Helping you live sustainably, simply and affordably

centrica

We put colleagues and customers at the heart of everything we do, delivering innovative energy and services solutions to help homes, businesses and communities live sustainably, simply and affordably.

Key to this is our talented team of 20,000 colleagues including 7,000 engineers, who serve millions of customers every day through trusted brands like British Gas, Bord Gáis Energy and Centrica Business Solutions.

Our focus on improving operational performance, a strong financial position and a responsible approach to business means our customers can rely on us for their energy needs. It also allows us to invest in energy security and the transition to net zero whilst creating the diverse and inclusive team we need to succeed and contribute to the communities we're all part of.

In doing so, we can add value for customers, colleagues, communities and shareholders alike.

Find out more at centrica.com

Unless otherwise stated, all references to the Company shall mean Centrica plc (Registered in England and Wales No. 3033654); references to the Group shall mean Centrica plc and all of its subsidiary entities; and references to operating profit or loss, taxation, cash flow, earnings and earnings per share throughout the Strategic Report are adjusted figures, reconciled to their statutory equivalents in the Group Chief Financial Officer's Report on pages 14 to 20. See also notes 2, 4 and 10 to the Financial Statements on pages 128 to 129, 137 to 143 and 154 to 155 for further details of these adjusted performance measures. In addition see pages 253 to 257 for an explanation and reconciliation of other adjusted performance measures used within the document.

01 Our strategy and business model

Our strategy is driven by our Purpose to help customers live sustainably, simply and affordably. We have evolved our strategy to help meet the challenges of today and prepare us for a net zero future.

+ Read more about our strategy and business model on **pages 7 to 11**

02 People and Planet

Our People & Planet Plan aims to create a more inclusive and sustainable future. From being a net zero business by 2045 and helping our customers be net zero by 2050, to creating the diverse and inclusive team to get there.

+ Read more on **pages 39 to 54**

03 Our stakeholders

Engaging a diverse range of stakeholders, including our workforce, enables us to deliver on our strategic objectives by understanding risks and opportunities better, whilst creating stronger outcomes for people and planet.

+ Read more **on pages 12 to 13, 37 to 38 and 70 to 71**

Group Highlights

Group Operational Metrics

British Gas Services & Solutions – Services Engineer Net Promoter Score(1)

2022 **+64**
2021 +60

Total recordable injury frequency rate (per 200,000 hours of worked)

2022 **1.12**
2021 1.07

Colleague engagement

2022 **73%**
2021 55%

Total greenhouse gas emissions (tCO$_2$e)

2022 **2,007,655†**
2021 1,032,807(2)

† Included in DNV Business Assurance Services UK Limited (DNV)'s independent limited assurance engagement. See page 258 or centrica.com/assurance for more.

(1) Measured independently, through individual questionnaires, the customer's willingness to recommend British Gas following an engineer visit.

(2) Restated due to Liquified Natural Gas shipping and the retained Spirit Energy assets in the UK and the Netherlands moving into scope. See pages 43 and 52.

Group Financial Metrics (Year ended 31 December 2022)

Strong underlying financial performance, with the Company managing elevated and volatile commodity prices very well.

Group adjusted operating profit
£3,308m
2021 £948m

Group adjusted basic EPS
34.9p
2021 4.1p

Group free cash flow from continuing operations
£2,487m
2021 £1,174m

Adjusted net cash
£1,199m
2021 £680m

Full year dividend per share
3.0p
2021 –

Statutory loss and earnings predominantly reflects the impact of falling commodity prices towards the end of the year, on the value of forward commodity purchases. This will unwind over future periods.

Group statutory operating (loss)/profit
£(240)m
2021 £954m

Group statutory basic EPS
(13.3p)
2021 20.7p

Group statutory net cash flow from operating activities
£1,314m
2021 £1,611m

Chairman's Statement

Scott Wheway
Chairman

In many ways Centrica's centrally important role in the energy market has been affirmed over the last 12 months. During times of uncertainty, our size, strength and responsible approach has helped provide stability in a crisis that, despite it being no fault of energy customers, has left many struggling.

I'm proud of what we've managed to achieve over the last year to stabilise the market. We have taken on more than 700,000 customers from failed energy suppliers since the second half of 2021. We agreed a deal with Equinor to bring additional gas supplies to the UK, which has already started delivering enough gas to heat an additional 4.5 million UK homes over the next three years. We brought 36 Liquified Natural Gas (LNG) cargoes into the UK, enough to supply millions of homes. And we have re-opened our Rough gas storage facility in the North Sea, adding 50% to the UK's capacity and boosting the UK's energy resilience.

All of these actions help incrementally reduce costs for our customers and strengthen the UK's energy security.

We've also taken more direct action for customers, having created the largest voluntary energy support fund for customers in the UK, helping those struggling with rising costs through grants of up to £1,500. Nobody has done more than Centrica in this space. We donated more money in grants for support and invested more in customer service to meet additional demand, than we made in profit from British Gas Energy.

Outperforming expectations

We've been clear that Centrica has been in a period of turnaround since 2020. In 2022, while we reported a statutory loss, we delivered strong operational performance, which is reflected in our underlying financial result. Elevated market prices and volatility provided favourable market conditions for our Energy Marketing & Trading business, which continues to play a critical role in storing, transporting and balancing energy supply across Europe. However, I am confident that even in a more benign environment we would have seen adjusted earnings growth, demonstrating our progress towards delivering the turnaround of Centrica.

I was pleased that we have been able to reinstate the dividend at a prudent and sensible level. As shareholders you have been very patient during years of underperformance. The reinstatement, and the start of a share repurchase programme in November, underpins the Board's confidence in the strength of Centrica and the journey we are on to grow a sustainable business that delivers for our colleagues, our customers, our shareholders and the UK as a whole.

Responding to the cost of energy supplier failures

We know that customers are struggling financially in these challenging economic times. On a number of occasions this year I have spent time speaking with colleagues who take calls from our customers. No one could fail to be touched by some of the accounts our staff hear every day of people genuinely struggling to make ends meet.

Almost 30 suppliers failed during 2021-2022, leaving the customers of other suppliers to bear the cost. Given how high customer bills are already, many simply cannot afford to keep picking up the tab for the failure of suppliers. This is why we are continuing to engage with both the UK energy regulator and the Government to put in place a robust regulatory framework that will deliver a future retail energy market that is stable and puts at its heart the long-term interests of customers.

Strong expertise and capability in risk management and managing commodity markets

While 2022 has been a challenging year for our retail energy supply and services businesses, this has been compensated by the rest of our portfolio, with our Optimisation and Infrastructure businesses delivering strong operational and financial performance. This is a demonstration of the resilience that comes from having a balanced portfolio.

Part of the reason we have been able to manage the storm is our ability to manage our commodity exposure and risk in core markets, thanks to the strong expertise and capability we have built over a number of years within our Energy Marketing & Trading business.

With European energy markets increasingly interlinked, it is an advantage to have expanded our activities outside our core markets of the UK and Ireland. In total, we now trade in 24 markets across Europe and employ around 600 colleagues across our main offices in Aalborg, London, and Antwerp. This is a core platform for growth within the business.

The important role of natural gas in the net zero transition

The significant increase in energy costs was born not just of the conflict in Ukraine, which has created greater uncertainty in energy markets, but also the premature disinvestment in natural gas driven by the urgent necessity to move away from carbon-emitting assets.

The net zero transition is happening at pace, but the reality is that given current capacity and the time it takes to build new infrastructure, the combination of solar, wind, nuclear and battery storage are not yet sufficiently developed to allow us to turn our back on gas completely.

It is likely that for the next 15 years methane will continue to play a role as a transition fuel. On one hand, by helping to keep UK homes warm, and on the other providing vital balance to support the growth of renewables. At present, around 40% of the UK's power comes from gas-fired turbines, which are typically brought online to fill the gap when renewables aren't generating sufficiently to meet our needs.

Although this figure is likely to decrease year on year, as more renewable assets are built and technologies develop, gas is likely to continue to play an important role for the foreseeable future – playing a vital balancing role in energy markets.

Transitional times for energy

A strong and responsible Centrica is uniquely placed to help see us through to the next phase of the energy transition.

The roll-out of net zero technology remains at a nascent stage, nevertheless we installed around 8,000 electric vehicle charging points and nearly 50,000 hydrogen blend ready boilers last year. And while demand hasn't been as high in 2022 as we'd hoped, we still installed more heat pumps than any other supplier in the UK and we've got plans to significantly ramp up roll-out through our British Gas Net Zero Ventures business which has launched a market-leading price guarantee to tackle affordability.

It's estimated around £500 billion could need to be spent on transforming the UK and Ireland's housing stock for net zero. Having the largest engineering force in the industry positions us to deliver a significant proportion of those upgrades.

We are laying the groundwork by growing our apprenticeship programme and providing world-class engineer training in our academies – to help develop the right capabilities for future net zero driven growth. This gives us confidence for the future of our services business.

We're excited too about the role that hydrogen can play in energy generation, heating homes and decarbonising transportation.

Hydrogen represents an opportunity for the UK to return to energy independence. But it will need long-term thinking beyond the usual political cycles, as well as both public and private investment to deliver at the scale and pace required. We're in a race with other developed economies for first mover advantage and the rewards for the winner could be very attractive.

Without question, a combination of technologies will be required, creating opportunities for companies with strong balance sheets, flexible business models and detailed knowledge of markets.

In summary

This year's strong performance demonstrates the new resilience of Centrica, showing our ability to trade through difficult times while providing support to our customers struggling with the cost of living crisis.

There is still work to do, and we haven't got everything right, but we're striving to improve.

Centrica is evolving into a new type of integrated energy company using our strong established positions in retail, optimisation and infrastructure. These capabilities and our financial strength are a result of the magnificent work of every member of the Centrica team and I want to take this opportunity to thank them for everything they have done for our customers, shareholders and our wider stakeholders in 2022.

Scott Wheway, Chairman
15 February 2023

Group Chief Executive's Statement

Chris O'Shea
Group Chief Executive

When I wrote to you last year, I said it appeared that this decade may be one of the most eventful for a long time, one where we learn and adapt more quickly than we've done in the past. I'm sure you'll agree that 2022 was another year where the unexpected became the norm!

It's hard to look at a news site or watch a news programme without seeing a mention of 'global warming', 'climate change', 'net zero', 'energy transition' or 'decarbonisation'. And it's difficult to know what to think – is it a real threat? Is it exaggerated? What does it mean for society, and for your Company, both today and in the future?

My belief is that climate change is the biggest single threat facing civilisation today, and net zero is the biggest single opportunity we have at Centrica.

Climate change is real, it's here, and it's impacting lives across the planet. We can see that clearly with changing weather patterns. Reducing the carbon we put into the atmosphere is the best way to stop the march towards a climate catastrophe. Transforming how we generate, store and use energy can make a huge difference to reducing the warming of our planet.

Longer term, if the net zero transition is thoughtful and targeted, it can keep prices stable for customers and drive economic growth, especially for those companies and countries at the forefront of the transition.

Russia's invasion of Ukraine led to an energy crisis on a scale not seen in decades. Using our agility, skills and assets to support energy security in our core markets of the UK and Ireland and help customers navigate through the cost of living crisis has been mission critical.

Protecting vulnerable customers is also an absolute priority and we have clear processes and policies to ensure we manage customer debt carefully and safely. We need to strike a balance between managing spiralling bad debt and being aware that there are those who refuse to pay and those who cannot pay.

However, allegations around a third-party contractor were unacceptable. I was deeply concerned to hear how some vulnerable customers appeared to be treated in our name, this is simply not how we should do business. We will get to the bottom of this and where we got it wrong, we'll make it right.

No one else in the industry has put in place the level of support for those struggling to pay that we have. We were right to invest in customer care and to set up a £50 million support fund for vulnerable customers. We have taken the decision to suspend prepayment warrant activity and have called on Government, industry and the regulator to come together to agree a long-term plan to address the issue of affordability and the needs of vulnerable customers and, ultimately, create an energy market that is sustainable.

Uniquely integrated

Your Company is a uniquely integrated energy company operating primarily in the UK and Ireland, active in both energy and related services. We operate across the energy sector with distinct but complementary businesses.

- We **Make** it – Producing gas at Spirit Energy and generating electricity through our Nuclear stake and in Centrica Business Solutions
- We **Store** it – Both gas storage through Centrica Storage Limited and electricity storage in our Centrica Business Solutions battery projects
- We **Move** it – Our Energy Marketing & Trading team is one of Europe's largest wholesalers of gas and electricity
- We **Sell** it – Over 8 million homes are supplied with gas and electricity through British Gas and Bord Gáis Energy
- We **Mend** it – We install and maintain heating systems in more than 3 million homes

No other company is as comprehensively involved in the UK & Ireland energy markets and as well placed to both drive, and benefit from, the energy transition. In 2022, we have been busy dealing with the energy crisis in Europe and its impact on our customers, investing in improved customer service, simplifying our business, growing our workforce for the future, and empowering our colleagues to deliver for our customers – happy colleagues mean happy customers, which leads to happy shareholders.

When we set out on the turnaround of Centrica three years ago, we had a clear view of the three stages:

1. Simplifying the portfolio and strengthening the balance sheet;
2. Stabilising the Company and driving operational performance; and
3. Delivering growth and positioning ourselves for net zero.

Progress made in 2022

Every one of our eight business units has substantial growth opportunities, whether it's growing customer numbers and new customer offerings in our Retail businesses; expanding both our Liquefied Natural Gas (LNG) business and our Route-to-Market activities for third-party power producers in our Optimisation businesses; or growing both our gas and electricity storage and our electricity generation capacity in our Infrastructure businesses.

In order to capture these opportunities, we needed to make sure our foundations were solid so that whatever we build is sustainable. Some of our businesses are further on than others, and you can see from the results that 2022 has been a year of building on the foundations we laid in 2020 and 2021, and starting to show that we can grow again.

The glue that holds our Group together is our **Energy Marketing & Trading** business, matching our energy production to our customer needs and making sure we have access to additional third party gas and electricity where needed to make up any shortfall. Our operations are critical to security of supply across Europe, and the team did an amazing job in 2022, making sure that we had enough gas and electricity to supply our customers. They secured gas from Norway and the USA amongst other countries, and electricity from the Nordics, Spain, France, Belgium and elsewhere, helping to maintain supplies for homes and businesses in the UK and Ireland. We put well over £1 billion of gas into storage across Europe to withdraw in 2023 when customers need it most, and we continued to play a major role in balancing physical gas and electricity markets across many European countries. This team of around 600 colleagues, based in the UK and Denmark, sit in the background quietly doing their work to make sure countries have the right amount of gas and power in the right place at the right time, moving gas around the world on ships as LNG or through pipelines in Europe, and moving power through the cables and interconnectors which connect different European power markets.

In **British Gas Energy**, we grew our customer numbers organically for the first time in many years. We now have more than 2 million customers on our new cloud-based IT platform and I'm looking forward to accelerating the transition of customers during 2023. This is not only to give our customers better service, but to allow us to use an integrated system which will allow households to dynamically manage their energy use and earn new revenue streams by what is known as Demand Side Response (DSR).

British Gas Services and Solutions completed the first year of its turnaround. We made material investments in improving our customer service, and whilst this means that this year's financial performance is disappointing, we leave 2022 with our operations in a stronger place than they have been for many years. In 2023, our efforts will be on maintaining the operational improvements and rebuilding commercial offerings to our customers, focused on what they want to buy. Undoubtedly the current cost of living crisis has had an impact on customer demand in 2022, and whilst this is expected to continue into 2023, we believe that longer term, this business will be at the forefront of the UK's journey to net zero.

The building blocks are being put in place with the formation of the British Gas Net Zero Ventures team, which is already delivering greater flexibility for customers through the launch of Peak Save, as well as installing the electric vehicle (EV) charge points and heat pumps that put our customers at the very heart of residential decarbonisation, and in greater control of their energy future.

Bord Gáis Energy performed well in the year, demonstrating the value of vertical integration as we invested some of the additional profits from our Whitegate power station in keeping customer prices as low as we could. During the year we took the decision to invest €250 million in two new hydrogen-ready gas-fired electricity plants to bring much-needed flexible and readily available electricity to the Irish market.

Energy Movers by Nature

On Wednesday 20 July 2022 parts of East London came perilously close to a blackout due to surging electricity demand combined with a still day which meant wind farms were not turning.

Our Energy Trading & Marketing team did what they do many times a day and found a solution, which played an important role in ensuring that the lights stayed on and homes and businesses could continue with their daily operations. Because we operate across the continent, we were able to move electricity from Belgium, where conventional electricity plants were fired-up and the electrons propelled back across the channel. All of this happened in under two hours.

We provide 15% of the traded volume that the UK electricity grid relies upon. Every year we are playing a more significant role as the energy makers and movers that keep the wheels turning. We currently manage more than 15GW of third-party electricity generation assets, with everything from solar farms to grid-scale batteries helping to put power where it's needed. Our team in Denmark help to physically balance gas and power markets across Europe and our team in Belgium operates one of Europe's biggest virtual power plants, combining thousands of assets to provide the flexibility grid operators need.

Demand Side Response

When there's not enough electricity on the grid, consumers can be paid to reduce demand, thus helping balance the grid.

Centrica Business Solutions delivered a profit, made material progress towards building out its 900MW target of flexible generating assets and has an exciting, diverse pipeline of projects.

In our Infrastructure businesses I was delighted that we were able to return the **Rough** gas field in the North Sea to storage operations in September, and withdrew the first gas from storage for five years on 30 November. Whilst only at 20% of its previous capacity, this is a critical first step to underpin the return to full capacity, and an investment of up to £2 billion to build the world's largest hydrogen storage facilities right here in the UK. **Spirit Energy** had a strong year in gas production, while also beginning to prepare for a carbon-free future by submitting an application for a carbon storage licence for the huge Morecambe Bay gas field in the East Irish Sea. This is the first step towards building what could be one of the world's largest carbon storage facilities. And our **Nuclear** electricity generation business had a strong year, delivering higher volumes and profits in 2022.

Managing responsibly for all stakeholders

Companies have a responsibility to make sure they are a constructive and responsible part of society, and at Centrica we are focused on delivering for all stakeholders – including colleagues, customers, communities and our shareholders.

We are supporting our 20,000 colleagues through these challenging times, including through the payment of two significant one-off cost of living payments. For customers, we provided by some distance the largest ever energy support package in the UK and Ireland. And we'll continue to review what more we can do as times remain hard for many customers, having committed to donate 10% of both British Gas Energy and Bord Gáis Energy's profits to help until the current crisis is over.

We donated £4.5 million to a number of charities, including over £1 million to the Disasters Emergency Committee Ukraine fund. We also took the decision in January to return £27 million received in 2020 from the UK Government under the furlough scheme.

I also feel it's important that we continue to be good neighbours in the communities we serve. This has seen us commit to give 100,000 volunteering days into local communities by 2030, as part of our People & Planet goals. All of our colleagues can use 15 hours of their time each year to support local communities.

And we also delivered for our shareholders – restarting dividend payments and commencing our £250 million share repurchase programme.

Reflecting on our 2022 financial performance

While a detailed breakdown of our financial performance is within the Group Chief Financial Officer's Report on pages 14 to 20, I would like to briefly reflect on a year which has seen us expertly navigate volatile trading conditions.

The Group's adjusted earnings per share from continuing operations reached 34.9 pence, up from 4.1 pence during the previous year, as we delivered strong performance in Energy Marketing & Trading and our Upstream businesses. Free cash flow was also up significantly, and we closed the year with £1.2 billion of adjusted net cash.

Continuing what we started

Last year, I noted that our people had started to adopt a winning mindset, and I have seen that our passion and determination to succeed continued to build momentum throughout 2022. We have a plan of action underpinned by our Purpose, and customers are at the heart of it.

We'll continue to focus on the end goal; by doing that, we'll put ourselves in the best position to drive further improvements in our performance and ultimately deliver long-term shareholder value.

We'll continue to do all we can to support colleagues and customers through difficult, uncertain times. And we'll continue to see the opportunities where others see the obstacles, moving faster than the competition to deliver an energy transition which leaves no one behind. I expect to see material progress in growing our market share in the residential net zero arena with heat pumps and EV chargers, as well as the expansion of the demand side response part of our business, from one which primarily focuses on B2B customers to one which ultimately sees a huge proportion of our customers being able to earn money for turning down their electricity demand. This is the future for energy markets – smarter, more interconnected energy systems. And your Company has everything needed to deliver this system and make it simple, sustainable and affordable for our customers.

It is a huge privilege to be your Chief Executive, to lead an incredible team of 20,000 colleagues, to serve over 10 million amazing customers and to work for over 450,000 incredible shareholders. I'm so very grateful for your support, and your patience, as we continue to transform your Company.

Chris O'Shea, Group Chief Executive
15 February 2023

Our Purpose

Helping you live sustainably, simply and affordably. This is our Purpose – it's why we come to work every day.

Our Purpose, Culture and Values

At Centrica we are strongly led by our Purpose – "to help customers live sustainably, simply and affordably". Our Strategy is driven by our Purpose and our enduring Values at Centrica underpin our delivery and culture. Whilst we have evolved our Strategy to help meet the challenges of today and prepare us for a net zero future, our Values remain firmly embedded in who we are and give direction to everything we do.

Our Values

Care

We care deeply about our impact on the planet, our customers and our colleagues. We want to make a difference to society and the safety and well-being of our team and customers is paramount

We are delivering crucial support for customers through the volatile market conditions and exceptional cost of living crisis delivering material, targeted support including through funding the British Gas Energy Trust and committing 10% of our energy profits to help those who need it.

Collaboration

Together we win, we build winning relationships throughout our own organisation and with others to deliver on the scale challenges the industry faces

We collaborate closely across our businesses to understand how our Group is exposed and responding to the climate challenge. Our ability to draw insights effectively between our businesses through close collaboration is demonstrated by our strong performance in climate disclosures.

Courage

We step up and take responsibility. We recognise the importance of challenging the industry to make difficult decisions for our future and we stand by our beliefs

We've stepped up to support the UK's security of supply, reinstating the Rough field as gas storage. We recognise the long-term needs for the UK and will invest in long-term security and decarbonisation through hydrogen and carbon capture.

Agility

We are nimble, curious and innovative; we adapt to our markets rapidly and seek out opportunities to support the system and succeed

Our Optimisation businesses have rapidly responded to volatile energy markets, managing risk across our Group and proactively supporting our customers through access to scale long-term gas supply and Liquified Natural Gas deals.

Delivery

We do things right and deliver for all of our stakeholders

We value delivering great service and customer outcomes. We are rigorous, and do things the right way. We have been recognised by Ofgem as a well run supplier, been protecting customers' credit balances and invested an additional £25 million in customer service through the crisis.

Our Strategy & Business Model

Our strategy is driven by our Purpose to help customers live sustainably, simply and affordably.

As the pace of change continues to accelerate, we are responding by focusing colleagues and technology on helping businesses and households to use energy more efficiently and sustainably. We recognise the need to help enable a more flexible energy system and are deploying a range of technologies to help build the grid of the future with both electric and hydrogen technologies.

Our Purpose | Helping you live sustainably, simply and affordably

Our Strategic Framework

Retail
We remain relentlessly focused on providing leading customer service and experience helping them to save money and decarbonise through innovative offerings.

Optimisation
We are supporting the responsible buying and selling of energy, managing risk across our business and accessing value from green generation in our trading business while continuing to build out the flexibility required for the future energy system.

Infrastructure
Investing to build a low carbon, reliable energy system including power generating renewables, flexible peaking generation and energy storage through batteries and geological storage.

Focusing on delivery		Positioned for growth	
British Gas	British Gas, HIVE, DYNO, phJones	Bord Gáis Energy	centrica Business Solutions
Energy supply for residential and small business customers in England, Scotland and Wales	Services and solutions for residential customers In England, Scotland, and Wales	Energy supply services and solutions for residential and business customers in the Republic of Ireland	Energy supply and low carbon solutions for businesses, building and operating a portfolio of flexible assets
British Gas Energy is transitioning onto a new digital platform to lower cost per customer and improve service	Services & Solutions is focused on fixing delivery and helping customers with the energy transition	Bord Gáis is an established business with opportunity to explore future growth	Centrica Business Solutions is refocusing on its strengths in supply and services and increasing investment in energy transition assets

Retail — Optimisation

Our Values

At Centrica we have clear values that guide us every day and enable us to succeed in delivering on our Strategy and Purpose for customers: Care, Collaboration, Courage, Agility and Delivery.

+ Read more on **page 7**

People and Planet

Our People & Planet Plan aims to create a more inclusive and sustainable future. From being a net zero business by 2045 and helping our customers be net zero by 2050, to creating the diverse and inclusive team to get there.

+ Read more on **pages 40-54**

Financial Framework underpinned by balance sheet strength.

Alongside our Interim Results in July we reinstated a progressive dividend policy, with dividend cover from earnings moving to around 2x over time. We also signalled our intent to make efficient use of capital, including the return of surplus structural capital to shareholders, and in November launched a £250m share repurchase programme. We will continue to invest in both organic growth and capital projects, focused on the energy transition and net zero. We intend to set out our longer term investment and return plans alongside our 2023 Interim Results in July.

Creating value from optionality

centrica Energy Trading	centrica storage	SPIRIT ENERGY	Nuclear
Trading and optimisation of energy globally, managing energy procurement and risk	Storing and producing gas to manage seasonal demand and energy security	Oil and gas production in existing UK assets	Minority stake in the UKs portfolio of existing nuclear power stations
Energy Marketing & Trading is an established business with proven capability ready to grow further	Centrica Storage has an opportunity to explore its role in the future of hydrogen	Spirit has an opportunity to explore its role in the future of hydrogen and carbon capture	We have a 20% minority stake in a declining portfolio, Centrica is exploring further investment in nuclear generation

Infrastructure

The Value we create

Customers
Helping our customers live sustainably, simply and affordably through investment in services and solutions alongside our desire to do the right thing.

Colleagues
Working together to achieve a more inclusive team where everyone feels motivated, safe and able to reach their full potential.

Investors
Evolving our strategy in a sustainable and responsible way to strengthen the success of our Company and deliver a return on investment.

Government and regulators
Enabling the delivery of national priorities through collaboration on key issues like decarbonisation, energy security and affordability.

Suppliers
Ensuring communities benefit from our business by targeting high standards across our supply chain and treating suppliers fairly.

Communities and NGOs
Tackling urgent social and environmental issues through local and national partnerships.

+ Read more on **pages 12 to 13** and **pages 68 to 69** in our S172 disclosure

Risk Management

The Group's Risk Management framework protects Centrica's financial, operational and strategic assets by identifying, assessing and responding appropriately to our key risks and uncertainties.

+ Read more on **pages 29-33**

Governance

The Group's governance framework seeks to support the creation of long-term value by enabling effective decision-making for delivery of the overarching strategy, as well as ensuring that the views of all stakeholders are properly considered and that reporting is accurate and transparent.

+ Read more on **pages 56-71**

Macro Trends

The need to decarbonise

We continue to face into the biggest challenge our industry, Government and customers have faced – climate change. Our ultimate long-term ambition is to support the transition to net zero by developing the green economy, finding sustainable solutions for customers, and ensuring a just transition.

How we're responding

- Investing in green and flexible generation and storage through a range of participation models
- Developing potential options for scale investment in low carbon infrastructure supporting the system today and in the future
- Helping customers on their decarbonisation journeys, installing heat pumps and electric vehicle chargers while exploring the future of hydrogen

Enabling system flexibility

The energy system of the future will need to be flexible, creating a greener and more intelligent grid alongside increasingly connected demand in customers' homes and businesses is our ultimate vision. We continue to develop our market-leading solutions to enable this future.

How we're responding

- We are optimising the buying and selling of renewable power through our trading business
- Our leading connectivity and optimised trading technology is being embedded in our customer solutions and systems
- Through Hive we are bringing customers along the journey and building solutions that allow them to be active participants in helping manage the UK's energy system, accessing rewards, saving costs and decarbonising

The need to support consumer change

Consumers continue to be at the core of our priorities with our focus being providing the best service and cost competitiveness throughout the transition, while providing the confidence and tools to enable the roll-out of the technology of the future.

How we're responding

- Through digitalising our energy and services businesses with new, flexible platforms we will be able to ensure our customers have access to quality service at an affordable price
- We are committed to enabling the transition to net zero and will continue to provide the best energy and heating solutions to our customers, tailored to their homes and businesses
- We advocate for the policy changes needed to reach net zero and drive the market on our customers' behalf

Market Changes

Cost of living crisis

The rapidly rising cost of living poses a major near-term challenge that affects our customers, colleagues and our business.

How we're responding

- Providing vulnerable customers with the support they need with £50 million in donations, including through the British Gas Energy Trust and the British Gas Energy Support Fund
- Helping customers lower their consumption and save on their bills with innovative products in Hive
- Striving to complete the transformation of our business, lowering costs for customers while continuing to provide the energy and services they need
- We are passionate about protecting and rewarding our colleagues with fair pay deals

Energy market volatility

This year has seen unprecedented volatility in global energy markets directly impacting the prices of the gas and power we buy for our customers.

How we're responding

- We have used our Optimisation businesses to help manage risk across the Group and responsibly procure energy for our customers
- We've acted responsibly in our supply businesses ensuring we hedge our customers' demand and ring fence credit balances to protect their money
- We've continued to invest in flexible generation which will help reduce and stabilise energy costs in the long term

System security

Geopolitical tensions and rising prices have created security of supply concerns and risks of energy shortages globally.

How we're responding

- Helping to keep our customers warm by signing scale long-term purchasing agreements for the import of European gas and US LNG into the UK
- Converting the Rough facility back to gas storage supporting supply security for homes and businesses
- Both directly and indirectly investing in bringing online additional green, low cost generation capacity
- Continuing to explore long-term scale investments in nuclear which will provide reliable baseload power

Stakeholder Engagement

Engaging a diverse range of stakeholders enables us to deliver on our strategic objectives by understanding risks and opportunities better, whilst creating stronger outcomes for people and planet.

Energy is at the heart of everyone's lives. So our actions can have a big impact on a broad range of stakeholders. That's why we strive to collaborate with all of our stakeholder groups to effectively understand, consider and evolve our strategy in a way that meets their expectations. This not only aids the success of our business by enabling us to deliver on our Purpose of helping our customers live sustainably, simply and affordably, but it allows us to maximise the wider positive contribution we can make to society.

Engagement is often led by our senior leadership team who regularly update the Board through briefings and presentations. As a result, the Board is well-placed to consider the long-term consequences of its decisions from the perspective of a range of stakeholders.

Section 172(1) Companies Act 2006 Statement

The Directors consider that they have performed their duty as stipulated under Section 172, to promote the success of the Company for the benefit of all of our stakeholders throughout its decision-making.

These pages set out our key stakeholders together with an example of how engagement was vital to navigating one of the most material issues faced in 2022. Further detail on how the Board engages and balances the needs of different stakeholders, together with the key decisions made in 2022, can be found in the Governance section.

+ Read more about how we considered the interests of different stakeholders in the Governance section on **pages 68 to 71**

Centrica stories

Helping people with their energy bills in the UK

In 2022, the energy market faced unprecedented challenges as the war in Ukraine constricted already tight global energy supplies, causing energy costs to soar. With the duration of the energy crisis unknown, rising energy bills have been a real worry for many. We've therefore worked with stakeholders to understand what we can do to help, enabling the Directors to take swift action.

To ensure customers can get in touch more easily, we invested £25 million in customer service with the recruitment of 700 additional UK-based agents, who have guided customers through the crisis with expert advice and support.

And on top of the millions of pounds we already provide in energy bill support, the Directors recognised that more needed to be done. So we committed £50 million to help people with their energy bills, including through our promise to donate 10% of British Gas Energy's profit for the duration of the crisis. This enabled us to establish the UK's largest voluntary customer support package. Of this, £25 million was given to the British Gas Energy Trust to create a dedicated cash support fund for customers and to help communities. To reach those who needed it most, we collaborated closely with the Trust by running a marketing campaign urging people not to suffer in silence, volunteered at over 100 Post Office Pop-Ups at over 50 locations to share advice at the heart of communities, and collaborated with charities like StepChange, to help more people access support. The remaining £25 million is administered by British Gas and largely supports prepayment customers and businesses with grants.

At the same time, the Directors alongside specialists in Corporate Affairs and Regulatory Affairs worked at pace with the UK Government and Ofgem. Parliamentarians were engaged to ensure they were up-to-date with the support available via information leaflets, meetings and drop-in sessions. Together, we also worked on short and longer-term improvements to achieve a more robust and sustainable market for consumers. We suspended all prepayment warrant activity until at least the end of Winter. And we increased volumes of renewable energy, reopened our Rough gas storage site and worked with Norwegian partners to secure gas supplies sufficient to heat 4.5 million homes, which increases greenhouse gas emissions in the short-term but was vital to boost energy security and reduce costs for consumers. Meanwhile, we continued to manage price volatility through agile hedging policies and effective demand forecasting.

As we balance different stakeholder needs and the transition to net zero, we're doing whatever we can to help people today and avoid another energy crisis in the future.

+ Read more on **pages 40, 51 and 68**

Our Key Stakeholders

Customers

Importance – It's vital that we listen to our customers and act on feedback so that we can understand what they want and need. This will enable us to satisfy existing customers and attract new ones too.

Main focuses – Energy efficient and low carbon services and solutions, customer service, energy prices and bill support.

Engagement – We mainly engage through focus groups, surveys, proposition and usability testing amongst other channels. In response, we're investing in sustainable services and solutions that help our customers save time, money and energy. And we provide extra support for those who need help with their energy bills.

+ Read more on **pages 12, 22 to 23, 40, 44 and 68 to 69**

Colleagues

Importance – Colleague feedback helps us create a team where everyone can be themselves and thrive. In doing so, we can attract, promote and retain more diverse talent to meet the needs of our customers.

Main focuses – Reward, development, diversity and inclusion, safety, business strategy and transformation.

Engagement – Feedback is sought through channels like our Shadow Board of diverse colleagues who regularly meet leaders, townhalls, quarterly engagement surveys, performance reviews and structured engagements with trade unions. Together, we're working to co-create a fair, safe and inclusive environment by rolling out our inclusion action plan alongside initiatives including training, policy development and colleague benefits.

+ Read more on **pages 6, 37 to 38, 40 to 42, 44 and 68 to 71**

Investors

Importance – Shareholders and debt holders from across the world provide funds that help us run and grow our business.

Main focuses – Financial and operational performance, shareholder returns and dividend, strategy and growth, and Environmental, Social and Governance (ESG) factors like net zero.

Engagement – Engagement with investors occurs throughout the year, predominantly via post-result investor roadshows, the Annual General Meeting (AGM), and ad-hoc meetings. We also respond to information requests and assessments from ESG ratings agencies. This enables us to consider and reflect the views of a diverse range of investors when updating on our strategy, to provide a sustainable return on investment.

+ Read more on **pages 46, 57 and 68 to 70**

Government and Regulators

Importance – Government and regulatory policies can have a significant impact on how we do business. The Directors therefore recognise the importance of working closely to deliver a stable regulatory environment where policy is developed in the interests of consumers, whilst enabling a sustainable and investable market.

Main focuses – Market design, customer service, net zero, skills, energy security and energy prices.

Engagement – Expertise is shared through participation in consultation processes, meetings and site visits. Through these interactions, we can effectively support policy development and reforms to help deliver on key issues like energy security, progressing net zero targets and support for vulnerable customers.

+ Read more on **pages 12, 43, 46 and 68 to 69**

Suppliers

Importance – The Directors fully support collaboration across our 3,500-strong supply chain. This reduces risk in our supply chain by targeting high standards of business conduct whilst securing a stable supply of services and solutions for customers.

Main focuses – Payment practices as well as social and environmental compliance on issues like human rights.

Engagement – We interact with suppliers in many ways such as tendering, surveys, site inspections and remote worker surveys. Through engagement, we ensure we pay suppliers fairly and enforce our Responsible Sourcing Policy which sets out ways of working to benefit communities and the environment, including obligations under anti-modern slavery laws.

+ Read more on **pages 44 and 68**

Communities and NGOs

Importance – Communities expect companies to support issues that are important to them. By working alongside charities, non-governmental organisations (NGOs) and community groups, we can create stronger and more inclusive communities.

Main focuses – Tackling urgent social and environmental issues like fuel poverty and net zero.

Engagement – Through meetings and collaborative research projects, the Board understands community issues and is able to determine how we can make a big difference – from donating to the British Gas Energy Trust to provide advice and grants alongside energy efficiency measures that help people with their energy bills, to volunteering and match funding for local schools, hospices and more.

+ Read more on **pages 12, 40, 42 and 68**

Group Chief Financial Officer's Report

Kate Ringrose
Group Chief
Financial Officer

Our underlying financial performance was strong in 2022, with significant improvements in adjusted operating profit, adjusted earnings per share and free cash flow. Our balance sheet is in a much more robust place now than it was two years ago, providing us with cash agility and resilience against the current volatile environment, and the ability to respond to attractive investment opportunities aligned to the energy transition when they arise. And I'm pleased we were able to recommence returns to shareholders in 2022, with the restart of our dividend and the launch of a share repurchase programme.

Financial overview

The environment was unprecedented in 2022, with high and volatile commodity prices being a key driver of the Group's financial performance, position and cash flow. The Group's adjusted operating profit was £3.3bn (2021: £0.9bn), with Energy Marketing & Trading (EM&T) increasing to £1.4bn (2021: £0.1bn) as we managed commodity volatility very well, and Upstream increasing to £1.8bn (2021: £0.7bn), a reflection of high market prices. British Gas Energy adjusted operating profit of £0.1bn was slightly lower than in 2021, reflecting voluntary support given to customers during the year. The Group's adjusted EPS was 34.9p (2021: 4.1p).

The Group's total Free Cash Flow (FCF) from continuing operations rose to £2.5bn (2021: £1.2bn), reflecting the higher adjusted operating profit and some big swings in working capital, including a £1.1bn inflow due to accelerated cash flows in British Gas Energy from government support schemes, offset by a £1.2bn outflow in EM&T, with a large proportion of profit in EM&T expected to settle from a cash perspective in 2023 and a significant year-on-year increase in gas held in storage. The reopening of the Rough asset also led to a £0.4bn outflow as we bought gas held in storage in the Upstream segment.

From a statutory perspective, the numbers include a large certain re-measurement loss during the year of £3.4bn (2021: £1.2bn) which, when added to business performance adjusted operating profit, leads to an overall statutory operating loss of £0.2bn (2021: £1.0bn gain). The certain re-measurement loss is predominantly because our net buy portfolios (mainly for future downstream supply requirements) bought forward commodity when prices were high, and market prices then fell towards year-end, thus leading to losses on the re-measurement of those derivatives on the balance sheet. In addition, commodity derivatives that had been in-the-money at the end of FY21 unwound to the middle column as certain re-measurements. These losses of £5.2bn were partially offset in the middle column of the income statement by a significant £1.8bn positive movement in the onerous supply contract provision over the course of 2022. None of the items reported in the middle column are considered to reflect the underlying performance of the business as they are economically related to our upstream assets, capacity/off-take contracts or our downstream demand, which are typically not fair valued, and hence they are reported in a separate performance column in the Income statement.

The Group's net assets fell to £1.3bn (2021: £2.8bn) as a result of the statutory loss, in addition to the impact of items reported in other comprehensive income or directly in equity, which include IAS 19 pension losses arising from our equity accounted Nuclear investment (£0.3bn), the share buyback programme (£0.3bn) and dividend payments to both shareholders and non-controlling interests (£0.3bn).

From a statutory cash flow perspective, net cash flow from operating and continuing investing activities was £0.7bn (2021: £1.3bn). This was lower than the Free Cash Flow balance noted above because of the exclusion from that measure of movements in variation margin and collateral (£1.2bn) to support our commodity hedging activity and the trading business, pension deficit payments (£0.2bn) and a loan to the pension scheme (£0.4bn).

Revenue

Group statutory revenue increased by 61% to £23.7bn (2021: £14.7bn). Group revenue included in business performance, which includes revenue arising on contracts in scope of IFRS 9 (see note 4b for further details) increased by 84% to £33.6bn (2021: £18.3bn).

Gross segment revenue, which includes revenue generated from the sale of products and services between segments, increased by 82% to £37.2bn (2021: £20.5bn). This was driven largely by the impact of higher wholesale commodity prices on Energy Marketing & Trading and Upstream, and the impact of higher wholesale prices on retail tariffs in British Gas Energy, Bord Gáis Energy and Centrica Business Solutions.

A table reconciling the different revenue measures is shown in the table below:

	2022			2021		
Year ended 31 December	**Gross segment revenue £m**	**Less inter-segment revenue £m**	**Group revenue £m**	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m
British Gas Services & Solutions	1,527	(50)	1,477	1,513	(53)	1,460
British Gas Energy	13,096	–	13,096	7,513	–	7,513
Bord Gáis Energy	1,771	–	1,771	1,111	–	1,111
Centrica Business Solutions	3,000	(19)	2,981	1,981	(28)	1,953
Energy Marketing & Trading	14,441	(219)	14,222	6,082	(214)	5,868
Upstream	3,351	(3,261)	90	2,282	(1,887)	395
Group revenue included in business performance	**37,186**	**(3,549)**	**33,637**	**20,482**	**(2,182)**	**18,300**
Less: revenue arising on contracts in scope of IFRS 9 included in business performance			(9,896)			(3,556)
Group revenue			**23,741**			**14,744**

Operating profit/(loss)

Adjusted operating profit increased to £3,308m (2021: £948m). Excluding the disposed Spirit Energy assets, adjusted operating profit increased to £2,823m (2021: £392m). The statutory operating loss from continuing operations was £240m (2021: profit of £954m). The difference between the two measures of profit relates to exceptional items and certain re-measurements, which are explained on pages 17 to 18. A table reconciling the different profit measures is shown below:

		2022			2021		
Year ended 31 December	Notes	**Business performance £m**	**Exceptional items and certain re-measurements £m**	**Statutory result £m**	Business performance £m	Exceptional items and certain re-measurements £m	Statutory result £m
Continuing operations							
British Gas Services & Solutions		**(9)**			121		
British Gas Energy		**72**			118		
Bord Gáis Energy		**31**			28		
Centrica Business Solutions		**44**			(52)		
Energy Marketing & Trading		**1,400**			70		
Core EM&T		*1,381*			*155*		
Legacy gas contract		*19*			*(85)*		
Upstream		**1,308**			107		
Spirit Energy (retained)		*245*			*68*		
Centrica Storage		*339*			*77*		
Nuclear		*724*			*(38)*		
Profit Share		**(23)**			—		
Total Group excluding Spirit Energy disposed assets		**2,823**			**392**		
Spirit Energy disposed assets		*485*			*556*		
Group operating profit/(loss)	4(c)	**3,308**	**(3,548)**	**(240)**	**948**	**6**	**954**
Net finance cost	8	**(143)**	—	(143)	(187)	—	(187)
Taxation	9	**(1,046)**	793	(253)	(454)	236	(218)
Profit/(loss) from continuing operations		**2,119**	**(2,755)**	**(636)**	**307**	**242**	**549**
Profit attributable to non-controlling interests		**(69)**	(77)	(146)	(70)	107	37
Adjusted earnings from continuing operations attributable to shareholders		**2,050**	**(2,832)**	**(782)**	**237**	**349**	**586**
Discontinued operations		—	—	—	—	624	624
Adjusted earnings attributable to shareholders		**2,050**	**(2,832)**	**(782)**	**237**	**973**	**1,210**
Adjusted earnings attributable to shareholders excluding disposed Spirit Energy assets		2,005			162		

Profit and inventory from Rough operations are reported under Centrica Storage Limited for presentational purposes only. Centrica Storage Limited does not produce, supply or trade gas, except to the extent necessary for the efficient operation of the storage facility. In accordance with the Gas Act 1986, such production, supply and trading of gas is carried out wholly independently of Centrica Storage Limited by other Centrica group companies.

Group operating profit from business performance (adjusted operating profit)

The increase in adjusted operating profit was primarily in Energy Marketing and Trading, with our diverse range of contractual gas storage, pipeline and power generation capacity proving very valuable in elevated and volatile commodity markets, and in Upstream, reflecting strong gas production and nuclear generation volumes against a backdrop of higher commodity prices and the return of Rough to gas storage operations.

In Retail, British Gas Energy profit fell, as we provided £50m of additional support to customers struggling in the current environment, while British Gas Services & Solutions reported a small loss, as we invested in improving customer service and pricing, and saw weak commercial performance against a challenging external backdrop.

More detail on specific business unit adjusted operating profit performance is provided in the Business Review on pages 22 to 25.

Group finance charge and taxation

Finance costs

Net finance costs from continuing operations decreased to £143m (2021: £187m), largely due to an increase in interest income on cash balances reflecting higher UK interest rates. Interest costs on bonds, bank loans and overdrafts were slightly down, with the impact of the decision to redeem the €750m hybrid bond at its first call date in April 2021 and the further maturity of two bonds in early 2022 largely offset by the impact of the higher interest rate environment on floating debt.

Taxation

Business performance taxation on profit from continuing operations increased to £1,046m (2021: £454m). After taking account of tax on joint ventures and associates, the adjusted tax charge was £1,077m (2021: £433m).

The resultant adjusted effective tax rate for the Group was 34% (2021: 59%), with the profit mix moving away from highly taxed E&P activities.

The adjusted effective tax rate calculation is shown below:

Year ended 31 December	2022 £m	2021 £m
Adjusted operating profit from continuing operations before impacts of taxation	**3,308**	948
Add: JV/associate taxation included in adjusted operating profit	**31**	(21)
Net finance cost from continuing operations	**(143)**	(187)
Adjusted profit before taxation	**3,196**	740
Taxation on profit from continuing operations	**(1,046)**	(454)
Share of JV/associate taxation	**(31)**	21
Adjusted tax charge	**(1,077)**	(433)
Adjusted effective tax rate	**34%**	59%

Exceptional items and certain re-measurements

Total certain re-measurements and exceptional items from continuing operations included within Group operating profit generated a pre-tax loss of £3,548m (2021: profit of £6m), made up of a loss on certain re-measurements of £3,393m (2021: loss of £1,241m) and an exceptional loss of £155m (2021: profit of £1,247m).

Total certain re-measurements and exceptional items from continuing operations generated a tax credit of £793m (2021: £236m), with a credit of £1,000m (2021: £486m) related to certain re-measurements and a charge of £207m (2021: £250m) related to exceptional items from continuing operations.

Certain re-measurements

The Group enters into a number of forward energy trades to protect and optimise the value of its underlying production, generation, storage and transportation assets (and similar capacity or off-take contracts), as well as to meet the future needs of our customers. A number of these arrangements are considered to be derivative financial instruments and are required to be fair valued under IFRS 9.

The Group has shown the fair value adjustments on these commodity derivative trades separately as certain re-measurements, as they do not reflect the underlying performance of the business because they are economically related to our upstream assets, capacity/off-take contracts or downstream demand, which are typically not fair valued.

As a result of significant commodity price increases, since 2021 the Group has also recognised an onerous contract provision for its UK downstream energy supply contract portfolio. Although gains and losses on the commodity derivative hedge trades are already separately recognised in the income statement, the Group must assess whether downstream customer contracts have become onerous, taking into account the reversal of any mark-to-market gains. Movement in the amount provided is recognised in certain re-measurements, as the supply contracts are economically related to both the hedges and forecast future profitability of supply and therefore do not reflect underlying performance.

The operating profit in the statutory results includes a net pre-tax loss for continuing operations of £3,393m (2021: loss of £1,241m) relating to re-measurements, comprising:

- A net loss of £5,160m on the re-measurement of derivative energy contracts. With the Group generally a net purchaser of commodity, we saw a negative revaluation of energy supply contract hedge purchases entered into over 2022 due for delivery in future periods given the reductions in forward commodity prices towards the end of the year, after the contracts were entered into. These re-measurements should unwind as the commodity is delivered to customers, mostly in H1 2023. In addition there was an unwind of in-the-money positions for the UK downstream energy supply business from December 2021 as the commodity was delivered to customers in 2022. The net negative impact of these two factors was £6,364m. This was partially offset by the unwind of Upstream and Energy Marketing & Trading out-the-money positions from December 2021, together with the revaluation of their sell trades due for delivery in future periods. The net positive impact of these two factors was £1,204m.

- A £1,766m release from the onerous energy supply contract provision. As the Group purchases the commodity required for future supply in advance, the decline in commodity prices towards the end of 2022 meant the costs of fulfilling residential downstream customer contracts would now be lower than the fixed/capped charges recoverable from customers. As a result, this portion of the provision has been reversed. The remaining provision of £999m relates to non-domestic customers on longer-term fixed contracts agreed at levels below the current forward commodity prices. The gain from releasing this provision will offset losses from the ultimate unwinding of in-the-money hedge positions, without affecting the ultimate profitability of the underlying transactions.
- There was also a £1m net gain arising on re-measurement of certain associates' contracts (net of taxation).

These re-measurements generated a taxation credit of £1,000m (2021: credit of £486m), including £473m associated with re-basing deferred tax on certain relevant derivatives for the Energy Profits Levy. As a result, the total loss from net re-measurements after taxation for continuing operations was £2,393m (2021: loss of £755m).

The Group recognises the realised gains and losses on commodity derivative and onerous supply contracts when the underlying transaction occurs. The business performance profits arising from the physical purchase and sale of commodities during the year, which reflect the prices in the underlying contracts, are not impacted by these re-measurements.

Further details can be found in note 7(a).

Exceptional items

An exceptional pre-tax charge of £155m was included within the statutory Group operating profit from continuing operations in 2022. In 2021, an exceptional pre-tax profit of £1,247m was recognised, largely relating to the write-back of Upstream gas production and electricity generation assets.

The 2022 pre-tax exceptional charge was made up of:

- A charge of £362m relating to the Spirit Energy Norwegian E&P and Statfjord disposal, which completed on 31 May 2022. See note 12 for further details.
- A £207m write-back of power assets, predominantly relating to the write-back of the nuclear investment as a result of higher forecast forward commodity prices, largely offset by the projected impact of the Electricity Generator's Levy announced in November 2022 and applicable from 1 January 2023.

The taxation charge on exceptional items was £207m (2021: £250m), which includes a £121m credit associated with deferred tax provisions related to E&P tax losses and decommissioning carry-back, due to the increase in forecast commodity prices and an exceptional £325m charge from the recognition of higher deferred tax liability balances due to the implementation of the Energy Profits Levy.

As a result, the total post-tax exceptional loss recognised in continuing operations after taxation was £362m (2021: profit of £997m).

Further details on exceptional items, including on impairment accounting policy, process and sensitivities can be found in notes 7(b) and 7(c).

Discontinued operations

There was no adjusted operating profit or adjusted earnings from discontinued operations in 2021 or 2022. Statutory earnings of £624m from discontinued operations in 2021 are related to the profit on disposal and release of a tax provision following the disposal of Direct Energy, which completed on 5 January 2021.

Group earnings

Adjusted earnings

Profit for the year from business performance from continuing operations after taxation was £2,119m (2021: £307m). After adjusting for non-controlling interests relating to Spirit Energy, adjusted earnings were £2,050m (2021: £237m). Excluding the disposed Spirit Energy assets, adjusted earnings were £2,005m (2021: £162m).

Adjusted basic EPS was 34.9p (2021: 4.1p). Excluding Spirit Energy assets, adjusted basic EPS was 34.2p (2021: 2.8p).

Statutory earnings

After including exceptional items, certain re-measurements and earnings from discontinued operations, the statutory loss attributable to shareholders for the period was £782m (2021: profit of £1,210m).

The Group reported a statutory basic EPS loss of 13.3p (2021: profit of 20.7p, of which 10.0p related to continuing operations).

Dividend

In addition to the interim dividend of 1.0p per share, the proposed final dividend is 2.0p per share, giving a total full year dividend of 3.0p per share (2021: nil).

Group cash flow, net debt and balance sheet

Group cash flow

Free cash flow is the Group's primary measure of cash flow as management believe it provides relevant information to show the cash generation of the business after taking account of the need to maintain its capital asset base. Free cash flow is reconciled to statutory net cash flow from operating and investing activities in the table below. See the explanatory note in note 4(f) for further details.

Year ended 31 December	2022 £m	2021 £m
Statutory cash flow from continuing operating activities	**1,314**	1,611
Statutory cash flow from continuing investing activities	**(566)**	(325)
Statutory cash flow from continuing operating and investing activities	**748**	1,286
Add back/(deduct):		
Sale and purchase of securities	**398**	3
Interest received	**(46)**	(2)
Movements in collateral and margin cash	**1,173**	(481)
Defined benefit pension deficit payments	**214**	368
Free cash flow from continuing operations	**2,487**	1,174
Discontinued operations free cash flow	**—**	2,588
Free cash flow	**2,487**	3,762

Net cash flow from continuing operating activities of £1,314m was down 18% (2021: £1,611m), with the impact of higher adjusted EBITDA partially offset by higher tax payments, and material working capital and collateral and margin cash outflows.

These significant working capital movements were largely a reflection of the higher commodity price environment and UK Government initiatives to address this. British Gas Energy saw a working capital inflow of £1.1bn in the year reflecting the introduction of the Energy Price Guarantee and Energy Bill Support Scheme, which resulted in earlier payment than under standard consumer payment patterns. EM&T saw a large working capital outflow of £1.2bn driven by a higher volume of gas inventory and by the timing of settlements on trading cash flows. In addition, we invested £0.4bn of working capital in Rough, having injected 16bcf into gas storage.

We saw a £1.2bn outflow of collateral and margin cash. In an elevated and volatile commodity price environment, initial margin requirements are greater and the likelihood of large movements on variation margin are also increased. At the end of 2022, commodity purchases made for our retail customers were out-the-money as prices fell towards the end of the year. We would expect these outflows to reverse in future periods, as we deliver the commodity to customers.

Net cash outflow from continuing investing activities increased to £566m (2021: £325m), with lower net investment in gas production more than offset by higher net investment in non-E&P activities and a £400m loan to the pension schemes in October 2022 to help them manage through volatile market conditions.

Group total free cash flow from continuing operations was £2,487m (2021: £1,174m), as reconciled to statutory cash flow measures in the table above.

Net cash outflow from continuing financing activities remained broadly unchanged at £917m (2021: £938m) with the two bond repayments in February and March 2022 resulting in lower cash outflow than from the hybrid redemption in 2021, offset by the impacts of the distribution of £273m to Spirit Energy's minority partner relating to the disposal of Spirit Energy's Norway assets and the recommencement of returns to shareholders through the payment of a 2022 interim dividend and the buyback of shares as part of the Group's £250m share repurchase programme.

Group adjusted net cash

The above resulted in a £169m decrease in cash and cash equivalents over the year, and when including the impact of reduced gross debt resulting from the bond repayments, the loan to the pension schemes and lease adjustments, the Group's adjusted net cash position at the end of December 2022 was £1,199m, compared to £680m on 31 December 2021.

Further details on the Group's sources of finance and net debt are included in note 24.

Pension deficit

The Group's IAS 19 net pension position improved to a £40m surplus as at the year-end, from £nil at 31 December 2021, with the impact of pension deficit contributions during the year being partially offset by net actuarial losses.

Further details on the post-retirement benefits are included in note 22.

Balance sheet

Net assets decreased to £1,280m (2021: £2,750m). This largely reflects the impact of the statutory loss in the year, in particular the net re-measurements in relation to energy supply contracts, the impact of the share repurchase programme, IAS 19 pension losses from our equity accounted Nuclear investment and the minority dividend payment.

2022 acquisitions, disposals and disposal groups classified as held for sale

On 8 December 2021, Centrica announced that the Spirit Energy Group, of which the Group owns 69%, had agreed to dispose of its Norwegian oil and gas exploration and production business and its interests in the Statfjord field for headline consideration of $1,076m (approximately £800m) on a debt-free cash-free basis, plus a deferred commodity price-linked contingent payment. The commercial effective date of the transaction was 1 January 2021, with the transaction approved by Centrica shareholders at a General Meeting on 13 January 2022 and completed on 31 May 2022.

After adjustments for the net post-tax cash flows generated by the sale business and interests after the commercial effective date, less any remaining tax payable on these cash flows, net consideration was £69m, including a deferred commodity price-linked receivable and a tax indemnity provided to Sval Energi. Spirit Energy has distributed the net cash flow generated since 1 January 2021 and the net consideration to Centrica and its joint venture partners in proportion to their ownership, with £233m distributed to Centrica's non-controlling interest in June 2022 and a further £40m distributed in the second half of 2022.

Further details on assets purchased, acquisitions and disposals are included in notes 4(e) and 12.

Events after balance sheet date

Details of events after the balance sheet date are described in note 26.

Risks and capital management

The nature of the Group's principal risks and uncertainties are broadly unchanged from those set out in its 2021 Annual Report. However, the Group's top three Principal Risks are now Credit & Liquidity Risk, Market Risk (including the outage risk of financial loss due to impact of lost asset production) and Weather Risk, reflecting the potential impacts of gas and electricity prices reaching record levels during 2022 together with extreme volatility.

The Group has actively responded to those risks heightened by global wholesale energy prices. Centrica's approach to risk management includes agile hedging policies and effective demand forecasting processes. The extent to which the Group may continue to be impacted by the consequences of the high level of commodity prices will, in part, depend on further government and regulatory policy, including setting of future levels of default tariff caps, levies on profits and any extension to customer support schemes.

Details of how the Group has managed financial risks such as liquidity and credit risk are set out in note S3. Details of the Group's capital management processes are provided under sources of finance in note 24.

Accounting policies

The Group's accounting policies and specific accounting measures, including changes of accounting presentation and selected key sources of estimation uncertainty, are explained in notes 1, 2 and 3.

Kate Ringrose, Group Chief Financial Officer
15 February 2023

Our View on Taxation

The Group takes its obligations to pay and collect the correct amount of tax very seriously.

Responsibility for tax governance and strategy lies with the Group Chief Financial Officer, overseen by the Board and the Audit and Risk Committee.

Our approach

Wherever we do business in the world, we take great care to ensure we fully comply with all our obligations to pay or collect taxes and to meet local reporting requirements.

We are committed to providing disclosures and information necessary to assist understanding beyond that required by law and regulation.

We do not tolerate tax evasion or fraud by our employees or other parties associated with Centrica. If we become aware of any such wrongdoing, we take appropriate action.

Our cross-border pricing reflects the underlying commercial reality of our business.

We ensure that income and costs, including costs of financing operations, are appropriately recognised on a fair and sustainable basis across all countries where the Group has a business presence. We understand that this is not an exact science and we engage openly with tax authorities to explain our approach.

In the UK we maintain a transparent and constructive relationship with His Majesty's Revenue & Customs (HMRC). This includes regular, open dialogue on issues of significance to HMRC and Centrica. Our relationship with fiscal authorities in other countries where we do business is conducted on the same principles.

We carefully manage the tax risks and costs inherent in every commercial transaction, in the same way as any other cost.

We do not enter into artificial arrangements in order to avoid taxation nor to defeat the stated purpose of tax legislation.

We seek to actively engage in consultation with governments on tax policy where we believe we are in a position as a Group to provide valuable commercial insight.

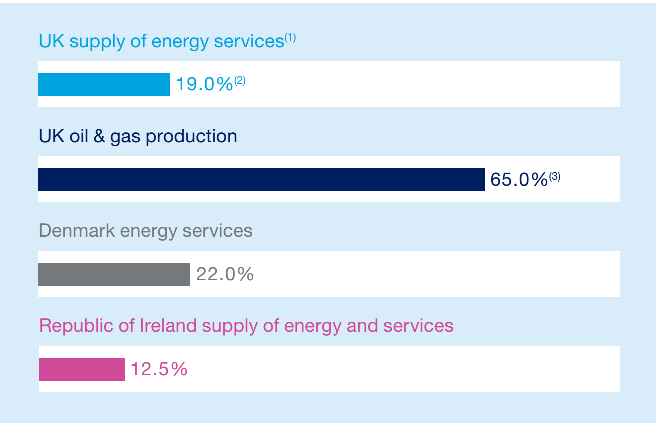
The Group's tax charge, taxes paid and the UK tax charge

The Group's businesses are subject to corporate income tax rates as set out in the statutory tax rates on profits table.

The overall tax charge is dependent on the mix of profits and the tax rate to which those profits are subject.

Statutory tax rates on profits

Group activities



(1) With effect from 1 January 2023, revenues from our Nuclear business (included in energy supply and services) will also be subject to Electricity Generator Levy at 45% in addition to corporation tax.

(2) With effect from 1 April 2023 the statutory rate applicable to UK supply of energy and services will increase to 25%.

(3) With effect from 1 January 2023, the statutory tax rate applicable to UK gas production increased to 75%; the statutory rate increased from 40% to 65% with effect from 26 May 2022.

Tax charge compared to cash tax paid

	2022 Current tax charge/(credit)	2022 Cash tax paid/ (received)
UK (including Petroleum Revenue Tax)	618	243
Norway	339	300
Denmark	130	17
Ireland	(26)	13
Rest of world	10	1
	1,071	**574**

Corporation tax is paid in instalments, generally based on estimates; one-off items and fluctuations in mark to market positions may cause divergence between the charge for the year and the tax paid.

+ Further information on the tax charge is set out in note 9 on **pages 151 to 153.**

+ Our Group Tax Strategy, a more detailed explanation of the way the Group's tax liability is calculated and the timing of cash payments, is provided on our website at **centrica.com/responsibletax**

Business Review

Business unit operational, commercial and financial performance

Improved operational metrics but weak commercial performance in British Gas Services & Solutions, with increased challenges from cost of living and inflationary pressures

British Gas Services & Solutions	2022	2021	Change
Services customers ('000) (closing) [(1)]	**3,141**	3,428	(8%)
Installs and on-demand jobs ('000)	**270**	282	(4%)
Services complaints per customer (%) [(2)]	**12.6%**	12.1%	0.5ppt
Services Engineer NPS [(3)]	**64**	60	4pt
Adjusted operating (loss) / profit (£m)	**(9)**	121	(107%)

All 2022 metrics and 2021 comparators are for the 12 months ended 31 December unless otherwise stated.
(1) Services customers are defined as single households having a contract with British Gas.
(2) Total complaints, measured as any oral or written expression of dissatisfaction, as a percentage of average customers over the year.
(3) Measured independently, through individual questionnaires, the customer's willingness to recommend British Gas following an engineer visit.

We continued to focus on fixing operational delivery in British Gas Services & Solutions in 2022, to improve the experience for our customers. We have been focused on recruitment, to enable us to complete a greater proportion of jobs using our own workforce, and in 2022 recruited over 800 engineers. This, coupled with a reduction in average sickness rates, resulted in improved capacity. Reflecting this, the number of rescheduled appointments fell from 11% to 6%, while Engineer NPS increased by 4 points to +64 over the year. Complaints per customer increased slightly to 12.6% as we still let some customers down, but improved in H2 2022 relative to H1 and further improvements in customer experience remains a focus for 2023.

Customer retention increased 1ppt to 83%, as we remained mindful of price changes that customers can absorb in the current economic environment, despite inflationary pressures on our own cost base. However, sales remained challenging against the weak economic backdrop, and there was also an impact of our decision to pause proactive selling for a period earlier in the year to focus on delivery for our existing customers. Reflecting this, total customer numbers fell by 287,000, or 8%, over the year. We also continue to see a trend of more customers trading down to lower priced products within our HomeCare range, with the number of services products per customer dropping to 2.17 compared with 2.23 at the start of the year and 33% of HomeCare products now coming with an excess compared with 31% at the start of the year.

The total number of installs and on-demand jobs for the year fell by 4% compared with 2021. Within this boiler installations increased by 9%, but a changed sales mix resulted in a lower average gross margin per installation. However, with our focus on catching up on a backlog of Annual Service Visits, we completed nearly 600,000 more in 2022 than in 2021, which reduced capacity for on-demand work and resulted in a 10% fall in these type of jobs.

British Gas Services & Solutions adjusted operating loss was £(9)m in 2022 against an adjusted operating profit of £121m in 2021.

- The reversal of COVID-19 and industrial action impacts from 2021 totalling £50m was partially offset by temporary factors seen in the first half of 2022, specifically increased workload that we believe was a function of customers choosing to have non-urgent work completed which they had delayed during the COVID-19 pandemic, temporary higher absence rates and an increase in the payment of compensation to customers. These factors negatively impacted adjusted operating profit by approximately £25m.
- We continued to invest in the future of the business, through increasing our direct engineer capacity and upgrading core IT systems, to ensure we are able to better serve customers today and well placed to capture longer-term opportunities arising from the decarbonisation of heating in the UK. This investment in service resulted in a negative impact on operating profit of approximately £45m in 2022. Having now stabilised our operational metrics, we would expect recruitment costs to reduce in 2023, while we expect to start benefiting from our investments through improved engineer productivity and increased sales of net zero products.
- We also continue to see inflationary cost pressures, on both direct labour as we support our colleagues through the cost of living crisis, and on third party costs. We chose not to fully pass these through in pricing to our customers, resulting in a negative impact on adjusted operating profit of approximately £50m.
- Lower contract customer numbers coupled with customers trading down to lower priced products was a factor in the financial result, as was a changed boiler sales mix. These factors negatively impacted adjusted operating profit by approximately £60m. Improving commercial performance remains a focus and we have a clear commercial plan for 2023.

Helping customers in British Gas Energy in a volatile and high price environment

British Gas Energy	2022	2021	Change
Residential energy customers ('000) (closing) [(1)]	**7,516**	7,260	4%
Small business customer sites ('000) (closing)	**480**	455	5%
Energy complaints per customer (%) [(2)]	**14.4%**	8.5%	5.9ppt
Energy Touchpoint NPS [(3)]	**13**	11	2pt
Cost per residential energy customer (excl. bad debt) (£)	**83**	84	(1%)
Adjusted operating profit (£m)	**72**	118	(39%)

All 2022 metrics and 2021 comparators are for the 12 months ended 31 December unless otherwise stated.
(1) Residential energy customers are defined as single households buying energy from British Gas.
(2) Total complaints, measured as an expression of dissatisfaction in line with submissions made to Ofgem, as a percentage of average customers over the year.
(3) 2021 restated to reflect the average weighted score by channel across the year. Measured independently, through individual questionnaires and the customer's willingness to recommend British Gas following contact.

We continued to focus on helping our customers in British Gas Energy in 2022, choosing to invest as much in customer service and support as we made in profits for the year, including through the UK's biggest ever energy support package totalling £50m.

Residential customer numbers increased by 256,000, or 4%, over 2022. This included a net increase of 158,000 customers who joined us through Ofgem's Supplier of Last Resort Process from Together Energy, while we also saw organic net growth of 98,000 in the year, against a backdrop of low levels of market switching. We also delivered a 25,000, or 5%, increase in the number of small business customers we serve, to 480,000, including organic net growth of 18,000.

With higher wholesale commodity prices resulting in significantly higher customer bills, we saw customer contact increase by almost a third compared to 2021, with greater customer focus on the level of their bill and direct debit payments. This led to a higher number of complaints, although almost 70% were resolved within a day, while Energy Touchpoint NPS improved to +13. We remain focused on ensuring we are able to handle an increased level of customer contact at this challenging time for many customers, and have now completed the recruitment of an additional 700 UK-based contact centre colleagues.

We continue to make good progress in migrating customer accounts in a controlled manner onto our new 'software as a service' IT platform. Around 2.2m customers have now been migrated onto the platform, more than double the amount at the half year, which combined with more modern ways of working is intended to enable a lower cost to serve and improved levels of customer service.

Cost per customer (excluding bad debt) decreased by £1 to £83 per customer, despite the impacts of inflation, a £3 impact of dual running IT costs and our investment in additional call centre agents, as we continue our drive to become more efficient. This figure excludes incremental voluntary support and donations.

British Gas Energy adjusted operating profit decreased by 39% to £72m, which largely reflects voluntary donations made to support customers and the repayment of furlough funds received by the Group in 2020.

- Rising wholesale commodity prices for much of the year meant that default tariffs remained cheaper than new fixed-price tariffs, resulting in more customers on default tariffs than we had hedged for. This required us to purchase more commodity at prices above the allowance in the price cap in Q1 2022, although with allowances introduced into the price cap from April 2022 to allow recovery for suppliers, the impact was broadly neutral in the year.
- Warmer than normal temperatures in H1 2022 resulted in lower demand and allowed the sale of surplus gas and power back into a high-priced market at a profit. Temperatures were also warmer in H2 2022, particularly in October and November. However, this came alongside a material fall in near-term commodity prices to levels below which we had forward purchased gas and power for our customers, and resulted in us selling surplus gas and power into the market at a loss. We also saw changing customer behaviour against a backdrop of higher customer bills, leading to a reduction in underlying consumption. Overall, the net impact of these factors on adjusted operating profit was slightly positive.
- The positive impact of increased residential customer numbers and average unit gross margins, and demand recovery from small business customers following the removal of COVID-19 restrictions, were more than offset by a £213m increase in the bad debt charge reflecting higher customer bills and the wider economic uncertainty.
- We also made a number of voluntary choices, including the repayment of £27m received by the Group under the UK Government's Coronavirus Job Retention Scheme, and investments totalling over £70m to support customers who need it most and in building our contact centre capacity to improve customer service resilience.

Bord Gáis Energy retail energy supply was loss making in 2022, but we delivered good operational performance, including from the Whitegate CCGT which was back online

Bord Gáis Energy	2022	2021	Change
Customers ('000) (closing)	**526**	509	3%
Complaints per customer (%) (1)	**2.2%**	1.6%	0.6ppt
Journey NPS (2)	**19**	30	(11pt)
Adjusted operating profit (£m)	**31**	28	11%

All 2022 metrics and 2021 comparators are for the 12 months ended 31 December unless otherwise stated.

(1) Total complaints, measured as any oral or written expression of dissatisfaction, as a percentage of average customers over the year.

(2) Weighted NPS for the main customer interaction channels.

While Bord Gáis Energy saw the return to service of Whitegate CCGT, the retail energy supply business was loss making in 2022, reflecting our decision to protect customers and absorb higher commodity costs. We have committed to donate 10% of Bord Gáis adjusted operating profit to our energy support fund to help vulnerable customers for the duration of the current crisis.

The number of customers grew by 17,000 in 2022, with the addition of customers from failed suppliers, and good retention rates reflecting the support we provided for existing customers. Customer complaints increased slightly and Journey NPS fell by 11 points over the year, which reflects market-wide customer concerns over the sharp rise in retail tariffs due to the significant increase in global commodity prices.

Despite the loss in retail energy, which also includes the impact of higher bad debt and lower customer consumption from warmer weather and changing customer behaviour, Bord Gáis Energy adjusted operating profit increased by 11% to £31m, reflecting good wholesale trading performance and strong availability from the Whitegate CCGT, which was offline for most of 2021. This demonstrates the value of an integrated business model in Ireland.

As part of the push for increased security of supply and decarbonisation in Ireland, we have also taken a positive final investment decision on two 100MW flexible gas peaking plants in Athlone and Dublin, at an expected cost of over €250m.

Strong management of commodity market volatility in Energy Marketing & Trading

Energy Marketing & Trading (EM&T)	2022	2021	Change
Renewable capacity under management (GW)	**11.6**	11.7	(1%)
Total EM&T adjusted operating profit (£m)	**1,400**	70	1,900%

All 2022 metrics and 2021 comparators are for the 12 months ended 31 December unless otherwise stated.

Our EM&T business has a diverse portfolio of contracted positions and is very well positioned when commodity prices are high and/or volatile, given our in-depth understanding of energy markets and ability to manage system complexity. We deployed more working capital, with an outflow of £1.2bn relating to investment in gas inventory for our storage and LNG positions and unrealised profit on derivative positions. However, this investment was well rewarded, with material in-year profits from our Gas & Power trading, Route-to-Market and LNG activities.

In Gas & Power Trading, our contracted pipeline and interconnector positions across Europe allowed us to move gas and power between markets and benefit during periods of significant price dislocations. In addition, our significant gas storage positions meant we were able to benefit from volatility in seasonal spreads.

In Route-to-Market, we've grown one of Europe's largest third-party renewable energy portfolios, creating an advanced, cross-European virtual power plant, and in 2022 we also benefited from the higher power price environment. Capacity under management, including renewables and optimisation assets such as battery and CHP, increased to 15.4GW from 14.6GW of which approximately 75% are renewable technologies. The diverse range of markets we serve and technologies we offer are proving increasingly valuable, as more intermittent generation comes online across Europe to increase the importance of balancing services. We remain focused on growing our route-to-market capacity as more renewable assets come online across Europe.

Our LNG business was profitable in 2022, despite us having forward sold all cargoes from our Cheniere contract for 2022 delivery in times of lower geographical price spreads, as large differentials between US and European gas prices provided opportunity to capture additional value. In total we traded 284 physical cargoes in 2022 and we continue to look to build on our contractual positions. During the year, we signed a Heads of Agreement with Delfin to take 1 million tonnes of LNG from their floating facility in the Gulf of Mexico, with a final agreement being worked up and operations expected to commence in 2026.

The remaining legacy gas contract delivered a profit for the year of £19m (2021: loss of £85m). At current forward prices we expect adjusted operating losses to total around £100m across the period 2023 to 2025 when the contract ends, an improvement of £50m from our expectation at the time of the Interim Results last July.

Reflecting the strong management of high and volatile commodity markets, EM&T adjusted operating profit was £1,400m (2021: £70m).

Delivering improved gross margin and building lower carbon and flexible generation assets in Centrica Business Solutions

Centrica Business Solutions	2022	2021	Change
Energy supply total gas and electricity volume (TWh)	**22.3**	22.3	nm
Energy supply complaints per customer (%) (1)(2)	**9.1%**	6.1%	3.0ppt
Energy supply Touchpoint NPS (3)	**31**	21	10pt
Services order intake (£m) (4)	**212**	371	(43%)
Services order book (£m) (4)	**670**	685	(2%)
Adjusted operating profit / (loss) (£m)	**44**	(52)	(185%)

All 2022 metrics and 2021 comparators are for the 12 months ended 31 December unless otherwise stated.

(1) Total complaints, measured as any oral or written expression of dissatisfaction, as a percentage of average customers over the year.

(2) 2021 restated as previously shown on a per site basis.

(3) Measured independently, through individual questionnaires and the customer's willingness to recommend.

(4) 2021 restated following re-segmentation of activity to EM&T.

The amount of energy supplied by Centrica Business Solutions to medium and large sized businesses was flat at 22.3TWh compared to 2021, with the easing of COVID-19 restrictions and underlying growth in medium sized business volumes being offset by the impacts of warmer weather and lower underlying customer demand in response to higher prices and the economic climate. Customer complaints increased, reflecting increased customer concern around higher energy prices, however Touchpoint NPS increased to +31 reflecting investments to improve overall customer service.

Services order intake of £212m was 43% lower than in 2021, driven by actions taken to focus the business and weaker uptake in the UK. The Services order book of £670m was broadly stable, ending the year 2% lower than in 2021.

Centrica Business Solutions operates a portfolio of flexible generation assets, principally a 49MW battery at Roosecote and a 49MW gas-peaking plant at Brigg. These assets performed well in the year, playing important roles for UK security of supply during times of high demand or reduced system availability. A further five large scale projects totalling nearly 150MW are currently under construction, including a 18MW solar farm at Codford, a 50MW battery at Brigg and a 30MW battery at Dyce.

Centrica Business Solutions reported an adjusted operating profit of £44m (2021: loss of £52m). Energy supply reported a significant improvement in adjusted operating profit to £73m (2021: £1m) driven by strong gross margins, which included gains from the sell back of excess hedged volumes in periods of warmer weather and lower underlying customer demand. These impacts were partially offset by an increase in the bad debt charge reflecting the current weaker economic environment.

Energy Services and Assets reported a reduced adjusted operating loss of £29m (2021: loss of £53m), reflecting higher gross margin capture due to improved operational focus and lower operating costs due to recent efforts to refocus the business.

Strong gas production and nuclear generation volumes and Rough reopened as a storage asset

Upstream	2022	2021	Change
E&P total production volumes (mmboe)	**27.0**	39.7	(32%)
Nuclear power generated (GWh)	**8,719**	8,342	5%
Adjusted operating profit (£m)	**1,793**	663	170%

All 2022 metrics and 2021 comparators are for the 12 months ended 31 December.

Please note that profit and inventory from Rough operations are reported under Centrica Storage Limited for presentational purposes only. Centrica Storage Limited does not produce, supply or trade gas, except to the extent necessary for the efficient operation of the storage facility. In accordance with the Gas Act 1986, such production, supply and trading of gas is carried out wholly independently of Centrica Storage Limited by other Centrica group companies.

Total E&P production was down 32% to 27.0mmboe. When excluding the disposed Spirit Energy assets, production was flat at 20.7mmboe.

- Total volumes from the retained Spirit Energy were down 2% to 17.5mmboe. Liquids volumes fell from 2.1mmboe to 1.2mmboe, with remaining 2P liquids reserves now only 1mmboe. Gas production volumes business increased by 3% to 16.3mmboe, reflecting strong operational performance at the Greater Markham Area and Cygnus.
- Production volumes from Centrica Storage's Rough field increased by 9% to 3.2mmboe, reflecting strong operational performance as a production asset in the first half of the year, with the asset then returning to gas storage operations in September 2022.

Centrica's share of nuclear generation volumes of 8.7TWh was 5% higher than 2021, despite the end of generation at Hunterston B in January and Hinkley Point B in August, reflecting improved plant reliability.

Upstream adjusted operating profit increased to £1,793m (2021: £663m). Excluding the disposed Spirit Energy assets, adjusted operating profit was £1,308m (2021: £107m).

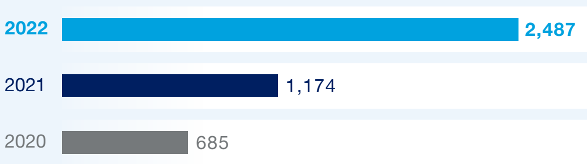
- The retained Spirit Energy business reported an adjusted operating profit of £245m (2021: £68m), with higher wholesale commodity prices resulting in a higher achieved price, despite the impact of hedging. This was partially offset by a higher depreciation charge following impairment write-backs in 2021.
- Centrica Storage adjusted operating profit was £339m (2021: £77m). This reflects strong production from Rough in the first half of 2022 during periods of high commodity prices, and capture of higher seasonal gas price spreads in the second half of the year following Rough's return to storage operations.
- Nuclear reported adjusted operating profit was £724m (2021: loss of £38m), reflecting strong generation volumes and higher achieved prices.

Key Performance Indicators

Our Key Performance Indicators (KPIs) help the Board and executive management assess performance against our Group Priorities set out in 2019.

In 2022, metrics across this section have been updated to better reflect the lead KPIs that are now employed to track performance across our key focus areas. This means that we are no longer reporting total shareholder return, aggregated Brand Net Promoter Score (NPS), aggregated complaints and process safety incident frequency rate (Tier 1 and 2) in this section, although performance is available elsewhere in the report. In particular, customer complaints and NPS are particularly important to our business and are tracked by business unit in the Business Review section.

Group free cash flow from continuing operations (£m)[1][2]



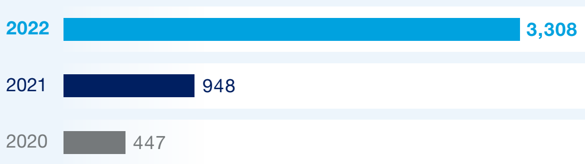
Free cash flow from continuing operations is the Group's primary measure of cash flow. It reflects the cash generation of the business after taking into account the need to continue to invest.

Free cash flow increased by 112% predominantly as a result of the increased operating profit in the Upstream segment and the acceleration of cashflows in British Gas Energy from government support schemes.

Link to Group Priorities

O CFG

Group adjusted operating profit from continuing operations (£m)[1][2]



Group adjusted operating profit from continuing operations is one of our fundamental financial measures.

Group adjusted operating profit was up 249% predominantly reflecting increased profit in Upstream and Energy, Marketing & Trading.

Link to Group Priorities

O CFG

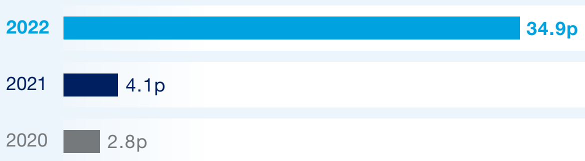
Our Group Priorities

- M Most Competitive Provider
- CO Customer Obsession
- O Operational Excellence
- S Safety, Compliance and Conduct Foundation
- CFG Cash Flow Growth
- E Empowered Colleagues

+ Read more about Our Group Priorities on our website **centrica.com**
+ Read more about adjusted performance measures on **pages 253 to 257**

(1) Excludes Direct Energy which was classified as a discontinued operation in 2021.
(2) See notes 2, 4 and 10 to the Financial Statements for definition and reconciliation of these measures.

Group adjusted basic earnings per share from continuing operations (EPS)[1][2]



EPS is a standard measure of corporate profitability. Adjusted EPS is used to measure the Group's underlying performance against its strategic financial framework.

Group adjusted basic EPS was up 751%, reflecting the increased operating profit and lower effective tax rate due to the profit tax.

Link to Group Priorities

O CFG

British Gas Services & Solutions – Services Engineer Net Promoter Score (NPS)[i]

Everything we do is focused on helping our customers live sustainably, simply and affordably. Following the recruitment of over 800 engineers coupled with a reduction in average sickness rates, our capacity to serve customers improved which led to our NPS rising by 4 points.

Link to Group Priorities

CO

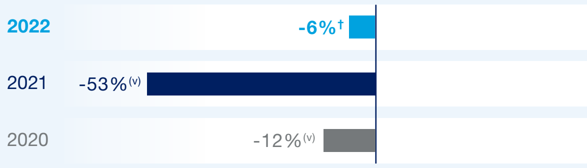
Total customers (m)[ii][iii]

Total customer numbers increased year-over-year, reflecting both organic growth and the addition of customers from failed suppliers in British Gas Energy and Bord Gáis Energy. This more than offset customer losses in British Gas Services & Solutions.

Link to Group Priorities

CO M

Total greenhouse gas (GHG) emissions – 40% reduction by 2034 & net zero by 2045 (2019 base year)[ii][iv]



With Whitegate power station resuming normal operations following an outage in 2021, savings dropped from the 53% temporary reduction achieved that year to a 6%† reduction. Overall, we are making positive progress against our long-term goal to be a net zero business by 2045 (see page 43).

Link to Group Priorities

O S

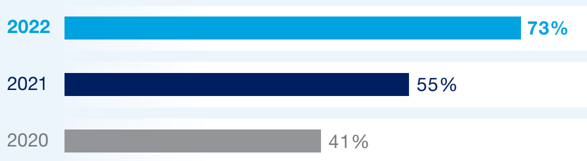
Total recordable injury frequency rate (TRIFR)[ii]

We want to keep our colleagues and customers safe, so we work hard to maintain a strong safety culture. Although we made good progress in some areas, our TRIFR per 200,000 hours rose by 5% and was largely due to an increase in slips, trips and musculoskeletal injuries.

Link to Group Priorities

S

Colleague engagement[ii][vi]



Our success is reliant on having a motivated and engaged team. Having focused on creating a more inclusive and supportive place to work whilst connecting colleagues with our Purpose and leaders, engagement improved by 18% to 73% favourable.

Link to Group Priorities

E

† Included in DNV Business Assurance Services UK Limited (DNV)'s independent limited assurance engagement. See page 258 or **centrica.com/assurance** for more.

(i) Measured independently, through individual questionnaires, the customer's willingness to recommend British Gas following an engineer visit. KPI moved from the previously reported aggregated Brand NPS to more transparently track and share performance in this key part of our customer-facing services business. For wider business unit NPS performance, see pages 22 to 24.

(ii) Excludes Direct Energy which was classified as a discontinued operation in 2021.

(iii) Includes British Gas Energy, British Gas Services and Bord Gáis Energy households and small and medium business customer sites in British Gas Energy and Centrica Business Solutions.

(iv) Net zero goal measures scope 1 (direct) and 2 (indirect) GHG emissions based on operator boundary, which now includes all emissions from our shipping activities relating to Liquified Natural Gas (LNG) alongside the retained Spirit Energy assets in the UK and the Netherlands. Non-operated nuclear emissions are excluded. Target is normalised to reflect acquisitions and divestments in line with changes in Group structure against a 2019 base year of 2,132,680mtCO_2e. It's also aligned to the Paris Agreement and based on science to limit global warming, corresponding to a well below 2°C pathway initially and 1.5°C by mid-century.

(v) Restated due to LNG shipping and Spirit Energy's remaining assets moving into scope in 2022.

(vi) Measured through colleague responses to a survey asking them to rate how they feel about the company. The survey moved from annual to quarterly in 2021.

+ Read more about our non-financial performance on **pages 39 to 54** and **258 to 260.**

Our Principal Risks and Uncertainties

We manage risks to support our Group strategy

Risk management

In the following pages we set out an overview of Centrica's risk management framework. Our Principal Risks remain linked to our Group Priorities and the Group's risk appetite is expressed in relation to our four categories of risk: Strategic, Operational, Financial and Compliance.

Risk management and internal control

Centrica's Group Enterprise Risk and Internal Controls Framework remains a core element of the Group's Governance Model which is set out below.

The most significant Principal Risks to the Group are set out on pages 30 to 33, in order of magnitude to the Group.

Risk appetite

The Board is ultimately responsible for aligning the risk appetite of the Group with our long-term strategic objectives, taking into account the emerging and Principal Risks. The Board has determined the risk appetites for the categories of Strategic, Operational, Financial and Compliance, and the key risks within Centrica's Risk Universe have been mapped into these categories.

Due to the industry and the nature of some of the markets in which the Group operates, we have high to moderate risk appetites for our strategic and operational risks. However, we have a minimal risk appetite for operational safety risks and we continue to strive for an incident free workplace. For financial risks we adopt a conservative approach to manage our liquidity position and balance sheet strength. However, due to the higher risks inherent in managing the commodity and weather variables within our energy supply businesses, we accept a higher appetite for those elements of financial market risk. We are committed to operating our businesses in compliance with relevant laws and regulations.

Risks are identified and assessed at a Business Unit (BU) level to determine impact and likelihood, with an appropriate risk response subsequently evaluated and implemented. The different risk responses are

- Terminate: cease the activity that creates the risk
- Transfer: pass the risk to another party
- Tolerate: accept a level of risk
- Treat: act to reduce the likelihood or impact of risk

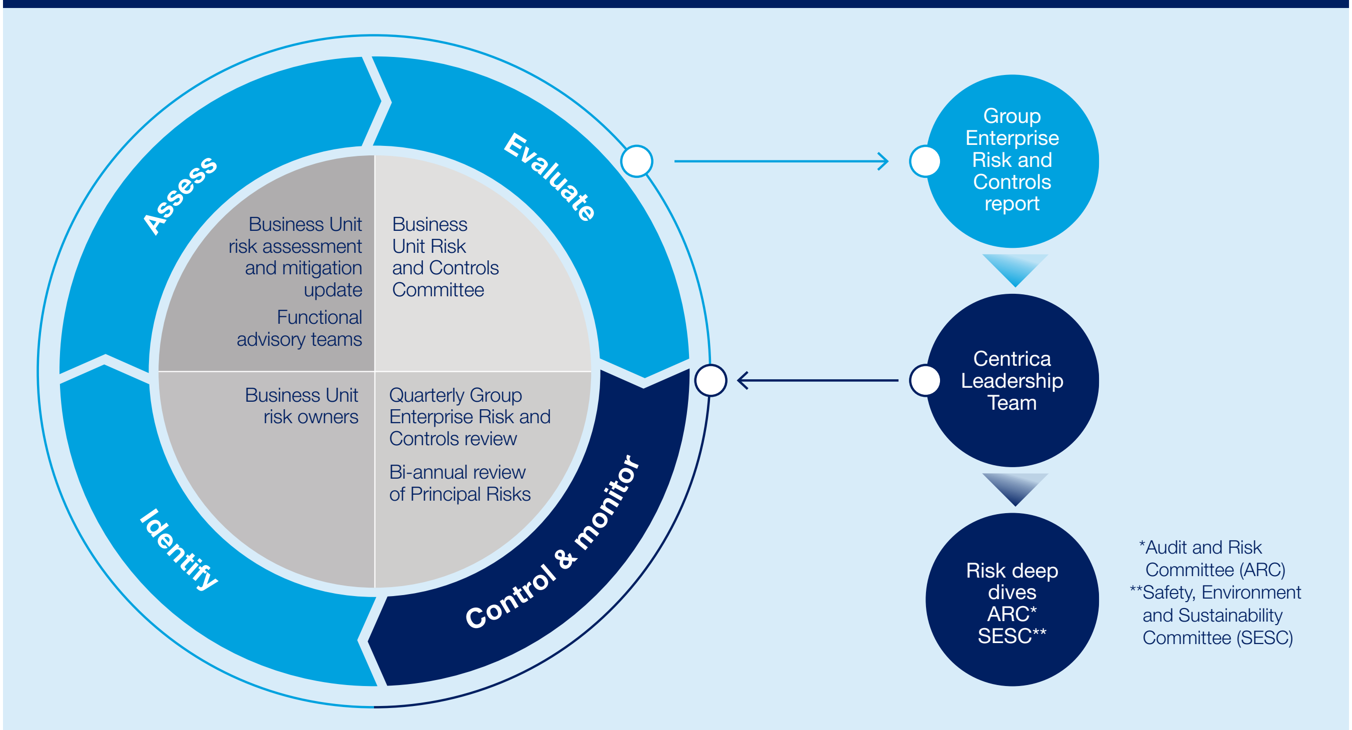
During BU and Group risk reviews, the net residual risk scores are compared to the Group risk appetite to review the adequacy of existing mitigating actions/controls, with further action taken to control and monitor risks as required.

Risk framework

Day-to-day ownership of risk sits with business management under the regular scrutiny of the Centrica Leadership Team (CLT) to whom the Board has delegated principal responsibility for risk oversight. The Group Principal Risks are those which could potentially impact delivery of our strategic objectives over the medium to long term, where medium term is up to three years, as determined through our strategic planning process.

The annual risk management process is summarised in the diagram below:

Centrica Group's Annual Risk Management Process



Quarterly Business Unit risk reviews

- Each BU is responsible for identifying and assessing its significant risks with support from functional subject matter experts. Current and emerging risks and issues are formally reviewed quarterly by the BU leadership teams.
- The finalised risk reporting and assessment of each BU's control environment is then formally discussed at a Group Risk and Controls Review for each BU. The meetings are chaired by the Chief Risk and Audit Officer.
- At these quarterly reviews, recent assurance reports and findings from internal audits and other assurance reviews are discussed. Actions from previous audits and assurance reviews are tracked to ensure close out in line with agreed timescales.

Executive and Board Committee reviews

- Bi-annually the Group Principal Risks are presented to the CLT for review and challenge.
- These include the aggregate risk assessments from the BU 'bottom-up' process and any Group-level risk assessments.
- The Group Principal Risk profile, as updated by the CLT, is presented to the ARC for review.
- Internal Audit presents quarterly to the ARC on any material findings as a result of independent assurance work.
- Risk deep dives are undertaken by the ARC and SESC to review high priority risks, ad-hoc topics and emerging matters.

In our assessment of viability, we consider the potential impact of 'severe but plausible' risks and note linkages to the Group Principal Risks as described on pages 30 to 33. The annual viability assessment has been presented to and approved by the ARC.

Board

- The Board reviews risk as part of its strategy review process and during the year conducted a robust assessment of the Company's emerging and Principal Risks.
- At the year-end the Board reviewed and approved the Principal Risk and Uncertainties disclosure.
- We evaluate our System of Risk Management and Control annually, which is supported by a certification of controls and adherence to Group policies by senior management.

Changes in risk climate and emerging matters

BUs and Functions review their risks and report key changes as part of their Business Performance and Risk Reviews. Major emerging risks and issues are escalated immediately.

During 2022 a number of Group-level areas of risk were closely monitored, and actions taken to mitigate their impact on the Group.

Inflation and cost of living

The cost of living crisis continued through 2022, with the UK Consumer Price Inflation rate hitting a 41-year high of 11.1% in October. This rate reflects the impact of rising energy and food prices but has been limited by the Energy Price Guarantee (EPG) which came into effect on 1 October. The EPG will be extended for a further 12 months from April 2023 for qualifying households.

The Government has provided further support through the Energy Bills Support Scheme, whereby all UK households will receive a £400 non-repayable discount in six monthly instalments. More targeted cost of living support will be provided beyond this to vulnerable households. A reduced Energy Bills Discount Scheme will replace the Energy Bill Relief Scheme (EBRS) discount for businesses and non-domestic customers from 1 April 2023.

The impact of the Government support schemes is reflected in the New Accounting Policies (note 1) and bad debt provision and is considered as part of the Going Concern review.

Energy market

Global wholesale energy prices have put pressure on the energy market, with gas and electricity prices reaching record levels during the year, exacerbated by the war in Ukraine and cessation of supply to Europe from the Nord Stream 1 pipeline.

Higher price levels and extreme volatility severely increased the Credit and Liquidity, Market and Weather risks within year, which the Group manages through agile hedging policies, and effective demand forecasting.

The reopening of the Rough gas storage facility will further strengthen the UK's energy resilience. The long-term aim is to turn Rough into one of the world's largest methane and hydrogen storage facilities. The Group will reallocate capital investment to bolster the UK's energy security, decarbonise the UK's industrial clusters and help reinstate the UK as a net exporter of energy.

The transfer of Bulb Energy customers to Octopus Energy is now subject to a judicial review as we are concerned that the structure of the deal could lead to potential market distortion.

Government and regulatory intervention

In June 2022, the Government enacted the Energy Profits Levy (EPL): a 25% surcharge on the extraordinary profits made by the oil and gas sector. In the November 2022 Autumn Statement, the Government announced this would increase to 35% from 1 January 2023 to 31 December 2028. They also announced a 45% Electricity Generator Levy (EGL), which is expected to be enacted following the Spring Finance Bill, on nuclear and renewable electricity generation from 1 January 2023 to 31 March 2028.

The Autumn Statement also included the announcement of a Vehicle Excise Duty on electric vehicles (EVs) starting in April 2025, which could impact our EV charging point strategy as increased taxes may make EV ownership less attractive.

We continue to sustain our focus on Environmental, Social and Governance matters.

Compliance with the many requirements proposed in the Government's paper on Restoring Trust in Audit and Corporate Governance is flagged as an emerging risk and there are projects in progress to understand, design and implement our responses.

Technology

We continue to automate and integrate our operations focusing on streamlining our finance reporting systems and using automation to replace manual controls. We actively monitor the changing technology landscape to exploit opportunities.

Strategic replacement or integration of trading systems and ERP systems is being planned in Energy Marketing & Trading, Centrica Business Solutions, British Gas Services & Solutions and Group Tax to drive efficiency, stability and improved end-to-end interfaces that will reduce manual intervention, duplication and the risk of error or omission. In British Gas Energy, the migration to the ENSEK digital platform is strategically critical in achieving our Purpose. This has not led to any changes in Principal Risk, but transformation risk will be monitored as these changes are delivered.

Supply chain

Supply chain issues arising from inflationary pressures and component shortages, specifically electronic chips in boilers and smart meters, have been managed by securing alternative supply routes and challenging price increases directly with suppliers to minimise the impact. In 2023, we will monitor China's economic outlook amid the growing tensions with Taiwan and the impact on Northern Ireland (NI) border checks if Article 16 of the NI protocol is implemented on our supply chain.

Principal Risks

The following Principal Risks were adopted by the Board in 2022 and reflect the position of the Group at the point of signing the accounts. Some prior year Principal Risks have been either split into component parts, merged or updated to more clearly articulate the nature and drivers of the risks. These are referenced as appropriate in the table below. The risks are presented in order of magnitude to the Group based on net residual risk, after mitigations. The Risk Climate is the expected change in the risk landscape from the previous risk review, based on the environment and controls in place.

Our Group Priorities

- CO Customer Obsession
- O Operational Excellence
- M Most Competitive Provider
- CFG Cash Flow Growth
- E Empowered Colleagues
- S Safety, Compliance and Conduct Foundation

	Credit and Liquidity Risk	Market Risk
	Risk Category: Financial	**Risk Category:** Financial
	FY21: Commodity Risk	**FY21:** Commodity Risk
	Group Priority: CFG Risk Climate: Deteriorated	Group Priority: CFG Risk Climate: Deteriorated
Overview	Risk of financial loss due to counterparty default, volatile commodity markets or a credit event limiting the availability of financial facilities or unsecured credit lines • Hedging commodity price risk in the markets exposes Centrica to (i) credit risk, which is the risk of a loss if a counterparty fails to perform on its obligations or (ii) liquidity risk when trades on exchange or with margining agreements result in collateral postings • Trending directional price moves can lead to a build-up of mark to market positions which is a key component of credit and liquidity risk • Volatile commodity markets can also increase cash and working capital requirements for both ourselves and our counterparties (with the latter increasing the risk that one of our counterparties fails to perform and consequently increases the risk of contagion). Further information is included in the S3: Financial risk management section within the Supplementary Information to the Financial Statements	Risk of financial loss due to trends and volatilities in commodity prices • Commodity exposure arises within the trading businesses, which provide a route to market for Centrica's upstream and power generation operations, sourcing of electricity and gas for the Group's energy supply businesses and proprietary trading activities. We also have commodity exposures driven by our LNG portfolio, in particular the Cheniere contract • Material movements in commodity prices can impact in-year P&L through revenue on sale of asset production, and impact on the long-term valuation of asset portfolios • Hedging commodity price risk in the markets exposes Centrica to supply shock, an unexpected event that changes the supply of a commodity, resulting in a sudden change in price • Changes in our customer demand requirements can result in a commodity exposure as we balance our established hedges at market prices
Mitigations	• Review of hedging policies at least annually in Group Risk Hedging Policy Committee meetings • Financial risks reviewed regularly in dedicated Risk Committee forums • Credit risk teams actively manage and reduce credit exposures, taking account of liquidity considerations • Energy Marketing & Trading and Group Treasury work closely to monitor liquidity requirements under normal and stressed market conditions	• Review of hedging policies at least annually in Group Risk Hedging Policy Committee meetings • Financial risks reviewed regularly in dedicated Risk Committee forums • The monthly Downstream Energy Margin Meeting is a forum for all relevant parties to review demand forecasting performance, hedge positions, risk and P&L, with actions recorded and tracked to completion • Hedging decisions and risk are agenda items at the monthly Finance Performance Reviews across the Group
Developments	• Market prices rose to unprecedented levels and credit exposures increased in line with this to counterparties where we are net buyers. As prices have started to decrease, exposures are building to counterparties where we are net sellers • Business Unit credit limits have been recalibrated using an expected loss methodology with increased limits available for better rated key counterparties • To ensure there is sufficient liquidity headroom for mark to market positions and margin requirements in the event of another price spike, Group Treasury approached existing banks to extend cash and Letters of Credit facilities • Management of the balance sheet is being improved to more effectively manage capital allocation	• Extreme prices and volatility continue to be affected by the ongoing Russian invasion of Ukraine and sanctions in place • Trading positions are scaled to operate within market risk appetite • The financial impact of outage risk associated with the output of Upstream assets remains high due to the higher price environment and the ageing asset infrastructure

Weather Risk

Risk Category: Financial

Group Priority: CFG

Risk Climate: Deteriorated

The impact on present or future profitability resulting from volume impacts as a result of deviation to normal weather

- The impact is compounded by the application of the price cap which limits recovery for unseen demand
- In normal conditions, downstream is exposed to revenue loss in warm weather which may be compounded by selling hedges at a loss
- When commodity prices are higher than the cap allowance and the risk exposure is primarily to cold weather when additional volumes may be required for downstream customers at a cost higher than can be recharged

- The monthly Downstream Energy Margin Meeting is a forum for all relevant parties to review weather impact and hedging proposals and performance, with actions recorded and tracked to completion
- Options to mitigate weather risk in British Gas Energy, to narrow the range of gross margin outcomes, are reviewed ahead of winter seasons with decision rights held by the Group Chief Executive
- Regular reviews ensure there is adequate access to liquidity in stressed cold weather scenarios

- Increased frequency of updated demand curves which capture changes in demand driven by deviations from seasonal normal weather
- Dynamic hedging strategy approved by the Group Chief Executive, to reduce the exposure to high price and cold weather risk
- The risk of a winter supply shock has eased following mild December weather, and risk is skewed to warm weather

Customer

Risk Category: Operational/Strategic

Group Priority: CO O

Risk Climate: New Principal Risk

Failure to deliver satisfactory customer service leading to complaints or loss of customers

- Cost of living and bad debt impacting customers' ability to pay and management of warrant activity to switch customers to prepayment meters
- Increased call volumes driven by commodity prices, Ofgem Price Cap increases, and the Government's Energy Support Schemes
- Peak service demand exceeding engineer capacity

- Customer Conduct Board provides oversight to minimise customer detriment, complaints and regulatory action
- Customer-facing BUs continue to build delivery capacity measures, including strengthening demand forecasting methodologies, and winter readiness planning activity
- Recruitment of frontline staff and expansion of web chat services to meet customer demand
- Focused recruitment activity at a qualified and apprentice level; use of temporary/contract resources and geographical re-deployment of engineer workforce to 'hotspot' demand areas

- The cost of living crisis, high levels of inflation and concerns over the continuity of energy supply arising from the Ukraine conflict and the National Grid's Winter Outlook report driving unprecedented levels of customer contact
- Suspension of all prepayment warrant activity at least until the end of the winter and providing £10 million to support prepayment customers
- We are working constructively with the wider industry, the UK Government and the regulator on the issue of prepayment warrant activity
- British Gas Energy and Bord Gáis Energy committed to donate 10% of all profits for the duration of the energy crisis. This contributed to £50 million being donated in the UK and €3.6 million in Ireland to help vulnerable customers
- Implementation of National Grid's discount scheme to manage peak demand and pilot of new scheme to reward customers switching energy usage to overnight
- Completing the migration to the ENSEK digital platform is strategically critical to reduce our cost to serve and deliver a quality service to customers at a competitive price

Political, Legal, Regulatory or Ethical Intervention/Compliance

Risk Category: Compliance/Strategic

FY21: Political and Regulatory Intervention
Legal, Regulatory & Ethical Compliance

Group Priority: CO O S

Risk Climate: Deteriorated

The risk of political or regulatory intervention and changes, failure to comply with laws and regulations, or greater regulatory scrutiny detecting unknown areas of non-compliance

- Risk of further government intervention to support vulnerable customers that may not be funded through the price cap mechanism
- Increased focus on Environmental, Social and Governance interventions and impact on investor confidence in our responses
- Material or sustained non-compliance with legal or regulatory obligations could lead to financial penalties, reputational damage, customer churn and/or legal and/or regulatory action
- Any material real or perceived failure to follow Our Code would undermine trust in our business

- Continuous engagement with policy makers to help form future regulatory requirements
- Dedicated Corporate Affairs and Regulatory teams which examine upcoming political and regulatory changes and their impact and report to the Leadership Team on an ongoing basis
- Understanding the expectations of stakeholders through reputational surveys and review of media sentiment
- The Board sets the tone from the top through Our Code and leadership behaviours
- Regulatory compliance monitoring activities performed by dedicated teams to drive Group-wide consistency and quality
- Control frameworks in place to deliver customer experience in line with requirements over sales compliance, billing, retentions, customer correspondence and complaints handling. These are regularly reviewed by relevant leadership teams through KPIs
- The Financial Crime Team monitors threats throughout the business and adequacy of response to the threat of bribery and corruption
- A global 'Speak Up' helpline exists to provide a consistent Group-wide approach to reporting unethical behaviour
- Continuous dialogue with Ofgem, consumer groups and the FCA to influence the regulatory environment

- Keeping pace with the velocity, volume and complexity of political and regulatory change has proved challenging, notably timely implementation of the various Government support packages
- We continue to note our concerns of potential instability in the supply market given the lack of additional regulation of suppliers to ensure adequate capitalisation and customer protection
- The Group Ethics and Compliance team is building capability in Energy Assurance to support the business with meeting complex regulatory requirements
- British Gas Energy has performed strongly in recent Ofgem Market Compliance Reviews (MCRs) of Direct Debit Assessments, Treatment of Customers in Payment Difficulties and Treatment of Vulnerable Customers
- We will continue to engage in consultation on the security of energy supply and decarbonisation of the UK retail energy market
- The roll-out and adoption of smart meters continues to present challenges due to the onboarding of c.700k SoLR customers disproportionately increasing installation targets. This has been exacerbated by supply chain disruptions and discussions are ongoing with Ofgem and Government
- The Our Code employee annual training for 2022 included expense fraud and information security dilemmas as part of a campaign to raise awareness of increased fraud risks

	People	Safety	Cyber
	Risk Category: Operational	**Risk Category:** Compliance/ Operational	**Risk Category:** Operational/ Compliance
	FY21: Capability of People	**FY21:** Health, Safety and Environment	
	Group Priority: O E Risk Climate: Stable	Group Priority: O S Risk Climate: Stable	Group Priority: S Risk Climate: Deteriorated
Overview	Risk of failure to attract, develop, engage and retain key talent. Risk of deterioration to the health and wellbeing of colleagues • Failure to attract and retain key capabilities and safeguard the health and wellbeing of the workforce across the business could have a detrimental impact on our ability to meet our strategic objectives • The cost of living crisis and inflation impact on colleague mental health and wellbeing • Labour market shortages for key skills impacting retention in some business units and locations	Risk of occupational, transportation, customer/third-party fatality or injury due to safety hazards • Our operations have the potential to result in personal harm • Significant Health, Safety and Environment (HSE) events could have regulatory, financial or reputational repercussions that would adversely affect some or all of our brands and businesses	Risk of failure to prevent impacts from the denial of service, cyber espionage and the related theft/disclosure of confidential/ customer data leading to reputational, regulatory and financial impacts A cyber-attack presents a risk to Centrica operations in the following ways: • Confidentiality: leakage of customer or company confidential data by threat actor, third party, staff or system error, either maliciously or by accident • Integrity: accuracy of Centrica's data due to malicious or accidental alteration by internal or external parties, or malicious actor • Availability: loss of assets, including data, due to cyber compromise Due to the diversity of Centrica's technology, the Company could suffer any or all of the above which could lead to: • Regulatory compliance impact or fines, including but not limited to, General Data Protection Regulations (GDPR), Payment Card Industry Data Security Standard (PCI), Financial Conduct Authority (FCA), Prudential Regulation Authority (PRA) and Smart Metering obligations (Ofgem) • Financial impact of investigating and recovering from a cyber-attack • Impact of negative media coverage on reputation and share price
Mitigations	• Quarterly Performance Conversations in place as part of the Terms & Conditions governance framework • Monitoring of key metrics including the Quarterly Employee Engagement index, absence and attrition rates. Proactive implementation of actions to support colleagues • Extensive focus on retention, building capabilities and providing targeted learning and development opportunities • Design and implementation of appropriate retention enhancement strategies • Continuous focus on our Values and culture aligned to our Purpose • Greater focus on diversity and inclusion at all levels of the organisation, and open access to colleague-led employee networks	• Continued investment in training to ensure maintenance of safe operating practices • HSE Management Systems are established to include policies, standards and procedures to protect employees, third parties and our environment • Assurance over our HSE processes and controls provided by our in-house HSE teams supported by external subject matter experts, where needed • Key senior HSE leaders to drive and embed HSE culture and competency, and continuous improvement in key metrics • Our approach to customer visits is continually reviewed to ensure that employees are operating in line with Government guidelines and that the health and safety of employees and customers is maintained	• Ongoing threat intelligence gathering, collaboration and information sharing with industry peers and National Cyber Security Centre • The Cyber Security Change Programme builds security capabilities and improvements in controls that increase the difficulty of targeting Centrica and being able to exploit weaknesses without detection • The Ransomware Minimal Viable Company Programme which aims to improve Centrica's ability to recover from a ransomware attack • Training and awareness campaigns and simulated phishing attacks in 2022 to raise awareness and highlight responsibilities in protecting data • Cyber-attack simulations to identify control gaps and undertake remediation activity
Developments	• New organisation structures have largely embedded with some discrete reorganisations in some business units and a major reorganisation is in progress in Spirit Energy as they prepare to repurpose the business for energy transition • FlexFirst successfully launched to combine working from home with time on site • Working groups established to help understand how the cost of living crisis is affecting colleagues. Resources and discounts made available to all colleagues are being actively promoted • Externally, the union environment remains challenging with trade unions focusing their effort on pay increases and protecting terms and conditions to support their members with increased pressure from the rising cost of living. Internally, we have successfully negotiated the April 2023 pay deal, which is now being implemented • Shadow Board established and acting as a forum to engage with the Centrica Leadership Team (CLT) to influence decisions, positively disrupt assumptions, and challenge executives' thinking to support colleague-centred decision-making	Management are enhancing existing HSE frameworks to respond to changing risks as the Group strategy evolves to include the following activities: • The reopening of Rough as a storage facility • The expansion of the services businesses • The construction of two new gas-powered peaking plants • Construction of a battery storage project at Brigg • The injection of hydrogen into a gas peaking plant at Brigg	• The Ukraine conflict has heightened the external cyber threat landscape. Increased cyber activity towards the oil and utilities sectors has been reported • The geopolitical situation and increased connectivity of Operational Technology (control systems used to manage domestic, commercial and national infrastructure) increases their vulnerability to cyber-attack • The volume, sophistication and velocity of ransomware attacks has evolved, with the most catastrophic bringing down IT systems within very short timeframes, and in some circumstances leading to publication of the exfiltrated data • The pursuit of our strategy into markets such as EV charging and localised battery storage will increase regulatory obligations to maintain a secure cyber posture. The anticipated increase in the scope of regulations will have a broader impact on Centrica requiring greater levels of reporting and significant consequences for non-compliance

Operational Asset Integrity

Risk Category: Operational/Compliance

FY21: Asset Production Process Loss of Containment

Group Priority	Risk Climate
CFG S	Stable

Risk that impaired structural or asset integrity, resulting from any of a failure in design, failure in appropriate maintenance & inspection, operating outside of design conditions and/or human error, leads to a major accident (such as loss of containment of flammable/hazardous materials or structural collapse) that could result in multiple fatalities and/or major damage to the environment

- Failure to invest in the inspection, maintenance and development of our assets could result in significant safety issues, such as personal or environmental harm, or asset underperformance through unplanned outages
- Failure to capture adequate return on our 20% nuclear investment due to operational issues or early station closures suppressing earnings and cash flows

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- The Group Annual Plan includes contingencies to cover events such as unexpected outages from assets
- Group-wide minimum operational and safety standards are applied to all assets, whether operated or non-operated, and adherence against them is monitored and reported
- Maintenance activity and improvement programmes are conducted across the asset base to optimise effectiveness and maximise production levels
- We use our presence on the Board of EDF Energy Nuclear Generation Group Limited to monitor the performance of the nuclear fleet
- Continued investment in training to ensure maintenance of safe operating practices
- HSE Management Systems are established to include policies, standards and procedures to protect employees, third parties and our environment
- Continuous engagement with regulatory agencies such as the Environment Agency, Oil and Gas Authority and UK Health and Safety Executive
- Assurance over our HSE processes and controls provided by our in-house HSE teams supported by external subject matter experts, where needed

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- As the Whitegate plant ages and we move to more flexible generation, plant reliability and safety risks will need to be carefully managed through proactive management, maintenance and investment
- We announced the reopening of the Rough gas storage facility, having completed significant engineering upgrades over the summer, and increasing the level of ongoing maintenance. The Group Insurance team continues to discuss the cost and benefits of business interruption cover with relevant business units
- The HSE Function works with the business to ensure effective HSE resources and competency operate consistently and effectively across the business
- Completion of the sale of Spirit Energy Norwegian assets, the majority of which were non-operated, completed in May 2022. As the majority of the assets were non-operated, there has been little impact on this risk. Spirit Energy continues to focus on maximising delivery of its gas production for the UK, repurposing assets for the energy transition and decommissioning activities
- Spirit Energy successfully decommissioned and removed the Hummingbird Floating Production System and Offloading vessel from the Chestnut Field (the last oil producing asset), thereby reducing the level of risk, particularly the risk of an oil spill

Climate Change

Risk Category: Strategic

Group Priority	Risk Climate
M S	Deteriorated

Risk of market, regulatory and policy changes driven by climate change affecting the ability of the Group to execute its strategy

- Increased pressure from Government, investors and customers to commit to meaningful carbon reduction targets
- Execution of Centrica Business Solutions strategy to realise opportunities from the energy transition
- Timing and execution of British Gas pivot to decarbonised heating, power and transport products and services
- Increased focus on 'greenwashing and greater rigour' on Renewables Guarantee of Origin, impacting renewable products and propositions

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- Monitoring of progress against People and Planet targets including net zero targets for our business and our customers
- Centrica's Climate Transition Plan, which outlines our approach to move to a low carbon future, was subject to a shareholder advisory non-binding vote at the 2022 AGM
- The SESC, which is chaired by an independent non-executive director, typically reviews climate change information and the Climate Transition Dashboard three times a year. The SESC additionally maintains oversight over material climate-related matters
- Our Climate Transition Plan has been incorporated into executive remuneration
- We have achieved full compliance in our 2022 Task Force on Climate-related Financial Disclosures (TCFD) reporting, reflected in pages 46 to 54
- British Gas Services & Solutions has established Net Zero Ventures to develop innovative and competitive products and propositions to gain a significant footprint in the growing low carbon market

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- Continued geopolitical focus on COP27 and on how corporations respond to climate change
- Completion of the sale of Spirit Energy Norway assets in line with our decarbonisation strategy
- A court case ruling against the UK Government applied pressure on them to develop and publish coherent plans on how to achieve the Sixth Carbon budget
- In the context of the cost of living and energy security crisis, the Government is undertaking a net zero review. The review will consider how to deliver against targets. Centrica is actively engaged and committed to influencing the shaping of the approach to the green transition in the UK and responds to Government consultations on related policy

The Group will reallocate capital investment to realise opportunities from moving to a low carbon future. Examples of diversified projects to build low carbon energy capability include:

- Solar farm at Codford
- Hydrogen initiatives including partnership with HiiROC, testing injection at Brigg, and hydrogen village trials in Whitby
- Battery storage development at Brigg
- Restarting gas storage at Rough, to meet short-term needs for the security of gas supply. Further investment could support potential repurposing of the asset for hydrogen storage
- Transitional use of peaking plants to aid the use of renewables in Ireland
- Launch of the inaugural Net Zero Index to understand public sentiment on climate change and any barriers to implementing changes that will help British Gas Services & Solutions develop relevant products and solutions. The availability of the Index will further help Government and other parties

Assessment of Viability Disclosure

Requirement

In accordance with provision 31 of the 2018 UK Corporate Governance Code the Directors have assessed the prospects and viability of the Group taking into account the business model (as set out in the Strategic report on pages 8 to 9), current position in the context of liquidity and credit metrics of the Group, and principal risks.

Assessment of prospects

The assessment considers the current position of the Group, the Group's strategy, longer-term market trends and customer needs, and the Group's principal risks as well as forecast cash generation against long-term obligations to repay debt and fund the defined benefit pension schemes.

Our business model is designed to allow us to focus on meeting the changing energy supply, services and solutions needs of our customers, helping them transition to a lower carbon future while positioning ourselves to deliver returns for shareholders and meet our broader obligations to society over the long-term.

Key factors in assessing the long-term prospects of the Group include the following:

1. The Group's competitive position today

Centrica has strong brands with large customer bases as the number one supplier in many of the markets in which it operates. In its core markets: British Gas Energy and British Gas Services are the largest residential energy supplier and home services provider in the UK; Bord Gáis is the second largest residential energy supplier in Ireland; and the Energy Marketing & Trading business is a leading route to market services provider across Europe. Centrica also has the largest heating engineer workforce in the country, who are highly trusted by our customers, and are well positioned to continue to support new fuels and technologies.

In assessing our prospects beyond the strategic planning period, the Board considers how these strengths position the company to grow long term shareholder value.

2. Market trends affecting future prospects

- commodity price volatility and its impact on the UK energy supply market;
- cost of living crisis and its impact on our customers;
- increasing progress and Government support for net zero, corporates committing to clear net zero targets;
- despite recent competitor supplier failures, competition may remain intense with margins under pressure within our retail business, and we expect that to remain the case as the market emerges from the current crisis;
- falling costs for battery, solar and wind, electric vehicle (EV) deployment accelerates, growing need for flexibility; and
- role of data analytics, artificial intelligence and automation increasingly important.

3. Customer needs

- hassle-free, empathetic, personalised and safe service. Offering solutions, not just products;
- responsible options (including green tariffs) and expert guidance to help them achieve their net zero goals;
- trusted and credible counterparty; and
- lower costs and greater efficiency.

We put customers' needs at the centre of everything we do and this is the core part of our strategy, as set out in the People and Planet and Strategic Report sections of this Annual Report on pages 39 and 8 respectively.

4. The Group's strategic objectives

The Group's strategic Purpose is to help our customers live sustainably, simply and affordably, as set out on page 7 of this Annual Report. This supports the assessment of the Group's prospects.

5. Principal risks facing the Group, as set out on pages 28 to 33

The risks we consider to be of greatest significance in assessing our prospects include:

- further political or regulatory intervention, including increased focus on Environment, Social and Governance interventions and responding to climate change;
- external risks associated with weather, commodity price movements and the cost of living crisis;
- access to sufficient financial facilities to support margin cash demands;
- credit risk;
- compromised asset production and health & safety impacts of process loss of containment; and
- risks associated with the effectiveness of our internal control environment in relation to cyber risk, data protection and customer conduct.

Climate change is the most important driver guiding Centrica's prospects today and is a core part of our Purpose as reflected by the actions we've taken, which include:

- we've outlined our plans for how we intend to decarbonise power, heat and transport through our Climate Transition Plan published in October 2021;
- we will continue to build out our green supply and solutions offerings for customers;
- we're training the next generation of apprentices to deliver low carbon technologies like heat pumps and EV chargers while exploring the future of hydrogen; and
- we're committed to creating additional green generation with up to £500 million to deploy through Centrica Energy Assets in low carbon and transition assets by 2025.

Good progress has been made on managing the prospects of the Group during 2022, including the completion of the sale of Spirit Norway on 31 May 2022 and the reopening of the Rough gas storage facility in September. We continue to simplify our management structure, reducing management layers and increasing the proportion of our colleagues who interact directly with customers, enabling us to put customers at the heart of everything we do. In addition, our balance sheet is now much stronger, with an adjusted net cash position as of 31 December 2022.

The Board has confidence in the long term prospects of the business. The Board believe that the strategic steps taken in 2022, and the Group's strategy and Purpose will set the Group up to be successful in the long term as market trends continue to evolve and key risks are managed.

Assessment of viability

The assessment is based upon the Group Annual Plan for 2023 and the longer-term strategic forecast for 2024 and 2025 which are approved annually by the Board. The Board continues to believe that a three-year time horizon is the appropriate timeframe to assess viability, and is also consistent with the Group's planning cycle and the period of reasonable visibility in the energy markets. The Group's focus on the energy supply and services businesses means the most significant risks continue to be shorter-term in nature including asset performance, commodity prices, weather and margin cash requirements.

Important context to the viability assessment is the management of the Group's financing profile through accessing a diverse source of term funding and maintaining access to carefully assessed levels of standby liquidity which support the Group's planned financial commitments. As at 31 December 2022, the Group had total committed credit facilities of £6.5 billion, of which £1.1 billion are temporary facility extensions that expire in mid-2023, £0.2 billion expire in 2024 and the remaining £5.2 billion expire in 2025. The undrawn committed facilities as at 31 December 2022 were £4.0 billion in addition to unrestricted cash and cash equivalents of £3.7 billion.

In the continuing environment of high and volatile commodity prices, the Group's portfolio provides increased opportunity for value capture and outperformance, but with significantly wider risk outcomes. The high price environment makes access to sufficient financial facilities a key focus for trading entities due to the requirement to hold sufficient collateral for mark to market positions, significantly increasing pressure on liquidity.

In addition, the cost of living crisis continues. Inflation rose above 10% in H2 2022 and could be slow to fall due to underlying pressures. As a result, the group is exposed to elevated levels of bad debt as customers struggle to pay their bills.

To reflect the current volatility of risk factors, Centrica has used judgement to determine severe but plausible scenarios and have modelled three versions of the viability assessment to give a high, base and low curve scenario. These scenarios reflect a range of reasonably possible increases or decreases in commodity prices due to market conditions. The price curves used for the high and low scenario are summarised in the following tables:

High curve	2023	2024	2025
NBP (p/th)	577	454	404
Baseload Power (£/Mwh)	504	339	254

Low curve	2023	2024	2025
NBP (p/th)	95	100	107
Baseload Power (£/Mwh)	146	148	127

Viability was initially assessed based on September prices. However prices between September and December have fallen. We have continued to monitor these price changes to ensure that our base, high and low curves remain appropriate and specifically whether our base assumptions remain within the high to low range. As a result of this exercise, the high and base price scenarios were not adjusted (as the base scenario remained within the high to low range), but we adjusted our low curve for baseload power to align to December prices, with a separate assessment performed on whether the Group would remain viable in the event that both NBP and baseload power fell further.

Note that the judgements within the financial statements, in particular impairment, have been based on actual forecast prices at the balance sheet date. Please see note 3 to the financial statements for further information.

The three scenarios share the same risks but, where relevant, the risks were flexed to reflect the Group's exposure in each scenario. We have modelled groups of risks within 'clusters'. It is not plausible that all risks would occur at the same time, and therefore each of the clusters is considered as a plausible combination of risks. The table below details the risk clustering and linkage to principal risks. Each of the clusters includes common risks throughout in addition to the risks associated with the cluster. The risks relating to commodity price, margin cash, bad debt, credit risk and letters of credit were selected as constant events in all three clusters.

Risk Cluster	Risk description	Links to Principal Risks	Risk >5% of opening headroom?*
Common risks	Commodity price impacts on earnings of asset-based businesses	• Financial Markets – Market Risk	Yes
	Increased margin cash requirements arising from adverse market conditions***	• Financial Markets – Credit & Liquidity Risk • Financial Markets – Market Risk	Yes
	Higher bad debt due to cost of living crisis	• Financial Markets – Market Risk • Financial Markets – Credit & Liquidity Risk	No
	Credit Risk: risk of financial loss due to counterparty default	• Financial Markets – Credit & Liquidity Risk	No
	Removal of 25% of drawn uncommitted Letters of Credit	• Financial Markets – Credit & Liquidity Risk	No
Cluster 1	Regulatory risks in relation to loss of sensitive data	• Political, Legal, Regulatory or Ethical Intervention/ Compliance • Cyber	No
	Operational impact of sustained employee industrial action	• People • Customer	No
Cluster 2	Significant disruption to the asset-based businesses leading to loss of production and earnings	• Operational Asset Integrity • Safety	Yes
Cluster 3	Significant adverse weather event	• Financial Markets – Weather Risk	Yes
See note below**	Increased collateral requirements arising from a single-notch credit rating downgrade	• Financial Markets – Credit & Liquidity Risk	Yes

* Headroom is calculated as undrawn committed facilities plus total liquid resources.

** A credit rating downgrade risk has only been applied to scenarios where the stressed credit metrics indicate Centrica would be at significant risk of downgrade by the agencies.

*** The largest margin outflow modelled in the scenarios is materially in excess of the £1.9bn margin cash position seen at the end of August 2022, and significantly higher than that in 2021 and 2022.

Group-wide assumptions include:

- No material acquisitions or disposals of Group business areas; and
- Centrica has a long standing relationship bank group and has recently received strong support from a number of the relationship banks for a temporary increase in committed credit facilities for the current winter period. As such, the Directors are confident in the ability of Centrica to refinance appropriate credit facilities and margin waiver facilities.

Liquidity requirements

Centrica has established enhanced processes in the trading businesses and in respect of Upstream to plan for and manage possible increased cash margin requirements. These processes include:

- monitoring reasonably possible scenarios for increased liquidity requirements as a result of changes in commodity prices and market conditions; and
- ensuring Centrica has sufficient headroom to meet reasonably possible liquidity requirements over the going concern period.

Centrica has also enhanced governance measures including establishing a Liquidity Working Group to monitor market conditions, trading activity, and the ability of counterparties to pay margin calls to Centrica, and to take action where appropriate.

Centrica uses sophisticated modelling and analysis of the volatile market conditions over the last two years and market forward data to determine severe but plausible scenarios of the liquidity requirements for the trading business and Upstream. These include high and low price scenarios which are reflected in the viability assessment. While these scenarios include assessing statistically to a 95% confidence level the market conditions that may arise in the future, they will not necessarily predict future conditions given markets are volatile. Therefore, Centrica maintains and monitors the liquidity requirements across the business to ensure sufficient headroom is retained.

Regular assessments are performed of the credit worthiness and liquidity of counterparties that Centrica trades with and pays and receives cash margin calls from. These include assessing the level of exposure to counterparties who are investment grade and non-investment grade, monitoring and dynamically managing credit limits and arranging credit enhancements such as requiring letters of credit from financial institutions.

Outcome of viability assessment

The viability scenarios have been assessed to confirm whether the Group would have sufficient liquidity available to meet its future planned financial commitments, and that the credit metrics calculated would not imply a sustained fall to below investment grade credit ratings (S&P BB+ and Moody's Ba1).

In order to reach a conclusion as to the Group's viability, the Directors have considered the following:

- Whether any of the scenarios and clusters of risks noted above breached the available headroom in the three-year period and concluded that sufficient headroom was available in all scenarios.
- Whether any of the scenarios and risks noted above indicated a deterioration in the credit rating metrics which would lead to a two notch downgrade to sub-investment grade. They concluded that the Group has a reasonable expectation that its net debt ratios would continue to sustainably support investment grade ratings (at least BBB- for S&P, and at least Baa3 for Moody's) for all scenarios.

While mitigations were not required in any of the above scenarios to ensure the Group was viable, additional mitigations could be deployed to increase headroom and reduce the risk of a credit downgrade, including reductions in operational and capital expenditure.

Reverse Stress Testing identified that there are some extreme risks that could theoretically result in Centrica entering a position whereby its financial resources were insufficient to meet its liabilities as they fall due. However, given the current financial strength of the company, the combination of events required to achieve this scenario is extremely unlikely to occur. We therefore believe that these risks do not represent a 'severe but plausible' threat to the viability of the company.

Conclusion

The Directors have considered all the above factors in their assessment of viability, including the availability of mitigating actions within their control in the event that one of the scenarios above materialises. We have performed sensitivity analysis that enables the Directors to confirm that they have a reasonable expectation of the Group's ability to continue to operate and meet its liabilities, as they fall due, over a period of at least three years.

Group Chief People Officer's Report

Jill Shedden
Group Chief People Officer

2022 has been an extraordinary year for Centrica. I am really proud of what all our colleagues have achieved together to support our customers, each other and our Company throughout the year.

Amongst our many successes we've donated £4.5 million to make a big difference to causes our colleagues are passionate about in our local communities and we are helping colleagues and customers as much as possible with ongoing energy and cost of living issues. We restarted returns to shareholders which will also benefit the majority of our colleagues who are or will become shareholders due to our Global profit share award.

Our HR function has made a huge contribution to Centrica as we have adapted to significant change in the business, supported our businesses during the most challenging of times and flexed with pace to meet unprecedented recruitment needs to ensure we have sufficient colleagues to support our customers.

Health, safety and wellbeing

Health and wellbeing is part of everything we do and we are building a supportive environment with an open and honest culture.

Our healthcare plan has been enhanced with additional wellbeing benefits and continues to be available to all UK-based colleagues and their dependants, giving peace of mind to colleagues and their families. Our data-driven approach provides real insight into our colleagues' key health risks and drives our strategy: to improve the health and wellbeing of all colleagues.

We utilise and leverage technology, have a 100-strong network of mental health first aiders across the UK business and provide a 24/7 emotional support line. Mental health training programmes are in place to support leaders and colleagues.

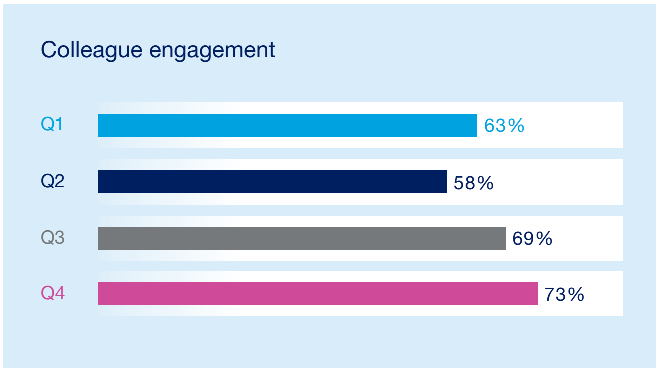
Through our wellbeing programme we are able to raise awareness of difficult and taboo subjects, such as the menopause, fertility, cancer and mental health. Our regular events with external and internal participants allow our colleagues to learn more and to share their experiences.

Looking after our colleagues through the rising cost of living

This year has presented many challenges and Centrica is committed to supporting colleagues especially through the cost of living crisis. We have set up a dedicated team to focus on cost of living support. A number of financial and non-financial initiatives have been implemented to support colleagues ranging from £1 lunches at all of our sites to providing additional mental health and wellbeing assistance for customer-facing colleagues. The team continues to monitor the external situation closely and to recommend additional intervention and assistance where necessary. In 2022 we made two separate cost of living payments to the majority of our colleagues and in the UK we continue to provide an allowance through payroll for all colleagues that are British Gas customers, to help with managing rising energy bills.

Colleague engagement

I am delighted that colleague engagement has continued to improve quarter on quarter throughout the year. In Q3 we exceeded our internal target of 63% and the Q4 result was 10% higher than our target at 73%. An engaged workforce ensures we are all focused on our Purpose, helping our customers to live sustainably, simply and affordably.



Global profit share award

In 2022 we also granted our first global profit share award to all colleagues, relating to our profits in 2021. The award was made in shares as we want our colleagues to share in our success as we continue to grow our business in the future. We will be making a similar award in shares in 2023, relating to our 2022 profits and this time, our improved absence performance across the business has also boosted the profit share pool which will be shared with all colleagues.

Supporting our colleagues' journey to net zero

Centrica is helping colleagues on the journey to cleaner and greener transportation, by leveraging Centrica products and services including a salary sacrifice scheme for electric vehicle (EV) leasing. This offers savings for both Centrica and our colleagues and it's a great opportunity for UK colleagues to access 'green' electric cars to support our commitment to net zero, reducing the carbon footprint of our fleet over time.

Listening to our people

We have put in place a Shadow Board which is a unique partnership with the Centrica Leadership Team to provide impartial insight, review and assurance on strategic topics relating to colleagues, customers and cash.

The role of the Shadow Board is to be a forum that the Group Chief Executive and Centrica Leadership Team will engage with to bring diverse perspectives from across the organisation into key discussions to ensure our values and standards are upheld. Through the Shadow Board, colleagues will be able to influence decisions, positively disrupt assumptions, and challenge the thinking of our leaders to support colleague-centred decision-making. The Shadow Board consists of nine colleagues from across Centrica.

Centrica stories

Jacqui's reflections on the Shadow Board

Having left school with a few GCSEs many years ago, I've had the opportunity to develop a wealth of experience and skills at Centrica. So when I heard they were creating a Shadow Board, I jumped at the chance to become its Chair, because I wanted to give something back.

The Shadow Board meets leaders regularly to share diverse perspectives from across the business and deliver colleague-centric decisions. And I'm incredibly proud of how we've worked together during our first year – from raising awareness and developing and supporting solutions for the challenges our engineers face, to strengthening our colleague engagement survey and providing feedback on how to bring our Purpose, Values and Strategy to life for colleagues.

In 2023, we'll build on this with priorities that include how to develop closer relationships with colleagues overseas and better support managers to ensure success. Following feedback, we will also run quarterly diversity network sessions to ensure our engineers are aware of, and have the same level of access to our support groups as our office-based colleagues.

9

Diverse colleagues on the Shadow Board, each serving an 18-month term

Developing our people

I am delighted that this year we recruited a further 367 apprentices, continuing to create new, highly skilled and well-paid British jobs. In addition to this we recruited 258 new employees via other training opportunities, including newly qualified and trainee pathways. 20% of our new colleagues were female via the combined engineering entry routes. In addition, our Ex-Forces programme got off to a strong start in 2022, hiring 143 former service personnel, spouses or family members.

- 3,010 internal moves & promotions happened in 2022
- 3,700 new colleagues joined us across the Group including 51 graduates, 57 summer placements and 15 Year in Industry colleagues

Colleague headcount full-time equivalent (FTE)

Colleague networks

I am incredibly proud that we have a number of active colleague-led networks that operate across Centrica. Our networks cover areas such as gender/sexual orientation, family, disability and ethnicity. I have highlighted some examples below.

Centrica Forces Network is a group of colleagues across all areas of Centrica who have either served in, or are serving reservists in the Armed Forces, or have an interest in being part of a community that supports these groups of colleagues. The objective is to create a diverse community that supports veterans and reservists within Centrica ensuring that we become an employer of choice for these groups.

Our Carers Network is a supportive group where colleagues are able to connect with others (who may or may not be carers) who can share ideas and information about any aspect of caring. This year the network and Carers UK collected two trophies at the Corporate Engagement Awards. Following the success of our three-year strategic charity partnership with Carers UK, we won bronze for Best Collaborative Approach and were highly commended in the Best Charity, NGO or NFP category. The partnership was recognised for its work to bring about a step change in the way that society recognises, values and supports carers. Whilst our strategic charity partnership has now ended, we continue to work closely together.

Jill Shedden, Group Chief People Officer
15 February 2023

People and Planet

Creating a more inclusive and sustainable future that supports communities, our planet and each other.

Our People & Planet Plan has five Group-wide goals that accelerate action on issues that matter deeply to our business and society, and where we're well-placed to make a world of difference – from achieving net zero[(1)] and creating the diverse and inclusive team we need to get there, to contributing to the communities we're all part of.

Whilst we've made really positive progress towards the majority of our goals, we're behind on some of our shorter-term milestones but are confident we'll get back on track in the years ahead. Unprecedented events including COVID-19, the collapse of failed energy suppliers and the rising cost of energy during the energy crisis, meant that we needed to shift our focus beyond the People & Planet Plan, to provide the urgent help our customers and communities need right now – including stepping up to give 10% of our British Gas Energy and Bord Gáis Energy profits to help people pay for the rising cost of energy.

(1) Net zero is the point at which there is a balance between human-related carbon dioxide (CO_2) being emitted into the atmosphere and the CO_2 taken out.

Over the next decade, we'll continue to harness the expertise of colleagues and collaborate with key stakeholders such as government and local communities, to drive the necessary action to deliver our People & Planet Plan and ensure we do business responsibly across our wider activities.

Ultimately, this will enable us to deliver on our Purpose of helping our customers live sustainably, simply and affordably whilst contributing positively to the United Nations Sustainable Development Goals (SDGs).

"2022 has been a year like no other and I'm really proud of the way we've worked together and with others, to provide the UK's largest voluntary support package for customers to help them with their energy bills, whilst making strong progress on our People & Planet Plan. We've a long way to go to achieve the inclusive and sustainable world we need, but I'm fully committed to making sure we get there."

Chris O'Shea, Group Chief Executive

+ Read more about our People & Planet Plan, Climate Transition Plan, SDGs and SASB disclosure amongst others at **centrica.com/peopleandplanet**

+ Read more about our non-financial KPIs on **pages 258 to 260**

Our People & Planet Plan

Supporting communities, our planet and each other

People

Supporting every colleague to be themselves to better serve our customers and communities

We want to:

- **Create a more engaged and inclusive team that reflects the full diversity of the communities we serve by 2030***
- **Recruit 3,500 apprentices and provide career development opportunities for under-represented groups by 2030** (1,000 apprentices by the end of 2022)

Planet

Supporting every customer to live more sustainably

We want to:

- **Help our customers be net zero by 2050** (28% carbon intensity reduction by the end of 2030)
- **Be a net zero business by 2045** (40% carbon reduction by the end of 2034)

- **Inspire colleagues to give 100,000 days to build inclusive communities by 2030** (20,000 days by the end of 2022)

Doing business responsibly

Underpinned by strong foundations to ensure we act fairly and ethically – from customer service to human rights

*All company and senior leaders to reflect 2011 Census data for working populations. This means 47% women, 14% ethnically diverse, 15% disability, 3% LGBTQ+ and 3% ex-service by 2030 (30% women, 13% ethnically diverse, 4% disability, 3% LGBTQ+ and 3% ex-service by the end of 2022). See page 40 for more.

Providing urgent help during the energy crisis

In 2022, the war in Ukraine led to global energy supplies constricting further and the cost of energy rising. Amidst the wider cost of living challenges, more and more people found it challenging to pay for their energy. With the duration of the energy crisis unknown, we urgently shifted our focus to do what we could to help. In the UK for example, we invested £25 million in customer service to handle a 50% increase in calls by hiring 700 additional UK-based customer service agents. We also committed £50 million to help homes and businesses with their energy bills, either through British Gas or via the British Gas Energy Trust which is an independent charity funded solely by British Gas, and helps anyone in need of assistance. As a result, we created the largest voluntary energy support fund for customers and our support will grow with our promise to voluntarily donate 10% of British Gas Energy's profit for the duration of the energy crisis. This is in addition to our mandated funding of the Warm Home Discount and Energy Company Obligation (ECO).

In Ireland during 2022, we similarly committed to donate 10% of Bord Gáis Energy's profit for the duration of the energy crisis. This equated to €3.6 million to support vulnerable customers with their energy bills. We also continued to work closely with charity partner, Focus Ireland, to support those at risk of or experiencing homelessness.

In total during 2022, we spent nearly £290 million helping vulnerable people with their energy[(1)] through expert advice, grants and energy efficiency measures.

(1) Comprises of £243.8 million in mandatory and £45.1 million in voluntary contributions, mainly through the Warm Home Discount, ECO and British Gas Energy Trust.

+ Read more about our support during the energy crisis on **pages 12 and 68**

People

Supporting every colleague to be themselves to better serve our customers and communities

Goal 1

By 2030, we want to:

Create an engaged team that reflects the full diversity of the communities we serve – this means all company and senior leaders to be 47% women, 14% ethnically diverse, 15% disability, 3% LGBTQ+ and 3% ex-service[(1)]

2022 Progress:

	All company	Senior leaders[(2)]
Women	30% ●	33% ●
– Excluding field engineers	41% ●	32% ●
Ethnically diverse	14% ●	9% ○
Disability	3% ○	3% ○
LGBTQ+	3% ●	0% ○
Ex-service	2% ○	3% ●

Progress against goals: ● On track ○ Behind

(1) Towards this, our milestone goal was to be 30% women, 13% ethnically diverse, 4% disability, 3% LGBTQ+ and 3% ex-service by the end of 2022. Our 2030 goal was based on 2011 Census data for working populations and beyond gender, 2022 progress was based on 70% of colleagues disclosing their diversity. For 2023 annual reporting onwards, our 2030 goal will be re-aligned to the recently released 2021 Census data for working populations with 48% women, 18% ethnically diverse, 20% disability, 3% LGBTQ+ and 4% ex-service.

(2) Senior leaders include colleagues above general management and spans senior leaders, the Centrica Leadership Team and the Board.

To build a more sustainable future, we need the best team – a diverse mix of people and skills, where different ideas can grow, and where everyone can succeed.

Our goal to reflect the full diversity of our communities is therefore essential but ambitious. Boosting the representation of women will be particularly challenging given our large engineering team reflects the male-dominated market, so it'll take time to tackle this sector-wide issue and build a more diverse talent pipeline through our apprenticeship programme (see Goal 2). In 2022 we did, however, make good progress by attracting, promoting and retaining more diverse talent. For example, the proportion of women across the company and among our senior leaders improved for the first time in a long time and we're now on track. And if we remove our engineering team from the data, our overall gender balance improves even further. Although we achieved gains across our ethnicity, disability, LGBTQ+ and ex-service representation in 2022, opportunities remain for improvement including through building on the success of our #ThisIsMe campaign to drive self-declaration in 2023, which will help us better understand who's working for us and where we need to focus action.

With our leadership team sharing an open letter to colleagues that set out our diversity and inclusion (D&I) action plan in 2021, we took important steps to deliver progress in 2022. This included:

- embedding tailored D&I dashboards alongside business unit action plans that are reviewed quarterly by leaders, and will help drive continuous improvement;
- confirming that FlexFirst was here to stay which enables colleagues to choose when they want to work from home, come into the office, or flex their hours. Around 90% of colleagues said it's helped provide the right work-life balance and has given parents, carers and those living in different regions, the chance to pursue development opportunities that otherwise wouldn't have been possible; and
- rolling out allyship training to leaders and mandating anti-racism training for all colleagues, to help continuously upskill and educate.

Through these activities and more, we've received external recognition for our efforts including earning a place in The Times Top 50 Employers for Women. In 2023, we'll refresh our goals in line with 2021 Census data for working populations and advance progress by continuing to embed our action plan whilst acting on colleague feedback.

Our wider diversity headcount

	Gender(1)				Ethnically diverse(1)(2)	
	2022		2021		2022	2021
	Women	Men	Women	Men	Ethnically diverse	Ethnically diverse
Board	**4 (44%)**	**5 (56%)**	4 (50%)	4 (50%)	**1 (11%)**	1 (13%)
Senior executives and direct reports	**24 (33%)**	**49 (67%)**	29 (32%)	61 (68%)	**6 (8%)**	6 (7%)
Senior leaders	**117 (33%)**	**243 (67%)**	99 (28%)	254 (72%)	**32 (9%)**	31 (9%)
All employees	**5,938 (30%)**	**14,190 (70%)**	5,421 (28%)	13,832 (72%)	**2,761 (14%)**	2,251 (12%)

(1) Headcount as at 31 December and based on overall headcount rather than headcount based on their full-time equivalent, to more accurately reflect the full diversity of our workforce. Read more about Board diversity on page 61.

(2) Based on 65% of colleagues in 2021 and 70% of colleagues in 2022, who voluntarily disclosed that they were from a Black, Asian, Mixed/Multiple or other ethnic group across the UK, Ireland and North America.

Goal 2

By 2030, we want to:

Recruit 3,500 apprentices and provide career development opportunities for under-represented groups (1,000 apprentices by the end of 2022)(3)

2022 Progress:

Apprentices 1,033

Progress against goals: On track Behind

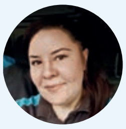
(3) Base year 2021.

To get to net zero and satisfy the wider needs of our customers, we need to create thousands of high-quality jobs – from Smart Energy Apprentices to customer service agents. To fill these roles, there's a huge opportunity to tap into the talent of under-represented groups to deliver a greener and more inclusive future. Towards this, we're recruiting 3,500 apprenticeships which is the equivalent of hiring one apprentice every day over the next decade. And by the end of 2022, we were on track with the goal having recruited 1,033 apprentices, whilst helping over 700 trainees professionally qualify in areas like gas and whitegoods.

In particular, our Ex-Forces programme got off to a great start in 2022, hiring 143 former service personnel and we're aiming to recruit 500 veterans, reservists, spouses and partners by the end of 2023. Meanwhile, following a targeted campaign aimed at women looking for a career change during COVID-19, progress against our ambition for 50% of our Smart Energy Apprentices to be women declined from 30% in 2021, to 20% in 2022. Whilst this remains higher than the gas engineer average of 0.2% women, the drop is disappointing so we're strengthening branding and marketing campaigns to continue to break down gender stereotypes and inspire more women into engineering.

Alongside this, we're working to encourage more young people to choose a career in energy by supporting Tech She Can's educational programme, Tech We Can, which has directly reached over 18,000 students.

Centrica stories



Chelsea's apprenticeship

As my son grew older, the time felt right to increase my work hours and find a new career. When I came across the Smart Energy Apprenticeship, it appealed to my love of science and learning but I wasn't sure if I'd fit in. Then I saw that British Gas were specifically targeting women, so I decided to give it a go.

I'm so glad I did! The team are really supportive, and I get treated just the same as everyone else. No two days are the same which I enjoy and it's really rewarding to leave customers with a smile on their face. I also flex my hours for the school run in the morning which makes life that little bit easier.

Having got a distinction in my apprenticeship, I'm really proud of all I've learnt and that I've now got a solid trade. And in the future, I'm sure there will be opportunities to cross-skill into electric vehicle (EV) charging or management. If more young girls see engineers like me, I hope they'll think it's a career they could do too.

3,500

Apprentices to be recruited with the ambition for 50% of recruits to be women by 2030

Goal 3

By 2030, we want to:

Give 100,000 days to build inclusive communities (20,000 days by the end of 2022)[1]

2022 Progress:

Days 12,987 (Behind)

Progress against goals: On track / Behind

(1) Base year 2019.

We're harnessing the passion of our people to build inclusive communities because strong communities are central to a more sustainable future. It's also a great way to help colleagues develop skills and improve engagement.

In 2022, we significantly ramped up volunteering and fundraising efforts with 2,098 days donated to help our local communities. This is a massive 600% increase from 2021 and brings our cumulative total to 12,987 days since 2019. Gains were made possible with the launch of 'The Big Difference' initiative which nearly 5,000 colleagues voted on and marks the move from a national to local approach that's mobilising everyone to get involved in local causes they care passionately about.

Despite this improvement, we missed our 2022 milestone due to COVID-19 limiting volunteering opportunities in previous years and our need to focus on providing the urgent support our customers have needed over the last two years with the collapse of failed energy suppliers and the energy crisis. But we'll get back on track as we work towards 4,000 volunteering days with 1 in 6 colleagues volunteering in 2023, and build to 1 in 3 colleagues by 2030.

Making a big difference in 2022:

400

Local and national charities supported – from Little Village in London and LOROS Hospice in Leicester, to the Trussell Trust, Age UK and Focus Ireland

7

New community organisations were awarded funding to progress their journey to net zero via our Energy for Tomorrow social impact fund, which has an annual budget of up to £600,000

£4.5m

Donated and fundraised for local communities, with over £1 million also supporting the crisis in Ukraine through the Disaster Emergency Committee

Planet

Supporting every customer to live more sustainably

Goal 4

By 2050, we want to:

Help our customers be net zero (28% reduction by the end of 2030)[2]

2022 Progress:

Reduction 6% (Behind)

Progress against goals: On track / Behind

(2) Net zero goal measures the greenhouse gas (GHG) intensity of our customers' energy use including electricity and gas with a 2019 base year of 183gCO_2e/kWh, normalised to reflect acquisitions and divestments in line with changes in Group customer base. Target aligned to the Paris Agreement and based on science to limit global warming, corresponding to a well below 2°C pathway initially and 1.5°C by mid-century.

Around 90% of our total GHG emissions (scope 1, 2 and 3), come from the sale of gas and electricity to customers (scope 3). So the biggest thing we can do to fight climate change, is to help our customers use energy more sustainably.

Towards this in 2022, we provided energy, services and solutions that enabled the GHG intensity of our customers' energy use to reduce by 6% against our 2019 base year, which was mainly driven by renewable and low carbon energy tariffs alongside energy efficiency and optimisation solutions. This was down from 17%[3] in 2021 following the reintroduction of fossil fuels into our electricity mix due to the escalating cost of green energy certification and the need to keep costs down for customers during the energy crisis. The zero-carbon content of our reported electricity fuel mix did, however, remain high at 75% versus the 55% UK average and is only slightly behind the glidepath for our long-term goal. We're exploring all options to decarbonise our electricity supply in an affordable way, which is key to delivering on our goal and ensuring a fair transition to net zero for our customers.

(3) Restated due to availability of improved data.

630,000 homes

The equivalent annual emissions we've saved through our energy, services and solutions

In 2022, we helped our customers advance towards net zero by supporting them with measures to decarbonise power, heat and transport by:

- launching British Gas Net Zero Ventures, a new business whose sole mission is to support customers with their journey to net zero by helping them adopt key technologies – from heat pumps to EV charging;
- installing over 2,300 heat pumps to date which is more than any other UK company, and we expect to ramp this up significantly with our market-leading price guarantee launched at the start of 2023;
- supporting growth in the take-up of EVs having installed nearly 28,000 charging points so far; and
- completing the Energy Company Obligation Phase 3 2019-22, providing energy efficiency measures to 150,000 homes, which is estimated to save around £2 billion on energy bills and 2mtCO_2e across the measures' lifetime – that's equivalent to avoiding seven billion miles being driven in a combustion engine car.

Goal 5

By 2045, we want to:

Be a net zero business
(40% reduction by the end of 2034)(1)

2022 Progress:

Reduction	6%† (On track)

Progress against goals: On track Behind

(1) Net zero goal measures scope 1 (direct) and 2 (indirect) GHG emissions based on operator boundary, which now includes all emissions from our shipping activities relating to Liquified Natural Gas (LNG) alongside the retained Spirit Energy assets in the UK and Netherlands. Non-operated nuclear emissions are excluded. Target is normalised to reflect acquisitions and divestments in line with changes in Group structure against a 2019 base year of 2,132,680mtCO_2e. It's also aligned to the Paris Agreement and based on science to limit global warming, corresponding to a well below 2°C pathway initially and 1.5°C by mid-century.

† Included in DNV Business Assurance Services UK Limited (DNV)'s independent limited assurance engagement using the International Standard on Assurance Engagements (ISAE) 3000 (Revised): 'Assurance Engagements Other Than Audits or Reviews of Historical Financial Information'. See page 258 or centrica.com/assurance for more.

In 2022, we continued to make progress against our net zero target with our total GHG emissions decreasing by 6%† against the 2019 base year. With our Whitegate power station resuming normal operations to play an important role in boosting energy security and providing a stable baseload power for intermittent renewables following an outage in 2021, savings were down from the 53%(2) temporary reduction achieved that year. Overall, we remain on track with our long-term goal.

The main driver of reductions in 2022 from the 2019 base year, arose from our oil and gas operations, which included closing our Hummingbird oil production offshore facility in the UK North Sea which is our last remaining oil production facility. Sustainable savings were also secured via our low carbon fleet initiatives such as rolling out EVs, delivering property efficiencies across lighting, heating and cooling systems, alongside property rationalisation and lowering occupancy as a result of FlexFirst which lets colleagues choose when they want to come into the office to connect and collaborate or work from home (see page 40).

As set out in our Climate Transition Plan, we'll continue to cut emissions by focusing on delivering energy efficiency and optimisation services, alongside low carbon technologies and cleaner energy (see page 51).

11.6GW

Route-to-market for renewables under our management, which can power around 10 million homes

70%

Our GHG emission reduction over the last decade following our strategic transformation away from most of our carbon intensive operations, to provide low carbon services and solutions for customers

11.5m

Electric miles driven by our British Gas fleet in 2022 – equivalent to driving around the world more than 460 times

To get to net zero, we remain committed to driving emissions out of our own activities and identifying opportunities wherever possible to support the adoption of lower carbon energy for our customers. This involves securing up to 800MW of low carbon and transition assets by 2025 that drive the transition forward including solar, flexible generation and battery storage, whilst exploring the conversion of our Rough gas storage facility to store hydrogen in the long term (see page 51).

It is, however, becoming increasingly clear that the path to achieving net zero by 2050 is unlikely to be linear in the context of a challenging geopolitical environment, where security of supply is a real risk for consumers in the markets in which we operate. We know that some investment decisions specifically geared towards enabling the energy transition and supporting energy consumers, may make our own path to net zero by 2045 more challenging in the short term, such as the development of two new flexible gas-fired generation plants in Ireland alongside our LNG activities (see pages 23 to 24). However, we see these investments as being in line with the view of policymakers that gas will be a key transition fuel(3) and as such, critical to support energy security until the issue of intermittency in renewable energy is addressed during the transition. Equally, national infrastructure that we depend upon to deliver our targets remains very much in its infancy – for example, plans to fully electrify our own fleet of vehicles by 2025, has been materially hampered by the UK's failure to develop a public charging network at scale over the past two years. We'll therefore continue to play our full part in the policy debate to secure a framework that facilitates the adoption of greener forms of energy.

(2) Restated due to LNG shipping and Spirit Energy's remaining assets moving into scope in 2022.
(3) British Energy Security Strategy, April 2022.

Our Foundations

Our People & Planet Plan is underpinned by strong foundations that ensure we act fairly and ethically.

Customers

We've been making big investments to deliver a better service for customers. Towards this in the UK, we recruited around 800 engineers to rebuild capacity and hired 700 additional UK-based call service agents. As a result in 2022, British Gas Services & Solutions Engineer Net Promoter Score (NPS) improved by four points to +64, whilst our British Gas Energy Touchpoint NPS rose by two points to +13 despite the challenging operating environment. In both the UK and Ireland, we've seen complaints increase which broadly reflects the significant rise in global wholesale and commodity prices impacting customer bills (see pages 22 to 24).

Colleagues

We want our people to feel safe, engaged and rewarded. Tragically, we experienced our first work-related fatality in six years when a British Gas engineer lost their life after being involved in a road traffic collision. And whilst our Tier 1 and 2 process safety incident frequency rate improved to zero with no events occurring compared to three Tier 2 events in 2021, our total recordable injury frequency rate rose by 5% to 1.12 per 200,000 hours (see page 27). Safety remains front-of-mind, with the need to continually reinforce a strong safety culture and advance controls and monitoring. In particular, with the majority of incidents occurring in British Gas Services & Solutions due to the size of the business and nature of work delivered, we'll enhance new starter safety training and aim to further embed procedures in 2023. Alongside physical health, we're mindful of the impact that the cost of living crisis may have on colleague wellbeing. So we provided two cost of living payments to colleagues and ran campaigns that talked about the importance of being open about mental health whilst encouraging use of our suite of support which includes a company-funded benefit healthcare plan for all, a wellbeing app, and our 100-strong network of mental health first aiders (see page 37).

Support like this as well as an improvement in trust in senior leaders amongst other things, has helped improve our engagement score by 18% to 73% favourable in 2022. This surpasses our goal of 70% by the end of 2023. With engagement being key to having a happy and productive team, we'll build on this with our continued focus on providing a more inclusive and supportive place to work.

As a responsible employer, we also reward our people fairly. This includes paying at least the Real Living Wage in the UK and upholding equal pay. In 2022, our gender pay gap reduced by 7% to 23% median and is driven by more men working in higher paid roles like engineering, with more women in valued but lower paid jobs like customer service. We're one of few companies to have voluntarily published our ethnicity pay gap which is driven by similar factors as gender, and likewise improved by 3% to 10% median. Tackling the pay gap won't be quick or easy, but we hope to continue to help transform our business, sector and society as our People & Planet Plan gets fully underway (see pages 40 to 41).

Communities and ethics

Our Code and Our Values help us operate in a way that's beneficial to communities by setting out the high standards we expect. For example, Our Code includes our commitment to uphold and protect human rights. We therefore take action to ensure colleagues and workers in our supply chain are safeguarded from abuses through activities such as risk-based training, reviewing social and environmental standards via ongoing due diligence, and monitoring of supplier selection and renewal. If suppliers receive a high-risk rating relating to the country where they operate or the products and/or services provided, we consider appropriate action which may involve conducting a third-party audit to better understand the level of risk or ending our relationship and reporting the abuse. In 2022, we rolled out on-the-ground audits to nine sites and issued 7,245 remote worker surveys spanning garment manufacturing and electrical products across Bangladesh, Cambodia, China, Hong Kong, Pakistan and the UK. Whilst we identified no serious non-conformance, we agreed 61 improvement opportunities with suppliers to continuously help make a positive contribution in raising standards on labour as well as health and safety. The majority of actions have now been completed subject to sign off by the auditor, with the rest due to be completed in 2023. To date, we've found no instances of modern slavery but we remain vigilant.

Our Code also provides clear guidance on bribery and corruption. We prohibit any improper payments, including facilitation payments regardless of value or jurisdiction, and exchange gifts and hospitality responsibly, declaring them on a register. Anti-bribery training is also provided for higher risk roles and our Financial Crime team run third-party risk management screening. Due diligence and monitoring is additionally undertaken across supplier selection and contract renewals including compliance with sanctions on Russia. A register is used to record and manage potential or actual conflicts of interest.

During 2022, 98% of colleagues completed refresher training on Our Code and confirmed they'd uphold its principles. If anyone has concerns about Our Code being contravened, they can raise them via our confidential Speak Up helpline. We had 1.5 reports of concern per 100 employees in 2022 which largely aligns with the external benchmark of 1.3, and illustrates that colleagues feel safe to speak up. Reports are investigated by the Ethics and Compliance team, with quarterly monitoring via the Safety, Environment and Sustainability Committee as well as the Audit and Risk Committee, with matters brought to the attention of the Board as appropriate.

+ Read more in our Modern Slavery Statement at **centrica.com/modernslavery**

Environment

Monitoring and managing our wider environmental impact is really important. During 2022, our water consumption increased by 30% to 317,760m^3 whilst waste also rose by 3% to 18,686 tonnes. This was largely due to Whitegate resuming normal operations following an outage in 2021 and more colleagues choosing to work from the office compared to the previous year.

Top 3

Our leadership position in the CCLA Mental Health Benchmark for the UK

Non-Financial Information Statement

In line with the Non-Financial Reporting Directive, we have set out where the relevant information we need to report against can be found.

This includes an explanation of the relevant Group policies which relate to the below matters and an overall summary of their effectiveness, including specific examples of how these policies are implemented, any due diligence processes conducted and outcomes.

Reporting requirement	Section
Business model	Our Strategy & Business Model – pages 8 to 9
Reporting requirement and policy position Our Code sets out our position on key issues by providing a high-level summary of key policies that form the foundation for how we do business. + Read more at **centrica.com/ourcode**	**Due diligence and outcome**
Colleagues Our policy states that we work collaboratively to create a workplace that has a respectful and inclusive culture whilst offering fair reward and recognition. We're also committed to working safely and provide proactive support to ensure colleagues' health and wellbeing.	• Stakeholder Engagement – page 13 • Principal Risks and Uncertainties: People, Safety and Operational Asset Integrity – pages 32 to 33 • Group Chief People Officer's Report – pages 37 to 38 • People and Planet – pages 40 to 42 and 44 • Key Performance Indicators (KPIs) – pages 27, 40 to 42, 44 and 258 to 259
Environmental matters This policy sets out that we endeavour to understand, manage and reduce our environmental impact. Towards this, we will play our part in the transition to net zero.	• Chairman's Statement – page 3 • Group Chief Executive's Statement – page 5 • Macro Trends – page 10 • Stakeholder Engagement – pages 12 to 13 • Business Review – pages 23 to 25 • Principal Risks and Uncertainties: Energy market, Government and regulatory intervention, Political, Legal, Regulatory or Ethical Intervention/Compliance, Operational Asset Integrity and Climate Change – pages 29, 31 and 33 • People and Planet – pages 42 to 54 • KPIs – pages 27, 42 to 44, 52 to 53, 258 and 260
Social matters Our policy states that we will treat all of our customers fairly. As part of this, we strive to provide services and solutions that meet their needs as well as care for customers who need extra support. We also want to make a difference and help create more inclusive communities. We partner with community and charity organisations on key issues and inspire colleagues to volunteer and fundraise.	• Chairman's Statement – page 2 • Group Chief Executive's Statement – pages 4 and 6 • Market Changes – page 11 • Stakeholder Engagement – pages 12 to 13 • Business Review – pages 22 to 24 • Principal Risks and Uncertainties: Inflation and cost of living, Supply chain, Customer, Political, Legal, Regulatory or Ethical Intervention/Compliance and Safety – pages 29 and 31 to 32 • People and Planet – pages 40, 42 and 51 • KPIs – pages 27, 22 to 24, 40, 42 and 258 to 260
Human rights This policy commits that wherever we work in the world, we respect and uphold the fundamental human rights and freedoms of everyone who works for us or with us.	• Stakeholder Engagement – page 13 • Principal Risks and Uncertainties: Political, Legal, Regulatory or Ethical Intervention/Compliance – page 31 • People and Planet – page 44 • KPIs – pages 44 and 260
Anti-bribery and corruption Our policy commits us to working with integrity, within the laws and regulations of all the countries in which we operate and in accordance with recognised international standards. This includes not offering or accepting bribes or other corrupt practices. We will not tolerate any form of bribery or corruption from suppliers.	• Principal Risks and Uncertainties: Political, Legal, Regulatory or Ethical Intervention/Compliance – page 31 • People and Planet – page 44 • Based on materiality, KPIs specific to anti-bribery and corruption are not reported externally.

Task Force on Climate-related Financial Disclosures

Climate change is one of the greatest challenges facing society. As an energy company, we play a pivotal role in helping our customers, communities and our business reach net zero.

We believe it's therefore important to share our action and plans on climate-related matters in a transparent and robust way. That's why across our business (see pages 8 to 9), we were early adopters of the TCFD and why we've achieved full compliance for the second year running in our 2022 reporting.

Governance

Climate change is an increasingly important issue for the Board, so its governance is embedded throughout the business – from our Board, to colleagues in our business (see diagram on next page).

The Board, and in particular our Group Chief Executive, has regular engagement with investors, government and regulators on climate change – whether that's on the technologies and incentives needed for the UK to reach net zero, or understanding more about our Climate Transition Plan (see page 51). It's vital therefore that the Board continuously strengthens capabilities on climate change to ensure they've the wide range of skills needed across energy, regulation, geopolitics and technology to reduce risk and maximise opportunities.

With this in mind, management's role in assessing and managing climate-related matters was strengthened during 2022-23. This included:

- 'climate change and sustainability' added as one of 11 criteria used in the Skills Matrix to assess Board capability, spanning a deep understanding of climate science, climate risk and mitigation, alongside evolving stakeholder expectations. 50% of our Board were identified as having these competencies when assessed in 2022, which we believe provides the necessary capability to effectively govern climate matters;
- a deep-dive session on greenwashing of climate and sustainability-related matters was run for the Board by internal and external experts;
- climate risk and opportunities were further embedded into strategic planning processes through updating and enhancing our climate scenario analysis with the business unit strategy teams, alongside the implementation of a new Group investment framework containing a number of specific net zero tests; and
- progress against our Climate Transition Plan was incorporated into the remuneration scheme for Executives. The 'Restricted Share Plan' will vest every three years and is subject to an underpin of the Remuneration Committee assessing performance across a range of financial and non-financial KPIs which includes our Climate Transition Dashboard, as well as any material risk of regulatory failures (see page 95).

Our governance and disclosure is strongly influenced by the materiality of Environmental, Social and Governance (ESG) matters, including those that are climate-related. We identify issues and assess materiality through a number of methods including direct engagement with stakeholders such as investors and government, customer surveys and our TCFD financial materiality thresholds. Through identification of these issues together with associated laws and regulations, management teams are able to focus on what we need to measure and report. We know what's important will shift over time as stakeholder needs change and the regulatory landscape evolves, so we'll continue to assess and align our approach in future years.

Listing Rule Compliance

We've complied with the requirements of LR 9.8.6R, by including climate-related financial disclosures that are consistent with the four TCFD pillars and the 11 recommended disclosures that are set out on page 54.

TCFD | TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Signatories of the TCFD since 2020

'A' grade leadership rating for action and disclosure on climate change by CDP

CDP DISCLOSURE INSIGHT ACTION

A diagram of our climate governance

The Board

Has ultimate responsibility for climate change and delegates authority to its Committees

- Oversees People and Planet-related matters including climate change, whilst prioritising material issues and setting strategy
- Challenges management on progress against climate targets and ambitions as well as ensuring the Company maintains a robust risk management framework, encompassing climate risks and opportunities
- Provides final sign-off on People and Planet annual reporting
- Reviews strategic and financial planning to ensure the full integration of climate considerations, and that opportunities to transition to net zero are maximised
- Chaired by Scott Wheway with attendance including the Group Chief Executive, who has overall accountability for climate change and regularly attends Committee meetings as well as chairing the CLT

+ Read more about our **pages 56 to 67**

Challenge

Report

Our Committees

Receive regular updates from senior leaders to ensure robust challenge and review, whilst outputs are shared with the Board

Safety, Environment and Sustainability Committee (SESC)

- Primarily responsible for supporting the Board in overseeing climate change, which is a standing item at each of the three annual meetings
- Assesses and approves proposals relating to net zero targets and the Climate Transition Plan, whilst monitoring progress, risks and opportunities
- Reviews annual reporting and associated requirements like TCFD
- Monitors stakeholder views including on climate change
- Oversees climate-related issues at the CLT
- Chaired by Heidi Mottram, Independent Non-Executive Director

+ Read more on **pages 82 to 83**

Audit and Risk Committee (ARC)

- Meets quarterly
- Reviews mitigations related to Principal Risks and opportunities for climate change
- Oversees and informs Group audits, financial statements and non-financial disclosures
- Manages effectiveness of whistleblowing
- Oversees audit and risk at the CLT
- Chaired by Kevin O'Byrne, Independent Non-Executive Director

+ Read more on **pages 72 to 79**

Remuneration Committee

- Meets at least four times a year
- Ensures that Executive Directors are appropriately rewarded, with climate change considered as part of remuneration arrangements
- Chaired by Carol Arrowsmith, Independent Non-Executive Director

+ Read more on **pages 84 to 103**

Challenge

Report

Centrica Leadership Team (CLT)

Provide ongoing oversight and challenge on climate strategy

CLT – As frequently as needed at the eight meetings held each year and chaired by the Group Chief Executive, the CLT monitors, assesses and informs progress and plans relating to our net zero targets and Climate Transition Dashboard alongside Principal Risks and opportunities, whilst reviewing Group-wide investment opportunities which considers the potential impact on delivering net zero as part of the investment framework

Challenge

Report

Sub-groups and sub-Committees

Support leadership on integrating climate change into strategy

TCFD working group – Ongoing engagement led by Group Environment with Strategy, Risk, Finance and Reward, to fulfil mandated requirements and embed climate strategy Group-wide(1)

Group Risk & Controls Committee – Chaired by the Chief Risk and Audit Officer with business unit Managing Directors and Chief Financial Officers in attendance; risks and opportunities alongside controls to manage Principal Risks are evaluated quarterly (see page 28)

Challenge

Report

Business units

Follow and feedback on climate strategy

Managers and teams – Operationalises climate change considerations in line with Group strategy

Risk owners – Identifies, assesses and mitigates climate risks and opportunities

(1) Group Head of Environment develops and socialises climate change strategy and progress, whilst co-ordinating and influencing related activities. Director of Group Strategy embeds climate change into our strategic planning and investment frameworks. Group Head of Enterprise Risk and Controls integrates climate risk and opportunities into the Enterprise Risk Management (ERM) Framework. Head of Accounting Reporting and Tax supports the business to understand the financial impacts of net zero. Group Head of Reward integrates ESG targets into remuneration frameworks.

Strategy

In 2022, we assessed our strategic resilience to climate change using 10 independent climate scenarios that are most relevant to our business and national climate targets, within our key markets of the UK and Ireland. These were the same scenarios used in 2021 but updated to the most recent versions. This allows us to robustly test the implications on each Centrica business of various plausible pathways relating to global warming ranging between 1.5°C to 4°C[(1)]. We did this using our in-house scenario analysis model, which assesses the potential positive and negative implications of each climate scenario on our gross margin (GM) for key services and solutions alongside asset valuations over the short, medium and long term, corresponding to 2025, 2035 and 2050. We consider this time horizon appropriate as it aligns with our net zero targets as well as our Climate Transition Plan, and encompasses the expected lifetime of the vast majority of our assets as well as the materialisation of key potential transitional risks and opportunities across the Group. We also recognise that scenarios extending this far out into the future are subject to significant uncertainties and carry material dependencies which should be considered when seeking insights.

Our scenario analysis showed that based on our strategic plans and capabilities, we remain well positioned to mitigate the risks and seize the opportunities related to climate change. Whilst some areas of our business will inevitably face greater disruption than others as the world increasingly decarbonises, our modelling suggests an overall net financial benefit for the Group across all scenarios as we continue to evolve in line with the needs of the energy transition and progress our Climate Transition Plan ambitions (see page 51), to ensure that we deliver on our Purpose of helping our customers live sustainably, simply and affordably.

As set out in the table on the next page, parts of our business are exposed to potential transitional risks and opportunities such as those relating to policy and regulatory changes which range from ‘low’ to ‘high’ in significance over the longer term. We recognise that the potential for risks to manifest in any given scenario is subject to uncertainty, as are the adjacent opportunities and our ability to pivot effectively and secure the value they offer. We therefore fully consider this uncertainty when assessing our strategic resilience to decarbonisation. For example, the key risk for businesses like British Gas and Bord Gáis Energy primarily relate to the gradual phase-out of natural gas in heating, which although an essential transition fuel in the mid-term, could require a shift in the range of services and solutions offered to our customers in the future. We believe we’re well positioned to pursue the opportunities created by this shift, given our trusted brands have all the necessary systems and capabilities in place to adjust from the trading and sale of gas and electricity to a system more heavily dependent on electricity and hydrogen. Similarly our market-leading engineering teams primarily install gas heating solutions today, but can be upskilled via our world-class training facilities. And we’re already enhancing our strategic resilience by establishing positions in low carbon solutions like heat pumps, EV charging and hydrogen, which will become an increasingly important focus now that we’ve launched British Gas Net Zero Ventures. Meanwhile, whilst Centrica Business Solutions provide some fossil fuel-based solutions to customers, the business was created to help drive the energy transition forward and over the last couple of years, we’ve increasingly ramped up investment in renewable and low carbon asset development such as solar and battery storage, and are helping more and more companies with bespoke action plans to get to net zero. All growth plans relevant to these key opportunities, are incorporated into budgets and business plans, with appropriate metrics and targets to monitor progress (see pages 52 to 53). They are also considered and factored into accounting assumptions, where relevant and in accordance with the specific accounting requirements (see note 3 to the financial statements).

(1) Climate scenario global warming measured out to 2100.

Net financial benefit

Our modelling suggests an overall net financial benefit for the Group across all climate scenarios and time periods assessed

Scenarios we’ve used:

- Transitional impacts are assessed using the National Grid Future Energy Scenarios comprising of four different pathways for the future of energy out to 2050, where assumptions on energy demand, production and use cases are adjusted. This allows detailed modelling of the potential impacts of the energy transition in the UK and Ireland at the individual product and commodity level, such as the demand for natural gas, electricity, hydrogen and the adoption of technologies like heat pumps, EVs and insulation. Where necessary, we adapt the scenarios to better reflect the Irish context including the higher proportion of off-grid consumers.
- Physical impacts are assessed using three different scenarios based on the Intergovernmental Panel on Climate Change Representative Concentration Pathways. The scenarios allow physical climate attributes to be modelled such as temperature and sea level rise as well as flooding and extreme weather, across differing average temperature rises resulting from varying radiative forces.
- To assess asset impairment, we use the International Energy Agency Net Zero Emissions scenario and Aurora Net Zero Mixed & High RES scenarios, which model 1.5˚C pathways to net zero for the energy sector. This allows us to model the potential impact on global and regional demand for different energy sources responding to drivers such as carbon pricing. This in turn affects commodity prices and the potential implications for the valuation of gas and power assets.

Summary of our most material risks and opportunities[1]

Impact on gross margin (GM)

0-5% GM	5-10% GM	>10% GM

TFCD category	Climate related trend	Potential financial impact		Potential materiality: 2025 (short term)	Potential materiality: 2035 (medium term)	Potential materiality: 2050 (long term)	Strategic response and resilience
Transition: Policy, Markets and Technology	Transition away from fossil fuelled heating	**Risk:** Reduced GM from the sale and servicing of natural gas residential boilers and commercial Combined Heat and Power (CHP)	>2°C	0-5% GM	0-5% GM	5-10% GM	• Strategic aim to remain the market leader in heating solutions in the UK and Ireland (UK&I), whilst growing market share in heating installs • Installation of hydrogen-ready boilers and CHP
			1.5°C	0-5% GM	5-10% GM	>10% GM	
Transition: Policy, Markets and Technology	Growth in low carbon heating market	**Opportunity**: Increased sales and servicing of electric and hydrogen fuelled heating systems	>2°C	0-5% GM	5-10% GM	5-10% GM	• Heat pump business launched with material growth plans, aiming for 20,000 installs a year by 2025 and build from there • Partnering in UK hydrogen use trials and research and development into low carbon CHP to grow adoption and capability
			1.5°C	0-5% GM	>10% GM	>10% GM	
Transition: Policy, Markets and Technology	Transition away from natural gas	**Risk:** Reduced GM from the sale of natural gas and energy efficiency	>2°C	0-5% GM	0-5% GM	>10% GM	• Strategic aim to grow customer numbers in UK&I energy supply
			1.5°C	5-10% GM	>10% GM	>10% GM	
Transition: Policy, Markets and Technology	Growth in low carbon heating market	**Opportunity:** Increased sales of electricity and green/low carbon hydrogen	>2°C	5-10% GM	5-10% GM	>10% GM	• Systems and capabilities in place to pivot towards trading and selling hydrogen • Partnering in hydrogen production and use trials to grow capability and adoption
			1.5°C	5-10% GM	5-10% GM	>10% GM	
Transition: Markets	Growth of EV transport market	**Opportunity:** Access to new and growing value pools related to EV charging installs, operation and maintenance (O&M), and energy supply	>2°C	0-5% GM	5-10% GM	>10% GM	• British Gas Net Zero Ventures launched with aim to become a leader in EV charging infrastructure installs and O&M • Ambition to install up to 100,000 EV charging points per annum by 2025
			1.5°C	0-5% GM	>10% GM	>10% GM	
Transition: Energy Source	Growth in demand for renewable energy	**Opportunity:** Strong growth in the market for low carbon and transition assets driven by decarbonisation	>2°C	0-5% GM	0-5% GM	0-5% GM	• Strategy to invest up to £100 million each year by 2025 to build a low carbon and transition asset portfolio of more than 800MW • Value derived from install, O&M and asset ownership
			1.5°C	0-5% GM	5-10% GM	5-10% GM	
Physical: Chronic	Rising mean temperatures	**Risk:** Reduced sales of natural gas and electricity for heat	4.3°C	0-5% GM	0-5% GM	5-10% GM	• Strategic aim to grow customer numbers in UK&I energy supply • Heat pump business launched with material growth plans – can also provide cooling
			1.6°C	0-5% GM	0-5% GM	0-5% GM	
Net Impact for Group			>2°C	+	+	+	• Analysis suggests an overall net financial benefit for the Group across all scenarios, based on our strategic plans, portfolios and capabilities
			1.5°C	+	+	+	

(1) Materiality is based on Group GM for Centrica plc 2021. A well-below and well-above 2°C scenario for global warming has been used to best demonstrate the spectrum of proactive and inactive progress on climate change in our key markets, and the impact this may have on our business. In the analysis which spans over 95% of the Group, this table includes our most material risks and opportunities together with the inclusion of our most material physical risk because whilst its less material than all other key risks in the long term, it's important to transparently show the net impact of physical risk on GM. The table concludes by showing an overall net financial benefit for the Group across all climate scenarios and time periods assessed.

Moreover, not only do most modelled opportunities exist within markets that we're already well established in, but they're also associated with relatively mature technologies such as EVs, electric heat pumps, battery storage and solar. The only high-impact opportunity identified that's reliant on more nascent technology is the use of clean hydrogen for heating. We've therefore been proactive in getting involved in research and development opportunities within the UK, as demonstrated by our role in the hydrogen village trials in Whitby and our investment in early-stage hydrogen production technology with HiiROC.

In terms of our physical risks, such as those associated with extreme weather in the UK and Ireland where we have material operations, we enhanced our assessment in 2022. This included testing existing analysis with additional modelling sources and assessing the risk of increased wave height to our offshore assets. Similar to 2021, our analysis confirmed that our asset businesses which consists of Centrica Storage Limited and Spirit Energy, are exposed to risks that are 'low' in significance over the near and longer term. This is because the remaining lifespan of these assets meant that modelled extremes had limited impact. However, having enhanced our assessment of the potential impact from a rise in mean temperature, we identified a potential 'medium' risk by 2050 in an extreme >4°C warming future, due to a reduction in energy demand for heating. This risk will be partially offset by an increase in cooling demand and is countervailing to many of the transition risks, providing a natural hedge for the Group.

We also assessed the risk of asset impairment based on price forecasts aligned with a 1.5°C scenario, whereby our most exposed assets were our gas production fields alongside our investment in nuclear. We found that the impact on the value of our gas assets was relatively 'low' due to existing impairment headroom, whilst our investment in nuclear would be impaired by around £100 million, as baseload power price scenarios are lower under net zero price forecasts (see note 7 to the financial statements). Further details on how the Directors' have considered the impact of climate risk and opportunities on the wider financial reporting judgements and estimates are provided in note 3 to the financial statements.

In 2022, we deepened our assessment of the potential impact climate change could have on our supply chain. Through our Responsible Procurement framework, we identified all strategic suppliers who provide vital products that we need to run and grow our business, as well as our 'bottleneck' suppliers who provide us with products that are only available through a small number of companies, and assessed the potential of their operations relevant to our business being exposed to climate change risks. We identified one boiler assembly site located in an area of the UK with a potential risk of flooding, however, the risk was assessed as 'low' even in the most extreme warming scenario. We additionally looked at our energy supply chain and concluded the risk is 'low' in significance over the near and longer term, with risk effectively managed through defined hedging strategies and collaboration with counterparties. As with all risks identified, we'll continue to monitor these risks so that we can act if the level of anticipated impact rises.

All modelled scenarios contain significant disruption to our markets as the energy strategy evolves and we'll need to adapt accordingly. Our assessment of the capital expenditure required to manage potential risks and opportunities required by decarbonisation, remains in line with current plans and balance sheet. Moreover, we've identified numerous opportunities for capital investment into new and existing assets and technologies required by decarbonisation. For example, we're investing up to £100 million in low carbon and transition assets annually from 2020 to 2025[1], and we're exploring investing up to £3 billion in the mid-term to convert assets that'll play an important role in the transition to net zero, including carbon capture and storage as well as hydrogen storage (see page 51).

Our assessment of how climate-related issues might affect our business were integrated into our annual strategic and financial planning process. In 2022, we again addressed net zero and the energy transition in all business unit strategic plans, which underpins how we are pivoting our organisation towards a lower carbon future and shapes our decisions on assets, supply, services and solutions as summarised in our Climate Transition Plan. This process includes growth plans for key opportunities identified, with metrics and targets to determine whether performance is on track (see pages 52 to 53).

(1) A mixed portfolio of solar, battery and gas-fired peaking assets, all enabling the grid to decarbonise.

Some investments we're making for a greener future:

18MW solar farm

Construction fully completed at our very first Centrica-owned solar farm at Codford, which can power 5,000 homes

50MW battery

Transforming our old gas-fired power station at Brigg to store energy from 40 wind farms, capable of supplying 11,000 homes

Hydrogen

Trial announced with the Net Zero Technology Centre to inject hydrogen using HiiROC technology into our gas-fired peaking plant at Brigg

+ Read more about our financial planning process in our CDP 2022 disclosure at **centrica.com/CDP22**

Centrica stories

Our Climate Transition Plan

In 2021, we set out our plan for how we intend to deliver our net zero targets whilst ensuring a fair and affordable transition for all.

To help our customers be net zero by 2050, we've set ambitions to:

- double the number of Hive customers to 2.5 million by 2025;
- achieve annual installs of up to 100,000 EV charging points and 20,000 heat pumps by 2025; and
- invest up to £100 million in low carbon and transition assets each year from 2020 to 2025[(1)].

And to be a net zero business by 2045, our ambitions are to:

- build a zero-emission road fleet in the UK by 2025;
- cut our UK property emissions by a further 50% by 2030;
- progress our strategic transformation to exit remaining activities in oil and gas exploration and production with our intention to run-off remaining fields and meet decommissioning obligations substantively by the early 2030s, whilst stopping any further investment in exploring new oil and gas fields; and
- redirect investment into assets that drive the transition forward – from securing up to 800MW of low carbon and transition assets including solar, peaking generation and battery storage by 2025, to exploring the conversion of our Rough gas storage facility to store hydrogen in time to help deliver a net zero electricity system by 2035, and decarbonise the Humber industrial cluster by 2040.

Although these ambitions are aspirational, they are baked into our business unit growth plans and will ensure that we aim high to deliver the necessary momentum to drive the transition forward. Whilst they provide great opportunities for our customers and our business, we know they'll be challenging with many factors beyond our control. It'll also require customers, government and others, to play their part as we play ours. Key to this is continuing to maintain an open dialogue with stakeholders, and specifically working to achieve the positive policy and regulatory support to make it possible.

And for the transition to be a success, we must ensure that we don't leave anyone behind. We'll therefore endeavour to champion the needs of our customers and support those who struggle with their energy bills, create thousands of high-quality inclusive green jobs, back sustainable initiatives in communities and collaborate for a low carbon supply chain.

At the AGM in 2022, our Climate Transition Plan went for a shareholder advisory vote that achieved 79.96% approval (see page 70).

(1) A mixed portfolio of solar, battery and gas-fired peaking assets, all enabling the grid to decarbonise.

+ Read more about how our ambitions are progressing on **page 53**

+ Read more at **centrica.com/climatetransition**

+ Read more about climate engagement with trade associations at **centrica.com/tradeassociations**

Risk management

In 2022, transitional and physical climate risks were predominantly managed via our ERM Framework alongside other risks. This enables us to effectively identify, assess and manage risks in a consistent way across the Group. Our ERM Framework uses a time horizon of 0–3 years to assess Principal Risks, alongside a longer timeframe of 3–20 years to assess Emerging Risks. Through this process, climate change was made a Principal Risk in 2021 and 2022.

As part of our wider strategic planning process, Group Strategy and Environment run the climate scenario analysis to identify and assess risks and opportunities across a range of plausible future scenarios. They then work closely with the Group Enterprise Risk and Control team, to ensure full consideration of potential financial impacts across time horizons, alongside integration within the ERM Framework, the Group Principal Risks table, and business unit risk registers.

As set out on page 47, to ensure appropriate Board oversight, climate change risks are considered along with other business unit risks at the Group Risk and Control Committee, with the most material Principal Risks reported to the CLT and then to the ARC. This rigour is complemented by a more detailed report on climate change strategy, progress, risk and opportunities, presented to the SESC by the Group Head of Environment. The Board Annual Planning Conference subsequently examines the external landscape and strategic plans, which includes risk relating to market, competition, technology and policy that are all influenced by climate change, and with this context, they are able to review robustness of the business's strategic proposals and transition plans.

+ Read more about risk on **pages 28 to 33**

Metrics and targets

We were early adopters of best practice reporting of GHG emissions and have a strong track record in setting and achieving climate-related targets. We therefore have targets, ambitions and metrics in place to help us manage our impact on climate change, respond to its risks and opportunities, and ultimately achieve net zero. Having fully considered the TCFD recommendations for all-sector and sector-specific metrics and targets, we report those that are most relevant and material to our business operations, and are most decision-useful for stakeholders.

For example, we monitor and report:

- our energy consumption and global scope 1, 2 and 3 emissions (see emissions table below). The majority of these metrics have undergone limited external assurance† every year since 2012. In 2021-22, our emissions roughly doubled and was largely due to Whitegate power station coming back online to play its important role in boosting energy security and providing a stable baseload power to back up intermittent renewables, following an outage the previous year;
- our People & Planet Plan targets include being a net zero business by 2045 and helping our customers be net zero by 2050 at the latest (see Dashboard on the next page). These targets are aligned to the Paris Agreement and based on science, corresponding to a well below 2°C pathway initially and 1.5°C by mid-century. We are, however, currently unable to progress our validation by the Science Based Target initiative (SBTi) due to the delayed Oil and Gas guidance which they believe will apply to us. In line with best practice, the vast majority of our targets will be delivered through carbon abatement rather than offsetting. We anticipate having hard to remove residual emissions during the 2040s, and consequently intend to use our in-house carbon trading team to engage high-quality carbon removal projects like tree planting, to capture carbon and achieve net zero in a credible way. Our targets receive limited external assurance† on a rotational basis every three years. Key drivers of performance are outlined on pages 42 to 43; and
- our Climate Transition ambitions (see Dashboard on the next page) were introduced as part of our Climate Transition Plan. The ambitions support our net zero targets and are incorporated into budgets, business plans and accounting assumptions. They enable us to track progress on our strategic response to climate-related risks and opportunities, by ramping-up key capabilities, services and solutions that'll help us achieve our net zero targets and secure a more sustainable future for all. We're on track with most of our ambitions but some areas are challenging with significant dependencies beyond our control. For example, our EV fleet roll-out has been impacted by van availability and viable charging solutions for some of our engineers who don't have driveways, but we're expecting the final delivery from our order of 3,000 vans made in 2021-22, to now be delivered during 2023 and we're trialling new charging solutions. Moreover, whilst EV charging point installation and heat pumps have received lower demand than expected, we're now seeing a more positive take-up of EV charging, whilst our British Gas Net Zero Ventures has secured a strong sales pipeline for heat pumps which has been partly aided by our market-leading price guarantee in 2023. See more about our performance on pages 42 to 43.

The Dashboard, which includes our net zero targets and Climate Transition ambitions, has been incorporated within arrangements for Executive remuneration (see page 95).

We expect this set of metrics, targets and ambitions to evolve as we keep pace with best practice and respond to the changing world around us.

Our energy use and GHG emissions

	2022	2021
GHG emissions (scope 1 and 2)(1)	**2,007,655tCO_2e†(2)**	1,032,807tCO_2e(3)(4)
Scope 1 GHG emissions	**1,994,153tCO_2e†(5)**	1,018,888tCO_2e(4)(6)
Scope 2 GHG emissions	**13,502tCO_2e†(7)**	13,919tCO_2e(4)(8)
Scope 3 GHG emissions(9)	**24,330,208tCO_2e**	22,812,989tCO_2e(10)
Total GHG intensity by revenue(11)	**85tCO_2e/£m(12)**	70tCO_2e/£m(4)(13)
Total energy use	**9,047,097,047kWh†(14)**	3,561,052,815kWh(4)(15)

Our energy and GHG emissions set out above and on pages 42 to 43, constitute our most material areas of environmental impact. Further metrics on energy and carbon as well as our wider environmental metrics, can be found on pages 44 and 260. Reporting practices are drawn from the WRI/WBCSD Greenhouse Gas Protocol and Defra's Environmental Reporting Guidelines. Reporting is additionally based on operator boundary which is the more commonly used approach set out by the WRI/WBCSD Greenhouse Gas Protocol, and now includes all emissions from our shipping activities relating to LNG alongside the retained Spirit Energy assets in the UK and Netherlands. Non-operated nuclear emissions are excluded.

† Included in DNV's independent limited assurance report. See page 258 or centrica.com/assurance for more.

(1) Comprises scope 1 and scope 2 emissions as defined by the Greenhouse Gas Protocol.
(2) Comprises UK 737,725tCO_2e and non-UK 1,269,930tCO_2e.
(3) Comprises UK 757,518tCO_2e and non-UK 275,289tCO_2e.
(4) Restated due to LNG shipping and the retained Spirit Energy assets in the UK and Netherlands moving into scope following the transition to become a fully operated joint venture in 2022.
(5) Comprises UK 725,422tCO_2e and non-UK 1,268,731tCO_2e.
(6) Comprises UK 746,243tCO_2e and non-UK 272,645tCO_2e.
(7) Market-based. Location-based is 16,261tCO_2e. Comprises UK 12,302tCO_2e and non-UK 1,200tCO_2e.
(8) Market-based. Location-based is 19,592tCO_2e. Comprises UK 11,276tCO_2e and non-UK 2,643tCO_2e.
(9) Includes emissions from the following scope 3 categories defined by the Greenhouse Gas Protocol: purchased goods and services, capital goods, fuel and energy-related activities, waste generated in operations, business travel, employee commuting, upstream and downstream transportation and distribution, use of sold product and investments. All emissions are calculated in line with the methodologies set out by the Greenhouse Gas Protocol's technical guidance, apart from working from home emissions which are based on methodology set out in EcoAct's homeworking emissions whitepaper. Other categories spanning upstream leased assets, processing of sold products, end-of-life treatment of sold product, downstream leased assets and franchises, are not included because they are not relevant to our business.
(10) Restated due to availability of improved data.
(11) Carbon intensity of revenue is employed as our intensity measure because it is the most meaningful intensity measure for our diverse business and is the most widely used and understood measure for climate-related stakeholders such as CDP. Based on statutory revenue.
(12) Comprises UK 42tCO_2e/£m and non-UK 203tCO_2e/£m.
(13) Comprises UK 70tCO_2e/£m and non-UK 71tCO_2e/£m.
(14) Comprises UK & Offshore 2,394,832,533kWh and non-UK energy use 6,652,264,514kWh.
(15) Comprises UK & Offshore 2,263,144,251kWh and non-UK energy use 1,297,908,564kWh.

Our Climate Transition Dashboard[1]

Includes our net zero targets, supported by our Climate Transition ambitions

	Target date	2022	2021
Customer GHG emissions – 28% intensity reduction[2] (net zero by 2050)	**2030**	**6% reduction** ○	**17% reduction[3]** ●
Hive Active Heating – 2.5 million customers (units sold to date)	2025	2.0m ●	1.6m ●
Smart meters – 6 million additional installed (from 2020)	2025	2.3m ●	1.5m ●
EV charging points – 100,000 in year (annual units installed)	2025	7.4k ○	2.4k ●
Heat pumps – 20,000 in year (annual units installed)	2025	200 ○	500 ○
Centrica GHG emissions – 40% reduction[2] (net zero by 2045)	**2034**	**6% reduction†** ●	**53% reduction[4]** ●
Low carbon and transition assets – 800MW installed[5] (from 2020)	2025	101MW ●	101MW ●
Fleet – 100% EV roll-out – Vans (total EVs)	2025	23% ○	12% ●
– 100% EV roll-out – Cars (total EVs)		43% ●	9% ●
Property – 50% reduction in UK emissions[6] (from 2019)	2030	63% ●	33% ●

Progress against goals: ● On track ○ Behind

† Included in DNV's independent limited assurance report. See page 258 or centrica.com/assurance for more.

(1) Glidepath trajectory for Climate Transition ambitions is not linear. Demand is expected to gradually grow, resulting in increased delivery against the target as we approach the target date.

(2) Base year 2019. See pages 42 to 43 for key drivers of performance.

(3) Restated due to availability of improved data.

(4) Restated due to LNG shipping and Spirit Energy's remaining assets moving into scope in 2022.

(5) A mixed portfolio of solar, battery and gas-fired peaking assets, all enabling the grid to decarbonise.

(6) Spans scope 1 and 2 emissions.

+ Read more about our data trends in our Data centre at **centrica.com/datacentre**

Task Force on Climate-related Financial Disclosures

The table below sets out the 11 TCFD recommendations and where the related information can be found.

Recommendation	Recommended disclosure	Pages
Governance	a) Describe the Board's oversight of climate-related risks and opportunities	• Pages 46 to 47 and 56 to 67
	b) Describe management's role in assessing and managing climate-related risks and opportunities	• Pages 46 to 47, 51, 72 to 79 and 82 to 103
Strategy	a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term	• Pages 48 to 51, 133 to 136 and 146 to 150
	b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	• Pages 48 to 51, 133 to 136 and 146 to 150 • CDP 2022 submission centrica.com/CDP22
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	• Pages 48 to 51
Risk management	a) Describe the organisation's processes for identifying and assessing climate-related risks	• Pages 28 to 29, 47 and 51
	b) Describe the organisation's processes for managing climate-related risks	• Pages 28 to 29, 31, 33, 47 and 51
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management	• Pages 28 to 29, 47 and 51
Metrics and targets	a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process	• Pages 51 to 53 • Data centre at centrica.com/datacentre
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	• Page 52
	c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	• Pages 42 to 43 and 51 to 53 • Climate Transition Plan at centrica.com/climatetransition

The Strategic Report, which has been prepared in accordance with the requirements of the Companies Act 2006, has been approved by the Board and signed on its behalf by:

Raj Roy
Group General Counsel
& Company Secretary
15 February 2023

Governance

Directors' and Corporate Governance Report

Dear Shareholder

I am pleased to introduce the Directors' and Corporate Governance Report for 2022.

This report describes: the activities of the Board during the year; Centrica's governance arrangements; the composition and operation of the Board and its Committees; and how the Board discharged its responsibilities, including the application of the relevant provisions of the UK Corporate Governance Code 2018 (UK Code) (details of our application of the UK Code can be found on page 58).

The year in review

2022 was an incredibly testing year for the energy sector and our customers in light of the extremely volatile global commodity markets, which drove significant increases in the cost of energy.

As the UK and Ireland's largest energy services and solutions company, supporting our customers through the energy crisis whilst playing an important role in the UK and Ireland's energy security became core priorities for the Board. The Board held several discussions in relation to the business response to the unprecedented increase in energy prices and geopolitical events surrounding the Russian invasion of Ukraine.

We were particularly pleased to announce on 28 October 2022 the reopening of the Rough gas storage facility, which will strengthen the UK's energy security of supply at a time when gas will play a critical role as a transition fuel on the path to a net zero energy sector. The Board ensured that the Company continued to focus on the energy transition so as to generate value for stakeholders and deliver net zero for our customers and stakeholders by 2050, at the latest, through our Climate Transition Plan. Our Climate Transition Plan, available at centrica.com/climatetransition, describes the progress made so far.

Creating value for shareholders and wider stakeholders in a sustainable way is a top priority of the Board. Following significant progress made in the implementation of the Group's strategy, the Board decided in July 2022 to reinstate a progressive dividend with a 2022 interim dividend of 1.0 pence per share, enabling us to return capital to our shareholders. The Company announced on 15 November 2022 the commencement of a share repurchase programme which would be conducted over up to 6.5 months to buy back ordinary shares of $6^{14}/_{81}$ pence each up to an aggregate of up to £250,000,000 (exclusive of associated fees, expenses and stamp duty), representing an amount equal to the aggregate value of approximately 5% of the Company's issued share capital at the date of the announcement.

Culture

Centrica's Values are Care, Delivery, Agility, Collaboration and Courage, which are central to the Group's organisational culture. That culture is underpinned by Our Code, which establishes our basic standards for all individuals with whom we engage or collaborate. It serves as a guide for making excellent decisions and symbolises our dedication to doing the right thing and acting with integrity. Information about Our Code can be found on our website centrica.com/ourcode or on page 44 of our People and Planet section.

The Board closely observes, and supports, the Centrica Leadership Team's various initiatives to further enhance and develop the Company's values and culture (details can be found on page 7 of the Strategic Report). The Group Chief Executive reports to the Board on employee engagement-related matters at each scheduled Board meeting. Additionally, the findings of the quarterly "Our Voice" employee engagement survey provide the Board with valuable insight into the culture's tone. Page 37 includes further information regarding the survey and the increase in colleague engagement. To ensure Centrica is prepared for the future, the Board will continue to focus on the growth of the Company's culture, which includes people development and digital enablement.

Board meetings

At Board meetings, the Board is dedicated to enabling strong corporate governance and compliance standards. These practices are critical to the Company's long-term performance and the creation of value for our stakeholders. Our Board meetings were mainly held in person. Hybrid or virtual meetings were held where restrictions on freedom of movement in response to an increase in COVID-19 infection rates remained in place in the early part of 2022. The Board continues to operate effectively in this way. Our commitment to supporting high standards of corporate governance and our strong governance framework enabled the Board to adjust its focus and priorities and take some important decisions to strengthen our balance sheet and protect the Company from the difficult market environment arising from the energy crisis. Examples of principal decisions taken by the Board can be found in the Section 172 statement on pages 68 to 69.

Board composition

During the year, we welcomed three new Non-Executive Directors to the Board. On 10 January 2022, the Company appointed Amber Rudd as a Non-Executive Director. Following that, Nathan Bostock was appointed to the Board on 9 May 2022 and then Chanderpreet (CP) Duggal was appointed to the Board on 16 December 2022. Each of these Directors brings diversity of background, experience and insight to steer the Company with the development and implementation of the Group strategy. Biographies for Amber, Nathan and CP, including the Board Committees on which they serve, are given on pages 63 and 64. These appointments stem from the detailed assessments made by the Nominations Committee of the Board's needs and the Group's strategy.

Stephen Hester and Pam Kaur both stepped down from the Board at the conclusion of the 2022 AGM on 7 June 2022 having served for six years and just over three years respectively on the Company's Board. The Board would like to take this opportunity to express its gratitude to Stephen and Pam and wish them all the best for their future endeavours. In addition, I want to particularly thank Stephen for all the support he has provided as Senior Independent Director. Kevin O'Byrne succeeded Stephen as the Senior Independent Director from 1 June 2022.

On 12 January 2023, we announced that Russell O'Brien will be appointed Group Chief Financial Officer (CFO) and an Executive Director on 1 March 2023. Kate Ringrose will step down as CFO and an Executive Director on 28 February 2023 and is expected to leave Centrica towards the end of 2023 after an orderly transition. On behalf of the Board, I want to pay tribute to Kate's achievements during almost 20 years at Centrica and to thank her for her significant contribution to the Company, including steering it through a challenging external landscape.

Further information about the Board composition is provided on pages 62 to 65.

Diversity and inclusion

Diversity and inclusion continues to be a top priority of the Board given it is inherent to the success of the Group. We continue to take steps to ensure that the diversity of the communities in which we operate is reflected in the Company and senior leaders.

We endeavour to establish a culture where everyone can be themselves and realise their full potential irrespective of age, gender, culture, race, religion, sexual orientation, disability or background. We also keep striving for greater representation targeted across gender, ethnicity, disability, and sexuality that is more in line with Census data for working populations.

The Company operates a diversity and inclusion policy at Board level and a Group Diversity, Respect & Inclusion Policy which applies to the Remuneration, Audit and Risk, Nominations and Safety, Environment and Sustainability Committees as well as the Company's administrative, management and supervisory bodies. Further information, including how each policy is implemented, can be found at centrica.com/policies.

We have made improvements in the business recruitment, advancement and development of diverse personnel, and we continue to do so. We are still dedicated to letting you know how we're doing, especially on pay discrepancies based on gender and race. Along with maintaining our current focus on any gender and ethnicity pay discrepancies, we will continue to report on the diversity of all of our employees. For more details regarding our diversity programmes and how we are doing with our objectives, see page 40.

Board and Committee evaluation and effectiveness

The Board recognises that it continually needs to monitor and improve its performance, including through the annual evaluation process. In accordance with the UK Code, Centrica's annual evaluation of Board effectiveness is facilitated by an independent third party at least once every three years.

During 2022, the opportunities for improvement identified from the 2021 evaluation were progressed through various actions including: expanding the Board through the recruitment of three new Non-Executive Directors; development of an agreed set of Board priorities subject to two annual reviews; improvements to the Non-Executive Director induction process and associated enhancements; teach-in sessions being held with the Board on strategically important topics; invitations to any induction site-visits being undertaken by new Non-Executive Directors being extended to all Non-Executive Directors; and an expanded set of opportunities for contact between the Board and members of the wider management team.

For the 2022 Board evaluation, a self-evaluation of the effectiveness of the Company's Board and Committees was facilitated by an external provider, Lintstock Limited. Lintstock generated a tailored report, drawing on the input of all Board members, which was reviewed in a meeting of all Members of the Board in November 2022. The Directors concluded that the Board and Committees continue to operate effectively, whilst agreeing on actions relating to succession planning; enhanced oversight of the Company's key suppliers and Board training.

I held performance meetings with each Director to discuss their individual contribution and performance over the year and their training and development needs. Following these meetings, I confirmed that each Director continued to make an effective contribution to the Board and the Company.

The Senior Independent Director, Kevin O'Byrne, conducted the evaluation of my performance through discussions with Directors and Senior Executives and concluded that I continue to make an effective contribution to the Board and the Company.

Engagement with our stakeholders

Stakeholder views are gathered through an extensive network of strategic engagement to help grow the business and deliver improvements for our customers, colleagues and society over the long term. During 2022, representatives from the Board also met with major shareholders from time to time in order to obtain their perspectives on a range of matters including the Company's performance and strategy and Environmental, Social and Governance matters.

The Board's approach to colleague engagement is one of shared responsibility amongst Board members, given the benefits that arise from all Board members gaining insight from meeting with a wide range of colleagues on a regular basis. This approach to colleague engagement will be subject to regular review to ensure that it is effective.

During the year, Non-Executive Directors travelled across our offices to understand the operational environment and speak with employees on the experience of their working environment and any other matters of importance to them. Engagement sessions included a Board site visit to the British Gas Energy contact centre in Leicester in June, where the Board met with customer-facing colleagues to gain an understanding of their perspectives, and a Board site visit to Bord Gáis Energy in Dublin in October, where the Board met with the local management team and various representatives from across the Irish business. Board Members undertook different engagement opportunities with customers including accompanying British Gas Services and Solutions engineers on customer visits.

Further details of our methods of engagement with our colleagues, including how the Shadow Board helps to bring the views of colleagues into the Boardroom are provided on page 38. Details of how the Board has sought to discharge its duties under Section 172 of the Companies Act 2006 during the year can be found in our Section 172 statement and Stakeholder Engagement section on pages 12 and 68 to 69.

Conclusion

The Board's priorities remain consistent, with a continuous emphasis on the Group's strategy, culture, succession planning and oversight of the Company's management of principal risks. The Board is well positioned to carry out its stewardship responsibility in order to guarantee that the Company continues to achieve long-term sustainable prosperity. The Board will continue to refine its approach in order to promote and protect the interests of the Company, its shareholders and other stakeholders.

The Directors' and Corporate Governance Report which follows has been prepared to provide stakeholders with a comprehensive explanation of the Company's governance framework consistent with the UK Code, the Companies Act 2006, the UK Listing Rules and the Disclosure Guidance and Transparency Rules.

Scott Wheway, Chairman
15 February 2023

Corporate Governance Statement

The Board is committed to high standards of corporate governance and is pleased to confirm that throughout the year ended 31 December 2022, the Company complied with all relevant provisions of the UK Corporate Governance Code (UK Code) apart from Provisions 40 and 41. An explanation of the non-compliance can be found in the Remuneration Committee Report on page 102. Our application of the UK Code is set out below.

The UK Code and associated guidance are available on the Financial Reporting Council's website at frc.org.uk. The index on page 104 sets out where to find each of the required disclosures in respect of Listing Rule 9.8.4 and Disclosure Guidance and Transparency Rules 4.1.5 R and 7.2.1.

Section 1. Board Leadership and Company Purpose	
Principles A, B, C, D, E	The Corporate Governance statement (CG Statement) on pages 56 to 103 gives information on the Group's compliance with the principles relating to the Board's Leadership and Company Purpose. More detailed information on: • the Group's statement of purpose can be found on page 7; • the Group's strategy, resources and the indicators it uses to measure performance can be found on pages 8 to 9 and 26 to 27 respectively; • the Group's engagement with stakeholders and the Group's Section 172(1) Statement is contained in the Section 172(1) Statement and Stakeholder Engagement section on pages 12 to 13 and 68 to 69; and • the Group's approach to workforce matters can be found in the Group Chief People Officer's report and in 'Our people' within our People and Planet section on pages 37 to 44. Last year, we reported that the Board had established a Shadow Board in collaboration with the Centrica Leadership Team (CLT), with the aim of providing impartial and diverse feedback, review, and assurance on crucial topics concerning colleagues, customers, and cash. The Shadow Board gives colleagues the power to impact decisions, disrupt assumptions, and strengthen customer-focused and colleague-centred choices in the Boardroom. Information on the Shadow Board's activity during the year in review is contained in the Group Chief People Officer's report on page 38. Details of the Group's framework of controls is contained in the Audit and Risk Committee report on pages 73 to 74 of the CG Statement and in the Principal Risk and Viability Disclosure section on pages 28 to 36.
Section 2. Division of Responsibilities	
Principles F, G, H, I	The CG Statement describes the structure and operation of the Board. In the CG statement, we describe on page 57 the process the Company conducts to evaluate the Board, to ensure that it continues to operate effectively, that individual Directors' contributions are appropriate and that the oversight of the Chairman promotes a culture of openness and constructive yet challenging debate. The policies and processes which support the Board to function effectively and efficiently can be found on our website centrica.com/board.
Section 3. Composition, Succession and Evaluation	
Principles J, K, L	Details of the skills, experience and knowledge of the existing Board members can be found in the Board biographies contained on pages 62 to 65. Information on the Board's appointment process and approach to succession planning is contained in the Nomination Committee report on page 80. Information on the Board evaluation process can be found on page 57.
Section 4. Audit, Risk and Internal Control	
Principles M, N, O	Information on the policies and procedures the Group has in place to monitor the effectiveness of the Group's Internal and External Audit functions, and the integrity of the Group's financial statements is contained in the Audit and Risk Committee report on pages 72 to 79 of the CG Statement, along with an overview of the procedures in place to manage risk and oversee the internal control framework. Further information on the Group's approach to risk management is contained in the Principal Risk and Viability Disclosure section of the Strategic Review on pages 28 to 36. The Board believes the 2022 Annual Report to be a fair, balanced and understandable assessment of the Company's position and prospects. A description of the Audit and Risk Committee's work in enabling the Board to reach this conclusion is contained in the Audit and Risk Committee report on page 73.
Section 5. Remuneration	
Principles P, Q, R	The Directors' Remuneration Report section of the CG Statement describes the Group's approach to Directors' remuneration, including the procedure for developing policy and the Remuneration Committee's discretion for authorising remuneration outcomes. Details of linkage of the Directors' Remuneration Policy with long-term strategy is contained on pages 96 and 103.

Governance framework

The Board is responsible for leading the Group in an efficient manner, establishing the Group's Purpose, Values and Strategy and satisfying itself that these and the Group's culture are aligned. It focuses primarily on strategic and policy issues and is responsible for developing the long-term sustainable value for stakeholders. It is responsible for ensuring there are effective risk assessment and management processes, setting the Group's strategy, overseeing the allocation of resources and monitoring the performance of the Group. The framework to enable this is set out in a schedule of matters reserved for the Board. In order to allow the Board to focus on its priorities, a number of its oversight responsibilities have been delegated to four principal Committees. These responsibilities are set out in the terms of reference for each Committee. The Board regularly reviews the remit, authority, composition and terms of reference of each Committee. In performance of these duties, the Board has regard to the interests of the Group's key stakeholders and the potential impact of the decisions it makes on wider society.

Matters reserved exclusively for the Board

There are certain key responsibilities that the Board does not delegate, and which are reserved for its consideration. The Board's responsibilities include: the development of strategy; acquisition and divestment policy; the approval of major capital expenditure; the Group's capital structure; the consideration of significant financing matters; and oversight and independent assurance of policies and procedures. The full schedule of matters reserved is available on the governance page of our website centrica.com.

Our Board

The Board comprises the Non-Executive Chairman (independent on appointment), two Executive Directors (Group Chief Executive and Group Chief Financial Officer), and six independent Non-Executive Directors. There is a clear division of responsibilities between the Chairman and Group Chief Executive, reflected in the schedule of matters reserved for the Board.

Board Committees

In keeping with best practice, our Board oversees the Group's operations through a unitary Board and four separate principal Committees – Audit and Risk Committee, Nominations Committee, Remuneration Committee, and Safety, Environment and Sustainability Committee (SESC).

The terms of reference of these Committees can be found on our website centrica.com/TOR. The Committee reports can be found on pages 72 to 103. Attendance at Committee meetings in 2022 can be found on page 66.

Board appointments

The report of the Nominations Committee on pages 80 to 81 describes the work of the Committee in relation to Board appointments. All Directors are subject to election or re-election at each AGM. The Board sets out in the Notice of Annual General Meeting the specific reasons why each Director's contribution is, and continues to be, valuable to the Company's long-term sustainable success.

The Board

The Centrica Board is collectively responsible for corporate governance, developing strategy and major policies, reviewing management performance, approving financials and providing entrepreneurial leadership to the Company within a framework of prudent and effective controls which enable risk to be assessed and managed. It is also responsible for setting the Company's culture, values and the behaviours it wishes to promote in conducting its business. The Board's role and responsibilities are reviewed against the UK Code to ensure that it is meeting all of its responsibilities.

The Chairman	The Group Chief Executive
The Chairman is responsible for the leadership and management of the Board. In doing so, he is responsible for promoting high ethical standards, ensuring the effective contribution of all Directors and, with support from the Group General Counsel & Company Secretary, ensuring best practice in corporate governance and the timely distribution of accurate and clear information to Directors.	The Group Chief Executive is responsible for the executive leadership and day-to-day management of the Company, to ensure the delivery of the strategy agreed by the Board.

Independent Non-Executive Directors	Senior Independent Director	Group Chief Financial Officer	Group General Counsel & Company Secretary
Independent Non-Executive Directors are responsible for contributing sound judgement and objectivity to the Board's deliberations and overall decision-making process, providing constructive challenge, and monitoring the Executive Directors' delivery of the strategy within the Board's risk and governance structure.	The Senior Independent Director acts as a sounding board for the Chairman and serves as a trusted intermediary for the other Directors, as well as shareholders, as required.	The Group Chief Financial Officer is responsible for providing strategic financial leadership to the Company and for the day-to-day management of the finance function.	The Group General Counsel & Company Secretary advises the Chairman on governance, together with updates on regulatory and compliance matters; supports the Board agenda with clear information flow; and acts as a link between the Board and its Committees, and between Non-Executive Directors and senior management.

Evaluation and effectiveness of the Board, Committees and the Directors

To ensure that the Board and its Committees continue to operate effectively, a performance evaluation of the Board and its principal committees is undertaken annually. We have used the services of external advisors, Lintstock Limited, to support the internal evaluation process (most recently in 2020 and 2022), which year on year has built on the priorities identified in the previous years. The outcome of this year's evaluation demonstrated that the Board continued to operate effectively. Details of this year's evaluation can be found on page 57.

Training and development for Directors

It is important to ensure that Directors' skills and knowledge are refreshed and updated regularly, given the dynamic business and regulatory environment in which the Company operates. The Chairman, supported by the Group General Counsel & Company Secretary and the Secretariat team, is responsible for the ongoing development of all Directors and discusses with each Director any individual training and development needs, such as formal and informal briefings, meetings with management and visits to the Group's operations. During 2022, the Directors received deep dives and training on various matters including trading & downstream commodity risk management and growth options, LNG strategy, cyber security risk management, and energy infrastructure. In addition, the Directors have full access to the advice and services of the Group General Counsel & Company Secretary, who is responsible for advising the Board, through the Chairman, on corporate governance matters. Directors are also able to seek independent professional advice at the Company's expense in respect of their duties.

Directors' independence and conflicts

All our Non-Executive Directors are considered to be independent against the criteria in the UK Code, and free from any business interest which could materially interfere with the exercise of their independent judgement. In addition, the Board is satisfied that each Non-Executive Director is able to dedicate the necessary amount of time to the Company's affairs.

The Non-Executive Directors' Letters of Appointment state that they must inform the Group General Counsel & Company Secretary of any other businesses, directorships, appointments, advisory roles, or other relevant connections (including any relevant changes, and a broad indication of the time involved). Directors also confirm that they will inform the Board of any subsequent changes to their circumstances which may affect the time they can commit to their duties. The agreement of the Chairman must be obtained before accepting additional commitments that might affect the time Non-Executive Directors are able to devote to their appointment.

In accordance with the Companies Act 2006 and the Company's Articles of Association, Directors are required to report actual or potential conflicts of interest to the Board for consideration and, if required, authorisation. If such conflicts exist, Directors recuse themselves from consideration of the relevant subject matter. The Company maintains a schedule of authorised conflicts of interest which is regularly reviewed by the Board.

The Company's Articles of Association provide how Directors are appointed, retired and replaced. These can be found on our website.

Directors' induction

The Board has in place processes for the Directors' induction and ongoing training. The Directors' induction programme is led by the Chairman and supported by the Group General Counsel & Company Secretary and the Secretariat team. It is tailored to meet the individual's needs, providing all the information and support required in a structured way to allow them to be effective in their role. Directors are asked to provide input on how their induction should be tailored, in relation to both content and delivery, with the opportunity for periodic subsequent review with the Chairman.

Director induction – Amber Rudd, Nathan Bostock, CP Duggal and Russell O'Brien

Following appointment, all Directors receive a comprehensive and tailored induction programme. This is designed through discussion with the Chairman and the Group General Counsel and Company Secretary and considers existing expertise and any prospective Board or Board Committee roles.

The induction plans for Amber Rudd and Nathan Bostock comprised a combination of in-person and virtual sessions with both internal functions and external advisors over an initial period of six months. This was structured to ensure that information material to the Non-Executive Director role was delivered in the early stages of the programme.

These briefings provided an initial opportunity to meet senior leaders and were supported by site visits to provide on-the-ground understanding of business units and working environments.

The induction for CP Duggal, who joined the Board on 16 December 2022 has begun. Russell O'Brien's induction will commence when he joins the Board on 1 March 2023. An update on their respective inductions will be provided in the 2023 Annual Report.

Areas covered during induction	Sessions covered by
Centrica's purpose, strategic priorities and business unit operations	Group Chief Executive and Managing Directors of each Business Unit
Financial position, performance, investment and funding, including credit ratings	Group Chief Financial Officer, Group Financial Controller and the Company's brokers
External assurance	External auditors
Energy sector and trends, energy markets	Group Strategy Director, Group Regulatory Affairs Director, Group Head of M&A, Group Head of Investor Relations
Net zero, sustainability	Group Strategy Director, Group Head of Environment
Stakeholder communication and engagement	Group General Counsel & Company Secretary and Group Corporate Affairs Director
Corporate governance and Board operations	Chairman of the Board, Group General Counsel & Company Secretary and Head of Secretariat
Shareholder and investment perspectives	Group Head of Investor Relations and the Company's brokers
Legal and regulatory landscape	Group General Counsel & Company Secretary, Director of Regulatory Affairs and Policy
Centrica's risk profile	Chief Risk and Audit Officer
Safety, Health and Environment, people and culture	Group General Counsel & Company Secretary, Group Chief People Officer

Board Diversity

Sex/gender representation

	Number of Board members	Percentage of the Board	Number of senior positions on the Board*	Number in executive management	Percentage of executive management
Men	5	55.6%	3	6	60%
Women	4	44.4%	1	4	40%
Other/not specified	—	—	—	—	—
Prefer not to say	—	—	—	—	—

*(Group Chief Executive, Group Chief Financial Officer, Chairman and Senior Independent Director)

Ethnicity representation

	Number of Board members	Percentage of the Board	Number of senior positions on the Board*	Number in executive management	Percentage of executive management
White British or other White	8	88.9%	4	7	70%
Mixed/Multiple Ethnic Groups	—	—	—	—	—
Asian/Asian British	1	11.1%	—	2	20%
Black/African/Caribbean/Black British	—	—	—	—	—
Other ethnic group, including Arab	—	—	—	—	—
Not specified/prefer not to say	—	—	—	1	10%

*(Group Chief Executive, Group Chief Financial Officer, Chairman and Senior Independent Director)

By nationality

	Number of Board members	Percentage of the Board
British	6	67%
Irish	1	13%
South African	1	13%
American	1	11%

Board tenure

	Number of Board members	Percentage of the Board
0-3 years	7	78%
4-6 years	2	22%

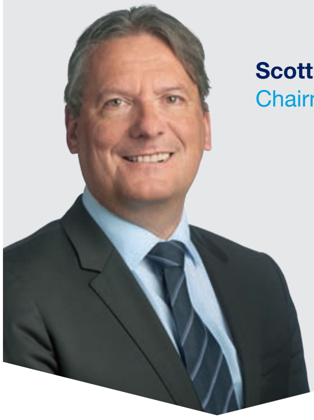
As at the reference date of 31 December 2022, the Company met or exceeded all the Board diversity targets set out in Listing Rule 9.8.6(9): (i) at least 40% female representation on the Board (44%); (ii) at least one senior position held by a woman (Group Chief Financial Officer)(1) and (iii) at least one Director being from a minority ethnic background(2).

Whilst this recently introduced Listing Rule only applies to companies that have a financial year beginning on or after 1 April 2022 and therefore the Company is not obliged to report this year as its financial year began prior to this date, the Board has chosen to report voluntarily in respect of 2022 as it recognises the importance of such disclosures and fully supports the drive to increase gender and ethnic diversity amongst the boards and executive management of premium and standard listed companies.

Our diversity data is collated through our HR management system. We encourage all to self-report information such as gender, gender identity, ethnicity, age, sexual orientation, disability and military background, and include the option to 'prefer not to say'. In 2022, the Group proactively launched the #ThisIsMe campaign to encourage colleagues to self-report their diversity information, which enables us to better understand the demographic of the Group to ensure we have a workforce that reflects the full diversity of our communities.

(1) As announced on 12 January 2023, Kate Ringrose will step down as Group Chief Financial Officer on 28 February 2023 and Russell O'Brien will become Group Chief Financial Officer from 1 March 2023.
(2) The Company temporarily did not meet the target between 7 June 2022 and 16 December 2022.

Board of Directors*



Scott Wheway
Chairman

C NC SC

Scott joined the Board on 1 May 2016 and became Chairman of the Board on 17 March 2020.

Relevant skills and experience

Scott has a wealth of experience as a senior customer-facing business leader with a mix of deep retail and consumer expertise. He has considerable knowledge gained in both the retail and insurance sectors, together with a strong understanding of operating within highly regulated businesses.

Previous experience

Scott worked in retail for 27 years both in the UK and internationally. His prior roles include chair of AXA UK plc from December 2017 until June 2022, seven years on the board of Santander UK plc, where he was the senior independent director, and non-executive director of Aviva plc between 2007 and 2016. He is the former chief executive officer of Best Buy Europe (retail services), director of The Boots Company plc, managing director and retail director of Boots the Chemist at Alliance Boots plc and a director of the British Retail Consortium. He formerly held a number of senior executive positions at Tesco plc (retail services), including chief executive of Tesco in Japan.

External appointments

Non-executive director of Lloyds Banking Group plc and Chair of Scottish Widows Group.

Chris O'Shea
Group Chief Executive

DC

Chris joined Centrica in 2018 as Group Chief Financial Officer and was appointed as Group Chief Executive in 2020. Chris is also Chair of the Disclosure Committee and Chair of Spirit Energy.

Relevant skills and experience

Chris has wide-ranging experience across the entire energy value chain together with recognised experience in transforming business and financial performance. He has considerable knowledge of working in highly regulated industries and in complex, multi-national organisations, not only in the energy sector but also in technology-led engineering and services industries.

Previous experience

Chris was appointed Group Chief Executive in early 2020 having previously been Group Chief Financial Officer. Prior to joining Centrica, Chris was group chief financial officer of UK listed Smiths Group plc and Vesuvius plc, and a non-executive director of Indian listed Foseco India Ltd. From 2006 to 2012 Chris held various senior finance roles with BG Group plc, including chief financial officer of Africa Middle East & Asia and Europe & Central Asia, prior to which he held a number of senior roles with Shell, living and working in the UK, the US and Nigeria, and with Ernst & Young. Chris studied Accounting and Finance at the University of Glasgow, is a Chartered Accountant, and holds an MBA from the Fuqua School of Business at Duke University.

External appointments

None.

Kate Ringrose
Group Chief Financial Officer

DC

Kate joined Centrica in 2005 and was appointed as Group Chief Financial Officer on 18 January 2021.

Relevant skills and experience

Kate's most recent role was Group Financial Controller, and she has also held a wide variety of positions across the Group, including in Centrica's energy supply, services, solutions and trading businesses, and in finance operations.

Previous experience

Prior to joining Centrica, Kate qualified as a chartered accountant with KPMG South Africa, before moving to the UK, and rejoining the KPMG London office. Kate was also non-executive director of EDF Energy Nuclear Generation Group Limited (representing Centrica).

External appointments

None.

Kate will step down as CFO and an Executive Director on 28 February 2023 and is expected to leave Centrica towards the end of 2023 after an orderly transition.

Carol Arrowsmith
Non-Executive Director

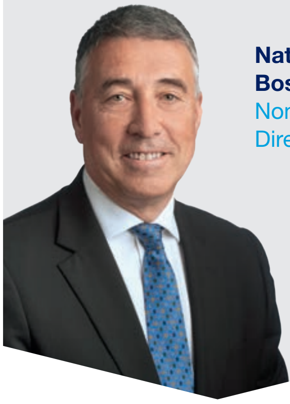
RC AC NC

Carol joined the Board on 11 June 2020 and is Chair of the Remuneration Committee.

Relevant skills and experience
Carol brings extensive advisory experience, especially of advising boards on executive remuneration across a range of sectors, and is a Fellow of the Chartered Institute of Personnel and Development.

Previous experience
Carol is a former deputy chair and senior partner of Deloitte LLP. She was a member of the Advisory Group for Spencer Stuart, global partner of Arthur Andersen, managing director of New Bridge Street Consultants and non-executive director of Vivo Energy Plc.

External appointments
Non-executive director of Compass Group plc and director and trustee of Northern Ballet Limited.



Nathan Bostock
Non-Executive Director

AC NC SC

Nathan joined the Board on 9 May 2022.

Relevant skills and experience
Nathan has worked in financial services since the mid-1980s and brings a wealth of financial, commercial, risk and compliance expertise, particularly in large-scale customer-facing businesses.

Previous experience
Nathan was chief executive officer of Santander UK from 2014 until 2022. He joined Santander from The Royal Bank of Scotland plc (RBS), where he was an Executive Director and Group Finance Director. He previously held the post of Group chief risk officer, having joined RBS in 2009. Nathan served on the Board of Abbey National plc (now Santander UK) as an executive director, from 2005 until 2009. He joined Abbey National plc in 2001, holding a number of senior positions including chief financial officer and executive director of Finance, Markets and Human Resources. Nathan is a chartered accountant and holds a BSc (Hons) in Mathematics.

External appointments
Head of Investment Platforms, Banco Santander.

Chanderpreet (CP) Duggal
Non-Executive Director

AC NC RC

CP joined the Board on 16 December 2022.

Relevant skills and experience
CP brings valuable expertise of digital technology and the use of data and analytics in large customer-facing businesses.

Previous experience
CP worked for 20 years at American Express in various senior roles, including leading the company-wide digital and analytics organisation. His digital experience includes managing demand generation (paid media, referral marketing, etc.), customer onboarding, membership and servicing journeys with best-in-class mobile app and web and email experiences, as well as customer marketing, loyalty, accounts receivables, etc. platforms. His data and analytics experience includes managing insights and modelling for a range of marketing channels, accelerating personalisation, leading AI labs, etc. CP started the data office organisation for American Express, managed the first line of defence operational excellence teams for global consumer business and led the global fraud risk management department.

In his most recent role, CP was the chief digital and analytics officer for Burberry plc and a member of its executive committee. He was responsible for transforming e-commerce and omni-channel strategy globally, accelerating customer relationship management focus, defining metaverse strategy and leveraging analytics across the company.

External appointments
Advisor, Burberry plc.

Heidi Mottram
Non-Executive Director

SC NC RC

Heidi joined the Board on 1 January 2020 and is Chair of the Safety, Environment and Sustainability Committee.

Relevant skills and experience
Heidi brings considerable relevant strategic and operational experience acquired in her current and previous roles. Her deep understanding of the importance of customer service, delivered in complex, multi-stakeholder environments with a high public profile, is particularly pertinent to the Company at this time, as it focuses on the delivery of its customer-centric strategy.

Previous experience
Heidi began her career with British Rail in the mid-1980s. She held a number of roles in GNER, before joining Midland Mainline in 1999 as operations director. She was commercial director for Arriva Trains Northern from January 2004, becoming managing director of Northern Rail Limited, the UK's largest rail franchise.

External appointments
CEO of Northumbrian Water Limited and Northumbrian Water Group Limited, vice-chair of the North East Local Enterprise Partnership, member of the board of The Great British Railways Transition Team and vice-chair of Newcastle University Council.

Kevin O'Byrne
Senior Independent Director

AC NC

Kevin joined the Board on 13 May 2019 and became Senior Independent Director from 1 June 2022. He is Chair of the Audit Committee.

Relevant skills and experience
Kevin brings extensive retail and finance experience to the Board, having occupied senior roles in a number of leading UK and international retailers. The Board considers that Kevin has recent and relevant financial experience.

Previous experience
Kevin was previously chief executive officer of Poundland Group plc, and held executive roles at Kingfisher plc, including divisional director UK, China and Turkey, chief executive officer of B&Q UK & Ireland and group finance director. Prior to that he was finance director of Dixons Retail plc. From 2008 to 2017 he was a non-executive director and chairman of the audit committee of Land Securities Group plc where he was also senior independent director from 2012 to 2016.

External appointments
Group chief financial officer of J Sainsbury plc until March 2023 when he retires from the role.

Rt Hon. Amber Rudd
Non-Executive Director

NC RC SC

Amber joined the Board on 10 January 2022.

Relevant skills and experience
Amber brings a wealth of real-world experience in energy, policy and business.

Previous experience
After around 20 years working in business, Amber served as a Member of Parliament between 2010 and 2019. In addition to holding the roles of Home Secretary, Secretary of State for Work and Pensions and Minister for Women and Equalities, Amber served as Secretary of State for Energy and Climate Change from 2015 to 2016 after having been Parliamentary Under Secretary of State at the Department of Energy and Climate Change from July 2014 until May 2015. Amber led the UK team to the successful completion of the Paris Climate Change Agreement. This UN sponsored 2015 Conference of the Parties (COP21) achieved a landmark global commitment to reduce national carbon emissions.

External appointments
Amber is a non-executive director of Pinwheel. Amber also acts as an advisor to businesses including Energy 1, Equinor, Darktrace, Finsbury Glover Hering, Centreview Partners and Phoenix Group. Amber is a trustee of The Climate Group, RUSI and Action Against Gambling Harms.

Raj Roy
Group General Counsel & Company Secretary

DC

Raj was appointed Group General Counsel & Company Secretary on 3 March 2021, having been appointed Interim Group General Counsel & Company Secretary with effect from 1 October 2020.

Relevant skills and experience
Raj has overall responsibility for legal, regulatory, compliance and secretariat activities across the Group, the effective operating of Centrica plc's Board and advising on key issues of corporate governance and compliance. Raj joined Centrica in 2014 as the Legal Director for Residential Energy, before becoming General Counsel for the UK and Ireland region in 2017. He has led legal, regulatory and compliance teams at Centrica in various formations across the UK and Ireland region and the Consumer division.

Previous experience
Prior to joining Centrica, Raj spent nine years at Vodafone, holding a number of senior in-house legal roles in the Group and UK legal functions. Raj started his career in private practice, qualifying as a solicitor at Slaughter and May in London and subsequently working for Freshfields in Brussels.

External appointments
Member of the Board of Energy UK (representing Centrica).

Committee membership key

- Denotes Committee Chair
- C Chairman of the Board
- AC Audit and Risk Committee
- DC Disclosure Committee
- NC Nominations Committee
- RC Remuneration Committee
- SC Safety, Environment and Sustainability Committee

Skills and experience key

- Consumer Services
- Energy Sector
- Engineering/Safety
- Finance/M&A
- Financial Services
- Government/Regulatory
- Technology

*as at 15 February 2023

The Board considers that each of the Directors continues to contribute effectively to the work and deliberations of the Board.
Reasons for the (re-)election of each of our Directors at the forthcoming AGM can be found within the Centrica plc Notice of Annual General Meeting 2023 which will be made available on our website centrica.com/agm23.

Full biographies can be found at centrica.com/board

Russell O'Brien
Appointed Group Chief Financial Officer with effect from 1 March 2023

Relevant skills and experience
Russell brings broad experience from across the energy value chain. He spent 25 years with Shell plc in a variety of roles and geographies. His roles included global Chief Financial Officer for both Shell's Integrated Gas and Retail businesses and most recently Group Treasurer.

Previous experience
Russell was Group Treasurer at Shell plc. Prior to this he has held a number of senior Chief Financial Officer roles at Shell plc. He is a Management Accountant who graduated from St. Andrews University in 1995.

External appointments
None.

Board meetings

The Board held eight formal meetings in 2022. In addition, supplementary meetings were called for specific approvals. The table showing the attendance of Directors at Board meetings in 2022 can be found below. If Directors are unable to attend a meeting, they have the opportunity beforehand to discuss any agenda items with the Chairman. The agendas for Board meetings are agreed in advance by the Chairman, Group Chief Executive and Group General Counsel & Company Secretary. The agenda typically consists of regular standing items, such as reports on financial performance, and in-depth examination or analysis of a topic, facilitating exchanges of views and robust debate.

During the year, the Non-Executive Directors, including the Chairman, met frequently without management present.

Site visits

The Directors recognise the importance of, and benefits gained by, visiting the Group's operations and endeavour to make a couple of visits to Centrica sites each year. The Board undertook site visits to the British Gas sites at Spinneyside in Leicester, to meet with our Leicester-based call handlers, who are focused on 'Changing the way Customer Services serve our Customers'. The Board also visited Dublin and met with the Bord Gáis Energy management team and various colleagues from across the Irish business.

Number of Board and Committee meeting attended during 2022[1]:

Name	Role	Joined the Board	Tenure[2]	Board	AC	NC	RC	SC
Scott Wheway	Chairman	01/05/2016	6 years, 7 months	8/8	N/A	4/4	N/A	3/3
Chris O'Shea	Group Chief Executive	01/11/2018	4 years, 1 month	8/8	N/A	N/A	N/A	N/A
Kate Ringrose[6]	Group Chief Financial Officer	18/01/2021	1 year, 11 months	8/8	N/A	N/A	N/A	N/A
Carol Arrowsmith	Independent Non-Executive Director	11/06/2020	2 years, 6 months	8/8	4/4	4/4	5/5	N/A
Nathan Bostock	Independent Non-Executive Director	09/05/2022	0 years, 7 months	5/8	3/4	3/4	N/A	3/3
Stephen Hester[3]	Senior Independent Non-Executive Director	01/06/2016	6 years, 5 months	3/8	1/4	1/4	3/5	N/A
CP Duggal	Independent Non-Executive Director	16/12/2022	0 years, 1 month	—	—	—	—	N/A
Pam Kaur[4]	Independent Non-Executive Director	01/02/2019	3 years, 9 months	3/8	1/4	1/4	N/A	1/3
Heidi Mottram	Independent Non-Executive Director	01/01/2020	2 years, 11 months	8/8	N/A	4/4	5/5	3/3
Kevin O'Byrne	Senior Independent Non-Executive Director	13/05/2019	3 years, 7 months	8/8	4/4	4/4	N/A	N/A
Amber Rudd[5]	Independent Non-Executive Director	10/01/2022	0 years, 11 months	8/8	N/A	3/4[5]	5/5	3/3

(1) Any Director who is unable to attend a Board meeting provides feedback to the Chairman on the matters to be discussed in advance of the meeting.
(2) Data as at 31 December 2022.
(3) Stephen Hester stood down from the Centrica plc Board at the conclusion of Centrica's 2022 Annual General Meeting. Kevin O'Byrne succeeded him as Senior Independent Director, with effect from 1 June 2022.
(4) Pam Kaur stood down from the Centrica plc Board at the conclusion of Centrica's 2022 Annual General Meeting.
(5) Amber Rudd joined the Nominations Committee with effect from 9 March 2022.
(6) On 12 January 2023, we announced that Kate Ringrose will step down as Group Chief Financial Officer and an Executive Director on 28 February 2023 and is expected to leave Centrica towards the end of 2023 after an orderly transition. Russell O'Brien will be appointed Group Chief Financial Officer and an Executive Director on 1 March 2023.

Board activity including Section 172(1) considerations

As stewards of the Company, the Board recognises that being aware of the needs and expectations of stakeholders is crucial, as it ensures that the Company is well-positioned to achieve long-term sustainable success and deliver value for all our different but interrelated stakeholder groups and society as a whole.

During the year, the Board considers a comprehensive programme of regular matters covering operational and financial performance reporting, strategic reviews and updates, and various governance reports and approvals. In addition, Board meetings regularly feature in-depth reviews of specific topics. The Directors confirm that the deliberations of the Board, which underpin its decisions, incorporated appropriate consideration with due regard to the matters detailed in Section 172 of the Companies Act 2006.

The outcome from the key engagements, stated above, are fed back to the Board through the appropriate forum.

Woven throughout this report and on our website are further examples and evidence of how the Directors have performed their fiduciary duty under Section 172.

Section 172	Evidence
The likely consequences of any decision in the long term	Please see page 7 to 9, 12 to 13, 39 to 54 and 66 to 69
The interests of our colleagues	Please see page 12 to 13, 37 to 38, 39 to 42, 66 to 69 and 71
The need to foster relationships with suppliers, customers and others	Please see page 12 to 13 and 82 to 83
The impact of the Company's operations on the community and the environment	Please see pages 39 to 45 and 82 to 83
The desirability of the Company maintaining a reputation for high standards of business conduct	Please see pages 44, 71 and 82 to 83, and visit our website centrica.com
The need to act fairly between members of the Company	Please see pages 67 to 69

Board discussions held during the year included:

Strategy and business plan

The Board considered and oversaw the delivery of the strategic initiatives for the benefit of our stakeholders, including customers.

The Board also considered the following matters:

- Strategic reviews, updates, and stress testing under a range of scenarios
- 2021 final dividend
- 2022 interim dividend
- Group Annual Plan 2022
- The Group's strategic plan
- The Energy Supply Market
- The Climate Transition Plan
- Return of surplus capital to shareholders
- Energy transition investment opportunities
- LNG growth opportunities
- Responsible Sourcing strategy

Stakeholders considered:

Performance and risk

Financial performance and Risks, as well as risk controls and processes are regularly reported to the Board and to the Audit and Risk Committee. Risks are also brought to the attention of the Board through reports from the Group Chief Executive, Group Chief Financial Officer, heads of business and functional subject matter experts.

- Health and safety performance and Process Safety risk
- Group Performance Reports
- 2021 Preliminary results statement
- Group credit exposure and liquidity
- Business reviews, including operational performance
- Periodic results
- Cyber security risk management
- Commodity price movements
- Climate Transition Plan performance
- People & Planet Plan performance
- Going concern and viability statements
- Audit fees
- Internal Audit review
- Annual tax update
- Treasury risk management annual update
- Insurance update

Stakeholders considered:

Governance

The Board receives regular reports from the Group General Counsel & Company Secretary on governance and regulatory matters, as well as regular updates and insights on market trends from the Investor Relations function. During the year, the Board took time to consider or oversee the following key governance activities/matters:

- 2021 Annual Report and Accounts
- General Meetings
- Sale of Spirit Energy Norway and Statfjord UK
- Non-Executive Director search
- Board evaluation
- Succession planning for the Board
- Committee composition
- Reports from Committee Chairs
- Conflicts of interest reviews
- Terms of reference reviews
- Director skillset and Director training requirements
- Director independence
- Workforce engagement
- All-Employee Share Plan
- Dividend policy
- AvantiGas acquisition

Stakeholders considered:

Culture and stakeholders

The Board recognises that understanding the views and interests of the Company's diverse community of stakeholders, including customers, is important.

The views and interests of stakeholders are considered in the development, delivery and oversight of the Group's business model, strategy and culture. During the year, the Board considered the following matters:

- Cost of living crisis and the impact on customers
- Colleague engagement
- Pensions
- Company culture
- Investor updates and feedback
- Voice of the Customer
- Diversity & Inclusion Strategy

Stakeholders considered:

Political and regulatory environment

During the year, the Board considered the following matters:

- Macro/geopolitical developments
- Reform of energy markets
- Sanctions
- Modern Slavery Act
- TCFD disclosure
- Government intervention initiatives
- UK and Ireland energy security

Stakeholders considered:

Stakeholders key

Customers
Colleagues
Investors
Government and Regulators
Suppliers
Communities and NGOs

Stated below are some examples of the decision-making of the Board during the year demonstrating key stakeholders and their interests, and how our Section 172 duties influenced the matters considered by, and the decision-making of, the Board during the year.

Consideration of stakeholders and outcomes:

Supporting customers and colleagues in relation to the cost of living crisis

Consideration of stakeholders

Customers:
- recognising the difficult environment many customers faced due to rising energy bills and wider inflationary impacts
- supporting customers impacted by the energy suppliers that ceased to trade

Communities and NGOs:
- using our resources and reach to make a big difference in our local communities, from helping people with their energy bills, to supporting local charities

Colleagues:
- recognising the impact of the cost of living crisis on colleagues
- providing resources and wellbeing support for customer-facing colleagues assisting customers

Investors:
- identifying and managing the commercial and financial considerations arising from the energy crisis, including ensuring the strength and resilience of the Company's balance sheet

Suppliers:
- ensuring we pay suppliers fairly

Outcomes

Recognising and balancing the interests and perspectives of the different stakeholders, a wide range of measures were implemented in the Company's core markets of the UK and Ireland, including:

UK:
- providing £50 million of funding to help UK customers struggling with their energy bills, establishing the UK's largest voluntary customer support package. The Company announced on 26 January 2023 that it was committing £10 million of this funding to helping British Gas prepayment and vulnerable customers;
- investing over £25 million in 2022 in customer service, support and pricing in the UK, including the recruitment of an additional 700 UK-based customer service roles in British Gas Energy to handle a 50% increase in call volumes and help ensure we can be there when our customers need us; and
- partnering with the Post Office and British Gas Energy Trust funded organisations to deliver over 100 Post Office 'Pop-ups' in over 50 locations, ensuring people can access the help they need with their energy bills.

In 2022, we worked more closely with our local communities having moved from a national to local charity approach which included volunteering 2,098 days, a 600% increase compared to last year.

Ireland:
- investing €3.8 million to help vulnerable customers with our commitment to contribute 10% of Bord Gáis Energy's operating profits for the duration of the energy crisis; and
- we agreed a new pay deal in 2022 which takes current inflationary pressures in the UK into account.

In early 2022, Bord Gáis Energy announced an extension of its partnership with homeless charity Focus Ireland for a further five years. Since the partnership was established in 2015, Bord Gáis Energy has committed over €4.4 million to help those experiencing homelessness and in 2022 alone, Bord Gáis Energy supported services assisted 1,869 Focus Ireland customers.

For colleagues, we provided a one-off cost of living payment in December 2022 to more than 19,000 employees to help them manage rising household prices. We also introduced a number of other financial and non-financial initiatives for our employees including an energy allowance for all employees who are British Gas customers and reduced price lunches at all our sites, and we have launched a number of new programmes aimed at supporting the mental health of our employees, particularly those that work in our call centres helping our customers who are struggling with rising household bills.

Supporting energy security in our core markets in response to the global energy crisis

Consideration of stakeholders

Government and Regulators:
- acting as a Supplier of Last Resort (SoLR)
- supporting and implementing Government initiatives, including the UK Energy Price Guarantee and UK Energy Bills Support Scheme
- supporting and enabling Government management of energy security

Customers:
- improving UK security of supply to ensure energy remains reliable and affordable for customers

Investors:
- realising commercial strengths available from the Company's assets and enabling the transition to net zero, including through a potential future pathway to hydrogen storage and associated market opportunities

Suppliers:
- targeting high standards of business conduct, which in turn brings benefits to communities and the environment

Outcomes

The Company played an active role in furthering energy security in its core markets of the UK and Ireland, including through:

- recruitment of over 1,000 new apprentices across 2021 and 2022, creating skilled, well-paid British jobs to play an important role in the drive for net zero in the UK;
- taking on another 176,000 customers in 2022 (taking the total over 2021 and 2022 to 700,000 customers) through Ofgem's SoLR processes, ensuring they received an uninterrupted supply of gas and electricity;
- securing increased volumes of gas and renewable energy to improve the UK and Europe's security of supply, including an agreement with Equinor to bring an additional 1 billion cubic metres of gas to the UK for each of the next three winters;
- re-opening Rough as a gas storage facility contributing to strengthening the UK and Ireland's security of supply with the potential transition to hydrogen storage in future;
- announcing plans to convert a decommissioned gas-fired power station at Brigg into a 50MW/100MWh battery storage facility capable of supplying the equivalent of a full day's energy consumption for 11,000 households;
- recognising the role of natural gas as a transition fuel, whilst assessing any impact on climate transition objectives; and
- collaboration with suppliers to embed high standards from our Responsible Sourcing Policy and undertaking audits with suppliers to verify that they uphold our commitments.

Reintroduction of the dividend

Consideration of stakeholders

Investors:

- recognising the importance of the dividend to shareholders and of the impact on shareholders by the decision taken by the Board to cancel the 2019 final dividend payment amidst the COVID-19 pandemic and that no dividend was declared by the Company in respect of 2020 or 2021 due to the ongoing COVID-19 pandemic
- strengthening the Group's balance sheet
- ensuring the delivery of strong free cash flow generation

Customers and colleagues:

- providing support for customers and colleagues in the context of the macroeconomic environment

Government and Regulators:

- taking steps to repay COVID-19 furlough monies received from the UK Government prior to the declaration of a dividend

Pensions:

- ensuring the interests of the Company's pension schemes were properly reviewed to ensure that they were protected prior to declaring a dividend

Outcomes

Following the actions taken by the Company in 2020, 2021 and 2022 to strengthen the Company's balance sheet, the Company was well placed to reintroduce the dividend to shareholders.

On 28 July 2022 the Company announced the reinstatement of an ordinary dividend via declaration of a 2022 interim dividend per share of 1.0 pence, the first dividend to be paid since 2019, paid on 17 November 2022 to shareholders on the register on 7 October 2022.

The Directors' propose a 2022 final dividend per share of 2.0 pence for the year ended 31 December 2022, consistent with our historic policy of paying roughly a third of the full year dividend as an interim.

We expect the dividend to be progressive and dividend cover from earnings to move to around two times over time, recognising the ratio is likely to vary each year dependent on the business cycle.

Launching the share repurchase programme

Consideration of stakeholders

Investors:

- ensuring the Company considers the potential return of any surplus structural capital to shareholders

Customers:

- ensuring the provision, in parallel, of additional funding to support customers facing difficulties with bills during the ongoing energy and cost of living crisis

Colleagues:

- ensuring steps could be taken in parallel to deliver an appropriate pay settlement for colleagues amidst the cost of living crisis

Pensions:

- ensuring that the funding required to be provided by the Company to the schemes was costed and built into the Company's future financial plans

Outcomes

Given the Company's financial performance, balance sheet strength and liquidity position, the Company announced, on 10 November 2022, plans to commence a share repurchase programme of up to 5% of its issued share capital. On 15 November 2022, the Company announced the commencement of the share buyback programme to be conducted over a period of up to 6.5 months to buy back shares up to an aggregate price of up to £250,000,000, representing an amount equal to the aggregate value of approximately 5% of the Company's issued share capital at the share price on that date.

Relations with our stakeholders

Shareholder engagement

The Board is committed to maintaining open channels of communication with all of the Company's stakeholders. An important part of this is providing a clear explanation of the Company's strategy and objectives, and ensuring feedback is acknowledged, considered and, where appropriate, acted upon.

Meetings, roadshows and conferences

The Company reports its financial results to shareholders twice a year, with the publication of its annual and half-year results. The Group Chief Executive and Group Chief Financial Officer typically meet with our major institutional shareholders twice a year, following the Company's Preliminary and Interim results, which provides an opportunity for a review of the Company's strategy and performance. In addition, management and/or Investor Relations attend a number of investor conferences throughout the year, giving shareholders further opportunity to meet and receive updates directly from Company representatives, while senior management are also available to meet on an ad-hoc basis with major shareholders if requested.

Engagement themes with our institutional shareholders

During the year, engagement themes included:

- Centrica's strategic refresh;
- Full year and interim results;
- the Rough storage facility;
- UK energy security;
- dividends and shareholder returns;
- the regulatory and political environment for UK energy;
- impact of rising commodity prices;
- energy transition investment opportunities;
- Board succession;
- liquidity and result of stress tests; and
- Environmental, Social and Governance (ESG) matters.

General Meetings

The Board is committed to communicating with shareholders and other stakeholders in a clear and open manner and seeks to ensure effective engagement through the Company's regular communications, the AGM and other investor relations activities. During 2022, the Company undertook an ongoing programme of meetings with investors (in person and virtually). The majority of these meetings were led by the Group Chief Executive and Group Chief Financial Officer.

The Company holds an Annual General Meeting (AGM) each year and, as required, holds General Meetings. At the AGM, the Chairman gives his thoughts on governance aspects of the preceding year and the Group Chief Executive reviews the performance of the Group over the last year. In advance of each AGM, we write to our largest shareholders inviting discussion on any questions they might like to raise and making the Chairs of the Board, the Audit Committee and the Remuneration Committee available to meet shareholders should they so wish. In addition, the Company engaged with its largest shareholders and key governance agencies in early 2022, on the Directors' Remuneration Policy and the Centrica plc's Climate Transition Plan resolution proposals. Feedback was received from major shareholders and governance agencies and dialogue entered into with a number of shareholders regarding the proposals.

The 2022 AGM was held as a hybrid meeting, giving shareholders the opportunity to participate (including voting) in person or virtually via an online platform (Lumi). Shareholders are encouraged to participate in these meetings and to ask questions at, or in advance of, these meetings. All shareholders were encouraged to exercise their votes by submitting their proxy forms either electronically or by post. We also invited shareholders to submit their questions in advance of the AGM via a dedicated question facility on our website and where appropriate the answers were published on our website. Shareholders were also able to ask questions at the AGM in person or virtually via Lumi.

Our 2022 AGM was well supported with voting in favour of the resolutions ranging from 79% to 99% and with 63% of issued share capital voted. Resolution 17, on approving our Climate Transition Plan, was supported by the overwhelming majority of shareholders (79.96%). However, we recognise that some shareholders (20.04%) chose not to support this resolution. In accordance with the UK Code, we made a note when we published the AGM result on 7 June 2022 and we published a follow up update on this engagement on 2 December 2022. As a final update on this matter, the feedback received from those shareholders who chose not to support will be considered in future actions as set out in the SESC report on pages 82 to 83 and the Company confirms it still intends to hold the next advisory non-binding vote in 2025 (as set out in the 2022 AGM notice).

Information about the 2023 AGM will be provided in the Notice of Meeting. Further information pertaining to the 2023 AGM will in due course be available at centrica.com/agm23. Voting on the resolutions will generally be conducted by a poll and the voting results will be announced through the Regulatory News Service of the London Stock Exchange and also made available on the Company's website.

Centrica.com

Our website centrica.com, contains up-to-date information for shareholders and other interested parties including Annual Reports, shareholder circulars, share price information, news releases, presentations to the investment community and information on shareholder services.

Workforce

Workforce engagement

Responsibility for workforce engagement is shared amongst Board members. As well as this approach of shared responsibility being one of the recognised approaches to colleague engagement that boards may pursue, the Board considered that there is benefit from all of the Board being involved in colleague engagement activities.

During the year, the Chairman and Non-Executive Directors engaged with members of the workforce in various ways, including meeting with call handlers, engineers and business unit leaders during the site visits and regular Board engagement sessions with business colleagues held in person immediately prior to selected Board meetings in 2022. These engagements undertaken by the Board during the year contributed to some of the decision-making of the Board. Further information on the decision-making of the Board can be found on pages 68 to 69.

The Executive Directors and senior leadership team dedicated significant time and focus on meeting with and listening to the views of colleagues, which included regular meetings with the Shadow Board. The work undertaken is set out in the Group Chief People Officer's Report on pages 37 to 38.

Further information, including why the Board believe that these methods of engagement are effective, can also be found on pages 12 to 13, 27, 32, 37 to 38, 44 and 56 to 57.

Employee involvement

Employee involvement is one of our core commitments. By understanding what our colleagues think and feel, we can take account of their views in decision-making. This will help ensure that Centrica is a place where everyone feels supported and able to deliver for our customers. Colleagues are therefore invited to ask questions and provide feedback throughout the year on a range of matters including our financial performance and business strategy at dedicated town halls, meetings and written communications like emails and articles from the Group Chief Executive, Group Chief Finance Officer and members of the Centrica Leadership team. This provides employees systematically with information on matters of concern to them as employees and achieves awareness among employees of factors affecting the performance of the Company. We also seek colleague feedback on a broader range of topics through methods like leader-led listening sessions and engagement surveys, as well as our employee-led Networks and our Shadow Board (see page 38).

Equal opportunities

The Group is committed to and has an active equal opportunities policy which includes, but is not limited to, recruitment and selection, training, career development, performance reviews and promotion to retirement. Our culture is to create an environment free from discrimination, harassment and victimisation. Our policies are in place to ensure everyone receives equal treatment regardless of gender, identity, race, ethnic or national origin, disability, age, marital status, sexual orientation or religion or any other characteristic protected by applicable laws.

We have created channels for colleagues to voice concerns confidentially, through a Speak Up support service, a confidential and anonymous helpline operated by an independent company.

All decisions relating to employment practices will be objective, free from bias and based solely upon work criteria and individual merit.

Employees with disabilities

It is our policy that current and prospective colleagues with a disability have the same right to access and develop their careers as anyone else. For example, colleagues with a disability receive full and fair consideration when applying for all vacancies and we interview those who meet the minimum criteria required. We also provide training, career development and promotion from which all of our colleagues can benefit and are continuously working to develop initiatives to support everyone to reach their full potential. We also endeavour to retain colleagues in the workforce if they become disabled during employment.

To support this approach, in 2017 we launched Diverse-Ability, a network that celebrates physiological and neurological diversity and abilities amongst our colleagues and helps them access the support they need to thrive at work. Diverse-Ability was re-launched earlier in 2021, with an increased emphasis on neurodiversity. Additionally, we are proud to support The Valuable 500 initiative and champion disability inclusion throughout Centrica. Launched at the World Economic Forum's Annual Summit in 2020, The Valuable 500 seeks 500 global businesses to place disability inclusion on their board agendas as the first step to full inclusion for disabled people in business. We are members of the Business Disability Forum, which offers support, toolkits and advice to businesses around disability matters. We also partner with Scope and in 2022 we renewed our level 2 Disability Confident status.

Human rights

We are fully committed to upholding the fundamental human rights and freedoms of everyone who works for us, with us, or lives in the communities where we operate. We uphold the UN Guiding Principles on Business and Human Rights and are signatories of the United Nations Global Compact. As set out in Our Code, we therefore take steps to ensure that we never knowingly cause or contribute to human rights abuses through activities like employment checks and supplier due diligence. We also aim to contribute positively to global efforts to ensure human rights are understood and observed. Further information about our efforts can be found in our People and Planet section on page 44, as well as in our Modern Slavery Statement and Our Code available on our website centrica.com.

+ Read more in our Modern Slavery Statement at **centrica.com/modernslavery**

Audit and Risk Committee

Membership, meeting attendance and key focus

Committee members

Kevin O'Byrne (Chair)
Carol Arrowsmith(1)
Nathan Bostock (with effect from 9 May 2022)
CP Duggal (with effect from 16 December 2022)

Pam Kaur and Stephen Hester retired as members of the Committee on 7 June 2022.

Biographical details of the Committee Chair and members can be found on pages 62 to 65. Meeting attendance of the Committee members can be found on page 66.

Meeting attendees by invitation

Chair of the Board
Amber Rudd
Heidi Mottram
Group Chief Executive
Group Chief Financial Officer
Group General Counsel & Company Secretary
Group Financial Controller
Group Head of Accounting, Reporting and Tax
Group Chief Risk & Audit Officer
External auditors

Focus areas in 2022

- The Group's published financial information;
- the effectiveness of the Group's risk management and internal controls framework;
- the Enterprise Risk and Control Framework including risks managed by the other Board committees;
- the management of cyber risks; and
- ethical, legal and regulatory matters.

(1) Carol Arrowsmith is connected to Deloitte LLP ('the Firm') as, historically, she was a partner there but she had left the Firm prior to their appointment as the Group's external auditors. In addition to this, the Firm provides her with services in a personal capacity. The Committee deems that this does not affect the independence and judgement of the Firm nor the Committee's oversight of the Firm's performance.

Dear Shareholder

I am pleased to present the Audit and Risk Committee's report for the year ended 31 December 2022, which provides an overview of the work carried out by the Committee to ensure the integrity of the Group's published financial information and the effectiveness of the Group's risk management and internal controls framework in a year of exceptional market volatility.

This report should be read in conjunction with our UK Corporate Governance Code application section on page 58, Our Principal Risks and Uncertainties on pages 28 to 33 and our Viability Statement on pages 34 to 36.

Committee overview

The Committee has a yearly agenda which is linked to the Company's financial calendar. The agenda is flexible, enabling in-depth reviews of topics of particular importance to the Committee.

The core responsibilities of the Committee are to:

- monitor and review the adequacy and effectiveness of the governance and oversight of the Company's financial processing and reporting, internal controls and risk management;
- provide advice and assurance to the Board on whether it has discharged its duties and whether the Annual Report and Accounts, when taken as a whole, is fair, balanced and understandable and provides all the necessary information for shareholders and other stakeholders to assess the Company's position, performance, business model and strategy;
- monitor and review the operation and effectiveness of the Group's Internal Audit function, including its independence, strategic focus, activities, plans and resources;
- supervise the appointment of the Group Chief Risk & Audit Officer;
- manage the relationship with the Group's external auditors on behalf of the Board (including appointment, independence, effectiveness and remuneration);
- conduct a tender for the external audit contract at least every 10 years and make appointment recommendations to the Board;
- review the Company's arrangements for its workforce/stakeholders to raise concerns in confidence about possible improprieties in financial reporting or other matters; and
- consider and review material legal and regulatory policy compliance issues or risks, and maintain oversight of the arrangements in place for the management of statutory and regulatory compliance in areas such as financial crime.

Main activities during 2022

During the year, the Committee met four times and considered a broad range of topics, our key highlights are disclosed below:

- reviewed business risk areas, accounting judgements and effectiveness of the finance function and control environment. Details of key judgements and financial reporting matters in 2022 are set out on pages 75 to 79;
- reviewed accounting judgements, in particular those relating to the accounting for the c.700k customers acquired by British Gas Energy through Supplier of Last Resort processes, the sale of Spirit Energy's Norwegian assets and interests in the Statfjord field, the calculation of the onerous supply contract provision, the impairment write-back for our Nuclear asset and the downstream supply bad debt provision assessment;
- reviewed the Viability and Going Concern assessments and associated disclosures;
- reviewed the 2021 financial results, 2021 Annual Report and Accounts, 2022 Interim results and following year end, the 2022 financial results, having regard to any matters that may have been communicated by Deloitte;
- considered the effectiveness of the external audit process and Internal Audit function;
- continued oversight of the maintenance and development of the control environment and finance systems, particularly in the context of the ongoing migration of British Gas Energy customers to the ENSEK platform;
- reviewed the approach taken to assess credit risk exposure amidst exceptionally volatile commodity prices, as well as reviewing the wider impact of a high commodity price environment;
- reviewed matters relating to the Group's pension schemes, including the triennial review and the impact of changes in gilt yields (see note 22);
- monitored information systems security and data security risk management, particularly in view of geopolitical developments during the year;
- received updates on legal, regulatory and ethical compliance, particularly in respect of energy trading and the sale and delivery of FCA regulated products and services as well as the operation of Our Code and the Speak Up helpline;
- reviewed the Company's preparedness for forthcoming legal and regulatory changes, including reform of the UK corporate governance regime;
- reviewed regular reports and recommendations from Internal and External Audit on risk, assurance and controls; and
- carried out in-depth reviews of the risks and controls environment for British Gas Energy, British Gas Services & Solutions, Centrica Business Solutions, Bord Gáis Energy and Energy Marketing & Trading, as well as the Group-wide financial risk and Group definitions of capital employed.

Risk management and internal controls

Internal Audit

The Committee is responsible for monitoring and reviewing the operation and effectiveness of the Group's Internal Audit function, including its independence, strategic focus, activities, plans and resources. The Chief Risk & Audit Officer has direct access to the Chairman of the Board and to the Committee Chair, and is accountable to the Committee.

The Committee reviewed and approved the Group's annual Internal Audit plan ('the plan'). The plan is designed with reference to the Group's Principal Risks, which regularly evolve. Further information on the Principal Risks is available on pages 28 to 33. During the year, the Committee received regular updates on the Internal Audit team's findings and reviewed progress against follow-up actions implemented by the business units.

During the year, the Committee reviewed an annual internal assessment of the independence, objectivity and effectiveness of the Internal Audit function. This assessment demonstrated that the maturity of the Internal Audit function had continued to improve since the External Quality Assessment carried in 2021 and the previous internal assessment in 2020. The Committee remains satisfied that the Internal Audit function has the necessary integrity, objectivity and competency to fulfil its mandate. It has also satisfied itself that the Internal Audit function has adequate standing and is free from management or other restrictions.

Review of the system of risk management and internal controls

Our risk management and internal controls, including compliance with Our Code, and policies are assessed through a self-certification process. We also have a programme to assess the Group's Entity Level Controls. The results of the annual process, together with the conclusions of the internal reviews by Internal Audit and the in-depth reviews of business unit control frameworks undertaken by the Committee, enable the Committee, on behalf of the Board, to form and report their view on the effectiveness of risk management and internal controls. During 2022, the Committee oversaw the work of Internal Audit and the functional support teams, alongside the management teams. As part of its oversight, the Committee received verbal and written reports on movements in the Group Principal Risks, as well as updates on other Group frameworks such as legal and regulatory compliance. The Committee has confidence in its ability to identify issues that arise and the business units' ability to remediate control gaps in the business, where necessary, in line with our risk appetite. The Committee noted the risk management process and internal controls have been in place throughout the year and remain effective, though we recognise the need for ongoing and continuous review or, where necessary, improvement. Examples of continuous improvement derived actions taken during 2022 were the implementation of:

(i) automation enhancements to Entity Level Controls attestation; and

(ii) a new quality assurance methodology to assure the effectiveness of the independent Group-level Controls and IT General Controls testing.

Fair, balanced and understandable

In line with the UK Code, the Committee, on behalf of the Board, reviews the Annual Report, to determine if, when taken as a whole, it is fair, balanced and understandable and provides the information necessary for shareholders and stakeholders to assess the Company's position and performance, culture, business model and strategy. Additionally, the Committee considers the processes and controls involved in the production of the Annual Report, as well as the financial responsibilities of the Directors. There is a robust governance framework around the production of the Annual Report which ensures it is critically reviewed and signed off by the key teams in the relevant businesses and functions.

External auditors

The Committee manages the relationship with the Group's external auditors on behalf of the Board. The Committee considers annually the scope, fee, audit plan, performance objectivity and independence of the external auditors.

To ensure objectivity, key members of the external audit team rotate off the Company's audit. To safeguard the independence of the Company's external auditors and the integrity of the audit process, the recruitment of senior colleagues from the Company's auditors is not permitted for a period of at least two years after they cease to be involved in the provision of services to the Company.

Following a competitive external audit process in 2016, Deloitte were appointed as the Company's auditors at the beginning of 2017 and will this year perform their sixth full audit. Consistent with auditing requirements, Jane Boardman took over from James Leigh as Deloitte's lead audit partner following conclusion of the 2021 audit.

In accordance with the CMA order on Statutory Audit Services for large companies, the Committee has considered the appropriate time to put the audit out to competitive tender. Given the complexity of the business it remains important to balance the benefits of a fresh perspective from a new audit firm, with the negative effects of the disruption and educational time requirements from both tendering and onboarding. The recent Deloitte lead audit partner rotation has provided a fresh perspective and accordingly, as shared last year, the Committee considers it is in the best interests of shareholders for the Company to continue to plan for a competitive audit tender in 2026 (the 10-year legal threshold) with the successful firm taking over for the 2027 financial year. The re-appointment of Deloitte as auditors for the 2022 financial year was approved by shareholders at the AGM in June 2022 and Deloitte has been recommended for re-appointment again in 2023. The Committee confirms that this recommendation is free from influence by any third party and no contractual term of the kind mentioned in Article 16(6) of the Audit Regulation has been imposed on the Company.

The Company has complied with the Statutory Audit Services Order 2014 for the financial year under review.

Effectiveness of the external audit process and the independence and objectivity of the external auditors

To assess the effectiveness of the external audit process and the independence and objectivity of the external auditors, the Committee carried out an assessment, as in prior years, primarily looking at the key areas of:

- robustness of the audit process;
- quality of people and service;
- quality of delivery;
- independence and objectivity; and
- value added advice.

This assessment included an internal questionnaire, which was completed by the Chairman of the Board, Committee members and senior members of management on their views of Deloitte's performance. The questionnaire covered a review of the audit partner and team, the audit scope and approach, audit plan execution, auditor independence and objectivity and robustness of challenge of management. Separately, Deloitte also provided an assessment, via an internal management questionnaire, of management's controls, judgements and engagement throughout the audit process. The feedback was reviewed by management and reported to the Committee. The Committee and the Board confirm that they have taken all the necessary steps to become aware of any relevant audit information and to pass that information onto Deloitte. The Committee was satisfied with the external auditors' commitment to audit quality, the robust and professional working relationship with management and demonstration of strong technical knowledge and professional scepticism. In addition, to ensure the independence of the external auditors, and in accordance with International Standards on Auditing (UK & Ireland) 260 and Ethical Standard 2019 issued by the Accounting Practices Board and as a matter of best practice, Deloitte have confirmed their independence as auditors of the Company. On the basis of Deloitte's confirmation and report on their approach to audit quality and transparency, the Committee concluded that: Deloitte possesses the appropriate qualifications and expertise; remains independent of the Group; and, coupled with effective management engagement, that the audit process was effective.

Corporate Reporting Review

The Audit and Risk Committee assists the Board in fulfilling its oversight responsibilities by reviewing and monitoring the integrity of the financial information provided to shareholders and other stakeholders. The Committee oversees financial reporting and related risks and internal controls, and also has a role in overseeing the internal and external auditors, as well as interacting with other members of management and external stakeholders as required. During the year, the 'TCFD' disclosures and the disclosures related to climate in the Group's 2021 Annual Report and Accounts were reviewed by the Corporate Reporting Review (CRR) team of the Financial Reporting Council (FRC). As a result, the Group received a small number of queries and subsequently committed to supplement existing disclosures and clarify certain climate ambitions. The Committee was pleased that the responses provided to the CRR dealt with the matters raised and the enhancements to the disclosures have been made in this 2022 Annual Report and Accounts. The Committee does note however that the review conducted by the FRC was based solely on the Group's published Annual Report and Accounts and does not provide assurance that it is correct in all material respects.

Non-audit fees

To safeguard the objectivity and independence of the external auditors, the Committee is responsible for the policy on the award of non-audit services to the external auditors. A copy of this policy is available on our website centrica.com. The Chair of the Committee must approve all requests to utilise Deloitte for non-audit services. There is an annual cap on non-audit work during the ordinary course of business of £1million, which is assessed each year for appropriateness in the context of external guidance and regulation.

Overall total non-audit fees incurred in 2022 were £0.9 million (2021: £1.7 million), including £0.5 million for the review of the interim results and £0.3 million for the audit of the Ofgem consolidated segmental statements. In line with the non-audit fees policy, approval for this expenditure was sought and received from the Committee in advance of the work commencing. The amount incurred in the year is well below the legal cap of 70% of non-audit fees (for services not required by regulation) compared to the three-year average of statutory audit fees, amounting to approximately 7%.

In normal circumstances, all significant non-audit work is put out to tender and Deloitte are only ever appointed if their experience and knowledge makes them the most appropriate supplier and it is clear another firm could not undertake the work without adversely impacting the business.

Committee effectiveness

The Committee undertakes an annual review of its terms of reference to ensure that it accurately reflects the role carried out by the Committee, taking into account any new internal and external developments and responsibilities. The Committee's terms of reference are available on our website centrica.com.

The Committee considers that it has continued to discharge its oversight role effectively in an area where expectations and requirements are constantly evolving with insightful and regular engagement and support from management. Read more about the Committee's effectiveness on page 57.

Kevin O'Byrne
on behalf of the Audit and Risk Committee
15 February 2023

Key judgements and financial reporting matters in 2022	Audit and Risk Committee reviews and conclusions
Determination of forecast commodity prices and their use in valuing long-lived assets and derivative contracts Commodity price forecasts are a key assumption in the valuation of the Group's long-lived assets and derivative contracts. For short-term commodity prices over the next four years, observable liquid market prices (as at 31 December 2022) are taken as the best view of expected price. For the longer-term period thereafter, the Group uses a 'P50' median price curve, derived from a collection of third-party forecasts. This approach is deemed to align to pricing that a reasonable market participant would use. The Group has used these price curves in its asset impairment testing and contract valuations. The Group has also obtained commodity price forecasts which are intended to be consistent with net zero by 2050. These are lower than the 'P50' curves the Group has adopted for NBP Gas and for baseload power. The Group has shown the impact of such price forecasts on the gas assets and Nuclear assets in note 7 of the financial statements.	The Committee noted the extreme volatility in short-term commodity prices during the year, with very significant rises seen earlier in the year before then falling back towards the year-end – although prices still remained well above 2021 levels. The Committee understood that this dynamic had a critical impact on many of the other judgements listed below. The Committee reconfirmed continued support for the longer-term 'P50' median curve (derived from third parties) approach. It noted that the 'P50' long-term commodity price forecasts were broadly similar year-on-year for all commodities and that these prices were dwarfed by the near-term increases. As a result of the above, the Committee was comfortable the curves were reasonable. Sensitivities of the asset impairment tests to changes in price forecasts are provided in note 7 on page 146 to 150. The Committee noted the use of a price curve intended to be consistent with net zero by 2050 in the impairment sensitivities and believed the output provided useful information to readers of the accounts. The Committee also noted and welcomed the inclusion of a Climate Change accounting considerations section in note 3.
Energy derivatives – classification and valuation The Group enters into numerous commodity contracts in its ordinary course of business. This can be to procure load for its downstream business, sell output from its upstream assets, to trade around its other commodity exposures or to make money from proprietary activities. On entering into these contracts, the business assesses each of the individual trades and classifies them as either: (i) Out of scope of IFRS 9: For 'own use' contracts (i.e. customer contracts, contracts to take delivery and meet customer demand or sell upstream output) and contracts that cannot be net settled. (ii) In scope of IFRS 9: Contracts for commodities which have the ability to be and practice of being net settled. Energy contracts outside the scope of IFRS 9 are accruals accounted. Those contracts considered to be within the scope of IFRS 9 are treated as derivatives and are marked-to-market (fair valued). If the derivatives are for proprietary energy trading, they are recorded in the business performance column of the Group Income Statement. If they are entered into to protect and optimise the value of underlying assets/contracts or to meet the future downstream demand needs, they are recorded as certain re-measurements. The fair-value of derivatives are estimated by reference to published liquid price quotations for the relevant commodity. Where the derivative extends into illiquid periods, the valuation typically uses the 'P50' median price curves (see Determination of long-term commodity prices and their use valuing long-lived assets). Judgement is required in all aspects of both the classifications and valuations. One of the Group's critical accounting judgements is that its LNG contracts are outside the scope of IFRS 9 because they are entered into for its own purchase and sale requirements ('own use').	The Committee noted that the Group's policy and methodologies in classifying and valuing energy derivatives were unchanged from previous periods. The Committee also reviewed and understood the breakdown by business of the movement in IFRS 9 energy derivative valuations in the Group Income Statement. They reflected on the fact the Group is generally a net buyer of commodity and that the certain re-measurement derivative net loss of £5.2 billion (being £6.4 billion loss for UK Supply book trades, offset by £1.2 billion gain for Upstream, EM&T and other books) was predominantly as a result of the extreme volatility in short-term commodity prices during the year. As prices rose significantly and then fell back, the timing of entering into the hedge trades was important. The Committee noted the link between the derivative certain re-measurements for the UK supply books and the onerous supply contract provision for certain re-measurements, as discussed below. Further detail is provided in notes 2 and 7 on pages 128 to 129 and 146 to 150. The Committee noted and continued to concur with the specific judgement around LNG contract own use classifications.

Key judgements and financial reporting matters in 2022	Audit and Risk Committee reviews and conclusions
Onerous energy supply contract provision The Group's residential and business energy supply contracts are accruals accounted. The Group operates and manages a hedging strategy to ensure that the future costs of supplying these customer portfolios are appropriately managed. These hedges are generally in the scope of IFRS 9 and are measured at fair value (see 'Energy Derivatives – classification and valuation' above). They are recognised as certain re-measurements in the Group's income statement until the point at which the related costs to purchase electricity and gas are incurred. In 2021, following a substantial increase in near-term commodity prices, significant gains arose on these procurement hedges as they are marked-to-market. This moved both the residential and business supply hedges to being significantly in-the-money. Because of this hedge value recognition, the assessment of whether the supply contracts were onerous had to be calculated based on the cost of fulfilling these arrangements, including the reversal of previous mark-to-market gains. Accordingly, the Group determined that at 31 December 2021, the future costs to fulfil customer contracts including marked-to-market reversals would exceed the charges recovered from customers because the associated hedging gains had already been recognised in the Income Statement. The Group therefore recognised an onerous supply contract provision of £2.5 billion at that date. In 2022, following the significant losses on procurement hedges (see 'Energy Derivatives – classification and valuation' above), the residential element of the supply book had moved to an overall out-of-the-money position, whilst the business element remained in-the-money (predominantly because a different hedging strategy is employed). Consequently, for residential, the costs to fulfil the customer contract including marked-to-market reversals no longer exceed the charges expected to be recovered from customer. Therefore, no onerous supply contract provision is required for this element and the previous provision has been reversed. Conversely, for business, the future costs to fulfil customer contracts including marked-to-market reversals is still expected to exceed the charges recovered from customers and accordingly an onerous provision of circa £1 billion is required for this element. This has been calculated by estimating the expected margins from business energy supply customers, and deducting from this margin the expected costs to fulfil those arrangements, including energy purchase costs reflecting the historic mark to market gains (as the hedge book remains in-the-money), and directly attributable overhead costs. For customers where this results in a loss, an onerous contract provision is recorded. The movement in the onerous provision has been reflected as a certain re-measurement in the Income Statement because these supply contracts are economically related to the fair value movements on the hedges. (Note that the Income Statement movement is £1.8 billion, because a £0.3 billion onerous provision was acquired as part of the AvantiGas purchase – see note 12.)	The Committee reviewed the change in the underlying derivative hedge values of the residential and business books and therefore the movement in the onerous energy supply contract provision. The Committee noted that this movement is mainly driven by the change in energy prices and that whilst the Company would expect the remaining onerous provision to predominantly unwind in 2023, this is dependent on market movements. The Committee observed that the residential onerous provision could come back in 2023 if derivative hedges moved back into the money but this is dependent on energy prices and the hedged position. The Committee reviewed the key assumptions used in the onerous provision calculation and noted the reduced sensitivity to margin and customer churn assumptions. It noted the disclosures included in the financial statements to highlight this area. The Committee held discussions with the external auditors to confirm the appropriateness of the accounting treatment and to confirm their views of the assumptions used. Further detail is provided in notes 2, 3 and 7 on pages 128 to 136 and 146 to 150.

Key judgements and financial reporting matters in 2022	Audit and Risk Committee reviews and conclusions
Impairment reversals of long-lived assets The Group makes judgements and estimates in considering whether the carrying amounts of its assets are recoverable: ***Upstream (Power assets and Gas assets)*** For Upstream assets, discounted cash flows are prepared from projected production profiles of each field or power asset, taking into account forecast future commodity prices, to assess their recoverable amount. When deriving forecast cash flows, market prices are used for the period when a commodity is liquid. For the longer-term illiquid period, the 'P50' median price curve is used (see 'Determination of forecast commodity prices and their use valuing long-lived assets and derivatives', above). Judgement is also required around production volumes. For Nuclear, individual station information and recent availability data is factored in to the overall asset valuation. The expected operating life of Sizewell has continued to be reflected to 2055 in the modelling, beyond the original design life. For Gas assets, each field has specific reservoir and field characteristics and is modelled independently. During 2022, new taxes have also been announced and these have been included in the discounted cash flow modelling. For Nuclear, the Electricity Generator Levy applies a tax rate of 45% on revenues exceeding a benchmark price of £75/MWh and will apply from 1 January 2023 to 31 March 2028. For Gas assets, the Energy Profits Levy will increase to 35% (bringing the headline rate on gas asset profits to 75% from 65%) from 1 January 2023 and continue until 31 March 2028. Despite the implementation of these new taxes, the year-on-year increase in forecast commodity prices has more than offset their impact. As a result, an exceptional impairment reversal of £195 million has been booked in relation to the Nuclear investment. For Gas assets, significant impairment headroom remains. Because the field carrying values have generally already been written back to their depreciated historic cost, no further write-back is allowed. Sensitivity analysis has been provided in the financial statements to show the impact if there was a 50% reduction in short-term liquid prices (see note 7).	The Committee challenged management and the external auditors on the key inputs to the impairment models including price, outage rates, assumed lives, tax and discount rates, and were comfortable with the conclusions reached. The Committee reviewed the Nuclear investment write-back and noted that the increase in near-term commodity prices had more than offset the cost of the Electricity Generator Levy. The Committee noted that price sensitivity disclosures have been included in the financial statements. Further detail on impairment write-back and the assumptions used in determining the recoverable amounts is provided in notes 7 and S2 on pages 146 to 150 and 187 to 199.
Credit provisions for trade and other receivables The IFRS 9 impairment model requires credit provisions ('bad debt') for trade and other receivables to be based on an expected credit loss model, as opposed to an incurred loss basis. The economic effects of the inflationary pressures on household income, not least energy prices, and the wider cost of living crisis will likely impact the ability of the Group's customers to pay amounts due. Accordingly, there is significant judgement around the levels of forecast bad debt and the provisioning required at the year-end. The Group's residential and business energy supply customers account for the majority of Group's credit exposure (with balances associated with our trading business generally received within 30 days). Expected default rates in these areas are calculated initially on a matrix basis by considering recent historical loss experience, the nature of the customer, payment method selected and, where relevant, the sector in which they operate. Management has then also factored in forward-looking economic assumptions, taking into account inflation and affordability forecasts. In the prior year a high-level macroeconomic provision of £30 million was maintained to cover inflationary concerns. In 2022, the deemed quality and relative ageing of the Group's debt has improved compared with last year, reducing the underlying modelled provision output (on a % basis). However, given the economic environment the high level macroeconomic provisions has been increased by £95 million (to £125 million) to cover the inflationary and cost of living concerns. For UK Downstream energy supply, the bad debt charge as a percentage of revenue increased to 2.1% (2021: 1.1%). The closing bad debt provision moved to 26% (2021: 29%) of UK energy supply gross receivables. Due to the significant estimation uncertainty in this area, management continues to provide detailed analysis and sensitivities in note 17 to the Financial Statements.	The Committee reviewed management's groupings of receivables by the key factors affecting recoverability (e.g. payment method, nature of customers) and considered the levels of provisions booked against each grouping, at the year-end. The Committee discussed the approach with the external auditors. The Committee was comfortable with the provisions booked, including the increase in the macroeconomic provisions, whilst noting the significant estimation uncertainty in this area. The Committee noted the continued enhanced disclosure in note 17, setting out the judgemental nature of the provisioning and the sensitivity analysis to allow users of the accounts to model different outcome scenarios.

Key judgements and financial reporting matters in 2022	Audit and Risk Committee reviews and conclusions
Classification and presentation of exceptional items and certain re-measurements The Group reflects its underlying financial results in the business performance column of the Group Income Statement. To be able to provide this in a clear and consistent presentation, the effects of certain re-measurements of financial instruments and onerous supply contract provisions, and exceptional items are reported separately in a different column in the Group Income Statement. The classification of items as exceptional and specific trades as certain re-measurements (see 'Onerous energy supply contract provision' and 'Energy Derivatives – classification and valuation' sections above) are subject to defined Group policies. These policies are reviewed annually by management. At the year-end, exceptional items included the Nuclear impairment reversal and loss on disposal from the sale of Spirit Energy's Norwegian and Statfjord fields noted above. Also included is a write-back of £12 million predominantly associated with a gas engine in Centrica Business Solutions. Certain re-measurements totalled an overall circa £3.4 billion loss – being £5.2 billion loss from derivatives and £1.8 billion gain from the onerous supply contract provision movement.	The Committee noted that the policy on certain re-measurements and exceptional items remains unchanged from prior year. The Committee had formally reviewed and approved the Group's policy on exceptional items in previous years and, in the current year, it used this policy to help inform the appropriateness of the proposed classifications. It challenged the items classified as exceptional items, considering their size, nature and incidence and in the context of the Group policy. The Committee concluded that separate disclosure of these items as exceptional was appropriate in the Financial Statements. The Committee ultimately agreed that presenting certain re-measurements and exceptional items separately continues to allow underlying performance to be reflected on a consistent and comparable basis. Further detail is provided in notes 2, 3 and 7 on pages 128 to 136 and 146 to 150.
Supplier of Last Resort (SoLR) Accounting Following the unprecedented rise in commodity prices in the second half of 2021, a number of UK energy suppliers were unable to continue trading and the Group was appointed as the Supplier of Last Resort for the customers of nine suppliers. Under Ofgem's licence conditions, the Group is entitled to make a Last Resort Supplier Payment claim for the shortfall between costs reasonably incurred in supplying gas and electricity to premises under the Last Resort Supply Direction, and the charges recovered from customers (which are limited by the tariff cap). The Group submitted an initial claim in 2021, covering a six-month period from the date of appointment, and received confirmation of Ofgem's acceptance in December 2021. The claim primarily covered incremental commodity costs, incurred as a result of procuring gas and electricity to supply affected customers. The initial claim is currently being settled in 12 monthly instalments ending in April 2023 and a total of £258 million has been received during 2022. The Group submitted a second claim to Ofgem in Autumn 2022, recognising both actual commodity costs incurred and additional costs which were not included in the initial claim. This includes the recovery of customer credit balances, where the Group had not waived the right to do so. The second claim was accepted by Ofgem in December 2022 and will be settled between April 2023 and April 2024. The value recognised for the SoLR receivable at 31 December 2022 is £275 million (31 December 2021: £234 million), offsetting cumulative costs incurred of £426 million (31 December 2021: £185 million) and cumulative customer credit balances of £107 million (31 December 2021: £49 million). The Group judges that the Last Resort Supplier Payment process represents an Ofgem support mechanism, enabling energy suppliers to provide stability to the customers of failed suppliers. The Group determines this is within the scope of IAS 20 'Government Grants' and amounts receivable under the mechanism are deemed virtually certain and are recognised as the related expenses are incurred or liabilities recognised.	The Committee has considered the judgement made by the Group and concurs that the recognition of the SoLR receivable continues to be appropriate and matches the costs and liabilities incurred or recognised by the Group during the year. The Committee held discussions with the external auditors to verify the approach being taken and noted that the accounting treatment aligns with industry practice. Further detail is provided in note 1 on pages 126 to 127.
Assets held for sale and discontinued operations The Group announced on 8 December 2021 that it had agreed to dispose of the Spirit Energy Norwegian and Statfjord fields to Sval Energi and Equinor respectively, and treated the assets and liabilities as a disposal group held for sale from that point. The Group judged that this disposal group did not represent a separate major line of business or geographical operations, because the Upstream segment retained other European producing fields, and hence the Group concluded that the disposal group did not constitute a discontinued operation. The transaction completed on 31 May 2022, resulting in an exceptional loss on disposal of £362 million (including recycling of historic foreign currency translation losses). The assets contributed £120 million of the Group's profit after tax, prior to the completion date.	The Committee noted that it had previously concurred that classification of the disposal group as a discontinued operation was not appropriate because the Group retains the Spirit Energy UK and Netherlands business, post-completion. The Committee held discussions with the auditors on the appropriateness and consequences of this conclusion. It was re-assured by those discussions and noted the extensive disclosures included in the Financial Statements on this area. Further detail on this disposal is provided in note 12 on pages 156 to 158.

Key judgements and financial reporting matters in 2022	Audit and Risk Committee reviews and conclusions
Energy supply revenue recognition The Group's revenue for energy supply activities includes an estimate of energy supplied to customers between the date of the last meter reading and an estimated year-end position. This is estimated through the billing systems, using historical consumption patterns, on a customer-by-customer basis, taking into account weather patterns, load forecasts and the differences between actual meter readings being returned and system estimates. An assessment is also made of any factors that are likely to materially affect the ultimate economic benefits which will flow to the Group, including bill cancellation and re-bill rates. To the extent that the economic benefits are not expected to flow to the Group, revenue is not recognised. At the year-end, unread energy income for the continuing supply businesses was £2.9 billion (2021: £1.7 billion). The Group's revenue was also impacted by the UK Government's customer support schemes. These schemes have been accounted for under IFRS 15: 'Revenue from Contracts with Customers'. Revenue of circa £1.75 billion has been recognised from Government from both the Energy Price Guarantee and the Energy Bill Relief Scheme.	The Committee has reviewed the level of unread revenue and unbilled accrual made during the year and discussed with management and the external auditors. The Committee noted that the ENSEK has had a different process on unbilled accrual but had followed the same estimation process as in previous years, for customers on the existing SAP platform, and a similar process for the new energy platform and that the external auditors had independently reperformed this calculation to within an immaterial difference. It discussed the accounting treatment for the customer support schemes with management and the Group's auditors and was comfortable with the treatment adopted. More details of the customer support schemes are provided in note 1 on pages 126 to 127, on unread energy income are provided in note 3 on page 132 and on unbilled energy income in note 17 on page 171.
Pensions The assets and liabilities, and the cost associated with providing benefits under defined benefit schemes is determined separately for each of the Group's schemes. Judgement is required in setting the key assumptions used for the actuarial valuation which determines the ultimate cost of providing post-employment benefits, especially given the length of the Group's expected liabilities. The net Group pension asset position was £40 million (2021: £nil). The UK defined benefit schemes used a nominal discount rate of 4.7% (2021: 1.8%) and inflation of 3.0% (2021: 3.1%) Following the Liability Driven Investment (LDI) crisis in the pensions arena in late 2022, the Group provided a £400 million interest-bearing loan to the UK Registered Pension Schemes to ensure the schemes could maintain a high level of interest and inflation hedging and meet any collateral requirements. The Group judged that this should be accounted for as a loan (within Securities) in the books of the Group and as a reduction in scheme assets for the Pension Schemes. As a consequence of the LDI issues, the pension scheme now has a greater proportion of unquoted assets in its asset portfolio. As a result the Group undertakes more detailed reviews of these valuations, whilst acknowledging the inherent uncertainty compared with quoted assets.	The Committee noted the key pension assumptions and disclosures in the Financial Statements. It noted that these assumptions were derived on a consistent basis to previous periods. The Committee recognised the role of the independent actuary, who is consulted on the appropriateness of the assumptions, and discussions were also held with the external auditors. The Committee also understood the issues that arose from the LDI crisis and the need to provide extra funding to the schemes to ensure they remained appropriately hedged. It also discussed the accounting treatment with the auditors and ultimately concurred with this judgement. It also noted the greater proportion of unquoted assets in the scheme portfolio and welcomed the greater scrutiny on these valuations. Further details on pensions are set out in notes 1 and 22 on pages 127 and 175 to 179.
Fair, balanced and understandable The Board is required to confirm that the Annual Report and Financial Statements are fair, balanced and understandable. To enable the Board to make this declaration, there is a year-end review process to ensure that the Committee and the Board have access to all relevant information, including management's papers on significant issues.	The Committee reviewed the key factors considered in determining whether the Annual Report is fair, balanced and understandable. The Committee and all Board members received a draft of the Annual Report and Financial Statements in sufficient time to review and challenge the disclosures therein. In addition, the Committee took into consideration the external auditors' reviews of the consistency between the reporting narrative of the Annual Report and the Financial Statements.
Ofgem Consolidated Segmental Statement The Group is required to prepare an annual regulatory statement (Consolidated Segmental Statement (CSS)) for Ofgem which breaks down our licensed activities for the financial year into a generation, domestic and non-domestic and electricity and gas result. The CSS is reconciled to our externally reported International Financial Reporting Standards Annual Report and Accounts. The Group publishes the CSS at the same time as the full-year Annual Report and Accounts and the CSS is independently audited. In preparing the CSS, judgement is required in the allocation of non-specific costs between domestic and non-domestic and electricity and gas, and the distinction between licensed and non-licensed activities.	The Committee reviewed the Ofgem CSS and the key judgements and disclosures made in its preparation. The external auditors also provided a report on the work on the CSS and held discussions with the Committee. The full CSS and the independent audit opinion are set out on pages 239 to 251.

Nominations Committee

Membership, meeting attendance and key focus

Committee members
Scott Wheway (Chair)
Carol Arrowsmith
Nathan Bostock (with effect from 9 May 2022)
CP Duggal (with effect from 16 December 2022)
Heidi Mottram
Kevin O'Byrne
Amber Rudd (with effect from 10 January 2022)

Stephen Hester and Pam Kaur retired as members of the Committee on 7 June 2022.

Biographical details of the Committee Chair and members can be found on pages 62 to 65. Meeting attendance of the Committee members can be found on page 66.

Meeting attendees by invitation
Group Chief Executive Officer
Group General Counsel & Company Secretary
Group Chief People Officer

Focus areas in 2022
- Board skills;
- Board diversity;
- Non-Executive Director succession planning;
- Executive Director succession planning;
- Board Committee composition;
- Non-Executive Director recruitment;
- Senior Independent Director succession;
- approach to workforce engagement;
- Board training requirements;
- election and re-election of Directors at the 2022 AGM; and
- approach to, and findings arising from, an annual Board effectiveness assessment (see page 57).

Dear Shareholder

On behalf of the Board, I am pleased to present the Nominations Committee report for 2022 which explains the Committee's focus and activities during the year.

Committee overview

The Nominations Committee is responsible for ensuring that the Board and its Committees have the appropriate balance of skills, knowledge, and experience to effectively lead the Company both now and in the future. This is achieved through a formal procedure for the appointment of new Directors to the Board, an effective succession planning process, reviewing Board composition and Board skills and assessing Board training requirements.

Main activities during 2022

Board succession planning and Board skills

The Committee is responsible for leading the succession planning process and making recommendations to the Board. The Committee takes a long-term view to succession planning, regularly reviewing Board tenure, Board diversity (particularly diversity of gender, cultural background and experience) and assessing the skills required by the Board to best support the Company's strategy on a multi-year lookahead as well as in the near term. Details of the wide range of skills possessed by the Board today can be found on pages 62 to 65. The Committee's work on succession planning directly informed recruitment in 2022. A focus area for the Committee in 2023 will remain ensuring the Company continues to have appropriate succession plans for different time horizons.

Non-Executive Director recruitment

A primary focus area for the Committee in 2022 was Non-Executive Director recruitment.

Centrica has a thorough and robust search process for the selection of new Non-Executive Directors. In identifying and nominating candidates to fill Board vacancies, the Committee considers candidates from a wide range of backgrounds, assessing them on merit against objective criteria and with due regard for the benefits of diversity on the Board. The Committee therefore takes particular interest in the recruitment process of its independent search firms to ensure that a diverse pool of candidates is considered for any vacancy.

A shortlist of candidates is shared with the Committee, meetings are scheduled with Directors and members of management, and then once the candidates have been identified, and their ability to meet the necessary time commitment is confirmed, a recommendation is made to the Board.

Spencer Stuart supported the search processes that led to appointing Amber Rudd, Nathan Bostock and Chanderpreet (CP) Duggal as Non-Executive Directors in 2022. Although Carol Arrowsmith was a member of its Advisory Group during 2021 and early 2022, there are no other connections between Spencer Stuart, the Company and its individual Directors. There were no changes in Executive Directors during 2022.

Executive Director succession

On 12 January 2023, we announced that Russell O'Brien will be appointed Group Chief Financial Officer (CFO) and an Executive Director on 1 March 2023. Kate Ringrose will step down as CFO and an Executive Director on 28 February 2023 and will leave Centrica at the end of 2023 following an orderly transition. Russell brings broad experience across the energy value chain, including roles as global CFO for both Shell's Integrated Gas and Retail businesses.

Board training

The Committee reviewed the training received by the Board during 2022 as well as the training requirements for the Board in 2023. In doing so, the Committee sought to ensure the Board remained equipped with the latest knowledge and understanding to support effective decision-making. Board training in 2022 included sessions on cyber security, energy market trends and wholesale energy trading. The Committee also identified further areas of training directly linked to Centrica's strategy that will inform the Board's training programme in 2023. Details of the induction for all new Directors are on page 60.

Oversight of Director external appointments

To ensure that Directors will continue to have sufficient time to commit to their Centrica responsibilities, any additional external appointments taken up require advance approval by the Board. This included the other members of the Board considering and approving my appointment as a Non-Executive Director of Lloyds Banking Group and as Chair of Scottish Widows Group, following my retirement from the role of Chair of AXA UK plc.

A focus on diversity and inclusion

We operate in increasingly diverse communities and this diversity is evident in our workforce and our customers, suppliers and other stakeholders. As set out in our Board Diversity Policy adopted in July 2019 we know that being inclusive of the diversity we have in our business will give us a competitive advantage. The Committee therefore continues to embrace the strategic importance of diversity and inclusion, including as part of the Board's own succession planning.

As at 31 December 2022, 44.4% of the Board and 50% of independent Non-Executive Directors (excluding the Chairman of the Board) were women, exceeding the target in Listing Rule 9.8.6(9).

As at 31 December 2022, the Board composition met, and continues to meet, the target ethnic minority representation in Listing Rule 9.8.6(9), except for the specific period following the resignation of Pam Kaur and appointment of CP Duggal. The Board comprises nationals of four different countries (the UK, Ireland, USA and South Africa), with a wide range of backgrounds and experience.

Having met or exceeded all applicable diversity targets for listed company boards in the past two years, following recent directorate changes with Kate Ringrose stepping down as the Group Chief Financial Officer in 2023, we recognise the need for the Board's diversity to remain consistent with or exceed these requirements in future. The Board is fully committed to securing this outcome at the earliest next opportunity and the Committee will ensure that these requirements inform and assume the necessary priority in the Board's succession planning in 2023.

Further information on the steps that the Company is taking to create a diverse and inclusive workplace is on pages 40 to 41.

Workforce engagement

The Committee reviewed the Board's approach to workforce engagement pursuant to the expectations of Section 5 of the UK Code, ultimately adopting a collective approach to workforce engagement involving all Non-Executive Directors leveraging a combination of different types of engagement, including: listening sessions with colleagues; meetings with senior leaders and future talent; and dedicated engagement sessions with the Chairs of the employee-led colleague networks.

Committee effectiveness

The Committee undertakes an annual review of its terms of reference to ensure that they accurately reflect the role carried out by the Committee, taking into account any new internal and external developments and responsibilities. The Committee's terms of reference are available on our website centrica.com/TOR.

The Committee considers that it has continued to discharge its oversight role effectively in an area where expectations and requirements are constantly evolving with insightful and regular engagement and support from management. Read more about the Committee's effectiveness on page 57.

Scott Wheway
on behalf of the Nominations Committee
15 February 2023

Safety, Environment and Sustainability Committee

Membership, meeting attendance and key focus

Committee members

Heidi Mottram (Chair)
Nathan Bostock (with effect from 28 July 2022)
Amber Rudd (with effect from 10 January 2022)
Scott Wheway

Pam Kaur retired as a member of the Committee on 7 June 2022.

Biographical details of the Committee Chair and members can be found on pages 62 to 65. Meeting attendance of the Committee members can be found on page 66.

Meeting attendees by invitation

Kevin O'Byrne
Carol Arrowsmith
CP Duggal (with effect from 16 December 2022)
Group Chief Executive
Group General Counsel & Company Secretary
Group Chief People Officer

Focus areas in 2022

- Health and Safety
- Environment
- Responsible business
- Governance

Dear Shareholder

On behalf of the Board, I am pleased to present the Safety, Environment and Sustainability Committee (SESC) report for the year ended 31 December 2022 which explains the Committee's focus on, and activities relating to, health and safety (H&S), environment and responsible business matters during the year.

Committee overview

The Committee's role and responsibilities, on behalf of the Board, are to review and monitor the culture, practices, risks and performance of Centrica with respect to H&S, ESG (Environmental, Social and Governance) and broader responsible business matters. This is achieved through a rigorous review of performance data, the Company's commitments and targets and activities, programmes and initiatives which relate to Centrica's H&S, social and sustainability priorities and values. As part of its focus, the Committee also provides input to, and review of, the Company's ESG annual reporting disclosure requirements.

Main activities during 2022

The Committee considered a broad range of topics and the key highlights are disclosed below.

Health and Safety

As a standing item on the agenda, the Committee maintained its regular focus on H&S performance metrics, assurance activity and material developments. The Committee reviewed risk identification and controls and considered that the Group had appropriate capabilities, correct processes and engaged culture in H&S. A focus area for the Committee was ensuring that any learnings from any H&S incidents were properly reviewed and, where appropriate, the relevant actions taken to mitigate the possibility of reoccurrence.

At each meeting, the Committee invited management from specific Business Units to discuss occupational and process safety reviews, outcomes and improvements derived from targeted interventions and future action plans.

Environment

The Committee provided oversight of the Company's continued commitment to, and role in, the drive to net zero, including the review of a scorecard that reported progress to date against the Company's People & Planet Plan and the Climate Transition Plan, as well as the impact of the Company's operations on the environment and the Company's green credentials.

The Climate Transition Plan first published in November 2021 was updated on 29 April 2022 to take into account retained Spirit Energy assets and published on the Company's website. At the 2022 AGM, the Climate Transition Plan, through an advisory non-binding vote, was supported by the overwhelming majority of shareholders (79.96% of votes received). In accordance with the UK Corporate Governance Code 2018, Centrica consulted some of the shareholders who did not support the resolution in order to understand the reasons behind their decision. The Committee reflected upon the feedback, and will oversee that these constructive views, together with overall investor expectations relating to ESG factors, are continually taken into account when developing the Climate Transition Plan and other environmental plans in the future.

The Committee investigated and assessed the impact on the Climate Transition Plan of major investment decisions taken by the Group, satisfying itself that the Group was striking the balance between discharging its obligation to support security of energy supply in the short term through investments in activities such as gas-fired peakers in Ireland, whilst still ensuring that the Group continued to focus on opportunities to deliver the targets in its Climate Transition Plan in the longer term. The Committee will continue to provide oversight and scrutiny of the Company's decarbonisation plans.

Responsible business

The Committee reviewed and endorsed Centrica's new approach to charity partnerships in the UK being locally focused, noting the high level of colleague support and engagement that the new approach generated. The Committee was also pleased to continue to support Bord Gáis's successful long-term relationship with Focus Ireland.

The Committee had specific sessions in the year to discuss modern slavery reporting practices and the robust management of modern slavery risk in the supply chain. This included the recommendation to the Board to adopt the Company's 2021 Modern Slavery Act Statement, which was in line with UK Home Office requirements and industry guidance.

Centrica works with suppliers seeking to continuously raise standards through its responsible sourcing assurance activity. The Committee reviews this activity on an annual basis, evaluating the progress made and providing feedback on any specific issues identified. In addition, the Committee approved the audit plan for 2023 and considered the external perceptions of Centrica's reputation.

Governance

In addition to the above, the Committee had opportunities to receive relevant training on matters specific to the Committee's remit. The Committee also reviewed corporate governance developments, ESG expectations and behaviours including key changes in law and regulation as well as examples of best practice.

Committee effectiveness

The Committee undertakes an annual review of its terms of reference to ensure that it accurately reflects the role carried out by the Committee, taking into account any new internal and external developments and responsibilities. The Committee's terms of reference are available on our website centrica.com/TOR.

The Committee considers that it has continued to discharge its oversight role effectively in an area where expectations and requirements are constantly evolving with insightful and regular engagement and support from management. Read more about the Committee's effectiveness on page 57.

Heidi Mottram
on behalf of the Safety, Environment and Sustainability Committee
15 February 2023

+ Read more about our People & Planet Plan on **pages 39 to 44**

Remuneration Committee

Membership, meeting attendance and key focus

Committee members
Carol Arrowsmith (Chair)
CP Duggal (with effect from 16 December 2022)
Heidi Mottram
Amber Rudd (with effect from 10 January 2022)

Stephen Hester retired as a member of the Committee on 7 June 2022

Biographical details of the Committee Chair and members can be found on pages 62 to 65. Meeting attendance of the Committee members can be found on page 66.

Meeting attendees by invitation
Chairman of the Board
Group Chief Executive
Group Chief People Officer
Group Head of Reward

Focus areas in 2022
- Approval of new Remuneration Policy
- Executive Director salary reviews
- Review of pay issues across the wider workforce
- Cost of living support for colleagues
- Gender and ethnicity pay gap report
- Review and approval of 2022 financial and business targets and individual objectives
- Review and approval of Directors' expenses
- Executive shareholding update
- Review and approval of remuneration package for Group Chief Financial Officer (CFO)

Dear Shareholder

On behalf of the Board I present the Remuneration Report for the year ended 31 December 2022.

The past two years have been a challenging time for our industry. We have faced the biggest energy crisis since the 1970's, huge instability in our markets together with an unprecedented round of energy company failures leaving stranded customers. Never has stability and the importance of being able to respond to our customers' needs been greater. The leadership team at Centrica has worked tirelessly to ensure that our business navigated these challenges and continued on our journey to improve our customer experience. We have work to do but believe that 2022 has been a turning point.

As the Remuneration Committee we have focused on balancing the views and experiences of our stakeholders with our responsibility to pay our leaders fairly in that context.

At our last AGM we proposed a new Remuneration Policy. Our aim was to design a remuneration structure that would support our strategic direction, enable us to engage our leadership team in the continuing transformation of Centrica and support our requirement for a team capable of making those changes, whilst addressing the challenges our Company and industry faces going forward. We introduced a new framework for annual bonus to allow us to incorporate judgement on our operational performance whilst retaining a strong focus on financial achievement. We replaced the long term incentive plan with a restricted share plan and thereby reduced the maximum share award from 3 times salary to a maximum of 1.5 times salary. During that review I spoke with many of our largest shareholders and as part of that process I received strong support for our leadership team and genuine interest in our aims.

I am pleased to say that we received support in favour of the new Policy at our AGM in June. This indicated that our shareholders understood and supported the rationale for moving to a new long-term incentive structure. We believe this will provide a stronger and more stable link with the long-term performance of our business so enabling us to attract people capable of leading Centrica which remains a complex business. We granted the first Restricted Share Plan (RSP) awards to our Executives shortly after the AGM.

Throughout my conversations with shareholders, I heard many of you expressing your strong support for the management team and the progress that was being made to simplify and stabilise our company.

Performance of our Executive team

Our Group Chief Executive, Chris O'Shea, has continued to show outstanding leadership, drive and determination to turn around the company for our 10 million customers, 20,000 colleagues and our many shareholders. Stability is vitally important to continue our transformation and for our customers, our colleagues and our shareholders who need us to retain a strong leadership team to deliver on our commitments.

We are investing in the future of UK energy and we have an ambitious investment pipeline of net zero aligned options. We have also re-opened our gas storage facility, Rough, to improve UK energy security.

The COVID-19 pandemic and the energy crisis, which saw the collapse of several energy suppliers, have demonstrated the need for well-funded, well-run energy companies. We have taken a responsible approach by safeguarding customer deposits and stepped in to help more than 700,000 customers that were left without a supplier.

Our financial resilience has allowed us to support customers through the energy crisis including donating £50 million to help vulnerable customers. Our donations will continue to grow with our commitment to give 10% of British Gas Energy and Bord Gáis Energy profits. This has enabled us to create the largest package of voluntary energy support for customers in the UK.

This financial resilience has also meant that we can support our people. In 2022 we provided two significant cost of living payments to colleagues to help them to manage rising household costs. We have introduced a number of other financial and non-financial initiatives for our colleagues including an energy allowance for all colleagues who are British Gas customers and reduced priced meals at all our sites. We have launched a number of new programmes aimed at supporting the mental health of our colleagues, particularly those that are providing vital support to our customers every day. In addition, we have invested £25m in customer service with the recruitment of 700 additional UK-based agents to allow us to manage the increase in demand from our customers. More information on our support to colleagues is set out in the Group Chief People Officer report on pages 37 to 38.

Our financial stability has also enabled us to fulfil our commitment to shareholders with the announcement in 2022 of the reinstatement of our dividends and the £250 million share repurchase programme which is well underway.

Financial performance outcomes for the year

As set out earlier in this report, the wider Centrica business has delivered exceptionally strong financial performance. Our portfolio has been simplified and our balance sheet strengthened.

Within our portfolio, our businesses are linked and well-positioned for growth. Our strong asset-backed balance sheet and our liquidity allows us to manage volatile markets effectively.

In my letter to shareholders last year, I explained that Chris O'Shea had elected not to accept his 2021 annual bonus payment due to the hardships faced by our customers. This decision was made after Chris had not received a bonus payment for the previous two financial years. I made it clear in my letter that if performance in 2022 justified a bonus, it was our intention to pay that bonus because we cannot expect to attract and retain leaders in the future if we do not meet our commitment to recognise and reward the performance and talent of our people.

It is the opinion of the Committee that the exceptional financial performance against the stretching targets that were set for 2022 does justify a bonus payment for both the Group Chief Executive (CEO) and the Group Chief Financial Officer (CFO).

Annual Incentive Plan

The assessment of annual performance for the Centrica leadership team is 75% based on business performance and the remaining 25% based on individual performance against strategic objectives.

The business performance element for the year was split equally between a financial measure, earnings per share (EPS), and the outcome of a balanced scorecard of financial and operational measures that were critical to the success of the organisation in 2022. Balanced scorecard measures included key Group financial performance measures as well as important business unit measures such as the cost to serve for our customer-facing businesses and a cost:income ratio for our Trading business (see page 89 for details).

The adjusted EPS measure had defined threshold, target and maximum levels. Exceptional overall business performance in 2022 resulted in our EPS outcome being well above the maximum level that had been set. The Committee reviewed the impact of commodity prices on the outcome and noted that, excluding this impact, the outcome would remain above maximum.

The Committee carefully considered the impact of this year's exceptional movement in commodity prices on performance compared to the targets set at the start of the year. Even after excluding the positive impact of commodity prices this year, the underlying financial performance was still above the maximum level for the Annual Incentive Plan (AIP).

Strong performance in various areas across the Group also meant that the majority of the balanced scorecard measures and targets were met in full. This included measures that reflect the capacity we have to deliver for our customers, strong free cash flow generation, the material improvement in the cost:income ratio in EM&T and progress against our long-term climate-related targets. In addition, whilst we continued to invest to improve our customer complaints taskforce and frontline resource, complaint volumes were above the prior year, partly due to pricing and cost of living concerns in the general economy. As a consequence, our cost to serve under some bases was above plan. Overall, this resulted in a score of 80% against the balanced scorecard.

With regards to individual performance, the Committee reviewed Chris O'Shea's contribution to, and leadership of the business, and agreed that he has performed exceptionally well throughout 2022. Highlights include step changes in customer outcomes, focus on instilling a culture of delivery and operational excellence and significant long-term improvement in colleague engagement scores. The Committee determined that an outcome of above target, at 88% of maximum, under this element of the annual bonus was appropriate.

For Kate Ringrose, the Committee determined that an outcome at 62.5% of maximum, under the personal objectives element of the annual bonus was appropriate based on her performance in the year, particularly in respect of her leadership and management during the recent commodity price environment and work in building the asset portfolio.

This results in bonuses of 89.5% of maximum (179% of salary) for Chris O'Shea and 83% of maximum (125% of salary) for Kate Ringrose.

Long Term Incentive Plan

In 2020 the Committee approved a Long Term Incentive Plan (LTIP) award for Chris O'Shea relating to the performance period 2020-2022. This was in line with our previous Remuneration Policy.

The performance targets for the LTIP award included Total Shareholder Return (TSR), Economic Profit (EP), Underlying Adjusted Operating Cash Flow growth (UAOCF) and key performance indicators (KPIs) focused on safety, customer and colleague engagement.

TSR performance over the three-year period has been strong against peers and resulted in an outcome of 62.4% of the maximum for this metric. Performance against the other financial measures exceeded the three-year targets set by the Committee at the start of the performance period in 2020 and has therefore resulted in maximum outcomes under these metrics. The Committee considered performance under the non-financial KPIs including the process safety outcome, achieved at maximum, and NPS, achieved between threshold and maximum, and taking the measures together determined an outcome under this element of 50% of maximum.

This results in an overall vesting outcome of 76% of maximum for the 2020 LTIP.

For various reasons, including the Board's involvement in the planned divestment of Direct Energy, the grant of the 2020 LTIP was delayed until May 2021. This award will therefore not vest until 2024, and the shares will be released in 2026, following the mandatory two-year holding period.

As the performance period for the award ended on 31 December 2022, the estimated value of the vested award has been included in the single figure for total remuneration table on page 88. In addition, the Committee felt it was appropriate at this point to review whether the CEO (the only recipient of a 2020 LTIP award) could benefit from windfall gains over the period. The Committee looked at a number of factors, including the share price of the award at grant and the strong performance of Centrica compared with that of our direct peers and the wider market over the three-year performance period. Following this review, the Committee concluded that as a result of the following actions already taken, the risk of a windfall gain has been sufficiently mitigated:

- The Committee reduced the award level to 250% of salary at grant compared to the maximum of 300% of salary to reflect historic share price performance (a reduction of 17%).
- The later grant date in 2021 resulted in a share price on grant of 55 pence, compared to if the award had been granted at the normal time (which would have been shortly after the onset of COVID-19) at a price of circa 37 pence (a further reduction of 33%).

Therefore, given the reduction of award on grant and the delay in vesting, the Committee concluded that no further adjustment for windfall gains was necessary to the vesting outturn of 76% of maximum.

Further details are set out on pages 90 to 91.

CEO salary review

We considered carefully the pay arrangements for the wider workforce when we debated the salary adjustment for the CEO. Typically, our pay arrangements take effect from 1 April. This year we accelerated the timing so that the pay rises became effective 1 January for the wider workforce. These arrangements were negotiated and communicated with support from our trade unions for which we are appreciative. For the majority of colleagues, the pay deal in total was worth more than 10% of salary. This included base salary increases of at least 5% and a package of additional financial support, including lump sum payments, to recognise the continuing challenge from the rising cost of living.

A salary increase of 2.6% will be awarded to the CEO effective 1 April 2023 taking his salary from £794,375 to £815,000. This increase is below the average base pay increase provided to the wider workforce of 5%. Further details are provided on page 89.

Director changes

We announced in January that Russell O'Brien will be appointed Group CFO on 1 March 2023. The Committee considered carefully the salary that should be offered to Russell O'Brien in his new role. In particular, we took account of his considerable relevant experience and previous finance and treasurer roles at Shell. We also were aware of the competitive landscape for other similar senior and complex roles as well as salaries within the ranges paid by the companies which the Committee believe are appropriate comparators for the Group. As a result, the new CFO's salary will be £540,000. Other elements of his package will be fully in line with the approved Remuneration Policy.

Kate Ringrose will step down as CFO and an Executive Director on 28 February 2023 and is expected to leave Centrica towards the end of 2023 after an orderly transition. The Committee agreed that Kate will be treated as a good leaver for the purposes of her outstanding long-term incentive awards, which will be pro-rated to her termination date.

We have deliberated over these individual decisions, and in particular the pay outcomes for our CEO in respect of the year ending December 2022 and firmly believe that the Remuneration Committee must be willing to pay the CEO against his contract for delivering exceptional personal leadership of the business in very challenging times. We believe that the decisions taken by Chris and his team have substantially and positively impacted the business and its ability to serve customers and contributed to greater energy stability in the market.

The Committee is dedicated to an open and transparent dialogue with our shareholders and therefore I welcome views on any part of our remuneration arrangements.

Carol Arrowsmith
on behalf of the Remuneration Committee
15 February 2023

At a Glance

How we've supported our stakeholders in 2022

Customers

£50m
Support to help customers during the energy crisis

10%
Of British Gas and Bord Gáis profits to be donated until current crisis is over

£25m
Invested in customer service

Colleagues

2
Significant cost of living payments made

18ppt
Increase in colleague engagement

3700
New colleagues joined us

Shareholders

£250m
Share repurchase programme launched

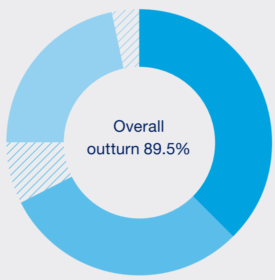
3p
Full year dividend per share

Annual Incentive Plan (AIP)

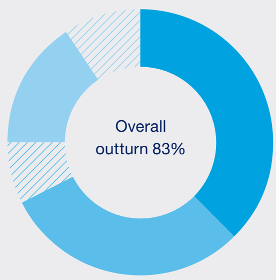
	Achieved	Not achieved	Weighting
EPS			37.50%
Balanced Scorecard			37.50%
Personal			25%

Read more on pages 89 to 90

Chris O'Shea CEO



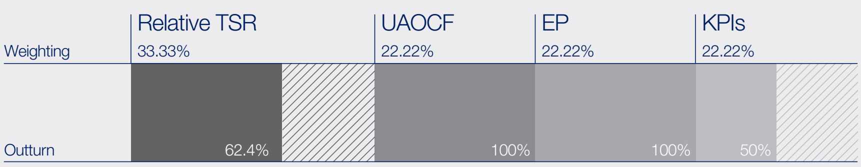
Kate Ringrose CFO



Long Term Incentive Plan (LTIP)

	Achieved	Not achieved	Weighting	Outturn
Relative TSR			33.33%	62.4%
UAOCF			22.22%	100%
EP			22.22%	100%
KPIs			22.22%	50%

Read more on pages 90 to 91



Directors' Annual Remuneration Report

Directors' remuneration in 2022

This report sets out information on the remuneration of the Directors for the financial year ended 31 December 2022.

Single figure for total remuneration (audited)

Executives

£000	Salary/ fees	Bonus (cash)	Bonus (deferred)(1)	Benefits(2)	LTIPs(3)	Pension(4)(5)	Total	Total fixed remuneration	Total variable remuneration
2022									
Chris O'Shea	**790**	**711**	**711**	**16**	**2,262**	**–**	**4,490**	**806**	**3,684**
Kate Ringrose	**459**	**288**	**288**	**16**	**–**	**33**	**1,084**	**508**	**576**
Total	**1,249**	**999**	**999**	**32**	**2,262**	**33**	**5,574**	**1,314**	**4,260**
2021									
Chris O'Shea	775	–	–	18	–	82	875	875	–
Kate Ringrose(6)	432	243	243	15	–	44	977	491	486
Total	1,207	243	243	33	–	126	1,852	1,366	486

(1) In accordance with the Remuneration Policy, 50% of the bonus is deferred into shares which are held for three years.
(2) Taxable benefits include car allowance, health and medical benefits. Non-taxable benefits include matching shares received under the Share Incentive Plan (SIP). Both taxable and non-taxable benefits are included in the table.
(3) The estimated value of the LTIP award that was granted in respect of the 2020-22 performance period is included in the table above, based on a share price of 83.65 pence (the 3 month average share price for the period ending 31 December 2022). The award will vest in May 2024 and the shares will then be subject to an additional two-year holding period. Further details of the performance outcomes are set out on page 90. £766K of the estimated value of the LTIP is attributed to share price growth. Dividend equivalents of £22K have been included.
(4) Notional contributions to the Centrica Unapproved Pension Scheme defined contribution section (CUPS DC) for Chris O'Shea and Kate Ringrose have been included in this table as if CUPS DC was a cash balance scheme. This includes a deduction in respect of an allowance for CPI inflation on the opening balances of 4.1% in 2022 (0.7% in 2021).
(5) For Chris O'Shea, the high CPI inflation (4.1%) that was applied to the CUPS DC fund value at the start of the year has offset the poor investment returns achieved over the year. Therefore, when comparing the start of year fund value to the year-end value the result is negative which is reflected as zero in the table above.
(6) Kate Ringrose was appointed to the Board on 18 January 2021

Single figure for total remuneration (audited)

Non-Executives

	Salary/fees		Total	
£000	**2022**	2021	**2022**	2021
Scott Wheway	**410**	410	**410**	410
Carol Arrowsmith	**93**	93	**93**	93
Nathan Bostock(1)	**47**		**47**	
CP Duggal(2)	**3**		**3**	
Stephen Hester(3)	**40**	93	**40**	93
Pam Kaur(4)	**32**	73	**32**	73
Heidi Mottram	**93**	93	**93**	93
Kevin O'Byrne	**109**	98	**109**	98
Amber Rudd(5)	**71**		**71**	
Total	**898**	860	**898**	860

(1) Nathan Bostock joined the Board on 9 May 2022
(2) CP Duggal joined the Board on 16 December 2022
(3) Stephen Hester stepped down from the Board on 7 June 2022
(4) Pam Kaur stepped down from the Board on 7 June 2022
(5) Amber Rudd joined the Board on 10 January 2022

Base salary/fees

Pay across the wider workforce

Following a period of negotiation and consultation with our trade unions, a pay deal was agreed in December 2022, to apply to UK colleagues in 2023. For the majority of colleagues, the pay deal in total was worth 10% of salary. This included base salary increases of at least 5% and a package of additional financial support, to recognise the continuing challenge from the rising cost of living. The additional support comprised non-consolidated lump sum payments and the backdating of pay increases. This means that our lower paid colleagues will receive a total pay increase of 12-13%, and all our customer-facing colleagues will receive a total pay increase of at least 10%, in 2023.

Pay for our Executive and Non-Executive Directors

The base salary for the Group Chief Executive (CEO) and the Chairman of the Board were reviewed by the Committee in January 2023. Taking into consideration the increases across the wider workforce, and salary benchmarking data for similar roles commensurate in size and complexity with Centrica, the Committee determined that the salary for the CEO would be increased by 2.6% to £815,000 and the salary for the Chairman of the Board would be increased by 2.6% to £420,500.

Non-Executive Director (NED) fee levels were reviewed in December 2022 and it was agreed the base fees would be increased by 4.8% to £76,000. This increase was recommended in order to align the fees with the market rate for the FTSE 100, to ensure Centrica is able to attract and retain NEDs with sufficient skills, knowledge and experience. The increase of 4.8% is below the average increase across the wider UK workforce.

The previous base fee for NEDs had been in place since 2016 and although fees have been reviewed each year, no increase has been applied for the past seven years.

Bonus – Annual Incentive Plan (AIP)

In line with the Remuneration Policy, in 2022 75% of the award was based on a mix of financial and business measures based on Centrica's priorities for 2022 and 25% was based on individual personal objectives.

The Committee agreed that half of the financial/business performance measures for 2022 would be based on an Earnings per Share (EPS) target with a defined threshold, target and maximum, as follows:

	Threshold	Target	Max	Outcome
Adjusted EPS	3.6p	6.1p	8.6p	34.9p

The EPS outcome was 34.9 pence which was significantly above the level for maximum achievement set by the Committee.

In addition, the Committee determined a balanced scorecard for the remaining financial and business elements of the AIP. It was agreed that there would be no formula to translate the scorecard to a bonus outcome and no formal weighting of individual measures. Instead, the Committee would discuss performance and consider the overall outcome against the balanced scorecard.

The balanced scorecard of measures, targets and outcomes was as follows:

	Measure	Target	Outcome
Group	Adjusted Operating Profit	£642m	£2,823m
	Free Cash Flow	£468m	£2,487m
	Net (Debt)/Cash	£12m	£1,199m
BG Energy	Complaints	8%	14.4%
BG S&S	Complaints	7%	12.6%
BG S&S	Reschedules	8.5%	6.2%
Bord Gáis	Cost to serve	€88.9 per customer	€108.9 per customer
BG Energy	Cost to serve(1)	£92 per customer	£112 per customer
CBS	Order Intake	£428m	£212m
EM&T	Opex: GM Ratio	51%	21%
	Customer numbers	10,186,000 unique customers	10,258,000 unique customers
	Colleague engagement	63%	73%
	Progress towards climate transition plan	Make good progress against the interim climate targets of Centrica's People & Planet Plan, including input measures tracked on the Climate Transition Plan dashboard	Achieved
	Customers on Ensek	2m	2m

(1) British Gas Energy cost to serve per customer excluding bad debt was £83, against a target of £83

The Committee carefully considered the outcomes against the EPS target and the balanced scorecard measures, determining an outcome of 100% against the EPS target and 80% against the balanced scorecard. Achievement against the overall financial and business targets therefore was at 180% of target.

Each Executive had a set of stretching personal objectives which included key non-financial performance indicators (KPIs) that were important to the success of the business in 2022. The KPIs were cascaded to business and functional leaders to ensure a strong line of sight to key priorities through the organisation.

Chris O'Shea's objectives for 2022 included delivering against significant operational improvements as well as agreeing the longer term energy transition plan to deliver a compelling strategic narrative. The Committee believes that these objectives were met in full with the operational improvements in the Services business, the launch of a new business division focused on net zero ventures and the re-opening of the Rough storage facility. Chris successfully navigated challenging regulatory and political issues, continuing to build capability and promote a performance and delivery culture whilst delivering shareholder value through new investment opportunities and portfolio shaping. Based on an assessment of achievement against strategic and personal objectives during the year the Committee determined that an outcome of above target, at 88% of maximum, against the personal objectives element of the annual bonus was appropriate. The overall bonus outcome for the CEO was therefore a payment of £1,421,931.

Kate Ringrose's objectives for 2022 included improving key capability and cultural structures in the finance and Digital Technology Services functions to ensure delivery of the longer-term plan and enabling the Group to deliver the strategy presented to the market. She supported the company to navigate the complex challenges and risks of the volatile commodity price environment. Kate made key changes to strengthen her leadership teams to ensure reporting and monitoring was more robust. Based on an assessment of achievement against strategic and personal objectives during the year, the Committee determined that an outcome of above target, at 62.5% of maximum under the personal objectives element of the annual bonus was appropriate. The overall bonus outcome for the CFO was therefore a payment of £575,121.

Long-term incentive awards relating to the performance period 2020-22

Performance conditions

The performance conditions relating to the three-year period ending in 2022 are set out below, together with the achievement against these performance conditions. Vesting between stated points is on a straight-line basis.

Financial targets and outcomes

		Targets		
Measures	Weightings	Threshold (25%)	Maximum (100%)	Outcomes
Relative Total Shareholder Return (TSR)	0.333	FTSE 100 median	FTSE 100 upper quartile	62.4%
Underlying adjusted operated cash flow (UAOCF) growth	0.222	CAGR 2%[1]	CAGR 5%[1]	55.8%
Absolute aggregate Economic Profit (EP)	0.222	1,357m	£1,797m	£2,638m
Non-financial KPI improvement	0.222	See below	See below	50%

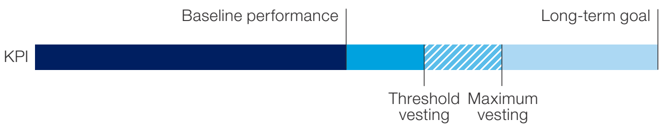
(1) Compound annual growth rate.

Centrica's TSR during the three-year performance period was 10.3%, compared with the required threshold level of -1.1%, therefore the TSR portion of the LTIP will vest at 62.4%.

Financial performance across the three-year performance period was strong, resulting in an above maximum outcome against the UAOCF target (an outcome of 55.8%) and the absolute aggregate EP target (an outcome of £2,638m).

Non-financial KPI targets and outcomes

KPI improvement relates to closure of the gap between performance at the start of the period (baseline performance) and our long-term aspirational goals which are generally aligned with upper quartile market performance.



We expect the KPI performance gap to close by 25% for threshold vesting and 50% for maximum vesting. The KPI measures, targets and outcomes for the 2020-22 cycle were:

		Targets			
	Baseline performance	Threshold	Maximum	Long-term goal	Outcomes
Safety					
Total recordable injury frequency rate (TRIFR)[1]	**1.06**	0.86	0.45	0.25	1.12
Tier 1 and Tier 2 process safety event frequency rate[1]	**0.08**	0.073	0.065	0.05	0.00
Customer satisfaction					
Aggregate brand NPS across our customer businesses weighted by customer numbers	**12.95**	13.61	14.26	16	14
Complaints per 100,000 customers across our customer businesses weighted by customer accounts	**3,879**	3,449	3,019	2,159	6,552
Colleague engagement (percentage favourable)	**43**	51.5	60	77	73

(1) Per 200,000 hours worked.

Performance against the non-financial KPIs across the performance period was mixed, with colleague engagement and process safety outcomes reaching the maximum level, NPS being 60% between threshold and max, and LTIFR and complaints outcomes not reaching threshold. The Committee determined that the level of vesting for this portion of the award would be 50%, to reflect what it considered to be the genuine performance of the Company over the performance period.

Overall performance outcome

The LTIP award was granted in May 2021 and therefore it will vest in May 2024, after which the shares are then subject to a mandatory holding period of two years. Taking into account the achievement against the financial performance targets, and the agreed outcome against the non-financial targets, the Committee approved the overall vesting outcome of 76%. The estimated value of the shares that will vest in respect of the three-year performance period, which ended in December 2022, has been included in the single figure for total remuneration on page 88. The shares will be released at the end of the holding period, in May 2026.

The Committee looked at a number of factors, including the share price of the award at grant and the strong performance of Centrica compared with that of our direct peers and the wider market over the period. Following this review, the Committee concluded that as a result of the following actions already taken, the risk of a windfall gain has been sufficiently mitigated:

- At grant, the award level had been reduced to 250% of salary compared to the maximum of 300% of salary to reflect historic share price performance (a reduction of 17%).
- The delay of the grant as noted above resulted in a share price on grant of 55 pence, compared to if the award had been granted at the normal time (which would have been shortly after the onset of COVID-19) at a price of circa 37 pence (a further reduction of 33%).

Assuming the Committee took no action at the time of grant (assumed to be 1 April 2020, in line with the historic grant date), the CEO would have been granted 6,265,157 shares at a share price of 37 pence. However the percentage of salary reduction in combination with the delay of grant (meaning the share price increased from 37 pence to 55 pence) resulted in a 44% reduction in the number of shares granted to the CEO (to 3,522,471).

Pension

In 2020, it was agreed that the pension contributions for the new and existing Executive Directors would be 10% of base salary to align them with the wider UK workforce. In 2022 the pension contribution rate across the UK workforce was 10-14%.

Chris O'Shea and Kate Ringrose participated in the Centrica Unapproved Pension Scheme Defined Contribution section (CUPS DC).

Notional contributions to the CUPS DC scheme have been included in the single figure for total remuneration table as if it was a cash balance scheme and therefore notional investment returns for the year have also been included. The notional pension fund balances for each Executive are disclosed below:

CUPS DC Scheme(1)	**Total notional pension fund as at 31 December 2022 £**	Total notional pension fund as at 31 December 2021 £
Chris O'Shea(1)	**319,407**	312,710
Kate Ringrose(1)(2)	**78,761**	43,670

(1) The retirement age for the CUPS DC scheme is 62.
(2) Kate Ringrose was appointed to the Board on 18 January 2021

Directors' interests in shares (number of shares) (audited)

The table below shows the interests in the ordinary shares of the Company for all Directors who served on the Board during 2022.

For the Group Chief Executive the minimum shareholding requirement is 300% of base salary and for the Group Chief Financial Officer the minimum shareholding requirement is 200% of base salary. The achievement against the requirement is shown below.

Executive Directors have a period of five years from appointment to the Board, or from any material change in the minimum shareholding requirement, to build up the required shareholding. Given the remuneration decisions that have been taken over the past three years, the Committee recognises that achieving the level of shareholding is challenging.

The Committee continues to keep both the shareholding requirement, and achievement against the shareholding requirement, under review and will take appropriate action should they feel it necessary.

A post-cessation shareholding requirement of 100% of the in-employment shareholding requirement (or full actual holding if lower) is applicable for two years post-cessation.

	Beneficially owned(1)	Shares subject to performance conditions	Shares vested but unexercised	Shares subject to continued service only(2)	Shares exercised in the year	Shareholding requirement (% of salary)	Current shareholding (% of salary)(3)
Executives							
Chris O'Shea(4)(5)	598,827	7,954,419	—	1,497,593	68,689	300	69
Kate Ringrose(5)	550,579	1,501,143	—	725,290	379,134	200	110
Non-Executives							
Carol Arrowsmith	49,286	—	—	—	—	—	—
Nathan Bostock	27,000	—	—	—	—	—	—
CP Duggal	—	—	—	—	—	—	—
Stephen Hester	20,700	—	—	—	—	—	—
Pam Kaur	—	—	—	—	—	—	—
Heidi Mottram	10,000	—	—	—	—	—	—
Kevin O'Byrne	40,000	—	—	—	—	—	—
Amber Rudd(6)	23,204	—	—	—	—	—	—
Scott Wheway	110,187	—	—	—	—	—	—

(1) These shares are owned by the Director or a connected person and they are not, save for exceptional circumstances, subject to continued service or the achievement of performance conditions. They include for Executives shares purchased in April 2022 with deferred AIP funds which have mandatory holding periods of three years and which will be subject to tax at the end of the holding periods.
(2) Shares owned subject to continued service include RSP shares awarded in 2022 and SIP free and matching shares that have not yet been held for the three-year holding period.
(3) The share price used to calculate the achievement against the guideline was 91.94 pence, the price on 31 December 2022.
(4) Chris O'Shea purchased 44,475 shares during the year. Due to LTIP awards granted in 2018 and 2019 not vesting, and the fact that Chris O'Shea has not received an Annual Incentive Plan payment with a corresponding deferred bonus award for the last three years, his shareholding is below the projected level. However, he will receive shares from the 2022 deferred bonus plan in March 2023, which will increase his achievement against the guideline to 159% of salary.
(5) During the period from 1 January 2023 to 15 February 2023 both Chris O'Shea and Kate Ringrose acquired 361 shares through the SIP.
(6) During the period from 1 January 2023 to 15 February 2023 Amber Rudd acquired 2,058 shares through the NED Share Purchase Agreement.

Share awards granted in 2022 (audited)

Set out below are details of share awards granted in 2022 to Executive Directors.

2022 RSP

	Plan	Award Type	Number of shares[1]	Basis of award % of salary	Face value of award £	Vesting date	Release date
Chris O'Shea	RSP	Conditional	1,496,336	150%	1,191,563	June 2025	June 2027
Kate Ringrose	RSP	Conditional	724,033	125%	576,563	June 2025	June 2027

(1) The number of shares awarded under the RSP was calculated by reference to a price of 79.6 pence, being the average of the Company's share price over the five trading days immediately preceding the date of grant of 23 June 2022.

The RSP award is measured against an underpin. If the Committee is not satisfied the underpin has been met, the Committee may scale back the awards (including to zero). In assessing the underpin, the Committee will consider the Company's overall performance, including financial and non-financial performance measures over the course of the vesting period, as well as any identified material risk or regulatory failures. Financial performance will include elements such as revenue, profitability, shareholder experience and return on capital. Non-financial performance will include a range of operational and strategic measures critical to the Company's long-term sustainable success.

For the 2022 award, the factors that the Committee will consider include, but are not limited to the following:

- a review of overall financial performance over the three-year vesting period;
- whether there have been any sanctions or fines issued by a Regulatory Body (participant responsibility may be allocated collectively or individually);
- whether a major safety incident has occurred which may or may not have consequences for shareholders;
- whether there has been material damage to the reputation of the Company (participant responsibility may be allocated collectively or individually);
- whether there has been failure to make appropriate progress against our Climate Transition Plan which sets out our ambition to be a net zero business by 2045 and help our customers be net zero by 2050;
- return on capital with reference to the cost of capital;
- TSR performance over the vesting period, including with reference to the wider energy sector;
- management of customer numbers over the vesting period; and
- progress against broader ESG commitments.

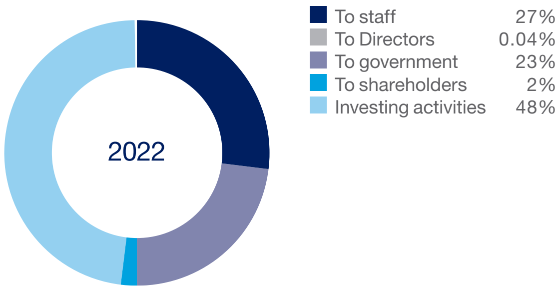
2022 Deferred AIP

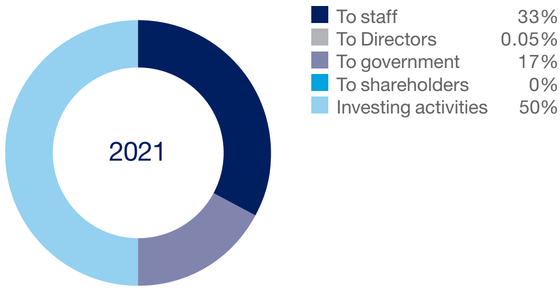
The 2022 AIP award was delivered 50% in cash and 50% in deferred shares, which were awarded on 1 April 2022. The face value of the award is based on the share price on the date of award, which was 79.65 pence. Deferred shares are not subject to further performance conditions and vest following a three-year holding period.

	Plan	Award Type	Number of shares	Face value of award £000	Vesting date
Kate Ringrose	AIP	Deferred shares	304,549	242,579	April 2025

2022 cash flow distribution to stakeholders

The Committee monitors the relationship between the Directors' total remuneration and cash outflows to other stakeholders. As demonstrated by the chart, the Directors' aggregate total remuneration for the year equates to 0.04% (2021: 0.05%) of the Group's operating cash flow.





Annual percentage change in remuneration of Directors and colleagues

The table below shows the percentage changes (on a full-time equivalent basis) in the Executive and Non-Executive Directors' remuneration over the last three financial years compared to the amounts for full-time colleagues of the Group for each of the following elements of pay:

	Percentage change from 2019 to 2020			Percentage change from 2020 to 2021			Percentage change from 2021 to 2022		
Executive Directors	Salary/fees	Benefits	Bonus	Salary/fees	Benefits	Bonus	Salary/fees	Benefits	Bonus
Chris O'Shea(1)(2)(3)	6.3	—	—	—	-28	—	2.5	-11.11	100
Kate Ringrose(3)	—	—	—	—	—	—	2.5	6.67	18.72
Non-Executive Directors									
Scott Wheway	268.8	—	—	—	—	—	—	—	—
Carol Arrowsmith	—	—	—	—	—	—	—	—	—
Nathan Bostock(4)	—	—	—	—	—	—	—	—	—
CP Duggal(5)	—	—	—	—	—	—	—	—	—
Heidi Mottram	—	—	—	27.8	—	—	—	—	—
Kevin O'Byrne(6)	—	—	—	—	—	—	20.51	—	—
Amber Rudd(7)	—	—	—	—	—	—	—	—	—
Average per colleague (excluding Directors)(3)	—	1.1	236.4	1.77	-10.27	16.25	1.89	—	17.82

(1) Chris O'Shea was appointed to the Centrica Board as Group Chief Financial Officer on 1 November 2018 and became interim Group Chief Executive with effect from 17 March 2020. He was appointed as Group Chief Executive on 14 April 2020. From 17 March until 31 December 2020, he elected to waive £100,000 of his salary.
(2) Chris O'Shea has not been paid a bonus since this disclosure has been included and therefore the payment of a bonus shows the percentage change of 100%.
(3) The comparator group includes all management and technical or specialist colleagues based in the UK in Level 2 to Level 6 (where Level 1 is the Executive and Non-Executive Directors). There are insufficient colleagues in the Centrica plc employing entity to provide a meaningful comparison. The colleagues selected have been employed in their role for full years to give meaningful comparison. The group has been chosen because the colleagues have a remuneration package with a similar structure to the Executive Directors, including base salary, benefits and annual bonus. The bonus number relating to 2022 colleagues is an estimate of the payments due to be made in March/April 2023.
(4) Nathan Bostock was appointed to the Board on 9 May 2022.
(5) CP Duggal was appointed to the Board on 16 December 2022.
(6) Kevin O'Byrne took on the role of Senior Independent Director from 1 June 2022.
(7) Amber Rudd was appointed to the Board on 10 January 2022.

The chart below shows the ratio of remuneration of the CEO to the average UK colleague of the Group.

CEO pay ratio

		25th percentile	50th percentile	75th percentile
2022	Option B	128:1	77:1	70:1
2021	Option B	29:1	24:1	15:1
2020	Option B	32:1	15:1	14:1
2019	Option B	34:1	29:1	22:1
2018	Option B	72:1	59:1	44:1

For 2020 the CEO total remuneration figure includes the single figure chart combined earnings of both Iain Conn and Chris O'Shea for the period that they were in the CEO role during 2020.

2022	Salary	Total pay and benefits
CEO remuneration	790,000	4,490,000
Colleague 25th percentile	25,709	35,073
Colleague 50th percentile	39,984	57,939
Colleague 75th percentile	41,124	63,705

The Company has used its gender pay gap data (Option B in the Directors' Reporting Regulations) to determine the colleagues whose remuneration packages sit at the lower, median and upper quartile positions across the UK workforce. This is deemed the most appropriate methodology for Centrica given the different pension and benefit arrangements across the diverse UK workforce. To ensure this data accurately reflects individuals at each quartile position, a sensitivity analysis has been performed. The approach has been to review the total pay and benefits for a number of colleagues immediately above and below the identified colleague at each quartile within the gender pay gap analysis.

The annual remuneration for the three identified colleagues has been calculated on the same basis as the CEO's total remuneration for the same period in the single figure table on page 88 to produce the ratios.

The ratio of CEO pay compared with the pay for the average colleague has increased in 2022 due to the disclosure of an annual bonus and an LTIP award for the CEO. The CEO has not received any payment from a long-term award since joining Centrica, nor an annual bonus since 2018. In 2022, a large proportion of CEO remuneration was delivered through the LTIP which was measured over a three-year performance period, from 2020-2022. The LTIP will be released in shares in 2026. In future, long-term incentives will be delivered to the CEO through the Restricted Share Plan which has a lower overall quantum, at 50% of the previous LTIP. The Company believes the ratios are appropriate given financial and business performance outcomes in 2022, and the size and complexity of the business.

Pay for performance

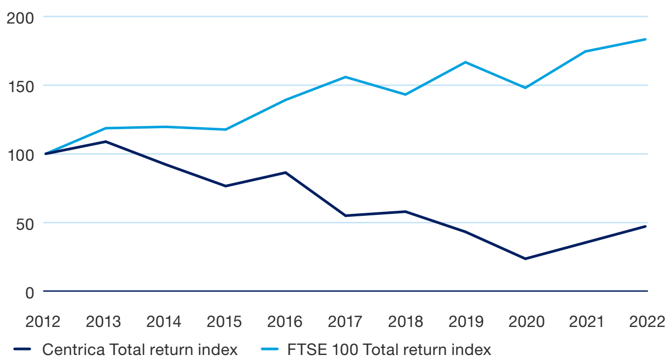
The table below shows the CEO's total remuneration over the last 10 years and the achieved annual short-term and long-term incentive pay awards as a percentage of the plan maximum.

	Chief Executive single figure for total remuneration £000	Annual short-term incentive payout against max opportunity %	Long-term incentive vesting against max opportunity %
Chris O'Shea			
2022	4,490	89.5	76
2021	875	0	0
2020	765	0	0
Iain Conn			
2020	239	0	0
2019	1,186	0	0
2018	2,335	41	18
2017	1,678	0	26
2016	4,040	82	0
2015	3,025	63	0
Sam Laidlaw			
2014	3,272	34	35
2013	2,235	50	0

For 2020 the single figure for total remuneration for both Iain Conn and Chris O'Shea are shown. The total remuneration figure for Chris O'Shea includes his earnings during 2020 as CFO and CEO.

The performance graph below shows Centrica's TSR performance against the performance of the FTSE 100 Index over the 10-year period to 31 December 2022. The FTSE 100 Index has been chosen as it is an index of similar-sized companies and Centrica has been a constituent member throughout the majority of the period.

Total return indices – Centrica and FTSE 100



Source: Datastream from Refinitiv

Fees received for external appointments of Executive Directors

There were no fees received for external appointments. Kate Ringrose represented Centrica as a non-executive director of EDF Energy Nuclear Generation Group Limited and Lake Acquisitions Limited. She received no fees or remuneration relating to these external appointments in 2022.

Relative importance of spend on pay

The table below shows the percentage change in total remuneration paid to all colleagues compared to expenditure on dividends and share buyback for the years ended 31 December 2021 and 2022.

	2022 £m	2021 £m	% Change
Share repurchase[1]	43	0	N/A
Dividends	59	0	N/A
Staff and employee costs[2]	1,440	1,247	15

(1) 47,201,133 shares were purchased during 2022 as part of the share buyback arrangement
(2) Staff and employee costs are as per note 5 in the notes to the Financial Statements.

Payments to past Directors (audited)

During 2022, no payments were made to past Directors with the exception of the payments disclosed in the single figure for total remuneration table on page 88.

Payments for loss of office (audited)

No payments for loss of office were made in 2022.

Advice to the Remuneration Committee

Following a competitive tender process, PwC was appointed as independent external advisor to the Committee in May 2017.

PwC also provided advice to Centrica globally during 2022 in the areas of employment taxes, regulatory risk and compliance issues and additional consultancy services.

PwC's fees for advice to the Committee during 2022 amounted to £132,900 which included the preparation for and attendance at Committee meetings. The fees were charged on a time spent basis in delivering advice that materially assisted the Committee in its consideration of matters relating to executive remuneration.

The Committee takes into account the Remuneration Consultants Group's (RCG) Code of Conduct when dealing with its advisors. PwC is a member of the RCG and the Committee is satisfied that the advice it received during the year was objective and independent and that the provision of any other services by PwC in no way compromises their independence.

Statement of voting

Shareholder voting on the resolutions to approve the Directors' Remuneration Policy, and the Directors' Remuneration Report, put to the 2022 AGM, was as follows:

Directors' Remuneration Policy

Votes for	%	Votes against	%
3,132,342,144	83.48	619,903,528	16.52

1,275,033 votes were withheld.

Directors' Remuneration Report

Votes for	%	Votes against	%
3,628,823,825	96.71	123,420,614	3.29

1,247,419 votes were withheld.

Implementation in the next financial year

Base salaries for Executive Directors were reviewed in January 2023 and the Committee determined that increases would be applied to the salary of the CEO and the Chairman of the Board. Salaries for the Non-Executive Directors were approved by the Board in December 2022 and the base fee was increased with effect from 1 January 2023. See further detail on page 89.

AIP awards will be in line with the limits set out in the Remuneration Policy table, not exceeding 200% of base salary. At least 75% of the award will be based on a mix of financial and business measures based on Centrica's priorities for the forthcoming year and up to 25% will be based on strategic and personal objectives. The financial targets will align with the Group Annual Plan.

The Committee carefully considered the impact of this year's exceptional movement in commodity prices on performance compared to the targets set at the start of the year. Even after excluding the positive impact of commodity prices on our infrastructure businesses this year, the underlying financial performance was still above the maximum level for the AIP. We intend to continue to exclude the impact of commodity prices on our infrastructure in future years.

The targets are considered commercially sensitive until the end of the financial year and will therefore be disclosed retrospectively in the Remuneration Report for 2023.

Restricted Share Plan (RSP) awards will be granted to the Executives. In line with the previous year the awards will be 150% of salary for the CEO and 125% of salary for the Group Chief Financial Officer.

The RSP awards will vest after three years, subject to a performance underpin, with an additional two-year post-vesting holding period.

In line with the Remuneration Policy, vesting will be contingent on the satisfaction of a discretionary underpin, assessed over a three-year period.

In assessing the underpin, the Committee will consider the Company's overall performance, including financial and non-financial performance measures over the course of the vesting period, as well as any material risk or regulatory failures identified. Financial performance will include elements such as revenue, profitability, shareholder experience and return on capital. Non-financial performance will include a range of operational and strategic measures critical to the Company's long-term sustainable success.

For the 2023 award, the factors that the Committee will consider include, but are not limited to the following:

- a review of overall financial performance over the three-year vesting period;
- whether there have been any sanctions or fines issued by a Regulatory Body (participant responsibility may be allocated collectively or individually);
- whether a major safety incident has occurred which may or may not have consequences for shareholders;
- whether there has been material damage to the reputation of the Company (participant responsibility may be allocated collectively or individually);
- whether there has been failure to make appropriate progress against our Climate Transition Plan which sets out our ambition to be a net zero business by 2045 and help our customers be net zero by 2050;
- return on capital with reference to the cost of capital;
- TSR performance over the vesting period, including with reference to the wider energy sector;
- management of customer numbers over the vesting period; and
- progress against broader ESG commitments including customer service, colleague engagement and our transition to net zero.

The Remuneration Report has been approved by the Board of Directors and signed on its behalf by:

Raj Roy
Group General Counsel & Company Secretary
15 February 2023

Directors' Remuneration Policy

The Remuneration Policy was approved by shareholders at the AGM on 7 June 2022.

This section contains a summary of Centrica's Directors' Remuneration Policy (Policy) that will govern and guide the Group's future remuneration payments. The full version can be found on our website at centrica.com.

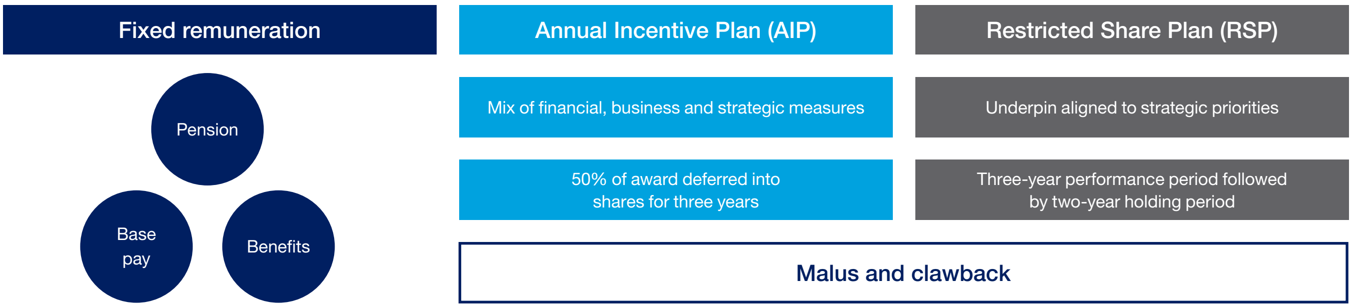
The Policy operated as intended in 2022.

Objectives of the Policy

The Policy aims to deliver remuneration arrangements that:

- attract and retain high-calibre Executives in a challenging and competitive global business environment;
- place strong emphasis on both short-term and long-term performance;
- are strongly aligned to the achievement of strategic objectives and the delivery of sustainable long-term shareholder value through returns and growth; and
- seek to avoid creating excessive risks in the achievement of performance targets.

Summary of Policy design



How the Policy links to our Strategy

At Centrica we are strongly led by our Purpose – "to help customers live sustainably, simply and affordably". Our Strategy is driven by our Purpose and our enduring Values at Centrica underpin our delivery and culture. Whilst we have evolved our Strategy to help meet the challenges of today and prepare us for a net zero future, our Values remain firmly embedded in who we are and give direction to everything we do.

Further information on our Purpose and Values is set out on page 7.

We need to engage our leadership team to fulfil our Purpose and to ensure Centrica is focused on delivery and positioned for growth.

The AIP focuses the Executives on the delivery of our near-term objectives, with at least 75% of the award based on a mix of financial and business measures based on Centrica's priorities for the forthcoming year and up to 25% based on individual strategic and personal objectives for the year. All targets align with the Group Annual Plan.

An RSP is the most appropriate long-term incentive vehicle for our Executives as it reduces the upper limit of payment and is aligned with our goal to simplify all aspects of our business. Potential payouts from restricted shares are far less variable than conventional long-term incentives.

The RSP has a three-year vesting period and the Committee will consider the Company's overall financial and non-financial performance during this period. Consideration will be given to elements such as revenue, profitability, shareholder experience and Centrica's progress towards a net zero future.

As we continue to restore shareholder value, the RSP will ensure a large proportion of our Executives' pay is based on direct and uninhibited share price movement.

We operate an RSP for leaders below the most senior management and this approach therefore creates alignment between our Executives and our senior colleagues.

Policy table for Executives

The following table summarises each element of the Policy for the Executives.

Purpose and link to strategy	Operation and clawback	Maximum opportunity	Performance measures
Base pay/salary			
Reflects the scope and responsibility of the role and the skills and experience of the individual. Salaries are set at a level sufficient for the Group to compete for international talent and to attract and retain Executives of the calibre required to develop and deliver our Strategy.	Base salaries are reviewed annually taking into account individual and business performance, market conditions and pay in the Group as a whole. When determining base salary levels, the Committee will consider factors including: • remuneration practices within the Group; • change in scope, role and responsibilities; • the performance of the Group; • experience of the Executive; • the economic environment; and • when the Committee determines a benchmarking exercise is appropriate, salaries within the ranges paid by the companies which the Committee believe are appropriate comparators for the Group.	Usually, base salary increases in percentage terms will be within the range of increases awarded to other employees of the Group. Increases may be made above this level to take account of individual circumstances such as a change in responsibility, progression/development in the role or a significant increase in the scale or size of the role.	Not applicable.
Annual Incentive Plan (AIP)			
Designed to incentivise and reward the performance of individuals in the delivery of short-term financial and non-financial metrics. Performance measures are linked to the delivery of the Group's long-term financial goals and key Group priorities.	In line with the Group's annual performance management process, each Executive has an agreed set of stretching individual objectives for each financial year. Following the end of the financial year, to the extent that performance criteria have been met, up to half of the AIP award is paid in cash. To further align the interests of Executives with the long-term interests of shareholders, the remainder is paid in deferred shares which are held for three years. No further performance conditions will apply to the deferred element of the AIP award. Dividend equivalents may be paid as additional shares or cash. Malus and clawback apply to the cash and share awards.	Maximum of 200% of base salary earned during the financial year. For threshold performance, up to 25% of the maximum opportunity will pay out. For on-target performance, 50% of the maximum opportunity will pay out.	At least 75% based on a mix of financial performance and business measures aligned to Centrica's priorities for the forthcoming financial year and up to 25% based on individual objectives aligned to the Group's priorities and strategy. Performance is assessed over one financial year.

Purpose and link to strategy	Operation and clawback	Maximum opportunity	Performance measures
Restricted share plan (RSP)			
Designed to reward and incentivise the delivery of long-term performance and shareholder value creation.	RSP awards granted to Executives will normally vest after three years subject to the achievement of an underpin, and are subject to a two-year post-vesting holding period during which the Executives may not normally dispose of their vested shares except as is necessary to pay tax and social security contributions arising in respect of their RSP awards. Dividend equivalents are accrued during the vesting period and calculated on vesting on any RSP share awards. Dividend equivalents are paid as additional shares or as cash. Malus and clawback apply to the awards.	The maximum opportunity for RSP awards will be 150% of salary earned during the financial year for Executives.	The RSP will be subject to an underpin framework. In assessing the underpin, the Committee will consider the Company's overall performance, including financial and non-financial performance measures over the course of the vesting period as well as any material risk or regulatory failures identified. Financial performance can include elements such as revenue, profitability, shareholder experience and return on capital. Non-financial performance can include a range of operational and strategic measures critical to the Company's long-term sustainable success. The Committee may scale back the awards (including to zero) if it is not satisfied the underpin has been met.
Pensions			
Positioned to provide a market competitive post-retirement benefit, in a way that manages the overall cost to the Company.	Executives are entitled to participate in a Company money purchase pension arrangement or to take a fixed salary supplement (calculated as a percentage of base salary, which is excluded from any AIP calculation) in lieu of pension entitlement. The Group's policy is not to offer defined benefit arrangements to new employees at any level, unless this is specifically required by applicable legislation or an existing contractual agreement.	The maximum benefit for Executives is 10% of base salary earned during the financial year. This compares with the average pension benefit across the wider UK workforce, currently 10-14% of salary.	Not applicable.
Benefits			
Positioned to support health and wellbeing and to provide a competitive package of benefits that is aligned with market practice.	The Group offers Executives a range of benefits including (but not limited to): • a company-provided car and fuel, or a cash allowance in lieu; • life assurance and personal accident insurance; • health and medical insurance for the Executive and their dependants; and • health screening and wellbeing services.	Cash allowance in lieu of company car – currently £15,120 per annum. The benefit in kind value of other benefits will not exceed 5% of base salary.	Not applicable.
All-employee share plans			
Provides an opportunity for employees to voluntarily invest in the Company.	Executives are entitled to participate in all-employee share plans on the same terms as all other eligible employees.	Maximum contribution limits are set by legislation or by the rules of each plan. Levels of participation apply equally to all participants.	Not applicable.

Purpose and link to strategy	Operation and clawback	Maximum opportunity	Performance measures
Shareholding requirements			
To align the interests of Executives with shareholders over a long-term period including after departure from the Group.	**In-employment requirement** During employment, the CEO and CFO are required to build and maintain a minimum shareholding of 300% and 200% of their base salary respectively. Executives must also hold 100% of vested incentive shares (net of tax) until the shareholding requirement is met. **Post-employment requirement** Executives are required to hold shares after cessation of employment to the full value of the shareholding requirement (or the existing shareholding if lower at the time) for a period of two years. Shares purchased by Executives with their own monies are excluded from the post-employment requirement.	**In-employment requirement** The current shareholding requirement is maintained at 300% of base salary for the CEO and 200% of base salary for the CFO. **Post-employment requirement** Executive Directors will be expected to retain the lower of the shares held at cessation of employment and shares to the value of 300% of base salary for the CEO and 200% of base salary for the CFO for a period of two years. Only shares earned from vested incentives will be included within the post-employment shareholding requirement.	Not applicable.

Notes to the Policy table

The Committee reserves the right to make any remuneration payments and payments for loss of office, notwithstanding that they are not in line with the Policy set out on pages 96 to 103, where the terms of the payment were agreed before the Policy came into effect, at a time when the relevant individual was not an Executive of the Company or, in the opinion of the Committee, the payment was not in consideration for the individual becoming an Executive of the Company. For these purposes payments include the amounts paid in order to satisfy awards of variable remuneration and, in relation to an award over shares, the terms of the payment are agreed at the time the award is granted. This includes satisfying LTIP awards granted in accordance with historic remuneration policies.

The Committee may make minor amendments to the Policy (for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation) without obtaining shareholder approval for that amendment.

Malus and clawback

In line with UK corporate governance best practice, the Committee can apply malus (that is reduce the number of shares in respect of which an award vests) or delay the vesting of awards. In addition, where an award has vested, the resulting shares will generally be held for a period during which they may be subject to clawback. The following provisions apply:

- AIP – cash awards: malus will apply up to the payment of the cash AIP award and clawback will apply for a period of three years after the cash AIP payment;
- AIP – deferred shares: clawback will apply during the vesting period of three years following the payment of the cash AIP award to which the deferred shares relate;
- historic LTIP awards: malus will apply during the vesting period and up to the date of vesting and clawback will apply for a period of two years post-vesting; and
- RSP awards: malus will apply during the vesting period and up to the date of vesting and clawback will apply for a period of two years post-vesting.

Legacy awards are governed by the malus and clawback provisions within the respective policy and plan rules. For awards granted under the Policy malus and clawback provisions may be applied in the following circumstances:

- material financial misstatement;
- where an award was granted, or performance was assessed, based on an error or inaccurate or misleading information;
- action or conduct of a participant amounts to fraud or gross misconduct;
- events or the behaviour of a participant have led to censure of the Company or Group by a regulatory authority or cause significant detrimental reputational damage;
- material failure of risk management; or
- corporate failure.

Pension arrangements applying to Executives

All registered scheme benefits are subject to HMRC guidelines and the Lifetime Allowance.

The Centrica Unapproved Pension Scheme (CUPS) defined contribution (DC) section provides benefits for individuals not eligible to join the CUPS defined benefit (DB) section and for whom registered scheme benefits are expected to exceed the Lifetime Allowance. The CUPS DC section is offered as a direct alternative to a cash salary supplement.

CUPS is unfunded but the benefits are secured by a charge over certain Centrica assets. An appropriate provision in respect of the accrued value of these benefits has been made in the Company's balance sheet.

The Centrica Pension Plan (CPP) is a registered defined benefit plan which is closed to new members.

Discretion and judgement

It is important that the Committee maintains the flexibility to apply discretion and judgement to achieve fair outcomes as no remuneration policy and framework, however carefully designed and implemented, can pre-empt every possible scenario. The Committee needs to be able to exercise appropriate discretion to determine whether mechanistic or formulaic outcomes are fair, in context and can be applied in an upward or downward manner when required.

Judgement is applied appropriately by the Committee, for example when considering the political and social pressures on the business, the impact of significant movements in external factors such as commodity prices, in setting and evaluating delivery against individual and non-financial performance targets to ensure they are considered sufficiently stretching and that the maximum and minimum levels are appropriate and fair.

The Committee has absolute discretion to decide who receives awards, the level of the awards under the incentive plans and the timing, within the parameters set in the rules and the limits in the Policy table.

Recruitment Policy

The Committee will apply the same Policy during the policy period as that which applies to existing Executives when considering the recruitment of a new Executive in respect of all elements of remuneration as set out in the Policy table.

Whilst the maximum level of remuneration which may be granted would be within plan rules and ordinarily subject to the maximum opportunity set out in the Policy table, in certain circumstances, an arrangement may be established specifically to facilitate recruitment of a particular individual up to 25% above the maximum opportunity, albeit that any such arrangement would be made within the context of minimising the cost to the Company.

The policy for the recruitment of Executives during the policy period includes the opportunity to provide a level of compensation for forfeiture of annual bonus entitlements and/or unvested long-term incentive awards (at a value no greater than what is forfeit) from an existing employer, if any, and the additional provision of benefits in kind, pensions and other allowances, as may be required in order to achieve a successful recruitment. The Company has a clear preference to use shares wherever possible and will apply timescales at least as long as previous awards.

Details of the relocation and expatriate assistance that may be available as part of the recruitment process can be found in the table below.

Relocation and expatriate assistance	
Purpose and link to strategy	Enables the Group to recruit or promote the appropriate individual into a role, to retain key skills and to provide career opportunities.
Operation and clawback	Assistance may include (but is not limited to) removal and other relocation costs, housing or temporary accommodation, education, home leave, repatriation and tax equalisation.
Maximum opportunity	Maximum of 100% of base salary.
Performance measures	Not applicable.
Changes	No changes.

Service contracts

Service contracts provide that either the Executive or the Company may terminate the employment by giving one year's written notice. The Committee retains a level of flexibility, as permitted by the UK Corporate Governance Code 2018, in order to attract and retain suitable candidates. It reserves the right to offer contracts which contain an initial notice period in excess of one year, provided that at the end of the first such period the notice period reduces to one year. All Executive and Non-Executive Directors are required to be re-elected at each AGM.

Executive Director	Date of appointment to role	Date of current contract	Notice from the Company	Notice from the individual
Chris O'Shea	1 November 2018	10 December 2020	12 months	12 months
Kate Ringrose	18 January 2021	17 January 2021	12 months	12 months

Termination policy

The Committee carefully considers compensation commitments in the event of an Executive's termination. The aim is to avoid rewarding poor performance and to reduce compensation to reflect the departing Executive's obligations and to mitigate losses.

Remuneration element	Scenario	Payment
Base salary, pension and other benefits	Dismissal with cause	No further payments made except those that an individual may be contractually entitled to.
	All other scenarios	Either continue to provide base salary, pension and other benefits for any unworked period of notice or, at the option of the Company, to make a payment in lieu of notice. Typically any payment in lieu of notice will be made in monthly instalments and reduce, or cease completely, in the event that remuneration from new employment is received.
AIP	Dismissal with cause	AIP award and any deferred awards will be forfeit.
	Resignation	Executives leaving as a result of resignation will forfeit any potential AIP award for the performance year in which the resignation occurs.
	Change of control	The AIP award will be pro-rated for time (based on the proportion of the AIP period elapsed at the date of change of control). The Committee has discretion to determine that the AIP does not pay out on change of control and will continue under the terms of the acquiring entity. The Committee has discretion to dis-apply pro-rating in exceptional circumstances. Deferred awards may vest immediately or be exchanged for new equivalent awards in the acquirer where appropriate.
	Exceptions*	An AIP award for the year in which the termination occurs may be made following the normal year-end assessment process, subject to achievement of the agreed performance measures and time apportioned for the period worked. Any award would normally be payable at the normal time with a 50% deferral in line with the Policy table. The Committee has discretion to accelerate the vesting of deferred awards.
LTIP and RSP	Dismissal with cause or resignation	All unvested awards will lapse.
	Change of control	Existing awards will be exchanged on similar terms or vest to the extent that the performance conditions have been met at the date of the event and be time-apportioned to the date of the event or the vesting date, subject to the overriding discretion of the Committee.
	Exceptions*	Any outstanding awards will normally be pro-rated for time based on the proportion of the performance and/or vesting period elapsed. Performance will be measured at the end of the performance period. On death, awards may vest earlier than the normal date. The Committee has the discretion to dis-apply pro-rating or accelerate testing of performance conditions in exceptional circumstances.

* Exceptions are defined by the plan rules and include those leaving due to the following reasons: ill health, disability, redundancy, retirement (with agreement from the Company), death, or any other reason that the Committee determines appropriate.

Following termination, awards continue to be subject to malus and clawback provisions in line with those set out in the rules and the Policy.

Pay fairness across the Group

The Group operates in a number of different environments and has many employees who carry out a range of diverse roles across a number of countries. In consideration of pay fairness across the Group, the Committee believes that ratios related to market competitive pay for each role profile in each distinct geography are the most helpful.

The ratios of salary to the relevant market median are compared for all permanent employees across the Group and are updated using salary survey benchmarking data on an annual basis.

Unlike the significant majority of the workforce who receive largely fixed remuneration, mainly in the form of salary, the most significant component of Executive compensation is variable and dependent on performance. As such, the Committee reviews total compensation for Executives against benchmarks rather than salary alone.

A number of performance-related incentive schemes are operated across the Group which differ in terms of structure and metrics from those applying to Executives.

The Group also offers a number of all-employee share schemes and Executives participate on the same basis as other eligible employees.

Performance measures applying to Executives are cascaded down through the organisation. Group employment conditions include high standards of health and safety and employee wellbeing initiatives.

External appointments of Executives

It is the Company's policy to allow each Executive to accept one non-executive directorship of another company, although the Board retains the discretion to vary this policy. Fees received in respect of external appointments are retained by the individual Executive and are set out in the Directors' Annual Remuneration Report each year.

Consideration of the UK Corporate Governance Code

As part of its review of the Policy, the Committee has considered the factors set out in provision 40 and provision 41 of the UK Corporate Governance Code 2018 (Code). In the Committee's view, the proposed Policy addresses those factors as set out below:

Principles of the Code	How the Policy aligns
Clarity Remuneration arrangements should be transparent and promote effective engagement with shareholders and the workforce	The Policy is simple and designed to support long-term, sustainable performance. Shareholders were extensively consulted in the design of the Policy, and the key rationale for the changes that were made. The Policy received shareholder approval at the AGM in June 2022.The Committee proactively seeks engagement with shareholders on remuneration matters on an ongoing basis. During the year, consultation took place with recognised trade unions on pay across the wider workforce. No direct engagement with the workforce occurred on executive remuneration. In order to enhance the level of engagement with our employees going forward, a Shadow Board, comprising colleagues across the business and in different locations, has been launched. Through the Shadow Board, colleagues will be able to discuss and share views on executive pay. During 2022, the Shadow Board was focused on establishing itself and beginning to engage with the Centrica Leadership Team and the Senior Leadership Team, although executive pay was not discussed. Details of how the Shadow Board engaged in discussions on executive pay will be disclosed in next year's Directors' Remuneration Report and on an ongoing basis.
Simplicity Remuneration structures should avoid complexity and their rationale and operation should be easy to understand	The latest Policy results in a clear simplification of remuneration arrangements through the replacement of a performance share plan, with a simpler restricted share plan. We further operate an annual incentive (the AIP) with a straightforward deferral structure to allow it to be easily understood. The performance conditions for variable elements are clearly communicated to, and understood by, participants and aligned with strategy.
Risk Remuneration arrangements should ensure reputational and other risks from excessive rewards, and behavioural risks that can arise from target-based incentive plans, are identified and mitigated	The majority of the Executives' total remuneration is weighted towards variable pay (and provided in shares). The arrangements result in a reduced risk of excessive reward, through lower quantum for the Executive team alongside an increased discouragement of excessive risk-taking behaviour through the use of a post-employment shareholding requirement. The Committee also retains discretion to override formulaic outcomes for incentive plans. Malus and clawback provisions mitigate behavioural risks by enabling payments to be reduced or reclaimed in specific circumstances.
Predictability The range of possible values of rewards to individual directors and any other limits or discretions should be identified and explained at the time of approving the Policy	The Policy sets out the maximum potential value for each element of remuneration subject to the achievement of performance conditions. The potential total remuneration outcomes are easily quantifiable and are set out in the illustrations provided in the Policy. As highlighted in Risk, the Committee has discretion to override formulaic outcomes if they were deemed to be inappropriate.
Proportionality The link between individual awards, the delivery of strategy and the long-term performance of the Group should be clear. Outcomes should not reward poor performance	Remuneration is appropriately balanced between fixed and variable pay. Short-term performance targets are linked to the Group's strategy and the use of deferral in the AIP ensures a link to long-term performance through this element. The introduction of an RSP ensures a strong link to long-term performance as executive reward is directly linked to the share price of the Company.
Alignment to culture Incentive schemes should drive behaviours consistent with the Group's purpose, values and strategy	The short-term incentive plans are measured against performance measures which underpin the Group's culture and strategy. The incentive structure is cascaded through the top six levels of the organisation ensuring that it drives the same behaviours across the Group.

Non-Executive Directors' remuneration

Remuneration Policy

Centrica's policy on Non-Executive Directors' (Non-Executives) fees takes into account the need to attract high-calibre individuals required to support the delivery of our strategy.

Remuneration Policy table

Purpose and link to strategy	Operation and clawback	Maximum opportunity	Performance measures
Chairman and Non-Executive Director Fees			
Sufficient level to secure the services of individuals possessing the skills, knowledge and experience to support and oversee the Executive Directors in their execution of the Board's approved strategies and operational plans. Fees reflect market practice as well as the responsibilities and time commitment required by our Non-Executives.	The fee levels for the Chairman are reviewed every two years by the Remuneration Committee. The fee levels of the Non-Executives are reviewed at least every two years. Non-Executives are paid a base fee for their services. Where individuals serve as Chair of a Committee of the Board, additional fees are payable. The Senior Independent Director also receives an additional fee. The Company reserves the right to pay a Committee membership fee in addition to the base fees.	The maximum level of fees payable to Non-Executives, in aggregate, is set out in the Articles of Association.	Not applicable.

Current fee levels (applying from 1 January 2023)(1):	
Chairman of the Board	up to £495,000
Basic fee for Non-Executives	£76,000
Additional fees	
Chair of Audit and Risk Committee	£25,000
Chair of Remuneration Committee	£20,000
Chair of Safety, Environment and Sustainability Committee	£20,000
Senior Independent Director	£20,000
Employee Champion	£20,000

(1) Non-Executive Director (NED) fee levels were reviewed in December 2022 and it was agreed the base fees would be increased by 4.8%. Further details can be found on page 89.

Recruitment policy

The policy on the recruitment of new Non-Executives during the policy period would be to apply the same remuneration elements as for the existing Non-Executives. It is not intended that variable pay, day rates or benefits in kind be offered, although in exceptional circumstances such remuneration may be required in currently unforeseen circumstances. The Committee will include in future Remuneration Reports details of the implementation of the policy as utilised during the policy period in respect of any such recruitment to the Board.

Terms of appointment

Non-Executives, including the Chairman, do not have service contracts. Their appointments are subject to Letters of Appointment and the Articles of Association. All Non-Executives are required to be re-elected at each AGM. The date of appointment and the most recent re-appointment and the length of service for each NED are shown in the table below:

Non-Executive Director	Date of appointment to role	Date of re-appointment	Notice from the Company	Notice from the individual
Scott Wheway	1 May 2016	7 June 2022	6 months	6 months
Carol Arrowsmith	11 June 2020	7 June 2022	3 months	3 months
Stephen Hester	1 June 2016	7 June 2022	3 months	3 months
Pam Kaur	1 February 2019	7 June 2022	3 months	3 months
Amber Rudd	10 January 2022	7 June 2022	3 months	3 months
Nathan Bostock	9 May 2022	7 June 2022	3 months	3 months
CP Duggal	16 December 2022	–	3 months	3 months
Heidi Mottram	1 January 2020	7 June 2022	3 months	3 months
Kevin O'Byrne	13 May 2019	7 June 2022	3 months	3 months

Other Statutory Information

The Directors submit their Annual Report and Accounts for Centrica plc, together with the consolidated Financial Statements of the Centrica group of companies, for the year ended 31 December 2022. The Directors' Report required under the Companies Act 2006 (the 'Act') comprises this Directors' and Corporate Governance Report (pages 56 to 106) including the TCFD section for disclosure of our greenhouse gas (GHG) emissions in the Strategic Report (page 52). The management report required under Disclosure Guidance and Transparency Rule 4.1.5 R comprises the Strategic Report (pages 2 to 54) (which includes the risks relating to our business), Shareholder Information (page 252) and details of acquisitions and disposals made by the Group during the year in note 12 (pages 156 to 158). The Strategic Report on pages 2 to 54 fulfils the requirements set out in Section 414 of the Act. This Directors' and Corporate Governance Report fulfils the requirements of the corporate governance statement required under Disclosure Guidance and Transparency Rule 7.2.1.

Articles of Association ('Articles')

The Company's Articles were adopted at the 2019 Annual General Meeting (AGM) and may only be amended by a special resolution of the shareholders. The Articles include various rules outlining the running and governing of the Company, for example rules relating to the appointment and removal of the Directors and how the Directors can use all of the Company's powers (except where the Articles or legislation says otherwise), for example in relation to issuing and buying back shares. The Articles can be found on our website centrica.com. The Company proposes to put amended Articles to its shareholders at the 2023 AGM. Further information on the changes will be published in the 2023 Notice of Meeting.

Centrica shares

Significant shareholdings

At 31 December 2022, Centrica had received notification of the following interests in voting rights pursuant to the Disclosure and Transparency Rules:

	Date notified	% of share capital(1)
BlackRock, Inc.	08.04.2022	5.25
Schroders Investment Management Limited	07.12.2022	5.00
Ameriprise Financial, Inc.	10.06.2022	<5%
Bank of America Corporation	22.11.2022	<5%

(1) Percentages are shown as a percentage of the Company's issued share capital when the Company was notified of the change in holding. As at 15 February 2023, the Company had received no further notifications. Copies of historic notifications and any notifications received since 15 February 2023, can be found on our website at centrica.com/rnsannouncements.

Share capital

The Company has a single share class which is divided into ordinary shares of 6 $^{14}/_{81}$ pence each. The Company was authorised at the 2022 AGM to allot up to 1,969,096,844 ordinary shares as permitted by the Act. A renewal of a similar authority will be proposed at the 2023 AGM. The Company's issued share capital as at 31 December 2022, together with details of shares issued during the year, is set out in note 25 to the Financial Statements on page 186.

Rights attaching to shares

Each ordinary share of the Company carries one vote. Further information on the voting and other rights of shareholders is set out in the Articles and in explanatory notes which accompany notices of general meetings, all of which are available on our website centrica.com. There are no shareholder agreements or restrictions in 2022.

Purchase of shares

As permitted by the Articles, the Company obtained shareholder authority at the 2022 AGM to purchase its own shares up to a maximum of 590,729,053 ordinary shares of 6 $^{14}/_{81}$ pence each. The Company commenced a share repurchase programme on 15 November 2022. As at 31 December 2022, 47,201,133 shares had been purchased under this authority (of which 45,714,883 shares had been settled) and 47,171,692 shares were held as treasury shares (of which 45,685,442 shares had settled). The shares purchased represent approximately 0.8% of the issued ordinary share capital at an aggregate cost of approximately £44 million (£43 million in respect of settled shares). Dividends are waived in respect of shares held in the treasury share account. Further details are set out in note S4 to the Financial Statements on page 208.

Shares held in employee benefit trusts

The Centrica plc Employee Benefit Trust (EBT) is used to purchase shares on behalf of the Company for the benefit of employees, in connection with the Restricted Share Scheme. The Centrica plc Share Incentive Plan Trust (SIP Trust) is used to purchase shares on behalf of the Company for the benefit of employees, in connection with the SIP. Both the Trustees of the EBT and the SIP Trust, in accordance with best practice, have agreed not to vote any unallocated shares held in the EBT or SIP Trust at any general meeting and dividends are waived in respect of these shares. In respect of allocated shares in both the EBT and the SIP Trust, the Trustees shall vote in accordance with participants' instructions. In the absence of any instruction, the Trustees shall not vote.

Employee participation in share schemes

The Company's all-employee share schemes are a long-established and successful part of our total reward package, encouraging the involvement of UK employees in the Company's performance through employee share ownership. We operate tax-advantaged Sharesave (SAYE) schemes in the UK and Ireland, and a Share Incentive Plan (SIP) in the UK, with good levels of take-up for all share plans across the Group. Currently, 14% of eligible employees participate in Sharesave and 32% of eligible employees participate in the SIP. In 2022 all eligible employees globally were awarded a Profit Share award under the SIP.

Other information

Directors' indemnities and insurance

In accordance with the Articles, the Company has granted a deed of indemnity, to the extent permitted by law, to the Directors of the Company. Qualifying third-party indemnity provisions (as defined by Section 234 of the Act) were in force during the year ended 31 December 2022 and remain in force. The Company also maintains directors' and officers' liability insurance for its Directors and officers. The Company has granted qualifying pension scheme indemnities in the form permitted by the Companies Act 2006 to the directors of Centrica Pension Plan Trustees Limited, Centrica Engineers Pension Trustees Limited and Centrica Pension Trustees Limited, that act as trustees of the Company's UK pension schemes.

Political donations

The Company operates on a politically neutral basis. No political donations were made by the Group for political purposes during the year.

Payments policy

We recognise the importance of good supplier relationships to the overall success of our business. We manage dealings with suppliers in a fair, consistent and transparent manner.

Significant agreements – change of control

There are a number of agreements to which the Company is party that take effect, alter or terminate upon a change of control of the Company following a takeover bid.

The significant agreements of this kind include:

- those that relate to 2009, when the Company entered into certain transactions with EDF Group in relation to an investment in the former British Energy Group, which owned and operated a fleet of nuclear power stations in the UK. The transactions include rights for EDF Group and the Company to offtake power from these nuclear power stations. As part of the arrangements, on a change of control of the Company, the Group loses its right to participate on the boards of the companies in which it has invested. Furthermore, where the acquirer is not located in certain specified countries, EDF Group is able to require Centrica to sell out its investments to EDF Group; and
- committed facility agreements, subordinated fixed rate notes and bonds issued under the Company's medium-term note programme.

The Remuneration Policy sets out on page 101 details on the treatment of the Executive Directors' pay arrangements, including the treatment of share schemes in the event of a change of control.

Disclosures required under Listing Rule 9.8.4 R

The Company is required to disclose certain information under Listing Rule 9.8.4 R in the Directors' Report or advise where such relevant information is contained. All such disclosures are included in this Directors' and Corporate Governance Report, other than the following sections of the 2022 Annual Report and Accounts:

Information	Location in Annual Report	Page(s)
Capitalised interest (borrowing costs)	Financial Statements	150, note 8
Details of long-term incentive schemes	Remuneration Report	85 and 90

Directors' statements

Accounting standards require that Directors satisfy themselves that it is reasonable for them to conclude whether it is appropriate to prepare the Financial Statements on a going concern basis. The Group's business activities, together with factors that are likely to affect its future development and position, are set out in the Group Chief Executive's Statement on pages 4 to 6 and the Business Reviews on pages 22 to 25. After making enquiries, the Board has a reasonable expectation that Centrica and the Group as a whole have adequate resources to continue in operational existence and meet their liabilities as they fall due, for the foreseeable future.

For this reason, the Board continues to adopt the going concern basis in preparing the Financial Statements.

Additionally, the Directors' Viability Disclosure, which assesses the prospects for the Group over a longer period than the 12 months required for the going concern assessment, is set out on pages 34 to 36. Further details of the Group's liquidity position are provided in notes 24 and S3 to the Financial Statements on pages 182 to 185 and 200 to 206.

Directors' responsibilities statement

The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law, the Directors are required to prepare the Group financial statements in accordance with international accounting standards, in conformity with the requirements of the Companies Act 2006. The Directors have also chosen to prepare the parent company financial statements in accordance with Financial Reporting Standard 101 'Reduced Disclosure Framework'.

Under company law, the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Company and of the profit or loss of the Company for that period.

In preparing the parent company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether Financial Reporting Standard 101 'Reduced Disclosure Framework' has been followed, subject to any material departures disclosed and explained in the Financial Statements; and
- prepare the Financial Statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

In preparing the Group Financial Statements, International Accounting Standard 1 requires that Directors:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRSs are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the Company's ability to continue as a going concern.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the Financial Statements comply with the Companies Act 2006.

They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of Financial Statements may differ from legislation in other jurisdictions.

Responsibility statement

Each of the Directors confirm that to the best of their knowledge:

- the Financial Statements, prepared in accordance with the relevant financial reporting framework, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole;
- the Strategic Report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face; and
- the Annual Report and Financial Statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the Company's position and performance, business model and strategy.

The names of the Directors and their functions are listed on pages 62 and 64.

Information to the independent auditors

The Directors who held office at the date of this Report confirm that:

- they have taken all the steps that they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information; and
- there is no relevant audit information of which Deloitte LLP are unaware.

This confirmation is given and should be interpreted in accordance with the provisions of Section 418 of the Companies Act 2006.

Deloitte LLP have expressed their willingness to continue in office as auditors and a resolution to re-appoint them will be proposed at the forthcoming AGM.

By order of the Board

Raj Roy
Group General Counsel & Company Secretary
15 February 2023

Financial Statements

Independent Auditor's Report

Report on the audit of the financial statements

1. Opinion

In our opinion:

- the financial statements of Centrica plc (the 'Company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the Company's affairs as at 31 December 2022 and of the Group's loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with United Kingdom adopted international accounting standards;
- the Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 'Reduced Disclosure Framework'; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements which comprise:

- the Group Income Statement;
- the Group Statement of Comprehensive Income;
- the Group and Company Statements of Changes in Equity;
- the Group and Company Balance Sheets;
- the Group Cash Flow Statement; and
- the related notes 1 to 26 and the supplementary notes S1 to S11 of the Group financial statements and notes I to XVI of the Company financial statements.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and United Kingdom adopted international accounting standards. The financial reporting framework that has been applied in the preparation of the Company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 'Reduced Disclosure Framework' (United Kingdom Generally Accepted Accounting Practice).

2. Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the Group and the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. The non-audit services provided to the Group for the year are disclosed in note S9 to the financial statements. We confirm that we have not provided any non-audit services prohibited by the FRC's Ethical Standard to the Group or the Company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Summary of our audit approach

Key audit matters

The key audit matters that we identified in the current year were:

- judgements associated with accounting for energy supply arrangements to British Gas Energy and Centrica Business Solution customers;
- impairment reversal in respect of the Group's investment in Nuclear;
- valuation of complex energy derivative contracts; and
- judgements associated with going concern assumptions.

Energy supply arrangements

In the prior year, the key audit matter covered judgements associated with the supply of energy including the billed debt provision, the risk of onerous supply contracts and accounting for transactions under the SoLR mechanism.

While commodity prices were consistently high for the majority of 2022, a significant drop towards the end of the year saw prices retreat to lower levels, albeit more elevated than they had been in 2021. This drop meant that the derivative contracts to procure energy for residential supply contracts were in a liability position at 31 December 2022. Given the expected gain on subsequent unwind of these derivative liabilities, residential energy supply contracts were not considered onerous at year-end and thus the previously recorded onerous contract provisions, which had totalled £0.9bn at 31 December 2021, were fully reversed during December 2022. The remaining onerous contract provision of £1bn relates to the business energy supply contracts which are of a reduced level of judgement and estimation uncertainty and accordingly not identified as a key audit matter.

Similarly, transfers of customers to British Gas Energy under the Supplier of Last Resort ('SOLR') mechanism during 2022 were less material than those in 2021. Since the appropriate accounting for these was agreed in 2021 and remains consistent this year, we removed accounting for transactions under the SoLR mechanism as a key audit matter.

In the current year this key audit matter includes judgements associated with determining expected credit losses in respect of customer receivables as a result of the higher trend of commodity prices and the resultant price cap revisions during the year which have led to increased levels of judgement around the recoverability of trade receivables given the inherent higher risk of customer defaults. In addition, accounting considerations in relation to payments and vouchers to customers and credits to customers' accounts in respect of the UK government's Energy Bill Relief Scheme (EBRS), Energy Bills Support Scheme (EBSS) and Energy Price Guarantee (EPG) were also considered as a key audit matter. Given the material number of customers migrated onto the new Energy billing platform (ENSEK) during the year and the developing nature of the controls environment, we also consider the accuracy and completeness of consumption data and unbilled revenue methodology in relation to ENSEK to be a key audit matter.

Nuclear impairment reversal

Higher commodity prices in 2022 as explained above, coupled with the UK Government introducing the Electricity Generators Levy (EGL), impacted the forecast future cashflows of the Group's Nuclear assets. Whilst the recoverable amount was lower at year-end, the carrying value of the Group's investment was also adversely impacted due to a higher-than-expected defined benefit actuarial loss allocation by EDF (Nuclear asset operator). As a result, primarily due to high commodity prices in 2022, the Group has recorded an impairment reversal of £195m in the year. Given the significant impairment movement on the investment in Nuclear in the current year, we identified a key audit matter around the valuation of these assets.

Complex energy derivative contracts valuation

For other own-use contracts, these contracts are not at risk of breaching the own-use designation. The reduced risk associated with LNG and own-use contracts means that these were not identified as key audit matters in the current year.

The key audit matter in the current year is focused on valuation of complex energy derivative contracts. We have identified a fraud risk, being the potential risk of management bias in the modelling of complex energy derivative contracts.

Going concern assumption

The going concern assumption, specifically margin liquidity risk, has been a source of significant audit effort this year driven by the high price environment and volatility experienced in the year in liquidity demands on the business. Given that this required increased and focused senior audit involvement, we have identified the audit of the going concern assumption as a key audit matter.

Other matters

The Group's Exploration and Production (E&P) assets exhibited reduced impairment risk due to significant headroom and commodity price rises over 2022 when compared to 2021, despite the impact of the Energy Price Levy (Group's E&P business now taxed at 75%) and the commodity price drop near the end of the year. Given the reduced risk of E&P asset impairment, the key audit matter for impairment in the current year is solely focused on the judgements associated with the Nuclear asset impairment reversal.

The first half of 2022 witnessed the completion of the disposal of Spirit Energy's Norwegian portfolio and Statfjord fields. We have therefore removed the key audit matter for 'Presentation and accounting for the planned disposal of Spirit Norway and Statfjord'.

Within this report, key audit matters are identified as follows:

! Newly identified

△ Increased level of risk

◁▷ Similar level of risk

▽ Decreased level of risk

Materiality

The materiality that we used for the audit of the Group financial statements is £158m (2021: £35m). This materiality was determined on the basis of adjusted profit before tax. Adjusted profit before tax is the pre-tax business performance profit adjusted for the impact of exceptional items and certain re-measurements. The significant increase in materiality in 2022 reflects higher commodity prices contributing to higher adjusted profit for the Upstream and Trading segments.

The materiality of £158m represents 0.5% (2021: 0.2%) of business performance revenue, 0.5% (2021: 0.1%) of total assets, and 6.4% (2021: 0.9%) of free cash flow.

Scoping	All components of the Group were subject to a full scope audit other than those below which were subject to specified audit procedures: • Bord Gáis; • non-regulated parts of British Gas Services and Solutions segment; and • Centrica Storage (within the Upstream segment). New Energy Services (within the Centrica Business Solutions segment) was subject to review procedures as compared to an audit of specified account balances in the prior year given the current year qualitative and quantitative insignificance to the group. Component materiality levels were set based on the size and audit risk associated with each component on a range of applicable metrics. Our risk assessment procedures resulted in a reduction in the group reporting scope for British Gas Services and Solutions given the limited volume of activities with limited profit compared to the Upstream (including Nuclear) and Trading segments which are designated as full scope audits.
Significant changes in our approach	Other than the changes in key audit matters discussed above, there were no other significant changes in our audit approach when compared to 2021.

4. Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Our evaluation of the directors' assessment of the Group's and Company's ability to continue to adopt the going concern basis of accounting is discussed in section 5.4.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In relation to the reporting on how the Group has applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the directors' statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

5. Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on the overall audit strategy, the allocation of resources in the audit and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

5.1 Judgements associated with accounting for energy supply arrangements to British Gas Energy and Centrica Business Solutions customers ▽

Key audit matter description

The Group supplies gas and power to residential and business customers in the UK through its British Gas Energy and Centrica Business Solutions segments.

The impact of key events, including current macroeconomic factors, high commodity prices, the Ukraine-Russia conflict and the resultant cost-of-living crisis has increased the level of judgement regarding recoverability of customer debt within the Group's British Gas and Centrica Business Solutions energy supply businesses, increasing the risk of material misstatement in the determination of expected credit losses at 31 December 2022. Credit losses of £809m (2021: £584m) have been recognised on amounts due of £3,106m (2021: £2,013m) from the supply of energy to customers, including £125m (2021: £30m) of additional provisions to reflect the cost-of-living crisis. Further details on credit losses relating to trade receivables can be found in notes 3b and 17.

Recognising the growing pressure on the cost of living in form of higher energy and other household or business costs, the UK Government introduced various schemes to provide support to customers as part of a suite of cost-of-living and business support measures. These are EBRS, EBSS and EPG. The Group is the initial recipient of cash under these schemes. The Group recognised £2,883m (2021: nil) of revenue and amounts received under various government support schemes with further details shown in notes 1b and 4b. At year-end, the Group held trade receivables in relation to government schemes of £284m as at 31 December 2022.

British Gas Energy continued the migration of customers onto its new digital energy platform (ENSEK) during the year. As at 31 December 2022, £2.1bn of revenue (2021: £0.4bn) was recognised from customers on this platform. Revenue from customers on the ENSEK platform is presented within the overall revenue figure in note 4.

These matters are also considered by the Audit and Risk Committee in its report on pages 75 to 79.

Expected credit losses in respect of customer receivables

The key assumptions in the determination of expected credit losses in British Gas Energy and Centrica Business Solutions include the methodology used to determine the impact that macroeconomic factors will have on the future cash collection and the resultant need to record additional provisions, over and above the 'business-as-usual' provisions.

Given the level of judgement and the impact of provisioning on key performance indicators of the Group, we identified a risk of material misstatement due to fraud in the recording of credit losses within British Gas Energy and Centrica Business Solutions.

Accounting for customer support schemes

Government support schemes include EBSS where residential customers have directly received a cash or credit amount, EPG which protects residential customers from increases in energy costs by limiting the amount suppliers can charge per unit of energy used and EBRS which protects business customers by capping the amount charged by energy suppliers for energy consumption. There is judgement in determining whether this revenue meets the definition of revenue under IFRS 15 Revenue from contracts with customers.

ENSEK revenue

Customer migration to the ENSEK platform has continued throughout 2022. Given the significant quantum of revenue, the developing controls environment and the difference from legacy SAP systems in the methodology used to derive unbilled revenue related to customers on ENSEK, there is a risk, including a fraud risk over the accuracy and completeness of the revenue recognised.

How the scope of our audit responded to the key audit matter	***Expected credit losses in respect of customer receivables*** • We tested and relied upon controls relevant to the calculation of billed debt provisions, where applicable. • With involvement of our IT and data analytics specialists, we tested the accuracy of the underlying debt books, including the age of debt, and recalculated management's provision rates based on historic cash collection. • We assessed how amounts receivable at 31 December 2021 were collected over 2022 in order to estimate an expected profile of the recovery of 31 December 2022 balances, on a 'business as usual basis'. We applied this profile to 31 December 2022 debt and then assessed: – the impact and sensitivity of this profile based on external forecasts such as household disposable income and inflation forecasts and the impact on billed debt provisions as the economic situation changes; and – management's accounting for the impact of these changes in the billed debt provision estimate. • We considered the extent to which the provision on a 'business as usual basis' factors in the change the current macroeconomic environment. • We understood and challenged the methodology and relevant controls over the determination and recording of the additional macroeconomic provision, with reference to available third-party analysis. • Given the significant increase in provision (including an additional macroeconomic provision) in 2022 and considering that the provision as a percentage of gross debt has reduced, we performed procedures to challenge the completeness and the appropriateness of the provision. • We assessed the appropriateness of the disclosures provided relating to this key source of estimation uncertainty, and the range of sensitivities disclosed. ***Accounting for customer support schemes*** • We assessed whether the revenue recognised under EBSS, EBRS and EPG falls within the scope of IFRS 15 'Revenue from Contracts with Customers'. This included assessing the reasonableness of the accounting treatment adopted including the methodology and controls associated with recording the revenue. • We evaluated the expected revenue under various government support schemes with the actual amounts recorded in the books of accounts, investigating differences above a pre-determined threshold. • We assessed the appropriateness of the disclosures and the presentation of the revenue recognised in the Group income statement from the various government support schemes within the 'Business performance group revenue' line item of the Group income statement. ***ENSEK revenue*** • We obtained an understanding of the relevant controls over the recognition of revenue from customers within the ENSEK system, including those regarding the completeness and accuracy of consumption data within ENSEK. • We understood and tested controls associated with the migration exercise, including validating the accuracy and completeness of the balance migrated from the legacy SAP systems. • We evaluated the accuracy of amounts recorded as revenue by testing the consumption data against supporting documentation. • We challenged the methodology used to calculate the ENSEK unbilled revenue, through comparison with the legacy SAP approach and calculating an expectation of unbilled revenue, investigating differences above a pre-determined threshold.
Key observations	We are satisfied that the Group's billed debt provisions of £812m (2021: £587m), including £125m (2021: £30m) of additional provisions to reflect macroeconomic uncertainty, and the associated methodology to calculate this adjustment, are appropriate. We consider the additional manual provision recognised to be appropriate and close to the mid-point of a calculated reasonable range. We are satisfied that the amounts recognised under various government schemes meet the definition of revenue under IFRS 15 'Revenue from Contracts with Customers' and are satisfied that the revenue has been appropriately presented within the 'Business performance group revenue' line item of the Group income statement. We are satisfied that the accuracy and completeness of the Group's ENSEK energy revenue, including the methodology to generate unbilled revenue is appropriate. Whilst improvements were made to controls during the year in relation to revenue recognition, they were not yet at a stage where we were able to rely on them.

5.2. Impairment reversal in the Group's investment in Nuclear ◁▷

Key audit matter description	As highlighted in section 3 above, commodity prices were consistently high in 2022 before witnessing a significant drop towards the end of the year, albeit higher than 2021 levels. The decrease in future forecast cashflows in the assessment of investment in Nuclear was offset by the decrease in carrying value as a result of a pension actuarial loss allocated by the operator. The total pre-impairment book value of the investment in Nuclear was £1,560m (2021: £1,625m) with a pre-tax impairment reversal of £195m (2021: £747m) recorded as at 31 December 2022. The details on the key sources of estimation uncertainty underpinning the impairment reversal for these assets can be found in note 3(b). Details on the sensitivity of the above impairment reviews to changes in key assumptions such as commodity prices are disclosed in note 7(c). This includes sensitivities associated with the Group's commodity price curves if these curves were aligned with the net zero scenario ('net zero curve') which assumes governmental policies are put in place to achieve the temperature and net zero goals by 2050. The matter is also considered by the Audit and Risk Committee in its report on page 77. Given the significant impairment movement in the investment in Nuclear in the current year, we identified a key audit matter around the valuation of these assets for impairment testing purposes. The underlying impairment reversal has been recorded within the exceptional items and certain re-measurements column of the Group income statement. The key assumptions and judgements underpinning the impairment testing of the investment in Nuclear include: • forecast future commodity prices, including the likely impact of the Paris Accord and climate change on those prices; • forecast future generation profiles of the assets; • forecast future cash flows for the assets; • availability forecasts in respect of the nuclear power stations; • useful life estimates; • impact of the Electricity Generator levy on the future forecast of cashflows; and • the discount rate.
How the scope of our audit responded to the key audit matter	***Procedures on the overall impairment reversal review:*** • We understood management's process for identifying indicators of impairment and impairment reversal and for performing their impairment assessment. • We obtained an understanding of the relevant controls relating to the asset impairment models, the underlying forecasting process and the impairment reviews performed. • We evaluated and challenged the key assumptions and inputs into the impairment models, which included performing sensitivity analysis, to evaluate the impact of selecting alternative assumptions. We evaluated changes in key assumptions and assessed retrospectively whether prior year assumptions were appropriate. • We involved our internal valuation specialists to evaluate management's discount rates, which involved benchmarking against available market views and analysis. • We tested the arithmetical accuracy of the impairment models. • We assessed the appropriateness of management's disclosures of the key assumptions and sensitivities including the presentation of the impairment reversals within the exceptional items and certain re-measurements column of the Group income statement. ***Procedures relating to forecast future cash flows:*** • We confirmed that forecast cash flows were consistent with the operator approved forecasts, where relevant, and analysed reasonably possible downside sensitivities. • We assessed the reasonableness of the plants' forecast outage rates by looking at recent historic outage rates and sensitised the impact of a change in assumptions on the overall impairment reversal. • We evaluated the Group's estimation of future commodity prices, benchmarked against externally available future commodity price estimates and performed sensitivity analysis with alternative future prices. This includes a scenario which assumes governmental policies are put in place to achieve the temperature and net zero goals by 2050. We recalculated management's disclosures relating to the sensitivity of the Group's impairment tests to reduced commodity prices, including the net zero curves. • We involved our tax specialist to adjudge the reasonableness of implementation of the Electricity Generators Levy and as a result, aiding the audit team's subsequent impact assessment on the forecasted future cash outflows.
Key observations	We are satisfied that the key assumptions used to determine the value in use of the Group's investment in Nuclear is appropriate, including production and availability forecasts. We are also satisfied that the Group's discount rate assumptions are determined based on acceptable valuation methodologies. The Group's future commodity price estimates are in the middle of the acceptable range of external sources, consistent with the prior year. We observed that generally, the forecasts from acceptable external sources for gas and baseload prices were above the assumed prices in the net zero scenario. We considered the sensitivity disclosures relating to the impact on the Group's impairment reviews of future commodity price estimates arising from climate change to be acceptable. We are satisfied that the Group's impairment reversal is appropriate and the presentation under the exceptional items and certain re-measurements column of the Group income statement is consistent with Group policy.

5.3. Valuation of complex energy derivative contracts △

Key audit matter description	As disclosed in note 7 to the financial statements, a re-measurements loss of £5,160m (2021: gain of £1,289m) on energy derivative contracts has been recognised in the year. Details on the Group's energy contracts can be found in note 19 and note S3(a). The key sources of estimation uncertainty associated with energy contracts can be found in note 3(b) with further details on the presentation of certain re-measurement arising on derivatives disclosed in note 2(b). The matter is also considered by the Audit and Risk Committee in its report on page 75. The Group undertakes proprietary trading activities and also enters into forward commodity contracts to optimise the value of its production and generation assets as well as to meet the future needs of its customers. Certain of these arrangements are accounted for as derivative financial instruments and are recorded at fair value. We identified a key audit matter relating to valuation of complex derivative trades performed internally by management's valuation specialists. There is judgement required in valuing complex energy derivative contracts, particularly where there is modelling complexity and bespoke contractual terms (level 3 in accordance with IFRS 13 'Fair Value Measurement'). Given the judgement and potential of management bias in the modelling, we have identified a potential risk of fraud. Whilst the value of complex energy derivative contracts increased through the year due to the significant rise in commodity prices, the drop in prices in December 2022 has reduced the valuation to early 2022 levels. Given the continued and heightened level of risk as well as the complexity associated with disclosures, the valuation of these contracts is identified as a key audit matter.
How the scope of our audit responded to the key audit matter	• We understood the Group's processes and tested controls, including the user access and segregation of duties controls, for authorising and recording commodity trades. • We have understood management's process and tested the relevant controls relating to the valuation of complex energy derivatives within the Group's Energy, Marketing and Trading ('EM&T') business. We also assessed the competence, capability and objectivity of management's own internal valuation specialists. • With involvement of financial instrument specialists, we assessed the value of material complex trades, either by creating an independent valuation or by testing how management developed their estimate. Particular emphasis was made to assess any new material models and material changes to relevant models including additional procedures to assess the reasonableness and appropriateness of these. • We assessed the movement in the fair values based on the change in significant inputs, while testing these inputs, where relevant. • We considered the appropriateness of the relevant complex derivative energy contracts disclosure, including the key source of estimation uncertainty disclosures.
Key observations	We are satisfied that complex derivative energy contracts are valued on an appropriate basis.

5.4. Judgements associated with going concern assumption !

Key audit matter description	During 2022, high and volatile commodity prices resulted in increased requirements for the Group and its counterparties to post and receive more significant cash margin collateral than was historically the case. To respond to this increased liquidity risk, the Group established enhanced processes in the trading businesses and in respect of Upstream to plan for and manage possible increased cash margin requirements. The enhanced governance processes included establishing a Liquidity Working Group to monitor and respond to volatile market conditions, trading activity, and the ability of counterparties to pay margin calls. To monitor reasonably possible margin requirements, the Group used modelling and analysis of the volatile market conditions over the last two years to determine severe but plausible scenarios of the possible liquidity requirements. Additionally, the Group took active steps to both increase liquidity facilities available, and to reduce and mitigate margin requirements as a result of trading activity. Further details in relation to the Group's measures are described in note 24(b) and the viability statement on pages 34 to 36. Given the impact of commodity price volatility on forecast liquidity headroom in the current year, the directors calculated minimum headroom under high, low and base price case scenarios. As such, this required increased and focused senior audit involvement and has led to the audit of the going concern assumption being identified as a key audit matter.
How the scope of our audit responded to the key audit matter	The key procedures to evaluate the directors' assessment of the Group's and Company's ability to continue to adopt the going concern basis of accounting included: • assessing the Group's future cash flow forecasts, by considering actual cash flow performance in 2022, the volatile commodity price environment, historical accuracy of the Group forecasts and key assumptions underpinning management's going concern assessment; • agreeing the level of committed undrawn facilities of £4.0bn to signed facility agreements, along with support from our treasury specialists, where relevant, to review the key terms of the facility agreements; • testing the clerical accuracy of the model used to prepare the cash flow forecasts and assessing the sophistication of the model used to prepare the forecasts; • assessing the sensitivities run by the directors and the linkage of these sensitivities to the Group's principal risks disclosed on pages 30 to 33 of the Annual Report & Accounts. These sensitivities include the impact of margin cash volatility, a reduction in the Group's credit rating, a reduction in commodity prices, or the risk of adverse weather and the resultant impact on cashflows; and • assessing the appropriateness of management's going concern disclosures in light of the above assessment. Given the high degree of judgement required to determine appropriate scenarios, including the range of possible unanticipated volatility in commodity prices, our audit response to this risk was focused on: • understanding management's process in determining the severe but plausible margin call scenarios and stressing the other drivers of liquidity demand in the trading businesses; • challenging management's assessment and rationale for each scenario, including the severity of the scenarios with respect to historical commodity prices and the probabilistic assessments of how elevated commodity prices may become in the future; • assessing the consistency of the margin call scenarios between the going concern model and that used to assess the viability of the Group; • testing the assumptions and detailed model methodology underpinning the scenarios, including using the expertise of complex modelling specialists; and • assessing the reasonability of the margin liquidity scenarios, available mitigations and whether management's approach of incorporating these scenarios into the Group going concern and viability reasonable worst case analysis was appropriate.
Key observations	The Group's key assumptions, methodology and the severity of the Group margin call scenarios were concluded to be appropriate in the context of current market conditions. We observed that the scenarios included modelling market conditions which were significantly more severe than were experienced in both 2021 and 2022. These scenarios included assessing statistically to a 95% confidence level the market conditions that may arise in the future, however they are not necessarily a predictor of all future conditions given the volatility of commodity markets. We are satisfied the management's disclosures regarding preparation of the financial statements on a going concern basis are appropriate.

6. Our application of materiality

6.1 Materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined the materiality of the financial statements as a whole as follows:

	Group financial statements	Company financial statements
Materiality	£158 million (2021: £35 million)	£150 million (2021: £33 million)
Basis for determining materiality	We determined materiality on the basis of 5% of adjusted profit before tax. Adjusted profit before tax is the pre-tax profit adjusted for the impact of exceptional items and certain re-measurements. The significant increase in materiality in 2022 reflects higher commodity prices contributing to higher adjusted profits for the Upstream and Trading segments. The materiality of £158m represents 0.5% of business performance revenue, 0.5% of total assets, and 6.4% of free cash flow. In the prior year, materiality was based on a range of applicable metrics including free cash flow, shareholders' equity and pre-tax profit adjusted for exceptional items and certain re-measurements. This represented 4.6% of final adjusted profit before tax.	We determined Company materiality based on 3.0% (2021: 1.0%) of estimated net assets but capped materiality at 95% (2021: 95%) of Group materiality. Our final materiality constituted 2.8% of net assets (2021: 0.6% of net assets). The percentage applied in determining Company materiality has been adjusted in the current year to reflect our historical audit experience.
Rationale for the benchmark applied	We considered adjusted profit before tax to be the most appropriate benchmark to measure the performance of the Group. We consider it appropriate to adjust for exceptional items and re-measurements as these items are volatile and not reflective of the underlying performance of the Group. We have reverted to this historical benchmark as it has become a more stable measure of performance following the impact of COVID-19 on pre-tax adjusted profit, which previously would have reduced materiality to a level which would not have reflected the size and scale of the Group. Notwithstanding the significant increase in year-on-year materiality, we challenged the appropriateness of using 5% of adjusted profit before tax for our assessment of materiality by looking at a range of alternative benchmarks. Given that the determined materiality was within the range of alternative benchmarks, we have concluded it to be appropriate. We considered our established materiality against the final audit results and considered that it remained appropriate in the context of the financial statements as a whole.	We considered net assets to be the most appropriate benchmark given the primary purpose of the Company is a holding company.

6.2. Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole.

	Group financial statements	Company financial statements
Performance materiality	70% (2021: 70%) of Group materiality	70% (2021: 70%) of Company materiality)
Basis and rationale for determining performance materiality	The factors we considered in setting performance materiality at 70% of Group and Company materiality included: • The overall quality of the control environment and that we were able to rely on controls in certain of the Group's businesses. • The nature, size and number of uncorrected misstatements identified in previous audits and management's willingness to correct those adjustments.	

6.3 Error reporting threshold

The significant increase in materiality has led to an increase in the error reporting threshold, which stands at £7.9m (2021: £1.8m). We have however, at the Audit and Risk Committee's request continued to report individual audit differences in excess of £5m (2021: £5m), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also reported to the Audit and Risk Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

7. An overview of the scope of our audit

7.1 Identification and scoping of components

The Group is organised into segments as outlined in note 4. These segments contain a number of individual businesses, and we use these businesses as the basis for identifying and scoping components. In the current year, Aalborg was identified as a component of the Group given the significant contribution to the Group's adjusted profit before tax. Other changes in scoping have been outlined in section 3 above.

Our audit was scoped by obtaining an understanding of the Group and its environment, including Group-wide controls, and assessing the risks of material misstatement at the Group level. Having performed this assessment, we established the following audit scope for each of the Group's businesses.

Segment	Business	Audit scope
British Gas Energy	British Gas Energy	Full scope audit
British Gas Services and Solutions	British Gas Services and Solutions	Audit of specified account balances
Bord Gáis Energy	Bord Gáis Energy	Audit of specified account balances
Energy, Marketing & Trading	Energy, Marketing & Trading (London)	Full scope audit
	Aalborg	Full scope audit
Centrica Business Solutions	New Energy Services	Review procedures
	Energy supply	Full scope audit
Upstream	Nuclear	Full scope audit
	Spirit Energy	Full scope audit
	Centrica Storage	Audit of specified account balances

This scoping resulted in 99% of Group revenue, 100% of Group adjusted profit before tax and 89% of Group shareholders' equity being subject to audit excluding those where we performed review procedures. The equivalent figures in 2021 were 96% of Group revenue, 98% of final pre-tax profit adjusted for exceptional items and 92% of shareholders' equity.

7.2. Our consideration of the control environment

- Our audit strategy is to rely on controls over certain processes within the more established businesses of the Group. These included revenue within British Gas Energy, British Gas Services and Solutions, CBS Energy and Bord Gáis Energy; credit loss provisions in British Gas; and the Group's central payroll and expenditure processes.
- The use of data analytics in Energy, Marketing and Trading means the need for controls reliance is reduced as we are able to test close to 100% of all transactions.
- Given the importance of IT to the recording of financial information and transactions, we assessed the design and implementation of general IT controls, and placed reliance on those controls in certain areas. The key IT systems we included in scope include the Group's SAP general ledger and consolidation financial reporting systems, the SAP and ENSEK revenue reporting systems in British Gas Energy and CBS Energy, the SAP reporting system in Bord Gáis Energy, the Endur trading system in Energy, Marketing and Trading, and Workday which is used to manage the Group's payroll processes.
- We adopted a non-controls reliance approach to test the ENSEK revenue given the dependency on manual checks and reviews.

7.3. Our consideration of climate-related risks

- Management has performed an assessment of the resilience of its annual strategic and financial planning process in the face of climate-related issues. This included assessing the potential impact of the material risks and opportunities and its Climate Transition Plan on both the current balance sheet position and its accounting policies.
- Management identified higher risks of material misstatement on the impact of the net zero price scenario on the non-current long-life asset Upstream impairment tests. In response, management has performed further sensitivities based on forecast prices aligned to net zero price curves. The net zero price curves for E&P and Nuclear consider prices from International Energy Agency and Aurora respectively.
- We reviewed management's climate change risk assessment and evaluated the completeness of the identified risks and impact on the financial statements. We also considered climate change within our audit risk assessment process in conjunction with our assessment of the balances.
- To mitigate the net zero price scenario risk for the Exploration and Production (E&P) assets and the Group's investment in Nuclear, we performed the following procedures:
  - Assessed the reasonableness of management's net zero prices by comparing these to the market net zero prices.
  - Engaged a financial advisory specialist to assess the appropriateness of the price providers utilised by the Group to assess whether net zero price curves are representative of the market view.
  - Verified the mathematical accuracy of the conversion to Nominal 2022 prices by adjusting the raw external price forecast data for inflation.
- With the involvement of our climate specialists, we:
  - evaluated the financial statement disclosures to assess whether climate risk assumptions underpinning specific account balances were appropriately disclosed; and
  - read the climate change-related statements (as disclosed in the People and Planet section in the Strategic Report) and considered whether the information included in the narrative reporting is materially consistent with the financial statements and our knowledge obtained in the audit.

7.4. Working with other auditors

- All components except for Bord Gáis Energy and Aalborg are audited from the UK and we oversee all component audits through regular meetings and direct supervision. Whilst we visited Aalborg during the year, the oversight procedures on Bord Gáis were performed virtually.
- The Group audit team was directly involved in overseeing the component audit planning and execution, through frequent conversations, virtual and in person meetings, debate, challenge and review of reporting and underlying work papers. We held a two-day planning meeting with all component teams and specialists to discuss audit execution and our risk assessment, including risks of material misstatement due to fraud. In addition to our direct interactions and detailed instructions to our component audit teams, Jane Boardman has taken on the Lead Audit Partner and British Gas & Centrica Business Solutions Energy Supply partner roles. This enables direct group supervision on two of the most significant components.
- We are satisfied that the level of involvement of the lead audit partner and Group audit team in the component audits has been extensive and has enabled us to conclude that sufficient appropriate audit evidence has been obtained in support of our opinion on the Group financial statements as a whole.

8. Other information

The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. This information comprises the Strategic report, the Directors' and Corporate Governance report, the Committee reports, the Remuneration Report and the Other Statutory Information. The directors are responsible for the other information contained within the annual report.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

9. Responsibilities of directors

As explained more fully in the Directors' responsibilities statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

10. Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

11. Extent to which the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below.

11.1. Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, we considered the following:

- the nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for directors' remuneration, bonus levels and performance targets;
- the Group's own assessment of the risks that irregularities may occur either as a result of fraud or error including the Group's fraud risk programme;
- results of our enquiries of management, internal audit and the Audit and Risk Committee about their own identification and assessment of the risks of irregularities;
- any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
  - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
  - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud; and
  - the internal controls established to mitigate risks of fraud or non-compliance with laws and regulations.
- the matters discussed among the audit engagement team including the component audit teams and relevant internal specialists, including tax, valuations, pensions, climate change, treasury and IT, regarding how and where fraud might occur in the financial statements and any potential indicators of fraud.

As a result of these procedures, we considered the opportunities and incentives that may exist within the organisation for fraud and identified the greatest potential for fraud in the following areas:

- the valuation of expected credit losses in respect of customer receivables;
- the accuracy and completeness of ENSEK revenue;
- the valuation of complex energy derivative contracts; and
- the valuation of decommissioning provisions.

In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override.

We also obtained an understanding of the legal and regulatory framework that the Group operates in, focusing on provisions of those laws and regulations that:

- had a direct effect on the determination of material amounts and disclosures in the financial statements. The key laws and regulations we considered in this context included the UK Companies Act, the UK Listing Rules, pensions and tax legislation; and
- do not have a direct effect on the financial statements but compliance with which may be fundamental to the Group's ability to operate or to avoid a material penalty. These included the Office of Gas and Electricity Markets (Ofgem) and Regulations levied by the UK Financial Conduct Authority and Prudential Regulatory Authority.

11.2. Audit response to risks identified

As a result of performing the above, we identified the following as key audit matters related to the potential risk of fraud: (1) valuation of complex energy derivative contracts; (2) accuracy and completeness of ENSEK revenue; and (3) valuation of expected credit losses in respect of customer receivables. The key audit matters section of our report explains the matters in more detail and also describes the specific procedures we performed in response to those key audit matters.

Our procedures to respond to risks identified included the following:

- reviewing the financial statement disclosures and testing the supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- enquiring of management, the Audit and Risk Committee, in-house legal counsel and the Group's ethics team concerning actual and potential litigation and claims;
- reviewing the reporting to the Audit and Risk Committee, on matters relating to fraud and potential non-compliance with laws and regulations including the Group's whistleblowing programme;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- reading minutes of meetings of those charged with governance, reviewing internal audit reports and reviewing correspondence with HMRC, Ofgem, the FCA and the PRA;
- in addressing the risk of fraud associated with decommissioning provisions, we used data analytics to identify the assumptions to which the decommissioning model is most sensitive and performed focused audit procedures, including corroborating and benchmarking these inputs to independent documentation (such as project management cost, wells cost and norms and rates) and external industry reports; and
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and component audit teams, and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Report on other legal and regulatory requirements

12. Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic report and the Directors' Report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and the Company and their environment obtained in the course of the audit, we have not identified any material misstatements in the Strategic Report or the Directors' Report.

13. Corporate Governance Statement

The Listing Rules require us to review the directors' statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to the Group's compliance with the provisions of the UK Corporate Governance Code specified for our review.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements and our knowledge obtained during the audit:

- the directors' statement with regards to the appropriateness of adopting the going concern basis of accounting and any material uncertainties identified set out on page 106;
- the directors' explanation as to its assessment of the Group's prospects, the period this assessment covers and why the period is appropriate set out on pages 34 to 36;
- the directors' statement on fair, balanced and understandable set out on page 73;
- the Board's confirmation that it has carried out a robust assessment of the emerging and principal risks set out on page 29;
- the section of the annual report that describes the review of effectiveness of risk management and internal control systems set out on page 73; and
- the section describing the work of the Audit and Risk Committee set out on pages 72 to 79.

14. Matters on which we are required to report by exception

14.1. Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Company financial statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

14.2. Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of directors' remuneration have not been made or the part of the Directors' Remuneration Report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

15. Other matters which we are required to address

15.1. Auditor tenure

Following the recommendation of the Audit and Risk Committee, we were reappointed by the shareholders on 10 June 2022 to audit the financial statements for the year ending 31 December 2022 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments of the firm is six years, covering the years ending 31 December 2017 to 31 December 2022.

15.2. Consistency of the audit report with the additional report to the Audit & Risk Committee

Our audit opinion is consistent with the additional report to the Audit and Risk Committee we are required to provide in accordance with ISAs (UK).

16. Use of our report

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

As required by the Financial Conduct Authority (FCA) Disclosure Guidance and Transparency Rule (DTR) 4.1.14 R, these financial statements form part of the European Single Electronic Format (ESEF) prepared Annual Financial Report filed on the National Storage Mechanism of the UK FCA in accordance with the ESEF Regulatory Technical Standard ('ESEF RTS'). This auditor's report provides no assurance over whether the annual financial report has been prepared using the single electronic format specified in the ESEF RTS.

Jane Boardman FCA (Senior statutory auditor)

For and on behalf of Deloitte LLP
Statutory Auditor

London, United Kingdom
15 February 2023

Group Income Statement

Year ended 31 December	Notes	2022 Business performance £m	2022 Exceptional items and certain re-measurements £m	2022 Results for the year £m	2021 Business performance £m	2021 Exceptional items and certain re-measurements £m	2021 Results for the year £m
Continuing operations							
Group revenue	4,7	**33,637**	**(9,896)**	**23,741**	18,300	(3,556)	14,744
Cost of sales [(i)]	5,7	**(28,198)**	**14,986**	**(13,212)**	(15,430)	2,749	(12,681)
Re-measurement and settlement of derivative energy contracts	7	**—**	**(8,484)**	**(8,484)**	—	(434)	(434)
Gross profit	4,7	**5,439**	**(3,394)**	**2,045**	2,870	(1,241)	1,629
Operating costs before exceptional items and credit losses on financial assets	5	**(1,872)**	**—**	**(1,872)**	(1,703)	—	(1,703)
Credit losses on financial assets	5,17	**(351)**	**—**	**(351)**	(116)	—	(116)
Exceptional items – net impairment reversals	7	**—**	**207**	**207**	—	1,218	1,218
Exceptional items – net loss on significant disposals	7	**—**	**(362)**	**(362)**	—	—	—
Exceptional items – net restructuring cost reversals	7	**—**	**—**	**—**	—	29	29
Operating costs	5	**(2,223)**	**(155)**	**(2,378)**	(1,819)	1,247	(572)
Share of profits/(losses) of joint ventures and associates, net of interest and taxation	6	**92**	**1**	**93**	(103)	—	(103)
Group operating profit/(loss)	4	**3,308**	**(3,548)**	**(240)**	948	6	954
Net finance cost	8	**(143)**	**—**	**(143)**	(187)	—	(187)
Profit/(loss) from continuing operations before taxation		**3,165**	**(3,548)**	**(383)**	761	6	767
Taxation on profit/(loss) from continuing operations	7,9	**(1,046)**	**793**	**(253)**	(454)	236	(218)
Profit/(loss) from continuing operations after taxation		**2,119**	**(2,755)**	**(636)**	307	242	549
Discontinued operations [(ii)]	7	**—**	**—**	**—**	—	624	624
Profit/(loss) for the year		**2,119**	**(2,755)**	**(636)**	307	866	1,173
Attributable to:							
Owners of the parent		**2,050**	**(2,832)**	**(782)**	237	973	1,210
Non-controlling interests		**69**	**77**	**146**	70	(107)	(37)

Earnings per ordinary share	Notes	2022 Pence	2021 Pence
From continuing and discontinued operations			
Basic	10	**(13.3)**	20.7
Diluted	10	**(13.3)**	20.5
From continuing operations			
Basic	10	**(13.3)**	10.0
Diluted	10	**(13.3)**	9.9
Interim dividend paid per ordinary share	11	**1.0**	—
Final dividend proposed per ordinary share	11	**2.0**	—

(i) Cost of sales includes a £1,766 million credit (2021: £2,530 million charge) relating to a reversal of the onerous energy supply contract provision within the certain re-measurements column. See note 7.
(ii) Profit from the disposal of Direct Energy reflected in discontinued operations is entirely attributable to equity holders of the parent. See note 7.

The notes on pages 126 to 224 form part of these Financial Statements.

Group Statement of Comprehensive Income

Year ended 31 December	Notes	2022 £m	2021 £m
(Loss)/profit for the year		**(636)**	1,173
Other comprehensive income			
Items that will be or have been reclassified to the Group Income Statement:			
Impact of cash flow hedging (net of taxation)	S4	**(20)**	(6)
Exchange differences on translation of foreign operations [(i)]	S4	**(90)**	(49)
Exchange differences reclassified to Group Income Statement on disposal [(i)]	12,S4	**272**	(20)
Net investment hedging gains reclassified to Group Income Statement (net of taxation)	S4	**—**	(40)
Items that will not be reclassified to the Group Income Statement:			
Net actuarial (losses)/gains on defined benefit pension schemes (net of taxation)	S4	**(124)**	144
Gains on revaluation of equity instruments measured at fair value through other comprehensive income (net of taxation)	S4	**—**	3
Share of other comprehensive (loss)/income of associates, net of taxation	14,S4	**(293)**	152
Other comprehensive (loss)/income, net of taxation		**(255)**	184
Total comprehensive (loss)/income for the year		**(891)**	1,357
Attributable to:			
Owners of the parent		**(1,042)**	1,397
Non-controlling interests	S11	**151**	(40)
Total comprehensive (loss)/income attributable to owners of the parent arises from:			
Continuing operations		**(1,042)**	833
Discontinued operations		**—**	564
		(1,042)	1,397

(i) Exchange differences on translation of foreign operations includes £95 million (2021: £46 million) of losses attributable to the equity holders of the parent, and £5 million of gains (2021: £3 million of losses) attributable to non-controlling interests. Exchange differences reclassified to Group Income Statement on disposal includes a £272 million loss (2021: £20 million gain) attributable to the equity holders of the parent, and £nil (2021: £nil) attributable to non-controlling interests. See note S4.

The notes on pages 126 to 224 form part of these Financial Statements.

Group Statement of Changes in Equity

	Share Capital £m	Share Premium £m	Retained Earnings £m	Other Equity £m	**Total £m**	Non-controlling Interests £m	**Total equity £m**
1 January 2021	361	2,347	(836)	(915)	957	425	1,382
Profit/(loss) for the year	—	—	1,210	—	1,210	(37)	1,173
Other comprehensive income/(loss)	—	—	—	187	187	(3)	184
Total comprehensive income/(loss)	—	—	1,210	187	1,397	(40)	1,357
Employee share schemes and other share transactions	2	30	3	(24)	11	—	11
31 December 2021	363	2,377	377	(752)	2,365	385	2,750
(Loss)/profit for the year	—	—	(782)	—	**(782)**	146	**(636)**
Other comprehensive (loss)/income	—	—	—	(260)	**(260)**	5	**(255)**
Total comprehensive (loss)/income	—	—	(782)	(260)	**(1,042)**	151	**(891)**
Employee share schemes and other share transactions	2	17	(2)	(14)	**3**	—	**3**
Share buyback programme [(i)]	—	—	—	(250)	**(250)**	—	**(250)**
Dividends paid to equity holders	—	—	(59)	—	**(59)**	—	**(59)**
Distributions to non-controlling interests (note 12)	—	—	—	—	**—**	(273)	**(273)**
31 December 2022	365	2,394	(466)	(1,276)	**1,017**	263	**1,280**

(i) See note S4 for further details of the share buyback programme

The notes on pages 126 to 224 form part of these Financial Statements.

Group Balance Sheet

	Notes	31 December 2022 £m	31 December 2021 £m
Non-current assets			
Property, plant and equipment	13	**1,748**	1,985
Interests in joint ventures and associates	14	**1,580**	1,628
Other intangible assets	15	**707**	760
Goodwill	15	**409**	401
Deferred tax assets	16	**1,709**	823
Trade and other receivables, and contract-related assets	17	**129**	233
Derivative financial instruments	19	**1,393**	1,005
Retirement benefit assets	22	**150**	231
Securities	24	**525**	135
		8,350	7,201
Current assets			
Trade and other receivables, and contract-related assets	17	**8,450**	5,881
Inventories	18	**1,269**	644
Derivative financial instruments	19	**6,034**	6,545
Current tax assets		**93**	83
Cash and cash equivalents	24	**4,842**	5,060
		20,688	18,213
Assets of disposal groups classified as held for sale		**—**	1,672
		20,688	19,885
Total assets		**29,038**	27,086
Current liabilities			
Derivative financial instruments	19	**(8,841)**	(4,929)
Trade and other payables, and contract-related liabilities	20	**(10,176)**	(7,513)
Current tax liabilities		**(472)**	(333)
Provisions for other liabilities and charges	21	**(1,213)**	(2,769)
Bank overdrafts, loans and other borrowings	24	**(1,009)**	(1,204)
		(21,711)	(16,748)
Liabilities of disposal groups classified as held for sale		**—**	(1,228)
		(21,711)	(17,976)
Non-current liabilities			
Deferred tax liabilities	16	**(8)**	(36)
Derivative financial instruments	19	**(1,310)**	(1,080)
Trade and other payables, and contract-related liabilities	20	**(165)**	(120)
Provisions for other liabilities and charges	21	**(1,446)**	(1,454)
Retirement benefit obligations	22	**(110)**	(231)
Bank loans and other borrowings	24	**(3,008)**	(3,439)
		(6,047)	(6,360)
Total liabilities		**(27,758)**	(24,336)
Net assets		**1,280**	2,750
Share capital	25	**365**	363
Share premium		**2,394**	2,377
Retained earnings		**(466)**	377
Other equity	S4	**(1,276)**	(752)
Total shareholders' equity		**1,017**	2,365
Non-controlling interests	S11	**263**	385
Total shareholders' equity and non-controlling interests		**1,280**	2,750

The Financial Statements on pages 121 to 224, of which the notes on pages 126 to 224 form part, were approved and authorised for issue by the Board of Directors on 15 February 2023 and were signed below on its behalf by:

Chris O'Shea
Group Chief Executive

Kate Ringrose
Group Chief Financial Officer

Centrica plc Registered No: 03033654

Group Cash Flow Statement

Year ended 31 December	Notes	2022 £m	2021 £m
Group operating (loss)/profit including share of results of joint ventures and associates		**(240)**	954
(Deduct)/add back share of (profits)/losses of joint ventures and associates, net of interest and taxation	6	**(93)**	103
Group operating (loss)/profit before share of results of joint ventures and associates		**(333)**	1,057
Add back/(deduct):			
Depreciation and amortisation	13,15	**669**	768
Write-downs, impairments and write-backs	4,7	**(99)**	(1,183)
Loss on disposals	12	**343**	28
(Decrease)/increase in provisions		**(1,903)**	2,434
Cash contributions to defined benefit schemes in excess of service cost income statement charge		**(184)**	(388)
Employee share scheme costs		**10**	12
Unrealised losses/(gains) arising from re-measurement of energy contracts		**4,095**	(1,159)
Exceptional charges reflected directly in operating profit		**—**	12
Operating cash flows before movements in working capital relating to business performance and payments relating to taxes and exceptional charges		**2,598**	1,581
Increase in inventories		**(593)**	(361)
Increase in trade and other receivables and contract-related assets relating to business performance		**(2,302)**	(3,358)
Increase in trade and other payables and contract-related liabilities relating to business performance		**2,239**	3,965
Operating cash flows before payments relating to taxes and exceptional charges		**1,942**	1,827
Taxes paid	9	**(574)**	(140)
Operating interest paid	8	**(30)**	—
Payments relating to exceptional charges in operating costs	7	**(24)**	(76)
Net cash flow from operating activities		**1,314**	1,611
Continuing operations:			
Purchase of businesses, net of cash acquired	12	**12**	(14)
Sale of businesses	12	**92**	70
Purchase of property, plant and equipment and intangible assets	4	**(371)**	(420)
Sale of property, plant and equipment and intangible assets		**11**	36
(Investments in)/disposal of joint ventures and associates	14	**(18)**	2
Dividends received from joint ventures and associates	14	**60**	2
Interest received		**46**	2
Settlement of securities	24	**150**	—
Purchase of securities	24	**(548)**	(3)
Net cash flow from continuing investing activities		**(566)**	(325)
Net cash flow from discontinued investing activities		**—**	2,588
Net cash flow from investing activities		**(566)**	2,263
Payments for own shares	S4	**(5)**	—
Share buyback programme	S4	**(43)**	—
Cash inflow from short-term borrowings	24	**1,220**	—
Proceeds from sale of forfeited share capital		**—**	1
Distributions to non-controlling interests	12	**(273)**	—
Financing interest paid	24	**(172)**	(233)
Repayment of borrowings and capital element of leases	24	**(1,585)**	(706)
Equity dividends paid	11	**(59)**	—
Net cash flow from financing activities		**(917)**	(938)
Net (decrease)/increase in cash and cash equivalents		**(169)**	2,936
Cash and cash equivalents including overdrafts, and cash classified as held for sale at 1 January		**4,328**	1,393
Effect of foreign exchange rate changes	24	**83**	(1)
Cash and cash equivalents including overdrafts at 31 December	24	**4,242**	4,328
Included in the following line of the Group Balance Sheet:			
Cash and cash equivalents	24	**4,842**	5,060
Overdrafts included within current bank overdrafts, loans and other borrowings	24	**(600)**	(750)
Assets of disposal groups classified as held for sale		**—**	18

The notes on pages 126 to 224 form part of these Financial Statements.

Notes to the Financial Statements

Notes to the Financial Statements provide additional information required by statute, accounting standards or Listing Rules to explain a particular feature of the consolidated Financial Statements.

The notes to these Financial Statements focus on areas that are key to understanding our business. Additional information that we are required to disclose by accounting standards or regulation is disclosed in the Supplementary Information (notes S1 to S11).

In addition, for clarity, notes begin with a simple introduction outlining its purpose.

1. Basis of preparation and summary of significant new accounting policies and reporting changes

This section details new accounting standards, amendments to standards and interpretations, whether these are effective in 2022 or later years, and if and how these are expected to impact the financial position and performance of the Group.

The principal accounting policies applied in the preparation of these consolidated Financial Statements are set out below and in the Supplementary Information (note S2). Unless otherwise stated, these policies have been consistently applied to the years presented.

(a) Basis of preparation

The consolidated Financial Statements have been prepared in accordance with the United Kingdom adopted International Accounting Standards, with International Financial Reporting Standards as issued by the IASB and in conformity with the requirements of the Companies Act 2006.

The consolidated Financial Statements have been prepared on the historical cost basis except for: certain gas inventory, derivative financial instruments, financial instruments required to be measured at fair value through profit or loss or other comprehensive income, and those financial instruments so designated at initial recognition, and the assets of the Group's defined benefit pension schemes that have been measured at fair value; the liabilities of the Group's defined benefit pension schemes that have been measured using the projected unit credit valuation method; and the carrying values of recognised assets and liabilities qualifying as hedged items in fair value hedges that have been adjusted from cost by the changes in the fair values attributable to the risks that are being hedged.

The Directors have, at the time of approving the financial statements, a reasonable expectation that the Company and Group have adequate resources to continue in operational existence for the foreseeable future, which reflects a period of twelve months from the date of approval of the accounts, with modelled analysis extending to 31 December 2024. The scenarios considered as part of the going concern assessment are consistent with those used in the longer-term viability statement. In particular, cash forecasts for the Group have been stress-tested for different scenarios including reasonably possible increases/decreases in commodity prices and the risk scenarios described in the viability statement, assessing reasonably possible combinations of risks, the largest of which is the increased margin outflows in our trading and upstream businesses. Risks considered also include the impact of significant adverse weather events, increased bad debt charges due to the cost of living crisis, the risk of financial loss due to counterparty default and production falls in the Group's upstream business. Due to the elevated and more volatile commodity prices in 2022, the Group has established enhanced processes in the trading business and in respect of Upstream to plan for and manage possible increases in margin cash requirements. The largest margin outflow modelled in the going concern scenarios is significantly in excess of actual margin requirements experienced in 2021 and 2022. Following this work, the level of undrawn committed bank facilities and available cash resources has enabled the Directors to conclude that there are no material uncertainties relating to going concern. As a result, the Group continues to adopt the going concern basis of accounting in preparing the financial statements. Further information on the Group's strong liquidity position, including its indebtedness and available committed facilities is provided in note 24.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity and areas where assumptions and estimates are significant to the consolidated Financial Statements are described in notes 2 and 3.

(b) New accounting policies, standards, amendments and interpretations effective or adopted in 2022

From 1 January 2022, the following standards and amendments are effective in the Group's consolidated Financial Statements:

- Amendments to IAS 37 'Provisions, Contingent Liabilities and Contingent Assets', costs of fulfilling a contract;
- Amendments to IAS 16: 'Property, Plant and Equipment', sale proceeds before intended use;
- Amendments to IFRS 3 'Business Combinations', reference to the Conceptual Framework; and
- Annual improvements to IFRS 2018-2020.

These changes and other amendments effective during the year did not materially impact the consolidated Financial Statements.

Customer Support Schemes

During the year the UK Government announced three new support schemes to provide support for customers during the cost-of-living crisis.

The Energy Bill Support Scheme (EBSS) requires energy suppliers to provide electricity customers with a £400 benefit spread over the six-month winter period. The Group is providing this support to customers as either a cash benefit, or a credit to their energy account depending on their payment type. Energy suppliers are receiving funding monthly in advance from the Government. Cash is restricted until the payment, or account credit, is applied to customers' accounts. Since the beginning of the EBSS scheme on 1 October 2022, the Group has received funding of £1,565 million from the Government. £440 million of this balance primarily relates to funding received in December and is disclosed as restricted cash. A corresponding liability is recognised on the Group's balance sheet until the EBSS support is applied to customer accounts in January 2023, see note 24 for further details.

1. Basis of preparation and summary of significant new accounting policies and reporting changes

The Energy Price Guarantee (EPG) scheme sets a government supported unit price for both gas and electricity for domestic customers at a level below the quarterly-calculated price cap. The EPG tariff rates are expected to reduce the average annual domestic household bill for the period from 1 October 2022 to 31 March 2023 to approximately £2,500 per annum. EPG rates will increase to approximately £3,000 per annum from 1 April 2023 and are expected to remain in place until 31 March 2024. The Government is compensating energy suppliers for the difference between the previously expected price cap and the reduced EPG rates with payments made in arrears. Since the start of the EPG scheme in October, the Group has recognised £706 million of revenue relating to the supply of electricity and £833 million relating to the supply of gas from the Government, of which a total of £153 million is recognised as a trade receivable on the balance sheet at the year-end date. The Group estimates and recognises revenue in accordance with existing Group policy and then applies the EPG discounts. Charges are recoverable from customers based on the net figure, with the EPG discount recoverable from the Government.

The Energy Bill Relief Scheme (EBRS) scheme has been introduced for non-domestic customers, providing government supported unit rates at £211/MWh for electricity and £75/MWh for gas. EBRS support is calculated on the differential between the EBRS rate, and the wholesale price of electricity or gas at either the inception of a customer's fixed price contract, or the date of delivery for variable, deemed and all other contracts, subject to a maximum discount. Since the EBRS scheme became effective from October 2022, the Group has recognised £219 million of revenue from the Government of which £131 million is recognised as a trade receivable on the balance sheet at the year-end date. The EBRS scheme is expected to end on 31 March 2023. Similar to the EPG, the Group recognises revenue based on existing estimation and measurement processes with the EBRS discount applied and subsequently recovered from the Government.

The Group has determined that it is appropriate to apply the requirements of IFRS 15 'Revenue from Contracts with Customers' where the Government is effectively settling a portion of customers' energy bills. This is on the basis that the Group remains entitled to receive consideration for the supply of electricity and gas based on either the existing price cap structure or customers' fixed or variable priced contracts and the transaction price is unchanged. The trade receivable arising from the supply of energy is settled both by the customer, and the Government. The Group observes that the alternative application of IAS 20 'Government Grants' would have resulted in a similar accounting outcome.

Pension Scheme Loan Arrangement

As a result of the turbulence in longer-dated UK Government debt markets during the second half of the year, the Group provided a loan facility to the Group's three defined benefit pension schemes. The facility amounted to £550 million, of which £400 million remained outstanding at the reporting date. Interest on the loan is calculated based on the Bank of England base rate plus 1%; interest accrues over the two-year term of the loan and is paid by the pension schemes at maturity. See note 22 for further details.

The Group has recognised the loan as a financial asset under IFRS 9 'Financial Instruments' measured at amortised cost and classified the receivable within securities on the Group's balance sheet. Correspondingly, the loan liability has been deducted from plan assets on the basis that the loan does not relate to employee benefits (scheme liabilities) in accordance with IAS 19.

(c) Standards and amendments that are issued but not yet applied by the Group

At the date of authorisation of these consolidated Financial Statements, the Group has not applied the following new and revised standards and amendments that have been issued but are not yet effective:

The following standard has been issued, endorsed and will be applied to the Group in future periods:

- IFRS 17 'Insurance Contracts', effective from 1 January 2023.

The following standards and amendments have been issued, endorsed and will be applied to the Group in future periods, subject to UK endorsement:

- Amendments to IAS 1 'Presentation of Financial Statements':
  - Disclosure of accounting policies and materiality judgements, effective 1 January 2023;
  - Classification of liabilities as current or non-current, effective 1 January 2024; and
  - Non-current liabilities with covenants, effective 1 January 2024.
- Amendments to IAS 8 'Accounting policies, Changes in Accounting Estimates and Errors'; effective from 1 January 2023;
- Amendments to IAS 12 'Income Taxes'; effective from 1 January 2023; and
- Amendments to IFRS 16 'Leases'; effective from 1 January 2024.

IFRS 17 will be effective from 1 January 2023. The Group currently has fixed-fee service contracts that it accounts for as insurance contracts under IFRS 4 'Insurance Contracts'. The Group has completed its assessment of IFRS 17 and expects these contracts to fall within the scope of IFRS 17 where the Group reflects an assessment of the risk associated with an individual customer in setting the price of the contract. The Group will apply the simplified 'Premium Allocation Approach' to its contracts on the basis that the coverage period of the Group's insurance contracts is not greater than one year. The Group does not expect a material impact from the application of this standard.

Management does not expect other issued but not effective amendments or standards, or standards not discussed above to have a material impact on the consolidated Financial Statements.

2. Centrica specific accounting measures

This section sets out the Group's specific accounting measures applied in the preparation of the consolidated Financial Statements. These measures enable the users of the accounts to understand the Group's underlying and statutory business performance separately.

(a) Use of adjusted performance measures

The Directors believe that reporting adjusted measures (revenue, margin, profit, earnings per share and cash flow) provides additional useful information on business performance and underlying trends. These measures are used for internal performance purposes, are not defined terms under IFRS and may not be comparable with similarly titled measures reported by other companies.

Management uses adjusted revenue, adjusted gross margin and adjusted operating profit to evaluate segment performance. They are defined as revenue/gross margin/operating profit before:

- exceptional items; and
- certain re-measurements.

Exceptional items and certain re-measurements are excluded because these items are considered by the Directors to distort the Group's underlying business performance. See section (b) of this note for further details. Similarly, for Segmental adjusted operating profit, the impact of the Group's profit share is excluded because management considers it unrelated to Segmental business performance.

Adjusted earnings is defined as earnings before:

- exceptional items net of taxation; and
- certain re-measurements net of taxation.

A reconciliation of adjusted earnings and adjusted earnings per share is provided in note 10.

Free cash flow is used by management to assess the cash generating performance of each segment. Segmental free cash flow is defined as net cash flow from operating and investing activities before:

- deficit reduction payments made to the UK defined benefit pension schemes;
- movements in variation margin and collateral;
- interest received;
- sale, settlement and purchase of securities; and
- taxes paid and refunded.

Segmental free cash flow as assessed by management excludes cash flows relating to tax. This is because the effect of Group relief and similar reliefs could distort the measure of segment performance. As a Group-wide measure, free cash flow includes taxes paid and refunded.

Free cash flow gives a measure of the cash generation performance of the business after taking account of the need to maintain its capital asset base. By excluding deficit reduction payments and movements in variation margin and collateral, which are predominantly triggered by wider market factors and, in the case of collateral and margin movements, represent timing differences, free cash flow gives a measure of the underlying performance of the Group.

Interest received and cash flows from the sale, settlement and purchase of securities are excluded from free cash flow as these items are included in the Group's adjusted net cash/debt measure and are therefore viewed by the Directors as related to the manner in which the Group finances its operations.

Adjusted net cash/(debt) is used by management to assess the underlying indebtedness of the business. Adjusted net cash/(debt) is defined as cash and cash equivalents, net of bank overdrafts, borrowings, leases, interest accruals and related derivatives. This is adjusted for:

- securities; and
- sub-lease assets.

(b) Exceptional items and certain re-measurements

The Group reflects its underlying financial results in the business performance column of the Group Income Statement. To be able to provide users with this clear and consistent presentation, the effects of 'certain re-measurements' of financial instruments, and 'exceptional items', are reported in a different column in the Group Income Statement.

The Group is an integrated energy business. This means that it utilises its knowledge and experience across the gas and power (and related commodity) value chains to make profits across the core markets in which it operates. As part of this strategy, the Group enters into a number of forward energy trades to protect and optimise the value of its underlying production, generation, storage and transportation assets and contracts (and similar capacity or off-take arrangements), as well as to meet the future needs of its customers (downstream demand). These trades are designed to reduce the risk of holding such assets, contracts or downstream demand and are subject to strict risk limits and controls.

Primarily because some of these trades include terms that permit net settlement, they are prohibited from being designated as 'own use' and so IFRS 9 'Financial Instruments' requires them to be individually fair valued.

Fair value movements on these commodity derivative trades do not reflect the underlying performance of the business because they are economically related to our upstream assets, capacity/off-take contracts or downstream demand, which are typically not fair valued. Similarly, where our downstream customer supply contracts have become onerous as a result of significant market price movements (and the fact any associated commodity hedges have separately been recognised at fair value under IFRS 9 and therefore the onerous supply contract assessment must reflect the reversal of those gains in subsequent periods), movements in the required provision are also reflected as a certain re-measurement in the 'Cost of sales' line item and separately disclosed in note 7.

Movements in this provision do not reflect the underlying performance of the business because they are economically related to both the hedges and forecast future profitability of the supply contracts. Therefore, these certain re-measurements are reported separately and are subsequently reflected in business performance when the underlying transaction or asset impacts profit or loss.

The effects of these certain re-measurements are presented within either revenue or cost of sales when recognised in business performance depending on the nature of the contract. They are managed separately from proprietary energy trading activities where trades are entered into speculatively for the purpose of making profits in their own right. These proprietary trades are included in revenue in the business performance column of the Group Income Statement.

2. Centrica specific accounting measures

The Group's result for the year presents both realised and unrealised fair value movements on all derivative energy contracts within the 'Re-measurement and settlement of derivative energy contracts' line item. The Group's result for the year presents the unrealised onerous supply contract provision movements within the 'Cost of sales' line item.

Exceptional items are those items that, in the judgement of the Directors, need to be disclosed separately by virtue of their nature, size or incidence. Again, to ensure the business performance column reflects the underlying results of the Group, these exceptional items are also reported in the separate column in the Group Income Statement. Items that may be considered exceptional in nature include disposals of businesses or significant assets, business restructurings, debt repurchase costs, certain pension past service credits/costs, asset impairments/write-backs, the tax effects of these items and the effect of changes in UK upstream tax rates.

The Group distinguishes between business performance asset impairments/write-backs and exceptional impairments/write-backs on the basis of the underlying driver of the impairment, as well as the magnitude of the impairment. Drivers that are deemed to be outside of the control of the Group (e.g. commodity price changes) give rise to exceptional impairments. Additionally, impairment charges that are of a one-off nature (e.g. reserve downgrades or one-time change in intended use of an asset) and significant enough value to distort the underlying results of the business are considered to be exceptional. Other impairments that would be expected in the normal course of business, such as unsuccessful exploration activity (dry holes), are reflected in business performance.

3. Critical accounting judgements and key sources of estimation uncertainty

This section sets out the key areas of judgement and estimation that have the most significant effect on the amounts recognised in the consolidated Financial Statements.

(a) Critical judgements in applying the Group's accounting policies

In addition to the judgements described above, management has made the following key judgements in applying the Group's accounting policies that have the most significant effect on the consolidated Group Financial Statements.

Spirit Energy consolidation

During 2017, the Group acquired Bayerngas Norge's exploration and production business and combined this with the Group's existing exploration and production business to form the Spirit Energy business (SE). The Group, through its Board majority, can control decisions that represent Board Reserved Matters and the Directors consider that these rights provide control over the relevant activities that most significantly influence the variable returns of the SE business. The Group has concluded that it controls SE and consequently SE is fully consolidated with a non-controlling interest of 31%.

Metering contracts

As part of the ongoing smart meter roll-out, the Group periodically renews meter rental arrangements with third parties. The last renegotiation took place in 2021. The Group assessed that these were not leases under IAS 17 and IFRIC 4 because at inception of the contract there were no specified assets, the Group did not have the right to physically or operationally control the smart meters and other parties took more than an insignificant amount of the output from the assets. This assessment was grandfathered on adoption of IFRS 16.

A reassessment of the contracts was performed in accordance with IFRS 16, following renegotiations of the meter rental arrangements. On the basis that the asset has a predetermined use and the Group neither has the right to operate the asset, nor was involved in its design, the conclusion that these arrangements are not leases continues to be appropriate.

LNG contracts

The Group is active in the liquified natural gas (LNG) market, both procuring long-term LNG supply arrangements and transacting in shorter-term LNG cargoes. As part of its operations in the market, the Group optimises its contractual positions in order to meet customer demand for physical commodity. In response to the continuing development of the global LNG market which, consistent with prior years, is not considered to be active, the Group has reviewed its portfolio of LNG transactions and contracts. It has judged that its activities are carried out for the purpose of receipt or delivery of physical commodity in accordance with its expected purchase and sale requirements. As a result, the Group's contracts to buy and sell LNG are outside the scope of IFRS 9 and are accounted for on an accruals basis.

Assets held for sale and discontinued operations

On 8 December 2021 the Group announced that it had agreed to sell Spirit Energy's entire Norwegian portfolio plus the Statfjord field to Sval Energi and Equinor. The transaction completed in the first half of 2022. See note 12.

The disposal group did not represent a separate major line of business or geographical operations, because the Upstream segment retains other European producing fields, and hence the Group concluded that the disposal group did not constitute a discontinued operation.

Supplier of Last Resort (SoLR)

During 2021, the Group was appointed as the Supplier of Last Resort (SoLR) to eight suppliers who ceased trading during the year and one further appointment was made in January 2022. Under Ofgem's licence conditions, the Group was entitled to make a Last Resort Supplier Payment (LRSP) claim for the shortfall between costs reasonably incurred in supplying gas and electricity to premises under the Last Resort Supply Direction, and the charges recovered from customers.

The Group submitted an initial claim in 2021, covering a six-month period from the date of appointment, and received confirmation of Ofgem's acceptance in December 2021. The claim primarily covered estimated incremental commodity costs, incurred as a result of procuring gas and electricity to supply affected customers. The initial claim is currently being settled in 12 monthly instalments ending in April 2023 and a total of £258 million has been received during 2022. The Group submitted a second claim to Ofgem in Autumn 2022, recognising both actual commodity costs incurred, and additional costs which were not included in the initial claim. This includes the recovery of customer credit balances, where the Group had not waived the right to do so. The second claim was accepted by Ofgem in December 2022 and will be settled between April 2023 and April 2024. The value recognised for the SoLR receivable at 31 December 2022 is £275 million (31 December 2021: £234 million). In 2022, the Group incurred a further £241 million of incremental costs (31 December 2021: £185 million) and an additional £58 million of cost relating to customer credit balances (31 December 2021: £49 million).

The Group has concluded that the LRSP process represents an Ofgem support mechanism, enabling energy suppliers to provide stability to the customers of failed suppliers. The Group determines that the LRSP is within the scope of IAS 20 'Government Grants' and amounts receivable under the mechanism are recognised as a credit within cost of sales and operating costs, as the related expenses are incurred.

Share buyback

On 10th November 2022, the Group announced an intention to undertake a share buyback of £250 million, expected to complete by 31 May 2023. The Group entered into contracts with third parties to undertake this repurchase programme and, as at 31 December 2022, £43 million of shares had been purchased. The Group judges that the terms and conditions of the contracts meant that, at the 31 December 2022, it was unable to cancel the remaining obligation. Accordingly, the Group has recorded a financial liability of £207 million for this remaining obligation, in accordance with IFRS 9: 'Financial Instruments'. See note S4.

3. Critical accounting judgements and key sources of estimation uncertainty

(b) Key sources of estimation uncertainty

The sections below detail the assumptions the Group makes about the future and other major sources of estimation uncertainty when measuring its assets and liabilities at the reporting date. The information given relates to the sources of estimation uncertainty that have a significant risk of resulting in a material adjustment to those assets and liabilities in the next financial year.

Estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, including current and expected economic conditions, and, in some cases, actuarial techniques. Although these estimates and associated assumptions are based on management's best knowledge of current events and circumstances, actual results may differ.

British Gas Energy and Centrica Business Solutions Onerous Supply Contracts

The Group operates and manages a hedging strategy to ensure that the future costs of supplying customers of the British Gas Energy and Centrica Business Solutions portfolios are appropriately managed.

Hedges are measured at fair value under IFRS 9 and are recognised as certain re-measurements in the Group's income statement until the point at which the related costs to purchase electricity and gas are incurred. Fair value movements on energy purchase contracts entered to meet the future needs of customers are economically related to customer demand; the supply contracts for which are measured on an accrual basis.

Gains and losses arising from hedges have been recognised in the income statement (within certain re-measurements) in accordance with the requirements of IFRS 9. Because of this hedge value recognition, the assessment of whether the supply contracts are onerous must include the contracted energy purchase costs and those mark-to-market reversals. In 2021, the Group determined that at the reporting date, the future costs to fulfil customer contracts, including those mark-to-market reversals, exceeded the charges recoverable from customers because the associated hedging gains had already been recognised in the income statement. As a result the Group recognised an onerous supply contract provision.

Throughout 2022, commodity prices have been elevated and volatile and the reversal of gains and losses arising from hedges has had a significant impact on the Group's onerous contract supply provision. Commodity prices have declined at year end and the overall provision has similarly reduced. If commodity prices increase, a further provision may be required in the future. Commodity price movements typically affect the Group's residential portfolio more immediately than non-domestic customers, because the residential hedging strategy reflects the more variable nature of the portfolio's pricing structure compared to Centrica Business Solutions customers who are typically on longer-term fixed contracts. The decrease in the onerous supply contract provision is partially offset by the corresponding losses on the related derivatives recognised in certain re-measurements. Further disclosures relating to movements in certain re-measurements are provided in note 7.

Due to the sharp decline in commodity prices at the end of 2022, fair value movements on energy purchase contracts entered to meet the future needs of British Gas Energy residential customers resulted in losses rather than gains being recognised as certain re-measurements in the Group's income statement. As a result, the Group determined that at the reporting date, the future costs to fulfil British Gas residential customer contracts fell below charges recoverable from customers and the onerous supply contract provision previously recognised in relation to the fulfilment of British Gas Energy customer contracts has been reversed in full.

Fair value movements on energy purchase contracts in relation to the Group's non-domestic customers have similarly resulted in the recognition of losses as a result of declining wholesale prices during December 2022. The hedging strategy for this portfolio differs from the residential portfolio, and the Group has determined that at the reporting date, the reversal of the cumulative fair value movements on this portfolio still results in future costs which exceed charges recoverable from customers. As a result, the Group continues to recognise an onerous supply contract provision for the Group's non-domestic customers.

The total onerous contract supply provision recognised by the Group is £999 million (31 December 2021: £2,530 million). This has been calculated by estimating the expected margins from energy supply customers, and deducting from this margin the expected costs to fulfil those arrangements, including energy purchase costs reflecting the mark-to-market gains, and directly attributable overhead costs.

In the prior year, key sources of estimation uncertainty related to the expected future tenure of the Group's customer portfolio, and the estimated gross margin attributable to them. Estimations were based on historic experience, adjusted to reflect non-recurring costs. The British Gas Energy residential element of the provision was particularly sensitive to movements in tenure and gross margin assumptions.

At 31 December 2022, the onerous supply contract provision only relates to non-domestic customers and is much less sensitive to the assumptions made.

Credit provisions for trade and other receivables

The economic effects of the significant increase in wholesale gas and electricity costs, and resultant increase in consumer tariffs alongside wider inflationary and cost-of-living pressures may impact the ability of the Group's customers to pay amounts due. Gas and electricity customers are benefitting from customer support schemes implemented by the Government, but prices are still significantly higher than in previous years and the level of estimation uncertainty in determining the credit provisions required for customers is heightened.

The methodology for determining provisions for credit losses on trade and other receivables and the level of such provision, along with associated sensitivities, is set out in note 17. Although the provisions recognised are considered appropriate, the use of different assumptions or changes in economic conditions could lead to movements in the provisions and therefore impact the Group Income Statement.

Impairment and impairment reversals of long-lived assets

The Group makes judgements in considering whether the carrying amounts of its long-lived assets (principally Upstream gas assets, Nuclear investment (20% economic interest accounted for as an investment in associate) and goodwill) or cash-generating units (CGUs) are recoverable and estimates their recoverable amounts.

2021 and 2022 have seen significant year-on-year increases in forward commodity prices, both in terms of observable market prices and forecast forward prices. As a result impairment reversals were booked in 2021 related to our retained assets. During 2022, the announcement of the Energy Profits Levy and Electricity Generator Levy has also impacted the recoverable amounts of our assets.

3. Critical accounting judgements and key sources of estimation uncertainty

Upstream gas assets

Forward prices for gas are a key input in the determination of the recoverable amount of the Group's gas assets. 2022 has seen continued increases in the prices for this commodity, both in terms of observable market prices and forecast forward prices. This increase, primarily due to higher commodity prices, has been partially offset by the implementation of the Energy Profits Levy. At 31 December 2022, impairment headroom remains for all significant fields. The recoverable amounts of the Group's gas assets are capped at depreciated historic cost; accordingly no material impairment reversals have been recorded during the period. As at 31 December 2022, this remains a key source of estimation uncertainty due to potential future price decreases. Sensitivities are provided in note 7.

Further details of the assumptions used in determining the recoverable amounts and sensitivities to the assumptions are provided in note 7.

Nuclear investment

The recoverable amount of the Nuclear investment is based on the value of the existing UK nuclear fleet operated by EDF. The existing fleet value is calculated by discounting pre-tax cash flows derived from the stations based on forecast power generation and power prices, whilst taking account of outages and the likely operational lives of the stations. During the period, the recoverable amount has improved as a result of increases in commodity prices more than offsetting the effect of the announcement of the Electricity Generator Levy. This, coupled with the impact of the actuarial loss from the associate's pension scheme, has resulted in an impairment reversal of £195 million.

The key source of estimation uncertain is commodity price forecasts, other input assumptions include production levels and station lives. Further details of these uncertainties, together with the methodology, assumptions and impairment reversal booked during the year are provided in note 7, together with related sensitivities.

Revenue recognition – unread gas and electricity meters

Revenue for energy supply activities includes an assessment of energy supplied to customers between the date of the last meter reading and the year-end (known as unread revenue). Unread gas and electricity comprises both billed and unbilled revenue. It is estimated through the billing systems, using historical consumption patterns, on a customer-by-customer basis, taking into account weather patterns, load forecasts and the differences between actual meter readings being returned and system estimates. Actual meter readings continue to be compared to system estimates between the balance sheet date and the finalisation of the accounts.

An assessment is also made of any factors that are likely to materially affect the ultimate economic benefits that will flow to the Group, including bill cancellation and re-bill rates. Estimated revenue is restricted to the amount the Group expects to be entitled to in exchange for energy supplied. The judgements applied, and the assumptions underpinning these judgements, are considered to be appropriate. However, a change in these assumptions would have an impact on the amount of revenue recognised. The primary source of estimation uncertainty relating to unread revenue arises in the respect of gas and electricity sales to UK downstream customers in British Gas Energy and Centrica Business Solutions, including where changes in customer behaviour in response to elevated prices, affects estimated consumption. At 31 December 2022 unread revenue arising from these customers amounted to £2,893 million (2021: £1,740 million). A change in these assumptions of 2% would impact revenue and profit by £58 million.

Decommissioning costs

The estimated cost of decommissioning at the end of the producing lives of gas fields is reviewed periodically and is based on reserves, price levels and technology at the balance sheet date. Provision is made for the estimated cost of decommissioning at the balance sheet date. The payment dates of total expected future decommissioning costs are uncertain and dependent on the lives of the facilities, but are currently anticipated to be predominantly incurred by 2030.

The level of provision held is also sensitive to the discount rate used to discount the estimated decommissioning costs. The real discount rate used to discount the decommissioning liabilities at 31 December 2022 is 1% (2021: 0%). There are a number of variable inputs into the calculation of discount rates including risk-free interest rates and debt and equity risk premium. As a result of changes in yields on government gilts appropriate to the forecast profile of the decommissioning expenditure, it has been deemed appropriate to increase the decommissioning rate. A 1% change in this discount rate would change the decommissioning liability by approximately £75 million.

Gas and liquids reserves

The volume of proven and probable (2P) gas and liquids reserves is an estimate that affects the unit of production method of depreciating producing gas and liquids property, plant and equipment (PP&E) as well as being a significant estimate affecting decommissioning and impairment calculations.

The impact of a change in estimated 2P reserves is dealt with prospectively by depreciating the remaining book value of producing assets over the expected future production. If 2P reserves estimates are revised downwards, earnings could be affected by higher depreciation expense or an immediate write-down (impairment) of the asset's book value. A change in reserves estimates could also change the timing of decommissioning activity, which could change the carrying value of the Group's provisions. The complex interaction of field-specific factors means that it is not possible to give a meaningful sensitivity of the Group's financial position or performance to gas and liquids reserves estimates. The factors impacting gas and liquids estimates, the process for estimating reserve quantities and reserve recognition and details of the Group's 2P reserves are given on page 237. Details of impairments of exploration and production fields and goodwill, along with associated sensitivities, are given in note 7.

Determination of fair values – energy derivatives

The fair values of energy derivatives classified as Level 3 in accordance with IFRS 13 'Fair Value Measurement' are determined to be a key source of estimation uncertainty as they are not actively traded and their values are estimated by reference in part to published price quotations in active markets and in part by using complex valuation techniques. The key source of estimation uncertainty is future commodity prices and their inclusion in the reliable estimation of the unobservable components of the Group's Level 3 derivatives in an elevated and volatile commodity price environment. More detail on the assumptions used in determining fair valuations of energy derivatives is provided in note S6 and on the sensitivities to these assumptions in note S3.

3. Critical accounting judgements and key sources of estimation uncertainty

Climate change

In preparing the financial statements, the Directors have considered the impact of climate change in the context of the risks and opportunities identified in the TCFD disclosures on pages 46 to 54. There has been no material impact identified on the financial reporting judgements and estimates. The Directors specifically considered the impact of climate change in the following areas:

- cash flow forecasts used in the impairment assessment of non-current assets, including goodwill;
- carrying value and useful economic lives of property, plant and equipment;
- recoverability of deferred tax assets; and
- going concern and viability of the Group over the next three years.

Whilst there is no short-term impact expected from climate change, the Directors are aware of the risks and regularly assess these risks against judgements and estimates made in preparation of the Group's financial statements.

Further detail is provided in the Climate change note below.

3. Critical accounting judgements and key sources of estimation uncertainty

(c) Climate change

The Group's assessment of how climate-related issues might affect the business has been integrated into its annual strategic and financial planning process. At the same time, the Group reviews the potential impact of the material risks and opportunities and its Climate Transition Plan on both the current balance sheet position and its accounting policies (including the useful economic lives of its assets).

Summary of our most material risks & opportunities

TCFD category	Climate-related trend	Potential impact
Transition: Policy, Markets and Technology	Transition away from fossil fuelled heating	Risk: Reduced gross margin (GM) from the sale and servicing of natural gas residential boilers and commercial Combined Heat and Power (CHP)
Transition: Policy, Markets and Technology	Growth in low carbon heating market	Opportunity: Increased sales and servicing of electric and hydrogen fuelled heating systems
Transition: Policy, Markets and Technology	Transition away from natural gas	Risk: Reduced GM from the sale of natural gas and energy efficiency
Transition: Policy, Markets and Technology	Growth in low carbon heating market	Opportunity: Increased sales of electricity and green/low carbon hydrogen
Transition: Markets	Growth of EV transport market	Opportunity: Access to new and growing value pools related to EV charging installs, operation and maintenance (O&M), and energy supply
Transition: Energy Source	Growth in demand for renewable energy	Opportunity: Strong growth in the market for low carbon and transition assets driven by decarbonisation
Physical: Chronic	Rising mean temperatures	Risk: Reduced sales of natural gas and electricity for heat

IFRS dictates how each asset or liability should be accounted for (e.g. cost, fair value or other measurement criteria) and accordingly, there is a fundamental difference between the holistic forward-looking risk and opportunities business analysis (see TCFD disclosure on pages 46 to 54), and the possible sensitivity of current accounting carrying values to these risks and opportunities.

For example, whilst the activity of supplying gas to customers or servicing/installing gas boilers is clearly subject to climate-related risks (and opportunities), the balance sheet does not reflect an overall value of those businesses (aside from an element of goodwill). Instead, accounting balances related to these businesses generally manifest themselves in short-term working capital assets and liabilities associated with procuring and selling gas or servicing/installing boilers; with those balances generally settled within six months and so specifically less exposed to climate risks.

In a similar vein, Upstream assets are tested for impairment in accordance with relevant IFRS accounting standards. These generally require the recoverable amount of the asset to be calculated based on a best estimate of long-term forecast commodity prices, which the Group estimates based on current market prices and the consensus of reputable commodity pricing consultants forecasts. However, these estimates are not consistent with net zero scenarios from the consultants (as they do not factor in any prospective, yet to be announced legislative or market changes that would be required to meet temperature targets) and hence impairment reviews are not based on net zero scenario forward prices. The Group instead discloses the impact on the carrying value of Upstream assets by way of sensitivity analysis (see note 7(c)).

3. Critical accounting judgements and key sources of estimation uncertainty

Accordingly, the Group is mindful of these dynamics when it considers which areas of the balance sheet are exposed to key estimation uncertainty from climate-related issues. The Group considers which assets are most exposed to impairment from climate risks and similarly whether there are any liabilities that are either currently unrecognised or might increase as a result of those risks.

The Group's assets/liabilities have been segmented into three tranches, grading each balance's exposure to climate risks/opportunities:

(i) Higher risk – As the consumption of gas and power is intrinsically linked to carbon emissions, their pricing is consequently exposed to climate and legislative risk. Accordingly, where assets or contract values have a key dependency on commodity price assumptions, those assets (or contracts) are deemed higher risk.

(ii) Medium risk – Gross margin energy transition considerations and their potential impact on forward-looking balances (e.g. Supply and Services and Energy Trading goodwill) and decommissioning balances in E&P.

(iii) Lower risk – No significant risk identified on the basis that positions are short-term in nature or are specifically linked to the energy transition or are immaterial.

The key non-current asset (and decommissioning provision) balance sheet items have been presented in more granular detail below, together with the groupings into the above risks and with rationale set out below the table:

As at 31 December 2022 related to (£m):	Goodwill	Intangibles	Investment in associates	Property, plant & equipment	Deferred tax assets	Decommissioning provision
Energy Supply	197					
Customer relationships		16				
Emission certificates		271				
Application software		146				
Energy Services	63					
Customer relationships		6				
Brand (mainly Dyno)		57				
Application software		128				
Battery storage				40		
Electric vehicles (vans/cars)				45		
Non-electric vehicles (vans/cars)				22		
Energy Trading	149					
Customer relationships		18				
Emission certificates		9				
Application software		29				
LNG vessel leases				124		
Gas Assets (E&P and Storage)	–					
E&P fields (Spirit)				1,124	(256)	(1,175)
E&P tax losses (Spirit)					214	
Gas storage facility (Rough)				71	131	(324)
Power Generation	–					
Nuclear investment			1,560			
Gas-fired power stations/engines				95		(15)
Combined heat and power (CHP)/fuel cell				45		
Solar				14		
Group/Other	–					
Application software		27				
Land & buildings [(i)]				104		
Derivatives deferred tax [(i)]					1,713	
Other [(i)]			20	64	(93)	
Total (notes 13-16 and 21)	409	707	1,580	1,748	1,709	(1,514)

(i) Land & buildings, Derivatives deferred tax and Other property, plant & equipment/Associates/Deferred tax have not been allocated out across business type.

Higher
Medium
Lower

3. Critical accounting judgements and key sources of estimation uncertainty

All items noted above may be impacted by climate-related risks but are not currently considered to be key areas of judgement or sources of estimation uncertainty in the current financial year.

Higher risk

E&P field valuations are dependent on forecast commodity prices. Climate change risk means that there is uncertainty over gas demand and forecast prices. This is not currently a key source of estimation uncertainty because current liquid commodity prices mean that there is significant impairment headroom over current carrying values. Nonetheless, valuation sensitivity information based on a net zero price forecast has been provided in note 7(c) to show field values can move significantly. (Note that the Group's intention is to run-off remaining fields with most production forecast in the next five years. Decommissioning obligations will be substantively met by the early 2030s, whilst further investment in exploring for new gas fields has ceased.) Recoverability of E&P deferred tax assets associated with historic losses is dependent on future field profitability and so is subject to climate change risk.

The valuation of the investment in Nuclear is also highly dependent on forecast commodity prices. Climate change risks and opportunities means there is uncertainty over electricity demand and forecast prices. The underlying Nuclear stations, which produce electricity with no carbon emissions, have different useful economic lives, with the last station forecast to cease operating in 2055. Valuation sensitivity information based on a net zero price forecast has been provided in note 7(c).

Medium risk

The Group's small number of gas-fired power stations and engines are exposed to climate change risk, with valuations dependent on forecast gas and electricity prices and electricity demand. However, they are deemed medium risk as they do not have a significant carrying value in the context of the Group.

Similarly the Group's investment in CHP and Fuel Cell assets are also exposed to climate risk. They have useful economic lives of up to 15 years but they do not, individually or in total, have material carrying values.

LNG Vessels on the balance sheet are exposed to risk from climate change, but as they are leased assets with the current term remaining less than five years, this risk is reduced to medium.

The Group is in the process of transitioning to an electrified vehicle fleet. Non-electric vehicles are deemed medium risk because their remaining useful economic lives are generally quite short.

Decommissioning provisions are generally longer-term but this could be brought forward for E&P assets if the energy transition accelerates. However, as the decommissioning discount rate is only 1% (real) the balance sheet and income statement impact of earlier decommissioning would not be material.

Deferred tax associated with field accelerated capital allowances and decommissioning in E&P and Storage is not considered high risk due to the length of carry-back rules for decommissioning and the mechanical unwind of other temporary differences. Deferred tax assets associated with derivatives are considered medium risk as the derivatives generally realise within 2 years.

Energy Supply, Energy Services and Energy Trading Goodwill, Customer Relationships and Application Software are categorised as medium risk because the businesses are exposed to energy transition risk as a result of climate change. However, there are also significant opportunities for these businesses and the carrying values are not material.

Lower risk

All other assets denoted in the table above are considered lower risk because they are either specifically related to the energy transition (e.g. electric vehicles, battery storage, emission certificates) or are immaterial.

Other contracts

The Group also has long-term LNG supply contracts with Cheniere and Mozambique. These are not reflected on the balance sheet but the Group has certain purchase commitments (see note 23). The contracts currently have significant value because of gas price locational spreads but are exposed to climate-change risk and therefore could ultimately become onerous in net zero scenarios. The commitments note provides detail of the length of the contracts and commodity purchase commitments.

4. Segmental analysis

The Group's reporting segments are those used internally by management to run the business and make decisions. The Group's segments are based on products and services as well as the major factors that influence the performance of these products and services across the geographical locations in which the Group operates.

(a) Segmental structure

The types of products and services from which each reportable segment derived its income during the year are detailed below. Income sources are reflected in Group revenue unless otherwise stated:

Segment	Description
British Gas Services & Solutions	(i) The installation, repair and maintenance of domestic central heating and related appliances, and the provision of fixed-fee maintenance/breakdown service and insurance contracts in the UK; and (ii) the supply of new technologies and energy efficiency solutions in the UK.
British Gas Energy	(i) The supply of gas and electricity to residential and small business customers in the UK.
Bord Gáis Energy	(i) The supply of gas and electricity to residential, commercial and industrial customers in the Republic of Ireland; (ii) the installation, repair and maintenance of domestic central heating and related appliances in the Republic of Ireland; and (iii) power generation in the Republic of Ireland [(i)].
Centrica Business Solutions	(i) The supply of gas and electricity to business customers in the UK [(i)]; and (ii) the supply of energy services and solutions to large organisations in all geographies in which the Group operates, and the development and operation of large-scale power assets in the UK.
Energy Marketing & Trading	(i) The procurement, trading and optimisation of energy in the UK and Europe [(i)]; (ii) the global procurement and sale of LNG; and (iii) the generation of power from the Spalding combined cycle gas turbine tolling contract (the contract ended in 2021).
Upstream	(i) The production and processing of oil and gas principally within Spirit Energy [(i)]; and (ii) the sale of power generated from nuclear assets in the UK.

(i) Where income is generated from contracts in the scope of IFRS 9, this is included in re-measurement and settlement of derivative energy contracts.

4. Segmental analysis

(b) Revenue

Gross segment revenue includes revenue generated from the sale of products and services to other reportable segments of the Group. Group revenue reflects only the sale of products and services to third parties. Sales between reportable segments are conducted on an arm's length basis.

	2022			2021		
Year ended 31 December	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m
British Gas Services & Solutions	1,527	(50)	1,477	1,513	(53)	1,460
British Gas Energy	13,096	—	13,096	7,513	—	7,513
Bord Gáis Energy	1,771	—	1,771	1,111	—	1,111
Centrica Business Solutions	3,000	(19)	2,981	1,981	(28)	1,953
Energy Marketing & Trading	14,441	(219)	14,222	6,082	(214)	5,868
Upstream	3,351	(3,261)	90	2,282	(1,887)	395
Group revenue included in business performance	37,186	(3,549)	33,637	20,482	(2,182)	18,300
Less: revenue arising on contracts in scope of IFRS 9 included in business performance			(9,896)			(3,556)
Group Revenue			23,741			14,744

The table below shows the Group revenue arising from contracts with customers, and therefore in the scope of IFRS 15, and revenue arising from contracts in the scope of other standards. The key economic factors impacting the nature, timing and uncertainty of revenue and cash flows are considered to be driven by the type and broad geographical location of the customer. The analysis of IFRS 15 revenue below reflects these factors.

	2022				
Year ended 31 December	Revenue from contracts with customers in scope of IFRS 15 (i) £m	Revenue from fixed-fee service and insurance contracts in scope of IFRS 4, and leasing contracts in scope of IFRS 16 £m	Group revenue £m	Revenue in business performance arising from contracts in scope of IFRS 9 £m	Group revenue included in business performance £m
Energy services and solutions	625				
British Gas Services & Solutions	625	852	1,477	—	1,477
Energy supply – UK	13,096				
British Gas Energy	13,096	—	13,096	—	13,096
Energy supply – Republic of Ireland	1,323				
Bord Gáis Energy	1,323	—	1,323	448	1,771
Energy supply – UK	1,465				
Energy services	249				
Centrica Business Solutions	1,714	14	1,728	1,253	2,981
Energy sales to trading and energy procurement counterparties	5,639				
Energy Marketing & Trading	5,639	16	5,655	8,567	14,222
Gas and liquid production	462				
Upstream	462	—	462	(372)	90
	22,859	882	23,741	9,896	33,637

(i) The Group has recognised £1,539 million of revenue from the Government in relation to the Energy Price Guarantee scheme for domestic customers in the British Gas Energy segment. A further £219 million of revenue has been recognised in respect of the Energy Bill Relief Scheme. £175 million of this total relates to Centrica Business Solutions customers and £44 million relates to non-domestic customers in the British Gas Energy segment. A further £1,125 million was received, and provided to customers of the British Gas Energy segment in respect of the Government's Energy Bill Support Scheme resulting in a net £nil presentation in the Group's income statement, see note 1.

4. Segmental analysis

Year ended 31 December	2021 Revenue from contracts with customers in scope of IFRS 15 £m	Revenue from fixed-fee service and insurance contracts in scope of IFRS 4, and leasing contracts in scope of IFRS 16 £m	Group revenue £m	Revenue in business performance arising from contracts in scope of IFRS 9 £m	Group revenue included in business performance £m
Energy services and solutions	554				
British Gas Services & Solutions	554	906	1,460	—	1,460
Energy supply – UK	7,513				
British Gas Energy	7,513	—	7,513	—	7,513
Energy supply – Republic of Ireland	903				
Bord Gáis Energy	903	—	903	208	1,111
Energy supply – UK	944				
Energy services	297				
Centrica Business Solutions	1,241	7	1,248	705	1,953
Energy sales to trading and energy procurement counterparties	2,825				
Energy Marketing & Trading	2,825	35	2,860	3,008	5,868
Gas and liquid production	760				
Upstream	760	—	760	(365)	395
	13,796	948	14,744	3,556	18,300

Geographical analysis of revenue and non-current assets

The Group monitors and manages performance by reference to its operating segments and not solely on a geographical basis. However, provided below is an analysis of revenue and certain non-current assets by geography.

	Group revenue (based on location of customer)		Non-current assets (based on location of assets) (i)	
Year ended 31 December	**2022 £m**	2021 £m	**2022 £m**	2021 £m
Continuing operations				
UK	**17,480**	10,891	**3,827**	4,203
Republic of Ireland	**1,323**	903	**152**	139
Scandinavia (including Denmark)	**1,473**	894	**181**	173
North America	**867**	413	**14**	25
Rest of the world	**2,598**	1,643	**353**	332
	23,741	14,744	**4,527**	4,872

(i) Non-current assets comprise goodwill, other intangible assets, PP&E, interests in joint ventures and associates and non-financial assets within trade and other receivables, and contract-related assets. Assets of disposal groups held for sale are not included.

4. Segmental analysis

(c) Adjusted gross margin and adjusted operating profit

The measure of profit used by the Group is adjusted operating profit. Adjusted operating profit is operating profit before exceptional items and certain re-measurements. This includes business performance results of equity-accounted interests.

This note also details adjusted gross margin. Both measures are reconciled to their statutory equivalents.

	Adjusted gross margin		Adjusted operating profit	
Year ended 31 December	**2022 £m**	2021 £m	**2022 £m**	2021 £m
British Gas Services & Solutions	**504**	574	**(9)**	121
British Gas Energy	**1,114**	849	**72**	118
Bord Gáis Energy	**160**	136	**31**	28
Centrica Business Solutions	**238**	143	**44**	(52)
Energy Marketing & Trading	**1,558**	242	**1,400**	70
Upstream	**1,874**	926	**1,793**	663
Segmental adjusted gross margin/adjusted operating profit	**5,448**	2,870	**3,331**	948
Reconciling items to Group Income Statement:				
Profit share (i)	**(9)**	—	**(23)**	—
Total Group adjusted gross margin/adjusted operating profit	**5,439**	2,870	**3,308**	948
Certain re-measurements:				
Onerous energy supply contract provision movement	**1,766**	(2,530)	**1,766**	(2,530)
Derivative contracts	**(5,160)**	1,289	**(5,160)**	1,289
Share of re-measurement of certain associates' energy contracts (net of taxation)	**—**	—	**1**	—
Gross profit	**2,045**	1,629		
Exceptional items in operating profit			**(155)**	1,247
Operating (loss)/profit after exceptional items and certain re-measurements			**(240)**	954

(i) The impact of the Group's profit share is excluded because management considers it unrelated to segmental business performance.

4. Segmental analysis

(d) Included within adjusted operating profit

Presented below are certain items included within adjusted operating profit, including a summary of impairments of property, plant and equipment and write-downs relating to exploration and evaluation assets.

	Depreciation and impairments of property, plant and equipment		Amortisation, write-downs and impairments of intangibles	
Year ended 31 December	**2022 £m**	2021 £m	**2022 £m**	2021 £m
British Gas Services & Solutions	**(31)**	(29)	**(16)**	(14)
British Gas Energy	**(3)**	(5)	**(79)**	(91)
Bord Gáis Energy	**(8)**	(5)	**(13)**	(13)
Centrica Business Solutions	**(13)**	(14)	**(32)**	(34)
Energy Marketing & Trading	**(31)**	(38)	**(15)**	(11)
Upstream	**(481)**	(461)	**—**	(25)
Other [(i)]	**(31)**	(31)	**(24)**	(28)
	(598)	(583)	**(179)**	(216)

(i) The Other segment includes corporate functions, subsequently recharged.

Impairments and write-downs of PP&E

During 2022, £88 million of impairments of PP&E (2021: £3 million) were recognised within business performance – £84 million in the Upstream segment and £4 million in the Other segment. Included in the Upstream segment write-down was £64 million related to an infill well that was dry, and a £20 million impairment associated with a producing field whose recoverable amounts reduced during the year due to worsening economics.

Write-downs and impairments of intangible assets

During 2022, there were no write-downs relating to exploration and evaluation asset dry holes (2021: £25 million) recognised in the Upstream segment. All such prior year write-downs were recognised within business performance as they were not deemed exceptional in nature. During 2022, £20 million of other intangible assets were impaired within business performance (2021: £3 million).

The recoverable amount of these assets was £nil.

4. Segmental analysis

(e) Capital expenditure

Capital expenditure represents additions, other than assets acquired as part of business combinations, to property, plant and equipment and intangible assets. Capital expenditure has been reconciled to the related cash outflow.

	Capital expenditure on property, plant and equipment		Capital expenditure on intangible assets other than goodwill	
Year ended 31 December	**2022 £m**	2021 £m	**2022 £m**	2021 £m
British Gas Services & Solutions	**52**	32	**25**	20
British Gas Energy	**—**	—	**582**	474
Bord Gáis Energy	**3**	40	**4**	6
Centrica Business Solutions	**47**	17	**205**	166
Energy Marketing & Trading	**—**	—	**14**	34
Upstream	**124**	238	**13**	51
Other	**26**	8	**—**	—
Capital expenditure	**252**	335	**843**	751
Capitalised borrowing costs	**—**	(8)	**—**	—
Inception of new leases and movements in payables and prepayments related to capital expenditure	**(49)**	(49)	**5**	24
Capital expenditure cash outflow subsequent to transfer to held for sale	**109**	21	**10**	—
Purchases of emissions allowances and renewable obligation certificates (note 15) (i)	**—**	—	**(799)**	(654)
Net cash outflow	**312**	299	**59**	121

(i) Purchases of emissions allowances and renewable obligation certificates of £578 million (2021: £472 million) in British Gas Energy, £203 million (2021: £155 million) in Centrica Business Solutions, £13 million (2021: £nil) in Upstream, and £5 million (2021: £27 million) in Energy Marketing & Trading.

4. Segmental analysis

(f) Free cash flow

Free cash flow is used by management to assess the cash generating performance of each segment, after taking account of the need to maintain its capital asset base. By excluding deficit reduction payments and movements in collateral and margin cash, which are predominantly triggered by wider market factors, and in the case of collateral and margin movements, represent timing movements, free cash flow is used by management as an adjusted measure of the cash generation of the business. Free cash flow excludes investing cash flows that are related to adjusted net debt/cash. This measure is reconciled to the net cash flow from operating and investing activities.

Year ended 31 December	2022 £m	2021 £m
Continuing operations		
British Gas Services & Solutions	**(19)**	170
British Gas Energy (i)	**1,283**	16
Bord Gáis Energy	**81**	3
Centrica Business Solutions	**(48)**	22
Energy Marketing & Trading (ii)	**199**	206
Upstream (iii)	**1,539**	835
Other (iv)	**26**	62
Segmental free cash flow excluding tax	**3,061**	1,314
Discontinued operations		
Direct Energy	**—**	2,597
Group total segmental free cash flow excluding tax	**3,061**	3,911
Taxes paid from continuing operations (iii)	**(574)**	(140)
Taxes paid from discontinued operations	**—**	(9)
Group total free cash flow	**2,487**	3,762
Less Discontinued operations free cash flow (including tax)	**—**	(2,588)
Free cash flow from continuing operations	**2,487**	1,174
UK Pension deficit payments (note 22)	**(214)**	(368)
Movements in variation margin and collateral (note 24)	**(1,173)**	481
Interest received	**46**	2
Purchase and settlement of securities (v)	**(398)**	(3)
	748	1,286
Net cash flow from continuing operating activities	**1,314**	1,611
Net cash flow used in continuing investing activities	**(566)**	(325)
Total cash flow from continuing operating and investing activities	**748**	1,286

(i) The Group has received £440 million under the Energy Bill Support Scheme during December 2022, which is disclosed as restricted cash (see note 1), and accelerated cash flows of approximately £700 million under the Energy Price Guarantee, when compared to the normal payment profile.

(ii) Energy Marketing & Trading free cash flow in 2022 includes cash outflows associated with increased gas in storage, and working capital movements of approximately £500 million. Energy Marketing & Trading adjusted operating profit includes a significant portion of unrealised derivative positions.

(iii) Upstream free cash flow in 2022 includes inflows of £630 million relating to the Norwegian disposal groups, including its disposal cash flows. Realised hedge cash outflows of £161 million (including £88 million realising post completion) have been incurred relating to the Norwegian assets but were held outside the disposal groups. £300 million of taxes paid relate to the Norwegian disposal groups.

(iv) The Other segment includes corporate functions.

(v) Purchase and settlement of securities includes outflows of £400 million of loans to the pension schemes. See note 22 for further details on pensions loans.

5. Costs

This section details the types of costs the Group incurs and the number of employees in each of our operations.

(a) Analysis of costs by nature

	2022			2021		
Year ended 31 December	Cost of sales and settlement of certain energy contracts £m	Operating costs £m	Total costs £m	Cost of sales and settlement of certain energy contracts £m	Operating costs £m	Total costs £m
Transportation, distribution, capacity market and metering costs	**(4,694)**	**—**	**(4,694)**	(3,702)	—	(3,702)
Commodity costs [i]	**(20,748)**	**—**	**(20,748)**	(9,302)	—	(9,302)
Depreciation, amortisation, impairments and write-downs	**(441)**	**(336)**	**(777)**	(497)	(302)	(799)
Employee costs	**(704)**	**(753)**	**(1,457)**	(464)	(749)	(1,213)
Other direct costs [i]	**(1,611)**	**(783)**	**(2,394)**	(1,465)	(652)	(2,117)
Costs included within business performance before credit losses on financial assets	**(28,198)**	**(1,872)**	**(30,070)**	(15,430)	(1,703)	(17,133)
Credit losses on financial assets (net of recovered amounts) (note 17)	**—**	**(351)**	**(351)**	—	(116)	(116)
Total costs included within business performance	**(28,198)**	**(2,223)**	**(30,421)**	(15,430)	(1,819)	(17,249)
Adjustment for gross cost of settled energy contracts in the scope of IFRS 9 and onerous energy supply contract provision	**14,986**	**—**	**14,986**	2,749	—	2,749
Exceptional items and re-measurement and settlement of derivative energy contracts (note 7)	**(8,484)**	**(155)**	**(8,639)**	(434)	1,247	813
Total costs within Group operating profit	**(21,696)**	**(2,378)**	**(24,074)**	(13,115)	(572)	(13,687)

(i) Commodity costs include a credit of £241 million recoverable under the Last Resort Supplier Payment claim (2021: £182 million), a further credit of £nil is included in other direct operating costs (2021: £3 million). These credits offset costs incurred as a result of the Group's appointment as Supplier of Last Resort to customers of energy suppliers who ceased trading during the year. See note 3.

(b) Employee costs

The below employee costs exclude the costs of redundancy and similar termination benefits.

Year ended 31 December	2022 £m	2021 £m
Wages and salaries	**(1,159)**	(965)
Social security costs	**(100)**	(104)
Pension and other post-employment benefits costs	**(171)**	(166)
Share scheme costs (note S4)	**(10)**	(12)
	(1,440)	(1,247)
Capitalised employee costs	**10**	19
Employee costs included in exceptional items	**—**	15
Repayment of Coronavirus government support programmes	**(27)**	—
Employee costs recognised in business performance in the Group Income Statement	**(1,457)**	(1,213)

5. Costs

(c) Average number of employees during the year

Year ended 31 December	2022 Number	2021 Number
British Gas Services & Solutions	**12,470**	12,178
British Gas Energy	**3,257**	3,006
Bord Gáis Energy	**320**	323
Centrica Business Solutions	**1,444**	1,706
Energy Marketing & Trading	**573**	478
Upstream	**670**	863
Group Functions	**1,220**	1,150
	19,954	19,704

6. Share of results of joint ventures and associates

Share of results of joint ventures and associates represents the results of businesses where we exercise joint control or significant influence and generally have an equity holding of up to 50%.

Share of results of joint ventures and associates

The Group's share of results of joint ventures and associates principally arises from its interest in Nuclear – Lake Acquisitions Limited, an associate, reported in the Upstream segment.

	2022			2021		
Year ended 31 December	Share of business performance £m	Share of exceptional items and certain re-measurements £m	Share of results for the year £m	Share of business performance £m	Share of exceptional items and certain re-measurements £m	Share of results for the year £m
Income	**592**	**—**	**592**	334	—	334
Expenses before exceptional items and certain re-measurements	**(472)**	**—**	**(472)**	(459)	—	(459)
Exceptional items and re-measurement of certain contracts	**—**	**1**	**1**	—	—	—
Operating profit/(loss)	**120**	**1**	**121**	(125)	—	(125)
Financing income	**3**	**—**	**3**	1	—	1
Taxation on profit/(loss)	**(31)**	**—**	**(31)**	21	—	21
Share of post-taxation results of joint ventures and associates	**92**	**1**	**93**	(103)	—	(103)

Further information on the Group's investments in joint ventures and associates is provided in notes 14 and S10.

7. Exceptional items and certain re-measurements

(a) Certain re-measurements

Certain re-measurements are the fair value movements on energy contracts entered into to meet the future needs of our customers or to sell the energy produced from our upstream assets. These contracts are economically related to our upstream assets, capacity/off-take contracts or downstream demand, which are typically not fair valued, and are therefore separately identified in the current period and reflected in business performance in future periods when the underlying transaction or asset impacts the Group Income Statement.

If the future costs to fulfil customer supply contracts, including the mark-to-market reversal of any energy hedging contracts entered into to meet this demand, exceed the charges recoverable from customers, an onerous contract provision will be recognised. Because the associated hedging gains or losses will be recognised in certain re-measurements, the movements in the onerous provision will also be recognised in certain re-measurements.

Year ended 31 December	2022 £m	2021 £m
Certain re-measurements recognised in relation to energy contracts:		
Net losses arising on delivery of contracts	**(1,403)**	(259)
Net (losses)/gains arising on market price movements and new contracts	**(3,757)**	1,548
Net re-measurements included within gross profit before onerous supply contract provision	**(5,160)**	1,289
Onerous energy supply contract provision movement (i)	**1,766**	(2,530)
Net re-measurements included within gross profit	**(3,394)**	(1,241)
Net gain arising on re-measurement of certain associates' contracts (net of taxation)	**1**	—
Net re-measurements included within Group operating profit	**(3,393)**	(1,241)
Taxation on certain re-measurements (note 9) (ii)	**1,000**	486
Certain re-measurements after taxation	**(2,393)**	(755)

(i) The onerous supply contract provision represents the future costs to fulfil customer contracts on a current market price basis. The associated hedging gains or losses are separately recognised within the losses/gains arising on market price movements and new contracts. The movement in the onerous provision is detailed in note 3(b).
(ii) Taxation on onerous energy supply contracts amounted to a £(295) million debit (2021: £481 million credit) and taxation on other certain re-measurements amounted to £1,295 million credit (2021: £5 million credit), including £473 million associated with re-basing deferred tax on certain relevant derivatives for the Energy Profits Levy.

Year ended 31 December	2022 £m	2021 £m
Total re-measurement and settlement of derivative energy contracts excluding:	**(8,484)**	(434)
IFRS 9 business performance revenue	**(9,896)**	(3,556)
IFRS 9 business performance cost of sales	**13,220**	5,279
Unrealised certain re-measurements recognised in relation to energy contracts included in gross profit	**(5,160)**	1,289
Onerous contract provision movement (cost of sales)	**1,766**	(2,530)
Total certain re-measurements	**(3,394)**	(1,241)

The table below reflects the certain re-measurement derivative movements by business segment:

Year ended 31 December	2022 £m	2021 £m
UK Energy Supply (British Gas Energy and Centrica Business Solutions)	**(6,364)**	3,917
Upstream/Energy Marketing & Trading/Bord Gáis	**1,204**	(2,628)
Unrealised certain re-measurements recognised in relation to energy contracts included in gross profit	**(5,160)**	1,289

7. Exceptional items and certain re-measurements

(b) Exceptional items

Exceptional items are those items that, in the judgement of the Directors, need to be disclosed separately by virtue of their nature, size or incidence. Items which may be considered exceptional in nature include disposals of businesses or significant assets, business restructurings, pension change costs or credits, significant debt repurchase costs and asset write-downs/impairments and write-backs.

Year ended 31 December	2022 £m	2021 £m
Exceptional items recognised in continuing operations		
Loss on disposal of E&P Norway (i)	(362)	—
Impairment of E&P Norway disposal group assets (including disposal related costs) and related asset write-downs	—	(244)
Write-back of other exploration and production assets (including completed field disposals) (ii)	—	838
Write-back of power assets (iii)	207	747
Impairment of Centrica Business Solutions goodwill and other assets	—	(123)
Fair value uplift on minority investment prior to transfer to asset held for sale	—	15
Restructuring credit	—	14
Exceptional items included within Group operating profit (iv)	(155)	1,247
Net exceptional item taxation (note 9) (v)	(207)	(250)
Net exceptional items recognised in continuing operations after taxation	(362)	997
Net exceptional items recognised in discontinued operations after taxation	—	624
Total exceptional items recognised after taxation	(362)	1,621

Exceptional items recognised in discontinued operations		
Profit on disposal of Direct Energy (including disposal related costs)	—	613
Exceptional items before taxation	—	613
Net exceptional item taxation	—	11
Net exceptional items recognised in discontinued operations after taxation	—	624

(i) The disposal of E&P Norway completed on 31 May 2022. See note 12 for further details.

(ii) Despite the increase in near-term liquid commodity prices (offset by the Energy Profit Levy implementation) no material impairment write-backs have been recorded for exploration and production assets because field carrying values have now reached depreciated historic cost. In 2021, impairment write-backs of £829 million (post-tax £476 million) were booked, alongside a field disposal and decommissioning provision reduction of £9 million (post-tax £2 million).

(iii) In the Upstream segment, a write-back of the nuclear investment of £195 million (post-tax £195 million) has been recorded predominantly as a result of the improvement in forecast commodity prices and changes to the associate's pension position (offset by the announcement of the Electricity Generator Levy, applicable from 1 January 2023). In the Centrica Business Solutions segment, a write-back of £12 million (post-tax £9 million) has been recorded, predominantly related to a gas engine, also following improvements in forecast commodity prices. See note 7(c).

(iv) Exceptional items for 2022 are non-cash, except for the disposal consideration received for E&P Norway (see note 12) which is reflected in the Sale of businesses line item in the Group Cash Flow Statement. The cash flows recorded as payments relating to exceptional charges of £24 million in the Group Cash Flow Statement relate to previous year exceptional restructuring costs.

(v) Exceptional item taxation includes a credit of £121 million associated with net deferred tax asset recognition related to exploration and production tax losses, investment allowance and decommissioning carrying back, due to the increase in forecast commodity prices. Also included is a debit of £325 million from the recognition of higher deferred tax liability balances associated with exploration and production accelerated capital allowances, due to the implementation of the Energy Profits Levy. These two items are unrelated to the other exceptional items.

7. Exceptional items and certain re-measurements

(c) Impairment accounting policy, process and sensitivities

The information provided below relates to the assets and CGUs (or groups of CGUs) that have been subject to impairment write-backs during the year.

Exceptional impairments/write-back assessments of assets measured on a Value-in-use (VIU) basis

Segment	Asset/CGU	Basis for write-back assessment	Recoverable amount £m	Write-back £m
Upstream	Nuclear	The year-on-year increase in short-term baseload power prices, together with the actuarial changes to the associate's pension position has more than offset the announcement of the implementation of the Electricity Generator Levy from 1 January 2023	1,560	195

Nuclear

A VIU calculation has been used to determine the recoverable amount of the Group's investment in Nuclear. The cash flows incorporated in the valuation are based on detailed business forecasts in the short term, extrapolated to future years to account for the expected generation profile of the fleet for its remaining life. Assumptions include forward commodity prices, capacity rates, fuel and network costs, and operating and capital expenditure requirements. Price assumptions are based on liquid market prices for 2023 to 2026 which are then blended over a one-year period to long-term price forecasts. Long-term price assumptions derived from third-party market comparator median curves are used due to alignment with pricing that a reasonable market participant would use.

The recently announced Electricity Generator Levy, applying a 45% tax rate to revenues generated over £75/MWh from 1 January 2023 to 31 March 2028, based on the above price assumptions, has also been included in the assessment.

The VIU calculation assumes that the Sizewell plant operates until 2055, reflecting a 20-year extension beyond its original design life. In the absence of this extension, the carrying value of the Group's investment in Nuclear would be reduced by £178 million. All other stations' life assumptions are aligned to lifetime closure dates announced by the operator (being between March 2024 and March 2028).

The VIU calculation is also sensitive to changes in outage assumptions, and the base level generation volumes assumed for the fleet were increased during the period based on a review of outage levels in recent years. A reduction of 5% in the unplanned outage rate applied to volumes across the nuclear fleet would lead to a write-back movement of £141 million.

The future pre-tax cash flows generated by the investment in the associate are discounted using a pre-tax nominal discount rate of 24.8% (2021: 14.7%). This equated to a post-tax rate of 8.0% (2021: 5.75%). The post-tax discount rate is initially derived from the Group weighted average cost of capital as adjusted for the risks associated with the asset and with reference to comparator companies. The pre-tax rate is then back-calculated by removing tax cash flows and assessing the rate that would give the same result as the post-tax rate. Due to the elevated near-term power prices which results in significantly elevated cash flows in the near-term, the pre-tax discount rate has significantly increased. A 2% increase in the post-tax discount rate would lead to an impairment of £113 million (when compared with the closing year-end carrying value). Similarly, a 2% reduction in the post-tax discount rate would lead to an increased write-back of £150 million.

The asset is particularly sensitive to changes in commodity price and the table below details average prices for the first 5- and 10-year periods and associated sensitivities. Note that the asset is valued for its entire economic life and not just this 15-year period.

	Five-year liquid and blended-period price (i)		10-year long-term average price (i)		Change in pre/post-tax write-back/(impairment) (ii)			
					+10%		-10%	
	2023-2027	2022-2026	2028-2037	2027-2036				
	31 December 2022	31 December 2021	**31 December 2022**	31 December 2021	**31 December 2022**	31 December 2021	**31 December 2022**	31 December 2021
	£/MWh	£/MWh	**£/MWh**	£/MWh	**£m**	£m	**£m**	£m
Baseload power	**150**	93	**63**	49	**198**	319	**(198)**	(317)
							-50% Five-year liquid and blended-period only	
							(565)	

(i) Prices are shown in 2021 real terms.
(ii) A 10% change was historically deemed to represent a reasonably possible variation across the entire period covered by the liquid market and comparator curves used in the nuclear impairment test. Given the increases in commodity prices during 2021 and 2022, a further sensitivity has been included based on a 50% fall in liquid and blend-period commodity prices only.

Furthermore, there is also uncertainty due to climate change and international governmental intervention to reduce CO_2 emissions and the likely impact this will have on both power demand and forecast prices. As a result, a further sensitivity is disclosed below based on forecast prices aligned to the net zero price curve issued by Aurora (a power analytics provider), which assumes governmental policies are put in place to achieve the temperature and net zero goals by 2050. This sensitivity retains the prices for the liquid period (four years) but replaces the longer term thereafter with Aurora's forecast prices for net zero.

7. Exceptional items and certain re-measurements

	10-year long-term average price (i)	Change in pre/post-tax impairment (ii)
	2028-2037	
	2022	£m
Baseload power (£/MWh)	59	(93)

(i) Prices shown in 2021 real terms.
(ii) Change would lead to an impairment of the carrying value.

Exceptional impairments/write-back of assets measured on a FVLCD basis

Fair value less costs of disposal (FVLCD) is determined by discounting the post-tax cash flows expected to be generated by the assets or CGU, net of associated selling costs, taking into account those assumptions that market participants would use in estimating fair value. Post-tax cash flows used in the FVLCD calculation are based on the Group's Board-approved business plans and strategic shape assumptions, together with, where relevant, long-term production and cash flow forecasts.

No exceptional impairments or write-backs have been recorded in 2022 for assets measured on a FVLCD basis. Nonetheless, the Upstream gas assets still have a significant carrying value on the balance sheet and accordingly further sensitivities are provided in the paragraph below:

Upstream gas assets

For Upstream gas assets post-tax cash flows are derived from projected production profiles of each field, taking into account forward prices for gas and liquids over the relevant period. Where forward market prices are not available (i.e. outside the active period for each commodity), prices are determined based on the median of third-party market comparator curves. The date of cessation of production depends on the interaction of a number of variables, such as the recoverable quantities of hydrocarbons, production costs, the contractual duration of the licence area and the selling price of the gas and liquids produced. As each field has specific reservoir characteristics and economic circumstances, the post-tax cash flows for each field are computed using individual economic models. Price assumptions are critical and use liquid market prices for 2023 to 2026, blended over a one-year period to long-term price forecasts. Long-term price assumptions derived from third-party market comparator median curves are deemed best aligned with pricing that a reasonable market participant would use. Following the implementation of the Energy Profits Levy, the increased tax rates have been included in the FVLCD calculations until the sunset date of 31 March 2028.

The future post-tax cash flows are discounted using a post-tax nominal discount rate of 10.5% (2021: 10.0%).

As forward commodity prices are a key assumption in these valuations, average prices and associated impairment sensitivities for the Group's upstream gas assets are shown below. Note that the fields are valued over their respective economic lives and the 5- and 10-year pricing information shown below is just to provide context. Note also that following the disposal of the Norwegian and Statfjord fields (see note 12), the asset portfolio reserves are predominantly gas (rather than liquids) and therefore only NBP figures have been shown below.

	Five-year liquid and blended-period price (i)		10-year long-term average price (i)		Change in post-tax write-back/(impairment) (ii)			
					+10%		-10%	
	2023-2027	2022-2026	2028-2037	2027-2036				
	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021
					£m	£m	£m	£m
NBP (p/th)	142	83	69	44	—	8	—	(7)
							-50% Five-year liquid and blended-period only	
							(130)	

(i) Prices are shown in 2021 real terms.
(ii) Sensitivity relates to Upstream exploration and production assets and CGUs. A 10% change was historically deemed to represent a reasonably possible variation across the entire period covered by both the liquid market and longer-term comparator curves used in upstream gas impairment tests. Given the increases in commodity prices during 2021 and 2022, a further sensitivity has been included based on a 50% fall in liquid and blend-period commodity prices only. The changes shown relate to further write-backs or impairments and are restricted because the most material fields have already been written back to their depreciated historic cost and have excess impairment headroom. The post-tax net present value (NPV) movements of the fields in +/-10% scenario are £150 million/£(144) million and in the -50% liquid price period scenario are £(711) million.

7. Exceptional items and certain re-measurements

Furthermore, there is also uncertainty due to climate change and international governmental intervention to reduce CO_2 emissions and the likely impact this will have on gas demand and forecast prices. As a result, a further sensitivity is disclosed below based on forecast prices aligned to the International Energy Agency's (IEA) Net Zero Emissions by 2050, which assumes governmental policies are put in place to achieve the temperature and net zero goals by 2050. This sensitivity retains the prices for the liquid period (four years) but replaces the longer term thereafter with the IEA's forecast prices for Net Zero Emissions by 2050.

	10-year long-term average price (i)	Change in post-tax write-back/ (impairment) (ii)	Change in post-tax NPV (iii)
	2028-2037		
	2022	£m	£m
NBP (p/th)	38	—	(72)

(i) Prices shown in 2021 real terms.
(ii) Change in impairment restricted due to the most material fields having already been written back to their depreciated historic cost and having excess impairment headroom.
(iii) Despite no change to the carrying value of the assets, the net present value (NPV) of the fields would reduce under net zero scenarios.

8. Net finance cost

Financing costs mainly comprise interest on bonds and bank debt, the results of hedging activities used to manage foreign exchange and interest rate movements on the Group's borrowings and notional interest arising from the discounting of decommissioning provisions and pensions. An element of financing cost is capitalised on qualifying projects.

Investment income predominantly includes interest received from short-term investments in money market funds, bank deposits and government bonds.

Continuing operations

	2022			2021		
Year ended 31 December	Financing costs £m	Investment income £m	Total £m	Financing costs £m	Investment income £m	Total £m
Cost of servicing net debt:						
Interest income	—	52	52	—	5	5
Interest cost on bonds, bank loans and overdrafts	(184)	—	(184)	(189)	—	(189)
Interest cost on lease liabilities	(6)	—	(6)	(6)	—	(6)
	(190)	52	(138)	(195)	5	(190)
Net gains on revaluation	—	22	22	—	4	4
Notional interest arising from discounting	(3)	3	—	(7)	—	(7)
	(193)	77	(116)	(202)	9	(193)
Other interest charges (i)	(31)	—	(31)	(2)	—	(2)
Capitalised borrowing costs (ii)	4	—	4	8	—	8
Financing (cost)/income	(220)	77	(143)	(196)	9	(187)

(i) Other interest charges includes interest charged on cash collateral, and fees for letters of credit. The cash flow associated is £30 million.
(ii) Borrowing costs have been capitalised using an average rate of 5.57% (2021: 4.49%). The capitalised borrowing costs in 2022 relate entirely to the Norwegian assets held for sale, and subsequently disposed of.

9. Taxation

The taxation note details the different tax charges and rates, including current and deferred tax arising in the Group. The current tax charge is the tax payable on this year's taxable profits together with amendments in respect of tax provisions made in earlier years. This tax charge excludes the Group's share of taxation on the results of joint ventures and associates. Deferred tax represents the tax on differences between the accounting carrying values of assets and liabilities and their tax bases. These differences are temporary and are expected to unwind in the future.

(a) Analysis of tax charge

	2022			2021		
Year ended 31 December	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m
Continuing operations:						
Current tax						
UK corporation tax	(385)	(241)	(626)	(7)	(80)	(87)
UK petroleum revenue tax	2	—	2	24	—	24
Non-UK tax	(477)	32	(445)	(386)	(21)	(407)
Adjustments in respect of prior years – UK	(47)	24	(23)	(1)	18	17
Adjustments in respect of prior years – non-UK	(8)	—	(8)	6	—	6
Total current tax	(915)	(185)	(1,100)	(364)	(83)	(447)
Deferred tax						
Origination and reversal of temporary differences – UK	(105)	755	650	(63)	520	457
UK petroleum revenue tax	6	(19)	(13)	(9)	(129)	(138)
Origination and reversal of temporary differences – non-UK	(89)	32	(57)	(63)	(45)	(108)
Change in UK tax rate	(7)	242	235	6	(9)	(3)
Adjustments in respect of prior years – UK	49	(27)	22	36	(18)	18
Adjustments in respect of prior years – non-UK	15	(5)	10	3	—	3
Total deferred tax	(131)	978	847	(90)	319	229
Total taxation on profit/(loss) from continuing operations (i)	(1,046)	793	(253)	(454)	236	(218)
Discontinued operations:						
Current tax – non-UK	—	—	—	—	11	11
Total taxation on profit from discontinued operations	—	—	—	—	11	11
Total taxation on profit/(loss) for the year	(1,046)	793	(253)	(454)	247	(207)

(i) Total taxation on profit/(loss) excludes taxation on the Group's share of profits of joint ventures and associates.

UK tax rates

Most activities in the UK are subject to the standard rate for UK corporation tax of 19% (2021: 19%). Upstream gas production activities are taxed at a rate of 30% (2021: 30%), a supplementary charge of 10% (2021: 10%), plus, with effect from 26 May 2022, the Energy Profits Levy of 25% to give an overall tax rate of 65% (2021: 40%). Certain upstream gas production assets in the UK are subject to the UK petroleum revenue tax (PRT) regime at the current tax rate of 0% (2021: 0%).

The rate of Energy Profits Levy will increase to 35% from 25% with effect from 1 January 2023. The increase in rate was substantively enacted on 30 November 2022 and therefore the upstream gas deferred tax balances included in these financial statements at 31 December 2022 have been re-measured at the higher rate.

The UK corporation tax rate will increase to 25% with effect from 1 April 2023. At 31 December 2022, the relevant UK deferred tax assets and liabilities included in these consolidated Group Financial Statements were based on the increased rate having regard to their reversal profiles.

Non-UK tax rates

Norwegian upstream profits are taxed at the standard rate of 22% (2021: 22%) plus a special tax of 56% (2021: 56%) resulting in an aggregate tax rate of 78% (2021: 78%).

Taxation in other jurisdictions, where the Group has a substantial presence, is calculated at the rate prevailing in those respective jurisdictions. Jurisdictions and rates include the Republic of Ireland 12.5%, and Denmark 22%.

Prior year adjustments reflect changes made to estimates or to judgements when further information becomes available.

Movements in deferred tax liabilities and assets are disclosed in note 16. Tax on items taken directly to equity is disclosed in note S4.

9. Taxation

(b) Factors affecting the tax charge

The Group is expected to continue carrying out most of its business activities in the UK and accordingly considers the standard UK rate to be the appropriate reference rate.

The differences between the total taxation shown above and the amount calculated by applying the standard rate of UK corporation tax to the profit/(loss) before taxation are as follows:

Year ended 31 December	2022 Business performance £m	2022 Exceptional items and certain re-measurements £m	2022 Results for the year £m	2021 Business performance £m	2021 Exceptional items and certain re-measurements £m	2021 Results for the year £m
Profit/(loss) before taxation from continuing operations	**3,165**	**(3,548)**	**(383)**	761	6	767
(Deduct)/add back share of (profits)/losses of joint ventures and associates, net of interest and taxation	**(92)**	**(1)**	**(93)**	103	—	103
	3,073	**(3,549)**	**(476)**	864	6	870
Tax on profit/(loss) at standard UK corporation tax rate of 19% (2021: 19%)	**(584)**	**674**	**90**	(164)	(1)	(165)
Effects of:						
Depreciation/impairment on non-qualifying assets	**1**	**37**	**38**	(20)	39	19
Higher rates applicable to Upstream profits/losses	**(429)**	**(112)**	**(541)**	(347)	98	(249)
Energy profits levy charge for the year	**(31)**	**(212)**	**(243)**	—	—	—
Energy profits levy re-measurement of deferred tax balances	**—**	**148**	**148**	—	—	—
Non-UK tax rates (excluding Upstream)	**(28)**	**(32)**	**(60)**	(14)	8	(6)
Upstream investment incentives	**32**	**—**	**32**	30	—	30
Movements in uncertain tax provisions	**(13)**	**—**	**(13)**	1	—	1
Disposal of Norway business	**—**	**(69)**	**(69)**	—	—	—
Changes in UK tax rate	**(7)**	**242**	**235**	6	(9)	(3)
(Impairment)/write-back of deferred tax assets relating to Upstream losses and decommissioning (note 7)	**(1)**	**121**	**120**	(8)	178	170
Petroleum revenue tax	**1**	**—**	**1**	11	(77)	(66)
Prior year adjustment	**9**	**(8)**	**1**	44	—	44
Other	**4**	**4**	**8**	7	—	7
Taxation on profit/(loss) from continuing operations	**(1,046)**	**793**	**(253)**	(454)	236	(218)
Less: movement in deferred tax	**131**	**(978)**	**(847)**	90	(319)	(229)
Total current tax from continuing operations	**(915)**	**(185)**	**(1,100)**	(364)	(83)	(447)
Current tax from discontinued operations	**—**	**—**	**—**	—	11	11
Total current tax on profit/(loss) for the year	**(915)**	**(185)**	**(1,100)**	(364)	(72)	(436)

The Group is subject to taxation in a number of jurisdictions. The complexity of applicable rules may result in legitimate differences of interpretation between the Group and taxing authorities (or between different taxing authorities) especially where an economic judgement or valuation is involved. Resolution of these differences typically takes many years. The uncertain tax provisions represent multiple layers of estimation for different time periods and different jurisdictions.

The Group has applied IFRIC 23: 'Uncertainty over Income Tax Treatments'. The interpretation requires consideration of the likelihood that the relevant taxing authority will accept an uncertain tax treatment in order to determine the measurement basis. The value is calculated in accordance with the rules of the relevant tax authority when acceptance is deemed probable.

The Group's uncertain tax provision relates to differences in the interpretation of tax legislation in the UK and Canada. Due to the uncertainty associated with such tax items, there is a possibility that, on conclusion of open tax matters at a future date, the final outcome may differ. The uncertain tax provision represents management's assessment of the likely outcome of each issue.

As at 31 December 2022 the provision for uncertain tax items was £42 million (2021: £157 million). The reduction in the Group's uncertain tax provision in the period predominantly relates to the sale of Spirit Energy's Norwegian business and transfer of the legal liabilities in respect of the open tax disputes to the buyer, Sval Energi. The Group has provided an indemnity to Sval Energi in respect of open tax disputes, currently valued at £129 million. See note 12.

9. Taxation

(c) Factors that may affect future tax charges

The Group's effective tax rates are impacted by changes to the mix of activities and profitability across the territories in which it operates.

Effective tax rates may also fluctuate where profits and losses cannot be offset for tax purposes. For example, losses arising in one territory cannot be offset against profits in another.

The headline rate of tax on the ring fence profits from gas production in the UK was 40% (consisting of ring fence corporation tax of 30% and supplementary charge of 10%) versus 19% UK statutory corporation tax rate. On 26 May 2022, the UK Government introduced with immediate effect an Energy Profits Levy, which is an additional 25% tax on UK gas production profits on top of the existing 40% headline rate of tax. As such, the Energy Profits Levy increases the headline rate of tax from 40% to 65% on the UK gas production profits from 26 May 2022.

In the Autumn Statement published on 22 November 2022, the UK Government further increased the Energy Profits Levy from 25% to 35%, increasing the headline rate of tax from 65% to 75% on gas production profits with effect from 1 January 2023.

The Energy Profits Levy is intended to be a temporary measure and applies to gas production profits during the period from 26 May 2022 to 31 March 2028. The rate of 25% applies from 26 May until 31 December 2022 and the rate of 35% applies from 1 January 2023 until 31 March 2028.

PRT is set at 0% but may still give rise to historic refunds from the carry-back of excess reliefs (for example, from decommissioning).

The UK Government also announced in the Autumn Statement its intention to introduce an Electricity Generator Levy applicable to the revenues generated from renewable and nuclear sources. If enacted, the Electricity Generator Levy will apply at the tax rate of 45% to electricity generation revenues, which will be determined by reference to revenue from sales exceeding a benchmark price of £75/MWh. The Electricity Generator Levy once enacted will apply from 1 January 2023 to 31 March 2028.

The Group's effective tax rate is dependent on the proportion of Group profits and losses arising from its UK upstream and nuclear activities relative to lower taxed UK and other jurisdictions profits and losses.

The Group monitors income tax developments in all the jurisdictions in which the Group operates, including the OECD Base Erosion and Profit Shifting (BEPS) initiative, which may affect the Group's tax liabilities. On 8 October 2021, more than 135 countries of the OECD Inclusive Framework on BEPS committed to fundamental changes to the international corporate tax system. This includes a proposed global minimum corporation tax rate set at 15% for financial years beginning in 2023 and 2024. Steps to introduce a global minimum corporation tax have either been enacted or are under serious consideration in the jurisdictions in which the Group operates. The Group does not expect its tax liabilities to be materially increased as a result of the minimum corporate tax.

(d) Relationship between current tax charge and taxes paid

	2022			2021		
Year ended 31 December	UK £m	Non-UK £m	Total £m	UK £m	Non-UK £m	Total £m
Current tax charge/(credit): (continuing and discontinuing activities)						
Corporation tax	**649**	**453**	**1,102**	70	390	460
Petroleum revenue tax	**(2)**	**—**	**(2)**	(24)	—	(24)
Total tax on results for the year (per note 9(b))	**647**	**453**	**1,100**	46	390	436
Current tax included in other comprehensive income [(i)]	**(29)**	**—**	**(29)**	(16)	—	(16)
Total tax charge	**618**	**453**	**1,071**	30	390	420
Taxes paid/(refunded):						
Corporation tax	**261**	**331**	**592**	113	85	198
Petroleum revenue tax	**(18)**	**—**	**(18)**	(49)	—	(49)
	243	**331**	**574**	64	85	149
Included in the following lines of the Group Cash Flow Statement:						
Taxes paid in net cash flows from continuing operating activities			**574**			140
Net cash flow from discontinued investing activities			**—**			9

(i) Current tax movements relating to pension deficit payments are reported in other comprehensive income. See note 1 for further details.

Differences between current tax charged and taxes paid arose principally due to the following factors:

- Corporation tax payments are generally made by instalment, based on estimated taxable profits, or the prior period's profits. Fluctuations in profits from year to year, one-off items and mark-to-market movements within the year may therefore give rise to divergence between the charge for the year and the taxes paid. In certain jurisdictions advance tax payments are required (based on estimated tax liabilities) which can result in overpayments. These are included as tax assets, to be refunded in a subsequent period; and
- PRT refunds are based on results in the preceding six-monthly PRT period, therefore PRT cash movements will reflect refunds on a six-month delay.

10. Earnings per ordinary share

Earnings per share (EPS) is the amount of profit or loss attributable to each share. Basic EPS is the amount of profit or loss for the year divided by the weighted average number of shares in issue during the year. Diluted EPS includes the impact of outstanding share options.

Basic earnings per ordinary share has been calculated by dividing the loss attributable to equity holders of the Company for the year of £782 million (2021: profit of £1,210 million) by the weighted average number of ordinary shares in issue during the year of 5,869 million (2021: 5,836 million). The number of shares excludes 32 million ordinary shares (2021: 35 million), being the weighted average number of the Company's own shares held in the employee share trust and treasury shares repurchased during the year by the Group as part of the share repurchase programme. These 32 million shares do not include shares expected to be repurchased as part of the Group's share buyback scheme during 2023. See note S4.

The Directors believe that the presentation of adjusted basic earnings per ordinary share, being the basic earnings per ordinary share adjusted for certain re-measurements and exceptional items, assists with understanding the underlying performance of the Group, as explained in note 2.

Information presented for diluted and adjusted diluted earnings per ordinary share uses the weighted average number of shares as adjusted for 68 million (2021: 69 million) potentially dilutive ordinary shares as the denominator, unless it has the effect of increasing the profit or decreasing the loss attributable to each share.

Continuing and discontinued operations

	2022		2021	
Year ended 31 December	£m	Pence per ordinary share	£m	Pence per ordinary share
Earnings – basic	(782)	(13.3)	1,210	20.7
Net exceptional items after taxation (notes 2 and 7) (i)	279	4.8	(1,521)	(26.0)
Certain re-measurement losses after taxation (notes 2 and 7) (i)	2,553	43.4	548	9.4
Earnings – adjusted basic	2,050	34.9	237	4.1
Earnings – diluted (ii)	(782)	(13.3)	1,210	20.5
Earnings – adjusted diluted	2,050	34.5	237	4.0

Continuing operations

	2022		2021	
Year ended 31 December	£m	Pence per ordinary share	£m	Pence per ordinary share
Earnings – basic	(782)	(13.3)	586	10.0
Net exceptional items after taxation (notes 2 and 7) (i)	279	4.8	(897)	(15.3)
Certain re-measurement losses after taxation (notes 2 and 7) (i)	2,553	43.4	548	9.4
Earnings – adjusted basic	2,050	34.9	237	4.1
Earnings – diluted (ii)	(782)	(13.3)	586	9.9
Earnings – adjusted diluted	2,050	34.5	237	4.0

Discontinued operations

	2022		2021	
Year ended 31 December	£m	Pence per ordinary share	£m	Pence per ordinary share
Earnings – basic	–	–	624	10.7
Net exceptional items after taxation (notes 2 and 7)	–	–	(624)	(10.7)
Earnings – adjusted basic	–	–	–	–
Earnings – diluted	–	–	624	10.6
Earnings – adjusted diluted	–	–	–	–

(i) Net exceptional items after taxation and certain re-measurement losses after taxation are adjusted to reflect the share attributable to non-controlling interests.

(ii) Potential ordinary shares are not treated as dilutive when they would decrease a loss per share.

10. Earnings per ordinary share

The Group's May and November 2022 trading updates mentioned that the 2022 adjusted basic earnings per ordinary share would be towards the top end of the range of sell-side analyst expectations, which at the time were 6.7 pence to 10.8 pence in May and 15.1 pence to 26.0 pence in November. In the July interim results it was confirmed that the interim period adjusted basic earnings per ordinary share was 11.0 pence and in the Group's January 2023 trading update, it was noted that the 2022 full year adjusted basic earnings per ordinary share was expected to be above 30.0 pence. For the purposes of Listing Rules LR 9.2.18(c), it is noted that the increase in reported adjusted basic earnings per ordinary share was predominantly due to the continued impact of elevated and volatile commodity prices throughout the year leading to greater than forecast profits in the Energy Marketing & Trading and Upstream businesses.

11. Dividends

Dividends represent the return of profits to shareholders. Dividends are paid as an amount per ordinary share held. The Group retains part of the profits generated to meet future investment plans or to fund share repurchase programmes.

	2022			2021		
	£m	Pence per share	Date of payment	£m	Pence per share	Date of payment
Prior year final dividend	—	—	—	—	—	—
Interim dividend	59	1.00	17 Nov 2022	—	—	—
	59			—		

The Directors propose a final dividend of 2.00 pence per ordinary share (totalling £118 million) for the year ended 31 December 2022.

The Company has sufficient distributable reserves to pay dividends to its ultimate shareholders. Distributable reserves are calculated on an individual legal entity basis and the ultimate parent company, Centrica plc, currently has adequate levels of realised profits within its retained earnings to support dividend payments. Refer to the Centrica plc Company Balance Sheet on page 226. At 31 December 2022, Centrica plc's company-only distributable reserves were c.£2.9 billion (2021: c.£2.5 billion). On an annual basis, the distributable reserve levels of the Group's subsidiary undertakings are reviewed and dividends paid up to Centrica plc as appropriate to replenish its reserves.

12. Acquisitions, disposals and disposal groups classified as held for sale

This section details business combinations, asset acquisitions and disposals made by the Group.

(a) Business combinations and asset acquisitions

On 1 October 2022 the Group acquired the UK B2B customer book and associated assets of AvantiGas ON Limited ('Avanti') including the hedging book in respect of the customers acquired. On acquisition, an onerous contract provision of £284 million and a derivative asset of £254 million have been separately recognised representing the expected losses and associated hedges of acquired customers who are expected to remain on their existing fixed price tariffs before anticipated renewals onto a standard variable tariff. The derivative asset reflects the increase in prices since contracts to purchase commodity for the acquired customers were entered into. Based on a small unhedged element and movement in forward prices the acquisition resulted in a net consideration received of £16 million. The transaction has been accounted for as an asset acquisition on the basis that the assets and liabilities acquired did not constitute a business.

Provisional fair value of the identifiable assets and liabilities

	AvantiGas ON Limited £m
Balance Sheet items	
Intangible assets	**11**
Derivative asset	**254**
Trade and other receivables	**3**
Onerous contract provision	**(284)**
Net identifiable liabilities acquired	**(16)**
Total cash consideration received	**16**
Income Statement items	
Revenue recognised since the acquisition date in the Group Income Statement	**9**
Profit since the acquisition date in the Group Income Statement	**1**

Pro forma information

The pro forma consolidated results of the Group, assuming the acquisitions had been made at the beginning of the year, would show revenue of £23,801 million (compared to reported revenue of £23,741 million) and loss after taxation of £632 million (compared to reported loss after taxation of £636 million).

During the year, the Group was appointed by Ofgem as the Supplier of Last Resort (SoLR) to one energy company who had ceased trading. This was in addition to the eight appointments that were made in 2021. These have not been accounted for as business combinations or asset acquisitions as the incremental costs associated with supplying the affected customers will be recoverable through the established Last Resort Supplier Payment (LRSP) claim mechanism under Ofgem supplier licence conditions. Cash outflows of £4 million were incurred in respect of prior year SoLR appointments. A customer relationship intangible asset of £10 million was recognised in 2021 in respect of certain customer credit balances that the Group did not include in their LRSP claims.

(b) Disposals

On 8 December 2021 the Group announced that it had agreed to sell Spirit Energy's entire Norwegian portfolio excluding the Statfjord fields to Sval Energi for a headline consideration of $1,026 million (£758 million), and the Statfjord fields to Equinor for a headline consideration of $50 million (£37 million).

The sales had a commercial effective date of 1 January 2021, and the consideration receivable at legal completion of 31 May 2022 has been reduced by the net cash flows generated by the business being disposed and interest since 1 January 2021. Net consideration receivable (including costs to dispose) reduced to £195 million from Sval Energi, with a net consideration payable to Equinor of £(126) million. This includes a deferred commodity price linked receivable, and a tax indemnity provided by Spirit Energy Norway. The deferred commodity price linked receivable is currently valued at £33 million from Sval Energi and £26 million from Equinor. The tax indemnity provided to Sval Energi is currently valued at £(129) million. Distribution of the net consideration and net cash flows generated will be pro-rata to the ownership share, with 31% attributable to the non-controlling interests. In the year ended 31 December 2022, £273 million (2021: £nil) was distributed to SWM Bayerische E&P Beteiligungsgesellschaft mbH upon completion of the Spirit Energy Norway sale.

In applying IFRS 5 'Non-current Assets Held for Sale and Discontinued Operations', the Group has judged that there are two separate disposal groups, being the Statfjord fields and the remainder of the Norwegian portfolio. The assets and liabilities comprising the disposal groups were classified as held for sale as at 8 December 2021. This is on the basis that at that point, the disposal groups were available for immediate sale, subject only to terms that are customary for sales of such assets, and the sale was highly probable. However, the disposal groups do not represent a separate major line of business of geographical operations and hence the Group has concluded that they do not constitute discontinued operations.

Details of the assets and liabilities of the disposal group at 31 May 2022 are shown below.

12. Acquisitions, disposals and disposal groups classified as held for sale

	Statfjord £m	Norway portfolio excluding Statfjord £m	Total £m
Non-current assets			
Property, plant and equipment	315	975	1,290
Other intangible assets	—	69	69
Goodwill (i)	19	191	210
Deferred tax assets (ii)	71	—	71
Other non-current financial assets	—	8	8
	405	1,243	1,648
Current assets			
Trade and other receivables, and contract-related assets	5	149	154
Inventories	17	14	31
Cash and cash equivalents	—	30	30
	22	193	215
Assets of disposal groups classified as held for sale	**427**	**1,436**	**1,863**
Current liabilities			
Trade and other payables, and contract-related liabilities	(61)	(129)	(190)
Current tax liabilities	(60)	(393)	(453)
Provisions for other liabilities and charges	(3)	(1)	(4)
Lease liabilities	—	(3)	(3)
	(124)	(526)	(650)
Non-current liabilities			
Deferred tax liabilities (ii)	140	(425)	(285)
Provisions for other liabilities and charges	(527)	(239)	(766)
Lease liabilities	—	(3)	(3)
	(387)	(667)	(1,054)
Liabilities of disposal groups classified as held for sale	**(511)**	**(1,193)**	**(1,704)**
Net (liabilities)/assets of disposal groups classified as held for sale	**(84)**	**243**	**159**
Consideration (payable)/receivable (net of transaction costs of £16 million)	**(126)**	**195**	**69**
Loss on disposal before recycling of foreign currency translation reserve	**(42)**	**(48)**	**(90)**
Recycling of foreign currency translation reserve on disposal			**(272)**
Loss on disposal before and after taxation			**(362)**

(i) The proposed divestment of the entire Norwegian portfolio, and attributing exploration and production goodwill of £408 million, resulted in an impairment of £198 million in 2021, before transfer of the remaining balance of £210 million to assets of disposal groups classified as held for sale.
(ii) Deferred tax assets of £71 million represents tax attributable to Statfjord UK, part of a UK tax group. Deferred tax liabilities are categorised between Statfjord Norway and the portfolio excluding Statfjord purely for presentation purposes.

The results of the disposal groups during 2022 reported in business performance are as follows:

	Statfjord £m	Norway portfolio excluding Statfjord £m	Total £m
Operating profit	142	416	558
Taxation on profit	(87)	(351)	(438)
Profit after taxation	**55**	**65**	**120**

Commodity derivatives previously entered into outside of the disposal group to hedge the future production of the disposal group assets have been volumetrically closed prior to the completion date. These derivatives have previously been recognised as a loss of £121 million within certain re-measurements. In accordance with the Group’s policy, these losses will not be subsequently reflected in the business performance column of the income statement because the underlying performance to which they relate (i.e. the asset production disposal group) will no longer occur. Cash flows associated with these derivatives will occur through to September 2023.

In the period to legal completion of 31 May 2022, £73 million pre-tax (£48 million post-tax) realised losses were recognised in business performance.

12. Acquisitions, disposals and disposal groups classified as held for sale

Breakdown of consideration:

	Statfjord £m	Norway portfolio excluding Statfjord £m	Total £m
December 2021 payment	—	39	39
May 2022 completion payment	(156)	278	122
2022 contingent consideration (including tax indemnity)	30	(106)	(76)
Total consideration	(126)	211	85
Less cost to dispose	—	(16)	(16)
	(126)	**195**	**69**

A reconciliation of the completion amounts received in 2022 to the cash flow statement is presented below:

	Statfjord £m	Norway portfolio excluding Statfjord £m	Total £m
May 2022 completion payment	(156)	278	122
2022 contingent consideration paid	4	(10)	(6)
Cash and cash equivalents included with disposal group	—	(30)	(30)
Disposal fees incurred	—	(16)	(16)
Cash flow statement	**(152)**	**222**	**70**

Additionally, within the Other segment the disposal of a minority investment made by the former Centrica Innovations business unit in Driivz (an electric vehicle charging software provider) has completed, with cash flow of £20 million received in the second half of the year.

All other disposals undertaken by the Group were immaterial, both individually and in aggregate. These amounted to a gain on disposal of £19 million, and cash inflow of £2 million.

13. Property, plant and equipment

PP&E includes significant investment in power stations, storage assets and gas and liquid production assets. Once operational, all assets are depreciated over their useful lives.

(a) Carrying amounts

	2022					2021				
	Land and buildings £m	Plant, equipment and vehicles £m	Power generation £m	Gas production and storage £m	Total £m	Land and buildings £m	Plant, equipment and vehicles £m	Power generation £m	Gas production and storage £m	Total £m
Cost										
1 January	259	575	205	11,339	**12,378**	303	576	843	15,296	17,018
Additions and capitalised borrowing costs	—	117	12	123	**252**	3	42	53	237	335
Disposals/retirements	(33)	(21)	(27)	(29)	**(110)**	(28)	(37)	(687)	(7)	(759)
Write-downs	—	—	—	(64)	**(64)**	—	—	—	—	—
Transfers	—	—	—	—	**—**	—	—	—	10	10
Transfers to disposal groups held for sale	—	—	—	—	**—**	(11)	(6)	—	(4,017)	(4,034)
Decommissioning liability and dilapidations revisions and additions (note 21)	1	—	—	67	**68**	2	—	—	(12)	(10)
Lease modifications and re-measurements	—	(7)	—	—	**(7)**	(8)	1	—	(2)	(9)
Exchange adjustments	8	27	9	81	**125**	(2)	(1)	(4)	(166)	(173)
31 December	**235**	**691**	**199**	**11,517**	**12,642**	259	575	205	11,339	12,378
Accumulated depreciation and impairment										
1 January	131	329	63	9,870	**10,393**	113	257	707	13,298	14,375
Charge for the year	22	81	15	392	**510**	27	83	18	452	580
Impairments/(write-backs)	4	(2)	(10)	20	**12**	8	1	8	(829)	(812)
Disposals/retirements	(28)	(19)	(25)	(29)	**(101)**	(9)	(23)	(666)	(5)	(703)
Transfers to disposal groups held for sale	—	—	—	—	**—**	(5)	(6)	—	(2,903)	(2,914)
Exchange adjustments	2	7	2	69	**80**	(3)	17	(4)	(143)	(133)
31 December	**131**	**396**	**45**	**10,322**	**10,894**	131	329	63	9,870	10,393
NBV at 31 December	**104**	**295**	**154**	**1,195**	**1,748**	128	246	142	1,469	1,985

13. Property, plant and equipment

(b) Assets in the course of construction included in above carrying amounts

31 December	2022 £m	2021 £m
Plant, equipment and vehicles	**33**	8
Gas production and storage	**61**	26
Power generation	**27**	11

(c) Additional information relating to right-of-use assets included in the above

	2022					2021				
	Land and buildings £m	Plant, equipment and vehicles £m	Power generation £m	Gas production and storage £m	Total £m	Land and buildings £m	Plant, equipment and vehicles £m	Power generation £m	Gas production and storage £m	Total £m
Additions	**—**	**54**	**—**	**—**	**54**	3	31	—	6	40
Depreciation charge for the year	**(21)**	**(66)**	**—**	**(12)**	**(99)**	(25)	(62)	(8)	(21)	(116)
NBV at 31 December [(i)]	**86**	**207**	**—**	**16**	**309**	106	208	—	28	342

(i) In 2022 £nil (2021: £5 million) of transfers to held for sale have taken place, in addition to other movements relating to right-of-use assets not disclosed individually.

Further information on the Group's leasing arrangements is provided in note 23.

14. Interests in joint ventures and associates

Investments in joint ventures and associates represent businesses where we exercise joint control or significant influence and generally have an equity holding of up to 50%. These include the investment in Lake Acquisitions Limited, which owns the existing EDF UK nuclear power station fleet.

(a) Interests in joint ventures and associates

	2022 Investments in joint ventures and associates £m	2021 Investments in joint ventures and associates £m
1 January	**1,628**	843
Additions (i)	**18**	—
Write-backs (ii)	**195**	747
Share of profit/(loss) for the year	**93**	(103)
Share of other comprehensive (loss)/income (iii)	**(293)**	152
Dividends	**(60)**	(2)
Disposals (iv)	**—**	(2)
Other movements	**(1)**	(7)
31 December	**1,580**	1,628

(i) The £18 million in 2022 relates to cash injections into Greener Ideas Limited.
(ii) The £195 million in 2022 relates to nuclear investment write-back (2021: £747 million). See note 7 for further details.
(iii) Share of other comprehensive (loss)/income mainly relates to actuarial changes on pension schemes within the nuclear investment.
(iv) In 2021, the Group sold its 50% equity stake in Barrow Shipping Limited.

(b) Share of joint ventures' and associates' assets and liabilities

31 December	2022 Associates Nuclear £m	2022 Other £m	2022 Total £m	2021 Total £m
Share of non-current assets	4,175	21	**4,196**	5,113
Share of current assets	842	—	**842**	706
	5,017	21	**5,038**	5,819
Share of current liabilities	(348)	—	**(348)**	(359)
Share of non-current liabilities	(2,612)	(1)	**(2,613)**	(3,140)
	(2,960)	(1)	**(2,961)**	(3,499)
Cumulative impairment	(497)	—	**(497)**	(692)
Interests in joint ventures and associates	**1,560**	**20**	**1,580**	1,628
Net cash included in share of net assets	112	—	**112**	50

Further information on the Group's investments in joint ventures and associates is provided in notes 6 and S10.

15. Other intangible assets and goodwill

The Group Balance Sheet contains significant intangible assets. Goodwill, customer relationships and brands usually arise when we acquire a business. Goodwill is attributable to enhanced geographical presence, cost savings, synergies, growth opportunities, the assembled workforce and also arises from items such as deferred tax. Goodwill is not amortised but is assessed for recoverability each year.

The Group uses European Union Allowances (EUAs) and Renewable Obligation Certificates/Renewable Energy Certificates (ROCs/RECs) to satisfy its related obligations.

Upstream exploration and evaluation expenditure is capitalised as an intangible asset until development of the asset commences, at which point it is transferred to PP&E or is deemed not commercially viable and is written down.

(a) Carrying amounts

	2022						2021					
	Customer relationships and brands £m	**Application software[(i)(ii)] £m**	**EUA/ ROC/ REC £m**	**Exploration and evaluation expenditure £m**	**Goodwill £m**	**Total £m**	Customer relationships and brands £m	Application software[(i)(ii)] £m	EUA/ ROC/ REC £m	Exploration and evaluation expenditure £m	Goodwill £m	Total £m
Cost												
1 January	**201**	**1,584**	**213**	**121**	**665**	**2,784**	203	1,752	208	352	1,651	4,166
Additions and capitalised borrowing costs	**—**	**44**	**799**	**—**	**—**	**843**	—	46	654	51	—	751
Acquisitions	**11**	**—**	**—**	**—**	**—**	**11**	13	—	—	—	—	13
Disposals/retirements and surrenders	**(9)**	**(129)**	**(732)**	**—**	**—**	**(870)**	(9)	(215)	(648)	(26)	—	(898)
Write-downs	**—**	**—**	**—**	**—**	**—**	**—**	—	—	—	(58)	—	(58)
Transfers	**—**	**—**	**—**	**—**	**—**	**—**	—	—	—	(10)	—	(10)
Transfers to disposal groups held for sale	**—**	**—**	**—**	**—**	**—**	**—**	—	—	—	(187)	(968)	(1,155)
Exchange adjustments	**5**	**11**	**—**	**—**	**15**	**31**	(6)	1	(1)	(1)	(18)	(25)
31 December	**208**	**1,510**	**280**	**121**	**680**	**2,799**	201	1,584	213	121	665	2,784
Accumulated amortisation												
1 January	95	1,143	—	121	264	1,623	91	1,166	—	247	722	2,226
Amortisation [(iii)]	17	142	—	—	—	159	13	175	—	—	—	188
Disposals/retirements and surrenders	(9)	(129)	—	—	—	(138)	(9)	(211)	—	—	—	(220)
Impairments	5	15	—	—	—	20	—	17	—	—	301	318
Transfers to disposal groups held for sale	—	—	—	—	—	—	—	—	—	(124)	(758)	(882)
Exchange adjustments	3	9	—	—	7	19	—	(4)	—	(2)	(1)	(7)
31 December	111	1,180	—	121	271	1,683	95	1,143	—	121	264	1,623
NBV at 31 December	97	330	280	—	409	1,116	106	441	213	—	401	1,161

(i) Application software includes assets under construction with a cost of £83 million (2021: £71 million).

(ii) The remaining amortisation period of individually material application software assets, which had a carrying value of £100 million (2021: £171 million), is between 0 and 4 years. Additionally, there is £61 million (2021: £43 million) of individually material software assets under construction.

(iii) Amortisation of £159 million (2021: £188 million) has been recognised in operating costs from continuing operations before exceptional items.

15. Other intangible assets and goodwill

(b) Carrying amount of goodwill and intangible assets with indefinite useful lives allocated to CGUs

Goodwill acquired through business combinations, and indefinite-lived intangible assets, have been allocated for impairment testing purposes to individual CGUs or groups of CGUs, each representing the lowest level within the Group at which the goodwill or indefinite-lived intangible asset is monitored for internal management purposes.

		2022			2021		
31 December	Principal acquisitions to which goodwill and intangibles with indefinite useful lives relate	Carrying amount of goodwill £m	Carrying amount of indefinite-lived intangible assets (i) £m	Total £m	Carrying amount of goodwill £m	Carrying amount of indefinite-lived intangible assets (i) £m	Total £m
CGUs							
British Gas Services & Solutions	AlertMe/Dyno-Rod	63	57	120	63	57	120
British Gas Energy	Enron Direct/Electricity Direct	121	–	121	121	–	121
Centrica Business Solutions							
– Energy solutions	ENER-G/Panoramic Power/REstore/SmartWatt	–	–	–	–	–	–
– Energy supply	Enron Direct/Electricity Direct	60	–	60	60	–	60
Bord Gáis Energy	Bord Gáis Energy	16	–	16	15	–	15
Energy Marketing & Trading	Neas Energy	149	–	149	142	–	142
Upstream	Newfield/Heimdal/Venture/Bayerngas	–	–	–	–	–	–
		409	57	466	401	57	458

(i) The indefinite-lived intangible assets relate mainly to the Dyno-Rod brand.

The Group has considered the impact of climate change on the carrying value of goodwill, including the impact of the risks and opportunities. See note 3(c).

16. Deferred tax liabilities and assets

Deferred tax is an accounting adjustment to provide for tax that is expected to arise in the future as a result of differences in the accounting and tax bases of assets and liabilities. The principal deferred tax assets and liabilities recognised by the Group relate to capital investments, decommissioning assets and provisions, tax losses, fair value movements on derivative financial instruments, PRT and pensions.

	Accelerated tax depreciation (corporation tax) £m	Net decommissioning (i) £m	Losses carried forward (ii) £m	Other timing differences £m	Marked to market positions £m	Net deferred PRT (iii) £m	Retirement benefit obligation and other provisions £m	Total £m
1 January 2021	(662)	876	136	72	(64)	125	4	487
(Charge)/credit to income	(383)	109	51	(36)	601	(83)	(30)	229
Credit/(charge) to equity	—	—	—	—	8	—	(90)	(82)
Transferred to held for sale	582	(428)	—	(6)	—	—	—	148
Exchange and other adjustments	5	(1)	—	1	—	—	—	5
31 December 2021	(458)	556	187	31	545	42	(116)	**787**
(Charge)/credit to income (iv)	(136)	(101)	29	(93)	1,160	(13)	1	**847**
Credit/(charge) to equity	—	—	—	—	8	—	(6)	**2**
Transferred within held for sale	—	—	—	70	—	—	—	**70**
Exchange and other adjustments	(1)	—	—	(4)	—	—	—	**(5)**
31 December 2022	**(595)**	**455**	**216**	**4**	**1,713**	**29**	**(121)**	**1,701**

(i) Net decommissioning includes deferred tax assets of £596 million (2021: £638 million) in respect of decommissioning provisions.

(ii) The losses arise principally from accelerated allowances for upstream investment expenditure, for which equivalent deferred tax liabilities are included under accelerated tax depreciation.

(iii) The deferred PRT amounts include the effect of deferred corporation tax as PRT is chargeable to corporation tax.

(iv) The increase in forecast commodity prices has enabled previously unrecognised exploration and production deferred assets to be recognised, and reduced recognised deferred tax assets. As a result a net credit of £121 million has been made to exceptional items and certain re-measurements (see note 7).

Certain deferred tax assets and liabilities have been offset where there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority.

	2022		2021	
31 December	**Assets £m**	**Liabilities £m**	Assets £m	Liabilities £m
Gross deferred tax balances	**2,481**	**(780)**	1,404	(617)
Offsetting deferred tax balances	**(772)**	**772**	(581)	581
Net deferred tax balances (after offsetting for financial reporting purposes)	**1,709**	**(8)**	823	(36)

Deferred tax assets arise typically on decommissioning provisions, trading losses carried forward, retirement benefit obligations and marked to market positions. Forecasts indicate that there will be suitable taxable profits to utilise those deferred tax assets not offset against deferred tax liabilities. Specific legislative provisions applicable to gas production provide assurance that deferred tax assets relating to decommissioning costs and certain trading losses will be utilised.

The UK upstream deferred tax assets and liabilities were measured at the headline rate of tax of 40% applicable to the UK gas profits, consisting of 30% ring fence corporation tax and 10% supplementary charge. Following the introduction of the additional 25% Energy Profits Levy on top of the existing 40% headline rate of tax on 26 May 2022, the UK upstream deferred tax assets and liabilities were re-measured at the rate of 65%.

In the Autumn Statement published on 22 November 2022, the UK Government increased the Energy Profits Levy from 25% to 35% with effect from 1 January 2023. Following substantive enactment on 30 November 2022, the UK upstream deferred tax balances at 31 December 2022 were re-measured at the rate of 75%. A net credit of £148 million has been recognised in exceptional items and certain re-measurements (see note 7) on the re-measurement of deferred tax balances as at 26 May 2022 and 31 December 2022. The net credit comprises a £325 million tax charge in respect of accelerated capital allowances and other timing differences offset by a tax credit of £473 million in respect of derivatives.

At the balance sheet date, the Group had certain £802 million (2021: £1,762 million) unrecognised deductible temporary differences related to carried forward tax losses available for utilisation against future taxable profits.

At the balance sheet date, no taxable temporary differences existed in respect of the Group's overseas investments (2021: £nil).

17. Trade and other receivables and contract-related assets

Trade and other receivables include accrued income, and are amounts owed by our customers for goods we have delivered or services we have provided. These balances are valued net of expected credit losses. Other receivables include payments made in advance to our suppliers. Contract-related assets are balances arising as a result of the Group's contracts with customers in the scope of IFRS 15.

	2022		2021	
31 December	Current £m	Non-current £m	Current £m	Non-current £m
Financial assets:				
Trade receivables	2,207	—	1,546	—
Unbilled downstream energy income	1,281	—	726	—
Trading and energy procurement accrued income (i)	3,179	—	2,546	—
Other accrued energy income	234	—	175	—
Other accrued income	90	—	108	—
Cash collateral posted	1,154	—	888	—
Supplier of Last Resort receivables	253	22	124	110
Government scheme receivables	284	—	—	—
Other receivables (including contract assets)	346	24	209	25
	9,028	46	6,322	135
Less: provision for credit losses	(872)	—	(633)	—
	8,156	46	5,689	135
Non-financial assets: prepayments, other receivables and costs to obtain or fulfil a contract with a customer	294	83	192	98
	8,450	129	5,881	233

(i) Trading and energy procurement counterparty receivables are typically with customers with external, published credit ratings. Such receivables have typically much lower credit risk than downstream counterparties, are settled in a short period of time and expected credit losses are not significant.

The amounts above include gross amounts receivable arising from the Group's IFRS 15 contracts with customers of £2,325 million (2021: £1,419 million). Additionally, accrued income of £1,371 million (2021: £797 million) arising under IFRS 15 contracts is included.

Trade and other receivables include financial assets representing the contractual right to receive cash or other financial assets from residential customers, business customers and treasury, trading and energy procurement counterparties as follows:

	2022		2021	
31 December	Current £m	Non-current £m	Current £m	Non-current £m
Financial assets by business type:				
Residential customers (i)	2,755	22	1,664	110
Business customers	1,750	22	1,019	21
Treasury, trading and energy procurement counterparties	4,523	2	3,639	4
	9,028	46	6,322	135
Less: provision for credit losses	(872)	—	(633)	—
	8,156	46	5,689	135

(i) Residential customers include current other receivables of £253 million (2021: £124 million) and non-current other receivables of £22 million (2021: £110 million) in relation to SoLR claims, see note 3(a) for further details.

17. Trade and other receivables and contract-related assets

Credit loss charge for trade and other receivables

The impairment charge in trade receivables is stated net of credits for the release of specific provisions made in previous years, which are no longer required. These relate primarily to residential and business customers in the UK. Movements in the provision for credit losses by business type are as follows:

	2022				2021			
	Residential customers £m	Business customers £m	Treasury, trading and energy procurement counterparties £m	**Total £m**	Residential customers £m	Business customers £m	Treasury, trading and energy procurement counterparties £m	Total £m
1 January	(426)	(207)	—	**(633)**	(400)	(187)	(4)	(591)
Increase in impairment of trade receivables (predominantly related to credit impaired trade receivables) (i) (ii) (iii)	(234)	(124)	—	**(358)**	(84)	(39)	—	(123)
Receivables written off (iv)	93	26		**119**	58	19	4	81
31 December	(567)	(305)	—	**(872)**	(426)	(207)	—	(633)

(i) Includes £348 million (2021: £107 million) of credit losses related to trade receivables resulting from contracts in the scope of IFRS 15.

(ii) All loss allowances reflect the lifetime expected credit losses on trade receivables and contract assets.

(iii) Excludes recovery of previously written-off receivables of £7 million (2021: £7 million). Due to the large number of individual receivables and the matrix approach employed, any reduction in provision is reflected in a reduced charge for the relevant period, rather than in separately identifiable reversals of previous provisions.

(iv) Materially all write-offs relate to trade receivables where enforcement activity is ongoing. The gross carrying value of write-offs related to trade receivables where enforcement activity is ongoing was £105 million (2021: £88 million).

Year ended 31 December	**2022 £m**	2021 £m
Increase in impairment provision for trade receivables (per above)	**(358)**	(123)
Less recovery of previously written-off receivables	**7**	7
Credit losses on financial assets (per Group Income Statement)	**(351)**	(116)

Enforcement activity continues in respect of balances that have been written off unless there are specific known circumstances (such as bankruptcy) that render further action futile.

17. Trade and other receivables and contract-related assets

Credit loss charge for trade and other receivables

Receivables from residential and business customers are generally considered to be credit impaired when the payment is past the contractual due date. The Group applies different definitions of default for different groups of customers, ranging from sixty days past the due date to six to twelve months from the issuance of a final bill. Receivables are generally written off only once a period of time has elapsed since the final bill. Contractual due dates range from falling due upon receipt to falling due in thirty days from receipt.

The table below shows credit impaired balances in gross receivables (those that are past due) and those that are not yet due and therefore not considered to be credit impaired.

Gross trade and other receivables

31 December	2022 £m	2021 £m (ii)
Balances that are not past due	**7,414**	5,155
Balances that are past due (i)	**1,614**	1,167
	9,028	6,322

(i) The majority of balances that are past due relate to residential and business customers, ageing of these receivables is included in the credit risk tables in the sections below.
(ii) The prior year has been re-presented to reclassify £123 million of balances that are past due to balances that are not past due.

The IFRS 9 impairment model is applicable to the Group's financial assets including trade receivables, contract assets and other financial assets using the simplified approach as described in note S3. As the majority of the relevant balances are trade receivables and contract assets to which the simplified model applies, this disclosure focuses on these balances.

The provision for credit losses for trade receivables and contract assets is based on an expected credit loss model that calculates the expected loss applicable to the receivable balance over its lifetime. Expected credit losses on receivables due from treasury, trading and energy procurement counterparties are not significant (see note S3 for further analysis of this determination). For residential and business customers default rates are calculated initially by considering historical loss experience and applied to trade receivables within a provision matrix. The matrix approach allows application of different default rates to different groups of customers with similar characteristics. These groups are determined by a number of factors including; the nature of the customer, the payment method selected and, where relevant, the sector in which they operate. The characteristics used to determine the groupings of receivables are the factors that have the greatest impact on the likelihood of default. The rate of default increases once the balance is thirty days past due.

Concentration of credit risk in trade and other receivables

Treasury, trading and energy procurement counterparty receivables are typically with customers with external, published credit ratings. Such receivables have typically much lower credit risk than downstream counterparties, and that risk is assessed primarily by reference to the credit ratings rather than to the ageing of the relevant balance. Counterparty credit rating information is given in note S3.

In 2021, the Group was appointed as a Supplier of Last Resort to a number of energy suppliers who have ceased to trade and one further appointment was made in January 2022. Under Ofgem licence conditions, the Group is entitled to make a Last Resort Supplier Payment claim for incremental costs reasonably incurred to supply affected customers; a total of £275 million (2021: £234 million) has been recognised in other receivables at 31 December 2022. This is being recovered as part of a two-step claim process. An initial levy claim, based on expected commodity costs, was submitted and approved by Ofgem in 2021, and is being settled in twelve monthly instalments ending in April 2023. A second claim, truing up the initial claim to reflect both actual costs incurred and customer credit balances was submitted to Ofgem and approved in December 2022. The second claim will be recovered between April 2023 and April 2024. The claims are settled by network operators, to whom the Group separately pays transmission and distribution charges. The risk of default is considered low. In addition, Ofgem has the power under licensing conditions to take enforcement action against default in accordance with its statutory duties and its enforcement guidelines.

The Group's cash collateral balance has increased to £1,154 million in 2022 (2021: £888 million) as a result of higher commodity prices. Collateral counterparties typically have strong credit ratings and accordingly have low credit risk; the Group does not expect credit losses to arise on these balances. See note S3.

The majority of the Group's credit exposure arises in the British Gas Energy and Centrica Business Solutions segments and relates to residential and business energy customers. The credit risk associated with these customers is assessed as described above, using a combination of the age of the receivable in question, internal ratings based on a customer's payment history, and external data from credit rating agencies and wider macroeconomic information. The disclosures below reflect the information that is reported internally for credit risk management purposes in these segments.

17. Trade and other receivables and contract-related assets

British Gas Energy credit risk

Of the Group total of £2,207 million (2021: £1,546 million) billed trade receivables, the British Gas Energy reporting segment contributes £1,531 million (2021: £1,033 million). British Gas Energy now includes small business customers on the basis that their profile closely matches those of residential customers. As described above, credit risk is concentrated in receivables from energy customers who pay in arrears. Gross receivables from British Gas Energy residential customers amount to £992 million (2021: £601 million) and are analysed below.

Trade receivables due from British Gas residential energy customers as at 31 December (i)	2022					2021				
Days beyond invoice date (ii)	<30 days £m	30-90 days £m	>90 days £m	**Total £m**	Percentage of credit risk	<30 days £m	30-90 days £m	>90 days £m	Total £m	Percentage of credit risk
Risk profile										
Direct debits (iii)										
Gross receivables	216	51	66	**333**		55	28	53	136	
Provision	—	—	(23)	**(23)**		—	—	(2)	(2)	
Net	216	51	43	**310**	**7%**	55	28	51	134	1%
Payment on receipt of bill (iii)										
Gross receivables	118	54	286	**458**		87	22	194	303	
Provision	(4)	(7)	(180)	**(191)**		(3)	(4)	(102)	(109)	
Net	114	47	106	**267**	**42%**	84	18	92	194	36%
Final bills (iv)										
Gross receivables	12	13	176	**201**		7	8	147	162	
Provision	(3)	(6)	(140)	**(149)**		(2)	(4)	(122)	(128)	
Net	9	7	36	**52**	**74%**	5	4	25	34	79%
Total net British Gas residential energy customers trade receivables	**339**	**105**	**185**	**629**	**37%**	144	50	168	362	40%

(i) The receivables information presented in this table relates to downstream customers who pay energy bills using the methods presented. It excludes low residual credit risk amounts, such as balances in the process of recovery through pay-as-you-go energy (PAYGE) arrangements and amounts receivable from PAYGE energy vendors. Gross amounts in the process of recovery through PAYGE arrangements at 31 December 2022 are £203 million (2021: £201 million), against which a provision of £138 million is held (2021: £136 million).

(ii) This ageing analysis is presented relative to invoicing date and presents receivables according to the oldest invoice outstanding with the customer. There are a range of payment terms extended to residential energy customers. Amounts paid on receipt of a bill (PORB), which are settled using bank transfers, cash or cheques are typically due within fourteen days of invoicing. Direct debit customers typically pay in equal instalments over a twelve-month period.

(iii) Receivables settled by direct debit are deemed to present a lower credit risk than PORB amounts. This is reflected in the relative level of provision held for these types of receivables.

(iv) Final bill customers are those who are no longer customers of the Group and have switched energy supplier. These balances are deemed to have the highest credit risk.

17. Trade and other receivables and contract-related assets

Gross receivables from British Gas Energy small business customers amount to £336 million (2021: £232 million) and are analysed below.

Trade receivables due from British Gas small business energy customers as at 31 December	2022					2021				
Days beyond invoice date (i)	<30 days £m	30-90 days £m	>90 days £m	**Total £m**	Percentage of credit risk	<30 days £m	30-90 days £m	>90 days £m	Total £m	Percentage of credit risk
Risk profile										
Small businesses										
Gross receivables	64	21	251	**336**		48	18	166	232	
Provision	(1)	(2)	(191)	**(194)**		—	(1)	(128)	(129)	
Total net British Gas small business energy customers trade receivables	**63**	**19**	**60**	**142**	**58%**	48	17	38	103	56%

(i) This ageing analysis is presented relative to invoicing date and presents receivables according to the oldest invoice outstanding with the customer. There are a range of payment terms extended to business energy customers. Average credit terms for small business customers are ten working days.

Unbilled downstream energy income at 31 December 2022 includes gross balances of £880 million in respect of British Gas energy customers (2021: £535 million), against which a provision of £36 million is held (2021: £21 million).

Centrica Business Solutions energy credit risk

Of the Group total of £2,207 million (2021: £1,546 million) billed trade receivables, the Centrica Business Solutions reporting segment contributes £390 million (2021: £299 million). As described above, credit risk is concentrated in receivables from business energy customers who pay in arrears, the remaining balances being immaterial in disaggregation. Gross receivables from these customers amount to £346 million (2021: £251 million) and are analysed below.

Trade receivables due from Centrica Business Solutions business energy customers as at 31 December	2022					2021				
Days beyond invoice date (i)	<30 days £m	30-90 days £m	>90 days £m	**Total £m**	Percentage of credit risk	<30 days £m	30-90 days £m	>90 days £m	Total £m	Percentage of credit risk
Risk profile										
Commercial and industrial (ii)										
Gross receivables	170	9	31	**210**		116	3	47	166	
Provision	—	—	(15)	**(15)**		—	—	(18)	(18)	
Net	170	9	16	**195**	**7%**	116	3	29	148	11%
Medium-sized entities (ME)										
Gross receivables	47	15	74	**136**		22	7	56	85	
Provision	—	—	(49)	**(49)**		—	—	(36)	(36)	
Net	47	15	25	**87**	**36%**	22	7	20	49	42%
Total net Centrica Business Solutions business energy customers trade receivables	**217**	**24**	**41**	**282**	**18%**	138	10	49	197	22%

(i) This ageing analysis is presented relative to invoicing date and presents receivables according to the oldest invoice outstanding with the customer. There are a range of payment terms extended to business energy customers. Average credit terms for ME customers are ten working days. Credit terms for Commercial and Industrial customers are bespoke and are set based on the commercial agreement with each customer.
(ii) This category includes low credit risk receivables, including those from public sector and customers with high turnover (greater than £100 million).

Unbilled downstream energy income at 31 December 2022 includes gross balances of £349 million in respect of Centrica Business Solutions business energy customers (2021: £193 million), against which a provision of £14 million is held (2021: £5 million).

The remaining reporting segments which are not shown above are not considered to have material credit risk.

17. Trade and other receivables and contract-related assets

Sensitivity to changes in assumptions

Typically, the most significant assumption included within the expected credit loss provisioning model that gives rise to estimation uncertainty is that future performance will be reflective of past performance and that there will be no significant change in the payment profile or recovery rates within each identified group of receivables. To address this risk, the Group reviews and updates default rates, by group, on a regular basis to ensure they incorporate the most up to date assumptions along with forward-looking information where available and relevant. The Group also considers regulatory changes and customer segment specific factors that may have an impact, now or in the future, on the recoverability of the balance.

The specific consideration of forward-looking information in the impairment model does not usually give rise to significant changes in the levels of credit losses. However, inflationary pressures and increasing wholesale gas and electricity costs continue to cause uncertainty in economic outlook. The economic recovery remains vulnerable and there remains a level of estimation uncertainty inherent in determining credit loss provisions for the Group's trade receivables.

Where customers experience difficulties in settling balances, the increased ageing of these amounts results in an increase in provisions held in respect of them under the provision matrix approach employed. The Group has also considered changes in customer payment patterns, the specific circumstances of the customers and the economic impacts of the factors identified above, on the sectors in which they operate. Whilst economic recovery is expected, a level of unpredictability remains apparent.

Customers are facing increases in their cost of living, including increased energy bills, higher inflation and higher interest rates. The Group has considered macroeconomic forecasts and sensitivities, as well as disposable income analysis from a credit rating agency, to model and determine the level of provisions for credit losses.

During 2022 the Group recognised impairment charges of £351 million (2021: £116 million) in respect of financial assets, representing 1.5% of Group revenue (2021: 0.8%) and 1.0% of Group revenue from business performance (2021: 0.6%). As described above, the majority of the Group's credit exposure arises in respect of downstream energy receivables in British Gas Energy and Centrica Business Services. Credit losses in respect of these assets amounted to £331 million (2021: £104 million). This represents 2.1% (2021: 1.1%) of total UK downstream energy supply revenue from these segments of £15,814 million (2021: £9,162 million). Further details of segmental revenue are provided in note 4.

Due to the different level of risks presented by billed and unbilled receivables, these asset groups are considered separately in the analysis below.

Billed trade receivables

	31 December 2022 £m	31 December 2021 £m
Trade receivables (i)	**2,207**	1,546
Provision	**(822)**	(607)
Net balance	**1,385**	939

	31 December 2022 %	31 December 2021 %
Provision coverage	**37**	39
Sensitivity	**£m**	£m
Impact on billed receivables/operating profit from 1 percentage point (increase)/decrease in provision coverage (ii)	**(22)/22**	(16)/16

(i) Excludes the Government receivables under the Energy Price Guarantee (EPG) and Energy Bill Relief Scheme (EBRS) schemes of £284 million (2021: £nil) which are not provided for.
(ii) Credit risk in the Group is impacted by a large number of interacting factors.

17. Trade and other receivables and contract-related assets

Cash collection relative to billing has marginally deteriorated throughout the second half of 2022, driven by higher customer billings and credit terms having a lagged impact on conversion. Despite overall billed debt levels increasing significantly, the recovery rates are not showing significant decline and provision rates for customers in the Group's downstream operations have fallen slightly. The drop in provision rates is driven by the mix of customer debt, including a higher proportion of direct debit debt and payment on receipt of bills debt in residential which are considered lower risk and attract a lower rate of bad debt provision.

The macroeconomic environment, however, remains challenging with higher inflation, higher interest rates, lower growth projections and more limited government support measures. There remains significant uncertainty around the possible increase in bad debt as a result of these factors. Also leading debt indicators including the number of new customers going into debt, insolvency volumes in business and direct debit cancellation rates in residential have deteriorated during 2022. High commodity prices and the delayed impact on customer payments (including the recent changes in the residential price cap levels), have not yet been fully reflected in the underlying matrix output model used to record provision coverage. Therefore, as part of management's assessment of adequacy of bad debt provisions, a £95 million increase to the macroeconomic provision has been recorded, the provision now totals £125 million across billed and unbilled debt and is included in the tables both above and below (2021: £30 million). Management considers the impact of specific cohorts of customers when making this assessment, recognising the different credit terms and different risk profiles that exist. This assessment also utilises a range of factors, both internal and external, historic and forward-looking, and considers the sensitivities of these to help management estimate the likely recovery of debt.

It remains uncertain as to when and how these factors will reduce the collectability of debt and at what scale. The impact of future changes in commodity prices and government intervention, including for the Energy Price Guarantee (EPG) and the Energy Bill Relief Scheme (EBRS), may also impact this. The table above and the unbilled section below provide details of the sensitivity of moving the debt provision by a further 1%.

The Group's services, upstream and trading operations are less susceptible to credit risk. No significant deterioration of credit risk has been experienced or is expected in the relevant segments in respect of billed trade receivables recognised at 31 December 2022, taking into account cash collection cycles in those areas of the Group and credit rating information (see note S3).

Unbilled downstream energy income

The table below shows the IFRS 15 unbilled downstream energy income for the Group as a whole.

	31 December 2022 £m	31 December 2021 £m
Gross unbilled receivables	1,281	726
Provision	(50)	(26)
Net balance	1,231	700

	31 December 2022 %	31 December 2021 %
Provision coverage	4	4
Sensitivity	£m	£m
Impact on unbilled receivables/operating profit from 1 percentage point (increase)/decrease in provision coverage (i)	(13)/13	(7)/7

(i) Credit risk in the Group is impacted by a large number of interacting factors.

Unbilled downstream energy income is typically provided at a significantly lower rate than billed debt. This is because a large proportion of this debt once billed will be subject to the very short cash collection cycles of the Group's downstream energy supply businesses.

18. Inventories

Inventories represent assets that we intend to use in future periods, either by selling the asset itself (for example gas in storage) or by using it to provide a service to a customer.

31 December	2022 £m	2021 £m
Gas in storage and transportation (i)	1,076	486
Other raw materials and consumables	114	99
Finished goods and goods for resale	79	59
	1,269	644

(i) Includes gas in storage held at fair value of £539 million (2021: £331 million).

The Group consumed £3,508 million of inventories (2021: £560 million) during the year. Write-downs amounting to £6 million (2021: £23 million) were charged to the Group Income Statement in the year. Reversals of write-downs amounted to £9 million (2021: £nil) during the year.

19. Derivative financial instruments

The Group generally uses derivative financial instruments to manage the risk arising from fluctuations in the value of certain assets or liabilities associated with treasury management and energy sales and procurement, and for proprietary energy trading purposes. The Group also uses derivatives to hedge exchange risk.

For accounting purposes, derivatives are either classified as held for trading, in which case changes in their fair value are recognised in the Group Income Statement, or they are designated in hedging relationships. Where derivatives are in hedging relationships, the treatment of changes in their fair value depends on the nature of that relationship, and whether it represents a fair value hedge, a cash flow hedge, or a net investment hedge. Note S5 provides further detail on the Group's hedge accounting. The table below gives a high-level summary of the Group's accounting for its derivative contracts.

Purpose	Classification	Accounting treatment
Proprietary energy trading and treasury management.	Held for trading and fair value hedges.	Changes in fair value recognised in the Group's business performance results for the year.
Treasury management and hedging of exchange risk on net assets of US dollar Direct Energy subsidiaries up to date of disposal in 2021.	Cash flow and net investment hedges.	Effective portion of hedge initially recognised in the Group Statement of Other Comprehensive Income. Gains and losses are recycled to the Group Income Statement when the hedged item impacts profit or loss. Ineffective portions of the hedge are recognised immediately in the Group's business performance results for the year.
Energy procurement and optimisation.	Held for trading.	Changes in fair value recognised in the Group's exceptional items and certain re-measurements results for the year.

The carrying values of derivative financial instruments by product type for accounting purposes are as follows:

31 December	2022 Assets £m	2022 Liabilities £m	2021 Assets £m	2021 Liabilities £m
Derivative financial instruments – held for trading under IFRS 9:				
Energy derivatives – for procurement/optimisation	**1,723**	**(5,400)**	3,611	(2,203)
Energy derivatives – for proprietary trading	**5,355**	**(4,256)**	3,775	(3,749)
Interest rate derivatives	**—**	**—**	4	—
Foreign exchange derivatives	**275**	**(268)**	60	(50)
Derivative financial instruments in hedge accounting relationships:				
Interest rate derivatives	**37**	**(221)**	67	—
Foreign exchange derivatives	**37**	**(6)**	33	(7)
Total derivative financial instruments	**7,427**	**(10,151)**	7,550	(6,009)
Included within:				
Derivative financial instruments – current	**6,034**	**(8,841)**	6,545	(4,929)
Derivative financial instruments – non-current	**1,393**	**(1,310)**	1,005	(1,080)

The contracts included within energy derivatives are subject to a wide range of detailed specific terms, but comprise the following general components, analysed on a net carrying value basis:

31 December	2022 £m	2021 £m
Short-term forward market purchases and sales of gas and electricity:		
UK and Europe	**(214)**	69
Other derivative contracts including structured gas sale and purchase arrangements	**(2,364)**	1,365
Net total	**(2,578)**	1,434

Net (losses)/gains on derivative financial instruments due to re-measurement

31 December	2022 Income Statement £m	2022 Equity £m	2021 Income Statement £m	2021 Equity £m
Financial assets and liabilities measured at fair value:				
Derivative financial instruments – held for trading	**(4,568)**	**—**	1,263	—
Derivative financial instruments in hedge accounting relationships	**(228)**	**(10)**	(95)	(42)
	(4,796)	**(10)**	1,168	(42)

20. Trade and other payables and contract liabilities

Trade and other payables include accruals and are principally amounts we owe to our suppliers. Financial deferred income represents monies received from customers in advance of the delivery of goods or services that may be returned to the customer if future delivery does not occur. For example, downstream customers with a credit balance may request repayment of the outstanding amount in cash, rather than taking delivery of commodity. By contrast, contract liabilities and non-financial deferred income arise when the Group receives consideration from a customer in advance of performance, and has a non-financial liability to deliver future goods or services in return.

	2022		2021	
31 December	Current £m	Non-current £m	Current £m	Non-current £m
Financial liabilities:				
Trade payables	(561)	(4)	(542)	(2)
Deferred income (i)	(538)	—	(281)	—
Capital payables	(158)	—	(85)	—
Cash collateral received	(601)	—	(1,185)	—
Other payables (ii)	(479)	(150)	(164)	(100)
Accruals:				
Commodity costs	(5,371)	—	(3,462)	—
Transportation, distribution and metering costs	(377)	—	(258)	—
Operating and other accruals	(845)	—	(775)	—
	(6,593)	—	(4,495)	—
	(8,930)	(154)	(6,752)	(102)
Non-financial liabilities:				
Other payables and accruals	(701)	(1)	(661)	(3)
Contract liabilities	(37)	(7)	(33)	(15)
Deferred income (iii)	(508)	(3)	(67)	—
	(10,176)	(165)	(7,513)	(120)

(i) Includes downstream customer credit balances for amounts billed in advance of energy supply.
(ii) Other payables includes share buyback liability of £207 million (2021: £nil).
(iii) Deferred income includes £440 million from the Energy Bill Support Scheme, expected to be applied to customer accounts in January 2023.

Maturity profile of financial liabilities within current trade and other payables

31 December	2022 £m	2021 £m
Less than 90 days	(8,543)	(6,531)
90 to 182 days	(217)	(134)
183 to 365 days	(170)	(87)
	(8,930)	(6,752)

21. Provisions for liabilities & charges

Provisions are recognised when an obligation exists that can be reliably measured, but where there is uncertainty over the timing and/or amount of the payment. The main provisions relate to decommissioning costs for upstream assets we own, or have owned, which require restoration or remediation, along with onerous supply contracts. Further provisions relate to restructuring costs, and legal and regulatory matters.

	1 January 2022 £m	Acquisitions and disposals £m	Charged in the year £m	Notional interest £m	Unused and reversed in the year £m	Utilised £m	Revisions and additions £m	Transfers (v) £m	Exchange adjustments £m	**31 December 2022 £m**
Current										
Restructuring costs	(29)	—	(3)	—	5	20	—	(7)	(1)	**(15)**
Decommissioning costs (i) (ii)	(149)	—	—	—	1	98	(14)	(151)	(1)	**(216)**
Onerous contracts provision (iii)	(2,535)	(215)	—	—	—	1,815	—	(2)	—	**(937)**
Other (iv)	(56)	—	(29)	—	9	37	2	(8)	—	**(45)**
Total	**(2,769)**	**(215)**	**(32)**	**—**	**15**	**1,970**	**(12)**	**(168)**	**(2)**	**(1,213)**

	1 January 2022 £m	Acquisitions and disposals £m	Charged in the year £m	Notional interest £m	Unused and reversed in the year £m	Revisions and additions £m	Transfers (v) £m	Exchange adjustments £m	**31 December 2022 £m**
Non-current									
Restructuring costs	(12)	—	—	—	—	—	7	—	**(5)**
Decommissioning costs (i) (ii)	(1,372)	—	(60)	—	42	(53)	151	(6)	**(1,298)**
Onerous contracts provision (iii)	(24)	(69)	(8)	—	—	—	2	—	**(99)**
Other (iv)	(46)	—	(6)	—	1	(3)	8	2	**(44)**
Total	**(1,454)**	**(69)**	**(74)**	**—**	**43**	**(56)**	**168**	**(4)**	**(1,446)**

Included within the above liabilities are the following financial liabilities:

	2022		2021	
31 December	**Current £m**	**Non-current £m**	Current £m	Non-current £m
Restructuring costs	**(15)**	**(5)**	(29)	(12)
Provisions other than restructuring costs	**(973)**	**(132)**	(2,580)	(57)
	(988)	**(137)**	(2,609)	(69)

(i) Provision has been made for the estimated net present cost of decommissioning gas production facilities at the end of their useful lives. The estimate has been based on 2P reserves, price levels and technology at the balance sheet date. The payment dates of decommissioning costs are dependent on the lives of the facilities, but utilisation of the provision is expected to occur until the 2040s. The maturity profile of total decommissioning provisions is analysed below:

Maturity profile of decommissioning provisions

31 December	**2022 £m**
2023-2027	**(559)**
2028-2032	**(795)**
2033-2037	**(146)**
2038-2042	**(9)**
2043-2047	**(5)**
	(1,514)

The rate used to discount decommissioning provisions is 1% (2021: 0%). See note 3.

(ii) Included in the provision balance as at 31 December 2022 is £1,174 million held in Spirit Energy, £324 million in relation to the Rough field, and £16 million in the remainder of the business.

(iii) Primarily includes the onerous supply contract provision of £999 million (2021: £2,530 million), including £284 million recognised upon acquisition of the AvantiGas customer book, see notes 3 and 12.

(iv) Other provisions have been made for dilapidations, insurance, legal, warranty and various other claims.

(v) Relates to amounts transferred between current and non-current provisions.

22. Post-retirement benefits

The Group manages a number of final salary and career average defined benefit pension schemes. It also has defined contribution schemes. The majority of these schemes are in the UK.

(a) Summary of main post-retirement benefit schemes

Name of scheme	Type of benefit	Status	Country	Number of active members as at 31 December 2022	Total membership as at 31 December 2022
Centrica Engineers	Defined benefit final salary pension	Closed to new members in 2006	UK	**1,615**	**8,433**
Pension Scheme	Defined benefit career average pension	Closed to new members in 2022	UK	**3,198**	**7,237**
Centrica Pension Plan	Defined benefit final salary pension	Closed to new members in 2003	UK	**1,471**	**8,441**
Centrica Pension Scheme	Defined benefit final salary pension	Closed to new members in 2003	UK	**1**	**10,197**
	Defined benefit career average pension	Closed to new members in 2008	UK	**750**	**4,191**
	Defined contribution pension	Open to new members	UK	**10,243**	**20,789**
Bord Gáis Energy Company Defined Benefit Pension Scheme	Defined benefit final salary pension	Closed to new members in 2014	Republic of Ireland	**94**	**170**
Bord Gáis Energy Company Defined Contribution Pension Plan	Defined contribution pension	Open to new members	Republic of Ireland	**270**	**392**

The Centrica Engineers Pension Scheme (CEPS), Centrica Pension Plan (CPP) and Centrica Pension Scheme (CPS) form the significant majority of the Group's defined benefit obligation and are referred to below as the 'Registered Pension Schemes'. The other schemes are individually, and in aggregate, immaterial.

Independent valuations

The Registered Pension Schemes are subject to independent valuations at least every three years, on the basis of which the qualified actuary certifies the rate of employer contributions, which together with the specified contributions payable by the employees and proceeds from the schemes' assets, are expected to be sufficient to fund the benefits payable under the schemes.

The latest full actuarial valuations agreed and finalised with the Pension Trustees were carried out at the following dates: the Registered Pension Schemes at 31 March 2021 and the Bord Gáis Energy Company Defined Benefit Pension Scheme at 1 January 2020. For the Registered Pension Schemes, the full actuarial valuation as at 31 March 2021 was agreed during the year. These valuations have been updated to 31 December 2022 for the purpose of meeting the requirements of IAS 19. Investments held in all schemes have been valued for this purpose at market value.

Governance

The Registered Pension Schemes are managed by trustee companies whose boards consist of both company-nominated and member-nominated Directors. Each scheme holds units in the Centrica Combined Common Investment Fund (CCCIF), which holds the majority of the combined assets of the Registered Pension Schemes. The board of the CCCIF is currently comprised of nine directors: three independent directors, three directors appointed by Centrica plc (including the Chairman) and one director appointed by each of the three Registered Pension Schemes.

Under the terms of the Pensions Act 2004, Centrica plc and each trustee board must agree the funding rate for its defined benefit pension scheme and a recovery plan to fund any deficit against the scheme-specific statutory funding objective. This approach was first adopted for the triennial valuations completed at 31 March 2006, and has been reflected in subsequent valuations, including the 31 March 2021 valuation.

22. Post-retirement benefits

(b) Risks

The Registered Pension Schemes expose the Group to the following risks:

Asset volatility

The pension liabilities are calculated using a discount rate set with reference to AA corporate bond yields. If the growth in plan assets is lower than this, this will create an actuarial loss within other equity. The CCCIF is responsible for managing the assets of each scheme in line with the risk tolerances that have been set by the trustees of the schemes, and invests in a diversified portfolio of assets. The schemes are relatively young in nature (the schemes' opened in 1997 on the formation of Centrica plc on demerger from BG plc (formerly British Gas plc)), and only took on past service liabilities in respect of active employees.

The trustees significantly reduced their tolerance to scheme valuation risk in 2019, increasing inflation and interest rate hedges from one third to two thirds, and further de-risked thereafter such that there was an 85% hedge level (in relation to assets) at 2021 year-end. This de-risking included the use of collateralised gilt holdings in the Schemes' Liability-Driven Investment (LDI) portfolio (shown in the Pension scheme asset table in section (f) of this note within Liability matching assets).

Throughout 2022 and in particular during September, there were significant increases and volatility in gilt yields. This led to a significant fall in the value of assets invested in the UK Registered Pension Schemes' Liability-Driven Investment (LDI) funds, thereby driving collateral calls and temporarily reducing the hedge position. All liquid credit mandates were placed into redemption with proceeds directed to the LDI portfolio to increase collateral and reduce leverage.

In October 2022, the Group agreed to provide the Schemes with a £400 million two-year revolving, unsecured, interest bearing credit facility, and a short-term £150 million loan. This money was immediately drawn down to purchase physical gilts to reduce the extent of interest rate and inflation risk. The short-term loan was repaid in December 2022 and the remaining £400 million credit facility is scheduled for repayment in 2024. At the 2022 year-end, the £400 million loan (together with unpaid interest) is recorded in Securities from a Centrica plc Group perspective and as a reduction to scheme assets for the UK Registered Pension Schemes.

At the 2022 year-end, the inflation and interest rate hedge level in relation to assets is around 92%. This has resulted in a reduction of return-seeking assets within the portfolio, as well as a higher weighting to assets that better manage downside risk.

Interest rate

A decrease in bond interest rates will increase the net present value of the pension liabilities. The relative immaturity of the schemes means that the duration of the liabilities is longer than average for typical UK pension schemes, resulting in a relatively higher exposure to interest rate risk. This risk is reduced via the hedging referred to in the Asset volatility section.

Inflation

Pensions in deferment, pensions in payment and pensions accrued under the career average schemes increase in line with the Retail Prices Index (RPI) and the Consumer Prices Index (CPI). Therefore, scheme liabilities will increase if inflation is higher than assumed, although in some cases caps are in place to limit the impact of significant movements in inflation. Furthermore, a pension increase exchange (PIE) option implemented in 2015 is available to future retirees, which gives the choice to receive a higher initial pension in return for giving up certain future increases linked to RPI, again limiting the impact of significant movements in inflation. Inflation risk is reduced via the hedging referred to in the Asset volatility section.

Longevity

The majority of the schemes' obligations are to provide benefits for the life of scheme members and their surviving spouses; therefore increases in life expectancy will result in an increase in the pension liabilities. The relative immaturity of the schemes means that there is comparatively little observable mortality data to assess the rates of mortality experienced by the schemes, and means that the schemes' liabilities will be paid over a long period of time, making it particularly difficult to predict the life expectancy of the current membership. Furthermore, pension payments are subject to inflationary increases, resulting in a higher sensitivity to changes in life expectancy.

Salary

Pension liabilities are calculated by reference to the future salaries of active members, and hence salary rises in excess of assumed increases will increase scheme liabilities. During 2011, changes were introduced to the final salary sections of CEPS and CPP such that annual increases in pensionable pay are capped to 2%, resulting in a reduction in salary risk. During 2016, a salary cap on pensionable pay for the CPS career average and CPP schemes was implemented, and in 2019 a similar change took place for CEPS. All of the 2011, 2016 and 2019 changes result in a reduction in salary risk.

Foreign exchange

Certain assets held by the CCCIF are denominated in foreign currencies, and hence their values are subject to exchange rate risk.

The CCCIF has long-term hedging policies in place to manage interest rate, inflation and foreign exchange risks.

The table below analyses the total liabilities of the Registered Pension Schemes, calculated in accordance with accounting principles, by type of liability, as at 31 December 2022.

22. Post-retirement benefits

Total liabilities of the Registered Pension Schemes

31 December	2022 %
Actives – final salary – capped	11
Actives – final salary – uncapped and crystallised benefits	5
Actives – career average	4
Deferred pensioners	38
Pensioners	42
	100

(c) Accounting assumptions

The accounting assumptions for the Registered Pension Schemes are given below:

Major assumptions used for the actuarial valuation

31 December	2022 %	2021 %
Rate of increase in employee earnings:		
Subject to 2% cap	1.5	1.8
Other not subject to cap	2.9	2.6
Rate of increase in pensions in payment	3.3	3.1
Rate of increase in deferred pensions:		
In line with CPI capped at 2.5%	2.5	2.4
In line with RPI	3.0	3.1
Discount rate	4.7	1.8

The assumptions relating to longevity underlying the pension liabilities at the balance sheet date have been based on a combination of standard actuarial mortality tables, scheme experience and other relevant data, and include an allowance for future improvements in mortality. The longevity assumptions for members in normal health are as follows:

Life expectancy at age 65 for a member

	2022		2021	
31 December	Male Years	Female Years	Male Years	Female Years
Currently aged 65	22.4	23.9	22.5	24.0
Currently aged 45	23.6	25.0	23.8	25.1

The other demographic assumptions have been set having regard to the latest trends in scheme experience and other relevant data. The assumptions are reviewed and updated as necessary as part of the periodic actuarial valuations of the pension schemes.

For the Registered Pension Schemes, marginal adjustments to the assumptions used to calculate the pension liability, or significant swings in bond yields or stock markets, can have a large impact in absolute terms on the net assets of the Group. Reasonably possible changes as at 31 December to one of the actuarial assumptions would have affected the scheme liabilities as set out below:

Impact of changing material assumptions

	2022		2021	
31 December	Increase/ decrease in assumption (i)	Indicative effect on scheme liabilities %	Increase/ decrease in assumption	Indicative effect on scheme liabilities %
Rate of increase in employee earnings subject to 2% cap	1.00%	+1/-2	0.25%	+/-0
Rate of increase in pensions in payment and deferred pensions	1.00%	+14/-12	0.25%	+/-4
Discount rate	1.00%	-15/+19	0.25%	-/+5
Inflation assumption	1.00%	+15/-12	0.25%	+/-5
Longevity assumption	1 year	+/-2	1 year	+/-4

(i) 1% has been used for sensitivity analysis this year as opposed to 0.25% in the prior year, due to the quantum of market rate movements during the year which mean it is considered that 1% is a more appropriate measure for 2022.

The indicative effects on scheme liabilities have been calculated by changing each assumption in isolation and assessing the impact on the liabilities. For the reasonably possible change in the inflation assumption, it has been assumed that a change to the inflation assumption would lead to corresponding changes in the assumed rates of increase in uncapped pensionable pay, pensions in payment and deferred pensions.

The remaining disclosures in this note cover all of the Group's defined benefit schemes.

22. Post-retirement benefits

(d) Amounts included in the Group Balance Sheet

31 December	2022 £m	2021 £m
Fair value of plan assets	**6,312**	10,666
Present value of defined benefit obligation	**(6,272)**	(10,666)
Recognised in the Group Balance Sheet	**40**	—
Presented in the Group Balance Sheet as:		
Retirement benefit assets	**150**	231
Retirement benefit liabilities	**(110)**	(231)

The Trust Deed and Rules for the Registered Pension Schemes provide the Group with a right to a refund of surplus assets assuming the full settlement of scheme liabilities. No asset ceiling restrictions have been applied in the consolidated Financial Statements.

(e) Movements in the year

	2022		2021	
	Pension liabilities £m	Pension assets £m	Pension liabilities £m	Pension assets £m
1 January	**(10,666)**	**10,666**	(10,671)	10,070
Items included in the Group Income Statement:				
Current service cost	**(84)**	**—**	(85)	—
Contributions by employer in respect of employee salary sacrifice arrangements [(i)]	**(21)**	**—**	(20)	—
Total current service cost	**(105)**	**—**	(105)	—
Past service credit	**—**	**—**	1	—
Interest (expense)/income	**(193)**	**196**	(155)	150
Termination benefit	**4**	**—**	52	—
Items included in the Group Statement of Comprehensive Income:				
Returns on plan assets, excluding interest income	**—**	**(4,559)**	—	301
Actuarial gain/(loss) from changes to demographic assumptions	**34**	**—**	(12)	—
Actuarial gain from changes in financial assumptions	**4,803**	**—**	123	—
Actuarial loss from experience adjustments	**(425)**	**—**	(194)	—
Items included in the Group Cash Flow Statement:				
Employer contributions	**—**	**264**	—	420
Contributions by employer in respect of employee salary sacrifice arrangements	**—**	**21**	—	20
Other movements:				
Benefits paid from schemes	**278**	**(278)**	297	(297)
Other	**(2)**	**2**	(2)	2
31 December	**(6,272)**	**6,312**	(10,666)	10,666

(i) A salary sacrifice arrangement was introduced on 1 April 2013 for pension scheme members. The contributions paid via the salary sacrifice arrangement have been treated as employer contributions and included within the current service cost, with a corresponding reduction in salary costs.

In addition to current service cost on the Group's defined benefit pension schemes, the Group also charged £66 million (2021: £61 million) to operating profit in respect of defined contribution pension schemes. This included contributions of £20 million (2021: £15 million) paid via a salary sacrifice arrangement.

22. Post-retirement benefits

(f) Pension scheme assets

The market values of plan assets were:

	2022			2021		
31 December	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	**19**	**486**	**505**	20	462	482
Corporate bonds	**24**	**—**	**24**	2,393	31	2,424
High-yield debt	**106**	**1,331**	**1,437**	2,720	1,197	3,917
Liability matching assets	**2,835**	**1,343**	**4,178**	1,963	1,356	3,319
Property	**—**	**366**	**366**	—	439	439
Cash pending investment	**205**	**—**	**205**	85	—	85
Loan and interest	**—**	**(403)**	**(403)**	—	—	—
	3,189	**3,123**	**6,312**	7,181	3,485	10,666

Unquoted private equity, liability matching assets and debt funds are valued at fair value as calculated by the investment manager at the latest valuation date in accordance with generally accepted guidelines, adjusted for cash flow in the intervening period. Investment properties are valued in accordance with guidelines by independent valuers. These valuations are reviewed annually as part of the CCCIF audit and receive greater scrutiny now that unquoted assets make up a greater proportion of the scheme portfolio. Included within equities are £nil of ordinary shares of Centrica plc (2021: £nil) via pooled funds that include a benchmark allocation to UK equities. Included within corporate bonds are £nil (2021: £nil) of bonds issued by Centrica plc, albeit minor exposure may be held within pooled funds over which the CCCIF has no ability to direct investment decisions. Apart from the investment in the Scottish Limited Partnerships which form part of the asset-backed contribution arrangements described in section (g) of this note, no direct investments are made in securities issued by Centrica plc or any of its subsidiaries or property leased to or owned by Centrica plc or any of its subsidiaries. The corporate bond, high-yield debt and liability matching asset categories headings above have segregated portfolio mandates which include the cash, cash funds and derivatives associated with the mandates.

At 31 December 2021 the aggregate gilts portfolio, the quoted element of the Liability matching assets line, was approximately 3 times leveraged (1 times being unleveraged). At 31 December 2022 the aggregate gilts portfolio was significantly less exposed to collateral movements, at approximately 1.3 times leveraged.

Included within the Group Balance Sheet within non-current securities are £95 million (2021: £111 million) of investments, held in trust on behalf of the Group, as security in respect of the Centrica Unfunded Pension Scheme. Of the pension scheme liabilities above, £49 million (2021: £66 million) relate to this scheme. More information on the Centrica Unapproved Pension Scheme is included in the Remuneration Report on pages 84 to 103.

(g) Pension scheme contributions

The Group estimates that it will pay £54 million of ordinary employer contributions during 2023 for its defined benefit schemes, at an average rate of 21% of pensionable pay, together with £26 million of contributions paid via a salary sacrifice arrangement.

For the Registered Pension Schemes the last actuarial valuation, agreed during the year with the Pension Trustees, was as at 31 March 2021. As at that date, the weighted average duration of the liabilities of the Registered Pension Schemes was 22 years and the technical provisions deficit (funding basis) was £944 million. The Group committed to additional annual cash contributions to fund this pension deficit. The overall deficit contributions, including the previously disclosed asset-backed contribution arrangements, totalled £175 million in 2021 (of which £99 million was after 31 March 2021), and £204 million in 2022; and will amount to £175 million per annum from 2023 to 2025, with a balancing payment of £127 million in 2026. Separately, a pension strain payment of £10 million associated with employee redundancies was also contributed in 2022 (2021: £193 million).

On a pure roll-forward basis, from 31 March 2021, using the same methodology and consequent assumptions, the technical provisions deficit (funding basis) would be c.£850 million on 31 December 2022. Note that the valuation methodology and assumptions used for future assessments may differ from those previously used.

In previous years, the Registered Pension Schemes also held a security package over the Group's equity shareholding in the Direct Energy business, amounting to £1,235 million, enforceable in the unlikely event the Group was unable to meet its obligations. In January 2021, as part of the Direct Energy disposal, this security package was released by the Pension Trustees. In exchange, the Group provided replacement security of £745 million of letters of credit and £250 million cash in escrow.

In October 2022, as part of the £400 million loan arrangement from Centrica plc to the Registered Pension Schemes (described in part (b) above), this security was reduced by £545 million, so that only £450 million of letters of credit remained at the year-end. When this loan is repaid, replacement security may be required (dependent on the funding position) and the form of security will be at the Group's discretion.

23. Leases, commitments and contingencies

(a) Commitments and leases

Commitments are not held on the Group's Balance Sheet as these are executory arrangements, and relate to amounts that we are contractually required to pay in the future as long as the other party meets its contractual obligations.

The Group's commitments in relation to commodity purchase contracts disclosed below are stated net of amounts receivable under commodity sales contracts where there is a right of offset with the counterparty, and are based on the expected minimum quantities of gas and other commodities that the Group is contracted to buy at estimated future prices.

The commitments in this note differ in scope and in basis from the maturity analysis of energy derivatives disclosed in note S3, as only certain procurement and sales contracts are within the scope of IFRS 9 and included in note S3 and the volumes used in calculating the maturity analysis in note S3 are estimated using valuation techniques, rather than being based on minimum contractual quantities.

The Group's 20-year agreement with Cheniere to purchase 89bcf per annum of LNG volumes for export from the Sabine Pass liquefaction plant in the US commits the Group to capacity payments of £3.6 billion (included in 'LNG capacity' below) between 2022 and 2039. It also allows the Group to make up to £6.0 billion of commodity purchases based on market gas prices and foreign exchange rates as at the balance sheet date.

During 2019, the Group signed a 20-year agreement to purchase LNG volumes from Mozambique LNG1 Company. The commercial start date is 2025 and under this agreement the Group is committed to make commodity purchases expected to amount to £8.0 billion based on market gas and oil prices at the reporting date.

These LNG contracts are deemed to be own use and therefore are accounted for on an accruals basis. Based on forecast gas spreads, they are predicted to be profitable but due to their duration are exposed over a long period of time to the impact of climate change governmental policy decisions.

The Group has numerous renewable power purchase arrangements where renewable obligation certificates are purchased as power is produced. This gives rise to the commitments below.

31 December	2022 £m	2021 £m
Commitments in relation to the acquisition of PP&E	**75**	255
Commitments in relation to the acquisition of intangible assets:		
Renewable obligation certificates	**3,642**	3,289
Other intangible assets	**194**	250
Other commitments:		
Commodity purchase contracts	**69,824**	44,443
LNG capacity	**3,894**	3,892
Transportation capacity	**320**	292
Other long-term commitments (i)	**459**	526

(i) Other long-term commitments include amounts in respect of executory contracts and the smart meter roll-out programme.

The maturity analysis for commodity purchase contract commitments at 31 December is given below:

	Commodity purchase contract commitments			
	Fixed price commodity commitments		Commodity commitments that float with indices	
31 December	2022 £billion	2021 £billion	2022 £billion	2021 £billion
<1 year	**13.0**	6.8	**15.4**	9.2
1–2 years	**2.3**	1.5	**10.9**	7.3
2–3 years	**0.9**	0.3	**7.5**	4.4
3–4 years	**0.1**	0.1	**2.3**	3.1
4–5 years	**—**	—	**1.8**	1.3
>5 years	**0.1**	—	**15.5**	10.4
	16.4	8.7	**53.4**	35.7

23. Leases, commitments and contingencies

The Group enters into lease arrangements for assets including property, vehicles, vessels and assets used within the exploration and production business.

The carrying amount, additions and depreciation charge associated with right-of-use assets is disclosed in note 13 and the interest expense arising on the Group's lease liability is disclosed in note 8. The total Group cash outflow in the year for capital and interest from lease arrangements was £107 million (2021: £203 million), and the maturity analysis of cash flows associated with the Group's lease liability at the reporting date is shown in note S3.

The table below provides further information on amounts not included in the lease liability and charged to the Group Income Statement during the year.

Year ended 31 December	2022 £m	2021 £m
Expense related to short-term leases	82	9
Expense related to variable lease payments	9	26

During the year, the Group's expense related to short-term lease commitments predominantly related to the hire of LNG vessels and exploration and production drilling rigs. The commitment at the balance sheet date also relates to assets of a similar nature. The Group has £17 million operating sub-lease arrangements mainly for LNG vessels. The Group does not have any material arrangements in which it acts as a lessor.

(b) Guarantees and indemnities

This section discloses any guarantees and indemnities that the Group has given, where we may have to provide security in the future against existing and future obligations that will remain for a specific period.

In connection with the Group's energy trading, transportation and upstream activities, certain Group companies have entered into contracts under which they may be required to prepay, provide credit support or provide other collateral in the event of a significant deterioration in creditworthiness. The extent of credit support is contingent upon the balance owing to the third party at the point of deterioration.

As at 31 December 2022, £84 million (2021: £525 million) of letters of credit and on-demand payment bonds have been issued in respect of decommissioning obligations included in the Group Balance Sheet. The reduction is predominantly as a result of the disposal of the Norwegian and Statfjord fields - see note 12.

(c) Contingent liabilities

The Group has no material contingent liabilities.

24. Sources of finance

(a) Capital structure

The Group seeks to maintain an efficient capital structure with a balance of adjusted net cash and equity as shown in the table below:

31 December	2022 £m	2021 £m
Adjusted net cash	**(1,199)**	(680)
Shareholders' equity	**1,017**	2,365
Capital	**(182)**	1,685

Debt levels are restricted to limit the risk of financial distress and, in particular, to maintain a strong credit profile. The Group's credit standing is important for several reasons: to maintain a low cost of debt, limit collateral requirements in energy trading, hedging and decommissioning security arrangements, and to ensure the Group is an attractive counterparty to energy producers and long-term customers.

The Group monitors its current and projected capital position on a regular basis, considering a medium-term view of at least three years, and different stress case scenarios, including the impact of changes in the Group's credit ratings and significant movements in commodity prices. A number of financial ratios are monitored, including those used by the credit rating agencies.

The level of debt that can be raised by the Group is restricted by the Company's Articles of Association. Borrowing is limited to the higher of £10 billion and a gearing ratio of three times Shareholder's equity. The Group funds its long-term debt requirements through issuing bonds in the capital markets and taking bank debt. Short-term debt requirements are met primarily through commercial paper or short-term bank borrowings. The Group maintains substantial committed facilities and uses these to provide liquidity for general corporate purposes, including short-term business requirements and back-up for commercial paper.

British Gas Insurance Limited (BGIL) is required to hold a minimum capital amount under PRA regulations and has complied with this requirement since its inception. BGIL's capital management policy and plan are subject to review and approval by the BGIL board. Reporting processes provide relevant and timely capital information to management and the board. A medium-term capital management plan forms part of BGIL's planning and forecasting process, embedded into approved timelines, management reviews and board approvals.

The Group's January 2023 trading update noted that the 2022 closing net cash position was expected to be above £1 billion and the Group's final net position is £1,199 million at the year-end.

24. Sources of finance

(b) Liquidity risk management and going concern

The Group has a number of treasury and risk policies to monitor and manage liquidity risk. Cash forecasts identifying the Group's liquidity requirements are produced regularly and are stress tested for different scenarios, including, but not limited to, reasonably possible increases or decreases in commodity prices and the potential cash implications of a credit rating downgrade. The Group seeks to ensure that sufficient financial headroom exists for at least a 12-month period to safeguard the Group's ability to continue as a going concern, and as at the reporting date, the analysis performed by the Group extends to 31 December 2024. It is the Group's policy to maintain committed facilities and/or available surplus cash resources of at least £1,200 million, raise at least 75% of its gross debt (excluding non-recourse debt) in the capital market and to maintain an average term to maturity in the recourse long-term debt portfolio greater than five years.

In response to the extremely volatile commodity market conditions witnessed during 2022, the Group proactively increased the level of committed credit bank facilities to ensure additional liquidity was available, if required, as the business entered the winter period.

At 31 December 2022 the Group had undrawn committed credit facilities of £3,951 million (2021: £3,006 million) and £3,687 million (2021: £3,875 million) of unrestricted cash and cash equivalents, net of outstanding overdrafts. 82% (2021: 89%) of the Group's gross debt has been raised in the long-term debt market and the average term to maturity of the long-term debt portfolio was 9.9 years (2021: 10.9 years). The completion of the disposal of the Direct Energy business on 5 January 2021 led to a cash receipt of $3.6 billion (£2.7 billion), significantly improving the Group's adjusted net debt position.

The Group's liquidity is impacted by the cash posted or received under margin and collateral agreements. The terms and conditions of these agreements depend on the counterparty and the specific details of the transaction. Margin/collateral is generally posted or received to support energy trading and procurement activities. It is posted when contracts with marginable counterparties are out of the money and received when contracts are in the money. Cash is generally returned to the Group or by the Group within two days of trade settlement. At 31 December 2022 the collateral position was as follows:

31 December	2022 £m	2021 £m
Collateral (received)/posted included within:		
Trade and other payables	**(601)**	(1,185)
Trade and other receivables	**1,154**	888
Collateral posted/(received) extinguishing:		
Net derivative liabilities/(assets) (i)	**270**	(114)
Net collateral posted/(received) (ii)	**823**	(411)

(i) Variation margin on daily settled derivatives results in the extinguishment of the net derivative asset/liability. These contracts remain outstanding until a future delivery date, and therefore the cumulative daily settlement is considered collateral until that fulfilment date.
(ii) In-year movements of net collateral posted/(received) include exchange adjustments of £61 million (2021: £4 million).

Commodity prices were very volatile throughout 2022. During the year, the peak month-end net collateral posted (i.e. outflow) was in August and amounted to £1.9 billion. The Group utilises initial margin waiver facilities to help manage its liquidity and working capital position in relation to derivative trading. For certain types of trade, initial margin is a requirement before entering into a transaction, as it provides credit assurance for the exchange. As initial margin is not a liability of the Group and is refundable, it is reflected as a margin asset on the Group's balance sheet. Accordingly, where counterparties waive any requirement to post initial margin, the Group has no liability.

The level of undrawn committed bank facilities and available cash resources has enabled the Directors to conclude that the Group has sufficient headroom to continue as a going concern. The statement of going concern is included in the Governance section – Other Statutory Information, on page 106.

24. Sources of finance

(c) Adjusted net cash/(debt) summary

Adjusted net cash/(debt) predominantly includes capital market borrowings offset by cash, securities and certain hedging financial instruments used to manage interest rate and foreign exchange movements on borrowings.

Presented in the derivatives and current and non-current borrowings, leases and interest accruals columns shown below are the assets and liabilities that give rise to financing cash flows.

				Other assets and liabilities			
	Current and non-current borrowings, leases and interest accruals £m	Derivatives £m	Gross debt £m	Cash and cash equivalents, net of bank overdrafts (i) (ii) £m	Current and non-current securities (iii) £m	Sub-lease assets £m	Adjusted net (debt)/ cash £m
Group adjusted net debt at 1 January 2021	(4,877)	346	(4,531)	1,393	138	2	(2,998)
Disposal of business (iv)	36	—	36	(132)	(4)	—	(100)
Cash outflow from settlement and purchase of securities	—	—	—	(3)	3	—	—
Cash outflow for payment of capital element of leases	162	—	162	(162)	—	—	—
Cash outflow for repayment of borrowings (vi)	650	(106)	544	(544)	—	—	—
Remaining cash inflow	—	—	—	4,010	—	—	4,010
Revaluation	122	(133)	(11)	—	19	—	8
Financing interest paid	206	(14)	192	(233)	—	—	(41)
Increase in interest payable and amortisation of borrowings	(195)	—	(195)	—	—	—	(195)
New lease agreements and re-measurement of existing lease liabilities	(28)	—	(28)	—	—	—	(28)
Exchange adjustments	25	—	25	(1)	—	—	24
Group adjusted net (debt)/cash at 31 December 2021 (iv)	(3,899)	93	(3,806)	4,328	156	2	680
Disposal of business (iv)	6	—	6	(30)	(21)	—	(45)
Net cash outflow from net purchase of securities	—	—	—	(398)	398	—	—
Cash outflow for payment of capital element of leases	103	—	103	(103)	—	—	—
Cash outflow for repayment of borrowings (vi)	1,482	—	1,482	(1,482)	—	—	—
Cash inflow from short term borrowings (vi)	(1,220)	—	(1,220)	1,220	—	—	—
Remaining cash inflow (iv) (v)	—	—	—	796	—	—	796
Revaluation/interest receivable on securities	240	(238)	2	—	(11)	—	(9)
Financing interest paid	179	(8)	171	(172)	—	—	(1)
Increase in interest payable and amortisation of borrowings	(181)	—	(181)	—	—	—	(181)
New lease agreements and re-measurement of existing lease liabilities	(42)	—	(42)	—	—	—	(42)
Exchange adjustments	(85)	—	(85)	83	3	—	1
Group adjusted net (debt)/cash at 31 December 2022	**(3,417)**	**(153)**	**(3,570)**	**4,242**	**525**	**2**	**1,199**

(i) Cash and cash equivalents includes £555 million (2021: £435 million) of restricted cash, of which £440 million relates to cash received from the Energy Bill Support Scheme. This includes cash totalling £6 million (2021: £31 million) within the Spirit Energy business that is not restricted by regulation but is managed by Spirit Energy's own treasury department.

(ii) Cash and cash equivalents are net of £600 million bank overdrafts (2021: £750 million).

(iii) Securities balances includes £403 million of loans to the pension schemes, measured at amortised cost, £67 million (2021: £83 million) other debt instruments and £55 million (2021: £52 million) equity instruments, both measured at fair value. See note 22 for further details on pension loans provided.

(iv) Group adjusted net cash at 31 December 2021 includes £6 million of lease liabilities and £18 million of cash and cash equivalents held for sale related to the Norwegian disposal group, and current and non-current securities includes £21 million related to the Driivz business held for sale at that date. Disposal of business in 2022 represents the disposal of these items as part of the sale of these businesses, and the cash received for the sale is shown as part of remaining cash inflow. Disposal of business in 2021 relates to the adjusted net cash items disposed of with the sale of Direct Energy in January 2021.

(v) Remaining cash inflow includes financing cash outflows of £59 million relating to equity dividends paid (see note 9), £273 million of distributions to non-controlling interests (see note 12) and £43 million related to the share buyback programme. There is a liability of £207 million recognised at 31 December 2022 related to this programme. See note S4 for further details.

(vi) Bond repayment comprises the scheduled £36 million repayment of a 3.68% HKD bond repaid on 22 February 2022, and £246 million repayment of a 6.375% GBP bond repaid on 10 March 2022. During August 2022 the Group borrowed £1,200 million, which was repaid in September 2022. During December 2022 short-term borrowing of £20 million was obtained. See note 24(b) for collateral volatility. Bond repayment in 2021 comprises £650 million repayment of a 3% Euro bond which the Group had the right to repay at par on 10 April 2021 net of £106 million foreign exchange gain on the associated Euro bond derivative.

(d) Borrowings, leases and interest accruals summary

31 December	Coupon rate %	Principal m	2022 Current £m	2022 Non-current £m	2022 Total £m	2021 Current £m	2021 Non-current £m	2021 Total £m
Bank overdrafts			**(600)**	**—**	**(600)**	(750)	—	(750)
Bank loans (> 5 year maturity)			**—**	**(143)**	**(143)**	—	(137)	(137)
Other borrowings			**(20)**	**—**	**(20)**	—	—	—
Bonds (by maturity date):								
22 February 2022	3.680	HK$450	**—**	**—**	**—**	(43)	—	(43)
10 March 2022	6.375	£246	**—**	**—**	**—**	(241)	—	(241)
16 October 2023 (i)	4.000	US$302	**(246)**	**—**	**(246)**	—	(228)	(228)
4 September 2026 (i)	6.400	£52	**—**	**(49)**	**(49)**	—	(55)	(55)
16 April 2027	5.900	US$70	**—**	**(58)**	**(58)**	—	(51)	(51)
13 March 2029 (i)	4.375	£552	**—**	**(471)**	**(471)**	—	(559)	(559)
5 January 2032 (ii)	Zero	€50	**—**	**(69)**	**(69)**	—	(63)	(63)
19 September 2033 (i)	7.000	£770	**—**	**(684)**	**(684)**	—	(788)	(788)
16 October 2043	5.375	US$367	**—**	**(299)**	**(299)**	—	(267)	(267)
12 September 2044	4.250	£550	**—**	**(539)**	**(539)**	—	(538)	(538)
25 September 2045	5.250	US$50	**—**	**(41)**	**(41)**	—	(36)	(36)
10 April 2075 (i) (iii)	5.250	£450	**—**	**(418)**	**(418)**	—	(455)	(455)
			(246)	**(2,628)**	**(2,874)**	(284)	(3,040)	(3,324)
Obligations under lease arrangements			**(88)**	**(237)**	**(325)**	(102)	(262)	(364)
Interest accruals			**(55)**	**—**	**(55)**	(68)	—	(68)
			(1,009)	**(3,008)**	**(4,017)**	(1,204)	(3,439)	(4,643)

(i) Bonds or portions of bonds maturing in 2023, 2026, 2029, 2033 and 2075 have been designated in a fair value hedge relationship. See note S5 for details of hedge relationships.

(ii) €50 million of zero coupon notes have an accrual yield of 4.2%, which will result in a €114 million repayment on maturity.

(iii) The Group has the right to repay at par on 10 April 2025 and every interest payment date thereafter.

25. Share capital

Ordinary share capital represents the total number of shares issued which are publicly traded. We also disclose the number of own and treasury shares the Company holds, which the Company has bought, principally as part of share repurchase programmes.

Allotted and fully paid share capital of the Company

31 December	2022 £m	2021 £m
5,907,846,138 ordinary shares of $6^{14/81}$ pence each (2021: 5,881,438,431)	**365**	363

During the year 26 million ordinary shares were issued at an average original purchase price of 70.8 pence for employee share awards.

The closing price of one Centrica ordinary share on 31 December 2022 was 96.5 pence (2021: 71.5 pence). Centrica employee share ownership trusts purchase Centrica ordinary shares from the open market and receive treasury shares to satisfy future obligations of certain employee share schemes. The movements in own and treasury shares during the year are shown below:

	Own shares (i)		Treasury shares (i)	
	2022 million shares	2021 million shares	**2022 million shares**	2021 million shares
1 January	**33.8**	59.6	**–**	–
Shares purchased	**6.5**	–	**–**	–
Shares issued and placed into trust	**8.4**	–	**–**	–
Shares released to employees on vesting	**(18.3)**	(25.8)	**–**	–
Share buyback programme (ii)	**–**	–	**45.7**	–
31 December (i)	**30.4**	33.8	**45.7**	–

(i) Own shares are shares held in trusts to meet employee share awards. Treasury shares are shares that have been purchased from the open market and have not been cancelled. The closing balance in the treasury and own share reserve of own shares was £20 million (2021: £18 million) and treasury shares was £43 million (2021: £nil).

(ii) See Note S4 for further details of the share buyback programme.

26. Events after the balance sheet date

The Group updates disclosures in light of new information being received, or a significant event occurring, in the period between 31 December 2022 and the date of this report.

The Directors propose a final dividend of 2.00 pence per ordinary share (totalling £118 million) for the year ended 31 December 2022. The dividend will be submitted for formal approval at the Annual General Meeting to be held on 13 June 2023 and, subject to approval will be paid on 20 July 2023 to those shareholders on the register at 9 June 2023.

The Group also announced an intention to extend the existing share buyback programme of £250 million by an additional £300 million.

Supplementary Information

Supplementary information includes additional information and disclosures we are required to make by accounting standards or regulation.

S1. General information

Centrica plc (the 'Company') is a public company limited by shares, domiciled and incorporated in the UK, and registered in England and Wales. The address of the registered office is Millstream, Maidenhead Road, Windsor, Berkshire, SL4 5GD. The Company, together with its subsidiaries comprise the 'Group'. The nature of the Group's operations and principal activities are set out in note 4(a) and on pages 1 to 54.

The consolidated Financial Statements of Centrica plc are presented in pounds sterling. Operations and transactions conducted in currencies other than pounds sterling are included in the consolidated Financial Statements in accordance with the foreign currencies accounting policy set out in note S2.

S2. Summary of significant accounting policies

This section sets out the Group's significant accounting policies in addition to the critical accounting policies applied in the preparation of these consolidated Financial Statements. Unless otherwise stated, these accounting policies have been consistently applied to the years presented.

Basis of consolidation

The Group Financial Statements consolidate the Financial Statements of the Company and entities controlled by the Company. Subsidiaries are all entities (including structured entities) over which the Group has control. Control is exercised over an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases. Transactions with non-controlling interests that relate to their ownership interests and do not result in a loss of control are accounted for as equity transactions.

The results of subsidiaries acquired or disposed of during the year are consolidated from the effective date of acquisition (at which point the Group gains control over a business as defined by IFRS 3, and applies the acquisition method to account for the transaction as a business combination) or up to the effective date of disposal, as appropriate. Where necessary, adjustments are made to the financial statements of subsidiaries, associates and joint ventures to align the accounting policies with those used by the Group.

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value with the change in carrying amount recognised in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as a joint venture, associate or financial asset.

Segmental reporting

The Group's operating segments are reported in a manner consistent with the internal reporting provided to and regularly reviewed by the Group's Executive Committee (which is the Group's Chief Operating Decision Maker as defined by IFRS 8: 'Operating segments') for the purposes of evaluating segment performance and allocating resources.

Revenue

Energy supply to business and residential customers

The vast majority of contractual energy supply arrangements have no fixed duration, and require no minimum consumption by the customer. No enforceable rights and obligations exist at inception of the contract and arise only once the cooling off period is complete and the Group is the legal supplier of energy to the customer. The performance obligation is the supply of energy over the contractual term; the units of supply represent a series of distinct goods that are substantially the same with the same pattern of transfer to the customer. The performance obligation is considered to be satisfied as the customer consumes based on the units of energy delivered. This is the point at which revenue is recognised. In respect of energy supply contracts, the Group considers that it has the right to consideration from the customer for an amount that corresponds directly with the invoiced value delivered to the customer through their consumption. The Group's assessment of the amount that it has a right to invoice includes an assessment of energy supplied to customers between the date of the last meter reading and the year end (known as unread revenue). Unread gas and electricity comprises both billed and unbilled revenue and is estimated through the billing systems, using historical consumption patterns, on a customer-by-customer basis, taking into account weather patterns, load forecasts and the differences between actual meter readings being returned and system estimates. Actual meter readings continue to be compared to system estimates between the balance sheet date and the finalisation of the accounts.

The Group holds a number of energy supply contracts that specify a minimum consumption volume over a specified contractual term. The transaction price for these contracts is the minimum supply volume multiplied by the contractually agreed price per unit of energy. Revenue from the sale of additional volumes is considered to be variable and not included in the transaction price. Revenue for these contracts continues to be recognised as invoiced.

In making disclosures under IFRS 15, the Group applies the practical expedient in paragraph 121 of IFRS 15 and therefore does not disclose information related to the transaction price allocated to remaining performance obligations on the basis that the Group recognises revenue from the satisfaction of the performance obligations within energy supply contracts in accordance with Paragraph B16.

S2. Summary of significant accounting policies

Energy services provided to business and residential customers

Energy services relate to the installation, repair and maintenance of central heating, ventilation and air conditioning systems.

In the UK, delivery of an item is considered a separate performance obligation to the installation of the item, both satisfied at a point in time. Delivery is the point at which control passes to the customer as the customer takes physical possession of the asset. It is also the point at which the Group has the right to consideration. Delivery and installation usually occur at the same point in time and consequently revenue is recognised for both performance obligations simultaneously.

Sales of LNG

Revenue arising from sales of LNG is recognised when control of the commodity passes to the counterparty, with each cargo representing a separate performance obligation satisfied at a point in time.

Sales of own gas and liquid production

Revenue arising from the sale of produced gas is recognised in a manner consistent with energy supply contracts with the revenue recognition profile reflecting the supply of gas to the customer.

The rights and obligations identifiable within a contract where the Group holds sellers' nomination rights are considered to be enforceable from inception of the contract. The transaction price for the contract will include variable consideration based on forecast production and market prices. The point at which the performance obligation is satisfied and revenue recognised is the point at which control of the commodity passes to the customer according to the contractual trading terms, usually on shipment or delivery to a specified location.

Energy sales to trading and energy procurement counterparties

Revenue arising from the sale of energy procured from generation asset owners to trading and energy procurement counterparties is also recognised in a manner consistent with energy supply contracts. There is a single performance obligation being the supply of energy over the contractual term at spot prices and revenue is recognised at the point at which energy is supplied to the counterparty in accordance with the contractual terms.

Revenue arising from contracts outside the scope of IFRS 15

Revenue from sources other than the Group's contracts with customers is recognised in accordance with the relevant standard, as detailed below:

Fixed-fee service and insurance contracts: revenue from these contracts is recognised in the Group Income Statement with regard to the incidence of risk over the life of the contract, reflecting the seasonal propensity of claims to be made under the contracts and the benefits receivable by the customer, which span the life of the contract as a result of emergency maintenance being available throughout the contract term.

Power generation: revenue is recognised under IFRS 9 where contracts to supply power are measured at fair value.

Cost of sales

Energy supply includes the cost of gas and electricity produced and purchased during the year for own-use contracts, taking into account the industry reconciliation process for total gas and total electricity usage by supplier and related transportation, distribution, royalty costs and bought-in materials and services.

Cost of sales relating to fixed-fee service and insurance contracts includes direct labour and related overheads on installation work, repairs and service contracts in the year.

Cost of sales relating to gas production includes depreciation of assets used in production of gas, royalty costs and direct labour costs.

Cost of sales within power generation businesses includes the depreciation of assets included in generating power, fuel purchase costs, direct labour costs and carbon emissions costs.

Re-measurement and settlement of energy contracts

Re-measurement and settlement of energy contracts includes both realised (settled) commodity sales and purchase contracts in the scope of IFRS 9, as well as unrealised (fair value changes) on active contracts, as detailed further in note 2.

Financing costs

Financing costs that arise in connection with the acquisition, construction or production of a qualifying asset are capitalised and subsequently amortised in line with the depreciation of the related asset. Financing costs not arising in connection with the acquisition, construction or production of a qualifying asset are expensed.

S2. Summary of significant accounting policies

Foreign currencies

The consolidated Financial Statements are presented in pounds sterling, the functional currency of the Company and the Group's presentational currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Transactions in foreign currencies are initially recorded in the functional currency of the entity at the exchange rate ruling at the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies are retranslated to the functional currency of the relevant entity at the rate of exchange ruling at the balance sheet date and exchange movements included in the Group Income Statement for the period.

Non-monetary items that are measured at historical cost in a currency other than the functional currency of the entity concerned are translated using the exchange rate prevailing at the dates of the initial transaction.

For the purpose of presenting consolidated Financial Statements, the assets and liabilities of the Group's non-sterling functional currency subsidiary undertakings, joint ventures and associates are translated into pounds sterling at exchange rates prevailing at the balance sheet date. The monthly results of these (generally foreign) subsidiary undertakings, joint ventures and associates are translated into pounds sterling each month at the average rates of exchange for that month. The closing exchange rates, and the average of the rates used to translate the results of foreign operations to pounds sterling are shown below.

	Closing rate at 31 December		Average rate for the year ended 31 December	
Exchange rate per pounds sterling (£)	**2022**	2021	**2022**	2021
US dollars	**1.20**	1.35	**1.24**	1.37
Canadian dollars	**1.63**	1.71	**1.61**	1.72
Euro	**1.14**	1.19	**1.17**	1.16
Norwegian krone	**11.89**	11.93	**11.84**	11.85
Danish krone	**8.51**	8.85	**8.73**	8.65

Exchange adjustments arising from the retranslation of the opening net assets and results of non-sterling functional currency operations are transferred to the Group's foreign currency translation reserve, a separate component of equity, and are reported in other comprehensive income. In the event of the disposal of a non-sterling functional currency subsidiary, the cumulative translation difference arising in the foreign currency translation reserve is charged or credited to the Group Income Statement on disposal. Where the Group utilises net investment hedging, changes in the fair value of the hedging instrument are recognised in equity and remain there until the disposal of the specific, related investments, at which point the gains and losses are recycled to profit or loss. The Group previously employed net investment hedging but ceased in 2009, with historic hedging gains and losses remaining in equity until the disposal of the related investment. During 2020 the Group recommenced net investment hedging in respect of the US dollar functional currency subsidiaries in its Direct Energy business up until the date of disposal in January 2021.

Employee share schemes

The Group operates a number of employee share schemes, detailed in the Remuneration Report on pages 84 to 86, under which it makes equity-settled share-based payments to certain employees. Equity-settled share-based payments are measured at fair value at the date of grant (excluding the effect of non-market-based vesting conditions). The fair value determined at the grant date is expensed on a straight-line basis together with a corresponding increase in equity over the vesting period, based on the Group's estimate of the number of awards that will vest, and adjusted for the effect of non-market-based vesting conditions.

The majority of the share-based payment charge arises from the Annual Incentive Plan. This scheme is applicable to senior executives, and senior and middle management. Shares issued under the scheme vest subject to continued employment within the Group in two stages (half after two years and the other half after three years). Employees leaving prior to the vesting date will normally forfeit their rights to unvested share awards. The fair value of the awards is measured using the market value at the date of grant.

More information is included in the Remuneration Report on pages 84 to 86.

Share buyback programme

On 10th November 2022, the Group announced an intention to undertake a share buyback of £250 million, expected to complete by 31 May 2023. The Group entered into contracts with third parties to undertake this repurchase programme and, as at 31 December 2022, £43 million of shares had been purchased. The Group has recognised a financial liability on the basis that the terms and conditions of the contracts mean that, as at the year-end, it was unable to cancel the remaining obligation during the period to the Group's Preliminary Announcement on 16 February 2023. Accordingly, the Group has recorded a financial liability of £207 million for this remaining obligation, in accordance with IFRS 9: 'Financial Instruments'.

S2. Summary of significant accounting policies

Business combinations and goodwill

The acquisition of subsidiaries is accounted for using the acquisition method (at the point the Group gains control over a business as defined by IFRS 3). The cost of the acquisition is measured as the cash paid and the aggregate of the fair values, at the date of exchange, of other assets transferred, liabilities incurred or assumed, and equity instruments issued by the Group in exchange for control of the acquiree. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement at the acquisition date.

Acquisition-related costs are expensed as incurred. The identifiable assets, liabilities and contingent liabilities are recognised at their fair value at the acquisition date, except for non-current assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5. The Group recognises any non-controlling interests in the acquiree either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets.

Goodwill arising on a business combination represents the excess of the consideration transferred, the amount of the non-controlling interests and the acquisition date fair value of any previously held interest in the acquiree over the Group's interest in the fair value of the identifiable net assets acquired. Goodwill arising on the acquisition of a stake in a joint venture or an associate represents the excess of the consideration transferred over the Group's interest in the fair value of the identifiable assets and liabilities of the investee at the date of acquisition. Goodwill is initially recognised as an asset at cost and is subsequently measured at cost less any accumulated impairment losses. The goodwill arising on an investment in a joint venture or in an associate is not recognised separately, but is shown under 'Interests in joint ventures and associates' in the Group Balance Sheet. If, after reassessment, the Group's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities exceeds the cost of the business combination, the excess is recognised immediately in the Group Income Statement.

Acquisitions of joint operations that meet the definition of a business as defined in IFRS 3 are accounted for as business combinations.

On disposal of a subsidiary, associate or joint venture entity, any amount of goodwill attributed to that entity is included in the determination of the profit or loss on disposal. A similar accounting treatment is applied on disposal of assets that represent a business.

Other intangible assets

Intangible assets acquired separately are measured on initial recognition at cost.

Capitalisation begins when expenditure for the asset is being incurred and activities necessary to prepare the asset for use are in progress and ceases when substantially all the activities that are necessary to prepare the asset for use are complete. Amortisation commences at the point of commercial deployment. The cost of intangible assets acquired in a business combination is their fair value as at the date of acquisition.

Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses. Intangible assets with finite lives are amortised over their useful lives and are tested for impairment, as part of the CGU to which they relate where necessary, annually and whenever there is an indication that the asset could be impaired. The amortisation period and method for an intangible asset are reviewed at each financial year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for on a prospective basis by changing the amortisation period or method, as appropriate, and treated as changes in accounting estimates.

Intangible assets are derecognised on disposal, or when no future economic benefits are expected from their use.

Intangible assets with indefinite useful lives are not amortised but tested for impairment annually, and whenever there is an indication that the intangible asset could be impaired, either individually or at the CGU level. The indefinite life assessment is reviewed annually and, if not supportable, the change in the useful life assessment from indefinite to finite is made on a prospective basis.

The useful economic lives for the principal categories of intangible assets are as follows:

Customer relationships and other contractual assets	Up to 20 years
Strategic identifiable acquired brands	Indefinite
Application software	Up to 15 years

Strategic identifiable acquired brands are deemed to have indefinite lives where evidence suggests that the brand will generate net cash inflows for the Group for an indefinite period.

Cloud computing arrangements

The Group has a number of contracts for Software as a Service (SaaS) and Platform as a Service (PaaS) Cloud Computing Arrangements. These contracts permit the Group to access vendor-hosted software and platform services over the term of the arrangement. The Group does not control the underlying assets in these arrangements and costs are expensed as incurred.

The Group also incurs implementation costs in respect of these contracts. Implementation costs are capitalised as intangible assets where costs meet the definition and recognition criteria of an intangible asset under IAS 38. Such costs typically relate to software coding which is capable of providing benefit to the Group on a standalone basis. Other implementation costs, primarily relating to the configuration and customisation of the Cloud software solution, are assessed to determine whether the implementation activity relating to these costs is distinct from the Cloud Arrangement, in which case costs are expensed as the activity occurs. If the configuration and customisation costs relate to activity which is integral to the Cloud Arrangement such that the activity is received over the term of the Cloud Arrangement, costs are recognised as a prepayment and expensed over the term of the Cloud Arrangement.

S2. Summary of significant accounting policies

UK & EU Emissions Trading Scheme

Purchased carbon dioxide emissions allowances are recognised initially at cost (purchase price) within intangible assets. The liability is measured at the cost of purchased allowances up to the level of purchased allowances held, and then at the market price of allowances ruling at the balance sheet date, with movements in the liability recognised in operating profit.

Forward contracts for the purchase or sale of carbon dioxide emissions allowances are measured at fair value with gains and losses arising from changes in fair value recognised in the Group Income Statement. The intangible asset is surrendered and the liability is extinguished at the end of the compliance period. No amortisation is charged up to the date of surrender as the cost and residual value of the intangible asset are deemed to be the same with no consumption of economic benefit.

Renewable certificates

The Group purchases renewable certificates both on a standalone basis, and through Power Purchase Agreements. The main types of renewable certificates acquired are Renewable Energy Guarantees of Origin (REGOs) which are certificates issued by Ofgem certifying that electricity has been produced from renewable sources, Renewable Obligation Certificates (ROCs) which are issued to accredited generators for the eligible renewable electricity they generate and Guarantees of Origin (GoOs) which are the EU equivalent of REGOs. The Group uses renewable certificates to meet its obligations under a number of Ofgem schemes, namely the Feed-in Tariff (FIT), the Contracts for Difference (CFD), the Fuel Mix Disclosure (FMD) and the Renewables Obligation (RO) scheme.

Purchased renewable certificates are recognised initially at cost within intangible assets as an indefinite life asset. A liability for the RO is recognised based on the level of electricity supplied to customers, and is calculated in accordance with percentages set by the UK Government and the renewable obligation certificate buyout price for that period.

The intangible asset is surrendered and the liability is extinguished at the end of the compliance period to reflect the consumption of economic benefits. Any recycling benefit related to the submission of renewable obligation certificates is recognised in the Group Income Statement when received. The Group also recognises supplier obligations for CFD and FIT schemes; renewable certificates are used to offset these liabilities.

Cash flows relating to renewable obligation certificates and similar schemes are recognised within cash flows from operating activities.

Exploration, evaluation, development and production assets

The Group uses the successful efforts method of accounting for exploration and evaluation expenditure. Exploration and evaluation expenditures associated with an exploration well, including acquisition costs related to exploration and evaluation activities are capitalised initially as intangible assets. Certain expenditures such as geological and geophysical exploration costs are expensed. If the prospects are subsequently determined to be successful on completion of evaluation, the relevant expenditure is transferred to PP&E. If the prospects are subsequently determined to be unsuccessful, the associated costs are expensed in the period in which that determination is made.

All field development costs are capitalised as PP&E. Such costs relate to the acquisition and installation of production facilities and include development drilling costs, project-related engineering and other technical services costs. PP&E, including rights and concessions related to production activities, is depreciated from the commencement of production in the fields concerned, using the unit of production method, based on all of the 2P reserves of those fields. Changes in these estimates are dealt with prospectively.

The net carrying value of fields in production and development is compared annually on a field-by-field basis with the likely discounted future net revenues to be derived from the remaining commercial reserves. An impairment loss is recognised where it is considered that recorded amounts are unlikely to be fully recovered from the net present value of future net revenues. Exploration assets are reviewed annually for indicators of impairment and production and development assets are tested annually for impairment.

Interests in joint arrangements and associates

The Group's joint ventures and associates (as defined in note 6) are accounted for using the equity method.

The Group's interests in joint operations (gas exploration and production licence arrangements) are accounted for by recognising its assets (including its share of assets held jointly), its liabilities (including its share of liabilities incurred jointly), its revenue from the sale of its share of the output arising from the joint operation, its share of the revenue from the sale of the output by the joint operation and its expenses (including its share of any expenses incurred jointly).

Where the Group has an equity stake or a participating interest in operations governed by a joint arrangement for which it is acting as operator, an assessment is carried out to confirm whether the Group is acting as agent or principal. As the terms and conditions negotiated between business partners usually provide joint control to the parties over the relevant activities of the gas fields that are governed by joint arrangements, the Group is usually deemed to be an agent when it is appointed as operator and not as principal as the contracts entered into presents gross liabilities and gross receivables of joint operations (including amounts due to or from non-operating partners) in the Group Balance Sheet in accordance with the netting rules of IAS 32: 'Financial instruments – presentation'.

Property, plant and equipment

PP&E is included in the Group Balance Sheet at cost, less accumulated depreciation and any provisions for impairment.

Subsequent expenditure in respect of items of PP&E, such as the replacement of major parts, major inspections or overhauls, are capitalised as part of the cost of the related asset where it is probable that future economic benefits will arise as a result of the expenditure and the cost can be reliably measured. All other subsequent expenditure is expensed as incurred.

S2. Summary of significant accounting policies

Freehold land is not depreciated. Other PP&E, with the exception of upstream production assets (see above), are depreciated on a straight-line basis at rates sufficient to write off the cost, less estimated residual values, of individual assets over their estimated useful lives. The depreciation periods for the principal categories of assets are as follows:

Freehold and leasehold buildings	Up to 50 years
Plant	5 to 20 years
Equipment and vehicles	3 to 10 years
Power generation assets	Up to 30 years

The carrying values of PP&E are tested annually for impairment and are reviewed for impairment when events or changes in circumstances indicate that the carrying value may not be recoverable. Residual values and useful lives are reassessed annually and, if necessary, changes are accounted for prospectively.

Impairment assumptions

The Group tests the carrying amounts of goodwill, PP&E and intangible assets (with the exception of exploration assets) for impairment at least annually. Interests in joint ventures and associates and exploration assets are reviewed annually for indicators of impairment and tested for impairment where such an indicator arises. Where an asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the CGU to which the asset belongs. The recoverable amount is the higher of value in use (VIU) and fair value less costs of disposal (FVLCD).

At inception, goodwill is allocated to each of the Group's CGUs or groups of CGUs that expect to benefit from the business combination in which the goodwill arose. If the recoverable amount of an asset (or CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or CGU) is reduced to its recoverable amount. Any impairment is expensed immediately in the Group Income Statement. Any CGU impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the CGU and then to the other assets of the CGU pro rata on the basis of the carrying amount of each asset in the CGU.

Further information on the assumptions used in the VIU calculations and FVLCD calculations that resulted in impairment or impairment reversals during the year can be found at note 7.

VIU – Key assumptions used

Pre-tax cash flows used in the VIU calculations are derived from the Group's Board-approved business plans, and assumptions specific to the nature and life of the asset. The Group's business plans and assumptions are based on past experience and adjusted to reflect market trends, economic conditions and key risks. Commodity prices used in the planning process are based in part on observable market data and in part on estimates. Note S6 provides additional detail on the active period of each of the commodity markets in which the Group operates.

(a) VIU – Growth rates and discount rates

Unless stated otherwise in the table below, cash flows beyond the planned period have been extrapolated using long-term growth rates in the market where the CGU operates. Long-term growth rates are determined using a blend of publicly available historical data and long-term growth rate forecasts published by external analysts. Cash flows are discounted using a discount rate specific to each CGU. Discount rates reflect the current market assessments of the time value of money and are based on the estimated cost of capital of each CGU. Additionally, risks specific to the cash flows of the CGUs are reflected within cash flow forecasts. Each CGU's weighted average cost of capital is then adjusted to reflect the impact of tax in order to calculate an equivalent pre-tax discount rate.

Long-term growth rates and pre-tax discount rates used in the VIU calculations for each of the Group's CGUs are shown below.

2022	**British Gas Services & Solutions %**	**British Gas Energy %**	**Centrica Business Solutions Energy Supply %**	**Bord Gáis Energy %**	**Centrica Business Solutions (turbines/ engines/ battery/solar) (i) %**	**Energy Marketing & Trading %**	**Nuclear (i) %**
Growth rate to perpetuity (including inflation)	**2.0**	**2.0**	**2.0**	**1.9**	**N/A**	**2.0**	**N/A**
Pre-tax discount rate	**9.3**	**10.0**	**11.3**	**8.1**	**9.3/8.0 (ii)**	**11.3**	**24.8**

2021	British Gas Services & Solutions %	British Gas Energy %	Centrica Business Solutions Energy Supply %	Bord Gáis Energy %	Centrica Business Solutions (turbines/ engines/ battery/solar) (i) %	Energy Marketing & Trading %	Nuclear (i) %
Growth rate to perpetuity (including inflation)	2.0	2.0	2.0	1.5	N/A	2.0	N/A
Pre-tax discount rate	8.0	8.0	8.7	7.1	6.7/5.3 (ii)	8.7	14.7

(i) Cash flows arising after the plan period have been derived from forecasts to the end of the asset lives. Due to the nature of these finite-lived assets this provides a more appropriate valuation in later years.

(ii) Battery and solar discount rates respectively.

S2. Summary of significant accounting policies

(b) VIU – Inflation rates

Inflation rates used in the business plan were based on a blend of publicly available inflation forecasts and range from 1.9% to 9.6%.

(c) Key operating assumptions by CGUs using VIU

The key operating assumptions across all CGUs are gross margin, revenues and operating costs. These assumptions are tailored to the specific CGU using management's knowledge of the environment, as shown in the table below:

CGU	Gross margin	Revenues	Operating costs
All – base assumptions	Existing customers: based on contractual terms. Losses are forecast based on historic data and future expectations of the market. New customers and renewals: based on gross margins achieved in the period leading up to the date of the business plan. Both adjusted for current market conditions and cost of goods inflation. For the Services business, future sales and related gross margins are based on planned future product sales and contract losses based upon past performance and future expectations of the competitive environment.	Existing customers: based on contractual terms. Losses are forecast based on historic data and future expectations of the market. Adjusted for: growth forecasts which are based on sales and marketing activity, recent customer acquisitions and the current economic environment in the relevant geography. Gas and electricity revenues based on forward market prices. Market share: percentage immediately prior to business plan.	Wages: projected headcount in line with expected efficiency programme. Salary increases based on inflation expectations. Credit losses: historical assumptions regarding realised cash losses have been updated to reflect the current environment.
Energy Marketing & Trading	Existing and new markets: management's estimate of future trading performance.	As above.	Future development: increase in costs to support growth forecasts, adjusted for planned business process efficiencies.
Centrica Business Solutions (turbines/ engines/battery/solar)	Based on forecast revenues, operations and maintenance costs, grid network and balancing system charges for the asset life.	Based on forward and contracted prices for commodity, capacity market and grid ancillary service contracts for the asset life.	Based on run-rate and forecast changes, including expected inflation for the asset life.

Overlift and underlift

Off-take arrangements for gas produced from joint operations are often such that it is not practical for each participant to receive or sell its precise share of the overall production during the period. This results in short-term imbalances between cumulative production entitlement and cumulative sales, referred to as overlift and underlift.

An overlift payable, or underlift receivable, is recognised at the balance sheet date within trade and other payables or trade and other receivables respectively, and is measured at market value, with movements in the period recognised within cost of sales.

S2. Summary of significant accounting policies

Leases

The Group assesses its contractual arrangements to determine whether they are or contain leases based on whether they convey the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. The liabilities for the majority of the Group's lease portfolio are calculated using the incremental borrowing rate. This rate is calculated on a lease-by-lease basis, taking into account the credit rating of the Group at the inception of the lease and the lease term. The credit adjustment used in this calculation is modified to reflect the security implicit in a lease arrangement based on the specific class of asset being leased.

Lease payments included in the measurement of the lease liability comprise: fixed payments (including in-substance fixed payments), variable lease payments that depend on an index or a rate (initially measured using the index or rate as at the commencement date), amounts expected to be payable under a residual value guarantee, the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early. When considering whether the Group is reasonably certain to exercise extension or termination options, various factors are considered, such as the level of lease payments relative to the market rate, the importance of the specific asset to the Group's operations and the period remaining until the option becomes exercisable. Such judgements are reconsidered when there is a significant event or change of circumstances that is within the control of the Group. Variable lease payments that do not depend on an index or rate are recognised in profit or loss in the period in which the event or condition that triggers those payments occurs.

The lease liability is subsequently measured at amortised cost using the effective interest method. It is re-measured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it will exercise a purchase, lease-term extension or termination option. Cash flows reflecting payment of capital and interest on leases are shown in cash flows from financing activities.

When the lease liability is re-measured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use of asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Group recognises the lease payments associated with short-term leases (leases expiring within twelve months from commencement) and leases of low value assets (underlying asset value less than £5,000) on a straight-line basis over the lease term.

The Group holds interests in a number of joint operations within its exploration and production business. The Group has applied judgement in identifying the customer where a lease arrangement is to be used by a jointly controlled operation.

If the leased asset is dedicated to a specific joint operation and its usage is dictated by the joint operating agreement, the joint operation is deemed the customer. In such instances:

- When the Group signs a lease agreement on behalf of a joint operation and has primary responsibility for payments to the lessor, the Group recognises 100% of the lease liability and a right-of-use asset on its balance sheet. When the partner is obliged to reimburse the Group for its share of lease payments, a sub-lease receivable is recognised and an equal adjustment to the right-of-use asset is made.
- When the partner has the primary responsibility for payments to the lessor and the Group is obliged to reimburse its share of the lease payments, a lease liability due to the partner and equal right-of-use asset are recognised.

If the leased asset is not dedicated to a specific joint operation or its usage is not dictated by the joint operating agreement of a joint operation to which it is dedicated, the signatory to the lease agreement is deemed the customer. If this is the Group, the lease liability and right-of-use asset are recognised in full. If it is the partner, no lease liability or right-of-use asset is recognised.

S2. Summary of significant accounting policies

Inventories

Inventories of finished goods are valued at the lower of cost (using weighted-average cost) or estimated net realisable value after allowance for redundant and slow-moving items. The cost of inventories includes the purchase price plus costs of conversion incurred in bringing the inventories to their present location and condition.

Inventory of gas in storage held for the purpose of the Group's own use is measured on a weighted-average cost basis, whilst gas used for trading purposes is measured at fair value less any costs to sell. Changes in fair value less costs to sell are recognised in the Group Income Statement.

Securities

The Group holds debt and equity securities predominantly in respect of the Centrica Unfunded Pension Scheme (see note 22). Debt securities are required to be measured at fair value through profit or loss under IFRS 9, as the contractual terms of these assets do not give rise to cash flows that are solely payments of principal and interest on the principal amounts outstanding. The Group has elected to recognise the changes in fair value of the equity securities in other comprehensive income. The Group has also elected to recognise the changes in fair value of certain equity trade investments held by Centrica Innovations in other comprehensive income. Further details can be found in the accounting policy on financial instruments.

Government grants

Government grants are transfers of resources to the Group in return for past or future compliance with certain conditions relating to the operating activities of the entity. Government assistance is designed to provide an economic benefit that is specific to an entity qualifying under certain criteria. The Group recognises government grants only when there is reasonable assurance that the Group will comply with the conditions attached to them and the grant will be received. Government grants are recognised in profit and loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Government grants related to assets are deducted from the carrying amount of the asset.

In 2021 and 2022 the Group recognised a SoLR receivable in relation to amounts recoverable under the Last Resort Supplier Payment mechanism administered by Ofgem, a government body, which is detailed in note 1. This process allows suppliers, appointed as Supplier of Last Resort, to recover costs reasonably incurred in supplying affected customers. The receivable recognised reflects amounts incurred primarily on commodity costs up to the reporting date which are recoverable under the LRSP claim. The associated credit has been recognised in cost of sales and operating costs.

Decommissioning costs

A provision is made for the net present value of the estimated cost of decommissioning gas production facilities at the end of the producing lives of fields and power stations at the end of their useful lives, based on price levels and technology at the balance sheet date.

When this provision relates to an asset with sufficient future economic benefits, a decommissioning asset is recognised and included as part of the associated PP&E and depreciated accordingly. The asset is subject to impairment review as detailed above. Changes in estimates and discount rates are dealt with prospectively and reflected as an adjustment to the provision and corresponding decommissioning asset included within PP&E. The discount rate used to calculate the provision is 1% as discussed in note 3. The unwinding of the discount on the provision is included in the Group Income Statement within financing costs.

Non-current assets and disposal groups held for sale and discontinued operations

Non-current assets and disposal groups classified as held for sale are measured at the lower of carrying amount and fair value less costs of disposal. No depreciation is charged in respect of non-current assets classified as held for sale.

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable, the asset or disposal group is available for immediate sale in its present condition and the Directors are committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

The profits or losses and cash flows that relate to a major component of the Group that has been sold or is classified as held for sale are presented separately from continuing operations as discontinued operations within the Group Income Statement and Group Cash Flow Statement.

Pensions and other post-employment benefits

The Group operates a number of defined benefit and defined contribution pension schemes. The cost of providing benefits under the defined benefit schemes is determined separately for each scheme using the projected unit credit actuarial valuation method. Actuarial gains and losses are recognised in the period in which they occur in other comprehensive income.

The cost of providing retirement pensions and other benefits is charged to the Group Income Statement over the periods benefitting from employees' service. Past service cost is recognised immediately. Costs of administering the schemes are charged to the Group Income Statement. Net interest, being the change in the net defined benefit liability or asset due to the passage of time, is recognised in the Group Income Statement within net finance cost.

The net defined benefit liability or asset recognised in the Group Balance Sheet represents the present value of the defined benefit obligation of the schemes and the fair value of the schemes' assets. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits are paid, and that have terms of maturity approximating to the terms of the related pension liability.

Payments to defined contribution retirement benefit schemes are recognised in the Group Income Statement as they fall due.

S2. Summary of significant accounting policies

In 2022 the Group provided a loan facility to the Group's three defined benefit pension schemes. The Group recognised the loan as a financial asset under IFRS 9 'Financial instruments' measured at amortised cost and classified as a receivable within securities on the Group's balance sheet. The loan liability has been deducted from plan assets on the basis that the loan does not relate to employee benefits in accordance with IAS 19.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, that can be measured reliably, and it is probable that the Group will be required to settle that obligation. Provisions are discounted to present value where the effect is material.

Where discounting is used, the increase in the provision due to the passage of time is recognised in the Group Income Statement within interest expense. Onerous contract provisions are recognised where the unavoidable costs of meeting the obligations under a contract exceed the economic benefits expected to be received under it. Contracts to purchase or sell energy are reviewed on a portfolio basis given the fungible nature of energy, whereby it is assumed that the highest priced purchase contract supplies the highest priced sales contract and the lowest priced sales contract is supplied by the lowest priced purchase contract. Since 2021, the Group recognises a material onerous supply contract provision where the future costs to fulfil customer contracts on a current market price basis exceed the charges recoverable from customers because the associated hedging gains have already been recognised in the Group Income Statement. Further detail relating to the key assumptions and sources of estimation uncertainty are provided in note 3.

Taxation

Current tax, including UK corporation tax, UK petroleum revenue tax and foreign tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date. From time to time, the Group may have open tax issues with a number of revenue authorities. Where an outflow of funds is believed to be probable and a reliable estimate of the dispute can be made, management provides for its best estimate of the liability. These estimates take into account the specific circumstances of each dispute and relevant external advice as well as the rules and regulations of the relevant tax authority in the jurisdiction of the dispute. Often the Group is unable to predict whether an uncertain tax treatment will be accepted by the relevant authority. In such instances the effects of uncertainty are reflected in management's assessment of the most likely outcome of each issue, as reviewed and updated on a regular basis. Each item is considered separately and on a basis that provides the better prediction of the outcome, unless the Group determines that it is appropriate to group certain items for consideration. See note 9 for further details on uncertain tax provisions.

Deferred tax is recognised in respect of all temporary differences identified at the balance sheet date, except to the extent that the deferred tax arises from the initial recognition of goodwill, or the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting profit nor taxable profit and loss. Temporary differences are differences between the carrying amount of the Group's assets and liabilities and their tax base.

Deferred tax liabilities may be offset against deferred tax assets within the same taxable entity or qualifying local tax group. Any remaining deferred tax asset is recognised only when, on the basis of all available evidence, it can be regarded as probable that there will be suitable taxable profits, within the same jurisdiction, in the foreseeable future, against which the deductible temporary difference can be utilised.

Deferred tax is provided on temporary differences arising on subsidiaries, joint ventures and associates, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the asset is realised or liability settled, based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Measurement of deferred tax liabilities and assets reflects the tax consequences expected from the manner in which the asset or liability is recovered or settled.

S2. Summary of significant accounting policies

Financial instruments

Financial assets and financial liabilities are recognised in the Group Balance Sheet when the Group becomes a party to the contractual provisions of the instrument. Financial assets are derecognised when the Group no longer has the rights to cash flows, the risks and rewards of ownership or control of the asset. Financial liabilities are derecognised when the obligation under the liability is discharged, cancelled or expires.

(a) Trade receivables

Trade receivables are initially recognised at a value based on their transaction price, and are subsequently held at amortised cost using the effective interest method (taking into account the Group's business model, which is to collect the contractual cash flows owing) less an allowance for impairment losses. Balances are written off when recoverability is assessed as being remote. If collection is expected in one year or less, receivables are classified as current assets. If not, they are presented as non-current assets.

(b) Trade payables

Trade payables are initially recognised at fair value, which is usually the original invoice amount and are subsequently held at amortised cost using the effective interest method. If payment is due within one year or less, payables are classified as current liabilities. If not, they are presented as non-current liabilities.

(c) Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction from the proceeds received. Own equity instruments that are reacquired (treasury or own shares) are deducted from equity. No gain or loss is recognised in the Group Income Statement on the purchase, sale, issue or cancellation of the Group's own equity instruments.

(d) Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and current balances with banks and similar institutions and money market deposits, which are readily convertible to known amounts of cash and which are subject to insignificant risk of changes in value and have an original maturity of three months or less. Money market funds are also included in cash and cash equivalents, and are required to be measured at fair value through profit or loss under IFRS 9, as noted in section (g) below. Cash and cash equivalents are presented net of outstanding bank overdrafts where there is a legal right of set off and, for the Group's cash pooling arrangements, to the extent the Group expects to settle its subsidiaries' year-end account balances on a net basis.

For the purpose of the Group Cash Flow Statement, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

(e) Interest-bearing loans and other borrowings

All interest-bearing loans and other borrowings with banks and similar institutions are initially recognised at fair value net of directly attributable transaction costs. After initial recognition, interest-bearing loans and other borrowings are subsequently measured at amortised cost using the effective interest method, except when they are hedged items in an effective fair value hedge relationship where the carrying value is also adjusted to reflect the fair value movements associated with the hedged risks. Such fair value movements are recognised in the Group Income Statement. Amortised cost is calculated by taking into account any issue costs, discount or premium.

(f) Financial instruments at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income are equity instruments that the Group has elected to recognise the changes in fair value of in other comprehensive income. They are recognised initially at fair value in the Group Balance Sheet and are re-measured subsequently at fair value with gains and losses arising from changes in fair value recognised directly in equity and presented in other comprehensive income. Dividends arising on these financial assets are recognised in the Group Income Statement.

If the Group assesses the need to recognise a loss allowance on a financial asset carried at fair value through other comprehensive income, the loss allowance is recognised in other comprehensive income; however, the recognition of a loss allowance does not impact the carrying value of the asset on the Group's Balance Sheet.

Cumulative gains and losses on equity instruments at fair value through other comprehensive income are not recycled to the Group Income Statement.

(g) Financial assets at fair value through profit or loss

The Group previously held investments in gilts which it designated at fair value through profit or loss in order to eliminate asymmetry arising from the measurement of an index-linked derivative. Other debt instruments and money market funds (which are classified as cash equivalents) are required to be measured at fair value through profit or loss under IFRS 9, as the assets are not held solely for the purpose of collecting contractual cash flows related to principal and interest. Both mandatory and designated instruments are measured at fair value on initial recognition and are re-measured to fair value in each subsequent reporting period. Gains and losses arising from changes in fair value are recognised in the Group Income Statement within investment income or financing costs.

S2. Summary of significant accounting policies

(h) Derivative financial instruments

The Group routinely enters into sale and purchase transactions for physical delivery of gas and power. A portion of these transactions take the form of contracts that were entered into and continue to be held for the purpose of receipt or delivery of the physical commodity in accordance with the Group's expected sale, purchase or usage requirements ('own use'), and are not within the scope of IFRS 9. The assessment of whether a contract is deemed to be 'own use' is conducted on a Group basis without reference to underlying book structures, business units or legal entities.

Certain purchase and sales contracts for the physical delivery of gas and power are within the scope of IFRS 9 due to the fact that they net settle or contain written options. Such contracts are accounted for as derivatives under IFRS 9 and are recognised in the Group Balance Sheet at fair value. Gains and losses arising from changes in fair value on derivatives that do not qualify for hedge accounting are taken directly to the Group Income Statement for the year.

The Group uses a range of derivatives for both trading and to hedge exposures to financial risks, such as interest rates, foreign exchange and energy price risks, arising in the normal course of business. Where considered appropriate, the Group may use weather derivatives to protect against earnings volatility arising from unseasonal weather variations. The use of such derivatives did not have a material financial statement impact in 2022 or 2021. The use of derivative financial instruments is governed by the Group's policies which are approved by the Board of Directors. Further detail on the Group's risk management policies is included within the Strategic Report – Principal Risks and Uncertainties on pages 28 to 33 and in note S3.

The accounting treatment of derivatives is dependent on whether they are entered into for trading or hedging purposes. A derivative instrument is considered to be used for hedging purposes when it alters the risk profile of an underlying exposure of the Group in line with the Group's risk management policies and is in accordance with established guidelines. Certain derivative instruments used for hedging purposes are designated in hedge accounting relationships as described by IAS 39 (the Group has not applied the hedge accounting requirements of IFRS 9). In order to qualify for hedge accounting, the effectiveness of the hedge must be reliably measurable and documentation describing the formal hedging relationship must be prepared at the point of designation. The hedge must be highly effective in achieving its objective. The Group also holds derivatives that are used for hedging purposes which are not designated in hedge accounting relationships and are held for trading.

All derivatives are recognised at fair value on the date on which the derivative is entered into and are re-measured to fair value at each reporting date. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative. Derivative assets and derivative liabilities are offset and presented on a net basis only when there is a currently enforceable legal right of set-off, and the intention to net settle the derivative contracts is present. The disclosure of current and non-current derivative assets and liabilities is determined by the settlement date of the derivative.

The Group enters into certain energy derivative contracts covering periods for which observable market data does not exist. The fair value of such derivatives is estimated by reference in part to published price quotations from active markets, to the extent that such observable market data exists, and in part by using valuation techniques, the inputs to which include data that is not based on or derived from observable markets. Where the fair value at initial recognition for such contracts differs from the transaction price, a fair value gain or fair value loss will arise. This is referred to as a day-one gain or day-one loss. Such gains and losses are deferred (not recognised) and amortised to the Group Income Statement based on volumes purchased or delivered over the contractual period until such time as observable market data becomes available. When observable market data becomes available, any remaining deferred day-one gains or losses are recognised within the Group Income Statement.

Recognition of the gains or losses resulting from changes in fair value depends on the purpose for issuing or holding the derivative. For derivatives that do not qualify for cash flow or net investment hedge accounting, any gains or losses arising from changes in fair value are taken directly to the Group Income Statement and are included within gross profit or investment income and financing costs. Where derivatives qualify for cash flow or net investment hedging, changes in fair value arising from the effective element of the hedge are recognised initially in the Group Statement of Comprehensive Income and are recycled to the Group Income Statement when the hedged item impacts profit or loss. Further details on the treatment of energy derivatives in the Group Income Statement is provided in note 2. Further detail on the treatment of derivatives in hedging relationships is provided in note S5.

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and the host contracts are not carried at fair value, with gains or losses reported in the Group Income Statement. The closely related nature of embedded derivatives is reassessed when there is a change in the terms of the contract that significantly modifies the future cash flows under the contract. Where a contract contains one or more embedded derivatives, and providing that the embedded derivative significantly modifies the cash flows under the contract, the option to fair value the entire contract may be taken and the contract will be recognised at fair value with changes in fair value recognised in the Group Income Statement. Gains and losses arising from changes in the fair value of energy derivative contracts are recognised within 'Re-measurement and settlement of energy contracts' in the Group's Results for the period under IFRS.

S2. Summary of significant accounting policies

(i) Hedge accounting

The Group continues to apply the hedge accounting requirements of IAS 39 and has not adopted IFRS 9 hedge accounting.

For the purposes of hedge accounting, hedges are classified as either net investment hedges, fair value hedges or cash flow hedges. Note S5 details the Group's accounting policies in relation to derivatives qualifying for hedge accounting under IAS 39.

(j) Financial guarantees

Financial guarantees are contracts that require the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument. The Group accounts for financial guarantee contracts at fair value under IFRS 9.

(k) Impairment of financial assets

In accordance with IFRS 9, the Group has applied the expected credit loss model to financial assets measured at amortised cost and to investments in debt instruments measured at fair value through other comprehensive income.

For trade receivables and contract assets the simplified approach is taken and the lifetime expected credit loss provided for.

For all other in-scope financial assets at the balance sheet date either the lifetime expected credit loss or a 12-month expected credit loss is provided for, depending on the Group's assessment of whether the credit risk associated with the specific asset has increased significantly since initial recognition. As the Group's financial assets are predominantly short-term (less than 12 months), the impairment loss recognised is not materially different using either approach. Further details of the assumptions and inputs used to calculate expected credit losses are shown in note 17.

Nuclear activity

The Group's investment in Lake Acquisitions Limited ('Nuclear') is accounted for as an associate. The following accounting policies are specific to this nuclear activity.

(a) Fuel costs – nuclear front end

Front-end fuel costs consist of the costs of procurement of uranium, conversion and enrichment services, and fuel element fabrication. All costs are capitalised into inventory and charged to the Group Income Statement in proportion to the amount of fuel burnt.

(b) Fuel costs – nuclear back end

Advanced gas-cooled reactors (AGR)

Spent fuel extracted from the reactors is sent for reprocessing and/or long-term storage and eventual disposal of resulting waste products. Back-end fuel costs comprise of a loading-related cost per tonne of uranium and a rebate/surcharge to this cost which is dependent on the out-turn market electricity price and the amount of electricity generated from AGR stations in the year. These costs are capitalised into inventory and charged to the Group Income Statement in proportion to the amount of fuel burnt.

Pressurised water reactor (PWR)

Back-end fuel costs are based on wet storage in station ponds followed by dry storage and subsequent direct disposal of fuel. Back-end fuel costs are capitalised into inventory on loading and are charged to the Group Income Statement in proportion to the amount of fuel burnt.

(c) Nuclear PP&E – depreciation

The majority of the cost of the nuclear fleet is depreciated from the date of the Group acquiring its share of the fleet on a straight-line basis, with remaining depreciable periods currently of up to 33 years.

Other expenditure including amounts spent on major inspections and overhauls of production plant is depreciated over the period until the next outage which for AGR power stations is 2 to 3 years and for the PWR power station is 18 months.

(d) Nuclear Liabilities Fund (NLF) funding arrangements

Under the arrangements in place with the Secretary of State, the NLF will fund, subject to certain exceptions, qualifying uncontracted nuclear liabilities and qualifying decommissioning costs.

In part consideration for the assumption of these liabilities by the Secretary of State and the NLF, the former British Energy Group agreed to pay fixed decommissioning contributions each year and £150,000 (indexed to RPI) for every tonne of uranium in PWR fuel loaded into the Sizewell B reactor after the date of these arrangements.

(e) NLF and nuclear liabilities receivables

The UK Government indemnity is provided to indemnify any future shortfall on NLF funding of qualifying uncontracted nuclear liabilities (including PWR back-end fuel services) and qualifying nuclear decommissioning costs such that the receivable equals the present value of the associated qualifying nuclear liabilities (apart from a small timing difference due to timing of receipts from NLF).

(f) Nuclear liabilities

Nuclear liabilities represent provision for liabilities in respect of the costs of waste management of spent fuel and nuclear decommissioning.

(g) Unburnt fuels at shutdown

Due to the nature of the nuclear fuel process there will be quantities of unburnt fuel in the reactors at station closure. The costs relating to this unburnt fuel (final core) are fully provided for at the balance sheet date. The provision is based on a projected value per tonne of fuel remaining at closure, discounted back to the balance sheet date and recorded as a long-term liability.

S3. Financial risk management

The Group's normal operating, investing and financing activities expose it to a variety of financial risks: market risk (including commodity price risk, currency risk and interest rate risk), credit risk and liquidity risk. The Group's overall financial risk management processes are designed to identify, manage and mitigate these risks.

Further detail on the Group's overall risk management processes is included within the Strategic Report – Principal Risks and Uncertainties on pages 28 to 33.

Commodity price risk management is carried out in accordance with individual business unit policies and directives including appropriate escalation routes.

Treasury risk management, including management of currency risk, interest rate risk and liquidity risk is carried out by a central Group Treasury function in accordance with the Group's financing and treasury policy, as approved by the Board.

The wholesale credit risks associated with commodity trading and treasury positions are managed in accordance with the Group's credit risk policy. Downstream customer credit risk management is carried out in accordance with appropriate group-wide and individual business unit credit policies.

Market risk management

Market risk is the risk of loss that results from changes in market prices (commodity prices, foreign exchange rates and interest rates). The level of market risk to which the Group is exposed at a point in time varies depending on market conditions, expectations of future price or market rate movements and the composition of the Group's physical asset and contract portfolios.

(a) Commodity price risk management

The Group is exposed to commodity price risk in its energy procurement and supply activities, production, generation and trading operations and uses specific limits to manage the exposure to commodity prices associated with the Group's activities to an acceptable level. The Group uses Profit at Risk (PaR) limits to control exposures to market prices. These are complemented by other limits including Value at Risk (VaR), volumetric or stop-loss limits to control risk around trading activities.

(i) Energy price exposed business activities

The Group's price exposed business activities consist of equity gas and liquids production, equity power generation, bilateral procurement and sales contracts, market-traded purchase and sales contracts and derivative positions primarily transacted with the intent of securing gas and power for the Group's supply customers, from a variety of sources at an optimal cost. The Group actively manages commodity price risk by optimising its asset and contract portfolios and making use of volume flexibility.

The Group's commodity price risk exposure within its business activities is driven by the cost of procuring gas and electricity to serve its supply customers and selling gas and electricity from its upstream production and generation, which varies with wholesale commodity prices. The primary risk is that market prices for commodities will fluctuate between the time that sales prices are fixed or tariffs are set and the time at which the corresponding procurement cost is fixed, thereby potentially reducing expected margins or making sales unprofitable.

The Group's supply activities are also exposed to volumetric risk in the form of an uncertain consumption profile arising from a range of factors, including the weather, energy consumption changes, customer attrition and the economic climate. There is also risk associated with ensuring that there is sufficient commodity available to secure supply to customers. The Group's production and generation activities are also exposed to volumetric risk in the form of uncertain production profiles.

In order to manage the exposure to market prices associated with the Group's business operations the Group uses a specific set of risk limits (including VaR and PaR) established by the Board, and sub-delegated downwards through the delegation lines to the commercial leaders.

PaR measures the estimated potential loss in a position or portfolio of positions associated with the movement of a commodity price for a given confidence level, over the remaining term of the position or contract. VaR measures the estimated potential loss for a given confidence level over a predetermined holding period. The standard confidence level used is 95%. In addition, regular stress and scenario tests are performed to evaluate the impact on the portfolio of possible substantial movements in commodity prices.

The Group measures and manages the commodity price risk associated with the Group's entire energy price exposed business portfolio. Only certain of the Group's energy contracts constitute financial instruments under IFRS 9 (see note S6.).

As a result, while the Group manages the commodity price risk associated with both financial and non-financial energy procurement and sales contracts, it is the notional value of energy contracts being carried at fair value that represents the exposure of the Group's energy price exposed business activities to commodity price risk according to IFRS 7 'Financial Instruments: Disclosures'. This is because energy contracts that are financial instruments under IFRS 9 are accounted for on a fair value basis and changes in fair value immediately impact profit. Conversely, energy contracts that are not financial instruments under IFRS 9 are accounted for as executory contracts and changes in fair value do not immediately impact profit and, as such, are not exposed to commodity price risk as defined by IFRS 7. So, whilst the PaR or VaR associated with energy procurement and supply contracts that are outside the scope of IFRS 9 are monitored for internal risk management purposes, only those energy contracts within the scope of IFRS 9 are within the scope of the IFRS 7 disclosure requirements.

S3. Financial risk management

(ii) Proprietary energy trading

The Group's proprietary energy trading activities consist of physical and financial commodity purchases and sales contracts taken on with the intent of benefitting from changes in market prices or differences between buying and selling prices. The Group conducts its trading activities in the over-the-counter market and through exchanges in the UK and continental Europe. The Group is exposed to commodity price risk as a result of its proprietary energy trading activities because the value of its trading assets and liabilities will fluctuate with changes in market prices for commodities.

The Group sets volumetric and VaR limits to manage the commodity price risk exposure associated with the Group's proprietary energy trading activities. VaR measures the estimated potential loss at a 95% confidence level over a one-day holding period. The carrying value of energy contracts used in proprietary energy trading activities at 31 December 2022 is disclosed in note 19.

As with any modelled risk measure, there are certain limitations that arise from the assumptions used in the VaR calculation. VaR assumes that historical price behaviours will continue in the future and that the Group's trading positions can be unwound or hedged within the predetermined holding period. Furthermore, the use of a 95% confidence level, by definition, does not take into account changes in value that might occur beyond this confidence level.

(b) Currency risk management

The Group is exposed to currency risk on foreign currency denominated forecast transactions, firm commitments, monetary assets and liabilities (transactional exposure) and on its net investments in foreign operations (translational exposure). IFRS 7 only requires disclosure of currency risk arising on financial instruments denominated in a currency other than the functional currency of the commercial operation transacting. As a result, for the purposes of IFRS 7, currency risk excludes items that are not financial instruments, such as the Group's net investments in international operations as well as foreign currency denominated forecast transactions and firm commitments.

(i) Transactional currency risk

The Group is exposed to transactional currency risk on transactions denominated in currencies other than the underlying functional currency of the commercial operation transacting. The primary functional currencies remain pounds sterling in the UK, Danish krone in Denmark, Euros in the Netherlands and the Republic of Ireland and US Dollars in the Group's LNG business. The risk is that the functional currency value of cash flows will vary as a result of movements in exchange rates. Transactional exposure arises from the Group's energy procurement, production and generation activities, where many transactions are denominated in foreign currencies. In addition, in order to optimise the cost of funding, the Group has, in certain cases, issued foreign currency denominated debt or entered into foreign currency loans, primarily in US dollars, Euros and Japanese yen.

It is the Group's policy to hedge material transactional exposures using derivatives (either applying formal hedge accounting or economic hedge relationships) to fix the functional currency value of non-functional currency cash flows, except where there is an economic hedge inherent in the transaction. At 31 December 2022, there were no material unhedged non-functional currency monetary assets or liabilities, firm commitments or probable forecast transactions (2021: £nil), other than transactions which have an inherent economic hedge and foreign currency borrowings used to hedge translational exposures.

(ii) Translational currency risk

The Group is exposed to translational currency risk as a result of its net investments in Europe. The risk is that the pounds sterling value of the net assets of foreign operations will decrease with changes in foreign exchange rates. The Group's policy is to protect the pounds sterling book value of its net investments in foreign operations where appropriate, subject to certain parameters, by holding foreign currency debt, entering into foreign currency derivatives, or a mixture of both.

The Group manages translational currency risk taking into consideration the cash impact of any hedging activity as well as the risk to the net asset carrying values in the Group's Financial Statements. The translation hedging programme including the potential cash impact is managed by the Group Treasury function and monitored by the Chief Financial Officer.

(c) Interest rate risk management

In the normal course of business the Group borrows to finance its operations. The Group is exposed to interest rate risk because the fair value of fixed-rate borrowings and the cash flows associated with floating rate borrowings will fluctuate with changes in interest rates. The Group's policy is to manage the interest rate risk on long-term borrowings by ensuring the exposure to floating interest rates remains within a 30% to 70% range, including the impact of interest rate derivatives.

The return generated on the Group's cash balance is also exposed to movements in short-term interest rates. The Group manages cash balances to protect against adverse changes in rates whilst retaining liquidity.

S3. Financial risk management

(d) Sensitivity analysis

IFRS 7 requires disclosure of a sensitivity analysis that is intended to illustrate the sensitivity of the Group's financial position and performance to changes in market variables (commodity prices, foreign exchange rates and interest rates) as a result of changes in the fair value or cash flows associated with the Group's financial instruments. The sensitivity analysis provided discloses the effect on profit or loss and equity at 31 December 2022, assuming that a reasonably possible change in the relevant risk variable had occurred at 31 December 2022, and has been applied to the risk exposures in existence at that date to show the effects of reasonably possible changes in price on profit or loss and equity. Reasonably possible changes in market variables used in the sensitivity analysis are based on implied volatilities, where available, or historical data for energy prices and foreign exchange rates. Reasonably possible changes in interest rates are based on management judgement and historical experience.

The sensitivity analysis has been prepared based on 31 December 2022 balances and on the basis that the balances, the ratio of fixed to floating rates of debt and derivatives, the proportion of energy contracts that are financial instruments, the proportion of financial instruments in foreign currencies and the hedge designations in place at 31 December 2022 are all constant. Excluded from this analysis are all non-financial assets and liabilities and energy contracts that are not financial instruments under IFRS 9. The sensitivity to foreign exchange rates relates only to monetary assets and liabilities denominated in a currency other than the functional currency of the commercial operation transacting, and excludes the translation of the net assets of foreign operations to pounds sterling.

The sensitivity analysis provided is hypothetical only and should be used with caution as the impacts provided are not necessarily indicative of the actual impacts that would be experienced. This is because the Group's actual exposure to market rates is changing constantly as the Group's portfolio of commodity, debt and foreign currency contracts changes. Changes in fair values or cash flows based on a variation in a market variable cannot be extrapolated because the relationship between the change in market variable and the change in fair value or cash flows may not be linear. In addition, the effect of a change in a particular market variable on fair values or cash flows is calculated without considering interrelationships between the various market rates or mitigating actions that would be taken by the Group.

(i) Transactional currency risk

The Group has performed an analysis of the sensitivity of the Group's financial position and performance to changes in foreign exchange rates. The Group deems 10% movements to US dollar and euro currency rates relative to pounds sterling to be reasonably possible.

The material impact of such movements on profit and equity, both before and after taxation, are as follows:

Incremental profit/(loss)	**2022 Impact on profit £m**	2021 Impact on profit £m
US dollar – increase/(decrease)	**139/(180)**	86/(117)
Euro – increase/(decrease)	**36/(38)**	111/(113)

All other currency sensitivities are not material.

(ii) Interest rate risk

The Group has performed an analysis of the sensitivity of the Group's financial position and performance to changes in interest rates. The Group deems a one percentage point move in UK, US and euro interest rates to be reasonably possible. The impact of such movements on profit and equity, both after taxation, is immaterial.

(iii) Commodity price risk – non proprietary

The impacts of reasonably possible changes in commodity prices on profit and equity, both after taxation, based on the assumptions set out above are as follows:

	2022		2021	
Energy prices	**Base price (i)**	**Reasonably possible change in variable (ii) %**	Base price (i)	Reasonably possible change in variable (ii) %
UK gas (p/therm)	**184**	**+/-47**	105	+/-58
European gas (p/therm)	**71**	**+/-47**	103	+/-58
UK power (£/MWh)	**189**	**+/-26**	115	+/-17
UK emissions (€/tonne)	**86**	**+/-7**	82	+/-7
UK oil (US$/bbl)	**84**	**+/-19**	71	+/-7
North American gas (US cents/therm)	**44**	**+/-25**	34	+/-13

S3. Financial risk management

Incremental profit/(loss)	2022 Impact on profit (ii) £m	2021 Impact on profit (ii) £m
UK gas price – increase/(decrease)	**365/(374)**	1,076/(1,053)
UK power price – increase/(decrease)	**540/(544)**	201/(225)
European gas price – (decrease)/increase	**(171)/171**	(690)/691
Other UK energy prices (oil and emissions) – (decrease)/increase	**(32)/32**	(22)/22
UK and European energy prices (combined) – increase/(decrease)	**702/(715)**	565/(565)
North American energy prices (combined) – increase/(decrease)	**60/(60)**	34/(34)

(i) The base price represents the average forward market price over the duration of the active market curve used in the sensitivity analysis provided.
(ii) The reasonably possible change in variable and the impact on profit are calculated using both the active and inactive market curves for energy prices.

The impact on other comprehensive income of such price changes is immaterial.

(iv) Commodity price risk – proprietary trades

As at 31 December 2022 the VaR associated with proprietary trading was £5 million (2021: £13 million). This represents the statistical downside risk associated with the proprietary trade and associated hedging positions. The changes in the year only relate to changes in commodity prices. Intra-day trading positions are monitored using a live time risk management system.

The impacts of reasonably possible changes using probability-based high and low price curves applied to level 3 proprietary trades are as follows:

Incremental profit/(loss)	2022 Impact on profit (i) £m	2021 Impact on profit (i) £m
Level 3 proprietary trades – increase/(decrease) (ii)	**891/(877)**	562/(503)

(i) The reasonably possible change in variable and the impact on profit are calculated using both the active and inactive market curves for energy prices, see note 7(c) for detail on market curves.
(ii) The level 3 proprietary financial instruments' sensitivity has been valued in Secure Environment and excludes associated hedges which would mitigate this impact.

S3. Financial risk management

Credit risk management

Credit risk is the risk of loss associated with a counterparty's inability or failure to discharge its obligations under a contract.

The Group continually reviews its rating thresholds for relevant counterparty credit limits and updates these as necessary, based on a consistent set of principles. It continues to operate within its limits. In respect of trading activities for both the US and Europe there is an effort to maintain a balance between exchange-based trading and bilateral transactions. This allows for a reasonable balance between counterparty credit risk and potential liquidity requirements. In addition, the Group actively manages the trade-off between credit and liquidity risks by optimising the use of contracts with collateral obligations and physically settled contracts without collateral obligations.

The Group is exposed to credit risk in its treasury, trading, energy procurement and downstream activities. The maximum exposure to credit risk for financial instruments at fair value is equal to their carrying value. Gross amounts are shown by counterparty credit rating in the table below. Further details of other collateral and credit security not offset against these amounts is shown in note S6.

	2022					
	Financial assets at amortised cost			**Financial assets at fair value**		
31 December	**Receivables including treasury, trading and energy procurement counterparties (i) £m**	**Securities (ii) £m**	**Cash and cash equivalents £m**	**Cash and cash equivalents £m**	**Derivative financial instruments with positive fair values £m**	**Securities £m**
AAA to AA	**245**	**—**	**1,046**	**2,800**	**19**	**95**
AA- to A-	**914**	**—**	**798**	**178**	**1,271**	**—**
BBB+ to BBB-	**2,727**	**—**	**20**	**—**	**4,459**	**—**
BB+ to BB-	**542**	**—**	**—**	**—**	**724**	**—**
B+ or lower	**112**	**—**	**—**	**—**	**235**	**—**
Unrated (iii)	**4,534**	**403**	**—**	**—**	**719**	**27**
	9,074	**403**	**1,864**	**2,978**	**7,427**	**122**

	2021					
	Financial assets at amortised cost			Financial assets at fair value		
31 December	Receivables including treasury, trading and energy procurement counterparties £m	Securities (ii) £m	Cash and cash equivalents £m	Cash and cash equivalents £m	Derivative financial instruments with positive fair values £m	Securities £m
AAA to AA	444	—	—	3,670	52	111
AA- to A-	615	—	1,278	—	2,128	—
BBB+ to BBB-	1,249	—	60	—	4,453	—
BB+ to BB-	1,051	—	—	—	629	—
B+ or lower	17	—	—	—	128	—
Unrated (iii)	3,081	—	52	—	160	24
	6,457	—	1,390	3,670	7,550	135

(i) The Group holds a provision of £872 million (2021: £633 million) against receivables. The significant majority of this provision is held against amounts due from unrated counterparties. Further analysis of past due trade receivables may be found at note 17.

(ii) Securities held at amortised cost consist of loans to the pension schemes – see note 22.

(iii) The unrated counterparty receivables primarily comprise amounts due from downstream customers, subsidiaries of rated entities, exchanges or clearing houses.

S3. Financial risk management

Details of how credit risk is managed across the asset categories are provided below:

(a) Treasury, trading and energy procurement activities
Wholesale counterparty credit exposures are monitored by individual counterparty and by category of credit rating, and are subject to approved limits. The Group uses master netting agreements to reduce credit risk and net settles payments with counterparties where net settlement provisions exist (see note S6. for details of amounts offset). In addition, the Group employs a variety of other methods to mitigate credit risk: margining, various forms of bank and parent company guarantees and letters of credit.

The vast majority of group credit risk associated with its treasury, trading and energy procurement activities is with counterparties in related energy industries or financial institutions together with smaller exposures to commodity traders and small independent renewable producers. The impairment considerations of IFRS 9 are applicable to financial assets arising from treasury, trading and energy procurement activities that are carried at amortised cost and debt instruments that are carried at fair value through other comprehensive income (FVOCI). Debt instruments measured at FVOCI are not material for further disclosure.

Included in the table above within receivables including treasury, trading and energy procurement counterparties is £4,525 million (2021: £3,643 million) of treasury, trading and energy procurement assets. The Group's risk assessment procedures and counterparty selection process ensure that the credit risk on this type of financial asset is always low at initial recognition.

Included within the table above is information about the exposure to credit risk arising from only certain of the Group's energy procurement contracts – those in the scope of IFRS 9. Whilst the Group manages the credit risk associated with both financial and non-financial energy procurement contracts, it is the carrying value of financial assets within the scope of IFRS 9 (note S6.) that represents the maximum exposure to credit risk in accordance with IFRS 7.

(b) Trade receivables and contract assets
The simplified approach of measuring lifetime expected credit losses has been applied to trade receivables and contract asset balances, which are the focus of this disclosure. Therefore, consideration of the significance of any change in credit risk since initial recognition for the purpose of applying this model is not required for any material component of the receivables balance.

In the case of business customers, credit risk is managed by checking a company's creditworthiness and financial strength both before commencing trade and during the business relationship. For residential customers, creditworthiness is ascertained normally before commencing trade to determine the payment mechanism required to reduce credit risk to an acceptable level. Certain customers will only be accepted on a prepayment basis or with a security deposit. In some cases, an ageing of receivables is monitored and used to manage the exposure to credit risk associated with both business and residential customers. In other cases, credit risk is monitored and managed by grouping customers according to method of payment or profile.

Liquidity risk management and going concern
Liquidity risk is the risk that the Group is unable to meet its financial obligations as they fall due. The Group experiences significant movements in its liquidity position due primarily to the seasonal nature of its business and margin cash arrangements associated with certain wholesale commodity contracts. To mitigate this risk the Group maintains significant committed facilities and holds cash on deposit to ensure that there is sufficient liquidity headroom at all points in the seasonal trading cycle of the business. See note 24 for further information.

S3. Financial risk management

Maturity profiles

Maturities of derivative financial instruments, provisions, borrowings and leases are provided in the following tables (all amounts are remaining contractual undiscounted cash flows):

Due for payment 2022	**<1 year £m**	**1 to 2 years £m**	**2 to 3 years £m**	**3 to 4 years £m**	**4 to 5 years £m**	**>5 years £m**
Energy and interest derivatives in a loss position that will be settled on a net basis (i)	**(1,159)**	**(146)**	**(47)**	**(28)**	**(18)**	**(80)**
Gross energy procurement contracts and other derivative buy trades carried at fair value	**(10,490)**	**(8,525)**	**(4,580)**	**(67)**	**(47)**	**(116)**
Foreign exchange derivatives that will be settled on a gross basis:						
Outflow	**(7,748)**	**(1,244)**	**(73)**	**—**	**—**	**—**
Inflow	**8,027**	**1,207**	**239**	**20**	**1**	**—**
Borrowings (bank loans, bonds, overdrafts and interest)	**(1,016)**	**(157)**	**(595)**	**(185)**	**(186)**	**(3,575)**
	(12,386)	**(8,865)**	**(5,056)**	**(260)**	**(250)**	**(3,771)**
Leases: (ii)						
Minimum lease payments	**(89)**	**(79)**	**(70)**	**(55)**	**(26)**	**(29)**
Capital elements of leases	**(88)**	**(69)**	**(67)**	**(51)**	**(24)**	**(26)**

Due for payment 2021	<1 year £m	1 to 2 years £m	2 to 3 years £m	3 to 4 years £m	4 to 5 years £m	>5 years £m
Energy and interest derivatives in a loss position that will be settled on a net basis (i)	(807)	(77)	(22)	(13)	(8)	(13)
Gross energy procurement contracts and other derivative buy trades carried at fair value	(6,118)	(5,063)	(3,342)	(1,821)	(42)	(122)
Foreign exchange derivatives that will be settled on a gross basis:						
Outflow	(4,068)	(985)	(130)	(22)	(3)	(54)
Inflow	4,500	990	130	22	1	96
Borrowings (bank loans, bonds, overdrafts and interest)	(1,141)	(385)	(154)	(592)	(182)	(3,673)
	(7,634)	(5,520)	(3,518)	(2,426)	(234)	(3,766)
Leases: (ii)						
Minimum lease payments	(103)	(68)	(59)	(55)	(47)	(48)
Capital elements of leases	(102)	(66)	(56)	(52)	(46)	(42)

(i) Proprietary energy trades are excluded from this maturity analysis as the Group does not take physical delivery of volumes traded under these contracts. The associated cash flows are expected to be equal to the contract fair value at the balance sheet date. See note 19 for further details.

(ii) The difference between the total minimum lease payments and the total capital elements of leases is due to future finance charges.

S4. Other equity

This section summarises the Group's other equity reserve movements.

	Cash flow hedging reserve £m	Foreign currency translation reserve £m	Actuarial gains and losses reserve £m	Financial asset at FVOCI reserve £m	Treasury and own shares reserve £m	Share based payments reserve £m	Merger, capital redemption and other reserves £m	Total £m
1 January 2021	16	(198)	(1,308)	—	(31)	79	527	(915)
Actuarial gain	—	—	218	—	—	—	—	218
Employee share schemes:								
Exercise of awards	—	—	—	—	13	(49)	—	(36)
Value of services provided	—	—	—	—	—	12	—	12
Impact of cash flow and net investment hedging	(7)	(49)	—	—	—	—	—	(56)
Taxation on above items	1	9	(74)	—	—	—	—	(64)
Share of other comprehensive income of joint ventures and associates, net of taxation	—	—	152	—	—	—	—	152
Exchange differences on translation of foreign operations	—	(46)	—	—	—	—	—	(46)
Exchange differences reclassified to Group Income Statement on disposal	—	(20)	—	—	—	—	—	(20)
Revaluation of FVOCI securities	—	—	—	3	—	—	—	3
31 December 2021	10	(304)	(1,012)	3	(18)	42	527	(752)
Actuarial loss	—	—	(147)	—	—	—	—	**(147)**
Employee share schemes:								
Exercise of awards	—	—	—	—	10	(22)	—	**(12)**
Value of services provided	—	—	—	—	—	10	—	**10**
Purchase of own shares	—	—	—	—	(5)	—	—	**(5)**
Issue of shares	—	—	—	—	(7)	—	—	**(7)**
Share buyback programme:								
Purchase of Treasury shares	—	—	—	—	(43)	—	—	**(43)**
Accrual for committed share purchases	—	—	—	—	—	—	(207)	**(207)**
Impact of cash flow hedging	(28)	—	—	—	—	—	—	**(28)**
Taxation on above items	8	—	23	—	—	—	—	**31**
Share of other comprehensive loss of joint ventures and associates, net of taxation	—	—	(293)	—	—	—	—	**(293)**
Exchange differences on translation of foreign operations	—	(95)	—	—	—	—	—	**(95)**
Exchange differences reclassified to Group Income Statement on disposal	—	272	—	—	—	—	—	**272**
31 December 2022	**(10)**	**(127)**	**(1,429)**	**3**	**(63)**	**30**	**320**	**(1,276)**

Merger, capital redemption and other reserves

During February 1997, BG plc (formerly British Gas plc) demerged certain businesses (grouped together under GB Gas Holdings Limited (GBGH)) to form Centrica plc. Upon demerger, the share capital of GBGH was transferred to Centrica plc and was recorded at the nominal value of shares issued to BG plc shareholders. In accordance with the Companies Act 1985, no premium was recorded on the shares issued. On consolidation, the difference between the nominal value of the Company's shares issued and the amount of share capital and share premium of GBGH at the date of demerger was credited to a merger reserve.

On 8 December 2017, the Group's existing exploration and production business was combined with that of Bayerngas Norge AS to form the Spirit Energy business. The Group acquired 69% of the Spirit Energy business and Bayerngas Norge's former shareholders acquired 31%. The non-controlling interest established on acquisition has been based on its share of the carrying value of the combined business, with the other reserve representing the difference between the fair value and this carrying value.

In accordance with the Companies Act, the Company has transferred to the capital redemption reserve an amount equal to the nominal value of shares repurchased and subsequently cancelled. Up to 31 December 2022 the cumulative nominal value of shares repurchased and subsequently cancelled was £28 million (2021: £28 million).

During the year, the Group recognised a financial liability of £207 million relating to the Share buyback programme. See treasury and own shares reserve section for more details.

S4. Other equity

Treasury and own shares reserve

The own shares reserve reflects the cost of shares in the Group held in the Centrica employee share ownership trusts to meet the future requirements of the Group's share-based payment plans.

Treasury shares are acquired equity instruments of the Company.

Centrica's current return of capital programme, initially approved by the Board on 9 November 2022, seeks to return up to £250 million to shareholders and is expected to be completed by 31 May 2023.

During the year ended 31 December 2022, the Group purchased 46 million ordinary shares, representing approximately 0.8% of the issued ordinary share capital at an average price of 93.7 pence per share, and an aggregate cost of £43 million under the share buyback programme.

A financial liability of £207 million was recognised at 31 December 2022, representing the difference between purchases to date, and the maximum potential repurchase by 16 February 2023. This liability is included within the Merger, capital redemption and other reserves. The monthly breakdown of all shares purchased and the average price paid per share (excluding expenses) for the year ended 31 December 2022 were as follows:

Period	Number of shares purchased under share buyback programme	Average price paid Pence	Total cost £m	Authorised purchases unutilised at month end £m
November 2022	16,906,393	93.3	16	234
December 2022	28,808,490	93.9	27	207
Total	**45,714,883**	**93.7**	**43**	**207**

S5. Hedge accounting

The Group primarily applies hedge accounting to address interest rate and foreign currency risk on borrowings.

For the purposes of hedge accounting, hedges are classified either as fair value hedges, cash flow hedges or hedges of net investments in foreign operations.

The fair values of derivatives and primary financial instruments in hedge accounting relationships at 31 December were as follows:

		2022			2021		
31 December	Hedge	Assets £m	Liabilities £m	Change in fair value £m	Assets £m	Liabilities £m	Change in fair value £m
Interest rate risk	Fair value	**37**	**(221)**	**(228)**	67	—	(95)
Foreign exchange risk	Cash flow hedge	**37**	**(6)**	**(10)**	33	(7)	(44)
Foreign exchange risk	Net investment hedge	**—**	**—**	**—**	—	—	2

2022	Hedge	Timing of nominal amount	Average rate	Nominal value	Hedged item	Change in fair value of hedged item in year £m	Cumulative amount of fair value hedge adjustments on hedged item £m	Accumulated gains/(losses) in equity (i) £m
Interest rate risk	Fair value	**2022-2033**	**Fixed to floating at LIBOR/US IBOR + 1%-5%**	**£50 million-£550 million, $250 million**	**Bonds (ii)**	**228**	**158**	**N/A**
Foreign exchange risk	Cash flow hedge	**2032**	**GBP to Euro at 1.171**	**€50 million**	**Euro bonds**	**7**	**N/A**	**26**
	Cash flow hedge	**2036-2038**	**GBP to Yen at 157.33**	**¥20 billion**	**Yen bank loans**	**3**	**N/A**	**(23)**

S5. Hedge accounting

2021	Hedge	Timing of nominal amount	Average rate	Nominal value	Hedged item	Change in fair value of hedged item in year £m	Cumulative amount of fair value hedge adjustments on hedged item £m	Accumulated gains/(losses) in equity (i) £m
Interest rate risk	Fair value	2022-2032	Fixed to floating at LIBOR/US IBOR + 1%-5%	£50 million-£550 million, $250 million	Bonds (ii)	95	(70)	N/A
Foreign exchange risk	Cash flow hedge	2021-2032	GBP to Euro at 1.356	€50 million, €750 million	Euro bonds	24	N/A	32
	Cash flow hedge	2036-2038	GBP to Yen at 145.43	¥20 billion	Yen bank loans	14	N/A	(21)
Foreign exchange risk	Net investment hedge/Cash flow hedge	2021	GBP to USD at 1.34	$2.3 billion	Carrying value of net assets of subsidiary/disposal proceeds	4	N/A	—

(i) In the years presented all amounts related to continuing cash flow hedge relationships.
(ii) The carrying amount of bonds designated as hedged items in hedging relationships is disclosed in note 24.

The Group's accounting policies in relation to derivatives qualifying for hedge accounting under IAS 39 are described below.

Fair value hedges

A derivative is designated as a hedging instrument and its relationship to a recognised asset or liability is classified as a fair value hedge when it hedges the exposure to changes in the fair value of that recognised asset or liability. The Group's fair value hedges consist of interest rate swaps used to protect against changes in the fair value of fixed-rate, long-term debt due to movements in market interest rates. Any gain or loss from re-measuring the hedging instrument to fair value is recognised immediately in the Group Income Statement in net finance cost. Any gain or loss on the hedged item attributable to the hedged risk is adjusted against the carrying amount of the hedged item and recognised in the Group Income Statement within net finance cost. The Group discontinues fair value hedge accounting if the hedging instrument expires or is sold, terminated or exercised, the hedge no longer qualifies for hedge accounting or the Group revokes the designation. Any adjustment to the carrying amount of a hedged financial instrument for which the effective interest method is used is amortised to the Group Income Statement. Amortisation may begin as soon as an adjustment exists and begins no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

Impact of interest rate benchmark reform

Phase 2 of the Interest Rate Benchmark Reform became effective on 1 January 2021. Under Phase 2, to the extent that modifications were made to financial instruments that were necessary to implement Interest Rate Benchmark Reform, reliefs from the discontinuation of hedge accounting or immediate recognition of any gains or losses in the income statement on the modification of financial instruments measured at amortised cost were available on transition to alternative rates, as the modification was a direct consequence of the reform and the new basis for calculating cash flows is economically equivalent to the previous basis.

The Group applied the International Swaps and Derivatives Associates (ISDA) fallback protocol to the derivative financial instruments held by the Group affected by the IBOR Reform where the interest rate benchmark was linked to GBP Libor. These instruments primarily comprise interest rate swap agreements designated in fair value hedge relationships. The ISDA fallback rates are derived from the Sterling Overnight Interbank Average (SONIA) rate and are calculated and published by Bloomberg.

The Group amended its hedge designation to reflect changes which are required by IBOR reform to designate movements in Bloomberg Fallback Libor as the hedged risk and to amend the description of both the hedged item and the hedging instrument to reference the alternative rate.

The Group also has interest rate swap agreements designated in fair value hedge relationships which are linked to USD Libor which is expected to remain in place until 2023, when it is expected to be replaced by the Secured Overnight Financing Rate (SOFR).

Cash flow hedges

A derivative is classified as a cash flow hedge when it hedges exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset, liability or a highly probable forecast transaction. The Group's cash flow hedges consist primarily of:

- forward foreign exchange contracts used to protect against the variability of functional currency denominated cash flows associated with non-functional currency denominated highly probable forecast transactions; and
- cross-currency interest rate swaps and forward foreign exchange contracts used to protect against the variability in cash flows associated with borrowings denominated in non-functional currencies.

S5. Hedge accounting

The portion of the gain or loss on the hedging instrument which is effective is recognised directly in equity while any ineffectiveness is recognised in the Group Income Statement. The gains or losses that are initially recognised in the cash flow hedging reserve through other comprehensive income are transferred to the Group Income Statement in the period in which the hedged item affects profit or loss. Where the hedged item is the cost of a non-financial asset or liability, the amounts taken to equity are transferred to the initial carrying amount of the non-financial asset or liability on its recognition. Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, no longer qualifies for hedge accounting or the Group revokes the designation. At that point in time, any cumulative gain or loss on the hedging instrument recognised in equity remains in equity until the hedged transaction occurs. If the transaction is no longer expected to occur, the cumulative gain or loss recognised in equity is recognised in the Group Income Statement. Note S4 details movements in the cash flow hedging reserve. The ineffective portion of gains and losses on cash flow hedging is immaterial.

Net investment hedges

Hedges of net investments in foreign operations hedge the exposure of the sterling value of the assets of foreign currency subsidiaries in the consolidated Financial Statements to changes in exchange rates. Such hedges are accounted for similarly to cash flow hedges. Any gain or loss on the effective portion of the hedge is recognised in equity, any gain or loss on the ineffective portion of the hedge is recognised in the Group Income Statement. On disposal of the foreign operation, the cumulative gains or losses recognised directly in equity are transferred to the Group Income Statement. The Group initially ceased any net investment hedging activity in 2009. The Group recommenced this strategy in respect of the US dollar subsidiaries in its Direct Energy business in 2020 until its disposal in 2021.

S6. Fair value of financial instruments

The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Group has documented internal policies for determining fair value, including methodologies used to establish valuation adjustments required for credit risk.

(a) Fair value hierarchy

Financial assets and financial liabilities measured and held at fair value are classified into one of three categories, known as hierarchy levels, which are defined according to the inputs used to measure fair value as follows:

- Level 1: fair value is determined using observable inputs that reflect unadjusted quoted market prices for identical assets and liabilities;
- Level 2: fair value is determined using significant inputs that may be directly observable inputs or unobservable inputs that are corroborated by market data; and
- Level 3: fair value is determined using significant unobservable inputs that are not corroborated by market data and may be used with internally developed methodologies that result in management's best estimate of fair value.

	2022				2021			
31 December	Level 1 £m	Level 2 £m	Level 3 £m	**Total £m**	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets								
Derivative financial instruments:								
Energy derivatives	—	6,486	592	**7,078**	—	6,906	480	7,386
Interest rate derivatives	—	37	—	**37**	—	71	—	71
Foreign exchange derivatives	—	312	—	**312**	—	93	—	93
Debt instruments	66	—	1	**67**	82	—	1	83
Equity instruments	29	9	17	**55**	29	3	20	52
Cash and cash equivalents	—	2,978	—	**2,978**	—	3,670	—	3,670
Total financial assets at fair value	**95**	**9,822**	**610**	**10,527**	111	10,743	501	11,355
Financial liabilities								
Derivative financial instruments:								
Energy derivatives	—	(8,806)	(850)	**(9,656)**	—	(5,662)	(290)	(5,952)
Interest rate derivatives	—	(221)	—	**(221)**	—	—	—	—
Foreign exchange derivatives	—	(274)	—	**(274)**	—	(57)	—	(57)
Total financial liabilities at fair value	**—**	**(9,301)**	**(850)**	**(10,151)**	—	(5,719)	(290)	(6,009)

S6. Fair value of financial instruments

The reconciliation of the Level 3 fair value measurements during the year is as follows:

	2022		2021	
	Financial assets £m	Financial liabilities £m	Financial assets £m	Financial liabilities £m
Level 3 financial instruments				
1 January	**501**	**(290)**	120	(129)
Disposal of Direct Energy	**—**	**—**	(53)	20
Total realised and unrealised gains/(losses):				
Recognised in Group Income Statement	**10**	**(784)**	453	(181)
Purchases, sales, issuances and settlements (net)	**(4)**	**—**	2	—
Transfer to assets held for sale	**—**	**—**	(21)	—
Transfers from Level 2 to Level 3 (i)	**101**	**224**	—	—
Foreign exchange movements	**2**	**—**	—	—
31 December	**610**	**(850)**	501	(290)
Total gains/(losses) for the year for Level 3 financial instruments held at the end of the reporting year	**10**	**(784)**	453	(181)

(i) Transfers between levels are deemed to occur at the beginning of the reporting year.

(b) Valuation techniques used to derive Level 2 and Level 3 fair values and Group valuation process

Level 2 interest rate derivatives and foreign exchange derivatives comprise interest rate swaps and forward foreign exchange contracts. Interest rate swaps are fair valued using forward interest rates extracted from observable yield curves. Forward foreign exchange contracts are fair valued using forward exchange rates that are quoted in an active market, with the resulting market value discounted back to present value using observable yield curves.

Level 2 energy derivatives are fair valued by comparing and discounting the difference between the expected contractual cash flows for the relevant commodities and the quoted prices for those commodities in an active market. The average discount rate applied to value this type of contract during the year was 5% per annum (31 December 2021 average discount rate of 1% per annum).

For Level 3 energy derivatives, the main input used by the Group pertains to deriving expected future commodity prices in markets that are not active as far into the future as some of our contractual terms. This applies to certain contracts within Europe and North America. Fair values are then calculated by comparing and discounting the difference between the expected contractual cash flows and these derived future prices using an average discount rate of 5% (Europe) and 5% (North America) per annum (31 December 2021 average discount rate of 1% (Europe) and 3% (North America) per annum).

Active period of markets	Gas	Power	Coal	Emissions	Oil
UK (years)	**4**	**4**	**3**	**3**	**3**

Because the Level 3 energy derivative valuations involve the prediction of future commodity market prices, sometimes a long way into the future, reasonably possible alternative assumptions for gas, power, coal, emissions or oil prices may result in a higher or lower fair value for Level 3 financial instruments. The impact of reasonably possible changes in commodity prices on profit and loss are included in note S3. Other than commodity prices there are no other unobservable inputs which would have a material impact.

It should be noted that the fair values disclosed in the tables above only concern those contracts entered into that are within the scope of IFRS 9. The Group has numerous other commodity contracts that are outside of the scope of IFRS 9 and are not fair valued. The Group's actual exposure to market rates is constantly changing as the Group's portfolio of energy contracts changes.

The Group's valuation process includes specific teams of individuals that perform valuations of the Group's derivatives for financial reporting purposes, including Level 3 valuations. The Group has an independent team that derives future commodity price curves based on available external data and these prices feed into the energy derivative valuations, subject to adjustments to ensure they are compliant with IFRS 13 'Fair Value Measurement'. The price curves are subject to review and approval by the Group's Executive Committee and valuations of all derivatives, together with other contracts that are not within the scope of IFRS 9, are also reviewed regularly as part of the overall risk management process. The Group adjusts the market value of derivative instruments to account for counterparty credit risk and corresponding possibility of a counterparty default preventing full realisation of the risk-free market value of the derivative. The Group estimates Credit Valuation Adjustments by computing an expected evolution of the market value of a counterpart's derivatives portfolio over the life of the contracts weighted by the probability of a default and an assumption of the market value recoverable in the event of a default. The default probability is calibrated to the price of Credit Default Swaps – a debt instrument reflecting the insurance premium payable to protect against a debtor's default. Debit valuation adjustments are the amount added back to the derivative value to account for the expected gain from the Group's own default and are calculated using a similar methodology with reference to the Group's own probability of default.

S6. Fair value of financial instruments

Where the fair value at initial recognition for contracts which have significant unobservable inputs and the fair value differs from the transaction price, a day one gain or loss will arise. These deferred gains are presented net against respective derivative assets and derivative liabilities. Such gains and losses are deferred and amortised to the Group Income Statement based on volumes purchased or delivered over the contractual period until such time as observable market data becomes available (see note S2 for further detail). The amount that has yet to be recognised in the Group Income Statement relating to the differences between the transaction prices and the amounts that would have arisen had valuation techniques used for subsequent measurement been applied at initial recognition, less subsequent releases, is as follows:

Day-one gains deferred	2022 £m	2021 £m
1 January	**90**	64
Disposal of Direct Energy	**–**	(45)
Net gains deferred on transactions in the year	**401**	70
Net amounts recognised in Group Income Statement	**(195)**	2
Exchange differences	**8**	(1)
31 December	**304**	90

(c) Fair value of financial assets and liabilities held at amortised cost

The carrying value of the Group's financial assets and liabilities measured at amortised cost are approximately equal to their fair value except as listed below:

			2022			2021		
31 December		Notes	**Carrying value £m**	**Fair value £m**	**Fair value hierarchy**	Carrying value £m	Fair value £m	Fair value hierarchy
Bank loans		24(d)	**(143)**	**(143)**	**Level 2**	(137)	(173)	Level 2
Bonds	Level 1	24(d)	**(2,805)**	**(2,840)**	**Level 1**	(3,218)	(3,947)	Level 1
	Level 2	24(d)	**(69)**	**(79)**	**Level 2**	(106)	(136)	Level 2

Bank loans and borrowings
The fair values of bonds classified as Level 1 within the fair value hierarchy are calculated using quoted market prices. The fair values of Level 2 bonds and bank loans have been determined by discounting cash flows with reference to relevant market rates of interest. The fair values of overdrafts and short-term loans are assumed to equal their book values due to the short-term nature of these amounts.

Other financial instruments
Due to their nature and/or short-term maturity, the fair values of trade and other receivables, cash and cash equivalents, trade and other payables and securities held at amortised cost are estimated to approximate their carrying values.

S6. Fair value of financial instruments

(d) Financial assets and liabilities subject to offsetting, master netting arrangements and similar arrangements

31 December 2022	Gross amounts of recognised financial instruments £m	Gross amounts of recognised financial instruments offset in the Group Balance Sheet £m	Net amounts presented in the Group Balance Sheet £m	Related amounts not offset in the Group Balance Sheet (i) Financial instruments £m	Related amounts not offset in the Group Balance Sheet (i) Collateral £m	Net amount £m
Derivative financial assets	**28,019**	**(20,592)**	**7,427**	**(956)**	**(601)**	**5,870**
Derivative financial liabilities	**(30,743)**	**20,592**	**(10,151)**	**956**	**1,154**	**(8,041)**
			(2,724)			**(2,171)**
Balances arising from commodity contracts:						
Accrued and unbilled downstream and energy income	**12,751**	**(8,057)**	**4,694**	**(622)**	**—**	**4,072**
Accruals for commodity costs	**(13,428)**	**8,057**	**(5,371)**	**622**	**—**	**(4,749)**
Cash and financing arrangements:						
Cash and cash equivalents	**4,842**	**—**	**4,842**	**(600)**	**—**	**4,242**
Bank loans and overdrafts	**(743)**	**—**	**(743)**	**600**	**—**	**(143)**

31 December 2021	Gross amounts of recognised financial instruments £m	Gross amounts of recognised financial instruments offset in the Group Balance Sheet £m	Net amounts presented in the Group Balance Sheet £m	Related amounts not offset in the Group Balance Sheet (i) Financial instruments £m	Related amounts not offset in the Group Balance Sheet (i) Collateral £m	Net amount £m
Derivative financial assets	33,212	(25,662)	7,550	(810)	(1,185)	5,555
Derivative financial liabilities	(31,671)	25,662	(6,009)	810	888	(4,311)
			1,541			1,244
Balances arising from commodity contracts:						
Accrued and unbilled downstream and energy income	8,890	(5,443)	3,447	(242)	—	3,205
Accruals for commodity costs	(8,905)	5,443	(3,462)	242	—	(3,220)
Cash and financing arrangements:						
Cash and cash equivalents	5,060	—	5,060	(750)	—	4,310
Bank loans and overdrafts	(887)	—	(887)	750	—	(137)

(i) The Group has arrangements in place with various counterparties in respect of commodity trades which provide for a single net settlement of all financial instruments covered by the arrangement in the event of default or termination, or other circumstances arising whereby either party is unable to meet its obligations. The above table shows the potential impact of these arrangements being enforced by offsetting the relevant amounts within each Group Balance Sheet class of asset or liability, but does not show the impact of offsetting across Group Balance Sheet classes where the offsetting Group Balance Sheet class is not included within the above table.

S7. Fixed-fee service and insurance contracts

This section includes fixed-fee service (FFS) and insurance contract disclosures for services related to British Gas.

FFS contracts in the UK are entered into with home services customers by British Gas Services Limited (BGSL) and with business customers by British Gas Services (Commercial) Limited. Insurance contracts in the UK are entered into with home services customers by British Gas Insurance Limited (BGIL), authorised by the PRA and regulated by the FCA and the PRA.

Product offerings include central heating, boiler and controls, plumbing and drains and electrical appliance insurance cover.

FFS contracts continue until either party cancels; insurance contracts normally provide cover for twelve months with the option of renewal.

The contracts that protect policyholders against the risk of breakdowns result in risk transfer to the contract provider. Benefits provided to customers vary in accordance with terms and conditions of the contracts entered into. However, they generally include maintenance, repair and/or replacement of the items affected.

The levels of risk exposure and service provision to customers under the contract terms depend on the occurrence of uncertain future events, particularly the nature and frequency of faults, and the cost of repair or replacement of the items affected. Accordingly, the timing and the amount of future cash outflows associated with the contracts is uncertain. As the Group's insurance contract portfolio is comprised of a large number of contracts with small individual values, a high volume of claims with relatively low unit cost results. The characteristics of the business mean that material concentrations or aggregations of risk are relatively remote. The key terms and conditions that affect future cash flows are as follows:

- provision of labour and parts for repairs, dependent on the agreement and associated level of service;
- a specified number of safety and maintenance inspections are carried out as set out in the agreement (usually once a year);
- no limit to the number of call-outs to carry out repair work; and
- limits on certain maintenance and repair costs.

The most significant insurance risk is an extreme weather event for an extended period, which has the propensity to increase claim frequencies. The Group regularly assesses insurance risk sensitivities, the most significant relating to increases in breakdown frequency and increases in the average cost of repair. A reasonably possible increase in either would not have a material impact on the results of the Group.

Revenue is recognised over the life of contracts (usually twelve months) regarding the incidence of risk, in particular the seasonal propensity of claims that span the life of the contract as a result of emergency maintenance being available throughout the contract term. Costs incurred to settle claims represent principally the engineer workforce employed by the Group within home services and the cost of parts utilised in repair or maintenance. Revenue is accounted for over a 12-month period, with adjustments made to reflect the seasonality of workload over a given year.

Weather conditions and the seasonality of repairs both affect the profile of the workload and associated costs incurred across the year.

The risk exposure of these uncertain events is actively managed by undertaking the following risk mitigation activities:

- an initial service visit is provided to customers taking up most central heating contracts and in some instances pre-existing faults may lead to the contract being cancelled and no further cover being provided;
- an annual maintenance inspection is performed as part of most central heating contracts to help identify and prevent issues developing into significant maintenance or breakdown claims; and
- contract limits are applied to certain types of maintenance and repair work considered to be higher risk in terms of frequency and cost.

The costs of FFS claims and insurance claims incurred during the year were £2 million (2021: £3 million) and £290 million (2021: £293 million) respectively and are included in the table below in 'Expenses relating to FFS and insurance contracts'. All claims are settled immediately and in full. Due to the short average lead time between claims occurrence and settlement, no material provisions were outstanding at the balance sheet date in 2022 or 2021.

31 December	2022 £m	2021 £m
Total revenue	**857**	913
Expenses relating to FFS and insurance contracts	**(848)**	(803)
Deferred income	**(39)**	(37)
Accrued income	**29**	31

The Group also considers whether estimated future cash flows under the contracts will be sufficient to meet expected future costs. Any deficiency is charged immediately to the Group Income Statement. Claims frequency is sensitive to the reliability of appliances as well as the impact of weather conditions. The contracts are not exposed to any interest rate risk or significant credit risk and do not contain any embedded derivatives.

S8. Related party transactions

The Group's principal related party is its investment in Lake Acquisitions Limited, which owns the existing EDF UK nuclear fleet. The disclosures below, including comparatives, only refer to related parties that were related in the current reporting period.

During the year, the Group entered into the following arm's length transactions with related parties who are not members of the Group, and had the following associated balances:

	2022		2021	
31 December	Purchase of goods and services £m	Amounts owed to £m	Purchase of goods and services £m	Amounts owed to £m
Associates:				
Nuclear	**(564)**	**(102)**	(300)	(40)
	(564)	**(102)**	(300)	(40)

During the year, there were no material changes to commitments in relation to joint ventures and associates.

At the balance sheet date, the Group had committed facilities to the Lake Acquisition Group totalling £120 million (2021: £120 million), although nothing has been drawn at 31 December 2022.

Remuneration of key management personnel

Year ended 31 December	2022 £m	2021 £m (i)
Short-term benefits	**4.4**	3.5
Post-employment benefits	**0.1**	0.4
Share-based payments	**4.1**	1.1
	8.6	5.0

Key management personnel comprise members of the Board and Executive Committee, a total of 11 individuals at 31 December 2022 (2021: 10).

Remuneration of the Directors of Centrica plc

Year ended 31 December	2022 £m	2021 £m (i)
Total emoluments (ii)	**3.2**	2.4
Amounts receivable under long-term incentive schemes	**2.3**	—
Contributions into pension schemes	**—**	0.1
	5.5	2.5

(i) 2021 comparatives have been restated.
(ii) These emoluments were paid for services performed on behalf of the Group. No emoluments related specifically to services performed for the Company.

Directors' interests in shares are given in the Remuneration Report on pages 84 to 95.

S9. Auditors' remuneration

Year ended 31 December	2022 £m	2021 £m
Fees payable to the Company's auditors for the audit of the Company's individual and consolidated:		
Financial Statements	**4.8**	5.0
Audit of the Company's subsidiaries	**1.7**	1.7
Total fees related to the audit of the parent and subsidiary entities	**6.5**	6.7
Fees payable to the Company's auditors and its associates for other services:		
Audit-related assurance services (i)	**0.9**	0.8
All other services (ii)	**—**	0.9
Total fees	**7.4**	8.4
Fees in respect of pension scheme audits (iii)	**0.1**	0.1

(i) Predominantly relates to the review of the condensed interim Financial Statements and the audit of the Ofgem Consolidated Segmental Statement.
(ii) Prior year relates to the Class 1 Circular reporting accountant work for the Spirit Energy Norway and Statfjord field disposal.
(iii) The pension scheme audit continues to be performed by PricewaterhouseCoopers LLP.

During 2021, work on the divestment of Spirit Energy Norway and Statfjord field required additional other services from Deloitte in respect of the disposal Class 1 Circular. Approval for this expenditure was sought and received from the Audit and Risk Committee in advance of the work commencing.

S10. Related undertakings

The Group has a large number of related undertakings principally in the UK, US, Canada, Denmark, the Netherlands and the Republic of Ireland. These are listed below.

(a) Subsidiary undertakings

Investments held directly by Centrica plc with 100% voting rights

31 December 2022	Principal activity	Country of incorporation/ registered address key (i)		Class of shares held
Centrica Beta Holdings Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Holdings Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Ireland Holdings Limited (ii)	Holding company	Republic of Ireland	B	Ordinary shares
CH4 Energy Limited (iii)	Dormant	United Kingdom	A	Ordinary shares
Rhodes Holdings HK Limited	Non-trading	Hong Kong	C	Ordinary shares

Investments held indirectly by Centrica plc with 100% voting rights

31 December 2022	Principal activity	Country of incorporation/ registered address key (i)		Class of shares held
Accord Energy (Trading) Limited	Dormant	United Kingdom	A	Ordinary shares
Alertme.com GmbH	In liquidation	Germany	D	Ordinary shares
Astrum Solar, Inc.	Home and/or commercial services	United States	E	Ordinary shares
Bord Gáis Energy Limited	Energy supply and power generation	Republic of Ireland	B	Ordinary shares
Bord Gáis Energy Trustees DAC	Pension trustee company	Republic of Ireland	B	Ordinary shares
British Gas Energy Procurement Limited (iii) (iv)	Dormant	United Kingdom	A	Ordinary shares
British Gas Finance Limited	Vehicle leasing	United Kingdom	A	Ordinary shares
British Gas Insurance Limited	Insurance provision	United Kingdom	A	Ordinary shares
British Gas Limited (iii)	Energy supply	United Kingdom	A	Ordinary shares
British Gas New Heating Limited	Electrical and gas installations	United Kingdom	A	Ordinary shares
British Gas Services (Commercial) Limited	Servicing and installation of heating systems	United Kingdom	A	Ordinary shares
British Gas Services Limited	Home services	United Kingdom	A	Ordinary shares
British Gas Social Housing Limited	Servicing and installation of heating systems	United Kingdom	A	Ordinary shares
British Gas Solar Limited (iv)	Dormant	United Kingdom	A	Ordinary shares
British Gas Trading Limited	Energy supply	United Kingdom	A	Ordinary shares
British Gas X Limited	Dormant	United Kingdom	A	Ordinary shares
Caythorpe Gas Storage Limited	Gas storage	United Kingdom	F	Ordinary shares
CBS Energy Assets Belgium B.V. (ii)	Construction of battery storage	Belgium	G	Ordinary shares
CBS Solar Assets UK Limited (iii)	Building solar farm & connecting to grid	United Kingdom	A	Ordinary shares
CBS US Solar Fund 1, LLC	Distributed Energy & Power	United States	H	Membership interest
Centrica (Lincs) Wind Farm Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Barry Limited	Power generation	United Kingdom	A	Ordinary shares
Centrica Brigg Limited (vi)	Construction of battery storage	United Kingdom	A	Ordinary shares
Centrica Business Holdings Inc.	Holding company	United States	I	Ordinary shares
Centrica Business Solutions (Generation) Limited	Power generation	United Kingdom	A	Ordinary shares
Centrica Business Solutions Asset Management, LLC	Energy management products and services	United States	H	Membership interest
Centrica Business Solutions B.V.	Energy management products and services	Netherlands	J	Ordinary shares
Centrica Business Solutions Belgium NV	Demand response aggregation	Belgium	G	Ordinary shares
Centrica Business Solutions Canada Inc.	Energy management products and services	Canada	K	Ordinary shares
Centrica Business Solutions Deutschland GmbH	Demand response aggregation	Germany	L	Ordinary shares
Centrica Business Solutions France SASU	Demand response aggregation	France	M	Ordinary shares
Centrica Business Solutions International Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Business Solutions Ireland Limited	Energy management products and services	Republic of Ireland	B	Ordinary shares
Centrica Business Solutions Italia Srl	Energy management products and services	Italy	N	Ordinary shares

S10. Related undertakings

31 December 2022	Principal activity	Country of incorporation/ registered address key (i)		Class of shares held
Centrica Business Solutions Management Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Business Solutions Optimize, LLC	Energy management products and services	United States	H	Membership interest
Centrica Business Solutions Romania Srl	Energy management products and services	Romania	O	Ordinary shares
Centrica Business Solutions Services, Inc.	Energy management products and services	United States	H	Ordinary shares
Centrica Business Solutions UK Limited	Energy management products and services	United Kingdom	A	Ordinary shares
Centrica Business Solutions UK Optimisation Limited	Demand response aggregation	United Kingdom	A	Ordinary shares
Centrica Business Solutions US, Inc.	Energy management products and services	United States	H	Ordinary shares
Centrica Business Solutions Zrt	Energy management products and services	Hungary	P	Ordinary shares
Centrica Combined Common Investment Fund Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Directors Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Distributed Generation Limited	Power generation	United Kingdom	A	Ordinary shares
Centrica Energy (Trading) Limited	In liquidation	United Kingdom	A	Ordinary shares
Centrica Energy Limited	Wholesale energy trading	United Kingdom	A	Ordinary shares
Centrica Energy Marketing Limited	Wholesale energy trading	United Kingdom	A	Ordinary shares
Centrica Energy Operations Limited (iv)	Dormant	United Kingdom	A	Ordinary shares
Centrica Energy Renewable Investments Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Energy Trading A/S	Energy services and wholesale energy trading	Denmark	Q	Ordinary shares
Centrica Energy Trading GmbH	Energy services and wholesale energy trading	Germany	R	Ordinary shares
Centrica Energy Trading Pte. Ltd	Energy services and wholesale energy trading	Singapore	S	Ordinary shares
Centrica Engineers Pension Trustees Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Finance (Canada) Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Finance (Scotland) Limited	Holding company	United Kingdom	T	Ordinary shares
Centrica Finance (US) Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Finance Investments Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Finance Norway Limited	Dormant	Jersey	U	Ordinary shares
Centrica Gamma Holdings Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Hive Limited	Energy management products and services	United Kingdom	A	Ordinary shares
Centrica Hive Srl	Energy management products and services	Italy	V	Ordinary shares
Centrica Ignite GP Limited	Investment company	United Kingdom	A	Ordinary shares
Centrica Ignite LP Limited	Investment company	United Kingdom	A	Ordinary shares
Centrica India Offshore Private Limited	Business services	India	W	Ordinary shares
Centrica Infrastructure Limited (iv)	Dormant	United Kingdom	T	Ordinary shares
Centrica Innovations UK Limited	Investment company	United Kingdom	A	Ordinary shares
Centrica Innovations US, Inc.	Investment company	United States	H	Ordinary shares
Centrica Insurance Company Limited	Insurance provision	Isle of Man	H	Ordinary and preference shares
Centrica KPS Limited	Power generation	United Kingdom	A	Ordinary shares
Centrica Lake Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Leasing (KL) Limited (iv)	Dormant	United Kingdom	A	Ordinary shares
Centrica LNG Company Limited	LNG Trading	United Kingdom	A	Ordinary shares
Centrica LNG UK Limited	LNG Trading	United Kingdom	A	Ordinary shares
Centrica Nederland B.V.	Holding company	Netherlands	J	Ordinary shares
Centrica Nigeria Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Nominees No.1 Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Offshore UK Limited	Gas and/or liquid exploration and production	United Kingdom	F	Ordinary shares
Centrica Onshore Processing UK Limited	Dormant	United Kingdom	F	Ordinary shares
Centrica Overseas Holdings Limited	Holding company	United Kingdom	A	Ordinary shares
Centrica Pension Plan Trustees Limited	Dormant	United Kingdom	A	Limited by guarantee

S10. Related undertakings

31 December 2022	Principal activity	Country of incorporation/ registered address key (i)		Class of shares held
Centrica Pension Trustees Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Production Limited	Dormant	United Kingdom	T	Ordinary shares
Centrica Resources (Nigeria) Limited	Non-trading	Nigeria	X	Ordinary shares
Centrica Resources (UK) Limited (iv)	Dormant	United Kingdom	A	Ordinary shares
Centrica Resources Petroleum UK Limited (iv)	Dormant	United Kingdom	A	Ordinary shares
Centrica Secretaries Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Services Limited	Business services	United Kingdom	A	Ordinary shares
Centrica Storage Holdings Limited	Holding company	United Kingdom	F	Ordinary shares
Centrica Storage Limited	Gas production and processing	United Kingdom	F	Ordinary shares
Centrica Titan Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Trinidad and Tobago Limited	Business services	Trinidad and Tobago	Y	Ordinary shares
Centrica Trust (No.1) Limited	Dormant	United Kingdom	A	Ordinary shares
Centrica Upstream Investment Limited (iv)	Dormant	United Kingdom	T	Ordinary shares
Centrica Trading Limited (iii)	Dormant	United Kingdom	A	Ordinary shares
CIU1 Limited (iv)	Dormant	United Kingdom	A	Ordinary shares
DEML Investments Limited	Holding company	Canada	K	Ordinary shares
DER Development No. 10 Ltd.	Holding company	Canada	K	Ordinary shares
Distributed Energy Customer Solutions Limited	Energy management products and services	United Kingdom	A	Ordinary shares
Dyno-Rod Limited	Operation of a franchise network	United Kingdom	A	Ordinary shares
ECL Contracts Limited	Dormant	United Kingdom	A	Ordinary shares
ECL Investments Limited	Dormant	United Kingdom	A	Ordinary shares
Electricity Direct (UK) Limited	Dormant	United Kingdom	A	Ordinary shares
ENER-G Cogen International Limited	Holding company	United Kingdom	A	Ordinary shares
ENER-G Nagykanizsa Kft	Energy management products and services	Hungary	P	Ordinary shares
ENER-G Power2 Limited	Holding company	United Kingdom	A	Ordinary shares
ENER-G Rudox, LLC	Energy management products and services	United States	H	Membership interest
Energy For Tomorrow	Not-for-profit energy services	United Kingdom	A	Limited by guarantee
GB Gas Holdings Limited	Holding company	United Kingdom	A	Ordinary shares
Generation Green Solar Limited	Dormant community benefit society	United Kingdom	A	Ordinary shares
GF One Limited (v)	In liquidation	United Kingdom	Z	Ordinary shares
GF Two Limited (v)	In liquidation	United Kingdom	Z	Ordinary shares
Goldbrand Development Limited	Dormant	United Kingdom	A	Ordinary shares
Home Assistance UK Limited	Dormant	United Kingdom	A	Ordinary shares
Neas Energy Limited	Energy services and wholesale energy trading	United Kingdom	A	Ordinary shares
Neas Invest A/S	Dormant	Denmark	Q	Ordinary shares
North Sea Infrastructure Partners Limited (iv)	Dormant	United Kingdom	T	Ordinary shares
NSIP (Holdings) Limited (iv)	Dormant	United Kingdom	T	Ordinary shares
P.H Jones Group Limited	Holding company	United Kingdom	A	Ordinary shares
Panoramic Power Ltd.	Energy management products and services	Israel	AA	Ordinary shares
Pioneer Shipping Limited	LNG vessel chartering	United Kingdom	A	Ordinary shares
PRP Battery (Dyce) Limited (ii)	Non-trading	United Kingdom	A	Ordinary shares
Solar Technologies Group Limited (iv)	Dormant	United Kingdom	A	Ordinary shares
South Energy Investments, LLC	Investment company	United States	AB	Membership interest
Vista Solar, Inc.	Distributed Energy & Power	United States	AC	Ordinary shares

S10. Related undertakings

Investments held indirectly by Centrica plc with 69% voting rights

31 December 2022	Principal activity	Country of incorporation/ registered address key (i)		Class of shares held
Spirit Norway Holdings AS	Dormant	Norway	AD	Ordinary shares
Spirit Energy Nederland B.V.	Gas and/or liquid exploration and production	Netherlands	AE	Ordinary Shares
Spirit Energy Norway AS	Gas and/or liquid exploration and production	Norway	AF	Ordinary shares
Spirit Infrastructure B.V.	Construction, ownership and exploitation of infrastructure	Netherlands	AE	Ordinary shares
Bowland Resources (No.2) Limited	Gas and/or liquid exploration and production	United Kingdom	AG	Ordinary shares
Spirit Energy Hedging Holding Limited	Dormant	United Kingdom	AG	Ordinary shares
Spirit Energy Hedging Limited	Dormant	United Kingdom	AG	Ordinary shares
Bowland Resources Limited	Gas and/or liquid exploration and production	United Kingdom	AG	Ordinary shares
Elswick Energy Limited	Gas and/or liquid exploration and production	United Kingdom	AG	Ordinary shares
Spirit Energy Limited	Holding company	United Kingdom	AG	Ordinary and deferred shares
Spirit Energy North Sea Limited	Gas and/or liquid exploration and production	United Kingdom	AG	Ordinary shares
Spirit Energy North Sea Oil Limited	Gas and/or liquid exploration and production	United Kingdom	AH	Ordinary shares
Spirit Energy Production UK Limited	Gas and/or liquid exploration and production	United Kingdom	AG	Ordinary shares
Spirit Energy Resources Limited	Gas and/or liquid exploration and production	United Kingdom	AG	Ordinary shares
Spirit Energy Southern North Sea Limited	Gas and/or liquid exploration and production	United Kingdom	AG	Ordinary shares
Spirit Energy Treasury Limited	Finance company	United Kingdom	AG	Ordinary shares
Spirit Europe Limited	Holding company	United Kingdom	AG	Ordinary shares
Spirit North Sea Gas Limited	Gas and/or liquid exploration and production	United Kingdom	AH	Ordinary shares
Spirit Norway Limited	Gas and/or liquid exploration and production	United Kingdom	AG	Ordinary shares
Spirit Production (Services) Limited	Business services	United Kingdom	AH	Ordinary shares
Spirit Resources (Armada) Limited	Gas and/or liquid exploration and production	United Kingdom	AG	Ordinary shares

(i) For list of registered addresses, refer to note S10(d).
(ii) Incorporated or acquired in 2022.
(iii) The following name changes were made during the year:
- Centrica Trading Limited to CH4 Energy Limited
- CH4 Energy Limited to Centrica Trading Limited
- British Gas Limited to British Gas Energy Procurement Limited
- British Gas Energy Procurement Limited to British Gas Limited
- Pennings Power Limited to CBS Solar Assets UK Limited

(iv) Active proposal to strike off.
(v) GF One Limited and GF Two Limited are 75% indirectly owned by Centrica plc.
(vi) Centrica Brigg Limited change of name to CBS Energy Storage Assets UK Limited as of 15 February 2023.

S10. Related undertakings

(b) Subsidiary undertakings – partnerships held indirectly by Centrica plc with 100% voting rights

31 December 2022	Principal activity	Country of incorporation/ registered address key (i)		Class of shares held
CF 2016 LLP	Group financing	United Kingdom	A	Membership interest
CFCEPS LLP	Group financing	United Kingdom	A	Membership interest
CFCPP LLP	Group financing	United Kingdom	A	Membership interest
Direct Energy Resources Partnership	Holding entity	Canada	AI	Membership interest
Finance Scotland 2016 Limited Partnership	Group financing	United Kingdom	T	Membership interest
Finance Scotland CEPS Limited Partnership	Group financing	United Kingdom	T	Membership interest
Finance Scotland CPP Limited Partnership	Group financing	United Kingdom	T	Membership interest
Ignite Social Enterprise LP	Social enterprise investment fund	United Kingdom	A	Membership interest

(i) For list of registered addresses, refer to note S10(d).

The following partnerships are fully consolidated into the Group Financial Statements and the Group has taken advantage of the exemption (as confirmed by regulation 7 of the Partnerships (Accounts) Regulations 2008) not to prepare or file separate accounts for these entities:

- Finance Scotland 2016 Limited Partnership;
- Finance Scotland CEPS Limited Partnership;
- Finance Scotland CPP Limited Partnership; and
- Ignite Social Enterprise LP.

(c) Joint arrangements and associates

31 December 2022	Principal activity	Country of incorporation/ registered address key (i)		Class of shares held	Indirect interest and voting rights (%)
Joint ventures (ii)					
Allegheny Solar 1, LLC	Energy supply and/or services	United States	AJ	Membership interest	40.0%
C2 Centrica MT, LLC	Energy supply and/or services	United States	AK	Membership interest	50.0%
Eurowind Polska VI Sp z.o.o.	Operation of an onshore windfarm	Poland	AL	Ordinary shares	50.0%
Greener Ideas Limited	Development of flexible power generation sites	Republic of Ireland	B	Ordinary shares	50.0%
Three Rivers Solar 1, LLC	Energy supply and/or services	United States	AJ	Membership interest	40.0%
Three Rivers Solar 2, LLC	Energy supply and/or services	United States	AJ	Membership interest	40.0%
Three Rivers Solar 3, LLC	Energy supply and/or services	United States	AJ	Membership interest	40.0%
Vindpark Keblowo ApS	Operation of an onshore windfarm	Denmark	AM	Ordinary shares	50.0%
Associates (ii)					
Lake Acquisitions Limited	Holding company	United Kingdom	AN	Ordinary shares	20.0%

(i) For list of registered addresses, refer to note S10(d).
(ii) Further information on the principal joint ventures and associate investments held by the Group is disclosed in notes 6 and 14.

All Group companies principally operate within their country of incorporation unless noted otherwise.

S10. Related undertakings

(d) List of registered addresses

Registered address key	Address
A	Millstream, Maidenhead Road, Windsor, SL4 5GD, United Kingdom
B	1 Warrington Place, Dublin 2, Republic of Ireland
C	Level 54, Hopewell Centre, 183 Queens Road East, Hong Kong
D	Thomas-Wimmer-Ring 1-3, 80539, Munich, Germany
E	2 Wisconsin Circle #700, Chevy Chase, MD 20815, United States
F	Woodland House, Woodland Park, Hessle, HU13 0FA, United Kingdom
G	Roderveldlaan 2 bus 2, 2600 Antwerp, Belgium
H	3411 Silverside Road, Suite 104, Tatnall Building. Wilmington, DE 19810, United States
I	3411 Silverside Road, Rodney Building #104, Wilmington, DE 19810, United States
J	Wiegerbruinlaan 2A, 1422 CB Uithoorn, Netherlands
K	550 Burrard Street, Suite 2900, Vancouver BC V6C 0A3, Canada
L	Neuer Wall 10, 20354 Hamburg, Germany
M	60 Avenue Charles de Gaulle, Cs 60016, 92573, Neuilly sur Seine Cedex, France
N	Milan (MI), Via Emilio Cornalia 26, Italy
O	Strada Martir Colonel Ioan Uță nr.28 camera 1, Municipiul Timisoara judet Timis, Romania
P	H-1106 Budapest Jászberényi út 24-36, Hungary
Q	Skelagervej 1, 9000 Aalborg, Denmark
R	Esplanade 40, 20354 Hamburg, Germany [(i)]
S	220 Orchard Road, #05-01 Midpoint Orchard, Singapore 238852, Republic of Singapore
T	1 Waterfront Avenue, Edinburgh, Scotland, EH5 1SG, United Kingdom
U	47 Esplanade, St Helier, JE1 0BD, Jersey, Channel Islands
V	Via Paleocapa Pietro 4, 20121, Milano, Italy
W	G-74, LGF, Kalkaji, New Delhi, South Delhi, 110019, India
X	Sterling Towers, 20 Marina, Lagos, Nigeria
Y	48-50 Sackville Street, Port of Spain, Trinidad and Tobago
Z	1 More London Place, London, SE1 2AF, United Kingdom
AA	15 Atir Yeda Street, Kfar Saba, 44643, Israel
AB	6 Landmark Square, 4th floor, Stamford CT 06901, United States
AC	4640 Admiralty Way, 5th floor, Marina del Rey, California 90292, United States
AD	Lilleakerveien 8, 0283 Oslo, Norway
AE	Transpolis Building, Polarisavenue 39, 2132 JH Hoofddorp, Netherlands
AF	Veritasvien 29, 4007 Stavanger, Norway
AG	1st floor, 20 Kingston Road, Staines-upon-Thames, TW18 4LG, United Kingdom
AH	5th floor, IQ Building, 15 Justice Mill Lane, Aberdeen, AB11 6EQ, United Kingdom
AI	350 7th Avenue SW, Suite 3400, Calgary AB T2P 3N9, Canada
AJ	1209 Orange Street, Wilmington, New Castle County, DE 19801, United States
AK	850 New Burton Road, Suite 201, Dover, DE 19904, United States
AL	Ul. Wysogotowska 23, 62-081 Przezmierowo, Wielkpolskie, Poland
AM	Mariagervej 58B, DK 9500 Hobro, Denmark
AN	90 Whitfield Street, London, W1T 4EZ, United Kingdom

(i) Centrica Energy Trading GmbH changed its registered address during the year from Gustav-Mahler-Platz 1, 20354 Hamburg, Germany to the address listed above.

S10. Related undertakings

(e) Summarised financial information

Management has determined that the investment in Lake Acquisitions Limited is sufficiently material to warrant further disclosure on an individual basis. Accordingly, the Group presents summarised financial information, along with reconciliations to the amounts included in the consolidated Group Financial Statements, for this investee.

Lake Acquisitions Limited

Summarised statement of total comprehensive income

	2022				2021			
Year ended 31 December	Associate information reported to Group £m	Unadjusted 20% share £m	Fair value and other adjustments £m	Group share £m	Associate information reported to Group £m	Unadjusted 20% share £m	Fair value and other adjustments £m	Group share £m
Revenue	2,960	592	—	592	1,661	332	—	332
Operating profit/(loss) before interest and tax	737	147	(26)	121	(1,106)	(221)	97	(124)
Profit/(loss) for the year	542	108	(15)	93	(889)	(178)	75	(103)
Other comprehensive (loss)/income	(1,467)	(293)	—	(293)	760	152	—	152
Total comprehensive (loss)/income	(925)	(185)	(15)	(200)	(129)	(26)	75	49

Summarised balance sheet

	2022				2021			
31 December	Associate information reported to Group £m	Unadjusted 20% share £m	Fair value and other adjustments [(i)] £m	Group share £m	Associate information reported to Group £m	Unadjusted 20% share £m	Fair value and other adjustments [(i)] £m	Group share £m
Non-current assets	17,121	3,424	751	4,175	21,054	4,211	898	5,109
Current assets	4,212	842	—	842	3,527	705	—	705
Current liabilities	(1,742)	(348)	—	(348)	(1,791)	(358)	—	(358)
Non-current liabilities	(12,405)	(2,481)	(131)	(2,612)	(14,379)	(2,876)	(263)	(3,139)
Net assets	7,186	1,437	620	2,057	8,411	1,682	635	2,317

(i) Before cumulative impairments of £497 million (2021: £692 million) of the Group's associate investment.

During the year, dividends of £60 million (2021: £1 million) were paid by the associate to the Group.

Joint operations - fields/assets

31 December 2022	Location	Percentage holding
Cygnus	UK North Sea	61%

S11. Non-controlling interests

The Group has one subsidiary undertaking with a non-controlling interest: Spirit Energy Limited, through which the Group carries out the majority of its exploration and production activities.

	2022					2021				
31 December	Non-controlling interests %	Profit for the year £m	Total comprehensive income	Total equity £m	Distributions to non-controlling interests £m	Non-controlling interests %	Loss for the year £m	Total comprehensive loss £m	Total equity £m	Distributions to non-controlling interests £m
Spirit Energy Limited	31	146	151	263	(273)	31	(37)	(40)	385	—

Summarised financial information

The summarised financial information disclosed is shown on a 100% basis. It represents the consolidated position of Spirit Energy Limited and its subsidiaries that would be shown in its consolidated financial statements prepared in accordance with IFRS under Group accounting policies before intercompany eliminations.

Summarised statement of total comprehensive income

Year ended 31 December	2022 £m	2021 £m
Revenue	1,667	1,795
Profit/(loss) for the year (i)	371	(118)
Other comprehensive income/(loss) (i)	116	(10)
Total comprehensive income/(loss)	487	(128)

(i) 2022 includes £101 million exchange differences reclassified to the income statement on disposal not attributable to non-controlling interests (2021: £nil).

Summarised balance sheet

31 December	2022 £m	2021 £m
Non-current assets	1,683	2,169
Current assets	1,451	1,649
Assets of disposal groups classified as held for sale	—	1,651
Current liabilities	(1,183)	(1,846)
Liabilities of disposal groups classified as held for sale	—	(1,225)
Non-current liabilities	(1,104)	(1,156)
Net assets	847	1,242

Summarised cash flow

Year ended 31 December	2022 £m	2021 £m
Net (decrease)/increase in cash and cash equivalents	(73)	66

Company Statement of Changes in Equity

	Share capital £m	Share premium £m	Retained earnings £m	Other equity (note II) £m	Total equity £m
1 January 2021	361	2,347	1,611	(5)	4,314
Profit for the year	—	—	976	—	976
Other comprehensive income	—	—	—	10	10
Total comprehensive income	—	—	976	10	986
Employee share schemes and other share transactions	2	30	3	(24)	11
31 December 2021	363	2,377	2,590	(19)	5,311
Profit for the year	—	—	719	—	**719**
Other comprehensive loss	—	—	—	(51)	**(51)**
Total comprehensive income/(loss)	—	—	719	(51)	**668**
Employee share schemes and other share transactions	2	17	(2)	(14)	**3**
Share buyback programme [(i)]	—	—	—	(250)	**(250)**
Dividends paid to equity holders	—	—	(59)	—	**(59)**
31 December 2022	**365**	**2,394**	**3,248**	**(334)**	**5,673**

(i) See note I and note S4 of the Group consolidated Financial Statements for further details of the share buyback programme.

As permitted by section 408(3) of the Companies Act 2006 no Income Statement or Statement of Comprehensive Income is presented.

The Directors propose a final dividend of 2.00 pence per ordinary share (totalling £118 million) for the year ended 31 December 2022. Details of the interim dividends are provided in note 11 to the Group consolidated Financial Statements.

Details of the Company's share capital are provided in the Group Statement of Changes in Equity and note 25 to the Group consolidated Financial Statements.

The notes on pages 227 to 236 form part of these Financial Statements, along with note 25 to the Group consolidated Financial Statements.

Company Balance Sheet

31 December	Notes	2022 £m	2021 (restated) £m
Non-current assets			
Property, plant and equipment	IV	**11**	5
Investments	V	**949**	1,100
Deferred tax assets	XII	**1**	–
Trade and other receivables	VI	**13,089**	12,809
Derivative financial instruments	VII	**101**	86
Retirement benefit assets	XIV	**56**	102
Securities	IX	**498**	110
		14,705	14,212
Current assets			
Trade and other receivables	VI	**1,500**	848
Derivative financial instruments	VII	**217**	87
Cash and cash equivalents		**3,395**	3,627
		5,112	4,562
Total assets		**19,817**	18,774
Current liabilities			
Derivative financial instruments	VII	**(211)**	(73)
Current tax liabilities		**–**	(1)
Trade and other payables	XI	**(9,883)**	(9,160)
Provisions for other liabilities and charges		**(1)**	(1)
Bank overdrafts, loans and other borrowings	XIII	**(905)**	(810)
		(11,000)	(10,045)
Non-current liabilities			
Deferred tax liabilities	XII	**–**	(14)
Derivative financial instruments	VII	**(271)**	(6)
Trade and other payables	XI	**(45)**	(154)
Provisions for other liabilities and charges		**(1)**	(1)
Retirement benefit obligations	XIV	**(49)**	(66)
Bank loans and other borrowings	XIII	**(2,778)**	(3,177)
		(3,144)	(3,418)
Total liabilities		**(14,144)**	(13,463)
Net assets		**5,673**	5,311
Share capital		**365**	363
Share premium		**2,394**	2,377
Retained earnings (i)		**3,248**	2,590
Other equity (ii)	II	**(334)**	(19)
Total shareholders' equity		**5,673**	5,311

(i) Retained earnings includes a net profit after taxation of £719 million (2021: £976 million profit).

(ii) Capital redemption reserve of (£179) million (including opening balance of £28 million) has been merged within 'Other equity' to align with Group consolidated Financial Statements presentation.

The prior year has been restated to reclassify £104 million of expected credit loss provision on financial guarantee contracts from current receivables owed by Group undertakings to current payables and shown as a separate liability as they do not meet IFRS 7 'Financial Instruments: Disclosures' criteria for financial guarantee contracts. See note I for further details.

The Financial Statements on pages 225 to 236, of which the notes on pages 227 to 236 form part, along with note 25 to the Group consolidated Financial Statements, were approved and authorised for issue by the Board of Directors on 15 February 2023 and were signed on its behalf by:

Chris O'Shea
Group Chief Executive

Kate Ringrose
Group Chief Financial Officer

Centrica plc Registered No: 03033654

Notes to the Company Financial Statements

I. General information and principal accounting policies of the Company

General information

The Company is a public company limited by shares, incorporated and domiciled in the UK, and registered in England and Wales. The registered office is Millstream, Maidenhead Road, Windsor, Berkshire, SL4 5GD.

The Company Financial Statements are presented in pounds sterling with all values rounded to the nearest million pounds. Pounds sterling is the functional currency of the Company.

(a) Basis of preparation

The separate financial statements of the Company are presented as required by the Companies Act 2006. The Company meets the definition of a qualifying entity under FRS 100 'Application of Financial Reporting Requirements' issued by the FRC. Accordingly, these financial statements are prepared in accordance with FRS 101 'Reduced Disclosure Framework'.

(b) New accounting policies, standards, amendments and interpretations effective or adopted in 2022

From 1 January 2022, the following standards and amendments are effective in the Company's Financial Statements:

- Amendments to IAS 37 'Provisions, Contingent Liabilities and Contingent Assets', costs of fulfilling a contract;
- Amendments to IAS 16 'Property, Plant and Equipment', sale proceeds before intended use;
- Amendments to IFRS 3 'Business Combinations', reference to the Conceptual Framework; and
- Annual improvements to IFRS 2018-2020.

These changes and other amendments effective during the year did not materially impact the Company's Financial Statements.

Pension Scheme Loan Arrangement

As a result of the turbulence in longer-dated UK government debt during the second half of the year, the Company provided a loan facility to the Company's three defined benefit pension schemes. The facility amounted to £550 million, of which £400 million (2021: £nil) remained outstanding at the reporting date. Interest on the loan is calculated based on the Bank of England base rate plus 1%; interest accrues over the two-year term of the loan and is paid by the pension schemes at maturity. See note 22 of Group consolidated Financial Statements for further details. The Company has recognised the loan as a financial asset under IFRS 9 'Financial Instruments' measured at amortised cost and classified the receivable within Securities on the Company's balance sheet. Correspondingly, the loan liability has been deducted from plan assets on the basis that the loan does not relate to employee benefits (scheme liabilities) in accordance with IAS 19.

(c) Standards and amendments that are issued but not yet applied by the Company

At the date of authorisation of these Company Financial Statements, the Company has not applied the following new and revised standards and amendments that have been issued but are not yet effective:

The following standard has been issued, endorsed and will be applied to the Company in future periods:

- IFRS 17 'Insurance Contracts', effective from 1 January 2023.

The following standards and amendments have been issued, endorsed and will be applied to the Company in future periods, subject to UK endorsement:

- Amendments to IAS 1 'Presentation of Financial Statements':
  - Disclosure of accounting policies and materiality judgements, effective 1 January 2023;
  - Classification of liabilities as current or non-current, effective 1 January 2024; and
  - Non-current liabilities with covenants, effective 1 January 2024.
- Amendments to IAS 8 'Accounting Policies, Changes in Accounting Estimates and Errors'; effective from 1 January 2023;
- Amendments to IAS 12 'Income Taxes'; effective from 1 January 2023; and
- Amendments to IFRS 16 'Leases'; effective from 1 January 2024.

Management does not expect other issued but not effective amendments or standards, or standards not discussed above to have a material impact on the Company's Financial Statements.

As permitted by FRS 101, the Company has taken advantage of the disclosure exemptions available under that standard in relation to:

- the requirements of IAS 7 'Statement of Cash Flows';
- the statement of compliance with Adopted IFRS;
- the effects of new but not yet effective IFRS;
- prior year reconciliations for property, plant and equipment and intangible assets;
- the prior year reconciliation in the number of shares outstanding at the beginning and at the end of the year for share capital;
- disclosures in respect of related party transactions with wholly owned subsidiaries in a group;
- disclosures in respect of the compensation of key management personnel; and
- disclosures in respect of capital management.

As the Group consolidated Financial Statements of Centrica plc, which are available from the registered office, include the equivalent disclosures, the Company has taken the exemptions available under FRS 101 in respect of certain disclosures required by IFRS 13 'Fair Value Measurement' and the disclosures required by IFRS 7 'Financial Instruments: Disclosures'. These disclosures have not been provided apart from those that are relevant for financial instruments held at fair value.

I. General information and principal accounting policies of the Company

Re-presentation of expected credit losses on financial guarantee contracts

In 2022, the Company has presented expected credit losses on financial guarantee contracts of £159 million (2021: £104 million) as separate liabilities under the requirements of IFRS 7 'Financial Instruments: Disclosures'. The Company had previously presented them within receivables as amounts owed by Group undertakings and has restated the prior period accordingly, see notes VI and XI.

Measurement convention

The Company Financial Statements have been prepared on the historical cost basis except for: investments in subsidiaries that have been recognised at deemed cost on transition to FRS 101; derivative financial instruments, financial instruments required to be measured at fair value through profit or loss or other comprehensive income, and those financial assets so designated at initial recognition, and the assets of the defined benefit pension schemes that have been measured at fair value; the liabilities of the defined benefit pension schemes that have been measured using the projected unit credit valuation method; and the carrying values of recognised assets and liabilities qualifying as hedged items in fair value hedges that have been adjusted from cost by the changes in the fair values attributable to the risks that are being hedged.

Going concern

The accounts have been prepared on a going concern basis, as described in the Directors' Report and note 24(b) of the Group consolidated Financial Statements.

Critical accounting judgements – share buyback programme

On 10 November 2022, the Company announced an intention to undertake a share buyback of £250 million, expected to complete by 31 May 2023. The Company entered into contracts with third parties to undertake this repurchase programme and, as at 31 December 2022, £43 million of shares had been purchased. The Company has recognised a financial liability on the basis that the terms and conditions of the contracts mean that, as at the year-end, it was unable to cancel the remaining obligation during the period to the Group's Preliminary Announcement on 16 February 2023. Accordingly, the Company has recorded a financial liability of £207 million for this remaining obligation, in accordance with IFRS 9 'Financial Instruments'.

Key sources of estimation uncertainty – subsidiary investment valuation

The Company is subject to estimation uncertainty related to the valuation of its investments in subsidiaries. Based on an impairment review conducted at 31 December 2022, the carrying value of its investments in Centrica Holdings Limited was in excess of the estimated recoverable amount and as a result, £140 million (2021: £nil) of impairment charge has been reflected as disclosed in note V. The impairment resulted from the payment of a dividend of £1.5 billion (2021: £1.25 billion) to the Company from its immediate subsidiary. This has resulted in an increase in the net assets of the Company but a reduction in the overall value of the remainder of the Group. The key assumption used in determining the recoverable amount of the Company's investments in subsidiaries is the use of an average of third-party analysts' 'sum of the parts' valuations for the Group's business units. For recoverable amount purposes, this valuation is allocated to each of the Company's relevant investments in subsidiaries and then compared with the carrying value of both the investment and any net intercompany receivable position. Where a shortfall exists, the investment carrying value is impaired first. The key source of estimation uncertainty relates to the analysts' 'sum of the parts' valuation of the Group's business units.

Principal accounting policies

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these Company Financial Statements.

Employee share schemes

The Group has a number of employee share schemes under which it makes equity-settled share-based payments as detailed in the Remuneration Report on pages 84 to 95 and in note S2 to the Group consolidated Financial Statements. Equity-settled share-based payments are measured at fair value at the date of grant (excluding the effect of non-market-based vesting conditions). The fair value determined at the grant date is expensed on a straight-line basis together with a corresponding increase in equity over the vesting period, based on the Group's estimate of the number of awards that will vest and adjusted for the effect of non-market-based vesting conditions. The issue of share incentives by the Company to employees of its subsidiaries represents additional capital contributions. When these costs are recharged to the subsidiary undertaking, the investment balance is reduced accordingly. Fair value is measured using methods detailed in note S2 to the Group consolidated Financial Statements.

Foreign currencies

The Company's functional and presentational currency is pounds sterling. Transactions in foreign currencies are translated at the rate of exchange ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into pounds sterling at closing rates of exchange. Exchange differences on monetary assets and liabilities are taken to the Income Statement.

Property, plant and equipment

PP&E is included in the Balance Sheet at cost, less accumulated depreciation and any provisions for impairment. The initial cost of an asset comprises purchase price and construction cost and any costs directly attributable to bringing the asset into operation. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

Depreciation is charged so as to write off the cost of assets over their estimated useful lives, on a straight-line basis, over a period of 3 to 10 years.

I. General information and principal accounting policies of the Company

Investments
Fixed asset investments in subsidiaries' shares are held at deemed cost on transition to FRS 101 and at cost in accordance with IAS 27 'Separate Financial Statements', less any provision for impairment as necessary.

Impairment
Impairment of investments in subsidiaries and non-financial assets
The Company's accounting policies in respect of impairment of property, plant and equipment, and intangible assets are consistent with those of the Group.

The carrying values of investments in subsidiary undertakings are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

The recoverable amount of an investment in a subsidiary undertaking is the greater of its value in use and its fair value less cost of disposal. In assessing a fair value less cost of disposal, an average of third-party analysts' 'sum of the parts' valuations for the Group's business units is taken and allocated to specific investments. This is then compared with the investment carrying value and net intercompany receivable.

Refer to Critical accounting judgements and key sources of estimation uncertainty within note I and note V for more details on the impairment charge on investments in subsidiaries recognised during the year.

Impairment of other financial assets and credit losses for financial guarantee contracts
The Company's impairment policies in relation to financial assets are consistent with those of the Group, with additional consideration given to amounts owed by Group undertakings. Except for certain loans due in greater than one year, all outstanding receivable balances are repayable on demand and arise from funding provided by the Company to its subsidiaries. Where net receivers of funding are unable to repay loan balances in full at maturity, or if the debt was otherwise called upon, the Company expects that in such circumstances the counterparty would either negotiate extended credit terms with the Company or obtain external financing to repay the balance. As such, this is considered a significant risk of causing material adjustment to the carrying amounts of financial assets within the next financial year. A detailed review of the amounts owed by Group undertakings for the expected credit loss provision is carried out on an annual basis. The model considers whether the receivable is repayable on demand within a 12-month period and the probability of default by the counterparty. As at 31 December 2022, there was a cumulative provision for expected credit losses on current financial assets of £15 million (2021: £97 million) as disclosed in note VI (i) and on non-current financial assets of £872 million (2021:£640 million) as disclosed in note VI (ii).

The Company has applied the impairment requirements of IFRS 9 to financial guarantees issued to its subsidiary undertakings. A financial guarantee contract is measured at fair value at the reporting date and where the expected credit loss is higher than calculated on recognition, an additional liability is recognised. Expected credit losses which arise on such arrangements have been calculated according to the nature of the guarantee and the Company's estimate of potential exposure at the balance sheet date. In 2022, there was a net provision for expected credit losses on financial guarantees contracts of £159 million (2021: £104 million) as disclosed in note XI (iv). The significant increase in the provision is due to the increased short-term derivative liabilities in the market-facing entities which actively trade and are exposed to the risk of market price volatility during the year.

Pensions and other post-employment benefits
The Company's employees participate in a number of the Group's defined benefit pension schemes. The total Group cost of providing benefits under defined benefit schemes is determined separately for each of the Group's schemes under the projected unit credit actuarial valuation method. Actuarial gains and losses are recognised in full in the period in which they occur. The key assumptions used for the actuarial valuation are based on the Group's best estimate of the variables that will determine the ultimate cost of providing post-employment benefits, on which further detail is provided in notes 3(b) and 22 to the Group consolidated Financial Statements.

The Company's share of the total Group surplus or deficit at the end of the reporting period for each scheme is calculated in proportion to the Company's share of ordinary employer contributions to that scheme during the year; ordinary employer contributions are determined by the pensionable pay of the Company's employees within the scheme and the cash contribution rates set by the scheme trustees. Note that as a participant in these multi-employer schemes, the Company could be liable for other entities' obligations (for example under section 75 of the Pensions Act). See note 22 of the Group consolidated Financial Statements for details of the overall scheme obligations. Current service cost is calculated with reference to the pensionable pay of the Company's employees. The Company's share of the total Group interest on scheme liabilities, expected return on scheme assets and actuarial gains or losses is calculated in proportion to ordinary employer contributions in the prior accounting period. Changes in the surplus or deficit arising as a result of the changes in the Company's share of total ordinary employer contributions are also treated as actuarial gains or losses.

I. General information and principal accounting policies of the Company

Taxation

Current tax, including UK corporation tax, is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is recognised in respect of all temporary differences identified at the balance sheet date, except for differences arising on:

- the initial recognition of an asset or liability in a transaction which is not a business combination and which at the time of the transaction affects neither accounting profit nor taxable profit; and
- investments in subsidiaries where the Company is able to control the timing of the reversal of the difference and it is probable that the difference will not reverse in the foreseeable future.

Temporary differences are differences between the carrying amount of the Company's assets and liabilities and their tax base.

Deferred tax assets and liabilities are offset when the Company has a legally enforceable right to offset current tax assets and liabilities and the deferred tax assets and liabilities relate to taxes levied by the same tax authority.

Deferred tax assets that are not eligible for offset against deferred tax liabilities are recognised only when, on the basis of all available evidence, it can be regarded as probable that there will be suitable taxable profits in the foreseeable future, against which the deductible temporary difference can be utilised.

Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the asset is realised or the liability is settled, based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Measurement of deferred tax liabilities and assets reflects the tax consequences expected from the manner in which the asset or liability is recovered or settled.

The tax expense for the year comprises current and deferred tax. Tax is recognised in the Income Statement, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

Financial instruments

The Company's accounting policies for financial instruments are consistent with those of the Group as disclosed in note S2 to the Group consolidated Financial Statements. The Company's financial risk management policies are consistent with those of the Group and are described in the Strategic Report – Principal Risks and Uncertainties on pages 28 to 33 and in note S3 to the Group consolidated Financial Statements.

Financial guarantees

Financial guarantees are contracts that require the Company to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument. The Company accounts for financial guarantee contracts at fair value under IFRS 9.

Presentation of derivative financial instruments

In line with the Group's accounting policy for derivative financial instruments, the Company has classified those derivatives held for the purpose of treasury management as current or non-current, based on expected settlement dates.

II. Other equity

	Cash flow hedging reserve £m	Actuarial gains and losses reserve £m	Financial asset at FVOCI reserve £m	Treasury and own shares reserve £m	Share-based payments reserve £m	Capital redemption reserve [ii] £m	Total £m
1 January 2021	8	(96)	7	(31)	79	28	(5)
Gains on revaluation of equity investments measured at fair value through other comprehensive income	—	—	4	—	—	—	4
Actuarial gains	—	11	—	—	—	—	11
Employee share schemes:							
Exercise of awards	—	—	—	13	(49)	—	(36)
Value of services provided	—	—	—	—	12	—	12
Impact of cash flow hedging	(1)	—	—	—	—	—	(1)
Taxation on above items	(2)	(2)	—	—	—	—	(4)
31 December 2021	5	(87)	11	(18)	42	28	(19)
Actuarial losses	—	(44)	—	—	—	—	**(44)**
Employee Share Schemes:							
Exercise of awards	—	—	—	10	(22)	—	**(12)**
Value of services provided	—	—	—	—	10	—	**10**
Purchase of own shares	—	—	—	(5)	—	—	**(5)**
Issue of shares	—	—	—	(7)	—	—	**(7)**
Share buyback programme: [i]							
Purchase of Treasury shares	—	—	—	(43)	—	—	**(43)**
Accrual for committed share purchases	—	—	—	—	—	(207)	**(207)**
Impact of cash flow hedging	(26)	—	—	—	—	—	**(26)**
Taxation on above items	8	11	—	—	—	—	**19**
31 December 2022	**(13)**	**(120)**	**11**	**(63)**	**30**	**(179)**	**(334)**

(i) See note I and Note S4 of the Group consolidated Financial Statement for further details of the share buyback programme.

(ii) Capital redemption reserve of £(179) million (including opening balance of £28 million) merged within 'Other equity' to align with Group consolidated Financial Statements presentation.

III. Directors and employees

Employee costs

Year ended 31 December	2022 £m	2021 £m
Wages and salaries	**(7)**	(7)
Other	**(8)**	(8)
	(15)	(15)

Average number of employees during the year

Year ended 31 December	2022 Number	2021 Number
Administration	**138**	107
Power	**8**	19
	146	126

IV. Property, plant and equipment

	Plant, equipment & vehicles 2022 £m
Cost	
1 January	31
Additions	12
Disposals/retirements	(31)
31 December	12
Accumulated depreciation	
1 January	(26)
Charge for the year	(6)
Disposals/retirements	31
31 December	(1)
NBV at 31 December (i)	11

(i) Included within the above are right-of-use assets of £9 million relating to infrastructure services (2021: £5 million), the contract of which was renewed in September 2022, and £2 million of staff salary sacrifice electric vehicles (2021: £nil).

V. Investments in subsidiaries

	2022 (i) £m	2021 (i) £m
Cost		
1 January	2,273	2,290
Employee share scheme net capital movement (ii)	(11)	(17)
31 December	2,262	2,273
Provision		
1 January	(1,173)	(1,173)
Impairment provided in the year (iii)	(140)	—
31 December	(1,313)	(1,173)
NBV at 31 December	949	1,100

(i) Direct investments are held in Centrica Holdings Limited, Centrica Trading Limited and Centrica Beta Holdings Limited, all of which are incorporated in England, and Rhodes Holdings HK Limited, which is incorporated in Hong Kong and Centrica Ireland Holdings Limited, which was incorporated in Ireland in November 2022. Related undertakings are listed in note S10 to the Group consolidated Financial Statements.

(ii) Employee share scheme movement is the net change in shares to be awarded under employee share schemes to employees of Group undertakings.

(iii) An impairment charge was recognised during the year, predominantly in relation to the investment in Centrica Holdings Limited.

The Directors believe that the carrying value of the investments is supported by their realisable value.

VI. Trade and other receivables

	2022		2021 (restated) (iii)	
31 December	Current (i) £m	Non-current (ii) £m	Current (i) £m	Non-current (ii) £m
Amounts owed by Group undertakings	1,496	13,085	645	12,804
Prepayments	4	4	203	5
	1,500	13,089	848	12,809

(i) The amounts receivable by the Company includes a gross balance of £1,424 million (2021: £80 million) that bears interest at a quarterly rate determined by Group treasury and linked to the Group cost of funds. The quarterly rates ranged between 0% and 4.1% per annum during 2022 (2021: 3% and 4.6%). The other amounts receivable from Group undertakings are interest free. All amounts receivable from Group undertakings are unsecured and repayable on demand. Amounts receivable by the Company are stated net of credit loss provisions of £15 million (Restated 2021: £97 million).

(ii) The amounts receivable by the Company includes a gross balance of £14,206 million (2021: £13,335 million) due after more than one year that bears interest at a quarterly rate determined by Group treasury and linked to the Group cost of funds. The quarterly rates ranged between 0% and 4.1% per annum during 2022 (2021: 3% and 4.6%).The other amounts receivable from Group undertakings are interest-free. All amounts receivable from Group undertakings are unsecured and not expected to be repayable within 12 months from the reporting date. Amounts receivable by the Company are stated net of credit loss provisions of £872 million (2021: £640 million).

(iii) The prior year has been restated to reclassify £104 million of expected credit losses on financial guarantee contracts from current receivables owed by Group undertakings to current payables and shown as a separate liability. See note I for further details.

VII. Derivative financial instruments

31 December	2022 Current £m	2022 Non-current £m	2022 Total £m	2021 Current £m	2021 Non-current £m	2021 Total £m
Derivative financial assets	**217**	**101**	**318**	87	86	173
Derivative financial liabilities	**(211)**	**(271)**	**(482)**	(73)	(6)	(79)

VIII Financial instruments
(a) Determination of fair values

The Company's policies for the classification and valuation of financial instruments carried at fair value are consistent with those of the Group, as detailed in note S6 to the Group consolidated Financial Statements.

(b) Financial instruments carried at fair value

31 December	Level 1 £m	Level 2 £m	2022 Total £m	Level 1 £m	Level 2 £m	2021 Total £m
Financial assets						
Derivative financial assets held for trading:						
Foreign exchange derivatives	—	243	**243**	—	70	70
Derivative financial assets in hedge accounting relationships:						
Interest rate derivatives	—	37	**37**	—	71	71
Foreign exchange derivatives	—	38	**38**	—	32	32
Debt instruments	66	—	**66**	82	—	82
Equity instruments designated FVOCI	29	—	**29**	28	—	28
Cash and cash equivalents	—	2,809	**2,809**	—	3,485	3,485
Total financial assets at fair value	**95**	**3,127**	**3,222**	110	3,658	3,768
Financial liabilities						
Derivative financial liabilities held for trading:						
Foreign exchange derivatives	—	(257)	**(257)**	—	(74)	(74)
Derivative financial liabilities in hedge accounting relationships:						
Interest rate derivatives	—	(221)	**(221)**	—	—	—
Foreign exchange derivatives	—	(4)	**(4)**	—	(5)	(5)
Total financial liabilities at fair value	**—**	**(482)**	**(482)**	—	(79)	(79)

IX. Securities

31 December	2022 £m	2021 £m
Debt instruments	**66**	82
Equity instruments	**29**	28
Other	**403**	—
	498	110

£95 million (2021: £110 million) of investments were held in trust, on behalf of the Company, as security in respect of the Centrica Unfunded Pension Scheme (refer to note XIV).

Other securities includes the pension scheme loan arrangement (including interest) of £403 million 2021: £nil) as disclosed in note I(b), note XIV(f) and in note 22(b) to the Group consolidated Financial Statements.

X. Lease liabilities maturity analysis

A maturity analysis of lease liabilities based on undiscounted gross cash flow is reported in the table below:

	2022 £m	2021 £m
Less than one year	**4**	5
2 years	**4**	—
3 years	**3**	—
Total lease liabilities (undiscounted)	**11**	5

Future finance charges are expected to be £0.5 million (2021: £0.02 million).

Analysed as:		
Non-current	**7**	—
Current	**4**	5
	11	5

XI. Trade and other payables

	2022		2021(restated) (iv)	
31 December	**Current (i) £m**	**Non-current (ii) £m**	Current (i) £m	Non-current (ii) £m
Amounts owed by Group undertakings	**(9,503)**	**(45)**	(9,044)	(154)
Loss on financial guarantee contracts (iv)	**(159)**	**—**	(104)	—
Accruals and other creditors (iii)	**(221)**	**—**	(12)	—
	(9,883)	**(45)**	(9,160)	(154)

(i) The amounts payable by the Company include £8,577 million (2021: £7,658 million) that bears interest at a quarterly rate determined by Group treasury and linked to the Group cost of funds. The quarterly rates ranged between 0% and 4.1% per annum during 2022 (2021: 3% and 4.6%). Other amounts payable by the Company are interest free, unsecured and repayable on demand. Refer to note I for further details.

(ii) There were no amounts payable by the Company due after more than one year that bear interest at the prevailing SONIA rate less 0.05% (2021: £141 million). The 2021 £141 million loan was fully settled after the obligations to repay were discharged by Centrica Lake Limited in April 2022. Other amounts payable by the Company are interest free, unsecured and repayable on demand.

(iii) During the year, the Company recognised a financial liability of £207 million (2021: £nil) relating to the share buyback programme. See note I and Own and treasury shares reserve section in note S4 of the Group consolidated Financial Statements for more details.

(iv) The prior year has been restated to reclassify £104 million of expected credit losses on financial guarantee contracts from current receivables owed by Group undertakings to current payables and shown as a separate liability. See note I for further details.

XII. Deferred tax

	Retirement benefit obligation £m	Other £m	**Total £m**
1 January 2021	7	(9)	**(2)**
Charge to income	(7)	(1)	**(8)**
Charge to equity	(2)	(2)	**(4)**
Deferred tax liabilities at 31 December 2021	(2)	(12)	**(14)**
(Charge)/credit to income	(6)	2	**(4)**
Credit to equity	11	8	**19**
Deferred tax assets/(liabilities) at 31 December 2022	**3**	**(2)**	**1**

Other deferred tax liabilities primarily relate to other temporary differences. All deferred tax crystallises in over one year.

XIII. Bank overdrafts, loans and other borrowings

	2022		2021	
31 December	**Current £m**	**Non-current £m**	Current £m	Non-current £m
Bank loans and overdrafts	**(600)**	**(143)**	(453)	(137)
Bonds	**(246)**	**(2,628)**	(284)	(3,040)
Interest accruals	**(55)**	**—**	(68)	—
Lease obligations	**(4)**	**(7)**	(5)	—
	(905)	**(2,778)**	(810)	(3,177)

Disclosures in respect of the Group's financial liabilities are provided in notes 24 and S3 to the Group consolidated Financial Statements. With the exception of leases and overdrafts, materially all of the Group's financing activity is carried out through the Company.

XIV. Pensions

(a) Summary of main schemes

The Company's employees participate in the following Group defined benefit pension schemes: Centrica Pension Plan (CPP), Centrica Pension Scheme (CPS) and Centrica Unfunded Pension Scheme. Its employees also participate in the defined contribution section of the Centrica Pension Scheme. Information on these schemes is provided in note 22 to the Group consolidated Financial Statements.

Together with the Centrica Engineers Pensions Scheme (CEPS), CPP and CPS form the significant majority of the Group's and Company's defined benefit obligation and are referred to below and in the Group Financial Statements as the 'Registered Pension Schemes'.

(b) Accounting assumptions, risks and sensitivity analysis

The accounting assumptions, risks and sensitivity analysis for the Registered Pension Schemes are provided in note 22 to the Group consolidated Financial Statements.

(c) Movements in the year

	2022		2021	
	Pension liabilities £m	Pension assets £m	Pension liabilities £m	Pension assets £m
1 January	**(1,328)**	**1,364**	(1,611)	1,583
Items included in the Company Income Statement:				
Current service cost	**(6)**	**–**	(5)	–
Contributions by employer in respect of employee salary sacrifice arrangements [(i)]	**(2)**	**–**	(2)	–
Total current service cost	**(8)**	**–**	(7)	–
Expected return on scheme assets	**–**	**–**	–	26
Interest (expense)/income on scheme liabilities/assets	**(24)**	**27**	(23)	–
Termination benefit	**1**	**–**	4	–
Items included in the Company Statement of Comprehensive Income:				
Returns on plan assets, excluding interest income	**–**	**(633)**	–	(250)
Actuarial gain from changes to demographic assumptions	**4**	**–**	–	–
Actuarial gain from changes in financial assumptions	**621**	**–**	288	–
Actuarial loss from experience adjustments	**(36)**	**–**	(27)	–
Other movements:				
Employer contributions	**–**	**17**	–	52
Contributions by employer in respect of employee salary sacrifice arrangements	**–**	**2**	–	1
Benefits paid from schemes	**39**	**(39)**	48	(48)
31 December	**(731)**	**738**	(1,328)	1,364

(i) A salary sacrifice arrangement was introduced on 1 April 2013 for pension scheme members. The contributions paid via the salary sacrifice arrangement have been treated as employer contributions and included within the current service cost, with a corresponding reduction in salary costs.

Presented in the Company Balance Sheet as:

31 December	2022 £m	2021 £m
Retirement benefit pension assets	**56**	102
Retirement benefit pension liabilities	**(49)**	(66)

The pension scheme liabilities relate to the Centrica Unfunded Pension Scheme.

XIV. Pensions

(d) Analysis of the actuarial losses recognised in reserves

Year ended 31 December	2022 £m	2021 £m
Actuarial loss (actual return less expected return on pension scheme assets)	**(633)**	(250)
Experience loss arising on the scheme liabilities	**(36)**	(27)
Changes in assumptions underlying the present value of the schemes' liabilities	**625**	288
Actuarial (loss)/gain recognised in reserves before adjustment for taxation	**(44)**	11
Cumulative actuarial losses recognised in reserves at 1 January, before adjustment for taxation	**(108)**	(119)
Cumulative actuarial losses recognised in reserves at 31 December, before adjustment for taxation	**(152)**	(108)

(e) Defined benefit pension scheme contributions

Note 22 to the Group consolidated Financial Statements provides details of the triennial review carried out at 31 March 2021 in respect of the UK Registered Pension Schemes and the future pension scheme contributions, including asset-backed arrangements, agreed as part of this review. Under IAS 19, the Company's contribution and trustee interest in the Scottish Limited Partnerships are recognised as scheme assets.

The Company estimates that it will pay £54 million of employer contributions during 2023 for its defined benefit schemes, at an average rate of 21% of pensionable pay, together with contributions via the salary sacrifice arrangement of £26 million.

For details of the weighted average duration of the liabilities of the Registered Pension Schemes see note 22 of the Group consolidated Financial Statements.

(f) Pension scheme assets

	2022			2021		
31 December	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	**19**	**486**	**505**	20	462	482
Corporate bonds	**24**	**—**	**24**	2,393	31	2,424
High-yield debt	**106**	**1,331**	**1,437**	2,720	1,197	3,917
Liability matching assets	**2,835**	**1,343**	**4,178**	1,963	1,356	3,319
Property	**—**	**366**	**366**	—	439	439
Cash pending investment	**205**	**—**	**205**	85	—	85
Loan and interest	**—**	**(403)**	**(403)**	—	—	—
Asset-backed contribution assets	**—**	**527**	**527**	—	600	600
Group pension scheme assets [(i)]	**3,189**	**3,650**	**6,839**	7,181	4,085	11,266

	2022 £m	2021 £m
Company share of the above	**738**	1,364

(i) Total pension scheme assets, including asset-backed contribution assets not recognised in the Group consolidated Financial Statements.

XV. Commitments

At 31 December 2022, the Company had commitments of £66 million (2021: £71 million) relating to contracts for outsourced services, £177 million (2021: £59 million) relating to the contracts for information services centralised last year and £5 million (2021: £5 million) relating to contracts for property services.

The Company has provided guarantees and letters of credit relating to its subsidiaries' trading activities and decommissioning obligations. At 31 December 2022, the Group has derivative liabilities of £10,151 million (2021: £6,009 million), and decommissioning liabilities of £1,514 million (2021: £1,521 million). See notes 19 and 21 to the Group consolidated Financial Statements for further information on these balances.

XVI. Related parties

During the year the Company accepted cash deposits on behalf of the Spirit Energy group of companies giving rise to a Trade and other payables balance of £1,091 million (2021: £1,161 million). Spirit Energy Limited is a subsidiary of the Company, held indirectly, that is not wholly owned. See note 3 to the Group consolidated Financial Statements for more information.

Gas and Liquids Reserves (Unaudited)

The Group's estimates of reserves of gas and liquids are reviewed as part of the full year reporting process and updated accordingly.

A number of factors affect the volumes of gas and liquids reserves, including the available reservoir data, commodity prices and future costs. Due to the inherent uncertainties and the limited nature of reservoir data, estimates of reserves are subject to change as additional information becomes available.

The Group discloses 2P gas and liquids reserves, representing the central estimate of future hydrocarbon recovery. Reserves for Centrica operated fields are estimated by in-house technical teams composed of geoscientists and reservoir engineers. Reserves for non-operated fields are estimated by the operator but are subject to internal review and challenge.

As part of the internal control process related to reserves estimation, an assessment of the reserves, including the application of the reserves definitions, is undertaken by an independent technical auditor. An annual reserves assessment has been carried out by DeGolyer & McNaughton for the Group's global reserves. Reserves are estimated in accordance with a formal policy and procedure standard.

The Group has estimated 2P gas and liquids reserves in Europe.

The principal retained fields in Spirit Energy are Cygnus, South and North Morecambe, Rhyl and Chiswick. The principal non-Spirit Energy field is Rough. The European reserves estimates are consistent with the guidelines and definitions of the Society of Petroleum Engineers, the Society of Petroleum Evaluation Engineers and the World Petroleum Council's Petroleum Resources Management System using accepted principles.

Estimated net 2P reserves of gas (billion cubic feet)	Spirit Energy – Norway/Statfjord (i)	Spirit Energy – retained fields (i)	Rough	Total
1 January 2022	189	296	26	**511**
Revisions of previous estimates (ii)	—	33	8	**41**
Disposals (iii)	(178)	—	—	**(178)**
Production (iv)	(11)	(68)	(18)	**(97)**
31 December 2022	—	261	16	**277**

Estimated net 2P reserves of liquids (million barrels)	Spirit Energy – Norway/Statfjord (i)	Spirit Energy – retained fields (i)	Rough	Total
1 January 2022	55	1	—	**56**
Revisions of previous estimates (ii)	—	1	—	**1**
Disposals (iii)	(53)	—	—	**(53)**
Production (iv)	(2)	(1)	—	**(3)**
31 December 2022	—	1	—	**1**

Estimated net 2P reserves (million barrels of oil equivalent)	Spirit Energy – Norway/Statfjord (i)	Spirit Energy – retained fields (i)	Rough	Total
31 December 2022 (v)	—	45	3	**48**

(i) The movements represent Centrica's 69% interest in Spirit Energy.
(ii) Revision of previous estimates include those associated with Cygnus
(iii) Disposal of Spirit Energy entire Norwegian portfolio and Statfjord field.
(iv) Represents total sales volumes of gas and oil produced from the Group's reserves.
(v) Includes the total of estimated gas and liquids reserves at 31 December 2022 in million barrels of oil equivalent.

Liquids reserves include oil, condensate and natural gas liquids.

Five Year Summary (Unaudited)

	2018 (restated) (i) (ii) £m	2019 (restated) (ii) £m	2020 (restated) (ii) £m	2021 £m	**2022 £m**
Group revenue from continuing operations included in business performance (i)	16,465	15,958	14,949	18,300	**33,637**
Operating profit/(loss) from continuing operations before exceptional items and certain re-measurements:					
British Gas Services & Solutions (ii) (iii)	101	187	191	121	**(9)**
British Gas Energy (ii) (iii)	490	117	82	118	**72**
Bord Gáis Energy (ii) (iii)	44	50	42	28	**31**
Centrica Business Solutions (ii) (iii)	(40)	(20)	(132)	(52)	**44**
Energy Marketing & Trading (ii) (iii)	35	138	174	70	**1,400**
Upstream (ii) (iii)	567	178	90	663	**1,793**
Profit share	—	—	—	—	**(23)**
	1,197	650	447	948	**3,308**
Operating profit from discontinued operations before exceptional items and certain re-measurements (ii) (iii)	195	251	252	—	**—**
Exceptional items and certain re-measurements after taxation	(416)	(1,531)	(520)	866	**(2,755)**
Profit/(loss) attributable to equity holders of the parent	183	(1,023)	41	1,210	**(782)**

	Pence	Pence	Pence	Pence	**Pence**
Earnings per ordinary share	3.3	(17.8)	0.7	20.7	**(13.3)**
Adjusted earnings per ordinary share	11.2	7.3	6.5	4.1	**34.9**
Dividend per ordinary share in respect of the year	12.0	1.5	—	—	**1.0**

Assets and liabilities

31 December (restated) (v)	2018 £m	2019 £m	2020 £m	2021 £m	**2022 £m**
Goodwill and other intangible assets	4,456	4,033	1,940	1,161	**1,116**
Other non-current assets (iv)	7,435	5,826	4,767	6,040	**7,234**
Net current assets/(liabilities)	284	(696)	622	1,465	**(1,023)**
Non-current liabilities (iv)	(8,227)	(7,474)	(8,072)	(6,360)	**(6,047)**
Net assets of disposal groups held for sale	—	106	2,125	444	**—**
Net assets	3,948	1,795	1,382	2,750	**1,280**
Adjusted net (debt)/cash (v) (note 24)	(2,946)	(3,507)	(2,998)	680	**1,199**

Cash flows

31 December (restated) (v)	2018 £m	2019 £m	2020 £m	2021 £m	**2022 £m**
Cash flow from operating activities before exceptional payments	2,182	1,548	1,532	1,687	**1,338**
Payments relating to exceptional charges in operating costs	(248)	(298)	(132)	(76)	**(24)**
Net cash flow from investing activities	(1,007)	(503)	(285)	2,263	**(566)**
Cash flow before cash flow from financing activities	927	747	1,115	3,874	**748**

(i) 2018 Group revenue included in business performance has been restated to include the net result of certain commodity purchases and sales trades that are deemed to be speculative in nature.

(ii) Results have been restated to reflect the new operating structure of the Group, effective during 2021.

(iii) Adjusted operating profit has been restated to include the impact of business performance interest and taxation of joint ventures and associates.

(iv) Results from the 2018 figures have not been presented in line with IFRS 16 'Leases'.

(v) Results have been restated to reflect the change in definition of adjusted net debt/cash in 2021.

Ofgem Consolidated Segmental Statement

Independent Auditor's Report to the Directors of Centrica plc and its Licensees

In our opinion the accompanying statement (the 'Consolidated Segmental Statement' or 'CSS') of Centrica plc and its Licensees for the year ended 31 December 2022 is prepared, in all material respects, in accordance with:

- the requirements of Ofgem's Standard Condition 19A of the Gas and Electricity Supply Licences and Standard Condition 16B of the Electricity Generation Licences established by the regulator Ofgem; and
- the basis of preparation on pages 246 to 249.

We have audited the Consolidated Segmental Statement of Centrica plc and its Licensees (as listed in footnote (i)) (the Group) for the year ended 31 December 2022 in accordance with the terms of our engagement letter dated 15 February 2023. The Consolidated Segmental Statement has been prepared by the Directors of Centrica plc and its Licensees based on the requirements of Ofgem's Standard Condition 19A and the Gas and Electricity Supply Licences and Standard Condition 16B of the Electricity Generation Licences (together, the 'Licences') and the basis of preparation on pages 246 to 249.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the CSS section of our report.

We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the CSS in the United Kingdom, including the Financial Reporting Council's (the 'FRC's') Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter – basis of accounting

We draw attention to pages 246 to 249 of the CSS which describes the basis of accounting. The CSS is prepared to assist the Company in complying with the requirements of Ofgem's Standard Condition 19A of the Gas and Electricity Supply Licences and Standard Condition 16B of the Electricity Generation Licences established by the regulator Ofgem. The basis of preparation is not the same as segmental reporting under IFRS and/or statutory reporting. As a result, the CSS may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

Conclusions relating to going concern

In auditing the CSS, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the CSS is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's ability to continue as a going concern for a period of at least twelve months from when the CSS is authorised for issue. Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

Other information

The other information comprises the information included in the Annual Report, other than the CSS and our auditor's report thereon. The Directors are responsible for the other information contained within the annual report. Our opinion on the CSS does not cover the other information and we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the CSS or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the CSS. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Responsibilities of the Directors

The Directors are responsible for the preparation of the CSS in accordance with the Licences and the basis of preparation on pages 246 to 249 and for such internal control as the Directors determine is necessary to enable the preparation of the CSS that are free from material misstatement, whether due to fraud or error.

In preparing the CSS, the Directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the CSS

Our objectives are to obtain reasonable assurance about whether the CSS as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this CSS.

A further description of our responsibilities for the audit of the CSS is located on the Financial Reporting Council's website at frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Independent Auditor's Report to the Directors of Centrica plc and its Licensees

Extent to which the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below.

We considered the nature of the Group's industry and its control environment, and reviewed the Group's documentation of their policies and procedures relating to fraud and compliance with laws and regulations. We also enquired of management, the directors and internal audit about their own identification and assessment of the risks of irregularities including those that are specific to Centrica's business sector.

We obtained an understanding of the legal and regulatory frameworks that the Group operates in, and identified the key laws and regulations that:

- had a direct effect on the determination of material amounts and disclosures in the CSS. These included UK Companies Act and Ofgem's Standard Condition 19A of the Electricity and Gas Supply Licences and Standard Condition 16B of the Electricity Generation Licences; and
- do not have a direct effect on the CSS but compliance with which may be fundamental to the Group's ability to operate or to avoid a material penalty.

We discussed among the audit engagement team including significant component audit teams regarding the opportunities and incentives that may exist within the organisation for fraud and how and where fraud might occur in the CSS.

As a result of performing the above, we identified the greatest potential for fraud in the following area, and our specific procedures performed to address it are described below:

- Credit losses on financial assets within the Group's energy supply businesses ('Bad debt provisions'). Our audit approach for bad debt provisions was a combination of data analytics, substantive audit procedures and tests of internal control.
- Accuracy and completeness of customer revenue processed through the ENSEK platform. Given the significant quantum of revenue, the developing controls environment and the difference from legacy SAP systems in the methodology used to derive unbilled revenue related to customers on ENSEK, there is a risk, including a fraud risk over the accuracy and completeness of the revenue recognised.

In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override. In addressing the risk of fraud through management override of controls, we tested the appropriateness of journal entries and other adjustments; assessed whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluated the business rationale of any significant transactions that are unusual or outside the normal course of business.

In addition to the above, our procedures to respond to the risks identified included the following:

- reviewing financial statement disclosures by testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the CSS;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- enquiring of management, internal audit and in-house legal counsel concerning actual and potential litigation and claims, and instances of non-compliance with laws and regulations; and
- reading minutes of meetings of those charged with governance, and reviewing internal audit reports.

Use of this report

This report is made solely to the Group's Directors, as a body, in accordance with our engagement letter dated 15 February 2023 and solely for the purpose of assisting the Directors in reporting on the CSS to the regulator Ofgem. We permit this report to be displayed on the Centrica plc website centrica.com and within the December 2022 Annual Report & Accounts (see footnote (ii)) to enable the Directors to show they have addressed their governance responsibilities by obtaining an independent assurance report in connection with the CSS. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Directors as a body and Centrica plc, for our work or this report, or for the opinions we have formed. The materiality level we used in planning and performing our audit was £50 million.

The engagement partner on the audit resulting in this independent auditor's report is Jane Boardman.

Deloitte LLP
15 February 2023

London

(i) British Gas Trading Limited, Neas Energy Limited, Centrica Brigg Limited (which changed its name to CBS Energy Storage Assets UK Limited on 15 February 2023), Centrica Distributed Generation Limited, Centrica KPS Limited, and EDF Energy Nuclear Generation Limited.

(ii) The maintenance and integrity of Centrica plc's website is the responsibility of the Directors of Centrica plc; the work carried out by the auditors does not involve consideration of these matters and accordingly, the auditors accept no responsibility for any changes that may have occurred to the CSS since it was initially presented on the website.

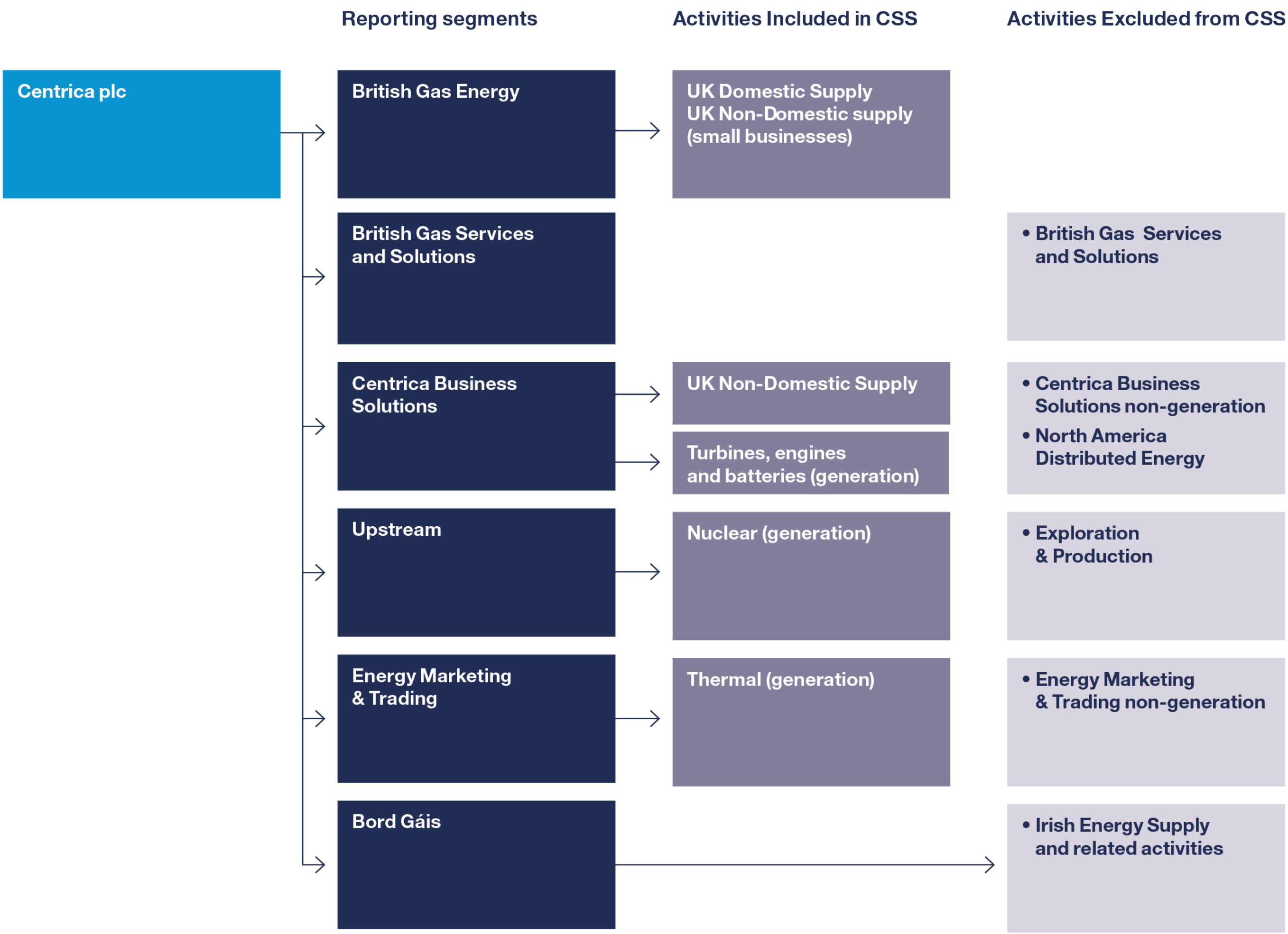
Introduction

The Ofgem Consolidated Segmental Statement (CSS) and required regulatory information on pages 241 to 251 are provided in order to comply with Standard Condition 16B of the Electricity Generation Licences and Standard Condition 19A of the Electricity and Gas Supply Licences.

The CSS and supporting information is prepared by the Directors in accordance with the Segmental Statements Guidelines issued by Ofgem. The CSS has been derived from and reconciled to the Centrica plc Annual Report and Accounts for the year ended 31 December 2022, which have been prepared in accordance with the United Kingdom adopted International Accounting Standards, with International Financial Reporting Standards as issued by the IASB and in conformity with the requirements of the Companies Act 2006.

Centrica plc operational reporting structure

Below is a summary of the Centrica plc Group's (Group) operational reporting structure. The CSS financial data has been extracted from the Centrica plc Annual Report and Accounts 2022 operating segments rather than with reference to specific legal entities. Certain activities included in the Group's operating segments have been excluded from the Generation and Supply segments of the CSS on the basis they are non-licensed activities (for example Services and Solutions and other trading activity unrelated to Generation or Supply) as illustrated below. The Centrica plc Annual Report and Accounts 2022 provides operating segment results in note 4. A full reconciliation between the relevant operating segment results and those disclosed for 'Domestic Supply', 'Non-Domestic Supply' and 'Generation' in this CSS is provided at the end of the report.



Centrica plc operational reporting structure

Centrica plc is the ultimate parent company of all 100% owned licensees. The individual supply and generation licences are held in legal entities whose licensed activities are reported as part of the Centrica plc Annual Report and Accounts 2022 within the operating segments shown above. The individual supply and generation licences held in subsidiaries, joint ventures or associates of Centrica plc at 31 December 2022 are detailed below:

Licensee	Licence	Ownership
British Gas Trading Limited	Supply	100%
Neas Energy Limited (i)	Supply	100%
Centrica Brigg Limited (ii)	Exempt	100%
Centrica KPS Limited	Generation	100%
Centrica Distributed Generation Limited	Exempt	100%
EDF Energy Nuclear Generation Limited (iii)	Generation	20% Associate

(i) Neas Energy Limited holds supply licences but currently does not supply any UK customers.
(ii) Centrica Brigg Limited changed its name to CBS Energy Storage Assets UK Limited on 15th February 2023.
(iii) The Group holds a 20% investment in Lake Acquisitions Limited which indirectly owns 100% of EDF Energy Nuclear Generation Limited.

Ofgem Consolidated Segmental Statement

Year ended 31 December 2022

		Electricity Generation		Aggregate Generation Business	Electricity Supply		Gas Supply		Aggregate Supply Business
	Unit	Nuclear	Thermal		Domestic	Non-Domestic	Domestic	Non-Domestic	
Total revenue	**£m**	**1,231.4**	**27.0**	**1,258.4**	**5,904.9**	**2,902.2**	**5,879.7**	**1,124.8**	**15,811.6**
Sales of electricity & gas	£m	1,203.7	24.7	**1,228.4**	5,900.0	2,902.2	5,876.0	1,124.8	**15,803.0**
Other revenue	£m	27.7	2.3	**30.0**	4.9	—	3.7	—	**8.6**
Total operating costs	**£m**	**(321.6)**	**(20.2)**	**(341.8)**	**(5,799.1)**	**(2,838.2)**	**(5,886.1)**	**(1,048.7)**	**(15,572.1)**
Direct fuel costs	£m	(78.0)	(10.2)	**(88.2)**	(3,351.3)	(1,609.0)	(3,832.4)	(828.4)	**(9,621.1)**
Direct costs	£m	(206.2)	(6.6)	**(212.8)**	(1,911.9)	(1,023.4)	(1,390.0)	(134.4)	**(4,459.7)**
Transportation costs	£m	(85.9)	(1.1)	**(87.0)**	(1,136.6)	(548.5)	(1,200.4)	(99.7)	**(2,985.2)**
Environmental and social obligation costs	£m	—	(2.2)	**(2.2)**	(682.0)	(415.6)	(103.4)	—	**(1,201.0)**
Other direct costs	£m	(120.3)	(3.3)	**(123.6)**	(93.3)	(59.3)	(86.2)	(34.7)	**(273.5)**
Indirect costs	£m	(37.4)	(3.4)	**(40.8)**	(535.9)	(205.8)	(663.7)	(85.9)	**(1,491.3)**
WACOF/E/G (i)	**£/MWh, P/th**	**(9.1)**	**(259.9)**	**N/A**	**(192.6)**	**(141.1)**	**(160.3)**	**(137.6)**	**N/A**
EBITDA	£m	**909.8**	**6.8**	**916.6**	**105.8**	**64.0**	**(6.4)**	**76.1**	**239.5**
DA	£m	(156.7)	(1.7)	(158.4)	(37.5)	(12.3)	(43.0)	(5.2)	**(98.0)**
EBIT	£m	**753.1**	**5.1**	**758.2**	**68.3**	**51.7**	**(49.4)**	**70.9**	**141.5**
Volume	TWh, MThms	8.7	—	N/A	17.4	11.4	2,390.3	601.9	N/A
Average customer numbers/sites	'000s	N/A	N/A	N/A	5,883.7	433.6	6,733.6	183.4	N/A

		Electricity Supply Domestic	Electricity Supply Non-Domestic	Gas Supply Domestic	Gas Supply Non-Domestic	Aggregate Supply Business
Supply EBIT	**margin**	**1.2%**	**1.8%**	**(0.8)%**	**6.3%**	**0.9%**
Supply PAT	**£m**	**52.2**	**40.0**	**(37.6)**	**55.0**	**109.6**
Supply PAT	**margin**	**0.9%**	**1.4%**	**(0.6)%**	**4.9%**	**0.7%**

2021 Summarised CSS

Year ended 31 December 2021

		Electricity Generation		Aggregate Generation Business	Electricity Supply		Gas Supply		Aggregate Supply Business
	Unit	Nuclear	Thermal		Domestic	Non-Domestic	Domestic	Non-Domestic	
Total revenue	£m	415.5	187.3	602.8	3,410.3	1,872.1	3,253.7	621.9	9,158.0
EBIT	£m	(59.5)	18.2	(41.3)	(106.9)	(43.4)	222.2	46.1	118.0

		Electricity Supply Domestic	Electricity Supply Non-Domestic	Gas Supply Domestic	Gas Supply Non-Domestic	Aggregate Supply Business
Supply EBIT	margin	(3.1)%	(2.3)%	6.8%	7.4%	1.3%
Supply PAT	£m	(85.8)	(35.1)	178.4	37.1	94.6
Supply PAT	margin	(2.5)%	(1.9)%	5.5%	6.0%	1.0%

Notes:

(i) WACOF/E/G is calculated using Volumes to 2 decimal places.

Glossary of terms

- 'WACOF/E/G' is weighted average cost of fuel (nuclear), electricity (supply) and gas (thermal and supply) calculated by dividing direct fuel costs by volumes. For the Thermal sub-segment, the cost of carbon emissions is added to direct fuel costs before dividing by the generated volume.
- 'EBITDA' is earnings before interest, tax, depreciation and amortisation, and is calculated by subtracting total operating costs from revenue.
- 'DA' is depreciation and amortisation.
- 'EBIT' is earnings before interest and tax, and is calculated by subtracting total operating costs, depreciation and amortisation from total revenue.
- 'Supply EBIT margin' is a profit margin expressed as a percentage and calculated by dividing EBIT by total revenue and multiplying by 100 for the Supply segment.
- 'Supply PAT' is profit after tax but before interest and is calculated by subtracting Group adjusted tax from EBIT for the Supply segment.
- 'Supply PAT margin' is a profit margin expressed as a percentage and calculated by dividing Supply PAT by total revenue and multiplying by 100 for the Supply segment.
- 'Volume' for Supply is supplier volumes at the meter point (i.e. net of losses); Generation volume is the volume of power that can actually be sold in the wholesale market (i.e. generation volumes after losses up to the point where power is received under the Balancing and Settlement Code but before subsequent losses).
- 'Average customer numbers/sites' are calculated by adding average monthly customer numbers/sites (as defined in the basis of preparation) and dividing by 12.
- 'Scheduling decisions' means the decision to run individual generation units.
- 'Responsible for interactions with the Balancing Market' means interactions with the Balancing Mechanism in electricity.
- 'Interacts with wider market participants to buy/sell energy' means the business unit is responsible for interacting with wider market participants to buy/sell energy, not the entity responsible for the buy/sell decision itself, which falls under 'Responsible for implementing hedging policy/makes decisions to buy/sell energy'.
- 'Matches own generation with own supply' means where there is some internal matching of generation and supply before either generation or supply interact with the wider market.
- 'Forecasts total system demand' means forecasting total system electricity demand or total system gas demand.
- 'Forecasts customer demand' means forecasting the total demand of own supply customers.
- 'Bears shape risk after initial hedge until market allows full hedge' means the business unit which bears financial risk associated with hedges made before the market allows fully shaped hedging.
- 'Bears short-term risk for variance between demand and forecast' means the business unit which bears financial risk associated with too little or too much supply for own customer demand.

Business functions table

Year ended 31 December 2022 – analysis of business functions (i)

The table below illustrates where the business functions reside.

	Generation	Supply	Another part of business
Operates and maintains generation assets	✓	–	–
Responsible for scheduling decisions	✓	–	–
Responsible for interactions with the Balancing Market	✓	✓	–
Responsible for determining hedging policy	✓ (output)	✓ (demand)	–
Responsible for implementing hedging policy/makes decision to buy and sell energy	✓ (output)	✓ (demand)	–
Interacts with wider market participants to buy/sell energy	✓ (bilateral)	✓ (market and bilateral)	✓ (market and bilateral) (ii)
Holds unhedged positions (either short or long)	✓	✓	✓ (ii)
Procures fuel for generation	✓	–	–
Procures allowances for generation	✓	–	–
Holds volume risk on positions sold (either internal or external)	✓	✓	–
Matches own generation with own supply	–	–	✓ (ii) (iii)
Forecasts total system demand	–	✓	–
Forecasts wholesale price	✓ (iv)	✓ (iv)	✓ (iv)
Forecasts customer demand	–	✓	–
Determines retail pricing and marketing strategies	–	✓	–
Bears shape risk after initial hedge until market allows full hedge	✓	✓	–
Bears short-term risk for variance between demand and forecast	–	✓	–

(i) The table reflects the business functions that impact our UK segments.

(ii) The Group's Supply and Generation businesses are separately managed. Both businesses independently enter into commodity purchases and sales with the market via Centrica Energy Limited (CEL), our market-facing legal entity. CEL forms part of our non-licensed element of Energy Marketing & Trading function and also conducts trading for the purpose of making profits in its own right. The Supply segment is also able to enter into market trades directly as part of its within day balancing activities (as well as external bilateral contracts).

(iii) 'Matches own generation with own supply' is undertaken in 'Another part of the business' (by CEL at market referenced prices), outside of the Generation and Supply segments.

(iv) A separate team forecasts the wholesale price for the benefit and use of the entire Group. This team does not formally reside in any particular segment but their costs are recharged across the Group.

Key:

✓ Function resides and profit/loss recorded in segment.

– Neither function nor profit/loss reside in segment.

Basis of preparation

The following notes provide a summary of the basis of preparation of the 2022 submission.

The Ofgem CSS segments our Supply and Generation activities and provides a measure of profitability, weighted average cost of fuel, and volumes, in order to increase energy market transparency for consumers and other stakeholders.

These statements have been prepared by the Directors of Centrica plc and its Licensees in accordance with Standard Condition 16B of the Electricity Generation Licences and Standard Condition 19A of the Electricity and Gas Supply Licences and the basis of preparation. Throughout the basis of preparation the first paragraph number relates to the generation licence and the second to the supply licence conditions respectively.

The financial data provided has been taken from the relevant licensee's and affiliate's financial information for the year ended 31 December 2022, included in the Centrica plc Annual Report and Accounts 2022 which have been prepared under IFRS as adopted by the United Kingdom (in accordance with paragraph 3/19A.3).

The CSS has been prepared on a going concern basis, as described in the Directors' Report and notes 1 and 24 in the Centrica plc Annual Report and Accounts 2022.

For the Generation segment, we have included the financial results from all activities that relate to our generation licences. For clarity, the following judgements have been made:

- the Group has a 20% equity interest in Lake Acquisitions Limited, which owns eight nuclear power stations (through its indirect investment in EDF Energy Nuclear Generation Limited), of which five were operational at year-end. Although we do not specifically hold a generation licence for any of the nuclear stations, our gross share of the financial result from this business (including any contractual arrangements) has been included in the Nuclear sub-segment and hence within the Generation segment;
- Brigg and Roosecote power stations had their licences revoked on 2 July 2015 (at their request) because they no longer required an electricity generation licence and are now exempt. Whilst we do not specifically hold a generation licence for these power stations (and note that Roosecote is now a battery storage site), the financial results from these businesses have been included in the Thermal sub-segment and hence within the Generation segment; and
- where power is purchased from third parties (for example from wind farms, power stations or other bilateral arrangements) and we do not have an equity interest in, or a leasing arrangement (from an IFRS perspective) over the assets that generate this power, the result related to these activities is excluded from the Generation segment. In all cases, the Generation segment reports direct fuel costs and generation volumes on a consistent basis (if the purchase cost is a direct fuel cost, then the electricity generated is reported in volume).

Domestic Supply represents the revenue and associated costs in supplying gas and electricity to residential customers in the UK. Non-Domestic Supply represents the revenue and associated costs in supplying gas and electricity to business customers in the UK.

As a voluntary disclosure, to aid comparability, a summarised 2021 CSS with margins has been included within the report.

Revenues

Revenues, costs and profits of the Licensees have been defined below and prepared in compliance with the Group's accounting policies as detailed in notes 2, 3 and S2 of the Centrica plc Annual Report and Accounts 2022, except for joint ventures and associates which are presented gross (in accordance with paragraph 4(a)/19A.4(a)).

- Revenue from sales of electricity and gas for the Supply segment is recognised on the basis of electricity and gas supplied during the year to both domestic and non-domestic customers.
- Revenue from sales of electricity and gas includes an assessment of energy supplied to customers between the date of the last meter reading and the year end (unread). For the respective Supply segments this means electricity and gas sales. Revenue for domestic supply is after deducting dual fuel discounts where applicable, with the discount split evenly between electricity and gas. Government mandated social tariffs and discounts, such as the Warm Home Discount, and other social discounts, have also been deducted from Domestic Supply revenues directly, charged specifically to each fuel.
- Revenue from sales of electricity and gas for the Supply segment include revenues ultimately due from the Government support schemes (Energy Price Guarantee and Energy Bill Relief Scheme). In 2022, these amount to: Domestic Electricity Supply of £705.7 million and Domestic Gas Supply of £832.6 million; Non-Domestic Electricity Supply of £164.2 million and Non-Domestic Gas Supply of £55.2 million
- Revenue from sales of electricity for the Generation segment is recognised on the basis of power supplied during the year. Power purchases and sales entered into to optimise the performance of each of the power Generation segments are presented net within revenue.

Basis of preparation

- The financial risks and rewards of owning and using the Group's power stations reside entirely in the reported Generation segment.
- Other respective segmental revenues not related to the sale of gas or power have been separately disclosed. Other revenues include:
  - £4.9 million (2021: £6.4 million) in Domestic Electricity Supply and £3.7 million (2021: £5.8 million) in Domestic Gas Supply primarily relating to New Housing Connections and smart meter installations;
  - £2.3 million (2021: £22.0 million) in Thermal principally relating to Supplementary Balancing Reserve (SBR), Short Term Operating Reserve (STOR), Triad revenue and Capacity Market income; and
  - £27.7 million (2021: £32.1 million) revenue in Nuclear not directly related to energy sales, such as capacity market income and provision of miscellaneous services.

Direct fuel costs

Direct fuel costs for both Generation and Supply include electricity, gas, nuclear fuel and imbalance costs.

- Energy supply to Domestic and Non-Domestic energy customers is procured at a market referenced price, through a combination of bilateral, over-the-counter (OTC) and exchange-based trades/contracts (see table below). Where energy is procured from within the Group it is also at a market referenced price on an OTC basis. The market referenced prices used are those prevailing at the time of procurement, which may differ from the price prevailing at the time of supply.
- Domestic and Non-Domestic fixed price products are hedged based upon anticipated demand at the start of the contract period. The majority of the gas and power for Non-Domestic energy and Domestic energy tariff products is purchased in advance (see table below).
- The exact Domestic and Non-Domestic purchasing patterns vary in response to the outlook for commodity markets and commercial factors.
- The Generation segment purchases gas and sells all of its energy at market referenced prices. Gas for turbines/engines is procured at market referenced prices through a combination of OTC and exchange-based trades/contracts. The cost to the power stations will reflect market referenced prices at the time of procurement, and so may differ from the price prevailing at the time of physical supply.

How we procure electricity, gas and carbon:

Long form bilateral contracts ('bilateral')	Individually negotiated contracts with non-standardised terms and conditions which may relate to size, duration or flexibility. Pricing is predominantly indexed to published market referenced prices, adjusted for transfer of risks, cost of carry and administration.
OTC	Broker supported market of standardised products, predominantly performed via screen-based trading. These transactions are between two parties, leaving both parties exposed to the other's default with no necessary intermediation of any exchange. An internal OTC price may be provided where market liquidity prevents external trading, with prices that are reflective of market conditions at the time of execution.
Exchange	Regulated electronic platform (notably ICE, APX, and N2EX) where standardised products are traded on exchange through the intermediary of the clearing house which becomes the counterparty to the trade. Membership of a clearing house is required which entails posting of cash or collateral as margin.

WACOF/WACOE/WACOG

- For Generation this represents a proxy for the weighted average input cost of gas, carbon and nuclear fuel, shown as £/MWh, used by the Generation business. Gas for turbines/engines is procured at market referenced prices through a combination of OTC and exchange-based trades/contracts. The cost to the power stations will reflect market referenced prices at the time of procurement, and so may differ from the price prevailing at the time of physical supply.
- For Supply this covers the wholesale energy cost, the energy element of reconciliation by difference (RBD) costs and balancing and shaping costs incurred by the Supply licensees. Again, gas and electricity is procured at market referenced prices through a combination of bilateral, OTC and exchange-based trades/contracts. The cost for the Supply business will reflect market referenced prices at the time of procurement, and so may differ from the price prevailing at the time of physical supply. Where gas is procured using (predominantly indexed) bilateral contracts, the fuel cost is then allocated between Domestic and Non-Domestic Supply using annually updated fixed percentages based on the historical split of tariff book volumes. Gas and Electricity balancing costs are allocated between Domestic and Non-Domestic Supply based on their respective volumes multiplied by an appropriate industry referenced price (for example APX or SAP).
- For electricity Supply the weighted average cost of electricity is shown as £/MWh. For gas Supply, the weighted average cost of gas is shown as p/th.

Basis of preparation

Direct costs

Direct costs for Supply and Generation are broken down into transportation (network) costs, environmental and social obligation costs and other direct costs.

- Transportation costs for Supply and Generation include network transportation costs, BSUOS and the transport element of RBD costs. Supply transportation costs include transportation and LNG costs, including £37.1 million (2021: £37.5 million) incurred by Gas Domestic Supply, which enables the segment to secure supply by giving the ability to bring gas into the UK from overseas.
- Environmental and social obligation costs for Domestic Supply include ROCs, FIT, ECO and UK Capacity Market costs. Non-Domestic Supply includes the cost of LECs, ROCs, FIT and UK Capacity Market costs. Within the Domestic and Non-Domestic segments, the costs of LECs, FIT, ROCs and UK Capacity Market costs are included within Electricity, and ECO is allocated between Electricity and Gas based on the relevant legislation. Environmental and social obligation costs for the Generation segment relate to EU ETS carbon emission costs and carbon tax.
- Other direct costs for Generation include employee and maintenance costs.
- Other direct costs for Supply include brokers' costs and sales commissions when the costs have given rise directly to revenue, that is, producing a sale. They also include Elexon and Xoserve market participation and wider smart metering programme costs.

Indirect costs

Indirect costs for Supply and Generation include operating costs such as sales and marketing, bad debt, costs to serve, IT, HR, finance, property, staffing and billing and metering costs (including smart meter costs).

- Indirect costs for the Generation, Domestic and Non-Domestic Supply segments (including corporate and business unit recharges) are allocated based on relevant drivers, which include turnover, headcount, operating profit, net book value of fixed assets and proportionate use/benefit. For Supply, indirect costs (including corporate recharges but excluding bad debt costs) are primarily allocated between Electricity and Gas on the basis of customer numbers (Domestic) and sites (Non-Domestic). Bad debt costs are allocated between Electricity and Gas on the basis of actual bad debt cost by individual contract in the billing system (Domestic) and on the basis of revenues (Non-Domestic).

Other

- For Supply, depreciation and amortisation is allocated between Electricity and Gas on the basis of customer numbers (Domestic) and sites (Non-Domestic).
- For the purposes of Supply PAT, tax is allocated between Gas and Electricity within both Domestic and Non-Domestic Supply based on their relative proportions of EBIT.
- For the Domestic Supply segment, customer numbers are stated based on the number of district meter point reference numbers (MPRNs) and meter point administration numbers (MPANs) in our billing system (for gas and electricity respectively), where it shows an active point of delivery and a meter installation. As a result, our customer numbers do not include those meter points where a meter may recently have been installed but the associated industry registration process has yet to complete, as the meter information will not be present in our billing system.
- For the Non-Domestic Supply segment, sites are based on the number of distinct MPRNs and MPANs in our billing system for gas and electricity respectively.

Basis of preparation

Transfer pricing for electricity, gas and generation licensees in accordance with paragraph 4(d)/19A.4(d)

There are no specific energy supply agreements between the Generation and Supply segments.

The Group continues to ensure transfer pricing methodologies are appropriate and up to date. In order to meet this requirement, the Group ensured all transfer pricing and cost allocation methodologies were internally reviewed, updated and collated in a central repository.

Treatment of joint ventures and associates

The share of results of joint ventures and associates for the year ended 31 December 2022 principally arises from the Group's interests in the entities listed on page 242.

Under paragraph 5 of the Conditions, the information provided in the CSS includes our gross share of revenues, costs, profits and volumes of joint ventures and associates. In preparing the CSS, joint ventures and associates (which hold a UK generation licence or exemption) are accounted for as follows:

- our proportionate share of revenues of joint ventures and associates has been included within revenue;
- our proportionate share of the profit before tax of joint ventures and associates has been included within EBIT and EBITDA; and
- our proportionate share of the generation volumes of joint ventures and associates has been included within the generation volumes.

For each of the above items, our share of the income and expenses of the joint ventures or associates has been combined line-by-line within the relevant item of the CSS.

Exceptional items and certain re-measurements

Impairment reversals that have been identified as exceptional items, and mark-to-market adjustments (alongside onerous supply contract provisions) in the Centrica plc Annual Report and Accounts 2022, are excluded from the CSS. For further details of excluded exceptional items and certain re-measurements see note 7 in the Centrica plc Annual Report and Accounts 2022.

A reconciliation of the Segmental Statement revenue, EBIT and depreciation to the 2022 audited Centrica plc Annual Report and Accounts has been included in accordance with paragraphs 4(b) & (c)/19A.4 (b) & (c) and 6/19A.6.

Reconciliation to Centrica plc Annual Report and Accounts

The reconciliation refers to the segmental analysis of the 2022 Centrica plc Annual Report and Accounts in note 4.

Revenue (£m)

	Notes	Generation segment	Supply segment – Domestic – Electricity	Supply segment – Domestic – Gas	Supply segment – Non-Domestic – Electricity	Supply segment – Non-Domestic – Gas
		2022	2022	2022	2022	2022
Centrica plc Annual Report and Accounts Segmental Analysis (i)		Upstream	British Gas Energy		Centrica Business Solutions	
Segment revenue		3,351.0	13,096.0		3,000.0	
Less non-UK and non-Generation/Supply	1	(2,147.3)	—		(257.4)	
Segment revenue after non-UK and non-Generation/Supply		1,203.7	13,096.0		2,742.6	
Reallocate British Gas Non-Domestic Supply element	2	—	(1,311.4)		1,311.4	
Reallocate Centrica Business Solutions Generation element	2	27.0	—		(27.0)	
Segment revenue after non-UK and non-Generation/Supply and reallocation of Generation element from Centrica Business Solutions to Upstream		1,230.7	11,784.6		4,027.0	
Electricity and Gas allocation	3	—	5,904.9	5,879.7	2,902.2	1,124.8
Include share of JVs and associates	4	592.0	—	—	—	—
Exclude intra-segment revenues	5	(564.3)	—	—	—	—
Ofgem Consolidated Segmental Statement		**1,258.4**	**5,904.9**	**5,879.7**	**2,902.2**	**1,124.8**

EBIT (£m)

	Notes	Generation segment	Supply segment – Domestic – Electricity	Supply segment – Domestic – Gas	Supply segment – Non-Domestic – Electricity	Supply segment – Non-Domestic – Gas
Centrica plc Annual Report and Accounts Segmental Analysis (i)						
Segment EBIT		1,793.0	72.0		44.0	
Less non-UK and non-Generation/Supply	1	(1,068.5)	—		36.8	
Segment EBIT after non-UK and non-Generation/Supply		724.5	72.0		80.8	
Reallocate British Gas Non-Domestic Supply element	2	—	(48.4)		48.4	
Reallocate Centrica Business Solutions Generation element	2	5.2	—		(5.2)	
Less Employee Profit share excluded from Segment EBIT			(4.7)		(1.4)	
Segment EBIT after non-UK and non-Generation/Supply and reallocation of Generation element from Centrica Business Solutions to Upstream		729.7	18.9		122.6	
Electricity and Gas allocation	3	—	68.3	(49.4)	51.7	70.9
Exclude share of JVs' and associates' interest and tax	4	28.5	—	—	—	—
Ofgem Consolidated Segmental Statement		**758.2**	**68.3**	**(49.4)**	**51.7**	**70.9**

Reconciliation to Centrica plc Annual Report and Accounts

Depreciation and amortisation (£m)

			Supply segment			
		Generation segment	Domestic		Non-Domestic	
			Electricity	Gas	Electricity	Gas
	Notes	2022	2022	2022	2022	2022
Centrica plc Annual Report and Accounts Segmental Analysis [(i)]		Upstream	British Gas Energy		Centrica Business Solutions	
Segment depreciation and amortisation		(481.0)	(82.0)		(45.0)	
Less non-UK and non-Generation/Supply	1	481.0	—		27.3	
Segment depreciation and amortisation after non-UK and non-Generation/Supply		—	(82.0)		(17.7)	
Reallocate British Gas Non-Domestic Supply element	2	—	1.5		(1.5)	
Reallocate Centrica Business Solutions Generation element	2	(1.7)	—		1.7	
Segment depreciation and amortisation after non-UK and non-Generation/Supply and reallocation of Generation element from Centrica Business Solutions to Upstream		(1.7)	(80.5)		(17.5)	
Electricity and Gas allocation	3	—	(37.5)	(43.0)	(12.3)	(5.2)
Include share of JVs and associates	4	(156.7)	—	—	—	—
Ofgem Consolidated Segmental Statement		**(158.4)**	**(37.5)**	**(43.0)**	**(12.3)**	**(5.2)**

(i) The tables reconcile the Generation segment to Upstream, the Domestic Supply segment to British Gas and the Non-Domestic Supply segment to Centrica Business Solutions from note 4 to the 2022 Centrica plc Annual Report and Accounts. Also included in note 4 is a reconciliation to the IFRS compliant statutory result reported by the Centrica plc Group.

Notes:

1. Centrica Business Solutions includes Business Services and Solutions and Upstream includes Exploration and Production, which are non-licensed activities and have been deducted to reconcile these CSS numbers.
2. British Gas Energy includes supply activity to certain companies fulfilling the Non-Domestic definition. Centrica Business Solutions includes generation activity from the Group's turbines, engines and battery assets.
3. The share of Domestic and Non-Domestic Revenues, Operating Profit (EBIT) and Depreciation (including amortisation) as provided in note 4 of the Centrica plc Annual Report and Accounts 2022, has been split between Electricity and Gas.
4. £592.0 million of revenues relating to the Group's share of joint ventures and associates in Generation are included in the CSS for Nuclear revenues. £120.5 million of EBIT in the Generation segment relates to profits from associates for Nuclear. Additionally, costs relating to the Group's share of joint ventures and associates: £78.0 million direct fuel costs, £194.4 million direct costs, £42.4 million indirect costs and £156.7 million depreciation and amortisation are included. Also, note that financing costs and tax of £(28.5) million are initially included in the Upstream segmental EBIT associated with nuclear. The results of joint ventures and associates are shown separately in the Centrica plc Annual Report and Accounts 2022 in notes 6 and 14. (Note that overall Nuclear indirect costs are less than the Nuclear associate indirect costs as a result of credits from recharges and provision releases in the non-associate books.)
5. £564.3 million of intra-segment revenues between the joint ventures and associates and the Generation segment (included in the £592.0 million of joint venture and associate revenues) are excluded from the CSS.

Shareholder Information

General enquiries

Centrica's share register is administered and maintained by Equiniti, our Registrar, whom you can contact directly if you have any questions about your shareholding which are not answered here or on our website. You can contact Equiniti using the following details:

Address: Equiniti, Aspect House, Spencer Road, Lancing, West Sussex BN99 6DA, UK

Telephone: 0371 384 2985*

Outside the UK: +44 (0)371 384 2985

Contact: help.shareview.co.uk

Website: equiniti.com

You can also contact Equiniti using the Relay UK website at relayuk.bt.com

* Calls to an 03 number cost no more than a national rate call to an 01 or 02 number. Lines open 8.30 am to 5.30 pm, Monday to Friday (UK time), excluding public holidays in England and Wales.

When contacting Equiniti or registering via shareview.co.uk, you should have your shareholder reference number to hand. This can be found on your share certificate, dividend confirmation or any other correspondence you have received from Equiniti.

Together with Equiniti, we have introduced an electronic queries service to enable our shareholders to manage their investment at a convenient time. Details of this service can be found at shareview.co.uk.

Dividend

As communicated previously, dividends are now paid only by direct transfer to your bank or building society account, rather than by cheque. This is faster, more secure and better for the environment.

If you have not already done so, please therefore provide Equiniti with your bank or building society account details. You can do this online at www.shareview.co.uk OR by telephoning Equiniti on +44 (0)371 384 2985.

American Depositary Receipt (ADR)

We have an ADR programme, trading under the symbol CPYYY. Centrica's ratio is one ADR being equivalent to four ordinary shares. Further information is available on our website or please contact:

Regular mail delivery address: BNY Mellon Shareowner Services, PO Box 505000, Louisville, KY 20233-5000, USA

Overnight, certified, registered delivery address: BNY Mellon Shareowner Services, 462 South 4th Street, Suite 1600, Louisville, KY 40202, USA

Email: shrrelations@cpshareownerservices.com

Website: mybnymdr.com

Telephone: +1 888 269 2377 (toll-free in the US)

Outside the US: +1 201 680 6825

Manage your shares online

We actively encourage our shareholders to receive communications via email and view documents electronically via our website, centrica.com. Receiving communications and documents electronically saves your Company money and reduces our environmental impact. If you sign up for electronic communications, you will receive an email to notify you that new shareholder documents are available to view online, including the Annual Report and Accounts, on the day it is published.

You will also receive alerts to let you know that you can cast your Annual General Meeting (AGM) vote online. You can manage your shareholding online by registering at shareview.co.uk, a free online platform provided by Equiniti, which allows you to:

- view information about your shareholding;
- have your dividend paid into your bank account;
- update your personal details; and
- appoint a proxy for the AGM.

Centrica FlexiShare

FlexiShare is an easy way to hold Centrica shares without a share certificate. Your shares are held by a nominee company, Equiniti Financial Services Limited. However, you are able to attend and vote at general meetings as if the shares were held in your own name. Holding your shares in this way is free and gives you:

- low cost share dealing rates (full details of which are available on centrica.com, together with dealing charges);
- quicker settlement periods for buying and selling shares; and
- no paper share certificates to lose.

centrica.com

The Shareholder Centre on our website contains a wide range of information including a dedicated investors section where you can find further details about shareholder services including:

- share price information;
- dividend history;
- telephone and internet share dealing;
- downloadable shareholder forms; and
- taxation.

This Annual Report and Accounts can also be viewed online by visiting centrica.com/ar22.

ShareGift

If you have a small number of shares and the dealing costs or the minimum fee make it uneconomical to sell them, it is possible to donate them to ShareGift, a registered charity, which provides a free service to enable you to dispose charitably of such shares.

More information on this service can be found at sharegift.org or by calling +44 (0)20 7930 3737.

Financial calendar

Ex-dividend date for 2022 final dividend	Thursday, 8 June 2023
Record date for 2022 final dividend	Friday, 9 June 2023
Annual General Meeting (AGM)	Tuesday, 13 June 2023
Payment of 2022 final dividend	Thursday, 20 July 2023

For more information on Centrica's financial calendar please visit centrica.com/investors/financial-calendar

Additional Information – Explanatory Notes (Unaudited)

Definitions and reconciliation of adjusted performance measures

Centrica's 2022 consolidated Financial Statements include a number of non-GAAP measures. These measures are chosen as they provide additional useful information on business performance and underlying trends. They are also used to measure the Group's performance against its strategic financial framework. They are not however, defined terms under IFRS and may not be comparable with similarly titled measures reported by other companies. Where possible they have been reconciled to the statutory equivalents from the primary statements (Group Income Statement ('I/S'), Group Balance Sheet ('B/S'), Group Cash Flow Statement ('C/F')) or the notes to the Financial Statements.

Adjusted revenue, adjusted gross margin, adjusted operating profit, adjusted earnings and free cash flow have been defined and reconciled separately in notes 2, 4 and 10 to the Financial Statements where further explanation of the measures is given. The Group has updated in the year its net debt adjusted performance measure to adjusted net debt, as the net debt adjusted performance measure now includes a loan of £400 million provided to the UK registered pension schemes. Additional performance measures are used within these Financial Statements to help explain the performance of the Group and these are defined and reconciled below. Further information has been provided to help readers when reconciling between different parts of the consolidated Group Financial Statements, and when reconciling cash flow measures to the Group Cash Flow Statement.

Adjusted EBITDA

Adjusted EBITDA is a business performance measure of operating profit, after adjusting for depreciation and amortisation. It provides a performance measure in its own right, and provides a bridge between the Income Statement and the Group's key cash metrics. Further, a reconciliation excluding Spirit Energy disposed assets is provided.

Year ended 31 December	Notes	2022 £m	2021 £m	Change
Group operating (loss)/profit	I/S	**(240)**	954	
Exceptional items included within Group operating loss/profit and certain re-measurements before taxation	7	**155**	(1,247)	
Certain re-measurements before taxation	7	**3,393**	1,241	
Share of (profits)/losses of joint ventures and associates, net of interest and taxation (i)	I/S	**(92)**	103	
Depreciation and impairments of PP&E (i)	4	**598**	583	
Amortisation, write-downs and impairments of intangibles (i)	4	**179**	216	
Group total adjusted EBITDA		**3,993**	1,850	116%

(i) These line items relate to business performance only.

Adjusted EBITDA excluding Spirit Energy disposed assets

Year ended 31 December	2022 £m	2021 £m	Change
Group total adjusted EBITDA	**3,993**	1,850	
Less disposed assets adjusted EBITDA (including associated hedges)	**(485)**	(803)	
Adjusted EBITDA excluding Spirit Energy disposed assets	**3,508**	1,047	235%

Adjusted operating profit excluding Spirit Energy disposed assets

Year ended 31 December	Notes	2022 £m	2021 £m	Change
Group total adjusted operating profit	I/S	**3,308**	948	
Less disposed assets adjusted operating profit (including associated hedges)		**(485)**	(556)	
Adjusted operating profit excluding Spirit Energy disposed assets		**2,823**	392	620%

The below table shows how adjusted EBITDA reconciles to free cash flow:

Year ended 31 December	Notes	2022 £m	2021 £m
Adjusted EBITDA		**3,993**	1,850
Group operating (loss)/profit including share of joint ventures and associates, from exceptional items and certain re-measurements	I/S	**(3,548)**	6
Share of profits of joint ventures and associates, net of interest and taxation, from exceptional items and certain re-measurements	I/S	**(1)**	—
Depreciation, amortisation, write downs, impairments and write-backs, from exceptional items and certain re-measurements	I/S	**(207)**	(1,214)
Loss on disposals	C/F	**343**	28
(Decrease)/increase in provisions	C/F	**(1,903)**	2,434
Cash contributions to defined benefit schemes in excess of service cost income statement charge	C/F	**(184)**	(388)
Employee share scheme costs	C/F	**10**	12
Unrealised losses/(gains) arising from re-measurement of energy contracts	C/F	**4,095**	(1,159)
Exceptional charges reflected directly in operating profit	C/F	**—**	12
Net movement in working capital	C/F	**(656)**	246
Taxes paid	C/F	**(574)**	(140)
Operating interest paid	C/F	**(30)**	—
Payments relating to exceptional charges in operating profit	C/F	**(24)**	(76)
Net cash flow from operating activities		**1,314**	1,611
Purchase of businesses, net of cash acquired	C/F	**12**	(14)
Sale of businesses	C/F	**92**	70
Purchase of property, plant and equipment and intangible assets	C/F	**(371)**	(420)
Sale of property, plant and equipment and intangible assets	C/F	**11**	36
(Investment in)/disposal of joint ventures and associates	C/F	**(18)**	2
Dividends received from joint ventures and associates	C/F	**60**	2
UK Pension deficit payments	4	**214**	368
Movements in variation margin and collateral	4	**1,173**	(481)
Free cash flow from continuing operations	4	**2,487**	1,174

Adjusted earnings attributable to shareholders excluding Spirit Energy disposed assets

Year ended 31 December	Notes	2022 £m	2021 £m	Change
Adjusted earnings attributable to shareholders	I/S	**2,050**	237	
Less disposed assets adjusted earnings attributable to shareholders (including associated hedges)		**(45)**	(75)	
Adjusted earnings attributable to shareholders excluding Spirit Energy disposed assets		**2,005**	162	1,138%

Adjusted basic earnings per share excluding Spirit Energy disposed assets

Year ended 31 December	Notes	2022	2021	Change
Adjusted earnings attributable to shareholders excluding Spirit Energy disposed assets (£m)		**2,005**	162	
Weighted average of ordinary shares in issue during the period (million shares)	10	**5,869**	5,836	
Adjusted basic earnings per share excluding Spirit Energy disposed assets		**34.2p**	2.8p	1,121%

Definitions and reconciliation of adjusted performance measures

Loss on disposals

Year ended 31 December	Notes	2022 £m	2021 £m
Loss on disposals	C/F	**343**	28
Less: exceptional loss on disposals	7	**(362)**	(31)
Profit on disposals relating to business performance		**(19)**	(3)

Group net investment

With an increased focus on cash generation, capital discipline and managing net debt/cash, Group net investment provides a measure of the Group's capital expenditure from a cash perspective and allows the Group's capital discipline to be assessed.

Year ended 31 December	Notes	2022 £m	2021 £m	Change
Capital expenditure (including small acquisitions) (i)		**377**	434	
Net disposals (ii)		**(103)**	(108)	
Group net investment		**274**	326	(16)%
Dividends received from joint ventures and associates	C/F	**(60)**	(2)	
Interest received	C/F	**(46)**	(2)	
Net purchase of securities	C/F	**398**	3	
Net cash flow used in continuing investing activities	C/F	**566**	325	74%

(i) Capital expenditure is the net cash flow on capital expenditure, purchases of businesses and investments in joint ventures and associates (less than £100 million). See table (a).

(ii) Net disposals is the net cash flow from sales of businesses, property, plant and equipment and intangible assets, and disposals of investments in joint ventures and associates. See table (b).

Group net investment is capital expenditure including acquisitions less net disposals. It excludes cash flows from investing activities not associated with capital expenditure as detailed in the table above.

(a) Capital expenditure (including small acquisitions)

Year ended 31 December	Notes	2022 £m	2021 £m	Change
Purchase of property, plant and equipment and intangible assets	C/F	**371**	420	
Purchase of businesses, net of cash acquired	C/F	**(12)**	14	
Investment in joint ventures and associates	C/F	**18**	–	
Less: material acquisitions (>£100 million)		**–**	–	
Capital expenditure (including small acquisitions)		**377**	434	(13)%

(b) Net disposals

Year ended 31 December	Notes	2022 £m	2021 £m	Change
Sale of businesses	C/F	**(92)**	(70)	
Sale of property, plant and equipment and intangible assets	C/F	**(11)**	(36)	
Disposal of joint ventures and associates	C/F	**–**	(2)	
Net disposals		**(103)**	(108)	(5)%

Definitions and reconciliation of adjusted performance measures

The following tables provide additional information to help readers when reconciling between different parts of the consolidated Group Financial Statements, and the Group Cash Flow Statement.

Reconciliation from free cash flow to change in adjusted net cash/(debt)

Year ended 31 December	Notes	2022 £m	2021 £m
Free cash flow from continuing operations	4	**2,487**	1,174
Free cash flow from discontinued operations	4	**—**	2,588
Group total free cash flow	4	**2,487**	3,762
Financing interest paid	C/F	**(172)**	(233)
Interest received	C/F	**46**	2
UK Pension deficit payments	4	**(214)**	(368)
Payments for own shares	C/F	**(5)**	—
Share buyback programme	C/F	**(43)**	—
Distributions to non-controlling interests	C/F	**(273)**	—
Equity dividends paid	C/F	**(59)**	—
Proceeds from sale of forfeited share capital	C/F	**—**	1
Movements in variation margin and collateral	4	**(1,173)**	481
Cash flows affecting adjusted net cash/debt		**594**	3,645
Discontinued operations non-cash movements in adjusted net cash/debt		**—**	32
Non-cash movements in adjusted net cash/debt		**(75)**	1
Change in adjusted net cash/debt		**519**	3,678
Opening adjusted net cash/(debt)	24	**680**	(2,998)
Closing adjusted net cash	24	**1,199**	680

Reconciliation of adjusted net cash to unadjusted net cash

Adjusted net cash/(debt) is a business performance measure used by management to assess the underlying indebtedness of the business.

Year ended 31 December	Notes	2022 £m	2021 £m
Adjusted net cash	24	**1,199**	680
Less: current and non-current securities	24	**(525)**	(156)
Less: sub-lease assets	24	**(2)**	(2)
Unadjusted net cash		**672**	522

Payments relating to exceptional charges in operating costs

Year ended 31 December	Notes	2022 £m	2021 £m
Restructuring costs incurred during the year and utilisation of prior year liabilities		**24**	76
Payments relating to exceptional charges in continuing operating costs	C/F	**24**	76

Definitions and reconciliation of adjusted performance measures

Depreciation, amortisation, write-downs, impairments and write-backs

Year ended 31 December	Notes	2022 £m	2021 £m
Movement from depreciation, amortisation, write-downs, impairments and write-backs, from exceptional items included in the Group Cash Flow Statement	7	**(207)**	(1,214)
Made up of:			
Write-back of E&P assets	7	**—**	(598)
Write-back of power assets	7	**(207)**	(747)
Impairment of Centrica Business Solutions goodwill and other assets	7	**—**	123
Impairment of property	7	**—**	8
Movement from depreciation, amortisation, write-downs, impairments and write-backs, from business performance included in the Group Cash Flow Statement		**777**	799
Made up of:			
Business Performance PP&E depreciation	4	**510**	580
Business Performance PP&E impairments	4	**88**	3
Business Performance intangibles amortisation	4	**159**	188
Business Performance intangibles impairments and write-downs	4	**20**	3
Business Performance E&E write-downs	4	**—**	25
Movement from depreciation, amortisation, write-downs, impairments and write-backs included in the Group Cash Flow Statement		**570**	(415)

Reconciliation of receivables and payables to Group Cash Flow Statement

Year ended 31 December	Notes	2022 £m	2021 £m
Receivables opening balance	B/S	**6,114**	2,946
Less: receivables closing balance	B/S	**(8,579)**	(6,114)
Payables opening balance	B/S	**(7,633)**	(3,836)
Less: payables closing balance	B/S	**10,341**	7,633
Net increase in receivables and payables		**243**	629
Non-cash changes, and other reconciling items:			
Share buyback liability		**(207)**	—
Transferred to held for sale and business disposals		**(22)**	(29)
Movement in capital creditors		**6**	10
Movement in ROCS and emission certificate intangible assets		**(67)**	(8)
Other movements (including foreign exchange movements)		**(16)**	5
Non-cash charges, and other reconciling items		**(306)**	(22)
Movement in trade and other receivables, trade and other payables and contract-related assets relating to business performance	C/F	**(63)**	607

Pensions

Year ended 31 December	Notes	2022 £m	2021 £m
Cash contributions to defined benefit schemes in excess of service cost income statement charge	C/F	**(184)**	(388)
Ordinary employer contributions	22	**50**	52
UK Pension deficit payments	22	**214**	368
Contributions by employer in respect of employee salary sacrifice arrangements	22	**21**	20
Total current service cost	22	**(105)**	(105)
Past service credit	22	**—**	1
Termination benefit	22	**4**	52

People and Planet – Performance Measures

In 2022, we engaged DNV Business Assurance Services UK Limited (DNV) to conduct an independent limited assurance engagement using the International Standard on Assurance Engagements (ISAE) 3000 (Revised): ‘Assurance Engagements Other Than Audits or Reviews of Historical Financial Information’. DNV has provided an unqualified opinion in relation to five KPIs that are identified with the symbol ‘†’ and feature on pages 1, 27, 43, 52 to 53, 258 and 260. It is important to read the responsible business information in the Annual Report and Accounts 2022 in the context of DNV’s full limited assurance statement and Centrica’s Basis of Reporting, which are available at centrica.com/assurance

+ Read more about our People & Planet Plan on **Pages 39 to 45**

+ Read more about our wider non-financial performance at **centrica.com/datacentre**

+ Read more about our SASB disclosure at **centrica.com/peopleandplanet**

Progress against our People & Planet Plan

Key: Progress against goals On track ● Behind ○

Goal	Milestone	2022 Progress		2021 Progress	
Create an engaged team that reflects the full diversity of the communities we serve by 2030 – this means all company and senior leaders to be[i]: • 47% women • 14% ethnically diverse • 15% disability • 3% LGBTQ+ • 3% ex-service	By the end of 2022: • 30% women • 13% ethnically diverse • 4% disability • 3% LGBTQ+ • 3% ex-service	**All company:**[ii]		All company:[ii]	
		• **30% women**	●	• 28% women	○
		– 41% excluding field engineers	●	– 44% excluding field engineers	●
		• **14% ethnically diverse**	●	• 12% ethnically diverse	○
		• **3% disability**	○	• 1% disability	○
		• **3% LGBTQ+**	●	• 2% LGBTQ+	●
		• **2% ex-service**	○	• 2% ex-service	●
		Senior leaders:[ii]		Senior leaders:[ii]	
		• **33%women**	●	• 28% women	○
		– 32%excluding field engineers	●	– 29%excluding field engineers	●
		• **9% ethnically diverse**	○	• 9% ethnically diverse	○
		• **3% disability**	○	• 1% disability	○
		• **0% LGBTQ+**	○	• 1% LGBTQ+	○
		• **3% ex-service**	●	• 2% ex-service	●
Recruit 3,500 apprentices and provide career development opportunities for under-represented groups by 2030 (base year 2021)	1,000 apprentices by the end of 2022	**1,033 apprentices**	●	666 apprentices[iii]	●
Inspire colleagues to give 100,000 days to build inclusive communities by 2030 (base year 2019)	20,000 days by the end of 2022	**12,987 days**	○	10,889 days	○
Help our customers be net zero by 2050[iv] (base year 2019)	28% carbon intensity reduction by the end of 2030	**6% reduction**	○	17% reduction[iii][v]	●
Be a net zero business by 2045[vi] (base year 2019)	40% carbon reduction by the end of 2034	**6%† reduction**	●	53% reduction[vii]	●

† Included in DNV’s independent limited assurance report referenced at the top of this page.

(i) Our 2030 goal was based on 2011 Census data for working populations. For 2023 annual reporting onwards, our goal will be re-aligned to the recently released 2021 Census data of 48% women, 18% ethnically diverse, 20% disability, 3% LGBTQ+ and 4% ex-service.

(ii) Beyond gender, 2021 disclosure is based on 65% of colleagues disclosing their diversity data and 70% in 2022. Senior leaders include colleagues above general management and spans senior managers, the Centrica Leadership Team and the Board.

(iii) Restated due to availability of improved data.

(iv) Net zero goal measures the greenhouse gas (GHG) intensity of our customers’ energy use including electricity and gas with a 2019 base year of 183gCO_2e/kWh, normalised to reflect acquisitions and divestments in line with changes in Group customer base. Target aligned to the Paris Agreement and based on science to limit global warming, corresponding to a well below 2°C pathway initially and 1.5°C by mid-century.

(v) Previous figure included in DNV’s limited assurance scope for the Annual Report 2021 was an 18% reduction.

(vi) Net zero goal measures scope 1 (direct) and 2 (indirect) GHG emissions based on operator boundary, which now includes all emissions from our shipping activities relating to Liquified Natural Gas (LNG) alongside the retained Spirit Energy assets in the UK and Netherlands. Non-operated nuclear emissions are excluded. Target is normalised to reflect acquisitions and divestments in line with changes in Group structure against a 2019 base year of 2,132,680mtCO_2e. It’s also aligned to the Paris Agreement and based on science to limit global warming, corresponding to a well below 2°C pathway initially and 1.5°C by mid-century.

(vii) Restated due to LNG shipping and Spirit Energy’s remaining assets moving into scope in 2022.

Progress against our Foundations

People

Metric	2022	2021	What's next
Customers			
British Gas Services & Solutions – Services Engineer Net Promoter Score (NPS)[(i)]	**+64**	+60	Continue to deliver energy, services and solutions that help our customers live sustainably, simply and affordably
British Gas Energy – Energy Touchpoint NPS[(ii)]	**+13**	+11[(iii)]	
Bord Gáis Energy – Journey NPS[(iv)]	**+19**	+30	
British Gas Services & Solutions – Services complaints per customer[(v)]	**12.6%**	12.1%	Maintain focus on driving down complaints by improving customer experience
British Gas Energy – Energy complaints per customer[(vi)]	**14.4%**	8.5%	
Bord Gáis Energy – Complaints per customer[(v)]	**2.2%**	1.6%	
Vulnerable customers helped through the UK Warm Home Discount scheme	**589,460**	535,866	Ensure customers in vulnerable circumstances receive the help they need with their energy bills
Customer safety incident frequency rate per 1,000,000 jobs completed	**3.64**	3.03	Consistently follow existing controls as well as encourage customers to maintain distance from work areas

(i) Measured independently, through individual questionnaires, the customer's willingness to recommend British Gas following an engineer visit.
(ii) Measured independently, through individual questionnaires and the customer's willingness to recommend British Gas following contact.
(iii) Restated to reflect the average weighted score by channel across the year.
(iv) Weighted NPS for the main customer interaction channels.
(v) Total complaints, measured as any oral or written expression of dissatisfaction, as a percentage of average customers over the year.
(vi) Total complaints, measured as an expression of dissatisfaction in line with submissions made to Ofgem, as a percentage of average customers over the year.

Metric	2022	2021	What's next
Colleagues			
Colleague engagement[(i)]	**73%**	55%	Continue to improve colleague experience by connecting colleagues with our Purpose and leaders, whilst supporting everyone to perform at their best
Gender pay gap[(ii)]	**23% median** **15% mean**	30% median 20% mean	Drive action through our People & Planet Plan to create an engaged team that reflects the full diversity of the communities we serve
Gender bonus gap[(iii)]	**12% median** **30% mean**	10% median 31% mean	
Ethnicity pay gap[(ii)(iv)]	**10% median** **3% mean**	13% median 0% mean	
Ethnicity bonus gap[(iii)(iv)]	**23% median** **0% mean**	12% median 4% mean	
Retention	**88%**	72%	Improve retention through our focus on talent development whilst providing a supportive and inclusive culture
Absence[(v)]	**10 days**	12 days	Reduce absence through good management practices alongside proactive support and education via our health and wellbeing suite of support
Total recordable injury frequency rate (TRIFR) per 200,000 hours worked	**1.12**	1.07	Drive down TRIFR and LTIFR by keeping safety front-of-mind and reinforcing a strong safety culture whilst advancing controls and monitoring
Lost time incident frequency rate (LTIFR) per 200,000 hours worked	**0.67**	0.72	
Process safety incident frequency rate (Tier 1 and 2) per 200,000 hours worked	**0**	0.20	Continue to ensure robust operational controls and operator competencies, timely safety-critical maintenance programmes and effective performance management
Significant process safety events (Tier 1)	**0**	0	
Fatalities	**1**	0	Return to zero fatalities

(i) Measured through colleague responses to a survey asking them to rate how they feel about the company.
(ii) Based on hourly rates of pay for all employees at full pay (including bonus and allowances) at the snapshot dates of 5 April 2021 and 2022. Read our Gender and Ethnicity Pay Statement to find out more at centrica.com/paygap.
(iii) Includes anyone receiving a bonus during the 12-month period leading up to the pay gap snapshot date and who are still employed on the snapshot date.
(iv) Based on 65% of colleagues who confirmed whether they are from a Black, Asian, Mixed/Multiple or other ethnic group in 2021 and 70% in 2022.
(v) Relates to absence from sickness rather than wider forms of absence such as bereavement.

Metric	2022	2021	What's next
Communities			
Total community contributions	**£293.4 million**(i)	£307.8 million(ii)	Make a big difference in our local communities – from helping people with their energy bills and energy efficiency, to volunteering and fundraising for causes colleagues feel passionately about
On the ground site audits completed	**9**	7	Continue to monitor and raise standards across our supply chain to reduce risk and guard against modern slavery, focusing on enhancing engagement and controls
Sites completing remote worker surveys	**6**	7	
Colleagues committed to Our Code	**98%**	98%	Ensure all colleagues uphold Our Code as part of our commitment to doing the right thing and acting with integrity

(i) Comprises £243.8 million in mandatory and £45.1 million in voluntary contributions to support vulnerable customers, alongside £4.5 million in charitable donations which includes £0.23 million in contributions from third parties such as colleague fundraising.

(ii) Comprises £304.8 million in mandatory and £2.0 million in voluntary contributions to support vulnerable customers, alongside £0.96 million in charitable donations which includes £0.21 million in contributions from third parties such as colleague fundraising. Restated due to availability of improved data.

Planet

Metric	2022	2021	What's next
Greenhouse gas (GHG) and energy			
Total GHG emissions (scope 1 and 2)(i)	**2,007,655tCO_2e†(ii)**	1,032,807tCO_2e(iii)(iv)(v)	Measure and reduce our emissions through our People & Planet Plan, whereby we're focused on being a net zero business by 2045 and helping our customers be net zero by 2050
Scope 1 emissions	**1,994,153tCO_2e†(vi)**	1,018,888tCO_2e(iv)(v)(vii)	
Scope 2 emissions	**13,502tCO_2e†(viii)**	13,919tCO_2e(iv)(v)(ix)	
Scope 3 emissions(x)	**24,330,208tCO_2e**	22,812,989tCO_2e(xi)	
Total GHG intensity by revenue(xii)	**85tCO_2e/£m(xiii)**	70tCO_2e/£m(iv)(xiv)	Continue to analyse the impact of our strategy on decoupling GHG emissions from value creation
Total energy use	**9,047,097,047kWh†(xv)**	3,561,052,815kWh(iv)(v)(xvi)	Remain focused on energy efficiency as we strive to be a net zero business by 2045
Water, waste and non-compliance			
Total water use	**317,760m^3**	245,242m^3(iv)	Effectively monitor, manage and reduce our water use and waste production, as well as our incidence of environmental non-compliance
Total waste generated	**18,686 tonnes**	18,060 tonnes(iv)	
Environmental non-compliance(xvii)	**22**	12(iv)	

Reporting is based on operator boundary which is the more commonly used approach set out by the WRI/WBCSD Greenhouse Gas Protocol, and now includes all emissions from our shipping activities relating to LNG alongside the retained Spirit Energy assets in the UK and Netherlands. Non-operated nuclear emissions are excluded.

† Included in DNV's independent limited assurance report. See page 258 or centrica.com/assurance for more.

(i) Comprises scope 1 and scope 2 emissions as defined by the Greenhouse Gas Protocol.

(ii) Comprises UK 737,725tCO_2e and non-UK 1,269,930tCO_2e.

(iii) Comprises UK 757,518tCO_2e and non-UK 275,289tCO_2e.

(iv) Restated due to LNG shipping and the retained Spirit Energy assets in the UK and Netherlands moving into scope following the transition to become a fully operated joint venture in 2022.

(v) Previous figures included in DNV's limited assurance scope for the Annual Report 2021 was 226,904tCO_2e for total carbon emissions, 222,064tCO_2e for scope 1, 4,840tCO_2e for scope 2 and 1,142,249,379kWh for total energy use.

(vi) Comprises UK 725,422tCO_2e and non-UK 1,268,731tCO_2e.

(vii) Comprises UK 746,243tCO_2e and non-UK 272,645tCO_2e.

(viii) Market-based. Location-based is 16,261tCO_2e. Comprises UK 12,302tCO_2e and non-UK 1,200tCO_2e

(ix) Market-based. Location-based is 19,592tCO_2e. Comprises UK 11,276tCO_2e and non-UK 2,643tCO_2e.

(x) Includes emissions from the following scope 3 categories defined by the Greenhouse Gas Protocol: purchased goods and services, capital goods, fuel and energy-related activities, waste generated in operations, business travel, employee commuting, upstream and downstream transportation and distribution, use of sold product and investments. All emissions are calculated in line with the methodologies set out by the Greenhouse Gas Protocol's technical guidance, apart from working from home emissions which are based on methodology set out in EcoAct's homeworking emissions whitepaper. Other categories spanning upstream leased assets, processing of sold products, end-of-life treatment of sold product, downstream leased assets and franchises, are not included because they are not relevant to our business.

(xi) Restated due to availability of improved data.

(xii) Carbon intensity of revenue is employed as our intensity measure because it is the most meaningful intensity measure for our diverse business and is the most widely used and understood measure for climate-related stakeholders such as CDP. Based on statutory revenue.

(xiii) Comprises UK 42tCO_2e/£m and non-UK 203tCO_2e/£m.

(xiv) Comprises UK 70tCO_2e/£m and non-UK 71tCO_2e/£m.

(xv) Comprises UK & Offshore 2,394,832,533kWh and non-UK energy use 6,652,264,514kWh.

(xvi) Comprises UK & Offshore 2,263,144,251kWh and non-UK energy use 1,297,908,564kWh.

(xvii) Includes breaches of environmental authorisation including permit, licence and consent coupled with wider environmental legislation where we are either required to notify the regulator or where an authority or regulator is involved. The majority of incidents relate to offshore activities.

Glossary

$	Refers to US dollars unless specified otherwise
2P reserves	Proven and probable reserves
Acas	The Advisory, Conciliation and Arbitration Service is an independent public body that receives funding from the UK Government to provide employees and employers with free impartial advice on workplace rights and to help resolve disputes
AGM	Annual General Meeting
AIP	Annual Incentive Plan
bcf	Billion cubic feet
CHP	Combined heat and power
CO_2e	Universal unit of measurement of the global warming potential (GWP) of greenhouse gases (GHG) expressed in terms of the GWP of one unit of CO_2e (carbon dioxide equivalent)
CPI	Consumer Price Index
CSS	Consolidated Segmental Statement
Data analytics	The process of examining data sets to draw conclusions and insights about the information they contain
DEEPAC	Direct Energy Employee Political Action Committee
EBITDA	Earnings before interest, tax, depreciation and amortisation
EBT	Employee Benefit Trust
EP	Economic profit
EPS	Earnings per share
ESG	Environmental, Social & Governance
Ethnically diverse	Colleagues from a Black, Asian, Mixed or Other ethnic background
EV	Electric vehicle
EU	European Union
FCA	Financial Conduct Authority
FCF	Free cash flow
FRS	Financial Reporting Standards
GDPR	General Data Protection Regulation
GHG	Greenhouse gas emissions
GM	Gross margin
GMB	Trade union
Green jobs	Jobs that have a direct positive impact on the planet
GW	Gigawatt
GWh	Gigawatt hours
HSES	Health, Safety, and Environmental Services
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
KPI	Key performance indicators
kWh	Kilowatt hour
LGBTQ+	Lesbian, gay, bisexual, transgender, queer (or questioning), and others. The 'plus' is inclusive of other groups such as asexual, intersex and pansexual
LNG	Liquefied natural gas
LTIFR	Lost time injury frequency rate
mmboe	Million barrels of oil equivalent
MThms	Million therms
Net zero	The point at which there is a balance between human-related carbon dioxide (CO_2) being emitted into the atmosphere and the CO_2 taken out
NGO	Non-governmental organisation
NPS	Net promoter score
Ofgem	The government regulator for gas and electricity markets in Great Britain
Paris Accord	A global agreement to keep temperature rise well below 2°C above pre-industrial levels, and pursue efforts to limit the increase to 1.5°C
PP&E	Property, Plant and Equipment
ppt	Percentage point
Process safety	Process safety is concerned with the prevention of harm to people and the environment, or asset damage from major incidents such as fires, explosions and accidental releases of hazardous substances
PRA	Prudential Regulatory Authority
PRT	Petroleum Revenue Tax
PWR	Pressurised water reactor
RBD	Reconciliation by difference
ROC	Renewable Obligation Certificate
RPI	Retail Price Index
SASB	Sustainability Accounting Standards Board
SAYE	Save As You Earn
SESC	Safety, Environment and Sustainability Committee
SIP	Share Incentive Plan
tCO_2e	Tonnes of carbon dioxide equivalent
T&Cs	Terms and Conditions
TCFD	Task Force on Climate-related Financial Disclosures
The Company	Centrica plc
The Group	Centrica plc and all of its subsidiary entities
TRIFR	Total recordable injury frequency rate
TSR	Total shareholder return
TWh	Terawatt hour
UAOCF	Underlying adjusted operating cash flow
Under-represented groups	A person or group of people who are insufficiently or inadequately represented in society such as women apprentices or those who are ethnically diverse, have a disability, are LGBTQ+ or carers
VIU	Value in use
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute

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This Annual Report and Accounts contains certain forward-looking statements. Forward-looking statements can be identified by the use of terminology such as 'intend', 'aim', 'project', 'anticipate', 'estimate', 'plan', 'believe', 'expect', 'forecasts', 'may', 'could', 'should', 'will', 'continue' or similar words. The forward-looking statements appear in a number of places throughout this Annual Report and Accounts and include statements regarding the current intentions, beliefs or expectations of the Directors, the Company and/or the Group concerning, among other things, the financial condition, goals and commitments, prospects, growth, strategies, results, operations and businesses of the Company.

Although we make such statements based on assumptions that we believe to be reasonable, by their nature, these forward-looking statements are subject to risk and uncertainties because they relate to, and may be impacted by, events and circumstances that will occur in the future which are beyond the Company's ability to control or estimate precisely. There can be no assurance that the Company's actual future results, financial condition, performance, operations and businesses will not differ materially from those expressed or implied in the forward-looking statements due to a variety of factors, including, but not limited to, those set out in the 'Our Principal Risks and Uncertainties' section of the Strategic Report. Readers are cautioned that these forward-looking statements are not guarantees or predictions of the Company's future performance and undue reliance should not be placed on them when making investment decisions.

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