INVINITY ENERGY SYSTEMS

ANNUAL REPORT & FINANCIAL STATEMENTS 2021

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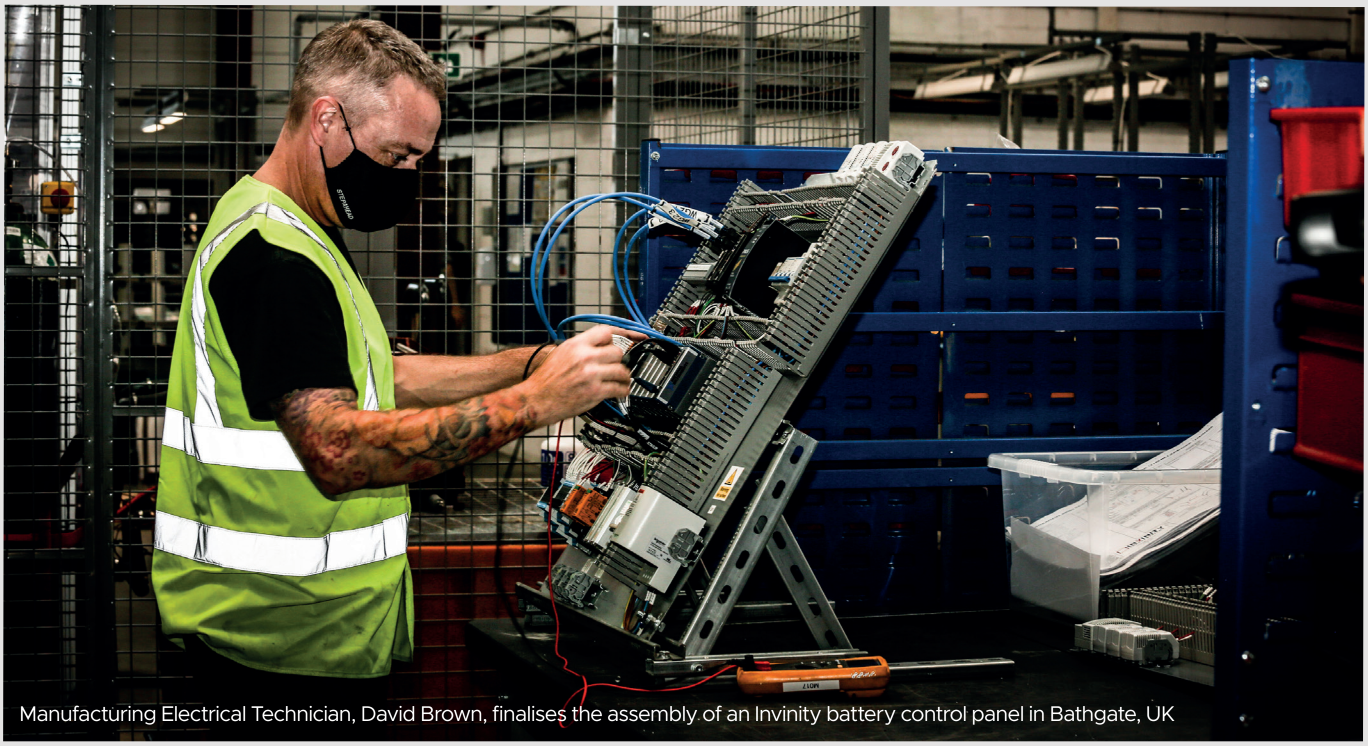


Manufacturing Electrical Technician, David Brown, finalises the assembly of an Invinity battery control panel in Bathgate, UK

ABOUT INVINITY

Invinity Energy Systems plc is a global manufacturer of vanadium flow batteries (VFB), a leading alternative to lithium-ion technology. Ideally placed to address the substantial demand for long-duration utility-grade stationary energy storage solutions, Invinity has deployed its modular battery systems at over 50 sites across 15 countries, more than any other company in the space.

Invinity's flow batteries have been designed from the ground up to meet the large scale, high-throughput energy requirements of business, industry and electrical networks around the world, helping to accelerate global progress towards net zero. Energy storage systems based on Invinity's flow batteries are safe, reliable, durable and economical. They unlock low-cost, low-carbon renewable energy which can be dispatched to fill in the "missing hours" when the wind does not blow or the sun does not shine.

Invinity has operations in the UK, Canada, the USA, Australia and China. The company is listed on the AIM Market of the London Stock Exchange (AIM:IES) and on the Aquis Stock Exchange (AQSE:IES).

www.invinity.com

2021 HIGHLIGHTS

Financial Highlights

- **Revenue for the year of £3.2m, a 690% increase vs 2020;**
- **Year-end closed sales backlog of £13.8m;**
- **Year-end inventory of £9.9m, including prepaid inventory;**
- **Year-end cash of £26.4m (2020: £22.0m);**
- **The Group remains debt free, excluding leases.**

Gamesa Electric JDCA

Invinity entered a Joint Development and Commercialisation Agreement (JDCA) with Gamesa Electric on 11 May 2021 to jointly develop a grid-scale vanadium flow battery (VFB) based on Invinity's proven technology and incorporating Gamesa Electric's advanced power conversion systems. Gamesa Electric was granted an option for 8.7m shares at 175p approved by Invinity shareholders at the October 2021 AGM.

Invinity and Gamesa Electric have been working together for over 12 months making good progress toward the milestones and stage gates set out as part of the agreed product development roadmap.

GamesaElectric

2021 Customer Pipeline Progression and Current Status

Date	Closed MWh	Base MWh	Advanced MWh	Qualified MWh
17 May 2021 (2020 Annual Report)	19.1	10.1	30.8	232.0
02 November 2021 (2021 Placing)	19.1	17.1	40.1	207.5
25 May 2022 (Current Trading)	**28.0**	**11.6**	**66.3**	**608.3**
% change (May 2021 to May 2022)	+46.6%	+14.9%	+115.3%	+162.1%

For further commentary on customer pipeline progression including definition of terms used, see the Chief Commercial Officer's report (pages 13-14).

Commercial and Operational Highlights

9.34 MWh
Sold January 2021 to June 2022

8.19 MWh
Delivered January 2021 to June 2022

£13.8m
Closed sales backlog for delivery in 2022

Four VS3 flow batteries, total capacity 0.8 MWh, operating at Scottish Water's waste water treatment site in Perth, UK – October 2021

OUR MISSION AND OUR TECHNOLOGY

OUR MISSION

The world is now responding to the climate emergency. Global energy systems are rapidly decarbonising by shifting to low carbon but fundamentally intermittent renewable energy sources. Energy storage is the key to the next phase of the energy transition. Our vanadium flow batteries unlock low-cost, low-carbon renewable energy on demand, delivering clean energy for generations to come.

Invinity was created to address the large and rapidly growing global market for energy storage solutions. The Company's safe, reliable, durable and economical VFB technology addresses many of the limitations of incumbent battery technologies such as lithium-ion. Invinity's batteries are fully recyclable, do not catch fire and do not contain rare earth or 'conflict materials' such as cobalt. The Company holds itself to high standards of sustainability and looks to make a significant contribution as part of the 'Just Transition' to net zero.

The energy storage market is forecast to be worth trillions by 2050. Invinity is in a leading position to capitalise on the demand for long duration energy storage driven by this tremendous growth.

OUR TECHNOLOGY

Invinity's VS3 flow battery technology has been designed to operate in high-throughput, heavy cycling applications. This capability defines "utility-grade" energy storage and gives our customers the operational freedom to maximise their return on investment. It also makes the VS3 particularly well suited for storing and dispatching energy on demand directly from renewable generation or managing constrained grid connections on a centralised basis to deliver low-carbon electricity to the grid over decades of service.

Our product has 4 key attributes that are highly advantageous for the global stationary energy storage market. They are:

1. Safe – the VS3 has no fire risk (unlike lithium batteries) as the electrolyte is an aqueous (water-based) solution, meaning VS3s may be safely deployed anywhere.

2. Durable – the VS3 has unlimited cycling capability and does not degrade, allowing it to be cycled multiple times per day over more than 20 years of continuous operation.

3. Economical – the VS3 provides a consistently low cost per MWh over its lifetime on a Levelised Cost of Storage (LCOS) basis.

4. Proven – the VS3 is already serving a variety of customers in a range of applications around the world.

With over 33 MWh of VFBs either contracted or deployed globally, Invinity has a strong commercial foundation that continues to grow, supported by the global transition to net zero and the need to install stationary energy storage to achieve global renewable energy targets.

In 2021, Invinity made the transition from a company working to refine its product offering to a company shipping a standardised, modular product to customers across the world. Although this transition took longer than expected due to the continued impacts of the COVID pandemic in both 2020 and 2021, the Company is now in a strong position to utilise these successful commercial VS3 product deployments as reference sites, accelerating commercial traction for Invinity's products.

Vanadium electrolyte in its four stable states – V2, V3, V4, V5.

DEVELOPING THE WORLD'S LARGEST SOLAR-POWERED FLOW BATTERY WITH EDF RENEWABLES AND THE UK GOVERNMENT

Invinity's latest commercial flow battery opportunity is the 40 MWh Vanadium Flow Battery Longer-duration Energy Asset Demonstrator (VFB LEAD) project announced in February 2022. Receiving support from the UK Government, this very large and exciting project will once again see Invinity working alongside EDF following the successful deployment of the UK's current largest vanadium flow battery, a 5 MWh system, at the Energy Superhub Oxford (ESO).

VFB LEAD aims to develop and deploy one of the UK's largest co-located solar + storage projects, featuring a 40 MWh VFB hybridised with a lithium-ion battery and connected to a utility-scale solar PV array. Invinity, alongside Pivot Power (part of EDF Renewables) and EDF R&D UK, are amongst the five winners of Phase 1 (Project development stage) in Stream 1 (proven technologies) of the UK Government's Longer Duration Energy Storage (LODES) competition. Run by the Department for Business, Energy and Industrial Strategy (BEIS), the competition aims to accelerate the commercialisation of longer-duration energy storage through large-scale demonstration projects.

At least three of the five Phase 1 winners will be chosen to proceed to Phase 2 (Construction stage). If successfully chosen for Phase 2 and once operational, Invinity's VFB LEAD project could be the largest of its type worldwide. This competition is part of the £1bn BEIS "Net Zero Innovation Portfolio" (NZIP), which is being managed by the UK's "Science and Innovation for Climate and Energy Directorate" (SICE).

Winning Phase 1: A case study in multi-partner, cross-functional collaboration across the energy industry

Invinity has built long-term relationships with key government departments in core target markets. Within the UK, Invinity's business development team has maintained an ongoing dialogue with government departments and agencies, most notably BEIS and Innovate UK. Invinity was therefore prepared for the release of a specifically non-lithium, non-pumped hydro, longer-duration energy storage grant opportunity in March 2021 when the LODES competition was formally launched by BEIS. Invinity was able to apply immediately.

Invinity's London-based business development team, part of the Company's Commercial division, led the response. The business development team is tasked with identifying new market opportunities for the Company's products as well as qualifying and responding to relevant grant funding opportunities. They work closely with prospective customers to optimise their business cases for maximum return from their investment. This insight into how customers look to operate battery systems provides important feedback for Invinity's Product Development, Solutions Engineering and R&D teams to assist with their strategic decision making.

27 VS3s operating on site at the Energy Superhub Oxford – May 2022

VFB LEAD consortium

The VFB LEAD application process required Invinity's Commercial, Product Development, Solutions Engineering, Finance and Executive teams to coordinate closely. Invinity, encouraged by the interest from long-standing partners to be part of the project consortium, chose Pivot Power (part of EDF Renewables), EDF R&D and Imperial College London. A comprehensive application was submitted within the timeframe that turned out to be one of the highest scoring applications received.

Prior to the official announcement on 23 February 2022, the consortium, led by Invinity, worked to conclude the grant funding agreement with BEIS and the formal collaboration agreements between the consortium partners.

In the official announcement made by BEIS at the 7th Energy Storage Summit in London, Energy and Climate Change Minister Greg Hands MP said:

> ***"Driving forward energy storage technologies will be vital in our transition towards cheap, clean and secure renewable energy.***
>
> ***It will allow us to extract the full benefit from our home-grown renewable energy sources, drive down costs and end our reliance on volatile and expensive fossil fuels. Through this competition we are making sure the country's most innovative scientists and thinkers have our backing to make this ambition a reality."***

Greg Hands MP Energy and Climate Change Minister

Leading a winning consortium towards Phase 2 delivery

EDF and Invinity are working through 2022 on Phase 1 of the competition, the "ready to build" phase. Down selection for the Phase 2 winners is expected by BEIS in Q2 2023 and if successful, the project will progress to the construction phase. Once commissioned, the project is forecast to avoid up to 27,400 tonnes of CO_2 per year.

Working with BEIS has also led to numerous follow-up opportunities for Invinity, including a roundtable on longer duration energy storage with Greg Hands MP alongside other industry leaders and an invitation to give evidence to the House of Lords Economic Affairs Committee enquiry into the UK Energy Supply and Investment on the benefits of Invinity's technology for the UK's energy future.

As a new energy storage asset class, longer-duration, high-throughput, non-lithium technologies continue to gain prominence in global markets. Invinity's ability to capitalise on opportunities such as the LODES competition is a key competitive advantage. This proven track record of working with government agencies around the world – BEIS in the UK, ARENA in Australia and the CEC in the USA – underlines the commitment of the Invinity team to accelerating the energy transition by deploying safe, reliable and durable VFBs at scale as a vital part of the net zero energy system of the future.

Matt Harper addressing the House of Lords Economic Affairs Committee on UK Energy Security and LDES – May 2022

PARTNERS IN INNOVATION: SOME OF INVINITY'S CUSTOMERS

elemental energy

Chappice Lake, Alberta, Canada

Battery:
8.4 MWh VFB coupled with a 21 MWp solar array.

Description: Alleviate network constraints to support the further rollout of renewable energy generation in Alberta and ensure excess solar energy is not wasted. The project aims to reduce CO_2 emissions by up to 90,000 tCO_2e/year by 2030.

"DC coupling of Invinity's battery with our solar PV plant allows us to maximise project efficiencies in light of grid interconnection constraints. A DC-coupled architecture enables us to increase our solar capacity and leverage fixed project costs, such as interconnection, protection and control, and inverter station costs, to the greatest extent possible. This approach also allows the project to utilise clipped solar generation that would otherwise have been lost. The net effect of these benefits is a significantly reduced effective cost per kilowatt-hour delivered."
Ryan Hanson, Project Director, Elemental Energy

YADLAMALKA ENERGY

Yadlamalka Energy Project, South Australia

Battery:
8 MWh VFB coupled with a 6 MWp solar array.

Description: Unlocking low-cost, low-emission energy for the South Australian grid, making c. 10 GWh of 'on-demand' solar power dispatchable each year as part of a world-first "solar power-plant" project.

"Yadlamalka Energy Trust is excited about being the first in Australia to construct a large-scale dispatchable solar power plant. Through using breakthrough technology in the form of vanadium flow batteries, we can deliver strong, economic infrastructure benefit to South Australia and at the same time support a low carbon economy."
Andrew Doman, Founder and Chairman, Yadlamalka Energy Trust

48 VS3 battery modules being installed at EMEC in Eday, Orkney – April 2022

European Marine Energy Centre, Orkney, UK (pictured)

Battery:
1.8 MWh VFB coupled with tidal generation, powering a hydrogen electrolyser.

Description: The VFB will 'smooth' tidal generation to create continuous, on-demand clean electricity to optimise green hydrogen production without CO_2 emissions.

"EMEC's core purpose is to demonstrate technologies in new and inspired ways to decarbonise our energy system. This is the first time that a flow battery will have been coupled with tidal energy and hydrogen production, and will support the development of the innovative energy storage solution being developed in the Interreg ITEG project."
Neil Kermode, Managing Director at EMEC

Energy Superhub Oxford, UK

Battery:
5 MWh VFB (hybridised with a 50 MWh Li-ion battery), transmission connected.

Description: World-first hybrid battery supports a smarter, more flexible energy system and provides a blueprint for urban decarbonisation. The project aims to reduce CO_2 emissions by c. 25,000 tCO_2e/year by 2032 and support integration of more renewable generation onto UK grid.

"We cannot carry on with business as usual – we need urgent solutions to decarbonise every part of society. Energy storage is the missing piece of this puzzle. Our hybrid battery combines innovative technology to meet various needs across the power sector. By underpinning homegrown renewable energy, Pivot Power is helping the UK to create a power system that is clean, secure, and able to meet the demands of the future."
Matt Allen, CEO, Pivot Power

Scottish Water, Perth, UK

Battery:
0.8 MWh VFB coupled with a 1 MWp solar array.

Description: Allow 94% of generated solar power to be used on site, support EV charging infrastructure and reduce site energy costs by c.40%, with the overall benefit of reducing Scottish Water's CO_2 emissions by c. 160 tCO_2e/year.

"We're excited to have our first battery facility up and running to help reduce emissions and tackle climate change. The ability to maximise green energy production as well as store and release this energy when we need it is a vital part of our journey to net zero."
Donald MacBrayne, Business Development Manager, Scottish Water Horizons

MOTIVATING REAL CHANGE
Chairman's Report

The past 12 months in energy have illustrated that only a crisis can motivate real change. Much of the world now recognises that the clean energy transition must be a global priority. Unlocking low-cost, low-carbon electricity through the widespread adoption of safe and reliable battery storage has therefore become an urgent necessity.

It is widely recognised that the electricity grids of the future will require storage to balance out the inherent volatility of solar and wind generation. According to Bloomberg New Energy Finance (BNEF), the global energy storage market is expected to grow eight-fold from 22 GWh installed today to up to 178 GWh installed annually by the end of the decade. Our growing pipeline of commercial opportunities confirms that Invinity's vanadium flow batteries will play an important part in this market, dispatching renewable energy into the 'missing hours' of wind and solar.

Encouraged by this uptick in demand, I am pleased to note we have secured major cornerstone projects in each of our core markets: the UK, North America and Australia. Our largest flow battery to date at the Energy Superhub Oxford (ESO) has become a key reference site for the Company. Despite global supply chain and logistics headwinds, throughout 2021 and early 2022 we delivered approximately 250 of our battery modules with a combined capacity of more than 8 MWh to customers across the world. This achievement underlines how Invinity stands apart from others in the flow battery industry. We will continue to build on this strong foundation in the years to come.

Our 5 MWh flow battery, an integral part of the ESO project, was energised in 2021 alongside a lithium-ion battery. This hybrid system is currently the UK's largest transmission-connected battery. To deliver this project, Invinity worked alongside Pivot Power (part of EDF Renewables), Habitat Energy, Siemens Gamesa and other leading industry players to provide a model for urban decarbonisation. I was delighted to note that, working again with Pivot Power, Invinity received funding in February of this year from the Longer Duration Energy Storage Demonstration (LODES) competition toward developing a project almost ten times the size of ESO. Building relationships such as this with major players across the industry is core to our corporate strategy and is intended to result in securing ever larger orders for our products and support our efforts to reduce our operating costs still further.

Another key highlight of the year was the commencement of a Joint Development and Commercialisation Agreement (JDCA) with Gamesa Electric, part of Siemens Gamesa Renewable Energy (SGRE), in May 2021. This exciting partnership will support the development and commercialisation of a new Invinity battery product specifically targeting grid-scale projects an order of magnitude larger than the project sizes the Company currently focuses on.

Neil O'Brien interviewed by BBC Scotland during COP26 at our Bathgate facility – November 2021

Looking inward, Invinity has assembled what the Board believes to be a market-leading team which focuses on winning new contracts, deploying our product and continuing to develop our leading-edge technology, whilst improving performance and reducing costs yet further. In a year which saw the challenges of COVID and supply chain disruption continue to impact on our plans, I would like to take this opportunity to thank the entire Invinity team for their efforts and successes in 2021. The dedication and diligence of our staff has been exemplary, especially during the long ISO audit process which resulted in the recent awarding of three major certifications concurrently. Finally, I would particularly like to thank all my Board colleagues for their support and assistance over the year. Our latest addition to the Board, Kristina Peterson, is already making an impact with her knowledge of the wider renewable industry and I am grateful to Rajat Kohli who now leads our newly formed Environmental, Social & Governance (ESG) Committee.

> ***"The widespread adoption of safe and reliable battery storage has therefore become an urgent necessity."***

In summary, 2021 saw Invinity continue to close sales for our products, begin to recognise meaningful revenue as a result of contract deliveries and raise funds which enable us to scale and grow in line with expanding global demand for energy storage. 2022 has already seen Invinity making further progress on both sales and delivery. I look forward to the team converting more of our pipeline leads into sales contracts throughout 2022 and continuing to generate long-term value for shareholders. Energy storage technologies such as vanadium flow batteries hold the key to the next stage of the global energy transition. I continue to be extremely optimistic in relation to Invinity's position within one of the fastest growing areas in the global energy market and look forward to further success as we deliver on this opportunity in 2022 and beyond.

Neil O'Brien
Chairman
27 June 2022

EXECUTING ON OUR VISION
Chief Executive Officer's Report

2021 was a year of tremendous accomplishments, some challenging setbacks, but overall significant progress for Invinity. I will report to you in three areas: 1) the macro environment, 2) Invinity's products, and 3) our strategic growth.

The Macro Environment

The entire world is electrifying. The reasons are many: to reduce carbon emissions, improve air quality and more recently, to achieve national energy security. This architectonic shift toward electrification won't occur smoothly or consistently, but the eventual outcome is not in doubt.

During 2021, the market for battery energy storage continued a year-long shift from potential to actual. The view that battery energy storage will play an essential part in the energy transition has become accepted at every level of the energy industry and especially among government leaders. Our Chief Commercial Officer, Matt Harper, recently addressed the House of Lords Economic Affairs Committee on the roles battery energy storage will play in the years to come. Those roles are: 1) compensating for shifts in demand and 2) dispatching low-carbon energy over hours, not minutes. Both needs are becoming more acute as intermittent renewables sources increasingly form the foundation of the world's electricity system.

But which battery technology to use? Lithium, the most common, has achieved that position without a viable alternative. Lithium may be ahead today, but it has not won the race. We are already delivering projects at a scale equivalent to the largest lithium-ion battery deployments achieved just a few years ago. The BEIS funded 40 MWh LODES project we are pursuing with Pivot Power/EDF is just one example.

There are many concerns about lithium batteries; they catch fire and wear out, and when they do, they leave a legacy of difficult-to-recycle toxic waste. Their components – lithium and nickel in particular – are dramatically increasing in price. Cobalt is sourced from areas of conflict. Recent industry analyses have concluded that there won't be enough lithium produced to come close to meeting the world's ambitions for the electrification of mobility, of cars and transport, much less supply the demand for stationary storage at massive scale to support the transition to renewable energy. In 10 years, we're going to look back and wonder why we put large quantities of perfectly good lithium, essential for electrifying mobility and portable uses, into boxes in a field to deteriorate.

For these reasons, the California Energy Commission (CEC) – charged with setting energy policy for the world's fifth-largest economy – recently conducted a day-long workshop on long-duration non-lithium storage. I was invited to speak and was proud to not only show photographs of our products in operation but note that I was the only presenter with a working product in the field. This brings us to the core of our business, supplying what we believe to be the world's most advanced vanadium flow battery.

Larry Zulch interviewed by PI World – September 2021

Invinity's Products

Invinity is fundamentally a product company. Our current product, the VS3, has been installed and is operating at the Energy Superhub Oxford, Scottish Water Perth, EMEC and soon in projects in California, at Chappice Lake in Canada and Yadlamalka in South Australia.

Our product design strategy is three pronged: first and foremost, our batteries must be safe and reliable. Second, they must perform; they must efficiently store and discharge energy on command so that a battery owner can depend on their reliability. Third, they must be long-lived, a characteristic that is core to our value proposition.

But these are just table stakes; they are what our customers expect. The real driver for everything we do and why our customers buy our products comes down to economics. Our success will derive from continuing to communicate our superior capabilities in economic terms, which often translates into a lower cost per unit of energy stored and discharged during the life of the battery.

An important component of this calculation is the system cost, a key focus for Invinity and an area the Company continues to improve upon. We're working hard to reduce costs across all areas for our VS3. In 2021 we had some backward steps, including supply chain disruptions and skyrocketing shipping charges. But these challenges have driven us to improve, and I'm delighted to report that despite a trend towards higher overall costs, we increased the efficiency of building our cellstack, reduced manufacturing costs, and qualified better performing materials across our supply chain. These efforts support our work on the LODES competition from the UK Government, for which cost reduction is a key parameter.

A significant step change in our customer-facing economic proposition is underway through our work with Siemens Gamesa Renewable Energy (SGRE) and their subsidiary Gamesa Electric. We are co-developing a grid-scale flow battery that I firmly believe will be head and shoulders above any other flow battery ever developed. The development process is complex and requires everything we know and have learned as one of the most experienced teams in vanadium flow batteries. Our joint activities are progressing well and we're looking forward to providing product details once we reach the stage where it is appropriate to do so.

Strategic Growth

We are continuing our focus on three core markets: UK, North America, and Australia, and expanding our engagement with them as I discuss below. Our strategy in other important global markets requires finding a substantial partner who can represent us and our products by providing sales, installation, and service support. A template for this strategy is in South Korea where Hyosung has become our distributor. I can't imagine a better partner than Hyosung in South Korea with their impressive infrastructure and capabilities in what is a very exciting market for flow batteries.

The United States is an area with much potential for Invinity in two areas: corporate development and market development, both aided by our recent announcement that we have engaged EAS Partners to advance our US presence. EAS's initial focus is on increasing the level of US investor activity in Invinity shares. We've brought on Matt Walz as Vice President of Business Development, whose extensive experience in energy businesses from AES Corporation to Duke Energy brings considerable depth to the US Invinity team. Matt's work on our US market development includes building on our relationship with the CEC and pursuing US government support for energy storage initiatives that were part of President Biden's infrastructure bill.

In the UK, we are now admitted to trading on the Aquis Stock Exchange (AQSE) which has increased liquidity in Invinity's shares and facilitated trading in the warrants that were created as part of our fundraise in late 2021. We've hired Peter Strassheim as director of sales in the UK and EU. Peter will enhance our commercial capabilities in the UK, building on work we've done with BEIS including the LODES competition, jointly with Pivot Power, to help advance the commercial viability of non-lithium energy storage. We're planning to soon enhance our senior executive presence in the UK, further underscoring our commitment to our home market.

In Australia, the Yadlamalka project site is in the process of being successfully relocated. We're eager to begin delivery of the products we've built for it. We're pursuing even larger projects with ARENA under the leadership of Michael Rutt, our recently hired Regional Director of Australia Pacific based in Melbourne. The Australians, blessed with ample sunshine and wind, are acutely aware of the need to augment their renewable power with energy storage.

Our activities in the three focus regions are one of three major areas where we are deploying the funds we raised late in 2021. The other two are advancing the previously discussed development of a grid-scale battery with SGRE and Gamesa Electric (which I have discussed earlier in this report) and delivering on the project commitments we've signed and announced. Our work in these three areas significantly advances our mission to make our vanadium flow batteries a commercially viable alternative to lithium storage.

Delivering on our announced project commitments, the third area, has required significant effort and resources as we have learned to successfully navigate a world much different than it was just a few years ago. Every business with a global supply chain, especially those manufacturing components in China, as we do, has had to find ways to turn obstacles into opportunities.

In recognition of our growing sales backlog, which we aim to deliver and recognise as revenue in 2022 and beyond, we have taken the strategic decision to expand our capacity by establishing a manufacturing relationship with long-time Invinity supporter Suzhou Baojia New Energy Technology Co. (Baojia). With over 1,000 employees and facilities of over 180,000 square meters located across Asia, Baojia will be an important partner for Invinity at this exciting stage of growth and can help us to rapidly achieve greater scale in a rapidly expanding market. Our current manufacturing partner, BCI, an early investor in Avalon, one of Invinity's predecessors, remains a supportive shareholder as they look to focus their manufacturing capabilities within the US market.

Our attention to delivery means more than smoothing our global supply chain and upgrading manufacturing; we must source vanadium electrolyte from partners around the world and assist the developers of projects that will be incorporating our batteries to overcome obstacles. We have deepened our relationships with global vanadium and vanadium electrolyte suppliers to reduce our exposure to commodity pricing as they and we look to much greater quantities in 2022 and yet greater volume in 2023. Our very capable UK-based solutions engineering team has been engaging with developers of projects that plan to use our batteries around the world, providing crucial assistance as the developers engage with innovative energy transition opportunities.

"Battery energy storage will play an essential part in the energy transition and has become accepted at every level of the energy industry."

Looking to the Future

Although undeniably challenging, 2021 saw the Company convert record order-flow in 2020 into meaningful revenue for the first time in its history. In my 2020 report, I noted that 2021 would be the year that Invinity would demonstrate its capabilities on a wider stage. Despite significant challenges, I believe we have made important progress on this front. Invinity ended 2021 in the best position it has ever been in terms of products, finances, market opportunity, and our ability to execute. Since then, we've made substantial further progress despite delays in announcing product deliveries and, not entirely unrelated, delayed announcements of product sales. With a macro environment extremely favourable for non-lithium storage, an ability to execute increasing daily, and a future vision that is compelling, I not only retain my optimism toward our business, I grow increasingly confident in our ability to realise our potential. Thank you for your support of Invinity. We continue to work with everything we have to merit your confidence.

Larry Zulch
Chief Executive Officer
27 June 2022

ADDRESSING VALUE, COST AND PROOF
Chief Commercial Officer's Report

Vision

Invinity was founded on the belief that success lies in commercial opportunities where our products deliver more to our customers – more revenue, more cycles, more profits.

In 2021 the global energy storage market started to recognise that the grid of the future will need a new asset class – higher-throughput, longer-duration, non-lithium storage solutions. Lithium batteries have been successful delivering minutes to hours of power at irregular intervals, but to reliably deliver low-cost, low-carbon energy, renewables need support from energy storage multiple times per day and for hours at a time. This is where we believe Invinity's vanadium flow batteries are without equal.

Current Sales Pipeline

	Closed MWh	Base MWh	Advanced MWh	Qualified MWh
02 November 2021 (2021 Placing)	19.1	17.1	40.1	207.5
25 May 2022 (Current Trading)	28.0	11.6	66.3	608.3
% Change	+46.6%	-32.2%	+65.3%	+193.2%

This recognition is driving growth in our sales pipeline over the last six months. We track our sales pipeline in stages: Qualified, Advanced, Base and Closed. Qualified opportunities have a solid revenue case, well-established project and site details, and a reason why Invinity's batteries are the best possible solution. Advanced opportunities are those where Invinity has been selected as the battery supplier and site engineering and planning are well underway. The Base category contains projects upon which we base our business: prices have been agreed, contracts are in process, and we have reserved working capital and manufacturing production slots to ensure we deliver on schedule. Closed opportunities are those which we are in the process of delivering or have already delivered.

The 8.4 MWh project with Elemental Energy announced in February 2022 increased Closed and decreased Base in 2022 in the table above. Advanced grew mainly from the 40 MWh project we are developing with our partners at Pivot Power and EDF Renewables for Phase 2 of the UK's LODES competition. Qualified opportunities grew because of the increasing number of high-quality opportunities in development.

We focus our sales efforts by segmenting opportunities among our three core markets – the UK, North America and Australia – and pursue projects outside these markets only when we have a strong partner such as Hyosung in South Korea. Since early 2022 we have strengthened our sales team: Michael Rutt joined our team as Regional Director in Australia, Jan Petrenko as Regional Manager for North America, and most recently Peter Strassheim as Regional Director for the UK and Europe.

We focus on customer categories most receptive to our products' inherent advantages: behind-the-meter commercial or industrial customers and front-of-meter project owners or operators. Helping drive the focus and relationships needed for success in these segments is Matt Walz, who recently joined Invinity as Vice President of Business Development, based in the US.

Matt Harper interviewed by STV News during COP26 at our Bathgate facility – November 2021

Progress in 2021

2021 was a year where renewable energy and energy storage made unprecedented progress in the face of extraordinary challenges. Solar and wind power are delivering results: for example, for a few hours in early May 2022 California powered its electric grid with 100% renewable generation for the first time ever. 2021 also saw significant headwinds emerging. Prices for everything from solar PV racking to transformers were up by 70% or more and shortages of components and personnel severely impacted the ability to get projects built and operational. Despite these challenges, the unwavering support of our employees, customers and suppliers allowed Invinity to deliver ground-breaking projects at the Energy Superhub Oxford and to Scottish Water, yielding significant revenue for the first time.

The past year also saw both progress and challenges to lithium battery projects. Some of the largest battery arrays ever conceived have come online, yet developers struggle with lithium battery price increases of up to 50% driven by supply chain disruptions and increasing demand. Safety has come to the forefront following lithium battery fires in Australia, the US and the UK, triggering tougher standards (and increased costs) for fire detection, fire suppression and emergency responder access. Finally, the operational limits of very large lithium arrays are becoming better understood, limiting their revenue potential.

Recognition of these challenges is pushing developers to seek alternatives as reflected in the considerable growth in the Qualified section of Invinity's sales pipeline. Similarly, government agencies like the CEC, BEIS and ARENA and independent bodies like Breakthrough Energy are funding broad programmes, such as LODES in the UK, to spur the growth of non-lithium long-duration storage.

Despite these generally supportive market conditions, individual deals tend to focus on three factors: **value**, **cost** and **proof**. The value delivered by our product must be well established, the cost of our product must align with the market, and the proof that our products perform must be unassailable.

The **value** of longer-duration, higher-throughput batteries is qualitatively well established, but the market and financial structures to fully exploit their advantages remain underdeveloped. Multiple revenue streams in a single project – "stacking" energy trading and frequency regulation, for instance – don't fully compensate for markets designed for hydrocarbon-fuelled peaking plants or short-duration lithium batteries. Fortunately, we see change on the horizon.

The initial **cost** of purchasing one of Invinity's VFBs is typically more than an equivalent lithium battery. However, customers tell us that the additional safety and siting costs required for lithium often bring us to cost parity, especially on projects under two megawatt-hours. We focus on those customers that need high throughput storage. An example is our project at EMEC, where four charge and discharge cycles per day mean our batteries deliver technically and economically superior performance.

The final factor is **proof** that our products perform. Historically, dozens of energy storage companies have attempted to deliver novel technologies to market, only to fail to navigate the chasm between the lab bench and a customer's site. Our customers know this and rightly insist on seeing proven operation in comparable projects before committing. Supply chain challenges in 2021 meant key projects in California, Australia and the UK were delayed, stalling our ability to demonstrate that our products deliver. But with our projects at ESO, Scottish Water and EMEC now delivered and major projects in the US, Canada and Australia not far behind, proof is at hand.

Early 2022: Enhancing Proof

February 2022 was a remarkable month. We announced an 8.4 MWh DC-coupled solar-plus-storage project, North America's largest flow battery, at Chappice Lake, Alberta, Canada alongside Elemental Energy, a developer, owner and operator of over 800 MW of wind and solar projects. This project is nearly identical to our project at Yadlamalka, South Australia, demonstrating the repeatability of our business model.

Later in February, we announced £0.7m of Phase 1 funding from BEIS as part of their LODES programme. Our joint entry with ESO partner Pivot Power underscores the strength of our relationship. Phase 2, if selected – and with five companies vying for at least three spots, our chances are good – will see us deliver the UK's largest flow battery, a 40 MWh Invinity VFB, co-located with lithium batteries and solar generation to deliver low-carbon power on demand.

Finally, during April we announced a relationship with Hyosung, one of Korea's largest energy storage systems integrators. In 2018 Korea was the single largest global market for storage, but the large number of lithium battery fires there has curtailed growth. Hyosung extensively tested Invinity's batteries and sees tremendous opportunities in deploying them in Korea and beyond.

Next in 2022: Reducing Cost

Our growing production volumes will deliver another benefit: lower costs. The combined 16.4 MWh we will deliver to Yadlamalka Energy and Elemental Energy more than doubles Invinity's total production to date. We will use the expertise gained in doing so to increase quality and reduce manufacturing costs at a faster rate than lithium batteries which have already benefited from decades of high-volume manufacturing.

Cost reduction also comes from refining our product design, and part of our Phase 1 LODES funding is allocated to reducing the cost of our current product. Further improvement will come through our development programme with Siemens Gamesa to develop and commercialise an Invinity VFB that delivers lower costs than our competitors at the gigawatt-hour scale of today's largest energy storage projects. We have made good progress on this programme and expect to release details of that product in the first half of 2023.

Beyond 2022: Increasing Value

The groundwork for regulatory changes that will massively increase Invinity's value to our customers is being laid through pathfinder projects from government agencies like BEIS, the CEC and ARENA. Our projects with Pivot Power, Elemental Energy and Yadlamalka Energy will be at the forefront of informing future policies.

Policymakers value independent analysis such as Aurora Energy Research's February 2022 report titled "Long duration electricity storage in GB" that noted that the UK grid would need up to 24 GW of long duration storage by 2035, saving UK ratepayers £1.13bn per year while decreasing UK annual CO_2 emissions by 10 million tons. Amongst the range of storage solutions analysed, VFBs were highlighted favourably on factors such as lifetime cost and durability.

We have been encouraged by policymakers seeking Invinity's input on delivering a net zero grid while creating employment opportunities and improving domestic economies. Invinity engaged in a CEC workshop on Advancing Non-Lithium-Ion Long Duration Energy Storage Technologies, presented evidence to the House of Lords' Economic Affairs Committee on UK energy supply and investment, participated in an industry roundtable with UK Energy Minister the Rt Hon Greg Hands MP, hosted the Scottish Cabinet Secretary for Net Zero, Michael Matheson MSP at our facility in Bathgate, and hosted British Consul General Thomas Codrington at our facility in Vancouver. In each case, our message was very well received.

Aligning and Accelerating

Despite delays, 2021 saw Invinity start to generate significant revenue by delivering major contracts, secure important follow-on opportunities and grow the pipeline of qualified deals. Invinity's commercial position, stronger than ever, will become even more robust as we establish Value, Cost and Proof for our customers. Taken together, this combination of position and traction give us tremendous confidence in our future commercial prospects and makes us excited for the role that Invinity and our VFBs have to play as a necessary part of our future net zero grid.

Matt Harper
Chief Commercial Officer
27 June 2022

RECOGNISING REVENUE
Chief Financial Officer's Report

Financial Highlights

- Revenue for the year of £3.2m, a 690% increase vs 2020;
- Year-end closed sales backlog of £13.8m;
- Year-end inventory of £9.9m, including prepaid inventory;
- Year-end cash of £26.4m (2020: £22.0m);
- May 2022 month-end cash of £18.3m;
- The Group remains debt free, excluding leases.

Operational

The four significant operational and financial highlights that characterised 2021 for the Group were:

1. First revenue recognised from its VS3 battery product;
2. An oversubscribed fundraising of £28.9m before expenses;
3. Submitting Phase 1 of the UK LODES Competition; and
4. Continued supply chain and cost challenges to delivering contracts.

2021 was the first year to recognise revenue from the VS3 battery product. Of the total revenue of £3.2m (2020: £0.4m), most came from the Energy Superhub Oxford (ESO) contract, with the balance from a number of other contracts, including pre-VS3 contracts, but particularly from the Scottish Water contract for its site in Perth.

Where contracts are for the delivery of both goods and services, the revenue on the goods is recognised when control of the goods transfers, usually on delivery to site, and on the services when the performance obligation is fulfilled, usually when the contract is handed over. Both ESO and Scottish Water were delivered during 2021 with the service element of the revenue to be recognised in 2022.

Delivering the contracts in 2021 tested every area of the business and the supply chain in particular. Whilst each challenge was successfully overcome, there were impacts on the costs of key inputs which, despite promising signs in late 2020, at best remained stubbornly high during the year. Particular examples were evident in the indices for shipping costs, which peaked at about $20,600 per container during Q3 2021 from about $2,000 in Q1 2020 and steel 10-ton futures contracts which peaked at about $900 from about $600 over the same period.

Largely as a result of high global input and shipping prices, the Group's cost of sales was £6.6m (2020: £1.2m) which was the key driver of the gross loss for the year of £3.4m (2020: £0.8m).

Administrative costs were £14.4m (2020: £9.6m) of which £9.0m (2020: £5.8m) related to staff costs, particularly within our customer facing departments (being Commercial, Solutions Engineering and Customer Operations) and product facing departments (being Product Development and Technology). This increase represents the continued investment in the Group's capabilities of much of the cash raised in 2020.

Peter Dixon-Clarke on site in Vancouver facility – October 2021

Other items of operating income and expense for the year were £3.4m (2020: £9.8m), of which £3.8m (2020: £1.1m) relates to the movement on the provision for onerous contracts. This movement, along with those on finance costs and foreign exchange, meant a reduced loss after income tax of £21.4m (2020: £26.4m). As all of the £4.9m onerous contract provision is expected to unwind in 2022, this will mean a gross loss for the year ended 2022.

2021 closed with an inventory balance of £9.9m (2020: £1.9m) including prepaid inventory of £4.1m (2020: £0.7m). Current terms of trade mean that most inventory payments are currently recorded as prepaid inventory within other current assets because most suppliers require payment prior to physical delivery. Upon physical receipt, prepaid inventory is transferred to inventory.

The balance above included the European Marine Energy Centre (EMEC) contract which has since been delivered, along with the two CEC contracts, Webcor and Soboba, both due for delivery in the third quarter 2022. Along with Yadlamalka and Elemental, these contracts equate to revenue of £13.4m.

Remaining inventory consisted mainly of stacks and balance of system, along with some electrolyte, which means there are already sufficient balance of systems, completed or near complete, to cover the remaining closed sales of Yadlamalka and Elemental.

Cost Down

Whilst the plan at the outset of 2021 was very much to drive down costs through a number of measures including increased output and further supply chain efficiencies, the reality of the continued COVID-related global disruptions was that almost all of our input costs increased and almost all of our potential customers' project timelines were extended.

2022 will see continued cost down focus on the measures above, an illustration being our decision to commence the switch of suppliers of our balance of system from BCI to Baojia whose sister company (Hong Kong Hao Yuan Shen Trading) owns 3.08% of the company's equity. Whilst this transition will take most of the rest of 2022 to complete, the greater size and reach of Baojia is already highlighting cost savings in the supply chain. This will allow us to scale faster when the time comes and maintain the option to manufacture outside of China should the current US tariffs make it advantageous.

Furthermore, moving from single sourcing to dual, or multiple, sourcing will also drive down costs and improve resilience. Opportunities exist in a number of areas, most notably regarding sourcing electrolyte where we have qualified one additional supplier and are well advanced with another. The scale and access to fixed-price offtake agreements of our new supplier has already proved its value by insulating us to a degree from the recent peak in the price of vanadium pentoxide.

As a counterpoint to the cost challenges of 2021, we saw increasing government support for non-lithium storage solutions in each of our three key markets, some of which include explicit financial support for further cost down measures as part of the programme. The best example being our winning of Phase One of the UK Government's LODES competition run by BEIS.

Phase 1 of LODES is worth about £0.7m of reimbursed costs to Invinity towards the cost of submitting, in conjunction with Pivot Power (part of EDF Renewables) and EDF R&D UK (both of whom we also worked with on ESO), a fully engineered and costed proposal for Phase 2, which is a 40 MWh storage installation co-located with solar in the UK. Phase 2 has to be delivered at a material cost down relative to 2021 and therefore encapsulates our short-term cost down roadmap in much the same way that our medium-term cost down roadmap is encapsulated within our JDCA with Siemens Gamesa.

Financial

The Group opened 2021 with £22.0m in cash (2020: £1.2m) and closed with £26.4m. Outside of the £23.0m (2020: £10.9m) of cash outflows from operating activities, the two highlights were a £7.9m increase in combined prepaid inventory and inventory (2020: £1.4m) and £27.4m (net of expenses) of receipts from the Q4 fundraising, by way of a placing and open offer.

An analysis of cash flows for 2021 shows:

	£m
Loss after income tax	(21.4)
Adjustments for non-cash items	2.2
Increase in inventory & prepaid inventory	(7.9)
Other changes in operating assets/liabilities	4.2
Investing activities	(0.7)
Financing activities	28.1
Movement	4.4
Opening cash	22.0
Closing cash	26.4

As part of the placing and open offer, the company granted a total of 14.5m short-term and 14.5m long-term warrants. The exercise prices are 150p and 225p for the short-term and long-term warrants respectively and the expiry dates are 15 September 2022 and 16 December 2024.

In response to the delays discussed elsewhere and to better align working capital requirements with expected sales, the Company is considering a modest extension to the expiry period of the short-term warrants. Should this occur, the Company will seek approval from warrant holders at the Company's next Annual General Meeting.

Going Concern

The successful winner, or winners, of the second phase of the UK Government's LODES competition is expected to be announced in the first half of 2023. Due to the extensive work required in preparing for the submission, contracting is expected to complete soon after the winner is announced, along with the payment of a material deposit on signing. Similar government supported opportunities are in progress in both the US and Australia, though LODES is considered the most advanced of the three.

Absent the exercise of any warrants, but including a deposit from the LODES, or similar contract, the latest cash flow forecasts indicate that provided existing contracts are delivered,


Eric Thomson, mechanical assembler, installs a stack into an Invinity VS3 flow battery at Bathgate site, UK

new contracts are closed and manufacturing costs reduce as forecast, the existing cash will be sufficient to fund the business for at least 12 months from the signing of the balance sheet.

14.5m short-term warrants were granted in 2021 and should all, or some, of these warrants be exercised prior to expiry on 15 September 2022 then the Company will receive up to an additional £21.8m of cash. The Group's cash balances at the end of May 2022 totalled £18.1m. Should all of the short-term warrants be exercised within the next 12 months then the existing cash will be sufficient to fund the business for at least 12 months from the signing of the balance sheet. However, the exercise price of the short-term warrants is 150p and, at the market close on 22 June 2022, the Company's share price is below this exercise price at 53p. Accordingly there is no certainty that any of the warrants will be exercised.

A change to the terms of the short-term warrants, such as the expiry date, is conditional upon the approval of the holders of the short-term warrants and requires at least 50% of the subscription rights for such class of warrants to vote in favour at a General Meeting and there can be no certainty that any such change in the terms will be approved.

Whilst 2021 demonstrated both the support of the Company's investors and the resilience of its organisation, as with many groups at this stage of development it remains reliant on timely receipts and closely managed costs. Should insufficient short-term warrants be exercised, existing contracts be delivered more than six-months late or the Group fail to win the LODES, or an equivalent, contract or close it later than the second quarter of 2023 then, assuming the Group maintains its forecast operational capacity, it will be necessary to raise further funding within the next 12 months in order to continue trading and deliver on the strategic objectives.

The Group's need to secure receipts from the exercise of the warrants or through winning new contracts, customers or additional funding creates a material uncertainty that casts significant doubt about its ability to continue as a going concern.

The financial statements do not include the adjustments that would result if the Group were unable to continue as a going concern.

In addition to the issues discussed above, the directors have also reviewed other varying, and wide-ranging information relating to both present and future conditions when reaching their conclusion regarding going concern. These included the:

- growing opportunities presented by the emergent energy storage market;
- growing levels of Government engagement and support in the three key markets;
- growing sales pipeline of 686 MWh in May 2022 vs 273 MWh in May 2021; and
- validation of the business provided by the continued engagement of EDF following the ESO contract in bidding together for Phase 2 of the LODES contract (following its winning of Phase 1).

Outlook

Despite the recent lockdowns in China, there are increasing signs of a return to global normality. Whilst doing so will take time, the ease of doing business, both internally and externally, is already improving and allowing us to be more proactive in pursuing sales and cost down opportunities.

Combining the cost down opportunities with a growing appreciation of the true value of energy security (in part driven by geopolitical events such as the war in Ukraine) and the critical role of a safe, high throughput non-lithium storage alternative, means that the gap between the sales price and our product cost should narrow increasingly rapidly and generate the commensurate revenue growth at a suitable margin.

Peter Dixon-Clarke
Chief Financial Officer
27 June 2022

Four VS3 flow batteries operating at Scottish Water's waste water treatment site in Perth, UK – October 2021

Risk Management Report

The Group's business exposes it to a broad range of risks. Invinity's approach to managing these risks is to create a system of internal controls. This system looks to manage, rather than eliminate, risk and, whilst the Group has an Audit & Risk Committee, it is seen as the responsibility of the entire Board.

Commercial Risk	**Detail**	**Likelihood**	**Impact**	**Risk trend**	**Mitigation**
Lithium battery manufacturers currently dominate the stationary battery energy storage system (BESS) market.	The Group's position of delivering a longer duration, safer and more durable BESS could come under threat if the incumbent providers rapidly improve their competitive offering.	High	Medium	→	Focus on markets where the Group has the largest advantages, including ultra-high cycle counts and safety-critical locations, and deliver projects to agreed specifications.
Whilst sales contracts are bilateral, they are usually part of multi-party projects.	Whilst Invinity contracts directly with the project developer, that same developer is contracting with a number of other parties as part of financial close, which may therefore be delayed for reasons unrelated to the Invinity contract.	High	High	→	Careful up-front screening of project characteristics along with a preference for developers with a good track record.
Most near-to-medium term sales are expected to require an element of grant funding support from the local, regional or national governments.	The relative market penetration of flow batteries against lithium means that grants are currently available but likely to be phased out as flow battery technology becomes more established in the longer term.	High	High	→	Continue to develop expertise in grant applications, prioritise contracts with a high chance of qualifying and continue to drive down costs through value engineering, scale and supply chain management.
Non-lithium storage projects are not yet considered 'bankable' by project finance.	Third party finance, particularly debt, is slower to engage with developments until technologies are considered 'established', which can increase the cost of capital.	High	Medium	↘	A bankability study is already underway, and will be completed soon, to ensure that the correct criteria are met as early as possible.
Commercialisation of the VS3 product is at an early stage and so may fall short of performance obligations.	With the first VS3 contracts delivered in 2021 it means 2022 will be the first opportunity to assess operational performance in the field for a full year.	High	High	→	Strict quality control procedures during manufacturing and acceptance tests prior to shipping combined with real-time performance reporting from the field into a dedicated support team.
Joint Development and Commercialisation programme with Gamesa Electric does not achieve commercial release within the timescales expected.	Invinity may be unable to deliver on the benchmarks for commercial competitiveness, as assessed by measures of performance relative to cost, set out by Gamesa Electric.	Medium	High	→	The Group is fully engaged with Gamesa Electric and its parent Siemens Gamesa Renewable Energy (SGRE) on every element of the development programme, with the design itself based on well-proven smaller scale existing products, thereby minimising technology risk.

Operational Risk	Detail	Likelihood	Impact	Risk trend	Mitigation
The supply chain is international and certain components are sole sourced.	The stacks, wherein resides the Group's 'know how', are manufactured in-house in Canada and Scotland with the balance-of-system manufactured in China. Final assembly is in Canada, Scotland or China, depending on customer location.	High	High	↗	Moving away from sole sourcing where and when possible, such as manufacturing stacks in both Canada and Scotland. Moving the manufacture of the balance of system to a supplier with higher capacity and multiple manufacturing locations.
The supply chain is, as yet, unproven at the scale envisaged.	Driving costs down to the levels envisaged will require material production increases in each of the coming years.	High	High	→	A full order book and a strong balance sheet will enable the Group to build more equitable relationships with larger suppliers. The transfer from BCI to Baojia has also highlighted areas of cost saving.
The levels of key input costs such as steel, electrolyte, labour and transport, can fluctuate, particularly in the current inflationary environment.	The disruptions caused by the COVID pandemic have caused increases in the costs of transport, steel and vanadium.	High	High	↗	Strategic relationships, such as offtake agreements with suppliers can reduce short-term price volatility.

Corporate Risk	Detail	Likelihood	Impact	Risk trend	Mitigation
The Group is international with primary operations in the UK, US, Canada & China.	Whilst the VS3 is a single product, employees are separated by geography and time zone, which makes collaboration and coordination harder.	High	Medium	↘	Senior roles have been allocated on the basis of function rather than geography to encourage a group, rather than regional, view.
Shareholder concentration.	Just over 50% of the register is held by five shareholders.	High	Medium	→	Continued shareholder engagement, particularly with Institutions able to make material investments.
Failure to meet shareholder expectations.	The post-merger fundraises have increased expectations and poor performance could deter potential investors from buying or existing shareholders from holding.	Medium	High	→	Regular news flow and trading updates, particularly where closed sales are concerned.
Competition attracting & retaining skilled personnel.	The sector is seeing rapid growth and salary inflation. Continuing to attract and retain skilled personnel will be required to ensure development of the Group's business.	Medium	Medium	↗	The Group has a proactive remuneration committee with access to suitable advice.
Cyber risk	The use of internal and external systems across a global operation is potentially vulnerable to cyber threats.	Medium	Medium	→	The Group has an established security programme that entrenches good practice, processes and systems, as well as regular staff training throughout the year.

Financial Risk	Detail	Likelihood	Impact	Risk trend	Mitigation
The Group does not yet generate positive cash flows and therefore is expected to require further funding.	The Group is in the early phase of commercialisation and so is not yet generating the product margins required to support all of its costs.	High	High	↗	Continued sales growth and product standardisation will allow the Group to drive down gross costs and improve product margin.
Having multi-jurisdictional operations exposes the Group to foreign exchange risk, particularly against the US $.	Whilst sales receipts are in a range of currencies, the majority of the materials costs are settled in US $ and a material element of payroll is settled in Canadian $. Post-merger fundraisings have all been in GB £.	High	Medium	↗	The Group holds up to six months of expected US $ required and converts Australian $ receipts into Canadian $.
All contracts contain warranties and some contain extended warranties.	A warranty provision for each sale is provided for in the balance sheet at the time revenue is recognised but may prove insufficient over the life of the warranty.	Medium	Medium	→	Maintaining product performance data, focus on reducing the need for maintenance and track ongoing operations & maintenance costs.
Having multi-jurisdictional operations exposes the Group to cross-border tax risk, particularly transfer pricing, and tariffs.	The Group has manufacturing operations in the UK, Canada and China, along with sales operations in the US. In addition to the tax issues, the US trade tariffs on Chinese output are potentially material.	High	Low	→	The Group seeks specialist external advice on tax and tariff related matters. In the case of the US tariffs on China, sufficient content is manufactured in Canada.
The merger with a US company exposes the Group to US tax inversion legislation.	Avalon Battery Corporation is a US registered entity and so may be deemed to be onshore by the US Internal Revenue Service for US tax purposes.	Low	Low	↘	The Group has taken specialist advice and does not believe this to be the case under current legislation, though this could change should retrospective legislation be introduced.

Invinity VS3 at a Carrefour hypermarket in Kaohsiung, Taiwan to reduce peak power draw from the grid – Nov 2021

OUR APPROACH TO THE ESG AGENDA
Sustainability Report

The core activity of Invinity's business is to accelerate the global renewable energy transition in pursuit of net zero targets. As a Company and as individuals, we are committed to taking action on climate change, but also understand the importance of a 'Just Transition' to a low-carbon economy, with no one left behind. This underscores our approach to operate responsibly and sustainably in the pursuit of our corporate goals.

As Environmental, Social and Governance (ESG) issues become ever more important in a world looking to combat climate change, we work continuously to achieve the highest standards of sustainability. In June 2022, we formed an ESG committee to help oversee, inform, and guide our approach to the ESG agenda. Chaired by Non-Executive Director Rajat Kohli, the committee will ensure that our ESG performance creates additional value for our business, shareholders, and wider stakeholders. The Committee is also charged with the regular and transparent disclosure of our progress on an ongoing basis.

ESG Committee — L-R: Raj Kohli, Michael Farrow and Matt Harper

Supporting the work of the ESG Committee are ESG Champions, appointed from amongst Invinity staff in each of the Company's offices. Their responsibilities will include the promotion and regular reporting on our environmental and social performance at each location to ensure a consistent and unified approach to sustainability across the organisation.

Guiding Principles

Through considered discussion, Invinity's Board has agreed a defined set of ESG principles – outlined below – that play an integral role in helping to achieve our commitment to the ESG agenda:

- Accelerate, through our products and services, the global transition to support national and international net zero targets;
- Champion innovation and thought leadership in all we do;
- Be a great place to work;
- Work in collaboration with all of our stakeholders;
- Engage with local communities to share knowledge capital and create opportunity.

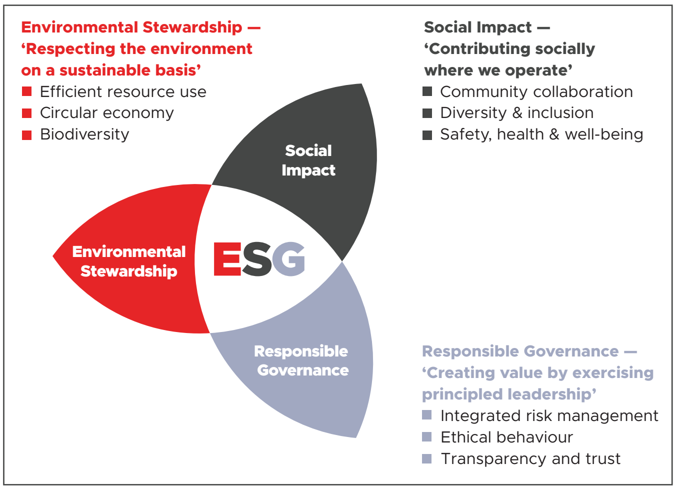
ENVIRONMENTAL STEWARDSHIP

A Green Economy Leader

Invinity is proud to have been one of the first recipients of the London Stock Exchange's Green Economy Mark, which recognises companies that derive 50% or more of their total annual revenues from products and services that contribute to the global green economy. The underlying methodology incorporates the Green Revenues data model developed by FTSE Russell, which helps investors understand the global industrial transition to a green and low carbon economy with consistent, transparent data and indexes.

Carbon reduction is at the heart of our business model

Our vanadium flow batteries are being installed at sites across the world to complement renewable energy generation such as solar PV, wind turbines and tidal power, creating 'dispatchable', on-demand, clean power. This already delivers significant carbon savings annually and enables renewables to compete directly with fossil fuel powered generation for the first time, accelerating the phase-out of coal and gas from the global generation mix, without having a destabilising effect on the grid.



Playing our part in the Circular Economy

Invinity's VFBs are a natural fit for the circular economy as the key product components consist of easily and widely recyclable materials. Our batteries do not contain rare earth or 'conflict' minerals such as cobalt and the vanadium electrolyte does not degrade with use, meaning that nearly 100% of the vanadium itself can be recovered from the electrolyte for use in other applications. This limits the need to constantly utilise 'new' raw materials during the life of the battery.

Managing our Impacts

As a fast-growing company that provides solutions which help avoid and remove emissions, we are fully committed to taking action to reduce our own carbon footprint. In recognition of the United Nations Race to Zero Campaign, Invinity has signed up to the SME Climate Commitment.

The SME Climate Commitment

Recognising that climate change poses a threat to the economy, nature and society-at-large, our company commits to take action immediately in order to:

1. Halve our greenhouse gas emissions before 2030
2. Achieve net zero emissions before 2050
3. Disclose our progress on a yearly basis

In doing so, we are proud to be recognised by the United Nations Race to Zero campaign, and join governments, businesses, cities, regions, and universities around the world that share the same mission.

Our Carbon Footprint

Invinity reports its carbon footprint in compliance with The Greenhouse Gas Protocol (the world's most widely used greenhouse gas reporting framework) and with the SME Climate Commitment. In line with these requirements, the Company reports primarily on its direct emissions (Scope 1) and indirect emissions arising from electricity, heat or steam consumption (Scope 2), using an operational control accounting approach.

In line with SME Climate Commitment guidelines, Invinity falls under the category of "fast growing SMEs that provide solutions which avoid or remove emissions as their core business". Therefore, it is considered appropriate for the Company to report its carbon footprint on an 'intensity' basis, using the metric of grammes of CO_2 equivalent per £ of annual revenue.

2021 Group Carbon Intensity:

22.5g CO_2e

per £1 of recognised revenue

77%

Reduction in carbon intensity vs 2020
(base year chosen as year of Invinity's formation)

Supporting the United Nations Sustainable Development Goals (UN SDGs)

Invinity continues to recognise that the UN SDGs are the blueprint to achieve a better and more sustainable future for all. The Company aims to make a meaningful contribution to all SDGs and is proud of its particular contribution to Goal 7 'Affordable and Clean Energy', Goal 11 'Sustainable Cities and Communities', and Goal 13 'Climate Action'.

Invinity's Canadian Internship Programme

Simon Fraser University

A third year Sustainable Energy Engineering student joined us as an Energy Storage Intern for the September 2021 four-month term.

The student was primarily involved in supporting early-stage commercial discussions with clients and working on compiling energy market research for North America investigating the potential for long duration energy storage deployment in various territories. Other work included a number of small-scale projects carrying out some techno-economic modelling for clients to help support the development of their business cases.

This was the student's first significant experience dealing with electricity markets and utilities so there was a good opportunity to learn the fundamentals of the various energy markets we were investigating as well as gain a good understanding of the different mechanisms energy utilities use to charge customers. There was a significant amount of data processing and analysis which the student hadn't done to the same extent previously and it was a good opportunity to work with a number of energy modelling tools that we had created in-house to learn how the analysis process works from start to finish.

University of British Colombia

A second year Engineering Physics student joined us as a Software Co-op for the January 2022 four-month term.

The focus for the co-op term was to develop real features into our product. They worked in the software team and during their term they developed a tool that upgrades our Firmware in the field.

This was their first co-op experience and they gained valuable knowledge on software development in a professional team setting. Taking what they have learned on engineering development in their degree and applying it in a professional setting. They focused on learning to build robust code that is maintainable. It was an opportunity for them to understand the bigger picture and impact of developing in a team environment where their code has real world impact on others development. They gained firsthand experience and knowledge from the experienced software engineers in the team.

Health and Safety statistics on Accidents and Near Misses 2020-2022

	UNITED KINGDOM			CANADA			OTHER LOCATIONS		
	2022	2021	2020	**2022**	2021	2020	**2022**	2021	2020
Average No. of employees	**68**	68	49	**72**	65	36	**14**	12	8
Reportable lost time incidents	**0**	0	0	**0**	0	0	**0**	0	0
Minor incidents	**0**	3	0	**0**	1	0	**0**	0	2
Near miss (No injury)	**1**	8	0	**0**	2	1	**0**	4	0
First Aid	**0**	1	Not reported in past	**0**	1	Not reported in past	**0**	0	Not reported in past

CASE STUDY **ENERGY SUPERHUB OXFORD**

The Energy Superhub Oxford (ESO) project is one of the most ambitious urban decarbonisation projects to have been undertaken in the UK to date. The deployment of the world's first transmission-connected vanadium-lithium hybrid battery that will support the electrification of Oxford, UK, it is a recognised blueprint for other cities to follow as part of the transition to net zero. ESO is designed to deliver innovation in smart local energy systems by using cutting edge energy storage systems.

Invinity's VFBs were chosen because our technology is able to perform deep charge/discharge cycles multiple times each day; safely, reliably and without degradation, helping to extend the life of the lithium battery. Working closely with our partners, Invinity successfully delivered, installed and energised a 5 MWh VFB – the UK's largest flow battery to date.

Social Impact

We empower our people, partners, and customers to change the world. Invinity is committed to driving the social value agenda forward and to making a positive change through our operations and wider activities. This includes supporting government-led initiatives as is appropriate to our business.

Our business growth and development incorporate:

- Significant levels of local employment in our offices in the UK, Canada and the U.S.;
- A commitment to being a great place to work by providing health and wellbeing support for all our staff, helping our people to remain safe and healthy;
- Collaborating with our communities, particularly through partnerships with the education sector, providing the opportunity for work experience and internships and supporting national initiatives such as the UK Government's STEM agenda. Four of our interns have been recruited into full-time positions over the last two years;
- Apprenticeships and volunteering are two areas of positive social impact we are looking to progress in the near future;
- Our commitment to Health and Safety remains non-negotiable and we retain a zero-tolerance approach to accidents and injuries. Our commitment is that all our people should finish their working day as healthily as they started it.

Invinity also has a clear policy framework to promote Equality, Diversity, and Inclusion (EDI). We are committed to maintaining and improving a workplace where everyone can flourish. Our approach addresses all elements of our operations from recruitment to promotion, career development and the creation of an outstanding working environment.

Governance

Invinity's Board of Directors believes that strong corporate governance and risk management are key to the delivery of shareholder value. The business is underpinned by a comprehensive framework of policies and risk management systems and the Board has adopted the Quoted Companies Alliance Corporate Governance Code 2018 (the QCA Code) as its corporate governance code which it believes provides a flexible model allowing our corporate governance to evolve as the business grows.

Further details on the Company's corporate governance practice and compliance with the principles of the QCA Code are provided on pages 26-28 of this Annual Report and on the website. Details of the risk management systems are provided on pages 18-20 of this Annual Report.

Rajat Kohli
Chairman, Environmental, Social and Governance Committee
27 June 2022

Research Chemist, Emma Wilson carrying out material testing at Invinity's R&D laboratory in Bathgate, UK

Board of Directors

Neil O'Brien *Non-Executive Chairman* 59 2C

Neil was appointed Non-Executive Chairman in April 2020, having first joined the Board as a Non-Executive Director in September 2016.

Neil's previous role was as CEO of AIM listed Alkane Energy, an independent UK power generator (acquired by Infinis in 2018), which he joined in 2008. Under his leadership, the Company achieved rapid output increases through a combination of organic growth and acquisition activity. Alkane expanded its UK portfolio of baseload power generating sites and established a leading position in the UK back-up power market covering winter peaking, National Grid "STOR" programme and the capacity market.

Neil started his career at Coopers & Lybrand in 1985, where he qualified as a Chartered Accountant, before joining Blue Circle in 1988, holding a number of senior financial and operational roles in the UK and Europe. He then spent three years as a Group Management Accountant at Aggregate Industries, before moving to Speedy Hire as Group Finance Director. Neil read Politics, Philosophy and Economics at Oriel College, Oxford University.

Neil is chairman of the Nomination Committee.

Additional External Directorships:

- Mercia Power
- South Staffordshire Community Energy

Larry Zulch *Chief Executive Officer* 64 2M

Larry became the CEO in April 2020. He has over 30 years' experience successfully commercialising advanced technologies and scaling the companies that deliver those technologies to market.

Prior to Invinity, Larry held a number of senior leadership and executive management roles including CEO of Avalon Battery, President & CEO of Dantz Development (acquired by EMC), President & CEO of Photometics, Chairman of PLCD, CEO of Cloud Engines, and President & CEO of Savvius (acquired by LiveAction). He served as VP and Officer at EMC, and as Executive Chairman of Freerange Communications (acquired by Sprint via Handmark).

An Executive Director, Larry joined the Board of Invinity in April 2020 and conducts his global responsibilities out of Invinity's San Francisco office. He is a member of the Nomination Committee.

Additional External Directorships:

- 3GO Security Incorporated
- Proactive Diagnostic Incorporated

Peter Dixon-Clarke *Chief Financial Officer* 56

Peter joined Invinity as CFO in August 2020. He has 30 years' experience in senior finance roles, primarily in the energy sector as well as in financial services.

During this time, he developed a deep understanding of the commercial dynamics and opportunities in the energy sector, having been heavily involved in two $1bn sales, coupled with a full appreciation of the need for transitionary technologies such as Invinity's. Prior to Invinity, his most recent CFO roles were at Kuwait Energy Company plc, Hotspur Geothermal ltd and AIM-listed Rockhopper Exploration plc.

Peter qualified at Deloitte as a chartered accountant and conducts his global responsibilities out of Invinity's London office.

He is an Executive Director and he joined the Board of Invinity in August 2020.

Matt Harper *Chief Commercial Officer* 45 4M

Matt became the CCO of Invinity in April 2020. He is an engineer and entrepreneur with over 20 years' experience developing and commercialising clean energy technologies, including 14 years in energy storage.

Matt co-founded Avalon Battery, which merged with redT energy to form Invinity. As President of Avalon, he designed and delivered ground-breaking vanadium flow battery-based energy storage solutions across the world. Prior to Avalon, Matt served as VP Products and Services at Prudent Energy spending time in both Vancouver and Beijing. He holds a Master of Science degree in Engineering and Management from the Massachusetts Institute of Technology and is named as the inventor of seven granted US patents.

An Executive Director, Matt joined the Board of Invinity in April 2020 and conducts his global responsibilities out of Invinity's Vancouver office.

He is a member of the ESG Committee.

Committee compositions

1 Audit & Risk Committee
2 Nomination Committee
3 Remuneration Committee
4 ESG Committee
C Chair
M Member

Jonathan Marren *Senior Independent Director* 46 1C 3C

Jonathan was appointed Senior Independent Director in May 2021, having been a Non-Executive Director since March 2016. Prior to this, he was Chief Financial Officer of redT energy between July 2012 and March 2016, having been an advisor to the company since early 2006, including on its flotation in April 2006.

He has previously held positions as Deputy Head of Corporate Finance at Singer Capital Markets, prior to which he was at Peel Hunt between 2000 and 2010 where he was a Director in the Corporate Department with responsibility for their new energy and clean tech franchise where he gained considerable experience of working with companies in this area.

Jonathan qualified as a Chartered Accountant with Arthur Andersen in 1999 after obtaining a BSc in Mathematics from Durham University.

Jonathan is Chairman of the Audit & Risk Committee and also sits on the Nomination and Remuneration Committees.

Additional External Directorships:

- Ryde School Construction Limited
- West Hill Park School Limited
- West Hill School Trust Limited

Michael Farrow *Non-Executive Director* 68 1M 2M 3C 4M

Michael founded and subsequently sold Consortia Partnership Ltd, a mid-sized Jersey regulated trust, fund and corporate administrator company, the latter being the corporate secretary to the Company. He was the former Group company secretary of Cater Allen Jersey, a banking, trustee and investment management group. Having retired, he currently sits on the boards of a number of listed and substantial private companies and funds.

Michael has considerable financial and corporate experience and holds an MSc in Corporate Governance. He is a Fellow of the Chartered Institute of Secretaries & Administrators and was formerly a regular British Army Officer.

Michael joined the Board of Invinity in March 2006. He is the Chairman of the Remuneration Committee and also sits on the Audit & Risk, Nomination and ESG Committees.

Additional External Directorships:

- STANLIB Funds Limited
- Circle Property PLC
- Melville Douglas Funds
- Urban Infrastructure Real Estate Funds
- Reuben Brothers Limited

Rajat (Raj) Kohli *Non-Executive Director* 58 1M 2M 3M 4C

Raj joined the Board of Invinity in June 2020 and brings over 30 years' experience in finance and the resources, energy and infrastructure sectors. In his City career, Raj worked as a mining and metals analyst at BNP Paribas, subsequently joining HSBC where he became a Managing Director in the Resources and Energy Group.

Raj then joined ArcelorMittal as Co-Head of Mergers & Acquisitions in 2007, returning to banking in 2011 with Standard Bank as Global Head of Metals and Mining. Since 2015, Raj has provided strategic consulting services to the natural resources sector as Principal of Ptolemy Resource Capital.

Raj is the Chair of the newly formed ESG Committee, and is a member of the Audit & Risk, Remuneration and Nomination Committees.

Additional External Directorships:

- Ptolemy Resource Capital Ltd
- Minas de Revuboe Ltd
- Talbot Group Investments Pty Ltd
- Talbot Group Holdings Pty Ltd
- Midrev Mining Mauritius Ltd
- Jockeys Financial Ltd

Kristina Peterson *Non-Executive Director* 58 3M

Kristina joined the Board of Invinity and was appointed Non-Executive Director in November 2021.

Kristina brings 30 years of experience in energy and infrastructure, having held senior executive management roles at Brookfield, EDF Renewables, Suntech, and Greenwood Energy. She began her career at Citibank and ABN AMRO Bank, where she arranged over $8.5 billion of project and structured finance debt transactions in the US, Asia, Middle East and Africa. She currently serves as Industrial Advisor, EQT Partners, and CEO, Mayflower Partners, where she provides climate, cleantech and software investment advisory services.

Kristina received an MBA from the University of Chicago Booth School of Business and completed graduate coursework in management at MIT's Sloan School prior to Booth. She earned a BS, Business Administration from Boston University School of Management.

She is a member of the Remuneration Committee.

Additional External Directorships:

- Augment Ventures Fund III, L.P.
- Mayflower Partners LLC
- Coalition for Green Capital

Governance Report

Introduction on the Governance Report from the Chairman, Neil O'Brien

Invinity is listed on the AIM Market of the London Stock Exchange and as such is required to apply a recognised corporate governance code. The Company's shares are also dual-listed on the Apex segment of the Aquis Stock Exchange Growth Market (AQSE) and the Company's short-term and long-term warrants are listed on the Access segment of the Aquis Stock Exchange Growth Market. The Board has adopted the Quoted Companies Alliance Corporate Governance Code (the "QCA Code"), which is designed for small to mid-sized companies and which has been adopted by many AIM companies. The Board has agreed that the QCA Code remains the most appropriate corporate governance code for the Company.

The Board has considered how the Company applies the ten principles of the QCA Code and the Governance Report includes the required disclosures and explanations where relevant. Further details of the Company's corporate governance practices are provided on the Company's website in the Investors section under Corporate Governance.

Corporate Governance Statement

The Board recognises that good governance helps to underpin the foundations of a solid and successful business and delivery of shareholder value. Invinity's Board, led by the Chairman, is committed to maintaining high standards of corporate governance for which the Directors are accountable to shareholders and other stakeholders and to ensuring that the Company's values are communicated and upheld across the Group. The Board recognises that corporate governance practices will need to be regularly reviewed as the Company grows to ensure that they remain appropriate and effective.

During 2021, the Board continued to strengthen the corporate governance framework with a number of initiatives including:

- the appointment of a Senior Independent Director, Jonathan Marren, to support the Chairman, to act as an intermediary for Board members and as a point of contact for shareholders;
- the appointment of a new Non-Executive Director, Kristina Peterson, to broaden the Board's skill set;
- the introduction of a Board performance appraisal process;
- enhanced Annual Report disclosures in respect of corporate governance and remuneration policy and practices;
- the streamlining of Board processes; and
- formalising the risk review process.

Furthermore, since the year end, the Board has established an ESG Committee to ensure that the Company delivers on its objective of operating responsibly and sustainably.

Corporate culture

The Company is committed to ensuring that there is a healthy corporate culture. As such, additional policies and procedures which are designed to ensure that ethical and transparent behaviour is recognised and followed across the Group, were put in place during the financial year. The policies and procedures currently in place include:

- Code of Conduct
- Whistleblowing Policy
- Equal Opportunities Policy
- Share Dealing Code
- Anti-Bribery and Corruption Policy
- Health and Safety Policy
- Modern Slavery Statement
- Procurement Policy
- Social Impact Policy
- Environmental Impact Policy
- Biodiversity Policy

Board composition

The Board currently consists of a Non-Executive Chairman, a Senior Independent Director, three Executive Directors and three Non-Executive Directors.

During 2021, the Board decided that it would be appropriate to appoint a Senior Independent Director to provide a sounding board for the Chairman and to act as an intermediary for Board members and as a point of contact for shareholders who have concerns which have not been adequately addressed by the Chairman or Chief Executive Officer. Accordingly, Jonathan Marren was appointed as Senior Independent Director with effect from 1 May 2021. Furthermore, to broaden the skill set and experience of the Board as well as support the Company's commitment to diversity, Kristina Peterson, who has considerable experience in renewables and project finance in North America, was appointed as a Non-Executive Director in November 2021.

Other than any shareholdings in the Company and the receipt of fees for acting as Directors, the Chairman and Non-Executive Directors have no financial interests in the Company or business relationships that would interfere with their independent judgement. Rajat Kohli was originally appointed as a representative of Bushveld Minerals pursuant to the terms of an investment agreement with the Company but this arrangement came to an end in 2021 after Bushveld Minerals disposed of its shareholding in the Company.

Board composition during the year

Name	Role	Length of service as at 27 June 2022	Date of appointment
Non-Executives			
Neil O'Brien	Non-Executive Chairman	5 years, 9 months	9 September 2016
Michael Farrow	Non-Executive Director	16 years, 3 months*	16 March 2006
Jonathan Marren	Senior Independent Director	6 years, 3 months	1 March 2016
Rajat Kohli	Non-Executive Director	2 years, 0 months	22 June 2020
Kristina Peterson	Non-Executive Director	0 years, 6 months	2 November 2021
Executives			
Lawrence Zulch	Chief Executive Officer	2 years, 2 months	2 April 2020
Matthew Harper	Chief Commercial Officer	2 years, 2 months	2 April 2020
Peter Dixon-Clarke	Chief Financial Officer	1 year, 9 months	10 August 2020

*See comment below regarding Michael Farrow's length of tenure/independence

Independence of Directors

The Board considers that the Chairman and all of the Non-Executive Directors, except Rajat Kohli, were independent for the whole of the 2021 financial year notwithstanding circumstances which could indicate otherwise. While recognising that Michael Farrow has been a Director for 16 years, the practicalities of maintaining corporate residency in Jersey means that it is advantageous to have an actively participative director located there. Neil O'Brien and Jonathan Marren have previously held executive positions within the Company. Notwithstanding the shareholdings disclosed on pages 40-41, the Board has determined each of these individuals demonstrate independence of character and judgement and that there are no circumstances which are likely, or could be perceived to be likely, to affect their judgement. During 2021, the Board agreed that Rajat Kohli, who had been the nominated representative of Bushveld Minerals until the disposal of their shareholding in the Company, should be invited to remain on the Board as an independent director.

Role of the Board

The Board is collectively responsible for delivery of the strategy which is designed to promote the long-term success of the Company and to deliver shareholder value. The Board is responsible for formulation and approval of the Company's long-term objectives and strategy, approval of budgets, oversight of operations across the Group, maintenance of internal controls and risk management systems and approval of Group policies. The Board may delegate specific responsibilities but there is a schedule of matters specifically reserved for decision by the Board to ensure that it exercises control over the key matters which could impact on delivery of the Company's strategy.

Board skills and responsibilities

The Directors have a wide range of skills and industry experience including technical, operational, commercial and financial both in the UK and internationally. The Chairman and Non-Executive Directors have held senior management, Board and advisory positions and bring relevant experience from their current and previous positions.

A clearly defined organisational structure exists across the Group, with lines of responsibility and delegation of authority to executive management.

Board meetings and processes

The Board has around eight scheduled meetings each year with other meetings held as required. During 2021, the majority of meetings were held by video conference call due to travel restrictions related to the COVID-19 pandemic. Informal meetings also take place between the Chairman and the Non-Executive Directors without the Executive Directors present.

At each Board meeting, the Board receives an update from the CEO on key current activities including HSE and considers the Commercial and Finance Reports and any papers relating to specific matters requiring consideration or approval.

Non-Executive Directors undertake on joining the Company that they are able to allocate sufficient time to discharge effectively their responsibilities and are required to keep the Board updated of any changes in respect of their other commitments.

The letters of appointment of the Non-Executive Directors detail the expected time commitment which is around six Board meetings, one General Meeting and two meetings in respect of each of the Audit and Remuneration Committees per annum and are required to devote to the Company's business such additional time as is reasonably necessary by way of preparation for or follow-up after any meeting. The Non-Executive Directors may also be asked to participate in other events such as marketing, social and client functions with this commitment not exceeding around six days per annum.

Board meeting attendance

Director	Board meetings attended
Neil O'Brien – Chairman	12
Lawrence Zulch	12
Matthew Harper	11
Peter Dixon-Clarke	12
Michael Farrow	12
Rajat Kohli	11
Jonathan Marren	12
Kristina Peterson (appointed 2 November 2021)	2
Total meetings during year	**12**

Board performance evaluation

During the year, an internal performance evaluation of the Board was undertaken. Each Board member completed a questionnaire which focused on strategy, risks and controls, Board structure and development, Board processes and the work and composition of the Board committees. The responses were collated and summarised by an external company secretary and the key conclusions tabled at a Board meeting.

Board induction, training and outside advice

There is no formal induction process but new Directors receive a briefing on AIM obligations from the Company's NOMAD, Canaccord Genuity, as well as an appropriate induction according to their requirements. The Board supports Directors who wish to receive ongoing training and education relating to their duties.

Independent legal advice is available to Directors at the Group's expense if external advice is considered necessary and appropriate.

External directorships and interests

Executive Directors are permitted to engage in other activities and businesses outside the Group providing that there is no risk of conflict with their executive duties and subject to full Board disclosure.

Non-Executive Directors are required to advise the Chairman as soon as practicable of any proposed Board appointments which could give rise to a conflict with their position as a Director of the Company. Details are circulated to other Board members who are invited to advise the Chairman if they have any concerns about the proposed appointment.

Conflicts of interest

The Board has in place a procedure for dealing with the consideration and authorisation of any actual or potential conflicts of interest. All Directors are aware of the requirement to advise the Chairman of any situations which could give rise to a conflict or potential conflict of interest. If requested by the Chairman, a Director will absent themselves from any Board discussions and decisions on matters where there is an actual or perceived conflict of interest.

Company Secretary

The Company Secretary is Oak Secretaries (Jersey) Limited which is 100% owned by the Oak Group (Jersey) Ltd (Oak Group), a Jersey-based limited liability company regulated by the Jersey Financial Services Commission. Michael Farrow was a director of the Oak Group until his retirement from that company in May 2019. The Company has also engaged the services of a qualified Company Secretary to assist with the administration of the share option scheme and compliance and to provide corporate governance advice and general support to the Board and its Committees.

Political and charitable donations

The Group made no charitable or political donations during the year (2020: £nil).

Communication with shareholders

The Company engages with shareholders in a variety of ways:

Meetings

Executive Directors meet regularly with major shareholders and the investment community which allows exposure to new investors, either online or in person. This process includes presentations, one-to-one meetings and both buy and sell-side analyst briefings. During 2021, a roadshow was undertaken in connection with the fundraising. The Chief Executive Officer regularly briefs the Board on meetings held and relays the views expressed. Details of analyst research reports, press reports, share trading and register analyses are shared with Directors which ensures that they are kept up to date with the views of the investment community.

Website

The Company's website is updated regularly and includes a dedicated Investor Relations section. This includes all direct shareholder communications, external presentations, Q&As with Directors and other relevant documentation so that existing and potential investors have access to up-to-date and relevant information.

Investor Relations

The Company encourages direct contact from shareholders and potential investors by providing an email address and telephone number for investors on the website which is monitored by the Director of Communications and the Corporate Relations Manager. This allows investors to address ad hoc queries to the Company.

Announcements

The Company issues announcements via the RNS news service and as press releases periodically to inform the market of significant news and developments.

Webinars

The Company hosts regular interactive webinars which give shareholders the chance to address questions to management.

Annual Report

The Company's annual report gives a detailed overview of the Company, its strategy, operations, financial position, risk profile and remuneration structure and is available in hard copy and on the website. This ensures that existing and potential investors are provided with the information that they need to make an assessment of the Company's performance and prospects.

Newsletter

The Company issues regular newsletters for Investors and any interested parties who have subscribed to receive updates on the Company's activities beyond what is issued through the Regulatory News Service.

AGM

In addition to the formal AGM business, the executive team give an operational and financial update and shareholders have the opportunity to address questions to the Board.

Neil O'Brien
Chairman
27 June 2022

Report of the Chairman of the Audit & Risk Committee

Introduction by the Audit & Risk Committee Chairman, Jonathan Marren.

I am pleased to present the report of the Audit & Risk Committee for the year ended 31 December 2021. The report includes details of the committee's activities during the financial year and since the year end.

Committee composition

The members of the Audit & Risk Committee are Jonathan Marren as Chairman, Michael Farrow and Rajat Kohli who replaced Neil O'Brien as a committee member during the year. The Board is satisfied that at least one member of the Audit & Risk Committee, Jonathan Marren, has recent and relevant financial experience.

Meetings

The Audit & Risk Committee met three times during the year and informal discussions were also held both with and without management present. The external auditors had discussions with the Chairman of the committee during the course of the year and also met the committee members without management present.

Only members of the committee have the right to attend the meetings of the committee but the committee can invite the Executive Directors, members of senior management and representatives of the external auditors to attend its meetings.

Details of the meetings attended during the financial year were as follows:

Director	Audit & Risk Committee meetings attended
Non-Executive Directors	
Jonathan Marren – Chairman	3
Michael Farrow	3
Neil O'Brien (resigned 20 May 2021)	*3
Rajat Kohli (appointed 20 May 2021)	**3
Executive Directors	
Lawrence Zulch	***3
Matthew Harper	***3
Peter Dixon-Clarke	***3
Total meetings during year	3

* 2 meetings attended as an invitee
** 1 meeting attended as an invitee
*** Invitee

Role

The core terms of reference of the Audit & Risk Committee include reviewing and reporting to the Board on matters relating to:

- the audit plans of the external auditors;
- the Group's overall framework for financial reporting and internal controls;
- the Group's overall framework for risk management;
- the accounting policies and practices of the Group;
- the annual and interim financial reporting carried out by the Group; and
- the independence and performance of the external auditor.

The committee is responsible for notifying the Board of any significant concerns that the external auditors may have arising from their audit work, any matters which may materially affect or impair the independence of the external auditors, any significant deficiencies or material weaknesses in the design or operation of the Group's internal controls and any serious issues of non-compliance. No such concerns were identified during the financial period.

Key matters considered by the committee

During the year, the issues considered by the committee both during and outside formal committee meetings included:

- Group financial disclosures and accounting matters relating to the preparation of the financial statements;
- audit plan of the external auditors for the 2020 financial year;
- reports of the external auditors concerning its audit and review of the financial statements of the Group;
- 2020 Annual Report and Accounts and 2021 interim financial statements;
- external auditors' fees; and
- terms of reference of the committee.

During the year, management reviewed and updated the risk matrix which identifies and classifies the key commercial, operational, corporate and financial risks facing the Group with associated mitigants. The risk matrix is reviewed regularly by the Board meetings and is updated to reflect any changes to the Company's risk profile.

Going concern

As part of the year end reporting process, management prepares a detailed report including detailed cashflow forecasts with a number of potential scenarios and sensitivity assumptions. The committee reviews and challenges management's assumptions and conclusions in order that it can provide comfort to the Board that management's assessment has been challenged and is supported and that it is appropriate to prepare the financial statements on a going concern basis. Further details of the going concern assessment process are contained in Note 2 of the Group financial statements on page 55.

External auditors

The committee recommends to the Board the appointment of the external auditors, subject to the approval of the Company's shareholders at a general meeting. Shareholders in a general meeting authorise the Board to fix the remuneration of the external auditors and the Board has delegated this responsibility to the committee.

The committee is responsible for the approval of the provision of all audit services and permitted non-audit services undertaken by the external auditors.

The committee actively considers the effectiveness and quality of the external auditors.

Whistleblowing and anti-bribery

The Company is committed to conducting all of its business dealings in a responsible, honest and ethical manner. All employees, directors and consultants are required to act with integrity and to have regard to the Company's Code of Conduct in their day-to-day business behaviour. The Company also has in place an Anti-Bribery and Corruption Policy and Procedures and arranges training for selected employees following a risk analysis.

All employees are made aware of the Company's whistleblowing policy which includes contact details for the Company's internal whistleblowing officer and an independent whistleblowing charity, Public Concern at Work.

All employees are required to undertake training on the Market Abuse Regulation in relation to inside information and unauthorised trading in the Company's shares.

Jonathan Marren
Chairman, Audit & Risk Committee
27 June 2022

Report of the Chairman of the Nomination Committee

Introduction by the Nomination Committee Chairman, Neil O'Brien.

I am pleased to present the report of the Nomination Committee for the year ended 31 December 2021.

Committee composition

The committee is chaired by Neil O'Brien with Michael Farrow, Rajat Kohli, Jonathan Marren and Larry Zulch as its members. The Board considers all members of the committee, with the exception of Larry Zulch (CEO), to be independent.

Meetings

The committee met once during 2021.

Details of the meetings attended during the financial year were as follows:

Director	Nomination Committeed meetings attended
Neil O'Brien – Chairman	1
Michael Farrow	1
Rajat Kohli	1
Jonathan Marren	—
Lawrence Zulch	—
Total meetings during year	1

Role

The role of the committee is to consider Board member succession, review the structure and composition of the Board and its Committees and identify and make recommendations for any changes to the Board. Any decisions relating to the appointment of Directors are made by the entire Board based on the merits of the candidates and the relevance of their background and experience, measured against objective criteria, with care taken to ensure that appointees have enough time to devote to the job.

Key matters considered by the committee

The issues considered by the committee during the financial year included:

- Appointment of Kristina Peterson as a Non-Executive Director; and
- Constitution of Board Committees.

Succession planning

The Company is committed to appointing, retaining and developing an experienced team which can effectively manage the Company's objectives and deliver its strategy. When considering succession planning, the committee will evaluate the balance of skills and experience on the Board and make recommendations to the Board on the basis of what it considers that the Company needs in order to support delivery of the agreed strategic objectives.

The committee recognises the need for progressive refreshing of the Board and the benefits of diversity and the committee will have regard to these when considering succession planning. When considering new Board appointments, the committee will be committed to recruiting on merit measured against objective criteria.

The management of human resources across the Group is a matter for Executive management but the Non-Executive Directors are advised in advance of recruitment plans in respect of senior appointments.

Neil O'Brien
Chairman, Nomination Committee
27 June 2022

Report of the Chairman of the Remuneration Committee

Introduction by the Remuneration Committee Chairman, Michael Farrow.

I am pleased, on behalf of the Remuneration Committee, to present the Directors' Remuneration Report ('Report') for the year ended 31 December 2021.

The Report is divided into two sections:

- The Policy report which sets out the current Remuneration Policy
- The Annual Report on Remuneration which sets out details of the operation of the Remuneration Committee and details of the Directors' remuneration packages for the year ended 31 December 2021. It also sets out details of the implementation of the Remuneration Policy for Executive and Non-Executive Directors for the year ending 31 December 2022.

The effects of COVID weighed heavily over the year with the overall performance of the Company suffering price increases and delays both in production and transportation. This, in turn, put great pressure on the Executives, notwithstanding the achievement of some of their annual bonus performance targets. The effort put in by the team is in no doubt and this led to significant progress towards improved cohesion within the merged business. The management team has amended monitoring processes and reporting of all the key metrics, such as stock control and the production cycle, thus enabling much improved internal efficiency. It takes time, however, for the results of these improvements to affect financial results which was exacerbated by general reticence of potential buyers to commit to transactions.

In 2021, albeit acknowledging the management's enormous efforts, the Remuneration Committee felt obligated to apply some downward discretion over the final outturn of the bonus awards. This, in no way, should be interpreted as a criticism but better aligns shareholder outcomes with the Company's management. Executive salaries were increased for 2022 but remain below the mid-market rates which reflects the Canadian and US inclination towards a lower fixed and higher variable pay structure. The long-term incentive arrangements remain unadjusted from establishment on the merger in 2020 which we believe to be best practice and avoids short term distortion of this important alignment of executive reward and shareholder value.

Key Performance Indicators ("KPI") have been set for the 2022 bonus which focus on sales, the reduction of costs and the development of new product and key relationships. These KPIs are further interpreted and adjusted for application down the management structure to ensure the entire workforce concentrates on the Board's priorities and is rewarded for success. The Remuneration Committee spent time refining high level KPIs which should require less annual adjustment, while believing that continuity of targets helps management over a longer horizon.

We recommend our Report to shareholders although do not seek their formal approval. I would be delighted to discuss any of the above matters with individual shareholders should they so wish.

Michael Farrow
Chairman, Remuneration Committee
27 June 2022

Directors' Remuneration Report

Remuneration policy

This part of the Report sets out the remuneration policy for the Company. The policy for the Executive Directors is determined by the Committee and the Committee recommends to the Board any adjustments to salary and bonus awards. The Committee also makes recommendations to the Board in respect of the remuneration packages of certain members of the senior team based on recommendations from the Chief Executive Officer. Authority is delegated to the Executive Directors to manage the remuneration packages of all other employees. Awards of share options to employees under the Company's Share Option Plan are the responsibility of the Board which considers recommendations from the Chief Executive Officer in respect of employees.
The aim of the Committee is to ensure that the remuneration packages are sufficiently competitive to attract, retain and motivate individuals of the quality required to contribute towards the strategic objectives of the Group and thereby enhance shareholder value. The Committee also aims to ensure that all employees receive rewards that fairly reflect their seniority, level of work and contribution to the Company.

The Company is committed to promoting equal opportunities in employment with all employees and potential employees receiving equal treatment.

Executive Director Policy

The summary of the remuneration policy for the Executive Directors is set out below. Full details of the remuneration packages are given in the Report on Remuneration on pages 33-41.

Salary

Purpose and link to strategy	To provide an appropriate salary level to support retention and recruitment of Executive Directors.
Operation	Executive Directors receive the same annual salary. Base salaries are reviewed annually on 1 January with regard to the external economic environment and salary adjustments across the Company. The salaries of the Chief Executive Officer and Chief Commercial Officer are designated in sterling but paid in local currencies. The salaries are re-based annually to allow for differentials arising through foreign exchange.
Opportunity	Salary increases will be awarded taking into account the outcome of the review. Salary increases will usually be in line with increases awarded to other employees but the Committee may make additional adjustments where there has been a change in role or responsibilities or to reflect a gap in market positioning.
Performance metrics	Not applicable for base salaries.

Pension and Benefits

Purpose and link to strategy	To provide an appropriate range of benefits and pension contributions to assist in the attraction and retention of the calibre of Executive Directors required for delivery of corporate and strategic objectives.
Operation	The CEO, based in the US, does not receive any benefits or employer contributions to a pension plan. The CFO, based in the UK, has income protection and life assurance cover. Benefits are administered internally and a review of providers and prices is conducted annually through a broker to ensure that the level of rates and cover remain competitive. A matching employer contribution of up to 5% of annual base salary is made to the Group personal pension plan. The CCO, based in Canada, has private medical and dental insurance and life assurance cover. He does not receive any employer pension contributions to a pension plan.
Opportunity	The benefits and pension packages, which are tailored to the individual Executive Directors, are set at a level that the Committee considers is appropriate. The value of benefits will vary each year according to the cost of provision.
Performance metrics	Not applicable for benefits and pension package.

Annual Bonus

Purpose and link to strategy	To reward the achievement of corporate targets.
Operation	Objectives are set as early as possible in the financial year. The bonuses may be paid in cash and/or shares after the end of the financial year to which they relate.
Opportunity	The annual bonus award is determined as a percentage of base salary based on performance against pre-agreed objectives. When deciding on the level of bonus awards, the Committee will have regard to the extent to which achievement of the objectives has contributed to progress against the Company's strategic drivers. The bonus is contractual but at the discretion of the Committee. The maximum bonus potential for Executive Directors is 100% of salary.
Performance metrics	The targets for the Executive Directors comprise the corporate, strategic and financial objectives agreed by the Board. There are no individual objectives. The Committee uses its judgement, supported by measurable evidence, to decide the extent to which the objectives have been achieved and exercises its discretion to decide on the level of bonus awards to be paid. The Committee considers whether operations have been completed to acceptable HSE standards and considers whether there were any HSE incidents when considering the level of bonus payments.

Share Option Plan (Option Plan)

Purpose and link to strategy	To support alignment with shareholders through the link to the creation of shareholder value.
Operation	The Option Plan was introduced in 2018 to replace historical long-term incentive arrangements. The Committee makes awards of options at an exercise price based on the prevailing market price of the Company's shares as at the date of grant. The options will vest in equal tranches after one, two and three years' further continuous employment subject to leaver provisions.
Opportunity	Option awards are usually made for a three-year term but the Committee has discretion over the frequency and quantum of awards.
Performance metrics	None.

Further details on the policy

Performance measurement

Annual bonus – the annual bonus is based on a range of corporate and individual objectives that the Board have agreed are key to progressing and delivering the Company's strategy. These can be operational, strategic and financial. Performance targets are designed to be stretching but achievable having regard to the Company's strategic priorities from time to time.

Option Plan – the Option Plan ensures alignment with shareholders being focussed on share price growth over the medium to long term. Vesting of equity awards is phased with options vesting in equal tranches in years 1, 2 and 3 after the date of grant. Options granted in exchange for options in predecessor companies at the time of the Merger vest in accordance with the terms of the original option grant. The Option Plan for the Executive Directors is the same as that for all other employees.

Remuneration policy for other employees and consultation

The Company's policy for all employees is to provide remuneration packages that reward them fairly for their contribution and role within the Company.

All employees are entitled to receive the full range of Company benefits but with different qualifying periods and levels of cover depending on seniority. The most senior employees below Board level are eligible to receive an annual bonus based on performance against corporate targets.

All permanent employees have been granted options under the Option Plan on the same terms as the Executive Directors but proportionate to their employment contracts and their ability to contribute towards the Company's strategic objectives. This ensures that an element of remuneration is deliverable through a scheme that aligns participants with shareholders.

The Company does not consult with employees on the effectiveness and appropriateness of the policy but, in considering individual salary increases, the Committee does have regard to salary increases across the Company.

Recruitment

In the case of recruiting a new Executive Director, the Committee can use all the existing components of remuneration as set out in the policy table.

The salary of a new appointee will be determined by reference to the experience and skills of the individual, market data, internal comparatives and the candidate's current remuneration. New appointees may be entitled to receive the full range of Company benefits on joining and, if the Committee considers it appropriate, a matching employer contribution of up to 5% of annual base salary to the Group personal pension plan.

In relation to any elements of variable pay, the Committee will take the following approach:

Component	Approach	Maximum annual opportunity
Annual Bonus	The annual bonus would operate as outlined in the Policy for existing Executive Directors. The relevant maximum will be pro-rated to reflect the period of employment over the year. Consideration will be given to the appropriate performance targets at the time of joining.	100% of base salary in respect of the current financial year.
Option Plan	The Option Plan would operate as outlined in the policy for existing Directors. An award of options may be granted on joining subject to the Company being in an open dealing period.	Committee discretion.

Service contracts, exit payments and change of control provisions

The Executive Directors have rolling term service agreements with the Company. Details of the Directors' service contracts and appointment dates are as follows:

Executive Directors	Appointment date	Contract date	Employing company
Lawrence Zulch	2 April 2020	2 April 2020	Invinity Energy Systems (US) Corporation
Matthew Harper	2 April 2020	2 April 2020	Invinity Energy Systems (Canada) Corporation
Peter Dixon-Clarke	10 August 2020	7 August 2020	Invinity Energy Systems plc

The Directors' service contracts are available to view at the Company's registered office and prior to each Annual General Meeting at the venue for the meeting.

The notice period for the Executive Directors is six months' notice in writing by either party. The Company has the right to make a payment in lieu of notice of six months' salary and, in the case of the CEO, a reimbursement of certain benefits if relevant. The Committee will consider termination payments on a case-by-case basis. It will consider the terms of the Director's contract and the circumstances of the termination and might consider making an ex-gratia payment where the circumstances and/or a Director's contribution to the Company justifies this. If an ex-gratia payment is to be made, the Committee will ensure that it is satisfied that it is in the best interests of the Company to make such a payment and that there is no "reward for failure".

The Committee also has discretion to settle any other amounts which it considers are reasonably due to the Director such as where the parties agree to enter into a settlement agreement and the individual is required to seek independent legal advice. The Committee can approve new contractual arrangements with a departing Director covering matters such as confidentiality or restrictive covenants and/or consultancy arrangements where it believes this is in the best interests of the Company.

Treatment of incentives for leavers and following a corporate event

a) Annual bonus

In relation to annual bonuses, a bonus payment will not usually be made if the Director is under notice at the bonus payment date or has already left.

b) Option Plan

In relation to awards granted under the Option Plan, all unvested options will lapse on cessation of employment. In Good leaver and Intermediate leaver circumstances (as defined in the Option Plan rules), all vested options will be retained and will be exercisable for a period of six months after the cessation of employment or 12 months in the case of death. The Committee has discretion to further extend the exercise period for Intermediate leavers and to allow the vesting of all or part of the unvested portion of an option for Good leavers.

In the event of change of control of the Company, all vested options will remain exercisable for a period of six months after the change of control and the Committee has the discretion to allow the vesting of all or part of the unvested portion of an option. Subject to the agreement of any acquiring company, option holders may be offered the opportunity to exchange their options for equivalent options over shares in the acquiring company for a period of up to six months from the change of control taking effect.

The Option Plan rules include malus and clawback provisions whereby the Committee has discretion to reduce the number of shares subject to an existing Option award in the event that an Option has been granted or has vested on the basis of any incorrect information relevant to the setting of any performance condition or condition of satisfaction including a material misstatement in the published financial results or in the event of fraud or misconduct by an Option holder including where an Option holder has been dismissed for cause. In the case of an Option which has been exercised, the Committee can require the Option holder to repay the Company an amount equal to the benefit by way of a transfer of shares or cash.

The Board can amend the Option Plan rules at any time provided that an option holder's existing rights cannot be adversely affected without the Option holder's consent.

Non-Executive Director Policy

The Company's Articles of Association provide that the Board can determine the remuneration of the Directors. The policy for the Chairman and Non-Executive Directors is as follows:

Fees

Purpose and link to strategy	To provide a competitive level of fee which will attract and retain high calibre directors with the range of skills and experience required to support the Executive Directors and assist the Company in delivering its objectives.
Operation	The fees for the Chairman and Non-Executive Directors are determined by the Board as a whole with directors absenting from discussions regarding their own remuneration. The Board has regard to level of fees paid to the Non-Executive Directors of other similar sized companies and the time commitment and responsibilities of the role. Neither the Chairman nor the Non-Executive Directors participate in any of the Company's share schemes.
Opportunity	The current annual fees are: Chairman: £60,000 Non-Executive Director basic fee: UK: £30,000 USA: $50,000 Senior Independent Director fee: £5,000 Committee Chair fee: UK: £5,000 USA: $10,000 in the event that a/the US Director is appointed to chair a Committee No additional fees are payable for acting as Chairman of the Nomination Committee or for membership of a Committee except in the case of a/the US Director who will receive $7,500 for membership of any Committees other than the Remuneration Committee. The fee levels will be reviewed on a periodic basis with reference to the time commitment of the role and fee levels in comparative companies. No benefits or other remuneration are provided.
Performance metrics	Not applicable to Non-Executive Directors.

Recruitment

The Committee will follow the Non-Executive Director remuneration policy as set out above in relation to the appointment of a new Non-Executive Director.

Terms of appointment

The Non-Executive Directors serve under letters of appointment. Their appointments can be terminated at any time by either party giving three months' notice to the other. The appointments can also be terminated by the Company without notice in certain circumstances including incapacity for three months in any 12-month period, serious or repeated breach of obligations in connection with the appointment or unsatisfactory performance as determined by the Board.
Details of the Non-Executive Director appointments are set out below:

Director	Appointment date	Original appointment letter	Revised appointment letter
Neil O'Brien	9 September 2016	8 September 2016	14 March 2019 – in respect of appointment as Executive Chairman 13 March 2020 – in respect of appointment as Non-Executive Chairman effective 2 April 2020
Michael Farrow	16 March 2006	16 March 2006	—
Rajat Kohli	22 June 2020	20 June 2020	—
Jonathan Marren*	1 March 2016	23 February 2016	—
Kristina Peterson	2 November 2021	30 October 2021	—

*Jonanthan Marren was Chief Financial Officer from 9 July 2012 to 29 February 2016

The Directors' letters of appointment are available to view at the Company's registered office and prior to each Annual General Meeting at the venue for the meeting.

Report on remuneration

Remuneration Committee membership and meetings

As at 31 December 2021, the Committee comprised Michael Farrow as the Committee Chairman, Rajat Kohli, Jonathan Marren and Kristina Peterson. Neil O'Brien stepped down as a member of the Committee on 20 May 2021 and Rajat Kohli and Kristina Peterson were appointed as members of the Committee on 20 May and 2 November 2021 respectively.

The Committee met once during the financial period and there were several informal meetings held during the year. Details of the meetings attended during the financial year were as follows:

Director	Remuneration Committee meetings attended
Michael Farrow	1
Neil O'Brien (resigned 20 May 2021)	1
Jonathan Marren	—
Rajat Kohli (appointed 20 May 2021)	—
Kristina Peterson (appointed 2 November 2021)	—
Total meetings during year	1

During the financial year, the Committee's main areas of activity included:

- Approving bonus awards in respect of the year ended 31 December 2020 and setting the bonus caps for Executive Directors and the members of the senior team immediately below Board level.
- Approving the 2021 KPIs for the executive bonus plan.
- Approving the alignment of the base salaries of the senior team immediately below Board level.
- Approving the remuneration package for the Chief Operating Officer who moved from a consultancy position to employee.
- Considering the timing of awards of options to new permanent employees.

No individual is involved in determining his or her own remuneration.

External advice

The Committee obtains external legal advice from Fox Williams in relation to employment matters.

The Committee considers that the advice it received during the financial period was objective and independent.

Total remuneration

The table below reports a single figure for total remuneration for each Executive Director:

	Salary £'000(i)		Benefits £'000(ii)		Annual bonus £'000(i)		Long-term incentives £'000 (v)		Pension benefits £'000		Total £'000	
Directors at 31 December 2021	**Year ended 31 Dec 21**	Year ended 31 Dec 20	**Year ended 31 Dec 21**	Year ended 31 Dec 20	**Year ended 31 Dec 21(iii)**	Year ended 31 Dec 20(iv)	**Year ended 31 Dec 21**	Year ended 31 Dec 20	**Year ended 31 Dec 21**	Year ended 31 Dec 20	**Year ended 31 Dec 21**	Year ended 31 Dec 20
Lawrence Zulch (appointed 2 April 2020)	**164.0**	103.9	**—**	—	**72.6**	101.1	**—**	—	**—**	—	**236.5**	205.0
Matt Harper (appointed 2 April 2020)	**154.4**	106.6	**1.9**	1.4	**72.6**	99.0	**—**	—	**—**	—	**228.9**	207.0
Peter Dixon-Clarke (appointed 10 August 2020)	**166.4**	63.0	**—**	—	**70.5**	50.0	**—**	—	**7.5**	3.1	**244.4**	115.6
Former Director												
Fraser Welham (resigned 10 August 2020)	**N/A**	88.0	**N/A**	8.0	**N/A**	115.0	**N/A**	—	**N/A**	5.0	**N/A**	216.0

(i) Salaries and bonuses of Lawrence Zulch and Matt Harper are designated in sterling but paid in local currencies. Figures for Lawrence Zulch and Peter Dixon-Clarke include payments of £16,400 each in respect of untaken holiday.

(ii) Represents employer contribution to private medical and dental insurance cover.

(iii) Represents amounts paid in 2022 in respect of bonus awards for the year ended 31 December 2021.

(iv) Represents amounts paid in 2021 in respect of bonus awards for the year ended 31 December 2020.

(v) A number of options vested during the year ended 31 December 2021. The value of the vested options, calculated with reference to the mid-market price on the various vesting dates less the cost of exercise, was £24,231 for Matt Harper (2020: £11,159) and £17,500 for Peter Dixon-Clarke (2020: £0). The options had not been exercised as at the date of this report.

The table below reports a single figure for total remuneration for each Non-Executive Director:

	Basic Fees £'000		Additional Fees £'000		Total Fees £'000	
Directors at 31 December 2021	**Year ended 31 Dec 2021**	Year ended 31 Dec 2020	**Year ended 31 Dec 2021**	Year ended 31 Dec 2020	**Year ended 31 Dec 2021**	Year ended 31 Dec 2020
Neil O'Brien	**60.0**	60.0	**—**	—	**60.0**	60.0
Michael Farrow	**30.0**	30.0	**5.0**	—	**35.0**	30.0
Rajat Kohli	**30.0**	15.0	**—**	—	**30.0**	15.0
Jonathan Marren (appointed as SID on 1 May 2021)	**30.0**	30.0	**8.3**	5.0	**38.3**	35.0
Kristina Peterson (appointed 2 November 2021)	**6.2**	—	**—**	—	**6.2**	—

No fees were paid to Non-Executive Directors for membership of a committee or for attending committee meetings nor were there any contributions paid to any pension schemes.

Additional information in respect of single figure table of remuneration for the year ended 31 December 2021

Annual bonus

In respect of the financial period, the Committee agreed that the Executive Director annual bonus opportunity would be up to 100 per cent of base salary. The Committee had agreed objectives with equal weighting relating to project delivery, signed sales contracts and development of strategic relationships.

The Committee agreed that the final bonus calculation for 2021 was 47%. The Committee had noted that a higher bonus amount was justified on the basis of the extent to which the objectives had been achieved but felt it appropriate to scale back the level of the bonus awards to ensure better alignment with shareholder outcomes.

Awards of share options during the financial year

There were no options granted to Executive Directors during the financial year.

Implementation of Executive Director remuneration policy for 2022

Base salaries

The base salaries of the Executive Directors were increased in the range of 5.8% to 6.7%, the differential being due to foreign exchange differences, with effect from 1 April 2022.

Annual bonus

For 2022, the Executive Director annual bonus will be determined as a percentage of base salary based on performance against pre-agreed corporate objectives. The maximum bonus potential is 100% of base salary.

For the financial year ending 31 December 2022, the Committee has agreed objectives with a range of weightings relating to signed sales contracts, share price performance, achievement of milestones on the joint development program with Gamesa Electric and production cost reductions.

Option Plan

The Committee does not plan to make any awards of share options to Executive Directors under the Option Plan during the 2022 financial year.

Benefits and pension contributions

The Executive Directors will receive the benefits and pension contributions in line with the policy.

Implementation of Non-Executive Director remuneration policy for 2022

No adjustments to Non-Executive Director fees are planned for the 2022 financial year. The Board has proposed the establishment of an ESG Committee during 2022. This will be chaired by a Non-Executive Director who will receive an annual fee of £5,000 in line with the Chairs of the Remuneration and Audit & Risk Committee.

The current fees are set out in the table below:

Role	Type of fee	
Chairman	Total fee	£60,000
Other Non-Executive Directors	Basic fee	£30,000 (UK) $50,000 (USA)
	Chair of Committees with exception of Nomination Committee	£5,000
	Senior Independent Director	£5,000

Statement of directors' shareholdings

The table below summarises the interests of the Directors in office at 31 December 2021 in the Company's shares:

	Ordinary shares of €0.50 each at 31 December 2021	Percentage of issued share capital at 31 December 2021
Neil O'Brien	87,500	0.08
Lawrence Zulch	2,258,949	1.95
Matt Harper	1,597,845	1.38
Peter Dixon-Clarke	12,000	0.01
Michael Farrow	9,224	0.01
Rajat Kohli	—	—
Jonathan Marren	155,876	0.13
Kristina Peterson (appointed 2 November 2021)	—	—

In line with other investors, the directors who participated in the Placing announced in November 2021 acquired one short-term warrant and one long-term warrant for every two Ordinary Shares purchased. The table below summarises the interests of the Directors in office at 31 December 2021 in warrants to subscribe for shares:

	Short-term warrants over Ordinary Shares of €0.50 each with an exercise price of 150p exercisable until 15 September 2022	% of short term warrants 31 December 2021	Long-term warrants over Ordinary Shares of €0.50 each with an exercise price of 225p exercisable until 16 December 2024	% of long-term warrants at 31 December 2021
Neil O'Brien	—	—	—	—
Lawrence Zulch	6,000	0.04	6,000	0.04
Matt Harper	—	—	—	—
Peter Dixon-Clarke	6,000	0.04	6,000	0.04
Michael Farrow	—	—	—	—
Rajat Kohli	—	—	—	—
Jonathan Marren	—	—	—	—
Kristina Peterson (appointed 2nd November 2021)	—	—	—	—

Outstanding awards under the Option Plan

Director	Date of grant	Exercise price	Options held at 31 December 2020	Lapsed/Relinquished/ exercised during year	Vested during year	Options held 31 December 2021	Earliest vesting date
Matt Harper	1 April 2020* (revised)	£0.0434	263,034	—	—	263,034	Options fully vested as at 15 July 2019
Matt Harper	1 April 2020* (revised)	£0.0434	73,065	—	8,524	73,065	Options fully vested as at 1 July 2021
Matt Harper	26 August 2020	£1.13	300,000	—	100,000	300,000	26 August 2021 (options vest in equal instalments at the end of years 1, 2 and 3 following date of grant)
Peter Dixon-Clarke	26 August 2020	£1.13	500,000	—	166,666	500,000	26 August 2021 (options vest in equal instalments at the end of years 1, 2 and 3 following date of grant)

* Following the merger between redT Energy PLC and Avalon Battery Corporation, the Company granted new options in substitution and cancellation of options held under the Avalon Battery Corporation 2013 Equity Incentive Plan which had original dates of grant of 21 November 2014 and 7 July 2016. The options have retained the original vesting dates.

Share price movements during year ended 31 December 2021

The mid-market closing price of the Company's shares at 31 December 2021 was 92.5 pence. The range of the trading price of the Company's shares during 2021 was between 73 pence and 236 pence per share.

Michael Farrow
Chairman of the Remuneration Committee
27 June 2022

Directors' Report

Principal activity

The principal activity of the Group is the production and selling of vanadium flow batteries for the energy storage market.

Results and dividends

The trading results for the year, and the Group's financial position at the end of the period, are shown in the attached financial statements. The Directors have not recommended a dividend for the year (year ended 31 December 2020: £nil).

Major shareholders

At 21 June 2022, the Company had been notified of the following interests of three percent or more of the Company's voting rights.

Shareholder/Fund Manager	Number of shares	% of issued share capital
Schroders plc	28,585,917	24.63%
GSR Ventures	8,495,506	7.32%
Amati Global Investors Limited	6,800,000	5.86%
Fidelity International Limited	6,732,535	5.80%
Johnson Chiang	6,019,612	5.19%
Brantingham & Carroll International	4,969,026	4.28%
Hong Kong Hao Yuan Shen Trading	3,579,276	3.08%

Directors

The present members of the Board are as listed in the Board composition section of the Governance Report. The interests of the Directors in office at the year-end in the share capital of the Company are shown in the Directors' Remuneration Report along with details of their service contracts and terms of appointment.

Post balance sheet events

Post balance sheet events are disclosed in note 31.

Going Concern

Going concern is disclosed in the Chief Financial Officer's report along with note 2.

Principal risks and uncertainties

Information relating to the principal risks and uncertainties facing the Group is set out in the Risk Management Report on pages 18-20 of the Strategic Report.

Related party transactions

Related party transactions are disclosed in note 29.

Financial instruments

During the period under review the Company granted 14.5m short-term warrants and 14.5m long-term warrants in conjunction with its placing and open offer. The exercise prices and expiry dates of the short- and long-term warrants are 150 pence and 15 September 2022 and 225 pence and 16 December 2024 respectively. No other financial instruments were held, outside of cash and receivables.

Financial risk management policies are disclosed in note 28 to the financial statements.

Political and charitable contributions

The Group made no charitable donations (year ended 31 December 2019: £nil) and no political donations (2020: £nil) during the year.

Creditor payment policy

The Group does not follow any specific code or standard on payment practice. However, it is the policy of the Group to ensure that all of its suppliers of goods and services are paid promptly and in accordance with contractual and legal obligations. Average creditor days for the year were 12 days (year ended 31 December 2020: 37 days), on the basis of accounts payable as a percentage of amounts invoiced during the year.

Directors' and Officers' insurance

The Group maintained directors' and officers' liability insurance cover throughout the period. The Directors are also able to obtain independent legal advice at the expense of the Group, as necessary, in their capacity as Directors.

Employees

The Group had 149 employees at the year end, three of whom are Executive Directors. The Group seeks to employ people on the basis of merit and ability to perform the required roles. The Group does not discriminate on any grounds including race, gender, religion, age, nationality or sexual orientation.

Relations with shareholders

The company provides shareholders and stakeholders with relevant information in a timely and balanced manner. We understand and respect the rights of shareholders, will convene Annual General Meetings in full consideration of these rights and encourage full participation of both institutional and private investors.

Auditor

A resolution for the re-appointment of Pricewaterhouse Coopers LLP as auditor of the company will be proposed at the forthcoming Annual General Meeting.

Peter Dixon-Clarke
Chief Financial Officer
27 June 2022

Statement of Directors' Responsibilities in Respect of the Financial Statements

The directors are responsible for preparing the Annual Report and the Financial Statements in accordance with applicable law and regulation.

The Companies (Jersey) Law, 1991 requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the Group financial statements in accordance with International Financial Reporting Standards (IFRS) as adopted in the European Union.

Under The Companies (Jersey) Law, 1991, 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 Group and of the profit or loss of the Group for that period. In preparing the financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- state whether applicable IFRS as adopted in the European Union have been followed, subject to any material departures disclosed and explained in the financial statements;
- make judgements and accounting estimates that are reasonable and prudent; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group will continue in business.

The directors are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for keeping proper accounting records that 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 Law (Jersey), 1991.

The directors are responsible for the maintenance and integrity of the Group's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors' confirmations

In the case of each director in office at the date the Directors' report is approved:

- so far as the Director is aware, there is no relevant audit information of which the Group's auditors are unaware; and
- 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 Group's auditors are aware of that information.

Peter Dixon-Clarke
Chief Financial Officer
27 June 2022

Independent Auditors' Report to the Members of Invinity Energy Systems plc

INTRODUCTION

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Report on the audit of the financial statements

Opinion

In our opinion, Invinity Energy Systems Plc's Group financial statements:

- give a true and fair view of the state of the Group's affairs as at 31 December 2021 and of its loss and cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards as adopted in the European Union; and
- have been prepared in accordance with the requirements of the Companies (Jersey) Law 1991.

We have audited the financial statements, included within the Annual Report and Financial Statements 2021 (the "Annual Report"), which comprise: the consolidated statement of financial position as at 31 December 2021; the consolidated statement of profit and loss, the consolidated statement of comprehensive income, the consolidated statement of cash flows and the consolidated statement of changes in equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Material uncertainty related to going concern

In forming our opinion on the financial statements, which is not modified, we have considered the adequacy of the disclosure made in note 2 to the financial statements concerning the Group's ability to continue as a going concern. Whilst the group has secured £29 million additional funding during the year through a placing and open offer, the appropriateness of the going concern assessment of the Group is dependent on existing contracts being delivered, new contracts being closed, and manufacturing costs reducing in line with forecast. If these conditions are not met, the Group is forecasted to require additional funding in order to continue trading and delivering on its strategic objectives. Also, there is no certainty that short-term warrants, which are due to expire in September 2022 and which may provide additional funding, will be exercised. These conditions, along with the other matters explained in note 2 to the financial statements, indicate the existence of a material uncertainty which may cast significant doubt about the Group's ability to continue as a going concern. The financial statements do not include the adjustments that would result if the Group were unable to continue as a 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 ability to continue to adopt the going concern basis of accounting included:

- obtaining future cash flow forecasts, covering base case and a severe but plausible downside case, for a period of at least 12 months from the date of approval of the financial statements. We assessed the forecast assumptions used in the base and severe but plausible downside scenarios;
- review of past forecasting accuracy by the directors;
- testing the mathematical accuracy of the forecasts;
- corroborating the forecast budgeted revenue with confirmed sales orders or revenue pipeline of the Group;
- comparing the assumptions used within the going concern model to the board approved budgets and business plans;
- reviewing and evaluating management's sensitivities and performing additional sensitivity analysis over key assumptions in the model in order to assess the potential impact of a range of possible outcomes; and
- reading the disclosures in the financial statements and checking these were consistent with the Group's plans for future fundraising and the group's current funding position.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Our audit approach

Context

Invinity Energy Systems plc is an independent, Jersey incorporated company. Its key subsidiaries are based in the UK, Canada and United States of America. The principal activities of the company and its subsidiaries relate to the manufacture and sale of vanadium flow battery systems plus associated installation, warranty and other services. Its manufacturing and assembly sites are located in the UK and Canada.

Overview

Audit scope

- We conducted full scope audits on four components and the audit of specified balances and classes of transactions on one component. The scope of work at each component was determined by its contribution to the group's overall financial performance and its risk profile.
- We engaged our network firm in Canada to perform the audit procedures for components based in the United States of America and Canada. The work on the other components was performed by us.
- The components where audit work was performed accounted for approximately 97% of total assets.

Key audit matters

- Material uncertainty related to going concern
- Revenue Recognition
- Onerous Contracts Provision and Inventory Valuation
- Warranty Provision
- Impairment of goodwill

Materiality

- Overall materiality: £650,000 (2020: £500,000) based on 1% of total assets.
- Performance materiality: £487,500 (2020: £375,000).

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the 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) identified by the auditors, including 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, and any comments we make on the results of our procedures thereon, 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.

In addition to going concern, described in the Material uncertainty related to going concern section above, we determined the matters described below to be the key audit matters to be communicated in our report. This is not a complete list of all risks identified by our audit.

Revenue Recognition, Onerous Contract Provision and Inventory Valuation and Warranty Provision are new key audit matters this year. Accounting for acquisition and purchase price allocation of Avalon Battery Corporation (Note 7) and COVID-19 risks and uncertainties (Note 2), which were key audit matters last year, are no longer included because of their nature being specific to the 2020 financial year end. Otherwise, the key audit matters below are consistent with last year.

Key audit matter	How our audit addressed the key audit matter
Revenue Recognition The Group recognised revenue totalling £3.2m for the year (2020: £0.4m). A total of £2.8m of this related to two contracts in the UK; Energy Superhub Oxford (ESO) and Scottish Water. The Group has identified 4 performance obligations under IFRS 15. We focused on this area due to the greater magnitude of revenue being recognised in the current year and the complexities associated with IFRS 15 when selling under contract. (Note 4)	We obtained and assessed management's IFRS 15 revenue recognition paper including the identification of the different performance obligations. We agreed with management's conclusion on performance obligations when considered against IFRS 15's concept of transfer of control. A key factor being that a customer has control of the battery system once delivered on site but not yet installed. For all contracts where a material amount of revenue was recognised in the current year we performed the following testing: ■ obtained the underlying contract; ■ tested management's recognition of revenue against the performance obligations outlined in their accounting policy agreeing that point in time recognition is appropriate; ■ corroborated the amount and allocation of the transaction price against the contract and the performance obligations; and ■ corroborated transfer of control for the battery systems by reference to supporting evidence including goods delivery notes and shipping documentation. Based on our work performed we believe revenue recognition is correctly applied.
Onerous Contracts Provision and Inventory Valuation At the balance sheet date the Group has inventory of £5.8m and an onerous contract provision of £4.9m. The onerous contract provision relates to 8 contracts. We have focused on the completeness of this provision and valuation of inventory as determining the appropriate provision for contracts that are, or are expected to become, loss making requires a significant level of judgement. The calculation of the provision will require identification of the costs expected to be incurred and the benefits expected to be derived from individual contracts. Further, the assessment of inventory valuation is inherently subjective and requires the exercise of judgment in determining the appropriate amount of provision. (Note 21)	In testing the completeness of the onerous contract provision and valuation of inventory we performed the following: ■ obtained the complete list of contracts signed with customers to check if an onerous contract provision had been recognised or at least considered for each one; ■ obtained management's onerous contract provision calculation and tested the constituent parts to management's assumptions and corroborating evidence. Part of this test was to assess whether or not what was recognised was sufficient in light of the evidence obtained; ■ considered losses made on contracts to date and compared this to the calculated forecasted losses on contracts to identify any inconsistencies; and ■ tested the recoverability of inventory taking into account whether the costs of raw materials and finished goods would be recovered through future sales based on current contracts as an indicator. Based on work performed we identified no indicators that would suggest management's assessment was materially misstated.

Key audit matter	How our audit addressed the key audit matter
Warranty Provision At the balance sheet date the Group has total warranty provisions of £1.1m including £0.9m related to legacy products. The assessment of future costs is inherently subjective and requires the exercise of judgment in determining the appropriate amount of provision that may be required and as such we have focused on the completeness of this provision. (Note 21)	In testing the completeness of the warranty provision we performed the following testing: ■ obtained management's warranty provision calculation and tested key inputs such as warranty period and number of stacks for each contract included under warranty; ■ tested management's fail rate calculation using supporting evidence of stacks failed to date; and ■ tested management's estimates of stack costs and labour costs to supporting evidence. We noted no issues from the above testing. The specific provisions in place relating to the legacy products have been in place since last year. We tested the build up of the costs for the specific provision and concluded these as being reasonable. Based on the work performed, we determined that the assumptions used, and the approach taken, were reasonable.
Impairment of goodwill The Group holds goodwill of £23.9m. IAS 36 Impairment of assets requires an annual impairment assessment to be carried out for all indefinite life intangibles (goodwill) and whenever there are any indications of impairment for all other assets. We focused on this area due to the material nature of the goodwill and given that the Group is currently incurring losses, there is a risk that the value of goodwill may not be recoverable. Management has determined the recoverable amount of the relevant cash generating unit as at 31 December 2021 based on fair value less costs of disposal (in line with the approach adopted in 31 December 2020). (Note 15)	In auditing the impairment assessment we performed the following: ■ we considered the appropriateness of using the fair value less costs to sell approach; ■ we corroborated the share price at the balance sheet date and checked the accuracy of the market capitalisation calculation; ■ assessed the inclusion of all appropriate assets and liabilities in the cash generating unit carrying value calculation and agreed that all relevant balances had been included; and ■ verified the adequacy of relevant disclosures in the group financial statements. Based on the work performed, we determined that the assumptions used, and the approach taken, were reasonable. The recoverability of the goodwill is interlinked with the going concern assumption therefore the recoverability of the asset is at risk should the Group not continue as a going concern.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the group, the accounting processes and controls, and the industry in which it operates.

The Group has one segment and cash generating unit. Following the acquisition of Avalon Battery Corporation, the Group has two manufacturing and assembly locations in the UK and Canada. The accounting and financial reporting functions are also based in these two regions.

Our group scoping was based on total assets within each component. We identified four components (the Company, Invinity Energy (UK) Limited, Invinity Energy Systems (Canada) Corporation and Invinity Energy Systems (US) Corporation) which comprised a high proportion of total Group assets which required an audit of their complete financial information. One other component was subject to procedures over the provisions and contract liabilities financial statement line item level to obtain sufficient coverage.

The audit work was performed by the group engagement team based in the UK and component auditors based in Canada. We maintained regular communication and conducted formal interim and year-end conference calls with component team, as well as reviewing the audit work and reports to us.

Together the above scoping gave appropriate coverage of all material balances at a Group level. On a consolidated basis, these provided coverage of 98% of total assets.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

Overall Group materiality	£650,000 (2020: £500,000).
How we determined it	1% of total assets
Rationale for benchmark applied	We believe that total assets are an appropriate measure for the Group given the current stage of development of the business and products.

For each component in the scope of our group audit, we allocated a materiality that is less than our overall group materiality. The range of materiality allocated across components was between £224,000 and £550,000.

We use performance materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality. Specifically, we use performance materiality in determining the scope of our audit and the nature and extent of our testing of account balances, classes of transactions and disclosures, for example in determining sample sizes. Our performance materiality was 75% (2020: 75%) of overall materiality, amounting to £487,500 (2020: £375,000) for the group financial statements.

In determining the performance materiality, we considered a number of factors – the history of misstatements, risk assessment and aggregation risk and the effectiveness of controls – and concluded that an amount in the middle of our normal range was appropriate.

We agreed with those charged with governance that we would report to them misstatements identified during our audit above £32,500 (2020: £25,000) as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or any form of assurance thereon.

In connection with our audit of the financial statements, 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 audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. 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 based on these responsibilities.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of the Directors' Responsibilities in Respect of the Financial Statements, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they 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 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.

Auditors' 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 auditors' 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.

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.

Based on our understanding of the Group and industry, we identified that the principal risks of non-compliance with laws and regulations related to Companies (Jersey) Law 1991, tax legislation and employment legislation, and we considered the extent to which non-compliance might have a material effect on the financial statements. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls) and determined that the principal risks were related to manipulation of financial results (such as revenue) and potential management bias in accounting estimates to improve the performance of the Group. The group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the group engagement team and/or component auditors included:

- Evaluation of the design effectiveness of management's controls designed to prevent and detect irregularities;
- Inquiries with the Board of Directors and Chief Financial Officer, including consideration of known or suspected instances of tax matters, employment regulations and non-compliance with laws and regulations and fraud;
- Review of board minutes;
- Challenging assumptions made by management in its significant accounting estimates, in particular in relation to impairment of intangible assets, provision for warranty, inventory and onerous contracts; and
- Identifying and testing the validity of journal entries, in particular any journal entries posted with unusual revenue account combinations.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Our audit testing might include testing complete populations of certain transactions and balances, possibly using data auditing techniques. However, it typically involves selecting a limited number of items for testing, rather than testing complete populations. We will often seek to target particular items for testing based on their size or risk characteristics. In other cases, we will use audit sampling to enable us to draw a conclusion about the population from which the sample is selected.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report
This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Article 113A of the Companies (Jersey) Law 1991 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies (Jersey) Law 1991 exception reporting
Under the Companies (Jersey) Law 1991 we are required to report to you if, in our opinion:

- we have not obtained all the information and explanations we require for our audit;

We have no exceptions to report arising from this responsibility.

Paul Cheshire
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants
Edinburgh
27 June 2022

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FINANCIAL STATEMENTS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Statement of Profit and Loss

For the year ended 31 December 2021

Continuing operations	Note	2021 £'000	2020 £'000
Revenue	4	**3,185**	406
Cost of sales	5	**(6,622)**	(1,221)
Gross loss		**(3,437)**	(815)
Operating costs			
Administrative expenses	6	**(14,439)**	(9,593)
Other items of operating income and expense	10	**(3,388)**	(9,822)
Loss from operations		**(21,264)**	(20,230)
Finance income	11	**—**	1
Finance costs	11	**(45)**	(2,298)
(Loss)/gain on foreign currency transactions	11	**(63)**	(1,744)
Net finance costs	11	**(108)**	(4,041)
Loss before income tax		**(21,372)**	(24,271)
Income tax expense	12	**—**	—
Loss for the year		**(21,372)**	(24,271)
Loss per ordinary share in pence			
Basic	13	**(24.1)**	(41.0)
Diluted	13	**(24.1)**	(41.0)

The above consolidated statement of profit and loss should be read in conjunction with the accompanying notes.

Consolidated Statement of Comprehensive Income

For the year ended 31 December 2021

Continuing operations	2021 £'000	2020 £'000
Loss for the year	**(21,372)**	(24,271)
Other comprehensive income/(expense)		
Exchange differences on the translation of foreign operations	**10**	(2,162)
Total comprehensive loss for the year	**(21,362)**	(26,433)

The above consolidated statement of comprehensive income should be read in conjunction with the accompanying notes.

Consolidated Statement of Financial Position

At 31 December 2021

	Note	2021 £'000	2020 £'000
Non-current assets			
Goodwill and other intangible assets	15	**24,097**	24,127
Property, plant and equipment	16	**1,130**	695
Right-of-use assets	17	**975**	1,014
Total non-current assets		**26,202**	25,836
Current assets			
Inventory	19	**5,797**	905
Other current assets	20	**6,280**	1,414
Contract assets	21	**324**	5
Trade receivables	22	**1,683**	33
Cash and cash equivalents	23	**26,355**	21,953
Total current assets		**40,439**	24,310
Total assets		**66,641**	50,146
Current liabilities			
Trade and other payables	24	**(3,513)**	(2,468)
Contract liabilities	21	**(5,142)**	(2,644)
Lease liabilities	25	**(350)**	(161)
Provisions	21	**(5,976)**	(1,927)
Total current liabilities		**(14,981)**	(7,200)
Net current assets		**25,458**	17,110
Non-current liabilities			
Lease liabilities	25	**(420)**	(595)
Total non-current liabilities		**(420)**	(595)
Total liabilities		**(15,401)**	(7,795)
Net assets		**51,240**	42,351
Equity			
Called up share capital	26	**50,690**	37,870
Share premium	26	**140,445**	124,545
Share-based payment reserve	26	**5,293**	3,762
Accumulated losses	26	**(143,557)**	(122,185)
Currency translation reserve	26	**(1,670)**	(1,680)
Other reserves	26	**39**	39
Total equity		**51,240**	42,351

The above consolidated statement of financial position should be read in conjunction with the accompanying notes.

The financial statements on pages 51 to 91 were authorised by the board of directors and authorised for issue on 27 June 2022 and were signed on its behalf by:

Michael Farrow
Director

Consolidated Statement of Changes in Equity

For the year ended 31 December 2021

	Called-up share capital £'000	Share premium £'000	Share-based payment reserve £'000	Accumulated losses £'000	Currency translation reserve £'000	Other reserves £'000	Total £'000
At 1 January 2021	**37,870**	**124,545**	**3,762**	**(122,185)**	**(1,680)**	**39**	**42,351**
Loss for the year	**—**	**—**	**—**	**(21,372)**	**—**	**—**	**(21,372)**
Other comprehensive income							
Foreign currency translation differences	**—**	**—**	**—**	**—**	**10**	**—**	**10**
Total comprehensive loss for the year	**—**	**—**	**—**	**(21,372)**	**10**	**—**	**(21,362)**
Transaction with owners in their capacity as owners							
Contribution of equity, net of transaction costs	**12,286**	**15,148**	**—**	**—**	**—**	**—**	**27,434**
Exercise of share options	**534**	**752**	**(296)**	**—**	**—**	**—**	**990**
Share-based payments	**—**	**—**	**1,827**	**—**	**—**	**—**	**1,827**
Total contributions by owners	**12,820**	**15,900**	**1,531**	**—**	**—**	**—**	**30,251**
At 31 December 2021	**50,690**	**140,445**	**5,293**	**(143,557)**	**(1,670)**	**39**	**51,240**

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

	Called-up share capital £'000	Share premium £'000	Share-based payment reserve £'000	Accumulated losses £'000	Currency translation reserve £'000	Other reserves £'000	Total £'000
At 1 January 2020	8,157	101,035	2,250	(97,914)	482	(1,422)	12,588
Loss for the year	—	—	—	(24,271)	—	—	(24,271)
Other comprehensive loss							
Foreign currency translation differences	—	—	—	—	(2,162)	—	(2,162)
Total comprehensive loss for the year	—	—	—	(24,271)	(2,162)	—	(26,433)
Transactions with owners in their capacity as owners							
Contribution of equity, net of transaction costs	11,704	20,030	—	—	—	—	31,734
Issue of ordinary shares as a consideration for a business combination, net of transaction costs	17,980	3,423	—	—	—	—	21,403
Exercise of share options	29	57	—	—	—	—	86
Share-based payments	—	—	1,512	—	—	—	1,512
Fair value realised on note conversion	—	—	—	—	—	1,461	1,461
Total contributions by owners	29,713	23,510	1,512	—	—	1,461	56,196
At 31 December 2020	37,870	124,545	3,762	(122,185)	(1,680)	39	42,351

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

Consolidated Statement of Cash Flows

For the year ended 31 December 2021

	Note	2021 £'000	2020 £'000
Cash flows from operating activities			
Cash used in operations	14	**(22,964)**	(10,885)
Interest received		**—**	1
Interest paid		**—**	(32)
Net cash outflow from operating activities		**(22,964)**	(10,916)
Cash flows from investing activities			
Acquisition of intangible assets	15	**(18)**	(9)
Acquisition of property, plant and equipment	16	**(733)**	(349)
Net cash outflows from investing activities		**(751)**	(358)
Cash flows from financing activities			
Payment of lease liabilities	25	**(320)**	(163)
Proceeds from the issue of share capital, net of transaction costs		**27,434**	28,915
Proceeds from the issue of convertible notes, net of transaction costs		**—**	1,944
Acquisition of cash through business combination		**—**	1,264
Proceeds from the exercise of share options and warrants		**990**	37
Net cash inflow from financing activities		**28,104**	31,997
Net increase/(decrease) in cash and cash equivalents		**4,389**	20,723
Cash and cash equivalents at the beginning of the year		**21,953**	1,243
Effects of exchange rate changes on cash and cash equivalents		**13**	(13)
Cash and cash equivalents at the end of the year		**26,355**	21,953

The above consolidated statement of cash flows should be read in conjunction with the accompanying notes.

Notes

(forming part of the consolidated historical financial information)

1 General Information

Invinity Energy Systems plc (the 'Company') is a public company limited by shares incorporated and domiciled in Jersey. The registered office address is Third Floor, IFC5, Castle Street, St. Helier, JE2 3BY, Jersey.

The Company is listed on the Alternative Investment Market of the London Stock Exchange with the ticker symbol IES.L.

The principal activities of the Company and its subsidiaries (together the 'Group') relate to the manufacture and sale of vanadium flow battery systems and associated installation, warranty and other services.

2 Summary of significant accounting policies

Basis of preparation

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by the European Union, the associated interpretations issued by the IFRS Interpretations Committee (together 'IFRS') and in accordance with the Companies (Jersey) Law 1991.

Separate presentation of the parent company financial statements is not required by the Companies (Jersey) Law 1991 and, accordingly, such statements have not been included in this report.

The significant accounting policies applied in preparing these consolidated financial statements are set out below. These policies have been consistently applied throughout the period and to each subsidiary within the Group.

The financial statements have been prepared under the historical cost convention except where stated.

Going concern

The successful winner, or winners, of the second phase of the UK Government's LODES competition is expected to be announced in the first half of 2023. Due to the extensive work required in preparing for the submission, contracting is expected to complete soon after the winner is announced, along with the payment of a material deposit on signing. Similar government supported opportunities are in progress in both the US and Australia, though LODES is considered the most advanced of the three.

Absent the exercise of any warrants as described below, but including a deposit from the LODES, or similar contract, the latest cash flow forecasts indicate that provided existing contracts are delivered, new contracts are closed and manufacturing costs reduce as forecast, the existing cash will be sufficient to fund the business for at least 12 months from the signing of the balance sheet.

14.5m short-term warrants were granted in 2021 and should all, or some, of these warrants be exercised prior to expiry on 15 September 2022 then the Company will receive up to an additional £21.8m of cash. The Group's cash balances at the end of May 2022 totalled £18.1m. Should all of the short-term warrants be exercised within the next 12 months then the existing cash will be sufficient to fund the business for at least 12 months from the signing of the balance sheet.

However, the exercise price of the short-term warrants is 150p and, at the market close on 22 June 2022, the Company's share price is below this exercise price at 53p. Accordingly there is no certainty that any of the warrants will be exercised.

A change to the terms of the short-term warrants, such as the expiry date, is conditional upon the approval of the holders of the short-term warrants and requires at least 50% of the subscription rights for such class of warrants to vote in favour at a General Meeting and there can be no certainty that any such change in the terms will be approved.

Whilst 2021 demonstrated both the support of the Company's investors and the resilience of its organisation, as with many groups at this stage of development it remains reliant on timely receipts and closely managed costs. Should insufficient short-term warrants be exercised, existing contracts be delivered more than six-months late or the Group fail to win the LODES, or an equivalent, contract or close it later than the second quarter of 2023 then, assuming the Group maintains its forecast operational capacity, it will be necessary to raise further funding within the next 12 months in order to continue trading and deliver on the strategic objectives.

The Group's need to secure receipts from the exercise of the warrants or through winning new contracts, customers or additional funding creates a material uncertainty that casts significant doubt about its ability to continue as a going concern. The financial statements do not include the adjustments that would result if the Group were unable to continue as a going concern.

Notes

(forming part of the consolidated historical financial information)

In addition to the issues discussed above, the directors have also reviewed other varying, and wide-ranging information relating to both present and future conditions when reaching their conclusion regarding going concern. These included the:

- growing opportunities presented by the emergent energy storage market;
- growing levels of Government engagement and support in the three key markets;
- growing sales pipeline of 686 MWh in May 2022 vs 273 MWh in May 2021; and
- validation of the business provided by the continued engagement of EDF following the ESO contract in bidding together for Phase 2 of the LODES contract (following its winning of Phase 1).

Foreign currency

Presentation currency

The consolidated financial statements are presented in Great British Pounds (GBP) rounded to the nearest thousand (£000), except where otherwise indicated.

Functional currency

Items included in the financial information of the individual companies that comprise the Group are measured using the currency of the primary economic environment in which each subsidiary operates (its functional currency).

Whilst Jersey uses the Jersey Pound as its currency, Jersey is in a currency union with the United Kingdom and so the functional currency of the parent company of the Group has been determined to be GBP.

Foreign currency transactions

Transactions in currencies other than an entity's functional currency (foreign currencies) are translated using the exchange rate on the date of the transaction. Foreign exchange gains and losses resulting from the settlement of transactions denominated in a foreign currency are translated into GBP using the relevant exchange rate at the date of the transaction.

Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation at the balance sheet date of monetary assets and liabilities denominated in foreign currencies, are recognised in the consolidated statement of comprehensive loss within gains/ (losses) on foreign currency transactions.

Foreign currency gains/(losses) realised on the retranslation of subsidiaries as part of the year-end consolidation are recorded in the translation reserve that forms a part of shareholders' funds in the consolidated financial statements of the Group.

Consolidation of subsidiaries

Subsidiaries are all entities over which the Company has control. The Company controls an entity when it is exposed to, or has rights over, variable returns from its involvement with the entity and can affect those returns through its ability to exercise control over the entity. Subsidiaries are consolidated in the Group financial statements from the date at which control is transferred to the Company.

Subsidiaries are deconsolidated from the date that control ceases. The ability to control an entity may cease because of the sale of a subsidiary or other change in the Company's shareholding in that subsidiary, voting rights or board representation.

Foreign operations

Subsidiaries of the Company that are based in countries other than the UK or Jersey may have functional currencies that are different from that of the Company. In addition, the Group financial statements are presented in GBP. The assets and liabilities of foreign subsidiaries consolidated into these financial statements are translated into the Group's presentational currency using exchange rates prevailing at the end of the reporting period. Income and expense items are similarly translated using the month-end rate for each month during the year. The exchange rates on the actual dates of transactions are used where exchange rates fluctuate significantly within a month. Exchange differences arising on consolidation are recognised in other comprehensive income and are accumulated as part of shareholder's equity.

Investments in associates and joint arrangements

Associates are entities where the Company can exert significant influence but is not able to exercise control.

Joint arrangements may be incorporated, where an entity exists, or may be unincorporated, where the venture or joint operation is governed by contract or other arrangement between two or more parties. The Company is not currently party to any unincorporated joint arrangements.

The Group accounts for its interests in associates and incorporated joint ventures using the equity method of accounting where the relevant investment is initially recorded at the cost to acquire the interest. After initial recognition, the Group recognises its share in the post-acquisition income and expenses of the associate in the statement of profit and loss with a corresponding increase (for income) or decrease (for losses) in the carrying value of the investment in the associate.

Dividends received by the Company from an associate are treated as a reduction in the carrying value of the associate (as its net assets have reduced by it giving the dividend) and income for the Group (as its net assets have increased by receiving the dividend).

The Group assesses the carrying value of associates for impairment at each reporting period end or at any other time where there is an indication that an impairment may exist. Where there is an indication of impairment of an investment, the Group assesses if an actual impairment loss exists by comparing the carrying value of the investment to its recoverable amount which is the lower of its fair value less cost to sell or its value in use.

Fair value less costs to sell is determined by reference to the proceeds that could be expected to be received should the interest in the associate be sold less the costs of doing so. Value-in-use is typically calculated by reference to the value of the discounted cash flows expected to be received from the associate.

Where there is a deficit of recoverable value as compared to the carrying value of the investment then an impairment loss is recognised in the consolidated statement of profit and loss in the amount of the calculated deficit. The carrying value of the investment in the associate is also reduced by a corresponding amount.

Acquisitions

The Group allocates the purchase consideration given in respect of the acquisition of a subsidiary to the assets acquired and liabilities assumed based on an assessment of their individual fair values at the date of acquisition. Any excess of the cost of the acquisition over the fair value of assets acquired and liabilities assumed in the business combination is recognised as goodwill.

The assessment of fair value is made by comparing the discounted value of the future cash flows expected to be generated from the CGU to which the goodwill has been allocated to the net book value of the assets and liabilities of that CGU including the allocated goodwill. Where a deficit of discounted cash flows compared to the carrying value of the CGU's net assets and allocated goodwill exists, the goodwill is reduced to its recoverable amount with a corresponding amount recognised as an impairment charge in profit or loss. A corresponding reduction is made to the carrying value of goodwill and then to the net assets of the CGU if goodwill is insufficient to absorb the loss. Goodwill may also be tested for impairment under the fair value less costs to sell method where the recorded value of goodwill is compared to the market or value of the Company calculated by reference to its share price.

Any such impairment loss is recognised in profit and loss in the period in which it is identified. Impairment losses related to goodwill cannot be reversed in future years.

Transaction between entities within the Group

Transactions and balances between companies forming part of the Group together with any unrealised income and expenses arising from intra-group transactions are eliminated in the preparation of the consolidated financial statements of the Group.

Discontinued operations

A discontinued operation is a component of the Company's business that represents a separate major line of business or geographical area of operations that has been disposed of or is held for sale. Classification as a discontinued operation occurs on actual disposal or earlier if the operation meets the criteria to be held for sale. When an operation is classified as a discontinued operation, the comparative consolidated statement of profit and loss is restated as if the operation had been discontinued from the start of the comparative period.

Disposal of subsidiaries

Transactions that result in the loss of control of a subsidiary are accounted for as disposals. The previously consolidated assets and liabilities and the carrying amount of any non-controlling interests in the subsidiary are derecognised. Any retained interest in the former subsidiary is recognised at its fair value at the date when control is lost. A gain or loss on disposal is recognised as the difference between the fair value of the consideration received together with the fair value adjustment made in respect of any retained interest in the subsidiary as offset by the carrying value of the assets and liabilities derecognised. Any gains or losses of the disposed entity that were previously recognised in other comprehensive income or loss and that require to be recycled to profit or loss also form part of the gain or loss on disposal.

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(forming part of the consolidated historical financial information)

New standards, amendments and interpretations effective and adopted by the Group in 2021

No new standards became effective for the preparation of financial statements in accordance with IFRS for the year ended 31 December 2021.

Amendments to existing standards previously issued by the IASB with effective dates during the year ended 31 December 2021 are summarised below. There was no effect on the Group's consolidated financial statements for the year ended 31 December 2021 as a result of the adoption of these amendments.

Amendment to 'IAS 37 Provisions, contingent liabilities and contingent assets'

An amendment to IAS 37 was published in May 2020 and requires the provision in respect of an onerous contract to also include an assessment of the indirect costs, such as production overhead or indirect labour, that are expected to be incurred in servicing a contract considered to be onerous.

The Company elected to early adopt the amendment as of 1 January 2020.

New standards and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2021 reporting periods and have not been early adopted by the Company. These standards are not expected to have a material impact on the entity in the current or future reporting periods or on foreseeable future transactions.

Amendment to 'IFRS 16 Leases'

IFRS 16 was issued by the IASB in January 2016 with an effective date of 1 January 2019 and introduced a single lease model requiring the recognition of right-of-use assets for all leases with a term greater than 12 months together with a corresponding lease liability. There is no longer any distinction between the accounting treatment for lease contracts that were previously classified as either operating leases or finance leases. IFRS 16 was adopted by the Group in its 2019 annual report and financial statements, as required by the standard.

On 28 May 2020, the IASB issued an amendment to the standard related to the treatment of rent concessions given by lessors in relation to COVID-19. The Group did not receive any rent concessions related to COVID-19 that would require consideration of the amendment to IFRS 16 and, accordingly, the amendment had no impact on the consolidated financial statements for the years ended 31 December 2020 or 2021.

Amendments to 'IFRS 9 Financial Instruments', 'IAS 39 Financial Instruments: Recognition and Measurement' and 'IFRS 7 Financial Instruments: Disclosures'

On 26 September 2019, the IASB issued 'Interest Rate Benchmark Reform (Amendments to IFRS 9, IAS 39 and IFRS 7)' related to potential effects of the IBOR reform on financial reporting related to hedging instruments. The amendment was effective for accounting periods starting on or after 1 January 2020. The Company does not currently use hedges or other purchased derivative instruments and therefore there is no impact on the Group financial statements for the year ended 31 December 2021.

A second amendment related to the IBOR reform was issued on 27 August 2020 with an effective date of 1 January 2021. This amendment is similarly not expected to have an impact on the financial reporting for the Group.

Critical accounting judgments and key sources of estimation uncertainty

The preparation of the financial statements in conformity with generally accepted accounting practice (GAAP) requires management to make estimates and judgments. Those estimates and judgments can affect the reported values for assets and liabilities as well as the disclosure of contingent assets and liabilities at the balance sheet date.

Management is also required to make estimates and judgments related to the reported amounts of revenues and expenses and related to the timing of the recognition of those revenues and expenses.

Judgments made and estimates applied are based on historical experience and other factors including management's expectations of future events that are considered relevant. Actual results may differ from these estimates. The estimates, judgments and underlying assumptions made are reviewed on an ongoing basis and specifically in the preparation of the interim and annual published financial information.

Revisions to accounting estimates are recognised in the period in which the estimate is revised and applied consistently in future periods subject to the ongoing reassessment of estimates.

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(forming part of the consolidated historical financial information)

Critical judgments for the year under review

Going concern

The directors are required to assess whether it is appropriate to prepare the financial statements on a going concern basis. In making this assessment the directors need to be satisfied that the Group can meet its obligations as they fall due and will remain cash-positive for a period of at least 12 months from the date of approval of the financial statements. Potential additional funding that is not yet committed at the date of approval of the financial statements cannot be anticipated in making the assessment of going concern.

The directors make their assessment based on a cash flow model prepared by management and based on its expectation of cash flows for the 18-month period from the date of approval of the financial statements. The extended period in the model provides additional comfort that the 12-month solvency requirement can be met when making the assessment of going concern.

In preparing the cash flow model, assumptions have been made regarding the timing of cash collection from customers based on the expected cash receipt under contracts that require milestone payments to be made by customers. The timing of the receipt of milestone payments may not always align with or precede the costs incurred by the Company in performing its obligations under a contract.

Downside sensitivities have been applied to the cash flows primarily related to the delay of customer receipts, from existing or expected sales contracts, and fluctuations in the price of input materials, particularly electrolyte. Refer to 'Basis of preparation' for details of the going concern analysis performed and the directors' conclusions regarding going concern.

Notwithstanding the material uncertainty articulated in relation to the basis of preparation, the directors expect that the business will continue to be viable throughout the model period and, accordingly, the financial statements have been prepared on a going concern basis.

Revenue recognition

Sales contracts are assessed in accordance with the Group accounting policy for revenue recognition. The policy requires the separate performance obligations, or promises, under the contract to be identified. Revenue is recognised only when a distinct performance obligation under a contract is satisfied.

Some performance obligations are satisfied separately – for instance, the delivery of equipment, other obligations may be satisfied in conjunction with other contract promises or where a contract calls for equipment sold under the contract to be integrated into a larger project before formal acceptance is notified by the customer.

Where the ability of a customer to benefit from a product or service is dependent on the satisfaction of other performance obligations, more than one promise may need to be bundled together as a combined performance obligation that must be satisfied before the revenue related to each element can be recognised.

Identifying where equipment or, more likely, services are readily available from other providers is a key determinant as to whether a contract promise represents a separate performance obligation or if it should be bundled with other promises that, together, represent a single performance obligation.

The assessment of what constitutes a performance obligation can be complex and requires judgment. Revenue is only recognised for each performance obligation under a contract when that performance obligation, bundled or otherwise, is satisfied. The requirement to bundle combinations of goods and/or services together as a single performance obligation could delay the timing of revenue recognition where the separate promises comprising the performance obligation are delivered sequentially.

Key sources of estimation uncertainty for the year under review

Warranty provision

The Company provides time-limited standard warranties in its contracts for sale of battery systems. In addition, customers may elect to purchase separate, standalone extended warranties. Extended warranties are for periods greater than the standard warranties that are provided with the purchase of all battery systems.

Estimating the costs that may be incurred by the Company in servicing warranty agreements requires management to estimate the number of expected claims in relation to the total number of battery systems sold. In addition, an estimate of costs that the Company could expect to incur to remedy each warranty claim should also be made to determine the amount of the total provision that should be recorded for warranties.

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Provisions made in respect of expected warranty obligations are reassessed and remeasured where actual experience indicates the claim rate may be higher or lower than initially expected or where costs to remedy warranty claims differ from the assumptions used in calculating the provision. The release of an over-provision of warranty costs results in other operating income being recognised in the period whereas an additional provision for warranties results in a charge being recognised.

Refer to note 21, contract related balances.

Provision for legacy products

Management has elected to provide ongoing maintenance for certain legacy contracts not otherwise covered under warranty. Management has determined that it is necessary to provide for the costs of this ongoing maintenance or to provide for outright decommissioning.

Refer to note 21, contract related balances.

Provision for onerous contracts

A contract is onerous when the unavoidable costs of meeting the Company's obligations under the contract are expected to be greater than the revenue earned under that contract. Previously, assessment of the unavoidable costs under a contract only required direct costs such as parts and labour to be considered.

An amendment to 'IAS 37 Provisions, contingent liabilities and contingent assets' was published in May 2020 and requires the provision in respect of an onerous contract to also include an assessment of the indirect costs, such as production overhead or indirect labour, that are expected to be incurred in servicing a warranty claim. The Company elected to early adopt the amendment as of 1 January 2020.

The assessment of future costs is inherently subjective and requires the exercise of judgment in determining the appropriate amount of provision that may be required.

Refer to note 21, contract related balances.

Share based payments, warrants and employee options

The Company determines the fair value of share-based payments and employee options using a Black-Scholes methodology. Black-Scholes uses certain assumptions to determine fair value including measures of share price volatility, expected conversion or exercise rates and levels of employee retention, among others.

In estimating the value of future share price volatility, a key input of the Black-Scholes methodology, the Company uses historic data relating to its share price. As the short and long-term warrants are listed, and therefore can be publicly traded, this provides an alternative arms-length determination of fair value.

Operating segments

The Group is organised internally to report to the Executive Directors as a whole. The Executive Directors comprise the Chief Executive Officer, the Chief Commercial Officer and the Chief Financial Officer. The Executive Directors, as a group, have been determined, collectively, to prosecute the role of chief operating decision maker of the Group.

The chief operating decision maker is ultimately responsible for entity-wide resource allocation decisions, the evaluation of the financial, operating and ESG performance of the Group.

The Group's activities have been determined to represent a single operating segment being the provision of vanadium flow batteries and ancillary services, principally comprising installation and integration services, and the provision of extended warranties for battery units sold.

3 Accounting policies

Revenue

The Group measures revenue based on the consideration specified in the contracts for sale with customers. Revenue is recognised when a performance obligation is satisfied by transferring control over a good or service to a customer. Control is usually considered to have transferred to a customer on delivery of equipment to the customer's site of operations. Revenue excludes any taxes such as sales taxes, value added tax or other levies that are invoiced and collected on behalf of third parties, such as government tax authorities.

The Group generates revenue from the sale of battery storage systems and related hardware and services. The main portion of sales is derived from contractual arrangements with customers that have multiple elements (or performance obligations), those elements usually being the sale of battery systems, system related options, installation, and extended warranties. The sales contracts do not include a general right of return.

For contracts that contain multiple elements or promises, the Group accounts for individual goods and services separately if they are distinct. A product or service is distinct if it is separately identifiable from other items in the agreement and where a customer can benefit from the good or service on its own or together with other resources that are readily available.

The consideration paid for each performance obligation is typically fixed. A significant portion of the aggregate payment due under a contract for sale is normally due before delivery or completion of the service. The total consideration under the contract is allocated between the distinct performance obligations contained in the contract based on their stand-alone selling prices. The stand-alone selling price is estimated using an adjusted market assessment approach that looks to industry benchmarks or pricing surveys for certain standalone products or services.

In addition, under the terms of its contracts for sale, the Group may be responsible for delivering battery systems to its customers. When this is the case, the Group will invoice the relevant customer for, and will recognise as revenue, any charges incurred together with any associated handling costs. The related costs incurred by the Group for shipping and handling services are recognised as cost of sales concurrent with the recognition of the associated revenue.

Grant income

Government and other grants received are recognised in the consolidated statement of profit and loss in the period that the related expenditure is incurred. Grant income received in respect of costs incurred is presented net within the associated cost category. Capital grants are similarly netted against the relevant asset acquired or constructed.

Grant income received in advance of the associated expenditure is presented as deferred income within contract liabilities and released to profit and loss as the associated expenditure is incurred. Grant income receivable is presented as accrued income within contract assets until such time as it can be claimed or is received.

Finance income and costs

Finance income comprises interest on cash deposits, foreign currency gains and the unwind of discount on any assets that are carried at amortised cost. Interest income is recognised as it accrues using the effective interest rate method.

Finance costs include foreign currency losses and the unwind of the discount on any liabilities held at amortised cost, such as lease liabilities arising from lease contracts.

Employee benefits

Short-term benefits

Benefits provided to employees that are short-term in nature are recognised as expenses in the statement of profit and loss as the related service is provided. The principal short-term benefits given to employees are salaries, associated holiday pay and other periodic benefits such as healthcare and pension contributions made by the Company for the benefit of the employee. A liability is recognised for the amount expected to be paid under short-term cash bonus plans if there is either a present legal or constructive obligation to pay the amount and the amount can be reliably estimated.

Share based payments

The Group operates equity-settled share-based compensation plans, under which it compensates employees for services rendered through the issue of equity instruments, deferred share awards or options to subscribe for ordinary shares of the Company. The fair value of the employee services received in exchange for the grant of the equity instruments, shares or options is recognised as an expense. The total amount to be expensed is determined by reference to the fair value of the options granted:

- including any market conditions (for example, the Company's share price)
- excluding the impact of any service and non-market performance vesting conditions (for example, profitability, sales growth targets, and the requirement to remain as an employee of the Group over a specified period)
- including the impact of any non-vesting conditions (for example, the requirement for an employee to save)

Non-market performance and service conditions are included in the assumptions regarding the number of options that are expected to vest. The total expense is recognised over the vesting period, which is the period over which all the specified vesting conditions are to be satisfied.

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In some circumstances, employees may provide services in advance of the grant date and therefore the grant date fair value is estimated for the purposes of recognising the expense during the period between service commencement and the grant date.

At the end of each reporting period, the Group revises its estimates of the number of options that are expected to vest based on the non-market vesting conditions. It recognises the impact of the revision to original estimates, if any, in the consolidated statement of profit and loss, with a corresponding adjustment to equity.

Any social security contributions payable in connection with the grant of the share options is considered an integral part of the grant itself, and the charge will be treated as a cash-settled transaction.

Taxes

The total tax charge or credit recognised in the statement of profit and loss comprises both current and deferred taxes.

Taxation is recognised in the consolidated statement of profit and loss except to the extent that it relates to a business combination or items recognised directly in equity or other comprehensive income.

Current tax

The current tax charge is based on the taxable profit for the year. Taxable profit or loss is different from the profit or loss reported in the statement of profit and loss as it excludes items of income and/or expense that are taxable or deductible in other years (temporary differences) and it further excludes items that are never taxable nor deductible (permanent differences).

Deferred tax

Deferred tax is the tax that is expected to be payable or recoverable on differences between the carrying value of assets and liabilities in the financial statements and the corresponding value of those assets and liabilities used to calculate taxable profit or loss.

Deferred tax assets are recognised as deductible temporary differences only where it is probable that taxable profits will be generated against which the carrying value of the deferred tax asset can be recovered. Deductible temporary differences exist where there is a difference in the timing of the recognition of an item of income or expense between the statement of profit and loss and the calculation of taxable profit or loss (a temporary difference).

Deferred tax assets and liabilities are recognised using the liability method for all taxable temporary differences, except in respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint operations. Where the timing of the reversal of temporary difference arising from such investment related assets and liabilities can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future then the Group does not recognise deferred tax liabilities on these items.

A deferred tax asset or liability is not recognised if a temporary difference arises on initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.

Current and deferred tax is calculated using tax rates and laws that have been enacted or substantively enacted at the balance sheet date.

Earnings per share

The Group presents basic and diluted earnings per share ("EPS") data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the year.

Diluted EPS is determined by adjusting the weighted average number of ordinary shares outstanding used in the EPS calculation to include all potentially dilutive ordinary shares, which, in the case of the Company, represents additional shares that could be issued in relation to 'in-the-money' convertible notes, warrants or share options.

The effects of anti-dilutive potential ordinary shares are ignored in calculating diluted EPS. Anti-dilution is when an increase in earnings per share or a reduction in loss per share would result from the exercise of such options, warrants or convertible instruments.

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(forming part of the consolidated historical financial information)

Intangible assets

Goodwill

The Group allocates the fair value of the purchase consideration on the acquisition of a subsidiary to the assets acquired and liabilities assumed based on an assessment of fair value at the acquisition date. Any excess of purchase consideration is recognised as goodwill. Where goodwill is recognised, it is allocated to the cash generating units (CGUs) in a systematic manner reflective of how the Group expects to recover the value of the goodwill.

Goodwill arising is recognised as an intangible asset in the balance sheet and is subject to annual reviews for impairment. Goodwill is written off where circumstances indicate that the recoverable amount of the underlying CGU may no longer support the carrying value of the goodwill. An impairment charge is recognised in the statement of profit and loss for the period in which it is determined the goodwill is no longer recoverable. Impairment losses related to goodwill cannot be reversed in future periods.

In testing for impairment, goodwill recognised on business combinations is allocated to the Group of CGUs representing the lowest level at which it will be monitored. Because the Group has been determined to consist of a single business unit, the carrying value of goodwill is tested for impairment based on the recoverable value of the Group as a whole.

The recoverable amount of a CGU or a group of CGUs is based on the higher of its assessed fair value less costs of disposal or its value-in-use. Value-in-use is calculated by reference to the expected future cash flows from the CGU, after discounting to take account of the time value of money. Fair value less costs to sell can be based on a similar cash flow measure adjusted for disposal costs or can be estimated by reference to similar comparable reference transactions.

Because the Company is listed, fair value can also be assessed by reference to the Company's market capitalisation. Where cash flows are used, they are risk weighted to reflect an assessment of future commercial success.

The key assumptions in assessing cash flows relate to the ability of the Company to develop existing markets and applications and to establish new markets and applications for the sale and use of its battery systems. Prospective cash flows are also sensitive to the Company's ability to realise economies of scale as market penetration grows.

Internally generated intangible assets – research and development costs

Research

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Research activities are aimed at creating new knowledge or the use of existing knowledge in new or creative ways to generate new concepts. Research activity does not typically have a defined commercial objective at the outset.

Development

Where projects evolve toward commerciality or are related to a specific commercial objective they are assessed to determine whether the activity constitutes development that is associated with a commercial objective or practical application.

The associated costs represent development costs and can be capitalised if, and only if, the following conditions can be demonstrated:

- the technical feasibility of completing the intangible asset so that it can be made available for use or sale;
- the intention to complete the intangible asset for use or sale;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell it;
- an asset is created that can be separately identified for use or sale;
- it is probable that the asset created will generate future economic benefits; and
- the development cost of the asset can be measured reliably.

Development work undertaken by the Group typically relates to the refinement of design, materials selection, construction techniques, firmware and control systems to enhance battery system performance over successive generations. Where development costs are capitalised, they are amortised over the expected period to the introduction of the next generation of battery system.

Amortisation is recorded over that period on a straight-line basis with the corresponding amortisation charge recognised in the statement of profit and loss as a component of administrative expenses.

Four years has historically been the typical cycle time between successive generations of battery system design.

Notes

(forming part of the consolidated historical financial information)

Other intangible assets

Intangible assets other than goodwill that are acquired by the Group are stated at their historical cost of acquisition less accumulated amortisation and any impairment losses.

Software and purchased domain names

Third-party software is initially capitalised at its cost of purchase. Amortisation is charged to administrative expenses over the expected useful life of the software which has been assessed as three years from the date of acquisition.

Acquired domain names are initially capitalised at cost of purchase. Amortisation is charged to administrative expenses over the expected useful life of the domain name which has been assessed as ten years from the date of acquisition.

Patents and certifications

Patent rights and certifications are initially capitalised at the cost of applying for relevant patent rights and other protections, and certifications. Amortisation is charged to administrative expenses over the expected useful life of the patents and certifications which has been assessed as five years from the date of acquisition.

Property, plant and equipment

Items of property, plant and equipment are stated at historical cost less accumulated depreciation and any impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Subsequent expenditure is only included in the asset's carrying amount or recognised as a separate asset, as appropriate, when it is probable that future economic benefits associated with that item will flow to the Group.

Costs that do not enhance the value of an asset such as repair and maintenance costs are charged to the statement of profit and loss in the period in which they are incurred.

Depreciation is charged to write off the cost of assets over their estimated useful lives on a straight-line basis. Depreciation commences on the date the asset is brought into use. Work-in-progress assets are not depreciated until they are brought into use and transferred to the appropriate category of property, plant and equipment.

Estimated useful lives for property, plant and equipment are:

Category	Period (years)	Recognition in statement of profit and loss
Computer and office equipment	3-5	Administrative expenses
Leasehold improvements	Shorter of lease term or useful life	Administrative expenses/ Cost of sales
Vehicles	3	Administrative expenses
Manufacturing equipment and tooling	3-20	Cost of sales
R&D Equipment	5-10	Administrative expenses
Software and purchased domain names	3	Administrative expenses
Patents and certifications	10	Administrative expenses

Depreciation methods, useful lives and residual values of assets are reviewed, and adjusted prospectively as appropriate, at each reporting date.

Where an asset is disposed of, the corresponding gain or loss on disposal is determined by comparing the sales proceeds received with the carrying amount of that asset at the date of disposal. Gains or losses on disposal of fixed assets are included within other items of operating income and expense in the statement of profit and loss.

Impairment of tangible and intangible assets

The Group reviews the carrying values of its tangible and intangible assets, other than goodwill, at each balance sheet date to determine if any indicators exist that could mean those assets are impaired. Where an indicator of impairment exists the recoverable amount of the relevant asset (or CGU) is estimated to determine the amount of any potential impairment loss.

Recoverable amounts are determined using a discounted cash flow model related to each asset or CGU being assessed. The discount rate applied to the cash flows in the model is a pre-tax discount rate that reflects market assessment of the time value of money and risks specific to the Company or the groups of assets being considered.

If the recoverable value estimated in the cash flow model for a specific asset (or CGU) is lower than the carrying value, then the carrying value of the asset is reduced to its estimated recoverable value with a corresponding charge immediately recognised in the statement of profit and loss.

Where the condition that gave rise to an impairment loss reverses in a subsequent period, the impairment loss is similarly reversed and the carrying value of the asset increased to the revised estimate of its recoverable value. The carrying value of an asset immediately following the reversal of an impairment cannot exceed the carrying value that the asset would have had if the original impairment had not been made and the asset was depreciated as normal.

A reversal of an impairment loss is recognised immediately in profit or loss.

The value of any impairment (or reversal of impairment) of an asset is recorded in the same financial statement line item where depreciation or amortisation of the asset would normally be shown.

Where it is impractical to meaningfully assess recoverable amount using a discounted cash flow model, for instance where near term cash flows are low or negative, an assessment of the fair value adjusted for the costs that would be incurred in the disposal of an asset or operation is used. This is typically the case for development stage assets, operations or associated intangible assets (including goodwill) where the underlying products or technologies have not yet been commercialised.

Provisions

Provisions are established when the Group has a present legal or constructive obligation because of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount of that outflow can be reliably estimated.

Provisions are measured at the present value of the expenditures that are expected to be incurred in settling the obligation using a pre-tax discount rate that reflects current market assessment of the time value of money and the risks related to the obligation. The initial recognition of a provision results in a corresponding charge to profit or loss.

The increase in a provision as the discount rate unwinds due to the passage of time, is recognised in the statement of profit and loss as other items of operating income and expense.

Leases

Group entities only participate in lease contracts as the lessee. Lease contracts typically relate to vehicles and facilities.

On inception of a contract, the Group assesses whether it contains a lease. A contract is, or contains, a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The right to control the use of an identified asset is determined based on whether the Group has the right to obtain substantially all the economic benefits from the use of the asset throughout the period of use, and if the Group has the right to direct the use of the asset.

Obligations under a lease are recognised as a liability with a corresponding right-of-use asset, these are recognised at the commencement date of the lease.

The lease liability is initially measured at the present value of the lease payments that have not yet been paid at the inception of the lease, discounted using the interest rate implicit in the lease contract. Where the interest rate implicit in the lease contract cannot be readily determined, the Group's incremental borrowing rate is used.

Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability. The lease liability is measured at amortised cost using the effective interest rate method.

The lease liability is subsequently measured at amortised cost using the effective interest method. It is remeasured when:

- there is a change in future lease payments arising from a change in an index or rate;
- there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee; or
- the Group changes its assessment of whether it will exercise a purchase, extension or termination option.

When a lease liability is remeasured under one of these scenarios, a corresponding adjustment is made to the carrying value of the right-of-use asset or in profit and loss when the carrying amount of the asset has already been reduced to zero.

The corresponding right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, any initial direct costs incurred and an estimate of the costs required to remove or restore the underlying asset, less any lease incentives received. The right-of-use asset is amortised over the shorter of the asset's useful life and the lease term on a straight-line basis.

The Group has elected not to recognise right-of-use assets and corresponding lease liabilities for short-term leases, those existing leases with a remaining lease term of less than 12 months at 1 January 2021 and leases related to low value assets with an annual lease cost of £3,500 or less.

The Group recognises these lease payments as an expense on a straight-line basis over the lease term.

Inventory
Inventory is stated at the lower of cost and net realisable value. Cost comprises direct materials and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their current location and condition. Cost is calculated using the first-in, first-out method.

Net realisable value is calculated as the estimated selling price for an item of inventory less estimated costs of completion and the costs that would be incurred in the marketing, selling and distribution of an item of inventory.

Prepaid inventory
Prepaid inventory is recognised on inventory payments where physical delivery of that inventory has not yet been taken by the Group and is stated at the lower of cost and net realisable value.

Financial instruments
Financial assets and liabilities are recognised by the Group and recorded in the statement of financial position when the Group is contractually bound to the terms of the financial instrument. Financial assets and liabilities are derecognised when the Group is no longer bound by the terms of the financial instrument through settlement or expiry.

Financial assets

The classification of financial assets to which the Group is a party is determined by the nature of the underlying financial instrument and the characteristics of the contractual cash flows expected to be received under the terms of instrument.

Financial assets are not reclassified after their initial recognition unless there is a contractual change in the nature of the cash flows under the instrument or the business purpose of the instrument has changed.

A financial asset is recorded at amortised cost where it is expected to be held to maturity and the objective of the Group is to collect the contractual cash flows under the financial instrument based on specified contractual terms, including the timing of receipt of cash flows.

Financial assets that the Group is party to are classified and measured as follows:

Financial asset	Measurement basis
Trade receivables and accrued income	Amortised cost
Other current assets	Amortised cost
Contract assets	Amortised cost
Cash and cash equivalents	Amortised cost

Amortised cost

On initial recognition, the Group measures amortised cost for financial assets based on the fair value of each financial asset together with any transaction costs that are directly attributable to the financial asset.

After initial recognition, amortised cost is measured for each financial asset held using the effective interest rate method less any impairment loss identified. Interest income is recognised for all financial assets, other than those that are classified as short-term, by applying the effective interest rate for the instrument. Interest income on short-term financial assets is not considered to be material. Short-term financial instruments are determined as those that have contractual terms of 12-months or less at inception.

Interest income, foreign exchange gains and losses, impairment, and any gain or loss on derecognition are recognised in profit or loss.

Impairment of financial assets

A loss allowance for financial assets is determined based on the lifetime expected credit losses for financial assets. Lifetime expected credit losses are estimated based on factors including the Group's experience of collection, the number and value of delayed payments past the average credit periods across the Group's financial assets. The Group will also consider factors such as changes in national or local economic conditions that correlate with default on receivables and financial difficulties being experienced by the counterparty.

Financial assets are impaired in full and a corresponding charge is recognised in profit or loss where there is no reasonable expectation of recovery.

Financial liabilities

The classification of financial liabilities is determined at initial recognition. Financial liabilities are classified and measured as follows:

Financial liability	Measurement basis
Trade and other payables	Amortised cost
Borrowings	Amortised cost
Lease liabilities	Amortised cost

Amortised cost

At initial recognition, the Group measures financial liabilities at amortised cost using the fair value of the underlying instrument less transaction costs directly attributable to the acquisition of the financial liability.

Derecognition of financial liabilities

The Group derecognises financial liabilities when the Groups obligations under the relevant instrument are discharged, expired or cancelled.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held with financial institutions that can be called on demand together with other short-term, highly liquid investments with maturities of three months or less and are readily convertible to known amounts of cash.

Equity instruments

Instruments are classified as equity instruments if the substance of the relative contract arrangements evidences a residual interest in the assets of the Group after deducting all of its liabilities. Equity instruments issued by the Company are recorded as proceeds received, net of direct issue costs not charged to income.

Offsetting

A financial asset and a financial liability are offset and the net amount presented in the statement of financial position when, and only when, the Group:

1. has a legally enforceable right to set off the recognised amounts; and
2. intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

4 Revenue from contracts with customers and income from government grants

Segment information

The Group derives revenue from a single business segment, being the manufacture and sale of vanadium flow battery systems and related hardware together with the provision of services directly related to battery systems sold to customers.

The Group is organised internally to report on its financial and operational performance to its chief operating decision maker, which has been identified as the three executive directors as a group.

All revenues in 2021 were derived from continuing operations.

Revenue from contracts with customers	2021 £000	2020 £000
Battery systems and associated control systems	**2,481**	369
Integration and commissioning	**701**	34
Other services	**3**	3
Total revenue in the consolidated statement of profit and loss	**3,185**	406
Analysed as:		
Revenue recognised at a point in time	**3,182**	369
Revenue recognised over time	**3**	37
Total revenue in the consolidated statement of profit and loss	**3,185**	406

Geographic analysis of revenue

The Group's revenue from contracts with customers was derived from the following geographic regions:

Geographic analysis of revenue	2021 £000	2020 £000
United Kingdom	**2,796**	15
Asia	**273**	206
United States of America	**116**	167
Other	**—**	18
Total revenue in the consolidated statement of profit and loss	**3,185**	406

The Group maintains its principal production and assembly facilities in Bathgate, Scotland and Vancouver, Canada. These facilities include office space for design, sales and administrative teams. The Group also has offices, operations and management based in London, England and Oakland, California.

The Group does not consider that the locations of its operations constitute geographic segments as they are managed centrally by the executive management team. The location of the manufacturing plants and business development activity is a function of time-zone when servicing customers both pre-sale and during product delivery. The geographic location of offices, facilities and management is not related to distinct markets or customer characteristics at the present time.

Significant customers and concentration of revenue

Revenue from contracts with customers was derived from two (2020: four) customers who each accounted for more than 10% of total revenue as follows:

Significant customers and concentration of revenue	2021 £000	2020 £000
Customer A	**2,300**	—
Customer B	**495**	—
Customer C	**—**	127
Customer D	**—**	82
Customer E	**—**	81
Customer F	**—**	44

Notes

(forming part of the consolidated historical financial information)

Grant income other than revenue

The Group receives grant income to help fund certain projects that are eligible for support, typically in the form of innovation grants. The Group also received grant income related to operating costs under government subsidy programmes as part of national COVID response efforts. The total grant income that was received in the year was as follows:

Grant income received	2021 £000	2020 £000
Business support grants against cost of sales – COVID-19	—	17
Business support grants against employee costs – COVID-19	156	240
Grants for research and development	302	203
Economic and social development	—	35
Total government grants	**458**	495

5 Cost of sales

	2021 £000	2020 £000
Movement in inventories of finished battery systems	5,240	436
Production costs	826	374
Depreciation of production facilities, equipment and amortisation of intangibles	116	107
Movement in provisions for warranty costs	440	304
Total cost of sales	**6,622**	1,221

6 Administrative expenses

	2021 £000	2020 £000
Staff costs	8,980	5,811
Research and development costs	1,792	1,099
Professional fees	1,950	960
Sales and marketing costs	249	96
Facilities and office costs	655	787
Other administrative costs	813	840
Total administrative expenses	**14,439**	9,593

No development costs were capitalised in the period (2020: £nil).

7 Auditors' Remuneration

	2021 £000	2020 £000
Fees payable to the Company's associates for the audit of the parent company and consolidated financial statements	172	213
Audit of financial statements of subsidiaries pursuant to legislation	21	20
Fees payable to the Company's auditor for other services:		
— Tax compliance services	9	8
— Other assurance related services including Reporting Accountant services associated with readmission to AIM	—	597
	202	838

The Group has a policy in place related to the commissioning of non-audit service from its auditors where all such work requires pre-approval by the audit committee before the commencement of any non-audit work.

Audit fees are discussed with and approved by the audit committee.

Notes

(forming part of the consolidated historical financial information)

8 Staff costs and headcount

Staff costs	2021 £000	2020 £000
Wages and salaries	**7,617**	5,053
Employer payroll taxes	**625**	365
Other benefits	**508**	225
Share-based payments	**1,827**	854
Total staff costs	**10,577**	6,497

Administrative staff costs in the year were £8,979,790 (2020: £5,810,887) and staff costs included in cost of sales were £1,596,839 (2020: £687,585).

Average headcount	2021 Number	2020 Number
United Kingdom	**60**	52
Canada	**55**	33
United States of America	**7**	6
South Africa	**2**	2
Total	**124**	93

Increases in staff costs are due to hiring for expansion in operating activity and the delivery of key projects to customers.

Key management compensation

From 1 April 2020, the key management of the Group has been determined to comprise the members of the senior leadership team.

Key management compensation	2021 £000	2020 £000
Short-term employee benefits	**1,590**	1,410
Post-employment benefits	**—**	14
Termination benefits	**—**	75
Total key management compensation	**1,590**	1,499

The Group made contributions to the defined contribution schemes of key management in the year of £12,917 (2020: £3,000).

Notes
(forming part of the consolidated historical financial information)

9 Share based payments

Since its incorporation, the Company has operated various share-based incentive plans. The purpose of each of the schemes has been to incentivise directors and employees related to improving company performance and building shareholder value.

Set out below is a summary of the option awards in issue at 31 December 2021. The comparative figures for both number of awards outstanding at the end of 2020 and their respective exercise prices have been adjusted to reflect the 50:1 share consolidation that took place on 1 April 2020 (as rounded down to the nearest whole share).

Standard	Grant date	Final Expiry date	Exercise price	**2021**	Restated 2020
redT 2015 plan	07 Dec 2015	07 Jan 2020	58.95 €c	**137,602**	206,911
redT 2018 plan	18 May 2018	18 May 2023	352.50 p	**3,888**	3,888
redT 2018 plan	18 May 2018	18 May 2023	295.00 p	**—**	60,000
redT 2018 plan	29 Nov 2018	29 Nov 2023	350.00 p	**—**	40,000
Invinity Energy 2018 ESOP	01 Apr 2020	12 Mar 2030	82.50 p	**185,143**	202,000
Invinity Energy 2018 Consultant SOP	01 Apr 2020	12 Mar 2030	82.50 P	**378,000**	378,000
Invinity Energy 2018 ESOP	01 Apr 2020	07 Jul 2026	4.34 p	**1,429,812**	1,666,055
Invinity Energy 2018 ESOP	01 Apr 2020	08 May 2029	6.84 p	**661,237**	697,769
Invinity Energy 2018 ESOP	26 Aug 2020	26 Aug 2030	113.00 p	**2,505,000**	2,619,0000
Invinity Energy 2018 ESOP	28 Jan 2021	28 Jan 2031	204.00 p	**480,000**	—
Invinity Energy 2018 ESOP	04 Mar 2021	04 Mar 2031	152.00 p	**222,000**	—
Invinity Energy 2018 ESOP	15 Apr 2021	15 Apr 2031	151.00 p	**126,000**	—
Invinity Energy 2018 ESOP	03 Aug 2021	03 Aug 2031	134.50 p	**455,000**	—
Invinity Energy 2018 ESOP	29 Oct 2021	29 Oct 2031	111.50 p	**359,000**	—
Invinity Energy 2018 ESOP	20 Dec 2021	20 Dec 2031	91.00 p	**135,000**	—
				7,077,682	5,873,623
Non-standard	Grant date	Expiry date	Price	**2021**	2020
Long-term incentive plan	8 Dec 2009	30 Jul 2023	50.00 €c	**15,000**	15,000
Camco 2006 Executive Share Plan	30 Jul 2013	30 Jul 2023	50.00 €c	**68,127**	68,127
redT 2018 plan	30 May 2018	30 Jul 2023	400.00 p	**70,000**	70,000
				153,127	153,127
Total				**7,230,809**	6,026,750
Weighted average remaining contractual life of options outstanding at the end of the year				**8.82**	9.32

* Prior year comparatives have been restated to account for late notification of lapses and the mis-categorisation of certain awards. The net change in the reported prior year comparatives is a reduction of 3,152 share options.

A total of 332,481 options were exercised during the year with a weighted average exercise price of 15.33p per share.

The grant-date fair value of share options issued is calculated using a Black-Scholes methodology at the date of grant. Key inputs to the model include the share price at the date of grant, the option exercise price, the term of the award, share price volatility, the risk-free interest rate (by reference to government bond yields) and the expected dividend yield rate, which has historically been and continues to be zero, reflective of the development-stage nature of the Company.

The Long-term Incentive Plan, Camco 2006 Executive Share Plan and the redT 2015 Plan are now closed. No further options option awards will be made under either of these plans.

Notes

(forming part of the consolidated historical financial information)

The aggregate number of options granted, vested, exercised and forfeited during the year under the plans are summarised and analysed between unvested and vested awards as follows:

	Unvested	Unvested	Vested	Vested
At 1 January 2021	**4,034,591**	**98.84p**	**1,839,032**	**29.09p**
Granted	**2,015,000**	**149.64p**	**1,301,543**	**87.15p**
Paralleled	**—**	**—**	**—**	**—**
Forfeited	**(378,460)**	**134.35p**	**(100,000)**	**317.00p**
Vested	**(1,301,543)**	**87.15p**	**—**	**—**
Exercised	**—**	**—**	**(332,481)**	**15.33p**
At 31 December 2021	**4,369,588**	**113.47p**	**2,708,094**	**35.26p**
	Unvested	Unvested	Vested	Vested
At 1 January 2020	500,172	284.81p	263,725	143.79p
Granted	4,363,757	86.31p	1,431,214	4.77p
Paralleled	(124,815)	330.21p	(30,259)	342.46p
Forfeited	(358,578)	138.59p	(100,542)	318.56p
Vested	(345,945)	82.68p	345,945	82.68p
Exercised	—	—	(71,051)	52.32p
At 31 December 2020	4,034,591	98.84p	1,839,032	29.09p

Plans with non-standard performance conditions

Long-term incentive plan (LTIP)

The LTIP for directors and employees was approved by the board in 2008 and entitled directors and employees to receive equity settled payments annually based on the achievement of certain market and non-market performance conditions.

The LTIP is now closed. At the end of the year, there were 15,000 (2020: 15,000) options vested and exercisable at €0.5 per share under the LTIP.

CAMCO 2006 executive share plan (the plan)

The plan was established in 2017 to make awards of shares up to an aggregate of 10% of the share capital of the Company over a period of ten years.

The plan is now closed. At the end of the year there were 68,127 (2020: 68,127) options that had vested and were exercisable at €0.50 per share.

2018 plan

Options with non-standard performance conditions were also issued under the 2018 plan. At the end of the year 70,000 (2020: 70,000) options under the 2018 plan had vested and are exercisable at 400p per share.

Plans with standard performance conditions

The primary share plan that remains outstanding at 31 December 2021 is the 2018 plan. The 2018 plan was adopted by the board on 14 May 2018 and introduced HMRC scheme rules related to certain non-taxable option grants. The plan contains provision to issue options as CSOP, EMI or unapproved awards.

In the year ended 31 December 2020 the board approved the expansion of awards to be made under the 2018 plan with grants expected to be made more frequently going forward and to a potentially wider group of employees. The intention of the increase in frequency and quantity of employee share options granted was to incentivise and to better align employee compensation with shareholder return.

Options issued to legacy Avalon employees at the merger date

Following the merger transaction, 1,432,000 options were granted to legacy Avalon employees to replace options held by them in the former Avalon employee share plan. A total of 2,670,492 options are vested and exercisable under the 2018 plan at 31 December 2021 with a further 4,269,588 unvested share options outstanding.

Notes

(forming part of the consolidated historical financial information)

Parallel options issued

In addition, certain legacy redT options were reissued as they were considered by the board to be sufficiently 'out-of-the-money' such that they no longer provided a performance incentive to the holders of the options. As a mechanism to adjust the terms of the unfavourable options, new parallel options were issued on a one-for-one basis with the same terms as the original awards excepting that they were issued with a lower exercise price.

Both the original and parallel option schemes remain in existence. However, the exercise by an employee of a single option from either pool (original or parallel) allocated to them will cause the equivalent value in the other pool to be forfeited. Accordingly, the number of options disclosed above has been adjusted to remove the number of options that is equivalent to the number of parallel options issued.

Other options

On 10 May 2021, the Company granted an option for 8,672,273 shares to Gamesa Electric S.A. Unipersonal (GaE), a wholly-owned subsidiary of Siemens Gamesa Renewable Energy S.A. The options were granted to GaE in consideration of its entering into a joint development and commercialisation agreement with Invinity Energy Nexus Limited, a wholly-owned subsidiary of the Company.

The exercise price of the options is 175 pence and upon exercise of those options then for as long as GaE holds at least 5% of the issued share capital of the Company it shall be entitled, subject to certain conditions, to nominate one non-executive director to the board of the Company.

Warrants issued in the period

Short-term and long-term equity warrants

In December 2021, the Company issued 14,464,571 'placing units' comprised of one share, one short-term warrant and one long-term warrant.

Each short-term warrant gives the holder the right to subscribe for one new Ordinary Share at a price of 150 pence per Ordinary Share at any time from Second Admission until 15 September 2022. Each long-term warrant gives the holder the right to subscribe for one new Ordinary Share at a price of 225 pence per Ordinary Share at any time from Second Admission until 16 December 2024.

The warrants were admitted to trading on the Aquis Stock Exchange (AQSE) on 9 March 2022. There was no adjustment to the issue price in respect of the attached warrants and they have been deemed to have no fair value based on the price at which they are currently being quoted.

10 Other items of operating income and expense

The following items are Included in other comprehensive loss:

	2021 £000	2020 £000
Income		
Gain on disposal of scrap inventory and equipment	**—**	(27)
Expense		
Merger transaction costs	**—**	1,412
Provision for onerous contracts, net of amounts used	**3,762**	1,064
Impairment of inventory to net realisable value	**—**	1,019
Accelerated amortisation of development costs	**—**	6,138
Impairment of property, plant and equipment	**60**	56
Reversal of impairment of obsolete inventory and disposal of scrap inventory	**(390)**	8
Abnormal unabsorbed production overhead costs	**—**	152
Profit on disposal of subsidiary	**(15)**	—
Gain on curtailment of right-of-use asset	**(29)**	—
Total other operating income and expenses (net)	**3,388**	9,822

Notes

(forming part of the consolidated historical financial information)

11 Net finance income and costs

	2021 £000	2020 £000
Finance income		
Interest on bank deposits and money market funds	**–**	(1)
Finance costs		
Interest on borrowings	**–**	422
Fair value adjustment on convertible loan notes	**–**	1,162
Finance charges for loan financing	**–**	682
Finance charges for lease liabilities held at fair value	**45**	27
Finance charges for liabilities held at amortised cost	**–**	5
Losses on foreign currency transactions	**63**	1,744
Net finance costs/(income)	**108**	4,041

12 Income tax expense

	2021 £000	2020 £000
Current tax		
Current tax on profits for the year	**–**	–
Total current tax expense	**–**	–

Reconciliation of income tax expense calculated using statutory tax rate

	2021 £000	2020 £000
Loss before tax	**(21,372)**	(24,271)
Tax at the Jersey rate of nil%	**–**	–
Tax effect of amounts which are not deductible (taxable) in calculating taxable income:		
Non-taxable gains and expenses not deductible for tax	**(113)**	(12)
Differences in overseas tax rates	**(3,942)**	(2,775)
Unrelieved tax losses carried forward	**3,109**	2,684
Origination and reversal of timing differences not recognised	**946**	103
Tax income tax expense	**–**	–

13 Loss per share

Basic loss per share	2021 £000	2020 £000
From continuing operations	**(24.1)**	(41.0)
From continuing and discontinued operations	**(24.1)**	(41.0)

Diluted loss per share	2021 £000	2020 £000
From continuing operations	**(24.1)**	(41.0)
From continuing and discontinued operations	**(24.1)**	(41.0)

Loss used in calculation of basic and diluted loss per share	2021 £000	2020 £000
From continuing operations	**(21,372)**	(24,271)
From continuing and discontinued operations	**(21,372)**	(24,271)

All operational activity in the years ended 31 December 2020 and 2021 relate to continuing operations.

Earnings per share in respect of the year ended 31 December 2020 have been restated to give effect to the 50:1 share consolidation that took place in 2020 and to aid comparability.

Weighted average number of shares used in calculation	2021 Number	2020 Number
Basic	**88,768,750**	59,206,588
Diluted	**119,792,519**	59,637,677

Additional potential shares used in the calculation of diluted earnings per share primarily relate to potential shares outstanding at 31 December 2021 that may be issued in satisfaction of 'in-the-money' employee share options. Potentially dilutive shares related to outstanding warrants to subscribe for ordinary shares in the Company are also included in calculating diluted earnings per share.

Where additional potential shares have an anti-dilutive impact on the calculation of loss per share calculation, such potential shares are excluded from the weighted average number of shares used in the calculation.

Weighted average number of shares used in loss per share calculation – basic and diluted	2021 Number	2020 Number
In issue at 1 January	**85,900,616**	19,025,799
Shares issued in the year – weighted average	**2,868,134**	40,180,789
Weighted average shares in issue 31 December	**88,768,750**	59,206,588
Effect of employee share options and other warrants not exercised	**31,023,769**	431,089
Weighted average number of diluted shares in issue 31 December	**119,792,519**	59,637,677

Additional potential shares are anti-dilutive where their inclusion in the calculation of loss per share results in a lower loss per share. The weighted average number of shares not included in the diluted loss per share calculation because they had an anti-dilutive effect on the calculation was 2,094,626 (2020: 5,475,305).

14 Cash flows from operating activities

	2021 £000	2020 £000
Loss after income tax	**(21,372)**	(24,271)
Adjustments for:		
Depreciation and amortisation	**727**	577
Impairment of property, plant and equipment	**—**	56
Accelerated amortisation of intangible asset	**—**	6,138
Gain on disposal of property, plant and equipment	**—**	(6)
Impairment of inventory	**(390)**	1,027
Loss on disposal of scrap inventory	**—**	27
Share-based payments charge	**1,827**	—
Equity settled share-based payment expenses	**—**	707
Equity issued in lieu of service	**—**	68
Equity settled transaction costs on acquisition of subsidiary	**—**	(456)
Equity settled interest and transaction costs on convertible notes	**—**	(592)
Fair value adjustment on convertible notes and warrants	**—**	300
Net finance costs	**—**	2,297
Net foreign exchange differences	**(27)**	(1,220)
	(19,235)	(15,348)
Change in operating assets & liabilities		
(Increase) in inventory	**(4,487)**	(1,359)
(Increase)/decrease in contract assets	**(319)**	53
(Increase)/decrease in trade receivables and other receivables	**(1,650)**	115
(Increase) in other current assets and prepaid inventory	**(4,866)**	(750)
Increase in trade and other payables	**1,046**	3,348
Increase/(decrease) in warranty provision	**293**	(380)
Increase in onerous contract provision	**3,756**	1,060
Increase in contract liabilities	**2,498**	2,376
	(3,729)	(402)
Cash used in operations	**(22,964)**	(10,885)

Notes

(forming part of the consolidated historical financial information)

15 Goodwill and other intangible assets

	Goodwill £000	Development costs £000	Patents and certifications £000	Software and domain names £000	Total £000
Cost					
At 1 January 2021	**23,944**	**—**	**203**	**29**	**24,176**
Additions	**—**	**—**	**—**	**18**	**18**
At 31 December 2021	**23,944**	**—**	**203**	**47**	**24,194**
Accumulated amortisation					
At 1 January 2021	**—**	**—**	**(30)**	**(19)**	**(49)**
Amortisation charge	**—**	**—**	**(41)**	**(7)**	**(48)**
At 31 December 2021	**—**	**—**	**(71)**	**(26)**	**(97)**
Net book value					
At 1 January 2021	**23,944**	**—**	**173**	**10**	**24,127**
At 31 December 2021	**23,944**	**—**	**132**	**21**	**24,097**

	Goodwill £000	Development costs £000	Patents and certifications £000	Software and domain names £000	Total £000
Cost					
At 1 January 2020	6,971	5,818	—	—	12,789
Acquisitions of subsidiaries	18,206	—	203	2	18,411
Additions	—	—	—	9	9
Disposals	—	(6,138)	—	—	(6,138)
Foreign currency exchange differences	(1,233)	320	—	18	(895)
At 31 December 2020	23,944	—	203	29	24,176
Accumulated amortisation					
At 1 January 2020	—	—	—	—	—
Amortisation charge	—	—	(30)	(2)	(32)
Accelerated amortisation charge	—	(6,138)	—	—	(6,138)
Disposals	—	6,138	—	—	6,138
Foreign currency exchange differences	—	—	—	(17)	(17)
At 31 December 2020	—	—	(30)	(19)	(49)
Net book value					
At 1 January 2020	6,971	5,818	—	—	12,789
At 31 December 2020	23,944	—	173	10	24,127

Goodwill

All goodwill is tested annually for impairment. At 31 December 2021, goodwill was tested for impairment using a fair value less costs of disposal methodology by reference to the Company's quoted market capitalisation using the price of 92.5 pence per share at that date. No impairment loss was identified in relation to goodwill. The closing share price on 22 June 2022 was 53p, giving a market capitalisation of £61.5m which may indicate a potential impairment.

Patents and certifications

There have been no events or circumstances that would indicate that the carrying value of patents and certifications may be impaired at 31 December 2021.

Notes

(forming part of the consolidated historical financial information)

16 Property, plant and equipment

	Computer and office equipment £000	Leasehold improvements £000	Vehicles and equipment £000	Total £000
Cost				
At 1 January 2021	**748**	**513**	**753**	**2,014**
Additions	**158**	**169**	**406**	**733**
Disposals	**(123)**	**—**	**—**	**(123)**
Foreign currency exchange differences	**(3)**	**(1)**	**6**	**2**
At 31 December 2021	**780**	**681**	**1,165**	**2,626**
Depreciation				
At 1 January 2021	**(694)**	**(357)**	**(268)**	**(1,319)**
Depreciation charge	**(85)**	**(71)**	**(145)**	**(301)**
Disposals	**123**	**—**	**—**	**123**
Foreign currency exchange differences	**3**	**1**	**(3)**	**1**
At 31 December 2021	**(653)**	**(427)**	**(416)**	**(1,496)**
Net book value				
At 1 January 2021	**54**	**156**	**485**	**695**
At 31 December 2021	**127**	**254**	**749**	**1,130**

	Computer and office equipment £000	Leasehold improvements £000	Vehicles and equipment £000	Total £000
Cost				
At 1 January 2020	747	302	105	1,156
Acquisition of subsidiaries	22	86	364	472
Additions	20	90	239	349
Disposals	(6)	—	—	(6)
Foreign currency exchange differences	(35)	35	45	45
At 31 December 2020	748	513	753	2,014
Depreciation				
At 1 January 2020	(595)	(242)	(63)	(900)
Depreciation charge	(136)	(79)	(103)	(318)
Impairment	—	—	(56)	(56)
Foreign currency exchange differences	37	(36)	(46)	(45)
At 31 December 2020	(694)	(357)	(268)	(1,319)
Net book value				
At 1 January 2020	152	60	42	254
At 31 December 2020	54	156	485	695

The Group has no assets pledged as security. No amounts of interest have been capitalised within property, plant and equipment at 31 December 2021 (2020: £nil).

Notes

(forming part of the consolidated historical financial information)

17 Right-of-use assets

	Offices and facilities £000	Vehicles and equipment £000	Total £000
Cost			
At 1 January 2021	**1,572**	**28**	**1,600**
Additions	**627**	**—**	**627**
Curtailments[1]	**(294)**	**—**	**(294)**
Foreign currency exchange differences	**(60)**	**—**	**(60)**
At 31 December 2021	**1,845**	**28**	**1,873**
Depreciation			
At 1 January 2021	**(576)**	**(10)**	**(586)**
Depreciation charge	**(369)**	**(9)**	**(378)**
Foreign currency exchange differences	**66**	**—**	**66**
At 31 December 2021	**(879)**	**(19)**	**(898)**
Net book value			
At 1 January 2021	**996**	**18**	**1,014**
At 31 December 2021	**966**	**9**	**975**

1 A lease on a right-of-use asset in Canada has been curtailed in 2021, with the termination date changing from June 2027 to June 2023. There is a corresponding decrease in the outstanding lease creditor and a gain on curtailment recognised in the consolidated statement of profit and loss.

	Offices and facilities £000	Vehicles and equipment £000	Total £000
Cost			
At 1 January 2020	161	—	161
Acquisition of subsidiaries	1,135	25	1,160
Additions	34	—	34
Foreign currency exchange differences	242	3	245
At 31 December 2020	1,572	28	1,600
Depreciation			
At 1 January 2020	(90)	—	(90)
Depreciation charge	(223)	(4)	(227)
Foreign currency exchange differences	(263)	(6)	(269)
At 31 December 2020	(576)	(10)	(586)
Net book value			
At 1 January 2020	71	—	71
At 31 December 2020	996	18	1,014

Right-of-use assets relate to buildings, vehicles and equipment held under leases with third-party lessors. A right-of-use asset represents the Company's right to use a leased asset over the term of the lease. The Company's rights to use specific buildings, items of equipment or specific vehicles under lease arrangements represent assets to the Group.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

To determine the incremental borrowing rate, the Group:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received;
- uses a build-up approach that starts with a risk-free interest rate adjusted for credit risk for leases;
- held by the Group, which does not have recent third party financing; and
- makes adjustments specific to the lease, e.g. term, country, currency and security.

Notes

(forming part of the consolidated historical financial information)

18 Deferred tax balances

	2021 £'000	2020 £'000
Timing differences and tax losses on which deferred tax is not recognised:		
Accelerated capital allowances	**450**	221
Share options	**1,576**	3,704
Accrued liabilities	**477**	462
Reserves and other	**4,161**	600
Tax losses	**70,880**	56,225
Total deferred tax assets	**77,544**	61,212

Tax losses

The Company's subsidiaries carry on business in other tax regimes where the corporation tax rate is not zero. At 31 December 2021, the Group had the following tax losses carried forward available for use in future periods:

	2021 £'000	2020 £'000
United Kingdom	**40,530**	34,699
Canada	**3,799**	11,067
United States of America	**9,994**	7,657
Ireland	**16,557**	2,802
Total potential tax benefit	**70,880**	56,225

Under current tax legislation tax losses in the United Kingdom and Ireland can be carried forward indefinitely and be offset against future profits arising from the same activities at the tax rate prevailing at that time. There is a portion of the tax losses in the United States of America that will begin to expire in 2035, whereas the majority can be carried forward indefinitely. The tax losses in Canada can be carried forward 20 years. Tax losses in Canada will begin to expire in 2025.

Due to the uncertainty regarding the timing and extent of future profits within these subsidiaries, no deferred tax assets have been recognised in respect of these tax losses. Deferred tax is also not recognised on the timing differences between accounting and tax treatment in these subsidiaries given the offsetting tax losses on which no deferred tax has been recognised.

In March 2021, the UK Government announced that the rate of Corporation Tax will increase from 19% to 25% on profits of over £250,000. Profits below £50,000 will continue to be chargeable to Corporation Tax at 19% and profits between the two thresholds charged at the marginal rate of 26.5%. In computing the UK deferred tax asset, management has assumed that as neither the deferred tax assets nor the deferred tax liabilities will crystallise in the immediate future, then calculations based on 19% are appropriate.

19 Inventory

	2021 £000	2020 £000
Raw materials and consumables	**1,897**	698
Work in progress	**3,900**	207
Finished goods	**—**	—
	5,797	905

Inventory recognised as an expense within cost of sales during the current year amounted to £5,239,682 (2020: £436,461).

There was a net reversal of inventory write-downs in 2021 amounting to £389,808 (2020: write-down of £1,045,232). These were recognised as an expense and included in other items of operating income and expense.

20 Other current assets

	2021 £000	2020 £000
Prepayments and deposits	**533**	417
Prepaid inventory	**4,112**	691
Tax credits – recoverable	**247**	127
Due from joint venture	**—**	168
Other receivables	**1,388**	11
Total other current assets	**6,280**	1,414

Prepaid inventory is recognised on inventory payments where physical delivery of that inventory has not yet been taken by the Group and is stated at the lower of cost and net realisable value.

21 Contract related balances

The Group has recognised the following assets and liabilities related to revenue from contracts with customers that are in progress at the respective year-ends:

	2021 £000	2020 £000
Amounts due from customer contracts included in trade receivables	**1,683**	33
Contract assets (accrued income for work done not yet invoiced)	**324**	5
Contract liabilities (deferred revenue related to advances on customer contracts)	**(5,142)**	(2,644)
Net position of sales contracts	**(3,135)**	(2,606)

The amount of revenue recognised in the year that was included in contract liabilities at the end of the prior year was £2,231,000 (2020: £nil).

The aggregate position on customer contracts included in the statement of financial position will change according to the number and size of contracts in progress at a given year-end as well as the status of payment milestones made by customers toward servicing those contracts. The Group structures payment milestones in its customer contracts to cover upfront expenditure for parts and materials and other working capital requirements associated with the delivery of promises under customer contracts to better manage group cash flow.

The timing of revenue recognition is based on the satisfaction of individual performance obligations within a contract and is not based on the timing of advances received. Customer advances are recognised as contract liabilities in the statement of financial position and are released to income progressively as individual performance obligations are met. The difference in timing between the receipt of contract advances and the timing of the satisfaction of performance obligations for revenue recognition can cause values to remain in deferred income. The amount of such deferrals is related to both the overall size of the underlying contract and the planned pace of delivery in the related work schedule. This is expected to occur where satisfaction of performance obligations is evidenced by customer acceptance of the good or service that is the subject of the performance obligation.

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Provisions related to contracts with customers

	Warranty provision £000	**Legacy products provision £000**	**Provision for contract losses £000**	**Total £000**
At 1 January 2021	**—**	**824**	**1,103**	**1,927**
Charges to profit or loss:				
— Provided in the year	**257**	**36**	**4,028**	**4,321**
— Unused amounts reversed	**—**	**—**	**(51)**	**(51)**
Amounts used in the year	**—**	**—**	**(221)**	**(221)**
At 31 December 2021	**257**	**860**	**4,859**	**5,976**

	Restated Warranty provision £000	Restated Legacy products provision £000	Provision for contract losses £000	Total £000
At 1 January 2020	—	95	—	95
Acquisition of subsidiaries	—	1,011	39	1,050
Charges to profit or loss:				
— Provided in the year	—	340	1,084	1,424
— Unused amounts reversed	—	(51)	—	(51)
Amounts used in the year	—	(571)	(20)	(591)
At 31 December 2020	—	824	1,103	1,927

Warranty provision

The warranty provision represents management's best estimate of the costs anticipated to be incurred related to warranty claims, both current and future, from customers in respect of goods and services sold that remain within their warranty period. The estimate of future warranty costs is updated periodically based on the Company's actual experience of warranty claims from customers.

The element of the provision related to potential future claims is based on management's experience and is judgmental in nature. As for any product warranty, there is an inherent uncertainty around the likelihood and timing of a fault occurring that would cause further work to be undertaken or the replacement of equipment parts.

A standard warranty of up to two years from the date of commissioning is provided to all customers on goods and services sold and is included in the original cost of the product. Customers are also able to purchase extended warranties that extend the warranty period for up to a total of ten years.

Provision for legacy products

Where it is considered of commercial value, management has elected to provide ongoing maintenance for certain legacy products not otherwise covered under warranty. Management has determined that it is necessary to provide for the costs of this ongoing maintenance or to provide for outright decommissioning. The prior year presentation has been re-stated to reflect this.

Provisions in respect of legacy products are expected to unwind over the next two years when maintenance is either terminated or the products are decommissioned.

Provision for contract losses

A provision is established for contract losses when it becomes known that a customer contract has become onerous. A contract is onerous when the unavoidable costs of fulfilling the Group's obligations under a contract are greater than the revenue that will be earned from it.

The unavoidable costs of fulfilling contract obligations will include both direct and indirect costs.

The creation of an additional provision is recognised immediately in profit and loss. The provision is used to offset subsequent costs incurred as the contract moves to completion.

In determining the amount to be provided, management has evaluated the likelihood of input costs continuing to rise against a backdrop of inflation and instability due to current macro-economic factors such as the global response to Covid-19, the increasing price of oil feeding through to production and shipping costs and continuing supply chain issues.

Provisions in respect of contract losses relate to contracts which are expected to be delivered in 2022 and will therefore unwind during that year.

22 Trade and other receivables

	2021 £000	2020 £000
Total trade and other receivables	**1,683**	33

All trade and other receivables relate to receivables arising from contracts with customers.

Trade receivables are amounts due from customers for sales of vanadium flow battery systems in the ordinary course of business. Trade receivables do not bear interest and generally have 30-day payment terms and therefore are all classified as current.

The actual credit loss over 2021 was determined to be 0% of total sales (2020: 0%). No allowance for potential credit loses has been recognised in either period presented.

23 Cash and cash equivalents

	2021 £000	2020 £000
Cash at bank and in hand	**26,355**	21,760
Short-term investments	**—**	193
Total cash and cash equivalents	**26,355**	21,953

Short term investments

Term deposits are presented as cash equivalents if they have a maturity of three months or less from the date of acquisition and are repayable with 24 hours' notice with no loss of interest.

24 Trade and other payables

	2021 £000	2020 £000
Trade payables	**1,484**	498
Other payables	**456**	—
Accrued liabilities	**1,013**	653
Accrued employee compensation	**505**	1,010
Government remittances payable	**55**	307
Total trade and other payables	**3,513**	2,468

Trade payables are unsecured and are usually paid within 30 days.

The carrying amounts of trade and other payables are the same as their fair values due to the short-term nature of the underlying obligation representing the liability to pay.

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25 Lease liabilities

The Group's obligations under lease contracts are presented as follows:

At 31 December	2021 £000	2020 £000
Current – due within 12 months	**350**	161
Non-current – due after 12 months	**420**	595
Total lease liabilities	**770**	756

Payments of lease principal and interest in the period to 31 December were:

At 31 December	2021 £000	2020 £000
Payments of lease principal	**275**	163
Payments of interest	**45**	26
Total payments under leases	**320**	189

The contractual undiscounted cash flows for lease obligations at each period end were:

At 31 December	2021 £000	2020 £000
Less than one year	**379**	190
One to five years	**448**	493
More than five years	**—**	155
Total lease liabilities	**827**	838

Lease liabilities represent the present value of the minimum lease payments the Group is obliged to make to lessors under contracts for the lease of assets that are presented as right-of-use assets.

26 Issued share capital and reserves

	2021 No: 000	2021 £000	2020 No: 000	2020 £000
Authorised at 31 December	**120,000**	**—**	120,000	—
Issued and fully paid				
At 1 January	**85,900**	**37,870**	19,025	8,157
Issued in the year	**30,148**	**12,820**	66,875	29,713
At 31 December	**116,048**	**50,690**	85,900	37,870

During the year, 30,148,145 new shares were issued with a nominal value of £12,819,729. The total gross proceeds were £30,216,444 with the balance credited to the share premium account. Total costs of issuance were £1,496,412 and these costs were charged directly to the share premium account.

On 1 April 2020, the Company consolidated each ordinary share of €0.01 nominal value on a 50 to 1 basis, such that every 50 ordinary shares consolidated into one ordinary share of €0.50. The closing balance of shares at 31 December 2020 equated to 19,025,008 consolidated shares.

The holders of ordinary shares are entitled to receive dividends as may be declared from time to time and are entitled to one vote per share at meetings of the Company.

In the year ended 31 December 2021, Yorkville Advisors exercised 909,090 warrants at 107 pence to subscribe for ordinary shares in the Company. A total of 909,090 new ordinary shares were issued to Yorkville Advisors in return for total subscription proceeds of £972,726.

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company.

Share-based payment reserve
The share-based payment reserve comprises the equity component of the Company's share-based payments charges.

Currency translation reserve
The translation reserve comprises foreign currency differences arising from the translation of the financial statements of foreign operations.

Other reserve
Other reserve comprises the portion of the consideration paid for redT energy Holdings (Ireland) Limited's minority interests over the fair value of the shares purchased.

27 Financial assets and liabilities

All financial assets are held at amortised cost. There were no financial assets measured at fair value through other comprehensive income nor through profit and loss in either period presented.

The maximum exposure to credit risk at the end of the reporting period is the carrying amount of each class of financial asset presented above. The carrying value of the financial assets approximate their fair values due to the short-term maturities of these instruments.

The Group does not currently use derivative instruments for managing financial risk. All financial liabilities are held at amortised cost.

Recognised fair value measurements
The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

Level 1: The fair value of financial instruments traded in active markets (such as publicly traded derivatives, and trading securities) is based on quoted market prices at the end of the reporting period.

The battery systems manufactured by the Company use vanadium metal as a key component in the electrolyte. Vanadium is an actively traded commodity for which quoted market prices are available.

The Company does not currently hold inventories of vanadium. Vanadium purchased from third parties is solely for the use in electrolyte and open purchase contracts are not accounted for as derivatives.

Level 2: The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined using valuation techniques that maximise the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value instrument are observable, the instrument is included in Level 2. The Group did not hold any financial assets or liabilities that were required to be valued using level 2 inputs (2020: none)

Level 3: If one or more of the significant inputs is not based on observable market data the instrument is included in Level 3.

The Group did not hold any financial assets or liabilities that were required to be valued using level 3 inputs at 31 December 2021. At 31 December 2020, the warrant deed remained outstanding. No other financial instruments were outstanding at the period end that required to be valued using a methodology that uses Level 1, 2 or 3 inputs.

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28 Financial risk management

This note explains the Group's exposure to financial risks and how these risks could affect the Group's future financial performance. Current year profit and loss information has been included where relevant to add further context.

Risk	Exposure arising from	Measurement	Management
Market risk – foreign exchange	Future commercial transactions Recognised financial assets and liabilities not denominated in GBP	Cash flow forecasting Sensitivity analysis	Cash is held in GBP until non-GBP requirements for up to the next six-months are established, at which point the GBP is sold in favour of the required currency, which is then remitted to the relevant Group entity
Market risk – commodity price risk	Purchases of vanadium to be used in the battery electrolyte	Quoted market prices for vanadium	Strategic supply arrangements with multiple pre-qualified suppliers
Credit risk	Cash and cash equivalents, trade receivables and contract assets	Ageing analysis Credit ratings	Monitoring accumulation of bank balances Credit risk assessment for customers and pre-agreed deposits and interim payments within customer contracts
Liquidity risk	Borrowings and other liabilities	Rolling cash flow forecasts	Access to capital markets for equity or debt funding

Market risk – foreign exchange risk

The Group is primarily exposed to foreign exchange risk related to bank deposits, receivables or payables balances and other monetary working capital items that are denominated in a currency other than the Company's functional currency which has been determined to be GBP.

The Group does not speculate on foreign exchange and aims to mitigate its overall foreign exchange risk by holding currency in line with forecast regional operating expenses, providing an element of natural hedge against adverse foreign exchange movement.

The Group's exposure to foreign exchange risk at the end of the reporting period, expressed in GBP, was as follows:

31 December 2021	Sterling £000	Euro £000	Canadian dollar £000	US dollar £000
Cash and cash equivalents	24,141	96	284	1,174
Trade receivables	1,288	23	223	150
Other current assets	2,985	278	2,113	345
Trade and other payables	(1,438)	(382)	(1,229)	(460)
Lease liabilities	(356)	—	(299)	(102)
Net exposure	26,220	15	1,092	1,107

31 December 2021 (continued)	Chinese Yuan £000	South African rand £000	Australian dollar £000	Total £000
Cash and cash equivalents	—	28	632	26,355
Trade receivables	—	—	—	1,684
Other current assets	—	10	—	5,731
Trade and other payables	—	(4)	—	(3,513)
Lease liabilities	—	(13)	—	(770)
Net exposure	—	21	632	29,487

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31 December 2020	Sterling £000	Euro £000	Canadian dollar £000	US dollar £000
Cash and cash equivalents	19,536	136	1,122	929
Trade receivables	4	—	—	29
Other current assets	10	63	9	26
Trade and other payables	(933)	(208)	(424)	(750)
Lease liabilities	—	—	(548)	(178)
Net exposure	18,617	(9)	159	56

31 December 2020 (continued)	Chinese Yuan £000	South African rand £000	Australian dollar £000	Total £000
Cash and cash equivalents	82	8	140	21,953
Trade receivables	—	—	—	33
Other current assets	—	5	—	113
Trade and other payables	—	(7)	(146)	(2,468)
Lease liabilities	—	(30)	—	(756)
Net exposure	82	(24)	(6)	18,875

Sensitivity – exchange rates

The sensitivity of profit or loss to changes in quoted exchange rates for currencies to which the Group is exposed is as follows, based on each relevant exchange rate strengthening (or weakening) by 5%.

There is no impact on other components of equity as the Group is not party to any derivative financial instruments, such as hedging instruments, where currency gains and losses would be recognised in other comprehensive loss.

At 31 December +/- 5%	**2021 £000**	2020 £000
Euro	**(5)**	4
Canadian dollar	**(14)**	(8)
US dollar	**(56)**	(3)
Chinese yuan	**(1)**	(4)
South African rand	**(30)**	2
	(106)	(9)

Market risk – commodity price risk

The Group's batteries use vanadium as the key component of their electrolyte. Vanadium is an elemental metal and is used primarily to toughen steel, particularly for the construction industry.

Whilst it is not a mature market traded commodity, such that one can buy forward or derivative contracts, market prices for vanadium pentoxide (V2O5) at 98% purity are quoted in US dollars per pound.

Vanadium forms about two-thirds of the value of the electrolyte, which in turn forms about a quarter of the landed cost of a battery, and so a fluctuation in the price of vanadium will impact the profitability of battery sales. An increase or decrease in the market price of vanadium of 5% would cause the value of the electrolyte component of a battery to increase or decrease by approximately 3%.

Credit risk – cash held on deposit with banks

Credit risk arises from cash and cash equivalents and deposits with banks and other financial institutions.

Credit risk related to holdings with financial institutions is managed by only maintaining bank accounts with reputable financial institutions. The Group aims only to place funds on deposit with institutions with a minimum credit rating of B2 Moody's.

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The Group's cash at bank and short-term deposits are held with institutions with credit ratings as follows:

At 31 December	2021 £000	2020 £000
Aa2	**1,087**	1,531
A1	**25,240**	—
A2	**—**	20,221
Ba2	**28**	8
B2	**—**	193
	26,355	21,953

Credit risk – trade and other receivables

Past due but not impaired

The Group's credit risk from receivables encompasses the default risk of its customers and other counterparties.

Its exposure to credit risk is influenced mainly by the individual characteristics of each customer or counterparty. The creditworthiness of potential and existing customers is assessed prior to entering each new transaction. A credit analysis is performed, and appropriate payment terms implemented that may include increased level of upfront deposits for the purchase of battery units.

Notwithstanding the above, the Group's standard terms of trade provide that up to 90% of the sales price of a battery unit is paid prior to delivery.

Receivables are considered for impairment on a case-by-case basis when they are past due or where there is objective evidence that the customer or counter party may be a default risk. The Group takes into consideration the customer or counter party payment history, its credit worthiness together with the prevailing economic environment in which it operates to assess the potential impairment of receivables.

On an ongoing basis, receivable balances attributable to each customer or other counterparty are monitored and appropriate action is taken when the relevant balance becomes or is considered likely to become overdue. The maximum exposure to loss arising from receivables is equal to invoiced value.

The ageing of trade receivable balances was:

At 31 December	2021 £000	2020 £000
Current	**249**	—
Past due – less than 30 days	**—**	—
Past due – more than 30 days	**1,434**	33
Total trade and other receivables	**1,683**	33

Of the past due amounts at 31 December 2021, £nil was considered to be impaired and related to eight customers (2020: £nil, three customers).

Liquidity risk

Liquidity risk relates to the Group's ability to meet its obligations as they fall due.

The Group generates cash from its operations that are principally related to the manufacture and installation of vanadium flow batteries. The market for reliable and flexible grid-scale storage solutions for energy generated from renewable sources is growing and the technology continues to develop.

The development of new and enhanced storage technologies can be capital intensive and the Group has historically funded development and early-stage commercial activity primarily from equity investment but also using cash from operations and loan funding.

The Group forecasts cash generation using a comprehensive company financial model and monitors the timing and amount of its payment obligations.

The following table shows the Group's financial liabilities by relevant maturity grouping based on contractual maturities. The amounts included in the analysis are contractual, undiscounted cashflows.

31 December 2021	**Less than one year £000**	**One to two years £000**	**Two to five years £000**	**Over five years £000**	**Total contracted cash flows £000**	**Carrying amount £000**
Trade and other payables	**3,513**	**—**	**—**	**—**	**3,513**	**3,513**
Lease liabilities	**379**	**331**	**117**	**—**	**827**	**770**
Total financial liabilities	**3,892**	**331**	**117**	**—**	**4,340**	**4,283**

31 December 2020	Less than one year £000	One to two years £000	Two to five years £000	Over five years £000	Total contracted cash flows £000	Carrying amount £000
Trade and other payables	2,468	—	—	—	2,468	2,468
Lease liabilities	190	179	314	155	838	756
Total financial liabilities	2,658	179	314	155	3,306	3,224

Capital management

The Group currently has no debt and is funded by proceeds raised through equity placings during 2021 and proceeds from the conversion of warrants in 2021.

The board regularly reviews the Group's cash requirements and future projections to monitor cash usage and assess the need for additional funding. At 30 April 2021, the Group had £20.8 million of cash on hand.

29 Related parties

The only related parties of the Company are the key management of the Group. Key management has been determined as the CEO and his direct reports.

Invinity Energy Systems plc purchased a total of 24,000 100p shares in the latest fundraising on behalf of two directors. 12,000 shares were purchased on behalf of Larry Zulch and 12,000 on behalf of Peter Dixon-Clarke. At 31 December 2021 the £12,000 owed by Peter Dixon-Clarke in respect of the shares had been settled. The £12,000 owed by Larry Zulch has since been settled.

Key management compensation is disclosed in note 8, Staff costs and headcount.

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30 Group entities

Direct subsidiary undertakings	Country of incorporation	Registered office	Principal activity	Ownership % 2021	2020
Camco Holdings UK Limited	England	Unit 4.12 Clerkenwell Workshops 27-31 Clerkenwell Close London EC1R 0AT United Kingdom	Holding company	**100%**	100%
Camco Services (UK) Limited	England	Unit 4.12 Clerkenwell Workshops 27-31 Clerkenwell Close London EC1R 0AT United Kingdom	Support services	**100%**	100%
Camco (Mauritius) Limited	Mauritius	24 Dr Joseph Rivière Street 1st Floor, Felix House Port Lewis, Mauritius	Holding company	**100%**	100%
Invinity Energy Systems (US) Corporation	United States of America	1201 Orange St. #600 Wilmington, DE USA 19899	Energy storage	**100%**	—
Invinity Energy Nexus Limited	England	Unit 4.12 Clerkenwell Workshops 27-31 Clerkenwell Close London EC1R 0AT United Kingdom	Energy storage	**100%**	100%

Indirect subsidiary undertakings	Country of incorporation	Registered office	Principal activity	Ownership % 2021	2020
redT Energy Holdings (UK) Limited	England	Unit 4.12 Clerkenwell Workshops 27-31 Clerkenwell Close London EC1R 0AT United Kingdom	Research and consultancy	**100%**	100%
Re-Fuel Technology Limited	England	Unit 4.12 Clerkenwell Workshops 27-31 Clerkenwell Close London EC1R 0AT United Kingdom	Energy storage	**99%**	99%
Invinity Energy (UK) Limited	England	Unit 4.12 Clerkenwell Workshops 27-31 Clerkenwell Close London EC1R 0AT United Kingdom	Energy storage	**99%**	99%
redT Energy Holdings (Ireland) Limited	Ireland	22 Northumberland Road Ballsbridge, Dublin 4	Energy storage	**99%**	99%
Invinity Energy Systems (Ireland) Limited	Ireland	22 Northumberland Road Ballsbridge, Dublin 4	Energy storage	**99%**	99%
redT energy (Australia) (Pty) Ltd	Australia	RSK Advisory, Level 2, Suite 7 66 Victoria Crescent Narre Warren, Victoria 3805 Australia	Energy storage	**99%**	99%
Invinity Energy (South Africa) (Pty) Ltd	South Africa	1st Floor, Kiepersol House Stonemill Office Park 300 Acacia Road Darrenwood Randburg 2194	Business Services	**100%**	100%

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Indirect subsidiary undertakings	Country of incorporation	Registered office	Principal activity	Ownership % 2021	2020
Invinity Energy Systems (Canada) Corporation	Canada	2900-550 Burrard Street Vancouver, BC Canada V6C 0A3	Energy storage	**100%**	—
Suzhou Avalon Battery Company Limited	The People's Republic of China	1809 Building 4 no.11888 East Taihu Avenue, Songling Town, Wujiang District, Suzhou City	Business Services	**100%**	—

Associates	Country of incorporation	Registered office	Principal activity	Ownership % 2021	2020
Vanadium Electrolyte Rental Limited	England	Unit 4.12 Clerkenwell Workshops 27-31 Clerkenwell Close London EC1R 0AT United Kingdom	Vanadium procurement	**50%**	—

The following entity was a subsidiary undertaking at 1 January 2021 but was wound up during 2021:

Direct subsidiary undertakings	Country of incorporation	Registered office	Principal activity
Camco International Carbon Asset Information Consulting (Beijing) Co. Limited	The People's Republic of China	Room 1408, Tower A, Lucky Tower, No.3 North Road East Third Ring Chaoyang District PRC, Beijing	Business Services

31 Events occurring after the report period

On 3 February 2022, the Company announced its largest North American energy storage sale to date, an 8.4 MWh VS3 flow battery to be co-located with a 21 MWp solar array in Alberta, Canada to be constructed by Elemental Energy. The contract with Elemental was signed on 31 December 2021 subject to two conditions precedent, both of which were satisfied by 2 February 2022.

On 23 February 2022, Invinity was awarded £708,271 of funding under Phase 1 of the Longer Duration Energy Storage (LODES) demonstration competition.

On 9 March 2022, the Company's shares were dual-listed on the Aquis Stock Exchange, in addition to the AIM Market, alongside the short-term and long-term warrants, which were simultaneously listed on Aquis.

On 8 April 2022, the Company announced the conclusion of a successful test and validation program of its energy storage system by Hyosung Heavy Industries and a subsequent signing of a non-binding Memorandum of Understanding for a global partnership with an exclusive relationship in Korea.

On 19 April 2022, the Company was certified as compliant with ISO standards for Quality Management (ISO 9001), Environmental Management (ISO 14001) and Health & Safety Management (ISO 45001) following an extensive audit process.

The ongoing events in Ukraine have led to international macro-economic instability. The impact on sterling has fed through to increased input costs and these are expected to continue while the situation remains unresolved.

Officers and Advisers

Officers	
Neil O'Brien	Non-Executive Chairman
Larry Zulch	Chief Executive Officer
Matt Harper	Chief Commercial Officer
Peter Dixon-Clarke	Chief Financial Officer
Jonathan Marren	Senior Independent Director
Rajat Kohli	Non-Executive Director
Michael Farrow	Non-Executive Director
Kristina Peterson	Non-Executive Director
Registered Address	Third Floor, IFC5 Castle Street St. Helier Jersey JE2 3BY
Investor Relations	
Joe Worthington	Director of Communications
Ralph Anderson	Corporate Relations Manager
	To contact Investor Relations, email IR@invinity.com or call +44 204 551 0361
Jersey Company Number	**92432**
Advisors	
Nominated Adviser and Joint Broker	**Canaccord Genuity Limited** 88 Wood Street London EC2V 7QR
Joint Broker	**VSA Capital Limited** Park House House 16-18 Finsbury Circus London EC2M 7EB
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