



# good energy

“To me,  
good energy  
is energy you  
can rely on.”

**Conway Blacker**  
Origin Plant Technician,  
Quarantine Power Station  
Adelaide



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## A message from Gordon and Frank

### Welcome to the 2018 Annual Report



“Good energy. It’s both our new brand position and a statement that embodies our intent in everything we do.”

Early in the year, when we were preparing our first major rebrand in our 18-year history, we asked ourselves, what does Origin stand for? And what do we want to be known for among our customers, our people, our shareholders and the broader community?

And as we thought about the pivotal role we play every day, delivering energy to customers large and small, we thought about what sets us apart from the pack.

It’s called ‘good energy’. It’s both our new brand position and a statement that embodies our intent in everything we do. Bringing this to life are the more than 5,000 people who work in our diverse business.

Conway Blacker, a Plant Technician at our Quarantine Power Station in Adelaide, is one of our people who is passionate about our delivering for our customers. We’d like to thank Conway for appearing on the cover of this report and detailing what good energy means to him.

This year, good energy was represented in many forms. It was delivering flat or falling power prices for customers. It was delivering on our priorities to reduce debt and improve our business performance. It was also leading on climate change, by committing to halve our emissions by 2032 in line with the Paris Agreement.

We discuss these and many other matters throughout this report.

#### Progress on our commitments

We have continued to focus on strengthening our balance sheet and improving returns. We met our debt reduction target through asset sales, disciplined capital management and more efficient operational performance. The divestment of Lattice Energy and Acumen contributed to a reduction in debt of \$1.6 billion, with adjusted net debt now sitting below \$6.5 billion.

In FY2018 we performed strongly across our operations, with earnings growth in both the Integrated Gas and Energy Markets businesses. By reducing debt and lifting business performance, we have put Origin in a much stronger financial position, making us more resilient to cycles in commodity prices.

However, as we have not yet reached our target capital structure, the Board decided not to pay a dividend for FY2018. We did not take this decision lightly, as we are fully aware of the importance of dividends to our shareholders.

At our full year results announcement on 16 August, we advised that, subject to Board approval and no material adverse changes in business conditions, our medium-term outlook supports dividends in FY2019. We look forward to updating you on these prospects at our AGM.

## What we're doing for customers

Energy affordability has been a big focus for us this year. The closure of two large power stations at relatively short notice resulted in a surge in wholesale electricity prices in 2017. In response, we significantly boosted output at Eraring, which helped put downward pressure on prices. This contributed to flat or falling tariffs flowing through to Origin customers in New South Wales, Queensland, South Australia and the Australian Capital Territory from 1 July 2018.

We believe we have turned the corner on prices, with significant renewable supply due to come online by 2020, further reducing wholesale electricity prices. We expect to pass these savings on to customers.

## Improved business performance

The improved performance in both our Energy Markets and Integrated Gas businesses increased underlying earnings before interest, taxes, depreciation and amortisation (EBITDA) to \$2.95 billion, a 36 per cent increase on last year's result.

Our power generation and gas portfolios drove growth in Energy Markets. A 14 per cent increase in output at Eraring Power Station, coupled with higher wholesale electricity prices and natural gas sales contributed to the improvement in Energy Markets Underlying EBITDA to \$1.8 billion.

The Integrated Gas business has made strong progress on plans to reduce operating and capital costs. At Australia Pacific LNG, a full year of operations from both LNG trains and higher commodity prices drove record production and earnings. Australia Pacific LNG also hit the milestone of delivering net cash flows back to Origin of \$363 million. Overall, Integrated Gas delivered an Underlying EBITDA of \$1.3 billion.

## Outlook

There is no doubt that the political and regulatory environment within which we operate is changing quickly. The outlook for our business that we gave at our full year results was premised on market conditions and the regulatory environment not materially changing.

On that basis, we said Energy Markets Underlying EBITDA is expected to be in the range of \$1.5 billion to \$1.6 billion. This lower outlook for FY2019 is due to increased competition in the retail market and because of our decision to absorb the 3 per cent electricity price increase in New South Wales from 1 July.

We also said that Energy Markets underlying earnings will be impacted by our changed treatment of certain electricity hedge premiums, which were previously outside of underlying earnings. While this decision changed the presentation of underlying earnings, it had no impact on our statutory profit or net cash flow and as a consequence, the ability of our company to perform.

In our gas business, we said we expect continued capital and operating cost savings will be offset by higher one-off costs associated with changes in scope from FY2018, increased exploration activity and higher infrastructure spend. Australia Pacific LNG is on track to become a low-cost operator, allowing us to compete better in a global market increasingly dominated by US shale. Australia Pacific LNG's production is expected to be steady with FY2018, at 660-690 petajoules.

We are confident that our improved position enables us to meet the challenges in front of us.

## Origin people and purpose

We were pleased to welcome Samantha Stevens to our executive leadership team as head of Corporate Affairs earlier in the year. Samantha is an important addition to Origin as we respond to the heightened focus on the energy sector, driven by concerns about affordability and reliability.

We introduced a new purpose, values and behaviours to guide our efforts in making energy more affordable, smarter, easier and more sustainable for our customers.

## The future

We know the energy market is set to face ongoing scrutiny and with this comes discussion of greater regulation. On behalf of our customers and shareholders, we will continue to contribute constructively to the policy debate.

We will also maintain our focus on getting energy right for our customers, communities and planet, to allow us to earn the confidence of our stakeholders to deliver the energy of the future.

We look forward to speaking with many of you at our forthcoming AGM on 17 October.

Thank you for your continued support.



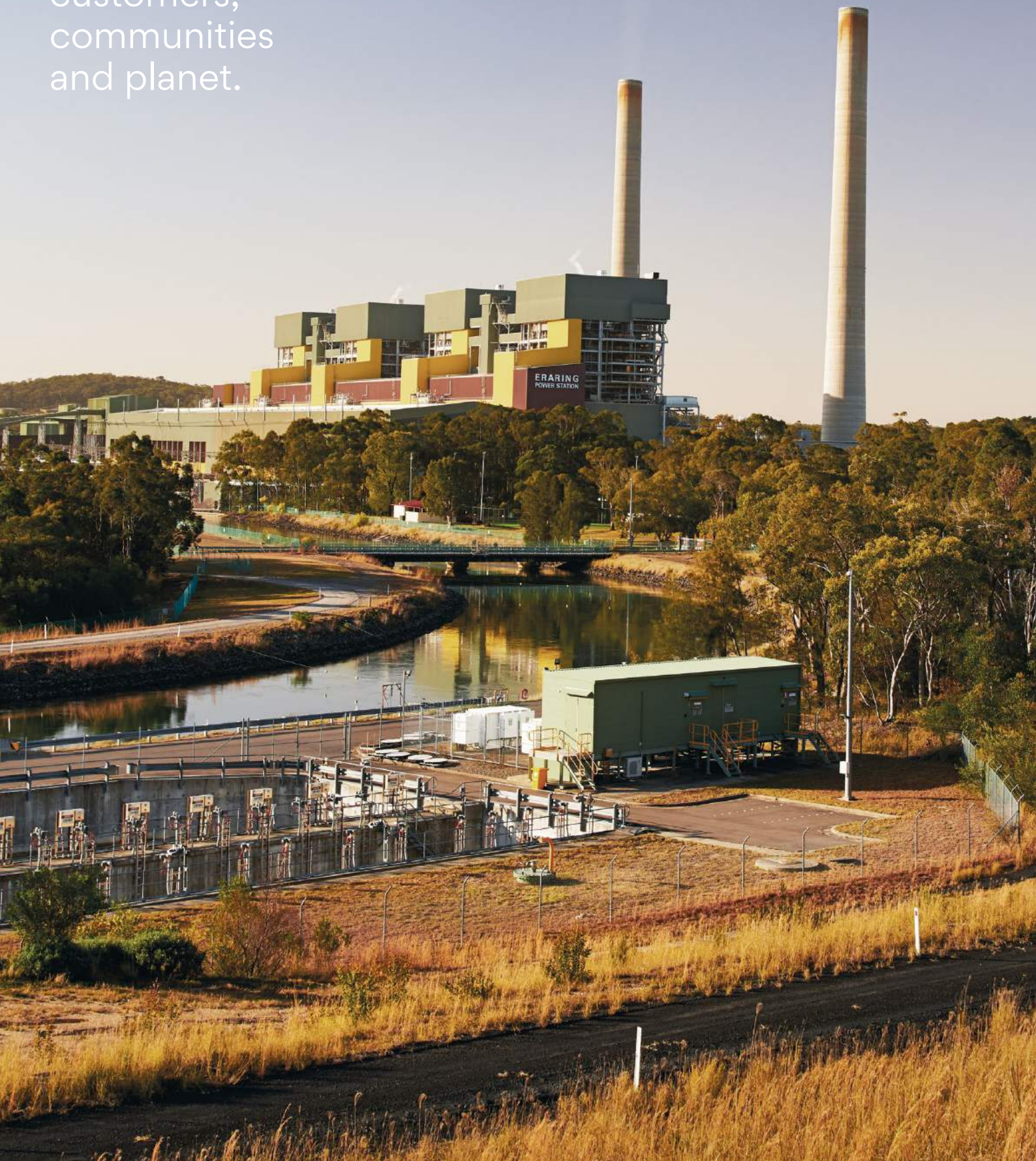
**Gordon Cairns**  
Chairman



**Frank Calabria**  
Chief Executive Officer

## Our purpose

Getting energy  
right for our  
customers,  
communities  
and planet.



## Shareholders

This year, Origin made good progress towards reducing debt and improving business performance.

### Statutory Profit

**\$218M**

▲ from a loss of \$2.4 billion last year

### Underlying EBITDA

**\$2.9B**

▲ \$774 million (continuing operations)

### Underlying Profit

**\$838M**

▲ \$438 million (continuing operations)

### Nil dividend in FY2018

### Outlook supports dividends in FY2019

(Subject to Board approval and no material adverse changes in business conditions)

### Adjusted Net Debt down

**\$1.6B**

### Improved safety performance with our lowest ever

TRIFR of **2.2**

## Outlook

### Energy Markets

**Underlying EBITDA \$1.50–\$1.60 billion**

### Integrated Gas

**Australia Pacific LNG FY2019 production 660–690 PJ (100%)**

### Exploration activities

**Beetaloo Basin, NT Ironbark, QLD**

# Directors' Report

For the year ended 30 June 2018



In accordance with the *Corporations Act 2001 (Cth)*, the Directors of Origin Energy Limited (Company) report on the Company and the consolidated entity Origin Energy Group (Origin), being the Company and its controlled entities for the year ended 30 June 2018.

The Operating and Financial Review and Remuneration Report form part of this Directors' Report.

## 1. Principal activities

During the year, the principal activity of Origin was the operation of energy businesses including:

- exploration and production of natural gas;
- electricity generation;
- wholesale and retail sale of electricity and gas; and
- sale of liquefied natural gas.

On 31 January 2018, Origin completed the sale of Lattice Energy, the name given to the upstream conventional oil and gas business. There were no other significant changes in the nature of these activities during the year.

## 2. Review of operations and future developments

A review of the operations and results of operations of Origin during the year, the financial position of Origin and the business strategies and prospects for future financial years, is set out in the Operating and Financial Review, which forms part of this Directors' Report.

## 3. Significant changes in the state of affairs

The following significant changes in the state of affairs of the Company occurred during the year:

### Australia Pacific LNG

In July 2017, Australia Pacific LNG completed the 90-day operational phase of the two-train project finance lenders' test, producing more than 10 per cent above nameplate capacity. The remaining US\$3.4 billion of shareholder guarantees relating to Australia Pacific LNG's US\$8.5 billion project finance facility were released in August 2017.

## Capital management

Origin completed the \$1,585 million sale of Lattice Energy on 31 January 2018, with an economic effective date of 1 July 2017. After adjusting for settlement of the acquisition by Lattice Energy of Benaris' interest in the Otway basin, close out of oil forward sale agreements, transaction costs, adjustments and taxes, the balance of approximately \$1 billion was used to pay down debt.

The sale of Acumen, Origin's retail metering business, was completed on 19 June 2018 with proceeds of \$267 million also used to pay down debt.

In June 2018 Origin redeemed its €500 million Capital Securities due 2071 at their first call date (16 June 2018), in accordance with the terms of the securities. Origin also completed the extension of approximately \$4 billion of syndicated loan facilities with new 4, 5 and 7 year maturities at reduced funding margins.

Adjusted net debt reduced by \$1.6 billion to \$6.5 billion driven by operating cash flows, proceeds from asset sales and net cash flows from Australia Pacific LNG, all of which were more than sufficient to fund capital expenditure and interest payments.

The events described above and those disclosed in the Financial Statements represent the significant changes in the state of affairs of Origin for the year ended 30 June 2018.

## 4. Events subsequent to balance date

No matters or circumstances have arisen since 30 June 2018, which have significantly affected, or may significantly affect the Company's operations, the results of those operations or the Company's state of affairs in future financial years.

## 5. Dividends

No Dividends were paid during the year by the Company and the Directors have determined that no final dividend will be payable for the year ended 30 June 2018.

## 6. Directors

The Directors of the Company at any time during or since the end of the financial year are:

**Gordon Cairns**  
Chairman

**Frank Calabria**  
Managing Director and  
Chief Executive Officer

**John Akehurst**  
Non-executive Director

**Maxine Brenner**  
Non-executive Director

**Teresa Engelhard**  
Non-executive Director

**Bruce Morgan**  
Non-executive Director

**Scott Perkins**  
Non-executive Director

**Steven Sargent**  
Non-executive Director

## 7. Information on Directors and Company Secretaries

Information relating to current Directors' qualifications, experience and special responsibilities is set out on pages 90-91. The qualifications and experience of the Company Secretaries are set out below.

**Andrew Clarke**  
Group General Counsel and  
Company Secretary

Andrew Clarke joined Origin in May 2009 and is responsible for the company secretarial and legal functions. He was a partner of a national law firm for 15 years and was Managing Director of a global investment bank for more than two years prior to joining Origin. Andrew has a Bachelor of Laws (Hons) and a Bachelor of Economics from the University of Sydney, and is a member of the Australian Institute of Company Directors.

**Helen Hardy**  
Company Secretary

Helen Hardy joined Origin in March 2010. She was previously General Manager, Company Secretariat of a large ASX listed company, and has advised on governance, financial reporting and corporate law at a Big 4 accounting firm and a national law firm. Helen is a Chartered Accountant and Chartered Secretary and a Graduate Member of the Australian Institute of Company Directors. She holds a Bachelor of Laws and a Bachelor of Commerce from the University of Melbourne, and is admitted to legal practice in New South Wales and Victoria.



## 8. Directors' meetings

The number of Directors' meetings, including Board committee meetings, and the number of meetings attended by each Director during the financial year are shown in the table below:

Directors	Board Meetings				Committee Meetings									
	Scheduled		Additional		Audit		Health, Safety and Environment (HSE)		Nomination		Remuneration & People		Risk	
	H	A	H	A	H	A	H	A	H	A	H	A	H	A
J Akehurst	10	10	3	3	-	-	5	5	1	1	-	-	4	4
M Brenner	10	10	3	3	4	4	-	-	1	1	-	-	4	4
G Cairns	10	10	3	3	4	4	5	5	1	1	6	6	4	4
F Calabria	10	10	3	3	-	-	5	5	-	-	-	-	-	-
T Engelhard	10	10	3	3	3	3	-	-	-	-	6	6	-	-
B Morgan	10	10	3	2	4	4	5	5	1	1	-	-	4	4
S Perkins	10	10	3	3	4	4	-	-	1	1	6	6	4	4
S Sargent	10	10	3	3	-	-	5	5	-	-	6	6	-	-

H Number of scheduled meetings held during the time that the Director held office or was a member of the committee during the year.

A Number of meetings attended.

The Board held ten scheduled meetings, including a two-day strategic review meeting and three additional meetings to deal with urgent matters. There were also seven Board or Committee workshops to consider matters of particular relevance. In addition, the Board conducted visits of Company operations at various sites and met with operational management during the year.

## 9. Directors' interests in Shares, Options and Rights

The relevant interests of each Director as at 30 June 2018 in the shares and Options or Rights over such instruments issued by the companies within the consolidated entity and other related bodies corporate at the date of this report are as follows:

Directors	Ordinary shares held directly and indirectly	Options over ordinary shares	Deferred Share Rights (DSR) over ordinary Shares	Performance Share Rights (PSR) over ordinary shares
J Akehurst	71,200	-	-	-
M Brenner	22,117	-	-	-
G Cairns	163,660	-	-	-
F Calabria	191,905	1,430,210 <sup>1</sup>	216,214 <sup>2</sup>	271,895 <sup>2</sup>
T Engelhard	-	-	-	-
B Morgan	47,143	-	-	-
S Perkins	30,000	-	-	-
S Sargent	31,429	-	-	-

Exercise price for Options and Rights:

1 227,065: \$15.65; 570,150: \$6.78; 231,707: \$5.67; 401,288: \$7.37.

2 Nil.

No Director other than the Managing Director and Chief Executive Officer participates in the Company's Equity Incentive Plan.

## Options and Rights granted by Origin

Non-executive Directors do not receive Options or Rights as part of their remuneration. The following Options and Rights were granted to the Managing Director and Chief Executive Officer and the five most highly remunerated officers (other than Directors) of the Company during the year ended 30 June 2018:

	Options	DSRs	PSRs
J Briskin	86,910	23,340	27,477
A Clarke	77,683	25,347	24,560
G Jarvis	93,219	25,993	29,471
M Schubert	83,769	18,945	26,484
L Tremaine	81,441	335,875	24,415

Each of these awards was made in accordance with the Company's Equity Incentive Plan as part of the relevant executive's remuneration. Further details on Options and Rights granted during the financial year, and unissued shares under Options and Rights, are included in Section 5 of the Remuneration Report.

No Options or Rights were granted since the end of the financial year.

## Origin shares issued on the exercise of Options and Rights

### Options

No Options granted under the Equity Incentive Plan were exercised during or since the year ended 30 June 2018, so no ordinary shares in Origin were issued as a result.

### Rights

3,822,999 ordinary shares of Origin were issued during the year ended 30 June 2018 on the vesting and exercise of Deferred Share Rights (DSRs) granted under the Equity Incentive Plan. No amount is payable on the vesting of those DSRs and, accordingly, no amounts remain unpaid in respect of any of those shares.

Since 30 June 2018, 228,709 ordinary shares were issued on the vesting of DSRs granted under the Equity Incentive Plan. No amount is payable on the vesting of those DSRs and, accordingly, no amounts remain unpaid in respect of any of those shares.

## 10. Environmental regulation and performance

The Company's operations are subject to environmental regulation under Commonwealth, State, and Territory legislation. For the year ended 30 June 2018, the Company's Australian operations recorded some environmental incidents arising from Origin's activities including those where Origin was the operator of a joint venture. These incidents resulted in environmental impacts mostly with a moderate and temporary nature. Regulators were notified of reportable environmental incidents. For FY2018, the Company recorded no formal notices or penalties from a regulator arising from Origin's activities as compared to the 12 notices received in FY2017. However, for Australia Pacific LNG, where Origin is the operator, one infringement at Spring Gully was received for \$12,615. Appropriate remedial actions have been taken or are being undertaken in response to the notice and reportable environmental incident.

## 11. Indemnities and insurance for Directors and Officers

Under its constitution, the Company may indemnify current and past Directors and Officers for losses or liabilities incurred by them as a Director or Officer of the Company or its related bodies corporate to the extent allowed under law. The constitution also permits the Company to purchase and maintain a Directors' and Officers' insurance policy. No indemnity has been granted to an auditor of the Company in their capacity as auditor of the Company.

The Company has entered into agreements with current Directors and certain former Directors whereby it will indemnify those Directors from all losses or liabilities in accordance with the terms of, and subject to the limits set by, the constitution.

The agreements stipulate that the Company will meet the full amount of any such liability, including costs and expenses to the extent allowed under law. The Company is not aware of any liability having arisen, and no claim has been made against the Company during or since the year ended 30 June 2018 under these agreements.

During the year, the Company has paid insurance premiums in respect of Directors' and Officers' liability, and legal expense insurance contracts for the year ended 30 June 2018.

The insurance contracts insure against certain liability (subject to exclusions) of persons who are or have been Directors or Officers of the Company and its controlled entities. A condition of the contracts is that the nature of the liability indemnified and the premium payable not be disclosed.

## 12. Auditor independence

There is no former partner or director of KPMG, the Company's auditors, who is or was at any time during the year ended 30 June 2018 an officer of the Origin Energy Group. The auditor's independence declaration for the financial year (made under section 307C of the *Corporations Act (Cth)*) is attached to and forms part of this Report.

## 13. Non—audit services

The amounts paid or payable to KPMG for non-audit services provided during the year was \$1,558,000 (shown to nearest thousand dollar). Amounts paid to KPMG are included in F7 to the full financial statements.

Based on written advice received from the Audit Committee Chairman pursuant to a resolution passed by the Audit Committee, the Board has formed the view that the provision of those non-audit services by KPMG is compatible with, and did not compromise, the general standards of independence for auditors imposed by the *Corporations Act 2001 (Cth)*. The Board's reasons for concluding that the non-audit services provided by KPMG did not compromise its independence are:

- all non-audit services provided were subjected to the Company's corporate governance procedures and were either below the pre-approved limits imposed by the Audit Committee or separately approved by the Audit Committee;
- all non-audit services provided did not, and do not, undermine the general principles relating to auditor independence as they did not involve reviewing or auditing the auditor's own work, acting in a management or decision making capacity for the Company, acting as an advocate for the Company or jointly sharing risks and rewards; and
- there were no known conflict of interest situations nor any other circumstance arising out of a relationship between Origin (including its Directors and officers) and KPMG which may impact on auditor independence.

## 14. Proceedings on behalf of the Company

The Company is not aware of any proceedings being brought on behalf of the Company, nor any applications having been made in respect of the Company under section 237 of the *Corporations Act 2001 (Cth)*.

## 15. Rounding of amounts

The Company is of a kind referred to in ASIC Corporations (Rounding in Financial/ Directors' Reports) Instrument 2016/191 dated 24 March 2016 and in accordance with that class order, amounts in the financial report and Directors' Report have been rounded off to the nearest million dollars unless otherwise stated.

## 16. Remuneration

The Remuneration Report forms part of this Directors' Report.

# Operating and Financial Review

For the year ended 30 June 2018



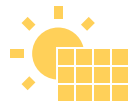
## 1. About Origin

### Energy Markets



#### Leading energy retailer

4.2 million gas, electricity and LPG customer accounts



#### Growing renewable supply

From ~ 13% of Origin's generation mix today to more than 25% by 2020



#### Large and flexible gas supply

Contracted gas supply beyond 2022



#### Significant generation portfolio

~ 7,000 MW with fuel and geographic diversity



#### Brownfield generation growth opportunities

To increase generation flexibility and capacity and integrate storage

## Integrated Gas

### Upstream operator and 37.5 per cent shareholder in APLNG



#### Australia's largest CSG reserves base

2P reserves of 12,453 PJ<sup>1</sup> (APLNG 100%)



#### Largest LNG facility on the Australian east coast

9 mtpa nameplate capacity



#### Supplier to domestic and export markets

Supplier of ~ 30% of domestic east coast gas demand in 2018  
~ 8.6 mtpa LNG export contracts to 2035

### Other exploration and development interests



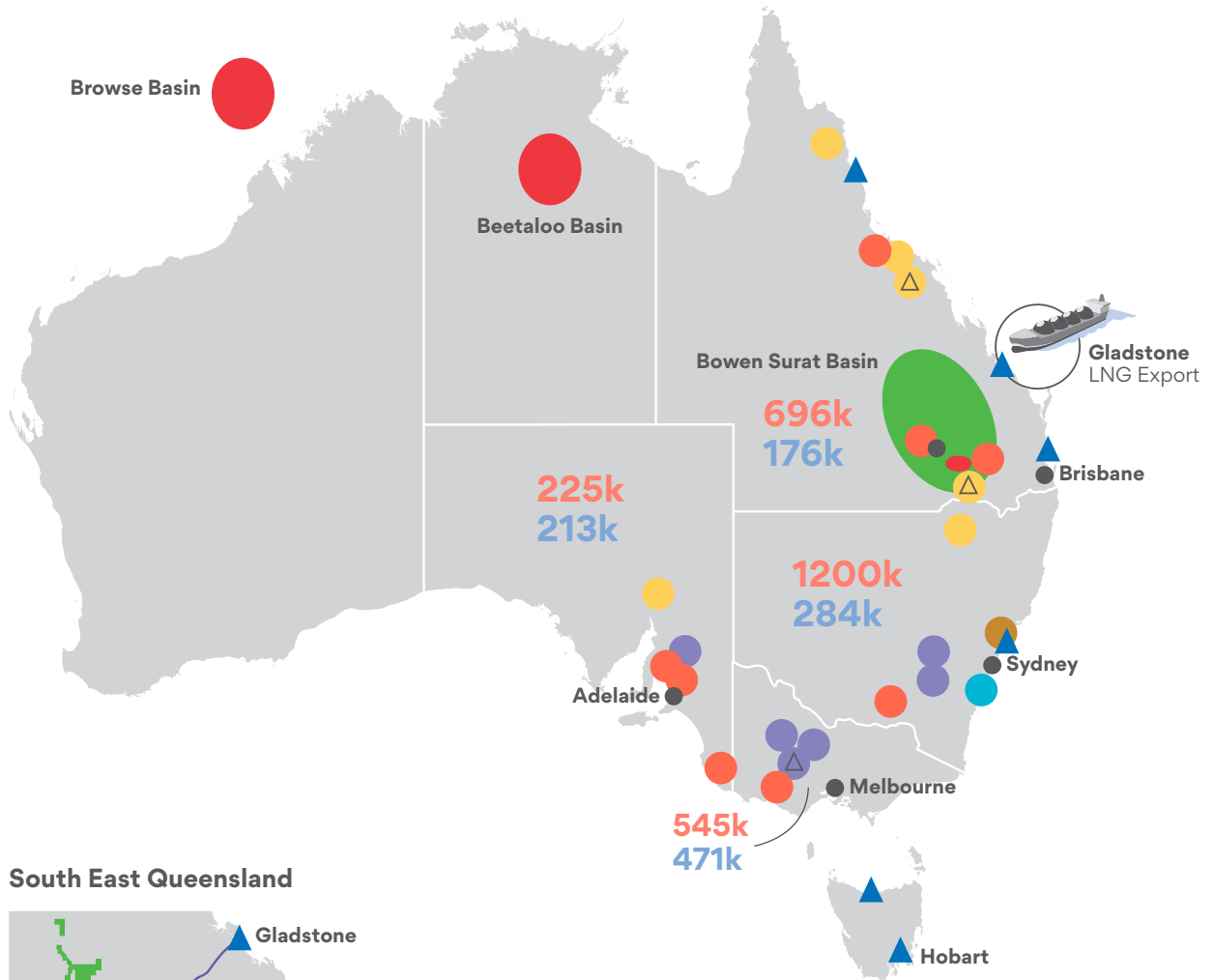
Surat Basin (Ironbark)  
Beetaloo Basin  
Browse Basin

### Discontinued Operations

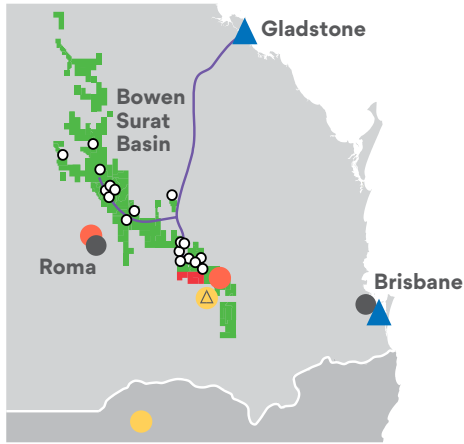
On 31 January 2018, Origin completed the sale of Lattice Energy which is treated as a discontinued operation (along with Jingemina and the Darling Downs Pipeline in the comparative period). Financial information in this report focuses on continuing operations. Refer to note E4 of Origin's Financial Statements for further detail.

<sup>1</sup> At 30 June 2018. For further information refer to Origin's Annual Reserves Report for the year ended 30 June 2018 on page 178 of this report. Some of APLNG's reserves and resources are subject to reversionary rights and an ongoing royalty interest in favour of Tri-Star. Refer to section 6 for further information.

# Operations



## South East Queensland



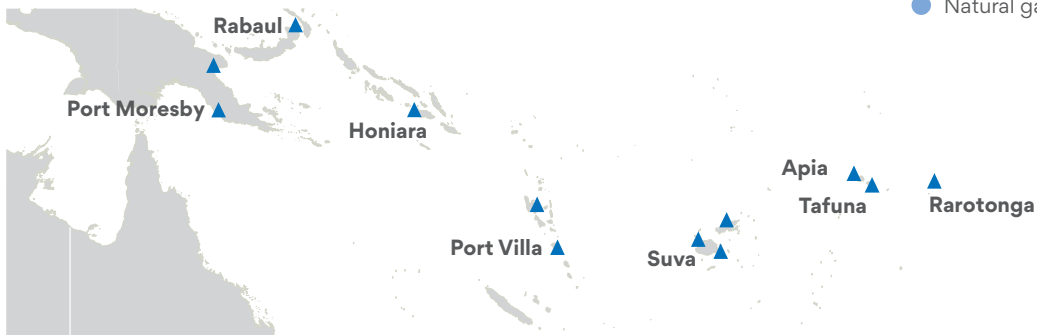
- Exploration acreage**
- Origin upstream acreage
  - APLNG upstream acreage
  - Production facility
  - APLNG pipeline
  - Office

- Generation**
- Gas
  - Pumped hydro
  - Solar (contracted)
  - Wind (contracted)
  - Coal
  - △ Under construction

▲ LPG seaboard terminal

- Electricity customer accounts
- Natural gas customer accounts

## Pacific Islands LPG



Origin also has one LPG seaboard terminal in Cam Ranh, Vietnam.

## Financial highlights

### Statutory Profit

**\$218M**

Up \$2.4b vs FY2017

### Underlying Profit – continuing operations

**\$838M**

Up \$438m or 110% vs FY2017

### Underlying EBITDA – continuing operations

**\$2,947M**

Up \$774m or 36% vs FY2017

### Net Cashflow from Operating and Investing Activities

**\$2,645M**

Up \$1,267m or 92% vs FY2017

### Underlying ROCE – continuing operations

**8.4%**

Up 3% vs FY2017 and  
in line with H1 FY2018

**\$1.6B** ✓

Adjusted Net Debt  
down to \$6.5b

## Operational highlights

### Generation output at Eraring

**15.9TWh**

Up 2 TWh or 14% vs FY2017

### APLNG production (100%)

**676 PJ**

Up 67 PJ or 11% vs FY2017

### Net proceeds from asset sales

**\$1.5B**

### Energy Markets natural gas sales

**281 PJ**

Up 32 PJ or 13% vs FY2017

### Cash flow from APLNG

**\$363M**

Up \$533m vs FY2017

### Capex – continuing operations

**\$328M**

## FY2019 guidance

### Energy Markets Underlying EBITDA

**\$1.5 –  
\$1.6B**

**\$1.74 – \$1.84b before  
adjusting for a change  
in treatment of certain  
electricity hedge premiums  
and NSW revenue forgone**

### APLNG Operating Breakeven

**US\$22 –  
26/BOE**

### APLNG Distribution breakeven

**US\$39 –  
44/BOE**

### Corporate costs

**\$60 –  
\$65M**

### Capex (excluding APLNG)

**\$385 –  
\$445M**

## Growth Opportunities

### Energy Markets

- Growing renewables >1,000 MW by FY2020
- Brownfield generation
  - Increased flexibility and capacity
  - Pumped hydro and batteries
- Retail adjacencies and new products
- Growing rooftop solar

### Integrated Gas

- Entering stage 2 in the Beetaloo
  - Targeting liquids rich plays
- Entered FEED for Ironbark Stage 1
  - Targeting first gas in FY2021/22
  - Assessing alternative strategic options

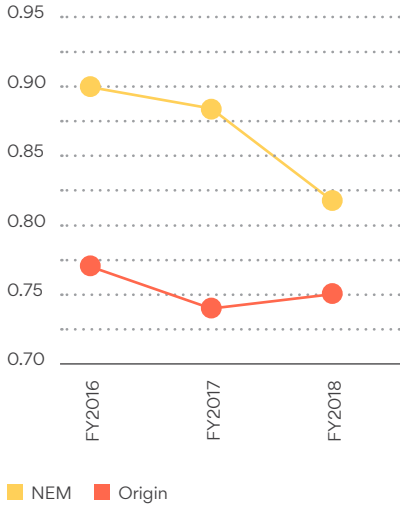


## Climate

### Energy Markets

0.75tCO<sub>2</sub>-e/MWh from owned and contracted power generation

Intensity consistently below the NEM (TCO<sub>2</sub>-e/MWh)



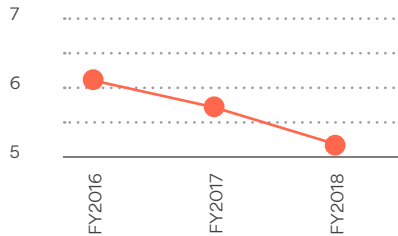
**5%**

in Scope 1 and Scope 2 operated emissions due to increased output at Eraring to help fill the supply gap following brown coal generation closures

### Integrated Gas

5.2tCO<sub>2</sub>-e/TJ from APLNG gas production

IG emissions intensity (Scope 1 & 2) (TCO<sub>2</sub>-e/TJ)



## TCFD recommendations adopted



Methane emissions from operated infrastructure: 0.1% of production

### Key targets

Out of coal by

**2032**

**50%**

in Scope 1 & 2 emissions by 2032

Renewables

**> 25%**  
of capacity by 2020

**25%**

in value chain Scope 3 emissions by 2032

# Customers, communities and people

## Customers



### More affordable

Increased electricity supply to put downward pressure on prices



### Tariffs flat or reducing

3% electricity price increase absorbed in NSW



### Smarter and easier

Giving customers control

- Usage Buster
- Home HQ
- Savernator

**Highest ever** Interaction NPS up 5.6 points from FY2017 to

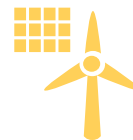
# 21.7



### More sustainable

# #1 Provider for Business Solar

Sunwiz, June 2018



# 1,200 MW

of new renewable supply committed since March 2016

## Communities

# 99.9%

of Eraring water is recycled

# \$236M

spent directly with regional suppliers

# \$23M

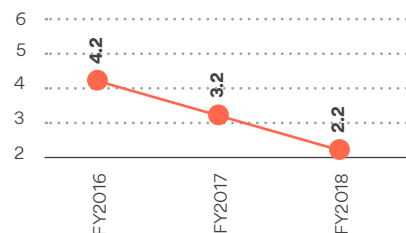
awarded by Origin Foundation since establishment in 2010

### 'Best Company Indigenous Procurement Initiative'

2018 Queensland Resources Council

## People

Origin's lowest Total Recordable Injury Frequency Rate (TRIFR)



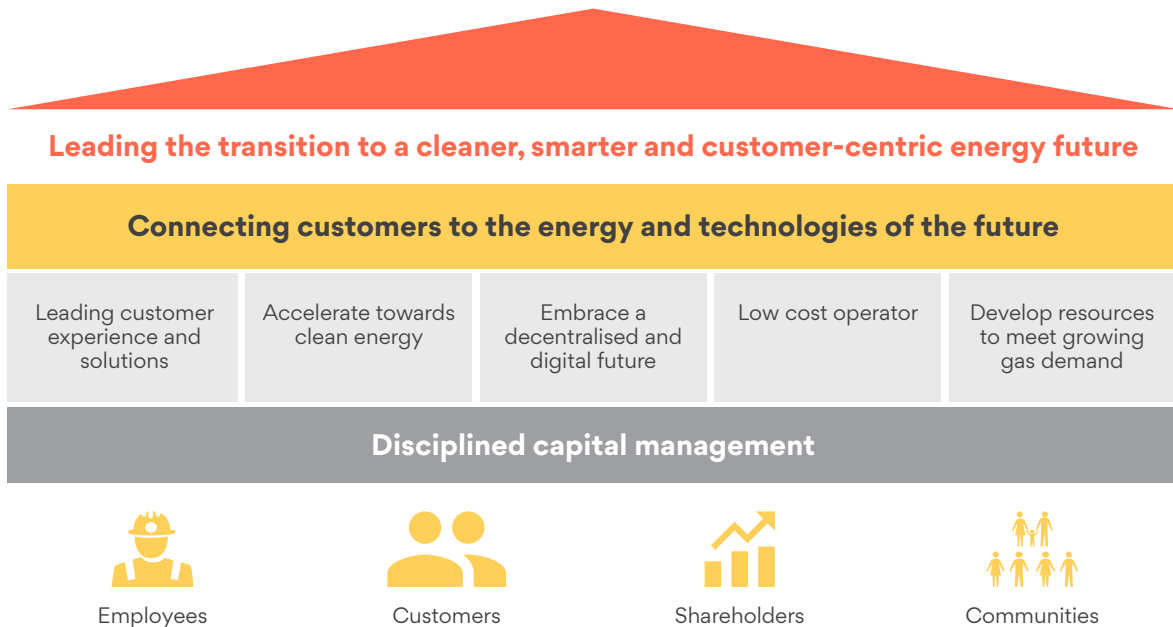
### Employee engagement

# 3% to 61%

### Women in senior roles

# 3% to 32%

## 2. Strategy and prospects



Origin operates in an evolving energy market shaped by the trend towards decarbonisation, decentralisation of supply and digitisation of customer interactions. Our strategy is driven by the following assumptions:

- Replacement of coal with growth in renewables and gas as a partner of renewables will support emission reductions;
- The advancement of technology and consumer desire for greater control will result in an increase in distributed generation and storage at a lower cost; and
- Increasing digitisation will result in more connected homes and businesses and will change all aspects of operations and interactions with customers.

**Our strategic priorities are designed to deliver value in the changing energy world by:**

<b>Leading customer experience and solutions</b>	<ul style="list-style-type: none"> <li>• Transforming the customer experience to one which is more affordable, smarter, easier and more sustainable e.g. Savernator, Usage Buster and Solar Boost products</li> <li>• Providing innovative and digitally enabled products that match customer preferences e.g. HomeHQ and mobile app</li> </ul>
<b>Accelerating towards clean energy</b>	<ul style="list-style-type: none"> <li>• Targeting renewables to be greater than 25 per cent of generation mix by 2020, supported by Australia’s largest peaking gas fleet</li> </ul>
<b>Embracing a decentralised and digital future</b>	<ul style="list-style-type: none"> <li>• Offering consumers, businesses and communities access to the latest technology in distributed generation and storage and connected and digitally enabled solutions</li> </ul>
<b>Becoming a low-cost operator</b>	<ul style="list-style-type: none"> <li>• Reducing the cash operating cost of our upstream gas operations to compete in a global market increasingly dominated by US Shale</li> <li>• Reducing Energy Markets cost to serve</li> <li>• Focus on streamlining processes across the business</li> </ul>
<b>Developing resources to meet growing gas demand</b>	<ul style="list-style-type: none"> <li>• Meeting demand domestically and in Asia through our interest in APLNG and other unconventional gas resources, particularly the Beetaloo Basin</li> </ul>

We will deliver our strategy within a disciplined capital management framework and our success will be measured by outcomes achieved for our key stakeholders.

We believe the transition to a low carbon economy presents more opportunities than risks for Origin given our focus on growth through renewable generation and natural gas. We have joined more than 315 other companies in adopting the Financial Stability Board’s Taskforce on Climate related Financial Disclosures (TCFD). Refer to section 5 for disclosures that are aligned with these recommendations.

## Prospects

### Energy Markets

Over the past 18 months, the Australian energy market has been characterised by high wholesale electricity and gas prices which have flowed through to customers, increased levels of competition particularly in retail electricity and a changing and uncertain regulatory environment.

We have acted to put downwards pressure on prices by increasing the supply of gas and electricity, including committing to contracting approximately 1,200 MW of new renewables since March 2016, 133 MW of which was online at 30 June 2018 and launching improved offers and low rate concession products for customers. We have advocated for energy policy that addresses the issues of affordability, emissions reduction and reliability, and to that end, we have actively supported the National Energy Guarantee which we believe can address these objectives.

We expect:

- a further reduction in average wholesale electricity prices as more renewable supply enters the market, which should flow through to lower bills and provide relief for customers;
- gas prices linked to international LNG prices; and
- the retail market to remain competitive.

Our Actions:

- optimising our flexible generation portfolio based on customer demand and market price signals;
- driving a leading customer experience and efficient cost structure through our digital first approach where we seek to simplify the experience of buying energy for our customers and create new sources of value; and
- maximising the supply of gas to customers as well as supporting energy security through gas-fired generation from our competitive wholesale gas portfolio.

We have a number of opportunities to invest in generation flexibility that are dependent on market signals and regulatory certainty which can be quickly implemented at the appropriate time.

We have been actively working with governments to address concerns about energy affordability and reliability. We support the objectives of the National Energy Guarantee as a practical way to reduce carbon emissions, maintain system reliability and improve affordability. We will consult with the government on the ACCC's report into the electricity market and support the intention to prioritise recommendations that will directly reduce bills for customers without distorting the market or limiting investment and innovation.

### Integrated Gas

We are on track to deliver a cost out program at APLNG that includes more than \$500 million per annum reduction in sustain capex and opex from the baseline provided in November 2017. This is expected to deliver an operating breakeven of <US\$24 boe<sup>2</sup> and distribution breakeven of <US\$40/boe<sup>2</sup> on a run rate basis from June 2019, with a full year impact in FY2020.

We have implemented a flatter, smaller, asset-led structure built around core processes, resulting in a reduction of 500 roles in FY2018, with a strong regional presence maintained.

As part of the cost out program, we are targeting the following unit costs on a run rate basis from June 2019:

- Operating costs of A\$1.00/GJ from upstream operated areas; and
- Well costs of A\$1.2 million/well.<sup>3</sup>

Over the year, well costs were an average of A\$1.9 million per well<sup>3</sup>, significantly lower than previous FY2018 guidance of A\$2.4 million per well. We expect well costs to continue decreasing driven by lower overheads, optimised gathering construction, simplified surface facilities design, drilling improvements and re-priced rig and construction contracts.

The international outlook for LNG demand is robust with Chinese demand driving recent spot LNG price strength.

We have entered the FEED phase for a Stage 1 development at Ironbark, targeting first gas in FY2021/FY2022. We are also assessing alternative strategic options for the asset.

In the Beetaloo Basin, following the lifting of the moratorium on fracture stimulation, announced by the Northern Territory Government in April 2018, we plan to drill and fracture stimulate a further five wells to complete existing farm-in commitments over the next two to three years. Exploration and appraisal activities planned for the 2019 dry season include one vertical and two fracture stimulated horizontal wells.

2 AUD = 0.75 USD

3 Single vertical unfracked Surat well

## FY2019 Guidance

Guidance is provided on the basis that market conditions and the regulatory environment do not materially change. Overall, Origin expects Underlying Profit to be higher and further debt reduction in FY2019.

### Energy Markets

Energy Markets FY2019 Underlying EBITDA is expected to be lower at **\$1.5–\$1.6 billion** driven by:

- lower Electricity gross profit reflecting a 3 per cent price increase forgone (\$80 million impact) after absorbing increased green and network costs in NSW and ongoing retail competition;
- moderate growth in Natural Gas gross profit; and
- change in treatment of certain electricity hedge premiums previously reported outside of underlying earnings (\$160 million pre-tax) to within underlying earnings. Following the implementation of a new Financial Instruments accounting standard from 1 July 2018, we have undertaken a review of all fair value accounting and determined that, from FY2019, the expense of these upfront cash premiums will be included within Underlying Profit. There is no change to Statutory Profit or cash flow as a result of this treatment change.

Year Ended 30 June	2018 (\$m)	2019 Guidance (\$m)
<b>Underlying EBITDA – pre NSW revenue forgone and treatment change</b>	<b>1,811</b>	<b>1,740–1,840</b>
NSW 3% electricity price increase absorbed	–	(80)
Change in treatment of electricity hedge premiums	(160)	(160)
<b>Underlying EBITDA – new basis</b>	<b>1,651</b>	<b>1,500–1,600</b>

### Integrated Gas

APLNG FY2019 production is expected to be 660–690 PJ.

We expect to drill 250–300 operated wells. Increased drilling is expected in non-operated areas, in particular Arcadia and Roma East as these fields commence production.

Planned downstream maintenance outages are posted on the AEMO Natural Gas Services Bulletin Board. The latest notification, dated 14 August 2018 outlines scheduled maintenance outages in August and September 2018.

Despite expected reductions in cost per well (–US\$1/boe) and savings on opex and purchases (–US\$2/boe), overall costs are expected to be higher than FY2018 due to:

- phasing/scope of non-operated activity (US\$2/boe);
- operated E&A (US\$2/boe); and
- higher operated infrastructure spend associated with the Eurombah Creek – Reedy Creek Interconnect pipeline, and the Talinga–Orana Gas Gathering Station, along with other infrastructure designed to increase flexibility (US\$3/boe).

Exploration and Appraisal spend is expected to increase in FY2019 as work progresses to test new conventional and unconventional prospects.

**FY2019 breakeven guidance**

<b>100% APLNG (A\$m)</b>	<b>FY2019 guidance @ 0.75 AUD/USD</b>
Capital expenditure – Sustain	1,450
Capital expenditure – E&A	200
Operating expenses – pre-capitalisation <sup>(a)</sup>	1,570
Less: Spot LNG & domestic revenue	(1,350)
<b>Operating breakeven</b>	<b>1,870</b>
<b>Operating breakeven (US\$/boe)<sup>(b)</sup></b>	<b>22–26</b>
Project finance interest	460
Project finance principal	860
<b>Distribution breakeven</b>	<b>3,190</b>
<b>Distribution breakeven (US\$/boe)<sup>(b)</sup></b>	<b>39–44</b>

(a) Operating expenses estimate includes royalties payable reflected at the breakeven oil price. Royalties payable increases as oil price increases.

(b) Range represents variability around work program scope, operating costs, project refinancing and non oil-linked revenue.

<b>100% APLNG (PJ)</b>	<b>FY2019 guidance</b>
Domestic & Spot LNG	232
Contract LNG	427
<b>Contract LNG (mmbœ)</b>	<b>56.4</b>

**APLNG is targeting operating breakeven of US\$22–26/boe and distribution breakeven of US\$39–44/boe in FY2019.**

For every US\$10/boe above distribution breakeven, Origin's share of APLNG distributable cash flow is expected to be approximately US\$200m.

**FY2019 oil and LNG hedging**

FY2019 oil hedging consists of 15.4 mmbbl hedged through a combination of put and call options, collars and three-way producer hedges.

Origin manages its exposure to APLNG's uncontracted LNG and gas sales predominately through executing forward fixed price hedge contracts. These hedge contracts have an estimated FY2019 hedge mark-to-market cost of \$75–\$85 million at current market prices.

Refer to section 3.4 for details.

**Corporate**

Corporate costs are expected to be \$60–\$65 million.

Capital expenditure (excluding APLNG) is expected to be \$385–\$445 million:

- Mandatory (\$80–\$100 million): Beetaloo, Ironbark and Power of Choice
- Sustaining (\$200–\$220 million): Generation, LPG and Solar businesses
- Productivity/growth (\$105–\$125 million): Generation flexibility, digital systems and investments in new customer-focussed technologies and solutions.

## 3. Financial update

### 3.1 Financial summary

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
<b>Statutory Profit/(Loss)</b>	<b>218</b>	<b>(2,226)</b>	<b>2,444</b>	<b>n/a</b>
<b>Underlying earnings (Continuing operations):</b>				
Energy Markets	1,811	1,492	319	21
Integrated Gas	1,251	747	504	67
Corporate	(115)	(66)	(49)	74
Underlying EBITDA	2,947	2,173	774	36
Underlying Profit	838	400	438	110
Underlying earnings per share	47.7¢	22.8¢	24.9¢	109
Underlying ROCE	8.4%	5.5%		3
Adjusted Net Debt/Underlying EBITDA <sup>(a)</sup>	3.4x	5.4x		(37)
<b>Other (Total operations):</b>				
Underlying profit	1,022	550	472	86
Net cash flow from operating and investing activities (NCOIA)	2,645	1,378	1,267	92
Adjusted Net Debt	6,496	8,111	(1,615)	(20)
Gearing	35%	42%		(7)

(a) FY2017 Adjusted Net Debt/Underlying EBITDA is calculated on a total operations basis.

For the year ended 30 June 2018, the statutory profit was \$218 million compared to a loss of \$2,226 million in FY2017, which largely reflected post-tax impairment charges. Underlying Profit from continuing operations more than doubled during the period to \$838 million reflecting improved performance in both our Energy Markets and Integrated Gas businesses – refer to sections 4.1 and 4.2 respectively for details.

Corporate costs increased by \$49 million due to an increase in non-cash provisions relating to legacy sites remediation (\$70 million), partially offset by FX gains relating to interest received on MRCPS and cost reductions.

Refer to Appendix 1 for a detailed breakdown of Underlying Profit.

Underlying ROCE from continuing operations improved by 3 per cent to 8.4 per cent reflecting increased earnings in both the Energy Markets and Integrated Gas businesses and lower average capital employed from the impact of impairments in H1 FY2018 and prior periods. Refer to Appendix 1 for a detailed breakdown of ROCE.

Net cash from operating and investing activities (NCOIA) increased by 92 per cent to \$2,645 million driven by improved earnings in Energy Markets, increased cash flows from APLNG and the successful completion of the Lattice Energy and Acumen sales. Refer to section 3.3 and Appendix 1 for details.

Adjusted Net Debt reduced by \$1.6 billion to \$6.5 billion at 30 June 2018 and Adjusted Net Debt/Underlying EBITDA was 3.4x, within the interim capital structure target of 3.0 – 3.5x. Gearing reduced 7 per cent from 42 per cent at 30 June 2017 to 35 per cent at 30 June 2018. Refer to section 3.4 for details.

The Board has determined not to pay a dividend in respect of earnings for the second half of 2018.

### 3.2 Reconciliation from Statutory to Underlying Profit

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)
<b>Statutory Profit/(Loss)</b>	<b>218</b>	<b>(2,226)</b>	<b>2,444</b>
Items Excluded from Underlying Profit (post-tax)			
Fair value and foreign exchange movements	(410)	96	(506)
LNG items pre-revenue recognition	-	(36)	36
Disposals, impairments and business restructuring	(394)	(2,836)	2,442
Total Items Excluded from Underlying Profit (post-tax)	(804)	(2,776)	1,972
<b>Underlying Profit (Total operations)</b>	<b>1,022</b>	<b>550</b>	<b>472</b>

Fair value and foreign exchange movements reflect fair value losses associated with commodity hedging, interest rate swaps and other financial instruments (see Appendix 1 for further information on the nature of financial instruments).

Fair value and foreign exchange movements also includes the expense associated with certain up-front electricity hedge premiums (\$112 million post-tax). Following the implementation of a new Financial Instruments accounting standard from 1 July 2018, we have undertaken a review of all fair value accounting and determined that, from FY2019, the expense of these upfront premiums will be included within Underlying Profit.

Disposals, impairments and business restructuring for the period of \$394 million includes a gain on the sale of Acumen of \$239 million, impairment charges recognised in H1 FY2018 of \$533 million (post-tax), transaction costs associated with the disposal of Lattice Energy of \$31 million (post-tax) and a Lattice Energy related Foreign Currency Translation Reserve release of \$27 million.

### 3.3 Cash flows

#### Sources of cash

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)
<b>Underlying EBITDA – continuing operations</b>	<b>2,947</b>	<b>2,173</b>	<b>774</b>
Non-cash APLNG Underlying EBITDA (equity accounted)	(1,405)	(859)	(546)
Other non-cash items in Underlying EBITDA	136	116	20
Change in working capital	(245)	(178)	(67)
Electricity hedge premiums (excluded from Underlying Profit)	(160)	(133)	(27)
Tax/Other	(120)	(115)	(5)
<b>Cash flows from operating activities – continuing operations</b>	<b>1,153</b>	<b>1,005</b>	<b>148</b>
Net cash from/(to) APLNG	363	(170)	533
Net disposals/other	1,486	888	598
Discontinued operations (NCOIA)	46	106	(60)
<b>Net sources of cash</b>	<b>3,048</b>	<b>1,829</b>	<b>1,219</b>

Other non-cash items in Underlying EBITDA includes a provision increase for legacy site remediation of \$70 million and amortisation of oil hedge premiums paid in the prior year of \$64 million.



FY2018 Working capital increased by \$245 million, primarily due to:

- \$137 million increase in Energy Markets driven primarily by higher coal and LREC inventory;
- \$54 million increase in Integrated Gas driven by timing of cost recoveries from APLNG as upstream operator; and
- \$53 million increase in Corporate primarily relating to timing of property fit-out incentive receivable and prior period transaction costs paid during the year.

Net cash distributions to Origin from APLNG were \$363 million. This comprised the following:

- (\$74) million contributed in the first half of FY2018
- \$76 million received via reserve account loan
- \$227 million received via MRCPS interest
- \$134 million received via MRCPS buy back

### Uses of cash

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)
<b>Net sources of cash</b>	<b>3,048</b>	<b>1,829</b>	<b>1,219</b>
Capital expenditure	(328)	(323)	(5)
Electricity futures collateral	(170)	6	(176)
Operator cash call movements	(81)	12	(93)
Interest and dividends paid	(476)	(542)	65
Close out of oil forward sale agreements <sup>(a)</sup>	(265)	-	(265)
Close out of FX hedges	(56)	-	(56)
Repayment of borrowings	(1,675)	(974)	(699)
<b>Net uses of cash</b>	<b>(3,050)</b>	<b>(1,821)</b>	<b>(1,228)</b>
<b>Net increase in cash and cash equivalents</b>	<b>(2)</b>	<b>7</b>	<b>(9)</b>

(a) Relates to the close out of agreements to forward sell oil where the proceeds were received in a prior period. The assets forecast to deliver oil were sold as part of the sale of Lattice Energy.

FY2018 continuing capital expenditure of \$328 million comprises:

- Mandatory spend (\$55 million), primarily expenditure related to the implementation of Power of Choice electricity market reforms;
- Sustaining spend (\$193 million), including \$63 million related to Eraring power station maintenance and unit 1 overhaul, \$33 million related to Darling Downs power station major outage and \$26 million LPG spend; and
- Productivity/growth (\$80 million), including Quarantine power station re-power and Future Energy investments.

Electricity futures collateral reflects movement in funds held on deposit to cover electricity futures positions.

Operator cash call movements represents the movement in funds held and other balances relating to Origin's role as upstream operator of APLNG.

### 3.4 Capital management

Since 30 June 2017, Adjusted Net Debt has reduced from \$8.1 billion to \$6.5 billion driven by improved operating cash flow, cash returns from APLNG and the proceeds from asset sales.

During FY2018 Origin progressed a number of capital management initiatives including:

- The sale of Lattice Energy for \$1,585 billion with an economic effective date of 1 July 2017 and net proceeds of ~ \$1 billion used to repay debt;
- The sale of the Acumen metering business for \$267 million with proceeds utilised to repay debt;
- The cancellation of \$3.4 billion of surplus undrawn debt facilities following completion of the APLNG lenders' test and asset disposals, resulting in ongoing commitment fee savings of ~ \$20 million per annum; and
- The refinancing of \$4 billion in syndicated debt with new four, five and seven year maturities and the redemption of the €500 million 2071 hybrid, which together with the proceeds from asset sales will result in savings of ~ \$80 million per annum.

In addition, APLNG and its shareholders are actively pursuing opportunities to refinance APLNG project finance debt with the prime objective of reducing interest costs.

#### Adjusted net debt down \$1.6 billion

Origin's target capital structure is to achieve an Adjusted Net Debt/Underlying EBITDA ratio of 2.5–3.0x which equates to a gearing range of ~ 25–30 per cent. Adjusted Net Debt/Underlying EBITDA as at 30 June 2018 was 3.4x, within the interim capital structure target of 3.0 – 3.5x, and gearing was 35 per cent down from 42 per cent at 30 June 2017.

See section 3.3 for details of cash movements.

FX/Other changes in Adjusted Net Debt relate primarily to foreign exchange and fair value adjustments associated with USD denominated debt held by Origin, electricity futures collateral, operator cash call movements and close out of FX hedges.

Origin holds investment grade credit ratings of BBB – (positive outlook) from S&P and Baa3 (positive outlook) from Moody's.

#### Debt portfolio and management

For the 12 month period Origin's average interest rate was 6.5 per cent. As at 30 June 2018 Origin's committed and undrawn debt facilities and cash totalled \$3.6 billion.

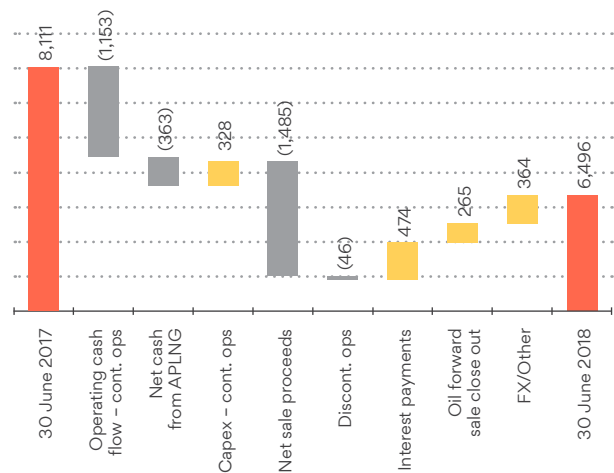
After the capital management initiatives noted earlier in section 3.4, Origin's average portfolio term to maturity increased from 2.8 years to 3.4 years, excluding the hybrid.

#### APLNG funding

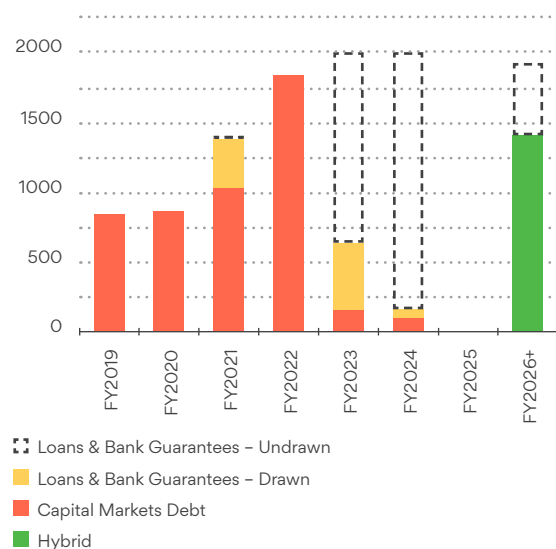
During the construction phase of APLNG, the shareholders, including Origin, contributed capital into APLNG via ordinary equity and the investment in preference shares (termed MRCPS) issued by APLNG. APLNG distributes funds to shareholders first via fixed dividends of 6.37 per cent per annum on the MRCPS, recognised as interest income by Origin and second either via buy-back of MRCPS or dividends on ordinary equity. During FY2018, Origin received \$227 million in MRCPS interest income and \$134 million via a buy-back of MRCPS. The balance of MRCPS held by Origin at 30 June 2018 was US\$2,673 million.

APLNG signed a US\$8.5 billion project finance facility in 2012 to fund the construction of the LNG project and the facility was fully drawn in 2017. During the period APLNG made principal repayments of US\$713 million (A\$915 million) on this facility. The outstanding project finance loan balance as at 30 June 2018 was US\$7,346 million (A\$9,949 million, APLNG 100 per cent).

Movements in Adjusted Net Debt (\$m)

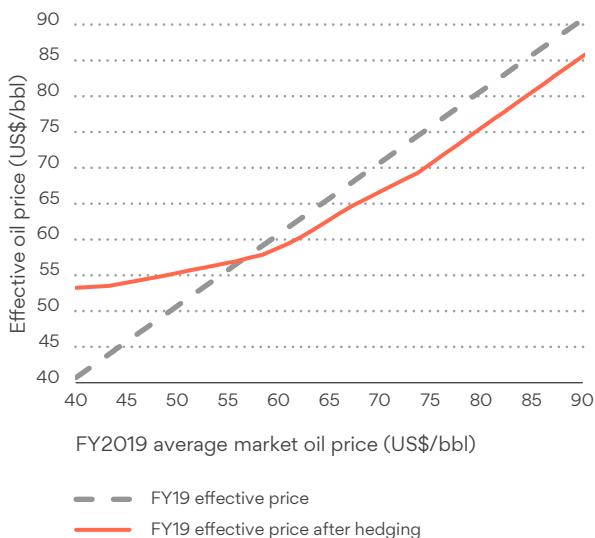


Debt maturity profile – post refinance (\$m)

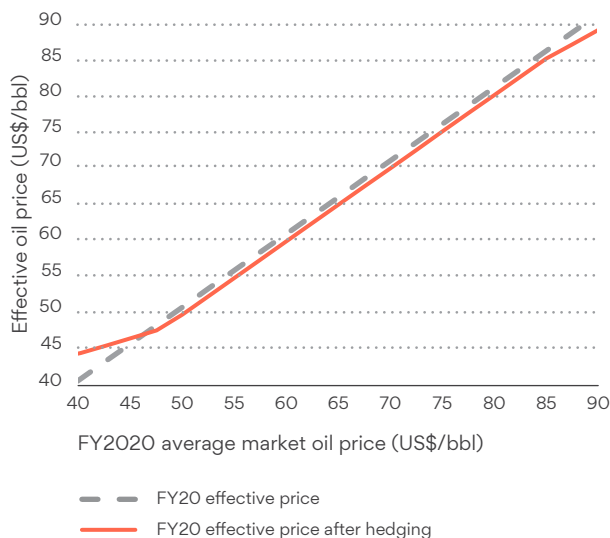


**Oil and LNG hedging**

**FY2019 oil hedging payoff**



**FY2020 oil hedging payoff**



All effective oil prices are in JCC crude oil equivalents. Effective price is inclusive of contract pricing lags, hedging gains (losses) and premium costs.

Origin entered into oil hedging instruments to manage its share of APLNG FY2019 and FY2020 oil price risk.

In FY2019, 15.4 mmbbl of oil have been hedged through a combination of put and call options, collars and three-way producer hedges for a premium of \$34 million. The FY2019 oil hedge position provides full participation to oil price movements above US\$75/bbl. The table below shows the hedging gain/(loss) at various FY2019 average oil prices.

**FY2019 expected hedge gain/(loss) at various oil prices (A\$m @ 0.75 AUD/USD)**

	US\$60/bbl	US\$65/bbl	US\$70/bbl	US\$75/bbl and above
Hedge gain/(loss)	1	(36)	(78)	(111)
Premium	(34)	(34)	(34)	(34)
<b>Total hedge cost</b>	<b>(33)</b>	<b>(70)</b>	<b>(112)</b>	<b>(145)</b>

In FY2020, 11.6 mmbbl of oil have been hedged at a floor price of US\$48/bbl and 4.2 mmbbl have been hedged via sold call options at a strike price of US\$85/bbl, for a total premium cost of \$26 million.

Gas volumes produced by APLNG in excess of the contracted volumes are sold to the domestic gas market and the spot LNG market. To manage the price risk associated with these volumes, Origin entered into a number of forward fixed price hedge contracts that settle over the period to the end of FY2020. Since entering into those contracts, the JKM spot price has increased resulting in higher cash flow from APLNG and a loss on those fixed price hedge contracts. Our FY2019 LNG hedge position currently consists of physical and financial LNG contracts at an estimated hedge mark-to-market cost of \$75-\$85 million at current market prices. In FY2020 we hold a smaller hedge position against the expected APLNG uncontracted sales exposure.

Origin also has an established position in LNG via a contract with ENN Energy Trading Company Limited to supply 0.28mtpa for a period of five years commencing in FY2019, and a contract to purchase 0.25mtpa from Cameron LNG for a period of 20 years on a Henry Hub linked basis commencing in FY2020, subject to the commencement of that project.

**Final dividend**

The Board has determined not to pay a dividend in respect of earnings for the second half of FY2018.

Subject to Board approval and no material adverse change in business conditions, our medium term outlook supports recommencement of dividends in FY2019.

## 4. Review of segment operations

### 4.1 Energy Markets

**Underlying EBITDA – continuing operations**

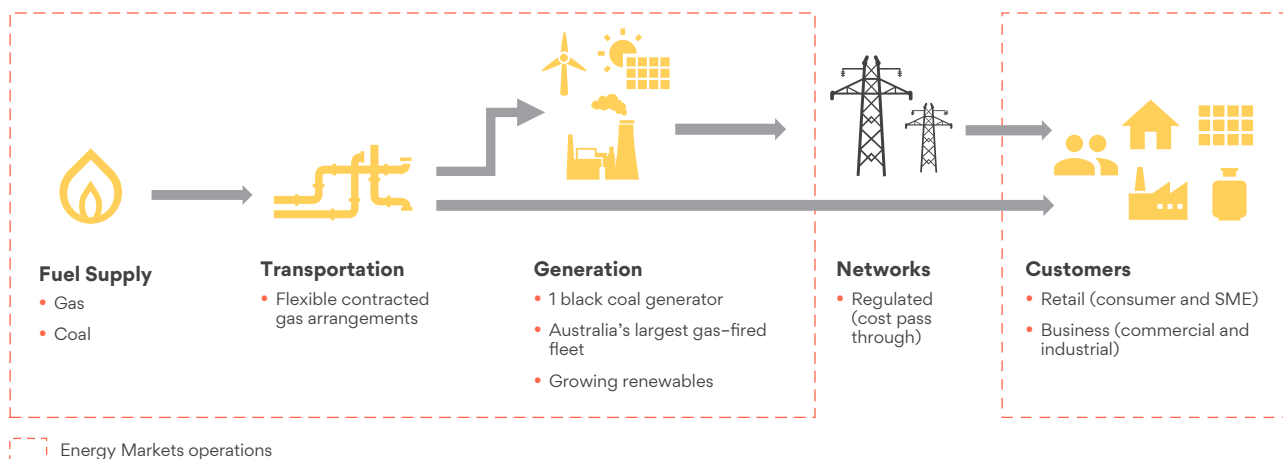
**\$1,811M**

Up 21% vs FY2017

**Electricity Generation Up by**

**14%**

vs FY2017 to 25.4 TWh (owned and contracted)



#### Overview

Energy Markets comprises Australia's largest energy retail business by customer accounts. The generation portfolio includes Australia's largest fleet of gas-fired peaking power stations supported by a substantial contracted fuel position, a growing supply of renewable energy and Australia's largest power station, the Eraring black coal-fired power station.

Energy Markets reports on an integrated portfolio basis. Electricity and Natural Gas gross profit and retail costs to serve are reported separately, as are the EBITDA of the Solar and Energy Services, Future Energy and LPG divisions.

#### Operations

Energy Markets delivered a 14 per cent increase in electricity generation during FY2018, reflecting the 1 in 20 year outage at Eraring in the prior year and increased our generation in response to higher wholesale prices. Increased generation included contracting 240 MW of gas fired capacity at Pelican Point from 1 July 2017, utilising Origin's gas supply portfolio.

Eraring generated 15.9 TWh, at the top end of guidance provided of 15.5–16 TWh. Since completing its major outage in FY2017 Eraring has achieved an average availability factor of 85 per cent, well above the NEM average.

Renewable supply continues to grow with a further 77 MW coming online during FY2018.

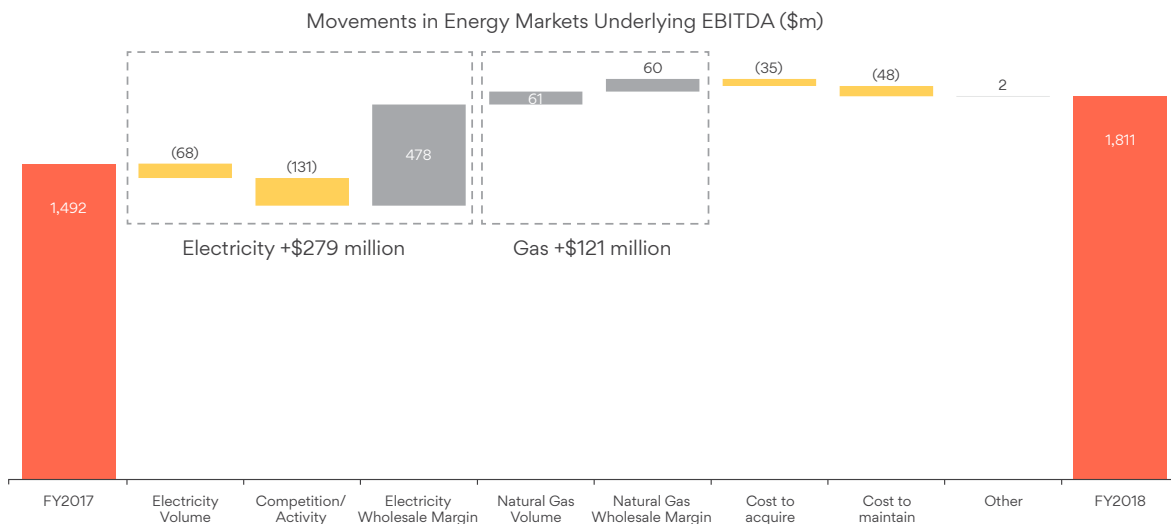
Retail markets experienced increased competition during FY2018 impacting customer numbers, operating costs and revenue rates as more customers moved onto higher headline discounts. We are continuing to defend market share and manage for value and are focused on transforming the customer experience and transitioning to a more efficient cost structure through a digital first approach.

## Financial summary

### Segment summary

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
<b>Earnings:</b>				
Total Segment Revenue	14,344	13,558	786	6
Electricity gross profit	1,705	1,426	279	20
Natural Gas gross profit	649	528	121	23
Electricity & Natural Gas cost to serve	(624)	(541)	(83)	15
LPG EBITDA	91	88	3	3
Solar & Energy Services EBITDA	10	5	5	100
Future Energy costs	(19)	(14)	(6)	41
<b>Underlying EBITDA</b>	<b>1,811</b>	<b>1,492</b>	<b>319</b>	<b>21</b>
Depreciation and amortisation	(359)	(325)	(34)	10
<b>Underlying EBIT</b>	<b>1,453</b>	<b>1,167</b>	<b>286</b>	<b>25</b>
<b>Cash flow:</b>				
Underlying EBITDA	1,811	1,492	319	21
Change in working capital	(137)	(165)	28	(17)
Electricity hedge premiums	(160)	(133)	(27)	21
Other	(26)	(60)	33	(56)
<b>Cash flow from operating activities</b>	<b>1,487</b>	<b>1,134</b>	<b>353</b>	<b>31</b>
Capital expenditure	(302)	(278)	(24)	9
Net disposals	267	436	(169)	(39)
<b>Net cash flow from operating and investing activities</b>	<b>1,453</b>	<b>1,292</b>	<b>161</b>	<b>12</b>

### Underlying EBITDA



Energy Markets' Underlying EBITDA increased \$319 million to \$1,811 million reflecting growth in both Electricity and Natural Gas gross profit, underpinned by strong wholesale portfolio performance, partially offset by increased retail costs to serve in a competitive market environment.

See Appendix 2 for a detailed breakdown of Energy Markets financial performance.

**Electricity gross profit increased \$279 million** driven by:

- Improved wholesale performance (\$478 million) with a 3 TWh increase in owned and contracted generation offsetting higher green costs from the roll off of legacy LREC inventory and increases in the SRES regulatory rate; partly offset by
- lower sales volumes (\$68 million) reflecting a combination of customer losses, milder weather and continued energy efficiency and solar PV penetration; and
- Increased competition and customer activity (\$131 million) including more customers moving onto discounted market offers.

Higher wholesale electricity prices and an increase in generation volumes, allowing for a reduction in contracted and spot electricity purchases saw unit margin increase from \$35.90/MWh to \$45.50/MWh.

**Natural gas gross profit increased \$121 million** reflecting improved sales volumes (\$61 million) and margins (\$60 million). A strong and flexible supply portfolio facilitated additional sales to business customers (26.5 PJ) and our own electricity generation portfolio (5.2 PJ). Unit margin increased across business and retail customer segments as a result of a competitive gas portfolio and rising market price environment. Average margin increased \$0.2/GJ to \$3.0/GJ notwithstanding higher gas procurement costs and the impact of a higher proportion of business customer volumes at lower unit margin.

**Electricity and natural gas cost to serve increased by \$83 million** to \$624 million due to increased competitive activity, reflecting higher energy prices and new entrants:

- Increased cost to acquire and retain (\$35 million) reflecting:
  - Costs associated with increased activity/competition and brand (\$34 million) including a 23 per cent increase in call volumes and a 23 per cent increase in win/retain activity
- Increased cost to maintain (\$48 million) due to:
  - Higher bad and doubtful debts expense (\$13 million) reflecting rising energy prices and more customers on payment plans;
  - Ongoing spend on data analytics to support customer strategy (\$10 million) and increased digital interactions (\$2 million); and
  - Other costs associated with an increase in activity/competition (\$8 million).

There was a 17,000 decrease in electricity and natural gas customer accounts during the period due to increased competition and new entrants.

We competed actively for customers through various sales channels, improving service, introducing new products and campaigns, which contributed to net customer gains of 30,000 in H2 FY2018. We lifted customer experience metrics by achieving the top Strategic Net Promoter Score of Tier 1 retailers and Interaction Net Promoter Score increasing by six-points to 21.7.

Origin's digital-first approach is driving more and more customer interactions through online channels, resulting in:

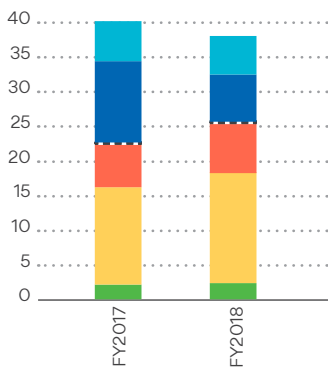
- An 18 per cent increase in eBilling accounts to 2.1 million;
- A 28 per cent increase in online sales to 345,000;
- A 13 per cent increase in direct debit accounts to 1.1 million; and
- A 54 per cent increase in MyAccount and Mobile App unique visits.

**Future Energy**

During the year we progressed a series of initiatives to connect customers to the energy and technologies of the future, including:

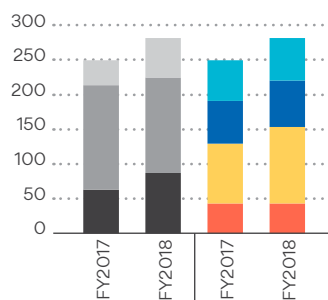
- Collaborative energy programs: We are a co-founder of Free Electrons, a global clean energy accelerator program that selects start-ups each year to undergo rigorous assessments, culminating in market trials with large utilities such as Origin. The 2018 program commenced in May with 15 start-ups and 10 utility partners involved. We are also the principal sponsor of Energy Lab based at the University of Technology, Sydney, a home for clean energy innovation and Australian energy technology start-ups.
- Energy management trials: We have rolled out Usage Buster to approximately 40,000 smart meter customers to break down their home energy usage and are working with commercial and industrial customers on demand-side management aimed at shifting load to achieve potential electricity cost savings.
- Connected home: We launched HomeHQ, a smart home solution allowing customers to monitor and control aspects of their home, as part of a bundled energy solution.
- Integrated renewable energy: Trial of a peer to peer energy trading solution.

**Sources of Electricity (TWh)**



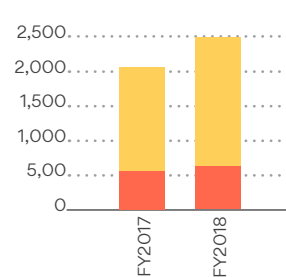
- Renewables
- Gas
- Contracts
- Coal (Eraring)
- Other
- Spot

**Sources and Uses of gas (PJ)**



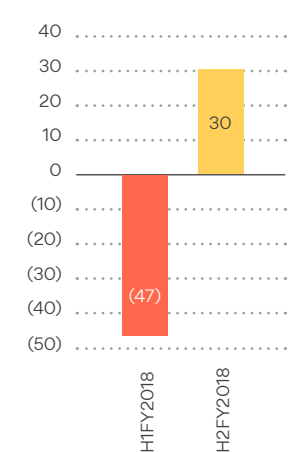
- Oil-linked
- Other fixed price
- APLNG - fixed price
- LNG
- Generation
- Business
- Retail

**Customer Wins/Retains (000s)**



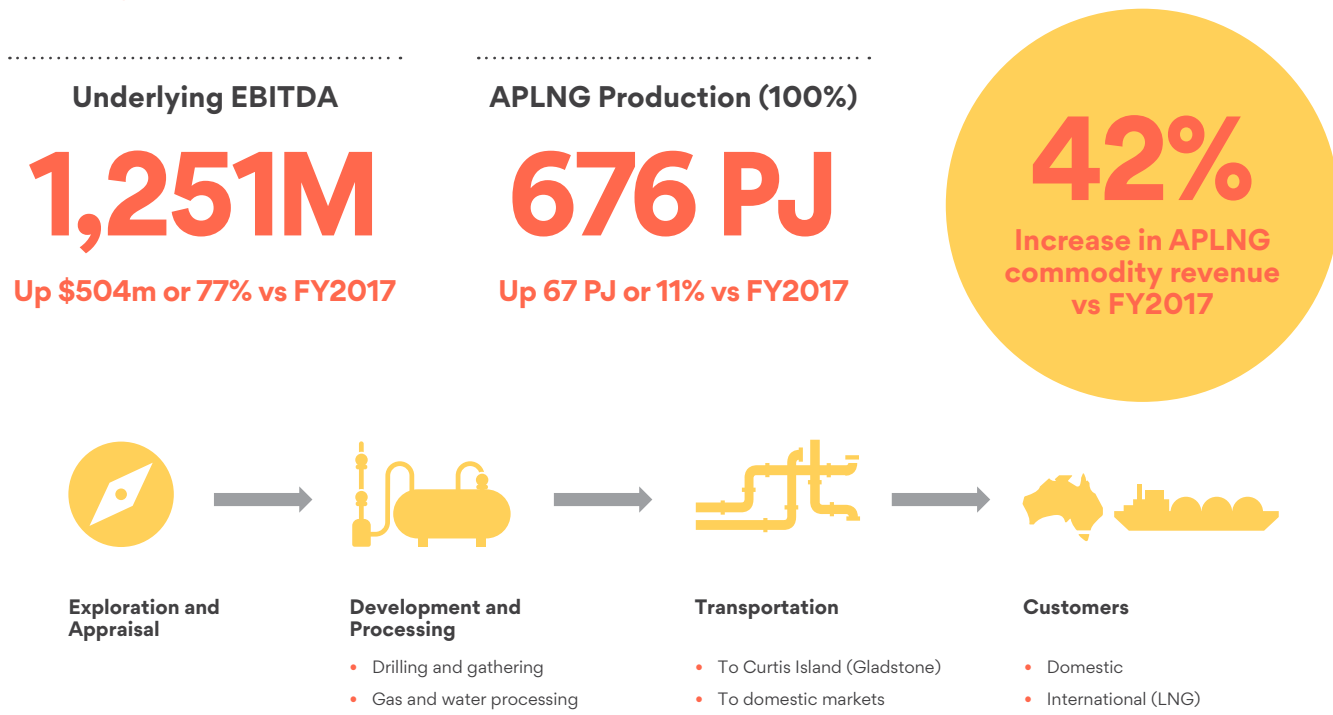
- Wins
- Retains

**Net customer movement (000s)**



- H1 FY2018
- H2 FY2018

## 4.2 Integrated Gas



### Overview

Integrated Gas comprises Origin’s 37.5 per cent shareholding in APLNG (an equity accounted incorporated joint venture), two potential unconventional exploration and development assets (Beetaloo and Ironbark) and a potential conventional development resource in the offshore Browse Basin. APLNG operates Australia’s largest CSG to LNG export project (by nameplate capacity) and has Australia’s largest 2P CSG reserves<sup>4</sup>. Origin is the operator of the upstream CSG exploration and appraisal, development and production activities. ConocoPhillips is the operator of the two train LNG facility at Gladstone in Queensland.

As APLNG is an incorporated joint venture, Integrated Gas reports its share of APLNG EBITDA, as well as costs (net of recoveries) incurred as upstream operator and corporate service provider and other costs incurred in managing this investment and Origin’s exposure to LNG pricing risk. The share of APLNG ITDA is recorded as one line item between EBITDA and EBIT.

### Operations

#### APLNG operations

APLNG continues to deliver increased production and revenue with more than 250 LNG cargoes loaded and shipped to 30 June 2018, including 125 cargoes in FY2018. APLNG has a proven ability to produce at > 10 per cent above the downstream plant’s 9 mtpa nameplate capacity. APLNG successfully completed the project finance lenders’ tests in FY2018, releasing the remaining US\$3.4 billion of shareholder guarantees in August 2017.

Planned maintenance was successfully completed during the second half of FY2018 on both LNG trains with excess gas volumes during this period directed to the domestic market and to the other LNG counterparties. Production from operated fields averaged 1,410 TJ/d over the year compared to 1,225 TJ/d for the same period last year.

APLNG announced an agreement to supply an additional 41 PJ of gas to Origin for the domestic market over 14 months commencing November 2017, playing a significant role in supplying gas to the Australian east coast market.

APLNG acquired various CSG interests from Tri-Star in 2002 that are subject to reversionary rights and an ongoing royalty in favour of Tri-Star. Refer to section 6 for disclosure relating to Tri-Star litigation associated with these CSG interests and for a description of other risks and mitigants with respect to APLNG’s gas reserves, resources and deliverability.

<sup>4</sup> As per EnergyQuest EnergyQuarterly, June 2018. Some of APLNG’s CSG reserves and resources are subject to reversionary rights and an ongoing interest in favour of Tri-Star. Refer to section 6 for further information.

## Other operations

### Beetaloo (Northern Territory)

Origin has a 70 per cent interest in exploration permits over 18,500 km<sup>2</sup> in the Beetaloo Basin. This is a compelling exploration opportunity with four stacked, unconventional hydrocarbon plays identified and a booked contingent resource of 6.6TCF (100 per cent) relating to the Velkerri B shale dry gas play. Origin is entering Stage 2 appraisal targeting the Kyalla and Velkerri shale liquids rich gas plays. The Scientific Inquiry into Hydraulic Fracturing in the Northern Territory released its Final Report in April 2018, allowing the Northern Territory government to lift the moratorium on fracking. Origin continues to work with the government on implementation of the 135 recommendations from the inquiry and engage with stakeholder groups, including those directly connected to the project area.

### Ironbark (Surat Basin, Queensland)

The Ironbark development has entered FEED for Stage 1 development with a revised multi-stage field development plan, initially targeting the high permeability sweet spot (Undulla Nose extension) in the North West sector of the tenement. Successful testing of low permeability drilling techniques at APLNG, which could be applied to Ironbark, provide the potential for development of additional resource. Origin is considering various options to bring the Ironbark gas to market and the FEED process is expected to inform an optimum path for development of the resource in the future.

## Financial Summary

### Segment Summary

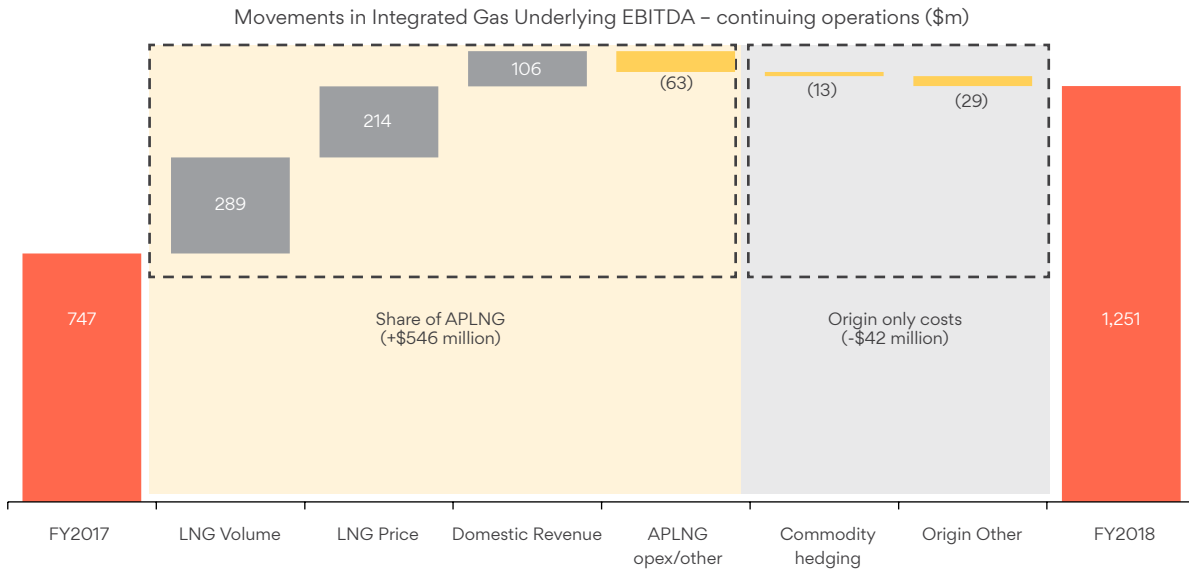
Year Ended 30 June Continuing Operations	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
<b>Earnings</b>				
Share of APLNG EBITDA	1,405	859	546	64
Origin only commodity hedging	(111)	(98)	(13)	13
Other Origin only costs	(43)	(14)	(29)	207
<b>Underlying EBITDA</b>	<b>1,251</b>	<b>747</b>	<b>504</b>	<b>67</b>
Origin Depreciation and amortisation	(22)	(19)	(3)	16
Share of APLNG ITDA	(1,194)	(925)	(269)	29
<b>Underlying EBIT</b>	<b>34</b>	<b>(197)</b>	<b>231</b>	<b>n/a</b>
Interest income	227	199	28	14
<b>Underlying Profit</b>	<b>261</b>	<b>2</b>	<b>259</b>	<b>13,971</b>
<b>Cash flow</b>				
Underlying EBITDA	1,251	747	504	67
Non-cash APLNG Underlying EBITDA (equity accounted)	(1,405)	(859)	(546)	64
Other Non-cash items in Underlying EBITDA <sup>(a)</sup>	66	116	(50)	(43)
Change in working capital	(54)	(8)	(46)	575
Other	(20)	(77)	57	(74)
<b>Cash flow from operating activities</b>	<b>(164)</b>	<b>(81)</b>	<b>(83)</b>	<b>102</b>
Capital expenditure	(21)	(31)	10	(32)
Net disposals	-	403	(403)	n/a
Net cash from/(to) APLNG <sup>(b)</sup>	287	(297)	584	n/a
<b>Net cash flow from operating and investing activities</b>	<b>101</b>	<b>(7)</b>	<b>108</b>	<b>(1,635)</b>

(a) Includes \$64 million related to amortisation of oil hedge premiums paid for in the prior year (FY2017: \$117 million).

(b) Excludes \$76 million loan proceeds (FY2017: \$127 million) included in financing cash flows.



**Underlying EBITDA**



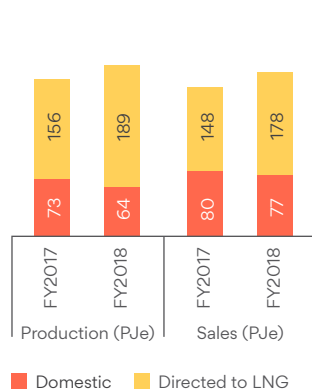
Integrated Gas Underlying EBITDA increased by \$504 million to \$1,251 million primarily reflecting increased production and higher commodity prices.

APLNG opex/other includes \$41 million relating to the exploration write-off of ATP663 (Gilbert Gully) and increased purchases and volume related costs (\$63 million), partially offset by net capitalised earnings from prior year (\$32 million).

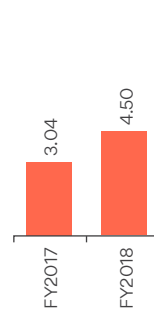
Commodity hedging reflects slightly lower oil hedging costs of \$95 million, inclusive of premiums (\$102 million in FY2017) offset by increased costs associated with LNG hedging of \$16 million (\$4 million gain in FY2017).

Origin Other includes lower cost recoveries relating to Origin’s upstream operatorship of APLNG.

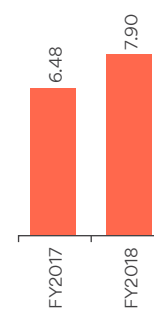
**APLNG Production and Sales (Origin share) (PJ)**



**APLNG Domestic Price (A\$/GJ)**



**APLNG LNG Price (US\$/MMBTU)**



Origin’s share of APLNG production increased by 25 PJ or 11 per cent to 254 PJ reflecting a full 12 month contribution from Train 2.

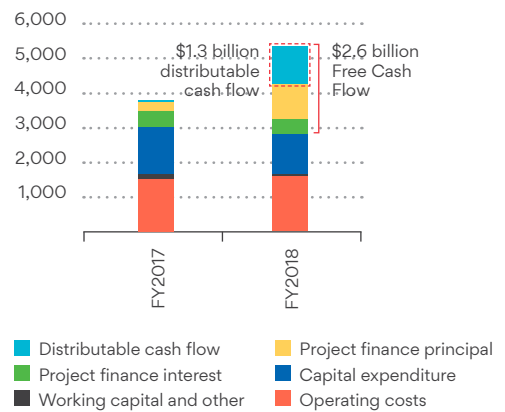
The average realised domestic gas price increased 48 per cent to \$4.50/GJ reflecting a reduction in sales of low priced gas under legacy contracts and higher market prices.

## Cash flow

APLNG generated Free Cash Flow of \$2.6 billion (APLNG 100 per cent) at an effective oil price of US\$56/bbl in FY2018. After servicing project finance interest and principal, net cash flow available for distribution was \$1.3 billion (Origin's 37.5 per cent share: \$482million). Refer to Appendix 3 for additional detail.

Increased production and higher commodity prices combined with a reduction in capital expenditure resulted in net cash from APLNG to Origin of \$363 million, compared to a \$170 million contribution from Origin to APLNG in FY2017. This is slightly lower than the share of distributable cash flow generated as cash was retained by APLNG for scheduled project finance repayments.

## APLNG uses of cash (A\$m)



Year Ended 30 June 100% APLNG (A\$m)	2018 @ 0.78 AUD/USD
Capital expenditure – Sustain	1,105
Capital expenditure – E&A	65
Operating expenses – pre-capitalisation	1,673
Less: Spot LNG & domestic revenue	(1,345)
<b>Operating breakeven</b>	<b>1,498</b>
<b>Operating breakeven (US\$/boe)</b>	<b>21</b>
Project finance interest	418
Project finance principal	915
<b>Distribution breakeven</b>	<b>2,831</b>
<b>Distribution breakeven (US\$/boe)</b>	<b>39</b>
<b>Sales Volumes</b>	
Domestic and Spot LNG (PJ)	248
Contract LNG volumes (PJ)	432
<b>Contract LNG volumes (mmboe)</b>	<b>57.0</b>

APLNG FY2018 distribution breakeven of US\$39/boe is US\$6/boe lower than FY2018 guidance of US\$45/boe driven by:

- Operated well cost savings of US\$2/boe with cost per well reducing to \$1.9 million from \$2.4 million;
- Changes to scope and timing of non-operated activity (US\$2/boe); and
- Higher spot LNG and domestic revenue from higher volumes sold at favourable realised prices (US\$2/boe).

Operating expenses were in line with expectations and reflect gas purchases to support the lenders test and redundancy costs.

## 5. Climate change disclosures

Origin unequivocally supports the Paris Climate Accord and other measures to reduce carbon emissions. We support Australia's 2030 target and the objectives of the proposed National Energy Guarantee, and have advocated for more ambitious targets for the electricity sector over time, including a transition to net zero emissions by 2050 or earlier.

The disclosures below reflect the adoption of the recommendations made by the Financial Stability Board's Taskforce on Climate-related Financial Disclosures (TCFD).

### Governance

Board	<ul style="list-style-type: none"> <li>• Considers, reviews and monitors climate-related risks and opportunities as part of investment considerations, regular financial and operational performance reviews.</li> <li>• Risk and HSE committees meet at least quarterly.</li> <li>• Monitors and oversees progress on targets aimed at addressing climate related issues and considers climate related risks and opportunities at least annually as part of the Company's strategic planning process.</li> </ul>
HSE risk controls	<ul style="list-style-type: none"> <li>• Outlines the requirements for managing climate related risks and impacts including carbon emissions.</li> <li>• Further detail on the risk management framework can be found in section 6 of this Operating and Financial Review.</li> </ul>
Executive leadership team	<ul style="list-style-type: none"> <li>• Strategic planning: monitor climate change risks via risk, assurance and compliance meetings.</li> <li>• Track, report and escalate risks to the appropriate level of management within Origin based on the assessed level of risk and the agreed escalation protocols.</li> <li>• The Executive General Manager, Integrated Gas and the Executive General Manger, Future Energy and Business Development are responsible for identifying, quantifying and managing climate related risks and reporting these to the Board and the Risk and HSE Committees.</li> </ul>

### Strategy

As a leading Australian integrated energy company, climate related risks and opportunities are a core feature of our strategy. We have a five pillar approach to drive decarbonisation of our business.

- 1) Exit coal-fired power generation by 2032;
- 2) Significantly grow renewables in our portfolio;
- 3) Utilise our strong gas position as a lower emissions generation firming fuel;
- 4) Empower customers with cleaner, smarter energy solutions; and
- 5) Demonstrate leadership in climate change advocacy.

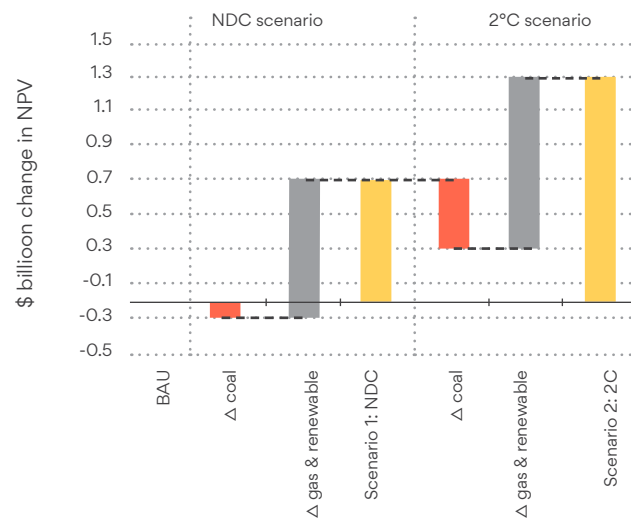
Origin is positioned to prosper in a low carbon economy and our long term planning is based on ensuring resilience and generating value under a number of carbon reduction scenarios.

#### **Our wholesale generation portfolio is not only resilient but well placed to prosper in a low carbon world:**

- Eraring is our only coal-fired power station
- Short generation – provides flexibility to add low cost renewables to our portfolio without stranding assets
- Increasing renewables exposure – targeting renewables reaching 25 per cent of generation mix by 2020
- Gas peaking fleet – sufficient capacity to support our increased uptake of renewables
- Strong gas supply – gas is the only fossil fuel to grow under IEA's 450 scenario.

In October 2017, Origin released a scenario analysis that demonstrated the value of its wholesale electricity generation portfolio increases in scenarios reflecting both Australia's Nationally Determined Contribution (NDC) and the Paris Climate Accord goal of limiting global average temperature increases to below 2°C above pre-industrial levels. The impacts of these scenarios on the value of the company's wholesale generation portfolio are expressed in the following chart.

**Origin Climate Change Scenarios – Net Present Value**



Under both scenarios, the value of Origin's gas and renewables portfolio increases as demand for these low emission assets grows. While the value of Eraring decreases, it retains a net positive value and is an important asset to ensure reliability and affordability of power in the short to medium term. Refer to ASX release dated 18 October 2017.

#### **Our gas portfolio is also well positioned for a lower carbon world:**

- Domestically Origin's gas position can partner with renewables to provide low emission firming
- APLNG makes an important contribution to lowering the carbon intensity of energy consumption in Asia

The vast majority of APLNG gas reserves are sold under 20 year take or pay contracts to major Asian counterparties on an oil-linked basis and as such the most material valuation sensitivity relates to oil price fluctuations. Origin's long term oil price assumption used for impairment testing is US\$67/bbl (real) from 2022. A decrease of US\$1/bbl in isolation would lead to a decrease of US\$375 million in Origin's investment in APLNG (from a carrying value of \$5,988 million as at 30 June 2018).

#### **Climate related risk management**

Climate change and associated regulatory change are core considerations of Origin's strategy and our risk management process. The climate change risks and opportunities considered focus on those that impact the price, supply and use of energy globally and domestically. Other climate change risks around water availability and severe weather events are also considered. Origin's risk management framework supports the identification of climate related risks, further details of which can be found in section 6 of this Operating and Financial Review.

Material strategic decisions, including those associated with climate change, are formulated by management and approved by the Board. Risks and opportunities associated with climate change are prioritised according to the magnitude and likelihood of the risk or opportunity.

Management considers a range of climate related risks as part of its risk identification process. These risks are reported to the Risk Committee in terms of their magnitude and likelihood of occurrence.

Origin's Supplier Code of Conduct was developed throughout FY2018 and will be implemented over the next year. It requires that suppliers ensure their practices consider the impact on the social and environmental sustainability of the communities in which they operate. This requirement will be operationalised through sourcing processes and supported through Origin's HSE management system.

**Metrics & targets**

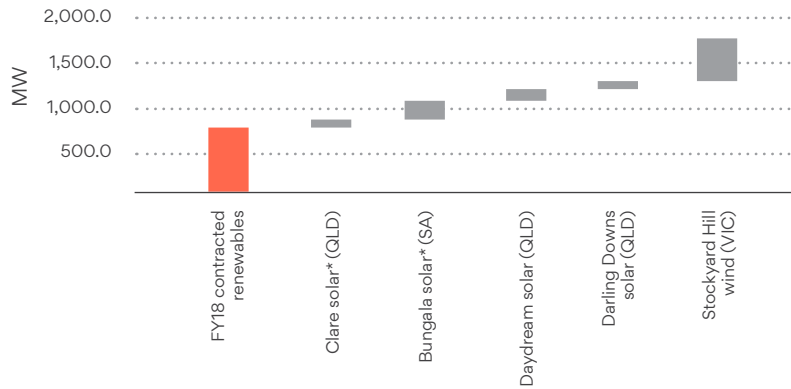
During FY2018, operated Scope 1 & 2 carbon emissions increased to 20,079 ktCO<sub>2</sub>-e due to a full year’s contribution from APLNG Train Two and increased output from the Eraring black coal-fired power station. Eraring power station is a major contributor to reliability and security of electricity supply following the closure of the Hazelwood brown coal-fired power station in Victoria.

Further metrics on climate change are detailed in section 1 of the OFR.

In December 2017, Origin announced a commitment to a company wide, independently verified target of a 50 per cent reduction in Scope 1 & 2 emissions<sup>5</sup> and a 25 per cent reduction in value chain Scope 3 emissions<sup>6</sup> by 2032, both from 2017 baseline levels. We remain committed to and confident in achieving these targets through the continued investment in renewable supply and our commitment to exit coal-fired generation by 2032.

We are targeting renewables to comprise more than 25 per cent of our generation mix by 2020 – up from 13 per cent today. The chart below shows the contracted renewable projects from 2018 to 2020.

**Origin’s Growth in Renewable Capacity in 2020  
(committed as at 30th June 2018)**



\*Partially online at 30 June 2018.

5 Excluding APLNG Train two, Origin will review the inclusion of Train two emissions in our target baseline during FY2019.

6 Excluding LNG exports.

## 6. Risks related to Origin's future financial prospects

The scope of operations and activities means that Origin is exposed to risks that can have a material impact on our future financial prospects. Material risks, and the company's approach to managing them, are summarised below.

### Risk management framework

Origin's risk management framework supports the identification, management and reporting of material risks. Overseen by the Board and the Board Risk Committee, the framework incorporates a 'three lines of defence' model for managing risks and controls in areas such as health and safety, environment, finance, reputation and brand, legal and compliance and social impacts. All employees are responsible for making risk-based decisions and to manage risk within approved limits.

During the year, the Board Risk Committee endorsed a consolidated set of financial, operational and strategic risk appetite statements.

#### Three lines of defence

Line of defence	Responsibility	Primary Accountability
<b>First line</b> Lines of business	Identifies, assesses, records, prioritises, manages and monitors risks.	Management
<b>Second line</b> Oversight functions	Provides the risk management framework, tools and systems to support effective risk management.	Management
<b>Third line</b> Internal audit	Provides assurance on the effectiveness of governance, risk management and internal controls.	Board, Board Committees and Management

### Material risks

The risks identified in this section have the potential to materially affect Origin's ability to meet its business objectives and impact its future financial prospects.

These risks are not exhaustive and are not arranged in order of significance.

#### Strategic risks

Strategic risks arise from uncertainties that may emerge in the medium to longer term and, while they may not necessarily impact on short-term profits, can have an immediate impact on the value of the company. These risks are managed through continuous monitoring and reviewing of emerging and escalating risks, ongoing planning and the allocation of resources and evaluation from management and the Board.

Risk	Consequences	Management
Competition	Origin operates in a highly competitive retail environment which can result in pressure on margins and customer losses.  Competition also impacts Origin's wholesale business, with generators competing for capacity and fuel and the potential for gas markets to be impacted by new domestic gas resources, LNG imports and the volume of gas exports.	<ul style="list-style-type: none"> <li>Our strategy to mitigate the impact of this risk on our retail business is to effectively manage customer lifetime value and build customer loyalty and trust by delivering simple, seamless and personalised customer experiences and offering innovative and differentiated products and services.</li> <li>We endeavour to mitigate the impact of this risk on our wholesale business by sourcing competitively priced fuel to operate our generation fleet and optimising flexibility in our fuel, transportation and generation portfolio.</li> </ul>
Technological developments/ disruption	Distributed generation is empowering consumers to own, generate and store electricity, consuming less energy from the grid. Technology is allowing consumers to understand and manage their power usage through smart appliances, having the potential to disrupt the existing utility relationship with consumers. Advances in technology have the potential to create new business models and introduce new competitors.	<ul style="list-style-type: none"> <li>Origin actively monitors and participates in technological developments through local and global start-up accelerator programs, trialling new energy technology and exploring investments in new products or business models.</li> <li>In parallel, Origin is growing its distributed generation and home energy services businesses and endeavouring to mitigate the impact of this risk on its core energy businesses by offering superior service and innovative products and reducing cost to serve.</li> </ul>

<p>Changes in demand for energy</p>	<p>Changes in energy demand driven by price, consumer behaviour, mandatory energy efficiency schemes, government policy, weather and other factors can reduce Origin's revenues and adversely affect Origin's future financial performance.</p>	<ul style="list-style-type: none"> <li>• Origin is partially mitigating the impact of this risk by applying advanced data and analytics capability to smart meter data to better predict customer demand and enable Origin to develop data based customer propositions.</li> </ul>
<p>Regulatory policy</p>	<p>Origin has broad exposure to regulatory policy change and other government interventions including energy markets, climate change policy, gas development and royalties and tax policy. Changes to policy and other government interventions will impact financial outcomes and, in some cases, change the commercial viability of existing or proposed projects or operations. Specific areas subject to review and development include retail price regulation, the National Energy Guarantee, domestic gas market interventions and the Petroleum Resources Rent Tax.</p>	<ul style="list-style-type: none"> <li>• Origin contributes to the policy process at all levels of government by actively participating in public policy debate, proactively engaging with policy makers and participating in public forums, industry associations, think tanks and research.</li> <li>• Origin advocates directly with key ministers and shadow ministers to achieve sound policy outcomes aligned with our commercial objectives.</li> <li>• Origin actively promotes the customer and economic benefits publicly that flow from our activities in deregulated energy markets.</li> </ul>
<p>Climate change</p>	<p>Climate change impacts many parts of Origin's business. Key risks and opportunities include ongoing decarbonisation of energy markets, decreased demand for fossil fuels in some markets, reduced lifespan of carbon-intensive assets, changes to energy market dynamics caused by the intermittency of renewables and community demand for lower-carbon sources of energy.</p>	<ul style="list-style-type: none"> <li>• Our strategy for transitioning to a carbon constrained future is focused on growth in renewables, gas and cleaner, smarter customer solutions. Origin has prepared for a range of decarbonisation scenarios.</li> <li>• Origin has committed to significantly growing supply of renewable generation, including 1,200 MW of committed large scale solar and wind energy since March 2016.</li> <li>• Origin uses the flexibility in its gas supply and peaking generation capacity to manage the intermittency of renewables.</li> <li>• Committed to halving emissions by 2032 in a science-based target.</li> </ul>

## Financial risks

Financial risks are the risks that directly impact the financial performance and resilience of Origin.

Risk	Consequences	Management
Commodity	<p>Origin has a long term exposure to international oil, LNG and gas prices through the sale of gas and LPG, and its investment in APLNG. Pricing can be volatile and downward price movements can impact cash flow, financial performance, reserves and asset carrying values.</p> <p>Prices and volumes for electricity that Origin sources to on-sell to customers are volatile and are influenced by many factors that are difficult to predict. Long term fluctuations in coal and gas prices also impact the margins of Origin's generation portfolio.</p>	<ul style="list-style-type: none"> <li>Commodity exposure limits are set by the Board to manage the overall financial exposure that Origin is prepared to take.</li> <li>Origin's commodity risk management process monitors and reports performance against defined limits.</li> <li>Commodity price risk is managed through a combination of physical positions and derivatives contracts.</li> </ul>
Foreign exchange and interest rates	<p>Origin has exposures through principal debt and interest payments in foreign currency long term borrowings, through the sale and purchase of gas and LPG, and through its investments in APLNG and the company's foreign operations. Interest rate movements and foreign exchange fluctuations could lead to a decrease in Australian dollar revenues or increased payments in Australian dollar terms.</p>	<ul style="list-style-type: none"> <li>Risk limits are set by the Board to manage the overall exposure.</li> <li>Origin's treasury risk management process monitors and reports performance against defined limits.</li> <li>Foreign exchange and interest rate risks are managed through a combination of physical positions and derivatives.</li> </ul>
Liquidity and access to capital markets	<p>Origin's business, prospects, and financial flexibility could be adversely affected by a failure to appropriately manage its liquidity position, or if markets are not available at the time of any financing or refinancing requirement.</p>	<ul style="list-style-type: none"> <li>Origin actively manages its liquidity position through cash flow forecasting and maintenance of minimum levels of liquidity as determined under Board approval limits.</li> </ul>
Credit and counterparty	<p>Some counterparties may fail to fulfil their obligations (in whole or part) under major contracts.</p>	<ul style="list-style-type: none"> <li>Counterparty risk assessments are regularly undertaken and where appropriate, credit support is obtained to manage counterparty risk.</li> </ul>

## Operational risks

Operational risks arise from inadequate or failed internal processes, people or systems or from external events.

Risk	Consequences	Management
Safe and reliable operations	<p>Malfunctioning plant, major infrastructure failure, incorrect application of procedures, unsafe practices, a physical security breach, or a cyber-attack may lead to the loss of lives, asset damage, environmental damage and other impacts to third parties.</p> <p>A production outage or constraint, network or IT systems outage, would affect Origin's ability to deliver electricity and gas to its customers. A serious incident or a prolonged outage may also damage Origin's financial prospects and reputation.</p>	<ul style="list-style-type: none"> <li>Core operations are subject to comprehensive operational, safety and maintenance procedures and directives.</li> <li>Origin personnel are adequately trained and licensed to perform their operational activities.</li> <li>Origin maintains an extensive insurance program to mitigate consequences by transferring financial risk exposure to third parties where commercially appropriate.</li> </ul>
Environmental	<p>An environmental incident or Origin's failure to consider and adequately mitigate the environmental, social and socio-economic impacts on communities and the environment has the potential to cause environmental impact, community action, regulatory intervention, legal action, reduced access to resources and markets, impacts to Origin's reputation and increased operating costs.</p>	<ul style="list-style-type: none"> <li>Origin engages with communities to understand, mitigate and report on environmental and social risks associated with its projects and operations.</li> <li>At a minimum, the management of environmental and social risks meets regulatory requirements. Where practical, their management extends to the improvement of environmental values and the creation of socio-economic benefits.</li> <li>A dedicated Board Committee oversees health, safety and environment risk. The Committee receives quarterly reporting of the highest rated environmental risks and mitigants, and reviews significant incidents and near misses.</li> </ul>



Risk	Consequences	Management
Cyber security	<p>A cyber security incident could lead to a breach of privacy, loss of and/or corruption of commercially sensitive data, and/or a disruption of critical business processes. This may adversely impact customers and the company's business activities.</p>	<ul style="list-style-type: none"> <li>• A dedicated cyber risk team, reporting directly to the executive responsible for Risk, is responsible for implementing a Board-approved cyber strategy.</li> <li>• Our cyber strategy improves preparedness for four scenarios: external intrusion leading to data theft or disruption; ransomware attacks; insiders stealing or disclosing data; and deliberate system manipulation.</li> <li>• External cyber security specialists are regularly employed to assess our cyber security profile, including penetration testing.</li> <li>• Employees undertake compulsory cyber awareness training, including how to identify phishing emails and keep data safe, and are subject to a regular program of random testing.</li> </ul>
APLNG gas reserves, resources and deliverability	<p>There is uncertainty about the productivity, and therefore economic viability, of resources and developed and undeveloped reserves. As a result, there is a risk that actual production may vary from that estimated, and in the longer term, that there will be insufficient reserves to supply the full duration and volumes to meet contractual requirements.</p> <p>As at 30 June 2018, APLNG's total resources are estimated to be greater than its contractual supply commitments on a volume basis. However, under certain scenarios of production and deliverability of gas over time, there is a risk that the rate of gas delivery required to meet APLNG's committed gas supply agreements may not be able to be met for the later years in the life of existing contracts.</p>	<ul style="list-style-type: none"> <li>• APLNG employs established industry procedures to identify and consider areas for exploration to mature contingent and prospective resources.</li> <li>• APLNG monitors reservoir performance and adjusts development plans accordingly and/or acquires reserves from alternate sources.</li> <li>• APLNG is progressing an exploration campaign to test high materiality plays that, if successful, could mitigate the deliverability risk.</li> <li>• APLNG is also progressing commercial arrangements for long term gas supply, and has the ability to substitute gas or LNG to meet contractual requirements if required</li> </ul>
Conduct	<p>Unethical business practice or failure to comply with Origin's Values may affect Origin's risk profile by impacting its business operations, financial prospects or reputation, particularly with customers and community stakeholders.</p>	<ul style="list-style-type: none"> <li>• Origin's Purpose, Values and Code of Conduct guide conduct and decision making across Origin.</li> <li>• A refresh of Company Values was deployed during the period throughout the company.</li> <li>• All Origin's people are trained every two years in Origin's Code of Conduct, and we conduct training for Insider Trading, privacy, anti-bribery and corruption and anti-competition and consumer law</li> <li>• Conduct risk is identified as a material risk within Origin's risk management framework and is regularly reported to the appropriate Board Committee. Controls specific to the different parts of Origin's business are the accountability of Business Units and are subject to Internal Audit.</li> </ul>
Joint venture	<p>Third party joint venture operators may have economic or other business interests that are inconsistent with Origin's own and may take actions contrary to the company's objectives, interests or standards. This may lead to potential financial, reputational and environmental damage in the event of a serious incident.</p>	<ul style="list-style-type: none"> <li>• Origin enforces a number of standards across its various joint venture interests.</li> <li>• Enterprise-wide joint venture governance and management standards are being revised to provide a more consistent approach to managing Origin's joint ventures.</li> <li>• Origin actively monitors and participates in its joint ventures through participation in their respective boards and governance committees.</li> </ul>
APLNG reversion	See page 42.	

### Australia Pacific LNG reversion

In 2002, APLNG acquired various CSG interests from Tri-Star that are subject to reversionary rights and an ongoing royalty in favour of Tri-Star. If triggered, the reversionary rights require APLNG to transfer back to Tri-Star a 45 per cent interest in those CSG interests for no additional consideration. The reversion trigger will occur when the revenue from the sale of petroleum from those CSG interests, plus any other revenue derived from or in connection with those CSG interests, exceeds the aggregate of all expenditure relating to those CSG interests plus interest on that expenditure, royalty payments and the original acquisition price.

The affected CSG interests represent approximately 21 per cent of APLNG's 3P CSG reserves (as at 30 June 2018).

Tri-Star served proceedings on APLNG in 2015 claiming that reversion occurred as early as 1 November 2008 following ConocoPhillips' investment in APLNG, on the assertion that the equity subscription monies paid by ConocoPhillips was revenue for purposes of the trigger. Tri-Star has also claimed in the alternative that reversion occurred in 2011 or 2012 following Sinopec's investment in APLNG. These claims are referred to in this document as Tri-Star's 'past reversion' claims.

Tri-Star has made other claims in these proceedings against APLNG. These relate to other aspects of the reversion trigger (including as to the calculation of interest) and the calculation of the royalty payable by APLNG to Tri-Star. The outcome of these other claims may impact on when reversion may occur in the future but will not result, if determined in favour of Tri-Star, in reversion having already occurred.

APLNG denies these claims and filed its defence and counter-claim in April 2016. Tri-Star responded with its reply and answer to APLNG's defence and counter-claim in March 2018.

If Tri-Star's past reversion claims are successful, then Tri-Star may be entitled to an order that reversion occurred as early as 1 November 2008. If the court determines that reversion has occurred, then APLNG may no longer have access to the reserves and resources that are subject to Tri-Star's reversionary interests and may need to source alternative supplies of gas (including from third parties) to meet its contracted commitments. There are also likely to be a number of further complex issues that would need to be resolved as a consequence of any such finding in favour of Tri-Star. These matters will need to be determined by the court (either in the current or in separate proceedings) or by agreement between the parties, and they include:

- ownership and/or rights to access certain infrastructure;
- the terms under which some of the affected CSG interests will be operated where currently there are no joint operating agreements in place;
- the amount of Tri-Star's contribution to the costs incurred by APLNG in exploring and developing the affected CSG interests between the date of reversion and the date of judgment, which APLNG has stated in its defence and counter-claim are in the order of \$3.1 billion (as at 31 December 2015); and
- the consequences of APLNG having dealt with Tri-Star's reversionary interests, between the date of reversion and the date of judgment, including the gas produced from them. Tri-Star has, in its reply and answer:
  - estimated the value of such gas to be \$2.06 billion (as at 31 December 2017) and approximately \$1.08 billion per annum thereafter; and
  - alleged that it should be entitled to set-off the value of such gas from any amount owing to APLNG arising from its counter-claim for contribution to the costs incurred by APLNG in exploring and developing the affected CSG interests between the date of reversion and the date of judgment.

Tri-Star has also commenced proceedings against APLNG which allege that APLNG breached three CSG joint venture agreements by failing to offer Tri-Star (and the other minority participants in those agreements) an opportunity to participate in the "markets" alleged to be constituted by certain of its LNG and domestic gas sales agreements, including the Sinopec and Kansai LNG sale agreements entered into by APLNG in 2011 and 2012. Tri-Star has alleged that it should have been offered participation in those sales agreements for its share of production from those three CSG joint ventures referable to both its small participating interests and its reversionary interests in those joint ventures.

Tri-Star is seeking damages and/or an order that APLNG offer Tri-Star (and the other minority participants in those CSG joint venture agreements) the opportunity to participate in those sales agreements for their proportionate share of production from those three CSG joint ventures. APLNG will defend the claims.

If APLNG is not successful in defending all or some of the claims being made in the proceedings by Tri-Star, APLNG's financial performance may be materially adversely impacted and the amount and timing of cash flows from APLNG to its shareholders, including Origin, may be significantly affected.

If APLNG is successful in defending Tri-Star's past reversion claims, the potential for reversion to otherwise occur in the future in accordance with the reversion trigger will remain.

## 7. Important information

### Forward looking statements

This Operating and Financial Review (OFR) contains forward looking statements, including statements of current intention, statements of opinion and predictions as to possible future events and future financial prospects. Such statements are not statements of fact and there can be no certainty of outcome in relation to the matters to which the statements relate. Forward looking statements involve known and unknown risks, uncertainties, assumptions and other important factors that could cause the actual outcomes to be materially different from the events or results expressed or implied by such statements, and the outcomes are not all within the control of Origin. Statements about past performance are not necessarily indicative of future performance.

Neither the Company nor any of its subsidiaries, affiliates and associated companies (or any of their respective officers, employees or agents) (the 'Relevant Persons') makes any representation, assurance or guarantee as to the accuracy or likelihood of fulfilment of any forward looking statement or any outcomes expressed or implied in any forward looking statement. The forward looking statements in this OFR reflect views held only at the date of this report and except as required by applicable law or the ASX Listing Rules, the Relevant Persons disclaim any obligation or undertaking to publicly update any forward looking statements, or discussion of future financial prospects, whether as a result of new information or future events.

### Non-IFRS financial measures

This OFR and Directors' Report refer to Origin's financial results, including Origin's Statutory Profit and Underlying Profit. Origin's Statutory Profit contains a number of items that when excluded provide a different perspective on the financial and operational performance of the business. Income Statement amounts, presented on an underlying basis such as Underlying Profit, are non-IFRS financial measures, and exclude the impact of these items consistent with the manner in which senior management reviews the financial and operating performance of the business. Each underlying measure disclosed has been adjusted to remove the impact of these items on a consistent basis. A reconciliation and description of the items that contribute to the difference between Statutory Profit and Underlying Profit is provided in section 3.2 of this OFR.

Certain other non-IFRS financial measures are also included in this OFR. These non-IFRS financial measures are used internally by management to assess the performance of Origin's business and make decisions on allocation of resources. Further information regarding the non-IFRS financial measures is included in the Glossary of this Annual Report. Non-IFRS measures have not been subject to audit or review. Certain comparative amounts from the prior corresponding period have been re-presented to conform to the current period's presentation.

## Appendix 1 – Consolidated financial supplementary data

### Underlying profit

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
<b>Continuing operations:</b>				
Energy Markets underlying EBITDA	1,811	1,492	319	21
Integrated Gas underlying EBITDA	1,251	747	504	67
Corporate underlying EBITDA	(115)	(66)	(49)	74
<b>Underlying EBITDA</b>	<b>2,947</b>	<b>2,173</b>	<b>774</b>	<b>36</b>
Underlying depreciation and amortisation	(381)	(344)	(37)	11
Underlying share of ITDA	(1,194)	(925)	(269)	29
<b>Underlying EBIT</b>	<b>1,372</b>	<b>904</b>	<b>468</b>	<b>52</b>
Underlying interest income – MRCPS	227	199	28	14
Underlying net financing costs – other	(497)	(483)	(15)	3
<b>Underlying profit before income tax and non-controlling interests</b>	<b>1,102</b>	<b>620</b>	<b>482</b>	<b>78</b>
Underlying income tax expense	(261)	(217)	(44)	20
Non-controlling interests' share of underlying profit	(3)	(3)	-	-
<b>Underlying profit</b>	<b>838</b>	<b>400</b>	<b>438</b>	<b>110</b>
Underlying earnings per share	47.7¢	22.8¢	24.9¢	109
<b>Discontinued operations:</b>				
Underlying profit	184	150	34	23
<b>Total operations:</b>				
<b>Underlying profit</b>	<b>1,022</b>	<b>550</b>	<b>472</b>	<b>86</b>

### Discontinued operations

On 31 January 2018, Origin completed the \$1,585 million sale of Lattice Energy to Beach Energy. Lattice Energy earnings have been classified as a discontinued operation in the current and prior period, along with the Darling Downs Pipeline and Jingemina asset in Western Australia in the prior period.

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
<b>Underlying EBITDA</b>	<b>270</b>	<b>357</b>	<b>(87)</b>	<b>(24)</b>
Underlying depreciation and amortisation	-	(133)	133	(100)
<b>Underlying EBIT</b>	<b>270</b>	<b>224</b>	<b>46</b>	<b>21</b>
Underlying financing costs	(8)	(12)	4	(33)
Underlying income tax expense	(78)	(62)	(16)	26
<b>Underlying profit</b>	<b>184</b>	<b>150</b>	<b>34</b>	<b>23</b>
Items excluded from underlying profit	(246)	(324)	78	(24)

## Cash flow

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
<b>Movements (continuing operations)</b>				
Underlying EBITDA	2,947	2,173	774	36
Non-cash items in Underlying EBITDA <sup>(a)</sup>	(1,269)	(743)	(526)	71
Movement in debtors	(240)	(380)	140	(37)
Movement in creditors	144	11	133	1,181
Movement in inventory	(76)	14	(89)	(648)
Movement in green certificates and prepayments	(73)	177	(250)	(142)
Change in working capital	(245)	(178)	(67)	38
Electricity hedge premiums (excluded from Underlying Profit)	(160)	(133)	(27)	21
Oil Puts premium paid	-	(64)	64	(100)
Other	(82)	(104)	22	(21)
Tax (refund received)/paid	(38)	53	(91)	(172)
<b>Cash flows from operating activities (continuing operations)</b>	<b>1,153</b>	<b>1,005</b>	<b>148</b>	<b>15</b>
Discontinued operations	140	284	(145)	(51)
<b>Total cash flows from operating activities</b>	<b>1,293</b>	<b>1,289</b>	<b>4</b>	<b>0</b>
Capital expenditure	(328)	(323)	(5)	2
Net cash from/(to) APLNG <sup>(b)</sup>	287	(170)	457	(269)
APLNG - reserve accounts	-	(127)	127	(100)
Net disposals	1,485	887	598	67
Interest income excl MRCPS	2	1	1	100
<b>Cash flows from investing activities (continuing operations)</b>	<b>1,445</b>	<b>267</b>	<b>1,177</b>	<b>440</b>
Discontinued operations - cash flow from investing activities	(94)	(178)	85	(47)
<b>Total cash flows from investing activities</b>	<b>1,352</b>	<b>89</b>	<b>1,263</b>	<b>1,419</b>
<b>Net cash flows from operating and investing activities (NCOIA)</b>	<b>2,645</b>	<b>1,378</b>	<b>1,267</b>	<b>92</b>
Net proceeds/(repayment) of debt	(1,675)	(974)	(700)	72
Electricity Futures Collateral	(170)	6	(176)	n/a
Operator cash call movements	(81)	12	(93)	n/a
Oil forward sale agreements	(265)	-	(265)	n/a
Close out of FX hedges	(56)	-	(56)	n/a
APLNG - loan proceeds <sup>(c)</sup>	76	127	(51)	(40)
Interest paid	(474)	(540)	66	(12)
Dividends paid	(2)	(2)	-	n/a
<b>Total cash flows used in financing activities</b>	<b>(2,647)</b>	<b>(1,371)</b>	<b>(1,276)</b>	<b>93</b>

(a) Non-cash items in Underlying EBITDA includes the contribution from equity accounted APLNG operations (\$1,405 million; FY2017 \$859 million) partly offset by a provision increase for legacy site remediation (\$70 million), amortisation of oil hedge premiums paid for in the prior year (\$64 million; FY2017: \$117 million) and exploration expense (\$2 million; FY2017 nil).

(b) APLNG net cash flow includes the receipt of \$227 million interest on MRCPS and the receipt of \$134m from APLNG buy-back of MRCPS less a \$74 million contribution to APLNG in H1 FY2018.

(c) APLNG - loan proceeds (\$76 million) represents cash generated by APLNG as part of its normal business operations deposited to a project finance debt service reserve accounts. Upon issuance of a bank guarantee to APLNG by Origin the cash was distributed to Origin by way of a loan.

## ROCE calculation

As at	30 Jun 2018 (\$m)	30 Jun 2017 (\$m)
Net Assets – continuing operations	11,828	10,088
<i>including:</i>		
Investment in APLNG	5,988	5,463
MRCPS issued by APLNG	3,620	3,609
Non-cash fair value uplift	(28)	(30)
Adjusted net assets – continuing operations	11,800	10,058
Origin Adjusted Net Debt	6,496	8,111
Net derivative liabilities	830	565
Origin's share of APLNG net debt (project finance less cash)	3,272	3,642
Capital employed – held for sale	-	1,330
<b>Capital employed</b>	<b>22,398</b>	<b>23,707</b>
Origin's underlying EBIT – continuing operations	1,372	903
Origin's equity share of APLNG interest and tax	503	324
Dilution depreciation adjustment	2	47
<b>Adjusted EBIT – continuing operations</b>	<b>1,877</b>	<b>1,275</b>
Adjusted EBIT – discontinued operations	271	224
<b>Adjusted EBIT</b>	<b>2,148</b>	<b>1,499</b>
<b>Average capital employed – continuing operations</b>	<b>22,387</b>	<b>23,174</b>
Average capital employed – discontinued operations	665	1,741
<b>Average capital employed</b>	<b>23,052</b>	<b>24,914</b>
<b>Underlying ROCE – continuing operations</b>	<b>8.4%</b>	<b>5.5%</b>
<b>Underlying ROCE</b>	<b>9.3%</b>	<b>6.0%</b>

## Key financials impacted by change in treatment of certain electricity hedge premiums

Year Ended 30 June	2018 As reported (\$m)	2018 Adjusted (\$m)	2017 As reported (\$m)	2017 Adjusted (\$m)
<b>Origin – continuing operations:</b>				
Underlying EBITDA	2,947	2,787	2,173	2,032
Underlying EBIT	1,372	1,212	903	762
Underlying Profit	838	726	400	301
Underlying ROCE	8.4%	7.7%	5.5%	4.9%
Adjusted Net Debt/Underlying EBITDA <sup>(a)</sup>	3.4x	3.7x	5.4x	6.0x
<b>Energy Markets segment:</b>				
Wholesale energy costs	(3,237)	(3,397)	(2,629)	(2,770)
Underlying EBITDA	1,811	1,651	1,492	1,351
Underlying EBIT	1,453	1,293	1,167	1,026

(a) FY2017 Adjusted Net Debt/Underlying EBITDA is calculated on a total operations basis.

### Proportionate earnings and free cash flow

The following analysis demonstrates Origin's earnings and free cash flow on a proportional line by line consolidated basis, rather than on an equity accounted basis as required by accounting standards.

Presenting the earnings on a proportional consolidated basis highlights the Group's EBIT excluding the impact of APLNG's interest and tax and highlights the Group's interest and tax including its share of APLNG's interest and tax costs.

Earnings Year Ended 30 June 2018	Energy Markets (\$m)	Integrated Gas ex-APLNG (\$m)	Corporate (\$m)	Total Origin ex-APLNG (\$m)	Share of APLNG (\$m)	Proportionate Total (\$m)
Revenue	14,344	260	-	14,604	2,073	16,677
Operating costs	(12,533)	(415)	(115)	(13,062)	(668)	(13,730)
<b>Underlying EBITDA – continuing operations</b>	<b>1,811</b>	<b>(155)</b>	<b>(115)</b>	<b>1,542</b>	<b>1,405</b>	<b>2,947</b>
Underlying depreciation and amortisation	(359)	(22)	-	(381)	(695)	(1,076)
Underlying share of ITDA	-	4	-	4	-	4
<b>Underlying EBIT – continuing operations</b>	<b>1,453</b>	<b>(173)</b>	<b>(115)</b>	<b>1,165</b>	<b>710</b>	<b>1,876</b>
Interest associated with MRCPS	-	227	-	227	(227)	-
Net financing costs excluding MRCPS	-	-	(497)	(497)	(193)	(691)
Underlying income tax expense	-	-	(261)	(261)	(83)	(344)
Non-controlling interest	-	-	(3)	(3)	-	(3)
<b>Underlying Profit – continuing operations</b>	<b>1,453</b>	<b>54</b>	<b>(876)</b>	<b>631</b>	<b>207</b>	<b>838</b>

\$1,165 million + \$207 million = \$1,372 million (Origin reported EBIT from continuing operations).

Presenting the cash flow on a proportional consolidated basis highlights the Group's cash generating ability on an unlevered basis without the impact of APLNG's project debt.

Cashflow Year Ended 30 June 2018	Energy Markets (\$m)	Integrated Gas ex-APLNG (\$m)	Corporate (\$m)	Total Origin ex-APLNG (\$m)	Share of APLNG (\$m)	Proportionate Total (\$m)
Underlying EBITDA	1,811	(155)	(115)	1,542	1,405	2,947
Non-cash items in Underlying EBITDA	-	66	70	136	41	177
Change in working capital	(137)	(54)	(53)	(245)	(13)	(257)
Electricity hedge premiums	(160)	-	-	(160)	-	(160)
Tax/Other	(26)	(20)	(72)	(120)	(14)	(134)
<b>Cash flow from operating activities – continuing operations</b>	<b>1,487</b>	<b>(164)</b>	<b>(170)</b>	<b>1,153</b>	<b>1,419</b>	<b>2,573</b>
Total capital expenditure	(302)	(21)	(5)	(328)	(439)	(767)
<b>Free Cash Flow – continuing operations</b>	<b>1,185</b>	<b>(185)</b>	<b>(175)</b>	<b>825</b>	<b>981</b>	<b>1,806</b>

APLNG generated \$981 million of free cash flow (Origin share) with an effective oil price of US\$56/bbl.





## Financial instruments and fair value adjustments

(\$m)	Derivative asset/(liability)		Balance Sheet Impact			Income Statement Impact	
	30 Jun 2018	30 Jun 2017	Inc/(dec) in derivatives	Inc/(dec) in other net assets	Total inc/(dec) in net assets	Gain/(loss) included in Underlying Profit	Gain/(loss) excluded from Underlying Profit
<b>Oil and gas</b>							
Forward oil sale	-	(290)	290	(314)	(24)	11	(35)
Oil and gas hedges	(68)	35	(103)	(108)	(210)	(84)	(126)
Other commodity hedges	14	1	13	1	14	14	0
	(54)	(254)	201	(421)	(220)	(59)	(161)
<b>Electricity</b>							
Electricity swaps and options	13	306	(294)	86	(208)	24	(232)
Power purchase agreements	(405)	(325)	(80)	104	24	104	(80)
Environmental derivatives	(123)	(25)	(98)	0	(98)	0	(98)
	(515)	(44)	(472)	190	(282)	128	(410)
<b>FX and interest rate</b>							
Foreign exchange contracts	(249)	(301)	52	(65)	(13)	(3)	(10)
Foreign currency debt hedges	805	294	511	(510)	1	0	1
Interest rate swaps	(6)	(8)	2	0	2	0	2
	<b>550</b>	<b>(15)</b>	<b>565</b>	<b>(575)</b>	<b>(10)</b>	<b>(3)</b>	<b>(7)</b>
	<b>(19)</b>	<b>(313)</b>	<b>294</b>	<b>(806)</b>	<b>(512)</b>	<b>66</b>	<b>(578)</b>
Fair value changes in other financial assets/liabilities							(46)
<b>Increase/(decrease) in fair value of financial instruments (Note A1(b))</b>							<b>(624)</b>
Reconciliation of net derivative liability to financial statements							
Derivative financial assets (Note C5)	1,639	1,296					
Derivative financial liabilities (Note C5)	(1,658)	(1,609)					
<b>Net derivative liability</b>	<b>(19)</b>	<b>(313)</b>					

**Oil and gas derivatives**

Origin is exposed to fluctuations in the oil price through its gas portfolio, as well as indirectly through its investment in APLNG, and utilises a variety of oil and gas derivatives to manage this price risk. Origin's gas hedging consists primarily of swaps that fix the price to be paid under oil-linked gas purchase contracts. The value of these derivatives increases when market oil prices exceed the agreed swap price. Much of the hedging is carried out through put options executed by Origin that establish a minimum price Origin will receive on oil-linked LNG sales. The value of these options declines in periods of rising oil and gas prices as payouts are less likely to be received.

**Electricity derivatives**

Origin generates approximately half of the total electricity volume it sells. As such it is exposed to fluctuations in wholesale electricity prices in respect of the electricity that must be purchased to meet retail and business customer demand. To manage this risk Origin utilises a variety of derivatives including swaps, options, power purchase arrangements and forward purchase contracts. The value of these derivatives declines when forward electricity prices are forecast to decrease as the electricity purchase costs to be paid by Origin exceed expected market prices.

**Currency and interest rate derivatives**

Origin utilises a variety of funding derivatives to manage the exposure to foreign exchange and interest rate risk on its debt portfolio. A significant portion of the debt portfolio is Euro denominated and cross currency interest rate swap derivatives have been used to hedge that debt to AUD or USD. Although Origin has an Australian functional currency, a portion of the foreign debt is swapped to USD as a natural offset to the investment in APLNG which is USD functional and will deliver USD distributions. The value of these currency derivatives increases in periods where the Euro strengthens against the Australian dollar. Also included in this portfolio, are foreign exchange contracts executed in prior periods to monetise the value that had accrued in certain cross currency interest rate swap derivatives. In aggregate, the value of the foreign exchange contracts, which will cash settle over the period to 2023, are not subject to foreign exchange fluctuations.

## Appendix 2 – Energy Markets supplementary data

### Energy Markets

#### Revenue reconciliation

The table below reconciles the difference between segment revenue and customer revenue disclosed in the Electricity, Natural gas, LPG and Solar & Energy Services tables.

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
<b>Energy Markets Segment Revenue</b>	<b>14,344</b>	<b>13,558</b>	<b>786</b>	<b>6</b>
<i>Less pool and other revenue:</i>				
Internal Generation	(1,907)	(2,073)	166	(8)
Renewable PPAs	(190)	(144)	(46)	32
Other PPAs	(80)	(200)	120	(60)
<b>Pool revenue</b>	<b>(2,177)</b>	<b>(2,418)</b>	<b>241</b>	<b>(10)</b>
<b>Other<sup>(a)</sup></b>	<b>(111)</b>	<b>(127)</b>	<b>16</b>	<b>(13)</b>
<b>Total Customer Revenue</b>	<b>12,056</b>	<b>11,014</b>	<b>1,042</b>	<b>9</b>

(a) Other revenue includes ancillary services, transmission use of system and other items which are partially offset in cost of energy

### Electricity

#### Volume summary

Year Ended 30 June	2018			2017			Change TWh	Change %
	Retail	Business	Total	Retail	Business	Total		
<b>Volumes sold (TWh)</b>								
NSW	8.4	9.2	17.6	9.0	9.1	18.1	(0.5)	(3)
Queensland	4.9	4.0	8.9	5.2	5.4	10.6	(1.7)	(16)
Victoria	3.2	4.8	8.0	3.4	4.8	8.2	(0.2)	(2)
South Australia	1.2	1.8	3.0	1.1	1.7	2.8	0.2	7
<b>Total volumes sold</b>	<b>17.7</b>	<b>19.8</b>	<b>37.5</b>	<b>18.6</b>	<b>21.1</b>	<b>39.7</b>	<b>(2.2)</b>	<b>(5)</b>

## Financial summary

Year Ended 30 June	2018	\$/MWh	2017	\$/MWh	Change %	Change (\$/MWh)
<b>Revenue (\$m)</b>	<b>8,573</b>	<b>228.7</b>	<b>8,085</b>	<b>203.8</b>	<b>6</b>	<b>24.9</b>
Retail (consumer & SME)	5,262	297.9	5,065	272.4	4	25.5
Business <sup>(a)</sup>	3,311	167.0	3,020	143.3	10	23.7
<b>Cost of goods sold (\$m)</b>	<b>(6,868)</b>	<b>(183.2)</b>	<b>(6,660)</b>	<b>(167.9)</b>	<b>(3)</b>	<b>(15.3)</b>
Network costs	(3,417)	(91.1)	(3,828)	(96.5)	11	5.4
Wholesale energy costs	(3,237)	(86.3)	(2,629)	(66.3)	(23)	(20.0)
Generation operating costs	(215)	(5.7)	(202)	(5.1)	(6)	(0.6)
Energy procurement costs	(3,452)	(92.1)	(2,831)	(71.4)	(22)	(20.7)
<b>Gross profit (\$m)</b>	<b>1,705</b>	<b>45.5</b>	<b>1,426</b>	<b>35.9</b>	<b>20</b>	<b>9.4</b>
Gross margin %	19.9%		17.6%		13	
<b>\$ Gross profit per customer</b>	<b>637</b>		<b>521</b>		<b>22</b>	

(a) Includes externally contracted generation

## Electricity supply

Year ended 30 June 2018	Nameplate Capacity (MW)	Type <sup>(a)</sup>	Equivalent Reliability Factor <sup>(b)</sup>	Capacity Factor	Electricity Output (GWh) <sup>(c)</sup>	Pool Revenue (\$m)	Pool Revenue (\$/MWh)
Eraring	2,880	Black Coal	92.6%	62.8%	15,854	1,331	83
Darling Downs	644	CCGT	99.3%	37.3%	2,107	154	74
Osborne <sup>(d)</sup>	180	CCGT	100.0%	81.1%	1,279	132	103
Uranquinty	664	OCGT	100.0%	9.7%	565	62	110
Mortlake	566	OCGT	99.5%	25.8%	1,280	157	124
Mount Stuart	423	OCGT	99.7%	0.3%	10	1	123
Quarantine	224	OCGT	98.6%	9.6%	189	31	165
Ladbroke Grove	80	OCGT	99.5%	24.0%	168	24	145
Roma	80	OCGT	99.0%	4.3%	30	3	107
Shoalhaven	240	Pump/Hydro	97.0%	4.7%	99	12	121
<b>Internal Generation</b>	<b>5,981</b>		<b>96.0%</b>	<b>41.2%</b>	<b>21,581</b>	<b>1,907</b>	<b>88</b>
Pelican Point	240	CCGT			1,512		
Renewable PPA's	953	Solar/Wind	n/a	27.9%	2,333	190	81
<b>Owned and Other Generation</b>	<b>7,174</b>			<b>38.1%</b>	<b>25,426</b>	<b>2,097</b>	<b>88</b>

(a) OCGT = Open cycle gas turbine; CCGT = Combined cycle gas turbine.

(b) Availability for Eraring = Equivalent Availability Factor (which takes into account de-ratings).

(c) Electricity output is measured at the node.

(d) Origin has a 50 per cent interest in the 180 MW plant and contracts 100 per cent of the output.

## Natural Gas

### Volume summary

Year Ended 30 June	2018			2017			Change	Change
Volumes sold (PJ)	Retail	Business	Total	Retail	Business	Total	PJ	%
NSW	9.5	22.3	31.8	9.4	23.4	32.8	(1.0)	(3)
Queensland	3.1	83.7	86.8	2.9	69.1	72.0	14.8	21
Victoria	24.9	53.0	77.9	25.6	40.9	66.5	11.4	17
South Australia	5.5	12.4	17.9	5.1	11.5	16.6	1.3	8
<b>External volumes sold</b>	<b>43.1</b>	<b>171.4</b>	<b>214.4</b>	<b>43.1</b>	<b>144.9</b>	<b>187.9</b>	<b>26.5</b>	<b>14</b>
Internal sales (generation)			66.6			61.5	5.2	8
<b>Total volumes sold</b>			<b>281.0</b>			<b>249.4</b>	<b>31.6</b>	<b>13</b>

### Financial summary

Year Ended 30 June	2018	\$/GJ	2017	\$/GJ	Change %	Change (\$/GJ)
Revenue (\$m)	2,644	12.3	2,154	11.5	23	0.8
Retail (consumer & SME)	1,097	25.5	1,030	23.9	6	1.6
Business	1,547	9.0	1,124	7.8	38	1.2
<b>Cost of goods sold (\$m)</b>	<b>(1,995)</b>	<b>(9.3)</b>	<b>(1,627)</b>	<b>(8.7)</b>	<b>(23)</b>	<b>(0.6)</b>
Network costs	(764)	(3.6)	(709)	(3.8)	(8)	0.2
Energy procurement costs	(1,231)	(5.7)	(918)	(4.9)	(34)	(0.8)
<b>Gross profit (\$m)</b>	<b>649</b>	<b>3.0</b>	<b>528</b>	<b>2.8</b>	<b>23</b>	<b>0.2</b>
Gross margin %	24.5%		24.5%		0	
<b>\$ Gross profit per customer</b>	<b>578</b>		<b>478</b>		<b>21</b>	

### Electricity and Natural Gas operating costs

Year Ended 30 June	2018	2017 <sup>(a)</sup>	Change	Change (%)
Cost to maintain (\$ per average customer <sup>(b)</sup> )	(124)	(109)	(15)	14
Cost to acquire/retain (\$ per average customer <sup>(b)</sup> )	(46)	(36)	(10)	27
<b>Elec &amp; Natural Gas Cost to Serve (\$ per average customer<sup>(b)</sup>)</b>	<b>(171)</b>	<b>(146)</b>	<b>(25)</b>	<b>17</b>
Maintenance Costs (\$m)	(455)	(406)	(48)	12
Acquisition & Retention Costs <sup>(c)</sup> (\$m)	(170)	(135)	(35)	26
<b>Elec &amp; Natural Gas cost to serve (\$m)</b>	<b>(624)</b>	<b>(541)</b>	<b>(83)</b>	<b>15</b>

(a) FY2017 has been re-stated to reflect changes in the allocation of certain items.

(b) Represents Cost to Serve per average customer account, excluding serviced hot water accounts.

(c) Customer wins (FY2018: 631,000; FY2017: 552,000) and retains (FY2018: 1,894,000; FY2017: 1,509,000).

## LPG

Year Ended 30 June	2018	2017	Change	Change (%)
Volumes (kt)	450	448	2	01
Revenue (\$m)	654	628	26	4
Cost of Goods Sold (\$m)	(434)	(418)	(16)	4
<b>Gross Profit (\$m)</b>	<b>220</b>	<b>211</b>	<b>9</b>	<b>4</b>
Operating Costs (\$m)	(129)	(122)	(7)	6
<b>Underlying EBITDA (\$m)</b>	<b>91</b>	<b>88</b>	<b>3</b>	<b>3</b>

As at 30 June 2018, Origin had 370,000 LPG customer accounts, down from 382,000 customer accounts at 30 June 2017.

## Solar and Energy Services

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
Revenue	185	148	37	25
Cost of Goods Sold	(99)	(74)	(25)	34
<b>Gross Profit</b>	<b>85</b>	<b>74</b>	<b>11</b>	<b>15</b>
Operating Costs	(76)	(69)	(7)	10
<b>Underlying EBITDA</b>	<b>10</b>	<b>5</b>	<b>5</b>	<b>90</b>

## Future Energy

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
Operating Costs	(19)	(14)	(6)	36
Investments	9	2	7	350

## Electricity and Natural Gas retail and business customer accounts

As at	30 June 2018			30 June 2017			Change
	Electricity	Natural Gas	Total	Electricity	Natural Gas	Total	
<b>Customer Accounts ('000)</b>							
NSW <sup>(a)</sup>	1,200	284	1,483	1,213	262	1,475	8
Queensland	696	176	872	752	168	920	(48)
Victoria	545	472	1,018	553	478	1,031	(14)
South Australia <sup>(b)</sup>	225	213	438	198	203	401	37
<b>Total</b>	<b>2,666</b>	<b>1,145</b>	<b>3,811</b>	<b>2,716</b>	<b>1,112</b>	<b>3,828</b>	<b>(17)</b>

(a) Australian Capital Territory (ACT) customers are included in New South Wales.

(b) Northern Territory and Western Australia customers are included in South Australia.

## Appendix 3 – Integrated Gas supplementary data

### APLNG production and sales volumes

Year Ended 30 June Volumes (PJ)	2018		2017	
	100% APLNG	Origin share	100% APLNG	Origin share
<b>Production volumes:</b>				
Operated	515	193	447	168
Non-operated	162	61	163	61.125
<b>Total production</b>	<b>676</b>	<b>254</b>	<b>610</b>	<b>229</b>
Purchases	45	17	23	9
Liquefaction/inventory	(41)	(15)	(25)	(9)
<b>Sales volumes</b>	<b>680</b>	<b>255</b>	<b>608</b>	<b>228</b>
Natural Gas sales volumes	205	77	214	80
LNG sales volumes	475	178	394	148
<b>Realised price (A\$/GJ)</b>				
Natural Gas	4.50		3.04	
LNG	9.60		8.16	

### APLNG underlying financial performance

Year Ended 30 June (\$m)	2018		2017	
	100% APLNG	Origin share	100% APLNG	Origin share
Operating revenue <sup>(a)</sup>	5,528	2,073	3,754	1,408
Operating expenses	(1,782)	(668)	(1,465)	(549)
<b>Underlying EBITDA</b>	<b>3,746</b>	<b>1,405</b>	<b>2,289</b>	<b>859</b>
Depreciation and amortisation	(1,853)	(695)	(1,614)	(605)
MRCPS financing expense	(605)	(227)	(626)	(235)
Net financing expense	(515)	(193)	(326)	(122)
Income tax (expense)/benefit	(222)	(83)	87	32
<b>Underlying ITDA</b>	<b>(3,195)</b>	<b>(1,198)</b>	<b>(2,479)</b>	<b>(930)</b>
<b>Underlying profit<sup>(b)</sup></b>	<b>551</b>	<b>207</b>	<b>(190)</b>	<b>(71)</b>

(a) Includes commodity revenue as reported in the Quarterly Production Report, plus other revenue of \$46 million (Origin share: \$16 million) in FY2018 and \$8 million (Origin share: \$3 million) in FY2017. FY2017 operating revenue is net of \$130 million (Origin share: \$49 million) of revenue capitalised prior to the recognition of earnings from Train 2 in November 2016.

(b) Origin's share of APLNG Underlying Profit differs to note E1.2 of Origin's financial statements (FY2018: \$211 million; FY2017: \$66 million loss) due to an elimination of APLNG depreciation related to capitalised MRCPS interest. Refer to note E1.2 of Origin's financial statements for details.

### Australia Pacific LNG breakeven operating cash costs (100%)

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
Operated opex <sup>(a)</sup>	649	681	(32)	(5)
APLNG Corporate opex	43	36	7	19
Purchases	262	146	116	79
Downstream opex	227	213	14	7
Royalties and tariffs <sup>(b)</sup>	179	182	(3)	(2)
Non-operated opex	199	204	(5)	(2)
Other	113	80	33	41
<b>Total operating costs</b>	<b>1,673</b>	<b>1,541</b>	<b>132</b>	<b>9</b>

(a) Production from operated areas during the period was 515 PJ, equating to unit operating costs of \$1.26/GJ.

(b) Reflects royalties paid at breakeven prices. Actual royalties and tariffs included in underlying EBITDA amount to \$239 million (FY2017: \$187 million).

### APLNG capital expenditure (100%)

Year Ended 30 June	2018 (\$m)	2017 (\$m)	Change (\$m)	Change (%)
Operated sustain <sup>(a)</sup>	762	922	(159)	(17)
Exploration & Appraisal	65	80	(17)	(21)
Operated SIB	105	138	(33)	(24)
Downstream	49	155	(106)	(68)
Non-operated	189	79	111	141
<b>Total capital expenditure</b>	<b>1,169</b>	<b>1,373</b>	<b>(205)</b>	<b>(15)</b>

(a) FY2018 includes drilling of 273 vertical wells, costs of fracture stimulation, infrastructure spend and drilling of other non-standard wells.



**APLNG cash flow (100%)**

<b>Year Ended 30 June</b>	<b>2018 (\$m)</b>	<b>2017 (\$m)</b>	<b>Change (\$m)</b>	<b>Change (%)</b>
Underlying EBITDA	3,746	2,289	1,457	64
Change in working capital/other	40	(168)	207	(124)
Sustain capital expenditure	(1,105)	(1,293)	189	(15)
Exploration and appraisal expenditure	(65)	(80)	15	(19)
<b>Free cash flow</b>	<b>2,617</b>	<b>748</b>	<b>1,869</b>	<b>250</b>
Repayment of project finance	(915)	(299)	(616)	206
Project finance interest	(418)	(421)	3	(1)
<b>Distributable cash flow</b>	<b>1,284</b>	<b>29</b>	<b>1,256</b>	<b>4,392</b>
Loan advanced to Origin	(76)	(127)	51	(40)
Loans (advanced to)/paid by other shareholders	33	(210)	242	(115)
MRCPS interest	(603)	(608)	5	(1)
MRCPS buy-back	(360)	-	(360)	n/a
Shareholder cash calls	198	1,377	(1,180)	(86)
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>476</b>	<b>461</b>	<b>15</b>	<b>3</b>

# Remuneration Report

For the year ended 30 June 2018



## Letter from the Chairman of the Remuneration and People Committee

On behalf of the Remuneration and People Committee (RPC) and the Board, I am pleased to present the Remuneration Report for the year ended 30 June 2018.

During the year we implemented a simpler remuneration framework geared to enhance executive share ownership and to better align the interests of the executives with our shareholders. The work of simplification and refinement is a continuing one in which the RPC regularly reviews both the operation and outcomes of the framework to assure its fitness for purpose in a constantly changing business context.

Significant progress has been made in FY2018 on our twin priorities of reducing debt and improving returns. The sale of Lattice Energy was successfully completed, contributing a net \$1 billion towards debt reduction, and underlying profit increased substantially. Over the period, the Australia Pacific LNG project lenders' test was completed, production and revenue increased, and we began implementing a simpler lower cost operating model. Despite intense competition, our Energy Markets performance improved, with contributions to this growth by both our electricity and gas businesses. Our renewable energy supply increased, and we trialled new technologies and introduced new products to improve our customer experience. We continue to position the company for a cleaner and smarter energy future.

The company's share price rose by over 46 per cent in FY2018, and over two years has risen over 74 per cent, reflecting the strength of our recent progress against our priorities. Annual Short Term Incentive (STI) outcomes for FY2018 have climbed above their targets (as detailed in tables 3 and 4), reflecting this progress and improvement. At the same time, FY2018 represented the sixth successive year of zero vesting and forfeiture of all Long Term Incentive (LTI) awards. This reflects that while recent performance has been strong, the long-term performance (as shown in the 3-year Total Shareholder Return (TSR)) is still unsatisfactory. Our remuneration framework ensures that reward and performance are linked to both short and long-term outcomes.

Our Remuneration Report this year is more focused, reflecting the changes and simplifications being made to the remuneration framework.

### Scott Perkins

Chairman, Remuneration and People Committee

## Contents

The Remuneration Report for the 12 months ended 30 June 2018 (FY2018, the Period) forms part of the Directors' Report. Except as otherwise noted it has been prepared in accordance with the *Corporations Act 2001* (Cth) (the Act) and in compliance with AASB 124 *Related Party Disclosures*, and audited as required by section 308(3C) of the Act. The report is divided into the following sections:

1. People covered by the report
2. Remuneration outcomes for FY2018
3. Executive remuneration policy and structure
4. Remuneration governance
5. Statutory disclosures
6. Loans and other transactions with Key Management Personnel.

## 1. People covered by the Remuneration Report

The Remuneration Report discloses the remuneration arrangements and outcomes for people listed in table 1, who are those individuals who have been determined as Key Management Personnel as defined by AASB 124 *Related Party Disclosures*.

**Table 1: KMP**

Name	Position and board committees	Term as KMP in FY2018
<b>Non-executive Directors (NEDs)</b>		
G Cairns	Independent Chairman Nomination (Chair); Audit; Risk; Remuneration and People; Health, Safety and Environment	Full year
J Akehurst	Independent Director Health, Safety and Environment (Chair); Risk; Nomination	Full year
M Brenner	Independent Director Risk (Chair); Audit; Nomination	Full year
T Engelhard	Independent Director Remuneration and People; Audit (since September 2017)	Full year
B Morgan	Independent Director Audit (Chair); Risk; Health, Safety and Environment; Nomination	Full year
S Perkins	Independent Director Remuneration and People (Chair); Audit; Risk; Nomination	Full year
S Sargent	Independent Director Origin Foundation (Chair); Remuneration and People; Health, Safety and Environment	Full year
<b>Executive Director</b>		
F Calabria	Chief Executive Officer (CEO)	Full year
<b>Other KMP</b>		
J Briskin	Executive General Manager, Retail	Full year
G Jarvis	Executive General Manager, Energy Supply and Operations	Full year
G Mallett	Acting Chief Financial Officer KMP role until 9 July 2017	To 9 July 2017
M Schubert	Executive General Manager, Integrated Gas	Full year
L Tremaine	Chief Financial Officer Appointed KMP Monday 10 July 2017	From 10 July 2017

The term Executive KMP is a reference to the Executive Director plus Other KMP.

Although focused on the remuneration arrangements and outcomes for the KMP listed in table 1, the report also provides a perspective across the broader Executive Leadership Team (ELT). The term 'senior executives' in this report is a collective reference to Other KMP plus non-KMP members of the ELT.

## 2. Remuneration outcomes for FY2018

This section summarises remuneration outcomes for FY2018 and provides commentary on their alignment with company outcomes.

### 2.1 Five-year company performance and remuneration outcomes

Table 2 summarises key financial and non-financial performance for the company from FY2014 to FY2018, grouped and compared with short-term and long-term remuneration outcomes.

**Table 2: Five-year performance history**

	2014	2015	2016	2017	2018
<b>Earnings and cash flow</b>					
Revenue \$m	14,518	14,147	12,174	14,107	14,883
Revenue \$m (continuing activities <sup>1</sup> )	12,363	11,893	11,456	13,646	14,604
Statutory profit \$m <sup>2</sup>	530	(658)	(628)	(2,226)	218
Statutory EPS cents <sup>2,3</sup>	42.1	(52.1)	(39.8)	(126.9)	12.4
Underlying profit \$m	713	682	365	550	1022
Underlying profit \$m (continuing activities <sup>1</sup> )	604	603	286	400	838
Underlying EPS cents <sup>3</sup>	56.7	54.0	23.2	31.3	58.2
Underlying EPS cents <sup>3</sup> (continuing activities <sup>1</sup> )	48.0	47.7	18.1	22.8	47.7
Net cash from/(used in) operating and investing activities (NCOIA)	(1,087)	(2,081)	1,215	1,378	2,645
<b>STI award outcomes (table 5)</b>					
Executive KMP outcome (% of \$ target)	111.1	81.0	43.8	91.7	129.1
<b>Returns</b>					
Share price <sup>3</sup> (closing at 30 June, \$)	12.79	10.47	5.75	6.86	10.03
Dividends (cents)	50.0	50.0	10.0	0.0	0.0
Annual TSR (%)	20.6	(15.0)	(42.0)	19.3	46.2
3-year rolling TSR <sup>4</sup> (CAGR % pa)	0.9	2.8	(18.5)	(14.2)	(2.6)
Underlying ROCE <sup>5</sup> (% pa)	na	na	na	6.0	9.3
<b>LTI outcomes</b>					
LTI vesting % in the year	0	0	0	0	0
LTI forfeit % in the year	100	100	100	100	100

1 Excludes Contact Energy (2014–2016) and Lattice Energy (2016–2018).

2 2016 statutory profit and statutory EPS have been restated to reflect adjustments as noted in 2017 financial statements.

3 EPS and share price have been re-stated for the bonus element of the rights issue completed in October 2015.

4 Using a three-month (60 trading days) volume weighted average price (VWAP) to 30 June, reflecting the LTI methodology for calculating TSRs for Origin and the comparator group companies.

5 Reporting for ROCE commenced FY2017.

Table 2 shows that overall awarded STI outcomes have varied from 43.8 per cent to 129.1 per cent of target over the last five years. The specific performance metrics supporting the Executive KMP results for FY2018 STI are provided in section 2.2.

There has been no vesting of LTI for any executive since 2011 (when vesting occurred for grants allocated in 2008). The forfeiture of this awarded remuneration reflects share price underperformance in recent years and underlines the strong linkage between company performance and remuneration outcomes. More recently performance has improved. The share price has increased by over 74 per cent over the last two years, and over 46 per cent over the last year.

## 2.2 STI awards and scorecard details for FY2018

The STI program operates on an annual financial year cycle, using a scorecard made up of key performance indicators (KPIs). Before the commencement of the performance year, targets are set for each KPI at three levels — threshold, target and stretch. Achievement at the target level is scored at 100 per cent, with threshold achievements at one-third (33 per cent) of target, and outperformance achieving the stretch level is scored at 167 per cent.<sup>1</sup>

Unless the threshold level is achieved, the award for the KPI is zero. The stretch performance level is set on the basis of significantly exceeding budget and operational targets. Between target and threshold, and between threshold and stretch, outcomes are calculated on a proportionate basis.

For FY2018 the scorecard was weighted 60 per cent to financial KPIs and 20 per cent each to Customer and People KPIs. Table 3 shows the CEO's scorecard, targets and outcomes for FY2018.

**Table 3: CEO scorecard for FY2018**

	Target	Actual				
CEO Scorecard KPIs	Threshold 33%	Target 100%	Stretch 167%	Weight %	Score % Target	Result %
<b>Financial (60%)</b>						
Underlying EPS (c)	41.6	46.3	50.9	15	167	25.1
			58.2			
Net cash from operating and investing activities (NCOIA) excluding Lattice net proceeds (\$m)	608	675	743	10	167	16.7
			1,575			
Lattice net proceeds (\$m)	934	983	1,032	5	167	8.3
			1,070			
Energy Markets EBITDA (\$m)	1,679	1,745	1,810	15	167	25.0
			1,811			
FY18 APLNG operating breakeven (\$m)	2,381	2,268	2,155	15	167	25.0
			1,493			
				<b>60</b>	<b>167.0</b>	<b>100.1</b>
<b>Customer (20%)</b>						
Strategic NPS (T1 refers to #1 Tier 1)	T1 or >-16	T1 & -10	T1 & -6	10	67	6.7
	-13					
Customer value – retail gross margin (\$m)	880	940	990	7.5	167	12.5
			1,082			
Customer value – customer net movement	-50k	-35k	-20k	2.5	167	4.2
			-15k			
				<b>20</b>	<b>105.0</b>	<b>23.4</b>
<b>People (20%)</b>						
People, culture and HSE Measures <sup>2</sup>		100.9		20	100.9	20.2
				<b>Business scorecard result (% target)</b>	<b>100</b>	<b>143.7</b>
				<b>% Fixed Remuneration<sup>3</sup></b>		<b>123.0</b>

1 In earlier years this was expressed as threshold and target representing 20 per cent and 60 per cent of maximum respectively.

2 Measures include engagement and culture metrics, total recordable injury frequency rate, significant incidents, process safety and environmental reportable incidents.

3 The difference between target (100 per cent) and stretch (167 per cent) KPIs is 67 points, and the CEO's opportunity difference is 20 points (110 per cent FR at target, 130 per cent FR at maximum). Therefore, for a 143.7 per cent scorecard outcome, the calculation as per cent FR equals  $110 + \{20 \times (143.7 - 100) / 67\} = 123.0$  per cent FR. Table 5 shows this represents 111.8 per cent of the dollar target opportunity. These conversions will not be necessary from FY2019 forward as the CEO's opportunity levels will be aligned with the rest of the organisation as detailed in table 9.

Scorecards for Other KMP follow the same structure, where financial KPIs represent at least 60 per cent of the overall weighting, customer KPIs represent between 15 per cent and 25 per cent, and business unit KPIs are incorporated in addition to the Group targets. Table 4 summarises the outcomes for Other KMP for FY2018.

**Table 4: Other KMP scorecard summaries for FY2018**

Other KMP Scorecards	Threshold 33%	Target 100%	Stretch 167%
J Briskin (EGM, Retail)			147.1
G Jarvis (EGM, Energy Supply & Operations)			145.1
M Schubert (EGM, Integrated Gas)			138.3
L Tremaine (Chief Financial Officer)			142.1

The scorecard outcomes range from 138.3 per cent to 147.1 per cent of target. These dollar results are summarised in table 5 which shows the STI outcomes for all Executive KMP.

### 2.3 LTI allocations for FY2018

LTI allocations for FY2018 have been set at the standard (target) level. In the absence of reasons to exercise its discretion to deviate from usual practice (which it has done from time to time when circumstances warranted), the Board has determined that 2018 allocations will be at the standard role-based level. Vesting outcomes depend on future performance against the performance hurdles.

The allocation of equity for the CEO is subject to shareholder approval.

As foreshadowed in the 2017 Remuneration Report, the 2018 and future allocations are wholly based on face value methodology. Previously the allocation was based on a mixture of fair and face value. Opportunity levels have been adjusted to reflect this change without materially altering the allocation value to the executive, as set out in table 11.

### 2.4 Variable pay outcomes

Table 5 summarises variable pay awards (STI and LTI) made to Executive KMP for FY2018 and FY2017, including the proportions between cash and conditional deferred elements.

The level of STI deferred has increased from 35.6 per cent to the 50 per cent level, reflecting one of the changes made for FY2018 to have all Executive KMP subject to deferral of half their STI award. Overall the proportion of deferred remuneration increased from 68.5 to 76.4 per cent.

## 2.5 Actual pay received

In line with general market practice a (non-AIFRS) presentation of actual pay received is provided in table 6 in addition to the statutory requirements (table 18). This gives shareholders another perspective of actual remuneration outcomes, albeit one that includes remuneration derived from prior years.

In addition to Fixed Remuneration (FR) and the cash component of STI, actual pay received includes equity that has vested from equity grants made in prior periods, whether from Deferred STI or from LTI vesting.

The value of Deferred STI that vests, even though it is not subject to further performance conditions, depends on the company's share price at the time of vesting. This ensures that the original award value is exposed to increases or decreases in share price over the deferral period.

With respect to LTI awards table 6 shows no value crystallised in FY2018 (or FY2017) from prior year LTI allocations, and those amounts previously reported as statutory remuneration were forfeited during the year. These remuneration outcomes reflect that the company's performance in recent years has not reached sustained levels at which executives derive any value from the LTI component of their remuneration package.

These results underline the strong alignment that exists between executive remuneration and both short-term and sustained long-term company performance.

Table 5: Variable pay (STI and LTI) awarded for the period

Name		FR base (\$) <sup>1</sup>	STI					LTI			Deferral				
			Target (% FR)	Target STI (\$)	Scorecard (%)	STI Award (%FR)	STI Award (% Target)	STI Award (\$)	Maximum STI (% FR)	STI Award (% of maximum) <sup>2</sup>	Target LTI (% FR)	LTI Award (%FR)	LTI Award (\$) <sup>3</sup>	% of STI deferred	% of variable deferred
<b>Executive Director</b>															
F Calabria	2018	1,700,000	110	1,870,000	143.7	123.0	111.8	<b>2,091,000</b>	130	94.6	180	180	<b>3,060,000</b>	50.0	79.7
	2017	1,700,000	110	1,870,000	128.2	118.5	107.7	<b>2,014,500</b>	130	91.2	180	165	<b>2,805,000</b>	50.0	79.1
<b>Other Executive KMP</b>															
J Briskin	2018	675,000	66	445,500	147.1	97.1	147.1	<b>655,331</b>	110	88.3	90	90	<b>607,500</b>	50.0	74.1
	2017	384,750	66	253,935	115.8	76.5	115.8	<b>294,142</b>	110	69.5	90	90	<b>346,275</b>	33.3	69.4
G Jarvis	2018	724,000	66	477,840	145.1	95.8	145.1	<b>693,346</b>	110	87.1	90	90	<b>651,600</b>	50.0	74.2
	2017	412,680	66	272,369	120.3	79.4	120.3	<b>327,580</b>	110	72.2	90	90	<b>371,412</b>	33.3	68.7
M Schubert	2018	724,000	66	477,840	138.3	91.3	138.3	<b>660,853</b>	110	83.0	90	90	<b>651,600</b>	50.0	74.8
	2017	108,650	56	60,844	115.0	64.4	115.0	<b>69,949</b>	92.5	69.6	90	90	<b>97,785</b>	33.3	72.2
L Tremaine	2018	980,769	100	980,769	142.1	142.1	142.1	<b>1,393,673</b>	167	85.1	120	120	<b>1,176,923</b>	50.0	72.9
	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Former Executive KMP</b>															
G King	2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	760,000	90	684,000	0.0	0	0.0	<b>0</b>	150	0.0	180	0	<b>0</b>	-	-
G Mallett	2018	11,346	45	5,106	0	0	0	<b>0</b>	75	0	60	0	<b>0</b>	0.0	-
	2017	590,000	45	265,500	134.5	60.5	134.5	<b>357,098</b>	75	80.7	60	60	<b>354,000</b>	33.3	66.5
D Baldwin	2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2017	951,740	78	742,357	100.0	78.0	100.0	<b>742,357</b>	130	60.0	120	0	<b>0</b>	-	-
<b>Total</b>	<b>2018</b>	<b>4,815,115</b>		4,257,055			<b>129.1</b>	<b>5,494,203</b>		<b>88.7</b>	<b>128</b>	<b>128</b>	<b>6,147,623</b>	<b>50.0</b>	<b>76.4</b>
	<b>2017</b>	<b>4,907,820</b>		4,149,005			<b>91.7</b>	<b>3,805,626</b>		<b>63.3</b>	<b>137</b>	<b>81</b>	<b>3,974,472</b>	<b>35.6</b>	<b>68.5</b>

1 The FR base is the reference to Fixed Remuneration (FR) applicable for STI and LTI calculations, pro-rata for part year KMP periods. The FR base excludes acting and temporary allowances that may be included in FR more generally.

2 Where the STI award is less than 100 per cent of the maximum, the difference is forfeited. Awards are calculated with reference to the target. The ratio between maximum and target STI is 1.67 times, except for the CEO where the ratio is 1.18. Awards expressed relative to target are consistent between executives, but when expressed as a percentage of maximum the CEO appears proportionally higher relative to other executives because of his different ratio. This inconsistency will be eliminated from FY2019 (see table 9).

3 The LTI award allocation is conditional pay subject to performance hurdles over periods of 3-5 years. The awards may vest (partially or fully) or they may lapse without value in a future period. LTI for 2017 has been re-stated to align with the full face-value allocation commenced in 2018. The number of instruments held has not changed. The allocation value was originally expressed in a mixture of accounting fair value and face value and is now expressed wholly in terms of face value (see table 11 'Allocation Amount').



Table 6: Actual pay received in the period (\$) – non-AIFRS

Name		Variable pay (STI + LTI) received				Total remuneration received <sup>5</sup>	Equity forfeited <sup>6</sup>
		Fixed Remuneration <sup>1</sup>	STI cash <sup>2</sup>	Deferred STI vested <sup>3</sup>	LTI vested <sup>4</sup>		
<b>Executive Director</b>							
F Calabria	2018	1,700,000	1,045,500	213,380	0	<b>2,958,880</b>	(157,741)
	2017	1,498,461	1,007,250	158,714	0	<b>2,664,425</b>	(1,755,705)
<b>Other Executive KMP</b>							
J Briskin	2018	675,000	327,666	101,870	0	<b>1,104,536</b>	(41,757)
	2017	339,225	196,095	0	0	<b>535,320</b>	0
G Jarvis	2018	724,000	346,673	156,882	0	<b>1,227,555</b>	(104,317)
	2017	373,209	218,387	0	0	<b>591,596</b>	0
M Schubert	2018	724,000	330,427	213,771	0	<b>1,268,198</b>	0
	2017	100,479	46,633	0	0	<b>147,112</b>	0
L Tremaine	2018	980,769	696,837	0	0	<b>1,677,606</b>	0
	2017	-	-	-	-	-	-
<b>Former Executive KMP</b>							
G King	2018	-	-	-	-	-	-
	2017	680,319	0	174,793	0	<b>855,112</b>	(6,245,275)
G Mallett	2018	71,346	0	0	0	<b>71,346</b>	0
	2017	849,078	238,065	48,968	0	<b>1,136,111</b>	(411,555)
D Baldwin	2018	-	-	-	-	-	-
	2017	942,484	742,357	162,567	0	<b>1,847,408</b>	(2,000,352)
<b>Total</b>	<b>2018</b>	<b>4,875,115</b>	<b>2,747,103</b>	<b>685,903</b>	<b>0</b>	<b>8,308,121</b>	<b>(303,815)</b>
	<b>2017</b>	<b>4,783,255</b>	<b>2,448,787</b>	<b>545,042</b>	<b>0</b>	<b>7,777,084</b>	<b>(10,412,887)</b>

1 F Calabria was in two different roles during FY2017. Pro-rata for KMP periods for L Tremaine and G Mallett (FY2018) and for G King and D Baldwin (FY2017). G Mallett's FR includes allowances paid for acting in the role of CFO.

2 For FY2018, STI cash represents half of the STI award (for FY2017, except for the CEO, it was two-thirds of the award, and for D Baldwin it was the whole award). The STI cash is allocated to the earning year even though it is physically paid after the end of that year.

3 Deferred STI vested in FY2018 was from grants awarded in 2013, 2014 and 2015; vests in FY2017 arose from grants in 2014 and 2015. The vested value is calculated as the number of vested securities multiplied by the closing price of Origin ordinary shares on the day of vesting.

4 LTI vested represents the value of LTI awards from prior years that vested wholly or partially during the year. No LTI awards vested in FY2018 or FY2017.

5 Total remuneration received is the sum of FR plus STI cash, plus the value of Deferred STI and LTI that vested during the Period.

6 The value of equity forfeited relates to previously awarded equity that was forfeited during the year (i.e. the relevant grants realised no benefit). The forfeited value represents original value that was attributed to remuneration in the year of the grant. Only one LTI tranche (October 2013 Options) was tested during FY2018 (resulting in 100 per cent forfeit).

### 3. Executive remuneration policy and structure

#### 3.1 Key features

The key elements of the executive remuneration framework are summarised in table 7 and shown schematically in table 8.

**Table 7: Key elements of the executive remuneration framework**

Parameter	Details
Objectives	<p>(1) To attract, motivate and retain high-calibre individuals from diverse backgrounds and industries. This is achieved by setting remuneration in two components. Fixed Remuneration is the first component and is set to be competitive in the broad market, and a Variable Remuneration component that offers attractive rewards when company and personal performance is high or outstanding; <i>and</i></p> <p>(2) To align the interests of executives with those of shareholders through executive share ownership, thus exposing executives to company performance outcomes as experienced by shareholders generally. This is achieved by integrating performance benchmarks and equity elements into the Variable Remuneration structure such that reward levels reflect actual performance over time. The most senior executives (those who have the greatest influence on company outcomes) are exposed to proportionately higher levels of at-risk remuneration and higher proportions of equity.</p>
Benchmark peer groups	<p>Below executive level, the prime benchmarking reference is through job evaluation methodology matched to grade levels sourced through Korn Ferry Hay Group's market data. For more senior roles, positions are matched across relevant peer organisations (based on similar market capitalisation or operational scale and scope).</p> <p>When recruiting externally, the company has regard to wider industry comparisons and to the S&amp;P/ASX-50 in order to access the best people from a diverse talent pool.</p>
Fixed Remuneration (FR)	Fixed Remuneration (FR) comprises cash salary, employer contributions to superannuation and salary sacrifice benefits. Further details are provided in section 3.2.
Variable Remuneration (VR)	<p>Variable Remuneration is awarded on a contingent basis depending on outcomes against defined targets. It is divided into two elements, a short-term incentive (STI) and a long-term incentive (LTI), which depend respectively on annual and long term performance measures.</p> <p>The STI program is described in detail in section 3.3.</p> <p>The LTI program is described in detail in section 3.4.</p>
Total Remuneration (TR)	The sum of FR, STI and LTI represents total remuneration (TR). It is intended that when VR is awarded at target levels, the TR will reflect "at target" TR for the benchmark populations. Additionally, when performance is exceptional, it is intended that executives well established in their roles will have the potential for TR to be at or above the 75th percentile of the benchmark population.

**Table 8: FY2018 remuneration framework and timelines (ELT)**

	Grant	Year 1	Year 2	Year 3	Year 4
<b>Fixed remuneration</b> ASX-50 and other relevant benchmarks					
<b>STI earning year</b> 60% Financials (including EPS, NCOIA, EBITDA, opex) 20% Customer (strategic NPS etc) 20% People (safety, engagement, gender etc)	●	cash award (50% of STI) equity award (50% of STI)			
<b>LTI</b> Pre-grant service contribution	◇	STI deferral (2 years)	●	○	> Ongoing minimum shareholding requirement
		Performance share rights Half with 3-year ROCE hurdle Half with 3-year relative TSR hurdle		1-year post-vest holding lock	

◇ Equity Grant   ● Vest   ○ Conditional Vest

### 3.2 Fixed Remuneration

FR (cash salary, employer contributions to superannuation and salary sacrifice benefits) takes into account the size and complexity of the role, and the know-how, skills and experience required to be successful in it. To be market competitive, roles are benchmarked annually with reference to comparable roles in the peer groups and achieving median for FR over time.

FY2018 FR for Executive KMP is shown in tables 5 and 6. Following a benchmark review, FR for the CEO will increase from \$1,700,000 to \$1,800,000 effective for FY2019, and an average increase of 3.7 per cent will apply to other ELT roles. This review also took into account that the incumbents are becoming more established in the roles that were created in the executive team restructure of December 2016. The CEO's base remuneration is below the benchmark median of peer organisations and is intended to move closer to median over time subject to performance and prevailing benchmarks.

### 3.3 STI plan details

STI awards are calculated on the basis of achievement of various KPIs defined annually by the Board. These KPIs reference both annual financial results and other measures that reflect organisational health and predict superior long term performance. STI awards are delivered half in cash and half deferred into equity for two years which is contingent on ongoing employment with satisfactory service over that period. Any trading in the resulting shares is further subject to the Executive Minimum Shareholding Requirement (MSR) requirements described in section 3.6.

A detailed description of the STI plan operation is provided in table 9, with table 10 setting out the arrangements for the deferred element of STI awards.

Table 9: STI plan details

Parameter	Details																								
Name	Short Term Incentive Plan (STIP)																								
Objective	To align superior outcomes for shareholders with remuneration outcomes for executives and employees; to reward performance; to be competitive in the broad market and to offer attractive levels of reward for out-performance. STIP is a key element in the overall remuneration objective to attract, motivate and retain high-calibre individuals.																								
Type	Annual awards based on annual objectives delivered half in cash and half in deferred equity (see table 10).																								
Opportunity amount	<p>The STI opportunity level varies according to the executive's role, generally increasing with role size and accountability and the capacity to influence business outcomes. For FY2018 the levels were:</p> <table border="1"> <thead> <tr> <th colspan="4">% of Fixed Rem</th> </tr> <tr> <th>Role</th> <th>Min</th> <th>Target</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>CEO</td> <td>0</td> <td>110*</td> <td>130*</td> </tr> <tr> <td>CFO</td> <td>0</td> <td>100</td> <td>167</td> </tr> <tr> <td>Other Executive KMP</td> <td>0</td> <td>66</td> <td>110</td> </tr> <tr> <td>Next level executives</td> <td>0</td> <td>45-60</td> <td>75-100</td> </tr> </tbody> </table> <p>*See below for FY2019 changes for CEO</p> <p>The opportunity levels are set with reference to the benchmarks in table 7 such that target outcomes align with median market outcomes, and when performance is at its highest there is opportunity to reach the 75th percentile of that market.</p>	% of Fixed Rem				Role	Min	Target	Max	CEO	0	110*	130*	CFO	0	100	167	Other Executive KMP	0	66	110	Next level executives	0	45-60	75-100
% of Fixed Rem																									
Role	Min	Target	Max																						
CEO	0	110*	130*																						
CFO	0	100	167																						
Other Executive KMP	0	66	110																						
Next level executives	0	45-60	75-100																						
Deferral	The CEO and senior executives have one-half of their STI award deferred on the terms and conditions set out in table 10 below.																								
Approval	The KPIs and the outcomes for Executive KMP are approved by the Board on advice from the RPC. The CEO makes recommendations to the RPC in respect of his direct reports.																								
Payment and superannuation	The portion of an STI award that is not deferred (see table 10) is paid in cash (less applicable tax and required superannuation contribution) approximately three months after the end of the financial year in which it was earned.																								
Service and behavioural conditions	<p>The award of STI is subject to ongoing employment with satisfactory performance throughout the performance period and, in addition, through to the end of any applicable deferral periods (see Deferral below).</p> <p>Adherence to Origin's values and behavioural standards is a requirement for achieving satisfactory performance. Failure to do so will result in disqualification from incentive awards and may jeopardise continued employment. A more formalised measurement of behaviours is being introduced for FY2019 and this will be incorporated more specifically into remuneration assessment. The Board retains discretion to vary formulaic outcomes to ensure all relevant matters are taken into account when determining appropriate levels of remuneration within the maximum prescribed levels.</p>																								
Cessation and good leavers	<p>No STI award is made where the Service Conditions have not been met in full, except in limited "good leaver" circumstances.</p> <p>"Good leaver" circumstances are those where cessation of employment arises in consequence of death, disability, redundancy, genuine retirement or other exceptional circumstances as approved by the Board.</p> <p>STI awards are settled wholly in cash (no deferral) where payment is in circumstances of a good leaver cessation.</p> <p>Previously awarded but unvested deferred awards vest at cessation of employment in good leaver circumstances, unless the Board determines otherwise.</p>																								
Changes for FY2019	<p>Following an extensive benchmarking exercise taking account of CEO tenure and performance, the STI range for FY2019 will be reduced to 100 per cent FR at target and increased to 167 per cent at maximum. This aligns with relevant benchmarks and accords with the desired balance between FR and variable remuneration, and the pay for performance principle that underscores the remuneration framework. Importantly, the benefit of this change is delivered only where outcomes are high (above target).</p> <p>This change will align the CEO and CFO opportunity levels. In addition, all Executive KMP will share the same outperformance opportunity (stretch at 1.67 times target).</p>																								

Table 10: STI deferral details

Parameter	Details						
Objective	There are two main objectives of deferral and the use of an equity instrument. The first is to subject a portion of awards based on annual results to a further time-test in the market, and the second is to align the interests of management and shareholders through share ownership. As deferred awards are forfeited on resignation during the deferral period, they also act as a retention mechanism.						
Proportion	The CEO and all senior executives are currently subject to deferral of 50 per cent of their STI award. Deferral is triggered where the amount subject to deferral exceeds a threshold (\$2000 for FY2018).						
Deferral period	The deferral period is just over 2 years from the end of the financial year to which the STI award relates: <table border="1" data-bbox="427 689 1310 840"> <thead> <tr> <th>Grant date FY2018 STI awards</th> <th>STI performance period</th> <th>Vesting/release date</th> </tr> </thead> <tbody> <tr> <td>August 2018 (October 2018 for CEO*)</td> <td>1 July 2017 to 30 June 2018</td> <td>August 2020 (the second trading day after the release of the FY2020 full year results)</td> </tr> </tbody> </table> <p>*Subject to shareholder approval</p>	Grant date FY2018 STI awards	STI performance period	Vesting/release date	August 2018 (October 2018 for CEO*)	1 July 2017 to 30 June 2018	August 2020 (the second trading day after the release of the FY2020 full year results)
Grant date FY2018 STI awards	STI performance period	Vesting/release date					
August 2018 (October 2018 for CEO*)	1 July 2017 to 30 June 2018	August 2020 (the second trading day after the release of the FY2020 full year results)					
Instrument	Deferred STI is awarded in the form of Deferred Share Rights (DSRs) and/or Restricted Shares (RS). A DSR is the right to a fully paid share in the company subject to the fulfilment of the Service Condition. A RS is a share subject to a holding lock which corresponds to the Service Condition.  DSRs and RSs are granted to executives for no cost as they represent part of the recipient's remuneration package.  The Board may award in alternative forms (including cash or deferred cash) where appropriate to do so.						
Allocation basis and pricing period	Allocation of Deferred STI awards is at face value, calculated as the 30-day VWAP to the 30th of June immediately preceding grant. The number of DSRs or RSs allocated is the Deferred STI amount (\$) divided by the face value, rounded to the nearest whole number.						
Grant	The Board's recommendation for the CEO's Deferred STI equity award is submitted for approval <sup>1</sup> at the first AGM following the end of the financial year, and the equity grant is made as soon as practicable after shareholder approval has been obtained.  Deferred STI equity grants to other executives are made as soon as practicable after Board approval, which is generally at the end of August following the end of the financial year.						
Dividends and voting rights	DSRs carry no dividend entitlements or voting rights. Restricted shares carry dividend entitlements and voting rights.						
Vesting, release and exercise	DSRs vest and Restricted Shares are released on meeting the Service Conditions (or as described in the Cessation and Good Leaver provisions above). Exercise of DSRs is automatic on vesting and there is no exercise price. Share disposals are subject to the minimum shareholding requirement (section 3.6).						
Changes for FY2019	The preferred allocation vehicle for deferred STI equity granted after 1 July 2018 will be in the form of Restricted Shares. The intention will be to purchase the shares on market (unless circumstances arise where the Board determines otherwise), which ties the share award to current rather than future share price.						

<sup>1</sup> Where the CEO's Deferred STI equity allocation is purchased on market, which from 2018 is the Board's preferred approach, shareholder approval is not required. However, in the interests of good governance and to preserve flexibility to issue shares where it may be appropriate to do so, the Board's practice is to seek shareholder approval.

### 3.4 LTI plan details

LTI awards are provided in the form of equity allocations which are made annually according to role size and influence on long-term performance. The equity may vest in the future subject to the executive meeting service and performance obligations, **and** the company meeting or exceeding three-year performance hurdles. There is a further one-year holding lock such that the overall deferral period is four years. Any trading in vested equity is further subject to the Executive Minimum Shareholding Requirement (MSR) requirements described in section 3.6. A detailed description of the LTI plan operation is provided in table 11.

Table 11: LTI plan details

Parameter	Details										
Name	Long Term Incentive Plan (LTIP)										
Objective	The objective is to align the interests of executives with those of shareholders. If shareholders do well, executives are rewarded. Conversely, where shareholders do not do well, neither does the executive. In combination with the holding lock (see below) and the Minimum Shareholding Requirement (section 3.6), the plan achieves alignment through increased executive share ownership. Unvested equity is forfeited if the executive resigns before the end of the performance period, therefore the LTI also serves as a retention tool.										
Type	LTI is conditional equity that may or may not vest (crystallise) in the future. Vesting is subject to the company meeting or exceeding long-term performance conditions (set out below), and, in addition, conditional on the executive meeting service and performance obligations.										
Allocation basis and pricing period	The basis of LTI awards and allocation is on the face value of an Origin share calculated as the 30-day VWAP to and including the last trading day of the financial year immediately preceding the year the award is granted.										
Grant	The Board's recommendation for the CEO's LTI equity award is submitted for approval at the first AGM following the end of the financial year, and the equity grant is made as soon as practicable after shareholder approval has been obtained.  LTI equity grants to other executives are made as soon as practicable after Board approval, which is generally at the end of August following the end of the financial year.										
Allocation amount	The value of the allocation is role-based reflecting role accountability and influence on long-term company performance.  As foreshadowed in the 2017 Remuneration Report, Options were discontinued effective from FY2018 awards and the basis of allocation has been changed from partly Face Value (for PSRs) and partly Fair Value (for Options) to entirely Face Value. The Board, having taken external advice to ensure that the change was made on a remuneration-neutral basis, has applied an overall gross-up factor of 50 per cent to the previous standard or target allocation level. <sup>1</sup> <table border="1" data-bbox="368 1048 1077 1272"> <thead> <tr> <th>Role</th> <th>% of Fixed Rem allocated on a Face Value basis</th> </tr> </thead> <tbody> <tr> <td>CEO</td> <td>180</td> </tr> <tr> <td>CFO</td> <td>120</td> </tr> <tr> <td>Other Executive KMP</td> <td>90</td> </tr> <tr> <td>Next level executives</td> <td>60-75</td> </tr> </tbody> </table> <p>Awards are considered soon after the end of each financial year, and take into account demonstrated performance and long-term commitment as assessed at that time (this is the "pre-grant service contribution" referred to in table 8). The Board may determine that the allocation should be varied up or down (including to zero).</p> <p>The benchmarks used to determine the allocation levels are described in the Total Remuneration section of table 7.</p>	Role	% of Fixed Rem allocated on a Face Value basis	CEO	180	CFO	120	Other Executive KMP	90	Next level executives	60-75
Role	% of Fixed Rem allocated on a Face Value basis										
CEO	180										
CFO	120										
Other Executive KMP	90										
Next level executives	60-75										
Allocation approval	Annual LTI allocations for Executive KMP are approved by the Board on advice from the RPC. The CEO makes recommendations to the RPC in respect of his direct reports.										
Instruments	Performance Share Rights (PSRs) are the standard vehicle for all LTI awards made after 18 October 2017. A PSR is a right to a fully paid ordinary share in the company, subject to the fulfilment of performance and service conditions. The PSRs are granted at no cost because they are awarded as remuneration.										
Dividends and voting rights	PSRs carry no dividend entitlements or voting rights.										
Performance and deferral period	The deferral period is approximately 4 years, made up of a 3-year performance period (three financial years) followed by a holding lock of approximately 13½ months: <table border="1" data-bbox="368 1684 1505 1854"> <thead> <tr> <th>Grant date FY2018 LTI awards</th> <th>Base date (Start of performance period)</th> <th>Test date (End of performance period)</th> <th>Vested Shares Holding Lock</th> </tr> </thead> <tbody> <tr> <td>August 2018 (October 2018 for CEO*)</td> <td>1 July 2018</td> <td>30 June 2021</td> <td>The second trading day after the release of the FY2022 full year results in August 2022</td> </tr> </tbody> </table>	Grant date FY2018 LTI awards	Base date (Start of performance period)	Test date (End of performance period)	Vested Shares Holding Lock	August 2018 (October 2018 for CEO*)	1 July 2018	30 June 2021	The second trading day after the release of the FY2022 full year results in August 2022		
Grant date FY2018 LTI awards	Base date (Start of performance period)	Test date (End of performance period)	Vested Shares Holding Lock								
August 2018 (October 2018 for CEO*)	1 July 2018	30 June 2021	The second trading day after the release of the FY2022 full year results in August 2022								
	*Subject to shareholder approval										
	The pre-grant service contribution (see table 8 and Allocation Amount above) is additional to and not counted in the performance or deferral period.										

<sup>1</sup> The gross-up required for changing from fair value to face value allocation was determined to be approximately 100 per cent based on consideration of external advice. As this change applied to one-half of the original LTI structure (the Options tranche) the overall gross-up was set at 50 per cent. The CEO's LTI remuneration from appointment was expressed as an opportunity range with a target 110 per cent FR and a maximum cap of 130 per cent FR, on the basis of mixed allocations (face value and fair value). In moving to a standard allocation expressed wholly on the basis of face value, the mid-point of the old range (120 per cent FR) has been grossed-up by 50 per cent (i.e. to 180 per cent FR).

Parameter	Details
Service and behavioural conditions	In addition to the performance conditions below, unvested LTI awards will ordinarily be forfeited if the holder does not remain in ongoing employment with satisfactory service through to the end of the performance period. Satisfactory service includes adherence to Origin's values and behavioural standards.
Performance condition 1	<p>One half of the LTI award has a relative Total Shareholder Return (TSR) hurdle. Relative TSR has been chosen because it directly reflects returns to shareholders and aligns executive reward to that return.</p> <p>Vesting occurs only where Origin's TSR over the performance period places it above the 50th percentile of the S&amp;P/ASX-50 companies as defined at the start of the performance period.</p> <p>Half of the PSRs in this tranche vest if the 50th percentile is exceeded, and all of the PSRs in this tranche vest if Origin's TSR achieves or exceeds the 75th percentile, with straight-line vesting between.</p> <p>The S&amp;P/ASX-50 has been chosen as the comparator group because, in the absence of a sufficient number of operationally similar and direct competitors, it represents the most meaningful group with which Origin competes for shareholder investment and executive talent.</p> <p>For awards to be granted in 2018 (referable to FY2018 service) consideration was given to the inclusion of a share price growth condition, however following consultation it was decided not to do so as the absolute measure conflicted with the operation of the relative return measure.</p>
Performance condition 2	<p>One half of the LTI award has a Return on Capital Employed (ROCE) condition. The choice of ROCE reflects the importance of prudent capital allocation and the need to generate sufficient returns over that capital employed over time.</p> <p>ROCE is referenced to EBIT divided by average capital employed. Adjustments to statutory EBIT are considered in restricted circumstances. Circumstances that would result in impairment related adjustments include for example where such impairments cannot reasonably be said to be the responsibility of current management. Determination of the appropriate cost of capital during the performance period follows established capital asset pricing model norms. Adjustments to these targets may be warranted, at the Board's discretion, to appropriately reflect the impact of corporate actions such as M&amp;A or major projects which, while in shareholders' long term interests, may adversely impact near-term ROCE.</p> <p>For awards granted in 2017, the ROCE performance condition was in two parts. First, the simple average of actual ROCE outcomes over the performance period must meet or exceed the simple average of the annual targets set in advance by the Board. In addition, for any vesting to occur, the actual ROCE must also meet or exceed Origin's overall weighted average cost of capital (WACC) in either of the last two years of the performance period. If both of these targets are achieved, half of the relevant PSRs vest. If the WACC hurdle is exceeded by two percentage points or more, then all of the relevant PSRs vest, with straight line proportionate vesting in between.</p> <p>For awards to be granted in 2018, the ROCE approach has been refined to better recognise the differing capital characteristics between the Integrated Gas and Energy Markets businesses. Accordingly average actual ROCE outcomes will need to exceed average annual ROCE targets which are reflective of delivering WACC for each business, and will be tested separately, and vest separately, for the two businesses (half of the ROCE tranche will be allocated to each). Meeting or exceeding the ROCE targets will result in half of the relevant PSRs vesting, while exceeding the targets by two percentage points or more will result in all of the relevant PSRs vesting, with straight line proportionate vesting in between.</p>
Cash awards	In exceptional circumstances (for example an LTI recipient residing in an international jurisdiction, or where it is inappropriate to provide shares) the Board may determine to cash settle an award.
Cessation and good leavers	<p>Generally, unvested LTI awards held at cessation of employment will be forfeited on the date of cessation.</p> <p>"Good leaver" circumstances are those where cessation of employment arises in consequence of death, disability, redundancy, genuine retirement or other exceptional circumstances as approved by the Board.</p> <p>In good leaver circumstances, unvested LTI awards may be held 'on foot' subject to their original Performance Conditions and other terms and conditions being met (except for the waived Service Condition), or dealt with in an appropriate manner determined by the Board.</p>
Minimum and maximum value	The minimum value of the PSRs is zero. This will be the case where awards are not made, or where service conditions are not met, or where performance conditions are not met and there is no vesting. The maximum present-day value is the present-day face value based on full vesting. The actual future value will of course depend on the future share price and the level of vesting.
Pricing period	The pricing period for allocation is the 30-day VWAP up to and including the last trading day of the financial year immediately preceding grant.
Vesting and exercise	PSRs vest according to the level at which each of the Performance Conditions have been met. Exercise of PSRs is automatic on vesting and there is no exercise price. Shares allocated after vesting are subject to a holding lock, and, more generally, disposals are also subject to the minimum shareholding requirement (section 3.6).
Legacy Options	<p>In addition to PSRs, legacy awards that remain unvested or unexercised as at the date of this Report include seven series of Options granted between 22 October 2014 and 18 October 2017. An Option is the right to a fully paid ordinary share on payment of an exercise price.</p> <p>All of the legacy Options have a Relative TSR performance condition, against a peer group of either S&amp;P/ASX-100 (2014 and 2015 series), or (for 2016 and 2017 series) on the basis of a market capitalisation reference (the ten companies immediately larger and smaller than Origin) plus AGL, Oil Search, Santos and Woodside (if they were not already in that group).</p> <p>The legacy Options have performance periods varying between four and five years, with exercise prices as tabulated in table 20.</p>

### 3.5 Remuneration range, mix and deferral

The possible range of remuneration outcomes and their mix is summarised in tables 12-15, using the following definitions:

Minimum	FR plus zero STI awarded, and zero LTI awarded (or zero LTI vested outcome)
Target	FR plus Target STI awarded, plus LTI allocated at full face value with 50% vesting
Maximum	FR plus Maximum STI awarded, and LTI allocated at full face value with 100% vesting

For the CEO, the range is shown below for both FY2018 and for FY2019. The FY2019 data incorporates a change to Fixed Remuneration (refer section 3.2) from 1 July 2018, and to STI opportunity levels (refer table 9). The CEO's Total Remuneration will increase by 2.4 per cent at target outcomes with a potential increase of up to 15.4 per cent for the achievement of outstanding (stretch) results.

**Table 12: Remuneration range (\$)**

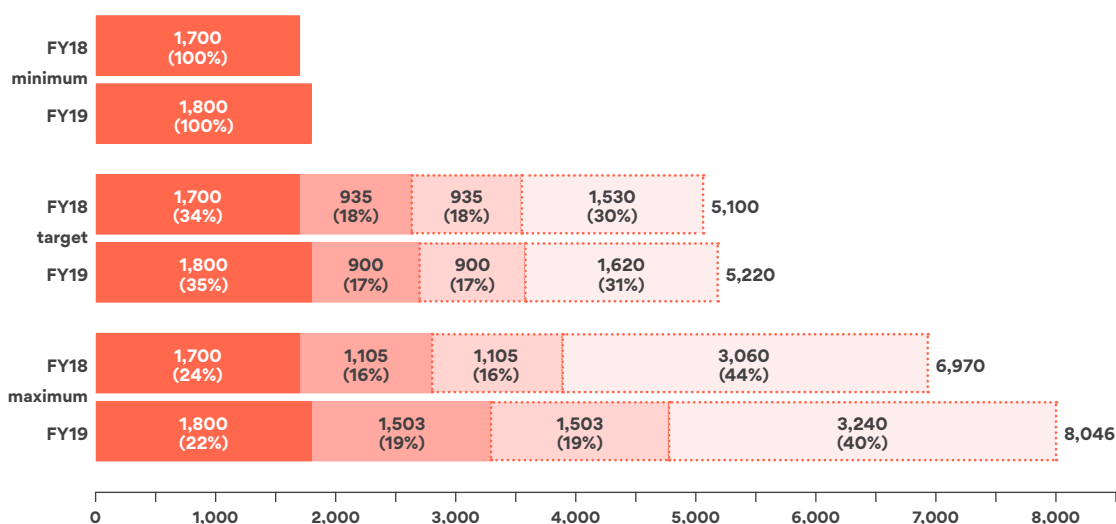
CEO	FY2018			FY2019		
	Minimum	Target	Maximum	Minimum	Target	Maximum
FR	1,700,000	1,700,000	1,700,000	1,800,000	1,800,000	1,800,000
STI	0	1,870,000	2,210,000	0	1,800,000	3,006,000
LTI	0	1,530,000	3,060,000	0	1,620,000	3,240,000
Total	1,700,000	5,100,000	6,970,000	1,800,000	5,220,000	8,046,000

The make-up of the package at these different delivery levels is summarised in table 13:

**Table 13: Remuneration range (\$'000)**

■ Fixed (FR)  
 ■ Cash STI  
 ■ Deferred STI  
 ■ LTI

Dashed lines indicate conditional variable pay that is subject to forfeiture



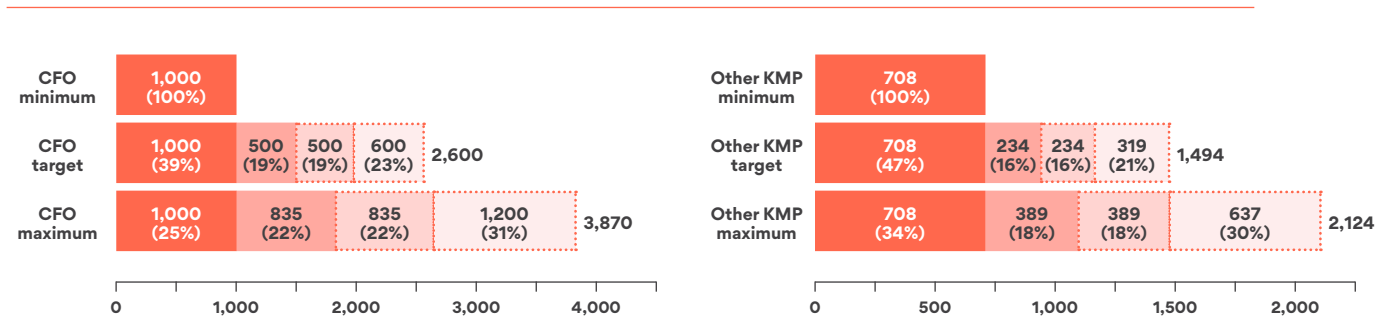


Tables 14 and 15 show the remuneration ranges applying in FY2018 for the Chief Financial Officer and the average of other Executive KMP.

**Table 14: Remuneration range (\$)**

	CFO			Other average KMP		
	Minimum	Target	Maximum	Minimum	Target	Maximum
FR	1,000,000	1,000,000	1,000,000	708,000	708,000	708,000
STI	0	1,000,000	1,670,000	0	467,280	778,800
LTI	0	600,000	1,200,000	0	318,600	637,200
Total	1,000,000	2,600,000	3,870,000	708,000	1,493,880	2,124,000

**Table 15: Remuneration range and mix (\$'000)**



The proportion of at-risk pay and the proportion of pay that is deferred and conditional (subject to forfeiture) increases with the seniority of the role, and also with the level of payout.

### 3.6 Minimum shareholding requirement (MSR) for senior executives

Effective from 1 July 2017, there is a requirement for the CEO and all senior executives to build and maintain a minimum shareholding in the company. An additional disposal restriction applies until the MSR is met<sup>1</sup>. The MSR is an equity holding equivalent to two times annual FR for the CEO, and one times annual FR for senior executives, and is expected to be met within four years. Executive KMP shareholdings are shown in table 21.

### 3.7 Malus and clawback

The STI and LTI arrangements are subject to malus and clawback provisions that enable the company to reduce or claw back awards where it is appropriate to do so.

The Board retains wide discretion to adjust formulaic incentive outcomes up or down (including to zero) prior to their finalisation. Malus refers to the exercise of downward discretion. The Board has, from time to time, applied malus to ensure that overall outcomes were aligned to both benchmarks and to the overall circumstances of the company (for example, it awarded zero STI and LTI allocations for some executives in both FY2015 and FY2016, even though some of the relevant performance conditions had been met).

Clawback refers to the Board's power to recover awards or payments that have been made, granted or vested (including the forfeiture of unvested equity awards, or the demand of the return of shares or the realised cash value of those shares) where the Board determines that the benefit obtained was inappropriate (for example, as a result of fraud, dishonesty or breach of employment obligations by the recipient or any employee of the Group). The Board has not encountered circumstances in this or prior periods that have required the application of the clawback provisions.

<sup>1</sup> The restriction is in addition to any other trading or holding lock restriction, and generally applies to shares vested from incentive plans after the policy was introduced, except to the extent required to meet taxation obligations. Unvested equity that is not subject to performance hurdles may be counted towards the MSR.

### 3.8 No hedging

The company's policy requires that employees cannot trade instruments or other financial products that limit the economic risk of any securities held under any equity-based incentive scheme. Non-compliance may result in summary dismissal.

### 3.9 Change of control

If a change of control occurs prior to the vesting of share rights that are not subject to performance hurdles the Board has discretion to bring forward vesting dates where it considers it appropriate to do so.

If a change of control<sup>1</sup> occurs prior to the vesting of LTI that is subject to performance hurdles, provided the executive has held the relevant instruments for at least 12 months as at the change of control, the Board has discretion to bring forward testing against the performance conditions as at the date of the change of control, and vesting may occur to the extent that the relevant performance conditions have been met.

### 3.10 Capital reorganisation

On a capital reorganisation, the number of unvested share rights and Options held by participants may be adjusted in a manner determined by the Board to minimise or eliminate any material advantage or disadvantage to the participant. If new awards are granted, they will, unless the Board determines otherwise, be subject to the same terms and conditions as the original awards.

### 3.11 Other equity/share plans

The company operates a universal employee share plan in which all full-time and part-time employees can be awarded up to \$1,000 worth of company shares on an annual basis. As foreshadowed in last year's report, the arrangements are being amended to encourage greater share ownership across the company. For FY2018 eligibility for the award was expanded by removing the conditional safety hurdle and reducing the service requirement from twelve to six months. The company is planning to introduce a salary sacrifice and matching mechanism to begin in FY2019.

For the FY2018 award, shares will be purchased on-market during late August for allocation to employees on a restricted basis (the shares cannot be traded until the earlier of cessation of employment or three years). Directors are not eligible for the general employee share plan.

To help preserve shareholder value, retention plans may be used selectively to retain key people. The RPC regularly assesses the risk of the Group losing key people in areas of intense market activity, for example critical employees who manage core activities or have skills that are being actively solicited in the market.

Where appropriate the RPC may consider putting in place deferred payment arrangements to reduce the risk of critical loss. Key people may be offered DSRs or deferred cash payments subject to the condition of remaining in ongoing employment with the company through to a nominated date and achieving personal performance targets over that period. Where DSRs are used for this purpose they represent the same equity vehicle described in table 10 for deferred STI, but their purpose is for retention and the vesting period will vary according to the specific circumstances.

No deferred cash or retention DSRs were provided to KMP during the current or the prior period.

From time to time it may be necessary to offer deferred equity to replace similar or equivalent equity that an executive forfeits when leaving another employer to take up employment with the company. 'Sign-on' equity of this sort, where required, is targeted to the particular circumstances and will have vesting periods matching those circumstances. Table 20 identifies that such sign-on equity was granted to L Tremaine in FY2018.

<sup>1</sup> Change of control is defined as a person/entity acquiring more than 50 per cent of the relevant interest in the company pursuant to a takeover bid that has become unconditional, or when a person/entity otherwise acquires more than 50 per cent of a relevant interest in the issued capital of the company.

### 3.12 Remuneration and contractual details for Executive KMP

Table 16 sets out the main employment terms and conditions for Executive KMP as at 30 June 2018.

**Table 16: Executive service agreements and remuneration terms**

	<b>CEO</b>	<b>Other KMP</b>
Basis of contract	Ongoing (no fixed term)	Ongoing (no fixed term)
Notice period	12 months by either party, or shorter notice by agreement. No notice for misconduct or breach of contract.	Up to six months by either party or shorter notice by agreement. No notice for misconduct or breach of contract.
Termination benefits for cause	Statutory entitlements only	Statutory entitlements only
Termination benefits for resignation	Notice as above or payment in lieu of notice that is not worked; current-year STI forfeited; all unvested equity lapses; statutory entitlements	Notice as above or payment in lieu of notice that is not worked; current-year STI forfeited; all unvested equity lapses; statutory entitlements
Termination benefits for <b>other than</b> resignation or cause	Notice worked (or payment in lieu of any portion not worked); pro rata STI for the period worked (no deferral applicable); all unvested equity lapses unless held 'on foot' in accordance with Equity Incentive Plan Rules (in cases of death, disability, genuine retirement or extraordinary circumstance); and statutory entitlements	Notice worked (or payment in lieu of any portion not worked); pro rata STI for the period worked (no deferral applicable); all unvested equity lapses unless held 'on foot' in accordance with Equity Incentive Plan Rules (in cases of death, disability, bona fide redundancy, genuine retirement or extraordinary circumstance); and statutory entitlements  Payment in accordance with the company's general redundancy policy of three weeks FR per year of service with a minimum of 18 weeks and a maximum of 78 weeks
Remuneration	As set out in table 12. Remuneration is regularly reviewed to align with policy and benchmarks.	As set out in table 12. Remuneration is regularly reviewed to align with policy and benchmarks.

## 4. Remuneration governance

### 4.1 Role of the Board and its Remuneration and People Committee

The full Board has oversight of Origin's remuneration arrangements. It is accountable for the remuneration of executives and of NEDs, and the policies and processes governing both.

The Remuneration and People Committee (RPC) operates under a Charter published on the company's website at [originenergy.com.au](http://originenergy.com.au). The RPC, through its chairman, provides advice and makes recommendations to the full Board on remuneration for NEDs and for ELT members, and also for all equity arrangements and grants regardless of level. The RPC has delegated authority to approve remuneration arrangements for Origin people outside these groups.

As identified in table 1, the RPC has four members (including its chairman) who are all independent NEDs. The RPC's Charter requires a minimum of three NEDs. In addition, there is a standing invitation to all Board members to attend the RPC's meetings. The RPC met formally six times during the Period.

### 4.2 External advisors

The RPC has established protocols for engaging and dealing with external advisors, including those defined as remuneration consultants for the purposes of the Act. The protocols are to ensure independence and the avoidance of conflicts of interest.

The protocols require that remuneration advisors are directly engaged by the RPC and act on instruction from its Chairman. Reports must be delivered directly to the RPC Chairman. The advisor is prohibited from communication with company management except as authorised by the Chairman, and limited to the provision or validation of factual and policy data. The advisor must furnish a statement confirming the absence of any undue influence from management.

During the Period the RPC engaged external advisors to conduct practice reviews and benchmarking exercises, and it also received general market trend information from a variety of commercial and industry sources. It did not seek or receive any remuneration recommendations within the definition of the Act.

### 4.3 Remuneration policy and structure for NEDs

NED remuneration is designed to ensure independence by setting fees that are fixed and not dependent on company results. There are no bonus or incentive-based payments. This ensures that NEDs are able to independently and objectively assess both executive and company performance.

On 18 October 2017 shareholders approved setting the aggregate cap for overall NED remuneration at \$3,200,000 per annum, prior to that it had last been approved in 2013 (at \$2,700,000). The increase was approved to provide the Board with sufficient flexibility to appoint additional directors, and it also recognised that there had been a decrease in the number of executive directors and an increase in the number of NEDs.

Board and committee fees take into account market rates for similar positions at relevant Australian organisations (those of comparable size and complexity) that fairly reflect the time commitments and responsibilities involved. Per diem fees may also be paid on occasions where approved special work is undertaken outside of the expected commitments. No per diem fees were paid during the Period.

The Origin Chairman receives a single fee that is inclusive of committee activities, while other NEDs receive a NED Base Fee and separate fees for their role on specific committees, other than the Nomination Committee, which is considered within the NED Base Fee. All fees include superannuation contributions.

As reflected in table 17, which sets out the structure and level of NED fees, there is no change to the fees to apply during FY2019. Fees were last increased in FY2013 (fees for the Risk Committee were introduced in FY2016).

**Table 17: NED and committee fees (\$)**

<b>FY</b>	<b>2018</b>	<b>2019</b>
Board — Chairman (inclusive of committee fees)	677,000	677,000
NED Base Fee (exclusive of committee fees)	196,000	196,000
Audit — Chairman	57,000	57,000
Audit — Member	29,000	29,000
Remuneration and People — Chairman	47,000	47,000
Remuneration and People — Member	21,000	21,000
Health, Safety and Environment — Chairman	42,000	42,000
Health, Safety and Environment — Member	21,000	21,000
Risk — Chairman	42,000	42,000
Risk — Member	21,000	21,000
Nomination — Chairman	nil	nil
Nomination — Member	nil	nil
Origin Foundation — Chairman	nil	nil

#### 4.4 Minimum shareholding requirement (MSR) for NEDs

To align the interests of the Board and shareholders, NEDs are required to build and then maintain a minimum shareholding in the company.

The MSR for the Chairman was raised effective from 1 July 2017 from one times the NED Base Fee to two times the NED Base Fee, and for all other NEDs it is one times the NED Base Fee.

The MSR must be reached within three years of appointment, or, where the requirement has been increased, within two years of the increase. At the date of this Remuneration Report, all NEDs either met the minimum requirement or were on track to meet it within the required time. Details on NED shareholdings are included in table 21.

A Non-executive Director Share Plan (NEDSP) was suspended in 2013 (existing participants could no longer make acquisitions) and closed to new entrants. The NEDSP provided for NEDs to sacrifice annual fees toward the acquisition of shares, which were then acquired on market by the Trustee of the plan. There is one remaining participant in the NEDSP. A revised Director Share Acquisition Plan is under consideration for introduction during FY2019.



## 5. Statutory disclosures

Table 18: Executive KMP statutory remuneration (A-IFRS) (\$, except where otherwise indicated)

		Short-term benefits			Post-employment benefits	Accounting value of long-term benefits			Termination benefits	Totals		
		Base salary	Cash STI <sup>1</sup>	Non-monetary benefits <sup>2</sup>	Superannuation	Deferred STI <sup>3</sup>	LTI <sup>4</sup>	Accrued leave change		Total remuneration	At Risk (%)	Share based (%)
<b>Executive Director</b>												
F Calabria	2018	1,646,466	1,045,500	32,826	24,384	697,375	612,235	42,500	-	4,101,285	57	32
	2017	1,471,005	1,007,250	32,312	27,456	433,397	458,546	265,312	-	3,695,278	51	24
<b>Other Executive KMP</b>												
J Briskin	2018	654,936	327,666	10,645	20,064	187,782	109,763	68,488	-	1,379,343	45	22
	2017	328,035	196,095	4,375	11,190	61,343	35,477	13,903	-	650,418	45	15
G Jarvis	2018	684,258	346,673	27,225	27,468	220,422	161,139	18,100	-	1,485,285	49	26
	2017	357,798	218,387	15,236	15,411	81,009	73,845	37,868	-	799,554	47	19
M Schubert	2018	703,936	330,427	9,848	20,064	223,244	121,000	9,042	-	1,417,561	48	24
	2017	97,200	46,633	1,672	3,279	30,180	10,123	1,881	-	190,968	46	21
L Tremaine <sup>5</sup>	2018	961,091	696,837	10,764	19,678	220,978	1,784,358	12,253	-	3,705,959	73	54
	2017	-	-	-	-	-	-	-	-	-	-	-
<b>Former Executive KMP</b>												
G King <sup>6</sup>	2018	-	-	-	-	-	-	-	-	-	-	-
	2017	673,026	0	21,000	7,293	20,796	272,492	15,738	2,173,077	3,183,422	9	9
G Mallett <sup>5</sup>	2018	70,486	0	963	482	956	4,693	142	-	77,722	7	7
	2017	824,046	238,065	26,282	25,032	112,805	131,850	15,000	-	1,373,080	35	18
D Baldwin <sup>6</sup>	2018	-	-	-	-	-	-	-	-	-	-	-
	2017	926,237	742,357	27,649	16,247	142,087	507,254	23,945	746,019	3,131,795	44	21
<b>Total</b>	<b>2018</b>	<b>4,721,173</b>	<b>2,747,103</b>	<b>92,272</b>	<b>112,140</b>	<b>1,550,756</b>	<b>2,793,188</b>	<b>150,525</b>	<b>0</b>	<b>12,167,157</b>	<b>58</b>	<b>36</b>
	<b>2017</b>	<b>4,677,347</b>	<b>2,448,787</b>	<b>128,526</b>	<b>105,908</b>	<b>881,617</b>	<b>1,489,587</b>	<b>373,647</b>	<b>2,919,096</b>	<b>13,024,515</b>	<b>37</b>	<b>18</b>

1 For FY2018 STI cash represents one half of the STI award. For FY2017 it represents two-thirds of the STI awarded, except for the CEO which was one half. For Former Executive KMP the STI award may not be subject to deferral. The STI cash is physically paid after the end of the financial year to which it relates, but is allocated to the earning year. The balance of the STI award is STI deferred.

2 Non-monetary benefits include insurance premiums and fringe benefits such as car parking and expenses associated with travel.

3 Deferred STI is that portion of the accounting value of equity granted or to be granted (DSRs) under the STI plan for the current and prior periods attributable to the reporting period. In following reporting periods the accumulated expense is adjusted for the number of instruments then expected to vest. A 'bring-forward' of future-period accounting expense may occur where a cessation of employment occurs before the normal vesting date.

4 LTI includes all long-term incentives (i.e. those not awarded under the STI plan) and represents that portion of the accounting value of the awards made, or to be made, for the current and prior periods, which is attributable to the reporting period. Where instruments vest against a market condition (such as TSR) the application of accounting rule AASB-2 determines a fair value that takes into account that market condition. This involves assumptions for the volatility of Origin shares and the shares of all other companies in the comparator group, dividend yields, and the risk-free rate (see note F3(a)(i) to the financial statements). In the case of Options it also includes assumptions on the timing of exercise. This fair value, amortised over the service/vesting period is used for expensing purposes. The value is not adjusted for the actual outcome against the market condition. Where instruments vest against a non-market condition (such as ROCE), AASB-2 does not take into account the hurdle. The initial grant date expense is represented by face value less dividends foregone over the vesting period. True-ups then occur each reporting period for the expected vesting outcome, based on reasonable and successive forecasts of the final vesting outcome, lastly with a final true-up when the outcome is known. A 'bring-forward' of future-period accounting expense may occur where a cessation of employment occurs before the normal vesting date where prior years' awards remain on foot at cessation. At cessation, if unvested Options or PSRs remain on foot then any unvested expense is brought forward, but if forfeited, previously booked expense is reversed. Neither treatment has any bearing on what the executive may ultimately forfeit or receive. The applicable treatment may not be known at the end of the reporting period even if a cessation is expected in the near future. At the time of FY2017 reporting, the 'on-foot/lapse' position for D Baldwin was unknown. Subsequently the equity lapsed and previously expensed amounts totalling \$1,042,171 (and attributed to KMP remuneration in prior periods) required reversal, this is recorded as an FY2018 adjustment.

5 For FY2018, pro-rata periods for KMP office are: G Mallett 1 July 2017 to 9 July 2017, and L Tremaine 10 July 2017 to 30 June 2018.

6 For FY2017 comparatives, pro-rata periods for KMP office are G King 1 July 2016 to 19 October 2016; and D Baldwin 1 July 2016 to 28 April 2017.

Table 19: NED statutory remuneration table (\$) (A-IFRS)

		Cash fees	Non-monetary benefits <sup>1</sup>	Superannuation	Total remuneration
<b>Non-executive Directors</b>					
J Akehurst	2018	238,936	200	20,064	259,200
	2017	239,368	200	19,632	259,200
M Brenner	2018	246,936	200	20,064	267,200
	2017	247,368	200	19,632	267,200
G Cairns	2018	656,936	12,749	20,064	689,749
	2017	657,368	12,400	19,632	689,400
T Engelhard	2018	221,103	200	20,064	241,367
	2017	32,894	33	3,272	36,199
B Morgan	2018	274,936	200	20,064	295,200
	2017	275,368	200	19,632	295,200
S Perkins	2018	272,936	200	20,064	293,200
	2017	241,694	18,209	19,632	279,535
S Sargent	2018	217,936	200	20,064	238,200
	2017	218,368	200	19,632	238,200
<b>Former Non-executive Directors</b>					
H Nugent <sup>2</sup>	2018	-	-	-	-
	2017	185,216	134	13,301	198,651
<b>Total</b>	<b>2018</b>	<b>2,129,719</b>	<b>13,949</b>	<b>140,448</b>	<b>2,284,116</b>
	<b>2017</b>	<b>2,097,644</b>	<b>31,576</b>	<b>134,365</b>	<b>2,263,585</b>

1 Non-monetary benefits include insurance premiums and fringe benefits. Changes between current and prior year primarily reflect expenses associated with varying travel commitments.

2 For FY2017 comparatives, H Nugent pro-rata period for KMP office was 1 July 2016 to 3 March 2017.





**Table 20: Details of, and movements in, rights to equity**

Rights to equity in the company are granted to Executive KMP only, no NEDs hold rights to equity. This table covers holdings and movements for rights held (directly, indirectly or beneficially including related parties) over the Period (or KMP portion of the Period), including grants, transactions and forfeits, by value and by number. Details of the terms and vesting and exercise conditions attaching to the rights are set out in tables 21 and 22. Awards to L Tremaine represent compensation for equity forfeited from his previous employer as a consequence of accepting employment with the company, reflecting the timing and vesting patterns of the forfeited instruments.

Type	Held at start <sup>1</sup>	Grant date	Granted						Vested			Forfeited		Vested exercisable at end	Held at end <sup>1</sup>	
			Number granted	Fair value <sup>2,3</sup> (\$)	Value (\$)	Exercise price (\$)	Vest date <sup>3</sup>	Expiry date <sup>4</sup>	No. vested	No. exercised	Value at exercise <sup>5</sup> (\$)	No. forfeited <sup>6</sup>	Value <sup>7</sup> (\$)			
<b>Executive Director</b>																
F Calabria	Options	1,096,046	18 Oct 2017	401,288	2.30	922,962	7.37	22 Aug 2022	23 Aug 2027	0	0	0	67,124	157,741	0	1,430,210
	PSRs	145,029	18 Oct 2017	126,866	6.98	885,525	-	23 Aug 2021	Vest date	0	0	0	0	0	0	271,895
	DSRs	107,921	18 Oct 2017	136,668	7.18	981,731	-	2019 to 2021	Vest date	28,375	28,375	213,380	0	0	0	216,214
<b>Other Executive KMP</b>																
J Briskin	Options	17,769	30 Aug 2017	86,910	2.50	217,275	7.37	22 Aug 2022	23 Aug 2027	0	0	0	17,769	41,757	0	86,910
	PSRs	60,733	30 Aug 2017	27,477	7.21	198,109	-	23 Aug 2021	Vest date	0	0	0	0	0	0	88,210
	DSRs	25,163	30 Aug 2017	23,340	7.65	178,551	-	26 Aug 2019	Vest date	13,615	13,615	101,870	0	0	0	34,888
G Jarvis	Options	229,982	30 Aug 2017	93,219	2.50	233,047	7.37	22 Aug 2022	23 Aug 2027	0	0	0	44,390	104,317	0	278,811
	PSRs	54,319	30 Aug 2017	29,471	7.21	212,486	-	23 Aug 2021	Vest date	0	0	0	0	0	0	83,790
	DSRs	42,679	30 Aug 2017	25,993	7.65	198,846	-	26 Aug 2019	Vest date	20,862	20,862	156,882	0	0	0	47,810
G Mallett	Options	232,270	-	0	-	0	-	-	-	0	0	0	0	0	0	232,270
	PSRs	54,435	-	0	-	0	-	-	-	0	0	0	0	0	0	54,435
	DSRs	39,510	-	0	-	0	-	-	-	0	0	0	0	0	0	39,510
M Schubert	Options	153,641	30 Aug 2017	83,769	2.50	209,423	7.37	22 Aug 2022	23 Aug 2027	0	0	0	0	0	0	237,410
	PSRs	45,652	30 Aug 2017	26,484	7.21	190,950	-	23 Aug 2021	Vest date	0	0	0	0	0	0	72,136
	DSRs	52,578	30 Aug 2017	18,945	7.65	144,929	-	26 Aug 2019	Vest date	23,639	23,639	213,771	0	0	0	47,884
L Tremaine	Options	0	30 Aug 2017	81,441	2.52	205,231	7.37	23 Aug 2021	23 Aug 2026	0	0	0	0	0	0	81,441
	PSRs	0	30 Aug 2017	24,415	7.43	181,403	-	24 Aug 2020	Vest date	0	0	0	0	0	0	24,415
	DSRs	0	30 Aug 2017	335,875	7.55	2,536,272	-	2018 to 2020	Vest date	0	0	0	0	0	0	335,875

1 The number of instruments that are held at the start/end of the Period, or, where the holder is KMP for part-year only, on the relevant start/end dates of holding KMP office.

2 Accounting expense value per instrument at grant date (Black-Scholes Monte Carl for Relative TSR performance conditions; discounted cash flow for DSRs) or as estimated at first reporting period after grant (ROCE non-market hurdle).

3 Where the DSRs were granted in three tranches with different vesting dates, the range of vesting dates is shown and the fair value is the weighted average of the three tranches per instrument.

4 The expiry date is the same as the vesting date where the terms of the grant apply automatic exercise on vesting. Where there is no automatic exercise on vesting, the expiry date is the last possible expiry. Rights and options may expire earlier, for example if the rights or options fail to vest on testing, they will lapse on the vesting date.

5 The value of rights exercised is calculated as the closing market price of the company's shares on the Australian Securities Exchange (ASX) on the date of exercise, after deducting any exercise price. The exercise price for PSRs and DSRs is nil. DSRs vesting in the Period were granted on 14 Oct 2013 (vested 16 Oct 2017), 22 Oct 2014 (vested 23 Oct 2017), 22 Oct 2015 (vested 23 Oct 2017) and 7 Dec 2015 (vested 15 Jan 2018).

6 Forfeited Options were granted in October 2013.

7 The value of equity forfeited represents prior year Origin equity allocations that were forfeited during the year (i.e. the relevant grants realised no benefit and lapsed without value). The forfeited value represents the grant date value that was disclosed and attributed to remuneration at the time of the grant.

**Table 21: Details of, and movements in, ordinary shares of the company**

Holdings and movements for ordinary shares held by KMP (directly, indirectly or beneficially including related parties) over the Period.

	Held at start <sup>1</sup>	Acquired <sup>2</sup>	Received on exercise of Options/PSRs <sup>3</sup>	Received on exercise of DSRs <sup>3</sup>	Disposed <sup>4</sup>	Held at end <sup>1,5</sup>	Position relative to shareholding requirement <sup>6</sup>
<b>Non-executive Directors<sup>7</sup></b>							
J Akehurst	71,200	0	-	-	0	71,200	Met
M Brenner	22,117	0	-	-	0	22,117	Met
G Cairns	163,660	0	-	-	0	163,660	Met
T Engelhard	0	0	-	-	0	0	On track
B Morgan	47,143	0	-	-	0	47,143	Met
S Perkins	30,000	0	-	-	0	30,000	Met
S Sargent	31,429	0	-	-	0	31,429	Met
<b>Executive Director</b>							
F Calabria	163,530	0	-	28,375	0	191,905	Met
<b>Other Executive KMP</b>							
J Briskin	15,302	134	-	13,615	0	29,051	On track
G Jarvis	14,319	134	-	20,862	0	35,315	Met
G Mallett	43,282	0	-	0	0	43,282	na
M Schubert	28,138	134	-	23,639	8,000	43,911	Met
L Tremaine	0	0	-	0	0	0	On track

1 The number of instruments that are held at the start/end of the Period, or, where the holder is KMP for part-year only, on the relevant start/end dates of holding KMP office.

2 Purchases and transfers in. For Other Executive KMP this includes allotments of fully-paid ordinary shares granted under the general Employee Share Plan (ESP). Executive Directors do not participate in the ESP.

3 After vesting and after payment of the exercise price (the exercise price for PSRs and for DSRs is nil).

4 Sales and transfers out.

5 Other than options and rights disclosed elsewhere in this Report, no other equity instruments including shares in the company were granted to KMP during the period.

6 Minimum shareholding requirements are set out in sections 3.6 and 4.4. For informative purposes the test applied here uses the 30-day VWAP to 30 June 2018 (\$9.80).

7 NEDs are not issued shares under any incentive or equity plans. Acquisitions include purchases of shares on-market, or pursuant to the company's dividend reinvestment plan or the August 2016 Entitlement Offer.

**Table 22: Details of equity granted**

The table below lists all unissued shares potentially arising from equity-based incentive grants current at 30 June 2018 held by current or former employees (including Executive Directors and Executive KMP). Equity-based incentives are not granted to NEDs. No terms of equity-settled share-based transactions have been altered or modified subsequent to grant. Equity grants that failed to meet their performance hurdles on their final test dates prior to 30 June 2018 have all been lapsed.

Granted	Number Outstanding	Exercise Price	Last possible expiry <sup>1</sup>
<b>Options</b>			
22 October 2014	1,909,798	\$15.65	22 October 2021
22 October 2015	2,199,410	\$6.78	21 October 2025
30 August 2016	1,484,094	\$5.67	28 August 2026
19 October 2016	450,000	\$5.21	28 August 2026
30 August 2017	81,441	\$7.37	28 August 2026
30 August 2017	949,570	\$7.37	23 August 2027
18 October 2017	401,288	\$7.37	23 August 2027
<b>Performance Share Rights</b>			
22 October 2014	406,294	-	22 October 2018
22 October 2015	1,231,040	-	21 October 2019
30 August 2016	1,268,094	-	24 August 2020
19 October 2016	129,558	-	24 August 2020
30 August 2017	900,375	-	23 August 2021
30 August 2017	24,415	-	24 August 2020
18 October 2017	126,866	-	23 August 2021
<b>Deferred Share Rights</b>			
22 October 2015	37,746	-	22 October 2018
7 December 2015	10,068	-	15 January 2019
30 August 2016	1,951,271	-	20 August 2018
30 August 2016	38,404	-	26 August 2019
30 August 2016	38,404	-	24 August 2020
30 August 2017	165,860	-	10 July 2018
30 August 2017	93,813	-	10 July 2019
30 August 2017	76,202	-	10 July 2020
30 August 2017	1,766,650	-	26 August 2019
30 August 2017	42,627	-	24 August 2020
30 August 2017	35,023	-	23 August 2021
18 October 2017	45,556	-	26 August 2019
18 October 2017	45,556	-	24 August 2020
18 October 2017	45,556	-	23 August 2021

<sup>1</sup> The expiry date is the same as the vesting date where the terms of the grant apply automatic exercise on vesting. Where there is no automatic exercise on vesting, the expiry date is the last possible expiry. Rights and options may expire earlier, for example if the rights/options fail to vest on testing, they will lapse on the vesting date.

## 6. Loans and other transactions with KMP

There were no loans with KMP during the year.

### 6.1 Other transactions with the consolidated entity or its controlled entities

Transactions entered into during the year with KMP which are within normal employee, customer or supplier relationships on terms and conditions no more favourable than dealings in the same circumstances on an arm's length basis include:

- the receipt of dividends from Origin Energy Limited;
- participation in the Employee Share Plan, Equity Incentive Plan and NED Share Plan;
- terms and conditions of employment or directorship appointment;
- reimbursement of expenses incurred in the normal course of employment;
- purchases of goods and services; and
- receipt of interest on Retail Notes.

Certain directors of Origin Energy Limited are also directors of other companies which supply Origin Energy Limited with goods and services or acquire goods or services from Origin Energy Limited. Those transactions are approved by management within delegated limits of authority and the directors do not participate in the decisions to enter into such transactions. If the decision to enter into those transactions should require approval of the Board, the director concerned will not vote upon that decision nor take part in its consideration.

Signed in accordance with a resolution of Directors



**Gordon Cairns**  
Chairman

Sydney, 16 August 2018

## Lead Auditor's Independence Declaration



### Lead Auditor's Independence Declaration under Section 307C of the Corporations Act 2001

To the Directors of Origin Energy Limited

I declare that, to the best of my knowledge and belief, in relation to the audit of Origin Energy Limited for the financial year ended 30 June 2018 there have been:

- i. no contraventions of the auditor independence requirements as set out in the *Corporations Act 2001* in relation to the audit; and
- ii. no contraventions of any applicable code of professional conduct in relation to the audit.

KPMG

Duncan McLennan  
*Partner*

Sydney

16 August 2018

# Board of Directors



## Gordon Cairns

### Independent Non-executive Chairman

Gordon Cairns joined the Board in June 2007 and became Chairman in October 2013. He is Chairman of the Nomination Committee and a member of the Risk, Remuneration and People, Audit and Health, Safety and Environment committees.

He has extensive Australian and international experience as a senior executive, as Chief Executive Officer of Lion Nathan Ltd, and has held senior management positions in marketing, operations and finance with PepsiCo, Cadbury Ltd and Nestlé.

Gordon is Chairman of Woolworths Group Limited (since September 2015), a Director of Macquarie Group Limited (since November 2014) and Macquarie Bank Limited (since November 2014), and Non-executive Director of World Education Australia (since November 2007). He was previously Chairman of the Origin Foundation, David Jones Limited (March – August 2014), Rebel Group (2010 – 2012), Director of The Centre for Independent Studies (May 2006 – August 2011), Quick Service Restaurant Group (October 2011 – May 2017) and Westpac Banking Corporation (July 2004 – December 2013). He was also a senior advisor to McKinsey & Company.

Gordon holds a Master of Arts (Honours) from the University of Edinburgh.



## John Akehurst

### Independent Non-executive Director

John Akehurst joined the Board in April 2009. He is Chairman of the Health, Safety and Environment Committee and a member of the Nomination and Risk committees.

His executive career was in the upstream oil and gas and LNG industries, initially with Royal Dutch Shell and then as Chief Executive Officer of Woodside Petroleum Limited.

He is Chairman of the National Centre for Asbestos Related Diseases and of the Fortitude Foundation, a Director of Human Nature Adventure Therapy Ltd (since February 2018), a former Chairman of Transform Exploration Pty Ltd (February 2012–December 2017), Alinta Limited (January–September 2007) and Coogee Resources Ltd (2008–2009) and a former Board Member of the Reserve Bank of Australia (September 2007–September 2017), Director of CSL Limited (April 2004–October 2016), Oil Search Limited (1998–2003), Securrency Ltd (2008–2012), Murdoch Film Studios Pty Ltd and the University of Western Australia Business School.

John holds a Masters in Engineering Science from Oxford University and is a Fellow of the Institution of Mechanical Engineers.



## Maxine Brenner

### Independent Non-executive Director

Maxine Brenner joined the Board in November 2013. She is Chairman of the Risk Committee and a member of the Audit and Nomination committees.

Maxine is a Non-executive Director of Orica Ltd (since April 2013) and Qantas Airways Ltd (since August 2013). She is also an Independent Director and Chairman of the Audit and Risk Committee for Growthpoint Properties Australia and a member of the University of NSW Council.

Maxine was formerly a Managing Director of Investment Banking at Investec Bank (Australia) Ltd. Prior to Investec, Maxine was a Lecturer in Law at the University of NSW and a lawyer at Freehills, specialising in corporate law. Her former directorships include Treasury Corporation of NSW, Bulmer Australia Ltd, Neverfail Springwater Ltd (1999–2003) and Federal Airports Corporation, where she was Deputy Chair. In addition, Maxine has served as a Council Member of the State Library of NSW and as a member of the Takeovers Panel.

Maxine holds a Bachelor of Arts and a Bachelor of Laws.



## Frank Calabria

### Managing Director and Chief Executive Officer

Frank Calabria was appointed Managing Director and Chief Executive Officer in October 2016. Frank is a member of the Health, Safety and Environment Committee and a Director of the Origin Foundation.

Frank joined Origin as Chief Financial Officer in November 2001 and was appointed Chief Executive Officer, Energy Markets in March 2009. In that latter role, Frank was responsible for the integrated business within Australia including retailing and trading of natural gas, electricity and LPG, power generation and solar and energy services.

Frank is a Director of the Australian Energy Council and the Australian Petroleum Production & Exploration Association. He is a former Chairman of Australian Energy Council and former Director of the Australian Energy Market Operator.

Frank has a Bachelor of Economics from Macquarie University and a Master of Business Administration (Executive) from the Australian Graduate School of Management. Frank is also a Fellow of the Chartered Accountants Australia and New Zealand and a Fellow of the Financial Services Institute of Australasia.



### Teresa Engelhard

#### Independent Non-executive Director

Teresa Engelhard joined the Board in May 2017. She is a member of the Audit and Remuneration and People committees.

Teresa has more than 20 years' experience in the information, communication, technology and energy sectors as a senior executive and venture capitalist. Teresa is a Non-executive Director of Wisetech Global (since March 2018), Planet Innovation Ltd (since April 2016), StartupAUS (since March 2016) and Redkite (since February 2017). Teresa started her career at McKinsey & Company in California, where she served energy and retail clients. More recently, she focused energy sector innovation as a Managing Partner at Jolimont Capital. Her former directorships include Daintree Networks and Red Bubble Ltd (July 2011–October 2017).

Teresa holds a Bachelor of Science (Hons) degree from the California Institute of Technology (Caltech) and an MBA from Stanford University. She is a graduate of the Australian Institute of Company Directors.



### Bruce Morgan

#### Independent Non-executive Director

Bruce Morgan joined the Board in November 2012. He is Chairman of the Audit Committee and a member of the Health, Safety and Environment, Nomination and Risk committees.

He is Chairman of Sydney Water Corporation (since October 2013), a Director of Caltex Australia Ltd (since June 2013) and a Director of Redkite, the University of NSW Foundation and the European Australian Business Council. Bruce has a Bachelor of Commerce (Accounting and Finance) from the University of NSW.

Bruce served as Chairman of the Board of PricewaterhouseCoopers (PwC) Australia between 2005 and 2012. In 2009, he was elected as a member of the PwC International Board, serving a four-year term. He was previously Managing Partner of PwC's Sydney and Brisbane offices. An audit partner of the firm for over 25 years, he was focused on the financial services and energy and mining sectors, leading some of the firm's most significant clients in Australia and internationally.

He is a Fellow of the Chartered Accountants Australia and New Zealand and of the Australian Institute of Company Directors.



### Scott Perkins

#### Independent Non-executive Director

Scott Perkins joined the Board in September 2015. He is Chairman of the Remuneration and People Committee and a member of the Audit, Risk and Nomination committees.

Scott is a Non-executive Director of Woolworths Limited (since September 2014) and Brambles Limited (since May 2015). He is Chairman of Sweet Louise (since 2005), a Director of the Museum of Contemporary Art in Sydney (since 2011) and the New Zealand Initiative (since 2012). Scott was previously a Non-executive Director of Meridian Energy (1999–2002).

Scott has extensive Australian and international experience as a leading corporate adviser. He was formerly Head of Corporate Finance for Deutsche Bank Australia and New Zealand, and a member of the Executive Committee with overall responsibility for the Bank's activities in this region. Prior to that he was Chief Executive Officer of Deutsche Bank New Zealand and Deputy CEO of Bankers Trust New Zealand.

He has a longstanding commitment to breast cancer causes, the visual arts and public policy development.

Scott holds a Bachelor of Commerce and a Bachelor of Laws (Hons) from Auckland University.



### Steven Sargent

#### Independent Non-executive Director

Steven Sargent joined the Board in May 2015. He is Chairman of the Origin Foundation and a member of the Health, Safety and Environment and Remuneration and People committees.

Steven is Chairman of OFX Group Ltd (since November 2016). He is Deputy Chairman of Nanosonics Ltd (since July 2016) and Non-executive Director of the Great Barrier Reef Foundation (since March 2015). Over recent years Steven has been a Non-executive Director of Veda Group Ltd (2015–2016) and Bond University Ltd (2010–2016). Steven was also a member of the Australian Treasurer's Financial Sector Advisory Council, President of the American Chamber of Commerce and a Director on the Board of the Business Council of Australia and he was a member of the Australian B20 Leadership Group.

Steven's executive career included 22 years at General Electric, where he led businesses across the USA, Europe and Asia Pacific. Steven was President and CEO of GE Mining, GE's global mining technology and business services. Prior to this he was President and CEO of GE Australia, NZ & PNG, where he had local responsibility for GE's Energy, Oil and Gas, Aviation, Healthcare and Financial Services businesses.

Steven holds a Bachelor of Business from Charles Sturt University and is a Fellow with the Australian Institute of Company Directors and the Australian Academy of a Technological Sciences and Engineering.



# Executive Leadership Team



## Jon Briskin

**Executive General Manager, Retail**

Jon Briskin joined Origin in 2010 and was appointed Executive General Manager, Retail in December 2016.

Jon leads the teams responsible for energy sales, marketing, product development and service experience for Origin's residential and SME customers.

Jon has held various roles at Origin, leading customer operations, service transformation and customer experience.

Prior to Origin, Jon worked as a management consultant across financial services, energy, technology and government sectors. Jon holds a Bachelor of Commerce (Accounting and Finance) from Monash University.



## Andrew Clarke

**Group General Counsel and Company Secretary**

Andrew Clarke joined Origin in May 2009 and is responsible for the company secretarial and legal functions. He was a partner of a national law firm for 15 years and was Managing Director of a global investment bank for more than two years prior to joining Origin.

Andrew has a Bachelor of Laws (Hons) and a Bachelor of Economics from the University of Sydney, and is a member of the Australian Institute of Company Directors.



## Greg Jarvis

**Executive General Manager, Energy Supply and Operations**

Greg Jarvis joined Origin in 2002 as Electricity Trading Manager and was appointed General Manager, Wholesale, Trading and Business Sales in February 2011.

Greg is responsible for Wholesale, Trading, Business Energy, Solar, Generation and LPG.

Holding 20 years' experience in the financial markets, with 15 years' experience in energy markets, Greg began his career in the banking industry in Australia before moving to the energy industry leading wholesale energy trading functions. He has a Masters in Applied Finance and a Bachelor of Business.



## Tony Lucas

**Executive General Manager, Future Energy and Business Development**

Tony Lucas joined Origin as Risk Analysis Manager in 2002 and was appointed as General Manager, Energy Risk Management in February 2011.

Tony leads the team responsible for Strategy and Risk for Energy Markets. He will also ensure that Origin is uniquely positioned to lead the transition into a low-carbon, technology-enabled world where customers are empowered with greater choice by investing in, incubating and deploying the best future energy solutions.

Originally from New Zealand, Tony began his career in the banking industry before moving to London where he worked for Lehman Brothers. He moved to Australia in 1997 and worked with Bankers Trust and Integral Energy. Tony has an NZ Diploma in Business Studies and Master of Applied Finance.



## Carl McCamish

**Executive General Manager, Technology, Risk, HSE, and Transformation**

Carl McCamish joined Origin in March 2008 and is responsible for Information Technology, Company transformation and risk. Carl was previously Executive General Manager Corporate Development and subsequently Executive General Manager Corporate Affairs, and more recently Executive General Manager, People & Culture.

Before joining Origin, Carl was head of strategic development at the private equity firm, Terra Firma. He was previously Senior Energy Advisor in the United Kingdom Prime Minister's Strategy Unit. Before that he worked at McKinsey & Company management consultants.

Carl has a Bachelor of Arts and Laws from the University of Melbourne and a Masters in Industrial Relations and Labour Economics from Oxford University where he was a Rhodes Scholar.



### Sharon Ridgway

**Executive  
General Manager,  
People and Culture**

Sharon Ridgway joined Origin in 2009 and is responsible for People and Culture and The Origin Foundation. Sharon was appointed in 2012 as the Head of P&C for the Integrated Gas business unit, before being appointed as the General Manager P&C for Energy Markets in 2015.

Sharon's team provide strategic support to the business in key areas such as engagement, diversity, talent management and culture change.

Originally from the UK, Sharon spent most of her early career with the Dixons Group, a large European electrical retailer. There she held a number of operational roles before being appointed as the Head of HR and subsequently the Head of European Recruitment. Sharon holds a Bachelor of Business Administration and a Postgraduate Diploma in HR Management.



### Mark Schubert

**Executive  
General Manager,  
Integrated Gas**

Mark Schubert joined Origin in April 2015 and was appointed Executive General Manager, IG, in April, 2017. He is responsible for Origin's Integrated Gas business, which manages the Company's portfolio of natural gas and LNG interests. Integrated Gas includes Origin's interests in Australia Pacific LNG, as operator of the upstream and pipeline components of the joint venture and as gas marketing agent.

Mark also held a number of senior positions during his 18-year career with Shell. Most recently Mark served as General Manager Production where he had direct accountability for developing Prelude FLNG - the world's first floating LNG facility. Mark's other roles in Shell included General Manager Geelong Refinery and General Manager Oceania Supply & Marine. Mark holds a Masters of Finance and Financial Law from the University of London and a Bachelor of Engineering (Chemical) from the University of Sydney.



### Samantha Stevens

**Executive  
General Manager,  
Corporate Affairs**

Samantha Stevens joined Origin in March 2018 as Executive General Manager, Corporate Affairs.

Samantha is responsible for Origin's external affairs, government and public policy and employee communication functions.

Samantha has more than 20 years' experience in corporate affairs, mainly in the resources, industrials and financial services sectors.



### Lawrie Tremaine

**Chief Financial Officer**

Lawrie Tremaine joined Origin in June 2017 and holds the position of Chief Financial Officer

Lawrie leads the teams responsible for all finance activities, corporate strategy, corporate development, procurement and investor relations.

Lawrie has over 30 years' experience in financial and commercial leadership, predominantly in the resource, oil and gas and minerals processing industries.

Prior to joining Origin Lawrie held a number of senior positions during his 10 years at Woodside Petroleum, including Chief Financial Officer for over 6 years. Prior to joining Woodside Lawrie worked at Alcoa for 17 years, culminating in 5 years in Tokyo and Beijing as Vice President Finance, Alcoa Asia Pacific.

Lawrie has a Bachelor of Business from Chisholm Institute (now Monash University) and is a Fellow of CPA Australia.

# Corporate Governance Statement

For the year ended 30 June 2018



Origin is committed to the creation of shareholder value and meeting the expectations of stakeholders to practice sound corporate governance.

Origin aspires to the highest standards of integrity, personal safety and environmental performance. To achieve this, every employee and contractor is required to act in accordance with Origin's governance and business conduct standards across its operations in Australia and internationally.

## Compliance with the ASX Corporate Governance Principles and Recommendations (ASX Principles)

This statement has been approved by the Board and summarises the Company's governance practices which were in place throughout the financial year ended 30 June 2018. During the financial year and to the date of this Report, Origin has complied with all the ASX Principles.

## Principle 1: Lay solid foundations for management and oversight

The Board's roles and responsibilities are formalised in a Board Charter, which is available on the Company's website. The Charter sets out those functions that are delegated to management and those that are reserved for the Board. The Company Secretary is accountable directly to the Board, through the Chairman, on all matters to do with the proper functioning of the Board.

Before a Director is appointed, Origin undertakes appropriate evaluations. These include independent checks of a candidate's character, experience, education, criminal record, bankruptcy history, and any other factors that would affect the Company's or the individual's reputation.

Where a candidate is standing for election or re-election as Director, the notice of meeting will set out information on the candidate including biographical details, qualifications and experience,

independence status, outside interests and the recommendation of the rest of the Board on the resolution.

At the time of joining Origin, Directors and senior executives are provided with letters of appointment, together with key Company documents and information, setting out their term of office, duties, rights and responsibilities, and entitlements on termination.

The performance of all key executives, including the Managing Director and Chief Executive Officer, is reviewed annually against:

- A set of personal financial and non-financial goals
- Company and Business-Unit specific goals
- Adherence to the Company's Purpose and Values.

The Remuneration and People Committee and the Board consider the performance of the Managing Director & Chief Executive Officer and all members of the Executive Leadership Team (ELT) when deciding whether to award performance-related remuneration through short-term and long-term incentives for the year completed and when assessing fixed remuneration for future periods. Further information on the outcomes of the FY2018 assessment of executive remuneration is set out in the Remuneration Report.

Each year, the Directors review the performance of the whole Board, Board committees and individual Directors. This year, a full review was undertaken with assistance from an independent external consultant, covering individual Director performance, the Board's and Committees' activities and work programs, time commitments, meeting efficiency and Board contribution to Company strategy, monitoring, compliance and governance. The results of the review were discussed by the whole Board, and initiatives to improve or enhance Board performance and effectiveness were considered and recommended. Individual Director feedback was discussed directly between that Director and the Chairman.

## Diversity

Origin's Diversity and Inclusion policy applies to all aspects of employment including recruitment, selection, promotion, training, remuneration benefits and performance management. There are also procedures in place to prevent and eliminate unlawful discrimination and harassment.

Origin promotes a culture where managers and employees proactively apply the diversity policies and programs through effective leadership and communication.

The Company has an 'All Roles Flex' policy. This challenges the organisation, both employees and managers, to find flexibility in any role. The aim is to improve productivity by further removing barriers to workplace diversity. This program also targets greater flexibility for employees working in roles that are traditionally less flexible due to shift rosters or remote locations, such as an operational role at a power station.

In February 2018, the Workplace Gender Equality Agency (WGEA) announced Origin as an Employer of Choice for Gender Equality again for 2017-2018. During FY2018, enhancements were made to the parental leave program. Any employee can take up to 13 weeks paid parental leave as the primary care giver in the child's first year.

The Board oversees Origin's strategies on gender diversity, including monitoring achievement against gender targets set by the Board.

Origin's gender diversity targets are:

1. Continue to deliver equal average pay for men and women at each job grade
2. Increase the number of women in senior roles by:
  - a) Improving our rate of appointment of women to senior roles by 15 per cent
  - b) Reducing the gap between male and female turnover to zero.

## Definition of seniority

For the purpose of gender diversity targets, 'senior roles' includes all people in Hay Pay Scale job grades that pay approximately \$150,000 per annum in fixed remuneration.<sup>1</sup>

We define seniority by reference to standard Hay Pay Scale job grades, rather than reporting relationship to the CEO, for two reasons:

- To make genuine comparisons of seniority. A large number of senior people in corporate support areas such as legal, company secretary, human resources, strategy and communications are only two or three levels below the CEO, while in the operating businesses there are many roles with significant line management responsibility that are more than three levels below.
- To make analysis comparable over time. Any restructure that changes ELT roles also changes the reporting relationships for hundreds of people at lower levels, making it less valid to accurately compare progress on gender pay equality at those levels before and after the restructure. While Origin does not use reporting relationship to the CEO to define Origin's gender diversity targets, the gender profile of these cohorts is of interest to some external stakeholders and is presented in the cohorts by gender table below.

## Performance against FY2018 targets

### 1. Continue to deliver equal average pay for men and women at each job grade

The average difference between male and female pay across all job grades measured following each annual remuneration review has remained below one percentage point. While the average female pay is higher at some grades than average male pay; it is reversed at other grades.

### 2a) Improve our rate of appointment of women to senior roles to 45 per cent

- The percentage of women recruited into senior roles was 31.5 per cent, which was well below the target. Performance against this target was very strong in the second half of the year with a significant increase in senior female appointments, but was overshadowed by poorer outcomes in the first half.
- It should be noted that whilst the appointment rate fell (to 31.5 per cent) it nevertheless was at a higher rate than the initial incumbency of women in senior roles (28.9 per cent at the end of FY2017).

### 2b) Reduce the gap between male and female turnover to zero

The gap between male and female voluntary turnover from senior roles reduced to 0.1 percentage points at the end of FY2018, but the total turnover gap increased to 11 percentage points. Although the total turnover gap increased, its impact was favourable to females (male turnover exceeded female turnover), a consequence of restructuring in the male-dominated Integrated Gas business.

As a result of our strong appointment rate in the first half of the year and our increased retention of females, our female representation rate at the end of FY2018 was 32.3 per cent (up from 28.9 per cent at the end of FY2017).

## FY2019 targets

Origin's diversity targets for FY2019 will be to:

1. Continue to deliver equal average pay for men and women at each job grade;
2. Increase the number of women in senior roles by:
  - a) Improving our rate of appointment of women to senior roles by 15 per cent compared to FY2018 (which is an appointment rate of 36 per cent) and;
  - b) Reducing the gap between male and female turnover to zero.

The Board has set itself a target of females being at least 40 per cent of the Board by 2020.

## Principle 2: Structure the Board to add value

The Board is structured to facilitate the effective discharge of its duties and to add value through its deliberations.

In FY2018, the Board had 10 scheduled meetings, including a two-day strategic planning meeting. The Board and committees also had seven separate scheduled workshops to consider matters of particular relevance. Outside of scheduled meetings, the full Board met on three other occasions to consider urgent matters. In addition, the Board and individual directors conducted visits of Company operations and met with operational management during the year on various matters. The Board also undertook visits to the US and China during the year to meet with Origin's current and potential partners.

From time to time, the Board delegates its authority to non-standing committees of Directors to consider transactional or other matters. In the 12 months to 30 June 2018, four such additional Board committee meetings were held.

At Board meetings, Directors receive reports from executive management on financial and operational performance, risk, strategy, people, HSE, and major projects or initiatives in which Origin is involved. In addition, the Directors receive reports from Board committees and, as appropriate, presentations on opportunities and risks for the Company.

Non-executive Directors also meet without the presence of the Managing Director and Chief Executive Officer or other management to address such matters as succession planning, key strategic issues, and Board operation and effectiveness. All Directors have access to Company employees, advisors and records. In carrying out their duties and responsibilities, Directors have access to advice and counsel from the Chairman, the Company Secretary and the Group General Counsel, and are able to seek independent professional advice at the Company's expense, after consultation with the Chairman.

### Female representation within Origin (%)

Female representation	2018	2017	2016
Board <sup>(a)</sup>	25.0	25.0	25.0
CEO-1 <sup>(b)</sup>	22.2	11.1	16.7
CEO-2 <sup>(c)</sup>	33.8	26.2	25.0
Senior roles	32.3	28.9	27.4
Origin Group	37.5	35.1	34.9

(a) Board includes Executive and Non-executive Directors.

(b) "CEO-1" is a classification within the WGEA guidelines, which equates to the ELT excluding the CEO

(c) "CEO-2" is a classification within the WGEA guidelines which equates to CEO-1 and their direct reports who are themselves responsible for managing people

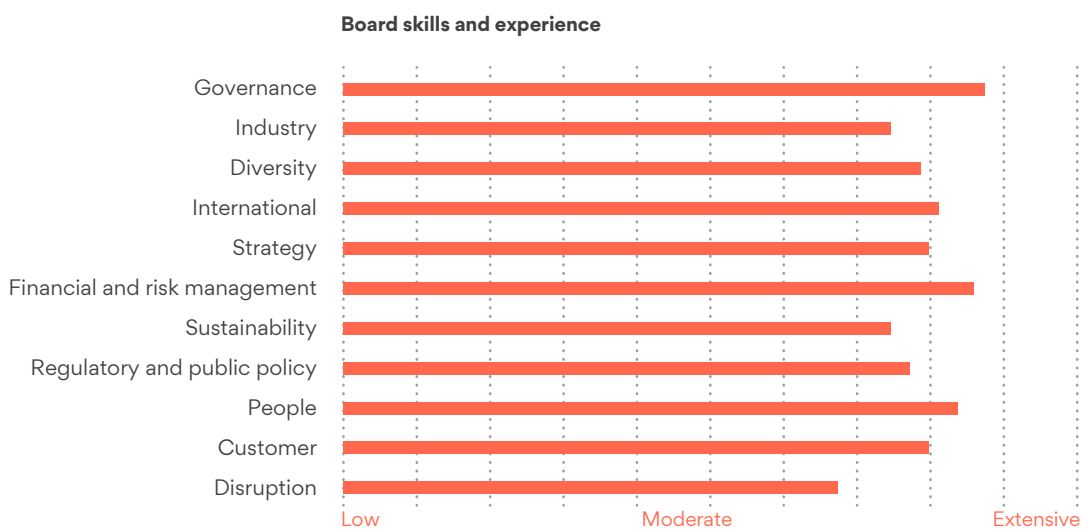
<sup>1</sup> The dollar number is approximate because the boundary is defined by Korn Ferry Hay Group position grading methodology. The corresponding market rate varies with time.

New Directors undergo an induction program which includes sessions with members of management, the Chairman of the Board, and Chairs of each relevant Board committee, and visits to key operations to familiarise them with Origin’s business and administration. Directors also receive continuing education through ongoing briefings and workshops on industry, regulatory or other relevant topics and attendance at industry or governance conferences.

The Board’s size and composition is determined by the Directors, within limits set by Origin’s constitution, which requires a Board of between five and 12 Directors. As at 30 June 2018, the Board comprised eight Directors, including seven Non-executive Directors, all of whom are considered independent by the Board, and the Managing Director & Chief Executive Officer. Of the eight Directors, two are women. Directors’ profiles, duration of office and details of their skills, experience and special expertise are set out in the Directors’ Report.

The Board seeks to have an appropriate mix of skills, experience, expertise and diversity to enable it to discharge its responsibilities and add value to the Company. The Board values diversity in all respects, including gender and differences in background and life experience, communication styles, interpersonal skills, education, functional expertise and problem solving skills.

Together, the Directors contribute the following key skills and experience:



**Skills and experience**

<p><b>Governance</b></p> <p>A commitment to and experience in setting best practice corporate governance policies, practices and standards. Ability to assess the effectiveness of senior management.</p>	<p><b>International</b></p> <p>Exposure to international regions either through experience working in an organisation with global operations or through management of international stakeholder relationships. Understanding of different cultural, political, regulatory and business requirements.</p>	<p><b>Sustainability</b></p> <p>Experience in programs implementing health, safety and environment strategies, including for mental health and physical wellbeing. Ability to identify economically, socially and environmentally sustainable developments and to set and monitor sustainability aspirations.</p>
<p><b>Industry</b></p> <p>Experience in the energy or oil and gas industries, or upstream or integrated exploration and production company including in-depth knowledge of the Company’s strategy, markets, competitors, operational issues, technology and regulatory concerns. This includes advisory roles for these industries.</p>	<p><b>Strategy</b></p> <p>Senior executive and directorship experience, dealing with complex business models and projects. Experience in developing, setting and executing strategic direction and driving growth.</p>	<p><b>Regulatory and public policy</b></p> <p>Experience in the identification and resolution of legal and regulatory issues. Experience in public and regulatory policy, including how it affects corporations.</p>
<p><b>Diversity</b></p> <p>Diversity in gender, background, geographic origin, experience (industry and public, private and non-profit sectors).</p>	<p><b>Financial and risk management</b></p> <p>Senior executive experience in financial accounting and reporting, corporate finance, risk and internal controls. Experience in anticipating and evaluating risks that could impact the business, recognising and managing these risks through sound risk governance policies and frameworks.</p>	<p><b>People</b></p> <p>Experience in building workforce capability, setting a remuneration framework that attracts and retains a high calibre of executives, and the promotion of diversity and inclusion.</p>
<p><b>Customer</b></p> <p>Experience in industries which have high degrees of customer centricity.</p>	<p><b>Disruption</b></p> <p>Background in an industry that has faced significant disruptive change.</p>	

The Company's policy on the independence of Directors requires that the Board is comprised of a majority of independent Directors. In defining the characteristics of an independent Director, the Board uses the ASX Principles, together with its own considerations of the Company's operations and businesses, and appropriate materiality thresholds. Further details of the matters considered by the Board in assessing independence are contained in the Company's Independence of Directors policy which is part of the Board Charter and is available on the Company's website.

The Board reviews each Director's independence annually. At its review for the FY2018 reporting period, the Board formed the view that all Non-executive Directors were independent.

The Board selects and appoints the Chairman from the independent Directors. The Chairman, Mr Cairns, is independent, and his role and responsibilities are separate from those of the Managing Director & Chief Executive Officer.

Five committees assist the Board in executing its duties relating to audit; remuneration and people; health, safety and environment (HSE); nomination; and risk. Each committee has its own Charter which sets out its role, responsibilities, composition, structure, membership requirements and operation. These are available on the Company's website. Each committee's Chairman reports to the Board on the committee's deliberations at the following Board meeting, where the committee meeting minutes are also tabled. Additional and specific reporting requirements to the Board by each committee are addressed in the respective committee charters.

Additional information about the Audit Committee, Risk Committee, HSE Committee, and Remuneration and People Committee is provided in response to Principles 4, 7 and 8 respectively.

A list of the members of each Board committee as at 30 June 2018 is set out below and their attendance at committee meetings during FY2018 is set out in the Directors' Report.

#### Board committee membership as at 30 June 2018

	Audit	Rem and People	HSE	Nomination	Risk	Tenure
<b>Independent Non-executive Directors</b>						
John Akehurst			Chairman	Member	Member	9 years 4 months
Maxine Brenner	Member			Member	Chairman	4 years 9 months
Gordon Cairns	Member	Member	Member	Chairman	Member	11 years 2 months
Teresa Engelhard	Member	Member				1 year 3 months
Bruce Morgan	Chairman		Member	Member	Member	5 years 9 months
Scott Perkins	Member	Chairman		Member	Member	2 years 11 months
Steve Sargent <sup>2</sup>		Member	Member			3 years 3 months
<b>Managing Director and Chief Executive Officer</b>						
Frank Calabria			Member			1 year 10 months

<sup>2</sup> Mr Sargent also chairs the Origin Foundation.

The Nomination Committee is comprised of the Chairman of the Board and the Chairman of each other Board Committee, and is chaired by Mr Cairns. The Nomination Committee held one formal meeting during FY2018 and undertook various activities outside formal committee meetings to support and advise the Board, including:

- Assessing the range of skills and experience required on the Board and of Directors as part of the Company's continued consideration of Board renewal and succession planning
- Reviewing the performance of Directors and the Board
- Reviewing the processes to identify suitable Directors, including the use of professional intermediaries
- Interviewing potential Board candidates
- Recommending Directors' appointments and re-elections
- Considering the appropriate induction and continuing education provided for Directors.

When identifying potential candidates, the Nomination Committee considers the current and future needs of Origin and desired attributes and skill sets for a new Director. Where a candidate is recommended by the Nomination Committee, the Board will assess that candidate against criteria including background, experience, professional qualifications and the potential for the candidate's skills to augment the existing Board and his/her availability to commit to the Board's activities. If these criteria are met and the Board appoints the candidate as a Director, that Director will stand for election by shareholders at the following Annual General Meeting (AGM).

Each year the performance of the Directors retiring by rotation and seeking re-election under the constitution is reviewed by the Nomination Committee (other than the relevant Director), the results of which form the basis of the Board's recommendation to shareholders. The review considers a Director's expertise, skill and experience, along with his/her understanding of the Company's business, preparation for meetings, relationships with other Directors and management, awareness of ethical and governance issues, independence of thought and overall contribution.

The Nomination Committee and then the Board reviewed the performance of Messrs Akehurst, Perkins and Sargent, who are standing for re-election at the AGM in October 2018. Each of Messrs Akehurst, Perkins and Sargent respectively were not present for their own review. The Board (with each relevant Director absent) found that each of Messrs Akehurst, Perkins and Sargent had been high-performing Directors and concluded that each should be proposed for re-election.

### Principle 3: Act ethically and responsibly

All Directors and employees are expected to comply with the law and act with a high level of integrity. Origin has a Code of Conduct and a number of policies governing conduct in pursuit of Company objectives in dealing with shareholders, employees, customers, communities, business partners, suppliers, contractors and other stakeholders. The Code of Conduct, together with the Company's Purpose and Values, serves as a guide to Origin's decision making, behaviours and actions for its employees.

Origin's Purpose and Values and a summary of the Code of Conduct are available on Origin's website.

Origin prohibits the offer, payment, solicitation or acceptance of bribes and facilitation payments in any form. It also prohibits the provision of gifts and gratuities, both directly and indirectly, to public officials or relatives or associates of public officials. The giving or receiving of gifts or hospitality is prohibited in all circumstances that do not align with Origin's Code of Conduct.

Origin encourages individuals to report known or suspected instances of inappropriate conduct, including breaches of the Code of Conduct and other policies and directives. There are policies and procedures in place, including procedures to escalate concerns, designed to protect employees and contractors from any reprisal, discrimination or being personally disadvantaged as a result of their reporting a concern.

### Principle 4: Safeguard integrity in corporate reporting

The Board has an Audit Committee which comprises four Non-executive Directors, all of whom are independent. The Chairman of the Board cannot chair the Audit Committee. The Chairman of the Audit Committee, Mr Bruce Morgan, is an independent Director with significant financial expertise. All members of the committee are financially literate and the committee possesses sufficient accounting and financial expertise and knowledge of the industry in which Origin operates.

Prior to approval of the Company's financial statements for each financial period, the Managing Director & Chief Executive Officer and the Chief Financial Officer give the Board a declaration that, in their opinion, the financial records have been properly maintained, that the financial statements complied with the accounting standards and gave a true and fair view, and that their opinion had been formed on the basis of a sound system of risk management and internal compliance and control which was operating effectively.

The Audit Committee oversees the structure and management systems that are designed to protect the integrity of the Company's corporate reporting. The Audit Committee reviews the Company's half and full year financial reports and makes recommendations to the Board on adopting the financial statements. The committee provides additional assurance to the Board with regard to the quality and reliability of financial information. The committee has the authority to seek information from any employee or external party.

The internal and external auditors have direct access to the Audit Committee Chairman and, following each scheduled committee meeting, meet separately with the committee without management present.

The committee reviews the independence of the external auditor, including the nature and level of non-audit services provided, and reports its findings to the Board every six months.

The names of the members of the Audit Committee are set out in the table under Principle 2 and their attendance at meetings of the committee is set out in the Directors' Report.

The external auditor attends the Company's AGM and is available to answer questions from shareholders relevant to the audit.

### Principle 5: Make timely and balanced disclosure

Origin has adopted policies and procedures designed to ensure compliance with its continuous disclosure obligations and make senior management and the Board accountable for that compliance.

Origin provides timely, full and accurate disclosure and keeps the market informed with quarterly releases detailing exploration, development and production, and half year and full year reports to shareholders including in digital format on the Company's website. Origin also participates in industry conferences and hosts investor briefings that often include material that is publicly disclosed in advance.

All material matters are disclosed immediately to the stock exchanges on which Origin's securities are listed (and subsequently to the media, where relevant), as required by the relevant listing rules. All material investor presentations are released to the stock exchanges and are posted on the Company's website. Other reports or media statements that do not contain price-sensitive information are included on the Company's website. Shareholders can subscribe to an email notification service and receive notice of any stock exchange announcements released by the Company.

Both the Continuous Disclosure policy and the Communications with Shareholders policy are available on the Company's website.

### Principle 6: Respect the rights of shareholders

Origin respects the rights of its shareholders and has adopted policies to facilitate the effective exercise of those rights through participation at general meetings and with the provision of information about Origin and its operations.

Origin provides a high standard of communication to shareholders and other stakeholders so that they have all available information reasonably required to make informed assessments of the Company's business value and prospects.

Shareholders can review the financial and non-financial performance of Origin via a half year report, shareholder review, annual report, sustainability report, investor presentations and annual general meeting materials. These reports are also available on the ASX and on Origin's website. Shareholders may also request hardcopies.

Origin has also joined more than 315<sup>3</sup> other companies as a public supporter of the Financial Stability Board's Taskforce on Climate-related Financial Disclosures (TCFD). The TCFD has developed a set of voluntary recommendations for companies to disclose information on how they oversee and manage climate-related risks and opportunities. Disclosures in this FY2018 Annual Report are aligned to these recommendations.

Sustainability reporting is guided by the Global Reporting Initiative and includes disclosures of material environmental, social and governance (ESG) aspects of the Company's business activities. This year, Origin has reported the sustainability aspects which are considered the most important to our stakeholders. We have identified where each of these aspects aligns with the Sustainable Development Goals of the United Nation's 2030 Agenda for Sustainable Development.

Origin also discloses other ESG information via regulated National Greenhouse Emissions Reporting, as well as voluntary disclosure platforms such as the Carbon Disclosure Project. Origin regularly engages with and provides requested information to research firms. Origin was again included in the FSTE4Good Index and the Dow Jones Sustainability Australia Index during the period.

All communications from, and most communications to, the Company's share registry are available electronically, including company reports, and shareholders are encouraged to take up the option of e-communications.

Origin's website contains a list of key dates and all recent announcements, presentations, past and current company reports and notices of meetings. Shareholder meetings and results announcements are webcast and an archive of these meetings is published on the Company's website.

Origin welcomes and encourages shareholders to attend and participate in its AGM, either in person, by proxy or attorney, or by other means adopted by the Board. At each AGM, the Chairman allows a reasonable opportunity for shareholders to ask questions of the Board and the external auditors. Shareholders who are unable to attend the AGM can view a webcast of the meeting (and certain past general meetings) on the Company's website.

Origin has a wide stakeholder engagement program and a dedicated investor relations function to facilitate effective two-way communication with investors. The Company undertakes regular surveys to garner feedback from investors on how this function is performing and can be improved.

The Communications with Shareholders policy is available on Origin's website.

In addition to shareholders, Origin's projects and operations necessitate interaction with a range of stakeholders including local communities, business partners, government, industry, media, suppliers and non-government organisations. Origin has a program to support these stakeholder interactions and facilitate constructive relationships.

These include:

- Dedicated community advisors to help facilitate and implement the Company's engagement with local communities and regular dialogue with the communities in which Origin operates
- A government relations team which regularly interacts with policy makers within the jurisdictions of Origin's operations, particularly to help develop sound and stable policy to ensure business certainty
- Dedicated external affairs team with regular interaction with media and NGOs to create a better understanding of Origin's business
- Contributing to the formulation of public policy through submissions to various enquiries.

Further information on the Company's stakeholder engagement program can be found in the sustainability report under *Stakeholder engagement*.

Customers are a central part of Origin's engagement, innovation and value creation. Origin continues to adapt processes, introduce new products and invest in technology to provide customers with greater choice and an improved customer experience. The sustainability report provides further information on Origin's interaction with its customers.

## Principle 7: Recognise and manage risk

Origin's approach to risk management aims to embed a risk-aware culture in all decision making and to manage risk in a proactive and effective manner. The Board has an overarching policy governing the Company's approach to risk oversight and management and internal control systems. This policy and further information on Origin's approach to managing its material risks is available on the Company's website.

The Board has an established Risk Committee to oversee Origin's policies and procedures in relation to risk management and internal control systems. The Risk Committee is comprised of the Chairman of the Board and the Chairman of each other Board committee, and is chaired by independent Non-executive Director Ms Maxine Brenner. The Risk Committee Charter is available on the Company's website. The names of the members of the Risk Committee are set out in the table under Principle 2 and a record of their attendance at meetings of the Committee is set out in the Directors' Report.

The Company's risk policies are designed to identify, assess, manage and monitor strategic, operational, financial and project risks and mitigate the impact in the event that they materialise. The Board has also approved policies for hedging interest rates, foreign exchange rates and commodities. Certain specific risks are covered by insurance. During the period, the Risk Committee endorsed a consolidated set of financial, operational and strategic risk appetite statements and risk limits, as delegated by the Board.

Management is responsible for the design and implementation of the risk management and internal control systems to manage the Company's risks. Management reports to the Risk Committee on how material risks are being managed and the effectiveness of controls in place to mitigate those risks. The Risk Committee has an annual calendar that includes regular detailed risk profile reviews.

The Risk Committee reviews the Company's risk management framework annually to satisfy itself that it continues to be sound. An independent review of the risk management framework was completed during the financial year and it found the framework to be sound. Management has reported to the Risk Committee and the Board that, as at 30 June 2018, the framework is sound based on this review and the subsequent framework improvements completed.



Origin also has an internal audit function which utilises both internal and external resources to provide an independent appraisal of the adequacy and effectiveness of the Company's risk management and internal control systems. The internal audit function has direct access to the Chairmen of the Board and each Board committee and management, and has the right to seek information. A risk-based approach is used to develop the annual internal audit plan, aligning planned internal audit activities to the Company's material risks. The internal audit plan is approved by the Audit, Risk and HSE Committees annually, and reviewed quarterly.

In addition to internal audit activities, second line assurance activity is undertaken across the business in the management of risk. The findings of this activity are reported through to the relevant executive and, where appropriate, Board committees.

Origin's approach to the management of risks and controls reflects the 'three lines of defence' model. The first line of defence comprises operational business managers that own and manage risks. The second line of defence comprises the corporate functions that oversee, monitor and challenge risks. The third line of defence comprises the Origin group internal audit function that assures compliance with policies and standards.

The Board's HSE Committee supports and advises the Board on HSE matters and HSE-related risks arising out of the activities and operations of Origin and its related companies. The HSE Committee comprises the Managing Director and Chief Executive Officer and four independent Non-executive Directors. The Chairman, Mr John Akehurst, is an independent Director. The Board considers that the direct impact the deliberations of the HSE Committee can have on the day-to-day operations of Origin makes it appropriate for the Managing Director & Chief Executive Officer to be a member of that committee.

The names of the members of the HSE Committee are set out under Principle 2 and a record of their attendance at meetings of the committee is set out in the Directors' Report.

Beyond the financial results, Origin is witnessing changes in community attitudes and an increased focus on local and global environmental challenges. Origin recognises the need for disclosure and transparency of decision making to help investors assess both short-term and long-term risks and prospects.

Origin assesses the environmental and social risks associated with projects and operations. Projects are developed with precautionary engineering and management measures in place to mitigate or manage key environmental and social risks, and operations are managed using policies and procedures to control remaining environmental and social risks. Environmental and social risk management is subject to periodic audits and assurance.

As one of Australia's largest power generators, Origin closely measures, manages and reports on the greenhouse gas emissions associated with its operations. These emissions are governed by laws and regulations. Management of emissions extends to the development of a low-carbon power generation portfolio including natural gas, wind and solar.

Further information on Origin's management and performance in the social, environmental and economic aspects in operating its business is contained in the sustainability report.

Origin measures its reputation, that is, how Origin is perceived by Australians (including shareholders) using RepTrak®. Origin's reputation performance and reputation risk issues are periodically reported to the Board.

In addition to stakeholder measurement through RepTrak®, Origin also engages external advisors to provide real-time monitoring of mainstream and social media to evaluate the external operating environment and ensure emerging risks, issues and shifting public and policy debates are identified and addressed accordingly. Quarterly quantitative and qualitative mainstream media analysis is undertaken to better understand external trends, and sentiment and key public influencers.

These insights influence and inform Origin's external affairs and stakeholder engagement strategies, as well as customer-facing positioning and community engagement programs.

## Principle 8: Remunerate fairly and responsibly

The Remuneration Report sets out details of the Company's policies and practices for remunerating Directors, key management personnel and employees.

The Board has a Remuneration and People Committee which comprises four Non-executive Directors, all of whom are independent. The Chairman, Mr Scott Perkins, is an independent Director. The names of the members of the Remuneration and People Committee are set out under Principle 2 and a record of their attendance at meetings of the Committee is set out in the Directors' Report.

Further information about the Remuneration and People Committee's activities is provided in the Remuneration Report.

The remuneration of Non-executive Directors is structured separately from that of the Executive Directors and senior executives. Information on remuneration for Non-executive Directors is in the Remuneration Report.

Origin has established a policy which governs dealings in its securities. This precludes any Origin personnel from engaging in short-term dealings in the Company's securities and states that margin loans should not be entered into if they could cause a dealing that requires, or allows for, Origin securities to be disposed of at a time that would be a breach of the policy, or is in breach of the general insider trading provisions of the Corporations Act. Origin personnel are prohibited from entering into hedging transactions which operate to limit the economic risk of any of their unvested equity-based incentives. The Dealing in Securities policy is available on the Company's website.

The Code of Conduct, Dealings in Securities policy and other relevant policies are supported by appropriate training programs and regular updates.

*Information referred to in this Corporate Governance Statement as being on Origin's website may be found at [originenergy.com.au/governance](http://originenergy.com.au/governance).*

# Financial Statements

30 June 2018



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## Income Statement

### For the year ended 30 June

	Note	2018 \$million	2017 \$million
<b>Continuing operations</b>			
Revenue	A2	14,604	13,646
Other income	A2	253	187
Expenses	A3	(14,589)	(13,667)
Results of equity accounted investees	E1	205	(1,912)
Interest income	A2	229	224
Interest expense	A3	(500)	(553)
<b>Profit/(loss) before income tax</b>		<b>202</b>	<b>(2,075)</b>
Income tax benefit	D1	81	26
<b>Profit/(loss) for the period from continuing operations</b>		<b>283</b>	<b>(2,049)</b>
<b>Discontinued operations</b>			
Loss from discontinued operations	E4	(62)	(174)
<b>Profit/(loss) for the period</b>		<b>221</b>	<b>(2,223)</b>
<b>Profit/(loss) for the period attributable to:</b>			
Members of the parent entity		218	(2,226)
Non-controlling interests		3	3
<b>Profit/(loss) for the period</b>		<b>221</b>	<b>(2,223)</b>
<b>Earnings per share</b>			
Basic earnings per share	A4	12.4 cents	(126.9) cents
Diluted earnings per share	A4	12.3 cents	(126.9) cents
<b>Profit/(loss) for the period from continuing operations attributable to:</b>			
Members of the parent entity		280	(2,052)
Non-controlling interests		3	3
<b>Profit/(loss) for the period</b>		<b>283</b>	<b>(2,049)</b>
<b>Earnings per share from continuing operations</b>			
Basic earnings per share	A4	15.9 cents	(117.0) cents
Diluted earnings per share	A4	15.9 cents	(117.0) cents

The income statement should be read in conjunction with the accompanying notes set out on pages 107 to 166.

## Statement of Comprehensive Income

### For the year ended 30 June

	Note	2018 \$million	2017 \$million
<b>Profit/(loss) for the period</b>		<b>221</b>	<b>(2,223)</b>
<b>Other comprehensive income</b>			
<i>Items that will not be reclassified to the income statement</i>			
Actuarial gain on defined benefit superannuation plan		-	1
<i>Items that may be reclassified to the income statement</i>			
Foreign currency translation differences for foreign operations		278	(200)
<b>Available-for-sale financial assets</b>			
Valuation loss taken to equity		(6)	(41)
<b>Cash flow hedges</b>			
Changes in fair value of cash flow hedges	C2	(106)	(202)
Total items that may be reclassified to the income statement		166	(443)
<b>Total other comprehensive income for the period, net of tax</b>	C7	<b>166</b>	<b>(442)</b>
<b>Total comprehensive income for the period</b>		<b>387</b>	<b>(2,665)</b>
<b>Total comprehensive income attributable to:</b>			
<i>Items that will not be reclassified to the income statement</i>			
Members of the parent entity		-	1
Non-controlling interests		-	-
		-	1
<i>Items that may be reclassified to the income statement</i>			
Members of the parent entity		383	(2,669)
Non-controlling interests		4	3
		387	(2,666)
<b>Total comprehensive income for the period</b>		<b>387</b>	<b>(2,665)</b>
<b>Total comprehensive income for the period attributable to members of the parent entity arising from:</b>			
Continuing operations		462	(2,332)
Discontinued operations		(79)	(336)

The statement of comprehensive income should be read in conjunction with the accompanying notes set out on pages 107 to 166.

## Statement of Financial Position

### For the year ended 30 June

	Note	2018 \$million	2017 \$million
<b>Current assets</b>			
Cash and cash equivalents		150	117
Trade and other receivables	B1	2,537	2,278
Inventories		196	138
Derivatives	C2	522	241
Other financial assets	B6	208	86
Assets classified as held for sale	E4	-	2,050
Other assets		153	101
<b>Total current assets</b>		<b>3,766</b>	<b>5,011</b>
<b>Non-current assets</b>			
Trade and other receivables	B1	4	4
Derivatives	C2	1,117	1,055
Other financial assets	B6	3,683	3,700
Investments accounted for using the equity method	E1	5,988	5,463
Property, plant and equipment (PP&E)	B3	3,696	3,714
Exploration, evaluation and development assets	B2	363	858
Intangible assets	B4	5,328	5,325
Deferred tax assets	D2	277	35
Other assets		35	34
<b>Total non-current assets</b>		<b>20,491</b>	<b>20,188</b>
<b>Total assets</b>		<b>24,257</b>	<b>25,199</b>
<b>Current liabilities</b>			
Trade and other payables		2,011	1,892
Payables to joint ventures		221	130
Interest-bearing liabilities	C1	1,089	133
Derivatives	C2	424	300
Other financial liabilities	B6	361	387
Provision for income tax		115	52
Employee benefits		175	184
Provisions	B5	53	56
Liabilities classified as held for sale	E4	-	720
<b>Total current liabilities</b>		<b>4,449</b>	<b>3,854</b>
<b>Non-current liabilities</b>			
Trade and other payables		5	10
Interest-bearing liabilities	C1	6,350	8,382
Derivatives	C2	1,234	1,309
Employee benefits		30	35
Provisions	B5	361	191
<b>Total non-current liabilities</b>		<b>7,980</b>	<b>9,927</b>
<b>Total liabilities</b>		<b>12,429</b>	<b>13,781</b>
<b>Net assets</b>		<b>11,828</b>	<b>11,418</b>
<b>Equity</b>			
Share capital	C6	7,150	7,150
Reserves		629	439
Retained earnings		4,025	3,807
<b>Total parent entity interest</b>		<b>11,804</b>	<b>11,396</b>
Non-controlling interests		24	22
<b>Total equity</b>		<b>11,828</b>	<b>11,418</b>

The statement of financial position should be read in conjunction with the accompanying notes set out on pages 107 to 166.

## Statement of Changes in Equity

### For the year ended 30 June

\$million	Share capital	Share-based payments reserve	Foreign currency translation reserve	Hedge reserve	Available-for-sale reserve	Retained earnings	Non-controlling interests	Total equity
<b>Balance as at 1 July 2017</b>	<b>7,150</b>	<b>222</b>	<b>114</b>	<b>119</b>	<b>(16)</b>	<b>3,807</b>	<b>22</b>	<b>11,418</b>
Other comprehensive income (refer to note C7)	-	-	277	(106)	(6)	-	1	166
Profit	-	-	-	-	-	218	3	221
<b>Total comprehensive income for the period</b>	<b>-</b>	<b>-</b>	<b>277</b>	<b>(106)</b>	<b>(6)</b>	<b>218</b>	<b>4</b>	<b>387</b>
Dividends paid	-	-	-	-	-	-	(2)	(2)
Share-based payments	-	25	-	-	-	-	-	25
<b>Total transactions with owners recorded directly in equity</b>	<b>-</b>	<b>25</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(2)</b>	<b>23</b>
<b>Balance as at 30 June 2018</b>	<b>7,150</b>	<b>247</b>	<b>391</b>	<b>13</b>	<b>(22)</b>	<b>4,025</b>	<b>24</b>	<b>11,828</b>
<b>Balance as at 1 July 2016</b>	<b>7,150</b>	<b>197</b>	<b>314</b>	<b>321</b>	<b>25</b>	<b>6,032</b>	<b>21</b>	<b>14,060</b>
Other comprehensive income (refer to note C7)	-	-	(200)	(202)	(41)	1	-	(442)
(Loss)/profit	-	-	-	-	-	(2,226)	3	(2,223)
<b>Total comprehensive income for the period</b>	<b>-</b>	<b>-</b>	<b>(200)</b>	<b>(202)</b>	<b>(41)</b>	<b>(2,225)</b>	<b>3</b>	<b>(2,665)</b>
Dividends paid	-	-	-	-	-	-	(2)	(2)
Share-based payments	-	25	-	-	-	-	-	25
<b>Total transactions with owners recorded directly in equity</b>	<b>-</b>	<b>25</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(2)</b>	<b>23</b>
<b>Balance as at 30 June 2017</b>	<b>7,150</b>	<b>222</b>	<b>114</b>	<b>119</b>	<b>(16)</b>	<b>3,807</b>	<b>22</b>	<b>11,418</b>

The statement of changes in equity should be read in conjunction with the accompanying notes set out on pages 107 to 166.

## Statement of Cash Flows

### For the year ended 30 June

	Note	2018 \$million	2017 \$million
<b>Cash flows from operating activities</b>			
Cash receipts from customers		16,171	15,263
Cash paid to suppliers		(14,840)	(14,027)
Cash generated from operations		1,331	1,236
Income taxes paid, net of refunds received		(38)	53
<b>Net cash from operating activities</b>	F6	<b>1,293</b>	<b>1,289</b>
<b>Cash flows from investing activities</b>			
Acquisition of PP&E		(314)	(354)
Acquisition of exploration and development assets		(11)	(65)
Acquisition of other assets		(87)	(82)
Acquisition of other investments		(10)	-
Interest received from other parties		2	1
Net proceeds from sale of non-current assets		1	887
Net proceeds from sale of investment in Acumen Energy (refer note E4)		267	-
Net proceeds from sale of investment in Lattice Energy (refer note E4)		1,217	-
<i>Australia Pacific LNG investing cash flows</i>			
- Investment in equity accounted investees		(74)	(389)
- Interest received from equity accounted investees		227	218
- Proceeds from buy-back of Australia Pacific LNG MRCPS (refer note B6)		134	-
- Investment in equity accounted investees (funding of APLNG debt service reserve account)		-	(127)
<b>Net cash from investing activities</b>		<b>1,352</b>	<b>89</b>
<b>Cash flows from financing activities</b>			
Proceeds from borrowings <sup>(1)</sup>		925	2,980
Repayment of borrowings <sup>(1)</sup>		(2,907)	(3,936)
Interest paid		(474)	(540)
Early settlement of forward oil sale		(265)	-
Loan from equity accounted investees <sup>(2)</sup>		76	127
Dividends paid to non-controlling interests		(2)	(2)
<b>Net cash used in financing activities</b>		<b>(2,647)</b>	<b>(1,371)</b>
<b>Net (decrease)/increase in cash and cash equivalents</b>		<b>(2)</b>	<b>7</b>
<b>Cash and cash equivalents at the beginning of the period</b>		<b>151</b>	<b>146</b>
Effect of exchange rate changes on cash		1	(2)
<b>Cash and cash equivalents at the end of the period<sup>(3)</sup></b>		<b>150</b>	<b>151</b>

(1) Comparative amounts have been restated to reflect the net impact of amounts drawn down and repaid within a short period of time to better reflect the nature of the underlying cash flows.

(2) \$76 million (2017: \$127 million) represents cash generated by Australia Pacific LNG as part of its normal business operations deposited to a project finance debt service reserve account. Upon issuance of a bank guarantee to Australia Pacific LNG by Origin the cash was distributed to Origin by way of a loan.

(3) Cash and cash equivalents at the end of the prior period of \$151 million includes \$34 million of cash and cash equivalents which were classified as held for sale.

The statement of cash flows should be read in conjunction with the accompanying notes set out on pages 107 to 166.

## Notes to the Financial Statements

### Overview

Origin Energy Limited (the Company) is a for-profit company domiciled in Australia. The address of the Company's registered office is Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000. The nature of the operations and principal activities of the Company and its controlled entities (the Group) are described in the Segment information.

The consolidated general purpose financial statements of the Group for the year ended 30 June 2018 were authorised for issue in accordance with a resolution of the directors on 16 August 2018.

The financial statements:

- have been prepared in accordance with the requirements of the *Corporations Act 2001* (Cth), Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board (AASB) and International Financial Reporting Standards as issued by the International Accounting Standards Board;
- have been prepared on a historical cost basis, except for derivative financial instruments, environmental scheme certificates, surrender obligations, available-for-sale financial assets and assets and liabilities classified as held for sale that are carried at their fair value; and trade and other receivables that are initially recognised at fair value, and subsequently measured at amortised cost less accumulated impairment losses;
- have been prepared on a going concern basis. At 30 June 2018, the consolidated statement of financial position shows a net current liability position of \$683 million. The deficit is primarily caused by the classification of US144A US\$800 million debt as a current liability, with this due to mature in October 2018. Notwithstanding the net current liability position, the Group has reasonable grounds to believe it will be able to pay its debts as and when they become due based on the continued strong cash flows of the Group's existing operations, along with the strong financial profile of the Group which includes significant committed undrawn facilities;
- are presented in Australian dollars;
- are rounded to the nearest million dollars, unless otherwise stated, in accordance with Australian Securities and Investments Commission (ASIC) Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191;
- present reclassified comparative information where required for consistency with the current year's presentation;
- present a change in accounting policy adopted by its parent entity for the financial year ending 30 June 2018. AASB 2014-9 *Equity Method in Separate Financial Statements* amended AASB127 *Separate Financial Statements* to allow entities to use the equity method of accounting for investments in subsidiaries, joint ventures and associates in their separate financial statements for annual reporting periods beginning on or after 1 January 2016. Refer to the parent entity disclosures in note F10;
- adopt all new and amended Accounting Standards and Interpretations issued by the AASB that are relevant to the operations of the Group and effective for reporting periods beginning on or after 1 July 2017. AASB 2016-2 *Amendments to Australian Accounting Standards – Amendments to AASB 107*, applicable from 1 January 2017, has been adopted by the Group. The amendment requires disclosure of changes arising from cash flows such as drawdowns and repayments of borrowings; and non-cash changes such as acquisitions, disposals and unrealised exchange differences. This amendment has no impact on the accounting policies, financial position or performance of the Group; and
- do not early adopt any Accounting Standards and Interpretations that have been issued or amended but are not yet effective. Refer to note F11 for further details.

### Key judgements and estimates

In the process of applying the Group's accounting policies, a number of judgements and estimates have been made. Judgements and estimates which are material to the financial statements are found in the following notes:

- Income (note A2)
- Trade and other receivables (note B1)
- Exploration, evaluation and development assets (note B2)
- Property, plant and equipment (note B3)
- Intangible assets (note B4)
- Provisions (note B5)
- Fair value of financial assets and liabilities (note C5)
- Income tax expense (note D1)

Estimates of recoverable amounts are based on an asset's value in use or fair value less costs of disposal, using a discounted cash flow method. This requires estimates and assumptions to be made about highly uncertain external factors such as future commodity prices, foreign exchange rates, discount rates, the effects of inflation, climate change policies, supply-and-demand conditions, reserves, future operating profiles and production costs.



## A Results for the year

This section highlights the performance of the Group for the year, including results by operating segment, income and expenses, earnings per share and dividends.

### A1 Segments

The Group's Managing Director monitors the operating results of the business using operating segments organised according to the nature and/or geography of the activities undertaken. This section includes the results by operating segment (A1.1), segment assets and liabilities (A1.2) and geographical information for revenue and non-current assets (A1.3).

#### A1.1 Segment result for the year ended 30 June

\$million	Ref.	Energy Markets <sup>(1)</sup>		Integrated Gas <sup>(2)</sup>		Corporate <sup>(3)</sup>		Total continuing operations		Discontinued operations <sup>(4)</sup>		Consolidated	
		2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
<b>Revenue</b>													
Segment revenue		14,344	13,558	260	88	-	-	14,604	13,646	477	824	15,081	14,470
Eliminations	(a)	-	-	-	-	-	-	-	-	(198)	(363)	(198)	(363)
<b>External revenue</b>		<b>14,344</b>	<b>13,558</b>	<b>260</b>	<b>88</b>	<b>-</b>	<b>-</b>	<b>14,604</b>	<b>13,646</b>	<b>279</b>	<b>461</b>	<b>14,883</b>	<b>14,107</b>
<b>EBITDA</b>		<b>1,592</b>	<b>1,669</b>	<b>633</b>	<b>(2,701)</b>	<b>(179)</b>	<b>(236)</b>	<b>2,046</b>	<b>(1,268)</b>	<b>7</b>	<b>(79)</b>	<b>2,053</b>	<b>(1,347)</b>
Depreciation and amortisation		(359)	(325)	(22)	(19)	-	-	(381)	(344)	-	(133)	(381)	(477)
Share of ITDA of equity accounted investees		-	-	(1,192)	(134)	-	-	(1,192)	(134)	-	-	(1,192)	(134)
<b>EBIT</b>		<b>1,233</b>	<b>1,344</b>	<b>(581)</b>	<b>(2,854)</b>	<b>(179)</b>	<b>(236)</b>	<b>473</b>	<b>(1,746)</b>	<b>7</b>	<b>(212)</b>	<b>480</b>	<b>(1,958)</b>
Interest income <sup>(5)</sup>				227	222	2	2	229	224	-	-	229	224
Interest expense <sup>(5)</sup>						(500)	(553)	(500)	(553)	(8)	(12)	(508)	(565)
Income tax benefit/(expense) <sup>(6)</sup>						81	26	81	26	(61)	50	20	76
Non-controlling interests (NCI)						(3)	(3)	(3)	(3)	-	-	(3)	(3)
<b>Statutory profit/(loss) attributable to members of the parent entity</b>		<b>1,233</b>	<b>1,344</b>	<b>(354)</b>	<b>(2,632)</b>	<b>(599)</b>	<b>(764)</b>	<b>280</b>	<b>(2,052)</b>	<b>(62)</b>	<b>(174)</b>	<b>218</b>	<b>(2,226)</b>
<b>Reconciliation of statutory profit/(loss) to segment result and underlying profit/(loss)</b>													
Fair value and foreign exchange movements	(b)	(459)	20	(89)	19	(3)	13	(551)	52	(35)	82	(586)	134
LNG-related items pre revenue recognition	(c)	-	-	-	16	-	(68)	-	(52)	-	-	-	(52)
Disposals, impairments and business restructuring <sup>(7)</sup>	(d)	239	157	(526)	(2,669)	(63)	(183)	(350)	(2,695)	(228)	(519)	(578)	(3,214)
Tax and NCI on items excluded from underlying profit						343	243	343	243	17	113	360	356
<b>Total significant items</b>		<b>(220)</b>	<b>177</b>	<b>(615)</b>	<b>(2,634)</b>	<b>277</b>	<b>5</b>	<b>(558)</b>	<b>(2,452)</b>	<b>(246)</b>	<b>(324)</b>	<b>(804)</b>	<b>(2,776)</b>
<b>Segment result and underlying profit/(loss)</b>		<b>1,453</b>	<b>1,167</b>	<b>261</b>	<b>2</b>	<b>(876)</b>	<b>(769)</b>	<b>838</b>	<b>400</b>	<b>184</b>	<b>150</b>	<b>1,022</b>	<b>550</b>
<b>Underlying EBITDA</b>		<b>1,811</b>	<b>1,492</b>	<b>1,251</b>	<b>747</b>	<b>(115)</b>	<b>(66)</b>	<b>2,947</b>	<b>2,173</b>	<b>270</b>	<b>357</b>	<b>3,217</b>	<b>2,530</b>

(1) Energy retailing, power generation and LPG operations predominantly in Australia.

(2) Unconventional Gas business including the Group's investment in Australia Pacific LNG; the results of the Group's activities as Australia Pacific LNG upstream operator and management of the Group's exposure to LNG pricing risk. The results of the Group's upstream conventional business which are part of the Lattice Energy divestment, have been classified as discontinued operations.

(3) Various business development and support activities that are not allocated to operating segments.

(4) Further details of discontinued operations are included in note E4.

(5) Interest income earned on MRCPS has been allocated to the Integrated Gas segment relating to the LNG business. Interest expense has been allocated to both the Corporate and the discontinued operations segments.

(6) Income tax expense for entities in the Origin tax consolidated group is allocated to the Corporate segment with the exception of amounts related to discontinued operations.

(7) Included in the Integrated Gas segment in the prior period is Origin's share of APLNG's net impairment expense of \$1,846 million, which is stated net of tax.

## A1 Segments (continued)

### Explanatory notes to segment results for the year ended 30 June

#### (a) Segment revenue eliminations

Sales between segments occur on an arm's length basis. The Upstream conventional business (of which assets relating to the Lattice Energy divestment have been classified as discontinued operations) sells gas and LPG to the Energy Markets segment.

\$million	2018		2017	
	Gross	Tax and NCI	Gross	Tax and NCI
<b>(b) Fair value and foreign exchange movements</b>				
(Decrease)/increase in fair value of financial instruments <sup>(1)</sup>	(624)	187	207	(63)
LNG foreign currency gain/(loss)	38	(11)	(73)	22
Tax benefit on translation of foreign denominated long-term tax balances	-	-	-	3
	<b>(586)</b>	<b>176</b>	<b>134</b>	<b>(38)</b>
<b>(c) LNG-related items pre revenue recognition</b>				
Net financing costs incurred in funding the Australia Pacific LNG project	-	-	(45)	14
LNG pre-production costs not able to be capitalised	-	-	(7)	2
	<b>-</b>	<b>-</b>	<b>(52)</b>	<b>16</b>
<b>(d) Disposals, impairments and business restructuring</b>				
Gain on sale of Acumen	239	-	-	-
Recycling of foreign currency translation reserve to income statement in respect of OE Resources Ltd Partnership <sup>(2)</sup>	(27)	-	-	-
Gain on sale of Jingemia <sup>(2)</sup>	7	(2)	-	-
Loss on sale of Lattice <sup>(2)</sup>	(10)	(8)	-	-
Gain on sale of Rimu, Kauri and Manutahi (RKM)	-	-	1	-
Gain on sale of Mortlake Pipeline	-	-	88	(26)
Gain on sale of Surat Basin	-	-	2	(1)
Gain on sale of Cullerin Range Wind Farm	-	-	12	(4)
Loss on sale of OTP Geothermal Pte Ltd	-	-	(1)	-
Gain on sale of Javiera solar project <sup>(3)</sup>	1	-	2	-
Gain on sale of Darling Downs Solar Farm	-	-	3	(1)
Gain on sale of Darling Downs Pipeline	-	-	234	(71)
Gain on sale of Stockyard Hill Wind Farm	-	-	60	(18)
Capital loss recognition	-	-	-	40
Tax expense reflecting difference between carrying amount and tax base of entities sold	-	-	-	(17)
<b>Disposals</b>	<b>210</b>	<b>(10)</b>	<b>401</b>	<b>(98)</b>

(1) (\$35 million (pre-tax) (2017: \$82 million (pre-tax))) relates to discontinued operations.

(2) Amounts relating to discontinued operations.

(3) Amount in current period relates to release of escrow balance held in respect of sale of Javiera in 2017.

## A1 Segments (continued)

### Explanatory notes to segment results for the year ended 30 June (continued)

\$million	2018		2017	
	Gross	Tax and NCI	Gross	Tax and NCI
<b>(d) Disposals, impairments and business restructuring (continued)</b>				
<i>Integrated Gas impairments</i>				
Ironbark	(514)	154	-	-
Lattice Energy <sup>(1)</sup>	(198)	25	-	-
Share of Australia Pacific LNG reversal of impairment of non-current assets held for sale <sup>(2)</sup>	4	-	-	-
Share of Australia Pacific LNG impairment of non-current assets <sup>(2)</sup>	(2)	-	(1,846)	-
Browse Basin	-	-	(825)	248
Assets held for sale	-	-	(753)	226
<i>Corporate</i>				
Investment in Energia Austral SpA	-	-	(114)	-
<b>Impairments</b>	<b>(710)</b>	<b>179</b>	<b>(3,538)</b>	<b>474</b>
Transaction costs in respect of the Lattice Energy divestment	(44)	13	(40)	12
Restructuring costs	(18)	7	(17)	5
Share of Australia Pacific LNG restructuring costs <sup>(2)</sup>	(8)	-	-	-
Corporate transaction costs	(8)	4	(20)	6
De-recognition of tax assets relating to divestment of Lattice Energy <sup>(1)</sup>	-	(9)	-	(21)
<b>Business restructuring</b>	<b>(78)</b>	<b>15</b>	<b>(77)</b>	<b>2</b>
<b>Total disposals, impairments and business restructuring</b>	<b>(578)</b>	<b>184</b>	<b>(3,214)</b>	<b>378</b>

(1) Amounts relating to discontinued operations.

(2) As the Group equity accounts for its share of net profit after tax of Australia Pacific LNG the above amounts are presented post-tax.

## A1 Segments (continued)

### A1.2 Segment assets and liabilities as at 30 June

\$million	Energy Markets		Integrated Gas		Corporate		Total continuing operations		Total assets and liabilities held for sale		Consolidated	
	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
<b>Assets</b>												
Segment assets	12,447	12,188	745	973	156	126	13,348	13,287	-	1,696	13,348	14,983
Investments accounted for using the equity method (refer to note E1)	-	-	5,988	5,463	-	-	5,988	5,463	-	-	5,988	5,463
Cash, funding related derivatives and tax assets			3,620	3,609	1,301	790	4,921	4,399	-	354	4,921	4,753
<b>Total assets</b>	<b>12,447</b>	<b>12,188</b>	<b>10,353</b>	<b>10,045</b>	<b>1,457</b>	<b>916</b>	<b>24,257</b>	<b>23,149</b>	<b>-</b>	<b>2,050</b>	<b>24,257</b>	<b>25,199</b>
<b>Liabilities</b>												
Segment liabilities	(3,205)	(2,852)	(695)	(565)	(653)	(467)	(4,553)	(3,884)	-	(720)	(4,553)	(4,604)
Financial liabilities, interest-bearing liabilities, funding related derivatives and tax liabilities					(7,876)	(9,177)	(7,876)	(9,177)	-	-	(7,876)	(9,177)
<b>Total liabilities</b>	<b>(3,205)</b>	<b>(2,852)</b>	<b>(695)</b>	<b>(565)</b>	<b>(8,529)</b>	<b>(9,644)</b>	<b>(12,429)</b>	<b>(13,061)</b>	<b>-</b>	<b>(720)</b>	<b>(12,429)</b>	<b>(13,781)</b>
<b>Net assets</b>	<b>9,242</b>	<b>9,336</b>	<b>9,658</b>	<b>9,480</b>	<b>(7,072)</b>	<b>(8,728)</b>	<b>11,828</b>	<b>10,088</b>	<b>-</b>	<b>1,330</b>	<b>11,828</b>	<b>11,418</b>
Acquisitions of non-current assets (includes capital expenditure) <sup>(1)</sup>	329	276	107	396	16	11	452	683	68	113	520	796

(1) The Integrated Gas segment includes \$74 million of cash contributions to Australia Pacific LNG at 30 June 2018 (30 June 2017: cash contributions of \$388 million).

## A1 Segments (continued)

### A1.3 Geographical information

Detailed below is revenue based on the location of the customer and non-current assets (excluding derivatives, other financial assets and deferred tax assets) based on the location of the assets.

	2018 \$million	2017 \$million
<b>Revenue for the year ended 30 June</b>		
Australia	14,476	13,515
Other	128	131
<b>Revenue from continuing operations</b>	<b>14,604</b>	<b>13,646</b>
Australia	198	318
New Zealand	81	143
<b>Revenue from discontinued operations</b>	<b>279</b>	<b>461</b>
<b>Total external revenue</b>	<b>14,883</b>	<b>14,107</b>
<b>Non-current assets as at 30 June</b>		
Australia	15,363	15,359
Other	51	39
<b>Total non-current assets<sup>(1)</sup></b>	<b>15,414</b>	<b>15,398</b>

(1) Excludes amounts that are classified as held for sale at 30 June 2017.

## A2 Income

	2018 \$million <sup>(1)</sup>	2017 \$million <sup>(1)</sup>
<b>Income from continuing operations</b>		
Revenue <sup>(2)</sup>	14,604	13,646
Net gain on sale of assets	237	167
Other	16	20
<b>Other income</b>	<b>253</b>	<b>187</b>
Interest earned from other parties	2	2
Interest earned on Australia Pacific LNG MRCPS (refer to note E1)	227	222
<b>Interest income<sup>(3)</sup></b>	<b>229</b>	<b>224</b>

(1) Excludes amounts classified as discontinued operations at 30 June 2017 and 30 June 2018. Refer to note E4.

(2) Revenue from the sale of oil and gas by the Integrated Gas segment is recognised when title to the commodity passes to the customer. Revenue from the sale of electricity and gas by the Energy Markets segment is recognised on delivery of the product. Amount excludes revenue from discontinued operations of \$279 million (2017: \$461 million). Note A1 provides segment revenue.

(3) Interest income is recognised as it accrues.

### Key estimate: unbilled revenue

At the end of each period, the volume of energy supplied since a customer's last bill is estimated in determining the unbilled revenue included in income. This estimation requires judgement and is based on historical customer consumption and payment patterns.

Related to this are unbilled network expenses for unread gas and electricity meters, which are estimated based on historical customer consumption patterns and accrued at the end of the reporting period. This is recorded within trade and other payables in the statement of financial position.

## A3 Expenses

	2018 \$million <sup>(1)</sup>	2017 \$million <sup>(1)</sup>
<b>Expenses from continuing operations</b>		
Raw materials and consumables used	11,674	11,099
Labour <sup>(2)</sup>	648	618
Depreciation and amortisation	381	344
Impairment of assets <sup>(3)</sup>	514	939
Decrease/(increase) in fair value of financial instruments	589	(125)
Net foreign exchange (gain)/loss	(44)	75
Other	827	717
<b>Expenses<sup>(4)</sup></b>	<b>14,589</b>	<b>13,667</b>
Interest on interest-bearing liabilities	496	550
Impact of discounting on long-term provisions	4	3
<b>Interest expense</b>	<b>500</b>	<b>553</b>
Financing costs capitalised	1	2

(1) Excludes amounts classified as discontinued operations at 30 June 2017 and 30 June 2018. Refer to note E4.

(2) Includes contributions to defined contribution superannuation funds from continuing operations of \$65 million (2017: \$61 million).

(3) Reflects impairments of \$514 million (tax benefit \$154 million) relating to the Ironbark Cash Generating Unit (CGU). The Ironbark valuation is determined based on an assessment of fair value less costs of disposal (level 3 fair value hierarchy). Key assumptions in Ironbark's valuation are reserves, future production profiles, commodity prices, operating costs and any future development costs necessary to produce the reserves. The pre-tax discount rate, determined as weighted average cost of capital, that has been applied in determining the recoverable amount of \$279 million is 12.7 per cent as at December 2017. The impairment charges resulted primarily from a reduction in the reported reserves.

(4) Includes operating lease rental expense of \$119 million (2017 restated: \$101 million) from continuing operations.

## A4 Earnings per share

	2018	2017
<b>Earnings per share based on statutory consolidated profit/(loss)</b>		
Basic earnings per share	12.4 cents	(126.9) cents
Diluted earnings per share	12.3 cents	(126.9) cents
Basic earnings per share from continuing operations	15.9 cents	(117.0) cents
Diluted earnings per share from continuing operations	15.9 cents	(117.0) cents
Basic earnings per share from discontinued operations	(3.5) cents	(9.9) cents
Diluted earnings per share from discontinued operations	(3.5) cents	(9.9) cents
<b>Earnings per share based on underlying consolidated profit<sup>(1)</sup></b>		
Underlying basic earnings per share	58.2 cents	31.3 cents
Underlying diluted earnings per share	57.9 cents	31.2 cents
Underlying basic earnings per share from continuing operations	47.7 cents	22.8 cents
Underlying basic earnings per share from discontinued operations	10.5 cents	8.5 cents

(1) Refer to note A1 for a reconciliation of statutory profit/(loss) to underlying consolidated profit.

### Calculation of earnings per share

#### Basic earnings per share

Basic earnings per share (EPS) is calculated as profit/(loss) for the period attributable to the parent entity (2018: \$218 million profit; 2017: \$2,226 million loss) divided by the average weighted number of shares on issue during the period.

#### Basic earnings per share from continuing operations

Basic EPS from continuing operations is calculated as profit/(loss) for the period from continuing operations attributable to the parent entity (2018: \$280 million profit; 2017: \$2,052 million loss) divided by the average weighted number of shares on issue during the period (2018: 1,757,442,268; 2017: 1,754,489,221).

#### Diluted underlying earnings per share

Diluted underlying EPS represents profit/(loss) for the period attributable to the parent entity divided by an average weighted number of shares (2018: 1,765,715,232; 2017: 1,759,929,408) which has been adjusted to reflect the number of shares which would be issued if all outstanding options, performance share rights and deferred shares rights were to be exercised (2018: 8,272,964; 2017: 5,440,187).

Due to the statutory loss attributable to the parent entity in the year ended 30 June 2017, the effect of these instruments has been excluded from the 2017 calculation of diluted EPS and diluted EPS from continuing operations, as their inclusion would have the effect of reducing the loss per share.

## A5 Dividends

The Directors have determined not to pay a final dividend for the year ended 30 June 2018 (30 June 2017: nil).

	2018 \$million	2017 \$million
<b>Dividend franking account</b>		
Franking credits available to shareholders of Origin Energy Limited for subsequent financial years are shown below.		
Australian franking credits available at 30 per cent	116	-
New Zealand franking credits available at 28 per cent (in NZD)	304	304

## B Operating assets and liabilities

This section provides information on the assets used to generate the Group's trading performance and the liabilities incurred as a result.

### B1 Trade and other receivables

The following balances are amounts which are due from the Group's customers and other parties.

	2018 \$million	2017 \$million
<b>Current</b>		
Trade receivables net of allowance for impairment	888	728
Unbilled revenue net of allowance for impairment	1,288	1,193
Other receivables	361	357
	<b>2,537</b>	<b>2,278</b>
<b>Non-current</b>		
Trade receivables	4	4
	<b>4</b>	<b>4</b>

Trade and other receivables are initially recorded at the amount billed to customers. Unbilled receivables represent estimated gas and electricity services supplied to customers since their previous bill was issued. Trade and other receivables (including unbilled revenue) reflect the amount anticipated to be collected. The collectability of these balances is assessed on an ongoing basis. When there is evidence that an amount will not be collected, it is provided for, and then if recovery is not possible it is written off. If receivables are subsequently recovered, the amounts are credited against other expenses in the income statement when collected.

The Group's customers are required to pay in accordance with agreed payment terms. Depending on the customer segment, settlement terms are generally 14 to 30 days from the date of the invoice. Credit approval processes are in place for large customers. All credit and recovery risk associated with trade receivables has been provided for in the statement of financial position.

#### Key judgements and estimates

**Recoverability of trade receivables:** *Judgement is required in determining the level of provisioning for customer debts. Impairment allowances take into account the age of the debt, prevailing economic conditions and historic collection trends.*

**Unbilled revenue:** *Unbilled gas and electricity revenue is not collectable until customers' meters are read and invoices issued. Refer to note A2 for judgement applied in determining the amount of unbilled gas and electricity revenue to recognise.*

The average age of trade receivables is 21 days (2017: 19 days). The ageing of trade receivables that were not impaired at 30 June are shown below.

	2018 \$million	2017 \$million
Not yet due	592	500
1-30 days past due	140	111
31-60 days past due	61	46
61-90 days past due	25	23
91 days past due	70	48
	<b>888</b>	<b>728</b>

The movement in the allowance for impairment in respect of trade receivables and unbilled revenue during the year is shown below.

Balance as at 1 July	110	87
Impairment losses recognised	88	75
Amounts written off	(84)	(52)
<b>Balance as at 30 June</b>	<b>114</b>	<b>110</b>



## B2 Exploration, evaluation and development assets

	Exploration and evaluation assets		Development assets	
	2018 \$million	2017 \$million	2018 \$million	2017 \$million
Balance as at 1 July	858	1,932	-	292
Additions	19	58	-	-
Exploration expense – continuing operations	(3)	-	-	-
Exploration expense – discontinued operations	(5)	(64)	-	-
Net impairment loss <sup>(1)</sup>	(506)	(1,068)	-	-
Transfers to PP&E	-	-	-	(292)
<b>Balance as at 30 June<sup>(2)</sup></b>	<b>363</b>	<b>858</b>	<b>-</b>	<b>-</b>

(1) Reflects impairment of the Ironbark CGU of \$514 million (tax benefit \$154 million), of which \$506 million relates to exploration and evaluation assets (2017: \$243 million (tax benefit \$73 million) relating to assets subsequently transferred to held for sale and disposed and Browse Basin exploration asset of \$825 million (tax benefit \$248 million) in the prior period).

(2) The closing balance includes \$296 million in relation to Ironbark and \$67 million in relation to Beetaloo Basin assets.

The Group holds a number of exploration permits that are grouped into areas of interest according to geographical and geological attributes. Expenditure incurred in each area of interest is accounted for using the successful efforts method. Under this method all general exploration and evaluation costs are expensed as incurred except the direct costs of acquiring the rights to explore, drilling exploratory wells and evaluating the results of drilling. These direct costs are capitalised as exploration and evaluation assets pending the determination of the success of the well. If a well does not result in a successful discovery, the previously capitalised costs are immediately expensed.

The carrying amounts of exploration and evaluation assets are reviewed at each reporting date to determine whether any of the following indicators of impairment are present:

- the right to explore has expired, or will expire in the near future, and is not expected to be renewed;
- further exploration for and evaluation of resources in the specific area is not budgeted or planned;
- the Group has decided to discontinue activities in the area; or
- there is sufficient data to indicate the carrying value is unlikely to be recovered in full from successful development or by sale.

Where an indicator of impairment exists, the asset's recoverable amount is estimated and an impairment is recognised in the income statement if required.

### Key judgement: recoverability of exploration and evaluation assets

*Assessment of the recoverability of capitalised exploration and evaluation expenditure requires certain estimates and assumptions to be made as to future events and circumstances, particularly in relation to whether economic quantities of reserves have been discovered. Such estimates and assumptions may change as new information becomes available. If it is concluded that the carrying value of an exploration and evaluation asset is unlikely to be recovered by future exploitation or sale, the relevant amount will be written off to the income statement.*

Upon approval of the commercial development of a project, the exploration and evaluation asset is classified as a development asset. Once production commences, development assets are transferred to PP&E.

### B3 Property, plant and equipment

\$million	Generation property, plant and equipment	Other land and buildings	Other plant and equipment	Producing areas of interest	Capital work in progress	Total
<b>2018</b>						
Cost	4,415	79	901	-	263	5,658
Accumulated depreciation	(1,298)	(42)	(622)	-	-	(1,962)
	<b>3,117</b>	<b>37</b>	<b>279</b>	<b>-</b>	<b>263</b>	<b>3,696</b>
Balance as at 1 July 2017	3,241	42	226	-	205	3,714
Additions	60	15	170	-	72	317
Disposals	-	(15)	(19)	-	-	(34)
Depreciation/amortisation – continuing operations	(201)	(5)	(57)	-	-	(263)
Net impairment loss <sup>(1)</sup>	-	-	(8)	-	-	(8)
Transfers from inventory	17	-	-	-	-	17
Transfers within PP&E	-	-	14	-	(14)	-
Transfers to intangibles	-	-	(48)	-	-	(48)
Effect of movements in foreign exchange rates	-	-	1	-	-	1
<b>Balance as at 30 June 2018</b>	<b>3,117</b>	<b>37</b>	<b>279</b>	<b>-</b>	<b>263</b>	<b>3,696</b>
<b>2017</b>						
Cost	4,392	79	814	-	205	5,490
Accumulated depreciation	(1,151)	(37)	(588)	-	-	(1,776)
	<b>3,241</b>	<b>42</b>	<b>226</b>	<b>-</b>	<b>205</b>	<b>3,714</b>
Balance as at 1 July 2016	3,327	78	1,274	559	447	5,685
Additions	94	-	139	39	66	338
Disposals	-	(9)	(150)	-	(68)	(227)
Depreciation/amortisation – continuing operations	(187)	(3)	(46)	-	-	(236)
Depreciation/amortisation – discontinued operations	-	-	(51)	(81)	-	(132)
Net impairment loss <sup>(1)</sup>	-	(6)	(282)	(207)	(15)	(510)
Transfers within PP&E	7	-	176	-	(183)	-
Transfers from Development assets	-	-	-	292	-	292
Transfers to held for sale	-	(17)	(822)	(598)	(42)	(1,479)
Effect of movements in foreign exchange rates	-	(1)	(12)	(4)	-	(17)
<b>Balance as at 30 June 2017</b>	<b>3,241</b>	<b>42</b>	<b>226</b>	<b>-</b>	<b>205</b>	<b>3,714</b>

(1) Reflects impairment of the Ironbark CGU of \$514 million (tax benefit \$154 million), of which \$8 million relates to property, plant and equipment. (2017: Reflects impairments of \$510 million (tax benefit \$153 million) relating to assets held for sale at 30 June 2017.)

### B3 Property, plant and equipment (continued)

PP&E is recorded at cost less accumulated depreciation, depletion, amortisation and impairment charges. Cost includes the estimated future cost of required closure and rehabilitation.

The carrying amounts of assets are reviewed to determine if there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated and if required, an impairment is recognised in the income statement.

Several different depreciation methodologies are used by the Group. Sub-surface assets relating to producing areas of interest are amortised on a units of production basis. This method applies an average unit depletion cost to current period production. The proved and probable reserves (2P), expenditure to date and an estimate of future development expenditure required to develop those reserves are used to derive the unit depletion cost. Land and capital work in progress are not depreciated. All other assets are depreciated on a straight-line basis over their useful lives.

The range of depreciation rates for the current and comparative period for each class of asset are set out below.

	%
Generation PP&E	2-95
Other land and buildings	0-20
Other plant and equipment	1-50
Producing areas of interest	0-28

At 30 June 2018, the Group reassessed the carrying amounts of its non-current assets for indicators of impairment.

Estimates of recoverable amounts are based on an asset's value in use or fair value less costs to sell (Level 3 fair value hierarchy).

The recoverable amount of these assets is most sensitive to those assumptions highlighted in the key judgements and estimates below.

#### Key judgements and estimates

**Recoverability of carrying values:** *Assets are grouped together into the smallest group of assets that generate largely independent cash inflows (cash generating unit). A Cash Generating Unit's (CGU) recoverable amount comprises the present value of the future cash flows that will arise from use of the assets. Assessment of a CGU's recoverable amount requires estimates and assumptions to be made about highly uncertain external factors such as future commodity prices, foreign exchange rates, discount rates, the effects of inflation, climate change policies and the outlook for global or regional market supply-and-demand conditions. In addition, the Group makes estimates and assumptions about reserves, future operating profiles and production costs. Such estimates and assumptions may change as new information becomes available. If it is concluded that the carrying value of a CGU is not likely to be recovered by use or sale, the relevant amount will be written off to the income statement.*

**Estimation of reserves:** *Conventional reserves are estimates of the amount of product that can be extracted from an area of interest. A range of assumptions are used to estimate economically recoverable 2P reserves. As the economic assumptions change from period to period, and because additional geological information becomes available during the course of operations, estimates of 2P reserves may change from period to period. These changes could impact the asset carrying values, unit of production depletion calculations, restoration provisions and deferred tax balances. Refer note E1.2 for information regarding Australia Pacific LNG's unconventional reserve estimation policy.*

**Estimation of commodity prices:** *The Group's best estimate of future commodity prices is made with reference to internally derived forecast data, current spot prices, external market analysts' forecasts and forward curves. Where volumes are contracted, future prices reflect the contracted price. Future commodity price assumptions impact the recoverability of carrying values and are reviewed at least annually.*

**Estimation of useful economic lives:** *A technical assessment of the operating life of an asset requires significant judgement. Useful lives are amended prospectively when a change in the operating life is determined.*

**Restoration provisions:** *An asset's carrying value includes the estimated future cost of required closure and rehabilitation activities. Refer to note B5 for a key judgement related to restoration provisions.*

**Future downhole costs:** *The depletion and amortisation calculation for producing areas of interest depends in part on the estimated future downhole expenditure required to develop and extract 2P undeveloped reserves. Changes in future downhole expenditure can therefore impact amortisation recognised. Future expenditure estimates have been based on the proposed development profiles for the fields.*

## B4 Intangible assets

	2018 \$million	2017 \$million
Goodwill at cost – Energy Markets	4,820	4,827
Software and other intangible assets at cost less impairment losses	1,303	1,169
Less: Accumulated amortisation	(795)	(671)
	<b>5,328</b>	<b>5,325</b>

Reconciliations of the carrying amounts of each class of intangible asset are set out below.

\$million	Goodwill	Software and other intangibles	Total
Balance as at 1 July 2017	4,827	498	5,325
Additions	–	91	91
Transfers from PP&E	–	48	48
Disposals	–	(10)	(10)
Net impairment loss <sup>(1)</sup>	(7)	(1)	(8)
Amortisation expense – continuing operations	–	(118)	(118)
<b>Balance as at 30 June 2018</b>	<b>4,820</b>	<b>508</b>	<b>5,328</b>
Balance as at 1 July 2016	4,827	539	5,366
Additions	–	72	72
Disposals	–	(1)	(1)
Amortisation expense – continuing operations	–	(108)	(108)
Amortisation expense – discontinued operations	–	(1)	(1)
Transfers to held for sale	–	(3)	(3)
<b>Balance as at 30 June 2017</b>	<b>4,827</b>	<b>498</b>	<b>5,325</b>

(1) Amounts relating to discontinued operations.

Goodwill is stated at cost less any accumulated impairment losses and is not amortised. Software and other intangible assets are stated at cost less accumulated amortisation and impairment losses. Amortisation is recognised as an expense on a straight-line basis over the estimated useful lives of the intangible assets.

The average amortisation rate for software and other intangibles (excluding capital work in progress) was 12 per cent (2017: 12 per cent).

## B4 Intangible assets (continued)

### Key judgement

Carrying values of assets: Refer to note B3 for a key judgement relating to carrying values of assets.

### Impairment testing

The recoverable amount of the Energy Markets goodwill has been determined using a value in use model that includes an appropriate terminal value. The key inputs and assumptions in the calculation of value in use are set out below.

Key input/assumptions	Energy Markets
Period of cash flow projections	Either 40 years, or the life of each Generation asset, based on the Group's five-year business plan. The Energy Markets business is considered a long-term business and as such projection of long-term cash flows is appropriate for a more accurate forecast. The growth rate used to extrapolate cash flow projections beyond the five year plan ranges between 2.2 per cent to 2.5 per cent.
Customer numbers and customer churn	Based on review of actual customer numbers and historical data regarding movements in customer numbers and levels of customer churn. The historical analysis is considered against current and expected market trends and competition for customers.
Gross margin and other operating costs per customer	Based on review of actual gross margins and cost per customer, and consideration of current and expected market movements and impacts.
Discount rate	Pre-tax discount rate of 10.3 per cent (2017: 10.3 per cent).

## B5 Provisions

\$million	Restoration	Other	Total
<b>Balance as at 1 July 2017</b>	<b>177</b>	<b>70</b>	<b>247</b>
Provisions recognised	103	140	243
Provisions released	(5)	(13)	(18)
Payments/utilisation	(4)	(54)	(58)
<b>Balance as at 30 June 2018</b>	<b>271</b>	<b>143</b>	<b>414</b>
Current	7	46	53
Non-current	264	97	361
	<b>271</b>	<b>143</b>	<b>414</b>

Restoration provisions are initially recognised at the best estimate of the costs to be incurred in settling the obligation. Where restoration activities are expected to occur more than 12 months from the reporting period, the provision is discounted using a pre-tax rate that reflects current market assessments of the time value of money.

At each reporting date, the restoration provision is remeasured in line with changes in discount rates, and changes to the timing or amount of the costs to be incurred based on current legal requirements and technology. Any changes in the estimated liability in future periods are added to or deducted from the related asset. The unwinding of the discount is recognised in each period as interest expense.

### Key estimate: restoration, rehabilitation and dismantling costs

*The Group estimates the cost of future site restoration activities at the time of installation or construction of an asset, or when an obligation arises. Restoration often does not occur for many years and thus significant judgement is required as to the extent of work, cost and timing of future activities.*

## B6 Other financial assets and liabilities

Other financial assets	2018 \$million	2017 \$million
<b>Current</b>		
Environmental scheme certificates	153	58
Available-for-sale financial assets	18	28
Mandatorily Redeemable Cumulative Preference Shares issued by Australia Pacific LNG (refer to note E1) <sup>(1)</sup>	37	–
	<b>208</b>	<b>86</b>
<b>Non-current</b>		
Available-for-sale financial assets	100	91
Mandatorily Redeemable Cumulative Preference Shares issued by Australia Pacific LNG (refer to note E1) <sup>(1)</sup>	3,583	3,609
	<b>3,683</b>	<b>3,700</b>

(1) The Group has invested in Mandatorily Redeemable Cumulative Preference Shares (MRCPS) issued by Australia Pacific LNG (APLNG) in the amount of US\$2,775 million (converted from USD to AUD using an end of period exchange rate of 0.7384). During the period, APLNG performed a buy-back of MRCPS in the amount of US\$102 million (A\$134 million). The non-current financial asset has reduced accordingly, although it is offset by the movement in exchange rate from 0.7689 (June 2017) to 0.7384 (June 2018).

The MRCPS are the mechanism by which the funding for the CSG to LNG Project has been provided by the shareholders of APLNG in proportion to their ordinary equity interests.

The MRCPS have a fixed rate dividend obligation based on the relevant observable market interest rates and estimated credit margin at the date of issue. The dividend is paid twice per annum. The mandatory redemption date for the MRCPS is 30 June 2026. Dividends received are recognised as interest. Refer to note A2.

The effective interest rate at 30 June 2018 was 6.37 per cent (2017: 6.37 per cent).

Financial assets are recognised (or derecognised) on the date on which the Group commits to purchase (or sell) the asset.

Other financial assets are designated as available-for-sale if they do not have fixed maturities and fixed or determinable payments, and are intended to be held for the medium to long term.

The Group's available-for-sale assets are primarily electricity Settlement Residue Distribution Agreements and shares in listed corporations held by Origin Foundation Limited.

Other financial liabilities	2018 \$million	2017 \$million
<b>Current</b>		
Environmental scheme surrender obligations	304	276
Other financial liabilities	57	111
	<b>361</b>	<b>387</b>

At 30 June 2018, the Group's other financial liabilities represent deferred option premiums. At 30 June 2017, these liabilities represented the net amount owed for exchange-traded derivative contracts that had not settled at the reporting date.

The environmental scheme certificates and surrender obligations are initially recorded at fair value which approximates cost. Subsequently, they are recorded at their market price (i.e. fair value).

## C Capital, funding and risk management

This section focuses on the Group's capital structure and related financing costs. Information is also presented about how the Group manages capital, and the various financial risks to which the Group is exposed through its operating and financing activities.

### C1 Interest-bearing liabilities

	2018 \$million	2017 \$million
<b>Current</b>		
Bank loans – unsecured	7	6
Capital market borrowings – unsecured	1,081	126
<b>Total current borrowings</b>	<b>1,088</b>	<b>132</b>
Lease liabilities – secured	1	1
<b>Total current interest-bearing liabilities</b>	<b>1,089</b>	<b>133</b>
<b>Non-current</b>		
Bank loans – unsecured	220	787
Capital market borrowings – unsecured	6,124	7,588
<b>Total non-current borrowings</b>	<b>6,344</b>	<b>8,375</b>
Lease liabilities – secured	6	7
<b>Total non-current interest-bearing liabilities</b>	<b>6,350</b>	<b>8,382</b>

Interest-bearing liabilities are initially recorded at the amount of proceeds received (fair value) less transaction costs. After that date, the liability is amortised to face value at maturity using an effective interest rate method with any gains or losses recognised in the income statement.

<b>The contractual maturities of non-current borrowings are as set out below.</b>	2018 \$million	2017 \$million
One to two years	915	1,044
Two to five years	3,742	4,773
Over five years	1,687	2,558
<b>Total non-current borrowings</b>	<b>6,344</b>	<b>8,375</b>
Lease liabilities	6	7
<b>Total non-current interest-bearing liabilities</b>	<b>6,350</b>	<b>8,382</b>

Some of the Group's borrowings are subject to terms that allow the lender to call on the debt. As at 30 June 2018, these terms had not been triggered.

#### Significant funding transactions

On 27 June 2018 the Group completed a \$4 billion debt refinancing which extended the previous tenor from a maturity of October 2021 to new 4, 5 and 7 year maturities.

## C2 Derivatives and hedging

The Group is exposed to risk from movements in foreign exchange, interest rates, and commodity prices including electricity and oil. As part of the risk management strategy set out in note C3, the Group holds the following types of derivative instruments.

\$million	Assets		Liabilities	
	Current	Non-current	Current	Non-current
<b>2018</b>				
Interest rate swaps <sup>(1)</sup>	-	-	-	(6)
Cross-currency interest rate swaps <sup>(2)</sup>	229	642	-	(66)
Forward foreign exchange contracts <sup>(3)</sup>	1	-	-	(250)
Electricity derivatives <sup>(4)</sup>	50	327	(51)	(841)
Oil derivatives <sup>(5)</sup>	230	142	(370)	(70)
Other commodity derivatives	12	6	(3)	(1)
	<b>522</b>	<b>1,117</b>	<b>(424)</b>	<b>(1,234)</b>
<b>2017</b>				
Interest rate swaps	-	-	-	(8)
Cross-currency interest rate swaps	-	597	(229)	(74)
Forward foreign exchange contracts	-	-	(1)	(300)
Electricity derivatives	184	451	(58)	(621)
Oil derivatives	55	5	(12)	(303)
Other commodity derivatives	2	2	-	(3)
	<b>241</b>	<b>1,055</b>	<b>(300)</b>	<b>(1,309)</b>

(1) At 30 June 2018, the fixed interest rates varied from 2.25 per cent to 2.27 per cent (2017: 2.25 per cent to 2.84 per cent) and the main floating rate was the Bank Bill Swap Rate (BBSW). The hedged interest payment transactions are expected to impact profit at various dates between one month and five years from the reporting date.

(2) At 30 June 2018, the fixed interest rates varied from 3.30 per cent to 7.91 per cent (2017: 3.30 per cent to 7.91 per cent) and the main floating rates were BBSW and the US Dollar London Interbank Offered Rate (LIBOR). The hedged interest payment transactions are expected to impact profit at various dates between one month and five years from the reporting date.

(3) Predominantly represents forward foreign exchange contracts executed in prior periods to monetise the value accrued in certain cross currency interest rate derivatives. The contracts will cash settle over the period to 2023, do not incur interest expense and the value of the contracts, in aggregate, is not subject to foreign exchange fluctuations.

(4) The hedged electricity purchase and sale transactions are expected to impact profit continuously for each half hour period throughout the next 13 years from the reporting date.

(5) The hedged oil sale and purchase transactions are expected to impact profit continuously throughout the next three years from the reporting date.



## C2 Derivatives and hedging (continued)

Derivatives are initially recognised at fair value. If the fair value differs from the transaction price, the difference is deferred in the statement of financial position and recognised in the income statement over the life of the instrument. The following amounts have been deferred and/or recognised in the income statement during the year.

	2018 \$million
<b>Derivative assets</b>	
Opening balance	533
Recognised in the income statement	(59)
Reclassified to derivative liabilities	(9)
Derivatives derecognised in the period	(54)
	<b>411</b>
<b>Derivative liabilities</b>	
Opening balance	374
Recognised in the income statement	(29)
Reclassified to derivative assets	9
Derivatives derecognised in the period	(42)
	<b>312</b>

After initial recognition, derivatives are subsequently remeasured at their fair value. The method of recognising any resulting gain or loss depends on whether the derivative is designated as a hedging instrument and the nature of the item being hedged. Gains or losses on derivatives that are not designated as hedging instruments are recognised in the income statement and resulted in a \$563 million loss in the year ended 30 June 2018 (2017: \$109 million gain). This includes a \$35 million loss relating to discontinued operations (2017: \$82 million gain).

### Derivatives designated as hedging instruments

The Group designates certain derivatives as either:

- hedges of the fair value of recognised assets, liabilities or firm commitments (fair value hedge);
- hedges of a particular cash flow risk associated with a recognised asset, liability or highly probable forecast transaction (cash flow hedge); or
- hedges of a net investment in a foreign operation (net investment hedge).

The following table shows the fair value of instruments that have been designated as hedging instruments.

		Assets		Liabilities	
		2018 \$million	2017 \$million	2018 \$million	2017 \$million
Fair value hedges	(a)	645	484	-	(34)
Cash flow hedges	(b)	454	351	(183)	(65)

## C2 Derivatives and hedging (continued)

### (a) Fair value hedges

The Group designates certain cross-currency interest rate swaps as fair value hedges of foreign denominated debt. Changes in the fair value of these derivatives are recorded in the income statement, together with any changes in the fair value of the hedged debt.

The following table shows the changes in the fair values of the hedged debt and related derivatives recognised in the income statement for the year.

	2018 \$million	2017 \$million
Gain/(loss) on the derivatives	160	(145)
(Loss)/gain on the hedged debt	(175)	121
	<b>(15)</b>	<b>(24)</b>

### Derivatives designated as hedging instruments

### (b) Cash flow hedges

The Group designates certain foreign exchange contracts, electricity derivatives, interest rate swaps, cross-currency interest rate swaps and oil derivatives in cash flow hedge relationships. The effective portion of changes in the fair value of these derivatives are recognised in the cash flow hedge reserve (in equity). The gain or loss relating to the ineffective portion is recognised immediately in the income statement.

Amounts accumulated in the hedge reserve are transferred to the income statement in the periods when the hedged item affects profit or loss (for instance, when the forecast sale that is hedged takes place). When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in the hedge reserve at that time remains in the hedge reserve and is recognised when the forecast transaction is ultimately recognised in the income statement. If a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in the hedge reserve is immediately transferred to the income statement.

	2018 \$million	2017 \$million
Ineffective portion of the gains on cash flow hedges recognised in the income statement post-tax	-	6
<b>Changes in the fair value of cash flow hedges</b>		
Effective portion of the (losses)/gains on cash flow hedges	(46)	246
Gains transferred to sales	(16)	(77)
Gains transferred to cost of sales	(131)	(319)
Gains transferred to change in fair value of financial instruments	(14)	(198)
Losses transferred to finance cost	54	60
	(153)	(288)
Tax	47	86
<b>Changes in the fair value of cash flow hedges post-tax</b>	<b>(106)</b>	<b>(202)</b>

### C3 Risk management

The Group holds or issues financial instruments for the following purposes:

- *Funding*: used to finance the Group's operating activities. The principal types of instruments include syndicated bank loans, bank guarantee facilities, senior notes, hybrid securities, cash and short-term deposits;
- *Operating*: the Group's day-to-day business activities generate financial instruments such as cash, trade receivables and trade payables; and
- *Risk management*: to reduce risks arising from the financial instruments described above, the Group holds derivatives such as forward exchange contracts and interest rate swaps (including cross-currency). In addition, a range of standard and bespoke financial instruments are held to manage the Group's exposure to fluctuations in commodity prices.

A number of these financial instruments are recorded at the value that reflects current market conditions, i.e. at fair value. The Group's methodology for calculating fair value can be found in note C5.

These risks are managed under policies approved by the Board of Directors. The key financial risks to which the Group is exposed are explained further in the following sections. They include:

- Credit risk;
- Liquidity risk;
- Market risk (including foreign exchange and price risk); and
- Interest rate risk.

#### C3.1 Credit risk

Credit risk is the risk that a counterparty will not fulfil its financial obligations under a contract or other arrangement. In order to manage credit risk, the Group has credit limits that determine the level of exposure it is prepared to accept with respect to counterparties. The Group is exposed to credit risk through its normal operating activities, primarily through customer contracts, financing activities, deposits and the collection risk from arrangements entered into to manage financial risk.

The Group has Board approved credit risk management policies that allocate credit limits to counterparties based on publicly available credit information from recognised providers where available. Credit policies cover exposures generated from the sale of products and the use of derivative instruments. The Group also utilises International Swaps and Derivative Association (ISDA) agreements with all derivative counterparties in order to limit exposure to credit risk through the netting of amounts receivable from and amounts payable to individual counterparties when a counterparty defaults under the terms of the ISDA. Refer note F8.

The carrying amounts of financial assets, which are disclosed in more detail in notes B1, B6 and C2, best represents the Group's maximum exposure to credit risk at the reporting date. The Group holds no significant collateral as security and there are no other significant credit enhancements in respect of these assets. All financial assets are monitored in order to identify any potential changes in the credit quality.

#### C3.2 Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group is exposed to liquidity risk through its ongoing business obligations, its strategy to take advantage of new investment opportunities as they arise and its hedging activities. The Group has a capital structure that allows it to support these activities. A key element of this structure is the use of committed undrawn debt facilities.

The Group manages liquidity risk centrally by monitoring operating cash flow forecasts and the degree of access to debt and equity capital markets. The Group holds a number of debt instruments with varying maturities. The debt portfolio is periodically reviewed to ensure there is funding flexibility and an appropriate repayment profile.

	2018 \$million	2017 \$million
The Group has the following committed undrawn floating rate borrowing facilities.		
Expiring beyond one year <sup>(1)</sup>	3,474	6,407

(1) As outlined in note C1, the Group refinanced its bank debt facilities during the current period. The amount shown above reflects the committed undrawn balance of the refinanced facility.

## C3 Risk management (continued)

### C3.2 Liquidity risk (continued)

Set out below are the contractual cash flows of the Group's derivative and non-derivative financial assets and liabilities, including drawn borrowings, at reporting date. The cash flows are undiscounted and include items not recorded in the statement of financial position such as interest and drawn guarantees.

#### Derivative financial instruments

	2018 \$million			2017 \$million		
	Derivative financial liabilities	Derivative financial assets	Net derivative financial (liabilities)/ assets	Derivative financial liabilities	Derivative financial assets	Net derivative financial (liabilities)/ assets
<b>\$million</b>						
Less than one month	(72)	15	(57)	(8)	30	22
One to three months	(93)	91	(2)	(18)	83	65
Three to 12 months	(335)	495	160	(492)	188	(304)
One to five years	(804)	1,085	281	(584)	1,422	838
Over five years	(216)	257	41	(514)	652	138

#### Non-derivative financial instruments<sup>(1)</sup>

	2018 \$million			2017 \$million		
	Other financial liabilities	Other financial assets	Net other financial (liabilities)/ assets	Other financial liabilities	Other financial assets	Net other financial (liabilities)/ assets
<b>\$million</b>						
Less than one month	(692)	732	40	(1,485)	615	(870)
One to three months	(713)	1,377	664	(691)	1,262	571
Three to 12 months	(1,993)	1,632	(361)	(2,556)	716	(1,840)
One to five years	(6,589)	3,183	(3,406)	(6,717)	2,337	(4,380)
Over five years	(179)	-	(179)	(311)	2,312	2,001

(1) All facilities are deemed to be repaid at the earlier of their contractual maturity date or first call/intended repayment date.

## C3 Risk management (continued)

### C3.3 Foreign exchange (FX) risk

FX risk is the risk that fluctuations in exchange rates will adversely impact the Group's result. FX risk arises from future commercial transactions (including interest payments and principal debt repayments on foreign currency long-term borrowings, the sale and purchase of oil and gas and the purchase of capital equipment), the recognition of assets and liabilities (including foreign receivables and borrowings) and net investments in foreign operations. The Group is mainly exposed to fluctuations in the US dollar and the Euro through its operations (both overseas and in Australia), its financing facilities and through arrangements put in place to manage risk.

As at 30 June 2018, after hedging, the Group is exposed to FX risk on receivables of US\$1,324 million (A\$1,792 million) (30 June 2017: US\$553 million (A\$719 million)).

To manage FX risk, the Group uses forward foreign exchange contracts and cross-currency interest rate swaps. In certain circumstances borrowings are left in the foreign currency, or swapped from one currency to another, to hedge expected future business cash flows in that currency.

Significant transactions undertaken in the normal course of operations that are denominated in a foreign currency are managed on a case-by-case basis.

The table below shows the impact of a 10 per cent change in FX rates (holding all other things constant) on the carrying value of the Group's financial instruments at the reporting date. The impacts on profit and equity do not take into account any mitigating actions that management might take if the rate change occurred.

	Impact on post-tax profit		Impact on equity	
	Increase	Decrease	Increase	Decrease
	\$million		\$million	
<b>2018</b>				
US dollar	(104)	104	(112)	112
Euro <sup>(1)</sup>	1	(1)	(18)	18
<b>2017</b>				
US dollar	(65)	69	(74)	79
Euro <sup>(1)</sup>	9	(9)	17	(17)

(1) Represents the ineffectiveness from some fair value hedges of Euro debt that has been swapped to AUD.

## C3 Risk management (continued)

### C3.4 Commodity price risk

Commodity price risk is the risk that fluctuations in commodity prices will adversely impact the Group's result. The Group is exposed to fluctuations in electricity, oil, gas and environmental scheme certificate prices.

To manage its price risks the Group utilises a range of financial instruments and derivatives, including fixed-price swaps, options, futures and fixed price forward purchase contracts. The policy for managing price risk permits the active hedging of price and volume exposures within prescribed limits. The full hedge portfolio is tested on an ongoing basis against these limits.

The table below shows the impact of a 10 per cent change in commodity prices (holding all other things constant) on the carrying value of the Group's financial instruments at the reporting date. The impacts on profit and equity do not take into account any mitigating actions that management might take if the price change occurred.

	Impact on post-tax profit		Impact on equity	
	Increase	Decrease	Increase	Decrease
	\$million		\$million	
<b>2018</b>				
Electricity forward price	171	(170)	206	(205)
Oil forward prices	(21)	22	(13)	14
Environmental scheme certificate prices	23	(23)	23	(23)
<b>2017</b>				
Electricity forward price	202	(202)	238	(238)
Oil forward prices	9	(2)	28	(21)
Environmental scheme certificate prices	25	(25)	25	(25)

### C3.5 Interest rate risk

Interest rate risk is the risk that fluctuations in interest rates adversely impact the Group's results. Borrowings issued at variable interest rates expose the Group to cash flow interest rate risk. Borrowings issued at fixed rates expose the Group to fair value interest rate risk.

After hedging, the exposure of the Group's borrowings (excluding lease liabilities) to interest rate changes and the contractual repricing periods are set out below.

	2018 \$million	2017 \$million
Variable rate borrowings	3,843	2,838
<b>Fixed interest rate – repricing dates</b>		
Six months or less	400	1,900
Six to twelve months	–	742
One to five years	3,075	2,695
Over five years	114	332
	7,432	8,507

## C3 Risk management (continued)

### C3.5 Interest rate risk

The Group's risk management policy is to manage interest rate exposures using Profit at Risk and Value at Risk methodologies. Exposure limits are set to ensure that the Group is not exposed to excess risk from interest rate volatility.

The Group manages its cash flow interest rate risk by entering into fixed-rate interest rate swap contracts and fixed-rate debt securities, with rates ranging between 2.25 per cent to 7.91 per cent per annum, at a weighted average rate of 5.75 per cent per annum (2017: 2.25 per cent to 7.91 per cent per annum, at a weighted average rate of 5.29 per cent per annum). Such interest rate swaps have the economic effect of converting borrowings from floating to fixed rates.

The Group manages its fair value interest rate risk by using fixed-to-floating interest rate swaps. Where possible these are designated to hedge the interest rate costs associated with underlying debt obligations.

The table below shows the impact of a 100 basis point shift in interest rates (holding all other things constant) on the carrying value of the Group's interest-bearing assets and liabilities as at the reporting date. The impacts on profit and equity do not take into account any mitigating actions that management might take if the rate change occurred.

	Impact on post-tax profit		Impact on equity	
	Increase	Decrease	Increase	Decrease
	\$million		\$million	
<b>2018</b>				
Interest rates	1	(6)	(3)	(2)
<b>2017</b>				
Interest rates	8	(13)	5	(10)

## C4 Capital management

The Group's objectives when managing capital are to safeguard the ability to continue as a going concern so that it can continue to provide returns for shareholders and benefits for other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital.

To maintain or adjust the capital structure, the Group monitors its current and future funding requirements for at least the next five years and regularly assesses a range of funding alternatives to meet these requirements in advance of when the funds are required.

Key factors considered in determining the Group's capital structure and funding strategy at any point in time include expected operating cash flows, capital expenditure plans, maturity profile of existing debt facilities, dividend policy and the ability to access funding from banks, capital markets and other sources.

The Group monitors its capital requirements through a number of metrics including the gearing ratio. This ratio is calculated as adjusted net debt divided by total capital. Net debt is adjusted to take into account the effect of FX hedging transactions on the Group's foreign currency debt obligations. The Group maintains a gearing ratio designed to optimise the cost of capital while providing flexibility to fund growth opportunities.

The Group also monitors various other credit metrics including funds from operations to net adjusted debt and EBITDA to interest expense.

	2018 \$million	2017 \$million
Total interest-bearing liabilities	7,439	8,515
Less: Cash and cash equivalents	(150)	(151)
Net debt	7,289	8,364
Fair value adjustments on FX hedging transactions	(793)	(253)
Adjusted net debt	6,496	8,111
Total equity	11,828	11,418
Total capital	18,324	19,529
Gearing ratio	35%	42%

## C5 Fair value of financial assets and liabilities

The following table summarises the methods that are used to estimate the fair value of the Group's financial instruments.

Instrument	Fair value methodology
Financial instruments traded in active markets	Quoted market prices at reporting date.
Forward foreign exchange contracts	Present value of expected future cash flows using quoted forward exchange rates.
Commodity option contracts which are regularly traded	Most recent available transaction prices for same or similar instruments.
Long-term debt and other financial assets	Quoted market prices, dealer quotes for similar instruments, or present value of estimated future cash flows.
Commodity swaps and non-exchange traded futures	Present value of expected future cash flows using market forward prices.
Interest rate swaps and cross currency interest rate swaps	Present value of expected future cash flows of these instruments. Key variables include market pricing data, discount rates and credit risk of the Group or counterparty where relevant. Variables reflect those which would be used by market participants to execute and value the instruments.
Structured electricity derivatives which are not regularly traded and with no observable market price	The valuation models for long-term electricity derivatives reflect the fair value of the avoided costs of construction of the physical assets which would be required to achieve an equivalent risk management outcome for the Group. The methodology takes into account all relevant variables including forward commodity prices, physical generation plant variables, the risk-free discount rate and related credit adjustments, and asset lives. The valuation models for short-term electricity derivatives include premiums for lack of volume in the market relative to the size of the instruments being valued.
Power purchase arrangement electricity derivatives	The discounted cash flow methodology reflects the difference in the contract price and long term forecast electricity pool prices which are not observable in the market. The valuation also requires estimation of forecast electricity volumes, the risk-free discount rate and related credit adjustments.
Oil forward structured derivative instrument	Valued with reference to the observable market oil forward prices, foreign exchange rates and discount rates. As a result of the structured nature of the instrument, certain risk premium and credit variables utilised in the valuation model are unobservable.

Valuation methodologies are determined based on the nature of the underlying instrument. To the maximum extent possible, valuations are based on assumptions which are supported by independent and observable market data. Where valuation models are used, instruments are discounted at the market interest rate applicable to the instrument.

### Key estimate: fair value

*To estimate the fair value of financial assets and financial liabilities, the Group uses a variety of methods (outlined in the table above) and makes assumptions based on existing market conditions at each reporting date.*



## C5 Fair value of financial assets and liabilities (continued)

The following table provides information about the reliability of the inputs used in determining the fair value of financial assets and liabilities carried at fair value. The three levels in the hierarchy reflect the level of independent observable market data used in determining the fair values and are defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical instruments.
- Level 2: other valuation methods for which all inputs that have a significant impact on fair value are observable, either directly (as prices) or indirectly (derived from prices).
- Level 3: one or more key inputs for the instrument are not based on observable market data (unobservable inputs).

	Note	Level 1 \$million	Level 2 \$million	Level 3 \$million	Total \$million
<b>2018</b>					
Derivative financial assets	C2	21	1,388	230	1,639
Environmental scheme certificates	B6	153	-	-	153
Available-for-sale financial assets	B6	103	15	-	118
<b>Financial assets carried at fair value</b>		<b>277</b>	<b>1,403</b>	<b>230</b>	<b>1,910</b>
Derivative financial liabilities	C2	(15)	(988)	(655)	(1,658)
Environmental scheme surrender obligations	B6	(304)	-	-	(304)
<b>Financial liabilities carried at fair value</b>		<b>(319)</b>	<b>(988)</b>	<b>(655)</b>	<b>(1,962)</b>
<b>2017</b>					
Derivative financial assets	C2	116	882	298	1,296
Environmental scheme certificates	B6	58	-	-	58
Available-for-sale financial assets	B6	113	6	-	119
<b>Financial assets carried at fair value</b>		<b>287</b>	<b>888</b>	<b>298</b>	<b>1,473</b>
Derivative financial liabilities	C2	(16)	(842)	(751)	(1,609)
Environmental scheme surrender obligations	B6	(276)	-	-	(276)
<b>Financial liabilities carried at fair value</b>		<b>(292)</b>	<b>(842)</b>	<b>(751)</b>	<b>(1,885)</b>

The following table shows a reconciliation of movements in the value of instruments included in Level 3 of the fair value hierarchy.

	\$million
<b>Balance as at 1 July 2017</b>	(453)
Net loss recognised in other comprehensive income	(25)
Net gain recognised in revenue line	10
Net gain recognised in raw materials and consumables used	107
Net loss recognised in change in fair value of financial instruments	(365)
Net cash settlements	301
<b>Balance as at 30 June 2018</b>	<b>(425)</b>

## C5 Fair value of financial assets and liabilities (continued)

The following is a summary of the main inputs and assumptions used by the Group in measuring the fair value of Level 3 financial instruments.

**Discount rates:** Based on observable market rates for risk-free instruments of the appropriate term.

**Credit adjustments:** Applied to the discount rate depending on the asset/liability position of a financial instrument to reflect the risk of default by either the Group or a specific counterparty. Where a counterparty specific credit curve is not observable, an estimated curve is applied that takes into consideration the credit rating of the counterparty and its industry.

**Forward commodity prices:** Including both observable external market data and internally derived forecast data. For oil derivatives, internally derived data principally relates to the forward price path for Japanese Customs-cleared Crude (JCC) that is not readily observable in the market. The forward curve for JCC is inferred from the observable Brent oil forward curve. For certain long term electricity derivatives, internally derived forecast spot pool prices and renewable energy certificate prices are applied as market prices are not readily observable for the corresponding term.

**Physical generation plant variables:** Variables that would be used in the valuation of physical generation assets with equivalent risk management outcomes including new build capital costs, operating costs and plant efficiency factors. For derivatives related to renewable generation, further assumptions are applied to forecast generation volumes over the life of the instrument.

**Liquidity premiums:** Applied to allow for the lack of volume in the market relative to the size of the instruments being valued.

**Strike premiums:** Applied to allow for instances where instruments have different strike prices to those associated with instruments that have observable market prices.

The use of different methodologies or assumptions could lead to different measurements of fair value. For Level 3 fair value measurements, a 10 per cent increase or decrease in the unobservable assumptions would have the following effects.

	2018		2017	
	Impact on post-tax profit		Impact on post-tax profit	
	Increase	Decrease	Increase	Decrease
	\$million		\$million	
Electricity derivatives	229	(228)	268	(268)
Oil derivatives	(1)	1	(1)	1

Except as noted below, the carrying amounts of financial assets and liabilities are reasonable approximations of their fair values.

The Group has the following non-current financial instruments which are not measured at fair value in the statement of financial position.

	Fair value hierarchy level	Carrying value		Fair value	
		2018 \$million	2017 \$million	2018 \$million	2017 \$million
<b>Assets</b>					
Other financial assets	2	3,583	3,609	3,428	3,115
<b>Liabilities</b>					
Bank loans – unsecured	2	220	787	244	744
Capital markets borrowings – unsecured	2	6,124	7,588	6,387	7,959
		<b>6,344</b>	<b>8,375</b>	<b>6,631</b>	<b>8,703</b>

The fair value of these financial instruments reflect the present value of estimated future cash flows of the instrument. Key variables used to determine the present value include:

- market pricing data (for the relevant underlying interest rates, foreign exchange rates or commodity prices);
- discount rates; and
- the credit risk of the Group or counterparty where appropriate.

For these instruments, each of these variables is taken from observed market pricing data at the valuation date and therefore these variables represent those that would be used by market participants to execute and value the instruments.

## C6 Share capital and reserves

	2018 \$million	2017 \$million
<b>Issued and paid-up capital</b>		
1,759,156,516 (2017: 1,755,333,517) ordinary shares, fully paid	7,150	7,150
Ordinary share capital at the beginning of the period	7,150	7,150
Shares issued:		
• 3,822,999 (2017: 1,997,753) shares in accordance with the Long Term Incentive Plans <sup>(1)</sup>	-	-
<b>Total movements in ordinary share capital</b>	<b>-</b>	<b>-</b>
<b>Ordinary share capital at the end of the period</b>	<b>7,150</b>	<b>7,150</b>

(1) Relates to shares that have not yet vested.

### Terms and conditions

Holders of ordinary shares are entitled to receive dividends as determined from time to time and are entitled to one vote per share at shareholders' meetings. In the event of the winding up of the Group, ordinary shareholders rank after creditors, and are fully entitled to any proceeds of liquidation.

The Group does not have authorised capital or par value in respect of its issued shares.

### Nature and purpose of reserves

#### Share-based payments reserve

The share-based payments reserve is used to recognise the fair value of options, performance share rights and deferred share rights over their vesting period. Refer to note F3.

#### Foreign currency translation reserve

The foreign currency translation reserve records the foreign currency differences arising from the translation of foreign operations, and the translation of transactions that hedge the Group's net investments in foreign operations.

#### Hedge reserve

The hedge reserve is used to record the effective portion of the gains or losses on cash flow hedging instruments that have not yet settled. Where the underlying transaction is recognised in profit or loss, hedge reserve amounts are subsequently recycled to the income statement at the time the underlying transaction affects profit or loss. Where the underlying transaction results in recognition of an asset, hedge reserve amounts subsequently form part of the cost of the asset.

#### Available-for-sale reserve

Changes in fair value and exchange differences arising on translation of investments are taken to the available-for-sale reserve. Amounts are recognised in profit or loss when the associated investments are sold/settled or impaired.

## C7 Other comprehensive income

\$million	Foreign currency translation reserve	Hedge reserve	Available-for- sale reserve	Retained earnings	Non- controlling interests	Total other comprehensive income
<b>2018</b>						
<i>Items that will not be reclassified to the income statement</i>						
Actuarial loss on defined benefit superannuation plan, net of tax	-	-	-	-	-	-
	-	-	-	-	-	-
<i>Items that may be reclassified to the income statement</i>						
Foreign currency translation differences for foreign operations	277	-	-	-	1	278
Net loss on cash flow hedges (refer note C2(b))	-	(106)	-	-	-	(106)
Available-for-sale financial assets – valuation loss taken to equity, net of tax	-	-	(6)	-	-	(6)
	<b>277</b>	<b>(106)</b>	<b>(6)</b>	<b>-</b>	<b>1</b>	<b>166</b>
<b>Total other comprehensive income</b>	<b>277</b>	<b>(106)</b>	<b>(6)</b>	<b>-</b>	<b>1</b>	<b>166</b>
<b>2017</b>						
<i>Items that will not be reclassified to the income statement</i>						
Actuarial gain on defined benefit superannuation plan, net of tax	-	-	-	1	-	1
	-	-	-	1	-	1
<i>Items that may be reclassified to the income statement</i>						
Foreign currency translation differences for foreign operations	(200)	-	-	-	-	(200)
Net loss on cashflow hedges (refer note C2(b))	-	(202)	-	-	-	(202)
Available-for-sale financial assets – valuation loss taken to equity, net of tax	-	-	(41)	-	-	(41)
	<b>(200)</b>	<b>(202)</b>	<b>(41)</b>	<b>-</b>	<b>-</b>	<b>(443)</b>
<b>Total other comprehensive income</b>	<b>(200)</b>	<b>(202)</b>	<b>(41)</b>	<b>1</b>	<b>-</b>	<b>(442)</b>

## D Taxation

This section provides details of the Group's income tax expense, current tax provision and deferred tax balances and the Group's tax accounting policies.

### D1 Income tax expense

	2018 \$million	2017 \$million
<b>Income tax</b>		
Current tax expense	174	77
Deferred tax benefit	(195)	(158)
Under provided in prior years	1	5
<b>Total income tax benefit</b>	<b>(20)</b>	<b>(76)</b>
<b>Income tax expense/(benefit) attributable to:</b>		
Profit/(loss) from continuing operations	(81)	(26)
Loss from discontinued operations	61	(50)
	<b>(20)</b>	<b>(76)</b>
<b>Reconciliation between tax expense and pre-tax net profit</b>		
Profit/(loss) from continuing operations before income tax	202	(2,075)
Loss from discontinued operations before income tax	(1)	(224)
	<b>201</b>	<b>(2,299)</b>
Income tax using the domestic corporation tax rate of 30 per cent (2017: 30 per cent)		
Prima facie income tax expense on pre-tax accounting profit:		
– at Australian tax rate of 30 per cent	60	(690)
– adjustment for tax exempt charity (Origin Foundation Limited)	(17)	–
– adjustment for difference between Australian and overseas tax rates	(2)	5
<b>Income tax expense/(benefit) on pre-tax accounting profit at standard rates</b>	<b>41</b>	<b>(685)</b>

## D Taxation (continued)

### D1 Income tax expense (continued)

	2018 \$million	2017 \$million
<b>Increase/(decrease) in income tax expense due to:</b>		
Lattice disposal	55	-
Acumen disposal	(72)	-
Entity wind-up	9	-
Impairment expense not recoverable	-	28
Capital loss recognition	-	(40)
Recognition of change in net tax loss position	-	21
Recognition of cost base on disposal of entities	-	17
Share of results of equity accounted investees	(60)	574
Other	6	4
	<b>(62)</b>	<b>604</b>
Under provided in prior years	1	5
<b>Total income tax benefit</b>	<b>(20)</b>	<b>(76)</b>
<b>Deferred tax movements recognised directly in other comprehensive income (including foreign currency translation)</b>		
Financial instruments at fair value	(51)	(103)
Property, plant and equipment	5	(4)
Provisions	(1)	2
	<b>(47)</b>	<b>(105)</b>

The Company and its wholly-owned Australian resident entities, which met the membership requirements, formed a tax-consolidated group with effect from 1 July 2003. The head entity within the tax-consolidated group is Origin Energy Limited. Tax funding arrangement amounts are recognised as inter-entity amounts.

Income tax expense is made up of current tax expense and deferred tax expense. Current tax expense represents the expected tax payable on the taxable income for the year, using current tax rates and any adjustment to tax payable in respect of previous years. Deferred tax expense reflects the temporary differences between the accounting carrying amount of an asset or liability in the statement of financial position and its tax base.

#### Key judgements

**Tax balances:** Tax balances reflect a current understanding and interpretation of existing tax laws. Uncertainty arises due to the possibility that changes in tax law or other future circumstances can impact the tax balances recognised in the financial statements. Ultimate outcomes may vary.

**Deferred taxes:** The recognition of deferred tax balances requires judgement as to whether it is probable such balances will be utilised and/or reversed in the foreseeable future.

**Petroleum Resource Rent Tax (PRRT):** PRRT applies to all Australian onshore oil and gas projects, including coal seam gas projects. The application of PRRT legislation involves significant judgement around the taxing point of projects, the transfer price used for determining PRRT income, and the measurement of the Starting Base on transition of existing permits, production licences and retention leases into the PRRT regime. In assessing the recoverability of deferred tax assets, estimates are required in respect of future augmentation (escalation) of expenditure, the sequence in which current and future deductible amounts are expected to be utilised, and the probable cash flows used in determining the recoverability of deferred tax assets.

## D1 Income tax expense (continued)

Income tax expense recognised in other comprehensive income

\$million	2018			2017		
	Gross	Tax	Net	Gross	Tax	Net
<i>Available for sale assets:</i>						
Valuation loss taken to equity	(10)	4	(6)	(58)	17	(41)
<i>Cash flow hedges:</i>						
Reclassified to income statement	-	-	-	(534)	160	(374)
Effective portion of change in fair value	(153)	47	(106)	246	(74)	172
Foreign currency translation differences for foreign operations	278	-	278	(200)	-	(200)
Actuarial gain on defined benefit superannuation plan	-	-	-	2	(1)	1
<b>Other comprehensive income for the period</b>	<b>115</b>	<b>51</b>	<b>166</b>	<b>(544)</b>	<b>102</b>	<b>(442)</b>

## D2 Deferred tax

Deferred tax balances arise when there are temporary differences between accounting carrying amounts and the tax bases of assets and liabilities, other than for the following:

- where the difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and affects neither the accounting profit nor taxable profit or loss;
- where temporary differences relate to investments in subsidiaries, associates and interests in joint arrangements to the extent the Group is able to control the timing of the reversal of the temporary differences and it is probable that they will not reverse in the foreseeable future; and
- where temporary differences arise on initial recognition of goodwill.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced if it is no longer probable that the related tax benefit will be realised.

## D2 Deferred tax (continued)

### Movement in temporary differences during the year

Asset/(liability) \$million	1 July 2016	Recognised in income	Recognised in equity	Transfers to held for sale <sup>(1)</sup>	30 June 2017	Recognised in income	Recognised in equity	30 June 2018
Employee benefits	70	(1)	-	(7)	62	(1)	-	61
Provisions	264	(12)	(2)	(149)	101	44	1	146
Tax value of carry-forward tax losses recognised	164	(154)	(1)	-	9	(9)	-	-
Property, plant and equipment	(361)	186	4	(249)	(420)	8	(5)	(417)
Exploration and evaluation assets	(443)	273	-	85	(85)	136	-	51
Financial instruments at fair value	270	(125)	103	-	248	10	51	309
APLNG MRCPS elimination (refer note E1.2)	50	3	-	-	53	(1)	-	52
Business related costs (deductible under s.40-880 ITAA97)	21	2	-	-	23	30	-	53
Other items	57	(14)	1	-	44	(22)	-	22
<b>Net deferred tax assets</b>	<b>92</b>	<b>158</b>	<b>105</b>	<b>(320)</b>	<b>35</b>	<b>195</b>	<b>47</b>	<b>277</b>

(1) Relates to amounts classified as held for sale at 30 June 2017.

Unrecognised deferred tax assets and liabilities	2018 \$million	2017 \$million
<b>Deferred tax assets have not been recognised in respect of the following items:</b>		
Revenue losses	42	53
Capital losses	280	2
Petroleum resource rent tax, net of income tax <sup>(1)</sup>	690	2,459
Acquisition transaction costs	57	57
Investment in joint ventures	67	67
Intangible assets	8	8
	<b>1,144</b>	<b>2,646</b>
<b>Deferred tax liabilities have not been recognised in respect of the following items:</b>		
Investment in Australia Pacific LNG <sup>(2)</sup>	(1,320)	(1,190)
	<b>(1,320)</b>	<b>(1,190)</b>

(1) PRRT is considered, for accounting purposes, to be a tax based on income under *AASB 112 Income Taxes*. Accordingly, any current and deferred PRRT expense is measured and disclosed on the same basis as income tax. The application of PRRT legislation relies on a forecast of future years expenditure in order to determine whether the utilisation of the PRRT base will be required. As the forecast indicates that no utilisation is required, no deferred tax asset has been recognised with respect to PRRT in these financial statements.

(2) A deferred tax liability has not been recorded in respect of the investment in Australia Pacific LNG as the Group is able to control the timing of the reversal of the temporary difference through its voting rights and it is not expected that the temporary difference will reverse in the foreseeable future.



## E Group structure

The following section provides information on the Group's structure and how this impacts the results of the Group as a whole, including details of joint arrangements, controlled entities, transactions with non-controlling interests and changes made to the Group structure during the year.

### E1 Joint arrangements

Joint arrangements are those entities over whose activities the Group has joint control, established by contractual agreement and require consent of two or more parties for strategic, financial and operating decisions. The Group classifies its interests in joint arrangements as either joint operations or joint ventures depending on its rights to the assets and obligations for the liabilities of the arrangements.

#### E1.1 Interests in joint ventures

Interests in joint ventures are initially recognised at cost and are subsequently adjusted for changes in the Group's share of the joint venture's net assets.

Joint venture entity	Reporting date	Country of incorporation	Ownership interest (%)	
			2018	2017
Australia Pacific LNG Pty Ltd <sup>(1)</sup>	30 June	Australia	37.5	37.5
Energia Andina Geothermal SpA <sup>(2)</sup>	31 December	Chile	49.9	49.9
Energia Austral SpA <sup>(3)</sup>	31 December	Chile	34.0	34.0
KUBU Energy Resources (Pty) Limited	30 June	Botswana	50.0	50.0
PNG Energy Developments Limited	31 December	PNG	50.0	50.0
Venn Energy Trading Pte Limited	31 March	Singapore	50.0	50.0

(1) Australia Pacific LNG Pty Ltd is a separate legal entity. Operating, management and funding decisions require the unanimous support of the Foundation Shareholders, which includes the Group and ConocoPhillips. Accordingly, joint control exists and the Group has classified the investment in Australia Pacific LNG as a joint venture.

(2) Energia Andina Geothermal SpA (previously named Energia Andina S.A) is a separate legal entity. Key decisions require super majority (four directors) approval, with the Group entitled to appoint two of the five directors. As a consequence joint control exists and the Group has classified the investment as a joint venture.

Prior to being renamed, Energia Andina S.A was split into two entities and one of those, Andina Solar – Javiera was sold in the prior period.

(3) Energia Austral SpA is a separate legal entity. Key decisions require super majority (four directors) approval, with the Group entitled to appoint two of the five directors. As a consequence joint control exists and the Group has classified the investment as a joint venture. The Group's ownership interest can change between reporting periods when equity contributions are made to the joint venture.

Of the above joint arrangements, only Australia Pacific LNG has a material impact to the Group.

## E1 Joint arrangements (continued)

### E1.2 Investment in Australia Pacific LNG Pty Ltd

Australia Pacific LNG's second LNG train commenced production during the prior period, with revenue recognition for the second train commencing in November 2016. A summary of Australia Pacific LNG's financial performance and its financial position for the periods ended 30 June 2018 and 30 June 2017 follows.

#### Summary income statement of Australia Pacific LNG

\$million	2018		2017	
	Total APLNG	Origin interest	Total APLNG	Origin interest
Operating revenue	5,528		3,754	
Operating expenses	(1,811)		(1,465)	
Reversal of impairment of non-current assets held for sale	16		-	
Impairment expense	(8)		(7,031)	
<b>EBITDA</b>	<b>3,725</b>	<b>1,397</b>	<b>(4,742)</b>	<b>(1,778)</b>
Depreciation and amortisation expense	(1,853)		(1,614)	
Interest income	17		3	
Interest expense on MRCPS	(605)		(626)	
Other interest expense	(532)		(495)	
Capitalised interest	-		166	
Income tax (expense)/benefit	(216)		2,196	
<b>Statutory result for the period</b>	<b>536</b>	<b>201</b>	<b>(5,112)</b>	<b>(1,917)</b>
Elimination of MRCPS depreciation <sup>(1)</sup>	-	4	-	5
<b>Total statutory result for the period</b>	<b>536</b>	<b>205</b>	<b>(5,112)</b>	<b>(1,912)</b>
Other comprehensive income	-	-	-	-
<b>Statutory total comprehensive income</b>	<b>536</b>	<b>205</b>	<b>(5,112)</b>	<b>(1,912)</b>
<b>Items excluded from segment result:</b>				
Reversal of impairment of non-current assets held for sale	11	4	-	-
Impairment of non-current assets	(5)	(2)	(4,922)	(1,846)
Restructuring costs	(21)	(8)	-	-
<b>Total items excluded from segment result</b>	<b>(15)</b>	<b>(6)</b>	<b>(4,922)</b>	<b>(1,846)</b>
<b>Underlying profit/(loss) for the period</b>	<b>551</b>	<b>211</b>	<b>(190)</b>	<b>(66)</b>
<b>Underlying EBITDA for the period</b>	<b>3,746</b>	<b>1,405</b>	<b>2,289</b>	<b>859</b>

(1) During project construction, interest paid by Australia Pacific LNG (APLNG) to the Group on Mandatorily Redeemable Cumulative Preference Shares (MRCPS) was capitalised by APLNG. These capitalised interest amounts in APLNG now form part of the cost of APLNG's assets and these assets have been depreciated since commencement of operations. During the project construction period, when the Group received interest on the MRCPS from APLNG, it recorded the interest as income after eliminating a proportion of this interest which related to its ownership interest in APLNG. When the Group now takes up its share of APLNG's net profit after tax (NPAT) the result contains an element of depreciation relating to this capitalised interest. As these amounts were previously eliminated by the Group against its investment at the time the interest was received, an adjustment is made to reverse the impact of this depreciation on APLNG NPAT.

## E1 Joint arrangements (continued)

### E1.2 Investment in Australia Pacific LNG Pty Ltd (continued)

#### Carrying value of investment

The carrying amount of the Group's equity accounted investment in Australia Pacific LNG (APLNG) is reviewed at each reporting date to determine whether there is any indication of impairment. Where an indicator of impairment exists, a formal estimate of the recoverable amount is made. APLNG has performed its own impairment assessment and determined that no impairment is required. The Group's own assessment of the carrying value identified no impairment.

The recoverable amount of the investment is sensitive to changes in key assumptions. A change in assumption could result in impairment losses or the reversal of previous impairment losses. The assumptions and the sensitivity of the investment to assumption changes are described below.

The APLNG valuation is determined based on an assessment of fair value less costs of disposal (based on level 3 fair value hierarchy). Key assumptions in APLNG's valuation are reserves, future production profiles, foreign exchange, commodity prices, operating costs and any future development costs necessary to produce the reserves.

Estimated unconventional reserve quantities in APLNG are based upon interpretations of geological and geophysical models and assessment of the technical feasibility and commercial viability of producing the reserves. Reserve estimates are prepared which conform to guidelines prepared by the Society of Petroleum Engineers. These assessments require assumptions to be made regarding future development and production cost, commodity prices, exchange rates and fiscal regimes. The estimates of reserves may change from period to period as the economic assumptions used to estimate the reserves can change from period to period, and as additional geological data is generated during the course of operations. Estimated reserve quantities include a Probabilistic Resource Assessment approach.

Estimates of future commodity prices are based on APLNG's best estimate of future market prices with reference to external industry and market analysts' forecasts, current spot prices and forward curves. Future commodity prices for impairment testing are reviewed on a six monthly basis. Where volumes are contracted, future prices are based on the contracted price.

Oil prices (Brent oil Nominal, US\$/bbl) used by APLNG in its impairment assessment are set out below.

	2018	2019	2020	2021	2022	2023 <sup>(1)</sup>
30 June 2018	76	73	70	71	73	78

(1) Escalated at 2.1 per cent from 2023.

Forecasts of the foreign exchange rate for foreign currencies, where relevant, are estimated with reference to observable external market data and forward values, including analysis of broker and consensus estimates.

The future estimated AUD/USD rates applied by APLNG are represented below.

	2018	2019	2020	2021	2022	2023
30 June 2018	0.76	0.76	0.77	0.77	0.77	0.77

The pre-tax discount rate, determined as APLNG's weighted average cost of capital, adjusted for risks where appropriate, that has been applied is 11.2 per cent (2017: 10.1 per cent).

#### Impairment sensitivity

The calculation of fair value less costs of disposal for APLNG is most sensitive to changes in oil price, discount rates and the AUD/USD foreign exchange rate. Key accounting judgements and estimates used in forming the valuation are disclosed in the previous carrying value of investment section.

Reasonably possible changes in circumstances will affect assumptions and the estimated fair value of Origin's investment in APLNG. These reasonably possible changes include:

- A decrease in oil prices of USD\$1/bbl, which in isolation would lead to a decrease of US\$375 million in the valuation; and
- An increase in the discount rate of 0.27 per cent in isolation or an increase in the AUD/USD FX rate of 2.6 cents in isolation from the rates assumed in the valuation would lead to a similar decrease as noted for oil above.

Changes in any of the aforementioned assumptions may be accompanied by changes in other assumptions which may have an offsetting impact.

## E1 Joint arrangements (continued)

### E1.2 Investment in Australia Pacific LNG Pty Ltd (continued)

#### Summary statement of financial position of Australia Pacific LNG (100 per cent share) \$million

	2018	2017
Cash and cash equivalents	1,223	747
Assets classified as held for sale	65	-
Other current assets	607	677
<b>Current assets</b>	<b>1,895</b>	<b>1,424</b>
Receivables from shareholders	394	333
Property, plant and equipment	34,865	33,853
Exploration, evaluation and development assets	256	351
Other non-current assets	2,282	2,425
<b>Non-current assets</b>	<b>37,797</b>	<b>36,962</b>
<b>Total assets</b>	<b>39,692</b>	<b>38,386</b>
Bank loans – secured	872	927
Payable to shareholders (MRCPS)	98	-
Liabilities classified as held for sale	76	-
Other current liabilities	841	915
<b>Current liabilities</b>	<b>1,887</b>	<b>1,842</b>
Bank loans – secured	9,077	9,532
Payable to shareholders (MRCPS)	9,556	9,624
Other non-current liabilities	2,810	2,413
<b>Non-current liabilities</b>	<b>21,443</b>	<b>21,569</b>
<b>Total liabilities</b>	<b>23,330</b>	<b>23,411</b>
<b>Net assets</b>	<b>16,362</b>	<b>14,975</b>
Group's interest of 37.5 per cent of APLNG net assets	6,136	5,615
Group's own costs	25	25
Mandatorily Redeemable Cumulative Preference Shares elimination <sup>(1)</sup>	(173)	(177)
<b>Investment in Australia Pacific LNG Pty Ltd</b>	<b>5,988</b>	<b>5,463</b>

(1) The Mandatorily Redeemable Cumulative Preference Shares (MRCPS) are recognised as a financial asset by the Group, and the MRCPS dividend is recognised as interest revenue in the Group's income statement. The proportion attributable to the Group's own interest (37.5 per cent) is eliminated through the equity accounted investment balance as Australia Pacific LNG has capitalised a portion of interest expense associated with the MRCPS.

Balance sheet amounts are converted from USD to AUD using an end of period exchange rate of 0.7384 (2017: 0.7689).

Australia Pacific LNG is subject to the Petroleum Resource Rent Tax legislation and has an unrecognised deferred tax asset balance of \$6,220 million (100 per cent Australia Pacific LNG) at 30 June 2018 (2017: \$5,377 million). Any future recognition of this balance by Australia Pacific LNG will result in an increase in the Group's equity accounted investment in Australia Pacific LNG, rather than wa deferred tax asset, as the Group equity accounts its 37.5 per cent interest.

## E1 Joint arrangements (continued)

### E1.3 Transactions between the Group and Australia Pacific LNG Pty Ltd

The Group provides services to Australia Pacific LNG including corporate services, upstream operating services related to the development and operation of Australia Pacific LNG's natural gas assets, and marketing services relating to coal seam gas (CSG). The Group incurs costs in providing these services and charges Australia Pacific LNG for them in accordance with the terms of the contracts governing those services.

Separately, the Group has entered agreements with Australia Pacific LNG to purchase gas (2018: \$476 million; 2017: \$255 million) and the Group sells gas to Australia Pacific LNG (2018: \$118 million; 2017: \$66 million). At 30 June 2018, the Group's outstanding payable balance for purchases from Australia Pacific LNG was \$56 million (2017: \$nil) and outstanding receivable balance for sales to Australia Pacific LNG was \$7 million (2017: \$3 million).

The Group has invested in Mandatorily Redeemable Cumulative Preference Shares (MRCPS) issued by Australia Pacific LNG (APLNG). The MRCPS existing at 1 July 2016 were cancelled and replaced with US\$2.8 billion of MRCPS and US\$0.8 billion capital contribution. On 23 April 2018 the MRCPS balance reduced to US\$2.7 billion following a US\$0.1 billion share buy-back by APLNG. The MRCPS are the mechanism by which the funding for the CSG to LNG Project has been provided by the shareholders of Australia Pacific LNG in proportion to their ordinary equity interests. The MRCPS have a fixed rate dividend obligation based on the relevant observable market interest rates and estimated credit margin at the date of issue. The dividend is paid twice per annum. The mandatory redemption date for the MRCPS is 30 June 2026. The financial asset (loan) reflecting these MRCPS was \$3,620 million as at 30 June 2018 (2017: \$3,609 million). Dividends received are recognised as interest. Refer to note A2.

The carrying value of the financial asset at 30 June 2018, as disclosed in note B6, reflects the Group's view that Australia Pacific LNG will utilise cash flows generated from operations to redeem the MRCPS for their full issue price prior to their mandatory redemption date. There are no conditions existing at the reporting date which indicate that Australia Pacific LNG will be unable to repay the full carrying value. Accordingly the financial asset/(loan) is valued at amortised cost and reflects the cash provided to Australia Pacific LNG.

### E1.4 Interests in unincorporated joint operations

The Group's interests in unincorporated joint operations are brought to account on a line-by-line basis in the income statement and statement of financial position. These interests are held on the following assets whose principal activities are oil and/or gas exploration, development and production, power generation and geothermal power technology:

- Bonaparte Basin
- Browse Basin
- Otway Basin
- Geodynamics
- Beetaloo Basin

## E2 Business combinations

There were no significant business combinations during the years ended 30 June 2018 and 30 June 2017.

### E3 Controlled entities

The financial statements of the Group include the consolidation of Origin Energy Limited and controlled entities. Controlled entities are the following entities controlled by the parent entity (Origin Energy Limited).

	Incorporated in	2018 Ownership interest per cent	2017 Ownership interest per cent
Origin Energy Limited	NSW		
Origin Energy Finance Limited	Vic	100	100
Huddart Parker Pty Limited <	Vic	100	100
Origin Energy NZ Share Plan Limited	NZ	100	100
FRL Pty Ltd <	WA	100	100
B.T.S. Pty Ltd <	WA	100	100
Origin Energy Power Limited <	SA	100	100
Origin Energy SWC Limited <	WA	100	100
BESP Pty Ltd	Vic	100	100
Origin Energy Eraring Pty Limited <	NSW	100	100
Origin Energy Eraring Services Pty Limited <	NSW	100	100
Darling Downs Solar Farm Asset Holding Pty Ltd	NSW	100	100
Darling Downs Solar Farm Asset Pty Ltd	NSW	100	100
Origin Energy Upstream Holdings Pty Ltd	Vic	100	100
Origin Energy B2 Pty Ltd	Vic	100	100
Origin Energy Petroleum Pty Limited <	Qld	100	100
Origin Energy Browse Pty Ltd	Vic	100	100
Origin Energy CSG 2 Pty Limited	Vic	100	100
Origin Energy ATP 788P Pty Limited	Qld	100	100
Origin Energy Upstream Operator Pty Ltd	Vic	100	100
Origin Energy Upstream Operator 2 Pty Ltd	Vic	100	100
Origin Energy Holdings Pty Limited <	Vic	100	100
Origin Energy Retail Limited <	SA	100	100
Origin Energy (Vic) Pty Limited <	Vic	100	100
Gasmart (Vic) Pty Ltd <	Vic	100	100
Origin Energy (TM) Pty Limited <	Vic	100	100
Cogent Energy Pty Ltd	Vic	100	100
Origin Energy Retail No. 1 Pty Limited	Vic	100	100
Origin Energy Retail No. 2 Pty Limited	Vic	100	100
Horan & Bird Energy Pty Ltd	Qld	100	100
Origin Energy Electricity Limited <	Vic	100	100
Eraring Gentrader Depositor Pty Limited	Vic	100	100
Sun Retail Pty Ltd <	Qld	100	100
OE Power Pty Limited <	Vic	100	100
Origin Energy Uranquinty Power Pty Ltd <	Vic	100	100

## E3 Controlled entities (continued)

	Incorporated in	2018 Ownership interest per cent	2017 Ownership interest per cent
Origin Energy Mortlake Terminal Station No. 1 Pty Limited	Vic	100	100
Origin Energy Mortlake Terminal Station No. 2 Pty Limited	Vic	100	100
Origin Energy PNG Ltd #	PNG	66.7	66.7
Origin Energy PNG Holdings Limited #	PNG	100	100
Origin Energy Tasmania Pty Limited <	Tas	100	100
The Fiji Gas Co Ltd	Fiji	51	51
Origin Energy Contracting Limited <	Qld	100	100
Origin Energy LPG Limited <	NSW	100	100
Origin (LGC) (Aust) Pty Limited <	NSW	100	100
Origin Energy SA Pty Limited <	SA	100	100
Hylemit Pty Limited	Vic	100	100
Origin Energy LPG Retail (NSW) Pty Limited	NSW	100	100
Origin Energy WA Pty Limited <	WA	100	100
Origin Energy Services Limited <	SA	100	100
OEL US Inc.	USA	100	100
Origin Energy NSW Pty Limited <	NSW	100	100
Origin Energy Asset Management Limited <	SA	100	100
Origin Energy Pipelines Pty Limited <	NT	100	100
Origin Energy Pipelines (SESA) Pty Limited	Vic	100	100
Origin Energy Pipelines (Vic) Holdings Pty Limited <	Vic	100	100
Origin Energy Pipelines (Vic) Pty Limited <	Vic	100	100
Origin LPG (Vietnam) LLC	Vietnam	51	51
Origin Energy Solomons Ltd	Solomon Islands	80	80
Origin Energy Cook Islands Ltd	Cook Islands	100	100
Origin Energy Vanuatu Ltd	Vanuatu	100	100
Origin Energy Samoa Ltd	Western Samoa	100	100
Origin Energy American Samoa Inc	American Samoa	100	100
Origin Energy Insurance Singapore Pte Ltd	Singapore	100	100
Acumen Metering Pty Ltd	Vic	-	100
Angari Pty Limited <	SA	100	100
Oil Investments Pty Limited <	SA	100	100
Origin Energy Southern Africa Holdings Pty Limited	Qld	100	100
Origin Energy Kenya Pty Limited	Vic	100	100
Origin Energy Zoca 91-08 Pty Limited <	SA	100	100
Sagasco NT Pty Ltd <	SA	100	100
Sagasco Amadeus Pty Ltd <	SA	100	100
Origin Energy Amadeus Pty Limited <	Qld	100	100
Amadeus United States Pty Limited <	Qld	100	100

## E3 Controlled entities (continued)

	Incorporated in	2018 Ownership interest per cent	2017 Ownership interest per cent
Origin Energy Vietnam Pty Limited	Vic	100	100
Origin Energy Singapore Holdings Pte Limited	Singapore	100	100
Origin Energy (Song Hong) Pte Limited	Singapore	100	100
Origin Future Energy Pty Limited	NSW	100	100
Origin Energy Metering Coordinator Pty Ltd	NSW	100	100
Origin Energy Resources NZ (Rimu) Limited	NZ	100	100
Lattice Energy Limited <	SA	-	100
Lattice Energy Resources (Bonaparte) Pty Limited <	SA	-	100
Lattice Energy Resources (Perth Basin) Pty Limited <	ACT	-	100
Lattice Energy Resources (Bass Gas) Limited	UK	-	100
Lattice Energy Resources NZ (Holdings) Limited	NZ	-	100
Kupe Development Limited	NZ	-	100
Kupe Mining (No.1) Limited	NZ	-	100
Lattice Energy Resources NZ (Kupe) Limited	NZ	-	100
Lattice Energy Resources NZ (TAWN) Limited	NZ	-	100
OE Resources Limited Partnership	NSW	-	100
Lattice Energy Services Pty Limited	Vic	-	100
Lattice Energy Finance Limited	Vic	-	100
Origin Energy VIC Holdings Pty Limited <	Vic	100	100
Origin Energy New Zealand Limited	NZ	100	100
Origin Energy Universal Holdings Limited	NZ	100	100
Origin Energy Five Star Holdings Limited	NZ	100	100
Origin Energy Contact Finance Limited	NZ	100	100
Origin Energy Contact Finance No.2 Limited	NZ	100	100
Origin Energy Pacific Holdings Limited	NZ	100	100
Origin Energy Capital Ltd<	Vic	100	100
Origin Energy Finance Company Pty Limited <	Vic	100	100
OE JV Co Pty Limited <	Vic	100	100
OE JV Holdings Pty Limited	Vic	100	100
Origin Energy LNG Holdings Pte Limited	Singapore	100	100
Origin Energy LNG Portfolio Pty Ltd <	Victoria	100	100
Origin Energy Australia Holding BV #	Netherlands	100	100
Origin Energy Mt Stuart BV #	Netherlands	100	100
OE Mt Stuart General Partnership #	Netherlands	100	100
Parbond Pty Limited	NSW	100	100
Origin Education Foundation Pty Limited	Vic	100	100
Origin Foundation Limited	NSW	100	-



### E3 Controlled entities (continued)

	Incorporated in	2018 Ownership interest per cent	2017 Ownership interest per cent
Origin Renewable Energy Investments No 1 Pty Ltd	Vic	100	100
Origin Renewable Energy Investments No 2 Pty Ltd	Vic	100	100
Origin Renewable Energy Pty Ltd	Vic	100	100
Origin Energy Geothermal Holdings Pty Ltd	Vic	100	100
Origin Energy Geothermal Pty Ltd	Vic	100	100
Origin Energy Chile Holdings Pty Limited	Vic	100	100
Origin Energy Chile S.A. #	Chile	100	100
Origin Energy Geothermal Chile Limitada #	Chile	100	100
Nido Energy SpA #	Chile	100	100
Pleiades S.A	Chile	100	100
Origin Energy Geothermal Singapore Pte Limited	Singapore	100	100
Origin Energy Wind Holdings Pty Ltd	Vic	100	100
Crystal Brook Wind Farm Pty Limited	NSW	100	100
Wind Power Pty Ltd	Vic	100	100
Wind Power Management Pty Ltd	Vic	100	100
Lexton Wind Farm Pty Ltd	Vic	100	100
Tuki Wind Farm Pty Ltd	Vic	100	100
Dundas Tablelands Wind Farm Pty Limited	Vic	100	100
Origin Energy Hydro Bermuda Limited	Bermuda	100	100
Origin Energy Hydro Chile SpA #	Chile	100	100

< Entered into ASIC Corporations (Wholly-owned Companies) Instrument 2016/785 and related deed of cross guarantee with Origin Energy Limited.

# Controlled entity has a financial reporting period ending 31 December.

## E3 Controlled entities (continued)

### Changes in controlled entities

#### 2018

Lattice Energy Limited transferred its shares in Origin Energy Browse Pty Ltd and Origin Energy Petroleum Pty Ltd to Origin Energy Upstream Holdings Pty Ltd on 31 August 2017.

Origin Energy Power Limited transferred its shares in Darling Downs Solar Farm Operating Holding Pty Ltd to Origin Energy Holdings Pty Limited on 27 July 2017.

Darling Downs Solar Farm Operating Holding Pty Ltd changed its name to Origin Future Energy Pty Limited on 7 August 2017.

Origin Future Energy Pty Ltd transferred its shares in Darling Downs Solar Farm Operating Pty Ltd to Origin Energy Holdings Pty Ltd on 24 August 2017.

Darling Downs Solar Farm Operating Pty Ltd changed its name to Origin Energy Metering Coordinator Pty Ltd on 24 August 2017.

Lattice Energy Resources NZ (Holdings) Limited transferred its shares in Origin Energy Resources NZ (Rimu) Limited to Origin Energy Holdings Pty Ltd on 25 September 2017.

Lattice Energy Limited transferred its shares in Origin Energy CSG 2 Pty Ltd and Origin Energy ATP 788P Pty Ltd to Origin Energy Upstream Holdings Pty Ltd on 26 September 2017.

Origin Foundation Pty Limited changed its name to Origin Education Foundation Pty Limited on 11 January 2018.

Origin Foundation Limited was incorporated on 12 January 2018.

On 31 January 2018 Lattice Energy Limited ceased to be controlled by the Group (refer note E4).

Acumen Metering Pty Ltd was sold on 19 June 2018.

#### 2017

Sagasco South East Inc was deregistered on 10 October 2016.

Cullerin Range Wind Farm Pty Ltd and Stockyard Hill Wind Farm Pty Ltd were sold during the year ended 30 June 2017.

Darling Downs Solar Farm Operating Holding Pty Ltd, Darling Downs Solar Farm Asset Holding Pty Ltd, Darling Downs Solar Farm Asset Pty Ltd and Darling Downs Solar Farm Operating Pty Ltd were incorporated during the year ended 30 June 2017.

The following name changes occurred on 1 February 2017:

Origin Energy Pinjar Holdings No. 1 Pty Limited changed its name to Origin Energy Upstream Holdings Pty Ltd.

Origin Energy Pinjar Holdings No. 2 Pty Limited changed its name to Origin Energy Upstream Operator Pty Ltd.

Origin Energy Pinjar No. 1 Pty Limited changed its name to Origin Energy B2 Pty Ltd.

Origin Energy Pinjar No. 2 Pty Limited changed its name to Origin Energy Upstream Operator 2 Pty Ltd.

Origin Energy Darling Downs Solar Farm Pty Ltd changed its name to Darling Downs Solar Farm Pty Ltd on 26 April 2017. Darling Downs Solar Farm Pty Ltd was sold on 6 April 2017.

On 28 April 2017 Origin Energy Fairview Transmissions Pty Limited changed its name to Lattice Energy Services Pty Limited.

Origin Energy Walloons Transmissions Pty Limited, Origin Energy Wallumbilla Transmissions Pty Limited and Oil Company of Australia (Moura) Transmissions Pty Ltd were sold on 6 June 2017.

Lattice Energy Finance Limited was incorporated on 26 June 2017.

Origin Energy Pinjar Security Pty Ltd changed its name to Acumen Metering Pty Ltd effective from 27 June 2017.

Origin Energy Resources Limited changed its name to Lattice Energy Limited on 29 June 2017.

The following name changes occurred on 28 June 2017:

Origin Energy Developments Pty Limited changed its name to Lattice Energy Resources (Perth Basin) Pty Limited.

Origin Energy Bonaparte Pty Limited changed its name to Lattice Energy Resources (Bonaparte) Pty Limited.

Origin Energy Northwest Limited changed its name to Lattice Energy Resources (Bass Gas) Limited.

Origin Energy Resources (Kupe) Limited changed its name to Lattice Energy Resources NZ (Kupe) Limited.

Origin Energy Resources NZ Limited changed its name to Lattice Energy Resources NZ (Holdings) Limited.

Origin Energy Resources NZ (TAWN) Limited changed its name to Lattice Energy Resources NZ (TAWN) Limited.

## E4 Discontinued operations and disposals

### E4.1 Discontinued operations

On 6 December 2016 the Group announced its intention to divest the Lattice Energy assets. The associated earnings have been classified as discontinued operations in the income statement and all related note disclosures for the current and comparative period.

Earnings from the Darling Downs Pipeline and the Jingemina asset in Western Australia have been classified as discontinued operations in the income statement and all related note disclosures for the comparative period.

<b>for the year ended 30 June</b>	<b>2018</b>	<b>2017</b>
<b>Results of discontinued operations</b>	<b>\$million</b>	<b>\$million</b>
Revenue	279	461
Net (loss)/gain on sale of assets	(3)	234
Expenses	(71)	(154)
Impairment	(198)	(753)
Net financing costs	(8)	(12)
<b>Loss before income tax</b>	<b>(1)</b>	<b>(224)</b>
Income tax (expense)/benefit	(61)	50
<b>Loss after tax from discontinued operations</b>	<b>(62)</b>	<b>(174)</b>
<b>Attributable to:</b>		
Members of the parent entity	(62)	(174)
Non-controlling interests	-	-
	(62)	(174)
Financing costs capitalised	1	8
<b>Cash flows of discontinued operations</b>		
Cash flows from operating activities	140	284
Cash flows used in investing activities	(94)	(178)
<b>Net increase in cash and cash equivalents</b>	<b>46</b>	<b>106</b>

## E4 Discontinued operations and disposals (continued)

### E4.2 Disposals

On 26 April 2016 the Group entered into a Sale Agreement with Cyclone Energy Pty Ltd for the sale of the Jingemia asset in Western Australia. Completion of the transaction occurred on 14 July 2017 for cash proceeds of \$1. The assets and liabilities disposed primarily comprised a restoration provision of \$7 million, resulting in a pre-tax gain on sale of \$7 million, net of transaction costs.

On 28 September 2017 the Group entered into an agreement to sell its conventional upstream oil and gas business, Lattice Energy Limited (Lattice Energy), to Beach Energy with an economic effective date of 1 July 2017. Completion of the sale occurred on 31 January 2018.

On 24 May 2018 the Group entered into a Share and Asset Sale Agreement with Spark Investment Bidco Pty Ltd and IntelliHUB Operations Pty Limited for the sale of the Acumen Metering business. Completion of the sale occurred on 19 June 2018.

The assets and liabilities relating to the divestment of the conventional upstream business, Acumen metering business and Jingemia assets were classified as held for sale at 30 June 2017. All of these assets and liabilities have been disposed of during the year.

	Lattice Energy 2018 \$million	Acumen 2018 \$million
<b>Reconciliation of (loss)/gain on sale</b>		
Consideration received	1,317	267
Net assets disposed	(1,309)	(28)
<b>Gain on sale before income tax expense and reclassification of foreign currency translation reserve</b>	8	239
Reclassification of foreign currency translation reserve	(18)	-
<b>(Loss)/gain on sale before income tax expense</b>	<b>(10)</b>	<b>239</b>

	2018 \$million	2018 \$million
<b>Carrying value of net assets disposed</b>		
Cash and cash equivalents	100	-
Trade and other receivables	150	2
Inventories	49	1
Property, plant and equipment	1,384	19
Exploration and evaluation assets	7	-
Intangible assets	1	10
Deferred tax assets	255	-
Trade and other payables	(158)	(4)
Provisions and employee benefits	(479)	-
<b>Net assets disposed</b>	<b>1,309</b>	<b>28</b>

	2018 \$million	2018 \$million
<b>Reconciliation of cash consideration</b>		
Consideration	1,506	267
Less: settlement of Benaris acquisition transaction (Lattice Energy)	(189)	-
Consideration (net of transaction costs)	1,317	267
Less: Cash and cash equivalents disposed	(100)	-
<b>Consideration (net of cash disposed)</b>	<b>1,217</b>	<b>267</b>

## F Other information

This section includes other information to assist in understanding the financial performance and position of the Group, or items required to be disclosed to comply with accounting standards and other pronouncements.

### F1 Contingent liabilities

Discussed below are items for which it is not probable that the Group will have to make future payments or the amount of the future payments cannot be reliably measured.

#### Guarantees

Bank guarantees and letters of credit have been provided mainly to Australian Energy Market Operator Limited to support the Group's obligations to purchase electricity from the National Electricity Market.

	2018 \$million <sup>(1)</sup>	2017 \$million <sup>(2)</sup>
Bank guarantees – unsecured	408	368
Letters of credit – unsecured	–	2

(1) Includes unsecured bank guarantees of \$9 million related to discontinued operations of which \$8 million were cancelled on 3 July 2018 and \$1 million are in the process of being cancelled.

(2) Includes unsecured bank guarantees of \$13 million related to discontinued operations.

The Group's share of guarantees for certain contractual commitments of its joint ventures is shown at note F2. The Group has also given letters of comfort to its bankers in respect of financial arrangements provided by the banks to certain partly-owned controlled entities.

#### Joint arrangements

As a participant in certain joint arrangements, the Group is liable for its share of liabilities incurred by these arrangements. In some circumstances the Group may incur more than its proportionate share of such liabilities, but will have the right to recover the excess liability from the other joint arrangement participants.

During the period, Australia Pacific LNG (APLNG) made principal repayments of US\$713 million and interest payments on the project finance facility of US\$324 million. At 30 June 2018, the total outstanding balance of the project finance facility was US\$7,346 million.

In August 2017, the final Project Finance lenders' tests were passed which removed the remaining project finance guarantees provided by the Company's shareholders.

In September 2016, APLNG made a loan to the Group of US\$96 million and receipt of this US\$96 million from APLNG is shown as a current payable to joint ventures in the statement of financial position. A further US\$60 million was loaned by APLNG to Origin in September 2017, bringing the total loan amount to US\$156 million. These loans were made by APLNG to the Group in accordance with the terms of the APLNG project financing facility, which allows APLNG to make a loan to a shareholder if the shareholder provides the project financiers with a letter of credit for the amount of the loan.

The Group continues to provide parent company guarantees in excess of its 37.5 per cent shareholding in Australia Pacific LNG in respect of certain historical domestic contracts.

#### Legal and regulatory

Certain entities within the Group (and joint venture entities, such as Australia Pacific LNG) are subject to various lawsuits and claims as well as audits and reviews by government or regulatory bodies. In most instances it is not possible to reasonably predict the outcome of these matters or their impact on the Group. Where outcomes can be reasonably predicted, provisions are recorded.

A number of sites owned/operated (or previously owned/operated) by the Group have been identified as contaminated. These properties are subject to ongoing environmental management programs. For sites where the requirements can be assessed and remediation costs can be estimated, such costs have been expensed or provided for.

Warranties and indemnities have also been given and/or received by entities in the Group in relation to environmental liabilities for certain properties divested and/or acquired.

#### Capital expenditure

As part of the acquisition of Browse Basin exploration permits, the Group agreed to pay cash consideration of US\$75 million contingent upon a project Final Investment Decision (FID) and US\$75 million contingent upon first production. The Group will pay further contingent consideration of up to US\$50 million upon first production if 2P reserves, at the time of FID, reach certain thresholds. These obligations have not been provided for at the reporting date as they are dependent upon uncertain future events not wholly within the Group's control.

## F2 Commitments

Detailed below are the Group's contractual commitments that are not recognised as liabilities as the relevant assets have not yet been received.

	2018 \$million <sup>(1)</sup>	2017 \$million <sup>(1)</sup>
Capital expenditure commitments	87	72
Joint venture commitments <sup>(2)</sup>	452	740
Operating lease commitments <sup>(3)</sup>	505	465

The Group leases property, plant and equipment under operating leases with terms of one to 10 years. The future minimum lease payments under non-cancellable operating leases are shown below.

	2018 \$million	2017 \$million <sup>(3)</sup>
Less than one year	85	97
Between one and five years	191	186
More than five years	229	182
	<b>505</b>	<b>465</b>

(1) Includes \$Nil (June 2017: \$9 million) of capital expenditure commitments and \$Nil (June 2017: \$104 million) of joint venture commitments relating to discontinued operations.

(2) Includes \$441 million (2017: \$623 million) in relation to the Group's share of Australia Pacific LNG's capital, joint venture and operating lease commitments.

(3) Prior year disclosure has been restated by \$67 million to reflect additional operating lease arrangements identified during the period.

## F3 Share-based payments

This section sets out details of the Group's share-based remuneration arrangements, including details of the Company's Equity Incentive Plan and Employee Share Plan.

The table below shows share-based remuneration expense that was recognised during the year.

	Ref.	2018 \$million	2017 \$million
Origin Equity Incentive Plan	(a)	25	25
Origin Employee Share Plan	(b)	5	5
		<b>30</b>	<b>30</b>

## F3 Share-based payments (continued)

### Explanatory notes to share-based payments for the year ended 30 June

#### (a) Equity Incentive Plan

Eligible employees are granted share-based remuneration under the Origin Energy Limited Equity Incentive Plan. Participation in the plan is at the Board's discretion and no individual has a contractual right to participate or to receive any guaranteed benefits. Equity incentives granted prior to 1 July 2018 were offered in the form of Options and/or share rights; from 1 July 2018 in the form of Share Rights and/or Restricted Shares.

#### (i) Short Term Incentive (STI)

STI includes the award of Deferred Share Rights (DSRs) and/or Restricted Shares, which vest or are unrestricted where the employee remains employed with satisfactory performance for a set period (generally after two and up to four years). DSRs do not carry voting or dividend entitlements. Once vested, a DSR entitles the holder to one fully paid ordinary share of the Company. As there is no exercise price for DSRs, they are exercised automatically upon vesting. The fair value of DSRs is recognised as an employee expense over the related service period. DSRs are forfeited if the service and performance conditions are not met. In exceptional circumstances<sup>(1)</sup> the DSRs, which represent a portion of the earned STI within the employee's remuneration package, will vest at cessation unless the Board determines otherwise. Fair value is measured at grant date as the market value of an Origin share less the discounted value of dividends foregone (two year vesting period: \$7.65, three year vesting period: \$7.43 and four year vesting period: \$7.21). As at 30 June 2018, Restricted Shares have not been used but are expected to be used during FY19.

#### (ii) Long Term Incentive (LTI)

LTI includes the award of Performance Share Rights (PSRs) and, prior to 1 July 2018 Options. Neither PSRs nor Options carry dividend or voting entitlements and will only vest if certain company performance conditions and personal performance standards are met. For grants during FY18 PSRs have a performance period of four years, and Options have a performance period of five years.

Half of each LTI award is subject to a market hurdle, namely Origin's Total Shareholder Return (TSR) relative to a Reference Group of ASX-listed companies identified in the relevant Remuneration Report.

The remaining half of each LTI award is subject to an internal hurdle, namely Return on Capital Employed (ROCE) as set out in the relevant Remuneration Report.

The number of awards that may vest depends on performance against each hurdle, considered separately.

For awards subject to the relative TSR hurdle, no vesting occurs unless Origin's TSR over the performance period is ranked above the 50th percentile of the Reference Group. 50 per cent vesting occurs if the 50th percentile is exceeded. Full vesting occurs if Origin is ranked at or above the 75th percentile of the Reference Group, with pro-rata vesting between these two vesting points.

For awards granted in FY16 and FY17 subject to the ROCE hurdle, no vesting occurs unless Origin achieves two conditions, the first to meet the average of the annual target ROCEs, and the second to achieve Origin's weighted average cost of capital (WACC) in either of the last two years of the performance period.

For awards granted in respect of FY18 that are subject to the ROCE hurdle, average actual ROCE outcomes will need to exceed average annual WACC and will be tested separately for the Integrated Gas and the Energy Markets businesses.

In all cases, meeting or exceeding the ROCE targets will result in half of the relevant PSRs vesting, while exceeding the WACC targets by two percentage points or more will result in all of the relevant PSRs vesting, with straight line proportionate vesting in between.

Vested Options may be exercised up to a maximum of 10 years after grant date. The exercise price of Options is based on the weighted average price of the Company's shares over a period of 30 trading days referenced to 30 June. As there is no exercise price for PSRs, once vested they are exercised automatically. When exercised, either automatically or upon payment of the exercise price, a vested award is converted into one fully paid ordinary share that carries voting and dividend entitlements.

The fair value of the awards granted is recognised as an employee expense, with a corresponding increase in equity, over the vesting period. In exceptional circumstances<sup>(1)</sup> unvested PSRs or Options may be held 'on foot' subject to the specified performance hurdles and other plan conditions being met, or dealt with in an appropriate manner determined by the Board. For PSRs or Options subject to the relative TSR condition fair value is measured at grant date using a Monte Carlo simulation model that takes into account the exercise price, share price at grant date, price volatility, dividend yield, risk-free interest rate for the term of the security and the likelihood of meeting the TSR market condition. The expected volatility reflects the assumption that the historical volatility over a period similar to the life of the options is indicative of future trends, which may not necessarily be the actual outcome. The amount recognised as an expense is adjusted to reflect the actual number of awards that vest except where due to non-achievement of the TSR market condition. Set out below are the inputs used to determine the fair value of the PSRs and Options granted during the year. For PSRs subject to the ROCE condition, the initial fair value at grant date is the market value of an Origin share less the discounted value of dividends foregone, and the expensing value is trueed-up at each reporting period to the expected outcome as assessed at that time.

(1) The Equity Incentive Plan Rules set out the circumstances as death, disability, redundancy, genuine retirement, or other exceptional circumstances approved by the Board.

### F3 Share-based payments (continued)

#### Explanatory notes to share-based payments for the year ended 30 June (continued)

	Options		
	30-Aug-17	30-Aug-17	18-Oct-17
Grant date			
Grant date share price	\$7.65	\$7.65	\$7.38
Exercise price	\$7.37	\$7.37	\$7.37
Volatility (per cent)	40%	40%	40%
Dividend yield (per cent) <sup>(1)</sup>	1.8%	1.8%	1.8%
Risk-free rate (per cent)	2.35%	2.43%	2.51%
Grant date fair value (per award)	\$2.52	\$2.50	\$2.30

(1) Dividend assumptions are the compound average per annum rate over the vesting period (4 years PSRs, and 5 years Options).

	PSRs			
	30-Aug-17	30-Aug-17	30-Aug-17	18-Oct-17
Grant date				
Grant date share price	\$7.65	\$7.65	\$7.65	\$7.38
Exercise price	Nil	Nil	Nil	Nil
Volatility (per cent)	40%	40%	40%	40%
Dividend yield (per cent) <sup>(1)</sup>	1.5%	1.5%	1.5%	1.5%
Risk-free rate (per cent) <sup>(2)</sup>	-	2.11%	-	-
Grant date fair value (per award)	\$7.43	\$4.80	\$7.21	\$6.98

(1) Dividend assumptions are the compound average per annum rate over the vesting period (4 years PSRs, and 5 years Options).

(2) Where the risk free rate is nil, these PSR tranches are ROCE-tested, therefore the risk free rate is not relevant to their valuation.



### F3 Share-based payments (continued)

#### Explanatory notes to share-based payments for the year ended 30 June (continued)

##### Equity Incentive Plan awards outstanding

Set out below is a summary of awards outstanding at the beginning and end of the financial year.

	Options	Weighted average exercise price	PSRs	DSRs
Outstanding at 1 July 2017	9,886,114	\$10.35	3,486,357	5,434,657
Granted	1,432,299	\$7.37	1,117,385	2,943,713
Exercised	-	-	-	3,822,999
Forfeited	3,842,812	\$12.18	517,100	152,635
<b>Outstanding at 30 June 2018</b>	<b>7,475,601</b>	<b>\$8.84</b>	<b>4,086,642</b>	<b>4,402,736</b>
Exercisable at 30 June 2018	-	-	-	-
Outstanding at 1 July 2016	18,022,234	\$11.99	5,479,633	4,199,028
Granted	2,302,631	\$5.58	1,725,214	3,497,212
Exercised	-	-	-	1,986,376
Forfeited	10,438,751	\$12.13	3,718,490	275,207
<b>Outstanding at 30 June 2017</b>	<b>9,886,114</b>	<b>\$10.35</b>	<b>3,486,357</b>	<b>5,434,657</b>
Exercisable at 30 June 2017	-	-	-	-

The weighted average share price during 2018 was \$8.55 (2017: \$6.39). The options outstanding at 30 June 2018 have an exercise price in the range of \$5.21 to \$15.65 (2017: \$5.21 to \$15.65) and a weighted average contractual life of 6.9 years (2017: 6.3 years).

For more information on these share plans and performance rights issued to KMPs, refer to the Remuneration Report.

##### (b) General Employee Share Plan (GESP)

Under the GESP all full-time and permanent part-time employees of the Company who are based in Australia or New Zealand with at least one year of continuous service at 30 June of the performance year are granted up to AUD \$1,000 of fully paid Origin shares conditional upon the Company meeting certain safety targets. The shares are granted for no consideration. Shares awarded under the ESP are purchased on-market, registered in the name of the employee, and are restricted for three years, or until cessation of employment, whichever occurs first. New Zealand employees were able elect to have shares held in trust for three years; as at 30 June 2018 there were no New Zealand employees and no shares held in trust for them

For the award to be made later in 2018 (referable to FY2018 service) there is no conditional hurdle and the service period qualification has been reduced to commencement on or after 1 March 2018.

### F3 Share-based payments (continued)

#### Explanatory notes to share-based payments for the year ended 30 June (continued)

Details of the shares awarded under the GESP during the year are set out below.

	Grant date	Shares granted	Cost per share <sup>(1)</sup>	Total cost \$'000
<b>2018</b>	28-Aug-17	620,116	\$7.43	4,607
		<b>620,116</b>		<b>4,607</b>
<b>2017</b>	26-Aug-16	870,302	\$5.51	4,795
		<b>870,302</b>		<b>4,795</b>

(1) The cost per share represents the weighted average market price of the Company's shares on the grant date.

### F4 Related party disclosures

The Group's interests in equity accounted entities and details of transactions with these entities are set out in note E1.

Certain directors of Origin Energy Limited are also directors of other companies that supply Origin Energy Limited with goods and services or acquire goods or services from Origin Energy Limited. Those transactions are approved by management within delegated limits of authority and the Directors do not participate in the decisions to enter into such transactions. If the decision to enter into those transactions should require approval of the Board, the Director concerned will not vote upon that decision nor take part in the consideration of it.

### F5 Key management personnel

	2018 \$	2017 \$
Short-term employee benefits	9,704,215	9,383,880
Post-employment benefits	252,588	240,273
Other long-term benefits	150,525	373,647
Termination benefits	-	2,919,096
Share-based payments	4,343,944	2,371,204
	<b>14,451,272</b>	<b>15,288,100</b>

#### Loans and other transactions with key management personnel

There were no loans with key management personnel during the year.

Transactions entered into during the year with key management personnel are normal employee, customer or supplier relationships and have terms and conditions which are no more favourable than dealings in the same circumstances on an arm's length basis. These transactions include:

- the receipt of dividends from Origin Energy Limited or participation in the Dividend Reinvestment Plan;
- participation in the Employee Share Plan, Equity Incentive Plan and Non-Executive Director Share Plan;
- terms and conditions of employment or directorship appointment;
- reimbursement of expenses incurred in the normal course of employment;
- purchases of goods and services; and
- receipt of interest on Retail Notes.

## F6 Notes to the statement of cash flows

Cash includes cash on hand, at bank and short-term deposits, net of outstanding bank overdrafts.

	2018 \$million	2017 \$million
The following table reconciles profit to net cash provided by operating activities.		
<b>Profit/(loss) for the period</b>	<b>221</b>	<b>(2,223)</b>
Adjustments for:		
Depreciation and amortisation	381	481
Executive share-based payment expense	25	25
Impairment losses recognised – trade and other receivables	88	75
Exploration expense	8	62
Impairment of assets	712	1,692
Decrease/(increase) in fair value of financial instruments	624	(207)
Gain on sale of assets	(234)	(401)
Non-cash share of net profits of equity accounted investees	(205)	1,912
Unrealised foreign exchange (gain)/loss	(41)	76
Amortisation of oil option premiums	64	53
Net financing costs	279	341
Oil forward sale settlements(pre-early termination)	(86)	(141)
Electricity hedge premium	(160)	(133)
<b>Changes in assets and liabilities, net of effects from acquisitions/disposals</b>		
– Receivables	(321)	(487)
– Inventories	(66)	52
– Payables	128	58
– Provisions	(15)	(24)
– Tax balances	(58)	(23)
– Other	(51)	101
<b>Total adjustments<sup>(1)</sup></b>	<b>1,072</b>	<b>3,512</b>
<b>Net cash from operating activities</b>	<b>1,293</b>	<b>1,289</b>

(1) Adjustments include amounts that are classified as discontinued operations and held for sale at 30 June 2017. Refer to note E4 for details of cash flows relating to discontinued operations.

## F6 Notes to the statement of cash flows (continued)

### Reconciliation of movements of liabilities to cash flows arising from financing activities

\$million	Liabilities from financing activities			Total
	Current borrowings	Non-current borrowings	Other financial (assets)/liabilities	
<b>Balance as at 1 July 2017</b>	<b>133</b>	<b>8,382</b>	<b>111</b>	<b>8,626</b>
Proceeds from borrowings	-	925	-	925
Repayment of borrowings/other liabilities <sup>(1)</sup>	(167)	(2,268)	(472)	(2,907)
Foreign exchange adjustments	75	330	(271)	134
Other non-cash movements	1,048	(1,019)	(20)	9
<b>Balance as at 30 June 2018</b>	<b>1,089</b>	<b>6,350</b>	<b>(939)</b>	<b>6,500</b>

(1) The movement in other financial (assets)/liabilities includes a \$220 million cash repayment of cross-currency interest rate swaps.

## F7 Auditors' remuneration

During the year the following fees were paid or payable for services provided by the auditor of the parent entity, its related practices and non-related audit firms.

	2018 \$'000	2017 \$'000
<b>Audit and review services of the financial reports by:</b>		
Auditors of the Group (KPMG)	2,360	3,042
Other auditors	88	82
	<b>2,448</b>	<b>3,124</b>
<b>Other services by:</b>		
Auditors of the Group (KPMG)		
Accounting advice	-	45
Taxation services	97	65
Legal services	37	211
Lattice related services <sup>(1)</sup>	1,184	632
Advisory services	61	-
Other	179	18
	<b>1,558</b>	<b>971</b>
	<b>4,006</b>	<b>4,095</b>

(1) This amount relates to IPO transaction, US 144A advisory, accounting advice, legal advisory and taxation services for Lattice Energy.

## F8 Master netting or similar agreements

The Group enters into derivative transactions under International Swaps and Derivatives Association (ISDA) master netting agreements. In general, under such agreements the amounts owed by each counterparty on a single day in respect of all transactions outstanding in the same currency are aggregated into a net amount payable by one party to the other.

Financial assets and liabilities are offset, and the net amount reported in the statement of financial position, where the Group has a legally enforceable right to offset recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The Group has also entered into arrangements that do not meet the criteria for offsetting, but still allow for the related amounts to be offset in certain circumstances, such as a loan default or the termination of a contract.

The following table presents the recognised financial instruments that are offset, or subject to master netting arrangements but not offset, as at reporting date. The column 'net amount' shows the impact on the Group's statement of financial position if all set-off rights were exercised.

	Gross amount \$million	Amount offset in the statement of financial position \$million	Amount in the statement of financial position \$million	Related amount not offset \$million	Net amount \$million
<b>30 June 2018</b>					
Derivative financial assets	1,893	(254)	1,639	(678)	961
Derivative financial liabilities	(1,912)	254	(1,658)	678	(980)
<b>30 June 2017</b>					
Derivative financial assets	1,708	(412)	1,296	(414)	882
Derivative financial liabilities	(2,021)	412	(1,609)	414	(1,195)

## F9 Deed of Cross Guarantee

The parent entity has entered into a Deed of Cross Guarantee through which the Group guarantees the debts of certain controlled entities. The controlled entities that are party to the Deed are shown in note E3.

The following consolidated statement of comprehensive income and retained profits, and statement of financial position comprises the Company and its controlled entities which are party to the Deed of Cross Guarantee after eliminating all transactions between parties to the Deed.

<b>for the year ended 30 June</b>	<b>2018 \$million</b>	<b>2017 \$million</b>
<b>Consolidated statement of comprehensive income and retained profits</b>		
Revenue	14,297	13,646
Other income	95	393
Expenses	(13,554)	(12,509)
Share of results of equity accounted investees	205	(1,912)
Impairment	-	(753)
Interest income	228	224
Interest expense	(544)	(590)
<b>Profit/(loss) before income tax</b>	<b>727</b>	<b>(1,501)</b>
Income tax expense	(65)	(102)
<b>Profit/(loss) for the period</b>	<b>662</b>	<b>(1,603)</b>
Other comprehensive income	-	1
<b>Total comprehensive income for the period</b>	<b>662</b>	<b>(1,602)</b>
<b>Retained earnings at the beginning of the period</b>	<b>4,232</b>	<b>5,834</b>
Adjustments for entities entering the Deed of Cross Guarantee	(4)	-
<b>Retained earnings at the beginning of the period</b>	<b>4,228</b>	<b>5,834</b>
Dividends paid	-	-
<b>Retained earnings at the end of the period</b>	<b>4,890</b>	<b>4,232</b>

## F9 Deed of cross guarantee (continued)

as at 30 June	2018 \$million	2017 \$million
<b>Statement of financial position</b>		
<b>Current assets</b>		
Cash and cash equivalents	56	44
Trade and other receivables	3,146	3,321
Inventories	183	123
Derivatives	406	240
Other financial assets	208	86
Assets classified as held for sale	-	2,050
Other assets	151	99
<b>Total current assets</b>	<b>4,150</b>	<b>5,963</b>
<b>Non-current assets</b>		
Trade and other receivables	1,966	1,831
Derivatives	1,109	1,055
Other financial assets	4,274	4,614
Investments accounted for using the equity method	5,988	5,451
Property, plant and equipment	3,391	2,934
Exploration, evaluation and development assets	-	63
Intangible assets	5,130	5,131
Deferred tax assets	152	187
Other assets	38	34
<b>Total non-current assets</b>	<b>22,048</b>	<b>21,300</b>
<b>Total assets</b>	<b>26,198</b>	<b>27,263</b>
<b>Current liabilities</b>		
Trade and other payables	2,204	2,544
Payables to joint ventures	221	130
Interest-bearing liabilities	-	127
Derivatives	182	300
Other financial liabilities	61	387
Provision for income tax	114	51
Employee benefits	118	179
Provisions	34	33
Liabilities classified as held for sale	-	720
<b>Total current liabilities</b>	<b>2,934</b>	<b>4,471</b>
<b>Non-current liabilities</b>		
Trade and other payables	8,315	8,625
Interest-bearing liabilities	713	1,016
Derivatives	1,234	1,309
Employee benefits	19	34
Provisions	321	64
<b>Total non-current liabilities</b>	<b>10,602</b>	<b>11,048</b>
<b>Total liabilities</b>	<b>13,536</b>	<b>15,519</b>
<b>Net assets</b>	<b>12,662</b>	<b>11,744</b>
<b>Equity</b>		
Share capital	7,150	7,150
Reserves	622	362
Retained earnings	4,890	4,232
<b>Total equity</b>	<b>12,662</b>	<b>11,744</b>

## F10 Parent entity disclosures

The following table sets out the results and financial position of the parent entity, Origin Energy Limited.

Origin Energy Limited	2018 \$million	2017 Restated \$million
Loss for the period	(1,390)	(1,934)
Other comprehensive income, net of income tax	258	(187)
<b>Total comprehensive income for the period</b>	<b>(1,132)</b>	<b>(2,121)</b>
<b>Financial position of the parent entity at period end</b>		
Current assets	1,193	1,517
Non-current assets	20,164	21,779
<b>Total assets</b>	<b>21,357</b>	<b>23,296</b>
Current liabilities	3,596	2,373
Non-current liabilities	7,118	9,174
<b>Total liabilities</b>	<b>10,714</b>	<b>11,547</b>
Share capital	7,150	7,150
Share-based payments reserve	247	221
Foreign currency translation reserve	379	133
Hedging reserve	(13)	(25)
Retained earnings	2,880	4,270
<b>Total equity</b>	<b>10,643</b>	<b>11,749</b>
<b>Contingent liabilities of the parent entity</b>		
Bank guarantees – unsecured	213	126



## F10 Parent entity disclosures (continued)

The parent entity has entered into a deed of indemnity for the cross-guarantee of liabilities of a number of controlled entities. Refer to note E3.

The parent entity has also provided guarantees for certain contractual commitments of its joint ventures associated with capital projects.

### Change in accounting policy

The Group has re-assessed its accounting policy relating to accounting for interests in joint ventures in its parent entity. In the current year, the Group elected to change the method of accounting to use the equity method. The parent entity had previously measured its investments at cost.

The Group believes that this method provides more relevant information to the users of its financial statements and that it aligns the parent entity accounting policy to the Group's accounting treatment. The change in the parent entity has been applied retrospectively with an opening adjustment of \$4.0 billion recognised as an equity accounted investment classified under non-current assets and a corresponding increase in retained earnings of \$3.9 billion and foreign currency translation reserve of \$0.1 billion within equity.

In the current year, the applied equity accounting method has resulted in an increase in equity accounted investments of \$525 million with a corresponding increase in profit of \$205 million and foreign currency translation reserve of \$246 million.

## F11 New standards and interpretations not yet adopted

Australian Accounting Standards and Interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these standards, if applicable, when they become effective.

### AASB 9 Financial Instruments and AASB 2014-7 Amendments to Australian Accounting Standards arising from AASB 9

AASB 9 replaces AASB 139 *Financial Instruments: Recognition and Measurement* and generally simplifies the classification and measurement of financial instruments, introduces a new model for calculating impairment of financial assets, and aligns hedge accounting more closely with an entity's risk management practices.

In the current year, the Group completed its detailed impact assessment. The key impacts on the Group's accounting and reporting, as outlined below, are based on currently available information and may change should further reasonable and supportable information become available in 2018 when the Group adopts AASB 9.

The key changes to the Group's accounting for and reporting of financial instruments are outlined below.

- **Mandatorily Redeemable Cumulative Preference Shares (MRCPS)** – the MRCPS issued to the Group by Australia Pacific LNG are currently held at amortised cost. Under the new standard the MRCPS financial asset must be measured at fair value through profit and loss. At 30 June 2018, the fair value of the MRCPS receivable was \$3,465 million as compared to a carrying value of \$3,620 million.
- **Available-for-sale financial assets** – the Group's available-for-sale financial assets include Settlement Residue Distribution Agreements which are currently held at fair value through other comprehensive income. Under the new standard, changes in the fair value of these financial assets must be recognised in profit and loss. Cumulative fair value losses of \$22 million will be reclassified from reserves to retained earnings on initial adoption of AASB 9.

AASB 9 introduces an expected credit loss model for impairment of financial assets which replaces the existing incurred loss model. The various methodologies under which the Group currently calculates trade receivable and unbilled revenue impairment allowances have been reviewed and application of the new credit loss model will not have a material impact to the Group.

### AASB 15 Revenue from Contracts with Customers

AASB 15 replaces AASB 111 *Construction Contracts*, AASB 118 *Revenue* and related Interpretations and establishes a five-step model to account for revenue arising from contracts with customers. The core principle of AASB 15 is that revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to customers.

In the current year, the Group completed its detailed impact assessment which included review of a representative sample of revenue contracts and relevant industry guidance. As a result of the assessment, it is concluded that there will be no material adjustments to profit or retained earnings on adoption of AASB 15.

The revenue and expenses line items in the income statement will be subject to immaterial adjustments of equal amounts due to revised accounting for network connection fees passed onto customers in the Group's retail energy contracts and gas swap arrangements.

Further reclassification from other income to revenue may also arise where amounts recorded in other income are deemed to constitute contracts with customers under AASB 15.

### AASB 16 Leases

AASB 16 replaces AASB 117 *Leases* and related Interpretations. It is effective for the Group for the reporting period beginning 1 July 2019 and requires lessees to account for all leases under a single on-balance sheet model in a similar way to finance leases under the current standard. AASB 16 further introduces a new definition of a lease, which focuses on the right to control the use of an identified asset.

At the reporting date, the Group has \$505 million of non-cancellable operating lease commitments. Related information is disclosed in note F2 of the financial statements. Upon implementation of the new standard all lease arrangements will be recognised on the balance sheet. The Group has identified certain areas of the business where further work is required to understand and assess arrangements that may contain a lease under the new definition which are not leases under the current definition and therefore are not included in the non-cancellable operating lease commitment disclosures. In addition, the Group will need to assess option or renewal periods identified in lease agreements. Where such options are reasonably certain of exercise, payments in excess of those currently disclosed as operating lease commitments will be included in the calculation of the lease liability and right-of-use asset.

The Group's detailed impact assessment is ongoing and a reliable estimate of the impact is still being determined.

### Conceptual Framework for Financial Reporting

The International Accounting Standards Board (IASB) issued the revised Conceptual Framework on 20 March 2018. The Conceptual Framework sets out a comprehensive set of concepts for financial reporting, standard setting, guidance for preparing developing consistent accounting policies. The changes to the Conceptual Framework may affect the application of IFRS in situations where no standard applies to a particular transaction or event. The revised Conceptual Framework is effective for annual periods beginning on or after 1 January 2020.

The Group has assessed the impact of the changes to the Conceptual Framework. It is not expected to have a significant impact on the amounts recognised in these financial statements.

## F12 Subsequent events

No item, transaction or event of a material nature has arisen since 30 June 2018 that would significantly affect the operations of the Group, the results of those operations, or the state of affairs of the Group, in future financial periods.

# Directors' Declaration



- 1 In the opinion of the Directors of Origin Energy Limited (the Company):
  - (a) the consolidated financial statements and notes are in accordance with the *Corporations Act 2001* (Cth), including:
    - (i) giving a true and fair view of the financial position of the Group as at 30 June 2018 and of its performance, for the year ended on that date; and
    - (ii) complying with Australian Accounting Standards (including the Australian Accounting Interpretations) and the *Corporations Regulations 2001* (Cth).
  - (b) the consolidated financial statements also comply with International Financial Reporting Standards as disclosed in the Overview of the consolidated financial statements.
  - (c) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.
- 2 There are reasonable grounds to believe that the Company and the controlled entities identified in note E3 will be able to meet any obligations or liabilities to which they are or may become subject to by virtue of the Deed of Cross Guarantee between the Company and those controlled entities pursuant to ASIC Corporations (Wholly-owned Companies) Instrument 2016/785.
- 3 The Directors have been given the declarations required by section 295A of the *Corporations Act 2001* (Cth) from the Chief Executive Officer and the Chief Financial Officer for the financial year ended 30 June 2018.

Signed in accordance with a resolution of Directors

**Gordon Cairns**  
Chairman Director

Sydney, 16 August 2018



## Independent Auditor's Report

To the shareholders of Origin Energy Limited,

### Report on the audit of the Financial Report

#### Opinion

We have audited the **Financial Report** of Origin Energy Limited (the Company).

In our opinion, the accompanying Financial Report of the Company is in accordance with the *Corporations Act 2001*, including:

- giving a true and fair view of the **Group's** financial position as at 30 June 2018 and of its financial performance for the year ended on that date; and
- complying with *Australian Accounting Standards* and the *Corporations Regulations 2001*.

The **Financial Report** comprises:

- Consolidated statement of financial position as at 30 June 2018;
- Consolidated income statement, Consolidated statement of comprehensive income, Consolidated statement of changes in equity, and Consolidated statement of cash flows for the year then ended;
- Notes including a summary of significant accounting policies; and
- Directors' Declaration.

The **Group** consists of the Company and the entities it controlled at the year-end or from time to time during the financial year.

#### Basis for opinion

We conducted our audit in accordance with *Australian Auditing Standards*. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the Financial Report* section of our report.

We are independent of the Group in accordance with the *Corporations Act 2001* and the ethical requirements of the *Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the Financial Report in Australia. We have fulfilled our other ethical responsibilities in accordance with the Code.

#### Key Audit Matters

The **Key Audit Matters** we identified are:

- Carrying value of the Australian Pacific LNG (APLNG) equity accounted investment and Ironbark exploration asset
- Accounting for derivative financial assets and liabilities
- Unbilled revenue, and
- Unbilled network expenses

**Key Audit Matters** are those matters that, in our professional judgment, were of most significance in our audit of the Financial Report of the current period.

These matters were addressed in the context of our audit of the Financial Report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.



**Carrying value of Australia Pacific LNG (APLNG) equity accounted investment (A\$5,988m as at 30 June 2018) and Ironbark exploration asset (A\$296m as at 30 June 2018)**

Refer to Note E1 and B2 to the Financial Report

The key audit matter	How the matter was addressed in our audit
<p>The recoverability of the carrying value of the APLNG equity accounted investment and Ironbark exploration asset are considered a key audit matter. This is due to the:</p> <ul style="list-style-type: none"> <li>• Group's exposure to commodity price fluctuations, a fundamental input to these asset values;</li> <li>• Inherent complexity in estimating forecast future cash flows, used in the models to value these assets; and</li> <li>• Historical carrying value adjustments.</li> </ul> <p>Key matters we consider for both the APLNG and Ironbark Fair Value Less Cost of Disposal (FVLCOD) models include:</p> <ul style="list-style-type: none"> <li>• Economic assumptions such as commodity prices and foreign exchange rates due to the long term nature of these assets;</li> <li>• Cash generating units (CGU) specific factors, which are inherently complex to estimate including discount rates, forecast expenditure, and rehabilitation and abandonment costs; and</li> <li>• Available reserves and future production profiles. Reserve estimates are dependent on the production results and additional geological information obtained in the course of operations, as well as the judgment of the Group's internal specialists responsible for the determination of reserves.</li> </ul>	<p>In relation to asset carrying values based on FVLCOD models, our audit procedures included:</p> <ul style="list-style-type: none"> <li>• Assessing the accuracy of previous cash flow forecasts to challenge current period forecasts in areas where previous forecasts were not achieved.</li> <li>• Comparing the forecast cash flows included in the models to Board approved forecasts and estimates of future production profiles as published in the Group's 2018 annual reserves report.</li> <li>• Using our valuation specialists and comparing: <ul style="list-style-type: none"> <li>◦ Oil and gas price assumptions to a combination of observable external market forecasts, pricing of recent long-term supply contracts and internal supply/demand analysis;</li> <li>◦ Future foreign exchange rate assumptions to traded foreign exchange forward rates from external sources; and</li> <li>◦ The inputs to the CGUs' discount rates, including the risk free rate, equity beta, and market risk premium, to observable market and comparator group data.</li> </ul> </li> <li>• Comparing assumptions used by APLNG in the APLNG FVLCOD model to value their assets to assumptions used by the Group, including the impact of these on the APLNG valuation and conclusions reached.</li> <li>• Evaluating the competence, capability and objectivity of the Group's internal specialists responsible for the determination of reserve and production profiles.</li> <li>• Comparing rehabilitation and abandonment cost forecasts to the amounts included in the rehabilitation and abandonment provision models for consistency.</li> </ul>

**Accounting for derivative financial assets and liabilities (A\$1,639m and A\$1,658m respectively) as at 30 June 2018**

Refer to Note C2 – C5 to the Financial Report

The key audit matter	How the matter was addressed in our audit
<p>Accounting for derivative financial assets and liabilities is considered a key audit matter due to being inherently complex. The factors contributing</p>	<p>Our audit procedures included:</p> <ul style="list-style-type: none"> <li>• Using our valuation specialists and evaluating the methodology of the internal valuation models applied to Level 3 financial</li> </ul>



<p>to that complexity, included:</p> <ul style="list-style-type: none"> <li>the judgment required in the Group's estimation of the fair value of certain financial instruments within the Group's portfolio, particularly those Level 3 instruments, which are valued via internal models applying an industry accepted methodology and using key inputs that are not based on observable market data;</li> <li>the Group's application of hedge accounting to certain exposures in their portfolio in the initial year of designation as well as its monitoring of hedge effectiveness for compliance with the specific requirements of AASB139 Financial Instruments: recognition and measurement;</li> <li>the detailed spreadsheets used by the Group underlying the disclosures required by AASB7 Financial Instrument Disclosures, which are inherently more prone to error than system-generated calculations; and</li> <li>the Group's reliance on the operating effectiveness of a third party software system, REVAL, to value certain derivative financial instruments and apply hedge accounting.</li> </ul>	<p>instruments against market practices.</p> <ul style="list-style-type: none"> <li>Using our valuations specialists, we tested the internally derived inputs, such as long date forward curves and forecast volumes, in the level 3 valuations. We compared the unobservable inputs to our knowledge and understanding of the industry.</li> <li>Using our valuation specialists and independently re-performing a sample of Level 1 and 2 Group-prepared financial instrument valuations and hedge accounting results and comparing them to the Group's results.</li> <li>Obtaining and evaluating management's hedge documentation of new and changes to existing significant hedge relationships for compliance with AASB 139 Financial Instruments: recognition and measurement.</li> <li>Obtaining and evaluating the findings from the independent assurance report addressing the effectiveness of controls operating at the REVAL service organisation, for the implications to the Group's valuations. We tested key Group monitoring controls for the REVAL system and related valuation outputs, including user access testing and authorisation of program changes.</li> <li>Testing, on a sample basis, management authorisation controls and segregation of duties over the entry and settlement of financial instrument trades within the software systems: REVAL, Allegro, CETs and GETs.</li> <li>Checking, on a sample basis, the key terms for the entry of trades to underlying third party transaction documents. This includes: counterparty information, trade dates, rates, maturity dates and notional amount.</li> <li>Testing the integrity and mathematical accuracy of Group-prepared disclosure spreadsheets, checking disclosures to our audit work, and assessing the financial instrument disclosures in Notes C2 – C5 against the requirements of the accounting standard.</li> </ul>
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Unbilled revenue (A\$1,288m, net of allowance for impairment as at 30 June 2018)	
Refer to Note A2 and B1 to the Financial Report	
The key audit matter	How the matter was addressed in our audit
<p>The estimation of unbilled revenue is considered a key audit matter due to the estimation uncertainty involved in determining the volume of energy supplied since a customer's last bill and the application of complex pricing structures. Key factors impacting this estimate include:</p> <ul style="list-style-type: none"> <li>The different customer rates and product/plan</li> </ul>	<p>Our audit procedures included:</p> <ul style="list-style-type: none"> <li>Assessing the historical accuracy of the Group's estimates against subsequent billings to evaluate the accuracy of the Group's process and outcomes for estimating customer volumes of energy supplied, physical energy lost and rates applicable in determining the unbilled revenue estimate.</li> </ul>



Unbilled revenue (A\$1,288m, net of allowance for impairment as at 30 June 2018)	
<p>offerings across the various regulated and unregulated markets for both electricity and gas, which require stratification and disaggregation of our audit testing;</p> <ul style="list-style-type: none"> <li>The complex nature of estimating customer demand over a large number of customers. Customer demand can be influenced by a number of factors including weather and their individual circumstances. Due to large customer numbers, a small error in estimating demand at a customer level could have a large cumulative effect on estimates of total unbilled revenue; and</li> <li>Physical energy loss between purchasing energy and delivering the energy to the end customer, given its estimation difficulty.</li> </ul>	<ul style="list-style-type: none"> <li>Testing the volume of wholesale energy purchased by the Group to AEMO invoices on a sample basis.</li> <li>Reconciling purchase volumes to revenue volumes recognised.</li> <li>Challenging the current period estimate by comparing:                             <ul style="list-style-type: none"> <li>year end unbilled revenue amounts, by state and fuel type, against historical billings, and purchased volumes delivered to customers;</li> <li>year end unbilled revenue amounts to subsequent billings, where, possible, on a sample basis;</li> <li>average rates used in the accrual calculation to historical rates, current rates and retail offerings; and</li> <li>internally generated estimates of physical energy loss levels through the distribution process to the industry averages published by the Australian Electricity Market Operations (AEMO)</li> </ul> </li> </ul> <p>and investigating any unusual trends or variances.</p>

Unbilled network expenses contained within Trade Payables (A\$2,016m as at 30 June 2018)	
Refer to Note A2 to the Financial Report	
The key audit matter	How the matter was addressed in our audit
<p>The estimation of unbilled network expenses is considered a key audit matter due to the estimation uncertainty involved in estimating the volume of energy purchased to satisfy the Group's customer demand since the last bill. Key factors impacting this estimate include:</p> <ul style="list-style-type: none"> <li>Levels of customer demand and physical energy loss, all of which were outlined above in the Unbilled revenue key audit matter; and</li> <li>The amount of energy volume that was supplied to customers between the last invoice date from the respective distribution company and balance date.</li> </ul>	<p>Our audit procedures included:</p> <ul style="list-style-type: none"> <li>Assessing the historical accuracy of the Group's estimates against subsequent payments to distributors to evaluate the accuracy of the Group's process and outcomes for estimating customer volumes of energy supplied in determining the unbilled network expenses estimate.</li> <li>Testing the volume of wholesale energy purchased by the Group to AEMO invoices on a sample basis.</li> <li>Reconciling purchase volumes to revenue volumes recognised.</li> <li>Challenging the current period estimate by:                             <ul style="list-style-type: none"> <li>Comparing year end unbilled network expense accrual amounts, by state and fuel type, against historical distributor invoices and purchase volumes delivered to customers;</li> <li>Checking for consistency the correlation of volume estimates for unbilled network expenses to the estimates for unbilled revenue; and</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>○ Comparing internally generated estimates of physical energy loss levels through the distribution process to the industry averages published by the Australian Electricity Market Operations (AEMO) and investigating any unusual trends or variances.</li> <li>● Developing an expectation of unbilled distribution costs based on the above factors and investigating any variance that is outside our expectation.</li> </ul>
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#### Other Information

Other Information is financial and non-financial information in the Company's annual reporting which is provided in addition to the Financial Report and the Auditor's Report. The Directors are responsible for the Other Information.

Our opinion on the Financial Report does not cover the Other Information and, accordingly, we do not express an audit opinion or any form of assurance conclusion thereon, with the exception of the Remuneration Report.

In connection with our audit of the Financial Report, our responsibility is to read the Other Information. In doing so, we consider whether the Other Information is materially inconsistent with the Financial Report or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We are required to report if we conclude that there is a material misstatement of this Other Information, and based on the work we have performed on the Other Information that we obtained prior to the date of this Auditor's Report we have nothing to report.

#### Responsibilities of Directors for the Financial Report

The Directors are responsible for:

- preparing the Financial Report that gives a true and fair view in accordance with *Australian Accounting Standards* and the *Corporations Act 2001*
- implementing necessary internal control to enable the preparation of a Financial Report that gives a true and fair view and is free from material misstatement, whether due to fraud or error
- assessing the Group's ability to continue as a going concern. This includes disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

#### Auditor's responsibilities for the audit of the Financial Report

Our objective is:

- to obtain reasonable assurance about whether the Financial Report as a whole is free from material misstatement, whether due to fraud or error; and
- to issue an Auditor's Report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error. They are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this Financial Report.



A further description of our responsibilities for the Audit of the Financial Report is located at the Auditing and Assurance Standards Board website at: [http://www.auasb.gov.au/auditors\\_responsibilities/ar1.pdf](http://www.auasb.gov.au/auditors_responsibilities/ar1.pdf). This description forms part of our Auditor's Report.

#### Report on the Remuneration Report

##### Opinion

In our opinion, the Remuneration Report of Origin Energy Limited for the year ended 30 June 2018, complies with Section 300A of the *Corporations Act 2001*.

##### Directors' responsibilities

The Directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with Section 300A of the *Corporations Act 2001*.

##### Our responsibilities

We have audited the Remuneration Report included in the Directors' report for the year ended 30 June 2018.

Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with *Australian Auditing Standards*.

KPMG

Duncan McLennan  
Partner

Sydney

16 August 2018



# Share and Shareholder Information



Information set out below was applicable as at 16 August 2018.

As at 16 August 2018, there were:

- 140,775 holders of ordinary shares in the Company; and
- 28 holders of 7,475,601 Options, 94 holders of 4,009,862 Performance Share Rights, and 378 holders of 4,110,423 Deferred Share Rights granted under the Origin Energy Equity Incentive Plan.

There is not a current on-market buy-back of Origin shares.

During the reporting period 620,116 Origin shares were purchased on-market for the purpose of the Employee Share Plan. The average price per share purchased was \$7.36.

## Analysis of shares

Holdings Ranges	Holders	Total Units	%
1-1,000	57,826	25,745,086	1.463
1,001-5,000	60,472	145,507,919	8.270
5,001-10,000	13,936	97,746,699	5.556
10,001-100,000	8,325	168,683,537	9.587
100,001-99,999,999,999	216	1,321,758,534	75.124
<b>Totals</b>	<b>140,775</b>	<b>1,759,441,775</b>	<b>100.000</b>

5,346 shareholders hold less than a marketable parcel as at 16 August 2018.

## Substantial shareholders

There were no substantial shareholders as disclosed by notices received by the Company as at 16 August 2018.

## Top 20 holdings

Shareholder	Number of shares	% of issued shares
HSBC Custody Nominees	528,525,221	30.039%
J P Morgan Nominees Australia Limited	372,706,171	21.183%
Citicorp Nominees Pty Limited	130,199,967	7.400%
National Nominees Limited	100,533,019	5.714%
BNP Paribas Nominees Pty Ltd <Agency Lending DRP A/C>	34,512,013	1.962%
BNP Paribas Noms Pty Ltd <DRP>	25,360,474	1.441%
Argo Investments Limited	10,951,603	0.622%
HSBC Custody Nominees (Australia) Limited <NT-Comnwlth Super Corp A/C>	10,658,952	0.606%
Citicorp Nominees Pty Limited <Colonial First State Inv A/C>	8,916,533	0.507%
National Nominees Limited <N A/C>	6,249,524	0.355%

Shareholder	Number of shares	% of issued shares
AMP Life Limited	6,167,394	0.351%
Australian Foundation Investment Company Limited	6,000,000	0.341%
The Senior Master of the Supreme Court <Common Fund No 3 A/C>	3,580,943	0.204%
Forsyth Barr Custodians Ltd <Forsyth Barr Ltd-Nominee A/C>	3,570,616	0.203%
HSBC Custody Nominees (Australia) Limited <Euroclear Bank SA NV A/C>	3,363,658	0.191%
National Nominees Limited <DB A/C>	3,358,140	0.191%
HSBC Custody Nominees (Australia) Limited – A/C 2	2,463,130	0.140%
HSBC Custody Nominees (Australia) Limited	2,277,702	0.129%
CS Fourth Nominees Pty Limited <HSBC Cust Nom AU Ltd 11 A/C>	2,267,208	0.129%
BNP Paribas Nominees Pty Ltd HUB24 Custodial Serv Ltd DRP	1,767,279	0.100%
Total Securities of Top 20 Holdings	1,263,429,547	71.809%
<b>Total of Securities</b>	<b>1,759,441,775</b>	

## Shareholder enquiries

For information about your shareholding, to notify a change of address, to make changes to your dividend payment instructions or for any other shareholder enquiries, you should contact Origin Energy's share registry, Boardroom Pty Ltd on 1300 664 446. Please note that broker sponsored holders are required to contact their broker to amend their address.

When contacting the share registry, shareholders should quote their security holder reference number, which can be found on the holding or dividend statements.

Shareholders with internet access can update and obtain information regarding their shareholding online at [originenergy.com.au/investors](http://originenergy.com.au/investors)

## Tax File Number

For resident shareholders who have not provided the share registry with their Tax File Number (TFN) or exemption category details, tax at the top marginal tax rate (plus Medicare levy) will be deducted from dividends to the extent they are not fully franked. For those shareholders who have not as yet provided their TFN or exemption category details, forms are available from the share registry. Shareholders are not obliged to provide this information if they do not wish to do so.

## Information on Origin

The main source of information for shareholders is the Annual Report and the Shareholder Review. Both the Annual Report and Shareholder Review will be provided to shareholders on request and free of charge. Shareholders not wishing to receive the Annual Report should advise the share registry in writing so that their names can be removed from the mailing list. Origin's website [www.originenergy.com.au](http://www.originenergy.com.au) is another source of information for shareholders.

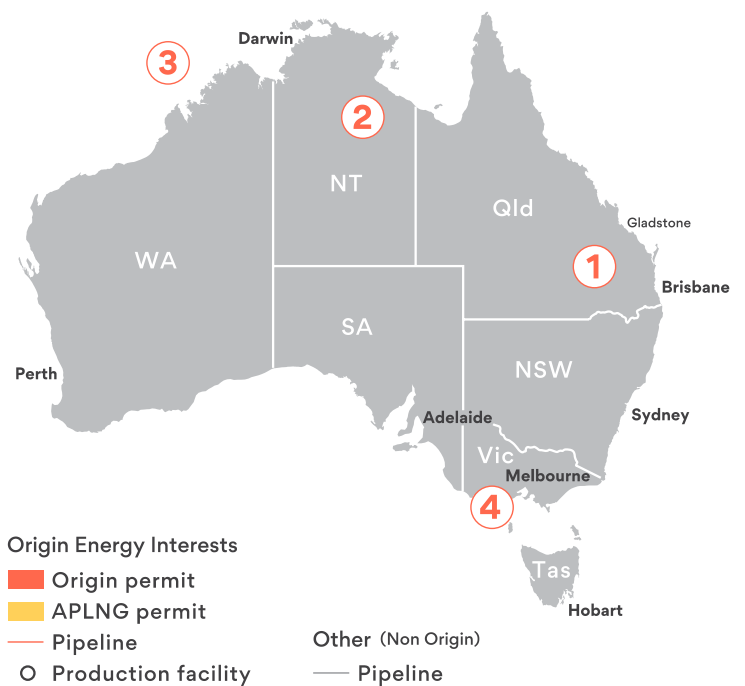
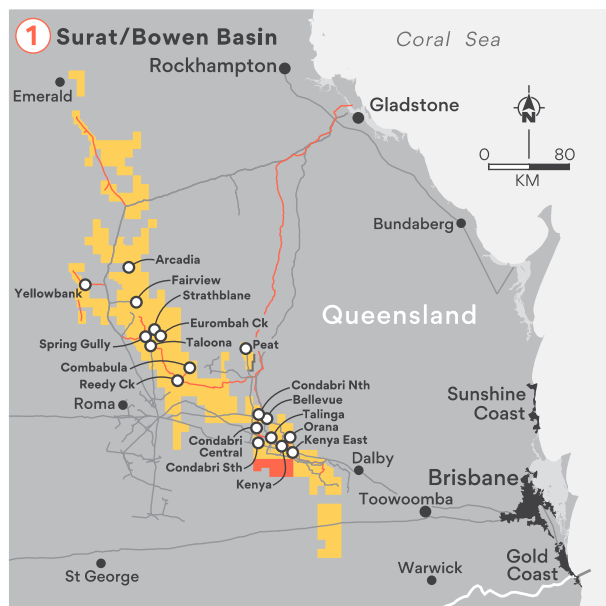
## Securities Exchange listing

Origin shares are traded on the Australian Securities Exchange Limited (ASX). The symbol under which Origin shares are traded is 'ORG'.

## Voting rights of members

At a meeting of members, each member who is entitled to attend and vote may attend and vote in person or by proxy, attorney or representative. On a show of hands, every person present who is a member, proxy, attorney or representative, shall have one vote and on a poll, every member who is present in person or by proxy, attorney or representative shall have one vote for each fully paid share held.

# Exploration and Production Permits and Data



## 1. Origin's interests

Origin held interests in the following permits at 30 June 2018.

Basin/Project Area	Interest	Basin/Project Area	Interest	Basin/Project Area	Interest
<b>Australia</b>					
<b>Surat Basin (Queensland)</b>					
ATP 788P (Shallows)	100.0% *	<b>Talinga/Orana</b>	ATP 692P and PL's 209, 215, 226, 272, 216(A), 225(A), 445(A)	37.50%	*1
ATP 788P (Deeps)	25.00% *				
<b>Denison Trough (Queensland)</b>					
PL's 41, 42, 43, 44, 45, 54, 67, 173, 183 and 218	18.75% *1	PPL's 171 and 181, PPL(A)2032	37.50%	*1	
ATP 1191 Farm-out (Production) and PL's 450, 451, 457 and 1012	11.25% *1	PFL 26	37.50%	*1	
ATP 1191	18.75%	1			
ATP 1177P	18.75%	1			
PPL's 10 and 11	18.75%	*1			
<b>LNG (Gladstone)</b>					
PPL's 162 and 163	37.50%	*1			
PFL 20	37.50%	*1			
<b>CSG (Queensland) Fairview</b>					
ATP 526P, ATP 2012P**, ATP(A)2033 and PL's 90, 91, 92, 99, 100, 232, 233, 234, 235 and 236, PL(A) 1017	8.97%	1			
<b>Spring Gully</b>					
ATP 592P and PL's 195, 414, 415, 416, 417, 418, 268 and 419(A)	35.44%	*1			
PL 204	37.40%	*1			
PL 200	35.89%	*1			
PPL 180	37.50%	*1			
<b>Kenya/Argyle/Lauren/Bellevue</b>					
		PL's 179, 180, 228, 229 and 263	15.23%	1	
		PL 247	11.02%	1	
		ATP 648 and PL's 257, 273, 274, 275, 278, 279, 442, 466, 474 and 503	11.72%	1	
		PL 1025	11.72%	1	
		PFL 19	11.72%	1	
		PPL's 107, 176 and 2014	15.23%	1	
<b>Peat</b>					
		PL 101	37.50%	*1	
<b>Other Bowen Basin</b>					
		ATP 804P	10.99%	1	
		ATP 745P and PL's 420, 421 and 440	8.94%	1	
		PL's 219 and 220	37.50%	*1	
<b>Other Surat Basin</b>					
		ATP 606P and PL's 297, 403, 404, 407, 408, 405, 406(A), 412(A), 413 and 444(A)	34.77%	*1	
		ATP 631P and PL's 281 and 282	6.79%	1	
		ATP 663P and PL's 434(A), 435(A), 436(A), 437(A), 438(A) and 439(A)	37.50%	*1	
		ATP 973P and PL's 265, 266 and 267	37.50%	*1	
		ATP 972P and PL's 469(A), 470(A) and 471(A)	34.77%	*1	
		PL 1011	37.50%	*1	
		PL 1018	37.50%	*1	
		PPL's 143, 177, 178, 185, 186, 2000 and 2026	37.50%	*1	
<b>Onshore Otway Basin (Victoria)</b>					
		PPL 2 Ex (Iona Exclusion)	100.00%	*	
		PPL 8	100.00%	*	
<b>Browse Basin (Western Australia)</b>					
		WA-315-P, WA-398-P and TP/28	40.00%		
<b>Beetaloo Basin (Northern Territory)</b>					
		EP 76, EP 98 and EP117	70.00%	*	
Notes:					
* Operatorship					
1 Interest held through 37.5 per cent ownership of Australian Pacific LNG Joint Venture					

# Annual Reserves Report



## 1. Reserves and Resources

This Annual Reserves Report provides an update on the reserves and resources of Origin Energy Limited (Origin) and its share of Australia Pacific LNG, as at 30 June 2018. The information in this report does not include Origin's share of reserves relating to Lattice Energy assets. The sale of Lattice Energy to Beach Energy was completed on 31 January 2018, with an economic effective date of 1 July 2017.

### 1.1 Highlights

#### Australia Pacific LNG

- Activity during FY2018 focused on maximising production for supply to the two LNG trains at Curtis Island and to the domestic market, contributing to:
  - a strong production result with Origin's share of Australia Pacific LNG production increasing by 11 per cent or 25 PJe to 254 PJe
  - an increase in Origin's share of proven reserves (1P) of 11 per cent or 314 PJe before production as a result of development drilling. After taking into account production, 1P increased by 61 PJe to 2,880 PJe.
- Australia Pacific LNG also continues to focus on maturing its strong resource base with exploration and appraisal activities, as well as through technology trials and cost saving initiatives underway.
- Following a technical and commercial review of ATP663 (Gilbert Gully), Australia Pacific LNG determined that this acreage has lower permeability and gas saturation than in other parts of the Surat Basin, making commercial development in this area unlikely, particularly due to the distance from existing production infrastructure. Accordingly, Australia Pacific LNG intends to divest the permit and has recorded a downward revision of 215 PJe (Origin's share) to its 2C contingent resource.

### 1.2 2P Reserves

#### Origin 2P reserves by area

2P reserves by area (PJe)	2P 30/06/2017	Acquisition/ divestment	New booking/ discovery	Revisions/ extensions	Production	2P 30/06/2018
<b>Australia Pacific LNG</b>	<b>4,704</b>	-	-	<b>219</b>	<b>(254)</b>	<b>4,670</b>
Surat/Bowen (unconventional)						
- Spring Gully & Denison Asset	606	-	-	102	(39)	670
- Condabri, Talinga & Orana Asset	1,467	-	-	87	(100)	1,453
- Reedy Creek, Combabula & Peat Asset	1,585	-	-	59	(54)	1,590
- Non-Operated Assets	1,046	-	-	(29)	(61)	957
<b>Other</b>						
Ironbark (unconventional)	249	-	-	(120)	-	129
<b>Total</b>	<b>4,953</b>	-	-	<b>99</b>	<b>(254)</b>	<b>4,799</b>

### Summary of 2P Reserves Movement

Proved plus probable (2P) reserves decreased by 154 PJe (including production) to a total of 4,799 PJe, when compared to 30 June 2017. The key changes in 2P reserves include:

- 254 PJe decrease due to production
- 99 PJe net increase resulting from revisions / extensions associated with Australia Pacific LNG and Ironbark.

The increase of 99 PJe of 2P reserves before production included movements in the following areas:

- Australia Pacific LNG increased by 219 PJe or 5 per cent due to:
  - improvements in forecast estimated recovery from producing areas due to more production data leading to an improved understanding of field behaviour
  - improved economic assumptions
  - reductions in future unit costs associated with the cost reduction program that is underway.
- Ironbark decreased by 120 PJe due to a revision to the field development plan based on experience and updated assumptions from analogous Australia Pacific LNG fields as announced to the market ASX on 8 February 2018 <https://www.asx.com.au/asxpdf/20180208/pdf/43rf6t5nxl0ycy.pdf>.

*Additional notes:*

- At 30 June 2018, 100 per cent of Origin 2P reserves are unconventional gas.

### Origin 2P reserves by development type

2P reserves by development type (PJe)	Developed	Undeveloped	Total 2P 30/06/2017	Developed	Undeveloped	Total 2P 30/06/2018
<b>Australia Pacific LNG</b>	<b>2,387</b>	<b>2,317</b>	<b>4,704</b>	<b>2,461</b>	<b>2,208</b>	<b>4,670</b>
Surat/Bowen (unconventional)						
– Spring Gully & Denison Asset	455	151	606	543	126	670
– Condabri, Talinga & Orana Asset	984	483	1,467	988	465	1,453
– Reedy Creek, Combabula & Peat Asset	486	1,099	1,585	529	1,061	1,590
– Non-Operated Assets	461	585	1,046	401	556	957
<b>Other</b>						
Ironbark (unconventional)	–	249	249	–	129	129
<b>Total</b>	<b>2,387</b>	<b>2,566</b>	<b>4,953</b>	<b>2,461</b>	<b>2,338</b>	<b>4,799</b>

### 1.3 1P Reserves

Proved (1P) reserves increased by 314 PJe or 11 per cent (before production) and 61 PJe after production to a total of 2,880 PJe, when compared to the previous reporting period, due to development drilling. 100 per cent of 1P reserves are unconventional gas.

#### Origin 1P reserves by area

1P reserves by area (PJe)	1P 30/06/2017	Acquisition/ divestment	New booking/ discovery	Revisions/ extensions	Production	1P 30/06/2018
<b>Australia Pacific LNG</b>	<b>2,819</b>	-	-	<b>314</b>	<b>(254)</b>	<b>2,880</b>
Surat/Bowen (unconventional)						
- Spring Gully & Denison Asset	497	-	-	95	(39)	553
- Condabri, Talinga & Orana Asset	1,018	-	-	133	(100)	1,051
- Reedy Creek, Combabula & Peat Asset	532	-	-	107	(54)	585
- Non-Operated Assets	772	-	-	(21)	(61)	691
<b>Other</b>						
Ironbark (unconventional)	-	-	-	-	-	-
<b>Total</b>	<b>2,819</b>	<b>-</b>	<b>-</b>	<b>314</b>	<b>(254)</b>	<b>2,880</b>

#### Origin 1P reserves by development type

1P reserves by development type (PJe)	Developed	Undeveloped	Total 1P 30/06/2017	Developed	Undeveloped	Total 1P 30/06/2018
<b>Australia Pacific LNG</b>	<b>2,387</b>	<b>432</b>	<b>2,819</b>	<b>2,461</b>	<b>419</b>	<b>2,880</b>
Surat/Bowen (unconventional)						
- Spring Gully & Denison Asset	455	41	497	543	10	553
- Condabri, Talinga & Orana Asset	984	34	1,018	988	63	1,051
- Reedy Creek, Combabula & Peat Asset	486	46	532	529	56	585
- Non-Operated Assets	461	311	772	401	290	691
<b>Other</b>						
Ironbark (unconventional)	-	-	-	-	-	-
<b>Total</b>	<b>2,387</b>	<b>432</b>	<b>2,819</b>	<b>2,461</b>	<b>419</b>	<b>2,880</b>

### 1.4 3P and 2C Contingent Resources for Origin Energy

#### Beetaloo

A material contingent resource announcement of 6.6 Tscf (gross) or 4.6 Tscf (Origin share) for the Beetaloo Basin was provided on 15 February 2017 to the ASX: <http://www.asx.com.au/asxpdf/20170215/pdf/43g0qhh87j71bb.pdf>. There has been no change to the contingent resource for the Beetaloo Basin in this reporting period.

On 17 April 2018 the Northern Territory government announced its decision to lift the moratorium on fracking and adopt the recommendations of the independent scientific inquiry. Origin is working with the NT Government, APPEA and other operators to provide input into the detail of recommendations before they are implemented and has held initial meetings to start access negotiations.

#### Ironbark

Ironbark (unconventional) 3P reserves decreased by 443 PJe to 192 PJe and 2C decreased by 44 PJe to 288 PJe. These changes are due to a revision to the field development plan, as announced to the ASX on 8 February 2018 (<https://www.asx.com.au/asxpdf/20180208/pdf/43rf6t5nxl0ycy.pdf>) and follow a detailed assessment of the Ironbark gas field applying updated assumptions consistent with the technical review of Australia Pacific LNG's reserves in June 2017.

## Appendix A: APLNG Reserves and Resources

Netherland, Sewell & Associates, Inc. (NSAI) has prepared a consolidated report of the reserves and resources held by Australia Pacific LNG for Non-Operated Assets. The reserves and resources estimates for each property in this report have been independently estimated by NSAI.

The tables below provide 1P, 2P and 3P reserves and 2C resources for Australia Pacific LNG (100 per cent) and Origin's 37.5 per cent interest in these Australia Pacific LNG reserves and resources.

### Reserves / resources held by APLNG (100% share)

Reserves/Resource classification	30/06/2017	Acquisition/ divestment	New booking/ discovery	Revisions/ extensions	Production	30/06/2018
1P (proven)	7,518	-	-	837	(676)	7,679
2P (proven plus probable)	12,545	-	-	584	(676)	12,453
3P (proven plus probable plus possible)	13,382	-	-	603	(676)	13,310
2C (best estimate contingent resource)	3,956	-	-	(707)	-	3,249

### Reserves / resources held by Origin (37.5% in APLNG)

Reserves/Resource classification	30/06/2017	Acquisition/ divestment	New booking/ discovery	Revisions/ extensions	Production	30/06/2018
1P (proven)	2,819	-	-	314	(254)	2,880
2P (proven plus probable)	4,704	-	-	219	(254)	4,670
3P (proven plus probable plus possible)	5,018	-	-	226	(254)	4,991
2C (best estimate contingent resource)	1,483	-	-	(265)	-	1,218

The 837 PJe increase in Australia Pacific LNG (100 per cent share) 1P excluding production is due to development drilling.

The 584 PJe increase in Australia Pacific LNG (100 per cent share) 2P excluding production is due to more production data leading to an increased understanding of estimated forecast recovery from producing areas, accompanied by improved economic assumptions and reduction in future capital expenditure reflecting the cost reduction program underway.

The 603 PJe increase in Australia Pacific LNG (100 per cent share) 3P excluding production is due to improved understanding of estimated recovery in producing areas.

The 707 PJe decrease in Australia Pacific LNG (100 per cent share) 2C is primarily due to the planned divestment of ATP663 (Gilbert Gully) resulting in a 573 PJe write-off and some minor reclassification to reserves. There are a number of appraisal activities presently ongoing that if successful will convert some resources to reserves.



## Appendix B: Notes Relating to this Report

### a. Methodology regarding Reserves and Resources

The Reserves Report has been prepared to be consistent with the Petroleum Resources Management System (PRMS) 2007 published by Society of Petroleum Engineers (SPE). This document may be found at the SPE website: [spe.org/industry/docs/Petroleum\\_Resources\\_Management\\_System\\_2007.pdf](http://spe.org/industry/docs/Petroleum_Resources_Management_System_2007.pdf). Additionally, this Reserves Report has been prepared to be consistent with the ASX reporting guidelines. For all assets Origin reports reserves and resources consistent with SPE guidelines as follows: proved reserves (1P); proved plus probable reserves (2P); proved plus probable plus possible reserves (3P); best estimate contingent resource (2C). Reserves must be discovered, recoverable, commercial and remaining.

The CSG reserves and resources held within Australia Pacific LNG's properties have either been independently prepared by NSAI or prepared by Origin. An independent audit of our CSG reserves and resources within ATP 788 (Ironbark) permit has been undertaken by NSAI. The reserves and resources estimates contained in this report have been prepared in accordance with the standards, definitions and guidelines contained within the Petroleum Resources Management System (PRMS) and generally accepted petroleum engineering and evaluation principles as set out in the SPE Reserves Auditing Standards.

Origin does not intend to report Prospective or Undiscovered Resources as defined by the SPE in any of its areas of interest on an ongoing basis.

### b. Economic test for reserves

The assessment of reserves requires a commercial test to establish that reserves can be economically recovered. Within the commercial test, operating cost and capital cost estimates are combined with fiscal regimes and product pricing to confirm the economic viability of producing the reserves.

Gas reserves are assessed against existing contractual arrangements, local market conditions, as appropriate. In the case of gas reserves where contracts are not in place a forward price scenario based on monetisation of the reserves through domestic markets has been used, including power generation opportunities, direct sales to LNG and other end users and utilisation of Origin's wholesale and retail channels to market. For CSG reserves that are intended to supply the Australia Pacific LNG CSG to LNG project, the economic test is based on a weighted average price across all sales contracts (including domestic and LNG contracts), less short run marginal costs for downstream transport and processing. This price is exposed to changes in the supply/demand balance in the market through oil price-linked LNG contracts.

### c. Reversionary Rights

The CSG interests that Australia Pacific LNG acquired from Tri-Star in 2002 are subject to reversionary rights. If triggered, these rights will require Australia Pacific LNG to transfer back to Tri-Star a 45 per cent interest in those CSG interests for no additional consideration. Origin has assessed the potential impact of these reversionary rights based on economic tests consistent with the reserves and resources referable to the CSG interests and based on that assessment does not consider that the existence of these reversionary rights impacts the reserves and resources quoted in this report. Tri-Star has commenced proceedings against Australia Pacific LNG claiming that reversion has occurred. Australia Pacific LNG denies that reversion has occurred and is defending the claim. Approximately 21 per cent of Australia Pacific LNG's 3P CSG reserves as at 30 June 2018 are subject to reversionary rights. Refer to Section 6 of the Operating and Financial Review.

### d. Information regarding the preparation of this Reserves Report

The internationally recognised petroleum consultant NSAI has prepared an independent audit of the reserves and resources for the Ironbark asset. The CSG reserves and resources held within Australia Pacific LNG's properties have either been independently prepared by NSAI or prepared by Origin. All assessments are based on technical, commercial and operational data provided by Origin on behalf of Australia Pacific LNG.

The statements in this Report relating to reserves and resources as of 30 June 2018 for Australia Pacific LNG's interests in Non-Operated assets are based on information in the NSAI report dated 31 July 2018. The data has been compiled by Mr. Dan Paul Smith, a full-time employee of NSAI. Mr. Dan Paul Smith has consented to the statements based on this information, and to the form and context in which these statements appear.

The statements in this Report relating to reserves and resources for other assets have been compiled by Simon Smith, a full-time employee of Origin. Simon Smith is a qualified reserves and resources evaluator and has consented to the form and context in which these statements appear.

### e. Rounding

Information on reserves is quoted in this report rounded to the nearest whole number. Some totals in tables in this report may not add due to rounding. Items that round to zero are represented by the number 0, while items that are actually zero are represented with a dash "-".

### f. Abbreviations

bbl	barrel
Tscf	trillion standard cubic feet
CSG	coal seam gas
kbbbls	kilo barrels = 1,000 barrels
ktonnes	kilo tonnes = 1,000 tonnes
mmboc	million barrels of oil equivalent
PJ	petajoule = $1 \times 10^{15}$ joules
PJe	petajoule equivalent

### g. Conversion Factors for PJe

CSG	1.038 PJ/Bscf
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**h. Reference Point**

Reference points for Origin's petroleum reserves and contingent resources are defined points within Origin's operations where normal exploration and production business ceases, and quantities of the produced product are measured under defined conditions prior to custody transfer. Fuel, flare and vent consumed to the reference points are excluded.

**i. Preparing and Aggregating Petroleum Resources**

Petroleum reserves and contingent resources are typically prepared by deterministic methods with the support from probabilistic methods. Petroleum reserves and contingent resources are aggregated by arithmetic summation by category and as a result, proved reserves may be a conservative estimate due to the portfolio effects of the arithmetic summation. Proved plus probable plus possible may be an optimistic estimate due to the same aforementioned reasons.

**j. Methodology and Internal Controls**

The reserves estimates undergo an assurance process to ensure that they are technically reasonable given the available data and have been prepared according to our reserves and resources process, which includes adherence to the PRMS Guidelines. The assurance process includes peer reviews of the technical and commercial assumptions. The annual reserves report is reviewed by management with the appropriate technical expertise, including the Chief Petroleum Engineer and Integrated Gas General Managers.

**k. Qualified Petroleum Reserves and Resources Evaluators**

The material presented in this report is based on, and fairly represents, information and supporting documentation prepared by, or under the supervision of the listed qualified reserves and resources evaluators. These individuals have consented to the statements based on this information, and to the form and context in which these statements appear.

Simon Smith	Origin Energy (Chief Petroleum Engineer)	SPE, EA, RPEQ
Graham Sutherland	Origin Energy	SPE, EA, RPEQ
Alistair Jones	Origin Energy	SPE, EA
Reneke van Soest	Origin Energy	SPE
Alexander Cote	Origin Energy	SPE, APEGA, EA
Levi Turner	Origin Energy	SPE
Melissa Goodfellow	Origin Energy	SPE
Miguel Tovar	Origin Energy	SPE, EA, RPEQ
Lin Xuejun	Origin Energy	SPE
Erhart Stockhausen	Origin Energy	SPE
Daus Jamal Asmara	Origin Energy	SPE
Ali Sani	Origin Energy	SPE
Turaj Nuralishahi	Origin Energy	SPE, EA, RPEQ
Russell Evans	Origin Energy	SPE
Samer Mutawe	Origin Energy	SPE
Masoud Zadmehr	Origin Energy	SPE
Natalie Chadud	Origin Energy	SPE, EA

\* SPE: Society of Petroleum Engineers; AAPG: American Association of Petroleum Geologists; APEGA: The Association of Professional Engineers and Geoscientists of Alberta; EA: Institution of Engineers Australia; RPEQ: Registered Professional Engineer of Queensland.

# Five Year Financial History



A reconciliation between statutory and underlying profit measures can be found in note A1 of the Origin Consolidated Financial Statements.

Income statement (\$m)	2018 <sup>1</sup>	2017 <sup>1</sup>	2016 <sup>1</sup>	2015 <sup>1</sup>	2014
Total external revenue	14,883	14,107	12,174	14,147	14,518
<b>Underlying</b>					
EBITDA	3,217	2,530	1,696	2,149	2,139
Depreciation and amortisation expense	(381)	(477)	(624)	(807)	(732)
Share of interest, tax, depreciation and amortisation of equity accounted investees <sup>2</sup>	(1,194)	(925)	(296)	(62)	(54)
EBIT	1,642	1,128	776	1,280	1,353
Net financing costs	(278)	(296)	(109)	(169)	(192)
Income tax benefit/(expense)	(339)	(279)	(286)	(349)	(342)
Non-controlling interests	(3)	(3)	(16)	(80)	(106)
Segment result and underlying consolidated profit	1,022	550	365	682	713
Impact of items excluded from segment result and underlying consolidated profit net of tax	(804)	(2,776)	(993)	(1,340)	(183)
<b>Statutory</b>					
Profit attributable to members of the parent entity	218	(2,226)	(628)	(658)	530
<b>Statement of financial position (\$m)</b>					
Total assets	24,257	25,199	28,905	33,367	30,941
Net debt/(cash)	7,289	8,364	9,470	13,273	9,134
Shareholders' equity – members/parent entity interest	11,804	11,396	14,039	12,723	13,444
Adjusted net debt/(cash) <sup>3</sup>	6,496	8,111	9,131	13,102	9,146
Shareholders' equity – total	11,828	11,418	14,060	14,159	15,129
<b>Cash flow</b>					
Net cash from operating and investing activities – total operations (\$m)	2,645	1,378	1,215	(2,081)	(1,087)
<b>Key ratios</b>					
Statutory basic earnings per share (cents) <sup>4</sup>	12.4	(126.9)	(39.8)	(52.1)	42.1
Underlying basic earnings per share (cents) <sup>4</sup>	58.2	31.3	23.2	54.0	56.7
Total dividend per share (cents)	–	0	10	50	50
Net debt to net debt plus equity (adjusted) (%) <sup>3</sup>	35	42	39	48	38
<b>Underlying EBITDA by segment (\$m)</b>					
Energy Markets	1,811	1,492	1,330	1,260	1,053
Integrated Gas <sup>5</sup>	1,521	1,104	386	498	570
Contact Energy	–	–	61	487	533
Corporate	(115)	(66)	(81)	(96)	(17)
<b>General Information</b>					
Number of employees (excluding Contact Energy)	5,565	5,894	5,811	6,922	6,701
Weighted average number of shares <sup>4</sup>	1,757,442,268	1,754,489,221	1,578,213,157	1,263,960,708	1,255,157,889

Income statement (\$m)	2018 <sup>1</sup>	2017 <sup>1</sup>	2016 <sup>1</sup>	2015 <sup>1</sup>	2014
<b>Integrated Gas<sup>5</sup></b>					
2P reserves (PJe)	4,799	5,788	6,277	6,260	6,473
Product sales volumes (PJe)	255	334	228	154	153
• Liquefied Natural Gas (Kt)	3,213	2,668	659	-	-
• Natural gas and ethane (PJ)	77	163	168	128	123
• Crude oil (kbbbls)	-	1,209	1,629	1,754	2,036
• Condensate/naphtha (kbbbls)	-	1,615	1,403	1,581	1,843
• LPG (kt)	-	144	127	147	160
Production volumes (PJe)	254	323	232	148	142
<b>Energy Markets</b>					
Generation (MW) – owned and contracted	5,981	6,011	6,011	5,994	6,010
Generation dispatched (TWh)	20.58	20.30	20.10	19.94	17.20
Number of customers ('000)	4,181	4,210	4,217	4,266	4,295
• Electricity	2,666	2,716	2,741	2,801	2,876
• Natural gas	1,145	1,112	1,089	1,083	1,036
• LPG	370	382	387	382	383
Electricity (TWh) <sup>6</sup>	37.5	39.7	38.1	37.3	39.1
Natural gas (PJ) <sup>7</sup>	214.4	187.9	167.1	134.7	96
LPG (Kt)	450	448	458	415	386

1 Includes discontinued operations and assets held for sale unless stated otherwise.

2 Origin discloses its equity accounted results in two lines: 'share of EBITDA of equity accounted investees,' included in EBITDA; and 'share of interest, tax, depreciation and amortisation of equity accounted investees,' included between EBITDA and EBIT.

3 Total current and non-current interest-bearing liabilities only, less cash and cash equivalents, less fair value adjustments on foreign exchange hedging transactions.

4 Prior period adjusted for the bonus element (discount to market price) of the September 2015 rights issue.

5 The Integrated Gas segment combines the former Exploration & Production and Australia Pacific LNG segments, as announced in August 2015.

6 FY2015 and FY2014 were restated to better reflect the recognition of volumes, revenues and costs associated with feed-in volumes from solar customers with no impact on gross profit.

7 Osborne gas sales were reclassified as internal due to new operational agreement. As a result, FY2015 and FY2014 external sales volumes, revenues and costs were revised with no impact on gross profit.

8 2018 excludes Lattice Energy (continuing operations basis shown).





# Glossary and Interpretation



## Financial measures

### Statutory Financial Measures

Statutory Financial Measures are measures included in the Financial Statements for the Origin Consolidated Group, which are measured and disclosed in accordance with applicable Australian Accounting Standards. Statutory Financial Measures also include measures that have been directly calculated from, or disaggregated directly from financial information included in the Financial Statements for the Origin Consolidated Group.

Term	Meaning
Statutory Profit/Loss	Net profit/loss after tax and non-controlling interests as disclosed in the Income Statement of the Origin Consolidated Financial Statements.
Statutory earnings per share	Statutory profit divided by weighted average number of shares.
Cash flows from operating activities	Statutory cash flows from operating activities as disclosed in the Statement of Cash Flows in the Origin Consolidated Financial Statements.
Cash flows from investing activities	Statutory cash flows from investing activities as disclosed in the Statement of Cash Flows in the Origin Consolidated Financial Statements.
Cash flows used in financing activities	Statutory cash flows used in financing activities as disclosed in the Statement of Cash Flows in the Origin Consolidated Financial Statements.
External revenue	Revenue after elimination of intersegment sales on consolidation as disclosed in the Income Statement of the Origin Consolidated Financial Statements.
Net Debt	Total current and non-current interest-bearing liabilities only, less cash and cash equivalents.
Non-controlling interest	Economic interest in a controlled entity of the consolidated entity that is not held by the parent entity or a controlled entity of the consolidated entity.

### Non-IFRS Financial Measures

This document includes certain Non-IFRS Financial Measures. Non-IFRS Financial Measures are defined as financial measures that are presented other than in accordance with all relevant Accounting Standards. Non-IFRS Financial Measures are used internally by management to assess the performance of Origin's business, and to make decisions on allocation of resources. The Non-IFRS Financial Measures have been derived from Statutory Financial Measures included in the Origin Consolidated Financial Statements, and are provided in this report, along with the Statutory Financial Measures to enable further insight and a different perspective into the financial performance, including profit and loss and cash flow outcomes, of the Origin business. The principal non-IFRS profit and loss measure of Underlying Profit has been reconciled to Statutory Profit in section 3.2 of the OFR. The key Non-IFRS Financial Measures included in this report are defined below.

Term	Meaning
Adjusted Net Debt	Net Debt adjusted to remove fair value adjustments on hedged borrowings.
Adjusted Net Debt/Underlying EBITDA	Adjusted Net Debt/Underlying EBITDA is calculated as Adjusted Net Debt/(Origin Underlying EBITDA - Share of APLNG EBITDA + net cash flow from APLNG) over the last 12 months.
Average interest rate	Interest expense for the current period divided by Origin's average drawn debt during the current period.
Current period	Year ended 30 June 2018.
Free Cash Flow	Net cash from operating activities less capital expenditure.
Gearing	Adjusted Net Debt/Adjusted Net Debt + Total equity
Gross Profit	Revenue less cost of goods sold.
Items excluded from Underlying Profit	<p>Items that do not align with the manner in which the Chief Executive Officer reviews the financial and operating performance of the business which are excluded from Underlying Profit. Items excluded from Underlying Profit are categorised as:</p> <ul style="list-style-type: none"> <li>Fair value and foreign exchange movements - reflecting the impact of mark to market movements on financial assets and liabilities from period to period.</li> <li>LNG related items pre-revenue recognition - primarily comprising net financing costs incurred (but unable to be capitalised) in funding Origin's investment in APLNG which relate to the period prior to revenue recognition for each of the two LNG Trains.</li> <li>Disposals, impairments and business restructuring - reflecting the impact of actions and decisions to dispose, acquire, revalue or restructure the company's assets and business operations.</li> </ul>

Term	Meaning
MRCPS	Mandatorily Redeemable Cumulative Preference Shares.
MRCPS elimination adjustment	The interest on MRCPS was capitalised by APLNG prior to commencement of revenue recognition. As the project is now operational, previously capitalised interest is being unwound through depreciation. The proportion of the unwind attributable to Origin's share is eliminated as Origin had previously eliminated the impact of the capitalised interest through the equity investment balance.
Non-cash fair value uplift	Reflects the impact of the accounting uplift in the asset base of APLNG that was recorded on the creation of APLNG and subsequent share issues to Sinopec. This balance will be depreciated in APLNG's income statement on an ongoing basis and, therefore, a dilution adjustment is made to remove this depreciation.
Prior period	Year ended 30 June 2017.
Share of ITDA	Origin's share of equity accounted investees interest, tax, depreciation and amortisation.
Total Segment Revenue	Total revenue for the Energy Markets, Integrated Gas, Corporate and discontinued operations segments, including inter-segment sales, as disclosed in note A1 of the Origin Consolidated Financial Statements.
Underlying earnings per share	Underlying profit/loss divided by weighted average number of shares.
Underlying EBITDA	Underlying earnings before underlying interest, underlying tax, underlying depreciation and amortisation (EBITDA) as disclosed in note A1 of the Origin Consolidated Financial Statements.
Underlying share of ITDA	Share of ITDA (interest, tax, depreciation and amortisation) of equity accounted investees adjusted for items excluded from underlying profit.
Underlying Profit	Underlying net profit after tax and non-controlling interests as disclosed in note A1 of the Origin Consolidated Financial Statements.
Underlying ROCE	Underlying ROCE is calculated as Adjusted EBIT/Average Capital Employed. <ul style="list-style-type: none"> <li>• Average Capital Employed = Shareholders Equity + Origin Debt + Origin's Share of APLNG project finance – Non-cash fair value uplift + net derivative liabilities. The average is a simple average of opening and closing in any year.</li> <li>• Adjusted EBIT = Origin Underlying EBIT and Origin's share of APLNG Underlying EBIT + Dilution Adjustment = Statutory Origin EBIT adjusted to remove the following items: a) Items excluded from underlying earnings; b) Origin's share of APLNG underlying interest and tax; and c) the depreciation of the Non-cash fair value uplift adjustment.</li> <li>• In contrast, for remuneration purposes Origin's statutory EBIT is adjusted to remove Origin's share of APLNG statutory interest and tax (which is included in Origin's reported EBIT) and certain items excluded from underlying earnings. Gains and losses on disposals and impairments will only be excluded subject to Board discretion. The Remuneration Report provides specific details.</li> </ul>

### Non-Financial Terms

Term	Meaning
1P reserves	Proved Reserves are those reserves that analysis of geological and engineering data can be estimated with reasonable certainty to be commercially recoverable. There should be at least a 90 per cent probability that the quantities actually recovered will equal or exceed the estimate.
2P reserves	The sum of Proved plus Probable reserves. Probable Reserves are those additional reserves which analysis of geological and engineering data indicate are less likely to be recovered than Proved Reserves but more certain than Possible Reserves. There should be at least a 50 per cent possibility that the quantities actually recovered will equal or exceed the best estimate of Proved plus Probable Reserves (2P).
3P reserves	Proved plus Probable plus Possible Reserves. Possible Reserves are those additional Reserves which analysis of geological and engineering data suggest are less likely to be recoverable than Probable Reserves. The total quantities ultimately recovered from the project have at least a 10 per cent probability of exceeding the sum of Proved plus Probable plus Possible (3P), which is equivalent to the high estimate scenario.
2C resources	The best estimate quantity of petroleum believed to be potentially recoverable from known accumulations by application of development oil and gas projects, but which are not currently considered to be commercially recoverable due to one or more contingencies. The total quantities ultimately recovered from the project have at least a 50 per cent probability to equal or exceed the best estimate for 2C contingent resources.
Boe	Barrel of oil equivalent
Capacity factor	A generation plant's output over a period compared with the expected maximum output from the plant in the period based on 100 per cent availability at the manufacturer's operating specifications.



Term	Meaning
Discounting	For Energy Markets, discounting refers to offers made to customers at a reduced price to the published tariffs. While a customer bill comprises a fixed and a variable portion, Origin's discounts only apply to the variable portion. In some cases, these discounts are conditional, such as requiring direct debit payment or on-time payments.
Equivalent reliability factor	Equivalent reliability factor is the availability of the plant after scheduled outages.
FEED	Front End Engineering Design
GJ	Gigajoule = $10^9$ joules
GJe	Gigajoules equivalent = $10^{-6}$ PJe
HSE	Health, Safety and Environment
Joule	Primary measure of energy in the metric system.
kT	Kilotonnes = 1,000 tonnes
kW	Kilowatt = $10^3$ watts
kWh	Kilowatt hour = standard unit of electrical energy representing consumption of one kilowatt over one hour.
Mtpa	Million tonnes per annum
MW	Megawatt = $10^6$ watts
MWh	Megawatt hour = $10^3$ kilowatt hours
NEM	National Electricity Market
NPS	Net Promoter Score (NPS) is a measure of customers' propensity to recommend Origin to friends and family
PJ	Petajoule = $10^{15}$ joules
PJe	Petajoules equivalent = an energy measurement Origin uses to represent the equivalent energy in different products so the amount of energy contained in these products can be compared. The factors used by Origin to convert to PJe are: 1 million barrels crude oil = 5.8 PJe; 1 million barrels condensate = 5.4 PJe; 1 million tonnes LPG = 49.3 PJe; 1 TWh of electricity = 3.6 PJe.
Scope 1 emissions	Direct emissions driven by Origin's owned and operated business operations, in particular electricity generation and gas development.
Scope 2 emissions	Emissions from the electricity that Origin purchases to undertake activities.
Scope 3 emissions	Indirect emissions through Origin's value chain that are not owned or controlled by Origin.
TRIFR	Total Recordable Incident Frequency Rate.
TW	Terawatt = $10^{12}$ watts
TWh	Terawatt hour = $10^9$ kilowatt hours
Watt	A measure of power when a one ampere of current flows under one volt of pressure.

### Interpretation

All comparable results reflect a comparison between the current period and the prior period ended 30 June 2017, unless specifically stated otherwise.

A reference to APLNG or Australia Pacific LNG is a reference to Australia Pacific LNG Pacific LNG Pty Limited in which Origin holds a 37.5 per cent shareholding. Origin's shareholding in APLNG is equity accounted.

A reference to \$ is a reference to Australian dollars unless specifically marked otherwise.

All references to debt are a reference to interest bearing debt only.

Individual items and totals are rounded to the nearest appropriate number or decimal. Some totals may not add down the page due to rounding of individual components.

When calculating a percentage change, a positive or negative percentage change denotes the mathematical movement in the underlying metric, rather than a positive or a detrimental impact.

Percentage changes on measures for which the numbers change from negative to positive, or vice versa, are labelled as not applicable.

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### Secretaries

Andrew Clarke  
Helen Hardy

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### Share Registry

Shareholders wishing to receive their shareholder communications electronically, including annual reports, notices of meeting, dividend statements and other company related information should contact the share registry.

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### Auditor

KPMG

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Further information about Origin's performance can be found on our website:

[originenergy.com.au](http://originenergy.com.au)