



To	Company Announcements Office	Facsimile	1300 135 638
Company	ASX Limited	Date	15 February 2018
From	Helen Hardy	Pages	48
Subject	<b>Investor Presentation for Half Year Results</b>		

Please find attached the investor presentation relating to Origin Energy's Results for the half year ended 31 December 2017.

Regards

Helen Hardy  
Company Secretary

02 8345 5000



# 2018 HALF YEAR RESULTS

Half year ended 31 December 2017

Frank Calabria CEO, Lawrie Tremaine CFO

15 February 2018

# Important Notices

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**1** Performance Highlights Frank Calabria

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**2** Financial Review Lawrie Tremaine

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**3** Operational Review Frank Calabria

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**4** Outlook Frank Calabria

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**5** Appendix



# PERFORMANCE HIGHLIGHTS

Frank Calabria

# Financial summary

## Statutory Loss

**\$(207) million**  
(11.8) cps



Including impairments of \$533 million after tax

## Underlying Profit (continuing operations)

**\$428 million**  
24.3 cps



Up \$255 million on H1 FY2017

## Underlying EBITDA (continuing operations)

**\$1,492 million**



Up \$502 million on H1 FY2017

## Operating cash flow (continuing operations)

**\$552 million**



up \$166 million on H1 FY2017

## Adjusted Net Debt

**\$7.9 billion**



Down \$0.2 billion from June 2017 (excludes completion of the sale of Lattice Energy)

## Underlying ROCE

**9.9%**



Up from 4.5% in HY2017

# Highlights

## ➤ **Improved earnings in electricity and natural gas**

- Energy Markets EBITDA up 21% on HY2017
- 33% increase in owned and contracted electricity generation on HY2017
- 20% increase in gas sales volume on HY 2017

## ➤ **Increasing production and revenue at APLNG**

- Integrated Gas EBITDA up 120% (ex Lattice Energy) on HY2017
- APLNG production and revenue increased by 15% and 64% respectively on HY2017
- \$116 million net APLNG cash flow to Origin

## ➤ **Deleveraging on track**

- 43% increase in operating cashflow from continuing operations on HY2017
- Lattice sale completed on 31 January 2018 (~\$1bn reduction in debt)

## ➤ **Record safety performance**

- TRIFR reduced to 1.9 from 3.2 in FY2017

# Near term focus

## Rebuilding the right to grow

- Continued balance sheet repair
- Disciplined capital management
- Reducing organisational complexity and cost

## Addressing energy security and prices

- Taking action on affordability
- Making energy simple and transparent
- Increasing supply of gas and electricity to help put downward pressure on energy prices

## Transforming customer experience

- Defending market share and managing for value
- Digital-first approach
- Trialling future energy solutions

## Step change reduction in upstream costs at APLNG

- Smaller, simpler operating model
- Streamlined processes
- Reducing costs and improving productivity

# How we are helping our customers

## Taking action on affordability

- New low rate products for concession customers (Origin Value, SA Concession)
- No price rises for hardship customers in the period
- Helping customers move onto competitive market offers
- Financial support and flexible plans to help customers manage their energy bills

## Making energy simpler and transparent

- Online comparator tool, an easy way to find the best deal
- Advocating for standardised comparator rate across industry
- Offers presented online with dollar value estimates

## Continuing to transform the customer experience

- Digital channels, making it easier for customers to interact
- New product offers (e.g. Solar + Grid bundles)
- Trialling new innovative solutions (demand-side management, load disaggregation and Home HQ)
- Increase in interaction NPS up 2 points from June 2017 to 18 in December 2017

# Increasing supply in a tight energy market

## Thermal generation

- 37% increase in generation output at Eraring
  - Average availability factor in 2017 was 87% (well above NEM average)
- Increasing flexibility at our Quarantine Power Station in South Australia

## Gas supply

- Supplying gas to bring 240 MW of generation back online in South Australia from 1 July 2017
- Secured 69 PJ of additional gas for the domestic market in 2018

## Renewables

- Contracting to bring >1.1 GW of renewable supply online by 2020

# Leading the transition to a cleaner, smarter energy future

## Committed to halving emissions in line with the Paris 2°C goal

- Out of coal by 2032
- Continued focus on gas for energy security
- Renewable supply expected to almost triple by 2020
- Portfolio structured to prosper in a carbon constrained world

## Embracing technologies of the future

- Trialling a range of future energy solutions to make it easier for customers to understand and use energy
- Utility scale batteries and demand-side management opportunities



# FINANCIAL REVIEW

Lawrie Tremaine

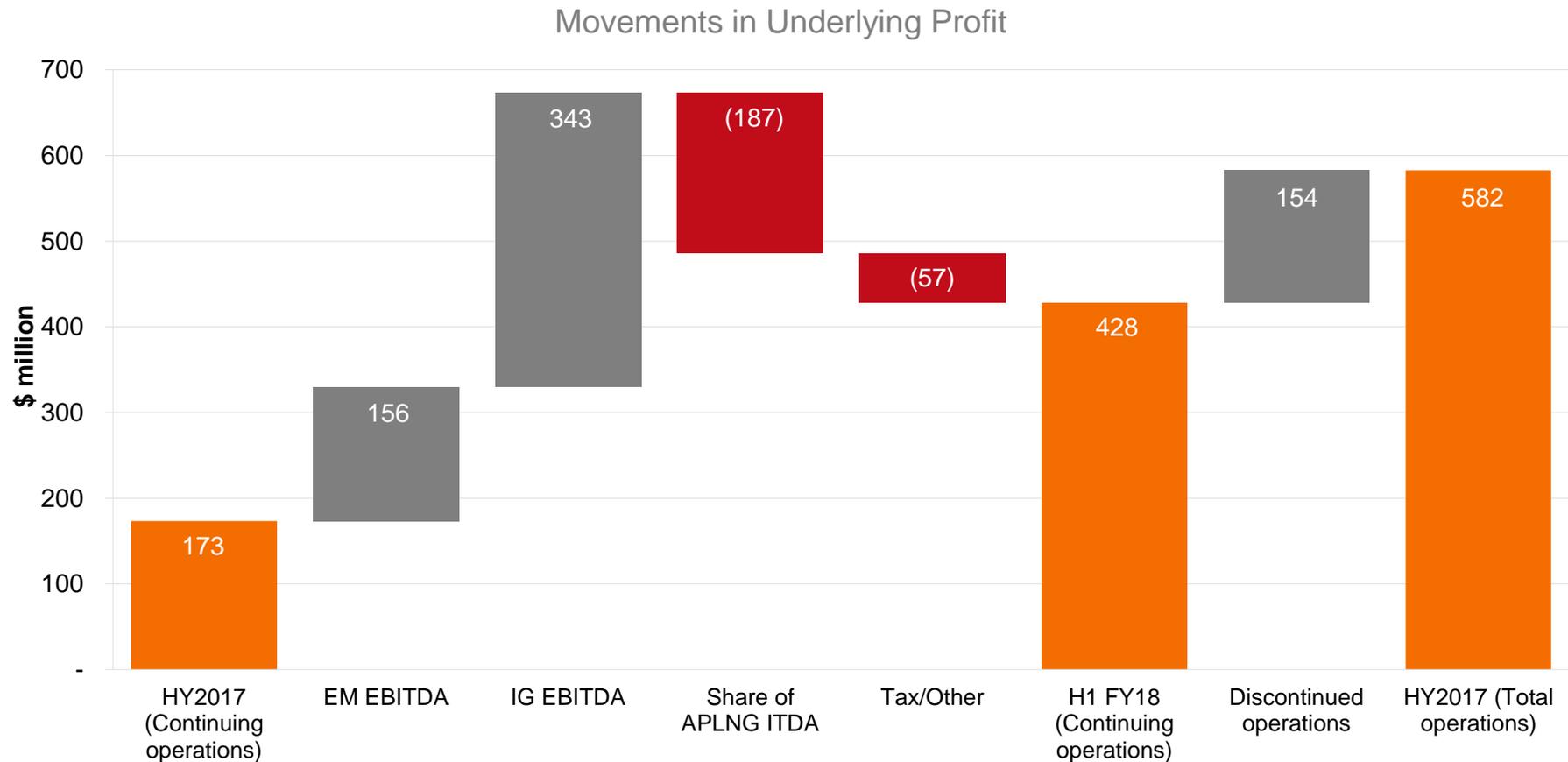
# Strong financial performance

		HY2018	HY2017		Change
Statutory profit/(loss)	\$m	(207)	(1,559)		
<b>Continuing operations</b>					
Underlying profit	\$m	428	173	↑	147%
Underlying EPS	cps	24.3	9.9	↑	147%
Operating cash flow	\$m	552	386	↑	43%
Capital expenditure	\$m	138	185	↓	(25%)
<b>Total operations</b>					
Underlying profit	\$m	582	184	↑	216%
Net cash from operating and investing activity	\$m	486	326	↑	49%
Underlying ROCE <sup>1</sup>		9.9%	4.5%	↑	
Debt/EBITDA <sup>2</sup>		3.9x	5.9x	↓	

(1) Adjusted EBIT / Average Capital employed (annualised). See Glossary for details

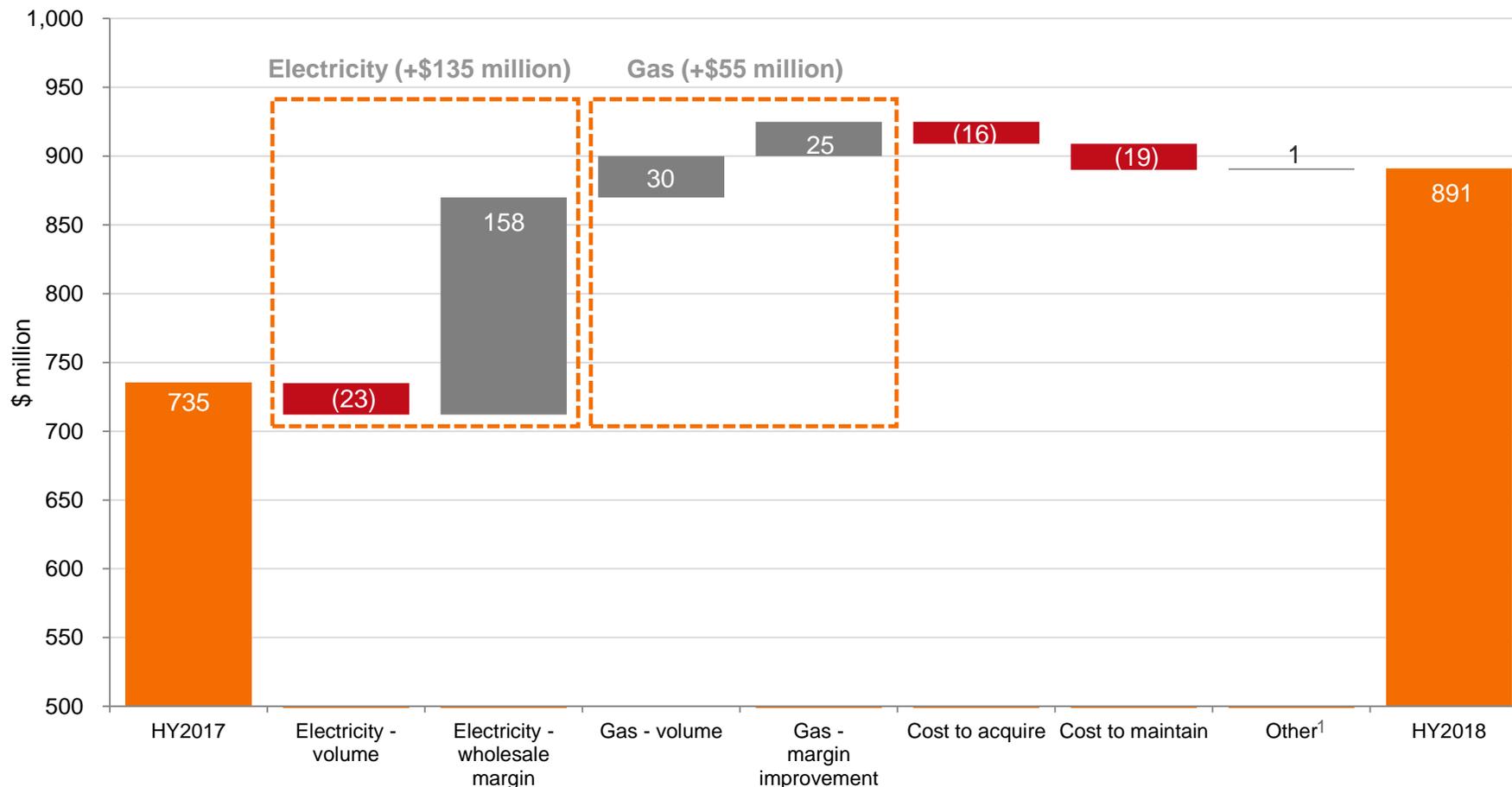
(2) Adjusted net debt / (Origin EBITDA – Share of APLNG EBITDA + net cash flows from APLNG) over the last twelve months

# Underlying profit from continuing operations more than doubled to \$428 million



# Energy Markets EBITDA increased by 21% to \$891 million

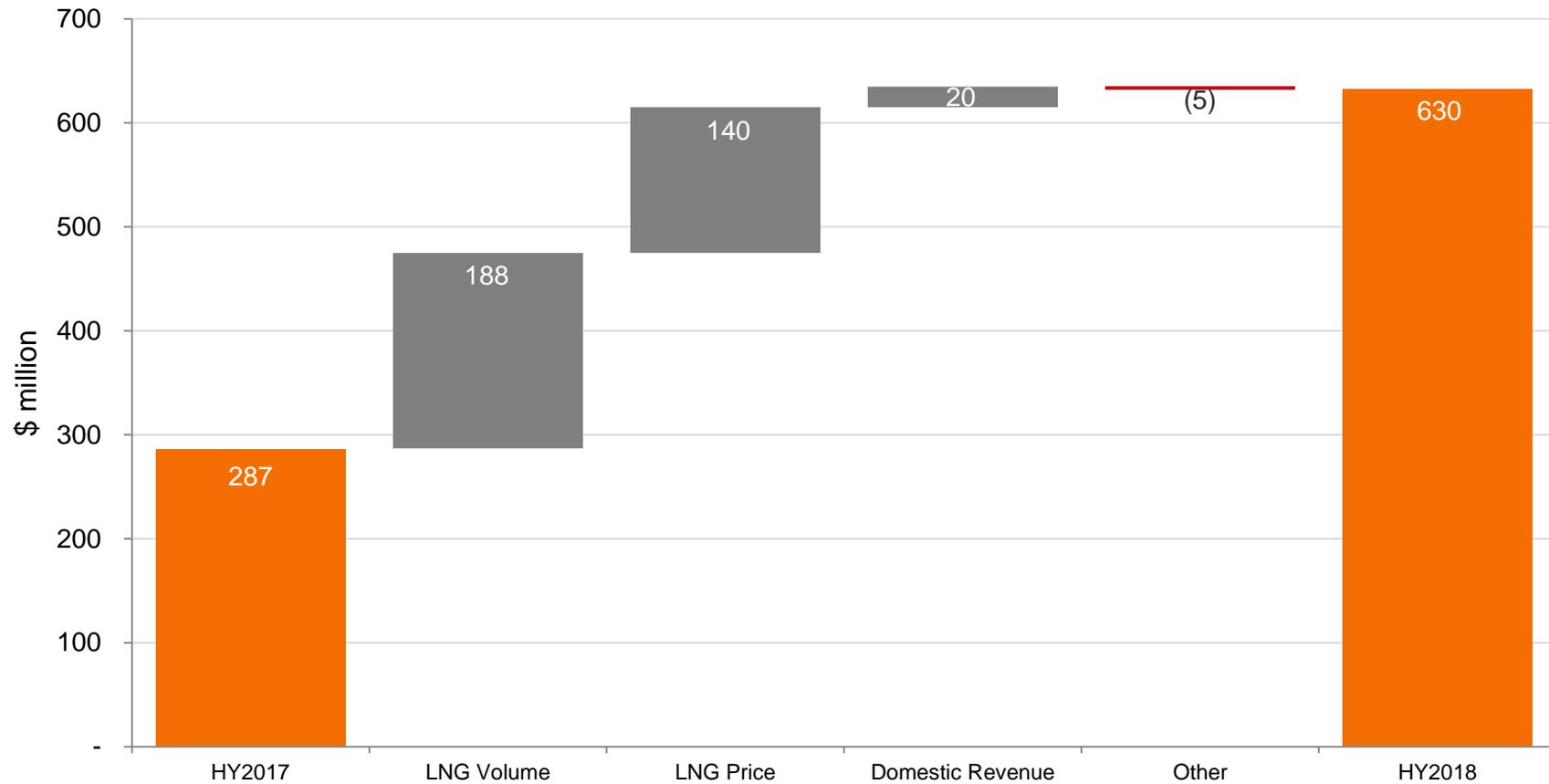
Movements in Energy Markets Underlying EBITDA



(1) Other comprises LPG (+\$10 million), Solar and Energy Services (+\$1 million) and Future Energy (-\$10 million)

# Integrated Gas EBITDA (ex-Lattice) increased 120% to \$630 million

Movements in Integrated Gas Underlying EBITDA (ex-Lattice)



# Improving cash flow

(\$ million)	HY2018	HY2017	Change (\$m)
Operating cash flow – continuing operations	552	386	166
Capital expenditure – continuing operations	(138)	(185)	47
Net cash flow from/(to) APLNG	116	(124)	240
Net disposals	-	365	(365)
Interest	(248)	(281)	33
<b>Total cash flows – continuing operations</b>	<b>282</b>	<b>161</b>	<b>121</b>
Total cash flows – discontinued operations	32	12	20
<b>Total cash flows – total operations</b>	<b>314</b>	<b>173</b>	<b>141</b>
Repayment of borrowings / Other	(206)	(162)	(43)
<b>Net increase in cash and cash equivalents</b>	<b>108</b>	<b>10</b>	<b>98</b>

→ \$453 million cash improvement

# Ironbark assessment

- Non-cash impairment of \$360 million post-tax reflecting:
  - Downward reserves revision
    - Applies assumptions and experience from analogous APLNG fields
  - Updated field development plan
- Revised 31 December 2017 carrying value of \$279 million
- Expected to enter FEED for Stage 1 development in FY2018
  - Revised development plan initially targeting higher permeability sweet spot
  - Multi-stage plan enables further Integrated Gas cost improvements and lower permeability learnings to be applied
  - Targeting first gas FY2021

Ironbark	30-Jun-17	Revision	31-Dec-17
2P Reserves	249	(120)	129
3P Reserves	635	(443)	192
2C Resource	332	(44)	288

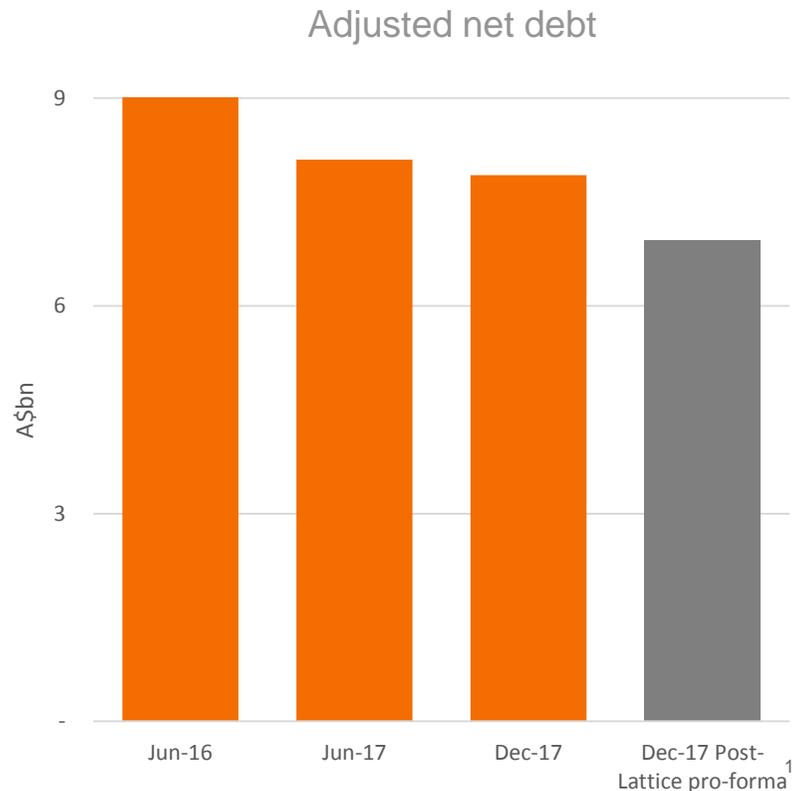
Assessment of Ironbark reserves and resources as at 8 February 2018 prepared in accordance with the SPE Petroleum Resources Management System (PRMS) using the deterministic method<sup>1</sup>.

1) Origin is not aware of any new information or data that materially affects the information included in the announcement to the ASX on 8 February 2018 and all material assumptions and technical parameters underpinning these estimates continue to apply and have not materially changed.

# Lattice sale completed 31 January 2018

- \$1,585 million sale of Lattice Energy completed on 31 January 2018 with an effective date of 1 July 2017
- Consistent with ongoing commitments to reduce debt and move to a leaner, simpler operating model
- Approximately \$1 billion directed to paying down debt
  - Reflecting settlement of Benaris transaction (\$190 million), close out of oil forward sale agreements (\$265 million), transactions costs, adjustments and taxes
- Non-cash post-tax impairment charge of \$173 million
  - Reflects Lattice Energy earnings from 1 July until completion

# Capital management



(1) Unaudited - Includes proceeds from sale of Lattice (net of transaction related costs and adjustments)

- Debt reducing towards our target capital structure of 2.5–3.0x Debt/EBITDA
- Cancelled \$2 billion of surplus undrawn debt
  - further \$900 million to be cancelled in H2 FY2018
  - **cumulative interest saving of ~\$20 million p.a.**
- Intend to redeem the €500 million 2071 hybrid on its first call date in June 2018
  - No adverse impact on credit ratings expected
  - Lattice proceeds combined with hybrid redemption, **further ~\$70 million p.a. interest savings**



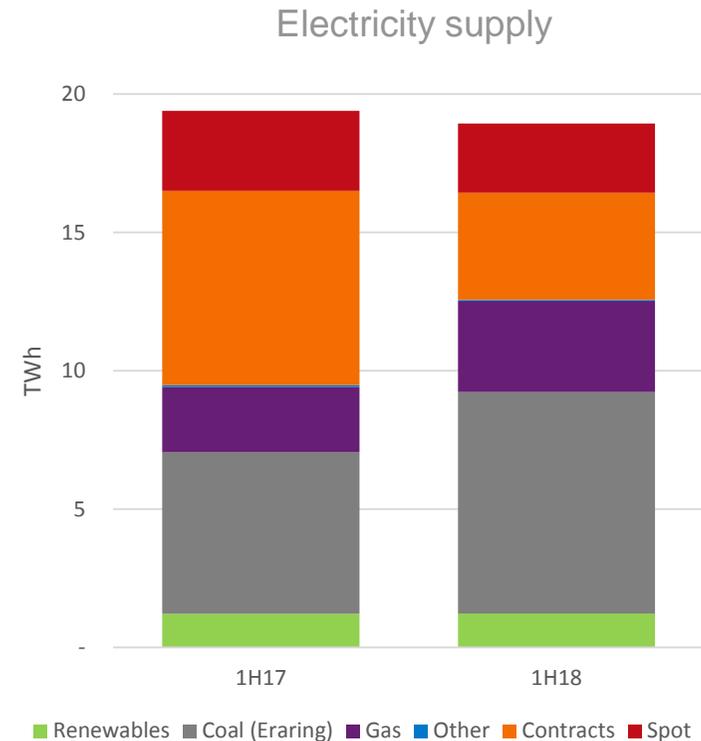
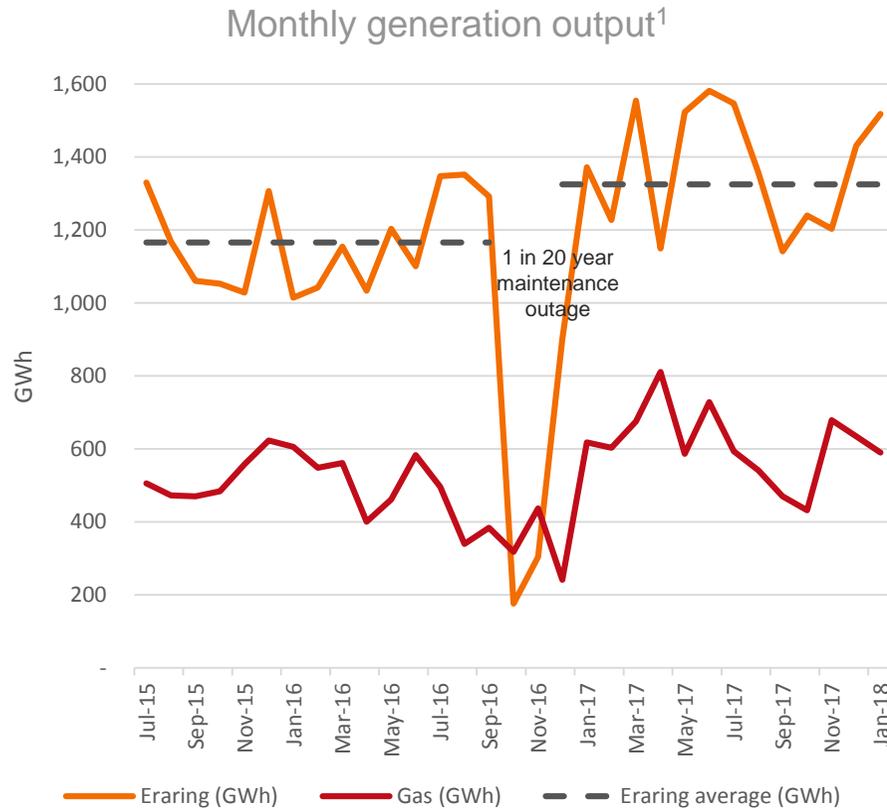
# OPERATIONAL REVIEW

Frank Calabria



# ENERGY MARKETS

# Running generation harder

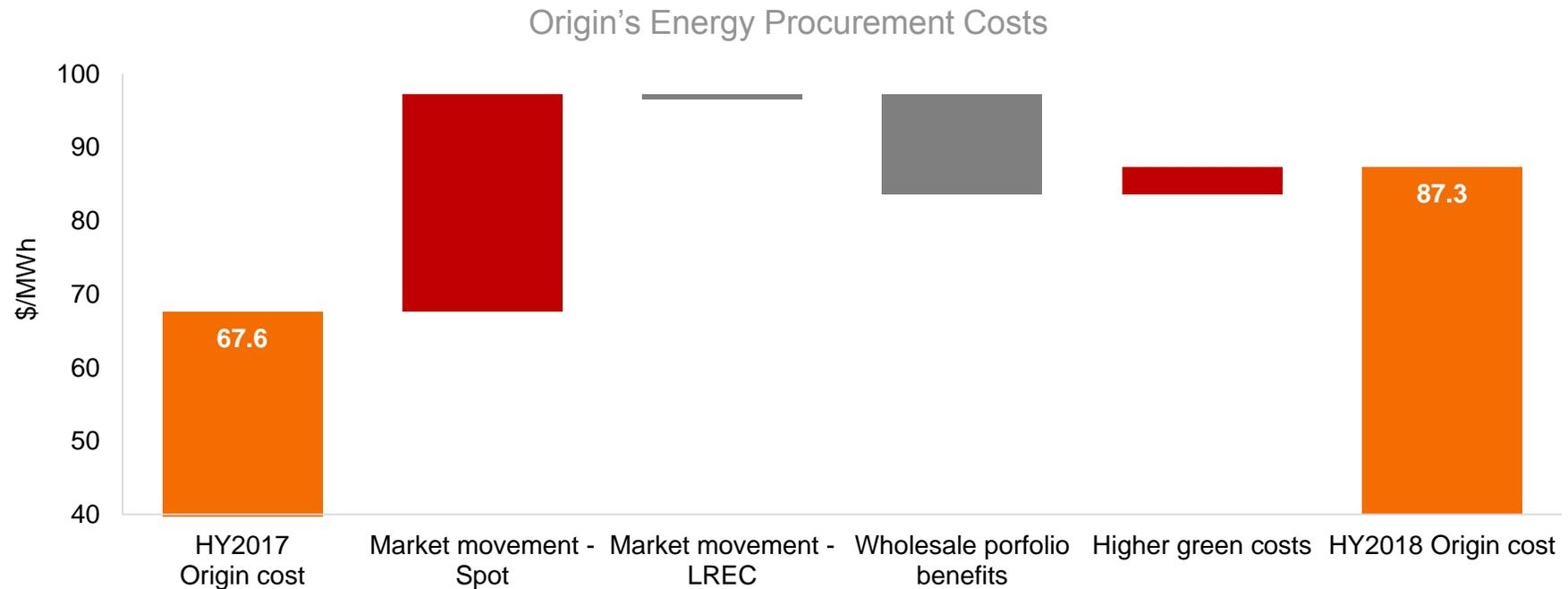


➤ On track to increase Eraring output by 12-15% in FY2018 to 15.5 – 16 TWh

➤ Increased supply from Eraring and Pelican Point (Gas) has resulted in reduced contract and spot exposure

(1) Includes contracted generation from Pelican Point, but excludes generation from renewable PPAs

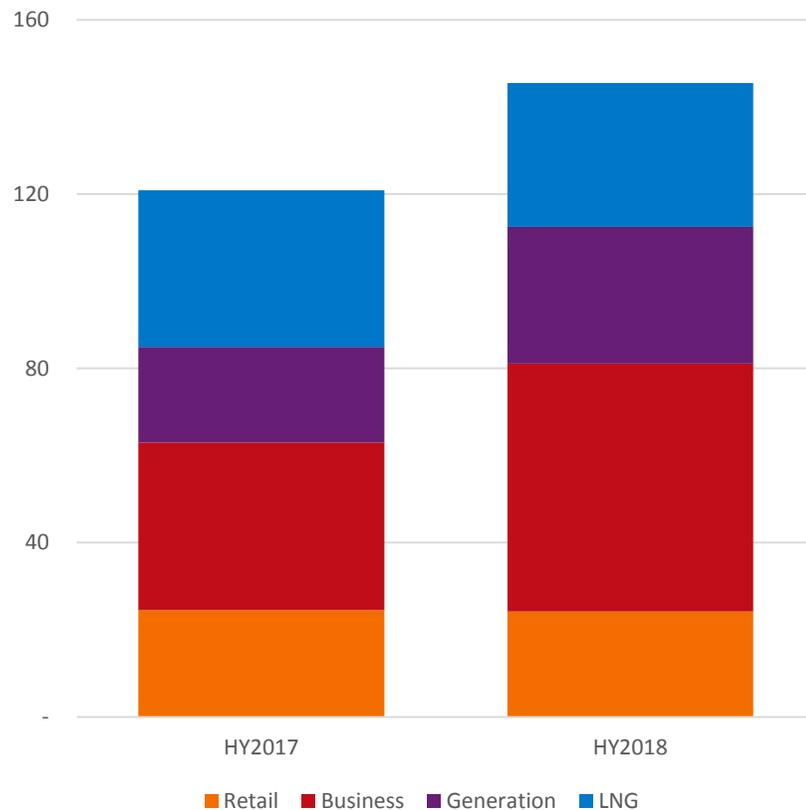
# Delivering a competitive cost of energy in a rising wholesale market



- Flexible wholesale and generation portfolio outperformed rising wholesale market
- Cost of energy increased \$20/MWh vs ~\$28/MWh increase in market prices (black and green)
  - Green cost increase added \$3.70/MWh to wholesale cost (\$70 million impact). Green cost increase driven by roll off of legacy LREC inventory
  - Green costs are expected to benefit from competitively priced renewable supply coming online
- Wholesale portfolio benefits are net of fuel cost increases for generation

# Growing natural gas sales volumes to customers and to generation

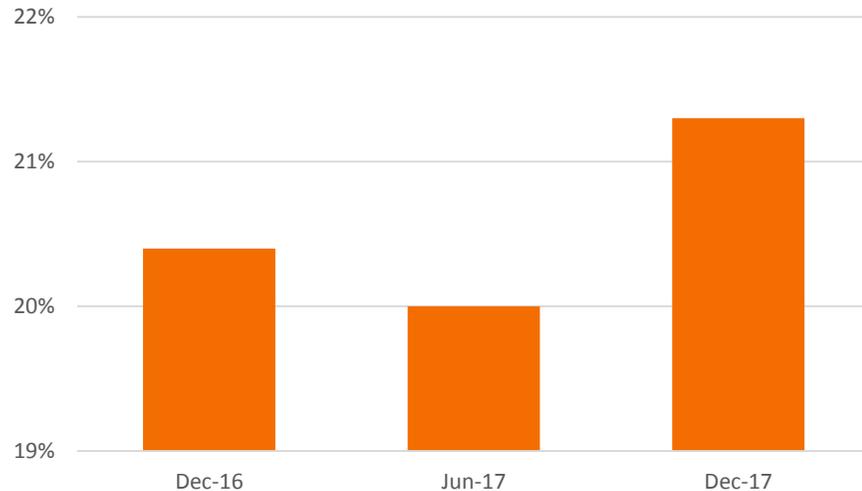
Energy Markets Natural Gas sales



- Additional 15.1 PJ of gas sales to external Business customers
- Flexibility to direct gas through Origin's electricity generation fleet (volumes up 9.5 PJ)
- Underpinned by a competitively priced and flexible gas supply portfolio able to swing gas to the highest value market
- Natural Gas gross profit margin increased to \$2.80/GJ from \$2.70/GJ in HY2017

# Origin responding to increased customer activity

## Market churn



6 monthly average market churn

- Market churn increased substantially in 6 months to December 2017
- Origin churn remains below market
- Market remains highly competitive

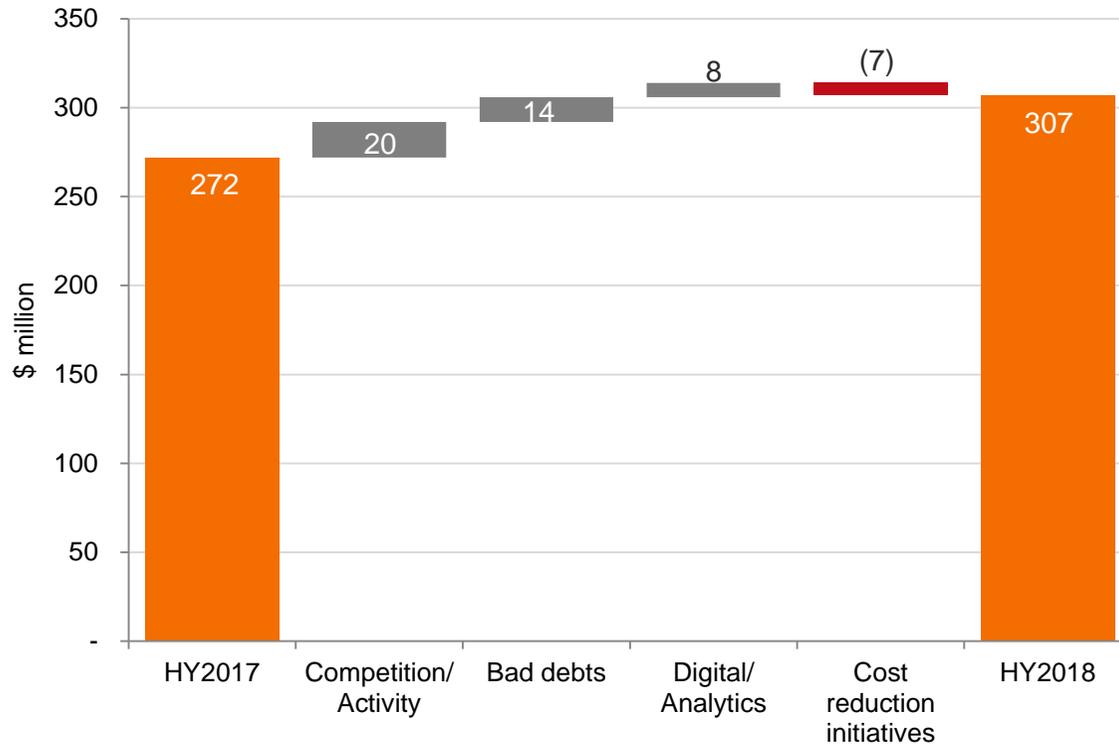
## Monthly net customer position



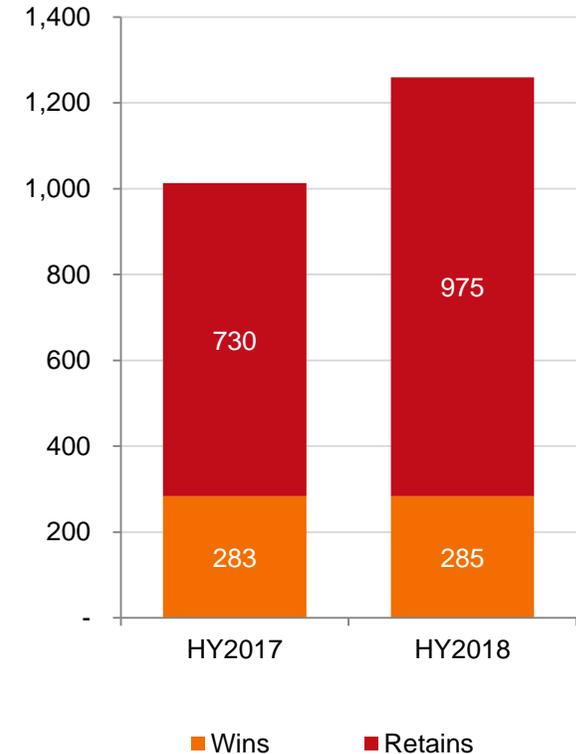
- Net customer loss of 47,000 in the half, trend improving in December and January
- Responding to increased customer activity
  - Increased sales and marketing
  - 24% increase in wins/retains
  - 10% increase in call volumes

# Operating cost pressures driven by increased customer activity

## Electricity and Natural Gas Cost to Serve



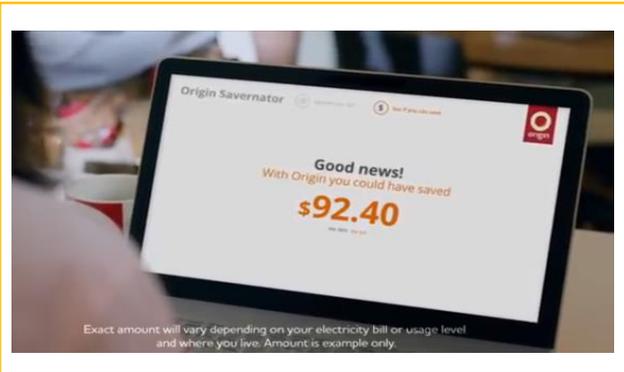
## Customer activity



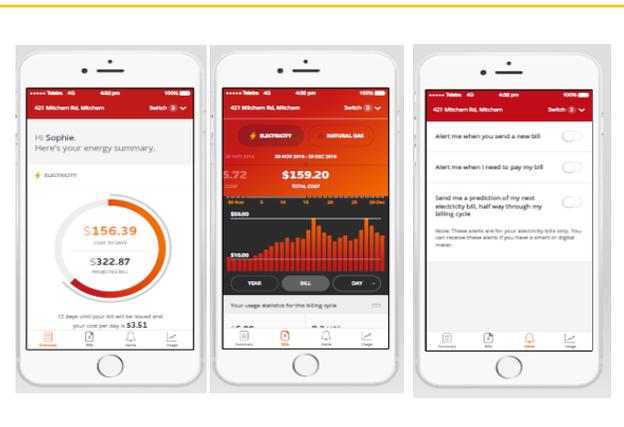
- Increased customer activity driven by affordability and price-based competition has led to increased spend on sales and marketing, digital/analytics and higher bad and doubtful debts expense
- Origin is defending market share, managing for value and building a leading digitally-enabled customer experience

# Continuing to transform the customer experience

## Price transparency with Origin Savernator



## Origin App



## Increasing digital interactions

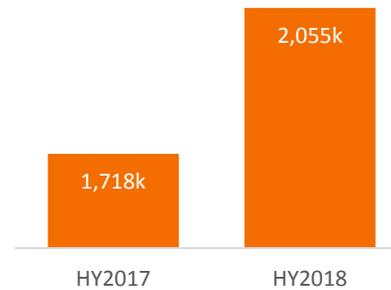
### Online sales up 41% (wins & retains)



### MyAccount registrations up 14%



### eBilling accounts up 19%



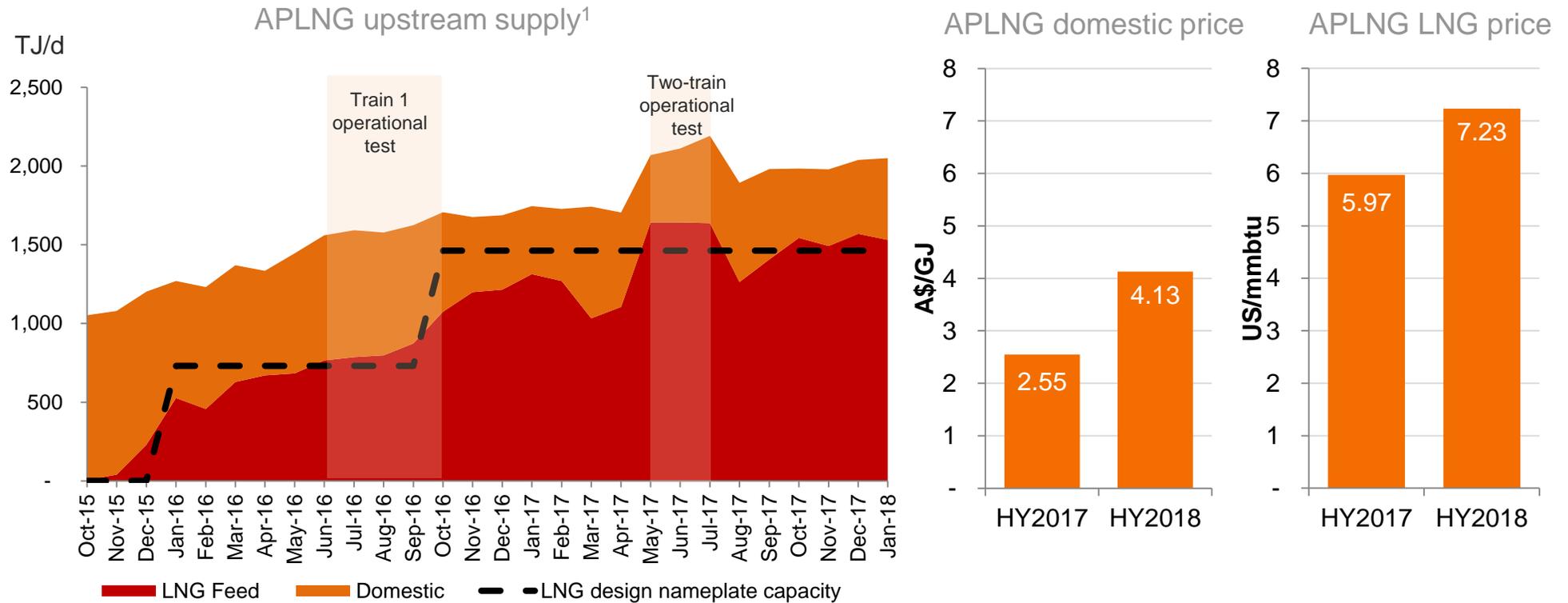
### Direct Debit accounts up 12%





INTEGRATED GAS

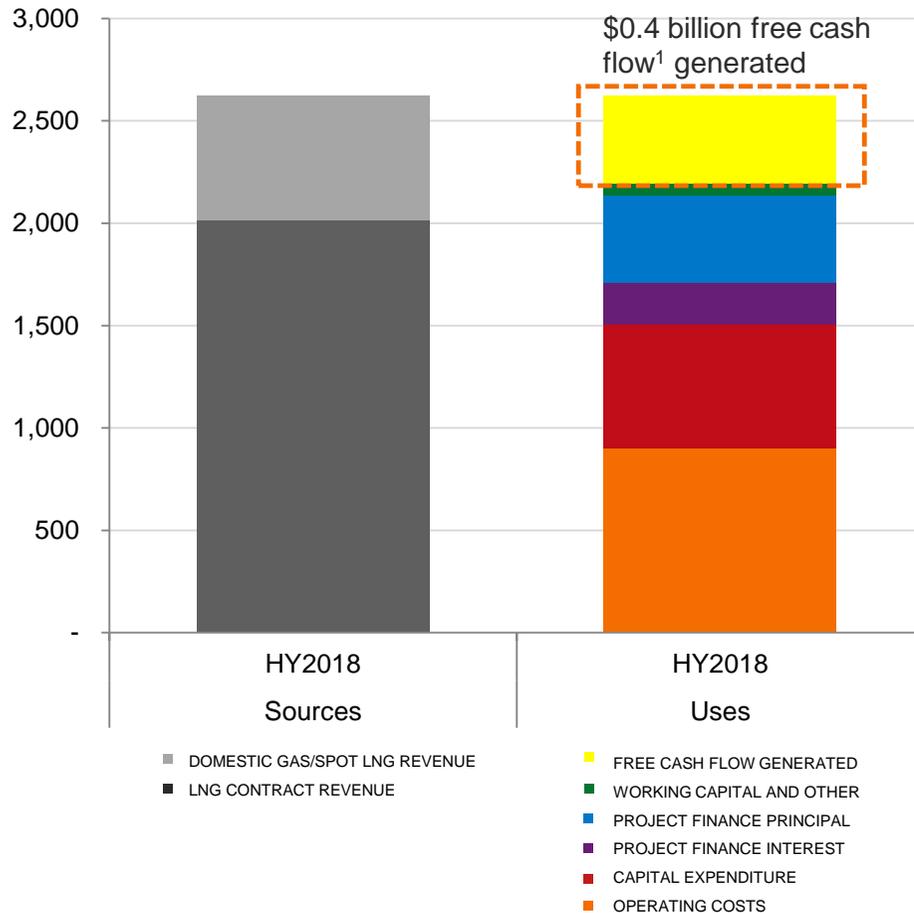
# APLNG delivering increased production and revenue



(1) Includes 26 PJ of insurance gas purchased for two-train operational test across FY17 and H1 FY2018

# APLNG sources and uses of cash

APLNG cashflow (100%)



## Operating costs

- HY2018 unit operating costs were A\$1.33/GJ, in line with expectations

## Capital expenditure

- 137 operated wells drilled (55 non-operated)
- 130 operated wells commissioned (37 non-operated)
- HY2018 standard vertical well costs were \$2.5 million per well, in line with expectations
- 69 fracked wells commissioned

(1) Excluding movements in project finance reserve accounts

# APLNG FY2018 breakeven update

## Benefiting from higher spot LNG and domestic revenue and deferral of activity

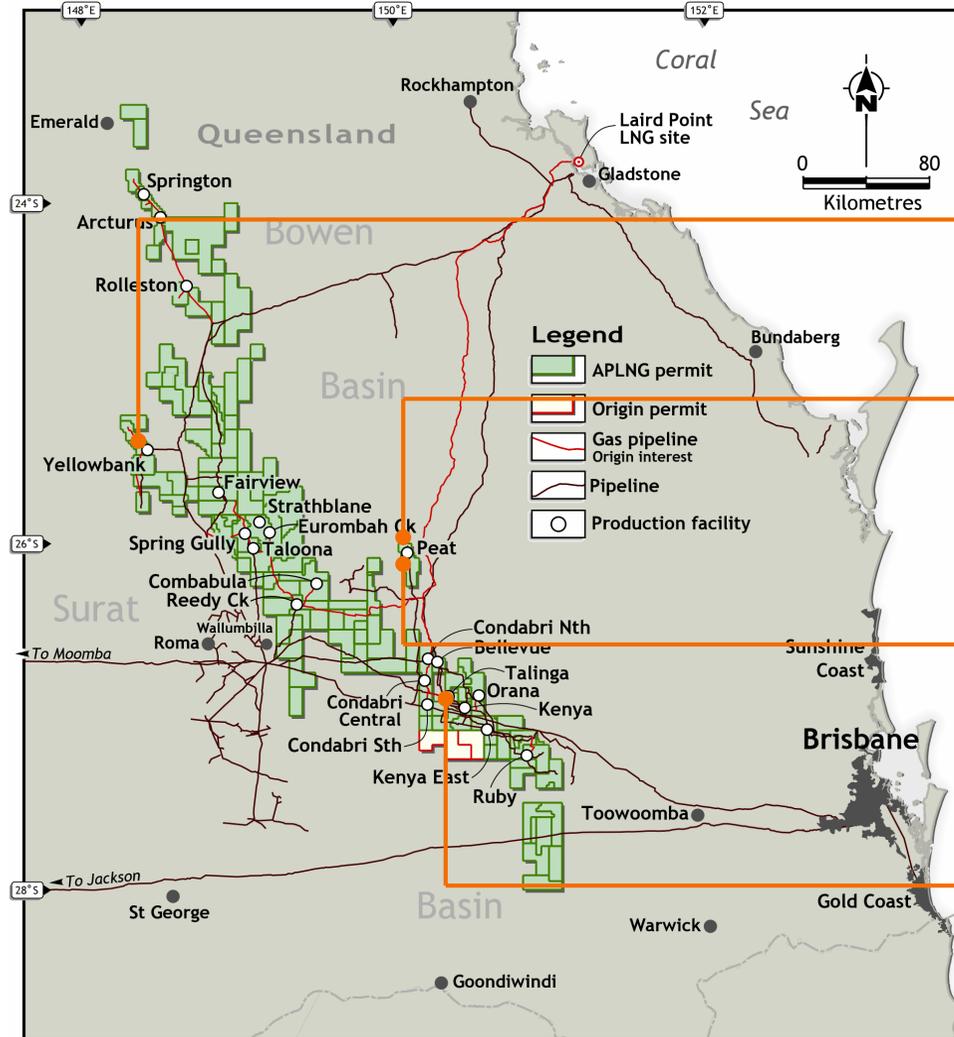
100% APLNG (A\$bn)	Previous Guidance @ 0.75 AUD/USD	Updated Guidance @ 0.78 AUD/USD
Capital expenditure – Sustain	1.4	1.3
Capital expenditure – E&A	0.3	0.1
Operating expenditure	1.6	1.7
Less: Spot LNG & Domestic revenue <sup>1</sup>	(1.1)	(1.2)
<b>Operating breakeven</b>	<b>2.3</b>	<b>2.0</b>
<b>Operating breakeven (US\$/boe)<sup>2</sup></b>	<b>30</b>	<b>27</b>
Project finance interest	0.4	0.4
Project finance principal	1.0	0.9
<b>Distribution breakeven</b>	<b>3.6</b>	<b>3.3</b>
<b>Distribution breakeven (US\$/boe)<sup>2</sup></b>	<b>48</b>	<b>45</b>
Sales volumes, 100% APLNG (100%)	Previous Guidance	Updated Guidance
Domestic and Spot LNG (PJ)	256	240
Contract LNG volumes (PJ)	433	433
<b>Contract LNG volumes (mmbœ)<sup>2</sup></b>	<b>57</b>	<b>57</b>

- Guidance update based on AUD/USD of 0.78
- Sustain capex reduced to reflect revised non-operated scope and deferral of operated activity
  - Progress on simplified and streamlined well delivery not impacted by deferrals
- E&A guidance reduction represents deferral of some activity to FY2019
- Opex increase due to one-off redundancy costs from the organisational restructure
- Spot LNG and domestic revenue increased
  - Lower volumes due to downstream maintenance shutdowns more than offset by higher prices

(1) Based on Facts Global Energy forecasts for spot LNG prices

(2) Based on contract LNG sales volumes converted to barrels of oil equivalent adjusted for contract slope.

# Increased exploration activity from H2 FY2018 as material plays progress



- Drill Westgrove 9
- Deep conventional exploration play
- H1 FY2019

- Drill South Burunga 2
- Deep conventional exploration play
- H2 FY2018

- Peat 3D Seismic Survey
- FY19

- East Bowen Deep pilots on track for 2018/2019

# Committed to delivering a step change reduction in upstream costs at APLNG

Key Outcomes	Initial Targets	Metric	June 2019 target run rate
Cost reduction and productivity improvement	Well cost <sup>1</sup>	A\$m/well	1.2
	Operating cost <sup>2</sup>	A\$/GJ	1.0
	Opex and Capex	A\$bn	<2.8
	Operating breakeven <sup>3</sup>	US\$/boe	<24
	Distribution breakeven <sup>3</sup>	US\$/boe	<40

(1) Standard unfracked vertical Surat well (2) Upstream operated (3) AUD = 0.75 USD

Distribution breakeven includes target savings from project finance

- June 2019 target run rate includes \$500m+ reduction in sustain capex and opex from \$3.3 billion baseline provided in November 2017
- Simplified organisation with streamlined processes
  - Asset-led structure that is smaller, flatter and simpler
  - Built around strong core processes
  - Experienced leadership team appointed
- 650 role reduction (majority by June 2018)
  - Majority of reductions in capital cities with a strong regional presence maintained



# OUTLOOK

Frank Calabria

## FY2018 guidance update

- ✓ Energy Markets FY2018 EBITDA is expected to be in the range of \$1.78 - \$1.85 billion (increased from \$1.7 - \$1.8 billion), provided that market conditions and the regulatory environment do not materially change
  - Increase driven by increased generation at Eraring and continued increase in natural gas volumes, partially offset by increased operating costs in a competitive market
- ✓ Origin's share of APLNG production is expected to be 245–265 PJ (unchanged)
- ✓ In FY2018, APLNG is expected to have a distribution break even of US\$45/boe (assuming AUD:USD exchange rate of 0.78)
- ✓ Capital expenditure (excluding Lattice Energy) is expected to be \$360 - \$420 million (unchanged)
- ✓ Adjusted Net Debt is expected to be below \$7 billion (unchanged)

# Wrap Up

- ✓ Deleveraging on track
- ✓ Moving to a simpler and leaner operating model
- ✓ Improved earnings in electricity and natural gas
- ✓ Continuing to address energy security and prices
- ✓ Transforming customer experience
- ✓ Increased production and revenue at APLNG
- ✓ Committed to a step change in upstream costs at APLNG



# APPENDIX

# Underlying profit

Continuing operations (\$ million)	HY2018	HY2017	Change
Energy Markets	891	735	156
Integrated Gas	630	287	343
Corporate	(29)	(32)	3
<b>Underlying EBITDA</b>	<b>1,492</b>	<b>990</b>	<b>502</b>
Underlying D&A	(181)	(167)	(14)
Underlying share of APLNG ITDA	(587)	(400)	(187)
<b>Underlying EBIT</b>	<b>723</b>	<b>423</b>	<b>300</b>
Underlying interest income	115	85	30
Underlying interest expense	(255)	(218)	(37)
Underlying income tax expense	(154)	(115)	(39)
Non-controlling interest	(1)	(1)	-
<b>Underlying Profit (continuing operations)</b>	<b>428</b>	<b>173</b>	<b>255</b>

Discontinued operations (\$ million)	HY2018	HY2017	Change
<b>Underlying EBITDA</b>	<b>230</b>	<b>155</b>	<b>75</b>
Underlying D&A	(4)	(133)	129
<b>Underlying EBIT</b>	<b>227</b>	<b>22</b>	<b>205</b>
Underlying interest expense	(6)	(6)	-
Underlying income tax expense	(66)	(5)	(61)
<b>Underlying Profit (discontinued operations)</b>	<b>154</b>	<b>11</b>	<b>143</b>

# Reconciliation from statutory to underlying profit

Half year ended 31 December (\$m)	HY2018
<b>Statutory Profit / (Loss)</b>	<b>(207)</b>
Items Excluded from Underlying Profit (post-tax)	
- Fair value and foreign exchange movements	(194)
- Disposals, impairments and business restructuring	(595)
Total Items Excluded from Underlying Profit (post-tax)	(789)
<b>Underlying Profit</b>	<b>582</b>

- Fair value and foreign exchange movements reflect fair value losses associated with oil hedging, interest rate swaps and other financial instruments
- Disposals, impairments and business restructuring primarily reflects
  - Impairment charges of \$533 million (post-tax);
  - Transaction costs of \$31 million (post-tax) associated with the disposal of Lattice Energy;
  - Lattice Energy related Foreign Currency Translation Reserve release of \$27 million

# Reconciliation of net debt

	Issue Currency	Issue Notional	Hedged Currency	Hedged Notional	AUD \$'m Dec-17	AUD \$'m Dec-17	AUD \$'m Dec-17
					Interest-bearing liabilities	Fair value adjustments on FX hedging transactions	Adjusted net debt
AUD Debt	AUD	517	AUD	517	517	0	<b>517</b>
USD Debt Left in USD	USD	790	USD	790	1,013	0	<b>1,013</b>
USD Debt Swapped to AUD	USD	895	AUD	1,004	1,145	(141)	<b>1,004</b>
EUR Debt Swapped to AUD	EUR	2,700	AUD	3,727	4,222	(495)	<b>3,727</b>
EUR Debt Swapped to USD	EUR	1,000	USD	1,372	1,532	228	<b>1,759</b>
NZD Debt Swapped to AUD	NZD	141	AUD	125	128	(4)	<b>125</b>
<b>Total</b>					<b>8,557</b>	<b>(412)</b>	<b>8,145</b>
Cash and cash equivalents							(258)
<b>Adjusted net debt</b>							<b>7,887</b>

- Foreign currency debt has been largely hedged into either AUD or USD using cross currency interest rate swap (CCIRS) derivatives
- Accounting standards require the foreign currency debt and the linked CCIRS derivatives to be disclosed separately
- As at 31 December 2017, Origin's interest bearing liabilities were A\$8,557 million. The associated CCIRS was a net derivative asset of A\$412 million. The net of these two amounts reflect the quantum of debt Origin is required to repay upon maturity

- (1) Since the inception of the CCIRS derivatives, the AUD has depreciated against the USD, EUR and NZD. This has meant that interest-bearing liabilities show a larger liability when the foreign debt is translated at current spot rates. The fair value of the CCIRS derivatives on the other hand increased, shown as a derivative asset (reduces the quantum of debt Origin is required to pay upon maturity).
- (2) Conversely, the USD has appreciated relative to EUR since the inception of the EUR to USD CCIRS derivatives. This has meant that interest-bearing liabilities show a lower liability when the foreign debt is translated at the current spot rate. The fair value of the CCIRS derivatives on the other hand has decreased and is shown as a derivative liability.

# Energy Markets sales volumes

## Natural Gas sales volume (PJ)

Half year ended 31 December	2017			2016			Change	Change
Volumes sold (PJ)	Retail	Business	Total	Retail	Business	Total	PJ	%
NSW	5.1	11.0	16.1	5.1	8.9	14.0	2.1	15
Queensland <sup>1</sup>	1.6	61.4	63.0	1.5	53.5	55.0	8.0	15
Victoria	14.5	11.7	26.2	14.8	6.9	21.7	4.5	21
South Australia	3.0	5.7	8.7	3.0	5.3	8.3	0.5	5
<b>External volumes sold</b>	<b>24.2</b>	<b>89.9</b>	<b>114.1</b>	<b>24.5</b>	<b>74.6</b>	<b>99.0</b>	<b>15.1</b>	<b>15</b>
Internal sales (generation)			31.4			21.9	9.5	43
<b>Total volumes sold</b>			<b>145.5</b>			<b>120.9</b>	<b>24.6</b>	<b>20</b>

## Electricity sales volume (TWh)

Half year ended 30 June	2017			2016			Change	Change
Volumes sold (TWh)	Retail	Business	Total	Retail	Business	Total	TWh	%
NSW	4.2	4.6	8.8	4.5	4.4	8.8	(0.0)	(0)
Queensland	2.4	2.0	4.4	2.5	2.4	4.9	(0.5)	(11)
Victoria	1.7	2.5	4.1	1.7	2.7	4.4	(0.2)	(5)
South Australia	0.6	1.0	1.5	0.5	0.8	1.3	0.3	23
<b>Total volumes sold</b>	<b>8.9</b>	<b>10.0</b>	<b>18.9</b>	<b>9.2</b>	<b>10.2</b>	<b>19.4</b>	<b>(0.5)</b>	<b>(3)</b>

(1) LNG and trading volumes for all states shown in QLD

# Energy Markets customer accounts

## Customer Accounts

As at Customer Accounts ('000)	31 December 2017			30 June 2017			Change
	Electricity	Natural Gas	Total	Electricity	Natural Gas	Total	
NSW <sup>1</sup>	1,189	265	1,455	1,213	262	1,475	(20)
Queensland	721	172	893	752	168	920	(27)
Victoria	551	475	1,026	553	478	1,031	(6)
South Australia <sup>2</sup>	203	204	407	198	203	401	6
<b>Total</b>	<b>2,664</b>	<b>1,116</b>	<b>3,780</b>	<b>2,716</b>	<b>1,112</b>	<b>3,828</b>	<b>(47)</b>

(1) Australian Capital Territory (ACT) customer accounts are included in New South Wales.

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

# Energy Markets generation

## Generation portfolio

Half year ended 31 December 2017	Nameplate Capacity (MW)	Type <sup>1</sup>	Equivalent Reliability Factor <sup>2</sup>	Capacity Factor	Electricity Output (GWh)	Pool Revenue (\$m)	Pool Revenue (\$/MWh)
Eraring	2,880	Black Coal	92.3%	63.0%	8,007	701	88
Darling Downs	644	CCGT	100.0%	24.7%	703	51	73
Osborne <sup>3</sup>	180	CCGT	100.0%	83.1%	660	61	93
Uranquinty	664	OCGT	100.0%	10.7%	314	33	105
Mortlake	566	OCGT	99.5%	28.7%	718	81	112
Mount Stuart	423	OCGT	100.0%	0.2%	3	0	117
Quarantine	224	OCGT	97.6%	5.5%	55	7	134
Ladbroke Grove	80	OCGT	99.8%	15.5%	55	7	125
Roma	80	OCGT	98.5%	5.6%	20	2	107
Shoalhaven	240	Pump/Hydro	98.1%	3.7%	39	5	125
<b>Internal Generation</b>	<b>5,981</b>		<b>97.79%</b>		<b>10,574</b>	<b>949</b>	<b>90</b>
Renewable PPAs	743	Solar / Wind	n.a.	38%	1,219	100	82
Pelican Point	240	CCGT	n.a.		799		
<b>Owned and Contracted Generation</b>	<b>6,964</b>				<b>12,592</b>		

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

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

(3) Origin has 50% interest in the 180MW plant and contracts 100% of the output.

# Glossary - 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 (EPS)	Statutory profit/loss 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 used in investing activities	Statutory cash flows used in investing activities as disclosed in the Statement of Cash Flows in the Origin Consolidated Financial Statements.
Cash flows from financing activities	Statutory cash flows from 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
NCOIA	Net cash flow from operating and investing activities
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 Group.

# Glossary - 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.

Term	Meaning
Adjusted Net Debt	Net Debt adjusted to remove fair value adjustments on borrowings in hedge relationships.
Capital Employed	Shareholders Equity plus Origin Debt plus Origin's Share of APLNG Project Finance less Non-cash fair value uplift plus net derivative liabilities
Gross Margin	Gross profit divided by Revenue.
Gross Profit	Revenue less cost of goods sold.
ITDA	Interest, Tax, Depreciation and Amortisation
Non-cash fair value uplift	Reflects the impact of the accounting uplift in the asset base of APLNG which 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 corresponding period	6 month period to 31 December 2016.
Underlying Profit	Underlying net profit after tax and non-controlling interests
Underlying average interest rate	Underlying interest expense for the current period divided by Origin's average drawn debt during the year (excluding funding related to Australia Pacific LNG).
Underlying EBITDA	Underlying earnings before underlying interest, underlying tax, underlying depreciation and amortisation (EBITDA)
Underlying ROCE	<p>Underlying ROCE is calculated as Adjusted EBIT / Average Capital Employed (annualised).</p> <ul style="list-style-type: none"> <li>Average Capital Employed = Shareholders Equity + Origin Debt + Origin's Share of Australia Pacific LNG project finance - Non-cash fair value uplift + net derivative liabilities.</li> <li>Adjusted EBIT = Origin Underlying EBIT and Origin's share of Australia Pacific LNG Underlying EBIT + Dilution Adjustment = Statutory Origin EBIT adjusted to remove the following items: a) Items excluded from underlying earnings; b) Origin's share of Australia Pacific LNG underlying interest and tax; and c) the depreciation of the Non-cash fair value uplift adjustment.</li> </ul> <p>In contrast, for remuneration purposes Origin's statutory EBIT is adjusted to remove Origin's share of Australia Pacific LNG 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.</p>
Underlying share of ITDA	The Group's share of underlying interest, underlying tax, underlying depreciation and underlying amortisation (ITDA) of equity accounted investees.

# Glossary - Non-Financial Terms

Term	Meaning
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 estimated 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.
APLNG	A reference to Australia Pacific LNG or APLNG is a reference to Australia Pacific LNG Pty Limited (and its related entities), an incorporated joint venture between Origin, ConocoPhillips and Sinopec in which Origin holds a 37.5% shareholding. Origin's shareholding in Australia Pacific LNG is equity accounted
Bbl	Barrel – An international measure of oil production. 1 barrel = 159 litres
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% availability at the manufacturer's operating specifications.
Contingent Resource	Contingent Resources estimates are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingent Resources are a class of discovered recoverable resources.
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
Joule	Primary measure of energy in the metric system.
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
Mmboe	million barrels of oil equivalent
Mmbtu	million British thermal units
MW	Megawatt = $10^6$ watts
MWh	Megawatt hour = $10^3$ kilowatt hours
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 LNG = 55.4 PJe; 1 million tonnes LPG = 49.3 PJe; 1 TWh of electricity = 3.6 PJe.
SPE	Society of Petroleum Engineers
TCF	Trillion cubic feet
TJ/d	Terajoules per day (Terajoule = $10^{12}$ Joules)
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.

## For more information

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