

То	Company Announcements Office	Facsimile	1300 135 638
Company	ASX Limited	Date	31 October 2017
From	Helen Hardy	Pages	15
Subject	September 2017 Quarterly Production Report		

Please find attached a release on the above subject.

Regards

Helen Hardy Company Secretary

02 8345 5000



#### ASX/Media Release

31 October 2017

### Origin reports stable production and revenues

Origin Energy Limited (Origin) has released its Quarterly Production Report for the quarter ended 30 September 2017 (September Quarter).

Origin's quarterly production of 89.1 PJe was stable compared to the June quarter, reflecting a sustained level of production following completion of the 90 day two-train operational test at Australia Pacific LNG.

Compared to the corresponding period in FY2016, Origin's quarterly production increased by 20 per cent. This primarily reflected increased LNG production by Australia Pacific LNG and increased production at Otway.

Revenue for the September Quarter 2017 was \$678.6 million, an increase of 1 per cent compared to the June quarter and a 58 per cent increase on the corresponding period in FY2016, reflecting higher production at Australia Pacific LNG and higher realised prices across all products.

During the quarter, Origin entered into an agreement to sell its conventional upstream oil and gas business, Lattice Energy, to Beach Energy for \$1,585 million. The transaction is effective as at 1 July 2017 with completion subject to satisfaction of customary conditions, including appprovals from the New Zealand Minister of Energy and Resources and the New Zealand Overseas Investment Office.

Origin CEO Frank Calabria said, "We reached another major milestone during the quarter announcing the sale of Lattice Energy, which delivers on our commitment to simplify our business and reduce debt. As part of the sale, Origin secured access to a significant portion of Lattice Energy's future east coast gas production under long-term gas supply agreements to support our domestic gas business.

"At Australia Pacific LNG planned maintenance was completed on both trains. Following the formal completion of the Lenders' Test, the remaining US\$3.4 billion of shareholder guarantees relating to the US\$8.5 billion project finance facility were released.

"Australia Pacific LNG continues to be a major supplier of gas to Australia's east coast, and is expected to provide almost 30 per cent of total east coast gas market demand in 2018, as well as meeting its export contract commitments. During the quarter, a total of 32 LNG cargoes were loaded and shipped under the project's long term Sales and Purchase Agreements," Mr Calabria said.

During the December quarter, Australia Pacific LNG expects to complete a planned maintenance program with a 0.5 train outage for approximately 10 days.

NOTE: The reports do not cover other areas of Origin's integrated business, including electricity generation, energy retailing or non-hydrocarbon development activity.



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### **About Origin**

Origin Energy (ASX: ORG) is the leading Australian integrated energy company. Origin is the leading energy retailer with approximately 4.2 million customer accounts, has approximately 6,000 MW of power generation capacity and is also a large natural gas producer. Origin is the upstream operator of Australia Pacific LNG, its incorporated joint venture with ConocoPhillips and Sinopec, which supplies natural gas to domestic markets and exports LNG under long term contracts.



# **Quarterly Production Report**

For period ended 30 September 2017

Comparative performance a	t a glance – Origin's tot	tal proportional interests	
Previous Quarter Comparison	September 2017	June 2017	Change %
Production (PJe)	89.1	89.2	-
Sales (PJe)	91.4	92.4	(1)
Revenue (A\$m) <sup>1</sup>	678.6	673.4	1
Prior Year Corresponding Quarter Comparison	September 2017	September 2016	Change %
Production (PJe)	89.1	74.2	20
Sales (PJe)	91.4	78.5	16
Revenue (A\$m) <sup>1</sup>	678.6	429.7	58

Note: Information presented in the table above and throughout this report relates only to hydrocarbon exploration and production activities undertaken by Origin Energy Limited ("Origin"), its subsidiaries and the incorporated joint ventures in which it has interests. The report does not cover other business activities of Origin such as electricity generation, or energy retailing.

#### **Highlights**

- Origin entered into an agreement to sell its conventional upstream oil and gas business, Lattice Energy, to Beach Energy for \$1,585 million. The transaction has an effective date of 1 July 2017 and net proceeds will be used to pay down debt. As part of the sale, Origin has secured access to a significant portion of Lattice Energy's future east coast gas production under long-term gas supply agreements to support its domestic gas business.
- Following successful completion of all lenders' completion tests in relation to APLNG's US\$8.5 billion project finance facility, the remaining US\$3.4 billion of shareholder guarantees were released.
- Planned maintenance was successfully completed on both LNG trains at APLNG in line with expectations. During these shutdowns excess upstream gas volumes were directed into the domestic market.
- Quarterly production of 89.1 PJe was in line with the June 2017 quarter, reflecting a sustained level
  of production at APLNG following the 90 day two-train operational test.
- Quarterly revenue increased 1% compared to the June 2017 quarter reflecting higher prices realised for LNG, natural gas and LPG, and higher domestic sales volumes by APLNG partially offset by lower LNG volumes.

#### **Production and Sales**

### September Quarter 2017 compared with June Quarter 2017

Production of 89.1 PJe in the September quarter was in line with the June 2017 quarter of 89.2 PJe. The September quarter saw APLNG production increase by 1.8 PJe compared to the June 2017 quarter despite planned shutdowns. Production excluding APLNG decreased by 1.8 PJe largely due to lower seasonal demand and field decline at Otway.

Revenue increased marginally in the September quarter compared to June 2017 reflecting higher realised prices for LNG, natural gas and LPG, and higher domestic sales volumes by APLNG partially offset by lower LNG volumes. Lower LNG sales volumes in the quarter was due to increased LNG inventory and timing of LNG cargo shipments.

<sup>&</sup>lt;sup>1</sup> Revenue disclosed includes APLNG related amounts that have been capitalised prior to November 2016 as well as gains/(losses) on forward sales and hedging.

### September Quarter 2017 compared with September Quarter 2016

Production of 89.1 PJe in the September 2017 quarter was 14.9 PJe or 20% higher than the September 2016 quarter reflecting increased volumes from APLNG (9.4 PJe) with two LNG trains on line, increased production at Otway (5.7 PJe) due to Halladale/Speculant volumes and higher plant availability at Otway compared to the September 2016 quarter.

Revenue increased by 58% from the September 2016 quarter primarily reflecting increased production at APLNG, with increased volumes sold as LNG, increased production at Otway and higher average realised prices across all products.

#### PRODUCTION, SALES AND REVENUE 1.

## Production by product and area (including interest in APLNG)

Natural Gas and Ethane	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
Natural Gas	PJ						
APLNG domestic <sup>2</sup>		16.6	15.2	10	25.9	16.6	25.9
SA Cooper & SWQ		2.7	2.7	(1)	2.8	2.7	2.8
Otway Basin (offshore)		11.7	13.6	(14)	6.4	11.7	6.4
Bass Basin		1.9	1.6	19	1.9	1.9	1.9
Perth Basin		1.3	1.2	3	1.0	1.3	1.0
Taranaki Basin (onshore)		-	-	-	0.2	-	0.2
Taranaki Basin (Kupe)		3.4	3.3	1	3.4	3.4	3.4
Ethane	PJ						
SA Cooper & SWQ		0.4	0.4	-	0.4	0.4	0.4
Total Production		38.0	38.0	-	41.9	38.0	41.9
Total Sales Volume		41.7	40.2	4	45.5	41.7	45.5
Total Commodity Revenue <sup>3</sup>	\$M	223.3	195.3	14	164.1	223.3	164.1
Average Gas Price – Total <sup>3</sup>	\$/GJ	5.36	4.86	10	3.61	5.36	3.61
Average Gas Price – APLNG <sup>3</sup>		4.42	3.73	18	2.13	4.42	2.13
Average Gas Price – ex APLNG		6.24	5.68	10	5.75	6.24	5.75

Liquefied Natural Gas (LNG)	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
LNG	Kt						
Total Production		825.9	824.0	-	461.1	825.9	461.1
Total Sales Volume		788.0	825.5	(5)	496.8	788.0	496.8
Total Commodity Revenue <sup>3</sup>	\$M	385.2	401.0	(4)	186.5	385.2	186.5
Average LNG Price <sup>3</sup>	\$/t	488.87	485.8	1	375.4	488.87	375.4
Average LNG Price <sup>3</sup>	US\$/t	385.38	365.9	5	282.0	385.38	282.0
Average LNG Price <sup>3</sup>	US\$/mmbtu	7.34	6.97	5	5.37	7.34	5.37

Crude Oil	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
Crude Oil	kbbls						
SA Cooper & SWQ		56.6	88.6	(36)	70.3	56.6	70.3
Taranaki Basin (onshore)		-	-	-	16.1	-	16.1
Total Production		56.6	88.6	(36)	86.4	56.6	86.4
Total Sales Volume		306.9	292.4	5	373.0	306.9	373.0
Total Commodity Revenue	\$M	20.2	20.7	(3)	24.4	20.2	24.4

<sup>&</sup>lt;sup>2</sup> Refers to production to meet domestic supply requirements and excludes production directed towards the LNG facility on Curtis Island.
<sup>3</sup> Prior periods include capitalised revenue related to APLNG ramp gas and LNG sales volumes up to November 2016. Includes gas sold by APLNG to Origin under long term contract.

Average Crude Price	\$/bbl	66	71	(7)	65	66	65
Condensate/Naphtha	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
Condensate/Naphtha	kbbls						
APLNG		-	-	-	0.3	-	0.3
SA Cooper & SWQ		46.6	40.4	15	45.0	46.6	45.0
Otway Basin (offshore)		128.4	142.5	(10)	81.2	128.4	81.2
Bass Basin		61.5	50.8	21	63.3	61.5	63.3
Perth Basin		0.6	0.5	10	0.6	0.6	0.6
Taranaki Basin (Kupe)		158.4	165.6	(4)	172.8	158.4	172.8
Total Production		395.5	399.7	(1)	363.1	395.5	363.1
Total Sales Volume		376.0	527.8	(29)	325.7	376.0	325.7
Total Commodity Revenue	\$M	22.1	31.6	(30)	18.3	22.1	18.3
Average Condensate Price	\$/bbl	59	60	(2)	56	59	56

LPG	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
LPG	Kt						
SA Cooper & SWQ		6.0	5.5	10	6.1	6.0	6.1
Otway Basin (offshore)		16.2	18.1	(10)	10.0	16.2	10.0
Bass Basin		5.9	4.2	41	5.9	5.9	5.9
Taranaki Basin (onshore)		-	-	-	0.3	-	0.3
Taranaki Basin (Kupe)		12.2	12.7	4	9.3	12.2	9.3
Total Production		40.3	40.5	-	31.5	40.3	31.5
Total Sales Volume		46.3	39.3	18	31.3	46.3	31.3
Total Commodity Revenue	\$М	23.0	19.4	19	12.1	23.0	12.1
Average LPG Price	\$/t	497	492	1	387	497	387

### 1.2 Production by basin (including interest in APLNG)

Production by Basin (All products, PJe)	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
Production by Basin	PJe						
APLNG⁴		63.5	61.7	3	54.1	63.5	54.1
SA Cooper & SWQ		3.9	4.1	(4)	4.2	3.9	4.2
Otway Basin (offshore)		13.1	15.3	(14)	7.4	13.1	7.4
Bass Basin		2.5	2.1	22	2.5	2.5	2.5
Perth Basin		1.3	1.2	2	1.0	1.3	1.0
Taranaki Basin (onshore)		-	-	-	0.3	-	0.3
Taranaki Basin (Kupe)		4.8	4.9	-	4.8	4.8	4.8
Total Production Volume		89.1	89.2	-	74.2	89.1	74.2
Total Sales Volume		91.4	92.4	(1)	78.5	91.4	78.5
Total Commodity Revenue	\$M	673.8	668.0	1	405.4	673.8	405.4
Gain / (Loss) on forward sale <sup>5</sup> and oil puts <sup>6</sup>	\$M	4.9	5.3	(9)	24.3	4.9	24.3
Total Revenue	\$M	678.6	673.4	1	429.7	678.6	429.7
Average Commodity Price	\$/GJe	7.42	7.28	2	5.47	7.42	5.47

### 1.3 Production, Sales Volumes and Revenue Summaries

### 1.3.1 Origin excluding interest in APLNG

Total All Products	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
Production Volume	PJe	25.7	27.5	(7)	20.1	25.7	20.1
Sales Volume	PJe	27.6	29.7	(7)	24.1	27.6	24.1
Sales Revenue	\$M	199.2	203.7	(2)	161.9	199.2	161.9
Gain / (loss) – forward sale <sup>5</sup>	\$M	4.9	5.3	(9)	9.7	4.9	9.7
Total Revenue	\$M	204.1	209.0	(2)	171.6	204.1	171.6
Average Commodity Price	\$/GJe	7.40	7.03	5	7.12	7.40	7.12

 <sup>&</sup>lt;sup>4</sup> Refers to production to meet domestic supply requirements and production directed to the LNG facility on Curtis Island (including liquefaction gas).
 <sup>5</sup> Refers to Origin's oil and condensate forward sale agreements. In FY2013 Origin entered into agreements to sell the majority of its future oil and condensate production over a 72 month period commencing 1 July 2015. The fixed price of US\$62.40/bbl represents the forward oil price at the time of US\$89/bbl, discounted to reflect the receipt of the proceeds upfront. Upon entry into the agreements, Origin received A\$482 million.

6 On 22 December 2015, Origin announced the purchase of oil puts providing Origin with the right to sell 15mmbbl of JCC at a strike price of A\$55/bbl for 75% of the volume and US\$40/bbl for 25% of the volume during FY2017.

### 1.3.2 Origin's interest in APLNG

Total All Products	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
Production APLNG 100%	PJe	169.2	164.6	3	144.3	169.2	144.3
Origin's 37.5% interest							
Production (all products)	PJe	63.5	61.7	3	54.1	63.5	54.1
Sales (all products)	PJe	63.9	62.7	2	54.4	63.9	54.4
Revenue <sup>7</sup>	\$M	474.5	464.4	2	243.6	474.5	243.6
Gain/(loss) on oil puts (Origin only)8		-	-	-	14.6	-	14.6
Total Revenue		474.5	464.4	2	258.2	474.5	258.2
Average Commodity Price	\$/GJe	7.43	7.40	-	4.75	7.43	4.75

## 1.4 Internal and External Purchase and Sales Summary

### 1.4.1 Internal and External Sales (Origin excluding interest in APLNG)

Internal & External Sales Volumes	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
Sales Volume	PJe						
Sales to Energy Markets business		14.0	16.1	(13)	9.1	14.0	9.1
Sales to external parties		13.6	13.7	-	15.0	13.6	15.0
Total		27.6	29.7	(7)	24.1	27.6	24.1

#### 1.4.2 External Purchases

Product Purchase Volumes included in above sales	Unit	This Quarter	Previous Quarter	% Change	Sept Quarter 2016	YTD 2017/18	YTD 2016/17
Origin (excluding interest in APLNG)	PJe	1.1	1.8	(39)	1.8	1.1	1.8
Origin's 37.5% interest in APLNG	PJe	6.0	4.8	27	1.2	6.0	1.2
Total	PJe	7.2	6.6	9	3.0	7.2	3.0

Prior periods include capitalised revenue related to APLNG ramp gas and LNG sales volumes up to November 2016.
 On 22 December 2015, Origin announced the purchase of oil puts providing Origin with the right to sell 15mmbbl of JCC at a strike price of A\$55/bbl for 75% of the volume and US\$40/bbl for 25% of the volume.

### 2. DEVELOPMENT AND EXPLORATION OPERATIONS

### 2.1 Origin's interests held through Australia Pacific LNG (APLNG)

### 2.1.1 Operations Update

APLNG production (100%) was up 4.6 PJe to 169.2 PJe during the quarter, an increase of 3% compared to the June 2017 quarter (164.6 PJe). This reflects the sustained level of production by APLNG following the 90 day two-train operational test.

APLNG sales volume (100%) was up 3.1 PJe to 170.3 PJe during the quarter reflecting an increase in domestic sales of 8.6 PJe, partially offset by a 5.5 PJe decrease in LNG sales primarily due to timing of LNG cargoes and inventory movements.

During the period, production from operated fields increased to an average of 1,375 TJ/d from 1,364 TJ/d in the June 2017 quarter (APLNG share), reflecting ongoing commissioning of new wells in the Surat Basin, and continued production ramp-up.

Average production from all non-operated assets increased to 465 TJ/d in the September 2017 quarter from 445 TJ/d in the June 2017 quarter (APLNG share). Production from QGC operated fields increased to 349 TJ/d from 330 TJ/d in the June 2017 quarter primarily due to the planned shutdown of a gas processing plant and unplanned field downtime in May and June 2017.

During the quarter, APLNG successfully concluded the 90-day operational phase of the project finance two-train lenders' test, and on 24 August 2017, Origin announced that the remaining US\$3.4 billion of shareholder guarantees relating to Australia Pacific LNG's US\$8.5 billion project finance facility have been released after the project met all of the lenders' completion tests.

Planned maintenance was successfully completed on both LNG trains in line with expectations, with the planned Train One shutdown completed in late August, returning to normal operations in early September, and with Train Two at half rates in late September. During these shutdowns, excess upstream gas volumes were directed into the domestic market, with APLNG also completing upstream maintenance activities.

APLNG expects to complete a maintenance shutdown during Q2 FY2018. This shutdown involves one train operating at half rates for approximately 10 days.

During the September 2017 quarter, a total of 32 produced LNG cargoes were loaded and shipped from the APLNG facility on Curtis Island.

APLNG participated in the drilling of 63 operated development wells, 30 non-operated development wells and 7 non-operated appraisal wells during the September 2017 quarter.

### **APLNG Operated Production Wells**

				Development Wells <sup>9</sup>		
		Avg daily production (APLNG share)		Wells drilled	Wells commissioned	
	Spring Gully	ully 273.9 TJ/d	This Quarter	9	-	
			YTD 2017/18	9	-	
Bowen	Peat	8.1 TJ/d	This Quarter	-	-	
Dowell	reat		YTD 2017/18	-	-	
	Denison 0	0 TJ/d	This Quarter	-	-	
		0 13/d	YTD 2017/18	-	-	
	Talinga 172.6 TJ/d	170 6 T I/d	This Quarter	-	-	
		172.0 13/0	YTD 2017/18	-	-	
	0	165.1 TJ/d	This Quarter	-	-	
Surat	Orana		YTD 2017/18	-	-	
Surat	Condabri	054.0.7.1/.	This Quarter	8	25	
	Condabri 351.3 TJ/d	YTD 2017/18	8	25		
	Combabula /	400 F T 1/4	This Quarter	46	30	
	Reedy Creek	403.5 TJ/d	YTD 2017/18	46	30	
	TOTAL	OTAL 1,374.5 TJ/d	This Quarter	63	55	
	IUIAL		YTD 2017/18	63	55	

### **APLNG Non-Operated Production Wells**

				Development Wells		
		Avg daily production (APLNG share)		Wells drilled	Wells commissioned	
GLNG	Fairview	116.0 TJ/d	This Quarter	10	3	
GLING	raliview	110.0 13/0	YTD 2017/18	10	3	
	Kenya East	166.8 TJ/d	This Quarter	1	-	
			YTD 2017/18	1	-	
QGC	Kenya	171.5 TJ/d	This Quarter	19	1	
QGC			YTD 2017/18	19	1	
	Bellevue	10.6 TJ/d	This Quarter	-	-	
			YTD 2017/18	-	-	
	TOTAL 404	464.9 TJ/d	This Quarter	30	4	
	TOTAL	404.9 IJ/0	YTD 2017/18	30	4	

 $<sup>^{\</sup>rm 9}$  APLNG operated wells delivering gas to domestic customers and the CSG to LNG project

## 3. DRILLING ACTIVITY

## 3.1 Exploration/Appraisal

The table below summarises the exploration and appraisal drilling in which Origin had an interest during the Quarter:

Exploration/Appraisal Wells	Basin / Area	Target	Origin Effective Interest %	Well Status
Judga 4	Cooper - SWQ	Gas	16.74%	C&S
Okotoko North 1	Cooper - SWQ	Gas	16.74%	C&S
Koree South 2	Cooper - SA	Gas	13.19%	C&S
Merrimelia 63	Cooper - SA	Oil	13.19%	C&S
Merrimelia 67	Cooper - SA	Oil	13.19%	C&S
Waitsia 4	Perth - L1L2	Gas	50.00%	C&S
Mount Kingsley 14	Bowen	CSG	8.94%	Appraisal
Mount Kingsley 15	Bowen	CSG	8.94%	Appraisal
Mount Kingsley 16	Bowen	CSG	8.94%	Appraisal
Mount Kingsley 17	Bowen	CSG	8.94%	Appraisal
Mount Kingsley 18	Bowen	CSG	8.94%	Appraisal
Mount Kingsley 19	Bowen	CSG	8.94%	Appraisal
Meadows 1	Bowen	CSG	8.97%	Exploration

<sup>\*</sup> Denotes Origin operatorship

## 3.2 Development

The table below summarises development drilling in which Origin had an interest during the September 2017 quarter. Origin participated in 92 CSG development wells across the Bowen and Surat Basins, four conventional gas development wells and two oil development wells in the Cooper Basin during the September 2017 quarter.

Basin / Area Development Wells	Origin Effective Interest %	Well Status	Basin / Area Development Wells	Origin Effective Interest %	Well Status
Cooper Basin - SA	mitorest /0		Combabula 340	34.77%*	Developme
Target – Gas			Combabula 353	34.77%*	Developme
Jack Lake 6	13.19%	C&S	Combabula 360	34.77% 34.77%*	Developme
Jack Lake 7	13.19%	C&S	Combabula 360	34.77% 34.77%*	Developme
Target - Oil	10.1070	340	Combabula 445	34.77% 34.77%*	Developme
Merrimelia 65	13.19%	C&S			•
Merrimelia 66	13.19%	Spudded	Combabula 97	34.77%*	Developme
	13.19%	Spudded	Condabri South 141	37.50%*	Developme
Cooper Basin – SWQ			Condabri South 142	37.50%*	Developme
Target – Gas	40 740/	000	Condabri South 143	37.50%*	Developme
Roti 5	16.74%	C&S	Harry 106	11.72%	Developme
Roti 6	16.74%	C&S	Kate 101	15.23%	Developme
_			Kate 102	15.23%	Developme
Bowen			Kate 103	15.23%	Developme
Target – CSG			Kate 104	15.23%	Developme
Durham Ranch 86	35.44%*	Development	Kate 112	15.23%	Developme
Durham Ranch 113	35.44%*	Development	Kate 113	15.23%	Developme
Durham Ranch 114	35.44%*	Development	Kate 114	15.23%	Developme
Durham Ranch 115	35.44%*	Development	Kate 115	15.23%	Developme
Durham Ranch 171	35.44%*	Development	Kate 12	15.23%	Developme
Durham Ranch 277	35.44%*	Development	Kate 123	15.23%	Developme
Durham Ranch 377	35.44%*	Development	Kate 125	15.23%	Developme
Durham Ranch 393	35.44%*	Development	Kate 126	15.23%	Developme
Durham Ranch 874	35.44%*	Development	Kate 127	15.23%	Developme
Fairview 12-22-4	8.97%	Development	Kate 128	15.23%	Developme
Fairview 12-37-2	8.97%	Development	Kate 129	15.23%	Developme
Fairview 12-38-1	8.97%	Development	Kate 134	15.23%	Developme
Fairview 12-39-1	8.97%	•	Kate 135	15.23%	•
		Development			Developme
Fairview 12-40-1	8.97%	Development	Kate 145	15.23%	Developme
Fairview 12-41-1	8.97%	Development	Kate 206	15.23%	Developme
Fairview 12-42-1	8.97%	Development	Pine Hills 178	34.77%*	Developme
Fairview 12-43-1	8.97%	Development	Reedy Creek 120	34.77%*	Developme
Fairview 13-28-1	8.97%	Development	Reedy Creek 121	34.77%*	Developme
Fairview 13-29-1	8.97%	Development	Reedy Creek 123	34.77%*	Developme
			Reedy Creek 126	34.77%*	Developme
Surat			Reedy Creek 127	34.77%*	Developme
Target – CSG			Reedy Creek 148	34.77%*	Developme
Combabula 144	34.77%*	Development	Reedy Creek 150	34.77%*	Developme
Combabula 251	34.77%*	Development	Reedy Creek 155	34.77%*	Developme
Combabula 252	34.77%*	Development	Reedy Creek 156	34.77%*	Developme
Combabula 270	34.77%*	Development	Reedy Creek 157	34.77%*	Developme
Combabula 271	34.77%*	Development	Reedy Creek 180	34.77%*	Developme
Combabula 272	34.77%*	Development	Reedy Creek 181	34.77%*	Developme
Combabula 273	34.77%*	Development	Reedy Creek 182	34.77%*	Developme
Combabula 293	34.77%*	Development	Reedy Creek 53	34.77%*	Developme
Combabula 294	34.77%*	Development	Reedy Creek 62	34.77%*	Developme
Combabula 295	34.77%*	Development	Reedy Creek 63	34.77%*	Developme
Combabula 296	34.77%*	Development	Reedy Creek 88	34.77%*	Developme
Combabula 313	34.77%*	Development	Reedy Creek 94	34.77%*	Developme
Combabula 314	34.77%*	Development	Reedy Creek 95	34.77%*	Developme
Combabula 314	34.77%*	Development	Reedy Creek 96	34.77%*	Developme
					•
Combabula 317	34.77%*	Development	Riley 31	37.50%*	Developme
Combabula 318	34.77%*	Development	Riley 32	37.50%*	Developme
Combabula 337	34.77%*	Development	Riley 33	37.50%*	Developme
Combabula 338	34.77%*	Development	Riley 34	37.50%*	Developme
Combabula 339	34.77%*	Development	Riley 35 Note: *denotes Origin o	37.50%* pperatorship	Developme

### 4. EXPLORATION, EVALUATION AND CAPITAL EXPENDITURE

The table below includes total expenditure incurred on exploration and evaluation activities and capital expenditure on development and production activities. They include expenditure committed under farm-in agreements and capitalised interest and exclude expenditure on acquisitions. Expenditure in the current financial year is preliminary and is subject to audit review.

### **Lattice Energy**

	This Quarter	Previous Quarter	September Qtr 2016	YTD 2017/18	YTD 2016/17
A\$m					
Exploration/Evaluation	4	6	1	4	1
Development/PP&E	31	25	37	31	37
Total	35	31	38	35	38

#### Other Origin Energy upstream assets

	This Quarter	Previous Quarter	September Qtr 2016	YTD 2017/18	YTD 2016/17
A\$m					
Exploration/Evaluation	2	4	9	2	9

### **APLNG (37.5% Origin share)**

	This Quarter	Previous Quarter	September Qtr 2016	YTD 2017/18	YTD 2016/17
A\$m					
Exploration/Evaluation	4	14	3	4	3
Development/PP&E	118	103	137	118	137
Total Capex	122	117	140	122	140

### **5.1 Conversion Factors**

Crude oil0.00583PJ/kbblsCondensate0.00541PJ/kbblsLPG0.0493PJ/ktonnesEthane0.0517PJ/ktonnesLNG0.0554PJ/ktonnesLNG1.0532PJ/mmbtu

#### 5.2 Abbreviations

**APLNG** Australia Pacific LNG – an incorporated Joint Venture between Origin,

ConocoPhillips and Sinopec

**barrels** an international measure of oil production. 1 barrel = 159 litres

Bopdbarrels of oil per daybwpdbarrels of water per dayC&Ccased and completedC&Scased and suspended

**CSG** coal seam gas

FID final investment decision

GJ gigajoule = 10<sup>9</sup> joules

joule a measure of energy

kbbls Kilo barrels = 1,000 barrels

kT Kilo tonnes = 1,000 tonnes

LPG liquefied natural gas
LPG liquid petroleum gas
mmbbl million barrols

mmbbl million barrels
mmboe million barrels

mmboemillion barrels of oil equivalentmmbtumillion British thermal unitsmmscfmillion standard cubic feetmtpamillion tonnes per annumP&Aplugged and abandonedP&Splugged and suspended

pa per annum

**PJ** petajoule = 10<sup>15</sup> joules

PJe petajoule equivalent, a measure used to express the volume of different petroleum

products on the basis of the energy contained in the product

QGC Queensland Gas Company
Spudding to commence drilling a well
SWQ South West Queensland

t tonnes

TJ terajoule = 10<sup>12</sup> joules TJ/d terajoules per day YTD year to date