

To	Company Announcements Office	Facsimile	1300 135 638
Company	ASX Limited	Date	29 October 2021
From	Helen Hardy	Pages	24
Subject	September 2021 Quarterly Report		

Please find attached a release on the above subject.

Regards

A handwritten signature in black ink, appearing to read 'Helen Hardy'.

Authorised for lodgement by:  
Helen Hardy  
Company Secretary

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## ASX/Media Release

29 October 2021

### Quarterly Report September 2021

Origin Energy Limited (Origin) has released its Quarterly Report for the period to 30 September 2021, covering the performance of its Integrated Gas and Energy Markets divisions.

#### Integrated Gas:

- September quarter APLNG production and sales volume was stable compared to June quarter despite planned downstream shutdown during the period.
- APLNG commodity revenue increased 25 per cent on prior quarter and 69 per cent on corresponding 2020 quarter, primarily driven by higher realised oil prices.
- September quarter APLNG realised gas price was A\$10.05/GJ, comprising an average LNG price of US\$9.09/mmbtu and an average domestic price of A\$6.79/GJ (legacy and short-term).
- Agreement announced for the sale of 10 per cent of APLNG to EIG for \$2.12 billion.
- In the Beetaloo Basin, the 2021 exploration program has been completed with further production testing at the Amungee NW 1H well recording positive results, significantly increasing our assessment of potential commerciality in this area and preliminary results from the Velkerri 76 S2-1 well encouraging.

#### Energy Markets:

- Electricity sales volumes were up 3 per cent compared with corresponding 2020 quarter: Retail volumes flat with higher residential demand offset by lower usage due to solar and energy efficiency; 6 per cent increase in business volumes due to net customer wins, more than offsetting COVID impacts.
- Gas volumes declined 7 per cent compared to September 2020 quarter: Business volumes down 14 per cent, primarily due to expiration of contracts; Retail volumes were flat. Gas used in generation increased 10 per cent due to higher pool prices and to cover an outage at Eraring.

Origin CEO Frank Calabria said, "The rebound in global commodity prices drove a significant increase in revenue at Australia Pacific LNG for the quarter.

"Planned downstream maintenance at Australia Pacific LNG was completed ahead of what is expected to be a busy northern hemisphere winter, and with the plant back at full capacity three JKM-linked spot cargoes have been sold into the tight Asian LNG market for delivery in the December quarter.

"Large customers in Australia continued to enjoy good access to reasonably priced gas, with Australia Pacific LNG average prices at less than \$7/GJ.

"The announcement to sell a 10 per cent interest in Australia Pacific LNG represents an opportunity for Origin to crystallise some of the significant value we have created in this world-class asset, while retaining a substantial shareholding and our role as upstream operator.

"In Energy Markets, our electricity volumes increased with net business customer wins and higher residential usage, offsetting lower demand from business and commercial customers due to a downturn in economic activity across many sectors.



“Demonstrating Origin’s portfolio flexibility, gas was diverted to generation this quarter to take advantage of higher pool prices and to cover planned maintenance at Eraring.

“Eraring continues to operate flexibly and going forward we may cycle units on standby, subject to market conditions, with the ability to bring units back online if required within three to five days. This will increase overall station efficiency, leading to cost and emissions reductions,” Mr Calabria said.

	Unit	Sep-21 QTR	Jun-21 QTR	% Change	Sep-20 QTR	% Change
<b>Integrated Gas – Share of APLNG<sup>1</sup></b>						
Production	PJ	65.1	64.7	1%	64.2	1%
Sales	PJ	63.1	63.6	(1%)	57.4	10%
Commodity revenue	\$m	633.7	507.6	25%	373.9	69%
Average commodity price	A\$/GJ	10.05	7.98	26%	6.52	54%
<b>Energy Markets</b>						
Electricity sales	TWh	8.9	8.6	4%	8.7	3%
Natural gas sales	PJ	67.1	59.1	14%	72.0	(7%)
<b>Corporate</b>						
Origin capex	\$m	102	92	10%	74	38%
Origin investments	\$m	189	8	n/m	1	n/m

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<sup>1</sup> Origin share presented within this report represents 37.5% of APLNG. On 24 October 2021, Origin announced an agreement for the sale of 10% of APLNG to EIG for \$2.12 billion. On completion of the sale Origin’s share of APLNG will be 27.5%.

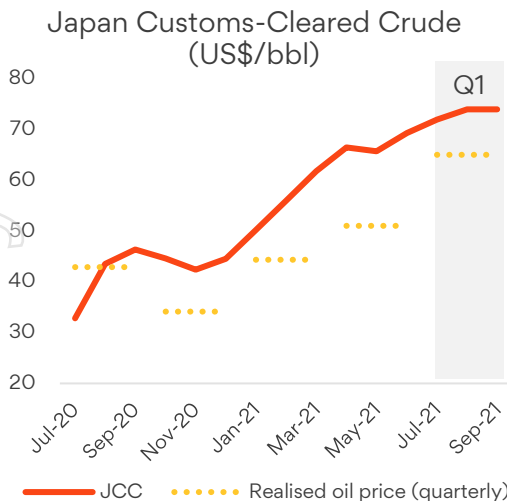
# Quarterly Report

## September 2021

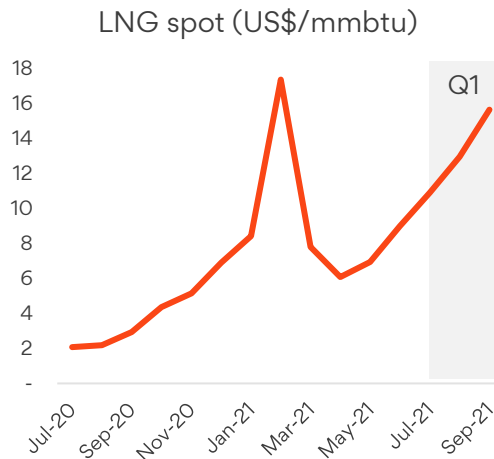




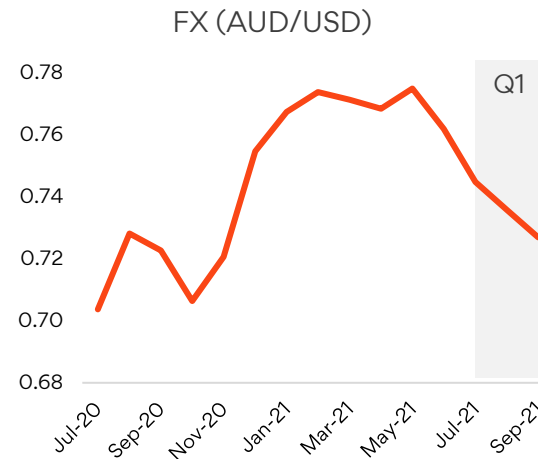
Integrated Gas



Source: Petroleum Association of Japan, Refinitiv



Source: IHS Markit<sup>1</sup>

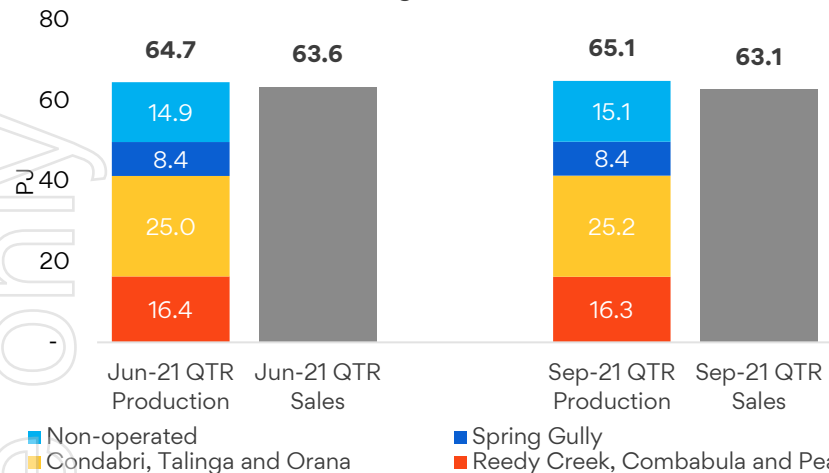


- APLNG's effective oil price in the Sep-21 quarter was US\$65/bbl (A\$88/bbl), up from US\$51/bbl (A\$66/bbl) in the Jun-21 quarter and up from US\$43/bbl (A\$60/bbl) in the Sep-20 quarter
- Both oil and spot LNG prices improved in the quarter driven by continued recovery in global demand and persistent supply bottlenecks. Low consumer inventory and producer spare capacity levels have supported further price increases since September, improving the outlook for the Dec-21 quarter
- No spot LNG cargoes were delivered during the quarter due to planned downstream maintenance. APLNG has sold three JKM-linked spot cargoes for delivery in the Dec-21 quarter. Mix of contract and spot LNG sales for H2 FY2022 is yet to be determined

# APLNG production and sales stable

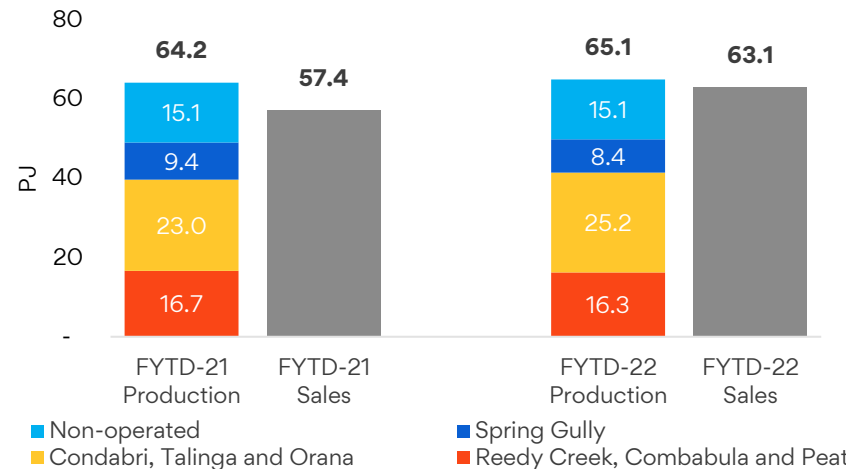


Quarterly production and sales volumes  
(Origin share)



- Sep-21 quarter production up 1% compared to Jun-21 quarter
- Sep-21 quarter sales volume slightly lower than Jun-21 quarter due to the impact of a 31-day planned downstream shutdown conducted during the quarter

FYTD production and sales volumes  
(Origin share)

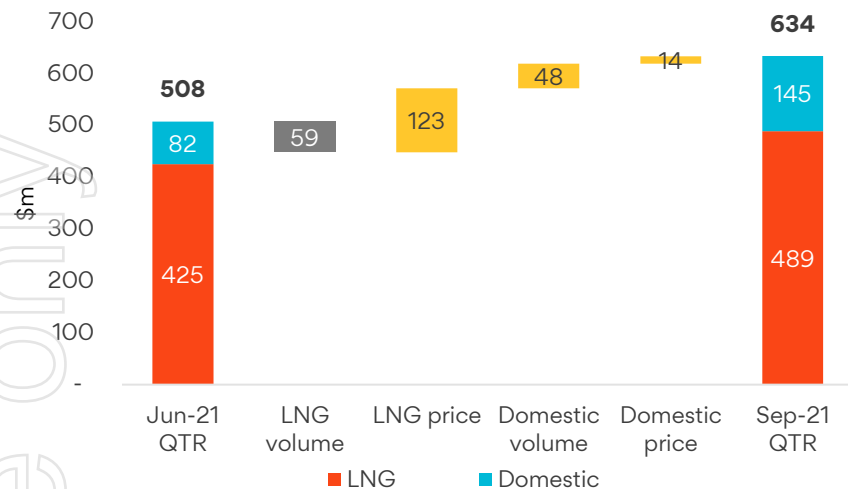


- FYTD-22 production up 1% compared to Sep-20 quarter:
  - Increase at Condabri, Talinga and Orana reflecting reduced production in the prior period in response to lower demand and planned maintenance
  - Partially offset by slightly lower than expected production at Spring Gully due to decline rates in legacy wells, coupled with well and supply chain constraints
- FYTD-22 sales volume up 10% primarily reflecting more volumes lifted from non-operated production and more purchased gas via swaps during downstream maintenance

# APLNG revenue up 25% on prior quarter and 69% on prior year

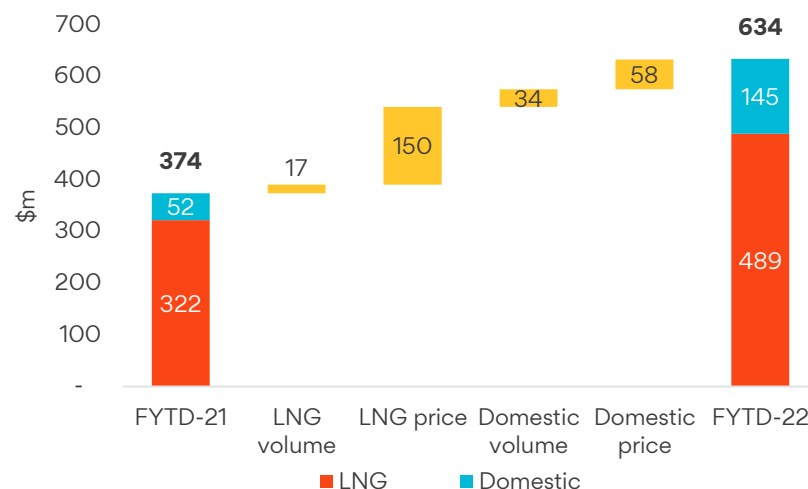


Sep-21 QTR vs Jun-21 QTR (Origin Share)



- APLNG revenue up 25% from Jun-21 quarter:
  - LNG revenue up 15% driven by higher realised oil prices, partially offset by lower volumes due to planned downstream maintenance
  - Domestic revenue up 75% primarily driven by higher short-term contract volumes and prices

FYTD-22 vs FYTD-21 (Origin Share)



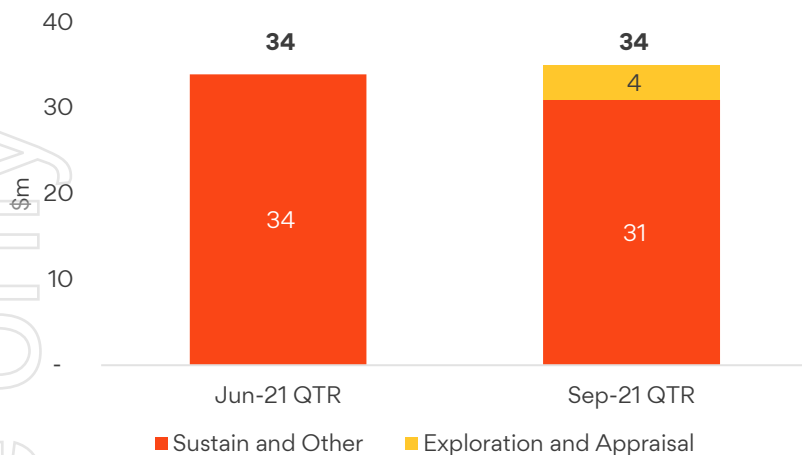
- APLNG revenue up 69% from Sep-20 quarter:
  - LNG revenue up 52% primarily driven by higher realised oil prices with more volumes delivered to long term buyers
  - Domestic revenue up 180% primarily driven by higher short-term contract prices and volumes



# APLNG capital expenditure (Origin share)

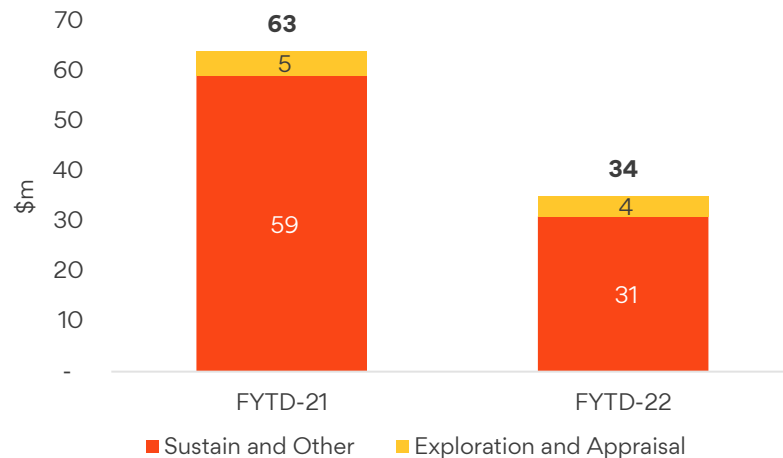


Quarterly APLNG Capex (Origin share)<sup>1</sup>



- Capex was stable from Jun-21 quarter in line with planned phasing of operated spend and non-operated development activity

FYTD APLNG Capex (Origin share)<sup>1</sup>



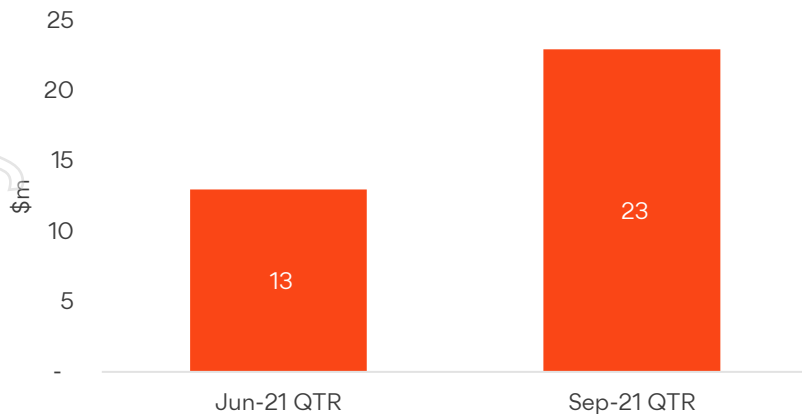
- Capex was down \$29 million (46%) driven by decreased operated development activity enabled by strong field performance

<sup>1)</sup> APLNG capex is reported on an accrual basis.

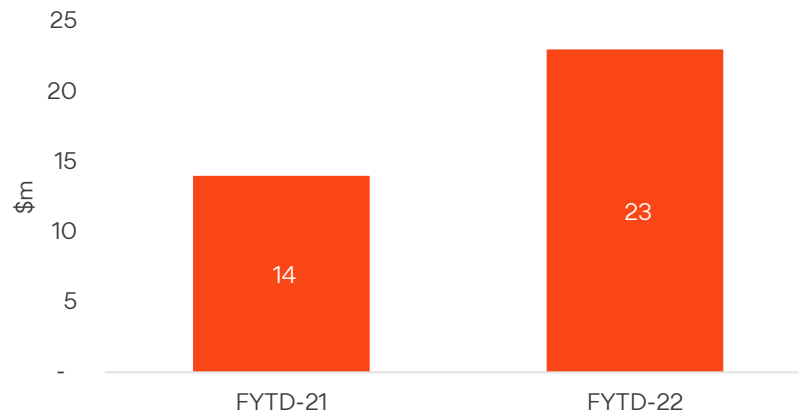
# Integrated Gas – Origin capex and E&A



Quarterly Integrated Gas - Other Capex



FYTD Integrated Gas - Other Capex



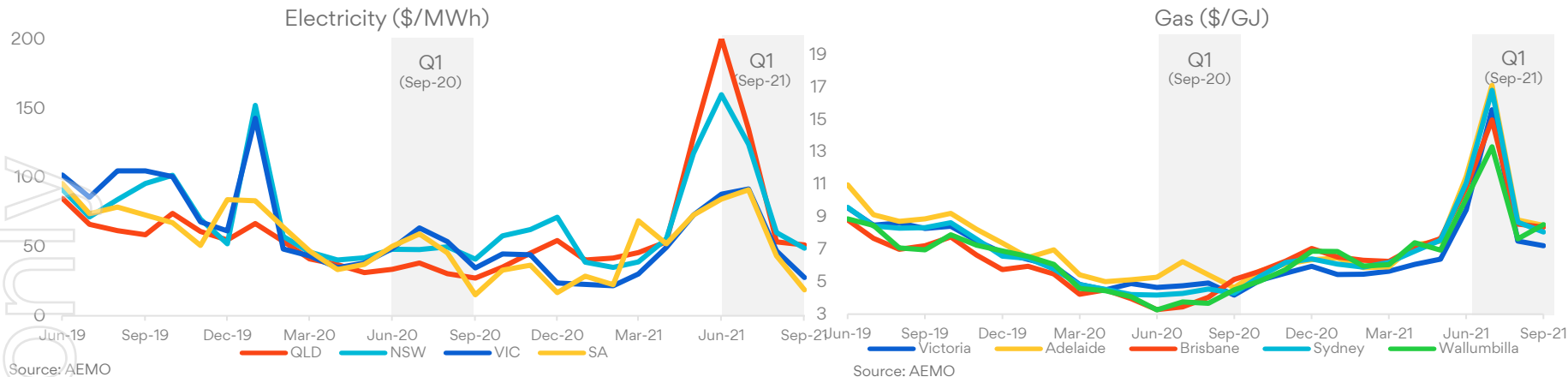
In the Beetaloo Basin, further production testing at the Amungee NW 1H well recorded positive results with average gas flow rate of 1.02 MMscf/day observed over a 45-day period from only a portion of the well. Production testing was concluded at the Kyalla 117 well and the well has been shut in. Velkerri 76 S2-1 well was drilled to total depth in October with observations during drilling indicating that the Velkerri shales at this location are within the wet gas window

In the Canning Basin, Rafael 1 well was spudded with drilling operations continuing. Currajong 1 well was drilled and has been suspended while data is examined as no oil was recovered from the tested zones. A 2D seismic acquisition program was successfully completed



# Energy Markets

# Electricity and natural gas markets

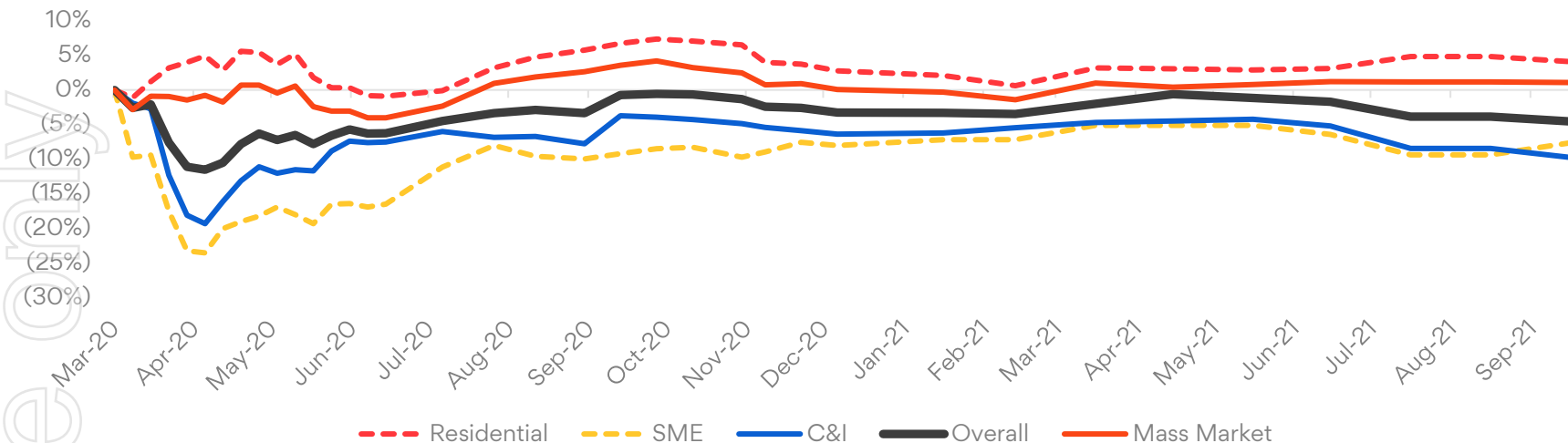


- Average NEM spot electricity price for Sep-21 quarter was \$66.1/MWh, down from \$94.7/MWh in Jun-21 quarter, but an increase from \$42.2/MWh in Sep-20 quarter:
  - Decrease from Jun-21 quarter due to fewer unplanned baseload outages and increased renewable availability
  - Increase from Sep-20 quarter due to unplanned baseload outages and higher fuel costs for coal and gas generation
- Average east coast spot gas price for Sep-21 quarter was \$10.65/GJ, up from \$8.25/GJ in Jun-21 quarter and \$4.53/GJ in Sep-20 quarter:
  - Increase from Jun-21 quarter driven by higher seasonal demand due to seasonality, lower storage levels and production outages
  - Increase from Sep-20 quarter driven by price recovery from historically low 2020 levels and higher LNG exports in Queensland
- Considering cycling units at Eraring to improve operational efficiency in a subdued spot market environment. Standby units are expected to take three to five days to be returned to service, dependent on the period of outage.

# COVID-19 impacts on electricity demand



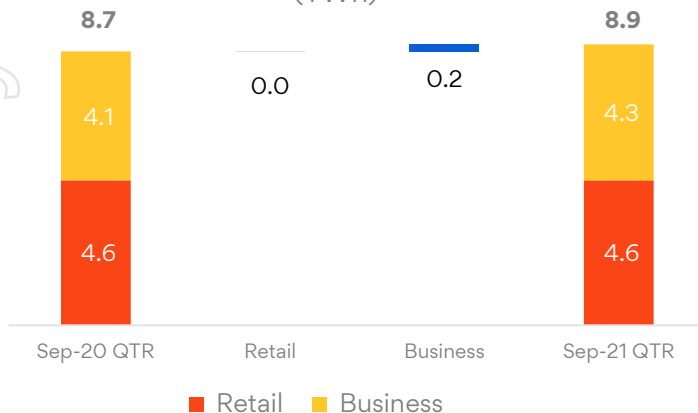
## COVID-19 Impact on Demand (Weather Corrected) - All States



Source: Origin customer meter data and internal analysis

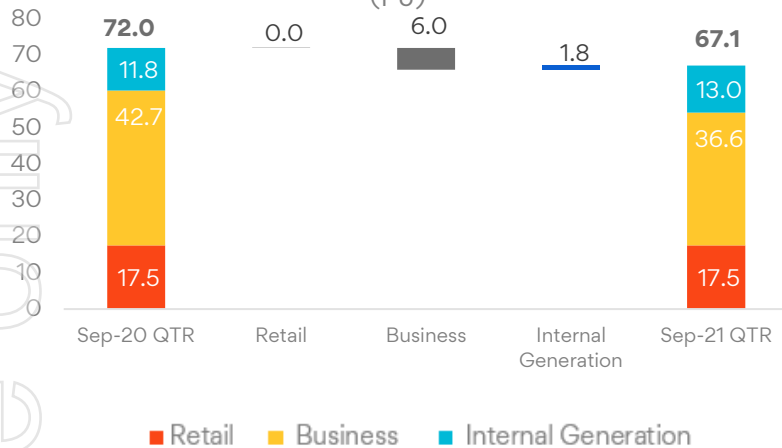
- Weather corrected electricity demand across all states is 4.5% lower than pre COVID-19 levels having significantly recovered from a low of 10% in Apr-20
- Residential volumes remained ~4% above pre COVID-19 levels with an increase in working from home
- C&I and SME volumes are down 10% and 8% respectively, driven by lower demand from service sectors such as travel, hospitality, recreation and education

Sep-21 Quarter vs Sep-20 Quarter  
(TWh)



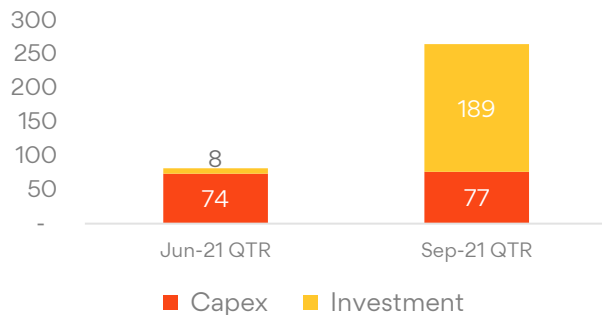
- Retail volumes flat on Sep-20 quarter due to
  - COVID-19 impacts (+0.1 TWh) with higher residential demand due to lockdowns;
  - offset by lower usage due to solar and energy efficiency (-0.1 TWh)
  - stable customer numbers
- Business volumes up 6% or 0.2 TWh on Sep-20 quarter with by COVID-19 impacts more than offset by net customer wins, including sales to the Portland smelter

Sep-21 Quarter vs Sep-20 Quarter  
(PJ)



- Retail volumes flat on Sep-20 quarter due to:
  - higher customer numbers (+0.2 PJ); and
  - increased demand due to COVID-19 (+0.3 PJ); offset by
  - a milder winter (-0.5 PJ).
- Business volumes down 14% on Sep-20 due to expiration of contracts and COVID-19 impacts, partly offset by new sales.
- Gas to generation up 10% on Sep-20 quarter due to higher pool prices and to cover a planned outage at Eraring.

Quarterly Energy Markets capex and investments (\$m)



- Capex spend in Sep-21 quarter included generation maintenance (\$18 million), spend on the move to 5 minute settlement of pool prices and the Kraken licence and retail platform (\$33 million).
- Investment spend in Sep-21 quarter relates to deferred consideration for the initial 20% equity investment in Octopus Energy announced in May 2020.



Data tables

# Integrated Gas – APLNG 100%



APLNG	Unit	Sep-21 QTR	Jun-21 QTR	% Change	Sep-20 QTR	% Change
Total production	PJ	173.6	172.6	1%	171.3	1%
Total sales	PJ	168.2	169.7	(1%)	153.0	10%
LNG						
Production	kt	2,030.3	2,284.7	(11%)	2,002.2	1%
Sales	kt	2,011.4	2,300.4	(13%)	2,008.3	0%
Commodity revenue	\$m	1,304.6	1,133.8	15%	859.5	52%
Average realised price	US\$/mmbtu	9.09	7.23	26%	5.81	56%
Domestic gas						
Sales	PJ	56.7	42.2	34%	41.7	36%
Commodity revenue	\$m	385.4	219.8	75%	137.5	180%
Average realised price	\$/GJ	6.79	5.21	30%	3.30	106%
APLNG capex <sup>1</sup>						
E&A	\$m	9	-	n/a	12	(25%)
Sustain and Other	\$m	81	90	(10%)	156	(48%)

1) APLNG capex is reported on an accrual basis.

# APLNG sources of gas – APLNG 100%



Production volumes	Units	Sep-21 QTR	Jun-21 QTR	% Change	Sep-20 QTR	% Change
<b>Operated</b>						
Spring Gully	PJ	22.4	22.5	(0%)	25.0	(10%)
Peat	PJ	0.4	0.9	(56%)	0.9	(56%)
Talinga	PJ	18.8	18.4	2%	17.4	8%
Orana	PJ	16.3	16.5	(1%)	13.5	21%
Condabri	PJ	32.4	31.7	2%	30.5	6%
Combabula/Reedy Creek	PJ	43.0	43.1	(0%)	43.7	(2%)
<b>Total operated production</b>	<b>PJ</b>	<b>133.2</b>	<b>133.0</b>	<b>0%</b>	<b>131.1</b>	<b>2%</b>
<b>Non-operated</b>						
Fairview (GLNG)	PJ	7.4	7.6	(3%)	8.2	(10%)
Arcadia (GLNG)	PJ	1.9	1.6	19%	0.7	171%
Angry Jungle (GLNG)	PJ	1.4	1.3	8%	0.9	56%
Anya (QGC)	PJ	0.4	0.3	33%	0.3	33%
Kenya East (QGC)	PJ	12.5	11.3	11%	14.0	(11%)
Kenya (QGC)	PJ	15.8	16.6	(5%)	15.1	5%
Bellevue (QGC)	PJ	1.0	1.0	0%	1.0	0%
<b>Total non-operated production</b>	<b>PJ</b>	<b>40.3</b>	<b>39.6</b>	<b>2%</b>	<b>40.3</b>	<b>0%</b>
<b>Total upstream production</b>	<b>PJ</b>	<b>173.6</b>	<b>172.6</b>	<b>1%</b>	<b>171.3</b>	<b>1%</b>
Natural gas purchases	PJ	3.8	3.2	19%	0.7	443%
Changes in Upstream gas inventory/other	PJ	1.0	3.0	(67%)	(10.5)	(110%)
<b>Total sources of natural gas</b>	<b>PJ</b>	<b>178.4</b>	<b>178.7</b>	<b>(0%)</b>	<b>161.5</b>	<b>10%</b>

## APLNG Operated Production Wells

				Development Wells	
		Avg daily production (APLNG share)		Wells drilled	Wells commissioned
Bowen	Spring Gully	243 TJ/d	Sep-21 QTR FYTD-22	- -	- -
	Peat	5 TJ/d	Sep-21 QTR FYTD-22	- -	- -
Surat	Talinga	204 TJ/d	Sep-21 QTR FYTD-22	- -	20 20
	Orana	177 TJ/d	Sep-21 QTR FYTD-22	- -	- -
	Condabri	352 TJ/d	Sep-21 QTR FYTD-22	26 26	- -
	Combabula / Reedy Creek	467 TJ/d	Sep-21 QTR FYTD-22	- -	- -
	Total	1448 TJ/d	Sep-21 QTR FYTD-22	26 26	20 20

# APLNG uses of gas – APLNG 100%



Uses of gas	Units	Sep-21 QTR	Jun-21 QTR	% Change	Sep-20 QTR	% Change
LNG feed gas	PJ	121.7	136.5	(11%)	119.7	2%
Domestic sales	PJ	56.7	42.2	34%	41.7	36%
<b>Total uses of natural gas</b>	<b>PJ</b>	<b>178.4</b>	<b>178.7</b>	<b>(0%)</b>	<b>161.5</b>	<b>10%</b>

LNG	Units	Sep-21 QTR	Jun-21 QTR	% Change	Sep-20 QTR	% Change
LNG production	kt	2,030.3	2,284.7	(11%)	2,002.2	1%
Changes in LNG inventory	kt	(18.9)	15.6	(221%)	6.1	(410%)
<b>Total LNG sales volume</b>	<b>kt</b>	<b>2,011.4</b>	<b>2,300.4</b>	<b>(13%)</b>	<b>2,008.3</b>	<b>0%</b>
<b>LNG cargos sold</b>	<b>#</b>	<b>29</b>	<b>33</b>	<b>(12%)</b>	<b>29</b>	<b>0%</b>

APLNG commodity revenue	Units	Sep-21 QTR	Jun-21 QTR	% Change	Sep-20 QTR	% Change
LNG	\$m	1,304.6	1,133.8	15%	859.5	52%
Domestic gas	\$m	385.4	219.8	75%	137.5	180%
<b>Total commodity revenue</b>	<b>\$m</b>	<b>1,689.9</b>	<b>1,353.5</b>	<b>25%</b>	<b>997.0</b>	<b>69%</b>

Sales – APLNG average realised prices	Units	Sep-21 QTR	Jun-21 QTR	% Change	Sep-20 QTR	% Change
LNG	\$/GJ	11.71	8.90	32%	7.73	51%
Domestic Gas	\$/GJ	6.79	5.21	30%	3.30	106%
<b>Average commodity price</b>	<b>\$/GJ</b>	<b>10.05</b>	<b>7.98</b>	<b>26%</b>	<b>6.52</b>	<b>54%</b>

# Integrated Gas – Origin share<sup>1</sup>




APLNG (ORG share)	Unit	Sep-21 QTR	Jun-21 QTR	% Change	Sep-20 QTR	% Change
Total production (ORG share)	PJ	65.1	64.7	1%	64.2	1%
Total sales (ORG share)	PJ	63.1	63.6	(1%)	57.4	10%
LNG (ORG share)						
Production	kt	761.4	856.8	(11%)	750.8	1%
Sales	kt	754.3	862.6	(13%)	753.1	0%
Commodity revenue	\$m	489.2	425.2	15%	322.3	52%
Average realised price	US\$/mmbtu	9.09	7.23	26%	5.81	56%
Domestic gas (ORG share)						
Sales	PJ	21.3	15.8	35%	15.6	36%
Commodity revenue	\$m	144.5	82.4	75%	51.6	180%
Average realised price	\$/GJ	6.79	5.21	30%	3.30	106%

Integrated Gas Other	Unit	Sep-21 QTR	Jun-21 QTR	% Change	Sep-20 QTR	% Change
Origin only capex						
Capex	\$m	2	3	(33%)	3	(33%)
E&A	\$m	21	10	110%	11	91%
Origin oil hedging and LNG trading						
Hedge premium expense	\$m	-	(3.0)	n/a	-	n/a
Gain / (Loss) on oil hedging	\$m	(26.4)	2.1	(1357%)	43.2	(161%)
Gain / (Loss) on LNG trading	\$m	(20.5)	(10.6)	93%	(9.9)	107%
<b>Total oil hedging and LNG trading gain/(loss)</b>	<b>\$m</b>	<b>(46.9)</b>	<b>(11.5)</b>	<b>308%</b>	<b>33.3</b>	<b>(241%)</b>

- Hedging and LNG trading losses increased quarter-on-quarter driven by higher commodity prices

<sup>1)</sup> Origin share presented within this report represents 37.5% of APLNG. On 24 October 2021, Origin announced an agreement for the sale of 10% of APLNG to EIG Partners for \$2.12 billion. On completion of the sale Origin's share of APLNG will be 27.5%  
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	Unit	Sep-21	Jun-21	% Change	Sep-20	% Change
<b>Sales volumes</b>						
Electricity – Retail	TWh	4.6	4.2	8%	4.6	0%
Electricity – Business	TWh	4.3	4.3	0%	4.1	6%
Natural gas – Retail	PJ	17.5	14.7	19%	17.5	0%
Natural gas – Business	PJ	36.6	33.9	8%	42.7	(14%)
Natural gas – Internal generation	PJ	13.0	10.5	23%	11.8	10%
Capex	\$m	77	74	4%	56	38%
Investments	\$m	189	8	n/m	1	n/m

## Electricity sales volume (TWh)

	Sep-21 QTR		Jun-21 QTR		Sep-20 QTR	
Volumes sold (TWh)	Retail	Business	Retail	Business	Retail	Business
New South Wales	2.3	1.9	2.1	2.2	2.4	2.0
Queensland	1.1	0.9	1.0	0.9	1.1	0.8
Victoria	0.8	1.1	0.8	0.8	0.8	0.8
South Australia	0.4	0.5	0.4	0.4	0.3	0.4
<b>Total volumes sold</b>	<b>4.60</b>	<b>4.32</b>	<b>4.24</b>	<b>4.32</b>	<b>4.60</b>	<b>4.09</b>

## Natural Gas sales volume (PJ)

	Sep-21 QTR		Jun-21 QTR		Sep-20 QTR	
Volumes sold (PJ)	Retail	Business	Retail	Business	Retail	Business
New South Wales	4.6	5.1	3.9	5.2	4.2	7.7
Queensland	0.8	14.9	0.9	14.0	1.1	14.5
Victoria	10.0	13.7	8.4	11.8	10.1	17.8
South Australia	2.1	3.0	1.6	2.8	2.2	2.7
<b>External volumes sold</b>	<b>17.5</b>	<b>36.6</b>	<b>14.7</b>	<b>33.9</b>	<b>17.5</b>	<b>42.7</b>
Internal sales (generation)		13.0		10.5		11.8
<b>Total volumes sold</b>		<b>67.1</b>		<b>59.1</b>		<b>72.0</b>

## Conversion factors

LNG	0.0554 PJ/ktonnes
LNG	1.0551 GJ/mmbtu

## Abbreviations

\$	Australian dollars, unless stated otherwise
APLNG	Australia Pacific LNG Pty Limited – an incorporated joint venture between Origin, ConocoPhillips and Sinopec
Barrels (bbl)	an international measure of oil production. 1 barrel = 159 litres
E&A	Exploration & Appraisal
GJ	gigajoule = $10^9$ joules
JCC	Japan Customs-cleared Crude
joule	primary measure of energy in the metric system
kT	Kilo tonnes = 1,000 tonnes
LNG	liquefied natural gas
mmbbl	million barrels
mmboe	million barrels of oil equivalent
mmbtu	million British thermal units
MMscf/d	million standard cubic feet per day
MWh	Megawatt hour = $10^3$ kilowatt hours
PJ	petajoule = $10^{15}$ joules
t	tonnes
TJ	terajoule = $10^{12}$ joules
TJ/d	terajoules per day
TWh	Terrawatt hour = $10^9$ kilowatt hours