

Origin Energy 2020 Full Year Results

Year ended 30 June 2020

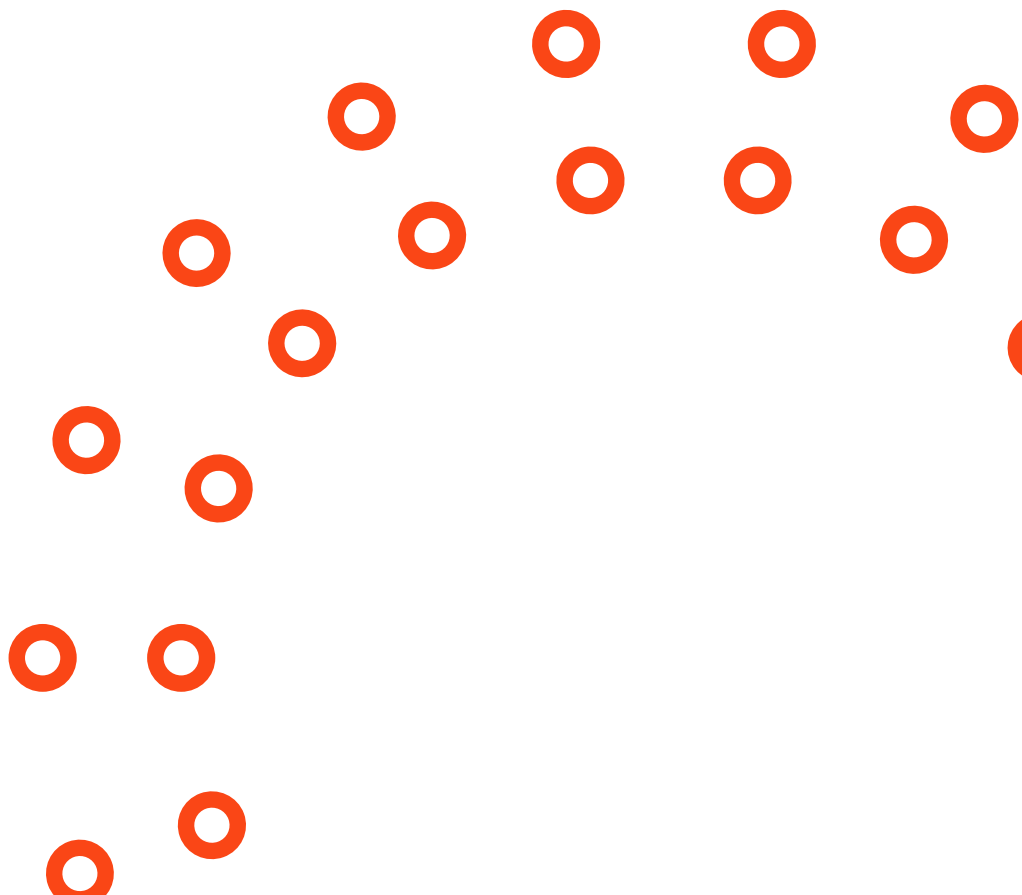


Frank Calabria, CEO & **Lawrie Tremaine**, CFO

20 August 2020

Outline

- 1. Performance Highlights**
 - Frank Calabria
- 2. Financial Review**
 - Lawrie Tremaine
- 3. Operational Review**
 - Frank Calabria
- 4. Outlook**
 - Frank Calabria





Performance Highlights

Frank Calabria, CEO

FY2020 financial summary

Statutory Profit



\$83

million
(4.7 cps)



Reflecting \$1.2 billion APLNG impairment and
Cameron LNG onerous contract provision

Underlying Profit



\$1,023

million
(58.1 cps)



Stable with lower Corporate and LNG hedging
costs partly offset by lower electricity margin

Underlying ROCE



8.8%



Down from 9.1% in FY2019

Free Cash Flow



\$1,644

million



7% increase including increased cash
distributions from APLNG

Adjusted Net Debt



\$4.6

billion



\$773 million decrease from June-19, \$5.2
billion including lease liability under AASB 16

Final dividend



10 cps

unfranked



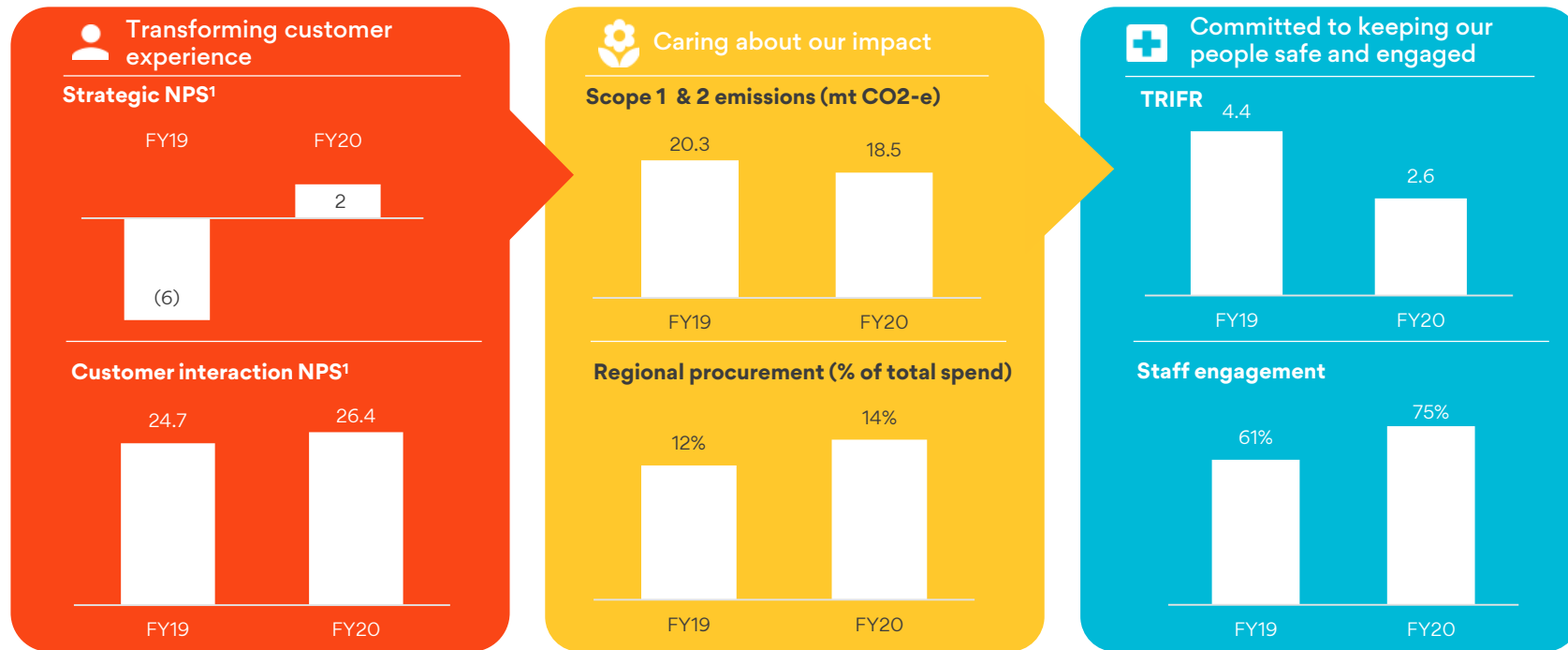
25 cps total FY2020 dividend (FY2019: 25 cps)
27% of FY2020 Free Cash Flow

All comparisons relate to FY2019 unless stated otherwise.

Strong operational and financial performance

- ✓ Record production and cash distributions from APLNG
- ✓ 5% increase in APLNG 2P operated reserves, before production
- ✓ \$73 million of targeted \$100 million retail cost savings achieved in Energy Markets
- ✓ Best ever Net Promoter Scores in FY2020
- ✓ Top quartile staff engagement score and improved safety performance
- ✓ Increased Free Cash Flow underpinned debt reduction, dividends and investment in future growth

We remain committed to delivering for our stakeholders



NPS: Net Promoter Score; TRIFR: Total recordable Injury Frequency Rate

1) Strategic NPS based on a 3 month rolling average; Interaction NPS includes both LiveChat and voice interactions

We are driven by our Purpose of “Getting energy right”

... for our Customers

- Bushfire, drought & COVID relief
- Reducing prices beyond regulatory requirements
- Maintaining reliable energy supply
- Moving to a simpler, digitised customer experience

... for our Communities

- \$365 million spent with regional businesses
- >\$2.9 million contributed by the Origin Energy Foundation
- >\$870,000 donated to bushfires and drought initiatives
- >6,700 hours of staff volunteering

... for the Planet

- Scope 1 & 2 emissions down 9%
- New Scope 1 emissions target: 10% reduction on average over FY21-23¹
- Aim to achieve net zero emissions by 2050
- 1.5°C scenario analysis published for wholesale electricity portfolio



Drought



Bushfires



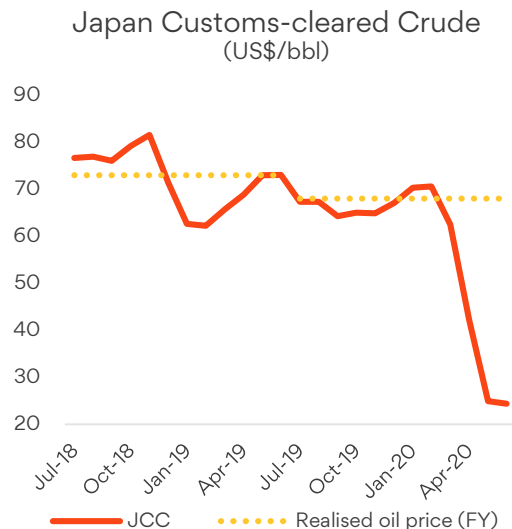
**Extreme events
(heatwaves, storms,
floods)**



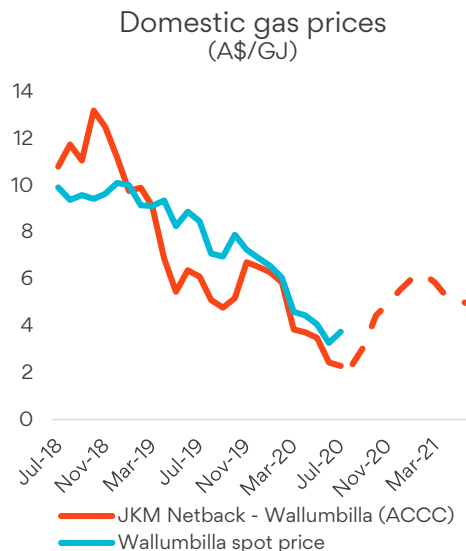
**COVID-19
pandemic**

1) From a FY2017 baseline

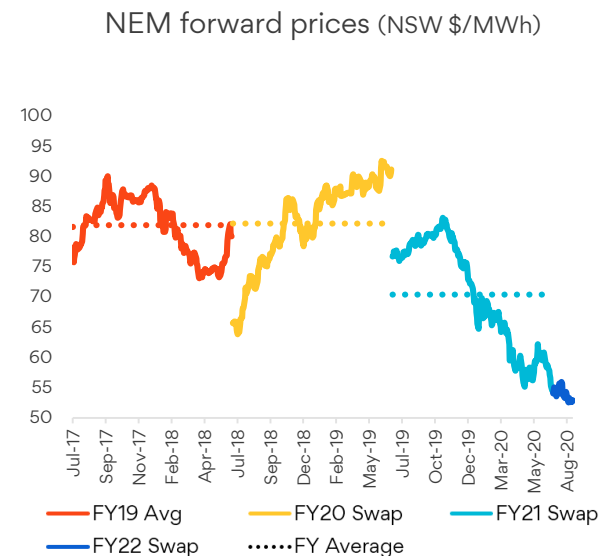
We experienced unprecedented volatility in our key markets



Source: Petroleum Association of Japan, Refinitiv



Source: ACCC, AEMO



Source: AEMO/Bloomberg

- Stable APLNG realised oil prices reflect LNG sales contract lags, deferring impact to FY2021

- Majority of APLNG domestic sales are under long term contracts
- Energy Markets benefited from lower gas prices in FY2020

- Relatively fixed cost generation position of ~15-20 TWh leveraged to lower wholesale prices

Response to COVID-19 and low commodity price environment

COVID-19 impact on business operations

- Average electricity and gas demand down 5-10%
 - Reductions in C&I and SME partially offset by modest increases in Residential demand
- \$40 million increase in bad and doubtful debts provision
- APLNG train major shutdown postponed to July 2021
- Beetaloo exploration program temporarily paused (planning to recommence in Q3/Q4 calendar year 2020)
- Transition to safely working from home for the majority of our people (~4,000)

Operational response and financial resilience

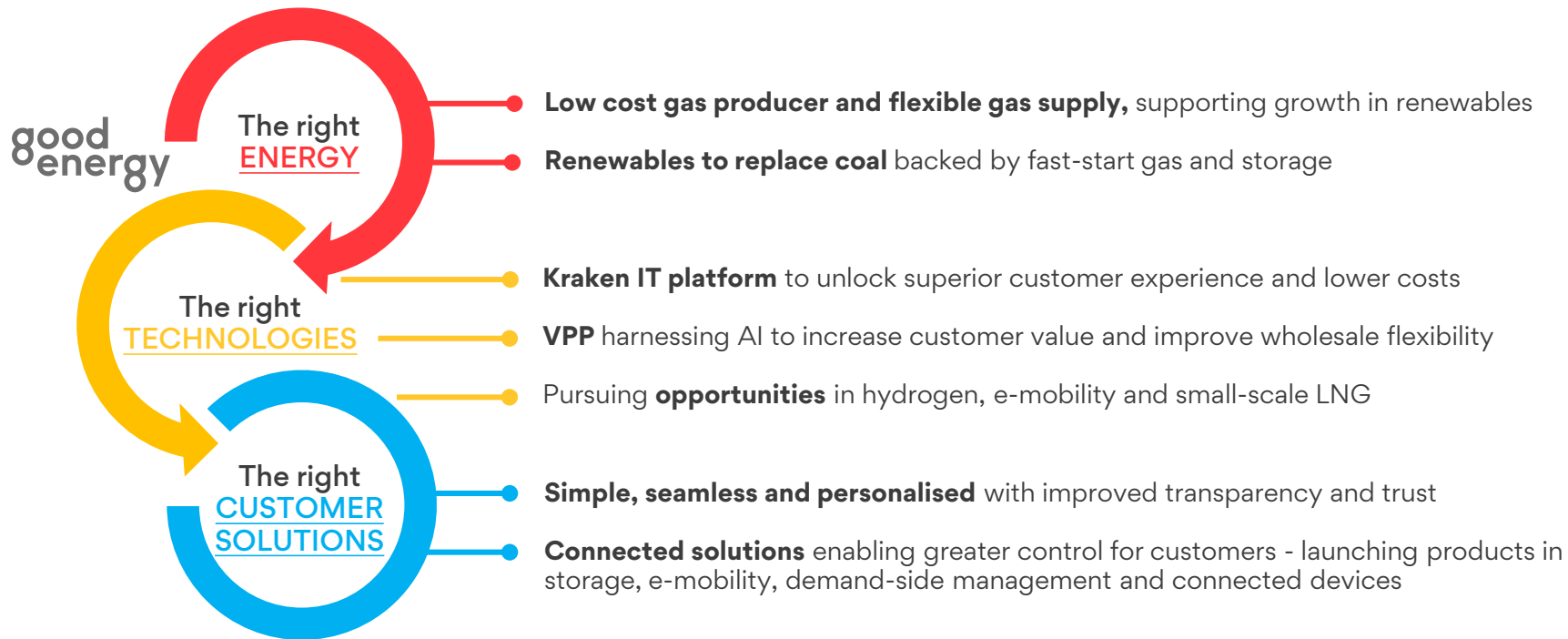
- Customer support - pausing default listings, disconnections and late payment fees and providing payment extensions for customer in financial distress
- Supported employees - pandemic leave and health & wellbeing hub
- Flexing down coal-fired power generation when economic to do so
- Targeting cost reductions across the business:
 - APLNG costs \$300-\$500 million lower in FY2021
 - Origin capex also lower in FY2021
 - \$100 million retail cost out on track for FY2021 (further \$100-\$150 million by FY2024)
- APLNG flexing output in response to lower demand
- Extended debt maturity profile in July 2020 with significant headroom in liquidity

Economic recovery provides policy opportunities

- Coming out of COVID-19 will require a co-ordinated business and government-led recovery
- Policies incentivising investment in flexible capacity will help achieve reliability, affordability and emissions reduction
 - a range of technologies will be needed to “firm” renewables (batteries, pumped hydro and fast-start gas)
- Governments should focus on actions that encourage gas development
 - removing restrictions, releasing acreage and streamlining approvals and regulation
- Market reform must be co-ordinated under the ESB’s Post 2025 Market Review, focused on customer outcomes
- Long term, integrated energy and carbon policy and targets are important to drive investment
- Economic impacts of the pandemic are likely to be significant and ongoing; cost of supporting customers must be borne across the supply chain

Executing strategy to create value in a changing energy landscape

Connecting customers to the energy and technologies of the future



Positioning both businesses for long term value

Energy Markets



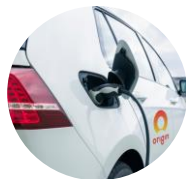
- ✓ Step change in customer experience and cost



- ✓ Progressing brownfield generation and storage opportunities



- ✓ VPP orchestrating >85 MW from >11k customers, launched new demand-side management product ("Spike")



- ✓ EV charging and fleet management solutions

Integrated Gas



- ✓ Competitive, low cost upstream gas producer (US\$29/bbl distribution breakeven in FY2020)



- ✓ Opportunity to scale low-cost upstream model at Beetaloo



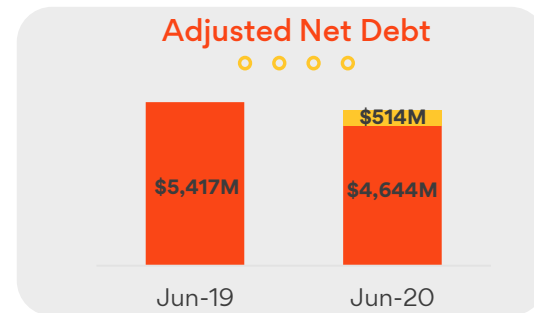
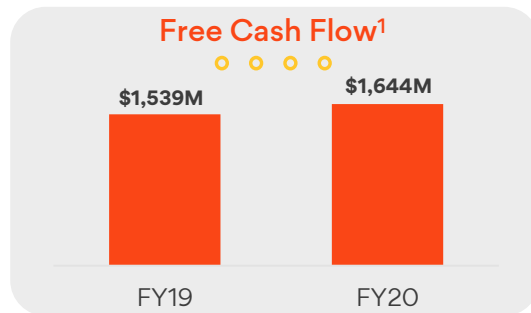
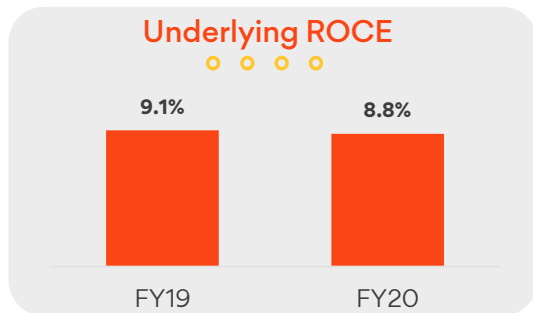
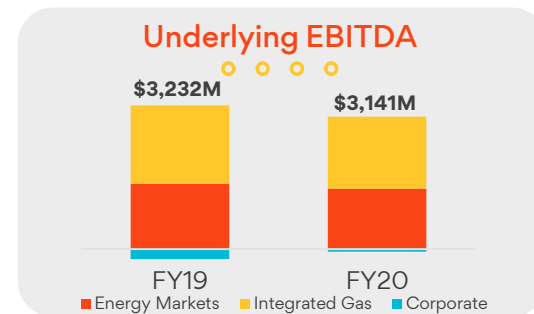
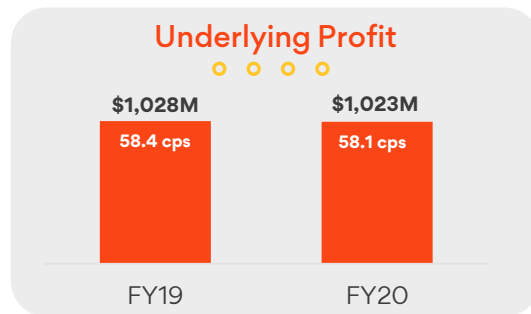
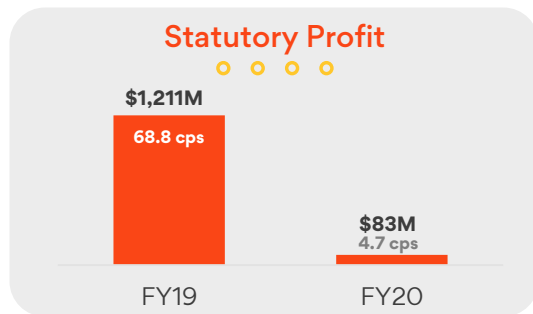
- ✓ Green hydrogen and small scale LNG opportunities



Financial Review

Lawrie Tremaine, CFO

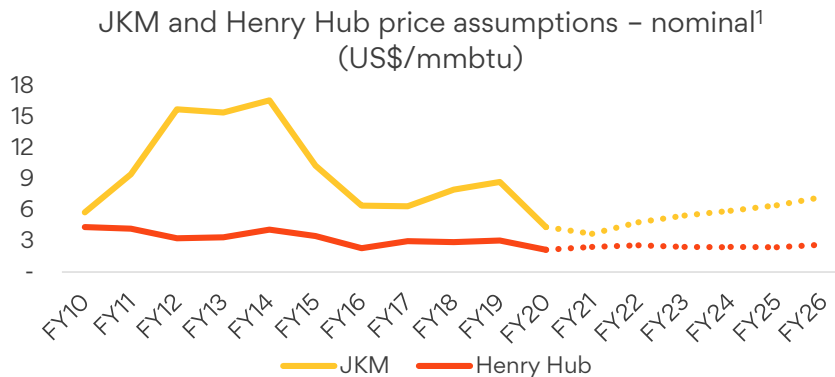
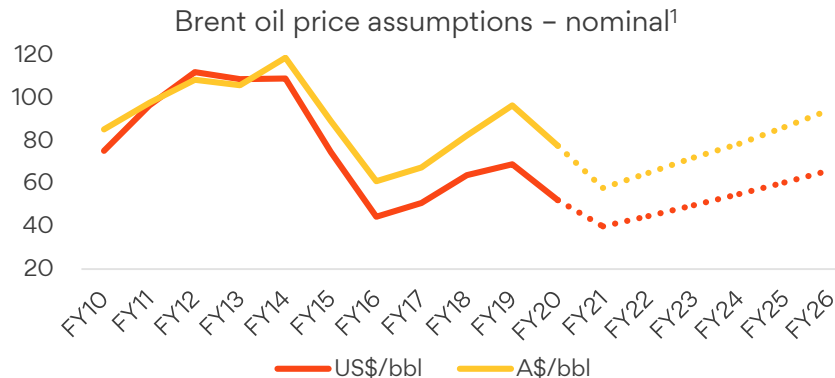
FY2020 financial overview



■ Lease liability under AASB 16 (first recognition)

1) Free Cash Flow is defined as cash from operating activities and investing activities (excluding major growth) less interest paid. \$141 million major growth relating to the Octopus Energy partnership has been excluded.

Impacts of revised commodity price assumptions



Impairment in carrying value of APLNG (\$746 million)

- Assumed reduction near term in oil prices and long term Brent crude assumption of US\$60/bbl (real 2020) from FY2026
- Cost reductions, improved field and operating performance partially offset price impact

Onerous contract provision (\$455 million post-tax)

- 20-year 0.25 mtpa purchase contract from Cameron LNG
- Origin buys LNG at Henry Hub linked price + fixed tolling fee
- Assumed reduction in JKM LNG sales price reflects weaker medium term demand and moderately lower long term prices
- Assumed lower US treasury bond rates (0.81% on average)
- Current estimated annual cost of A\$25 million² post-tax on average over the contract period

1) Assumptions used by Origin for the purpose of determining carrying values at 30 June 2020.
2) Based on current forward market prices, JKM price of US\$7.15/mmbtu and a Henry Hub price of US\$2.60/mmbtu (real 2020 from FY2026).

Accounting changes adopted from 1 July 2019

AASB 16 Leases

- Adopted from 1 July 2019, prospectively
- Lease liability and corresponding right-of-use asset recognised
- Lease expense in EBITDA replaced by depreciation and interest expense
- Lease payments and interest recognised as financing cash flow, no change to net cash

Impact to Underlying Profit	\$m
Energy Markets	62
Integrated Gas – Share of APLNG	13
Integrated Gas – Other	11
Corporate	11
EBITDA impact	97
Depreciation and amortisation	(80)
Share of equity accounted ITDA	(22)
Net financing costs	(18)
Income tax expense	4
Net impact	(18)

APLNG dewatering and workover costs:

- Change in treatment from 1 July 2019, prospectively
- Previously capitalised
- Now expensed as incurred as, following a period of embedding steady state operations, these costs are considered ongoing and operational in nature going forward
- Recognised within operating cash flow, no change to net cash

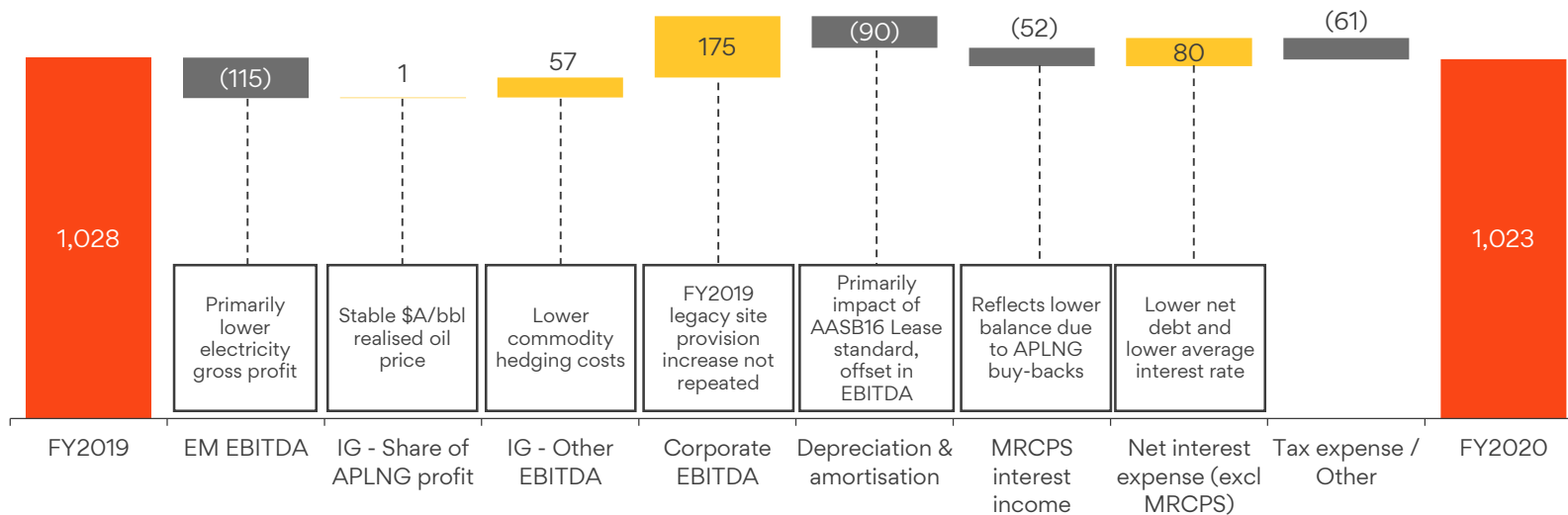
As reported within Underlying Profit	FY19 (\$m)	FY20 (\$m)	Change (\$m)
<i>Workovers¹</i>	-	(67)	(67)
<i>De-watering¹</i>	-	(40)	(40)
Integrated Gas – EBITDA impact	-	(107)	(107)
Depreciation and amortisation ²	(152)	-	152
Income tax expense ²	46	32	(14)
Net impact	(106)	(75)	31

1) Capitalised in FY2019: workovers \$89 million; de-watering \$38 million.

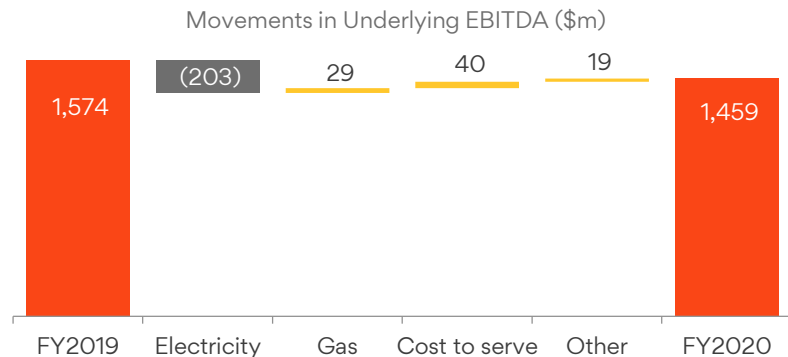
2) Included within Origin Share of ITDA.

Underlying Profit stable

Movements in Underlying Profit (\$m)



Energy Markets Underlying EBITDA down 7%



Electricity gross profit down \$203 million or 15% to \$1,187 million:

- Margin impacts (-\$136 million)
 - Regulation: VDO/DMO price impact (-\$110 million)
 - Mortlake and Earing outage, net of insurance recoveries (-\$21 million)
 - Other margin impacts (-\$5 million)
- Volumes/mix (-\$67 million):
 - Milder weather and lower usage from solar and efficiency (-\$33 million)
 - COVID-19 impacts on SME and C&I demand (-\$26 million)
 - Customer movements, primarily Business and SME tenders (-\$8 million)

Gas gross profit up \$29 million or 4% to \$744 million:

- Higher margins: primarily lower average procurement costs (+\$88 million)
- Lower volumes: Roll-off of short-term wholesale contracts (-\$59 million)

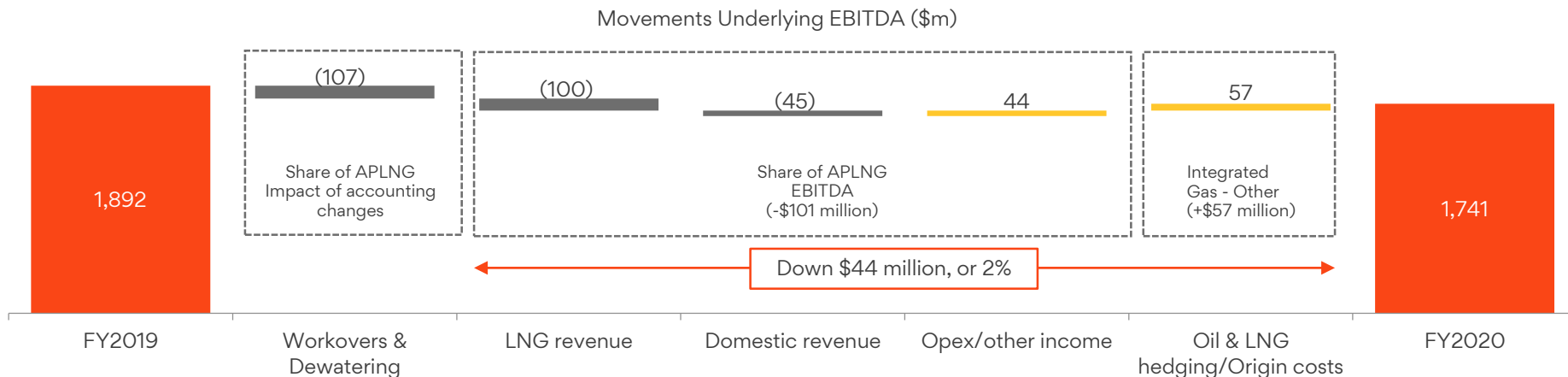
Cost to serve down \$40 million or 6% to \$570 million:

- Lower labour and other variable costs (\$58 million)
- Benefit from adoption of AASB 16 Leases (\$25 million)
- COVID-19 impacts: Bad and doubtful debts and fee waivers (-\$43 million)

Other (+\$19 million): Primarily impact of AASB 16 Leases in other divisions

	FY20	FY19	Change
Underlying EBITDA (\$m)	1,459	1,574	(115)
Electricity			
Volumes sold (TWh)	33.5	36.2	(2.7)
Gross profit (\$m)	1,187	1,390	(203)
Gross Profit (\$/MWh)	35.4	38.4	(3.0)
Gas			
External volumes sold (PJ)	203.6	222.0	(18.3)
Gross profit (\$m)	744	715	29
Gross Profit (\$/GJ)	3.7	3.2	0.4

Integrated Gas Underlying EBITDA down 2%, excl. accounting change



	FY20	FY19	Change
- Share of APLNG (\$m)	1,915	2,123	(208)
- Integrated Gas Other (\$m)	(174)	(231)	57
Underlying EBITDA (\$m)	1,741	1,892	(151)

APLNG 100%

Sales volumes (PJ)			
- Domestic Gas	187	195	(8)
- LNG	481	481	-
Realised price (A\$/GJ)			
- Natural Gas	4.61	5.04	(0.43)
- LNG	12.86	13.42	(0.56)

Share of APLNG EBITDA down \$208 million to \$1,915 million:

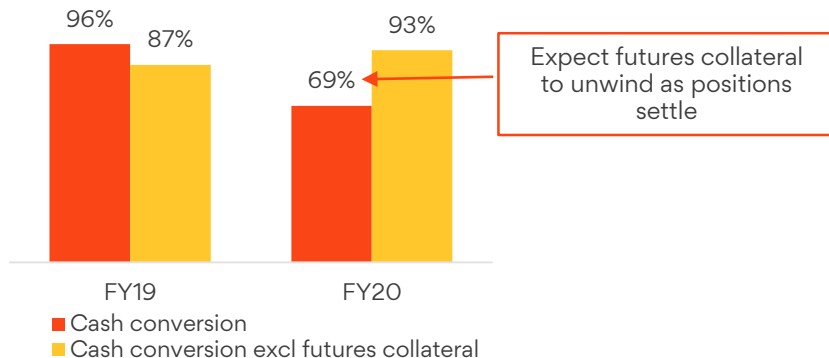
- Impact of change in accounting treatment (-\$107 million), more than offset by a reduction in ITDA
- Higher proportion of lower priced LNG spot sales and lower domestic volumes and prices, partially offset by lower operating costs

Integrated Gas (Other) costs reduced by \$57 million to \$174 million:

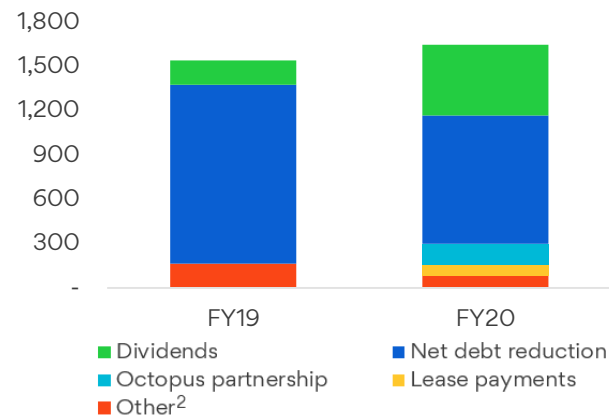
- Lower oil and LNG hedging and trading costs (+\$107 million)
- One off payment to reduce share of overriding royalty in the Beetaloo (-\$15 million)
- Other costs net of APLNG recoveries (-\$35 million)

Lower operating cash flow, higher free cash flow

Operating cash conversion ¹



Uses of Free Cash Flow (\$m)



(\$m)	FY20	FY19	Change
Underlying EBITDA	3,141	3,232	(91)
Non cash items (primarily APLNG EBITDA)	(1,754)	(1,846)	92
Underlying EBITDA adj for non-cash items	1,387	1,386	1
Working cap and other excl futures collateral	118	(76)	194
Electricity futures exchange collateral	(340)	125	(465)
Tax paid	(215)	(110)	(105)
Cash from operating activities	951	1,325	(374)

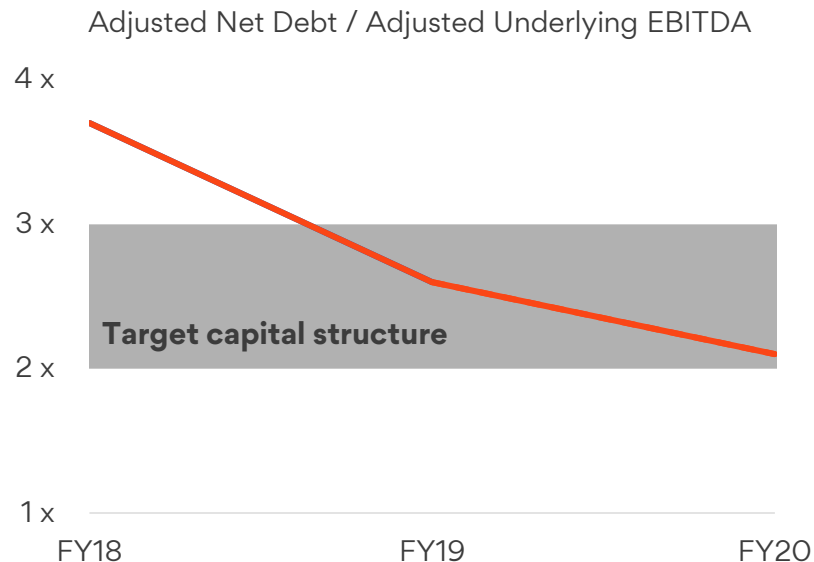
(\$m)	FY20	FY19	Change
Cash from operating activities	951	1,325	(374)
Cash distributions from APLNG	1,275	974	301
Capital expenditure, acquisitions/disposals	(431)	(387)	(44)
Net interest paid	(292)	(373)	81
Free Cash Flow incl major growth	1,503	1,539	(36)
Major growth (Octopus Energy)	141	-	141
Free Cash Flow	1,644	1,539	105
Free Cash Flow Yield³	16%	15%	1%

1) Calculated as cash from operating activities / Underlying EBITDA adjusted for non-cash items.

2) Includes on market purchase of shares, operator cash calls, settlement of foreign currency contracts and APLNG loan repayment.

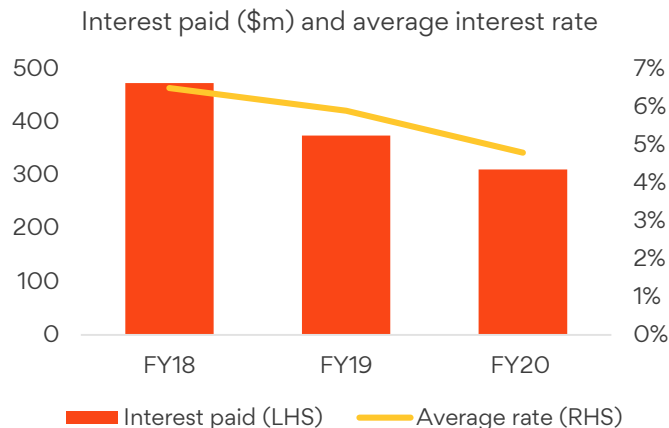
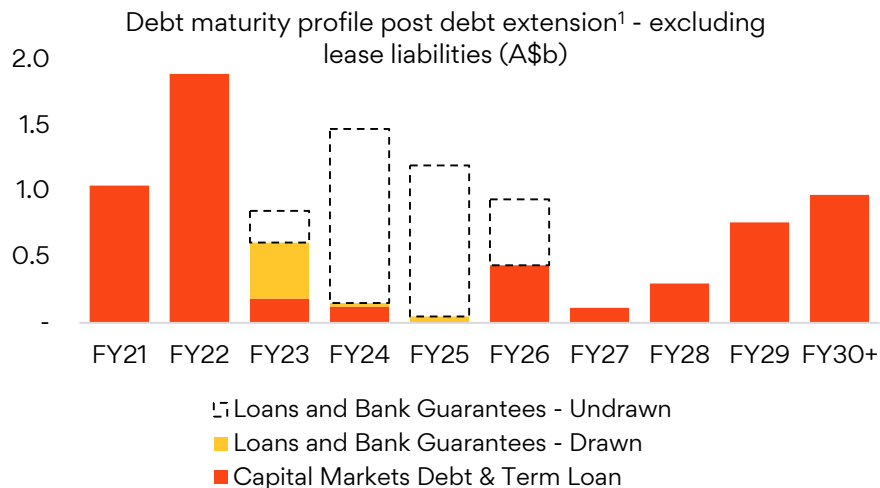
3) Based on 30 day VWAP of \$5.72 per share as at 17 August 2020.

Capital structure and dividend



- Capital structure restored to lower end of target range
- Low franking balance expected over FY2021-23 due to tax deduction timing
- Lower cash flow expected in FY2021 with lower commodity prices
- In this environment **10 cps unfranked final FY2020 dividend declared:**
 - Total interim and full year 2020 distribution of 25 cps consistent with FY2019 distribution
 - 27% of free cash flow, below target range of 30% to 50% free cash flow

Increasing debt maturity and lowering costs



- Over 36 months of liquidity available even under stress low oil price environment
 - Average term to maturity of 3.9 years, up from 3.0 years at 30 June 2019
 - FY2020 average interest rate of 4.8%, down from 5.9% at FY2019
 - FY2020 net interest paid down \$81 million from FY2019
- Interest expense and average interest rate expected to reduce further as near term debt is paid down with cash

¹⁾ In July 2020, the maturity date of A\$1.1 billion of bank debt facilities was extended from FY2023 to FY2025. Surplus liquidity of \$0.2 billion was cancelled as part of this transaction.

Building resilience to lower commodity prices

Reducing capex

- FY2021 APLNG costs expected to be \$300-\$500 million lower than FY2020
- Expected FY2021 Origin capex of \$420 - \$470 million, compared to \$500 million in FY2020

Lowering operating costs

- Cost to serve reduction of \$73 million to date, \$100 million target by FY2021 on track
- Octopus deal targeted savings of \$70-80 million in FY2022, increasing to \$100 - \$150 million annually from FY2024

Oil hedging

- In FY2021, Origin share of APLNG JCC oil price exposure is estimated at ~22 mmboe
 - as at 31 July 2020, 11.4 mmboe priced at ~US\$41/bbl before hedging, based on contract lags
- 6.4 mmbbl hedged by Origin in FY2021 primarily using swaps, producer collars and put options
 - as at 31 July 2020, 3.7 mmbbl of hedges realised at ~US\$55/bbl
 - estimated FY2021 hedging gain is \$99 million based on current market prices¹

1) As at 17 August 2020



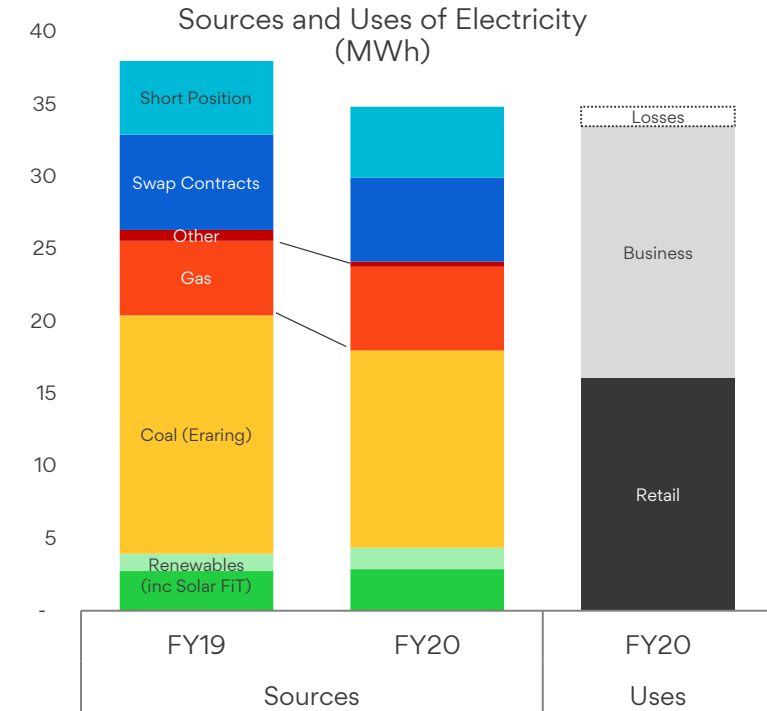
Operational Review

Frank Calabria, CEO

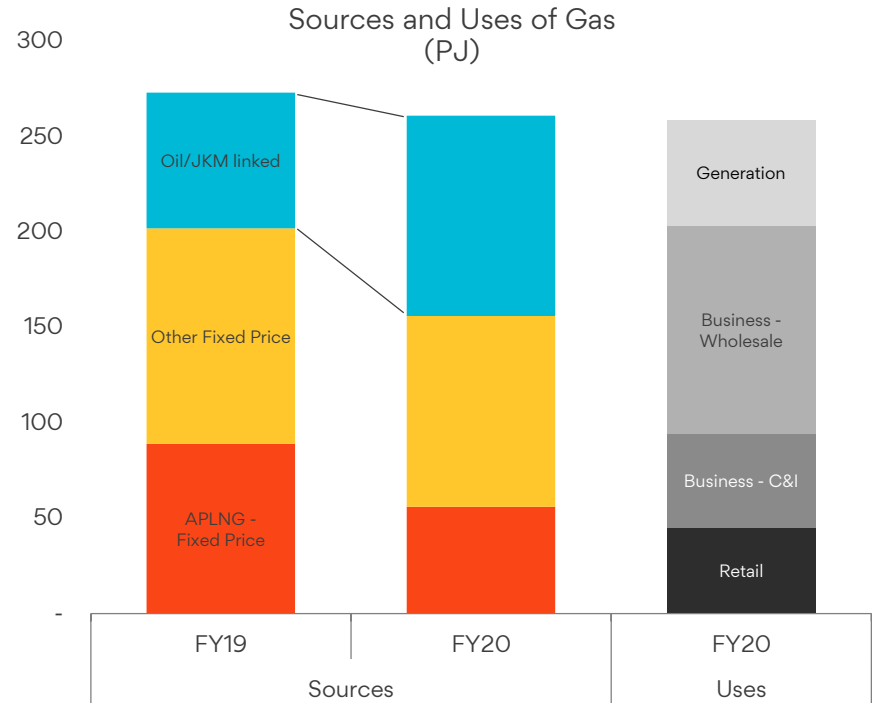


Energy Markets

Adjusting our portfolio to adapt to market conditions



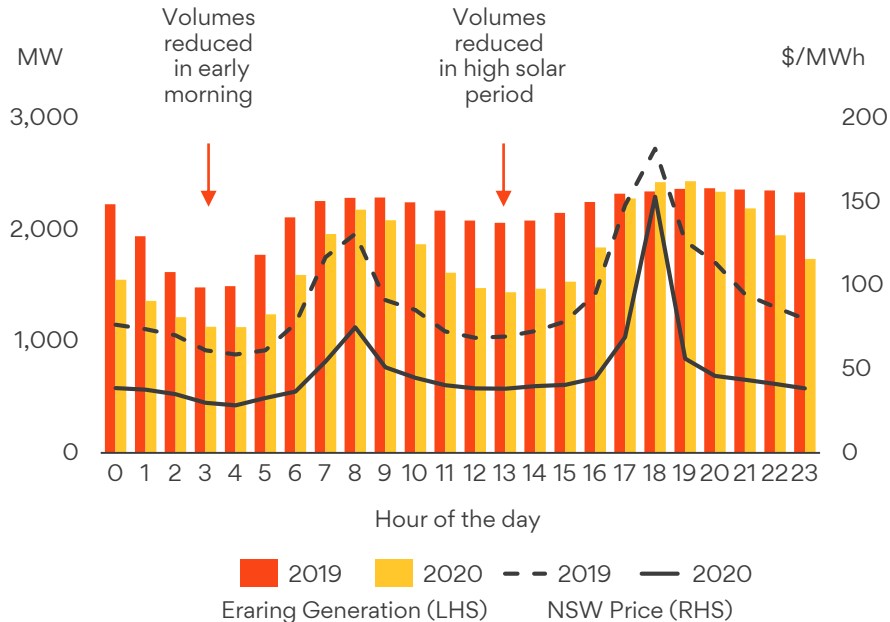
- Reduced output at Eraring in response to lower demand
- Roll-off of wholesale gas contracts freed up gas for generation



- Increased proportion of JKM and oil linked supply reduced FY2020 gas procurement costs

Eraring provides generation flexibility

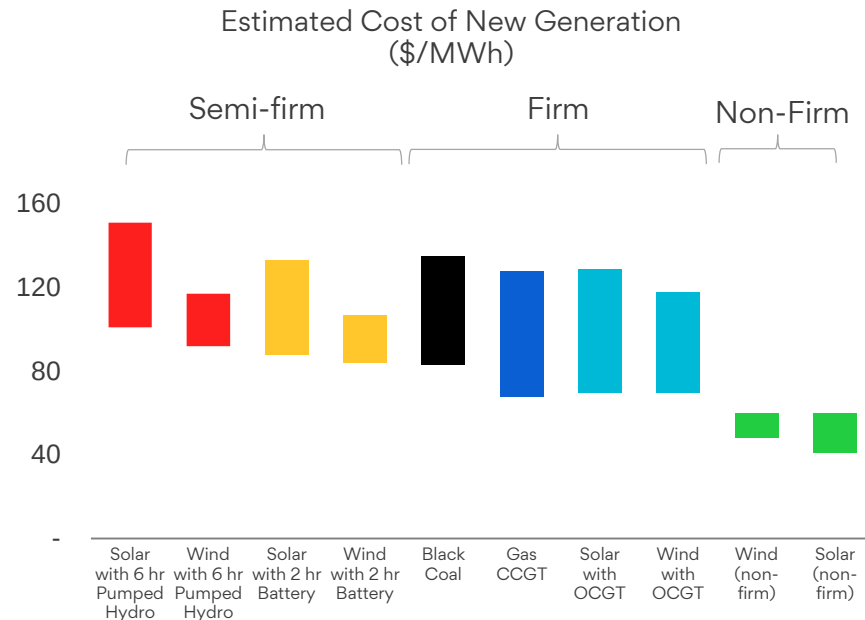
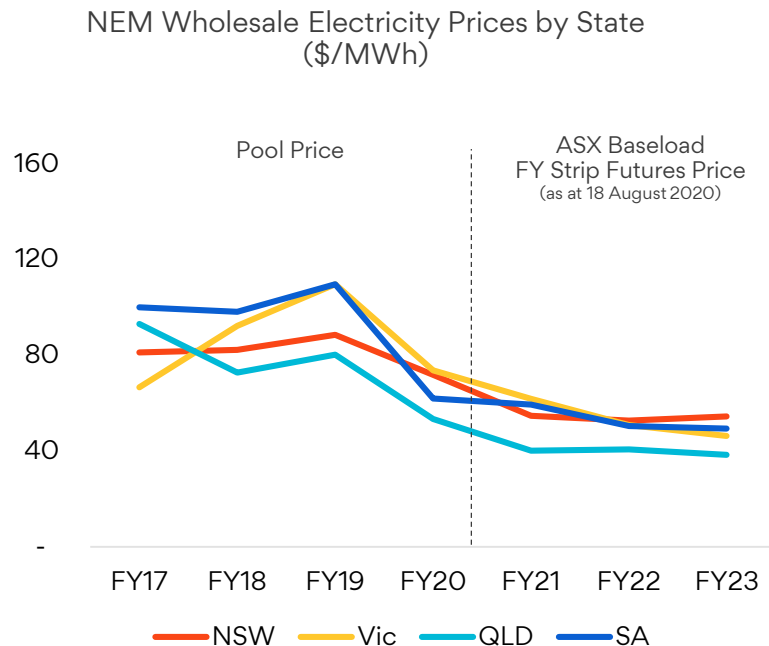
Average Eraring Generation and NSW Pool Price
(June 2020)



- Volatility increasing reflecting increased renewables
- Eraring able to respond to lower average demand and intra-day swings
- Capable of 880 MW to 2,880 MW in 1-1.5 hours
- Flexible fuel position with minimal long term take-or-pay coal and enhanced rail unloading capability
- Strong reliability over peak summer periods

Source: AEMO

Wholesale prices below the cost of firm generation & marginal for renewables

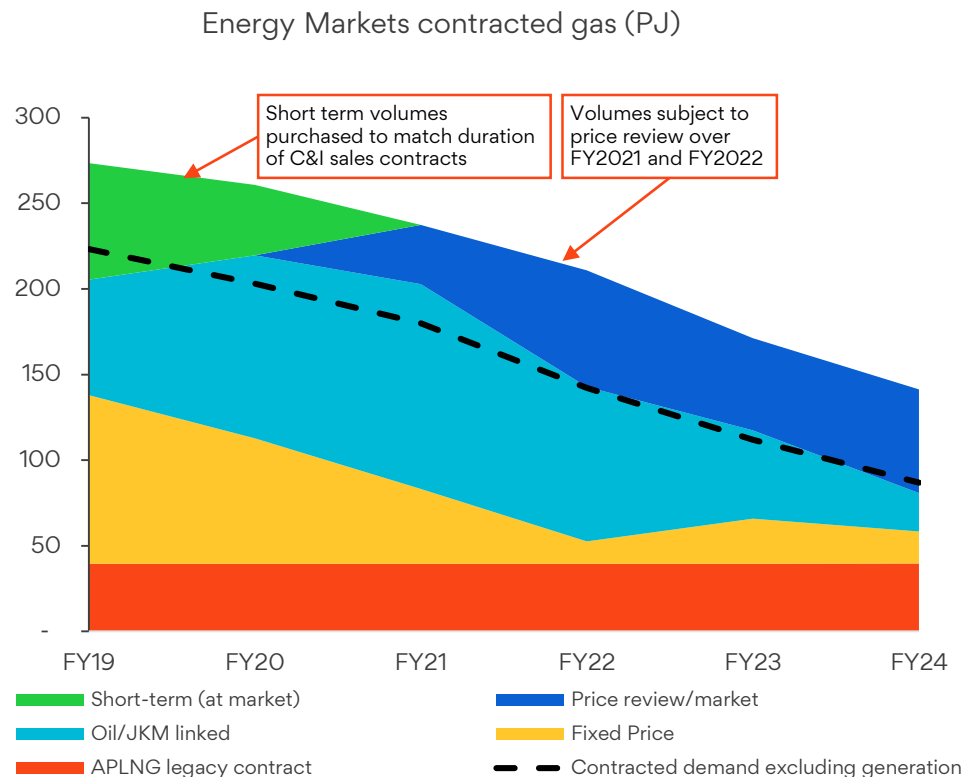


- We are progressing brownfield opportunities in fast-start gas and storage, subject to market signals and regulatory certainty

Source: AEMO; ASX

Source: AEMO/CSIRO GenCost 2019-20 Report, Origin analysis
Based on gas prices of \$5.8-11.3/GJ, coal prices of \$2.8-4.1/GJ, carbon prices of \$0-28.7/tCO_{2e}, and renewable capacity factors of 22%-32% for solar and 35%-44% for wind

Gas continues to deliver, benefiting from lower supply costs in FY2020

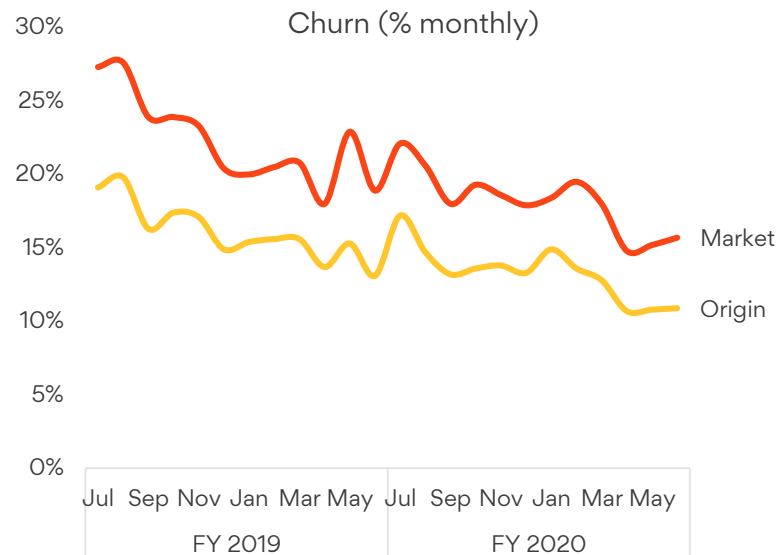
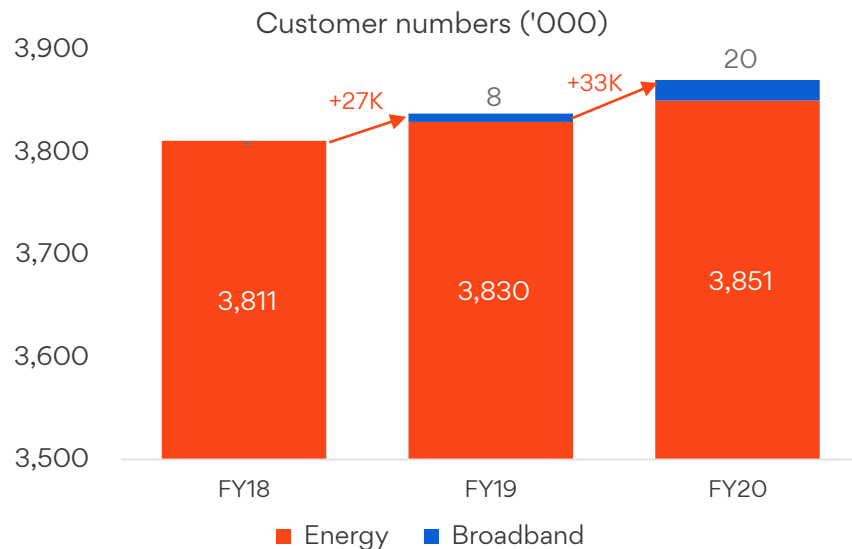


- Natural gas gross profit is underpinned by a flexible competitive supply portfolio
- FY2020 benefited from lower costs on short term and oil/JKM linked purchases
- Long-term transport capacity sales contract benefit to roll off in FY2021
- Portfolio well supplied medium term, with pipeline and storage flexibility enabling us to direct gas to where it is most needed
- ~35 PJ p.a. under price reviews over both FY2021 and FY2022 which typically have regard to terms of comparable wholesale contracts

Medium term wholesale drivers

Key Drivers	Market context	Origin context
Wholesale prices	- COVID-19 has reduced demand, impacting prices - We expect prices to reflect growth in renewables, increased volatility and baseload exits over time	15-20 TWh of relatively fixed cost wholesale supply ~3 million certificates via fixed cost PPA's (Stockyard Hill to come online, replacing higher cost contracts) 50-60PJ longer term fixed cost gas supply
Fuel costs (coal and gas)	- Spot coal and gas prices have both declined - We expect east coast gas prices to be impacted by international LNG and oil prices	- Coal: ~4 mtpa contracted to 2022 (~5-6 mtpa current usage) - Gas: Lower prices benefit our supply position
Firming capacity	Expect higher levels of intra-day volatility requiring flexible fast-start generation	- Covered for peak demand - Flexible portfolio: Ability to generate more in higher price periods and be short in lower price periods - Legacy hedge contracts to roll off with lower replacement costs
Volume demand	- We expect grid demand to remain stable (population growth offset by usage - solar penetration, efficiency) - Demand can also fluctuate with market and weather conditions and customer movements	- More leveraged to solar due to incumbency in areas where penetration rates are lower and properties are well suited to solar - Disciplined customer lifetime value approach

Optimising customer lifetime value

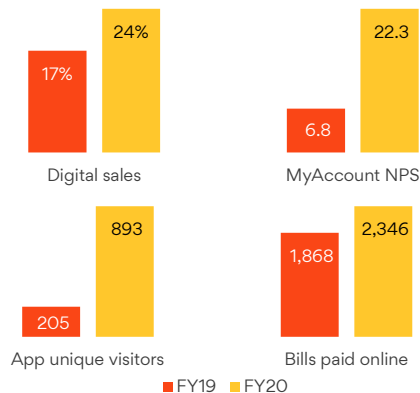


- Growth in customer base underpinned by residential gas and community energy services
- Churn continues to reduce - moves and new connections represent a greater proportion of customer activity
 - Origin Moves NPS +50, Renewals NPS +29
- We employ a disciplined approach to managing for customer lifetime value - pricing, products, channels and renewal strategies
- Underpinned by strong data and analytics capabilities

Delivering on our retail strategy



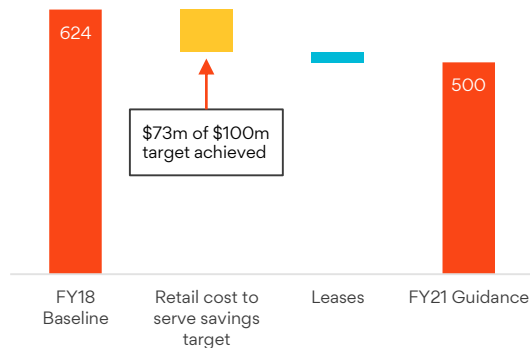
Transform customer experience



- Interaction NPS increased 1.7 points to 26.4 in FY2020 (33.9 in Q4)
- 30% reduction in call volumes from FY17
- 68% e-billing, up from 47% in FY17



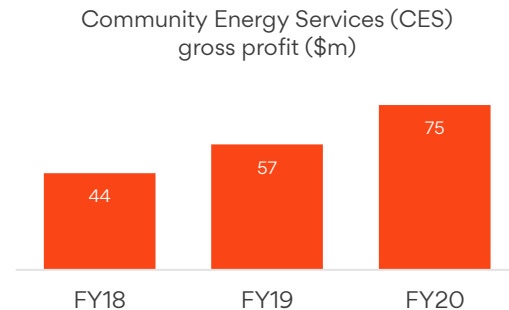
Target market leading cost position



- \$73 million cost-to-serve savings realised since FY2018
- \$100 million savings target on track for FY2021
- Simplified offerings, leaner operations, increased automation, and optimised marketing and sales channels



Grow new revenue streams



- CES gross profit up 70% since FY2018
- Broadband customers up 12,000 to 20,000 customers in FY2020
- Residential solar installs up 12 MW to 47 MW in FY2020

Octopus Energy initiatives to accelerate our strategy and set Origin apart



Radical improvement in customer experience

- Single point of service
- Advanced customer analytics
- Simplified / automated processes



Material reduction in cash costs

- Target savings of \$70-80 million in FY2022, increasing to \$100-\$150 million annually from FY2024
- Lower churn



Opening up future growth opportunities

- Seamless integration and scaling of new products and services
- Accelerates connected solutions and data driven models

Adopting Octopus' **disruptive operating model and proven IT platform** ("Kraken")

- Joint development of customised Kraken platform and new operating model underway
- Origin personnel servicing Octopus customers, gaining experience in the platform
- Targeting first 50,000 customers migrated by end of CY2020



20% equity interest **octopus**energy

- Octopus continues to grow customers and achieve service excellence awards in the UK
- Continued innovation with new EV charging solution
- Progressing well with both the EON and Origin integration projects

Origin at the leading edge of the convergence between data and energy



Cloud migration reducing cost and increasing agility

- Migration began in 2016
- 65% of applications migrated
- Targeting 100% by end CY2021



Data & Analytics at the core of customer experience and business simplification

- Automation and insights - streamlining business process
- AI & machine learning - personalised/targeted customer experiences



Virtual Power Plant unlocking customer value and wholesale flexibility

- >85 MW connected from >11k customers (AI orchestration of distributed energy and IoT devices)
- Optimises customer energy use and complements our wholesale portfolio



Connected solutions that empower customers, building engagement and trust

- Launched Spike, a gamified demand response program
- Developing a portable battery product for the home
- EV smart charging trial underway



Data Sharing Ecosystem opening up new opportunities

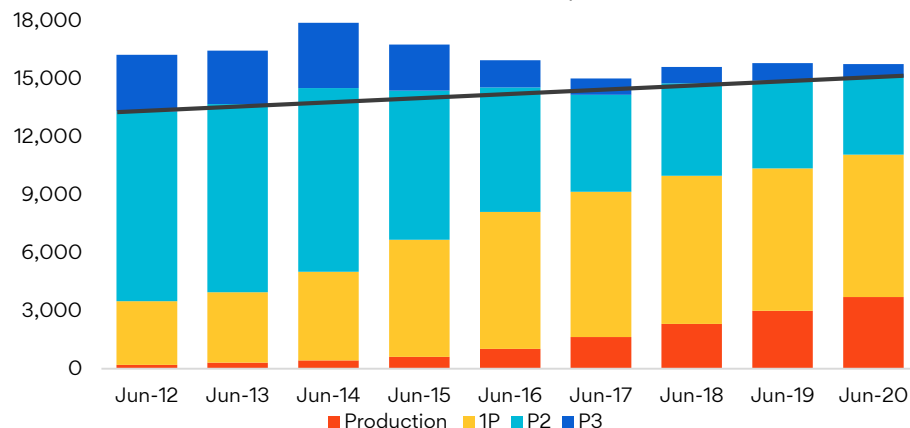
- Collaboration with network businesses to use smart meter data to provide insights and alerts on grid stability
- Continued roll out of smart meters creates further opportunities to create data sharing services



Integrated Gas

APLNG reserves and production continue to perform at or above expectations

APLNG reserves and cumulative production (PJ)



- **2P additions replaced ~90% of production** in operated fields since June 2017
- **2P increased by >1,700 PJ since Jun-12** (before production)
- **Reserve base largely de-risked:** 70% now 1P or produced
- **Strong operated field performance:** Reserve increases in operated areas, enabling a decision not to participate in less economic non-operated fields
 - Strong performance in Combabula, Condabri, Talinga and Orana resulting in an increase in estimated recovery
 - Addition of Peat Flank reserves after successful appraisal
- **Continue to mature resource base** through E&A
 - Peat Flank pilots confirm area feasible for development
 - East Bowen Deepes pilots flowing first gas

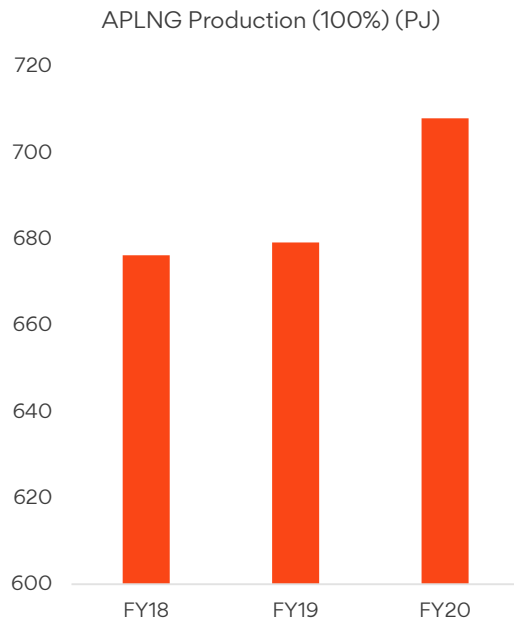
2P reserves (PJ)	2P 30 Jun 2019	Acquisitions	Revisions/ extensions	Production	2P 30 Jun 2020
Operated	9,634	129	318	(542)	9,539
Non-operated	2,286	-	(278)	(165)	1,843
Total	11,920	129	40	(708)	11,381

1) Reserves are 100% APLNG as reported in FY2020 Reserves Report released to the ASX on 20 August 2020

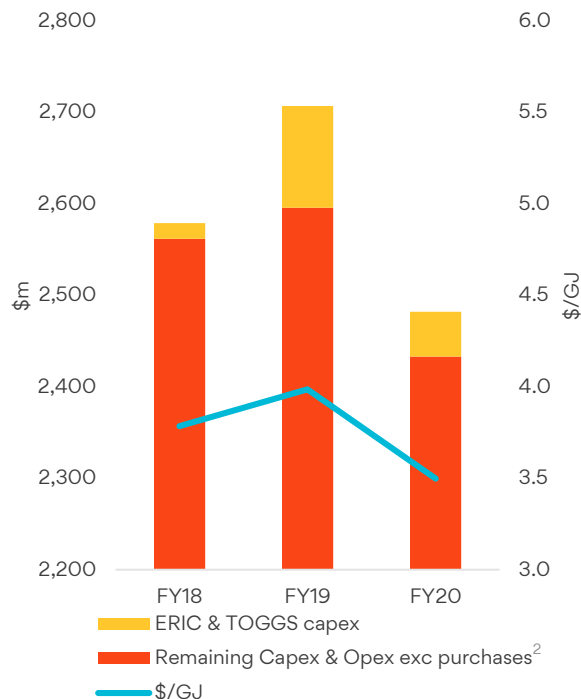
2) Some of APLNG's CSG reserves and resources are subject to reversionary rights and ongoing interest in favour of Tri-Star. Refer to section 7 of the Operating and Financial Review released to the ASX on 20 August 2020 for further information

APLNG delivering operational excellence

Record production



Competitive cost base



Field connection infrastructure completed to date

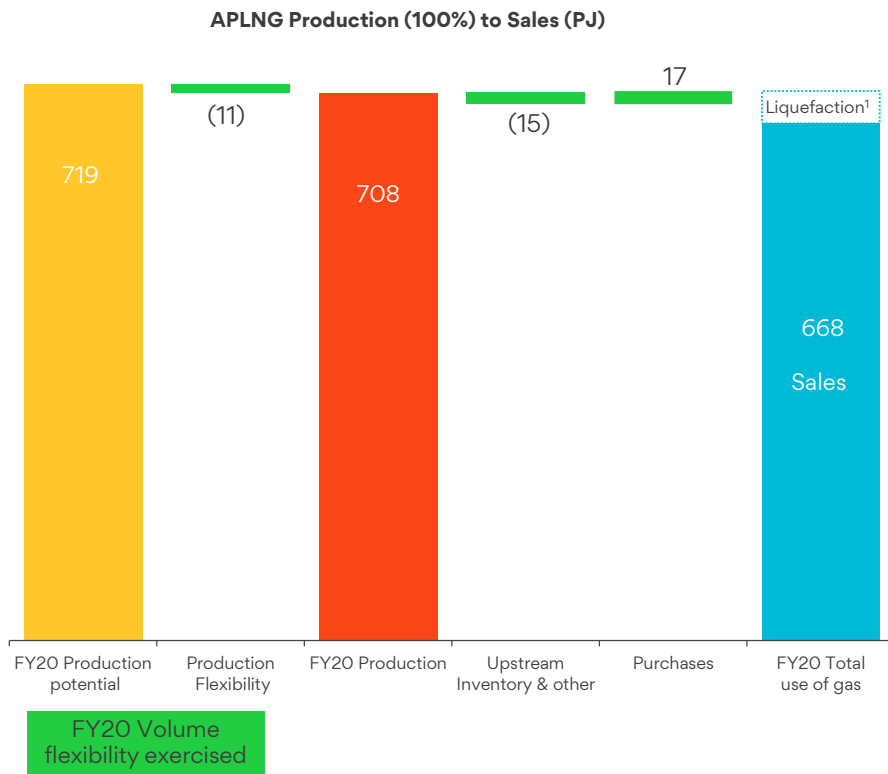
- ✓ TCIP online May 2016
- ✓ ERIC online July 2019
- ✓ TOGGS online July 2020

Strong upstream facilities and well performance

- ✓ 99.5% facility reliability¹

- 1) Upstream operated electrified facilities FY20 average.
- 2) Operating cash costs excludes purchases and reflects royalties at the breakeven oil price.

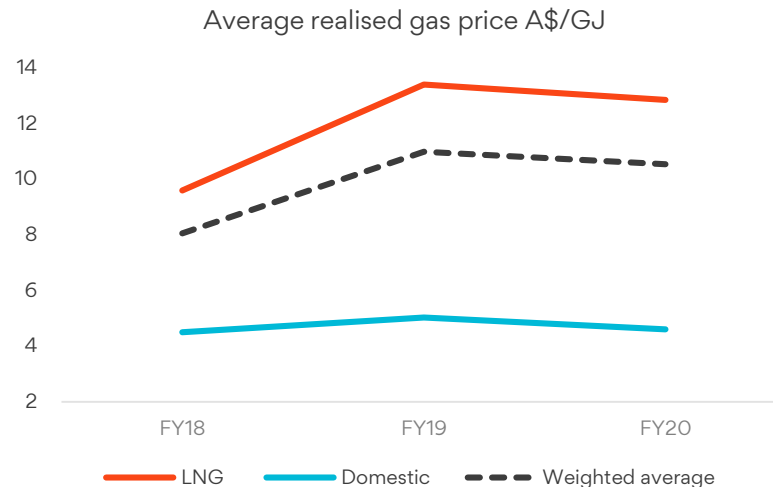
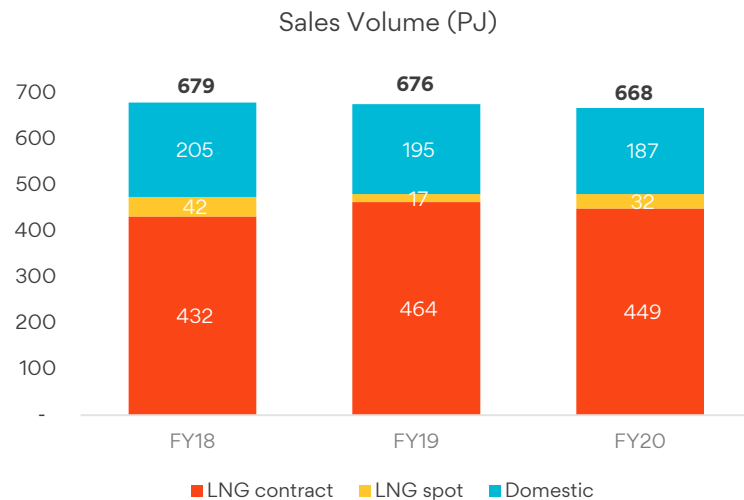
Demonstrating flexibility to adapt to market demand



- Reduced operated production by 11 PJ in response to lower demand due to COVID-19
 - Ability to ramp up with quick recovery times
 - Using artificial intelligence to remotely optimise production flexibility
- Upstream Inventory management
 - 15 PJ increase in upstream inventory in FY2020
 - Further flexibility through
 - lifted volumes from non-operated assets
 - optimising short-term pipeline line pack
 - utilising LNG tank inventory
- Purchases
 - 17 PJ in FY2020 reduced from 32 PJ in FY2019
 - Further ability to use gas purchases for operational or commercial opportunities

1) Gas used to power plants and includes a small amount of downstream inventory

APLNG sales mix and realised prices



- Sold 481 PJ to LNG contract and spot market at an average price of A\$12.86/GJ (US\$9.12/mmbtu)
- Sold 187 PJ of gas to domestic market at an average price of \$4.61/GJ
- FY2020 revenue down 5% with increased production offset by lower purchases and gas inventory movements
 - average realised LNG price decreased 4% reflecting a higher mix of spot LNG sales
 - average realised domestic gas price decreased 9% driven by reduced short term sales prices

FY2021 guidance reflects continued cost focus and volume flexibility

APLNG (100%)	FY18	FY19	FY20	FY21 Guidance
Production (PJ)	676	679	708	650-680
Capex + opex, excl. purchases ¹ (A\$b)	2.6	2.7	2.5	2.0 - 2.2
Unit capex + opex, excl. purchases ¹ (A\$/GJ)	3.8	4.0	3.5	2.9 - 3.4
Distribution breakeven (US\$/boe)	39	36	29	27-31 ²

1) Operating cash costs excludes purchases and reflects royalties payable at the breakeven oil price. Royalties payable increases as oil price increases

2) FY2021 FX rate 0.69 AUD/USD

- Strong upstream performance in FY2020 underpinned higher production and lower costs - enabling scope and schedule optimisation, including decision to defer or not participate in less economic non-operated developments
- Expecting lower demand in FY2021 and lower production accordingly
- Strong field capability provides flexibility to ramp up production to respond to demand if required
- Estimated APLNG costs reduced from FY2020 reflecting
 - Improved field performance
 - Reducing drilling activity
 - Deferring E&A activity
 - Reducing workovers and lower infrastructure spend
- FY2021 Breakeven at AUD/USD of 0.69 (0.01 rate change equates to ~US\$0.26/boe)
- Breakeven includes ~US\$12/boe in project finance costs

APLNG commercial update

APLNG contracts

- Both major LNG customers have declared downward quantity tolerance (DQT) for calendar year 2020
- Cash received in January 2020 for 5 deferred cargoes from calendar 2019
- The first price review under APLNG's LNG contract with Sinopec was completed with no change to the contract price
- Increased equity share to 100% for Murrungama block (near Chinchilla in south-western Queensland), with 100% of gas produced to go to local manufacturers

Tri-Star proceedings

- APLNG's position remains unchanged since 2014 that reversion has not occurred
- APLNG filed its amended defence and counterclaim in the reversion proceeding in May 2020 and defence and counterclaim in the markets proceeding in April 2020
- Next substantive step is for Tri-Star to file its response. Once pleadings are finalised, there will be a period of document disclosure, potentially court ordered mediation, and a hearing

Beetaloo exploration targeted to resume in late 2020



Beetaloo

- Acquired additional 7.5% share in the joint venture from Falcon Oil & Gas in exchange for increasing Falcon's carry by \$25 million over the coming years
- Activity temporarily paused in March 2020 in response to COVID-19
- Results obtained to date demonstrate good reservoir continuity, conductive natural fractures and continuous gas shows
- Targeting recommencement of the Kyalla program in Q3/Q4 calendar year 2020
- Kyalla results in early 2021 will inform options to either further evaluate this play or commence activities on the Velkerri shale liquids rich gas play

Kyalla-117 Timeline¹ (Shale liquids rich gas play)



1) Subject to ongoing impacts of COVID-19



Outlook

Frank Calabria, CEO

FY2021 Guidance

Provided on the basis that market conditions and the regulatory environment do not materially change, adversely impacting operations. Considerable uncertainty exists relating to potential ongoing impacts of COVID-19 and this guidance is subject to any further material impact on demand and customer affordability.

		FY19	FY20	FY21 guidance
Energy Markets				
Underlying EBITDA	A\$m	1,574	1459	1,150 – 1,300
Integrated Gas – APLNG 100%				
Production	PJ	679	708	650 – 680
Capex + opex, excl. purchases ¹	A\$m	2,691	2,482	2,000 – 2,200
Unit capex + opex, excl. purchases ¹	A\$/GJ	4.0	3.5	2.9 – 3.4
Distribution breakeven ²	US\$/boe	36	29	27 – 31
Integrated Gas – Origin costs				
LNG/Oil hedging & trading	A\$m	(199)	(92)	50 ³
Corporate				
Net corporate costs	A\$m	(234) ⁴	(59)	(75 – 85)
Capex (excluding investments)	A\$m	(341)	(500)	(420 – 470)

1) Operating cash costs excludes purchases and reflects royalties payable at the breakeven oil price. Royalties payable increases as oil price increases

2) FY20 FX rate: 0.67 AUD/USD, excludes Ironbark acquisition costs; FY21 FX rate: 0.69 AUD/USD

3) Includes net hedging gain of \$99 million based on forward market prices as at 17 August 2020

4) Includes \$170 million relating to a non-cash provision increase in legacy site remediation

FY2021 Guidance continued

Energy Markets

- Lower Underlying EBITDA of \$1,150 - \$1,300 million:
 - Electricity gross profit reduction of \$170-\$220 million with lower wholesale electricity and green certificate prices flowing into tariffs and network cost increases of \$40 million absorbed
 - Gas gross profit reduction of \$100-\$150 million with long-term supply and transport capacity sales contracts rolling off (\$70 million), and repricing of retail and business tariffs
 - Cost to serve savings of \$70 million, in line with >\$100 million target (subject to any material increase in bad & doubtful debts)

Integrated Gas

APLNG 100%

- APLNG production range of 650–680 PJ reflects anticipated lower demand with strong field capability to increase production in response to demand
- APLNG costs reflect reduced development and workover activity and lower infrastructure spend

Other

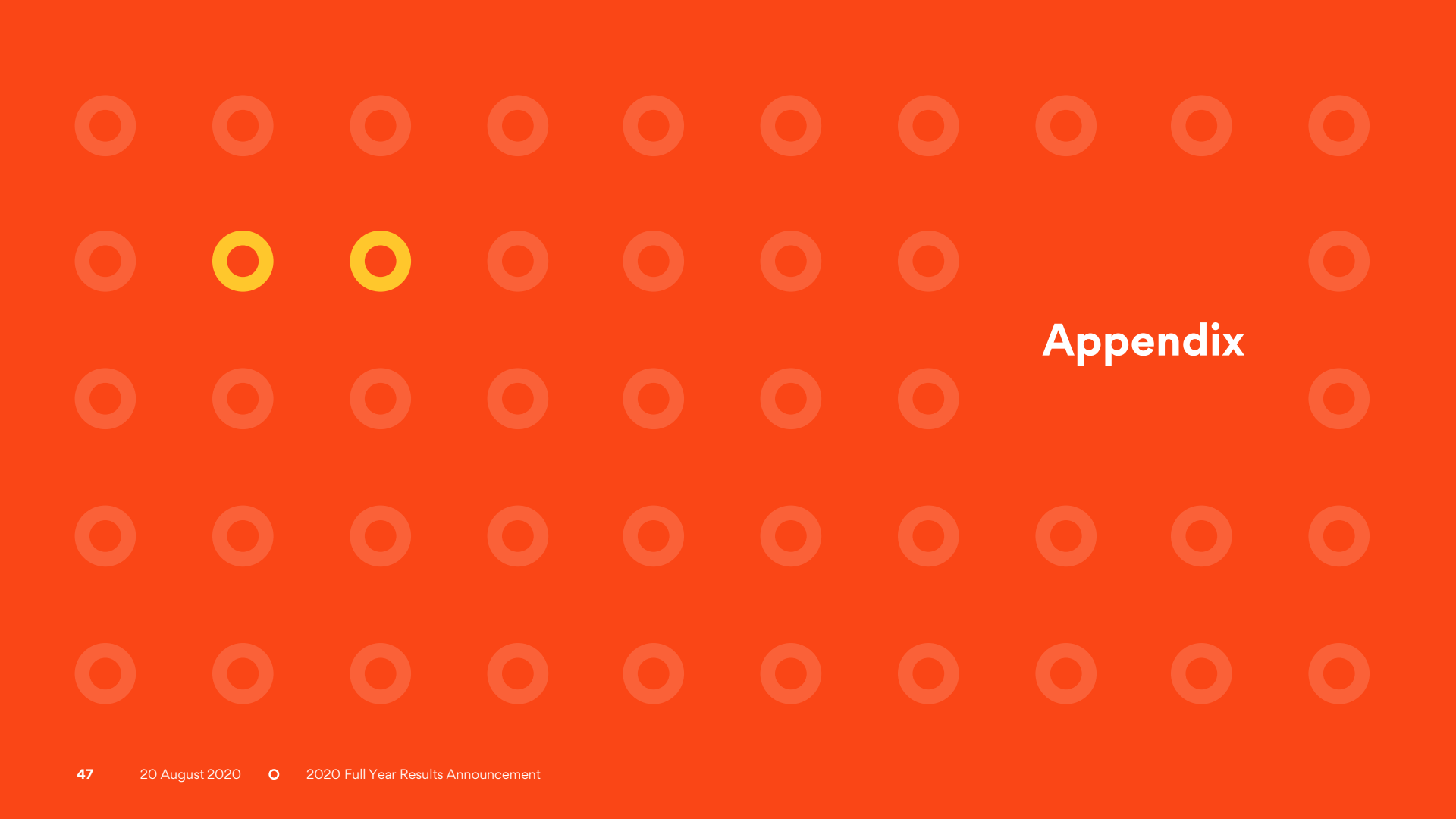
- Net LNG/oil hedging and trading gain of \$50 million, including net oil hedging gain of \$99 million based on current forward market prices
- Other Origin only costs (excluding LNG/oil hedging and trading) estimated to be similar to FY2020

Corporate

- Underlying costs of \$75–85 million with ERP replacement and FY2020 FX gains and self-insurance costs not repeating
- Capex of \$420–470 million:
 - includes \$65-80 million in E&A
 - excludes Octopus Energy investment instalments of \$90-100 million
- Depreciation expected to be \$50-60 million higher than FY2020 reflecting decommissioning of retail IT systems and generation restoration provisions



Questions



Appendix

Segment summary

	Energy Markets		Integrated Gas - Share of APLNG		Integrated Gas - Other		Corporate		Total	
(\$m)	FY20	FY19	FY20	FY19	FY20	FY19	FY20	FY19	FY20	FY19
Underlying EBITDA	1,459	1,574	1,915	2,123	(174)	(231)	(59)	(234)	3,141	3,232
Underlying EBIT	974	1,173	614	613	(197)	(243)	(62)	(235)	1,329	1,308
Underlying Profit/(Loss)	974	1,173	614	613	(23)	(17)	(542)	(741)	1,023	1,028
Operating cash flow	1,307	1,707	-	-	(109)	(208)	(247)	(174)	951	1,325
Investing cash flow	(560)	(357)	-	-	1,414	946	8	-	862	589
Interest paid	-	-	-	-	-	-	(310)	(375)	(310)	(375)
Free cash flow including major growth	747	1,350	-	-	1,305	737	(549)	(548)	1,503	1,539
Exclude major growth spend	141	-	-	-	-	-	-	-	141	-
Free cash Flow	888	1,350	-	-	1,305	737	(549)	(548)	1,644	1,539

Underlying ROCE

As at	30 June 2020 (\$m)	30 June 2019 (\$m)	Change (\$m)	Change (%)
Capital Employed				
Net Assets	12,701	13,149	(448)	(3)
<i>including:</i>				
<i>Investment in APLNG</i>	<i>6,978</i>	<i>6,960</i>	<i>18</i>	<i>-</i>
<i>MRCPS issued by APLNG</i>	<i>2,109</i>	<i>3,045</i>	<i>(936)</i>	<i>(31)</i>
Non-cash fair value uplift	-	(26)	26	(100)
Adjusted net assets	12,701	13,123	(422)	(3)
Adjusted Net Debt	5,158	5,417	(259)	(5)
Net derivative liabilities	588	735	(147)	(20)
Origin's share of APLNG net debt (project finance less cash)	3,088	3,055	33	1
Capital employed	21,534	22,330	(796)	(4)
Origin's Underlying EBIT	1,329	1,308	22	2
Origin's equity share of APLNG interest and tax	602	717	(115)	(16)
Dilution depreciation adjustment	-	2	(2)	(100)
Adjusted EBIT	1,931	2,027	(96)	(5)
Average capital employed - continuing operations	21,932	22,380	(448)	(2)
Underlying ROCE	8.8%	9.1%		(0.3)
Energy Markets	10.2%	12.2%		(2)
Integrated Gas	8.2%	8.2%		-

Proportionate Free Cash Flow

Free cash flow prepared on the basis of proportionate consolidation of APLNG.

(\$m)	Energy Markets		Integrated Gas - Share of APLNG		Integrated Gas - Other		Corporate		Proportionate Total	
	FY20	FY19	FY20	FY19	FY20	FY19	FY20	FY19	FY20	FY19
Operating cash flow	1,307	1,707	1,965	2,076	(109)	(208)	(247)	(174)	2,916	3,401
Investing cash flow ¹	(560)	(357)	(466)	(487)	140	(27)	8	-	(878)	(871)
Interest paid	-	-	(150)	(192)	-	-	(310)	(375)	(460)	(567)
Proportionate Free Cash Flow	747	1,350	1,349	1,397	31	(235)	(549)	(548)	1,578	1,963

Presenting free cash flow on this basis highlights cash generation on an unlevered basis prior to the repayment of APLNG's project finance debt which is serviced by APLNG prior to shareholder distributions.

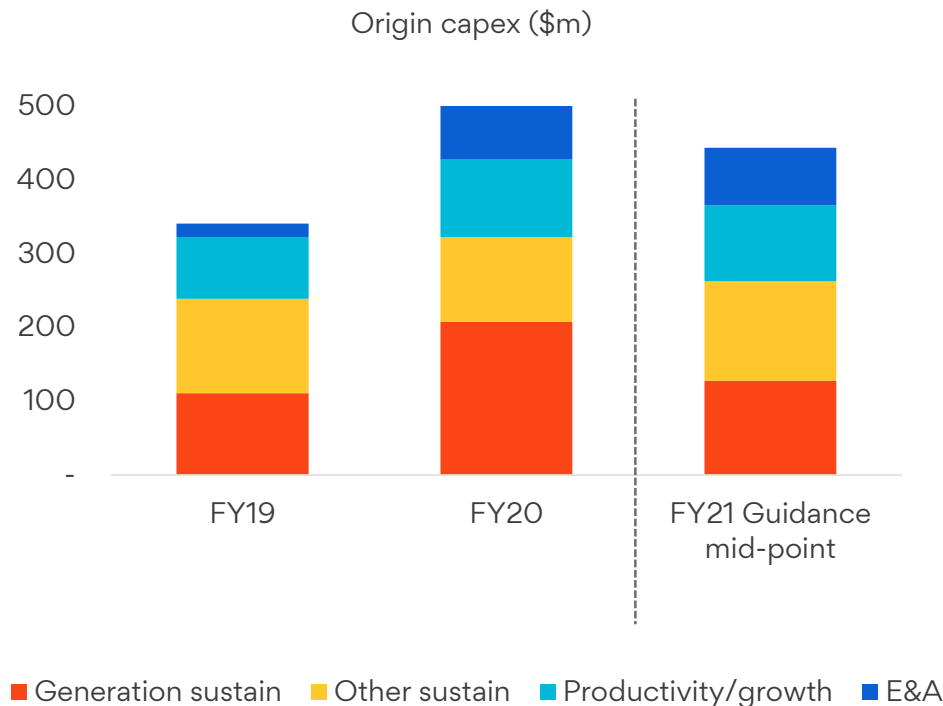
1) Cash flow from investing activities has been adjusted to remove cash flows between Shareholders and APLNG.

Reconciliation of Adjusted Net Debt

	Issue Currency	Issue Notional	Hedged Currency	Hedged Notional	AUD \$m 30 June 20	AUD \$m 30 June 20	AUD \$m 30 June 20
					Interest- bearing liabilities ²	Debt and CCIRS fair value adjustments	Adjusted Net Debt
AUD debt	AUD	826	AUD	826	806	-	806
USD debt left in USD	USD	1,195	USD	1,195	1,737	-	1,737
EUR debt swapped to AUD	EUR	2,300	AUD	3,273	3,795	(530)	3,265
Total					6,338	(530)	5,808
Lease liabilities					514	-	514
Total (including lease liabilities)					6,852	(530)	6,322
Cash and cash equivalents ¹							(1,164)
Adjusted Net Debt							5,158

1) Excludes \$76 million cash held on behalf of APLNG as upstream operator.
2) Includes transaction costs.

Capex summary



FY2020 capex

- **Generation sustain (\$208 million)** includes major overhauls at Eraring power station, Uranquinty and Mortlake power station repairs
- **Other sustain (\$115 million)** includes ERP replacement, regulatory market reforms and community energy services spend
- **Productivity/growth (\$92 million)** relates to Quarantine power station upgrade, Kraken licensing costs, community energy services, LPG, digital and solar spend
- **Exploration and appraisal (\$85 million)** primarily relates to Beetaloo appraisal

Energy Markets segment revenue reconciliation

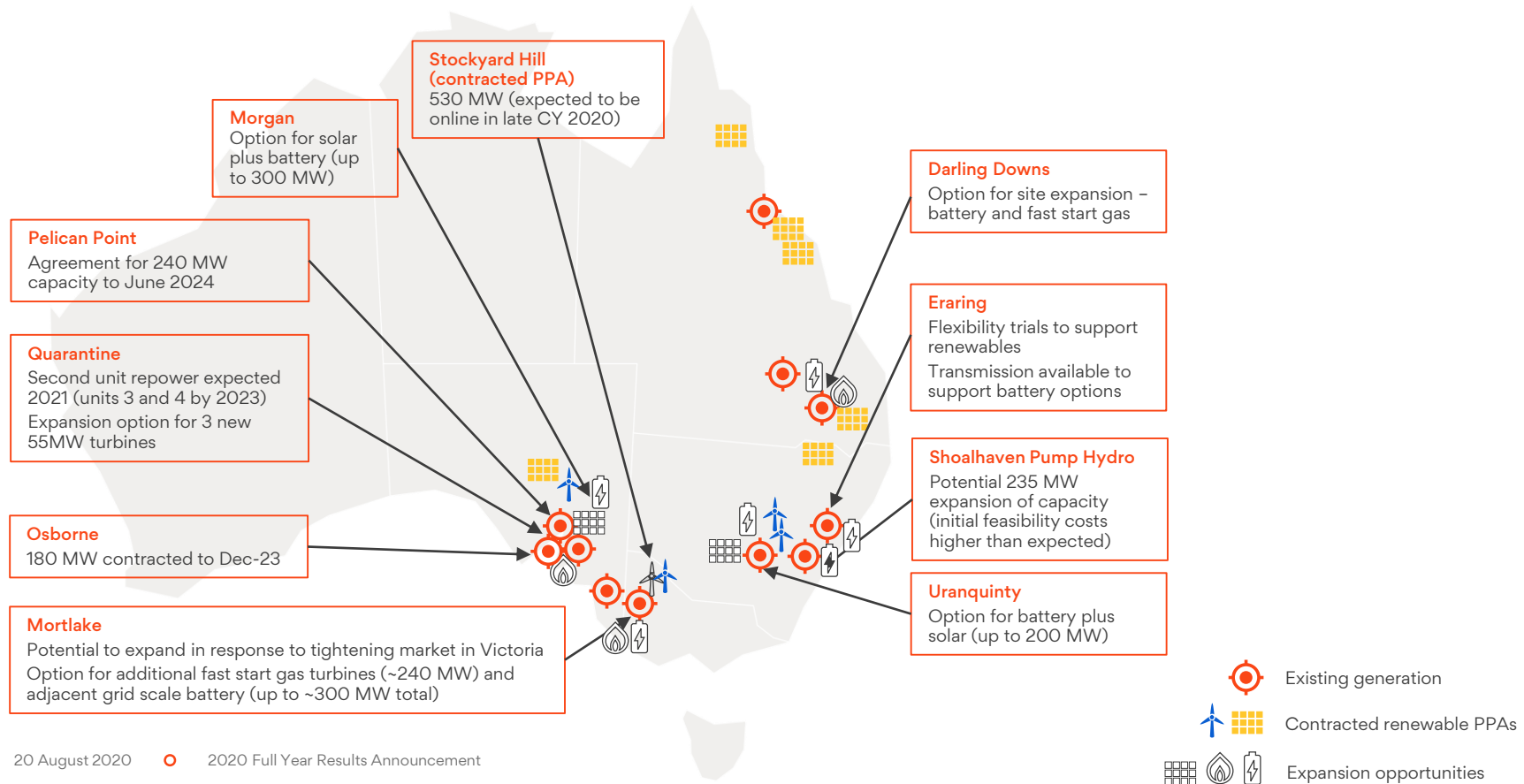
The table below reconciles the difference between segment revenue and customer revenue disclosed in the Electricity, Natural Gas, LPG and Solar & Energy Services tables.

	FY20	FY19	Change	Change
	(\$m)	(\$m)	(\$m)	(%)
Energy Markets segment revenue	12,888	14,293	(1,405)	(10)
<i>Less pool and other revenue:</i>				
Internal generation	(1,495)	(2,050)	555	(27)
Renewable PPAs ¹	(19)	(40)	21	(53)
Other PPAs ¹	(14)	(27)	13	(49)
Pool revenue	(1,527)	(2,117)	590	(28)
Other²	(109)	(96)	(13)	13
Total customer revenue	11,250	12,080	(830)	(7)

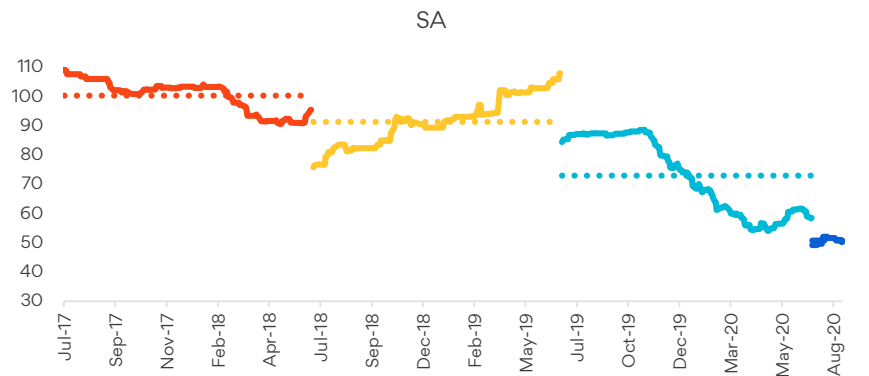
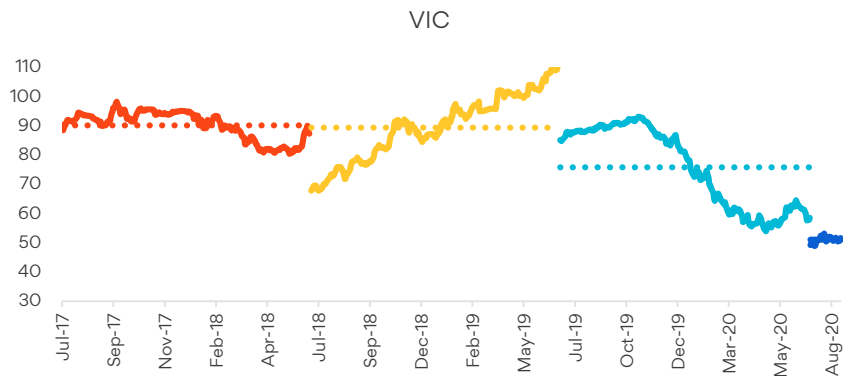
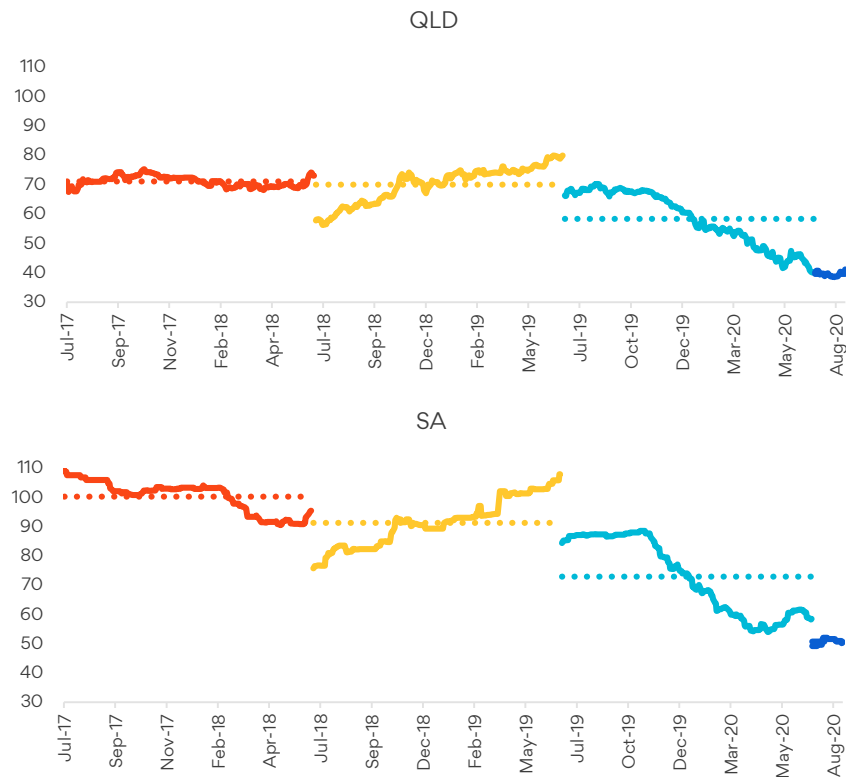
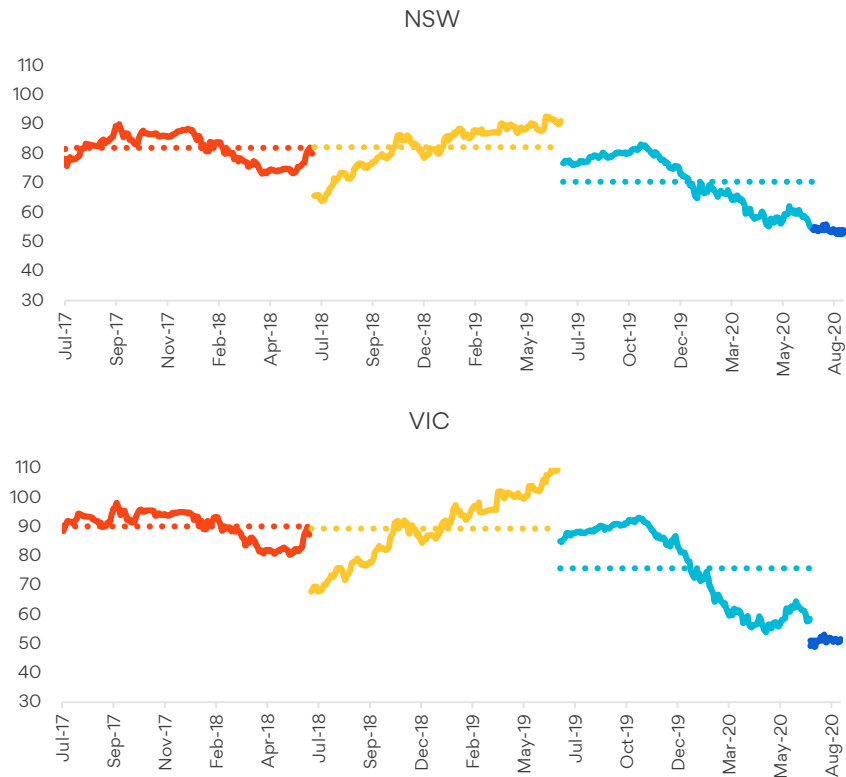
1) Gross settled PPAs only. Net settled Renewable PPAs for FY2020 amount to \$127 million (FY2019: \$201 million) and are presented in cost of sales on a net basis. There were no net settled Other PPAs in FY2020 (FY2019: \$26 million).

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

Brownfield generation opportunities



Electricity forward price by state (A\$/MWh)



Source: AEMO/Bloomberg

55

20 August 2020

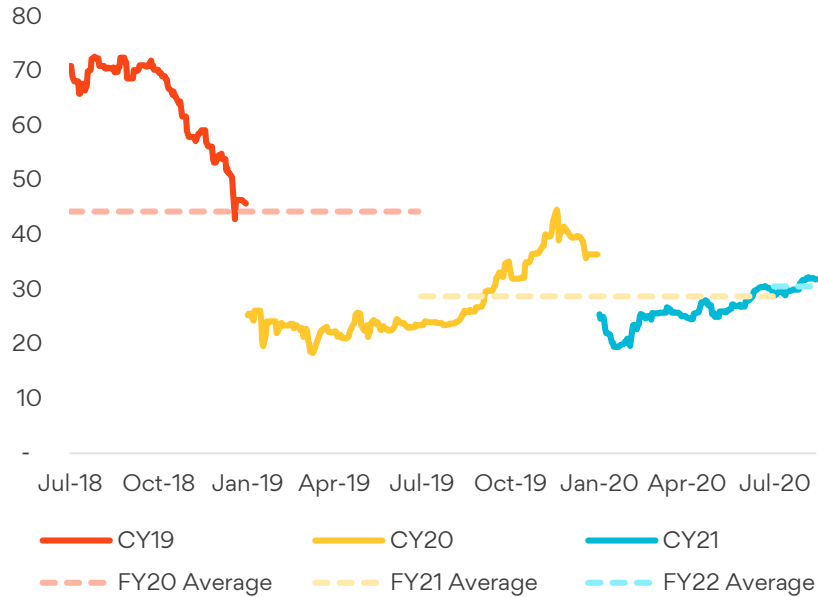
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2020 Full Year Results Announcement

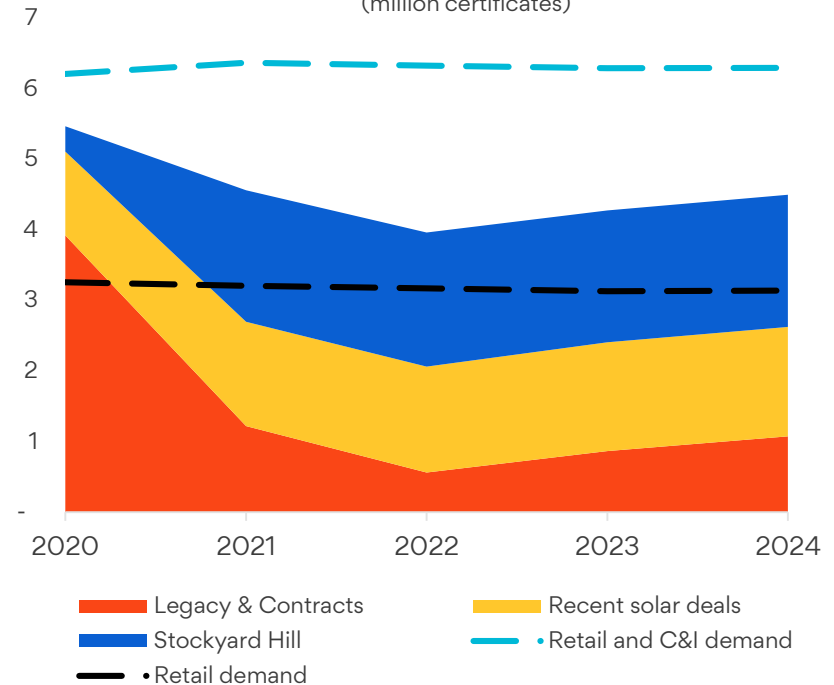
— FY19 Avg — FY20 Swap — FY21 Swap
— FY22 Swap FY Average

LREC prices and LREC position

LREC forward prices (\$/cert)



Origin's LREC position (million certificates)

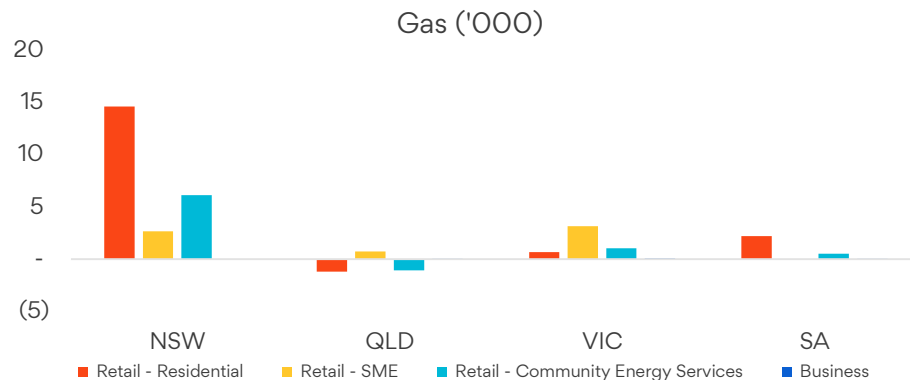
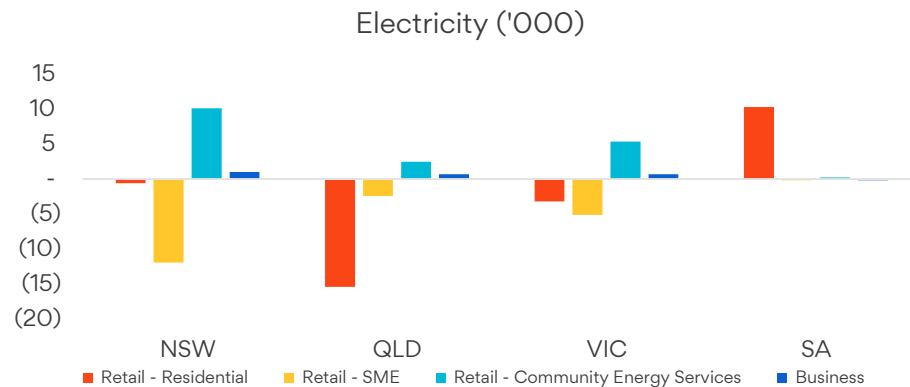


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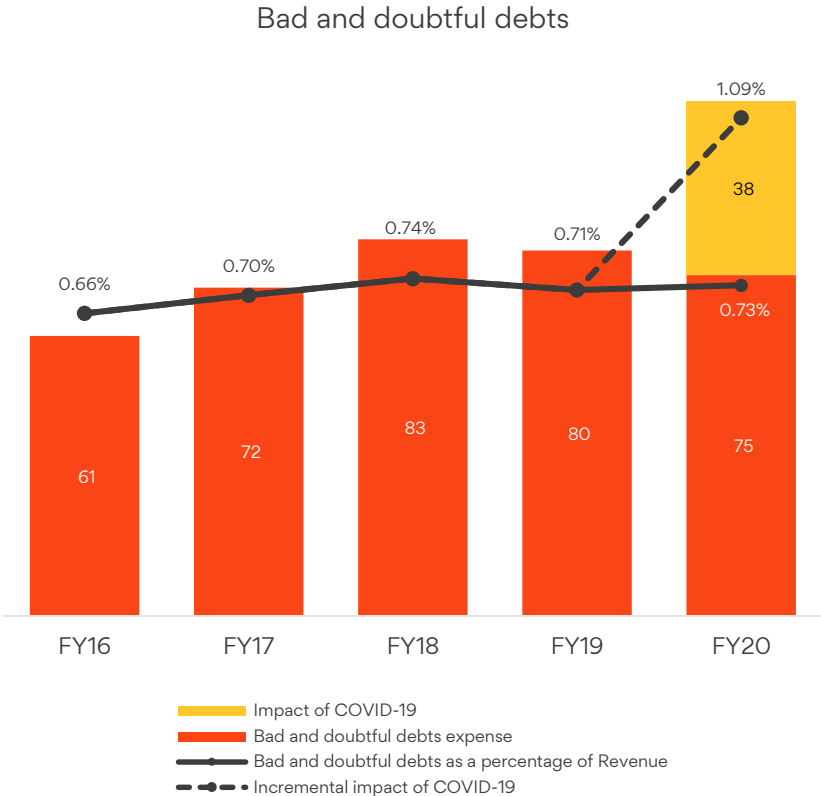
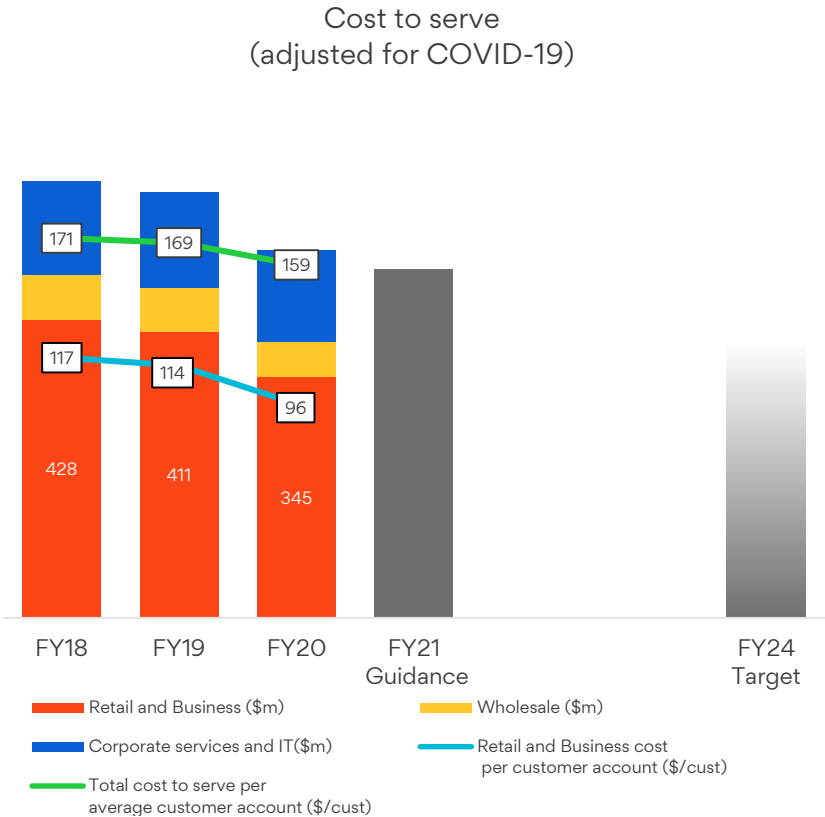
Customer movements

('000)	FY20	FY19	Change
Electricity			
Business	29	27	2
Retail – Residential	2,261	2,270	(9)
Retail – SME	264	283	(20)
Retail – Community Energy Services	77	59	18
Total	2,631	2,639	(8)

('000)	FY20	FY19	Change
Gas			
Business	1	1	-
Retail – Residential	958	942	16
Retail – SME	80	74	7
Retail – Community Energy Services	180	174	7
Total	1,220	1,191	29



Cost to serve and bad and doubtful debts over time



APLNG Project Finance debt amortisation profile

The table below outlines APLNG's US\$ project finance debt amortisation profile. APLNG's average interest rate associated with its project finance debt portfolio was 3.6% for FY2020, FY2021 is expected to be ~3.1%

Closing balance as at 30 June (US\$b)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Bank loan (variable) ¹	2,265	1,972	1,689	1,407	1,153	871	587	265	-	-	-
US Exim	2,203	2,001	1,772	1,519	1,247	965	679	382	162	-	-
USPP	2,000	2,000	2,000	2,000	1,940	1,887	1,787	1,690	1,437	930	297
Total	6,467	5,973	5,461	4,927	4,340	3,722	3,052	2,337	1,599	930	297

1) Based on current forward interest rates

Financial Instruments and fair value adjustments

(\$m)	Financial asset/(liability)		Balance Sheet Impact			Income Statement Impact		
	31 Jun 2020	30 Jun 2019	Inc/(dec) in financial instrument	Inc/(dec) in other net assets	Total inc/(dec) in net assets	Gain/(loss) included in Underlying Profit	Pre-tax Gain/(loss) excluded from Underlying Profit	Post-tax Gain/(loss) excluded from Underlying Profit
Oil and gas derivatives								
Oil and gas hedges - Integrated Gas	143	(60)	203	(120)	83	(134)	217	151
Oil and gas hedges - Energy Markets	(216)	21	(237)	231	(6)	(8)	3	1
Other commodity hedges	(9)	(8)	(1)	(7)	(8)	(7)	(1)	(1)
	(82)	(47)	(35)	105	70	(149)	219	153
Electricity derivatives								
Electricity swaps and options	(227)	172	(399)	442	43	31	11	8
Power purchase agreements ¹	(2)	(512)	510	(509)	1	4	(3)	(2)
Environmental derivatives	(13)	(127)	114	-	114	-	114	80
	(242)	(467)	225	(67)	158	35	122	85
FX and interest rate derivatives								
Foreign exchange contracts	(174)	(195)	21	(32)	(11)	2	(14)	(9)
Foreign currency debt hedges	460	658	(198)	148	(50)	-	(50)	(35)
Interest rate swaps	(20)	(18)	(2)	-	(2)	-	(2)	(1)
	266	445	(179)	116	(63)	2	(66)	(46)
Equity derivatives								
Share warrants	1	-	1	(1)	-	-	-	-
Increase in fair value of derivatives (financial statements Note A1(a))							275	193
Other financial assets/liabilities								
MRCPS issued by APLNG ²	2,109	3,045	(936)	1,269	333	175	158	111
Environmental certificates / surrender obligation	(131)	3	(133)	(540)	(673)	(632)	(41)	(29)
Settlement Residue Distribution Agreement units	60	54	7	11	18	9	9	6
Other investments	413	60	353	(356)	(3)	-	(3)	(2)
Increase in fair value of other financial assets/liabilities (financial statements Note A1(a))							123	86
Foreign exchange loss on foreign denominated debt (financial statements Note A1(a))							(4)	(3)
Total Fair value and foreign exchange movements (financial statements Note A1(a))							394	275
Reconciliation of net derivative liability to financial statements								
Derivative assets	1,158	1,434						
Derivative liabilities	(1,215)	(1,503)						
Net derivative liability	(57)	(69)						

- 1) The majority of Origin's renewable power purchase agreements meet the definition of a lease under AASB 16. As such, effective 1 July 2019, a net derivative liability of \$512 million was derecognised via an adjustment to opening retained earnings.
- 2) Under AASB 9, from 1 July 2018, Origin Energy holds MRCPS at fair value, rather than at cost.

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Important notices

All figures in this presentation relate to businesses of the Origin Energy Group (Origin, or the Company), being Origin Energy Limited and its controlled entities, for the reporting period ended 30 June 2020 (the period) compared with the reporting period ended 30 June 2019 (the prior corresponding period), except where otherwise stated.

Origin's Financial Statements for the reporting period ended 30 June 2020 are presented in accordance with Australian Accounting Standards. The Segment results, which are used to measure segment performance, are disclosed in note A1 of the Financial Statements and are disclosed on a basis consistent with the information provided internally to the Chief Executive Officer. 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 Consolidated Profit, are non-IFRS financial measures, and exclude the impact of these items consistent with the manner in which the Chief Executive Officer 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 Consolidated Profit is provided in the Operating and Financial Review.

This presentation also includes certain other non-IFRS financial measures. 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 and other key terms used in this presentation are included in the Operating and Financial Review Appendix. 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.

A reference to Australia Pacific LNG or APLNG is a reference to Australia Pacific LNG Pty Limited in which Origin holds a 37.5% shareholding. A reference to Octopus Energy or Octopus is a reference to Octopus Energy Holdings Limited in which Origin holds a 20% shareholding. Origin's shareholding in Australia Pacific LNG and Octopus Energy 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 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. Measures for which the numbers change from negative to positive, or vice versa, are labelled as not applicable.

For more information

Peter Rice

General Manager, Capital Markets

Email: peter.rice@originenergy.com.au

Office: +61 2 8345 5308

Mobile: + 61 417 230 306

Liam Barry

Group Manager, Investor Relations

Email: liam.barry@originenergy.com.au

Office: +61 2 9375 5991

Mobile: + 61 401 710 367

[originenergy.com.au](https://www.originenergy.com.au)