

To	Company Announcements Office	Facsimile	1300 135 638
Company	ASX Limited	Date	16 February 2023
From	Helen Hardy	Pages	74
Subject	ORG Half Year Results for the period ended 31 December 2022		

Please find attached the following documents relating to Origin Energy's Results for the half year ended 31 December 2022:

1. ASX Appendix 4D;
2. 2023 Half Year Report: Directors' Report including the Operating Financial Review; and the Interim Financial Statements.

Regards



Authorised by:
Helen Hardy
Company Secretary

02 8345 5000

Appendix 4D

Origin Energy Limited and its Controlled Entities Results for announcement to the market

31 December 2022

				31 December 2022	31 December 2021
Total Group revenue (\$m)	up	35%	to	8,760	6,511
Profit/(loss) for the period attributable to members of the parent entity (\$m)		nm ¹		399	(131)
				31 December 2022	30 June 2022
Net tangible asset backing per ordinary security ²	down	18%	to	\$3.33	\$4.08
Dividends				Amount per security	Franked amount per security at 30 per cent tax
Interim dividend determined subsequent to 31 December 2022				16.5 cents	16.5 cents
Previous corresponding period (31 December 2021)				12.5 cents	nil
Record date for determining entitlements to the dividend				1 March 2023	
Dividend payment date				24 March 2023	

1 Not meaningful.

2 The calculation of net tangible assets excludes lease related right-of-use assets of \$439 million (June 2022: \$466 million), categorised under Property, Plant & Equipment on balance sheet, as these are not considered tangible in nature.

Brief explanation of any of the figures reported above or other item(s) of importance not previously released to the market.

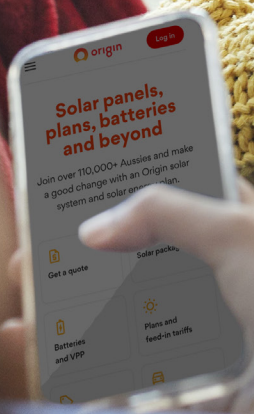
Refer to the attached Directors' Report and Operating and Financial review for explanations.

Discussion and Analysis of the results for the year ended 31 December 2022.

Refer to the attached Directors' Report and Operating and Financial Review for commentary

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For
all



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Contents



.....	
About Origin	2
.....	
Where We Operate	3
.....	
Operating and Financial Review	4
.....	
Directors' Report	35
.....	
Lead Auditor's Independence Declaration	36
.....	
Interim Financial Statements	37
.....	
Glossary and Interpretation	68
.....	

About Origin



ASX TOP
100

Leading integrated energy company

Listed on the Australian Securities Exchange in 2000



Powering Australia

7,800 MW generation portfolio, including 1,755 MW owned and contracted renewables and storage



Climate ambitions embedded in our strategy

Emissions intensity target consistent with 1.5°C pathway envelope²



4.5 million customer accounts

Electricity, gas, LPG¹ and broadband customers across Australia and the Pacific



27.5% interest in Australia Pacific LNG

Continue to be a significant contributor to the east coast gas market



Driving future energy innovation

20% interest in Octopus Energy, investing in new technology start-ups



5,000 employees

Inclusivity in the workplace; leading parental support



Transitioning our business to net zero

Growing our portfolio of renewables and cleaner energy



Supporting Australian communities

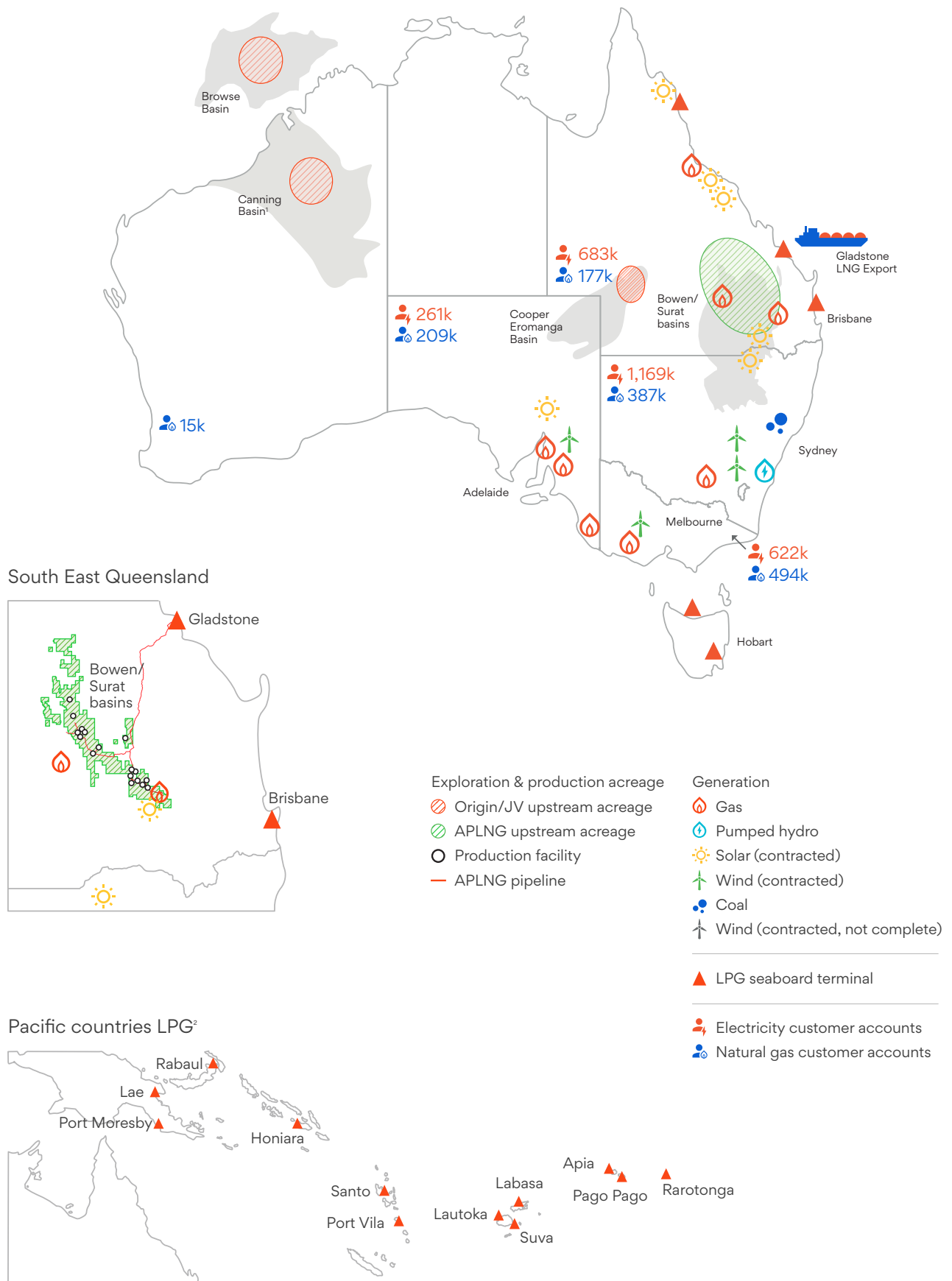
The Origin Energy Foundation has contributed more than \$35 million over 12 years

Where all good change starts

¹ On 8 November 2022, Origin entered into an agreement to sell Origin's LPG business in the Pacific

² Pursuant to the methodology set out in our Climate Transition Action Plan

Where We Operate



¹ An agreement has been executed with Buru Energy Limited to exit Origin's interest in Canning Basin.

² On 8 November 2022, Origin entered into an agreement to sell Origin's LPG business in the Pacific.

Operating and Financial Review

For the half year ended 31 December 2022

This report forms part of the Directors' Report.

1 Highlights

Sustainability performance

Getting energy right for our customers¹

Our customers are at the heart of everything we do. We are committed to providing 'good energy' that is reliable, affordable and sustainable.

- Rated 4.7 stars on TrustPilot with more 5 star reviews than any other Tier 1 or Tier 2 energy retailer in Australia
- 96 per cent of Mass Market customer accounts migrated to the Kraken platform, on track to complete by Q1 2023
- Origin Loop (in-house Virtual Power Plant) increased to 449 MW connected assets. Spike (demand response) grew to 85,000 connected services
- Origin Zero launched a growing set of energy and low carbon solutions for large business customers
- Customer accounts grew by 30,000. Named Australia's best-rated NBN provider of 2022 by Canstar Blue, with Broadband accounts at 74,000
- Continued to support our Power On hardship customers and acted to limit the impact of price increases on customers
- APLNG remains a major supplier to the east coast domestic market on competitive market terms

Getting energy right for our communities

We respect the rights and interests of the communities in which we operate, and consult with them to understand and manage our impact.

- Regional procurement was 18 per cent of total procurement spend
- \$13 million direct and indirect spend with Aboriginal and Torres Strait Islander businesses in HY2023, an increase from \$6 million HY2022
- Our employees contributed over 3,700 hours of volunteering through the Origin Energy Foundation's volunteer program
- Over \$1 million contributed to the community by the Origin Energy Foundation
- Progressed Eraring community investment and engagement strategies, including re-forming the Community Forum with local community representation

Customers

+1

Positive Strategic NPS

Communities

18%

regional procurement as a % of total procurement spend



Origin volunteer Caitlin helps students build a prosthetic hand for an amputee in the developing world through Origin Energy Foundation's partnership with the Helping Hands program.

¹ 12 month rolling average as at December 2022, commissioned research by third party.



Planet

37 MW

**residential and business solar
installs over HY2023**



People

3.6

**TRIFR (rolling 12 months)
compared to 4.0 at June 2022**

Getting energy right for the planet

We unequivocally support the Paris Agreement, including the aim to limit the world's temperature increase to 1.5°C above pre-industrial levels.

- Released Climate Transition Action Plan which received 94.5% shareholder support at the AGM
- Announced new 1.5°C Paris aligned emissions reduction target and net zero ambition
- Progressing large-scale batteries – negotiations progressed with selected contractors at Eraring; Mortlake received conditional approval for ~\$30 million ARENA grant
- Progressed green hydrogen and ammonia projects
- Launched a number of new EV products, including energy plans, chargers and subscription model

Our people

Having a diverse and inclusive workplace is key to creating a culture where people thrive, contributing to the success of our business.

- Total Recordable Incident Frequency Rate (TRIFR)² of 3.6, down from 4.0 at June 2022. We continue to focus on preventing serious harm, supported through HSE learning
- 44.1 per cent of women in Senior Leadership positions, up from 40.8 per cent at June 2022
- Continuing to support our people at Eraring – 96 per cent of employees have Individual Support Plans in place
- Increased Indigenous employees to 83, up from 81 at June 2022
- Awarded gold for 'Best Pro-Bono/Workplace Volunteering at the Workplace Giving Excellence Awards



“The release of our first Climate Transition Action Plan is an important milestone for Origin, and we believe it articulates a clear, pragmatic and ambitious pathway to accelerate decarbonisation across our business and create value for shareholders”

Frank Calabria

² Total Recordable Injury Frequency Rate (TRIFR) measures the number of company-wide work-related recordable injuries per million hours worked for employees and contractors.

Outlook

As global and domestic economies transition to a low carbon future, energy markets are experiencing significant shocks from changes in technology, customer demand and increasing electrification. Underinvestment in new supply and Russia's invasion of Ukraine exacerbated these shocks affecting the global supply of oil, coal and gas causing prices to rapidly escalate to extremely high levels over the 2022 calendar year.

Domestically, flooding events impacted coal supply to power stations resulting in severe price spikes at the end of FY2022 and into early FY2023. Flooding also affected the operations of APLNG. The announcement in December 2022 by the Federal government of price caps on gas and coal (discussed below) is in response to these global and domestic shocks.

More recently we have seen prices decline from previous highs but still well above long term average levels. Customer tariff increases have not kept pace with higher fuel costs and wholesale market price rises and this has had a negative impact on earnings, particularly in the electricity business. Business customer tariffs are beginning to reflect wholesale prices and we expect an improvement in the Energy Markets' earnings in the second half of FY2023. At APLNG, recovery from the cumulative production impact of three successive years of La Niña weather is underway.

In the medium term, we expect customer tariffs to more closely reflect wholesale prices and for high and volatile electricity prices to ease as fuel prices and supply chain disruptions normalise. We also expect increased electricity supply from large and small-scale renewable energy to put downward pressure on average electricity prices over time.

We believe Origin's core business is well positioned to succeed through the energy transition. We have a leading retail business with 4.5 million customer accounts and the implementation of the Kraken platform will result in improved customer service in multiproduct offerings and deliver a reduction in our cost to serve. Our thermal peaking generation fleet is the largest in Australia and is critical to supply reliable power to support intermittent supply from renewable generation. Our competitive gas portfolio with transport and storage flexibility supports this peaking fleet and our gas customers. APLNG consists of a high quality and low-cost resource, and we expect this business to continue to deliver strong cash flow.

By leveraging the strengths of our core business, we see opportunities to grow our earnings further. Our investment in the Community Energy Services business is performing well and we expect steady growth from a pipeline of forward sales opportunities. Our virtual power plant, called Origin Loop, has grown from 258 MW in June 2022 to 449 MW in December 2022 and we expect this rapid growth trajectory to continue. Our Broadband business has grown to 74,000 customers and was rated Australia's best NBN provider of 2022 by Canstar Blue. Our Origin Zero and E-mobility businesses are all growing as they partner with customers to optimise demand and supply low carbon energy solutions.

Our investment in Octopus Energy, a leading UK retailer and global utility software provider, has grown to be the number two energy supplier in UK by customer accounts. Octopus' Kraken platform has a strong global sales pipeline to achieve the stated ambition of 100 million licensed customer accounts.

We are progressing battery investment opportunities to support the intermittent nature of renewables. Our gas portfolio and investment in APLNG are both well positioned to capture value as they meet the needs of our customers.

Looking to the long term, Origin is uniquely placed to invest into the energy transition. A large-scale opportunity exists to build renewables and storage to accelerate the energy transition backed by our leading retail business and our competitive gas position. Our

early stage investment in green hydrogen is being met with strong customer interest and we expect hydrogen to play a significant role in the energy mix as the world seeks to decarbonise. Our focus includes hydrogen for domestic and export markets. Origin aims to develop capabilities and partnerships that will support domestic opportunities and longer term export prospects.

Consortium proposal update

During the period, the Board received an indicative, conditional and non-binding bid for all of the shares of the company at a price of \$9.00 per share representing a 54.9% premium to the then closing share price. This proposal demonstrates the value in Origin's business and that it is well placed to benefit from the energy transition.

Origin advises that the Consortium has substantially completed due diligence and active engagement continues on a non-exclusive basis in relation to the submission of a binding proposal. Any binding proposal will be subject to a number of conditions, including approval from the ACCC and FIRB and other terms and conditions, which will be subject to negotiation between the parties as part of a Scheme Implementation Deed.

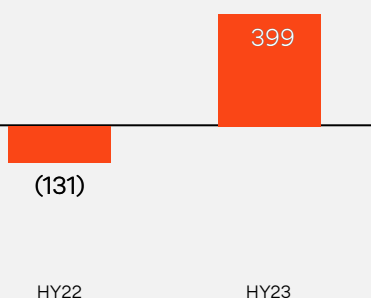
At this stage, shareholders do not need to take any action and Origin will continue to keep shareholders updated in accordance with its continuous disclosure obligations.

Energy Policy

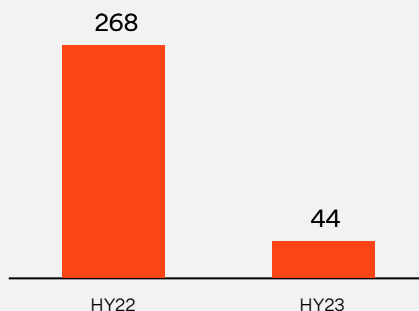
In December 2022, the Federal government legislated a temporary price cap of \$12/GJ on domestic gas sales by gas producers and a temporary price cap of \$125/t on coal effective from 23 December 2022. The gas price cap applies for 12 months, and the coal price cap applies until 30 June 2024. As almost all of the company's gas supplies for FY2023 had been contracted prior to the cap coming into effect, there was no material impact on the HY2023 earnings due to the introduction of the gas price cap. The government's coal policy has two limbs. The first limb of the policy will involve the government compensating power stations, such as Origin's Eraring power station, for the difference between the price of any existing coal contracts and the \$125/t capped price for coal to be delivered after 23 December 2022. The second limb of the policy provides that the price of any new coal contracts entered into after 23 December 2022 cannot exceed the legislated price cap of \$125/t. The Eraring power station purchases coal from a range of suppliers and we may receive compensation to recover coal costs that exceed the legislated coal price cap of \$125/tonne in the future. No compensation was received during the HY2023 period. Origin notes the implementation of the coal price cap will be important to achieve the government's intended aim of lowering wholesale electricity prices in order to put downward pressure on prices for customers in future periods. Origin is working to secure new coal contracts for supply in FY2023 and FY2024 under the legislated price cap policy.

Financial performance

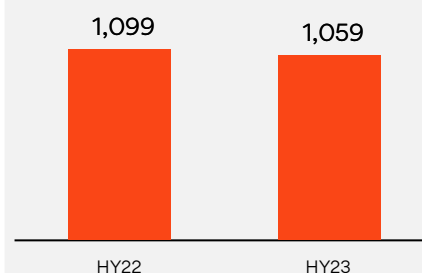
Statutory Profit (\$m)



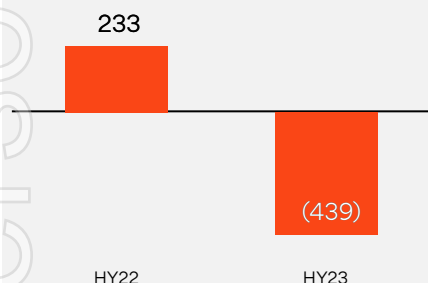
Underlying Profit (\$m)



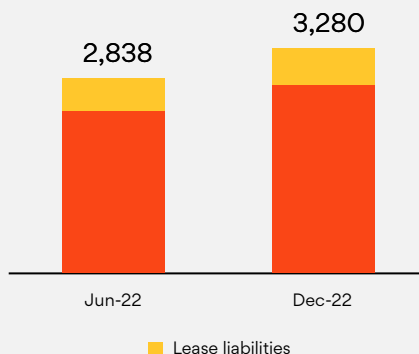
Underlying EBITDA



Adjusted Free Cash Flow (\$m)



Adjusted Net Debt (\$m)



Interim Dividend

16.5cps
100% franked

29cps total FY2022 dividend

Origin's Underlying profit declined to \$44 million, with higher Integrated Gas earnings more than offset by a reduction in Energy Markets gross profit and higher tax expense on the unfranked dividend received from APLNG.

APLNG continued to deliver strong cash flow in challenging operating conditions with the three year La Niña weather cycle restricting access to well sites and the consequential impact on production. APLNG benefited from high global oil and LNG prices.

Energy Markets' gross profit declined as higher fuel costs and wholesale electricity procurement costs were not fully recovered in customer tariffs within the period. Earnings from the natural gas business were up, with margins improving given our largely fixed price portfolio³ and business customer tariffs resetting, reflecting higher current wholesale procurement costs. Our retail business performed strongly with increased customer numbers, a positive strategic NPS of +1 and significant growth in our Community Energy Services business. Refer to Energy Markets Performance (see page 8) and Integrated Gas performance (see page 9) for further details.

The outlook for the second half of FY2023 has improved, and Origin announced improved earnings guidance for the full year as higher wholesale costs begin to flow through to customer tariffs. Refer to the Guidance section 2 for further details.

Volatile market conditions impacted our working capital position, as changes in prices flow through to timing of cash flows differently to earnings. Accordingly, Origin's Free Cash Flow for the period was suppressed, reflecting a reversal of prior period working capital benefits, higher tax paid and lower earnings contribution from Energy Markets. Origin's capital structure is at the conservative end of its target range with Adjusted Net Debt/Adjusted Underlying EBITDA ratio of 2.1x. Adjusted Net Debt rose in the period to \$3,280 million.

The Board has determined to pay a fully franked interim dividend of 16.5 cents per share. The interim dividend will be paid on 24 March 2023 to shareholders registered as at 1 March 2023.

³ Subject to CPI adjustments

Energy Markets performance

Underlying EBITDA

\$148M

Down \$120M or 45% vs HY2022

Operating cash flow

\$(445M)

Down \$755M vs HY2022

Underlying ROCE⁴

(3.9%)

Down by 5.2% vs HY2022

Cost to serve

\$266M

Up \$15M vs HY2022

Retail X

96%

Mass Market customer accounts
migrated to Kraken

4,489k

Customer accounts
Up 30k vs June 2022

Unprecedented market conditions dominated the second half of FY2022, seeing elevated and volatile wholesale electricity prices, coupled with a temporary suspension of the electricity spot market. In HY2023 both spot electricity and gas prices have moderated, driven by improved coal and renewable generation output, and lower demand, albeit prices remain considerably higher than in HY2022.

During the period, the electricity business continued to be adversely impacted by the under recovery of higher wholesale energy costs in customer tariffs. Origin's cost of energy also continued to be impacted by higher coal, gas and other electricity procurement costs, which resulted in a \$183 million reduction in the Electricity Gross Profit. Improved coal deliveries from our key supplier under legacy contracts, and increased rail deliveries have reduced our exposure to high wholesale electricity prices. Business customer tariffs are beginning to reflect higher wholesale costs. We expect an improvement in the electricity business in the second half of FY2023.

Natural Gas Gross Profit increased by \$145 million, driven by repricing of business and retail customer tariffs and increased sales to business customers, partly offset by higher procurement costs. Portfolio strength is underpinned by fixed price⁵ supply contracts and transport flexibility. The JKM supply position is fully hedged through to the end of FY2024 at favourable rates to current market prices, and there are no further price reviews on other supply contracts until FY2024.

Operating cash flow was lower, primarily driven by lower earnings and higher working capital (Refer to Section 3.3 for more details). Return on capital employed in HY2023 was -3.9 per cent, reflecting lower earnings.

Customer accounts increased by 30,000, driven largely by customer wins in Broadband and Community Energy Services business.

Our newly established Origin Zero business is partnering with large business customers to enable their decarbonisation journey, with an incremental 94 MW of flexible demand added to Origin Loop (our in-house VPP), a range of E-mobility products launched and has begun to grow customer engagement on products other than traditional energy supply.

We continued to invest in renewable and cleaner energy and customer solutions with a \$163 million (£94 million) investment made to maintain our 20 per cent stake in Octopus, and we also acquired the 60 MW Yanco Solar Farm development in NSW. We continue to move towards a final investment decision on proposed battery at the Eraring site and progress a number of other storage opportunities.

Volatile UK market conditions adversely impacted Octopus' Gross Profit during the period, with recovery expected in the second half of FY2023. Octopus completed the Bulb Energy acquisition in December 2022, adding around 2.5 million customer accounts. Octopus' customer accounts have grown by 52 per cent since 30 June 2022, and it is now the second largest energy retailer in UK by customer accounts. This growth demonstrates the success of Octopus' low-cost operating model and market-leading Kraken platform in a rapidly changing energy landscape.

Our implementation of the Kraken platform continues to progress with 96 per cent of mass market electricity and natural gas customer accounts migrated as at 31 December 2022, with the final phase of the migration the most complex. We are targeting the completion of customer accounts' migration by March 2023 and further cash cost savings in FY2024.

⁴ 12-month rolling average.

⁵ Subject to CPI adjustments.

Integrated Gas performance

Underlying EBITDA

\$954M

Up \$84m or 10% vs HY2022
Underlying EBIT up \$109m

Cash distributions from APLNG

\$783M

Up \$228m or 41% vs HY2022

19.8%

Underlying ROCE⁶
Up from 8.7% in HY2022

APLNG production (100%)

333PJ

Down 5% vs HY2022

Average realised LNG price

US\$15.1/MMBTU

Up 43% vs HY2022
Up 57% in A\$ terms at \$21.4/GJ

Capex and opex⁷/GJ

\$3.8/GJ

Up \$0.9/GJ vs HY2022

Integrated Gas' Underlying EBITDA increased by \$84 million or 10 per cent to \$954 million reflecting higher global commodity prices compared to HY2022, partly offset by Origin hedging losses associated with higher commodity prices.

The cash distribution from APLNG increased by \$228 million or 41 per cent from HY2022 to \$783 million. This increase is after Origin sold a 10 per cent interest in APLNG in December 2021 and reflects higher global commodity prices. Excluding the impact of the 10 per cent sell down, APLNG EBITDA increased by \$397 million. The average realised LNG price increased by 57 per cent to A\$21.42/GJ during the period.

APLNG's production was down 5 per cent compared to the HY2022 reflecting the cumulative impact of the La Niña weather event which restricted access to fields for workovers, drilling and optimisation activities. Commencement of planned cyclical maintenance at gas processing facilities and unplanned non-operated outages also impacted production during the period. Recovery in production is underway with additional wells online through a drilling campaign and ramp up in workover activity. The Talinga Condabri North Pipeline ramped to full capacity in December 2022 and the Orana South Loop Line is expected to come online in second half FY2023, providing greater operational flexibility to optimise gas processing.

APLNG remains a major supplier to the East Coast Domestic market at average prices well below those paid by international customers. The average realised domestic gas price increased by 53 per cent to \$10.14/GJ, primarily reflecting higher market linked short term contract prices.

Total capital and operating expenditure was up \$0.9/GJ compared to HY2022 to \$3.8/GJ⁷, reflecting increased activity in workovers and non-operated well development programs, along with the commencement of cyclical maintenance at gas processing facilities, and higher power costs.

Progress on strategic review of Origin's exploration permits:

In September 2022 we announced a strategic review of all remaining non APLNG exploration permits with a view to exiting those permits over time. Exiting these exploration permits will enable greater flexibility to allocate capital towards growing cleaner energy and new customer solutions, and supporting delivery of reliable energy through the transition.

- Beetaloo Basin – In November 2022 Origin completed the sale of its interest in the Northern Territory's Beetaloo Basin and received upfront consideration of \$60 million and a royalty agreement covering future production. Origin recorded a non-cash post tax loss of \$75 million in relation to the transaction.
- Canning Basin – An agreement has been executed with Buru Energy Limited to exit Origin's interest in Canning Basin and the transaction is expected to complete in the second half FY2023.
- Cooper-Eromanga Basin -Origin will transfer its interest in five permits back to Bridgeport, the remaining 12 permits are under a strategic review

⁶ 12-month rolling average.

⁷ Opex excludes purchases and reflects royalties at the breakeven oil price.

2 FY2023 guidance

The following guidance is consistent with prior guidance, and is provided on the basis that market conditions and the regulatory environment do not materially change, adversely impacting on operations.

Energy Markets

Since providing guidance in January 2023, operating and trading performance, including at Octopus Energy, has continued to improve with Energy Markets' underlying earnings now expected to be towards the higher end of the EBITDA guidance range noted below.

We estimate Energy Markets Underlying EBITDA to be higher than FY2022 at **\$600 - \$730 million**, driven by an expected increase in natural gas and electricity gross profit due to good operating and trading performance, as well as improved coal delivery under legacy contracts and earnings recovery from Octopus Energy. We expect cash flow to improve in the second half of FY2023 driven by higher earnings offset by ~\$200 million LGC shortfall charge.

- No material impact is expected on FY2023 Energy Markets earnings as a result of the introduction of the \$12/GJ cap on uncontracted gas, given gas supplies for the year had been almost entirely contracted prior to the cap coming into effect.
- The guidance excludes any potential impact of any compensation Origin may receive to recover coal costs that exceed the legislated coal price cap of \$125/tonne, or further coal supply contracts that may be executed at the capped price, noting the mechanism and timing through which the government policy will be administered remains uncertain.
- The Energy Markets business is expected to earn a return on capital employed⁸ in FY2023 of less than 4 per cent, at the top end of the above guidance range. The Energy Markets' return on capital employed¹ for HY2023 was - 3.9 per cent. The estimated full year return remains below the company's cost of capital.

We anticipate **further underlying earnings growth in FY2024** driven by customer tariffs increasing to reflect wholesale energy costs, earnings growth from Octopus Energy and cash cost savings associated with the Retail transformation program.

- Assumes current forward energy prices are maintained and priced into customer tariffs.
- Subject to coal contracting risk and ~50PJ gas price review outcome.
- Excluding the potential impact of the introduction of the legislated coal price cap.

Integrated Gas

		FY22	FY23 guidance
Integrated Gas - APLNG 100%			
Production	PJ	693	660 - 680
Capex and opex, excluding purchases ¹	A\$b	2.2	2.5 - 2.7
Unit capex + opex, excluding purchases ¹	A\$/GJ	3.2	3.7 - 4.1

¹ Opex excludes purchases and reflects royalties at the breakeven oil price.

- Production guidance of 660 - 680 PJ, reflecting the cumulative impact of three successive La Niña weather years restricting site access
- Capex and opex guidance of \$2.5 - \$2.7 billion, higher than FY2022 reflecting higher power costs, commencement of a multi-year upstream gas processing plant maintenance program and increased well workover and drilling program
- Approximately 97 per cent⁹ of Origin's 17 MMboe share of APLNG's FY2023 JCC oil price exposure has been priced at US\$105/bbl before hedging, based on the long-term LNG contract lags
- Based on forward market prices⁹ we estimate losses in FY2023 on oil hedging and hedging premium expense of \$283 million.
- \$1.4 to \$1.6 billion¹⁰ distributions estimated to Origin in FY2023, net of Origin oil hedging

		FY23 guidance
LNG Trading Guidance		
FY2023 - FY2024	A\$m	40 - 80
FY2025 - FY2026	A\$m	450 - 650

The LNG trading EBITDA for FY2023 and FY2024 has improved, reflecting improved market prices. This outlook remains subject to market prices on unhedged volumes, operational performance and delivery risk of physical cargoes, and shipping and regasification costs.

See Section 4.2.2 for details of Integrated Gas oil hedging and LNG trading.

⁸ Return on capital employed is calculated as Adjusted EBIT / Average Capital Employed.

⁹ As at 30 January 2023.

¹⁰ Assuming realised JCC oil price of US\$105/bbl before hedging and an average AUD/USD rate of 0.67 and all APLNG debt serviceability tests are met.

3 Financial update

3.1 Reconciliation from Statutory to Underlying Profit

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Statutory Profit/(Loss) - total operations	399	(131)	530	n/a
Items Excluded from Underlying Profit (post-tax)				
Increase/(decrease) in fair value and foreign exchange movements	405	36	369	n/a
Oil and gas	498	(47)	545	n/a
Electricity	(56)	84	(140)	(167)
FX and interest rate	-	(4)	4	(100)
Other financial instruments	(24)	43	(67)	(156)
FX gain/(loss) on foreign-denominated financing	(13)	(40)	27	(68)
Impairment, disposals, business restructuring and other	(50)	(435)	385	(89)
Total Items Excluded from Underlying Profit (post-tax)	355	(399)	754	(189)
Underlying Profit	44	268	(224)	(84)

Fair value and foreign exchange movements reflect non-cash or non-recurring fair value gains/(losses) associated with commodity hedging, interest rate swaps and other financial instruments. These amounts are excluded from Underlying Profit to remove the volatility caused by timing mismatches in valuing financial instruments and the underlying transactions they relate to.

- Oil and gas derivatives manage exposure to fluctuations in the underlying commodity price to which Origin is exposed through its gas portfolio and indirectly through Origin's investment in APLNG. See Section 4.2.2 for details of Origin's APLNG-related oil hedging.
- Electricity derivatives, including swaps, options and forward purchase contracts, are used to manage fluctuations in wholesale electricity and environmental certificate prices in respect of electricity purchased to meet customer demand.
- Foreign exchange and interest rate derivatives manage exposures associated with the debt portfolio. A portion of debt is euro-denominated and cross-currency interest rate swaps hedge that debt to AUD.
- Other financial instruments mainly reflects fair value movements in Settlement Residue Distribution Agreement units and Environmental scheme certificates and surrender obligations.
- Foreign exchange on foreign-denominated financing reflects currency fluctuations on unhedged USD debt. Debt is maintained in USD to offset the USD-denominated investment in APLNG, which delivers USD cash distributions.

Impairment, disposals, business restructuring and other are either non-cash or non-recurring items and are excluded from Underlying Profit to better reflect the underlying performance of the business. They include:

	HY23 (\$m)
Business restructuring	(28)
Disposals	(75)
Other	53
Deferred tax liability utilisation - APLNG	43
LGC net shortfall charge	(72)
Provision for legal matters	(13)
Onerous contracts - LNG	95
Impairment, disposals, business restructuring and other	(50)

- \$28 million business restructuring costs relating primarily to the Kraken implementation project;
- \$75 million post-tax disposal of Origin's interests in the Beetaloo Basin;
- \$43 million non-cash utilisation of deferred tax liability for dividends paid out of APLNG's retained earnings. Refer to Appendix 1 for further details;
- \$72 million net cost relating to a decision to defer the surrender of a portion of Origin's calendar year 2022 large-scale generation certificates. The costs associated with this deferral are expected to be recovered in future periods. Refer to Appendix 2 for further details; and
- \$95 million non-cash benefit relating to revaluation of the LNG onerous contract provisions, reflecting a reduction in the provision as the contract unwinds, partly offset by unfavourable movements in near term JKM purchase prices and Brent-linked revenues. The realised position for the period associated with these contracts is recognised in Underlying Profit.

The nature of Items Excluded from Underlying Profit set out in the above table have been reviewed by our auditor for consistency with the description in note A1 of the Origin Energy Financial Statements.

3.2 Underlying Profit

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Energy Markets	148	268	(120)	(45)
Integrated Gas - Share of APLNG	1,193	1,039	154	15
Integrated Gas - Other	(239)	(169)	(70)	41
Corporate	(43)	(39)	(4)	10
Underlying EBITDA	1,059	1,099	(40)	(4)
Underlying depreciation and amortisation (D&A)	(260)	(211)	(49)	23
Underlying share of ITDA of equity accounted investees	(556)	(600)	44	(7)
Underlying EBIT	243	288	(45)	(16)
Underlying interest income - MRCPS	-	37	(37)	(100)
Underlying interest income - Other	28	1	27	n/a
Underlying interest expense	(91)	(103)	12	(12)
Underlying profit before income tax and non-controlling interests	180	223	(43)	(19)
Underlying income tax expense	(134)	46	(180)	n/a
Non-controlling interests' share of Underlying Profit	(2)	(1)	(1)	100
Underlying Profit	44	268	(224)	(84)
Underlying EPS	2.5cps	15.2cps	(12.7cps)	(84)
Underlying ROCE - rolling 12 month	7.3%	4.9%		2.4%

Refer to Sections 4.1 and 4.2 respectively for Energy Markets and Integrated Gas analysis.

Corporate costs increased by \$4 million, primarily reflecting higher employee costs, and IT and People and Culture projects; partly offset by non-repeat of ERP implementation costs.

Underlying D&A increased by \$49 million, driven primarily by accelerated depreciation following the reassessment of Eraring's useful life.

Underlying share of ITDA decreased \$44 million, driven by lower ITDA from APLNG (\$23 million), reflecting lower net interest expense (\$47 million), and lower depreciation and amortisation (\$54 million) partially offset by higher tax expense from higher earnings (\$78 million); and decreased ITDA from Origin's equity share of Octopus Energy (\$23 million).

Underlying MRCPS interest income decreased \$37 million to nil with the principal fully repaid during FY2022.

Underlying net interest expense decreased \$39 million, reflecting a lower drawn debt balance compared with HY2022, and higher interest income due to a higher cash balance and interest income on futures collateral positions.

Underlying income tax expense increased \$180 million, reflecting income tax on unfranked dividends from APLNG.

3.3 Cash flows

Operating cash flow

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Underlying EBITDA	1,059	1,099	(40)	(4)
Underlying equity accounted share of EBITDA (non-cash)	(1,111)	(1,026)	(85)	8
Other non-cash items in Underlying EBITDA	87	81	6	7
Underlying EBITDA adjusted for non cash items	35	154	(119)	(77)
Change in working capital	(561)	(167)	(394)	236
<i>Futures exchange collateral</i>	196	102	94	92
<i>Energy Markets</i>	(649)	(83)	(566)	n/a
<i>Integrated Gas - excluding APLNG</i>	(91)	(174)	83	(48)
<i>Corporate</i>	(17)	(12)	(5)	42
Other	(128)	(64)	(64)	100
Tax (paid)/refunded	(132)	(2)	(130)	n/a
Cash flow from operating activities	(786)	(79)	(707)	895

Operating cash flow is inclusive of outflows from Integrated Gas hedging activities and the tax associated with increased cash flows from APLNG, however excludes those dividends received from APLNG. Cash flows from APLNG are included in investing activities, and increased \$228 million from HY2022.

Operating cash flow decreased \$707 million, reflecting:

- lower earnings from Energy Markets (\$120 million);
- lower earnings from Integrated Gas - Other (\$70 million) driven by hedge losses due to higher oil prices compared with the prior period. The benefit of higher oil and gas prices is reported in 'Investing Cash Flow - Distribution from APLNG';
- higher working capital (\$561 million).
 - Energy Markets working capital increased by \$649 million driven by the unwind of higher priced net creditors for wholesale energy, reflecting the unwind during the period of the extreme wholesale price environment in FY2022, and higher customer tariffs impacting outstanding receivables and a build up of the Eraring coal stockpile;
 - Integrated Gas working capital increased by \$91 million during the period primarily reflecting the cash settlement timing of LNG trading activities.
- partly offset by positive movement in futures collateral reflecting improved mark to market valuation in gas hedge contracts.

Underlying equity accounted share of EBITDA (non-cash) reflects share of APLNG (\$1,193 million) and share of Octopus (\$83 million loss). Other non-cash items include provisions for bad and doubtful debts (+\$52 million), share-based remuneration (+\$16 million) and exploration expense (+\$19 million).

Investing cash flow

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Capital expenditure	(269)	(215)	(54)	25
Distribution from APLNG	783	555	228	41
Interest received from other parties	24	-	24	n/a
Investments/acquisitions	(173)	(267)	94	(35)
Disposals	70	6	64	n/a
Cash flow from investing activities	435	79	356	451

HY2023 capital expenditure of \$269 million was up 25 per cent driven by spend at Eraring (including one-off spend on Myuna Bay Recreation Centre, and expenditure associated with Ash Dam stabilisation works), continued progress on the Kraken implementation and pre-FID solar and storage projects. Capital expenditure comprises:

- generation maintenance and sustaining capital (\$151 million), primarily at Eraring (\$116 million) due to costs associated with the new Myuna Bay Recreation Centre (\$40 million), Ash Dam (\$15 million) and maintenance activities, as well as Darling Downs Power Station capital spares and major outage (\$18 million);
- other sustaining capital (\$34 million) including LPG (\$16 million), and CES (\$8 million);
- productivity/growth (\$74 million) including Kraken implementation costs (\$23 million), Eraring Battery (\$10 million), Solar and other battery storage projects (\$11 million) and CES (\$9 million); and
- exploration and appraisal spend (\$10 million) primarily related to the appraisal program in the Beetaloo Basin prior to divestment.

Cash distributions from APLNG amounted to \$783 million comprising unfranked dividends, up from \$555 million in HY2022, which comprised \$515 million of MRCPS buy backs and \$40 million in MRCPS interest.

Interest received from other parties increased, reflecting a higher cash balance held along with futures collateral positions held with brokers.

Investments include deferred and contingent consideration for the equity interest in Octopus Energy (\$163 million), as well as investments in Yanco Solar Farm (\$6 million) and Future Energy (\$2 million).

Financing cash flow

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Net proceeds/(repayment) of debt	421	82	339	n/a
Operator cash call movements	121	(21)	142	n/a
AEMO cash deposits	290	-	290	n/a
On-market purchase of shares	-	(24)	24	(100)
Close out of foreign currency contracts	-	(27)	27	(100)
Interest paid	(78)	(112)	34	(30)
Payment of lease liabilities	(33)	(45)	12	(27)
Dividends paid	(291)	(111)	(180)	162
Total cash flow from financing activities	430	(258)	688	(267)
Effect of exchange rate changes on cash	1	-	1	n/a

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

Australian Energy Market Operator (AEMO) cash deposits relate to cash security deposits placed with AEMO to support Origin's energy purchases from national electricity and gas markets. The obligation is typically satisfied by bank guarantees; however the obligation was partially met with cash in FY2022, and subsequently refunded to Origin in HY2023.

On-market purchase of shares represents the purchase of shares to satisfy employee share remuneration schemes and the Dividend Reinvestment Plan (DRP), which was suspended following FY2022.

Close out of foreign currency contracts represents the partial closure of contracts executed in prior periods to monetise the value of certain cross-currency interest rate swap contracts. The value of outstanding contracts as at 31 December 2022 was \$48 million.

Free Cash Flow

Free Cash Flow represents cash flow available to pay dividends, repay debt, invest in major growth projects or return surplus cash to shareholders. This is prepared on the basis of the equity accounting of APLNG.

Major growth spend (\$186 million) comprising the Octopus equity investment (\$163 million) and Kraken licence implementation costs (\$23 million) has been excluded from HY2023 Free Cash Flow. The cash inflow from futures collateral of \$196 million has also been excluded from Free Cash Flow.

(\$m)	Energy Markets		Integrated Gas - Share of APLNG		Integrated Gas - Other		Corporate		Total	
	HY23	HY22	HY23	HY22	HY23	HY22	HY23	HY22	HY23	HY22
Underlying EBITDA	148	268	1,193	1,039	(239)	(169)	(43)	(39)	1,059	1,099
Non-cash items	138	61	(1,193)	(1,039)	23	28	8	5	(1,024)	(945)
Change in working capital - excluding futures exchange collateral	(649)	(83)	-	-	(91)	(174)	(17)	(12)	(757)	(269)
Futures exchange collateral	11	102	-	-	185	-	-	-	196	102
Other	(93)	(38)	-	-	(17)	(18)	(18)	(8)	(128)	(64)
Tax (paid) /refunded	-	-	-	-	-	-	(132)	(2)	(132)	(2)
Operating cash flow	(445)	310	-	-	(139)	(333)	(202)	(56)	(786)	(79)
Capital expenditure	(256)	(163)	-	-	(11)	(49)	(2)	(3)	(269)	(215)
Cash distribution from APLNG	-	-	-	-	783	555	-	-	783	555
(Acquisitions)/disposals	(172)	(261)	-	-	69	-	-	-	(103)	(261)
Interest received	-	-	-	-	-	-	24	-	24	-
Investing cash flow	(428)	(424)	-	-	841	506	22	(3)	435	79
Interest paid	-	-	-	-	-	-	(78)	(112)	(78)	(112)
Free Cash Flow	(873)	(114)	-	-	702	173	(258)	(171)	(429)	(112)
Major growth spend	186	297	-	-	-	-	-	-	186	297
LNG cargo adjustment	-	-	-	-	-	150	-	-	-	150
Futures exchange collateral	(11)	(102)	-	-	(185)	-	-	-	(196)	(102)
Adjusted Free Cash Flow	(698)	81	-	-	517	323	(258)	(171)	(439)	233

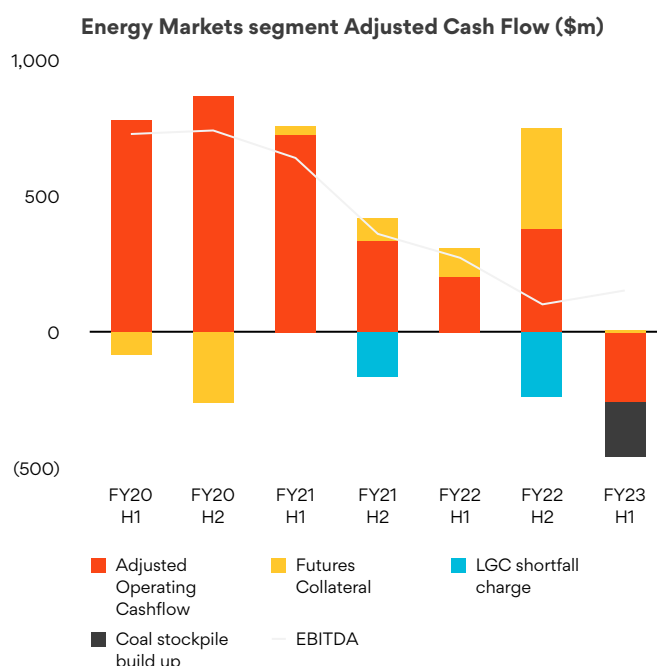
Energy Markets cash conversion

During the second half of FY2022, Energy Markets operating cash flow benefited from high wholesale prices, leading to a significant increase in net creditors. During HY2023, this position moved towards more normal levels, as wholesale prices abated. In addition, build up of the coal stockpile at Eraring in HY2023 required the investment of ~\$200 million, after inventory levels lowered towards the end of FY2022. The prior period benefit from the depletion of the stockpile was offset by higher priced coal purchased in late FY2022.

The value accretive LGC short surrender strategy resulted in LGC shortfall charge payments during calendar years 2021-2023. We expect a net cash refund of ~\$420 million over calendar years 2024-2026, improving cash conversion over this period.

The chart shows these dynamics, and the impact on Energy Markets cash conversion and Adjusted Operating Cashflow¹¹ over the previous half year periods.

We expect earnings and cashflow to improve in the second half of FY2023.



¹¹ Adjusted Operating Cashflow represents reported Energy Markets operating cashflow, excluding the impact of Futures Collateral, LGC shortfall charge and Eraring stockpile build up in H1 FY2023

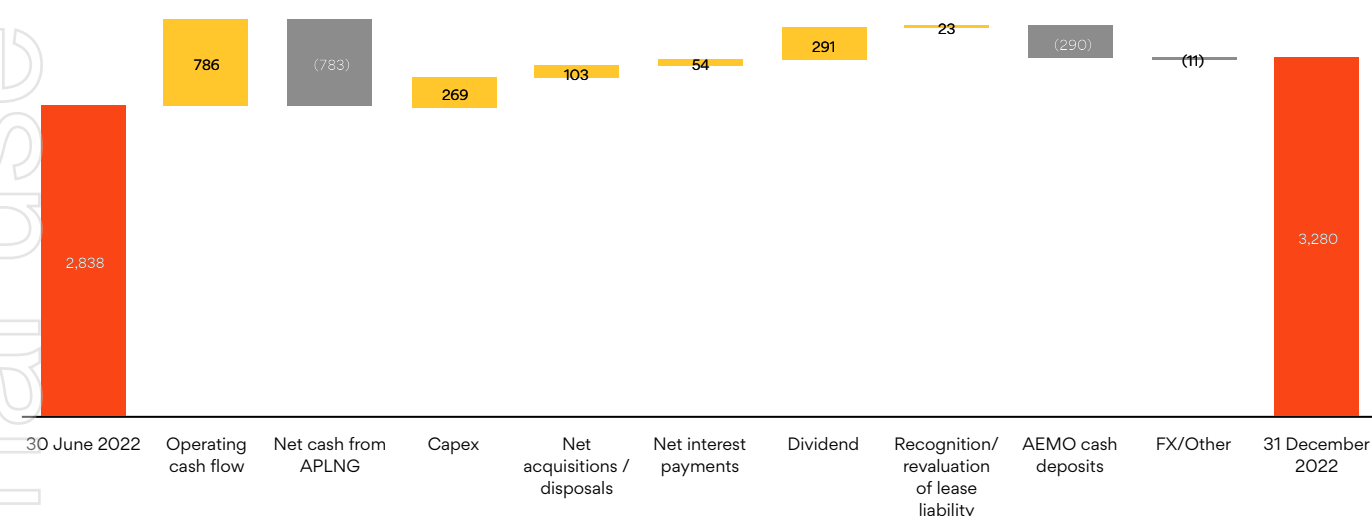
3.4 Capital management

During HY2023, the following capital management initiatives were completed:

- Repaid US\$20m (A\$29 million) Asian Term Loan at a 1.9 per cent effective interest rate.

Adjusted Net Debt

Movements in Adjusted Net Debt (\$m)



Adjusted Net Debt increased \$442 million, primarily driven by the consideration associated with the investment in Octopus (\$186 million), capital expenditure associated with the Myuna Bay Recreation Centre and higher working capital associated with the Energy Markets business and dividends paid to shareholders. These movements were partially offset by APLNG cash distributions, and the return of cash collateral deposits from AEMO.

Origin's objective is to maintain an Adjusted Net Debt/Adjusted Underlying EBITDA ratio of 2.0-3.0x and a gearing target of 20 per cent to 30 per cent. As at 31 December 2022 Origin's capital structure remained at the lower end of its target range with these ratios at 2.1x and 27 per cent respectively. The Adjusted Underlying EBITDA is measured on a rolling 12 months basis.

With expected improvements in cash flows from both our businesses we remain focused on maintaining our target capital structure towards the lower end of the Adjusted Net Debt/Adjusted Underlying EBITDA 2.0-3.0x range.

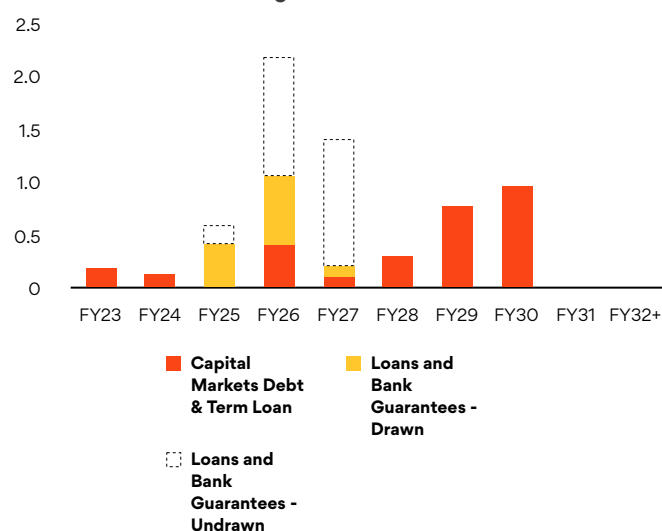
Debt portfolio management

Origin's debt book has been refinanced over the past few years, taking advantage of lower interest rates and stronger debt markets.

Average term to maturity decreased from 4.4 years at 30 June 2022 to 4.0 years at 31 December 2022, with limited near-term maturities. The rolling 12-month average interest rate on drawn debt increased from 4.3 per cent in FY2022 to 4.7 per cent in HY2023. At 31 December 2022 Origin held 29% of drawn debt at floating interest rates.

As at 31 December 2022, Origin held \$0.5 billion¹² of cash and \$2.3 billion in committed undrawn debt facilities. This liquidity position of \$2.8 billion is held to meet near-term debt and lease liability payment obligations of \$0.4 billion and to maintain a sufficient liquidity buffer.

Debt maturity profile
- excluding lease liabilities (A\$b)



¹² Excludes \$130 million cash held on behalf of APLNG as upstream operator.

APLNG funding

During construction of APLNG, shareholders contributed capital via ordinary equity and the investment in preference shares (termed MRCPS) issued by APLNG, with the MRCPS fully redeemed prior to the end of FY2022.

APLNG also funded construction via US\$8.5 billion (100% APLNG) in project finance facilities. These facilities were partially refinanced in FY2019. The outstanding balance at 31 December 2022 was US\$5,158 million (A\$7,616 million), net of unamortised debt fees of US\$45 million (A\$66 million). APLNG's average interest rate associated with its project finance debt portfolio for HY2023 was 3.5 per cent.

Gearing¹³ in APLNG was 20 per cent as of 31 December 2022, down from 21 per cent at 30 June 2022.

APLNG project finance debt amortisation profile

Closing balance as at 30 June								
(US\$m)	2023	2024	2025	2026	2027	2028	2029	2030
Bank loan (variable)	1,407	1,153	871	587	265	-	-	-
US Exim	1,519	1,247	965	679	382	162	-	-
USPP	2,000	1,940	1,887	1,787	1,690	1,437	930	297
Total	4,927	4,340	3,722	3,052	2,337	1,599	930	297

3.5 Shareholder returns

The Board has determined to pay a fully franked interim dividend of 16.5 cents per share. The interim dividend will be paid on 24 March 2023 to shareholders registered as at 1 March 2023.

During the period, the company experienced high energy procurements costs which were not fully recovered in customer tariffs and a significant outflow of working capital as the impact of prior period high wholesale prices unwound. This resulted in negative Free Cash Flow for the period. The outlook for the second half of FY2022 is for improved operating profit and cash flow as higher wholesale energy costs begin to be reflected in Business customer tariffs.

Origin will seek to deliver sustainable shareholder returns through the business cycle and will target a payout range of 30 per cent to 50 per cent of Free Cash Flow per annum in the form of ordinary dividends and/or on-market share buy-backs. Free Cash Flow is defined as cash from operating activities and investing activities (excluding major growth projects), less interest paid. Remaining cash flow will be applied to further debt reduction, value accretive organic growth and acquisition opportunities, and/or additional capital management initiatives.

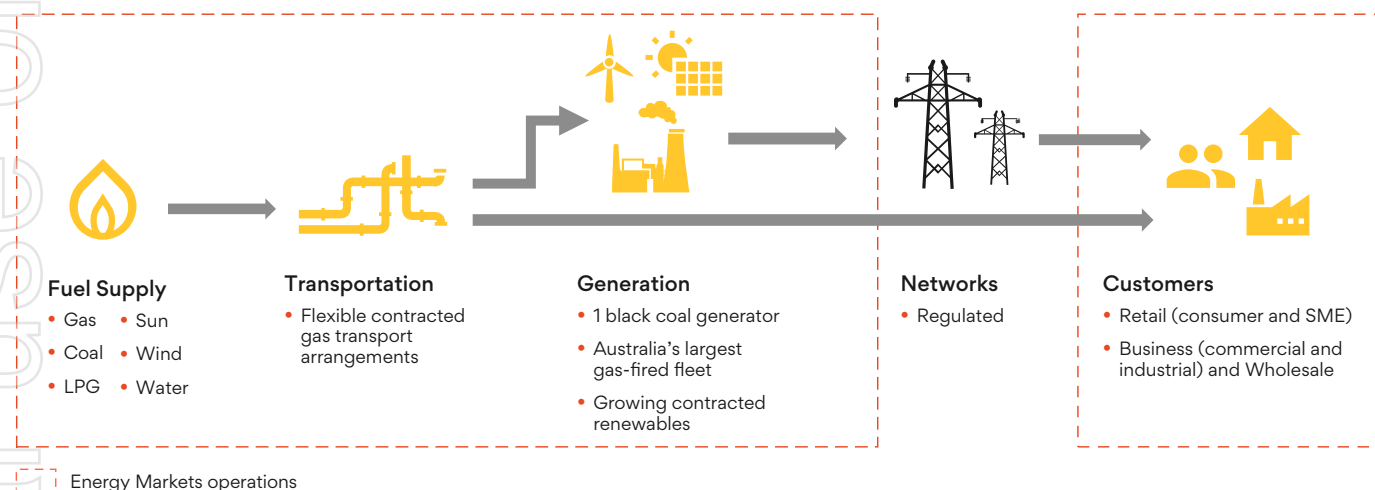
The Board maintains discretion to adjust shareholder distributions for economic and business conditions.

Considering the improving outlook for the business, the Board has decided to maintain the dividend at 16.5 cents per share consistent with the prior period dividend.

¹³ Gearing is defined as project finance debt less cash, divided by project finance debt less cash plus equity.

4 Review of segment operations

4.1 Energy Markets



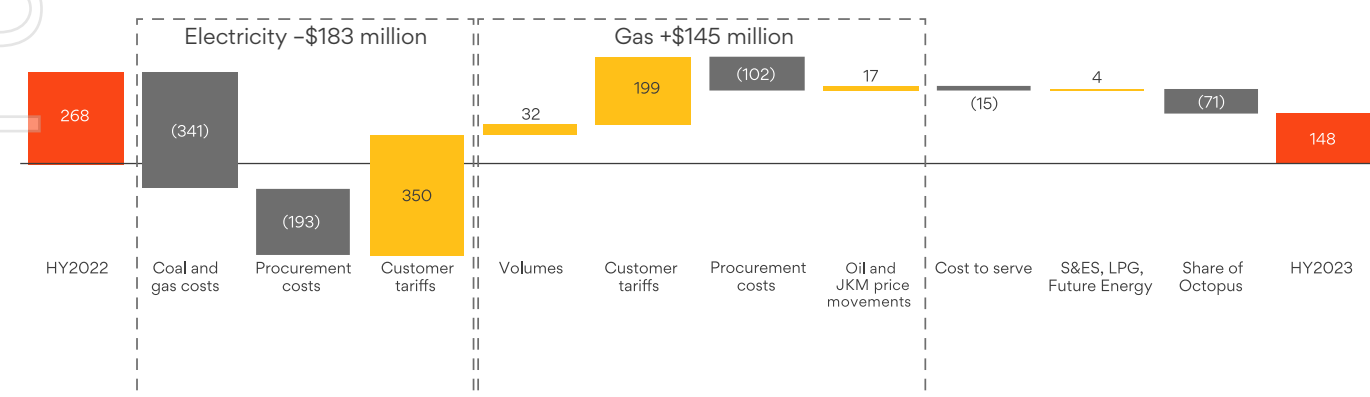
Origin's Energy Markets business comprises one of Australia's largest energy retail businesses by customer accounts, Australia's largest fleet of gas-fired peaking power stations supported by a substantial contracted fuel position, a growing supply of contracted renewable energy and Australia's largest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

The business reports on an integrated portfolio basis. Electricity and Natural Gas Gross Profit and cost to serve are reported separately, as are the EBITDA of the Solar and Energy Services, Future Energy and LPG divisions, and our 20 per cent¹⁴ share of earnings from Octopus Energy.

4.1.1 Financial summary

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Electricity Gross Profit	39	222	(183)	(82)
Natural Gas Gross Profit	393	248	145	58
Electricity and Natural Gas cost to serve	(266)	(251)	(15)	6
LPG EBITDA	62	52	10	19
Solar and Energy Services EBITDA	25	23	2	9
Future Energy EBITDA	(22)	(14)	(8)	57
Share of EBITDA from Octopus Energy	(83)	(12)	(71)	592
Underlying EBITDA	148	268	(120)	(45)
Underlying EBIT	(107)	38	(145)	(382)

Movements in Underlying EBITDA (\$m)



¹⁴ Following CPPIB' investment in Octopus Energy during December 2021, Origin accounted for its interest in Octopus Energy at 18.7 per cent from December 2021 until July 2022, then 20 per cent from August 2022 when an additional \$163 million (£94 million) was invested to restore its 20 per cent interest.

4.1.2 Electricity

Volume summary

Volumes sold (TWh)	HY23			HY22			Change (TWh)	Change (%)
	Retail	Business	Total	Retail	Business	Total		
NSW ¹	3.7	4.0	7.7	3.8	4.0	7.8	(0.1)	(1.7)
Queensland	1.9	2.3	4.2	2.0	1.9	3.9	0.2	6.3
Victoria	1.6	2.6	4.1	1.4	2.4	3.8	0.4	9.3
South Australia	0.7	1.4	2.1	0.6	0.9	1.6	0.5	33.9
Total volumes sold	7.8	10.3	18.1	7.9	9.2	17.1	1.0	5.9

¹ Australian Capital Territory customers are included in New South Wales.

Gross Profit summary

	HY23		HY22		Change (%)	Change (\$/MWh)
	\$m	\$/MWh	\$m	\$/MWh		
Revenue	3,794	209.7	3,457	202.3	9.8	7.5
Retail (residential/SME)	2,167	276.4	2,102	265.0	3.0	11.4
Business	1,628	158.8	1,354	147.9	20.2	10.9
Cost of goods sold	(3,756)	(207.6)	(3,235)	(189.3)	(16.1)	(18.3)
Network costs	(1,548)	(85.6)	(1,630)	(95.4)	5.0	9.8
Energy procurement costs	(2,207)	(122.0)	(1,605)	(93.9)	(37.6)	(28.1)
Gross Profit	39	2.1	222	13.0	(82.6)	(10.8)
Gross margin %	1.0%		6.4%		(84.1)	

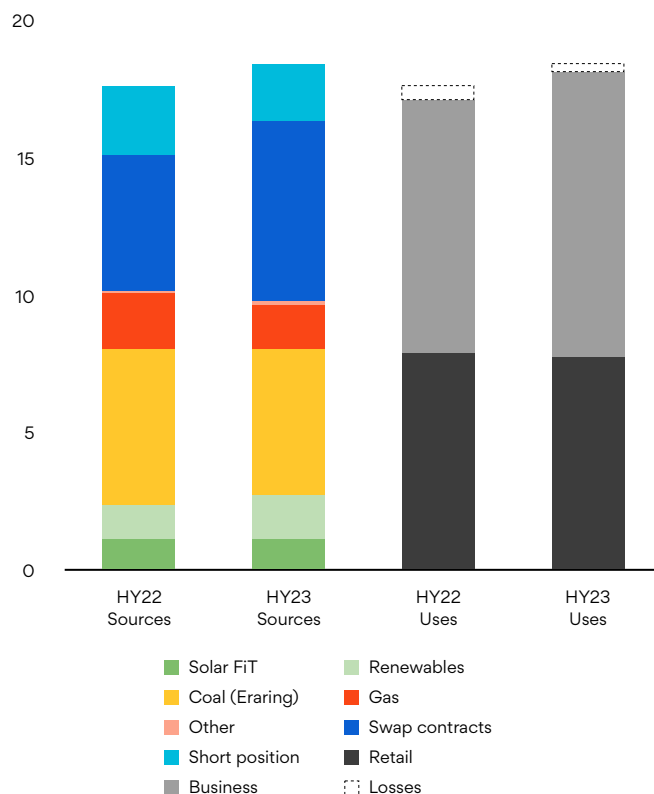
Electricity Gross Profit declined by \$183 million to \$39 million, driven by a \$10.8/MWh decrease in unit margins:

- +\$350 million primarily relating to higher wholesale prices flowing into retail and business customer tariffs. Due to lags in customer tariff repricing, this was not enough to fully recover increases in the cost of energy (see commentary below and Wholesale energy costs table);
- -\$341 million due to higher generation fuel costs. Unit fuel costs increased from \$57.8/MWh to \$106.2/MWh, driven by higher coal and gas costs. Coal deliveries from our key coal supplier via conveyor and from other suppliers via rail have significantly improved, but greater volumes of coal were purchased at higher market prices as long term contractual supply contracts approach their expiration date;
- -\$193 million due to higher other electricity procurement costs, largely reflecting higher net unit pool costs which increased from \$52.9/MWh to \$136.8/MWh, and higher market contracts' cost. A significant portion of the higher net pool costs relates to increased sales to business customers on a "pool price pass through basis" and therefore had no impact to Gross Profit. More market contracts were purchased at higher unit costs to mitigate the risk of high pool prices and potential further coal supply issues. These higher costs were partly offset by a lower cost of capacity hedge contracts as more expensive legacy contracts rolled off, lower bundled renewable PPA costs with Stockyard Hill volumes replacing more expensive legacy contracts, and lower Solar FIT costs driven by improved value management of Solar customers.

Volumes increased 1.0 TWh primarily reflecting a 1.1 TWh increase in business volumes driven by net customer wins. Residential volumes were flat with lower usage due to solar uptake and energy efficiency, largely offset by the impact of colder weather in the December 2022 quarter. With the volume increase primarily related to customers on pool price pass-through arrangements, there was no material impact to Gross Profit.

Owned and contracted generation output of 8.6 TWh, was lower by 0.3 TWh on HY2022. Generation from renewable PPAs increased 0.4 TWh primarily due to Stockyard Hill volumes received while ramping up production. Refer to Electricity Supply table below.

Sources and uses of electricity (TWh)



Wholesale energy costs

	HY23			HY22		
	\$m	TWh	\$/MWh	\$m	TWh	\$/MWh
Fuel cost ¹	749	7.1	106.2	449	7.8	57.8
Generation operating costs	129	7.1	18.3	112	7.8	14.4
Owned generation ¹	878	7.1	124.5	561	7.8	72.2
Net pool costs ²	268	2.0	136.8	130	2.5	52.9
Bundled renewable PPA costs ³	131	1.6	82.1	112	1.2	92.2
Market contracts ³	492	6.6	75.1	265	4.9	54.0
Solar feed-in tariff	81	1.2	67.2	121	1.2	98.4
Capacity hedge contracts	92			122		
Green schemes (excl. PPAs)	242			276		
Other	24			17		
Energy procurement costs	2,207	18.4⁴	120.3	1,605	17.6⁴	91.2

1 Includes volume from internal generation and contracted from Pelican Point.

2 Net pool costs includes gross pool purchase costs net of pool revenue from generation, gross and net settled PPAs, and other contracts.

3 Bundled PPAs includes cost of electricity and renewable certificates. Market contracts include swap and energy hedge contracts.

4 Volume differs from sales volume due to energy losses of 0.3 TWh (HY2022: 0.5 TWh).

Electricity supply

	Nameplate capacity (MW)	Type ¹	HY23			HY22			Change		
			Output (GWh)	Pool revenue (\$m)	(\$/MWh)	Output (GWh)	Pool revenue (\$m)	(\$/MWh)	Output (GWh)	Pool revenue (\$m)	(\$/MWh)
Eraring	2,922										
Units 1 - 4	2,880	Black Coal	5,345	1,109	207	5,699	468	82	(354)	640	125
Gas Turbine	42	OCGT	-	-	-	-	-	-	-	-	-
Darling Downs	644	CCGT	596	193	324	788	117	148	(192)	76	176
Osborne ²	180	CCGT	229	78	341	312	24	78	(83)	54	263
Uranquinty	692	OCGT	40	18	448	134	29	213	(95)	(11)	235
Mortlake	584	OCGT	307	97	317	193	23	120	114	74	197
Mount Stuart	423	OCGT	3	4	1,467	45	19	431	(42)	(16)	1,036
Quarantine	235	OCGT	134	39	291	39	5	128	95	34	163
Ladbroke Grove	80	OCGT	34	12	363	29	4	133	6	9	230
Roma	80	OCGT	9	6	660	36	8	211	(27)	(1)	449
Shoalhaven	240	Pump/hydro	135	36	265	49	5	113	87	30	152
Internal generation	6,080		6,832	1,592	233	7,323	702	96	(491)	890	137
Pelican Point	240	CCGT	220			441			(220)		
Renewable PPAs	1,515 ³	Solar / Wind	1,593			1,220			373		
Owned and contracted generation	7,835		8,646			8,984			(338)		

1 OCGT stands for open cycle gas turbine; CCGT stands for combined cycle gas turbine.

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

3 Nameplate capacity includes Stockyard Hill. Origin entitled to 50 per cent of its production output during the period of HY2023, then 100 per cent from January 2023.

4.1.3 Natural Gas

Volume summary

Volume sold (PJ)	HY23			HY22			Change (PJ)	Change (%)
	Retail	Business	Total	Retail	Business	Total		
NSW ¹	6.9	12.2	19.0	7.0	9.6	16.6	2.4	14
Queensland	1.7	39.4	41.2	1.5	33.2	34.7	6.5	19
Victoria	14.8	23.2	37.9	14.4	21.6	36.1	1.9	5
South Australia ²	3.2	7.1	10.3	3.3	5.6	8.9	1.4	16
External volumes sold	26.6	81.8	108.4	26.3	70.0	96.3	12.2	13
Internal sales (generation)			15.2			19.1	(3.9)	(20)
Total volumes sold			123.7			115.4	8.2	7

¹ Australian Capital Territory customers are included in New South Wales.

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

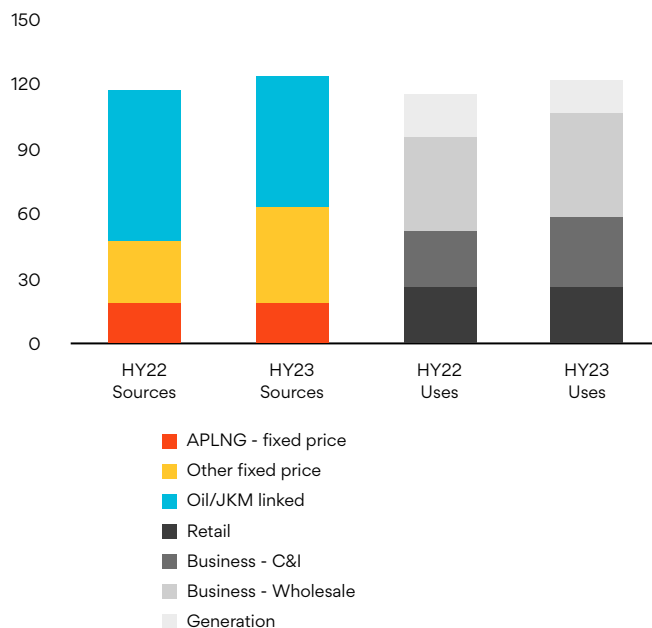
Gross Profit summary

	HY23		HY22		Change (%)	Change (\$/GJ)
	\$m	\$/GJ	\$m	\$/GJ		
Revenue	1,899	17.5	1,349	14.0	41	3.5
Retail (residential/SME)	746	28.0	661	25.1	13	2.9
Business	1,153	14.1	688	9.8	68	4.3
Cost of goods sold	(1,506)	(13.9)	(1,100)	(11.4)	(37)	(2.5)
Network costs	(413)	(3.8)	(389)	(4.0)	(6)	0.2
Energy procurement costs	(1,093)	(10.1)	(711)	(7.4)	(54)	(2.7)
Gross Profit	393	3.6	248	2.6	58	1.0
Gross margin %	20.7%		18.4%		12	

Natural Gas Gross Profit increased \$145 million to \$393 million driven by:

- +\$199 million due to business and retail customer tariffs repricing (excluding oil and JKM linked sales), reflecting the recovery of higher costs associated with the current and prior period;
- -\$102 million reflecting higher procurement costs (excluding oil and JKM linked purchases), driven by both higher priced short term market purchases and inflationary increases on longer-term supply contracts;
- +\$16 million reflecting a net benefit from oil and JKM price movements. The gas portfolio includes JKM and oil linked sales and purchases. Revenue increased by \$149 million due to higher price movements on JKM and oil linked sales, while procurement costs increased by \$133 million. To the extent that JKM and oil linked sales and purchases do not fully offset, hedging of any residual exposure to price movements is undertaken on an ongoing basis; and
- 12.2 PJ increase in external sales volume (+\$32 million) driven by net business customer wins, with retail volumes largely flat.

Sources and uses of gas (PJ)¹



¹ Fixed price contracts are subject to CPI adjustments.

4.1.4 Electricity and Natural Gas cost to serve

	HY23	HY22	Change (\$)	Change (%)
Cost to maintain (\$ per average customer) ¹	(56)	(50)	(5)	11
Cost to acquire/retain (\$ per average customer) ¹	(18)	(19)	1	(5)
Electricity and Natural Gas cost to serve (\$ per average customer)¹	(74)	(69)	(4)	6
Maintenance costs (\$m)	(200)	(182)	(18)	10
Acquisition and retention costs (\$m) ²	(66)	(69)	3	(5)
Electricity and Natural Gas cost to serve (\$m)	(266)	(251)	(15)	6

¹ Represents cost to serve per average customer account, excluding CES accounts.

² Customer wins (HY2023: 265,000; HY2022: 247,000) and retains (HY2023: 442,000; HY2022: 532,000).

	HY23 (\$m)	HY22 (\$m)	Change (\$)	Change (%)
Labour	(82)	(75)	(7)	9
Bad and doubtful debts	(46)	(42)	(4)	9
Other variable costs	(55)	(56)	2	(3)
Retail and Business	(182)	(173)	(9)	5
Wholesale	(33)	(27)	(5)	20
Corporate services and IT	(51)	(51)	(1)	2
Electricity and Natural Gas cost to serve	(266)	(251)	(15)	6

Electricity and Natural Gas cost to serve up \$15 million. We expect higher cost to serve in FY2023 primarily driven by higher payroll related on-costs, an increase in bad and doubtful debt expense due to higher bill sizes and the non-repeat of the release of a surplus COVID-19 bad and doubtful debt provision in FY2022.

We are currently in the most complex phase of the migration of customers to the Kraken platform. We continue to target a \$200 – \$250 million reduction in operating and capital cost savings from FY2018 baseline by FY2024 from the implementation of the Kraken platform and operating model. \$170 million cash cost savings have been achieved as at FY2022, with further savings expected in FY2024.

Bad debt expense as a percentage of total Electricity and Natural Gas revenue decreased to 0.81 from 0.87 in HY2022.

Customer accounts

Customer accounts ('000) as at	31 December 2022	30 June 2022	Change
Electricity	2,736	2,733	3
NSW ¹	1,169	1,193	(24)
Queensland	683	674	9
Victoria	622	608	14
South Australia ²	261	257	4
Natural Gas	1,282	1,277	4
NSW ¹	387	379	8
Queensland	177	178	(1)
Victoria	494	495	(1)
South Australia ²	224	226	(2)
Total electricity and natural gas	4,017³	4,010	7
Rolling average customer accounts	4,013	3,944	70
Broadband	74	61	14
LPG	368	368	0
Other ⁴	29	20	9
Total customer accounts	4,489	4,458	30

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

² Northern Territory and Western Australia customer accounts are included in South Australia.

³ Includes 413,000 CES customer accounts (FY2022: 403,000).

⁴ Largely relates to Origin Home Assist customers.

Origin churn remained largely flat at 13.2 per cent, as customers seek secure and reliable providers, compared to market churn of 19.3 per cent, which is up from 18.7 per cent in the prior period. Market churn increased driven by volatile and high wholesale energy prices, causing some retailers to either exit the market or offer uncompetitive prices to their customers.

Period end customer accounts increased by 30,000 overall. Electricity customer accounts increased by 3,000, reflecting gains across all states except New South Wales. Natural Gas customer accounts increased by 4,000, driven primarily by gains in New South Wales offset by minor losses in other states. Broadband customer accounts increased by 14,000 to a total of 74,000 and LPG customer accounts remained flat. The addition of around 4,000 customer accounts was due to Retailer of Last Resort (ROLR) events¹⁵ that occurred in the early part of HY2023.

Electricity and Gas: Customer account movement ('000)



4.1.5 LPG

	HY23	HY22	Change	Change (%)
Volumes (kT)	199	190	9	5
Revenue and Other Income (\$m)	400	362	38	11
Cost of goods sold (\$m)	(283)	(256)	(27)	11
Gross Profit (\$m)	117	106	11	11
Operating costs (\$m)	(56)	(54)	(2)	3
Underlying EBITDA (\$m)	62	52	10	19

Origin is one of Australia's largest LPG and propane suppliers, procuring and distributing LPG to residential and business locations across Australia. On 8 November 2022, Origin entered into an agreement to sell Origin's LPG business in the Pacific. This includes our wholly-owned operations in Vanuatu, American Samoa, Samoa and Cook Islands, and joint-venture operations in Fiji, Papua New Guinea and the Solomon Islands. The sale remains subject to fulfilment of conditions precedent.

Gross Profit was higher in HY2023 driven by higher retail prices and volumes, partly offset by the higher cost of gas. Volumes were up 5 per cent as a result of continued commercial segment growth. Operating costs remained relatively flat year on year with inflationary impacts partly mitigated through cost optimisation initiatives.

4.1.6 Solar and Energy Services

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Revenue and Other Income	269	183	86	47
CES Gross Profit	70	44	26	59
Solar Gross Profit	11	16	(5)	(31)
Other Gross Profit	0	3	(3)	(100)
Gross Profit	82	62	19	32
Operating costs	(57)	(39)	(17)	46
Underlying EBITDA	25	23	2	9

The Community Energy Services (CES) business provides serviced hot water, natural gas and electricity via embedded networks and other related services such as communal solar and battery systems to apartment blocks. The Solar business provides installation of solar photovoltaic (PV) systems and batteries to residential and business customers, and ongoing support and maintenance services.

Underlying EBITDA increased \$2 million. CES Gross Profit increased \$26 million or 59 per cent, driven by continued growth in customer accounts, with the WINconnect acquisition adding around 99,000 customer accounts at the time of completion in April 2022. Solar Gross Profit reduced \$5 million due to higher installation and panel costs. Operating costs increased by \$17 million primarily reflecting the one-off impact of the acquisition of WINconnect.

¹⁵ Power Club, Mojo Power East, Social Energy and Elysian Energy.

4.1.7 Future Energy

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Operating costs ¹	(22)	(15)	(8)	47
Other income	(0)	1	(1)	(100)
EBITDA	(22)	(14)	(8)	57
Net (investments) / disposals ²	(2)	2	(4)	(200)

1 Origin 360 EV is reported within Future Energy from HY2023. In the prior period, it was reported under Corporate.

2 Relates to investments in future energy technology focused private equity funds.

Future Energy activities and associated expenditure reflects the transition from the incubation phase to scaling of various initiatives.

Operating costs increased, primarily due the inclusion of Origin 360 EV, previously reported under Corporate, as well as continued scaling of Origin Loop, batteries and demand response offerings.

Origin Loop

Origin Loop, our in-house Virtual Power Plant, provides connected solutions to customers across multiple products and services. An increasing variety of distributed assets are aggregated, controlled and dispatched in response to market and portfolio positions, improving customer engagement while reducing energy costs for both customers and Origin.

Assets connected to Loop have grown by approximately 75 per cent, from 258 MW to 449 MW during HY2023. Spike, our behavioural demand response program that rewards customers for reducing energy usage during periods of peak market demand, continues to grow with 85,000 customers now signed up as at 31 December 2022. To accelerate our growth, we have launched a new feature whereby all eligible customers are automatically enrolled in the program. All Spike customers have been migrated onto the new Loop platform with more advanced digital experiences and insights.

Customers connected to Loop are more engaged, with 10 times greater in-app customer interaction. To continue improving customer engagement and accelerate our connected home footprint, we are deploying new compelling products, including bundled solar and battery offers with connection to Loop, and the launch of the BYO (bring your own) battery offer to integrate with customers' existing assets. In addition to increasing scale, investment was also made to enhance Loop's operational functionality and oversight.

Origin 360 EV

Origin 360 EV, our E-mobility business, provides full suite of end-to-end EV solutions to both commercial and residential customers. We continue to accelerate our growth by scaling our Fleet, Car Share and Charging solutions as well as launching new products including the EV Energy Plan, subscription model for employees and charging solutions for body corporates and residents of apartment buildings. We continue to offer smart charging solutions to customers by enrolling EV chargers onto Loop.

4.1.8 Octopus Energy

20 per cent Origin share	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Revenue - energy	1,430	655	774	118
Revenue - licensing	13	16	(2)	(19)
Cost of sales	(1,480)	(653)	(827)	127
Gross Profit	(37)	18	(55)	(306)
Operating costs	(46)	(30)	(16)	53
EBITDA	(83)	(12)	(71)	592
ITDA	(5)	(28)	23	(82)
NPAT	(88)	(40)	(47)	120

100 per cent Octopus customer accounts ('000) as at	31 December 2022	30 June 2022	Change
Energy customer accounts	9,127	6,013	3,114
Licensed Kraken platform customer accounts migrated to date	11,729	11,240	489

Origin's share of Octopus EBITDA¹⁶ for the period was a loss of \$83 million, down \$71 million from a loss of 12 million in HY2022, largely due to unprecedented volatility and high wholesale prices in the UK market from October to December 2022:

- Unseasonably warmer weather, record high wind generation and new capacity, coupled with customers reducing their energy usage under cost of living pressures, drove lower consumption volumes and lower spot prices particularly in October 2022. In this period Octopus sold excess energy capacity back to the market at lower spot prices.
- The recent volatile and high price environment caused the UK government to introduce the Energy Price Guarantee (EPG) in October 2022, capping the price customers pay for electricity. This led to all Octopus' fixed-tariff customers renewing to the lower capped price, resulting in a period of under recovery of wholesale procurement costs. Ofgem, the UK regulator, implemented a more frequent tariff reset mechanism to reflect rising wholesale energy prices. Customer tariffs are now set quarterly as opposed to the previous semi-annual mechanism, enabling retailers to recover higher energy procurement costs faster. The price for the January to March 2023 period has been set and reflects the high market prices observed towards the end of CY2022, allowing for higher tariffs and margin into the second half of FY2023.

Octopus added around 2.5 million Bulb Energy customer accounts in December 2022. Customer accounts in the UK retail business have grown to more than 9 million at the end of December 2022, a 52 per cent increase in the past 6 months, making Octopus the second largest energy retailer in UK by customer accounts.

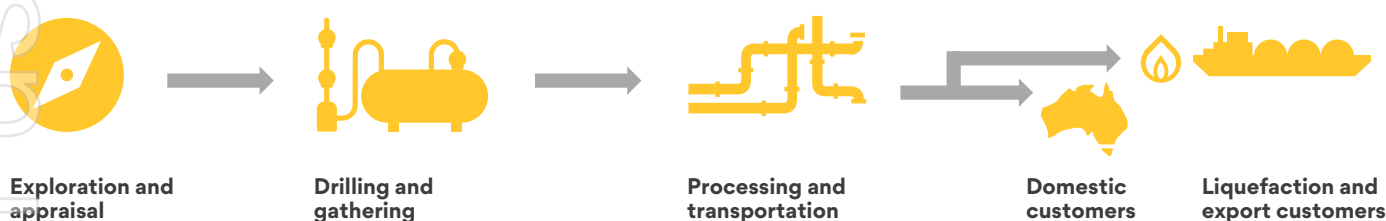
Octopus' market-leading Kraken platform now contracted to serve over half of all households in UK with a strong global sales pipeline to achieve the 100 million licensed customer account ambition. Licensing deals with EDF and Origin are progressing well, with all EDF's customers expected to be migrated by the end of June 2023, and 96 per cent of Origin's mass market electricity and natural gas customer accounts migrated by the end of December 2022.

¹⁶ Following CPPIB' investment in Octopus Energy during December 2021, Origin accounted for its interest in Octopus Energy at 18.7 per cent from December 2021 until July 2022, then 20 per cent from August 2022 when an additional \$163 million (£94 million) was invested to restore its 20 per cent interest.

4.2 Integrated Gas

	HY23 ¹⁷ (\$m)	HY22 ¹⁷ (\$m)	Change (\$m)	Change (%)
Share of APLNG (see Section 4.2.1)	1,193	1,039	154	15
Integrated Gas - Other (see Section 4.2.2)	(239)	(169)	(70)	41
Underlying EBITDA	954	870	84	10
Underlying depreciation and amortisation	(11)	(14)	3	(21)
Underlying share of ITDA from APLNG	(550)	(572)	22	(4)
Underlying EBIT	393	284	109	38

4.2.1 Share of APLNG



Origin holds a 27.5¹⁷ per cent shareholding in APLNG, an equity accounted incorporated joint venture. APLNG operates Australia's largest CSG to LNG export project (by nameplate capacity) with the country's largest 2P CSG reserves.¹⁸ Origin is the operator of the upstream CSG exploration and appraisal, development and production activities. ConocoPhillips is the operator of the 9 mtpa two-train LNG liquefaction facility at Gladstone in Queensland.

As APLNG is an equity accounted incorporated joint venture, Integrated Gas reports its share of APLNG EBITDA. The share of APLNG ITDA is recorded as a line item between EBITDA and EBIT.

APLNG acquired various CSG interests from Tri-Star in 2002 that are subject to reversionary rights and an ongoing royalty interest in favour of Tri-Star. These interests represent approximately 20 per cent of APLNG's 2P CSG reserves and approximately 20 per cent of 3P (proved plus probable plus possible) CSG reserves (as at 30 June 2022). Refer to Section 5 for disclosure relating to Tri-Star litigation associated with these CSG interests.

Financial summary – APLNG

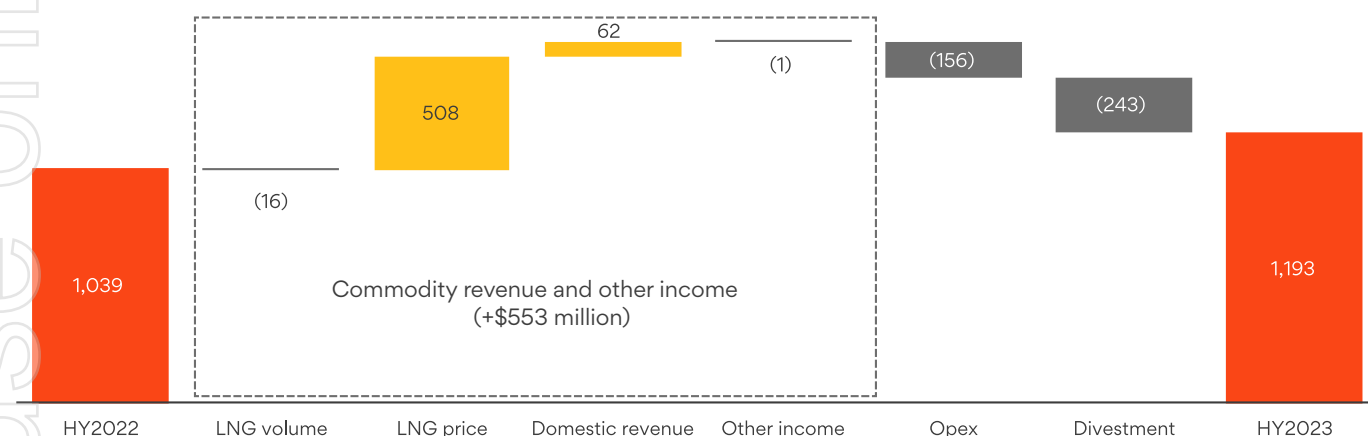
	HY23		HY22	
(\$m)	APLNG 100%	Origin share ¹⁷	APLNG 100%	Origin share ¹⁷
Commodity revenue and other income	5,953	1,637	3,941	1,412
Operating expenses	(1,614)	(444)	(1,049)	(373)
Underlying EBITDA	4,339	1,193	2,892	1,039
Depreciation and amortisation	(825)	(227)	(786)	(281)
MRCPS interest expense	-	-	(99)	(37)
Project finance interest expense	(164)	(45)	(128)	(46)
Other financing expense	(48)	(13)	(39)	(14)
Interest income	31	9	3	1
Income tax expense	(1,000)	(275)	(553)	(197)
Underlying ITDA¹	(2,006)	(551)	(1,602)	(574)
Underlying Profit	2,333	642	1,290	465

¹ See Origin Financial Statements note B1.1 for details relating to a \$1 million difference between APLNG ITDA and Origin's reported share in HY2023. (HY2022: \$2m)

¹⁷ Origin's interest is 27.5 per cent. Prior to 8 December 2021 it was 37.5 per cent.

¹⁸ As per EnergyQuest EnergyQuarterly, December 2022.

Movements in Origin's share of APLNG underlying EBITDA (\$m)



Origin's share of APLNG Underlying EBITDA increased by \$397 million excluding the impact from 10 per cent ownership change in December 2021,¹⁹ primarily driven by higher realised oil prices.

- Commodity revenue and other income increased by \$553 million, primarily reflecting higher realised oil price of US\$109/bbl (A\$163/bbl) compared to US\$68/bbl (A\$93/bbl) in HY2022 and higher domestic revenue from market linked short term contract prices. Three JKM-linked spot cargoes were sold in the HY2023 consistent with HY2022.
- Operating expenses increased by \$156 million, primarily reflecting higher royalties as a result of higher commodity revenue, increased gas purchases to manage the portfolio (primarily through operational swaps with other major producers), and additional workovers and commencement of planned cyclical maintenance at Upstream gas processing facilities.

Origin's share of depreciation and amortisation decreased by \$54 million, primarily reflecting the impact from 10 per cent ownership change in December 2021,¹⁹

MRCPS interest expense decreased by \$37 million to nil as MRCPS were fully repaid in FY2022. See Section 3.4 for details relating to APLNG funding.

APLNG volume summary

	HY23		HY22	
	APLNG 100%	Origin share ¹⁹	APLNG 100%	Origin share ¹⁹
Volumes (PJ)				
Operated	262	72	271	97
Non-operated	71	20	80	29
Total production	333	92	351	126
Purchases/ Swaps	14	4	8	3
Changes in upstream gas inventory/other	(2)	(1)	-	-
Liquefaction/downstream inventory/other	(23)	(6)	(23)	(8)
Total sales	322	89	337	121
Commodity revenue (\$m)				
Domestic gas	853	235	630	228
LNG	5,098	1,402	3,308	1,183
Sales mix (PJ)				
Domestic gas	84	23	95	35
LNG contract	227	62	231	82
LNG spot	11	3	11	4
Realised price				
Domestic gas (A\$/GJ)	10.14		6.61	
LNG (A\$/GJ)	21.42		13.67	
LNG (US\$/mmbtu)	15.08		10.55	

¹⁹ Origin's interest is 27.5 per cent. Prior to 8 December 2021 it was 37.5 per cent.

APLNG production was down 5 per cent compared to the HY2022 reflecting the cumulative impact of three consecutive years of Niña weather which restricted access to fields for workovers, drilling and optimisation activities. Commencement of planned cyclical maintenance at gas processing facilities and unplanned non-operated outages also impacted production during the period. Recovery in production is underway with additional wells online through a drilling campaign and ramp up in workover activity. The Talinga Condabri North Pipeline ramped to full capacity in December 2022 and the Orana South Loop Line is expected to come online in second half FY2023, providing greater operational flexibility to optimise gas processing.

APLNG sales volumes decreased by 4 per cent, primarily driven by lower production partly offset by higher gas purchases through operational swaps with other major producers to manage the gas portfolio.

The average realised LNG price increased by 57 per cent to A\$21.42/GJ, reflecting higher realised oil prices. The average realised domestic gas price increased by 53 per cent to \$10.14/GJ, reflecting higher market linked short-term contract prices.

Cash flow – APLNG 100%

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Underlying EBITDA	4,339	2,892	1,447	50
Non-cash items in underlying EBITDA	(131)	(6)	(125)	2,083
Change in working capital	(352)	30	(382)	(1,273)
Other	(6)	-	(6)	n/a
Operating cash flow¹	3,850	2,916	934	32
Capital expenditure ¹	(214)	(201)	(13)	6
Interest income ¹	28	3	25	833
Acquisitions/disposals ¹	-	6	(6)	n/a
Loans (advanced to)/paid by other shareholders	-	-	-	n/a
Investing cash flow	(186)	(192)	6	(3)
Project finance interest and transaction costs ¹	(144)	(121)	(23)	19
Repayment of project finance ¹	(399)	(350)	(49)	14
Other financing activities ¹	-	(22)	22	(100)
Repayment of lease liabilities ¹	(31)	(25)	(6)	24
Interest on lease liabilities ¹	(13)	(8)	(5)	63
MRCPS interest	-	(106)	106	(100)
MRCPS buy-back	-	(1,373)	1,373	(100)
Ordinary dividends paid	(2,846)	-	(2,846)	n/a
Financing cash flow	(3,433)	(2,005)	(1,428)	71
Net increase/(decrease) in cash and cash equivalents	231	719	(488)	(68)
Effect of exchange rate changes on cash ¹	65	46	19	41
Net increase/(decrease) in cash and cash equivalents including FX movement	296	765	(469)	(61)
Distributable cash flow¹	3,142	2,244	898	40

¹ Included in distributable cash flow. Distributable cash flow represents the net increase in cash, including foreign exchange movements before MRCPS interest and buy-backs, and transactions with shareholders.

APLNG generated distributable cash flow of \$3,142 million at an effective oil price of US\$109/bbl, up from \$2,244 million at an effective oil price of US\$68/bbl in HY2022. Cash distributions to Origin were \$783 million in HY2023, in the form of unfranked ordinary dividends.

The project finance facility requires APLNG to hold an amount of cash to service near-term operational and project finance obligations. As at 31 December 2022, APLNG held \$1,840 million of cash, up from \$1,544 million at 30 June 2022, reflecting higher cash receipts from LNG sales in the last quarter.

Increase in working capital of \$352 million is primarily due to higher debtors associated with higher LNG cargo revenue, and higher prepayments to operators.

Non-cash items reflect the reversal of a prior period provision.

Operating expenditure – APLNG 100%

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Purchases/ Swaps	(239)	(71)	(168)	237
Royalties and tariffs ¹	(486)	(282)	(204)	72
Upstream operated opex	(546)	(399)	(147)	37
Upstream non-operated opex	(152)	(131)	(21)	16
Downstream opex	(176)	(154)	(22)	14
APLNG Corporate/other	(15)	(12)	(3)	25
Total operating expenses per Profit and Loss	(1,614)	(1,049)	(565)	54
Other cash items	(47)	(20)	(27)	133
Total operating cash costs	(1,661)	(1,069)	(592)	55

¹ Reflects actual royalties paid. At breakeven price, royalties and tariffs would have amounted to \$117 million (HY2022: \$94 million).

Operating expenses increased \$565 million, primarily driven by higher royalties reflecting stronger commodity revenue and higher gas purchases to manage the gas portfolio (primarily through operational swaps with other major producers). Upstream operated opex increased by \$147 million, reflecting increased activity in workovers, along with the commencement of cyclical maintenance at gas processing facilities, and higher power costs. Upstream non-operated opex increased \$21 million primarily due to increased electricity costs. Downstream opex increased by \$22 million, reflecting major downstream maintenance activity conducted in Q1 FY2023 and foreign exchange movements.

Capital expenditure – APLNG 100%

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Operated upstream - Sustain	(95)	(98)	3	(3)
Operated upstream - Infrastructure	(17)	(8)	(9)	113
Exploration and appraisal	(21)	(22)	1	(5)
Downstream	(19)	(13)	(6)	46
Non-operated	(63)	(56)	(7)	13
Total capital expenditure	(215)	(197)	(18)	9

Capital expenditure increased by \$18 million. A \$9 million increase in Operated Upstream - Infrastructure is associated with the execution of Orana South Loop Line, which is scheduled for completion in the second half of FY2023, and a \$7 million increase in Non-operated is primarily related to the commencement of the next phase of the non-operating drilling program.

Operated upstream - Sustain is consistent with the prior period and includes expenditure for drilling, completions, fracture stimulation, the gathering network, surface connection, capital improvements and land access which occur over multiple years. In HY2023, 23 operated wells were drilled (34 in HY2022), 7 wells were fracture stimulated (11 in HY2022) and 33 operated wells were commissioned (34 in HY2022).

4.2.2 Integrated Gas – Other

This segment comprises Origin Integrated Gas activities that are separate from APLNG, and includes exploration interests in Cooper-Eromanga, Canning basins and a potential conventional development resource in the offshore Browse Basin.

This segment also includes overhead costs (net of recoveries) incurred as upstream operator and corporate service provider to APLNG, costs associated with growth initiatives such as hydrogen, and costs incurred in managing Origin's exposure to LNG pricing risk and impacts of its LNG trading positions.

In September 2022, Origin announced it will undertake a strategic review of all remaining exploration permits (excluding its interests in Australia Pacific LNG) with a view to exiting those permits over time, as the company focuses on its strategy and ambition to lead the energy transition.

Beetaloo Basin (Northern Territory)

In November 2022 Origin completed the sale of its interest in the Northern Territory's Beetaloo Basin and received upfront consideration of \$60 million. Origin will also receive a 5.5 per cent royalty based on wellhead revenues produced from the three Beetaloo permits. A non-cash post tax loss of \$75 million in relation to the transaction was recorded. Origin has also executed a gas sale agreement conditional on a final investment decision being made and future development occurring.

Cooper-Eromanga Basin (Queensland)

Origin exercised an option to exit its 75 per cent interest and operatorship of five permits and will transfer these back to Bridgeport. Origin has 100 per cent interest and operatorship of twelve permits in the Cooper-Eromanga Basin which remain under review.

Canning Basin (Western Australia)

An agreement has been executed with Buru Energy Limited to exit Origin's interest in Canning Basin and the transaction is expected to complete in the second half FY2023. The terms of the sale provide for Origin to provide Buru with up to \$4 million fund a seismic survey and for Buru to provide Origin with future reimbursement payments of up to a total \$34 million, conditional on the achievement of key development and production milestones. The exit from the Canning Basin is expected to save Origin ~\$40 million in future permit commitments and other costs.

Financial summary

	HY23 (\$m)	HY22 (\$m)	Change (\$m)	Change (%)
Origin only commodity hedging and trading	(180)	(96)	(84)	88
Other Origin only costs	(59)	(73)	14	(19)
Underlying EBITDA	(239)	(169)	(70)	41
Underlying depreciation and amortisation/ITDA	(10)	(12)	2	(17)
Interest income - MRCPS	-	37	(37)	(100)
Underlying Profit/(Loss)	(249)	(144)	(105)	73

Other Origin only costs decreased by \$14 million, primarily driven by lower exploration costs.

Refer to the following table for a breakdown of Origin only commodity hedging and trading costs.

Commodity hedging and trading summary

HY2023 positions realised a \$180 million loss compared to a \$96 million net loss in HY2022. Based on open positions at current forward market prices²⁰, we estimate a loss on oil hedging and hedging premium expense in FY2023 of \$283 million.

(\$m)	HY23 actual	HY22 actual	FY23 estimate ¹
Oil hedging premium expense	(5)	(3)	(22)
Gain/(loss) on oil hedging	(175)	(55)	(261)
Gain/(loss) on LNG trading	0	(37)	
Total	(180)	(96)	

¹ Based on forward prices as at 30 January 2023.

Oil hedging

Origin entered into oil hedging instruments to manage its share of APLNG oil price risk based on the primary principle of protecting the Company's investment grade credit rating and cash flows during volatile market periods.

For FY2023, Origin's share of APLNG related Japan Customs-cleared Crude (JCC) oil price exposure is estimated to be approximately 17 MMboe. As at 30 January 2023, we estimate that approximately 97 per cent has been priced (based on LNG contract lags) at approximately US\$105/bbl before any hedging.

Origin has separately hedged to provide downside protection (using 5.4MMbbl of swaps and 1.6 MMbbl of producer collars) and subsequently executed 4.4MMbbl of collars to reparticipate in any upside in the oil price between US\$55/bbl and US\$72/bbl. As at 30 January 2023, the effective price on 5.2 MMbbl equivalent of hedging was US\$66/bbl (see table below). Based on forward oil price of US\$84/bbl the effective prices on the 0.2 MMbbl equivalent hedges yet to be priced would be \$59/bbl, which results in an effective oil price on the company's FY2023 approximate 17 MMboe oil exposure of ~US\$88/bbl including hedges.

Premium spend for this hedge position is A\$22 million.

FY2023 hedge instruments	Priced as at 30 January 2023		Remaining to be priced	
	Volume (MMbbl)	Effective realised price on 5.2 MMbbl	Volume (MMbbl)	Average price
Brent USD swaps	5.2	US\$56/bbl	0.2	US\$46/bbl
Brent producer collars	1.2	-US\$2/bbl	0.4	US\$35-90/bbl
Brent USD upside participation collar	4.2	+US\$12/bbl	0.2	US\$55-72/bbl
Net price		US\$66/bbl		

The FY2024 hedge position consists of:

- 2 MMbbl hedged at a fixed price of A\$137/bbl; and
- 0.8 MMbbl hedged at a floor price of US\$35/bbl, with all of this hedged amount participating in market prices up to US\$90/bbl.

Premium spend for this hedge position is A\$2 million and will be incurred in FY2024.

LNG trading

In 2013, Origin established a Henry Hub linked contract to purchase 0.25 mtpa from Cameron LNG for a period of 20 years, with the first cargo delivered to Origin in June 2020.

In 2016, Origin established a medium term contract with ENN LNG Trading Company Limited to sell ~0.28 mtpa commencing in FY2019. As at 30 June 2022, a non-cash onerous provision of \$397 million was held in relation to this contract, reflecting stronger LNG prices relative to Brent oil prices. In HY2023, a reduction in the non-cash onerous provision of \$128 million was recognised, with the provision revalued to \$269 million as at 31 December 2022, reflecting a decline in near-term LNG price assumptions relative to Brent oil prices.

These contracts and derivative hedge contracts that manage the price risk associated with the physical LNG contracts form part of an LNG trading portfolio.

Based on market forward prices as at 31 January 2023, the total FY2023 and FY2024 LNG trading EBITDA across both periods is expected to be between \$40 - 80 million. Across both FY2025 and FY2026, the total LNG trading EBITDA is expected to be between \$450 - 650 million. This outlook remains subject to market prices on unhedged volumes, operational performance and delivery risk of physical cargoes, and shipping and regasification costs.

²⁰ As at 30 January 2023.

5 APLNG reversion

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

The affected CSG interests represent approximately 20 per cent of APLNG's 3P CSG reserves (as at 30 June 2022), and approximately 20 per cent of APLNG's 2P CSG reserves (as at 30 June 2022).

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

Tri-Star has made other claims in the reversion proceeding against APLNG relating to other aspects of the reversion trigger (including as to the calculation of interest, calculation of revenue and the nature and quantum of APLNG's expenditures that can be included), the calculation of the royalty payable by APLNG to Tri-Star, rights in respect of infrastructure, and claims relating to gas sold by APLNG following the alleged reversion dates. APLNG denies these claims and is defending the proceedings.

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

- the terms under which some of the affected CSG interests will be operated where currently there are no joint operating agreements in place;
- the amount of Tri-Star's contribution to the costs incurred by APLNG in exploring and developing the affected CSG interests between the date of reversion and the date of judgment, which APLNG has stated in its defence and counter-claim are in the order of \$4.56 billion (as at 31 December 2019) if reversion occurred on 1 November 2008; and
- the consequences of APLNG having dealt with Tri-Star's reversionary interests between the date of reversion and the date of judgment, including the gas produced from them. Tri-Star has:
 - estimated the value of such gas which it has been unable to take since the alleged reversion, calculated by reference to the sale of gas as LNG and gas to domestic customers, to be approximately \$3.37 billion (as at 31 March 2019) and approximately \$1.3 billion per annum thereafter. In the alternative, Tri-Star claims that the value of such gas should be assessed by reference to the revenue derived by APLNG or its affiliates from LNG sales since the alleged reversion, being

approximately \$2.5 billion (as at March 2019), or \$2.4 billion (as at March 2019) if the proceeds from the sale of LNG is determined to be calculated net of liquefaction costs; and

- alleged that it should be paid the value of such gas or is otherwise entitled to set-off the value of such gas from any amount owing to APLNG arising from APLNG's counter-claim for contribution to the costs incurred by APLNG in exploring and developing the affected CSG interests between the date of reversion and the date of judgement; and

- if reversion occurred:
- the extent of the reversionary interests principally with respect to Tri-Star's ownership and/or rights to use or access certain project infrastructure; and
- the repayment by Tri-Star of the ongoing royalty which has been paid by APLNG since reversion, resulting from its mistake as to the occurrence of the reversion trigger.

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

In 2017, Tri-Star commenced separate proceedings against APLNG ('markets proceeding') which allege that APLNG breached three CSG joint operating agreements by failing to offer Tri-Star (and the other minority participants in those agreements) an opportunity to participate in the "markets" alleged to be constituted by certain of its LNG and domestic gas sales agreements, including the Sinopec and Kansai LNG sale agreements entered into by APLNG in 2011 and 2012. Tri-Star has alleged that it should have been offered participation in those sales agreements for its share of production from those three CSG joint ventures referable to both its small participating interests and its reversionary interests in those joint ventures.

In September 2019, Tri-Star made further claims in the markets proceeding relating to:

- the nature and scope of the obligations of APLNG as operator pursuant to the CSG joint operating agreements;
- Tri-Star's ownership and/or rights to use or access certain project infrastructure; and
- APLNG's entitlement as operator to charge (both historically and in the future) certain categories of costs under the relevant CSG joint operating agreements.

Tri-Star is seeking, amongst other things, damages and/or an order that APLNG offer Tri-Star (and the other minority participants in those CSG joint operating agreements) the opportunity to participate in those sales agreements for their proportionate share of production from those three CSG joint ventures. APLNG denies these claims and is defending these proceedings.

APLNG filed defences and counterclaims in both proceedings in April and May 2020. In December 2020, Tri-Star filed replies and answers in both proceedings. APLNG filed its rejoinders in the reversion proceeding and the markets proceeding in February and April 2021 respectively. APLNG filed a further amended defence and counterclaim in the reversion proceeding in December 2021.

In September 2021, Tri-Star filed and served an application in both proceedings for questions to be determined separately (or further or alternatively referred to a referee to conduct an inquiry into and prepare a report to the court on those questions). The questions proposed for separate determination in those applications include the issue of whether the 2008 ConocoPhillips subscription monies are revenue for the purposes of the calculation of the reversion trigger. APLNG opposed those applications. The applications were heard in April 2022 and judgement has been reserved. Origin expects that the court will wait for the applications to be finally

determined before making further orders for the conduct of the two proceedings (which Origin expects will continue to be managed in parallel).

The necessary steps to prepare for a trial (whether as to all disputed issues or discrete questions) usually include document disclosure, evidence preparation and exchange and pre-trial mediation. The process that will ultimately be followed (and the procedural timetable) is difficult to predict at this stage.

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

6 Important information

Forward looking statements

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

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

Information on likely developments in the Company's business strategies, prospects and operations for future financial years and the expected results that could result in unreasonable prejudice to the Company (for example, information that is commercially sensitive, confidential or could give a third party a commercial advantage) has not been included in this OFR. The categories of information omitted include forward-looking estimates and projections prepared for internal management purposes, information regarding the Company's operations and projects, which are developing and susceptible to change, and information relating to commercial contracts.

Non-IFRS financial measures

This OFR and Directors' Report refers to Origin's financial results, including Origin's Statutory Profit and Underlying Profit. Origin's Statutory Profit contains a number of items that when excluded provide a different perspective on the financial and operational performance of the business. Income Statement amounts, presented on an underlying basis such as Underlying Profit, are non-IFRS financial measures, and exclude the impact of these items consistent with the manner in which senior management reviews the financial and operating performance of the business. Each underlying measure disclosed has been adjusted to remove the impact of these items on a consistent basis. A reconciliation and description of the items that contribute to the difference between Statutory Profit and Underlying Profit is provided in Section 3.1 of this OFR.

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

Appendix

1 Deferred Tax Liability - investment in APLNG

The MRCPS securities held by Origin in APLNG were fully redeemed in FY2022, after which APLNG commenced distributing ordinary dividends. The ordinary dividends will be unfranked until APLNG starts paying income tax, which is expected to be in the next few years.

Typically, when in receipt of unfranked dividends, the income tax expense would be recognised in the year the dividend is received. However, as Origin had an unrecognised deferred tax liability in respect of our investment in APLNG, accounting standards require recognition of a deferred tax expense provided certain criteria are met.

A deferred tax liability arises when the accounting cost base of an asset is higher than the tax cost base, resulting from a temporary difference. The carrying value of our investment in APLNG is significantly higher than the tax cost base, primarily as a result of our equity accounted share of retained profits to date.

Consistent with accounting standards, the deferred tax liability has not been recognised historically because

1. Origin is able to control the timing of distributions from APLNG which would reverse the temporary difference; and
2. it has not been probable that the temporary difference will reverse in the foreseeable future via dividends paid from current retained earnings, capital returns or a disposal.

As it became probable that APLNG will begin to distribute cash to shareholders via dividends in the coming years in FY2021, Origin recognised a deferred tax liability.

As at 30 June 2022, we held a deferred tax liability of \$708 million. During the period, an amount of \$43 million was utilised, representing the portion of APLNG unfranked dividends that were deemed to be paid out of carried forward retained earnings, and as such this amount was treated as an Item Excluded from Underlying Profit. As at 31 December 2022 we have a deferred tax liability on the balance sheet of \$665 million, representing 30 per cent of the dividends expected to be paid in the foreseeable future from the existing equity accounted retained earnings based on current market assumptions, including future oil prices, at our residual interest of 27.5 per cent.

Recognition of the deferred tax liability only impacts the timing of accounting for the tax expense and has no impact on the underlying economics or cash flows. There is a remaining unrecognised deferred tax liability at 31 December 2022 of \$721 million which may be partly or fully recognised in the future.

Going forward, when Origin receives unfranked dividends from APLNG, the proportion paid from earnings in that year will still incur tax expense, and the balance attributable to retained earnings will result in partial utilisation of the deferred tax liability.

2 Accounting for large-scale generation certificate trading strategy

Supply and demand for large-scale generation certificates (LGCs) is driven by the rate of new renewable projects coming online, voluntary demand for carbon offsets as well as the compliance obligations under the Large-scale Renewable Energy Target (LRET). Renewable project delays and generation curtailments have led to a near-term tightening of the LGC market. However, it is expected that the 33 TWh legislated target will be exceeded and longer term the market will be oversupplied. The Clean Energy Regulator has acknowledged this and provides the option for parties to shift demand from periods of tight supply by deferring the surrender of certificates to later years. Under the scheme, parties can defer up to 10 per cent of their obligation at no additional cost and can defer more than 10 per cent by incurring a shortfall charge of \$65 per certificate that is refundable provided the LGCs are surrendered within three years. Refunds are now non-assessable for tax following legislative change and aligns with the non-deductible treatment of the shortfall charge.

This presents an economic opportunity with the LGC forward curve in backwardation and Origin has elected to defer surrender of 2.5 million CY2020 certificates in February 2021 and 3.6 million CY2021 certificates in February 2022. Origin now expects to also defer approximately 2.9 million CY2022 certificates due for surrender in February 2023.

During HY2023, \$99 million was accrued in relation to the second half of CY2022.

Included in HY2023 Underlying Profit is a cost of \$27 million reflecting the estimated future surrender cost, based on a weighted average of the current forward price and purchases to date, comprising:

- \$3 million relating to reassessment of the surrender cost associated with the first half of CY2022; and
- \$24 million relating to the second half of CY2022 (~1.5 million certificates at \$16 each, reflecting the forward price for CY2025 and purchases to date).

The balance of \$72 million is excluded from Underlying Profit.

Future surrender cost will continue to be reassessed each reporting period.

Directors' Report

For the six months ended 31 December 2022



In accordance with the *Corporations Act 2001* (Cth), the Directors of Origin Energy Limited (Company) report on the Company and the consolidated entity Origin Energy Group (Origin), being the Company and its controlled entities for the half year ended 31 December 2022 ('the period').

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

Directors

The names of the Directors of the Company holding office during the half year ended 31 December 2022 and up to the date of this Report are as follows:

Scott Perkins (Chairman)
Frank Calabria (Managing Director & Chief Executive Officer)
Ilana Atlas
Maxine Brenner
Greg Lalicker
Mick McCormack
Bruce Morgan (retired 19 October 2022)
Steven Sargent
Nóra Scheinkestel
Joan Withers

Review of operations

A review of the operations and results of operations of Origin during the period is set out in the Operating and Financial Review, which is attached to and forms part of the Directors' report.

Dividend

The Directors have determined to pay a fully franked interim dividend of 16.5 cents per share which will be paid on Friday 24 March 2023 to shareholders on record on Wednesday 1 March 2023.

Lead Auditor's Independence Declaration

The lead auditor's independence declaration made under section 307C of the *Corporations Act 2001* (Cth) is attached to and forms part of the Directors' Report for the half year ended 31 December 2022.

Rounding

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

Signed in accordance with a resolution of the Directors:

Mr Scott Perkins
Chairman
Sydney, 16 February 2023

Mr Frank Calabria
Managing Director and Chief Executive Officer
Sydney, 16 February 2023



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Auditor's Independence Declaration to the Directors of Origin Energy Limited

As lead auditor for the review of the half-year financial report of Origin Energy Limited for the half-year ended 31 December 2022, I declare to the best of my knowledge and belief, there have been:

- a. No contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the review;
- b. No contraventions of any applicable code of professional conduct in relation to the review; and
- c. No non-audit services provided that contravene any applicable code of professional conduct in relation to the review.

This declaration is in respect of Origin Energy Limited and the entities it controlled during the financial period.

Ernst & Young

Ernst & Young

Andrew Price
Partner
Sydney
16 February 2023

Interim Financial Statements

For the half year ended 31 December 2022

Interim primary statements

Interim income statement
Interim statement of comprehensive income
Interim statement of financial position
Interim statement of changes in equity
Interim statement of cash flows

Notes to the interim financial statements

Overview

A Results for the half year ended 31 December 2022

A1 Segments
A2 Revenue
A3 Other income
A4 Expenses
A5 Income tax expense
A6 Results of equity accounted investees
A7 Earnings per share
A8 Dividends

B Investment in equity accounted joint ventures and associates

B1 Investment in APLNG
B2 Transactions between the Group and equity accounted investees

C Funding, financial instruments and contributed equity

C1 Capital management
C2 Other financial assets and liabilities
C3 Fair value of financial assets and liabilities
C4 Contributed equity

D Group structure

D1 Joint arrangements
D2 Changes in controlled entities
D3 Assets and liabilities held for sale and disposals

E Other information

E1 Contingent liabilities
E2 Commitments
E3 Subsequent events

Directors' declaration

Independent auditor's report

Interim income statement

For the half year ended 31 December

	Note	2022 \$m	2021 \$m
Revenue	A2	8,760	6,511
Other income	A3	24	63
Expenses	A4	(8,605)	(6,858)
Results of equity accounted investees	A6	555	426
Interest income	A3	28	38
Interest expense	A4	(97)	(105)
Profit before income tax		665	75
Income tax expense	A5	(264)	(205)
Profit/(loss) for the period		401	(130)
Profit/(loss) for the period attributable to:			
Members of the parent entity		399	(131)
Non-controlling interests		2	1
Profit/(loss) for the period		401	(130)
Earnings per share			
Basic earnings per share	A7	23.2 cents	(7.4) cents
Diluted earnings per share	A7	23.1 cents	(7.4) cents

The interim income statement should be read in conjunction with the accompanying notes to the interim financial statements.

Interim statement of comprehensive income

For the half year ended 31 December

	2022 \$m	2021 \$m
Profit/(loss) for the period	401	(130)
Other comprehensive income		
<i>Items that will not be reclassified to profit or loss, net of tax</i>		
Investment valuation changes	13	1
<i>Items that can be reclassified to profit or loss, net of tax</i>		
Foreign currency translation reserve:		
Translation of foreign operations	114	300
Cash flow hedges:		
Reclassified to income statement	(1,115)	(61)
Effective portion of change in fair value	(490)	568
Total other comprehensive income, net of tax	(1,478)	808
Total comprehensive income for the period	(1,077)	678
Total comprehensive income attributable to:		
Members of the parent entity	(1,079)	676
Non-controlling interests	2	2
Total comprehensive income for the period	(1,077)	678

The interim statement of comprehensive income should be read in conjunction with the accompanying notes to the interim financial statements.

Interim statement of financial position

as at

		31 December 2022	30 June 2022
	Note	\$m	\$m
Current assets			
Cash and cash equivalents		678	620
Trade and other receivables		2,336	3,371
Inventories		391	182
Derivatives		1,952	3,174
Other financial assets	C2	689	860
Assets classified as held for sale	D3	97	-
Other assets		152	90
Total current assets		6,295	8,297
Non-current assets			
Trade and other receivables		54	45
Derivatives		1,760	3,075
Other financial assets	C2	334	243
Investments accounted for using the equity method	A6	6,306	6,245
Property, plant and equipment (PP&E)		3,189	3,255
Exploration and evaluation assets		10	286
Intangible assets		2,484	2,523
Other assets		56	51
Total non-current assets		14,193	15,723
Total assets		20,488	24,020
Current liabilities			
Trade and other payables		2,142	3,485
Payables to joint ventures		134	131
Interest-bearing liabilities		417	316
Derivatives		1,300	1,590
Other financial liabilities	C2	1,068	727
Provision for income tax		83	59
Employee benefits		196	242
Provisions		303	378
Liabilities classified as held for sale	D3	19	-
Total current liabilities		5,662	6,928
Non-current liabilities			
Interest-bearing liabilities		3,432	3,074
Derivatives		1,193	1,744
Deferred tax liabilities		773	1,359
Employee benefits		39	37
Provisions		710	856
Total non-current liabilities		6,147	7,070
Total liabilities		11,809	13,998
Net assets		8,679	10,022
Equity			
Contributed equity	C4	6,905	6,877
Reserves		1,628	3,109
Retained earnings		126	11
Total parent entity interest		8,659	9,997
Non-controlling interests		20	25
Total equity		8,679	10,022

The interim statement of financial position should be read in conjunction with the accompanying notes to the interim financial statements.

Interim statement of changes in equity

For the half year ended 31 December

\$m	Contributed equity	Share-based payments reserve	Foreign currency translation reserve	Hedge reserve	Fair value reserve	Retained earnings	Non-controlling interests	Total equity
Balance as at 30 June 2022	6,877	237	716	2,147	9	11	25	10,022
Profit/(loss)	-	-	-	-	-	399	2	401
Other comprehensive income	-	-	114	(1,605)	13	-	-	(1,478)
Total comprehensive income for the period	-	-	114	(1,605)	13	399	2	(1,077)
Dividends provided for or paid	-	-	-	-	-	(284)	(7)	(291)
Movement in contributed equity (refer to note C4)	28	-	-	-	-	-	-	28
Share-based payments	-	(3)	-	-	-	-	-	(3)
Total transactions with owners recorded directly in equity	28	(3)	-	-	-	(284)	(7)	(266)
Balance as at 31 December 2022	6,905	234	830	542	22	126	20	8,679
Balance as at 1 July 2021 restated	7,138	226	222	72	5	1,792	20	9,475
Profit/(loss)	-	-	-	-	-	(131)	1	(130)
Other comprehensive income	-	-	299	507	1	-	1	808
Total comprehensive income for the period	-	-	299	507	1	(131)	2	678
Dividends provided for or paid	-	-	-	-	-	(132)	-	(132)
Movement in contributed equity (refer to note C4)	24	-	-	-	-	-	-	24
Share-based payments	-	(6)	-	-	-	-	-	(6)
Total transactions with owners recorded directly in equity	24	(6)	-	-	-	(132)	-	(114)
Balance as at 31 December 2021	7,162	220	521	579	6	1,529	22	10,039

The interim statement of changes in equity should be read in conjunction with the accompanying notes to the interim financial statements.

Interim statement of cash flows

For the half year ended 31 December

	2022 \$m	2021 \$m
Cash flows from operating activities		
Receipts from customers	10,784	7,444
Payments to suppliers and employees	(11,438)	(7,521)
Cash used in operations	(654)	(77)
Income taxes paid, net of refunds received	(132)	(2)
Net cash used in operating activities	(786)	(79)
Cash flows from investing activities		
Acquisition of PP&E	(220)	(94)
Acquisition of exploration and development assets	(10)	(45)
Acquisition of other assets	(39)	(76)
Acquisition of Octopus Energy	(163)	(260)
Acquisition of other investments	(10)	(7)
Interest received from other parties	24	-
Net proceeds from sale of non-current assets	70	6
<i>Australia Pacific LNG (APLNG) investing cash flows</i>		
Receipt of unfranked dividends	783	-
Receipt of Mandatorily Redeemable Cumulative Preference Shares (MRCPS) interest	-	40
Proceeds from APLNG buy-back of MRCPS	-	515
Net cash from investing activities	435	79
Cash flows from financing activities		
Proceeds from borrowings	850	2,999
Repayment of borrowings	(429)	(2,917)
Joint venture operator cash call movements	121	(21)
Settlement of foreign currency contracts	-	(27)
Australian Energy Market Operator (AEMO) cash deposits	290	-
Interest paid ¹	(78)	(112)
Repayment of lease principal	(33)	(45)
Dividends paid to shareholders of Origin Energy Ltd, net of Dividend Reinvestment Plan	(284)	(111)
Dividends paid to non-controlling interests	(7)	-
Purchase of shares on-market (treasury shares)	-	(24)
Net cash from/(used in) financing activities	430	(258)
Net increase/(decrease) in cash and cash equivalents	79	(258)
Cash and cash equivalents at the beginning of the period	620	472
Effect of exchange rate changes on cash	1	-
Cash and cash equivalents held for sale at the end of the period	(22)	-
Cash and cash equivalents at the end of the period	678	214

1 Includes \$10 million (2021: \$8 million) of interest payments on leases.

The interim statement of cash flows should be read in conjunction with the accompanying notes to the interim financial statements.

Notes to the interim financial statements

Overview

Origin Energy Limited (the Company) is a for-profit company domiciled in Australia. The nature of the operations and principal activities of the Company and its controlled entities (the Group or Origin) are described in the segment information in note A1.

On 16 February 2023, the Directors resolved to authorise the issue of these interim financial statements for the half year ended 31 December 2022.

The interim financial statements do not include all of the information required for a full annual financial report, and should be read in conjunction with the financial statements of the Group for the full year ended 30 June 2022, which are available upon request from the Company's registered office at Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000 or at <http://www.originenergy.com.au>.

Basis of preparation

The interim financial statements have been prepared:

- in accordance with AASB 134 Interim Financial Reporting and the Corporations Act 2001 (Cth);
- on a historical cost basis, except for derivatives, other financial assets and liabilities and assets held for sale, that are measured at fair value; and
- on a going concern basis.

The interim financial statements:

- are presented in Australian dollars;
- are rounded to the nearest million dollars, unless otherwise stated, in accordance with Australian Securities and Investments Commission (ASIC) Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191;
- do not early adopt any Accounting Standards and Interpretations that have been issued or amended but are not yet effective; and
- present reclassified comparative information where required for consistency with the current period's presentation.

The accounting policies and judgements and estimates applied by the Group in these interim financial statements are the same as those applied in its financial statements for the full year ended 30 June 2022 and include consideration of climate change risks.

A Results for the half year ended 31 December 2022

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

A1 Segments

The Group's operating segments are presented on a basis that is consistent with the information provided internally to the Managing Director, who is the chief operating decision maker. This reflects the way the Group's businesses are managed, rather than the legal structure of the Group.

The reporting segments are organised according to the nature of the activities undertaken and are detailed below.

- **Energy Markets:** Energy retailing and wholesaling, power generation and LPG operations predominantly in Australia. Also includes Origin's investment in Octopus Energy Holdings Limited (Octopus Energy).
- **Integrated Gas:** Origin's investment in APLNG, exploration interests in the Cooper-Eromanga and Canning basins and costs associated with growth initiatives such as hydrogen. It also includes overhead costs (net of recoveries from APLNG) and costs incurred in managing Origin's exposure to LNG pricing risk and impacts of its LNG trading positions. For greater transparency, the investment in APLNG is presented separately from the residual component of the segment.
- **Corporate:** Various business development and support activities that are not allocated to operating segments, including corporate treasury and tax items.

Underlying profit and underlying EBITDA are non-statutory (non-IFRS) measures. The objective of measuring and reporting underlying profit and underlying EBITDA is to provide a more meaningful and consistent representation of financial performance by removing items that distort performance or are non-recurring in nature.

Items excluded from the calculation of underlying profit are reported to the Managing Director as not representing the underlying performance of the business and thus excluded from underlying profit or underlying EBITDA. These items are determined after consideration of the nature of the item, the significance of the amount and the consistency in treatment from period to period.

The nature of items excluded from underlying profit and underlying EBITDA are shown below.

- Changes in the fair value of financial instruments not in accounting hedge relationships, to remove the significant volatility caused by timing mismatches in valuing financial instruments and the related underlying transactions. The valuation changes are subsequently recognised in underlying earnings when the underlying transactions are settled;
- Realised and unrealised foreign exchange gains/losses on debt held to hedge USD-denominated investment in APLNG;
- Significant redundancies and other costs in relation to business restructuring, transformation or integration activities;
- Gains/losses on the sale or acquisition of an entity;
- Transaction costs incurred in relation to the sale or acquisition of an entity;
- Impairment of assets;
- Significant onerous contracts;
- Deferred tax liability recognition relating to the APLNG investment;
- Large-scale Generation Certificates (LGCs) net shortfall charge; and
- Other significant non-recurring items.

A1 Segments (continued)

Segment result for the half year ended 31 December

\$m	Ref.	Integrated Gas									
		Energy Markets		Share of APLNG		Other		Corporate		Consolidated	
		2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
External revenue		8,000	6,086	-	-	760	425	-	-	8,760	6,511
EBITDA		(139)	335	1,193	1,039	557	(322)	(61)	(99)	1,550	953
Depreciation and amortisation		(249)	(202)	-	-	(11)	(14)	-	5	(260)	(211)
Share of ITDA of equity accounted investees		(6)	(28)	(551)	(574)	1	2	-	-	(556)	(600)
EBIT		(394)	105	642	465	547	(334)	(61)	(94)	734	142
Interest income ¹						-	37	28	1	28	38
Interest expense ²								(97)	(105)	(97)	(105)
Income tax expense ³								(264)	(205)	(264)	(205)
Non-controlling interests (NCI)								(2)	(1)	(2)	(1)
Statutory profit/(loss) attributable to members of the parent entity		(394)	105	642	465	547	(297)	(396)	(404)	399	(131)
Reconciliation of statutory profit/(loss) to segment result and underlying profit/(loss)											
Fair value and foreign exchange movements	(a)	(164)	149	-	-	761	(38)	(18)	(60)	579	51
Disposals, assets held for sale, impairments, business restructuring and other	(b)	(123)	(82)	-	-	35	(115)	(6)	(2)	(94)	(199)
Tax and NCI on items excluded from underlying profit								(130)	(251)	(130)	(251)
Total significant items		(287)	67	-	-	796	(153)	(154)	(313)	355	(399)
Segment result and underlying profit/(loss) ⁴		(107)	38	642	465	(249)	(144)	(242)	(91)	44	268
Underlying EBITDA ^{4,5}		148	268	1,193	1,039	(239)	(169)	(43)	(39)	1,059	1,099

1 Interest income earned on MRCPS in the prior period has been allocated to the Integrated Gas - Other segment.

2 Interest expense related to general financing is allocated to the Corporate segment.

3 Income tax expense for entities in the Origin tax consolidated group is allocated to the Corporate segment.

4 Underlying profit and underlying EBITDA are non-statutory (non-IFRS) measures.

5 Underlying EBITDA equals segment result and underlying profit/(loss) adjusted for: depreciation and amortisation; share of ITDA of equity accounted investees; interest income/(expense) net of \$6 million (2021: \$2 million) interest unwind significant item; income tax expense; and NCI.

A1 Segments (continued)

Segment result for the half year ended 31 December

\$m	2022		2021	
	Gross	Tax and NCI	Gross	Tax and NCI
(a) Fair value and foreign exchange movements				
Increase in fair value of derivatives	632	(190)	47	(14)
Net gain from financial instruments measured at fair value	(35)	11	61	(18)
Exchange loss on foreign-denominated debt	(18)	5	(57)	17
Fair value and foreign exchange movements	579	(174)	51	(15)
(b) Disposals, impairments, business restructuring and other				
Loss on disposal - Beetaloo ¹	(106)	31	-	-
Disposals	(106)	31	-	-
Impairment - assets held for sale APLNG	-	-	(193)	-
Impairment - assets held for sale other	-	-	(3)	1
Impairments	-	-	(196)	1
Restructuring costs	(1)	-	-	-
Transaction costs	(2)	1	-	-
Transformation costs	(35)	9	(10)	3
Business restructuring	(38)	10	(10)	3
LGC net shortfall charge	(72)	-	(91)	-
Deferred tax liability utilisation/(recognition) - APLNG	-	43	-	(39)
Net capital gains tax on divestment - APLNG ²	-	-	-	(173)
Other tax items on divestment	-	-	-	(5)
Gain on dilution of investment - Octopus Energy	-	-	44	-
Provision for legal matters	(13)	-	(22)	-
Onerous contracts provision ³	135	(40)	76	(23)
Other	50	3	7	(240)
Total disposals, impairments, business restructuring and other	(94)	44	(199)	(236)
Total significant items	485	(130)	(148)	(251)

¹ Refer to note D3.

² The prior period includes \$396 million of capital gains tax, offset by a \$223 million tax benefit pertaining to carry-forward capital losses.

³ The gross amount includes onerous contracts expense of \$141 million (2021: \$78 million) and interest unwind of \$6 million (2021: \$2 million).

A1 Segments (continued)

Segment assets and liabilities as at

\$m	Integrated Gas											
	Energy Markets		Share of APLNG		Other		Corporate		Assets held for sale		Consolidated	
	31 Dec 2022	30 Jun 2022	31 Dec 2022	30 Jun 2022	31 Dec 2022	30 Jun 2022	31 Dec 2022	30 Jun 2022	31 Dec 2022	30 Jun 2022	31 Dec 2022	30 Jun 2022
Assets												
Segment assets	11,735	15,982	-	-	1,470	972	154	155	74	-	13,433	17,109
Investments accounted for using the equity method (refer to note A6)	507	424	6,369	6,392	(570)	(571)	-	-	-	-	6,306	6,245
Cash, funding-related derivatives and tax assets					-	-	726	666	23	-	749	666
Total assets	12,242	16,406	6,369	6,392	900	401	880	821	97	-	20,488	24,020
Liabilities												
Segment liabilities	(4,630)	(6,713)	-	-	(1,762)	(1,763)	(581)	(604)	(11)	-	(6,984)	(9,080)
Financial liabilities, interest-bearing liabilities, funding-related derivatives and tax liabilities							(4,817)	(4,918)	(8)	-	(4,825)	(4,918)
Total liabilities	(4,630)	(6,713)	-	-	(1,762)	(1,763)	(5,398)	(5,522)	(19)	-	(11,809)	(13,998)
Net assets	7,612	9,693	6,369	6,392	(862)	(1,362)	(4,518)	(4,701)	78	-	8,679	10,022
Additions of non-current assets	365	697	-	-	12	65	3	4	-	-	380	766

A2 Revenue

for the half year ended
31 December

2022

\$m	Retail	Business and Wholesale	LPG	Solar and Energy Services	Integrated Gas	Total
Sale of electricity	2,166	1,581	-	108	-	3,855
Sale of gas	746	1,202	395	75	760	3,178
Pool revenue	-	1,613	-	-	-	1,613
Solar and batteries	-	-	-	50	-	50
Other revenue	26	8	-	30	-	64
Total	2,938	4,404	395	263	760	8,760

2021

\$m						
Sale of electricity	2,103	1,354	-	50	-	3,507
Sale of gas	661	688	359	57	425	2,190
Pool revenue	-	706	-	-	-	706
Solar and batteries ¹	-	-	-	51	-	51
Other revenue ¹	24	12	-	21	-	57
Total	2,788	2,760	359	179	425	6,511

¹ Prior period amounts for Solar and Energy Services were restated to reflect a new category for solar and batteries.

The Group's primary revenue streams relate to the sale of electricity and natural gas to retail (Residential and Small to Medium Enterprises), business and wholesale customers, the sale of generated electricity into the National Electricity Market (NEM), and the sale of physical LNG cargoes that form part of an LNG trading portfolio.

Retail contracts

Retail electricity is generally marketed through standard service offers that provide customers with discounts on published tariff rates. Contracts have no fixed duration, generally require no minimum consumption, and can be terminated by the customer at any time without significant penalty. The supply of energy is considered a single performance obligation for which revenue is recognised upon delivery to customers at the offered rate. Where customers are eligible to receive additional behavioural discounts, Origin considers this to be variable consideration.

Business and wholesale contracts

Contracts with business and wholesale customers are generally medium to long-term, higher-volume arrangements with fixed or index-linked energy rates that have been commercially negotiated. The nature and accounting treatment of this revenue stream is largely consistent with retail sales. Some business and wholesale sales arrangements also include the transfer of renewable energy certificates (RECs), which represent an additional performance obligation. Revenue is recognised for these contracts when Origin has the 'right to invoice' the customer for consideration that corresponds directly with the value of units of energy delivered to the customer. Pool revenue relates to sales by Origin generation assets into the NEM, as well as revenue associated with gross settled PPAs. Origin has assessed it is acting as the principal in relation to transactions with the NEM and therefore recognises pool sales on a gross basis. Revenue from these sales is recognised at the spot price achieved when control of the electricity passes to the grid.

Solar and Energy Services

Solar and Energy Services revenue primarily relates to sales of solar, batteries and Community Energy Services. Solar and batteries revenue includes the sale, installation, repairs and maintenance services of solar photovoltaic systems, and battery solutions, to residential and business customers. Revenue is recognised at the point in time that the system is installed, or the service provided is complete. Community Energy Services supplies electricity and gas within embedded network sites. Similar to Retail contracts, the supply of energy is considered a single performance obligation for which revenue is recognised upon delivery to the customers at the offered rate.

LPG and Integrated Gas

Revenue from the sale of LPG (from Origin's Energy Markets segment) and LNG (from Origin's Integrated Gas segment) is recognised at the point in time that the customer takes physical possession of the commodity. Revenue is recognised at an amount that reflects the consideration expected to be received.

A3 Other income

	2022	2021
for the half year ended 31 December	\$m	\$m
Net gain on dilution of investments ¹	-	44
Fees and services, and other income	24	19
Other income	24	63
Interest earned from other parties ²	28	1
Interest earned on APLNG MRCPS	-	37
Interest income	28	38

1 The prior period amount relates to a gain on dilution of the Group's equity accounted investment in Octopus Energy.

2 Interest income is measured using an effective interest rate method and recognised as it accrues.

A4 Expenses

	2022	2021
for the half year ended 31 December	\$m	\$m
Cost of sales	8,196	5,905
Employee expenses	397	339
Depreciation and amortisation	260	211
Impairment of assets held for sale ¹	-	196
Impairment of trade receivables (net of bad debts recovered)	52	41
Increase in fair value of derivatives	(632)	(47)
Net loss/(gain) from financial instruments measured at fair value	35	(61)
Net loss on sale of assets ²	106	-
Onerous contracts provision	(141)	(78)
Net foreign exchange loss	27	72
Other	305	280
Expenses	8,605	6,858
Interest on borrowings	77	94
Interest on lease liabilities	10	8
Unwind of discounting on long-term provisions	10	3
Interest expense	97	105

1 The prior period includes \$3 million related to embedded network meters and \$193 million related to the sale of 10 per cent of Origin's investment in APLNG.

2 Relates to divestment of Beetaloo. Refer to note D3.

A5 Income tax expense

	2022	2021
for the half year ended 31 December	\$m	\$m
Income tax expense	264	205
Reconciliation between tax expense and pre-tax net profit		
Profit before income tax	665	75
Income tax using the domestic corporation tax rate of 30 per cent (2021: 30 per cent)		
Prima facie income tax expense on pre-tax accounting profit:		
- at Australian tax rate of 30 per cent	200	22
- adjustment for tax exempt charity (Origin Foundation Limited)	-	(1)
- adjustment for difference between Australian and overseas tax rates	(1)	(1)
Income expense on pre-tax accounting profit at standard rates	199	20
Increase/(decrease) in income tax expense due to:		
Share of results of equity accounted investees	(166)	(140)
Unfranked dividends received - APLNG	235	-
Deferred tax liability (utilisation)/recognition - APLNG	(43)	39
Impairment on divestment - APLNG	-	58
Net capital gains tax on divestment - APLNG	-	173
Other tax items on divestment - APLNG	-	5
Accounting loss on divestment - Beetaloo	32	-
Net capital gains tax on divestment - Beetaloo	33	-
Deferred tax liability reversal on divestment - Beetaloo	(64)	-
LGC shortfall charge	30	43
Net capital gains tax on divestment - LPG Pacific entities	4	-
Other	4	7
Total increase	65	185
Total income tax expense	264	205

A6 Results of equity accounted investees

for the half year ended 31 December 2022			
\$m	Share of EBITDA	Share of ITDA	Share of net (loss)/profit
APLNG ^{1,2}	1,193	(550)	643
Total joint ventures	1,193	(550)	643
Octopus Energy ^{3,4}	(83)	(5)	(88)
Gasbot Pty Limited	-	-	-
Gaschem Sydney	1	(1)	-
Total associates	(82)	(6)	(88)
Total	1,111	(556)	555
2021			
\$m			
APLNG ^{1,2}	1,039	(572)	467
Total joint ventures	1,039	(572)	467
Octopus Energy ^{3,4}	(12)	(28)	(40)
Gasbot Pty Limited	(1)	-	(1)
Gaschem Sydney	-	-	-
Total associates	(13)	(28)	(41)
Total	1,026	(600)	426
Equity accounted investment carrying amount			
as at \$m	31 December 2022	30 June 2022	
APLNG ¹	5,799	5,821	
Octopus Energy ⁵	496	413	
Gasbot Pty Limited	1	1	
Gaschem Sydney	10	10	
Total	6,306	6,245	

1 APLNG's summary financial information is separately disclosed in notes B1.1, B1.2 and B1.3.

2 Included in the Group's share of net profit is \$1 million (2021: \$2 million) of MRCPS interest income, in line with the depreciation of the capitalised interest in APLNG's result. Refer to note B1.2.

3 The Group holds a 20 per cent interest in Octopus Energy and has significant influence over the entity. At 30 June 2022 the Group held 18.7 per cent interest. Refer to note B2 regarding changes in ownership interest during the period.

4 Included in the Group's share of net loss is \$10 million (2021: \$10 million) of depreciation, relating to the fair value attributed to assets at the acquisition date.

5 Refer to note B2 regarding changes in ownership interest during the period and other information.

A7 Earnings per share

for the half year ended 31 December	2022	2021
Weighted average number of shares on issue-basic ¹	1,719,728,778	1,758,705,082
Weighted average number of shares on issue-diluted ²	1,728,698,350	1,764,000,924
Statutory profit/(loss)		
Earnings per share based on statutory consolidated profit		
Statutory profit/(loss) \$m	399	(131)
Basic earnings per share	23.2 cents	(7.4) cents
Diluted earnings per share	23.1 cents	(7.4) cents
Underlying profit		
Earnings per share based on underlying consolidated profit		
Underlying profit \$m ³	44	268
Underlying basic earnings per share	2.5 cents	15.2 cents
Underlying diluted earnings per share	2.5 cents	15.2 cents

- 1 The basic earnings per share calculation uses the weighted average number of shares on issue during the period reduced by shares bought-back and excluding treasury shares held.
- 2 The diluted earnings per share calculation uses the weighted average number of shares on issue during the period reduced by shares bought-back and excluding treasury shares held. It is also adjusted to reflect the number of shares that would be issued if outstanding Options, Performance Share Rights, Deferred Shares Rights, Restricted Shares and Matching Share Rights were to be exercised (2022: 8,969,572; 2021: 5,295,842).
- 3 Refer to note A1 for a reconciliation of statutory profit to underlying consolidated profit.

A8 Dividends

The Directors have determined to pay a fully franked interim dividend of 16.5 cents per share, payable on 24 March 2023. Dividends paid during the period ended 31 December are detailed below.

	2022 \$m	2021 \$m
Final dividend of 16.5 cents per share, partially franked to 75 per cent, in respect of FY2022, paid 30 September 2022 (2021: 7.5 cents per share, unfranked, in respect of FY2021, paid 1 October 2021)	284	132

B Investment in equity accounted joint ventures and associates

This section provides information on the Group's equity accounted investments including financial information relating to APLNG and Octopus Energy.

B1 Investment in APLNG

This section provides information on financial information related to the Group's investment in the equity accounted joint venture APLNG.

B1.1 Summary APLNG income statement

for the half year ended 31 December	2022		2021	
\$m	Total APLNG	Origin interest ¹	Total APLNG	Origin interest ¹
Operating revenue	5,953		3,941	
Operating expenses	(1,614)		(1,049)	
EBITDA	4,339	1,193	2,892	1,039
Depreciation and amortisation expense	(825)	(227)	(786)	(281)
Interest income	31	9	3	1
Interest expense - MRCPS	-	-	(99)	(37)
Other interest expense	(212)	(58)	(167)	(60)
Income tax expense	(1,000)	(275)	(553)	(197)
ITDA	(2,006)	(551)	(1,602)	(574)
Statutory result for the period	2,333	642	1,290	465
Other comprehensive income	-	-	-	-
Statutory total comprehensive income²	2,333	642	1,290	465
Underlying profit for the period³	2,333	642	1,290	465
Underlying EBITDA for the period³	4,339	1,193	2,892	1,039

1 Origin's interest is 27.5 per cent. Prior to 8 December 2021 it was 37.5 per cent.

2 Excluded from the above is \$1 million (2021: \$2 million) (Origin share) of MRCPS interest income that has been recognised by Origin in line with the depreciation of the capitalised interest in APLNG's result above. Refer to note B1.2. This adjustment is disclosed under the Integrated Gas - Other segment on the 'share of ITDA of equity accounted investees' line in note A1.

3 Underlying profit and underlying EBITDA are non-statutory (non-IFRS) measures.

Income and expense amounts are converted from USD to AUD using the average rate prevailing for the relevant period.

B1.2 Summary APLNG statement of financial position

100 per cent APLNG as at \$m	31 December 2022	30 June 2022
Cash and cash equivalents	1,840	1,544
Other assets	1,160	788
Current assets	3,000	2,332
Receivables from shareholders	318	312
PP&E	32,276	32,083
Exploration, evaluation and development assets	568	558
Other assets	145	142
Non-current assets	33,307	33,095
Total assets	36,307	35,427
Bank loans - secured	813	776
Other liabilities	757	766
Current liabilities	1,570	1,542
Bank loans - secured	6,803	7,075
Other liabilities	4,775	3,569
Non-current liabilities	11,578	10,644
Total liabilities	13,148	12,186
Net assets	23,159	23,241
Group's interest of 27.5 per cent of APLNG net assets	6,369	6,392
Group's impairment expense ¹	(477)	(477)
Group's own costs	18	18
MRCPS elimination ²	(111)	(112)
Investment in APLNG³	5,799	5,821

¹ Relates to impairments taken by the Group in the year ended 30 June 2020.

² During project construction, when the Group received interest on the MRCPS from APLNG, it recorded the interest as income after eliminating a proportion of this interest that related to its ownership interest in APLNG. At the same time, when APLNG paid interest to the Group on MRCPS, the amount was capitalised by APLNG. Therefore, these capitalised interest amounts form part of the cost of APLNG's assets and these assets have been depreciated since commencement of operations. The proportion attributable to the Group's own interest (37.5 per cent prior to 8 December 2021 and 27.5 per cent thereafter) is eliminated through the equity accounted investment balance.

³ Includes a movement of \$118 million in foreign exchange that has been recognised in the foreign currency translation reserve. Also included is a movement of A\$783 million (US\$521 million) relating to unfranked dividends received from APLNG.

Reporting date balances are converted from USD to AUD using an end-of-period exchange rate of 0.6773 (30 June 2022: 0.6891).

B1.3 Summary APLNG statement of cash flows

100 per cent APLNG for the half year ended 31 December \$m	2022	2021
Cash flow from operating activities		
Receipts from customers	5,928	4,011
Payments to suppliers and employees	(2,078)	(1,095)
Net cash from operating activities	3,850	2,916
Cash flows from investing activities		
Acquisition of PP&E	(198)	(183)
Acquisition of exploration and development assets	(16)	(18)
Proceeds from sale of assets	-	6
Other investing activities	28	3
Net cash used in investing activities	(186)	(192)
Cash flows from financing activities		
Payments relating to other financing activities	-	(22)
Repayment of lease principal	(31)	(25)
Payment of interest on lease liabilities	(13)	(8)
Repayment of borrowings	(399)	(350)
Payments of transaction and interest costs relating to borrowings	(144)	(121)
Payments for buy-back of MRCPS	-	(1,373)
Payments of interest on MRCPS	-	(106)
Payments of ordinary dividends	(2,846)	-
Net cash used in financing activities	(3,433)	(2,005)
Net increase in cash and cash equivalents	231	719
Cash and cash equivalents at the beginning of the period	1,544	905
Effect of exchange rate changes on cash	65	46
Cash and cash equivalents at the end of the period	1,840	1,670

Cash flow amounts are converted from USD to AUD using the exchange rate that approximates the actual rate on the date of the cash flows.

B2 Transactions between the Group and equity accounted investees

Other than the matters disclosed below, there have been no significant transactions between the Group and equity accounted investees.

APLNG

The Group received unfranked dividends of A\$783 million during the half year ended 31 December 2022.

On 27 January 2023 the Group received unfranked dividends from APLNG of US\$102 million (A\$144 million).

On 14 February 2023 the directors of APLNG declared further unfranked dividends to be paid to shareholders. The Group expects to receive US\$179 million on 24 February 2023.

Octopus Energy

Additional equity transactions

On 26 July 2022 Origin announced an additional investment of £94 million (A\$163 million) to restore its 20 per cent equity interest. The amount was paid to Octopus Energy in August 2022.

Equity top-up

In January 2023 the Group invested a further £5.6 million (A\$10 million), following further investments by other shareholders, to maintain its 20 per cent equity interest.

Kraken milestone payment

The remaining £10 million final milestone payment is expected to be paid in March 2023.

Financial guarantee

The Group has provided a financial guarantee to Octopus Energy's financiers and during the period, \$4 million (2021: \$4 million) has been recognised within other income in respect of the financial guarantee income. The current financial guarantee expires in March 2023.

C Funding, financial instruments and contributed equity

C1 Capital management

The Group's objective when managing capital is to make disciplined capital allocation decisions between debt reduction, investment in growth and distributions to shareholders, and to maintain an optimal capital structure while maintaining access to capital. Management believes that a strong investment-grade credit rating (Baa2) through the cycle and an appropriate level of net debt are required to meet these objectives. The Group's current credit rating is Baa2 (stable outlook) from Moody's.

Key factors considered in determining the Group's capital structure and funding strategy at any point in time include expected operating cash flows, capital expenditure plans, the maturity profile of existing debt facilities, the dividend policy, and the ability to access funding from banks, capital markets and other sources.

The Group monitors its capital requirements through a number of metrics including the gearing ratio (target range of approximately 20 to 30 per cent) and an adjusted net debt to adjusted underlying EBITDA ratio (target range of 2.0x to 3.0x). These targets are consistent with attaining a strong investment-grade rating. Underlying EBITDA is a non-statutory (non-IFRS) measure.

The gearing ratio is calculated as adjusted net debt divided by adjusted net debt plus total equity. Net debt, which excludes cash held by Origin to fund APLNG-related operations, is adjusted to take into account the effect of FX hedging transactions on the Group's foreign currency debt obligations. The adjusted net debt to adjusted underlying EBITDA ratio is calculated as adjusted net debt divided by adjusted underlying EBITDA (Origin's underlying EBITDA less Origin's share of APLNG underlying EBITDA plus net cash flow from APLNG) over the relevant rolling 12-month period.

The Group monitors its current and future funding requirements for at least the next five years and regularly assesses a range of funding alternatives to meet these requirements in advance of when the funds are required.

	31 December 2022 \$m	30 June 2022 \$m
Borrowings	3,336	2,855
Lease liabilities	513	535
Total interest-bearing liabilities	3,849	3,390
Less: Cash and cash equivalents excluding APLNG related cash ¹	(548)	(572)
Net debt	3,301	2,818
Fair value adjustments on FX hedging transactions	(21)	20
Adjusted net debt	3,280	2,838
Total equity	8,679	10,022
Total capital	11,959	12,860
Gearing ratio	27%	22%
Ratio of adjusted net debt to adjusted underlying EBITDA	2.1x	1.9x

¹ This balance excludes \$130 million (June 2022: \$48 million) of cash held by Origin, as Upstream Operator, to fund APLNG related operations.

Bank debt facility repayment

On 19 August 2022 Origin made an early repayment of a US\$20 million syndicated bank facility tranche.

C2 Other financial assets and liabilities

as at \$m	31 December 2022		30 June 2022	
	Current	Non-current	Current	Non-current
Other financial assets				
<i>Measured at fair value through profit or loss</i>				
Settlement Residue Distribution Agreement units	91	75	109	70
Environmental scheme certificates	590	-	444	-
Investment fund units	-	61	-	59
Debt and other securities	7	86	14	22
Equity securities	-	1	-	1
<i>Measured at fair value through other comprehensive income</i>				
Equity securities	-	68	-	51
<i>Measured at amortised cost</i>				
Futures collateral	1	-	3	-
AEMO cash deposits	-	-	290	-
Debt instruments	-	43	-	40
Total other financial assets	689	334	860	243
Other financial liabilities				
<i>Measured at fair value through profit or loss</i>				
Environmental scheme surrender obligations	568	-	417	-
<i>Measured at amortised cost</i>				
Futures collateral	498	-	304	-
Financial guarantees ¹	2	-	6	-
Total other financial liabilities	1,068	-	727	-

¹ Financial guarantee contracts are initially recognised at fair value. Subsequently, they are measured at either the amount of any determined loss allowance or at the amount initially recognised less any cumulative income recognised, whichever is larger. This financial guarantee relates to the working capital facility entered into by Octopus Energy with its financiers, as referred to in note B2, for which the Group has provided a guarantee.

C3 Fair value of financial assets and liabilities

Financial assets and liabilities measured at fair value are grouped into the following categories based on the level of observable market data used in determining that fair value:

- Level 1: The fair value of financial instruments traded in active markets (such as exchange-traded derivatives and Renewable Energy Certificates (RECs)) is the quoted market price at the end of the reporting period. These instruments are included in level 1.
- Level 2: The fair value of financial instruments that are not traded in an active market (such as over-the-counter derivatives) is determined using valuation techniques that maximise the use of observable market data. If all significant inputs required to fair value an instrument are observable, either directly (as prices) or indirectly (derived from prices), the instrument is included in level 2.
- Level 3: If one or more of the significant inputs required to fair value an instrument is not based on observable market data, the instrument is included in level 3.

	Level 1 \$m	Level 2 \$m	Level 3 \$m	Total \$m
as at 31 December 2022				
Derivative financial assets	1,527	1,834	351	3,712
Other financial assets at fair value	756	68	155	979
Financial assets carried at fair value	2,283	1,902	506	4,691
Derivative financial liabilities	(339)	(1,636)	(518)	(2,493)
Other financial liabilities at fair value	(568)	-	-	(568)
Financial liabilities carried at fair value	(907)	(1,636)	(518)	(3,061)
as at 30 June 2022				
Derivative financial assets	1,917	3,382	950	6,249
Other financial assets at fair value	623	73	74	770
Financial assets carried at fair value	2,540	3,455	1,024	7,019
Derivative financial liabilities	(471)	(2,294)	(569)	(3,334)
Other financial liabilities at fair value	(417)	-	-	(417)
Financial liabilities carried at fair value	(888)	(2,294)	(569)	(3,751)

The following table shows a reconciliation of movements in the fair value of level 3 instruments during the period.

	\$m
Balance as at 30 June 2022	455
New instruments recognised in the period	52
Net cash settlements paid/(received)	(184)
Gains/(losses) recognised in other comprehensive income	17
<i>Gains/(losses) recognised in profit or loss</i>	
Change in fair value	(536)
Cost of sales	184
Balance as at 31 December 2022	(12)

C3 Fair value of financial assets and liabilities (continued)

Valuation techniques used to determine fair values

The various techniques used to value the Group's financial instruments are summarised in the following table. To the maximum extent possible, valuations are based on assumptions that are supported by independent and observable market data. For instruments that settle more than 12 months from the reporting date, cash flows are discounted at the applicable market yield, adjusted to reflect the credit risk of the specific counterparty.

Instrument	Fair value methodology
Financial instruments traded in active markets	Quoted market prices at reporting date.
Interest rate swaps and cross currency interest rate swaps	Present value of expected future cash flows based on observable yield curves and forward exchange rates at reporting date.
Forward foreign exchange contracts	Present value of future cash flows based on observable forward exchange rates at reporting date.
Electricity, oil and other commodity derivatives (not traded in active markets)	Present value of expected future cash flows based on observable forward commodity price curves (where available). The majority of the Group's level 3 instruments are commodity contracts for which further detail on the significant unobservable inputs is included below.
Other financial instruments	Discounted cash flow analysis.
Long-term borrowings	Present value of future contract cash flows.

Fair value measurements using significant unobservable inputs (level 3)

The following is a summary of the Group's level 3 financial instruments, the significant inputs for which market observable data is unavailable, and the sensitivity of the estimated fair values to the assumptions applied by management.

Instrument ¹	Unobservable inputs	Relationship to fair value
Electricity derivatives	Forward electricity swap price curve Forward electricity cap price curve Forecast REC prices	A 10 per cent increase/decrease in the unobservable inputs would increase/decrease fair value by \$210/(\$207) million (June 2022: \$256 million).

1 Excludes \$70 million (June 2022: \$49 million) of unlisted equity securities, and associated share warrants, for which management has assessed the investment cost to be a reasonable reflection of fair value at reporting date.

Day 1 fair value adjustments

For certain complex financial instruments, such as the structured electricity products, the fair value that is determined at inception of the contract using unobservable inputs does not equal the transaction price. When this occurs, the difference is deferred to the statement of financial position and recognised in the income statement over the life of the contract in a manner consistent with the valuation methodology initially applied.

	\$m
Reconciliation of net deferred gain	
Balance as at 30 June 2022	484
Value recognised in the interim income statement	(43)
New instruments recognised in the period	(23)
Balance as at 31 December 2022	418
Classification of net deferred gain	
Derivative assets	214
Derivative liabilities	204
Balance as at 31 December 2022	418

C3 Fair value of financial assets and liabilities (continued)

Financial instruments measured at amortised cost

Except as noted below, the carrying amounts of non-current financial assets and liabilities measured at amortised cost are reasonable approximations of their fair values due to their short-term nature.

The table below reflects debt instruments reported within non-current interest-bearing liabilities on the balance sheet. Non-current lease liabilities, which are also reported within non-current interest-bearing liabilities are excluded. The fair value of these financial instruments reflects the present value of expected future cash flows based on market pricing data for the relevant underlying interest and foreign exchange rates. Cash flows are discounted at the applicable credit-adjusted market yield.

	Fair value hierarchy level	Carrying value		Fair value	
		31 Dec 2022 \$m	30 Jun 2022 \$m	31 Dec 2022 \$m	30 Jun 2022 \$m
Liabilities					
Bank loans - unsecured	2	961	508	987	542
Capital markets borrowings - unsecured	2	2,013	2,090	1,774	1,874
Total¹		2,974	2,598	2,761	2,416

1 Non-current interest-bearing liabilities in the statement of financial position include \$2,974 million (June 2022: \$2,598 million) as disclosed above, and lease liabilities of \$458 million (June 2022: \$476 million).

C4 Contributed equity

for the half year ended 31 December	2022	2021	2022	2021
	Number of shares		\$m	
Ordinary share capital				
Opening balance	1,722,747,671	1,761,211,071	6,913	7,163
Less Treasury shares:				
Opening balance	(5,899,184)	(6,046,328)	(36)	(25)
Shares purchased on market	-	(5,410,616)	-	(24)
Utilisation of treasury shares on vesting of employee share schemes and DRP	4,512,259	11,012,605	28	48
Treasury Shares total	(1,386,925)	(444,339)	(8)	(1)
Closing balance	1,721,360,746	1,760,766,732	6,905	7,162

Ordinary shares

Holders of ordinary shares are entitled to receive dividends as determined from time to time and are entitled to one vote per share at shareholders' meetings. In the event of the winding up of the Group, ordinary shareholders rank after creditors, and are fully entitled to any proceeds of liquidation. The Group does not have authorised capital or par value in respect of its issued shares.

Treasury shares

Where the Group or other members of the Group purchase shares in the Company, the consideration paid is deducted from the total shareholders' equity and the shares are treated as treasury shares until they are subsequently sold, reissued or cancelled. Treasury shares are purchased primarily for use on vesting of employee share schemes and the DRP. Shares are accounted for at a weighted average cost.

D Group structure

The following section provides information on the Group's structure and how this impacts the results of the Group as a whole, including details of joint arrangements, associates and changes made to the Group structure during the half year.

D1 Joint arrangements

Joint arrangements are entities over whose activities the Group has joint control, established by contractual agreement and requiring the consent of two or more parties for strategic, financial and operating decisions. The Group classifies its interests in joint arrangements as either joint operations or joint ventures, depending on its rights to the assets and obligations for the liabilities of the arrangements.

Associates are entities, other than partnerships, for which the Group exercises significant influence, but no control, over the financial and operating policies, and which are not intended for sale in the near future.

Of the Group's interests in joint arrangements and associates, only APLNG and Octopus Energy have a material impact to the Group at 31 December 2022. Refer to Section B for details of the Group's interests in these entities.

D2 Changes in controlled entities

Business combinations

There were no significant business combinations during the period.

Changes in controlled entities

Sun Spot 6 Pty Ltd was acquired on 5 August 2022.

Origin Energy B2 Pty Ltd was sold on 9 November 2022.

D3 Assets and liabilities held for sale and disposals

Assets and liabilities held for sale

On 8 November 2022 the Group entered into an agreement to sell Origin's LPG business in the Pacific. This includes the Group's wholly-owned entities in Vanuatu, American Samoa, Samoa and Cook Islands, and controlled entities in Fiji, Papua New Guinea and the Solomon Islands.

There are a number of conditions and regulatory approvals required before the sale can be completed and the assets and liabilities relating to the sale have been classified as held for sale as at 31 December 2022.

	31 December 2022
	\$m
Current assets	
Cash and cash equivalents	22
Trade and other receivables	14
Inventories	14
Other assets	2
Total current assets	52
Non-current assets	
Property, plant and equipment (PP&E)	42
Intangible assets	2
Deferred tax assets	1
Total non-current assets	45
Total assets	97
Current liabilities	
Trade and other payables	11
Interest-bearing liabilities	2
Employee benefits	1
Total current liabilities	14
Non-current liabilities	
Interest-bearing liabilities	3
Deferred tax liabilities	2
Total non-current liabilities	5
Total liabilities	19
Net assets	78
Carrying amount of NCI	20

Disposals

On 19 September 2022 the Group entered into a Share Sale Agreement with Tamboran (B1) Pty Ltd for the sale of 100% of the shares of Origin Energy B2 Pty Ltd, which holds a 77.5% interest in three exploration permits in the Beetaloo Basin. Completion of the transaction occurred on 9 November 2022 for upfront consideration of \$60 million and a royalty based on wellhead revenues produced from the three Beetaloo permits. This resulted in a pre-tax loss on divestment of \$106 million.

E Other information

This section includes other information to assist in understanding the financial performance and position of the Group, or items required to be disclosed to comply with accounting standards and other pronouncements.

E1 Contingent liabilities

There has been no significant change in contingent liabilities since 30 June 2022.

E2 Commitments

Detailed below are the Group's contractual commitments that are not recognised as liabilities as there is no present obligation.

as at	31 December 2022 \$m	30 June 2022 \$m
Capital expenditure commitments	60	108
Joint venture commitments ¹	156	237

1 Includes \$149 million (June 2022: \$121 million) in relation to the Group's share of APLNG's capital and joint venture commitments.

E3 Subsequent events

Other than the matters described below, no item, transaction or event of a material nature has arisen since 31 December 2022 that would significantly affect the operations of the Group, the results of those operations, or the state of affairs of the Group, in future financial periods.

Dividends

On 16 February 2023, the directors declared a fully franked interim dividend of 16.5 cents per share on ordinary shares. The dividend will be paid on 24 March 2023.

APLNG dividends

On 27 January 2023 the Group received unfranked dividends from APLNG of US\$102 million (A\$144 million).

On 14 February 2023 the directors of APLNG declared further unfranked dividends to be paid to shareholders. The Group expects to receive US\$179 million on 24 February 2023.

Octopus Energy

In January 2023, the Group invested a further £5.6 million (A\$10 million) to maintain its 20 per cent equity interest in Octopus Energy following further investments by other shareholders.

Canning Basin disposal

On 10 February 2023 Origin executed an agreement with Buru Energy Limited (Buru) to exit from its participating interests in the seven Exploration Permits in the Canning Basin, the respective Joint Operating Agreements and the Farm-in Agreements. The terms of the sale provide for Origin to provide Buru with up to \$4 million to fund a seismic survey and for Buru to provide Origin with future reimbursement payments of up to \$34 million, conditional on the achievement of key development and production milestones. Settlement of the transaction remains subject to regulatory approvals. No post tax profit or loss is expected to be realised on completion of the transaction.

Directors' declaration

In the opinion of the Directors of Origin Energy Limited (the Company):

- a. the interim financial statements and notes are in accordance with the *Corporations Act 2001* (Cth), including:
 - i. giving a true and fair view of the financial position of the Group as at 31 December 2022 and of its performance, for the half year ended on that date; and
 - ii. complying with Australian Accounting Standard AASB 134 *Interim Financial Reporting* and other applicable accounting standards and the *Corporations Regulations 2001* (Cth); and
- b. there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a resolution of the Directors:



Mr Scott Perkins
Chairman

Sydney, 16 February 2023



Mr Frank Calabria
Managing Director and Chief Executive Officer

Sydney, 16 February 2023



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Independent auditor's review report to the members of Origin Energy Limited

Conclusion

We have reviewed the accompanying half-year financial report of Origin Energy Limited (the Company) and its subsidiaries (collectively the Group), which comprises the interim statement of financial position as at 31 December 2022, the interim income statement, the interim statement of comprehensive income, interim statement of changes in equity and interim statement of cash flows for the half-year ended on that date, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration.

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the half year financial report of the Group does not comply with the *Corporations Act 2001*, including:

- a. Giving a true and fair view of the consolidated financial position of the Group as at 31 December 2022 and of its consolidated financial performance for the half year ended on that date; and
- b. Complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations 2001*.

Basis for conclusion

We conducted our review in accordance with ASRE 2410 *Review of a Financial Report Performed by the Independent Auditor of the Entity* (ASRE 2410). Our responsibilities are further described in the *Auditor's responsibilities for the review of the half-year financial report* section of our report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the annual financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

Directors' responsibilities for the half-year financial report

The directors of the Company are responsible for the preparation of the half-year financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the half-year financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

Auditor's responsibilities for the review of the half-year financial report

Our responsibility is to express a conclusion on the half-year financial report based on our review. ASRE 2410 requires us to conclude whether we have become aware of any matter that makes us believe that the half-year financial report is not in accordance with the *Corporations Act 2001* including giving a true and fair view of the Group's financial position as at 31 December 2022 and its performance for the half-year ended on that date, and complying with Accounting Standard AASB 134 *Interim Financial Reporting* and the *Corporations Regulations 2001*.



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A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Ernst & Young

Ernst & Young

APR

Andrew Price
Partner
Sydney
16 February 2023

Glossary and Interpretation

Glossary

Statutory financial measures

Statutory financial measures are measures included in the Financial Statements for the Origin Consolidated Group, which are measured and disclosed in accordance with applicable Australian Accounting Standards. Statutory financial measures also include measures that have been directly calculated from, or disaggregated directly from financial information included in the Financial Statements for the Origin Consolidated Group.

Term	Meaning
Cash flows from investing activities	Statutory cash flows from investing activities as disclosed in the Statement of Cash Flows in the Origin Consolidated Financial Statements.
Cash flows from operating activities	Statutory cash flows from operating activities as disclosed in the Statement of Cash Flows in the Origin Consolidated Financial Statements.
Cash flows used in financing activities	Statutory cash flows used in financing activities as disclosed in the Statement of Cash Flows in the Origin Consolidated Financial Statements.
Net Debt	Total current and non-current interest-bearing liabilities only, less cash and cash equivalents excluding cash to fund APLNG day-to-day operations.
Non-controlling interest	Economic interest in a controlled entity of the consolidated entity that is not held by the Parent entity or a controlled entity of the consolidated entity.
Statutory Profit/Loss	Net profit/loss after tax and non-controlling interests as disclosed in the Income Statement in the Origin Consolidated Financial Statements.
Statutory earnings per share	Statutory Profit/Loss divided by weighted average number of shares as disclosed in the Income Statement in the Origin Consolidated Financial Statements.

Non-IFRS financial measures

Non-IFRS financial measures are defined as financial measures that are presented other than in accordance with all relevant Accounting Standards. Non-IFRS financial measures are used internally by management to assess the performance of Origin's business, and to make decisions on allocation of resources. The Non-IFRS financial measures have been derived from Statutory financial measures included in the Origin Consolidated Financial Statements, and are provided in this report, along with the Statutory financial measures to enable further insight and a different perspective into the financial performance, including profit and loss and cash flow outcomes, of the Origin business.

The principal Non-IFRS profit and loss measure of Underlying Profit has been reconciled to Statutory Profit in Section 3.1. The key Non-IFRS financial measures included in this report are defined below.

Term	Meaning
AASB	Australian Accounting Standards Board
Adjusted Net Debt	Net Debt adjusted to remove fair value adjustments on hedged borrowings
Adjusted Underlying EBITDA	Origin Underlying EBITDA – Share of APLNG Underlying EBITDA + net cash from APLNG over the relevant 12 month period.
Average interest rate	Interest expense divided by Origin's average drawn debt during the period.
cps	Cents per share.
Free Cash Flow	Net cash from operating and investing activities (excluding major growth projects), less interest paid.
HY23 (Current period)	Six months ended 31 December 2022.
HY22 (Prior period)	Six months ended 31 December 2021.
Gearing	Adjusted Net Debt / (Adjusted Net Debt + Total equity)
Gross Profit	Revenue less cost of goods sold.
Items excluded from Underlying Profit (IEUP)	Items that do not align with the manner in which the Chief Executive Officer reviews the financial and operating performance of the business which are excluded from Underlying Profit. See Section 3.1 for details.
MRCPS	Mandatorily Redeemable Cumulative Preference Shares.
Non-cash fair value uplift	Reflects the impact of the accounting uplift in the asset base of APLNG which was recorded on creation of APLNG and subsequent share issues to Sinopec. This balance will be depreciated in APLNG's Income Statement on an ongoing basis and, therefore, a dilution adjustment is made to remove this depreciation.
Share of ITDA	Origin's share of equity accounted interest, tax, depreciation and amortisation.
Total Segment Revenue	Total revenue for the Energy Markets, Integrated Gas and Corporate segments, as disclosed in note A1 of the Origin Consolidated Financial Statements.
Underlying EPS	Underlying Profit/Loss divided by weighted average number of shares.
Underlying EBITDA	Underlying earnings before underlying interest, underlying tax, underlying depreciation and amortisation (EBITDA) as disclosed in note A7 of the Origin Consolidated Financial Statements.

Term	Meaning
Underlying share of ITDA	Share of interest, tax, depreciation and amortisation of equity accounted investees adjusted for items excluded from Underlying Profit.
Underlying Profit/Loss	Underlying net profit/loss after tax and non-controlling interests as disclosed in note A1 of the Origin Consolidated Financial Statements.
Underlying ROCE (Return on Capital Employed)	Calculated as Adjusted EBIT / Average Capital Employed. Average Capital Employed = Shareholders Equity + Origin Debt + Origin's Share of APLNG project finance - Non-cash fair value uplift + net derivative liabilities. The average is a simple average of opening and closing in any 12 month period. Adjusted EBIT = Origin Underlying EBIT and Origin's share of APLNG Underlying EBIT + Dilution Adjustment = Statutory Origin EBIT adjusted to remove the following items: a) Items excluded from underlying earnings; b) Origin's share of APLNG underlying interest and tax; and c) the depreciation of the Non-cash fair value uplift adjustment. In contrast, for remuneration purposes Origin's statutory EBIT is adjusted to remove Origin's share of APLNG statutory interest and tax (which is included in Origin's reported EBIT) and certain items excluded from underlying earnings. Gains and losses on disposals and impairments will only be excluded subject to Board discretion.

Non-financial terms

Term	Meaning
Boe	Barrel of oil equivalent
CES	Community Energy Services
C&I	Commercial and Industrial
DMO	Default Market Offer
ERP	Enterprise resource planning
GJ	Gigajoule = 10^9 joules
JCC	Japan Customs-cleared Crude (JCC) is the average price of crude oil imported to Japan. APLNG's long-term LNG sales contracts are priced based on the JCC index.
Joule	Primary measure of energy in the metric system.
Kansai	When referring to the off-taker under the LNG Sale and Purchase Agreement (SPA) with APLNG, means Kansai Electric Power Co. Inc.
kT	kilo tonnes = 1,000 tonnes
Mtpa	Million tonnes per annum
MW	Megawatt = 10^6 watts
MWh	Megawatt hour = 10^3 kilowatt hours
NEM	National Electricity Market
NPS	Net Promoter Score (NPS) is a measure of customers' propensity to recommend Origin to friends and family
PJ	Petajoule = 10^{15} joules
PJe	Petajoules equivalent = an energy measurement used to represent the equivalent energy in different products so the amount of energy contained in these products can be compared.
PPA	Power Purchase Agreement
Sinopec	When referring to the off-taker under the LNG Sale and Purchase Agreement (SPA) with APLNG, means China Petroleum & Chemical Corporation which has appointed its subsidiary Unipecc Asia Co. Ltd. to act on its behalf under the LNG SPA.

Term	Meaning
SME	Small Medium Enterprise
TRIFR	Total Recordable Incident Frequency Rate. Total Recordable Injury Frequency Rate (TRIFR) measures the number of company-wide work-related recordable injuries per million hours worked for employees and contractors
TW	Terawatt = 10^{12} watts
TWh	Terawatt hour = 10^9 kilowatt hours
Watt	A measure of power when a one ampere of current flows under one volt of pressure.

Interpretation

All comparable results reflect a comparison between the current period and the prior period, unless otherwise stated.

A reference to APLNG or Australia Pacific LNG is a reference to Australia Pacific LNG Pty Limited in which Origin holds a 27.5 per cent shareholding. A reference to Octopus Energy or Octopus is a reference to Octopus Energy Group Limited in which Origin holds a 20 per cent interest. Origin's shareholding in APLNG 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. Percentage changes on measures for which the numbers change from negative to positive, or vice versa, are labelled as not applicable.

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Auditor

EY

Where all good change starts

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performance can be found on our website:

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