To	Company Announcements Office	Facsimile	1300 135 638
Company	ASX Limited	Date	15 February 2024
From	Helen Hardy	Pages	75
Subject	**ORG Half Year Results for the period ended 31 December 2023**		

Please find attached the following documents relating to Origin Energy's Results for the half year ended 31 December 2023:

1. ASX Appendix 4D;
2. 2024 Half Year Report including Directors' Report, Operating Financial Review and the Interim Financial Statements.

Regards

Authorised by:
Helen Hardy
Company Secretary

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Appendix 4D

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

31 December 2023

				31 December 2023	31 December 2022
Total Group revenue ($m)	down	9%	to	7,996	8,760
Profit for the period attributable to members of the parent entity ($m)	up	149%	to	995	399
				31 December 2023	**30 June 2023**
Net tangible asset backing per ordinary security[1]	up	4%	to	$3.59	$3.45

Dividends		Amount per security	Franked amount per security at 30 per cent tax
Interim dividend determined subsequent to 31 December 2023		27.5 cents	27.5 cents
Previous corresponding period (31 December 2022)		16.5 cents	16.5 cents
Record date for determining entitlements to the dividend	6 March 2024		
Dividend payment date	28 March 2024		

1 The calculation of net tangible assets excludes lease related right-of-use assets of $446 million (June 2023: $464 million), categorised under Property, Plant & Equipment on balance sheet, as these are not considered tangible in nature.

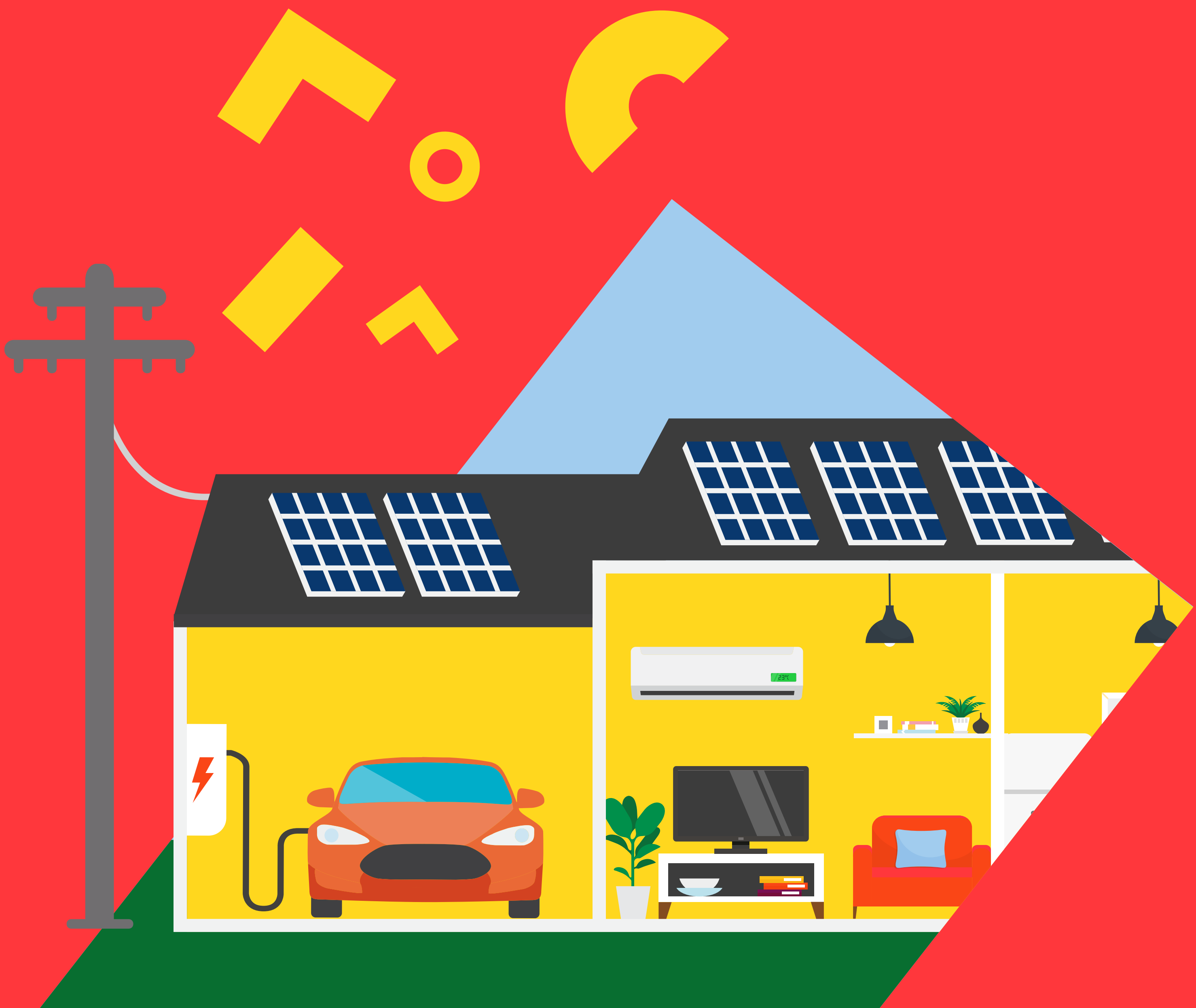
Brief explanation of any of the figures reported above or other item(s) of importance not previously released to the market.

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 2023.

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

2024
Half Year
Report



Contents

About Origin

ASX TOP 50

Leading integrated energy company

Listed on the Australian Securities Exchange in 2000

4.6 million customer accounts

Electricity, gas, LPG and broadband customers across Australia

>5,000 employees

Inclusivity in the workplace; leading parental support

Powering Australia

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

27.5% interest in Australia Pacific LNG

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

Transitioning our business to net zero

Growing our portfolio of renewables and cleaner energy

CO_2

Climate ambitions embedded in our strategy

Emissions intensity target consistent with 1.5°C pathway envelope[1]

Driving future energy innovation

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

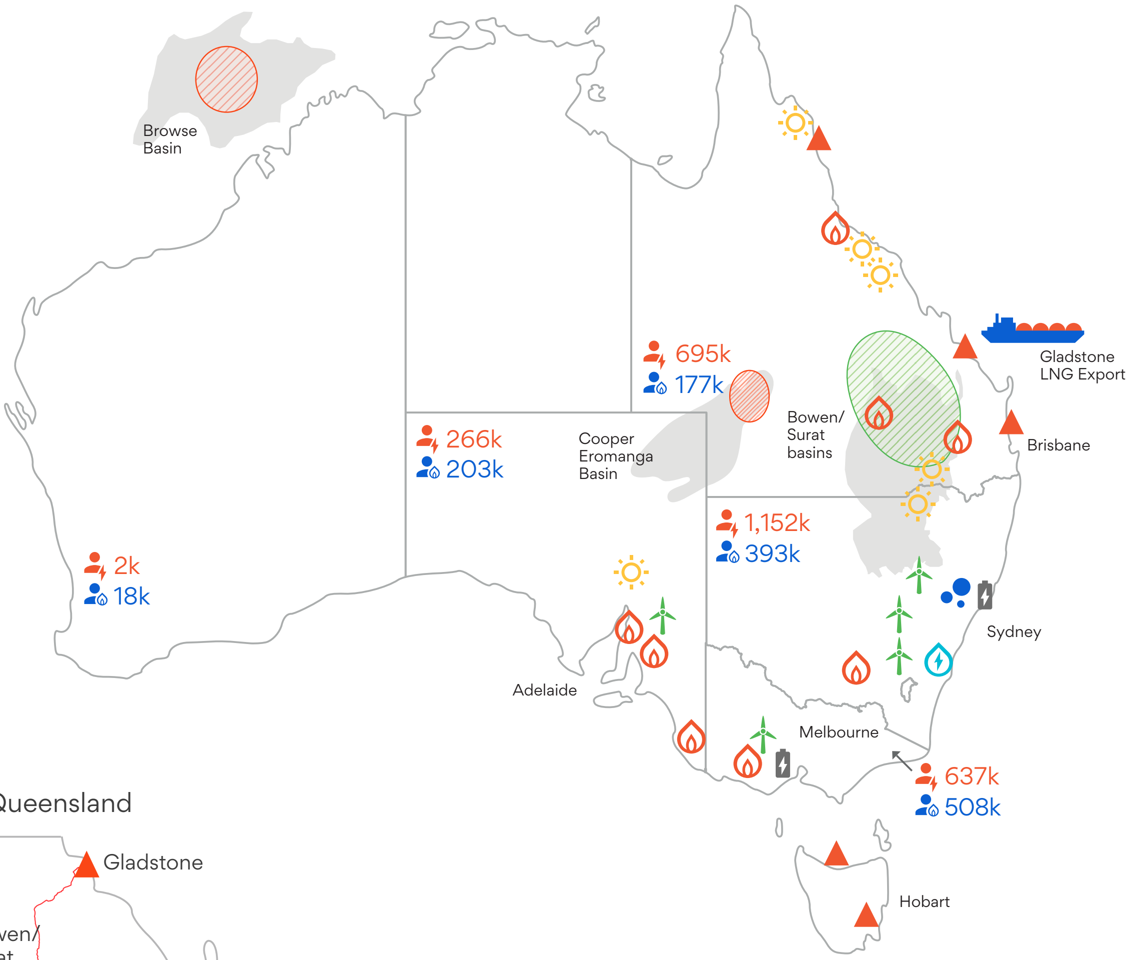
Supporting Australian communities

The Origin Energy Foundation has contributed more than $38 million over 13 years

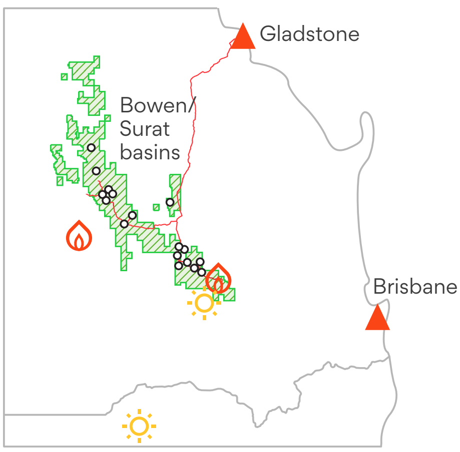
Where all good change starts

[1] Pursuant to the methodology set out in our Climate Transition Action Plan

Where We Operate



South East Queensland



Exploration & production acreage

- Origin/JV upstream acreage
- APLNG upstream acreage
- Production facility
- APLNG pipeline

Generation

- Gas
- Pumped hydro
- Solar (contracted)
- Wind (contracted)
- Coal
- Storage (under construction)

- LPG seaboard terminal

- Electricity customer accounts
- Natural gas customer accounts

Operating and Financial Review

For the half year ended 31 December 2023

This report forms part of the Directors' Report.

1 Highlights

Our purpose underpins everything we do: Getting energy right for our customers, communities and planet

Getting energy right for our customers

Our customers are at the heart of everything we do. Our focus is on delivering great customer experiences and striving to provide affordable, more sustainable and smarter energy solutions. In HY2024, we:

- Increased customer accounts by 56,000, driven by customer wins across our Electricity, Gas and Broadband businesses
- Increased our electric vehicles under management to around 600, up from around 400 at FY2023
- Continued to support residential and small business customers in financial distress, targeting $45 million in support this financial year
- Supported the domestic east coast gas market with the supply of gas through our APLNG business

Customers

67%

Customer Happiness Index, up from 65% at FY2023

Getting energy right for our communities

We aim to work responsibly and respectfully with our local communities and identify opportunities for Origin and our employees to make a positive difference. In HY2024:

- Direct and indirect spend with Aboriginal and Torres Strait Islander businesses was $10.6 million ($13 million at HY2023)
- We provided more than $270,000 to support eight local community initiatives in the first round of our Eraring Community Investment Fund
- Over $1.4 million was contributed to the community by the Origin Energy Foundation, in addition to 3,700 hours of employee volunteering
- We continued to engage with the wider Eraring community, including through hosting two Eraring Community Forum meetings

Communities

17%

regional procurement as a % of total procurement spend

Getting energy right for the planet

The energy transition is core to our strategy and key to delivering on our purpose. Our ambition is to lead the energy transition through cleaner energy and customer solutions. In HY2024, we:

- Made a final investment decision on the 300 MW Mortlake Battery, and commenced construction of the first stage 460 MW battery at Eraring
- Executed funding agreements with the Commonwealth and NSW Governments for the Hunter Valley Hydrogen Hub project
- Acquired a prospective 500 MW greenfield wind development property in NSW and partnered with BlueFloat Energy to apply for a feasibility licence for potential offshore wind in the Hunter offshore wind zone.
- Increased Origin Loop, our in-house Virtual Power Plant, to 1,174 MW across more than 366,000 connected assets, up from 815 MW at FY2023.

Planet

31 MW

residential and business solar installs over HY2024

Our people

We are a purpose-led and values-driven business, in which all our people are motivated to be their best every day. We promote safety, health and wellbeing, and foster diversity and an inclusive culture. In HY2024, we:

- Continued to focus on our *40:40 Vision* commitment to maintain gender balance of 40 per cent women in our leadership cohorts, with 44.8 per cent of women holding Senior Leadership positions[1]
- Maintained an employee engagement score of 7.7 (out of 10), which is above the sector average
- Continued to support our people at Eraring – 96% of eligible employees are actively engaged in career transition and support programs
- Were awarded GoodCompany's 'Best Workplace to Give Back'

People

3.7

TRIFR (rolling 12 months) compared to 3.8 at FY2023

[1] The three reporting levels below the CEO, including roles with base salaries exceeding approximately $200,000 per annum.

Context

The transition from fossil fuel-based energy production to renewable sources of energy is one of the greatest challenges society faces today. The Australian Federal Government has committed to increasing Australia's renewable electricity generation to 82% by 2030. There remains a significant amount of work to do if Australia is to meet this commitment and play its part in limiting the increase in the planet's temperature to 1.5°C over pre-industrialised levels. The energy transition represents a significant opportunity for Origin, our portfolio of businesses is well positioned to lead this transition in Australia, capture opportunities and create value for shareholders. The recent takeover proposal for all of the shares in Origin highlighted the strategic position the company holds in the domestic and global energy markets and the potential for Origin to create value through the energy transition.

Energy Markets, retail scale, flexible generation portfolio with energy transition growth opportunities

The retail business has delivered strong customer growth over the past three years as a leading multi-product retailer with brand, scale and a low-cost operating model providing customers with exceptional customer experiences. Through the adoption of the world class Kraken enterprise software, we are targeting further operating cost reductions in the future as well as continued improvement in customer service. The Origin Zero, Electric Vehicle Fleet, Broadband and Community Energy Services businesses have all delivered growth over the past 18 months and we see further growth opportunities for these businesses.

Our wholesale energy position consists of Australia's largest flexible gas fired peaking generation fleet and a strong gas supply portfolio with flexible transport contracts. With increasing renewable penetration in the energy system, this peaking generation fleet will play an increasingly important role firming the intermittent supply of renewable energy. The Australian electricity market is experiencing higher levels of intra-day volatility as more solar energy enters the energy system. In this environment, we expect the flexible peaking generation fleet to be a growing source of earnings.

The wholesale portfolio consists of growth opportunities in the form of a pipeline of value accretive brownfield battery investment opportunities that will play a key role in shifting energy from periods of excess supply and relatively low prices, to periods of supply constraint and relatively high prices. Construction is underway on the 460 MW two hour Eraring battery in NSW with an operational target date of the end of calendar 2025 and we have recently announced the commencement of the 300MW two hour Mortlake battery in Victoria with an operational target date of the end of calendar 2026.

Our virtual power plant (VPP), referred to as Origin Loop, has grown from 814 MW of connected assets to 1,174 MW in the past 6 months and we have an ambition of 2,000 MW of connected assets by FY2026. Orchestrating distributed energy assets through our VPP gives Origin greater flexibility in managing supply and demand, allowing us to work with residential and business customers to share savings and more efficiently meet their needs.

We remain in discussion with the NSW Government on the closure date for the Eraring Power Station.

Our investment and ownership strategy in wind and solar is subject to the level of demand from our customers and the economic returns available from investment in these projects. Our strategy is to develop construction ready projects suitable for third party investment. We continue to deliver on our Climate Transition Action Plan aim of growing renewables and storage capacity within our owned and contracted generation portfolio to 4 GW by 2030.

Octopus Energy, world class enterprise software and a rapidly growing global energy transition business

Octopus Energy is the owner of the world-class Kraken enterprise software and a major energy transition business. Octopus Energy continues its impressive growth trajectory and is now the number one electricity retailer and number two gas retailer in the UK market. It has grown its business by its relentless focus on customer excellence, project innovation and low cost, all enabled by the Kraken enterprise software. During 2023, Octopus Energy organically grew UK customer accounts by an impressive 600,000 accounts.

The global Kraken enterprise software business has grown to 51 million contracted accounts, with 19 million added in half year 2024. Octopus Energy is targeting 100 million accounts by 2027. Octopus Energy's international energy retail business is growing with operations in 10 countries and total customer accounts of over 900,000.

The services business is growing with renewable assets under management, heat pump sales and electric vehicle fleet size all experiencing significant growth over the past 12 months.

Origin recently announced it will increase its investment in Octopus Energy by 3 per cent to 23 per cent. The acquisition of the increased interest in Octopus Energy reflects Origin's confidence in its business, strategy, proprietary technology and team. Completion of the increased investment is subject to certain regulatory approvals.

APLNG, high quality resource reliably delivering critical gas supply and robust cash flows

APLNG has proven to be a high-quality resource reliably delivering critical gas supply to domestic and Asian markets and generating robust cash flows. Gas demand is expected to grow as energy producers move away from coal to renewables with gas playing a firming role. APLNG 's resource base has grown over time through field exploration and appraisal activity. A large contingent resource base exists near existing infrastructure providing the opportunity for low-cost tie in of new wells to further extend field life.

Strong balance sheet and evolving view on capital allocation preferences

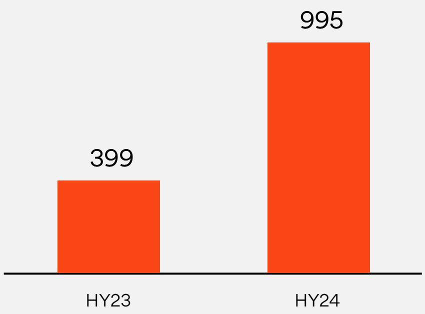
The company's balance sheet is in a strong position providing flexibility for targeted investment in the energy transition and distributions to shareholders. We will prioritise investment in batteries, Octopus Energy and retail growth initiatives for on balance sheet funding. We will be disciplined in our allocation of capital to projects and will only retain ownership of assets that meet strict investment hurdles and provide strategic value for our businesses.

A revised shareholder distribution policy will be announced in the second half FY2024.

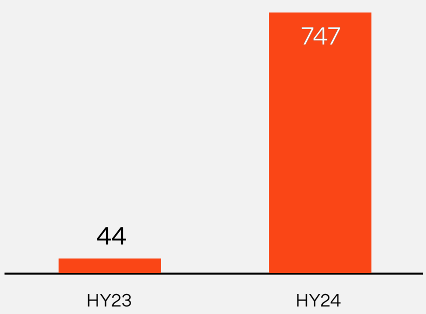
Your Board and management team remain focused on delivering further value for shareholders through the execution of our strategy.

Financial performance

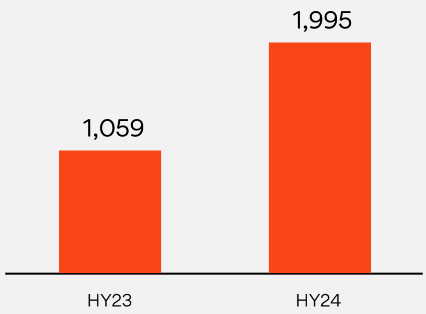
Statutory Profit ($m)



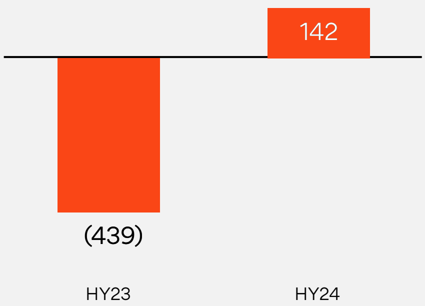
Underlying Profit ($m)



Underlying EBITDA



Adjusted Free Cash Flow ($m)



Adjusted Net Debt/Adjusted Underlying EBITDA

0.9x

Down from 1.2x at 30 June 2023

Interim Dividend

27.5 cps

100% franked

36.5cps total FY2023 dividend

Origin's Underlying profit increased to $747 million, with higher earnings from all three businesses.

Energy Markets' gross profit increased, reflecting the recovery of higher wholesale costs associated with the current and prior periods flowing into customer tariffs, and lower electricity procurement costs, driven primarily by lower coal costs, as deliveries improved and coal prices reduced. Earnings from the natural gas business increased slightly with business and retail customer tariffs repricing to reflect higher procurement costs, offset by the non-repeat of prior period trading gains and lower sales volumes. Our retail business performed strongly with increased customer numbers, and continued growth in customers adopting services such as Broadband and Electric Vehicles, with Origin Loop, our virtual power plant, growing to 1.2 GW under management.

APLNG continued to deliver strong cash flow, down on the prior period as global commodity prices moderated, with production slightly improved resulting from effective well and field optimisation activities. Origin's commodity hedging and trading activities registered a gain against a loss in the prior period.

Octopus Energy continued its strong customer growth trajectory and is now the number one electricity retailer and number two gas retailer in the UK, and the Kraken licensing business continues to expand globally. Origin announced the agreement to participate in the latest funding round and increase its interest to 23 percent, in total investing £280 million (~$530 million), subject to regulatory approvals.

Refer to Energy Markets Performance (see page 7) and Integrated Gas performance (see page 8) for further details.

Origin's Free Cash Flow increased with higher earnings, however this was impacted by Energy Markets working capital, which increased due to a rise in retail customer receivables reflecting higher bill sizes from tariff increases and lower collection performance with customer cost of living pressures and increased compliance measures, and a build-up of green certificate inventory. Growth capital expenditure and acquisitions were marginally higher in the period with spend on retail channel acquisitions, and storage and renewable projects.

Origin's capital structure remains strong with the Adjusted Net Debt/Adjusted Underlying EBITDA ratio of 0.9x, below the target range. Adjusted Net Debt rose in the period to $3,177 million.

The Board has determined to pay a fully franked interim dividend of 27.5 cents per share. The interim dividend will be paid on 28 March 2024 to shareholders registered as at 6 March 2024.

Energy Markets performance

Underlying EBITDA	Operating cash flow	Underlying ROCE[2]
$1,044M	**$470M**	**7.1.%**
Up $813M or 352% vs HY2023	Up $916M vs HY2023	Up from 0.0% in HY2023

Customer Happiness Index[3]	Origin Loop (VPP) connected assets	
67%	**1,174 MW**	**4,580k** Customer accounts
Up 2% from June 2023	Up from 815 MW as at June 2023	Up 56k vs June 2023

Energy Markets half-year earnings[4] increased $813 million to $1,044 million, primarily reflecting earnings recovery following a period of under recovery of wholesale costs in the electricity business. This resulted in a ROCE[2] of 7.1 per cent, up from 0.0 per cent[2] in the prior period. Operating cash flow also increased, up $916 million from the prior period.

Electricity Gross Profit increased by $911 million to $950 million, driven by the recovery of higher wholesale costs associated with the current and prior periods flowing into retail and business customer tariffs. Fuel costs decreased primarily due to lower coal prices. Approximately 70 per cent of expected coal volume requirement for FY2025 is contracted or hedged. The engagement with the NSW government on the potential closure of Eraring is continuing. Other electricity procurement costs have also reduced reflecting lower pool prices on an increased net short position, as well as lower market procurement costs.

Level of discounting in the electricity market has increased and heading back towards levels observed prior to the energy crisis. Origin has continued to widen the churn differential to the market.

Natural Gas Gross Profit increased by $10 million to $404 million, with higher wholesale prices flowing into customer tariffs, partly offset by non-repeat of JKM trading gains in the prior period. Our portfolio strength is underpinned by a portion of fixed priced[5] supply contracts and transport flexibility. The price review on a large existing gas supply contract with Beach Energy was concluded with a very pleasing outcome for our portfolio. Origin also executed a new three-year gas off-take agreement from Beach Energy's Enterprise field.

Cost to serve increased reflecting higher bad and doubtful debts due to cost of living pressures and additional compliance measures contributing to slower aged debt collection. Cost to serve in FY2024 is expected to increase reflecting a more challenging cost environment. We continue to pursue further improvements to our cost to serve advantage however it will take longer to mitigate the cost environment headwinds.

Customer accounts increased by 56,000, driven largely by wins across Electricity, Gas and Broadband. Our Customer Happiness Index[3] is 67 per cent, up 2 per cent from June 2023 and continues to improve with a January 2024 monthly score of 72 per cent.

Our Origin Zero business continues to grow new products, services and commercial models aimed at enabling and accelerating the decarbonisation journey for large business customers. The number of large customers engaging in non-commodity products increased to just under 6 per cent during the period and there are more than 600 EVs under management through a range of subscription and leasing services. There is now approximately 230 MW of flexible large business demand enrolled in our VPP which now has close to 1.2 GW assets connected.

We continue to execute our strategy and pursue value accretive growth opportunities, with construction of the first stage of the 460 MW Eraring battery commenced and land purchased in the New England Renewable Energy Zone for a prospective wind development. The construction of a 300 MW two-hour duration battery at Mortlake Power Station in Victoria has been approved and the feasibility study is underway for a 250 MW two-hour duration battery at Darling Downs Power Station in Queensland.

[2] 24-month rolling average. HY2023 Return on Capital Employed (ROCE) has been restated to exclude the impact of FY2022 $2.2 billion impairment of goodwill.
[3] Customer Happiness Index (CHI) is a measure of customer satisfaction and is measured as the average for the 12 months.
[4] Energy Markets segment now excludes Octopus Energy.
[5] Subject to CPI adjustments.

Integrated Gas performance

Underlying EBITDA	Cash distributions from APLNG	20.0%
$1,001M	**$648M**	Underlying ROCE[6]
Up $47m or 5% vs HY2023 Underlying EBIT up $119m	Down $135m or 17% vs HY2023	Up from 13.2% in HY2023

APLNG production (100%)	Average realised LNG price	Capex and opex[7]/GJ
342PJ	**US$11.8/ MMBTU**	**$3.9/GJ**
Up 3% vs HY2023	Down 22% vs HY2023 Down 20% in A$ terms at $17.1/GJ	Up $0.1/GJ vs HY2023

Integrated Gas' Underlying EBITDA increased by $47 million or 5 per cent to $1,001 million from the prior period, primarily due to hedging gains and higher production partially offset by lower commodity prices. APLNG's cash distributions to Origin for HY2024 amounted to $648 million.

APLNG production increased by 3 per cent in HY2024 reflecting strong field performance from the ongoing benefit of workover inventory backlog reductions and effective well and field optimisation. Seven spot LNG cargoes were delivered in HY2024 up from three cargoes in HY2023, reflecting the production recovery following the wet weather period in HY2023. Fewer maintenance disruptions and the ramp-up in both the Talinga Condabri North Pipeline and Orana South Loop Line in the second half of FY2023 improved gas processing capacity and operational flexibility.

Production was adversely impacted due to an unplanned turndown of approximately 9PJ following a LNG vessel power outage at the Curtis Island LNG facility in November 2023. Production successfully returned to pre-event levels by mid-December 2023.

APLNG continued to be a significant contributor to the east coast market . The average realised domestic gas price decreased by 28 per cent to $7.32/GJ, primarily reflecting lower market linked short term contract prices. The average realised domestic sale price remains below the international netback price.

Capital and operating expenditure increased $0.1/GJ from HY2023 to $3.9/GJ[7] reflecting increased well workover activity focused on reducing the wet weather inventory backlog from the prior period, higher operated well delivery activity, and higher non-operated development programs activities.

Other highlights across Integrated Gas during the period included:

- Cooper-Eromanga Basin – Origin executed an agreement to transfer its 75 per cent interest and operatorship of five permits back to Bridgeport.
- Hunter Valley Hydrogen Hub – Origin executed a $70 million grant funding agreement with the Commonwealth Government and a $45 million grant funding agreement with the NSW Government for the construction of the Hunter Valley Hydrogen Hub project.

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6 24-month rolling average.
7 Opex excludes purchases and reflects royalties at the breakeven oil price.

2 Guidance

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

Energy Markets

We estimate Energy Markets FY2024 Underlying EBITDA to be **$1,600 - $1,800 million**. The improved guidance range reflects:

- improved electricity gross profit driven by lower electricity procurement costs, reflecting lower net pool costs and growth in customer accounts; and
- improved gas gross profit following wholesale supply contract repricing.

The improved gross profit is partially offset by higher cost to serve, driven by increasing bad and doubtful debts and higher temporary workforce.

Compared to FY2023, we expect:

- electricity gross profit to increase due to regulated tariffs repricing, reflecting recovery of higher energy procurement costs in recent periods. Coal price caps are also expected to continue to 30 June 2024;
- gas gross profit to moderate on higher JKM linked supply costs; and
- cost to serve to be higher.

Energy Markets **FY2025 Underlying EBITDA is expected to be lower** compared to FY2024 driven by a reduction in electricity gross profit as regulated customer tariffs decline in line with wholesale costs, partially offset by lower cost to serve. This guidance assumes current forward energy prices are maintained and priced into customer tariffs.

Origin's share of Octopus Energy

Origin's share of Octopus Energy FY2024 EBITDA is expected to be a positive contribution of less than $100 million. We expect improved earnings from the UK retail business in the second half reflecting seasonality and an ongoing contribution from the Kraken licensing business as its grows. This is expected to be partially offset by no repeat of the recovery in margins from the lag in regulated tariffs reset in the second half of FY2023, increased investment in International Retail and Energy Services, the full year impact of Bulb acquisition accounting adjustments and rising renewable energy prices.

Integrated Gas

		FY23	FY2024 guidance
Integrated Gas - APLNG 100%			
Production	PJ	674	680 - 710
Capex and opex, excluding purchases[1]	A$b	2.6	2.8 - 3.0
Unit capex + opex, excluding purchases[1]	A$/GJ	3.9	3.9 - 4.4

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

- Production guidance of 680 - 710PJ, reflecting the ongoing benefit of workover execution and optimisation activities, offset by the unplanned turndown of wells after an LNG vessel lost power at Curtis Island
- Unit capex and opex[8] guidance of $3.9 - $4.4/GJ in FY2024, higher than FY2023 reflecting wet weather related catch-up of workovers and higher non-operated development, partially offset by lower cyclical maintenance
- Unit capex and opex[8] over FY2025 and FY2026 is expected to be lower at $3.6 - $4.1/GJ following delivery of production optimisation and cost of supply initiatives, completion of upstream cyclical maintenance program and expected lower power costs
- Cash distributions of $1.2 to $1.4 billion[9] net of Origin oil hedging. APLNG is expected to fully utilised its tax losses and begin paying tax in FY2024. Dividend franking is expected later in FY2024

		FY2024 guidance
LNG Trading Guidance[1]		
FY2024	A$m	60 - 90
FY2025 – FY2026	A$m	450 - 650

1 LNG trading result subject to market prices on unhedged volumes, operational performance and delivery risk of physical cargoes, and shipping and regasification costs. Based on market forward prices as at 5 February 2024.

See Section 4.3.2 for details of Integrated Gas oil hedging and LNG trading.

8 Opex excludes purchases and reflects royalties at the breakeven oil price
9 Assuming realised JCC oil price of US$84/bbl before hedging and an average AUD/USD rate of 0.66 and all APLNG debt serviceability tests are met.

3 Financial update

3.1 Reconciliation from Statutory to Underlying Profit[10]

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Statutory Profit/(Loss)	**995**	**399**	**596**	**149**
Items Excluded from Underlying Profit (post-tax)				n/a
Increase/(decrease) in fair value and foreign exchange movements	(184)	405	(589)	n/a
Oil and gas	*(147)*	*498*	*(645)*	*n/a*
Electricity	*(73)*	*(56)*	*(17)*	*30*
FX and interest rate	*-*	*-*	*-*	*n/a*
Other financial instruments	*15*	*(24)*	*39*	*n/a*
FX gain/(loss) on foreign-denominated financing	*21*	*(13)*	*34*	*n/a*
Impairment, disposals, business restructuring and other	432	(50)	482	n/a
Total Items Excluded from Underlying Profit (post-tax)	**248**	**355**	**(107)**	**(30)**
Underlying Profit	**747**	**44**	**703**	**n/a**

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 4.3.2 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 and foreign currency denominated transactions. 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:

	HY24 ($m)
Impairments	477
Business restructuring	(97)
Disposals	6
Other	46
Onerous contracts - LNG	*43*
Other provision	*3*
Impairment, disposals, business restructuring and other	**432**

- $477 million reversal of prior impairment in Origin's equity accounted investment in APLNG. The recent proposed scheme transaction provided an observable market price of the investment, which supported the full reversal of the prior impairment recorded;
- $97 million post-tax business restructuring costs including costs relating to the proposed acquisition of Origin ($50 million), and transformation costs relating to the stabilisation phase of the Kraken implementation project ($39 million);
- $6 million resulting from disposals, reflecting the post-tax gain on sale of LPG Pacific ($8 million), partly offset by the loss on disposal following the transfer of exploration permits in the Canning Basin to Buru Energy ($2 million); and
- $43 million non-cash benefit relating to the release of the LNG onerous contract provisions, reflecting the termination of the ENN LNG agreement, resulting in the release of the total provision.

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.

[10] Underlying profit and underlying EBITDA are non-statutory (non-IFRS) measures

3.2 Underlying Profit[10]

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Energy Markets	1,044	231	813	n/a
Share of Octopus Energy	(12)	(83)	71	(86)
Integrated Gas - Share of APLNG	944	1,193	(249)	(21)
Integrated Gas - Other	57	(239)	296	n/a
Corporate	(38)	(43)	5	(12)
Underlying EBITDA	**1,995**	**1,059**	**936**	**88**
Underlying depreciation and amortisation (D&A)	(254)	(260)	6	(2)
Underlying share of ITDA of equity accounted investees	(510)	(556)	46	(8)
Underlying EBIT	**1,231**	**243**	**988**	**n/a**
Underlying interest income	26	28	(2)	(7)
Underlying interest expense	(88)	(91)	3	(3)
Underlying profit before income tax and non-controlling interests	**1,169**	**180**	**989**	**n/a**
Underlying income tax expense	(422)	(134)	(288)	215
Non-controlling interests' share of Underlying Profit	-	(2)	2	(100)
Underlying Profit	**747**	**44**	**703**	**n/a**
Underlying EPS	**43.4cps**	**2.5cps**	**40.9cps**	**n/a**
Underlying ROCE - rolling 24 month	**12.1%**	**5.8%**[1]		**6.3%**

1 HY2023 Return on Capital Employed (ROCE) has been restated to exclude the impact of FY2022 $2.2 billion impairment of goodwill.

Refer to Sections 4.1, 4.2 and 4.3 respectively for Energy Markets, Octopus Energy and Integrated Gas analysis.

Corporate costs decreased by $5 million, primarily reflecting lower spend on IT and P&C projects, partially offset by increased employee costs.

Underlying share of ITDA decreased $46 million, driven by lower ITDA from APLNG ($70 million), reflecting lower tax expense from lower earnings ($77 million), lower net interest expense ($1 million), partially offset by higher depreciation and amortisation ($8 million); and increased ITDA from Origin's equity share of Octopus Energy ($24 million).

Underlying income tax expense increased $288 million, primarily reflecting increased earnings from Energy Markets and Integrated Gas - Other.

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

3.3 Cash flows

Operating cash flow

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Underlying EBITDA	1,995	1,059	936	88
Underlying equity accounted share of EBITDA (non-cash)	(932)	(1,111)	179	(16)
Other non-cash items in Underlying EBITDA	120	87	33	38
Underlying EBITDA adjusted for non cash items	1,183	35	1,148	n/a
Change in working capital	(791)	(757)	(34)	4
Energy Markets	*(625)*	*(649)*	*24*	*(4)*
Integrated Gas - excluding APLNG	*(102)*	*(91)*	*(11)*	*12*
Corporate	*(64)*	*(17)*	*(47)*	*276*
Futures exchange collateral	32	196	(164)	(84)
Other	(189)	(128)	(61)	48
Tax paid	(447)	(132)	(315)	239
Cash flow from operating activities	**(212)**	**(786)**	**574**	**(73)**

Operating cash flow is inclusive of cash flows from Integrated Gas hedging activities and the tax payments associated with unfranked dividends from APLNG, however excludes those dividends themselves. Dividends from APLNG are included in investing activities.

Operating cash flow increased $574 million, reflecting:

- higher earnings from Energy Markets ($813 million); and
- higher earnings from Integrated Gas - Other ($296 million) driven by gains in oil hedging and LNG trading and lower operating costs associated with the divestment of upstream exploration assets;

partly offset by:

- unfavourable change in working capital ($34 million), reflecting an outflow of $791 million in HY2024, compared with an outflow of $757 million in the prior period. Current year working capital cash outflow driven by:
  - Energy Markets working capital, increased by $625 million primarily due to
    - Retail ($260 million) due to higher bill sizes (~$100 million) from electricity tariff increases partly offset by lower volume of gas sales due to seasonality, ~$40 million to be collected from government relating to bill relief, as well as slower collections from residential and small business customers (~$90 million) due to system stabilisation, cost of living pressures and additional compliance measures, and large business customers (~$50 million) due to system stabilisation;
    - Wholesale (~$140 million) due to a reduction in payable balances (~$90 million) primarily due to lower energy prices and lower volumes due to gas seasonality, and increase in coal stockpile (~$30 million); and
    - Environmental schemes (~$200 million) due to a build up of green certificate inventory for CY24 surrender, and investment in CY25 surrender certificates at favourable prices.
  - Integrated Gas working capital, increased by $102 million during the period primarily reflecting the cash settlement timing of LNG cargo trading activities. This amount settled in January 2024.
- positive movement in futures collateral reflecting lower electricity initial margin requirements.
- higher tax paid, reflecting higher earnings and unfranked dividends received from APLNG.

Underlying equity accounted share of EBITDA (non-cash) reflects share of APLNG ($944 million) and share of Octopus ($12 million loss). Other non-cash items include provisions for bad and doubtful debts (+$110 million) and share-based remuneration (+$10 million).

Investing cash flow

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Capital expenditure	(302)	(269)	(33)	12
Government grants received	6	-	6	n/a
Distribution from APLNG	648	783	(135)	(17)
Interest received from other parties	21	24	(3)	(13)
Investments/acquisitions	(152)	(173)	21	(12)
Disposals	58	70	(12)	(17)
Cash flow from investing activities	**279**	**435**	**(156)**	**(36)**

HY2024 capital expenditure of $302 million was up 12 per cent including spend at Eraring on maintenance activities and progress on the Eraring Battery, and pre-FID solar and storage projects. Capital expenditure comprises:

- generation maintenance and sustaining capital ($149 million), primarily at Eraring ($93 million) due to the Unit 2 maintenance outage ($61 million), costs associated with the Ash Dam ($18 million) and maintenance activities, as well as Mortlake major inspection ($26 million);
- other sustaining capital ($32 million) including LPG ($17 million), and CES ($5 million);
- productivity/growth ($121 million) including Eraring Battery ($33 million), Northern Tablelands land purchase ($39 million), part of the New England Renewable Energy Zone, Origin Zero Electric Vehicles initiatives ($13 million) CES ($8 million), and Solar and other battery storage projects ($5 million); and
- there was no Origin exploration and appraisal spend following divestment of Origin's exploration and appraisal acreage.

Cash distributions from APLNG, comprising unfranked dividends, amounted to $648 million down from $783 million in HY2023.

Investments /acquisitions include retail aggregator acquisitions ($136 million), and disposals reflect the net proceeds from on sale of the LPG Pacific business.

Government grants represent amounts received from the Federal Government associated with the funding to develop the proposed Hunter Valley Hydrogen Hub (HVHH). The grant funding is conditional and contingent upon the Group making a project Final Investment Decision for the HVHH and complying with the reporting requirements and conditions of the grant agreement.

Financing cash flow

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Net proceeds/(repayment) of debt	73	421	(348)	(83)
Operator cash call movements	(1)	121	(122)	n/a
AEMO cash deposits	-	290	(290)	(100)
Interest paid	(78)	(78)	-	-
Payment of lease liabilities	(37)	(33)	(4)	12
Dividends paid	(345)	(291)	(54)	19
Total cash flow from financing activities	**(388)**	**430**	**(818)**	**n/a**
Effect of exchange rate changes on cash	-	1	(1)	(100)

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. No cash deposits were made in HY2024.

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 ($88 million) comprising investment in the Eraring battery ($33 million) and costs associated with the stabilisation phase of the Kraken implementation ($55 million) has been excluded from HY2024 Free Cash Flow.

Free Cash Flow has also been adjusted for:

- purchase of LNG cargo to settle an LNG trade, with settlement of the sale in January 2024 ($97 million)
- cash inflow from futures collateral ($32 million)

	Energy Markets		Share of Octopus Energy		Integrated Gas - Share of APLNG		Integrated Gas - Other		Corporate		Total	
($m)	**HY24**	**HY23**	**HY24**	**HY23**	**HY24**	**HY23**	**HY24**	**HY23**	**HY24**	**HY23**	**HY24**	**HY23**
Underlying EBITDA	1,044	231	(12)	(83)	944	1,193	57	(239)	(38)	(43)	1,995	1,059
Non-cash items	106	55	12	83	(944)	(1,193)	2	23	12	8	(812)	(1,024)
Change in working capital	(625)	(649)	-	-	-	-	(102)	(91)	(64)	(17)	(791)	(757)
Futures exchange collateral	32	11	-	-	-	-	-	185	-	-	32	196
Other	(87)	(93)	-	-	-	-	(32)	(17)	(70)	(18)	(189)	(128)
Tax paid	-	-	-	-	-	-	-	-	(447)	(132)	(447)	(132)
Operating cash flow	**470**	**(445)**	**-**	**-**	**-**	**-**	**(75)**	**(139)**	**(607)**	**(202)**	**(212)**	**(786)**
Capital expenditure	(296)	(256)	-	-	-	-	(6)	(11)	-	(2)	(302)	(269)
Government grants received	-	-	-	-	-	-	6	-	-	-	6	-
Cash distribution from APLNG	-	-	-	-	-	-	648	783	-	-	648	783
(Acquisitions)/disposals	(94)	(9)	-	(163)	-	-	-	69	-	-	(94)	(103)
Interest received	-	-	-	-	-	-	-	-	21	24	21	24
Investing cash flow	**(390)**	**(265)**	**-**	**(163)**	**-**	**-**	**648**	**841**	**21**	**22**	**279**	**435**
Interest paid	-	-	-	-	-	-	-	-	(78)	(78)	(78)	(78)
Free Cash Flow	**80**	**(710)**	**-**	**(163)**	**-**	**-**	**573**	**702**	**(664)**	**(258)**	**(11)**	**(429)**
Major growth spend	88	23	-	163	-	-	-	-	-	-	88	186
LNG cargo	-	-	-	-	-	-	97	-	-	-	97	-
Futures exchange collateral	(32)	(11)	-	-	-	-	-	(185)	-	-	(32)	(196)
Adjusted Free Cash Flow	**136**	**(698)**	**-**	**-**	**-**	**-**	**670**	**517**	**(664)**	**(258)**	**142**	**(439)**

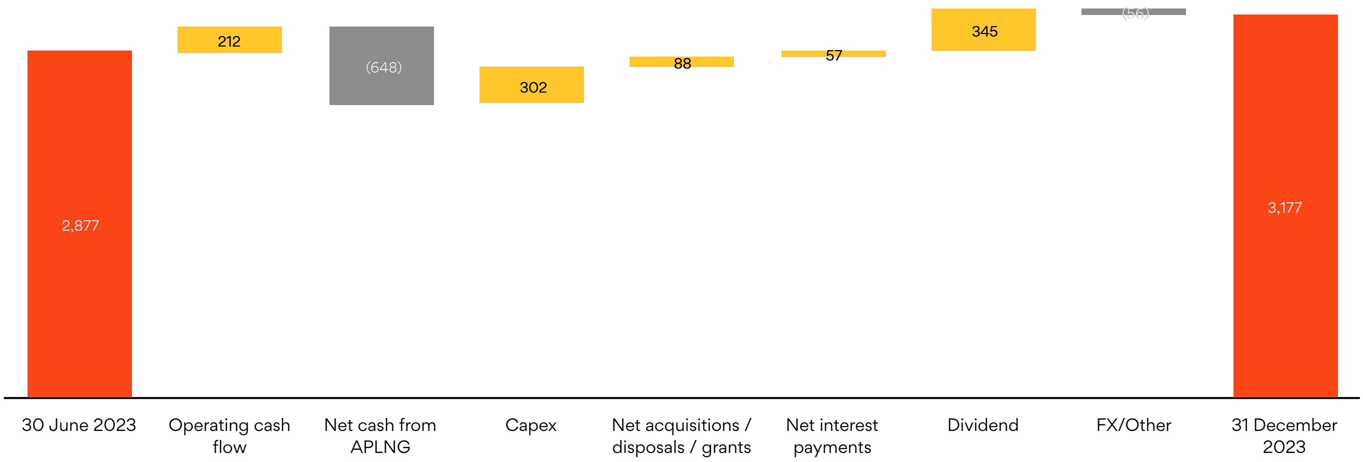
3.4 Capital management

During HY2024, the following capital management initiatives were completed:

- Repaid US$85 million (A$127 million) US Private Placement notes.

Adjusted Net Debt

Movement in Adjusted Net Debt ($m)



Adjusted Net Debt increased $300 million, primarily driven by operating cash outflow, reflecting higher working capital in Energy Markets, capital expenditure associated with generation maintenance and investment in storage and renewable projects; and dividends paid to shareholders. These movements were partially offset by APLNG cash distributions.

Origin aims to maintain an Adjusted Net Debt/Adjusted Underlying EBITDA ratio of 2.0-3.0x and a gearing[11] target of 20 per cent to 30 per cent. As at 31 December 2023 these ratios were 0.9x and 26 per cent respectively. The Adjusted Underlying EBITDA is measured on a rolling 12 months basis.

We expect the Adjusted Net Debt/Adjusted Underlying EBITDA to increase and return to the lower end of the target range of 2.0-3.0x with planned capital investment.

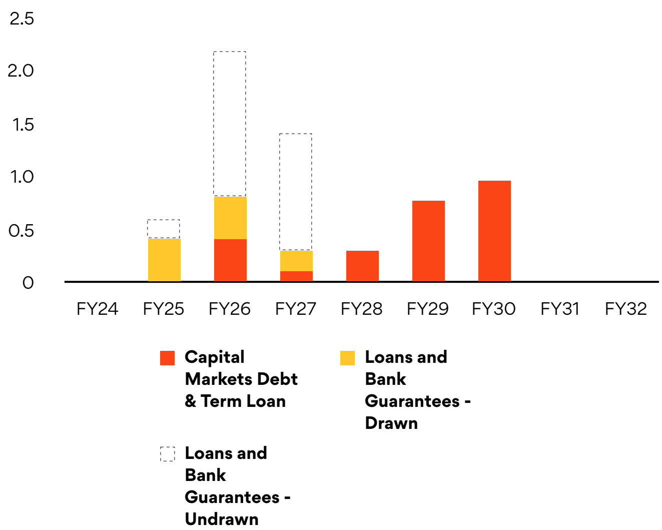
Our long-term credit profile is Baa2 (stable) from Moody's.

Debt portfolio management

Origin's debt average term to maturity decreased from 3.6 years at 30 June 2023 to 3.1 years at 31 December 2023, with limited near-term maturities. The rolling 12-month average interest rate on drawn debt increased from 5.0 per cent in FY2023 to 5.2 per cent in HY2024. At 31 December 2023 Origin held 26% of drawn debt at floating interest rates.

As at 31 December 2023, Origin held $0.1 billion[12] of cash and $2.5 billion in committed undrawn debt facilities. This liquidity position of $2.6 billion is held to meet near-term debt and lease liability payment obligations of $0.1 billion and to maintain a sufficient liquidity buffer.

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



[11] Gearing is Adjusted Net Debt divided by Adjusted Net Debt plus Equity.
[12] Excludes $61 million cash held on behalf of APLNG as upstream operator.

APLNG funding

APLNG partially 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 2023 was US$4,619 million (A$6,754 million), net of unamortised debt fees of US$33 million (A$48 million). APLNG's average interest rate associated with its project finance debt portfolio for HY2024 was 4.5 per cent.

Gearing[13] in APLNG was 20 per cent as of 31 December 2023, in line with 20 per cent at 30 June 2023.

APLNG project finance debt amortisation profile

Closing balance as at 30 June (US$m)	2024	2025	2026	2027	2028	2029	2030
Bank loan (variable)	1,153	871	587	265	-	-	-
US Exim	1,247	965	679	382	162	-	-
USPP	1,940	1,887	1,787	1,690	1,437	930	297
Total	**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 27.5 cents per share. The interim dividend will be paid on 28 March 2024 to shareholders registered as at 6 March 2024.

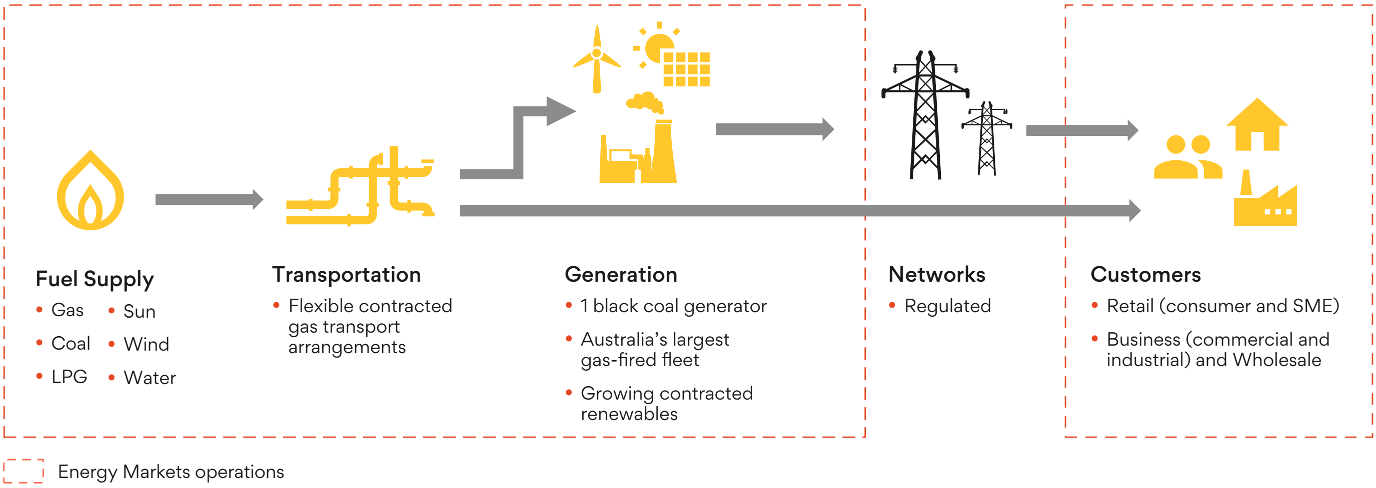
The determined dividend reflects the strong earnings outlook for all three businesses, combined with a strong balance sheet. Origin will seek to deliver sustainable shareholder returns through the business cycle, and expects to announce a revised shareholder distribution and capital allocation policy prior to the full year results. We expect shareholder distributions to take the form of fully franked dividends for the foreseeable future.

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

[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



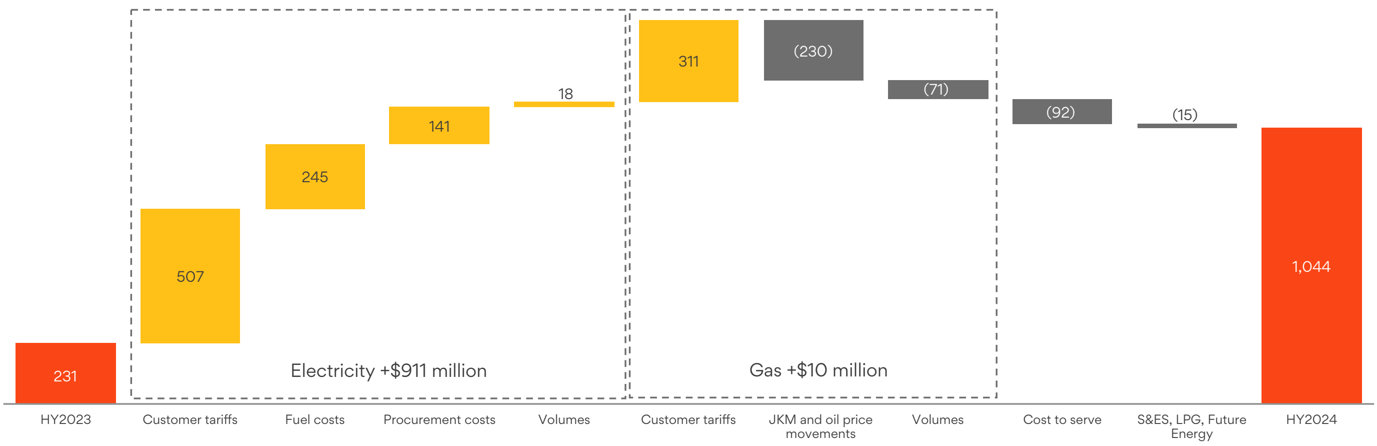
Origin's Energy Markets business comprises one of Australia's largest energy retail businesses by customer accounts, Australia's largest fleet of gas-fired peaking power stations supported by a substantial contracted fuel position, a growing supply of contracted renewable energy and Australia's largest 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. Origin's share of Octopus Energy EBITDA is now a separate segment - refer to section 4.2.

4.1.1 Financial summary

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Electricity Gross Profit	950	39	911	2,353
Natural Gas Gross Profit	404	393	10	3
Electricity and Natural Gas cost to serve	(358)	(266)	(92)	35
LPG EBITDA	44	62	(18)	(28)
Solar and Energy Services EBITDA	29	25	4	15
Future Energy EBITDA	(24)	(22)	(2)	7
Underlying EBITDA	**1,044**	**231**	**813**	**352**
Underlying EBIT	**798**	**(19)**	**817**	**n/m**

Movements in Underlying EBITDA ($m)



4.1.2 Electricity

Volume summary

Volumes sold (TWh)	HY24			HY23			Change (TWh)	Change (%)
	Retail	Business	Total	Retail	Business	Total		
New South Wales[1]	3.7	3.9	7.6	3.7	4.0	7.7	(0.1)	(1.1)
Queensland	2.2	1.9	4.1	1.9	2.3	4.2	(0.1)	(1.8)
Victoria	1.6	2.6	4.2	1.6	2.6	4.1	0.1	2.4
South Australia	0.7	1.4	2.1	0.7	1.4	2.1	(0.0)	(0.0)
Total volumes sold	**8.1**	**9.9**	**18.0**	**7.8**	**10.3**	**18.1**	**(0.1)**	**(0.4)**

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

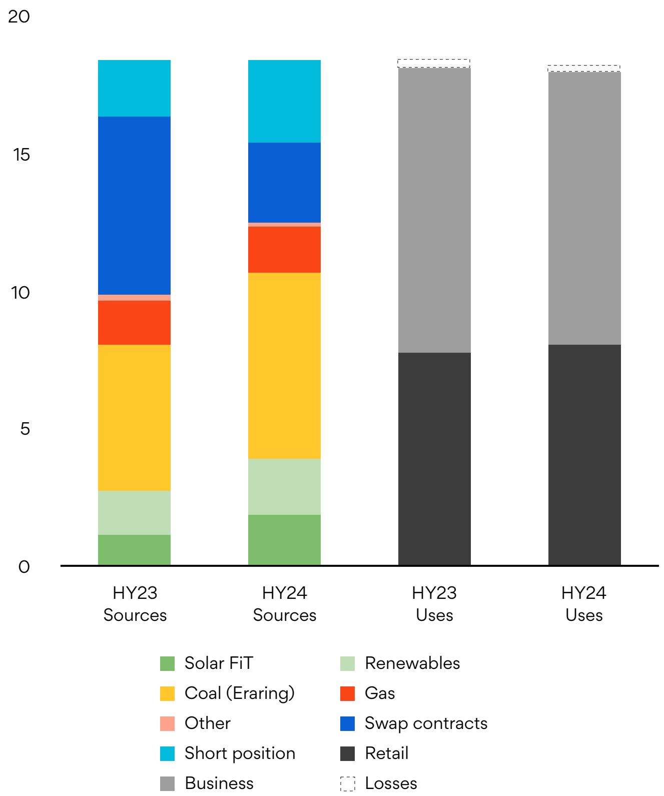
Gross Profit summary

	HY24		HY23		Change (%)	Change ($/MWh)
	$m	$/MWh	$m	$/MWh		
Revenue	**4,448**	**246.8**	**3,794**	**209.7**	**17.2**	**37.0**
Retail (residential/SME)	2,836	348.7	2,167	276.4	30.9	72.3
Business	1,612	162.9	1,628	158.8	(1.0)	4.2
Cost of goods sold	**(3,498)**	**(194.1)**	**(3,756)**	**(207.6)**	**6.9**	**13.5**
Network costs	(1,688)	(93.6)	(1,548)	(85.6)	(9.0)	(8.0)
Energy procurement costs	(1,810)	(100.4)	(2,207)	(122.0)	18.0	21.6
Gross Profit	**950**	**52.7**	**39**	**2.1**	**2,352.7**	**50.6**
Gross margin %	21.4%		1.0%		1,992.3	

Electricity Gross Profit increased by $911 million to $950 million:

- +$507 million primarily relating to higher wholesale prices flowing into retail and business customer tariffs, reflecting the recovery of higher costs associated with the current and prior periods;
- +$245 million due to lower generation fuel costs. Unit fuel costs decreased from $106.2/MWh to $71.4/MWh. Eraring generation output was higher (+1.4 TWh) with improved coal deliveries. Origin has sought to diversify its coal supply chain and now has a greater proportion of coal being delivered by rail. Coal price was lower following the introduction of the coal price cap implemented in December 2022, which included compensation from the NSW government for prior coal contracts struck above $125/tonne for coal delivered after 22 December 2022, and a cap on new contracts for deliveries until 30 June 2024. Gas procurement cost increased from supply contracts repricing and higher JKM linked supply costs;
- +$141 million due to lower other electricity procurement costs, largely reflecting lower net pool costs on an increased net short position which saw unit pool costs decrease from $136.8/MWh to $45.6/MWh, and lower market contracts costs due to lower swap prices and increased Eraring volumes leading to a lower volume of swap purchases. This was partially offset by increased capacity hedge contract costs as more cap contracts were purchased to manage the risk of volatile spot prices, and higher solar feed-in tariff reflecting a competitive market for solar customers;
- Volumes sold decreased 0.1 TWh, reflecting a 0.4 TWh decrease in business volumes, partly offset by a 0.3 TWh increase in retail volumes, with a +$18 million impact to Gross Profit. Lower business volumes were driven by net customer losses, and higher retail volumes were due to warmer weather and higher customer numbers, partly offset by lower usage due to solar uptake and energy efficiency.

Sources and uses of electricity (TWh)



Owned and contracted generation output (10.4 TWh) increased by 21 percent on HY2023, primarily driven by higher Eraring generation output. Generation from renewable PPAs increased 0.4 TWh primarily due to higher Stockyard Hill volumes received in HY2024 compared to HY2023, when it was ramping up production. Refer to Electricity Supply table below.

Wholesale energy costs

	HY24			HY23		
	$m	TWh	$/MWh	$m	TWh	$/MWh
Fuel cost[1]	605	8.5	71.4	749	7.1	106.2
Generation operating costs	155	8.5	18.3	129	7.1	18.3
Owned generation[1]	759	8.5	89.7	878	7.1	124.5
Net pool costs[2]	138	3.0	45.6	268	2.0	136.8
Bundled renewable PPA costs[3]	169	2.0	85.8	131	1.6	82.1
Market contracts[3]	165	2.9	56.8	492	6.6	75.1
Solar feed-in tariff	148	1.9	78.8	81	1.2	67.2
Capacity hedge contracts	174			92		
Green schemes (excl. PPAs)	235			242		
Other	22			24		
Energy procurement costs	**1,810**	**18.2**[4]	**99.3**	**2,207**	**18.4**[4]	**120.3**

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 0.2 TWh (HY2023: 0.3 TWh).

Electricity supply

			HY24			HY23			Change		
	Nameplate capacity (MW)	Type[1]	Output (GWh)	Pool revenue ($m)	Pool revenue ($/MWh)	Output (GWh)	Pool revenue ($m)	Pool revenue ($/MWh)	Output (GWh)	Pool revenue ($m)	Pool revenue ($/MWh)
Eraring	2,922										
Units 1 - 4	2,880	Black Coal	6,772	564	83	5,345	1,109	207	1,427	(544)	(124)
Gas Turbine	42	OCGT	-	-	-	-	-	-	-	-	-
Darling Downs	644	CCGT	703	91	130	596	193	324	107	(102)	(194)
Osborne[2]	180	CCGT	96	21	221	229	78	341	(132)	(57)	(120)
Uranquinty	692	OCGT	175	34	192	40	18	448	135	16	(256)
Mortlake	584	OCGT	139	20	143	307	97	317	(168)	(77)	(174)
Mount Stuart	423	OCGT	5	2	459	3	4	1,467	2	(2)	(1,008)
Quarantine	234	OCGT	68	15	217	134	39	291	(66)	(24)	(74)
Ladbroke Grove	80	OCGT	26	8	297	34	12	363	(8)	(5)	(66)
Roma	80	OCGT	2	0	271	9	6	660	(7)	(6)	(389)
Shoalhaven	240	Pumped Hydro	30	5	177	135	36	265	(105)	(30)	(88)
Internal generation	**6,079**		**8,017**	**761**	**95**	**6,832**	**1,592**	**233**	**1,184**	**(831)**	**(138)**
Pelican Point	240	CCGT	449			220			229		
Renewable PPAs	1,515[3]	Solar / Wind	1,971			1,593			378		
Owned and contracted generation	**7,834**		**10,437**			**8,646**			**1,791**		

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 received 50 per cent of its production output during HY2023, then 100 per cent from 1 January 2023.

4.1.3 Natural Gas

Volume summary

	HY24			HY23			Change	Change
Volume sold (PJ)	Retail	Business	Total	Retail	Business	Total	(PJ)	(%)
New South Wales[1]	5.6	12.8	18.3	6.9	12.2	19.0	(0.7)	(4)
Queensland	1.5	32.8	34.3	1.7	39.4	41.2	(6.9)	(17)
Victoria	10.9	19.1	30.0	14.8	23.2	37.9	(7.9)	(21)
South Australia[2]	2.7	3.6	6.3	3.2	7.1	10.3	(4.0)	(39)
External volumes sold	**20.7**	**68.2**	**88.9**	**26.6**	**81.8**	**108.4**	**(19.5)**	**(18)**
Internal sales (generation)			16.4			15.2	1.1	7
Total volumes sold			**105.2**			**123.7**	**(18.4)**	**(15)**

1 Australian Capital Territory customers are included in New South Wales.
2 Northern Territory and Western Australia customers are included in South Australia.

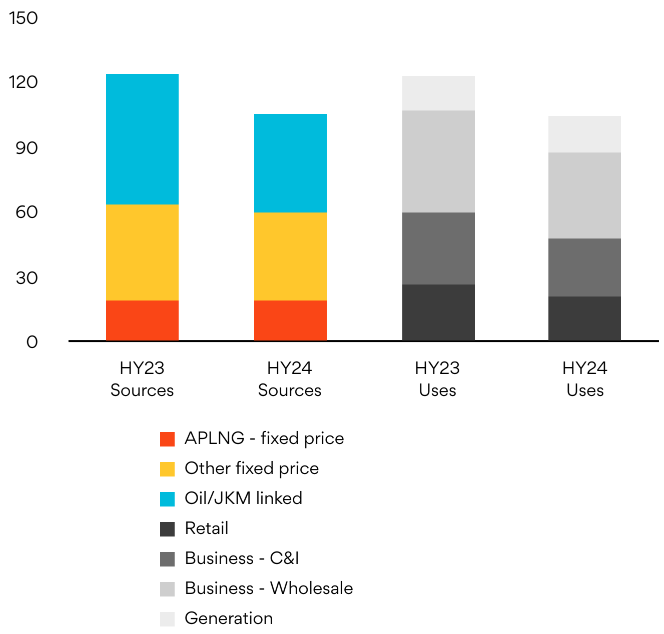
Gross Profit summary

	HY24		HY23		Change	Change
	$m	$/GJ	$m	$/GJ	(%)	($/GJ)
Revenue	**1,806**	**20.3**	**1,899**	**17.5**	**(5)**	**2.8**
Retail (residential/SME)	756	36.6	746	28.0	1	8.6
Business	1,050	15.4	1,153	14.1	(9)	1.3
Cost of goods sold	**(1,403)**	**(15.8)**	**(1,506)**	**(13.9)**	**7**	**(1.9)**
Network costs	(409)	(4.6)	(413)	(3.8)	1	(0.8)
Energy procurement costs	(993)	(11.2)	(1,093)	(10.1)	9	(1.1)
Gross Profit	**404**	**4.5**	**393**	**3.6**	**3**	**0.9**
Gross margin %	22.3%		20.7%		8	

Natural Gas Gross Profit increased $10 million to $404 million driven by a $0.9/GJ increase in gross profit margin:

- +$311 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 periods;
- -$230 million due to non-repeat of trading gains achieved in the prior period reflecting JKM and oil price movements as well as the timing of JKM hedge execution. Revenue increased by $15 million due to higher price movements on JKM and oil linked sales, while procurement costs increased by $245 million as the majority of the JKM exposure was hedged at higher prices. 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
- 19.5 PJ decrease in external sales volumes (-$71 million) mainly due to warmer weather and lower short-term trading sales.

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

	HY24	HY23	Change ($)	Change (%)
Cost to maintain ($ per average customer)[1]	(79)	(56)	(24)	42
Cost to acquire/retain ($ per average customer)[1]	(21)	(18)	(3)	15
Electricity and Natural Gas cost to serve ($ per average customer)[1]	**(100)**	**(74)**	**(26)**	**35**
Maintenance costs ($m)	(283)	(200)	(83)	42
Acquisition and retention costs ($m)[2]	(75)	(66)	(9)	14
Electricity and Natural Gas cost to serve ($m)	**(358)**	**(266)**	**(92)**	**35**

1 Represents cost to serve per average customer account, excluding CES accounts.
2 Customer wins (HY2024: 239,000; HY2023: 265,000) and retains (HY2024: 549,000; HY2023: 442,000).

	HY24 ($m)	HY23 ($m)	Change ($)	Change (%)
Labour	(90)	(76)	(14)	18
Bad and doubtful debts	(106)	(46)	(60)	132
Other variable costs	(76)	(61)	(15)	25
Retail and Business	**(272)**	**(182)**	**(90)**	**50**
Wholesale	(30)	(33)	2	(7)
Corporate services and IT	(56)	(51)	(4)	8
Electricity and Natural Gas cost to serve	**(358)**	**(266)**	**(92)**	**35**

Electricity and Natural Gas cost to serve up $92 million, primarily driven by an increase in bad and doubtful debt provision ($60 million) due to cost of living pressures and additional compliance measures contributing to slower aged debt collection. Post the migration of all mass market electricity and natural gas customers to the Kraken enterprise software in early May 2023, we were focused on stabilisation in the half year and supporting customers through a period of rising tariffs. This has increased short term Retail labour costs with a temporarily higher workforce.

With the cost headwinds expected to continue, we expect to see a higher cost to serve in FY2024. We continue to pursue further improvements to our cost to serve advantage however it will take longer to mitigate the cost environment headwinds.

Bad debt expense as a percentage of total Electricity and Natural Gas revenue increased to 1.69 from 0.80 in HY2023.

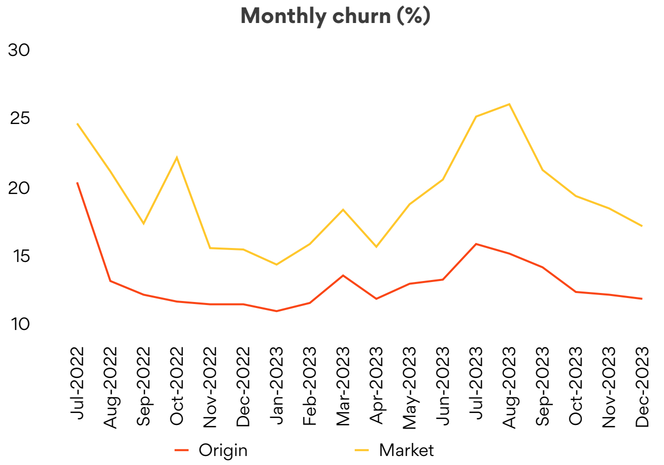
Customer accounts

Customer accounts ('000) as at	**31 December 2023**	**30 June 2023**	**Change**
Electricity	**2,752**	**2,742**	**10**
New South Wales[1]	1,152	1,157	(5)
Queensland	695	687	8
Victoria	637	634	3
South Australia[2]	268	264	4
Natural Gas	**1,298**	**1,282**	**17**
New South Wales[1]	393	386	7
Queensland	177	176	2
Victoria	508	501	7
South Australia[2]	220	220	1
Total electricity and natural gas	**4,051**[3]	**4,024**[3]	**27**
Rolling average customer accounts	4,037	4,008	29
Broadband	124	96	28
LPG	363	368	(6)
Other[4]	43	37	6
Total customer accounts	**4,580**	**4,525**	**56**

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 457,000 Community Energy Service customer accounts (HY2023: 413,000).
4 Relates to Origin Home Assist customers.

Our churn differential advantage to the market is increasing, with Origin churn of 13.4 per cent (HY2024 average) lower by 7.8 per cent against a market churn of 21.2 per cent.

Period end customer accounts increased by 56,000 overall. Electricity customer accounts increased by 10,000, reflecting gains across all states except New South Wales. Natural Gas customer accounts increased by 17,000, driven by gains across all states. Broadband customer accounts increased by 28,000 to a total of 124,000 and LPG customer accounts decreased by 6,000 due to the sale of the LPG Pacific business.



4.1.5 LPG

	HY24	HY23[1]	Change	Change (%)
Volumes (kT)	**180**	**199**	**(19)**	**(10)**
Revenue and Other Income ($m)	330	400	(70)	(18)
Cost of goods sold ($m)	(221)	(271)	49	(18)
Gross Profit ($m)	**109**	**129**	**(21)**	**(16)**
Operating costs ($m)	(65)	(68)	3	(5)
Underlying EBITDA ($m)	**44**	**62**	**(18)**	**(28)**

1 HY23 includes $12 million reclassified between cost of goods sold and operating cost relating to supply ship leases.

Origin is one of Australia's largest LPG and propane suppliers, procuring and distributing LPG to residential and business locations across Australia. The sale of Origin's LPG business in the Pacific was completed during the September 2023 quarter, which included wholly-owned operations in Vanuatu, American Samoa, Samoa and Cook Islands, and joint-venture operations in Fiji, Papua New Guinea and the Solomon Islands.

Gross Profit was lower in HY2024 largely due to divestment of the Pacific business and lower volumes in the Australian business driven by mild weather and decline in demand across some industrial sectors. Operating costs were lower with inflationary impacts mitigated by cost optimisation initiatives and unrealised foreign exchange gains on shipping lease liabilities.

4.1.6 Solar and Energy Services

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Revenue and Other Income	**301**	**269**	**32**	**12**
CES Gross Profit	71	70	0	1
Solar Gross Profit	14	11	3	27
Gross Profit	**85**	**82**	**3**	**4**
Operating costs	(56)	(57)	1	(1)
Underlying EBITDA	**29**	**25**	**4**	**15**

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 $4 million. CES Gross Profit remained largely flat with higher customer accounts partly offset by lower average consumption due to weather and higher cost of energy as legacy contracts rolled off. Solar Gross Profit increased $3 million with lower residential sales at an improved margin. Broadband EBITDA reduced $3 million as we continue to invest, reaching 124,000 customer accounts.

4.1.7 Future Energy

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Gross margin and other income	**8**	**0**	**7**	**n/m**
Operating costs - Origin 360 EV	(8)	(5)	(4)	79
Operating costs - Other	(23)	(18)	(5)	29
Total operating costs	**(32)**	**(23)**	**(9)**	**39**
Underlying EBITDA	**(24)**	**(22)**	**(2)**	**7**
Net (investments) / disposals[1]	(2)	(2)	0	(0)

1 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.

Gross margin and other income increased $7 million reflecting the business growth including Origin 360 EV and returns on investments in future energy technology focused private equity funds.

Operating costs increased primarily due to 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 44 per cent, from 815 MW to 1,174 MW in the past 6 months. The load growth was primarily driven by additions to Origin's hot water orchestration program, which represents an attractive opportunity to lower wholesale electricity costs by moving hot water heating load from overnight to the middle of the day, while actively managing customer requirements to maintain hot water amenity. Spike, our behavioural demand response program that rewards customers for reducing energy usage during periods of peak market demand, grew to 140,000 customers as at 31 December 2023, with good customer engagement on our updated digital platform.

Origin continues to grow our connected home footprint with Loop-connected products including bundled solar and battery offers, a BYO (bring your own) battery offer to integrate with customers' existing assets, and a new EV optimised-charging tariff to be launched in the second half of FY2024.

Origin 360 EV

Origin 360 EV, our e-mobility business, provides a full suite of end-to-end solutions to both commercial and residential customers. We continue to accelerate our growth by scaling our Fleet, Subscription and Charging solutions.

4.2 Octopus Energy - Origin share

20 per cent Origin share	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Revenue - energy	1,911	1,430	481	34
Revenue - licensing[1]	20	13	7	50
Cost of sales	(1,857)	(1,480)	(377)	25
Gross Profit	**74**	**(37)**	**111**	**n/m**
Operating costs[1]	(86)	(46)	(40)	88
EBITDA	**(12)**	**(83)**	**71**	**(86)**
ITDA	(29)	(5)	(24)	526
NPAT	**(41)**	**(88)**	**47**	**(53)**

1 Licensing revenue and operating costs disclosed here includes fees for Octopus Energy customers using the platform. These are eliminated on consolidation in Octopus Energy's statutory financial reporting.

100 per cent Octopus customer accounts ('000) as at	31 December 2023	30 June 2023	Change
UK customer accounts	12,076	9,183	2,893
International customer accounts	920	474	446
Contracted Kraken platform customer accounts	50,977	32,158	18,819

Origin's share of Octopus EBITDA for the period was a loss of $12 million, an improvement of $71 million from a loss of $83 million in HY2023. The result primarily reflects a return to profitability of the UK retail business and higher EBITDA for the Kraken licensing business partly offset by negative EBITDA contributions from the International Retail and Services businesses as investment is made in scaling those businesses.

The higher earnings from the UK Retail business reflected an increase in customer accounts (including a full period of contribution from Bulb customers), the non-repeat of under-recovery of costs that occurred in HY2023 due to lag in tariffs in a time of rising wholesale costs (recovered in H2 FY2023); offset by ongoing accounting adjustments reflecting the acquisition of Bulb Energy, which are expected to continue until September 2024 and minor prior period adjustments.

The UK market typically experiences weather patterns that mean, all else equal, volume demand and consequently first half earnings are lower than second half earnings. Although this is not a driver of period on period performance, it is relevant when forecasting annual earnings.

On 1 December 2023, Octopus announced the completion of the acquisition of Shell Energy Retail in the UK and Germany, with migration of customer accounts expected to be completed in mid 2024. The transaction means Octopus Energy is now the UK's largest electricity retailer and second largest energy retailer, serving around 12 million customer accounts, a 31 per cent increase in the past 6 months. Pleasingly, organic growth has continued to be strong, with a net ~600,000 customers choosing to switch to Octopus Energy in 2023.

Octopus' market-leading Kraken enterprise software has continued to demonstrate its growing appeal as the preferred technology platform for energy and other utilities globally. With the licensing agreements with Tokyo Gas and UK water utility Severn Trent, approximately 51 million accounts are contracted to be on Kraken globally, positioning Octopus more than half-way to its target of 100 million customers on Kraken by 2027. The licensing business improved its contribution, reflecting more paying customers on the platform. Kraken earns recurring revenue from licencing the platform to utilities as well as one-off fees earned through the period of customer account migration. Recurring revenue will continue to grow as accounts are migrated onto the platform.

Investment in the international Retail business has continued, and there are now 920,000 customers across seven non-UK countries. In the period this business contributed a loss as Octopus scales up business operations.

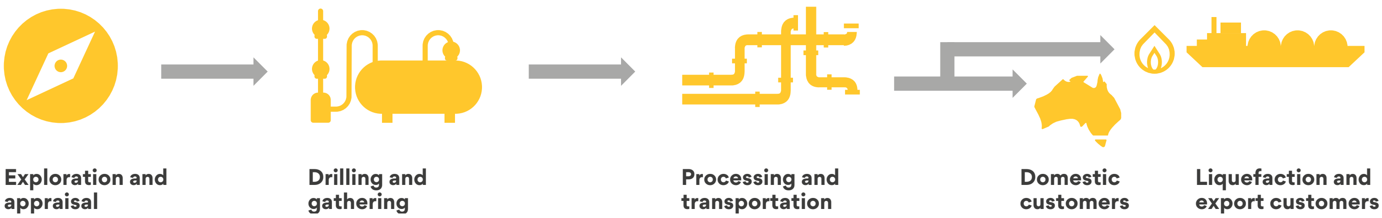
Octopus' Services businesses has also seen a period of investment which is expected to continue. These businesses manage 3.3 GW of generation, perform solar, meter and EV charger installations, manage 13.5k electric vehicles as a large leasing supplier in the UK, and commenced heat pump manufacturing with production of the first Cosy 6 heat pump units in December 2023. In total, the Services business contributed a loss in the period as it rapidly scales growth.

In December 2023, Origin advised it will invest £280 million (~$530 million) in Octopus as it participates in the latest funding round and increases its interest to 23 per cent, with the completion of the transaction subject to regulatory approvals. Origin's interest remains at 20 per cent for the first half of FY2024.

4.3 Integrated Gas

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Share of APLNG (see Section 4.3.1)	944	1,193	(249)	(21)
Integrated Gas - Other (see Section 4.3.2)	57	(239)	296	(124)
Underlying EBITDA	**1,001**	**954**	**47**	**5**
Underlying depreciation and amortisation	(9)	(11)	2	(18)
Underlying share of ITDA	(480)	(550)	70	(13)
Underlying EBIT	**512**	**393**	**119**	**30**

4.3.1 Share of APLNG



Origin holds a 27.5 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.[14] 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.

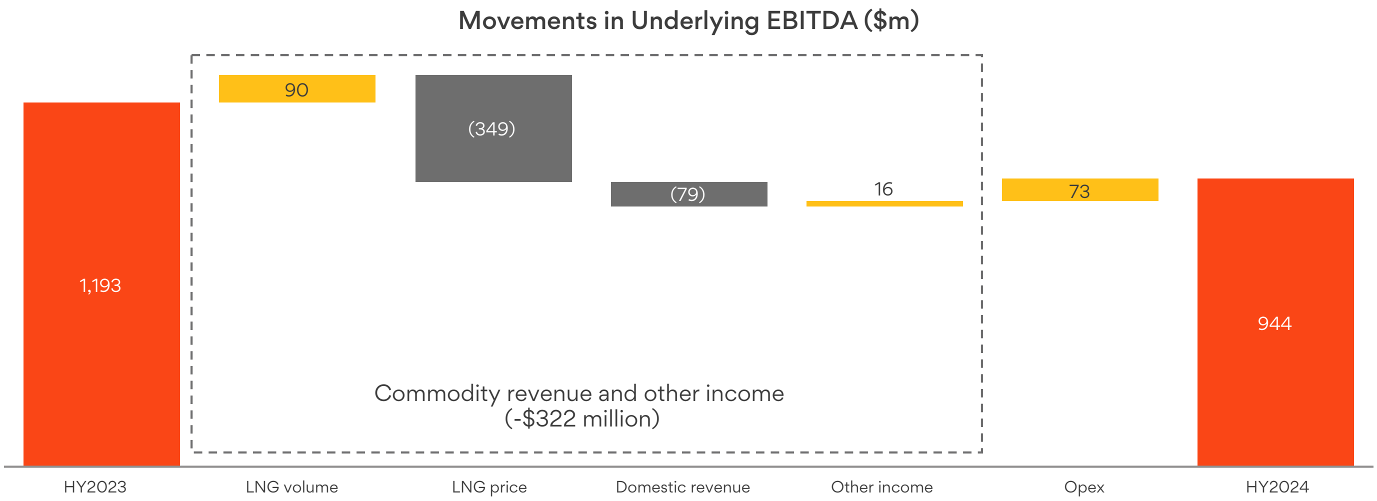
APLNG acquired various CSG interests from Tri-Star in 2002 that are subject to reversionary rights and an ongoing royalty interest in favour of Tri-Star. These interests represent approximately 19 per cent of APLNG's 2P CSG reserves and approximately 18 per cent of 3P (proved plus probable plus possible) CSG reserves (as at 30 June 2023). Refer to Section 5 for disclosure relating to Tri-Star litigation associated with these CSG interests.

Financial summary – APLNG

	HY24		HY23	
($m)	APLNG 100%	Origin share	APLNG 100%	Origin share
Commodity revenue and other income	4,782	1,315	5,953	1,637
Operating expenses	(1,349)	(371)	(1,614)	(444)
Underlying EBITDA	**3,433**	**944**	**4,339**	**1,193**
Depreciation and amortisation	(856)	(235)	(825)	(227)
Project finance interest expense	(177)	(49)	(164)	(45)
Other financing expense	(55)	(15)	(48)	(13)
Interest income	57	15	31	9
Income tax expense	(720)	(198)	(1,000)	(275)
Underlying ITDA[1]	**(1,751)**	**(481)**	**(2,006)**	**(551)**
Underlying Profit	**1,682**	**463**	**2,333**	**642**

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 HY2024. (HY2023: $1 million)

[14] As per EnergyQuest EnergyQuarterly, December 2023.



Origin's share of APLNG Underlying EBITDA decreased by $249 million primarily driven by lower realised oil prices.

- Commodity revenue and other income decreased by $322 million, primarily reflecting a lower realised oil price of US$84/bbl (A$128/bbl) compared to US$109/bbl (A$164/bbl) in HY2023 and lower domestic revenue from lower market linked short term contract prices.
- Operating expenses decreased by $73 million, reflecting lower gas purchases and lower royalties as a result of lower commodity revenue.

APLNG volume summary

	HY24		HY23	
	APLNG 100%	**Origin share[19]**	**APLNG 100%**	**Origin share[19]**
Volumes (PJ)				
Operated	273	75	262	72
Non-operated	70	19	71	20
Total production	**342**	**94**	**333**	**92**
Purchases/ Swaps	2	1	14	4
Changes in upstream gas inventory/other	(8)	(2)	(2)	(1)
Liquefaction/downstream inventory/other	(16)	(4)	(23)	(6)
Total sales	**321**	**88**	**322**	**89**
Commodity revenue ($m)				
Domestic gas	567	156	853	235
LNG	4,159	1,144	5,098	1,402
Sales mix (PJ)				
Domestic gas	77	21	84	23
LNG contract	217	60	227	62
LNG spot	26	7	11	3
Realised price				
Domestic gas (A$/GJ)	7.32		10.14	
LNG (A$/GJ)	17.08		21.42	
LNG (US$/mmbtu)	11.76		15.08	

APLNG total production increased 3 per cent or 9 PJ in HY2024, driven by the ongoing benefit of well workover execution focused on reducing the well workover inventory backlog and effective well and field optimisation. Fewer scheduled maintenance disruptions in HY2024 and the ramp-up in Talinga Condabri North Pipeline and Orana South Loop Line in the second half of FY2023 improved production capacity and provided increased gas processing flexibility.

Operated production was reduced by the unplanned turndown of approximately 9 PJ associated with the LNG vessel power outage at the APLNG Curtis Island LNG facility in November 2023. Production returned to pre-event levels by mid-December 2023, peaking at a record daily operated rate of 1,632 TJ/day.

APLNG sales volumes remain steady from HY2023, primarily driven by less gas purchases and reduced gas bank movement in downstream, partially offset by gas bank movement in upstream. Gas purchases in the form of time swap arrangements were utilised in HY2023 to manage gas sales volumes during major downstream maintenance activity. Gas bank movement in downstream is a reflection of timing of LNG cargoes.

The average realised LNG price decreased by 20 per cent to A$17.08/GJ, reflecting lower realised oil prices. The average realised domestic gas price decreased by 28 per cent to $7.32/GJ, reflecting lower market linked short-term contract prices.

Cash flow – APLNG 100%

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Underlying EBITDA	3,433	4,339	(906)	(21)
Non-cash items in underlying EBITDA	(4)	(131)	127	(97)
Change in working capital	(237)	(352)	115	(33)
Other	-	(6)	6	(100)
Operating cash flow	**3,192**	**3,850**	**(658)**	**(17)**
Capital expenditure	(320)	(214)	(106)	50
Interest received	53	28	25	89
Investing cash flow	**(267)**	**(186)**	**(81)**	**44**
Project finance interest and transaction costs	(177)	(144)	(33)	23
Repayment of project finance	(431)	(399)	(32)	8
Repayment of lease liabilities	(30)	(31)	1	(3)
Interest on lease liabilities	(14)	(13)	(1)	8
Ordinary dividends paid	(2,357)	(2,846)	489	(17)
Financing cash flow	**(3,009)**	**(3,433)**	**424**	**(12)**
Net (decrease)/increase in cash and cash equivalents	**(84)**	**231**	**(315)**	**(136)**
Effect of exchange rate changes on cash	6	65	(59)	(91)
Net (decrease)/increase in cash and cash equivalents including FX movement	**(78)**	**296**	**(374)**	**(126)**

APLNG paid dividends to shareholders of $2,357 million, down from $2,846 million in line with lower revenue. Cash distributions to Origin were $648 million in HY2024, in the form of unfranked ordinary dividends.

The change in working capital of $237 million is primarily due to higher debtors associated with timing of LNG cargo deliveries, higher prepayments, and reduction in contractor payables.

Increase in capital expenditure of $106 million reflects an increase in operated well delivery activity due to improved field access and an increase in non-operated development activity.

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 2023, APLNG held $1,642 million of cash, down from $1,720 million at 30 June 2023.

APLNG's accumulated tax loss position was approximately US$325 million (US$98 million tax effected) as at 31 December 2023. APLNG is expected to fully utilise its remaining tax losses during FY2024, and move to paying tax and franking dividends.

Operating expenditure – APLNG 100%

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Purchases/ Swaps	(18)	(239)	221	(92)
Royalties and tariffs	(426)	(486)	60	(12)
Upstream operated opex	(570)	(546)	(24)	4
Upstream non-operated opex	(150)	(152)	2	(1)
Downstream opex	(136)	(176)	40	(23)
APLNG Corporate/other	(49)	(15)	(34)	227
Total operating expenses per Profit and Loss	**(1,349)**	**(1,614)**	**265**	**(16)**
Other cash items	(26)	(47)	21	(45)
Total operating cash costs	**(1,375)**	**(1,661)**	**286**	**(17)**

Operating expenses reduced $265 million. Purchases/Swaps costs decreased $221 million reflecting lower levels of gas swaps in HY2024. Gas swap arrangements were utilised in HY2023 to manage major downstream maintenance activity .

Royalties and tariffs were lower by $60 million reflecting reduced commodity revenue. Upstream operated opex increased by $24 million due to higher workover activity focused on clearing wet weather inventory backlog and higher power costs.

Downstream opex decreased by $40 million, reflecting major downstream maintenance activity in HY2023.

Capital expenditure – APLNG 100%

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Operated upstream - Sustain	(158)	(95)	(63)	67
Operated upstream - Infrastructure	(8)	(17)	9	(54)
Exploration and appraisal	(31)	(21)	(10)	48
Downstream	(12)	(19)	7	(37)
Non-operated	(104)	(63)	(41)	65
Total capital expenditure	**(314)**	**(215)**	**(99)**	**46**

Capital expenditure increased by $99 million. Operated upstream - Sustain increased $63 million reflecting an increase in operated well delivery activity due to improved field access following a prolonged period of wet weather.

Operated upstream - Sustain includes expenditure for drilling, completions, fracture stimulation, gathering network, surface connection, capital improvements and land access which occurs over multiple years. In HY2024, 49 operated wells were drilled (versus 23 in HY2023), 12 wells were fracture stimulated (versus 7 in HY2023) and 52 operated wells were commissioned (versus 33 in HY2023).

Non-operated increased $41 million due to increased activity in Fairview and Angry Jungle development programs operated by GLNG and Kenya drilling program operated by QGC.

4.3.2 Integrated Gas – Other

This segment comprises Origin Integrated Gas activities that are separate from APLNG, including exploration interests in Cooper-Eromanga and interest in Hunter Valley Hydrogen Hub Project on Kooragang Island.

Cooper-Eromanga Basin (Queensland)

In June 2023, Origin executed an agreement to transfer its 75 per cent interest and operatorship of five permits back to Bridgeport. The transaction is expected to complete in the second half of FY2024.

Hunter Valley Hydrogen Hub

Origin executed a $70 million grant Funding Agreement with the Commonwealth Government and $45 million in funding from the NSW Government for the implementation of the Hunter Valley Hydrogen Hub project. The Hunter Valley Hydrogen Hub project (Phase 1 and 2) has been shortlisted under the Australian Government's $2 billion Hydrogen Headstart Program. The Australian Government intends to announce funding recipients in late 2024.

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.

Financial summary

	HY24 ($m)	HY23 ($m)	Change ($m)	Change (%)
Origin only commodity hedging and trading	86	(180)	266	(148)
Other Origin only costs	(29)	(59)	30	(51)
Underlying EBITDA	**57**	**(239)**	**296**	**(124)**
Underlying depreciation and amortisation/ITDA	(8)	(10)	2	(20)
Underlying Profit/(Loss)	**49**	**(249)**	**298**	**(120)**

Other Origin only costs decreased by $30 million, primarily reflecting exit from exploration acreage.

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

Commodity hedging and trading summary

HY2024 hedge positions realised a $86 million net gain, compared to a $180 million net loss in HY2023. The HY2024 net gain included a gain of $11 million associated with 4.0 MMbbl of oil and 2.5 tBtu of JKM hedge transactions which realised a hedge price of US$81/bbl and US$14/MMBtu respectively, in addition to US$428 million of FX forwards which realised an FX rate of 0.65.

Based on current forward market prices[15], we estimate a net loss on oil, gas and FX hedging in FY2024 of $15 million.

($m)	HY24 actual	HY23 actual	FY24 estimate[1]
Oil hedging premium expense	(2)	(5)	(2)
Gain/(loss) on oil, gas and fx hedging	11	(175)	(15)
Gain/(loss) on LNG trading	77	0	
Total	**86**	**(180)**	

1 Based on forward prices as at 5 February 2024.

Oil, gas and fx hedging

Origin has entered into oil and gas hedging instruments to manage its share of APLNG oil and gas price risk based on the primary principle of protecting the Company's investment grade credit rating and cash flows during volatile market periods and to satisfy conditions outlined in the Consortium's proposal. No further hedging activity has taken place since 30 June 2023.

For FY2024, Origin's share of APLNG related Japan Customs-cleared Crude (JCC) oil and Japan Korea Marker (JKM) gas price exposure is estimated to be approximately 17 MMboe and 21 tBtu respectively. As at 5 February 2024, we estimate that 84 per cent of JCC and 57 per cent of JKM have been priced (based on LNG contract lags) at approximately US$87/bbl and US$13/MMBtu respectively, before any hedging.

The FY2024 hedge contracts consisted of the following instruments:

- 2.0 MMbbl of Brent USD swaps hedged at a fixed price of A$137/bbl;
- 0.8 MMbbl of Brent producer collars struck between US$35/bbl and US$90/bbl;
- 6.2 MMbbl of JCC USD swaps hedged at a fixed price of US$81/bbl
- 4.2 tBtu of JKM futures hedged at a fixed price of US$16/MMBtu; and
- US$515 million FX forwards hedged at a fixed rate of 0.66

As at 5 February 2024, 7.6 MMbbl of Brent and JCC oil hedging and 2.8 tBtu of JKM hedging have been priced at US$84/bbl and US$16/MMBtu respectively. The effective prices of the remaining 0.6 MMbbl of oil and 1.4 tBtu JKM hedging are US$76/bbl and US$16/MMBtu respectively.

Based on a forward oil price of US$82/bbl and forward JKM price of US$9/MMBtu, the effective oil price on the company's FY2024 approximate 17 MMBoe and 21 tBtu JCC and JKM exposures are US$84/bbl and US$12/MMBtu including hedges.

Premium spend for this hedge position is A$2 million.

The hedge position for FY2025 onwards is shown in the table below:

Hedge instruments	FY2025		FY2026		FY2027	
	Volume	Fixed price	Volume	Fixed price	Volume	Fixed price
JCC USD swaps	6.2 MMbbl	US$76/bbl	4.6 MMbbl	US$72/bbl	1.1 MMbbl	US$70/bbl
JKM futures	3.5 tBtu	US$14/MMBtu	3.2 tBtu	US$11/MMBtu		
FX forwards	US$162m	0.69	US$84m	0.69		

LNG hedging and 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. At 30 June 2023, a non-cash onerous provision of $62 million existed in relation to this contract, reflecting stronger LNG prices relative to Brent oil prices. As at 31 December 2023, the onerous provision was fully unwound reflecting the termination of the contract .

The remaining 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 5 February 2024, the FY2024 LNG trading EBITDA is expected to be between $60 - 90 million. The second half FY2024 is impacted by lower priced hedge contracts, executed during a period of low commodity prices. 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.

15 As at 5 February 2024.

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 a calculation of 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 18 per cent of APLNG's 3P CSG reserves (as at 30 June 2023), and approximately 19 per cent of APLNG's 2P CSG reserves (as at 30 June 2023).

Tri-Star served proceedings on APLNG in 2015 ('2015 proceeding') claiming that reversion had been triggered. In 2017, Tri-Star commenced separate proceedings against APLNG ('2017 proceeding'), relating to various operating agreements among other things. APLNG has strongly denied Tri-Star's claims in the 2015 and 2017 proceedings and is vigorously defending those proceedings. Since commencing these actions, Tri-Star has amended and repleaded its claims in both proceedings on a number of occasions, most recently in October 2023, and has sought, unsuccessfully, to have certain questions separately determined. APLNG is preparing amendments to its defences and counterclaims which will address the latest amendments Tri-Star has made to its claims. APLNG is to file amendments to its defences and counterclaims by 15 April 2024.

In the 2015 proceeding, Tri-Star claims that reversion occurred on 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 also claims in the alternative that reversion occurred on or about 1 August 2022. These claims are referred to in this document as Tri-Star's "past reversion" claims.

Tri-Star has made other claims in the 2015 proceeding against APLNG relating to other aspects of the reversion trigger calculation (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.

If Tri-Star's past reversion claims are successful, then Tri-Star may be entitled to an order that reversion occurred on 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 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 current defence and counter-claim are in the order of $4.56 billion (as at 31 December 2019), if reversion occurred on 1 November 2008 (these costs have increased substantially since December 2019 and will be updated when APLNG amends its defence and counter-claim);
- whether Tri-Star would have sold the affected CSG interests in 2008 or 2009 (as alleged by Tri-Star) and, if so, what compensation might be recoverable for that 'lost opportunity' (Tri-Star's estimate of this claim is $409 million, on Tri-Star's assumption that it is not liable to pay any of the costs incurred by APLNG in exploring and developing the affected CSG interests between the date of reversion and the date of judgment);
- the consequences of APLNG having dealt with the affected CSG interests between the date of past reversion and the date of judgment, including the gas produced from them. In this regard, Tri-Star has claimed:
  - 'equitable compensation', which Tri-Star asserts is to be assessed by reference to the 'market value' of the gas produced from the affected CSG interests since the alleged reversion, either as at the date of trial or as at the date the gas was allegedly sold by APLNG:
    - for an alleged 1 November 2008 reversion, Tri-Star's asserted estimate of that 'market value' is approximately:
      - $13.01 billion (based on a wholesale domestic gas spot price of $12.97 per GJ) less processing and transportation costs; or
      - alternatively, $9.25 billion (based on Tri-Star's calculation of historical wholesale domestic gas market prices) less processing and transportation costs, plus compound interest; or
    - for an alleged 1 August 2022 reversion, Tri-Star's asserted estimate of that 'market value' is approximately:
      - $1.06 billion (based on a wholesale domestic gas spot price of $12.97 per GJ) less processing and transportation costs; or
      - alternatively, $1.36 billion (based on Tri-Star's calculation of historical wholesale domestic gas market prices) less processing and transportation costs, plus compound interest.

    Tri-Star does not quantify the deduction for processing and transportation costs for either scenario; or
  - alternatively, an 'account' of the profits earned by APLNG or its affiliates from the alleged sale of gas produced from the affected CSG interests, which Tri-Star asserts is to be calculated as the revenue received by APLNG or its affiliates, less the costs which APLNG or its affiliates establish should be taken into account in the calculation of the profits. Tri-Star's claim asserts that:
    - since 1 November 2008, its estimate of that revenue received, calculated by reference to the sale of gas as LNG and gas to domestic customers, is approximately $9.16 billion (as at 31 March 2023); and
    - since 1 August 2022, its estimate of that revenue received, calculated by reference to the sale of gas as LNG and gas to domestic customers, is approximately $1.41 billion (as at 31 March 2023).

    Tri-Star does not quantify in its claim the costs necessarily expended by APLNG or its affiliates to produce and sell the gas and LNG which generated that alleged revenue.

  There are presently a number of uncertainties as to the quantum of these claims, if they are able to be established by Tri-Star, including the amount of costs to be deducted, changes to the amount claimed to account for sales of gas up to the date of trial and the prevailing relevant gas prices at, and ahead of, that date.
- if reversion occurred:
  - the extent of the reversionary interests, principally with respect to Tri-Star's ownership of, 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 (in the premises of Tri-Star's claim) from APLNG's mistake as to the occurrence of the reversion trigger.

If APLNG is successful in defending Tri-Star's past reversion claims in the 2015 proceeding, the potential for reversion to otherwise occur in the future in accordance with the reversion trigger will remain.

In the 2017 proceeding, Tri-Star makes a number of claims relating to:

- the nature and scope of the obligations of APLNG as operator pursuant to the CSG joint operating agreements;
- Tri-Star's ownership of, 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.

After APLNG has filed its amended defences and counterclaims in both proceedings, the parties may also need to prepare replies and rejoinders. Once that process is finalised, the Court will make further orders for the conduct of the two proceedings.

Before the proceedings are set down for trial, the Court would ordinarily order a number of procedural steps to be completed by the parties, including document disclosure, evidence preparation and exchange and pre-trial mediation. The process that will be followed in the 2015 and 2017 proceedings (and the procedural timetable) will depend on the decisions of the Court and 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.

Compliance matters

Certain entities within the Group (and joint venture entities such as APLNG) are subject to various court proceedings and claims as well as audits and reviews by government, regulatory bodies or other joint venture partners. In some cases regulatory breaches are self-reported to the applicable regulator. In most instances, it is not possible to reasonably predict the outcome of these matters or their impact on the Group.

Appendix

1 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, 3.6 million CY2021 certificates in February 2022, and 3.2 million CY2022 certificates in February 2023.

Over FY2024 to FY2026 we will receive a net cash refund of $425 million, representing the shortfall charge paid less the actual cost of the certificates:

- $114 million in FY2024;
- $163 million in FY2025;
- $148 million in FY2026.

	Statutory Profit ($m)	Adjustment ($m)	Underlying Profit ($m)
CY2020 and CY2021 certificates shortfall			
Shortfall charge (~4.1 million certificates x $65; $160 million paid and $102 million accrued)	(262)	262	-
Expected surrender cost (~2.5 million CY2020 certificates x $19)	-	(46)	(46)
Expected surrender cost (~1.6 million CY2021 certificates x $12)	-	(18)	(18)
FY2021 impact	**(262)**	**198**	**(64)**
Reassessment of FY2021 impact, remaining CY2021 certificates shortfall and CY2022 certificates shortfall			
Shortfall charge accrued (~3.5 million certificates x $65; $236 million paid and $92 million accrued)	(225)	225	-
Reassessment of CY2021 shortfall recorded in FY2021 (~1.6 million certificates x $8)	-	(13)	(13)
Expected surrender cost (~2 million CY2021 certificates x $20)	-	(41)	(41)
Expected surrender cost (~1.4 million CY2022 certificates x $14)	-	(20)	(20)
FY2022 impact	**(225)**	**151**	**(74)**
Reassessment of FY2022 impact and remaining CY2022 certificates shortfall			
Shortfall charge accrued (~1.8 million certificates x $65; $206 million paid)	(114)	114	-
Reassessment of CY2022 shortfall recorded in FY2022 (~1.4 million certificates x $4)	-	(6)	(6)
Expected surrender cost (~1.8 million CY2022 certificates x $18)	-	(32)	(32)
FY2023 impact	**(114)**	**76**	**(38)**
CY2020 certificates surrender			
Surrender (~2.5 million certificates x $19)	(46)	46	-
Shortfall refund (~2.5 million certificates x $65)	160	(160)	-
FY2024 impact	**114**	**(114)**	**-**
CY2021 certificates surrender			
Surrender (~3.6 million certificates x $20)	(72)	72	-
Shortfall refund (~3.6 million certificates x $65)	235	(235)	-
FY2025 impact	**163**	**(163)**	**-**
CY2022 certificates surrender			
Surrender (~3.2 million certificates x $18)	(58)	58	-
Shortfall refund (~3.2 million certificates x $65)	206	(206)	-
FY2026 impact	**148**	**(148)**	**-**
Total cost of ~9.3 million certificates	**(177)**	**-**	**(177)**

Directors' Report

For the six months ended 31 December 2023

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 2023 ('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 2023 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
Steven Sargent
Nora 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 27.5 cents per share which will be paid on Thursday, 28 March 2024 to shareholders on record on Wednesday, 6 March 2024.

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 2023.

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, 15 February 2024

Mr Frank Calabria
Managing Director and Chief Executive Officer

Sydney, 15 February 2024

Ernst & Young
200 George Street
Sydney NSW 2000 Australia
GPO Box 2646 Sydney NSW 2001

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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 2023, 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
15 February 2024

Interim Financial Statements

For the half year ended 31 December 2023

Interim income statement

for the half year ended 31 December

	Note	2023 $m	2022 $m
Revenue	A2	7,996	8,760
Other income	A3	31	24
Expenses	A4	(7,069)	(8,605)
Results of equity accounted investees	A6	422	555
Interest income	A3	26	28
Interest expense	A4	(88)	(97)
Profit before income tax		**1,318**	**665**
Income tax expense	A5	(323)	(264)
Profit for the period		**995**	**401**
Profit for the period attributable to:			
Members of the parent entity		995	399
Non-controlling interests		-	2
Profit for the period		**995**	**401**
Earnings per share			
Basic earnings per share	A7	57.8 cents	23.2 cents
Diluted earnings per share	A7	57.5 cents	23.1 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

	2023 $m	2022 $m
Profit for the period	**995**	**401**
Other comprehensive income		
Items that will not be reclassified to profit or loss, net of tax		
Investment valuation changes	(2)	13
Items that can be reclassified to profit or loss, net of tax		
Foreign currency translation reserve:		
Translation of foreign operations	(190)	114
Reclassified to income statement	12	-
Cash flow hedges:		
Reclassified to income statement	(57)	(1,115)
Effective portion of change in fair value	(79)	(490)
Total other comprehensive income, net of tax	**(316)**	**(1,478)**
Total comprehensive income for the period	**679**	**(1,077)**
Total comprehensive income attributable to:		
Members of the parent entity	679	(1,079)
Non-controlling interests	-	2
Total comprehensive income for the period	**679**	**(1,077)**

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

	Note	31 December 2023 $m	30 June 2023 $m
Current assets			
Cash and cash equivalents		162	463
Trade and other receivables		2,689	2,548
Inventories		223	180
Derivatives		1,049	1,100
Other financial assets	C2	936	467
Assets classified as held for sale		-	101
Other assets		189	120
Total current assets		**5,248**	**4,979**
Non-current assets			
Trade and other receivables		74	60
Derivatives		948	1,576
Other financial assets	C2	367	341
Investments accounted for using the equity method	A6	6,324	6,255
Property, plant and equipment (PP&E)		3,378	3,169
Intangible assets		2,598	2,493
Other assets		52	75
Total non-current assets		**13,741**	**13,969**
Total assets		**18,989**	**18,948**
Current liabilities			
Trade and other payables		2,101	2,152
Payables to joint ventures		134	136
Interest-bearing liabilities		66	192
Derivatives		868	901
Other financial liabilities	C2	679	418
Provision for income tax		383	455
Employee benefits		228	277
Provisions		119	229
Liabilities classified as held for sale		-	15
Total current liabilities		**4,578**	**4,775**
Non-current liabilities			
Interest-bearing liabilities		3,210	3,066
Derivatives		985	1,174
Deferred tax liabilities		269	386
Employee benefits		48	50
Provisions		663	586
Total non-current liabilities		**5,175**	**5,262**
Total liabilities		**9,753**	**10,037**
Net assets		**9,236**	**8,911**
Equity			
Contributed equity	C4	6,912	6,901
Reserves		3,663	1,492
Retained earnings		(1,339)	498
Total parent entity interest		**9,236**	**8,891**
Non-controlling interests		-	20
Total equity		**9,236**	**8,911**

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	Accum-ulated profits reserve	Retained earnings	Non-controlling interests	Total equity
Balance as at 30 June 2023	**6,901**	**243**	**944**	**287**	**18**	**-**	**498**	**20**	**8,911**
Profit	-	-	-	-	-		995	-	995
Other comprehensive income	-	-	(178)	(136)	(2)	-	-	-	(316)
Total comprehensive income for the period	**-**	**-**	**(178)**	**(136)**	**(2)**	**-**	**995**	**-**	**679**
Dividends provided for or paid	-	-	-	-	-	-	(345)	-	(345)
Transfers to accumulated profits reserve (refer to note C5)	-	-	-	-	-	2,487	(2,487)	-	-
Sale of LPG Pacific (refer to note D4)	-	-	-	-	-	-	-	(20)	(20)
Movement in contributed equity (refer to note C4)	11	-	-	-	-	-	-	-	11
Total transactions with owners recorded directly in equity	**11**	**-**	**-**	**-**	**-**	**2,487**	**(2,832)**	**(20)**	**(354)**
Balance as at 31 December 2023	**6,912**	**243**	**766**	**151**	**16**	**2,487**	**(1,339)**	**-**	**9,236**
Balance as at 30 June 2022	**6,877**	**237**	**716**	**2,147**	**9**	**-**	**11**	**25**	**10,022**
Profit	-	-	-	-	-	-	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**

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

	Note	2023 $m	2022 $m
Cash flows from operating activities			
Receipts from customers		8,843	10,784
Payments to suppliers and employees		(8,826)	(11,438)
Government grants received	E3	218	-
Cash from/(used in) operations		**235**	**(654)**
Income tax paid, net of refunds received		(447)	(132)
Net cash used in operating activities		**(212)**	**(786)**
Cash flows from investing activities			
Acquisition of PP&E		(286)	(220)
Acquisition of exploration and development assets		-	(10)
Acquisition of other assets		(16)	(39)
Acquisition of Octopus Energy		-	(163)
Acquisition of other investments		(152)	(10)
Government grants received	E3	6	-
Interest received from other parties		21	24
Net proceeds from sale of non-current assets	D4	58	70
Australia Pacific LNG (APLNG) investing cash flows			
Receipt of unfranked dividends		648	783
Net cash from investing activities		**279**	**435**
Cash flows from financing activities			
Proceeds from borrowings		200	850
Repayment of borrowings		(127)	(429)
Joint venture operator cash call movements		(1)	121
Australian Energy Market Operator (AEMO) cash deposits		-	290
Interest paid[1]		(78)	(78)
Repayment of lease principal		(37)	(33)
Dividends paid to shareholders of Origin Energy Limited		(345)	(284)
Dividends paid to non-controlling interests		-	(7)
Net cash (used in)/from financing activities		**(388)**	**430**
Net (decrease)/increase in cash and cash equivalents		(321)	79
Cash and cash equivalents at the beginning of the period		463	620
Cash and cash equivalents held for sale at the beginning of the period		20	-
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		**162**	**678**

1 Includes $10 million (2022: $10 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 15 February 2024, the Directors resolved to authorise the issue of these interim financial statements for the half year ended 31 December 2023.

The interim financial statements do not include all 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 2023, 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 2023, except for the adoption of new and amended Accounting Standards and Interpretations effective as of 1 July 2023.

New and amended standards adopted

A number of amended standards became applicable in the current reporting period but did not have an impact on the interim financial statements of the Group.

Termination of Scheme Implementation Deed

On 27 March 2023 the Company entered into a binding Scheme Implementation Deed (the Scheme) with the Consortium comprising affiliates of Brookfield Renewable Partners L.P., together with its institutional partners and certain other global investors, and MidOcean Energy, an entity managed by EIG Partners (EIG), for the acquisition of all the issued shares in the Company.

On 22 November 2023 the Company received a non-binding and indicative proposal from the Consortium to amend the Scheme (the Alternative Offer). An announcement on the Alternative Offer was released to the ASX on 23 November 2023. On 30 November 2023 the Company announced that the Board considered that the Alternative Offer was not in the best interests of Origin or its shareholders.

The Scheme Meeting at which shareholders of the Company were asked to vote on the proposed acquisition of the Company by the Consortium by way of a Scheme of Arrangement was held on 4 December 2023 and the resolution to approve the Scheme of Arrangement was not approved by the requisite majorities of the Company's shareholders.

As a result, the shareholder approval condition precedent in the Scheme was not satisfied and the Scheme was terminated on 7 December 2023 in accordance with its terms.

A Results for the half year ended 31 December 2023

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.
- **Share of Octopus Energy:** Origin's investment in Octopus Energy Group Limited (Octopus Energy). This investment was previously included in the Energy Markets segment.
- **Integrated Gas:** Origin's investment in APLNG, exploration interest in the Cooper-Eromanga Basin 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 and reversal of 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

					Integrated Gas							
	Energy Markets		Share of Octopus Energy		Share of APLNG		Other		Corporate		Consolidated	
$m	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
External revenue	**7,659**	**8,000**	**-**	**-**	**-**	**-**	**337**	**760**	**-**	**-**	**7,996**	**8,760**
EBITDA	**781**	**(56)**	**(12)**	**(83)**	**944**	**1,193**	**501**	**557**	**(70)**	**(61)**	**2,144**	**1,550**
Depreciation and amortisation	(245)	(249)	-	-	-	-	(9)	(11)	-	-	(254)	(260)
Share of ITDA of equity accounted investees	(1)	(1)	(29)	(5)	(481)	(551)	1	1	-	-	(510)	(556)
EBIT	**535**	**(306)**	**(41)**	**(88)**	**463**	**642**	**493**	**547**	**(70)**	**(61)**	**1,380**	**734**
Interest income									26	28	26	28
Interest expense[1]									(88)	(97)	(88)	(97)
Income tax expense[2]									(323)	(264)	(323)	(264)
Non-controlling interests (NCI)									-	(2)	-	(2)
Statutory profit/(loss) attributable to members of the parent entity	**535**	**(306)**	**(41)**	**(88)**	**463**	**642**	**493**	**547**	**(455)**	**(396)**	**995**	**399**
Reconciliation of statutory profit/(loss) to segment result and underlying profit/(loss)												
Fair value and foreign exchange movements	(208)	(164)	-	-	-	-	(86)	761	31	(18)	(263)	579
Disposals, assets held for sale, impairments, business restructuring and other	(55)	(123)	-	-	-	-	530	35	(63)	(6)	412	(94)
Tax and NCI on items excluded from underlying profit									99	(130)	99	(130)
Total significant items	**(263)**	**(287)**	**-**	**-**	**-**	**-**	**444**	**796**	**67**	**(154)**	**248**	**355**
Segment result and underlying profit/(loss)[3]	**798**	**(19)**	**(41)**	**(88)**	**463**	**642**	**49**	**(249)**	**(522)**	**(242)**	**747**	**44**
Underlying EBITDA[3,4]	**1,044**	**231**	**(12)**	**(83)**	**944**	**1,193**	**57**	**(239)**	**(38)**	**(43)**	**1,995**	**1,059**

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

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

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

4 Underlying EBITDA equals segment result and underlying profit/(loss) adjusted for: depreciation and amortisation; share of ITDA of equity accounted investees; interest income/(expense); interest unwind significant item (2023: nil, 2022: $6 million); income tax expense; and NCI.

A1 Segments (continued)

Segment result for the half year ended 31 December

$m	2023 Gross	2023 Tax and NCI	2022 Gross	2022 Tax and NCI
Fair value and foreign exchange movements				
(Decrease)/increase in fair value of derivatives	(315)	95	632	(190)
Net gain/(loss) from financial instruments measured at fair value	22	(7)	(35)	11
Exchange gain/(loss) on foreign-denominated debt	30	(9)	(18)	5
Fair value and foreign exchange movements	**(263)**	**79**	**579**	**(174)**
Disposals, impairments, business restructuring and other				
Gain on sale - LPG Pacific[1]	12	(4)	-	-
Loss on disposal - Canning Basin[1]	(3)	1	-	-
Loss on disposal - Beetaloo[1]	-	-	(106)	31
Disposals	**9**	**(3)**	**(106)**	**31**
Reversal of impairment - APLNG equity accounted investment[2]	477	-	-	-
Impairments	**477**	**-**	**-**	**-**
Restructuring costs	(6)	2	(1)	-
Transaction costs	(77)	23	(2)	1
Transformation costs	(56)	17	(35)	9
Business restructuring	**(139)**	**42**	**(38)**	**10**
LGC net shortfall charge	-	-	(72)	-
Deferred tax liability utilisation - APLNG	-	-	-	43
Provision for legal matters	-	-	(13)	-
Onerous contracts provision[3]	61	(18)	135	(40)
Other provision	4	(1)	-	-
Other	**65**	**(19)**	**50**	**3**
Total disposals, impairments, business restructuring and other	**412**	**20**	**(94)**	**44**
Total significant items	**149**	**99**	**485**	**(130)**

1 Refer to note D4.
2 Refer to note B1.2.
3 The gross amount includes onerous contracts release of $61 million (2022: $141 million) and interest unwind of nil (2022: $6 million).

A1 Segments (continued)

Segment assets and liabilities as at

					Integrated Gas									
	Energy Markets		Share of Octopus Energy		Share of APLNG		Other		Corporate		Assets held for sale		Consolidated	
$m	31 Dec 2023	30 Jun 2023	31 Dec 2023	30 Jun 2023	31 Dec 2023	30 Jun 2023	31 Dec 2023	30 Jun 2023	31 Dec 2023	30 Jun 2023	31 Dec 2023	30 Jun 2023	31 Dec 2023	30 Jun 2023
Assets														
Segment assets	11,351	10,712	-	-	-	-	998	1,264	154	153	-	80	12,503	12,209
Investments accounted for using the equity method (refer to note A6)	10	10	720	776	5,685	6,038	(91)	(569)	-	-	-	-	6,324	6,255
Cash, funding-related derivatives and tax assets									162	463	-	21	162	484
Total assets	**11,361**	**10,722**	**720**	**776**	**5,685**	**6,038**	**907**	**695**	**316**	**616**	**-**	**101**	**18,989**	**18,948**
Liabilities														
Segment liabilities	(4,647)	(4,382)	-	-	-	-	(530)	(898)	(611)	(612)	-	(7)	(5,788)	(5,899)
Financial liabilities, interest-bearing liabilities, funding-related derivatives and tax liabilities									(3,965)	(4,130)	-	(8)	(3,965)	(4,138)
Total liabilities	**(4,647)**	**(4,382)**	**-**	**-**	**-**	**-**	**(530)**	**(898)**	**(4,576)**	**(4,742)**	**-**	**(15)**	**(9,753)**	**(10,037)**
Net assets	**6,714**	**6,340**	**720**	**776**	**5,685**	**6,038**	**377**	**(203)**	**(4,260)**	**(4,126)**	**-**	**86**	**9,236**	**8,911**
Additions of non-current assets	498	396	-	173	-	-	2	24	2	2	-	-	502	595

A2 Revenue

for the half year ended 31 December 2023 $m	Retail	Business and Wholesale	LPG	Solar and Energy Services	Integrated Gas	Total
Sale of electricity	2,849	1,562	-	118	-	4,529
Sale of gas	756	1,093	326	72	337	2,584
Pool revenue	-	764	-	-	-	764
Solar and batteries	-	-	-	51	-	51
Other revenue	7	6	-	55	-	68
Total	**3,612**	**3,425**	**326**	**296**	**337**	**7,996**
2022 $m						
Sale of electricity	2,178	1,581	-	108	-	3,867
Sale of gas	746	1,202	395	75	760	3,178
Pool revenue	-	1,613	-	-	-	1,613
Solar and batteries	-	-	-	50	-	50
Other revenue	14	8	-	30	-	52
Total	**2,938**	**4,404**	**395**	**263**	**760**	**8,760**

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. Contract duration can vary with some contracts providing a discount on published rates for a limited term, while other contracts have no fixed duration. Contracts 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 Power Purchase Agreements (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 (Energy Markets segment) and LNG (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

for the half year ended 31 December	2023 $m	2022 $m
Net gain on sale of assets[1]	10	-
Fees and services, and other income	21	24
Other income	**31**	**24**
Interest earned from other parties[2]	26	28
Interest income	**26**	**28**

1 Primarily relates to gain on the sale of LPG Pacific $12 million and loss on disposal of Canning Basin ($3 million). Refer to note D4.

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

A4 Expenses

for the half year ended 31 December	2023 $m	2022 $m
Cost of sales	6,164	8,196
Employee expenses	461	397
Depreciation and amortisation	254	260
Impairment of trade receivables (net of bad debts recovered)	110	52
Decrease/(increase) in fair value of derivatives	315	(632)
Net (gain)/loss from financial instruments measured at fair value	(22)	35
Reversal of impairment of non-current assets[1]	(477)	-
Net loss on sale of assets[2]	-	106
Onerous contracts provision	(61)	(141)
Net foreign exchange (gain)/loss	(30)	27
Other	355	305
Expenses	**7,069**	**8,605**
Interest on borrowings	71	77
Interest on lease liabilities	10	10
Unwind of discounting on long-term provisions	7	10
Interest expense	**88**	**97**

1 Refer to note B1.2.

2 Relates to disposal of Beetaloo in the prior period. Refer to note D4.

A5 Income tax expense

for the half year ended 31 December	2023 $m	2022 $m
Income tax expense	**323**	**264**
Reconciliation between tax expense and pre-tax net profit		
Profit before income tax	**1,318**	**665**
Income tax using the domestic corporation tax rate of 30 per cent (2022: 30 per cent)		
Prima facie income tax expense on pre-tax accounting profit:		
– at Australian tax rate of 30 per cent	395	200
– adjustment for difference between Australian and overseas tax rates	-	(1)
Income tax expense on pre-tax accounting profit at standard rates	**395**	**199**
Increase/(decrease) in income tax expense due to:		
Share of results of equity accounted investees	(127)	(166)
Unfranked dividends received - APLNG	194	235
Deferred tax liability utilisation - APLNG	-	(43)
Reversal of impairment - APLNG equity accounted investment	(143)	-
Accounting gain on sale - LPG Pacific	(4)	-
Net capital gains tax on sale - LPG Pacific	4	-
Accounting loss on disposal - Beetaloo	-	32
Net capital gains tax on disposal - Beetaloo	-	33
Deferred tax liability reversal on disposal - Beetaloo	-	(64)
LGC shortfall charge	-	30
Other	4	8
Total (decrease)/increase	**(72)**	**65**
Total income tax expense	**323**	**264**

A6 Results of equity accounted investees

for the half year ended 31 December 2023 $m	Share of EBITDA	Share of ITDA	Share of net (loss)/profit
APLNG[1,2]	944	(480)	464
Total joint ventures	**944**	**(480)**	**464**
Octopus Energy[3,4,5]	(12)	(29)	(41)
Gasbot Pty Limited	-	-	-
Gaschem	-	(1)	(1)
Total associates	**(12)**	**(30)**	**(42)**
Total	**932**	**(510)**	**422**
2022 **$m**			
APLNG[1,2]	1,193	(550)	643
Total joint ventures	**1,193**	**(550)**	**643**
Octopus Energy[3,4,5]	(83)	(5)	(88)
Gasbot Pty Limited	-	-	-
Gaschem	1	(1)	-
Total associates	**(82)**	**(6)**	**(88)**
Total	**1,111**	**(556)**	**555**

1 APLNG's summary financial information is separately disclosed in notes B1.1, B1.3 and B1.4.
2 Included in the Group's share of net profit is $1 million (2022: $1 million) of Mandatorily Redeemable Cumulative Preference Shares (MRCPS) interest income, in line with the depreciation of the capitalised interest in APLNG's result. Refer to note B1.3.
3 Octopus Energy's summary financial information is separately disclosed in notes B2.1 and B2.2.
4 The Group holds a 20 per cent interest in Octopus Energy and has significant influence over the entity.
5 Included in the Group's share of net loss is $10 million (2022: $10 million) of depreciation, relating to the fair value attributed to assets at the acquisition date.

	Equity accounted investment carrying amount	
as at **$m**	**31 December 2023**	**30 June 2023**
APLNG[1]	5,594	5,469
Octopus Energy[2]	720	776
Gasbot Pty Limited	-	-
Gaschem	10	10
Total	**6,324**	**6,255**

1 APLNG's summary financial information is separately disclosed in notes B1.1, B1.3 and B1.4.
2 Octopus Energy's summary financial information is separately disclosed in notes B2.1 and B2.2.

A7 Earnings per share

for the half year ended 31 December	2023	2022
Weighted average number of shares on issue-basic[1]	1,722,091,065	1,719,728,778
Weighted average number of shares on issue-diluted[2]	1,729,583,721	1,728,698,350
Statutory profit		
Earnings per share based on statutory consolidated profit		
Statutory profit $m	995	399
Basic earnings per share	57.8 cents	23.2 cents
Diluted earnings per share	57.5 cents	23.1 cents
Underlying profit		
Earnings per share based on underlying consolidated profit		
Underlying profit $m[3,4]	747	44
Underlying basic earnings per share	43.4 cents	2.5 cents
Underlying diluted earnings per share	43.2 cents	2.5 cents

1 The basic earnings per share calculation uses the weighted average number of shares on issue during the period excluding treasury shares held.

2 The diluted earnings per share calculation uses the weighted average number of shares on issue during the period 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 (2023: 7,492,656; 2022: 8,969,572).

3 Refer to note A1 for a reconciliation of statutory profit to underlying consolidated profit.

4 Underlying profit is a non-statutory (non-IFRS) measure.

A8 Dividends

The Directors have determined to pay a fully franked interim dividend of 27.5 cents per share, payable on 28 March 2024. Dividends paid during the period ended 31 December are detailed below.

	2023 $m	2022 $m
Final dividend of 20 cents per share, fully franked, in respect of FY2023, paid 29 September 2023 (2022: 16.5 cents per share, partially franked to 75 per cent, in respect of FY2022, paid 30 September 2022)	345	284

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	2023		2022	
$m	Total APLNG	Origin interest[1]	Total APLNG	Origin interest[1]
Operating revenue	4,782		5,953	
Operating expenses	(1,349)		(1,614)	
EBITDA	**3,433**	**944**	**4,339**	**1,193**
Depreciation and amortisation expense	(856)	(235)	(825)	(227)
Interest income	57	16	31	9
Other interest expense	(232)	(64)	(212)	(58)
Income tax expense	(720)	(198)	(1,000)	(275)
ITDA	**(1,751)**	**(481)**	**(2,006)**	**(551)**
Statutory result for the period	**1,682**	**463**	**2,333**	**642**
Other comprehensive income	-	-	-	-
Statutory total comprehensive income[2]	**1,682**	**463**	**2,333**	**642**
Underlying profit for the period[2,3]	**1,682**	**463**	**2,333**	**642**
Underlying EBITDA for the period[3]	**3,433**	**944**	**4,339**	**1,193**

1 Origin's interest is 27.5 per cent.

2 Excluded from the above is $1 million (2022: $1 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 B1.3. 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 Carrying amount of investment in APLNG

The carrying amount of the Group's equity accounted investment in APLNG is reviewed at each reporting date to determine whether there is any indication of impairment or reversal of previous impairment. The investment in APLNG forms part of the Integrated Gas segment and there has been no change to this cash-generating unit (CGU) during the period. There is no goodwill attached to this CGU or segment. In the year ended 30 June 2020, Origin took a post-tax impairment of $650 million for its 37.5 per cent investment in APLNG. Following a 10 per cent divestment of APLNG interests in December 2021, only $477 million of that initial impairment remains assessable for reversal as at 31 December 2023.

Where an indicator of impairment or impairment reversal exists, a formal estimate of the recoverable amount is made. The Group's assessment of the recoverable amount of its investment in APLNG is typically determined based on an assessment of fair value less costs of disposal, based on level 3 fair value hierarchy using a discounted cash flow methodology. However, for 31 December 2023 the proposed Scheme in combination with the Alternative Offer proposed on 22 November 2023 has provided an observable market price that is deemed a better indication of market fair value and is used for assessing the recoverable amount of the investment in APLNG.

The Alternative Offer provided an implied split in value between the Energy Markets and Integrated Gas businesses of 58%:42% respectively, which applied to the Scheme value of $9.38 per share, indicates an implied market valuation of the Integrated Gas business which was to be acquired by EIG. The USD components of the Scheme offer are converted to AUD using an exchange rate of 0.6674 as at 4 December 2023.

The Integrated Gas business which was to be acquired by EIG primarily included Origin's investment in APLNG as well as Other Integrated Gas operations. The Other Integrated Gas operations primarily consist of derivatives to manage Origin's exposure to APLNG and LNG purchase and sale contracts (including hedging contracts to manage price risk of these physical LNG contracts). The derivatives are carried at fair value using both level 1 and level 2 valuations as disclosed in note C3. The LNG purchase and sale contracts are valued using observable market prices for gas at an appropriate market discount rate.

Deducting the fair value of these Other Integrated Gas operations, the implied market value attributed by the Alternative Offer to Origin's investment in APLNG is approximately $6,461 million, compared to a post impairment reversal carrying value of $5,594 million. This implied market value is classified as level 3 on the fair value hierarchy which has been determined using fair value less costs of disposal method, maximising observable market inputs.

B1.2 Carrying amount of investment in APLNG (continued)

The valuation under the accounting standards requires market observable inputs to be maximised, which has been combined with the Group's view of the Other Integrated Gas operations to determine the value of the investment in APLNG. This approach may differ to other acceptable forms of valuation of the investment in APLNG within the market, as evident by the Independent Expert's Report included in the Scheme booklet. The valuation provided by the expert supports a higher valuation of the investment in APLNG between $7,030 million to $7,642 million, and as such further supports the position for a full reversal of previous impairment.

Overall, the recoverable amount based on the above supports a full reversal of the previous impairment of $477 million.

Impairment sensitivity

The Group's assessment of the recoverable amount in the Other Integrated Gas operations requires exercise of judgement and is mostly sensitive to changes in oil and gas prices. Reasonably possible changes of 1% in either oil or gas prices would still result in a full reversal of the $477 million previous impairment.

B1.3 Summary APLNG statement of financial position

100 per cent APLNG as at $m	**31 December 2023**	**30 June 2023**
Cash and cash equivalents	1,642	1,720
Other assets	1,015	910
Current assets	**2,657**	**2,630**
Receivables from shareholders	315	324
PP&E	31,230	32,441
Exploration, evaluation and development assets	516	510
Other assets	169	149
Non-current assets	**32,230**	**33,424**
Total assets	**34,887**	**36,054**
Bank loans - secured	896	885
Other liabilities	576	647
Current liabilities	**1,472**	**1,532**
Bank loans - secured	5,858	6,489
Other liabilities	6,886	6,078
Non-current liabilities	**12,744**	**12,567**
Total liabilities	**14,216**	**14,099**
Net assets	**20,671**	**21,955**
Group's interest of 27.5 per cent of APLNG net assets	5,685	6,038
Group's impairment expense[1]	-	(477)
Group's own costs	18	18
MRCPS elimination[2]	(109)	(110)
Investment in APLNG[3]	**5,594**	**5,469**

1 Relates to impairments taken by the Group in the year ended 30 June 2020. This balance was reversed during the period. Refer to note B1.2.

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 is eliminated through the equity accounted investment balance.

3 Includes a movement of $168 million in foreign exchange that has been recognised in the foreign currency translation reserve. Also included is a movement of A$648 million (US$419 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 0.6839 (June 2023: 0.6629).

B1.4 Summary APLNG statement of cash flows

100 per cent APLNG for the half year ended 31 December $m	2023	2022
Cash flow from operating activities		
Receipts from customers	4,730	5,928
Payments to suppliers and employees	(1,538)	(2,078)
Net cash from operating activities	**3,192**	**3,850**
Cash flows from investing activities		
Acquisition of PP&E	(314)	(198)
Acquisition of exploration and development assets	(6)	(16)
Interest received	53	28
Net cash used in investing activities	**(267)**	**(186)**
Cash flows from financing activities		
Repayment of lease principal	(30)	(31)
Payment of interest on lease liabilities	(14)	(13)
Repayment of borrowings	(431)	(399)
Payments of transaction and interest costs relating to borrowings	(177)	(144)
Payments of ordinary dividends	(2,357)	(2,846)
Net cash used in financing activities	**(3,009)**	**(3,433)**
Net (decrease)/increase in cash and cash equivalents	(84)	231
Cash and cash equivalents at the beginning of the period	1,720	1,544
Effect of exchange rate changes on cash	6	65
Cash and cash equivalents at the end of the period	**1,642**	**1,840**

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 Investment in Octopus Energy

Octopus Energy is an energy retailer and technology company incorporated in the United Kingdom and is not publicly listed.

The following table summarises the financial information of Octopus Energy adjusted for differences in accounting policies. The table also reconciles the summarised financial information to the carrying amount of the Group's interest in Octopus Energy.

B2.1 Summary Octopus Energy income statement

for the half year ended 31 December $m	2023 Total Octopus Energy	2023 Origin interest[1]	2022 Total Octopus Energy	2022 Origin interest[1]
Operating revenue	9,655		7,249	
Statutory result for the period	**(155)**	**(31)**	**(390)**	**(78)**
Other comprehensive income	-	-	-	-
Statutory total comprehensive income[2]	**(155)**	**(31)**	**(390)**	**(78)**
Underlying loss for the period[2,3]	**(155)**	**(31)**	**(390)**	**(78)**
Underlying EBITDA for the period[3]	**(60)**	**(12)**	**(415)**	**(83)**

1 Origin's interest is 20 per cent.
2 Excluded from the above is $10 million (2022: $10 million) (Origin share) of amortisation relating to the fair value attributed to assets at the acquisition date.
3 Underlying profit and underlying EBITDA are non-statutory (non-IFRS) measures.

B2.2 Summary Octopus Energy statement of financial position

100 per cent Octopus Energy as at $m	31 December 2023	30 June 2023
Current assets[1]	14,217	11,998
Non-current assets	2,085	1,729
Current liabilities[2]	(13,902)	(5,970)
Non-current liabilities[2]	(483)	(5,659)
Net assets	**1,917**	**2,098**
Group's interest of 20 per cent of Octopus Energy net assets	384	420
Goodwill, fair value adjustments and equity-settled transactions[3]	330	350
Group's own costs	6	6
Group's carrying amount of the investment in Octopus Energy[4]	**720**	**776**

1 Current assets include cash and cash equivalents of $7,551 million (June 2023: $7,686 million) and includes amounts ringfenced as part of the acquisition of Bulb Energy.
2 Current liabilities include $5,195 million relating to a funding agreement entered into as part of the acquisition of Bulb Energy (June 2023: $5,183 million included in non-current liabilities).
3 Includes goodwill and other fair value adjustments on initial recognition of the Group's equity accounted investment in Octopus Energy.
4 Includes a $15 million movement related to foreign exchange that has been recognised in the foreign currency translation reserve (June 2023: $51 million).

Reporting date balances are converted from GBP to AUD using an end-of-period exchange rate of 0.5365 (June 2023: 0.5250).

The associate has no contingent liabilities as at 31 December 2023.

B3 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$648 million during the half year ended 31 December 2023.

Octopus Energy

Additional equity transactions

On 18 December 2023 Origin announced an additional investment of £280 million (approximately A$530 million) to participate in Octopus Energy's latest funding round with existing shareholders and increase its interest by 3 per cent to 23 per cent. Completion of the transaction is subject to obtaining required regulatory approvals, with Origin's additional investment requiring approval from the United Kingdom's Financial Conduct Authority.

Financial guarantees

In the prior period, the Group provided a financial guarantee to Octopus Energy's financiers and A$4 million was recognised within other income in respect of the financial guarantee income. The financial guarantee expired 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 investment in growth, 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) 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 and Origin's share of Octopus Energy 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 2023 $m	30 June 2023 $m
Borrowings	2,751	2,713
Lease liabilities	525	545
Total interest-bearing liabilities	3,276	3,258
Less: Cash and cash equivalents excluding APLNG-related cash[1]	(101)	(370)
Net debt	3,175	2,888
Fair value adjustments on FX hedging transactions	2	(11)
Adjusted net debt	3,177	2,877
Total equity	9,236	8,911
Total capital	12,413	11,788
Gearing ratio	26%	24%
Ratio of adjusted net debt to adjusted underlying EBITDA	0.9x	1.2x

1 This balance excludes $61 million (June 2023: $93 million) of cash held by Origin, as Upstream Operator, to fund APLNG related operations.

Debt maturity

On 18 December 2023, upon maturity of its US Private Placement 2013 bonds, Origin repaid US$85 million.

C2 Other financial assets and liabilities

as at $m	31 December 2023 Current	 Non-current	30 June 2023 Current	 Non-current
Other financial assets				
Measured at fair value through profit or loss				
Settlement Residue Distribution Agreement units	70	56	73	56
Environmental scheme certificates	729	-	349	-
Investment fund units	-	63	-	61
Debt and other securities	10	106	7	100
Equity securities	-	6	-	1
Measured at fair value through other comprehensive income				
Equity securities	-	68	-	70
Measured at amortised cost				
Futures collateral	127	-	38	-
Debt instruments	-	68	-	53
Total other financial assets	**936**	**367**	**467**	**341**
Other financial liabilities				
Measured at fair value through profit or loss				
Environmental scheme surrender obligations	509	-	369	-
Measured at amortised cost				
Futures collateral	170	-	49	-
Total other financial liabilities	**679**	**-**	**418**	**-**

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) 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.

as at 31 December 2023	**Level 1 $m**	**Level 2 $m**	**Level 3 $m**	**Total $m**
Derivative financial assets	639	1,094	264	1,997
Other financial assets at fair value	861	63	184	1,108
Financial assets carried at fair value	**1,500**	**1,157**	**448**	**3,105**
Derivative financial liabilities	(318)	(910)	(625)	(1,853)
Other financial liabilities at fair value	(509)	-	-	(509)
Financial liabilities carried at fair value	**(827)**	**(910)**	**(625)**	**(2,362)**

as at 30 June 2023	**Level 1 $m**	**Level 2 $m**	**Level 3 $m**	**Total $m**
Derivative financial assets	1,044	1,310	322	2,676
Other financial assets at fair value	478	69	170	717
Financial assets carried at fair value	**1,522**	**1,379**	**492**	**3,393**
Derivative financial liabilities	(592)	(883)	(600)	(2,075)
Other financial liabilities at fair value	(369)	-	-	(369)
Financial liabilities carried at fair value	**(961)**	**(883)**	**(600)**	**(2,444)**

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 2023	**(108)**
New instruments recognised in the period	18
Instruments derecognised in the period	(5)
Net cash settlements paid/(received)	(10)
Gains/(losses) recognised in other comprehensive income	(2)
Gains/(losses) recognised in profit or loss	
Change in fair value	(80)
Cost of sales	10
Balance as at 31 December 2023	**(177)**

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 or market comparison for comparable transactions.
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	Unobservable inputs	Relationship to fair value
Electricity derivatives	Forward electricity swap price curve Forward electricity cap price curve Forecast Renewable Energy Certificates prices	A 10 per cent increase/decrease in the unobservable inputs would increase/decrease fair value by $135 million (June 2023: $201 million).

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 2023	**370**
Value recognised in the interim income statement	(45)
New instruments recognised in the period	(5)
Balance as at 31 December 2023	**320**
Classification of net deferred gain	
Derivative assets	175
Derivative liabilities	145
Balance as at 31 December 2023	**320**

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.

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.

		Carrying value		Fair value	
	Fair value hierarchy level	31 Dec 2023 $m	30 Jun 2023 $m	31 Dec 2023 $m	30 Jun 2023 $m
Liabilities					
Bank loans - unsecured	2	717	515	739	539
Capital markets borrowings - unsecured	2	2,034	2,070	1,904	1,975
Total[1]		**2,751**	**2,585**	**2,643**	**2,514**

1 Non-current interest-bearing liabilities in the statement of financial position include $2,751 million (June 2023: $2,585 million) as disclosed above, and lease liabilities of $459 million (June 2023: $481 million).

C4 Contributed equity

for the half year ended 31 December	2023	2022	2023	2022
	Number of shares		$m	
Ordinary share capital				
Opening balance	1,722,747,671	1,722,747,671	6,913	6,913
Less Treasury shares:				
Opening balance	(1,746,760)	(5,899,184)	(12)	(36)
Utilisation of treasury shares on vesting of employee share schemes	1,602,245	4,512,259	11	28
Treasury Shares total	(144,515)	(1,386,925)	(1)	(8)
Closing balance	**1,722,603,156**	**1,721,360,746**	**6,912**	**6,905**

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. Shares are accounted for at a weighted average cost.

C5 Reserves

Accumulated profits reserve

On 16 October 2023 the Board resolved to establish the Origin Energy Limited Accumulated Profits Reserve and to transfer the Company's accumulated undistributed net profits as at 1 October 2023 of $2,487 million to the accumulated profits reserve. The reserve has been established to record profits available for future distribution by the Company.

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 2023. Refer to Section B for details of the Group's interests in these entities.

D2 Changes in controlled entities

On 1 September 2023, 1Bill Holdings Pty Ltd, Thought World Pty Ltd, 1Bill Pty Ltd, Thought World Investments Pty Ltd, Residential Connections Pty Ltd, YP Connect Pty Ltd, YourPorter Pty Ltd, YourPorter Unit Trust, Compare & Connect NZ Limited, Fast Connect Limited, BrandMyBusiness Pty Ltd (50 per cent) and TWRW Unit Trust (50 per cent) were acquired.

On 28 September 2023, Origin Energy PNG Ltd, The Fiji Gas Co. Ltd, Origin Energy Solomons Ltd, Origin Energy American Samoa Inc., Origin Energy Cook Islands Ltd, Origin Energy Samoa Ltd and Origin Energy Vanuatu Ltd were sold.

On 1 November 2023, MyConnect Trading Pty Ltd and MyConnect Holdings Pty Ltd were acquired.

On 2 November 2023, Usses Pty Ltd, Templers Energy Pty Ltd and Templers Energy Trust were acquired.

On 6 November 2023, Origin Energy Wind East Pty Ltd and Origin Energy Wind East Trust were incorporated.

On 23 November 2023, Origin Energy Future Fuels (Gladstone) Pty Ltd was incorporated.

D3 Business combinations

Acquisition of retail aggregators

During the period the Group acquired two retail aggregators to add to Origin's Retail business. The acquisition of 100 per cent of the formerly privately held 1Bill Holdings Pty Ltd was completed on 1 September 2023 and the acquisition of 100 per cent of the formerly privately held MyConnect Holdings Pty Ltd was completed on 1 November 2023.

Considering the timing of the transactions and size of the operations, the overall impact of the acquisition to the Group's consolidated revenue and profit and loss since the acquisition date is not significant. Total purchase consideration of $136 million was paid to acquire the net assets on completion date. Given the acquired cash balance from the transactions was $1 million, the net cash impact from the acquisitions was $135 million and has been recognised in investing cashflow.

The acquisitions have been accounted for as Business Combinations, with total net assets acquired of $8 million, intangibles recognised on consolidation of $128 million, including goodwill. The goodwill comprises of synergies expected to arise from the acquisition of the retail aggregators and the Retail business. In accordance with the Group's accounting policies, the fair value of the net assets acquired are provisional and will be subject to further review for a period of up to 12 months from the dates of acquisition.

D4 Disposals

LPG Pacific

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 the Cook Islands, and controlled entities in Fiji, Papua New Guinea and the Solomon Islands. The net assets of these entities were classified as held for sale at 30 June 2023.

The sale was completed on 28 September 2023 and a gain on sale of $12 million before tax and transaction costs was recognised in the period.

Reconciliation of gain on sale	**2023 $m**
Consideration (net of transaction costs)	69
Net assets disposed	(65)
Reserves reclassified to profit and loss on sale	(12)
Non-controlling interest disposed	20
Gain on sale before income tax expense	**12**

Reconciliation of cash consideration	**2023 $m**
Consideration	71
Less: Transaction costs	(2)
Consideration (net of transaction costs)	**69**
Less: Cash and cash equivalents disposed	(11)
Consideration (net of cash disposed)	**58**

Canning Basin

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 require 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. Completion of the transaction occurred on 7 November 2023 and resulted in a pre-tax loss on disposal of $3 million.

Beetaloo

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 disposal of $106 million in the prior period.

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 2023.

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 2023 $m	30 June 2023 $m
Capital expenditure commitments	1,151	786
Joint venture commitments[1]	212	183

1 Includes $210 million (June 2023: $180 million) in relation to the Group's share of APLNG's capital and joint venture commitments.

E3 Government grants and assistance

Government grants and assistance are recognised when there is reasonable assurance that the associated conditions will be complied with, and the grants/assistance will be received. Government grants relating to expenses are recognised in profit or loss over the same period as the relevant expense. Government grants relating to the purchase of property, plant and equipment are allocated to the carrying amount of the asset and recognised in profit or loss on a straight-line basis over the expected useful life of the related asset as a reduced depreciation expense.

Coal price cap

In December 2022 the NSW Government introduced a legislated domestic coal price cap. During the half year the Group recognised compensation relating to supply coal contracts that exceeded the price cap of $229 million in cost of sales in the interim income statement (2022: nil) and $30 million was recognised in inventory in the interim statement of financial position (June 2023: $55 million). Cash of $218 million has been received and a receivable of $25 million has been accrued for compensation recognised but not yet paid at 31 December 2023 (June 2023: $39 million).

Regional Hydrogen Hubs Program

In June 2023 the Group and the Federal Government signed an agreement for $70 million in funding to develop the proposed Hunter Valley Hydrogen Hub (HVHH). During the half year the Group received cash of $6 million as funding in advance for future expenditure which has been recognised as deferred income within current liabilities at 31 December 2023 (June 2023: nil). The grant funding is conditional and contingent upon the Group making a project Final Investment Decision for the HVHH and complying with the reporting requirements and conditions of the grant agreement.

E4 Subsequent events

Other than the matters described below, no item, transaction or event of a material nature has arisen since 31 December 2023 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 15 February 2024, the Directors determined a fully franked interim dividend of 27.5 cents per share, on ordinary shares. This dividend will be paid on 28 March 2024.

Mortlake battery investment

On 29 January 2024 the Group entered into an agreement for the supply and construction of a large-scale battery at the Mortlake Power Station, committing to an investment of approximately $400 million.

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 2023 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, 15 February 2024

Mr Frank Calabria
Managing Director and Chief Executive Officer

Sydney, 15 February 2024

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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 2023, 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 2023 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 2023 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

Andrew Price
Partner
Sydney
15 February 2024

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 and Octopus Energy 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.
HY24 (Current period)	Six months ended 31 December 2023.
HY23(Prior period)	Six months ended 31 December 2022.
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 A1 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 the given 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 Unipec Asia Co. Ltd. to act on its behalf under the LNG SPA.
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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