



MARKET SUMMARY REPORT

Electricity and Gas - September 2023

Shell Energy Retail Pty Ltd
ABN 87 126 175 460

Introduction and Further Reading

This report provides information on wholesale price trends for all regions within the National Electricity Market (NEM), the Western Australia Energy Market, the East Coast Wholesale Gas Market and environmental scheme certificates. Wholesale gas price trends reference the ICAP Gas Forward Price Curve Data, published under permission by ICAP Energy.

Please note that all electricity prices are presented as a \$ per megawatt-hour (MWh) price and all certificate prices as a \$ per certificate price.

You can obtain the latest pricing information for the spot and contract markets on a daily basis from the "Market" section of the Shell Energy Customer Portal.

Tasmanian contract prices are the non-regulated prices published by Hydro Tasmania on a weekly basis. All NEM spot prices are published by the Australian Energy Market Operator (AEMO). NEM contract prices are sourced from the ASX.

Further information can be found at the locations noted below:

Tasmanian energy market - a comprehensive weekly report is published by the Office of the Tasmanian Energy Regulator which can be found [here](#).

Western Australia Energy Market - AEMO publishes a detailed market report which can be found [here](#).

NEM Spot Market - AEMO publish a range of detailed information which can be found [here](#).

Environmental Certificates - information about environmental certificates can be found [here](#).

Large-scale Generation Certificates (LGCs) - information about LGCs can be found [here](#). You can also refer to our [Energy Education video on LGCs](#).

Small-scale Technology Certificates (STCs) - information about the STC program can be found [here](#). You can also refer to our [Energy Education video on STCs](#).

Victorian Energy Efficiency Certificates (VEECs) - information about the VEEC program can be found [here](#). You can also refer to our [Energy Education video on VEECs](#).

Energy Saving Certificates (ESCs) - information about the ESC program can be found [here](#). You can also refer to our [Energy Education video on ESCs](#).

Contract Market

Calendar Year 2024 (CY24)

Calendar Year 2024 (CY24) swap contracts in September saw declines in all states except South Australia (SA). Q3 spot outcomes followed Q2 in being far lower than market participants were expecting. Despite lower thermal generation availability from unplanned and major planned outages, spot outcomes continued to be very low as the shoulder season brought ideal conditions for a higher volume of renewable capacity relative to last year. Further, given the hotter than usual temperatures arriving earlier than usual with the onset of [El Nino and Positive Indian Ocean Dipole \(IOD\) conditions](#), cooling demand dropped off much quicker than usual.

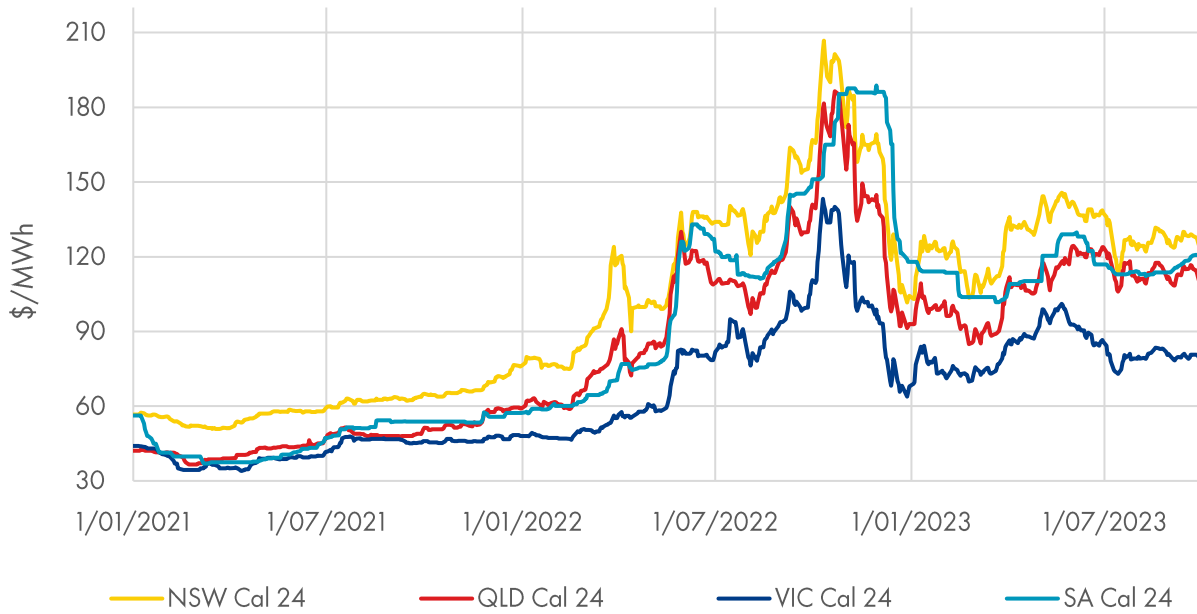
Domestic spot gas prices declined precipitously towards the end of the month due to unusually high domestic gas storage levels coinciding with lower-than-average heating gas demand. As such, cost of gas generation declined notably as well, making up for the lack of coal availability. Given these bearish spot conditions, Q2 and Q3 2024 contracts saw highly motivated selling. Bearish spot outcomes also drove selling in Q1 and Q4 contracts, however, the levels of these contracts held up longer due to the hot and dry conditions promised by El Nino and the Positive IOD. Despite the two-speed pricing of winter and summer contracts, enough declines in both saw CY24 decline overall.

While interesting, it is not unusual for pricing in SA to buck trends in the other states due to the low contract supply and high contract demand from retailers who need to hedge in region. Given the spot volatility often seen in SA due to the relatively small amount of dispatchable generation, high renewable penetration and its higher tendency to be physically islanded from the rest of the NEM, market participants price a sizeable risk premium into SA prices relative to other states such as Victoria. While Q2 and Q3 in SA this year, like the other NEM states, settled far lower than market expectations leading up to the quarters, Q2 and Q3 2024 contracts in September continued to trade close to the high levels seen in 2022, which were driven by very cold winter temperatures coinciding with very high gas and coal costs. Further, because of the Retailer Reliability Obligation placed on Q1 2024 and the looming El Nino and Positive IOD summer, Q1 2024 SA is trading at a slight premium to Q2 and Q3. In short, market participants are pricing in a very hot summer as well as a reasonably cold winter for CY24 SA, where the state would need to draw on expensive sources of thermal generation.

September 2023

State	Previous Close	Period Low	Period High	Closing Price
QLD	111.36	108.46	116.60	110.04
NSW	126.25	123.63	130.00	123.90
VIC	80.71	78.36	81.06	78.82
SA	113.67	113.67	120.80	120.61
TAS	78.80	71.31	78.75	73.56

CY24 Flat



Source: ASX data

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Contract Market

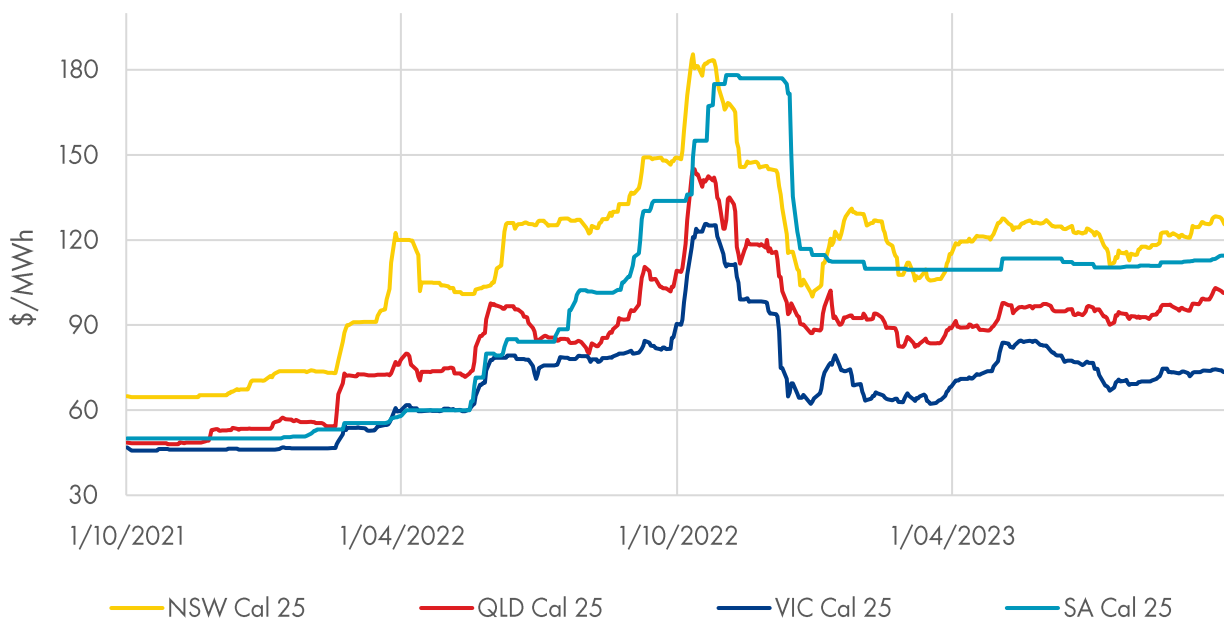
Calendar Year 2025 (CY25)

Calendar Year 2025 (CY25) forward swap contracts closed flat or higher in all states except TAS. Selling liquidity was not as high compared to CY24, while retail buying in the main states picked up. The bearish spot conditions were only enough to persuade market participants to discount their expectations for looming CY24 period, but not in later dated contracts.

September 2023

State	Previous Close	Period Low	Period High	Closing Price
QLD	96.07	95.07	103.11	101.69
NSW	121.82	120.79	128.38	125.40
VIC	73.59	71.96	74.37	73.20
SA	112.06	112.30	114.43	114.43
TAS	74.74	70.17	75.03	70.44

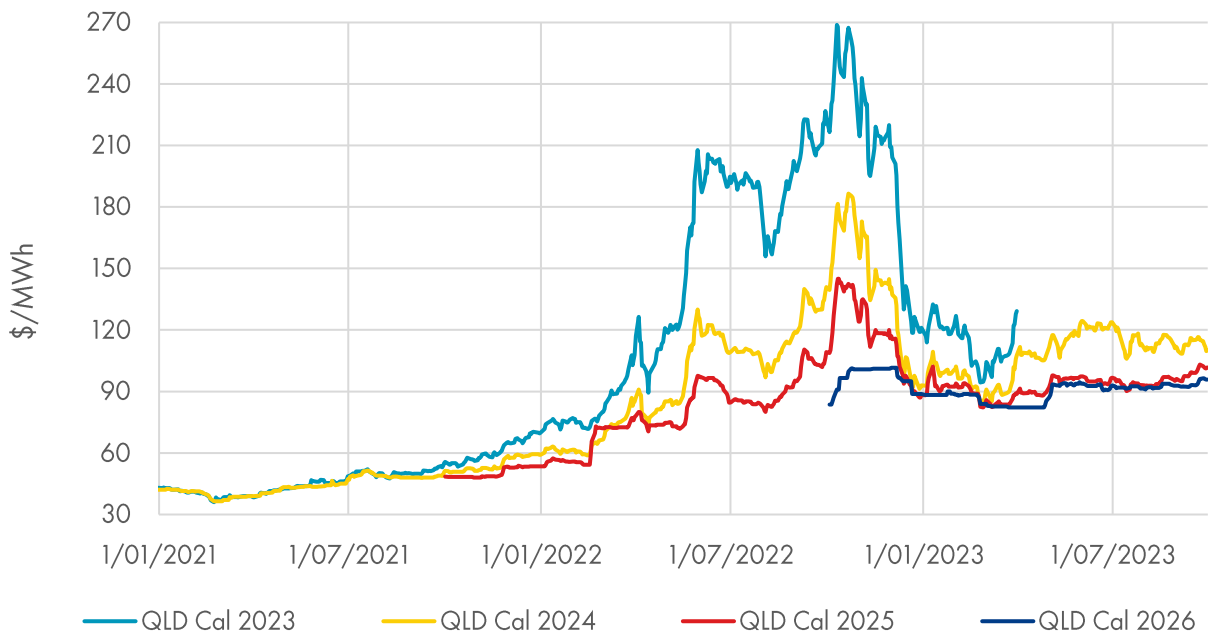
CY25 Flat



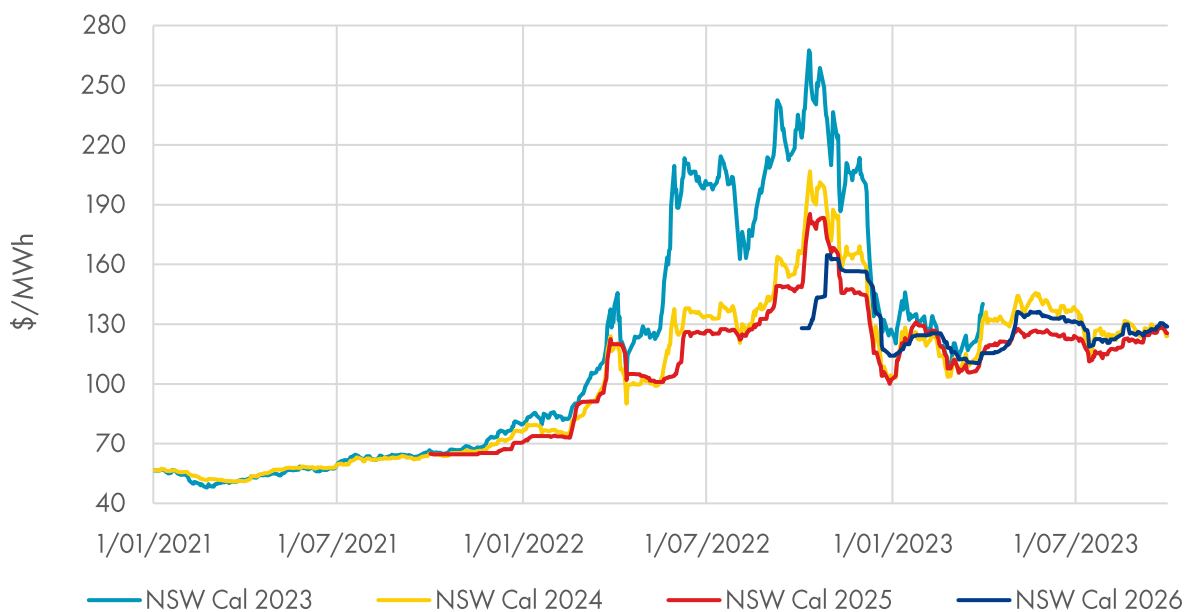
Source: ASX data

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Contract Market - QLD Calendar Years Flat



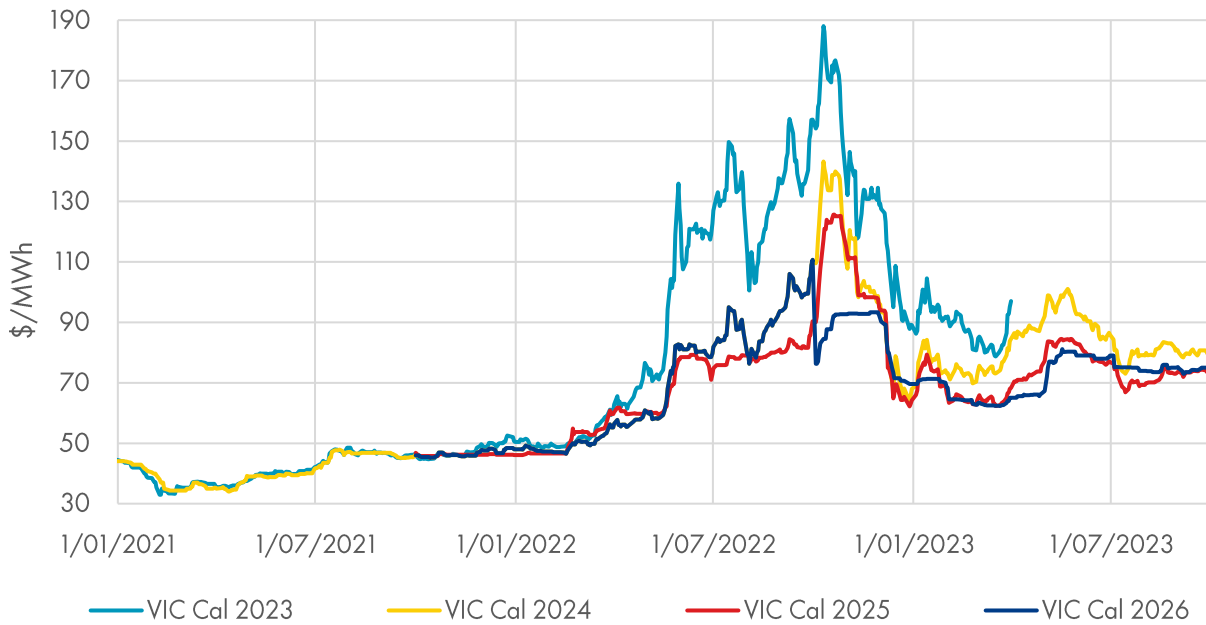
Contract Market - NSW Calendar Years Flat



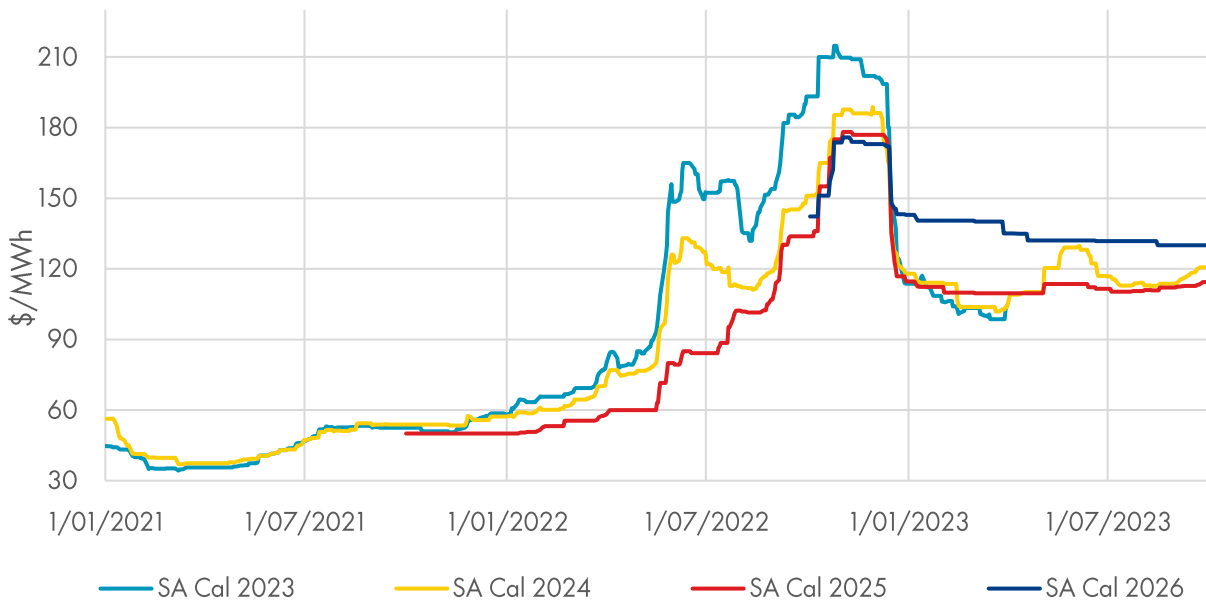
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Contract Market - VIC Calendar Years Flat



Contract Market - SA Calendar Years Flat



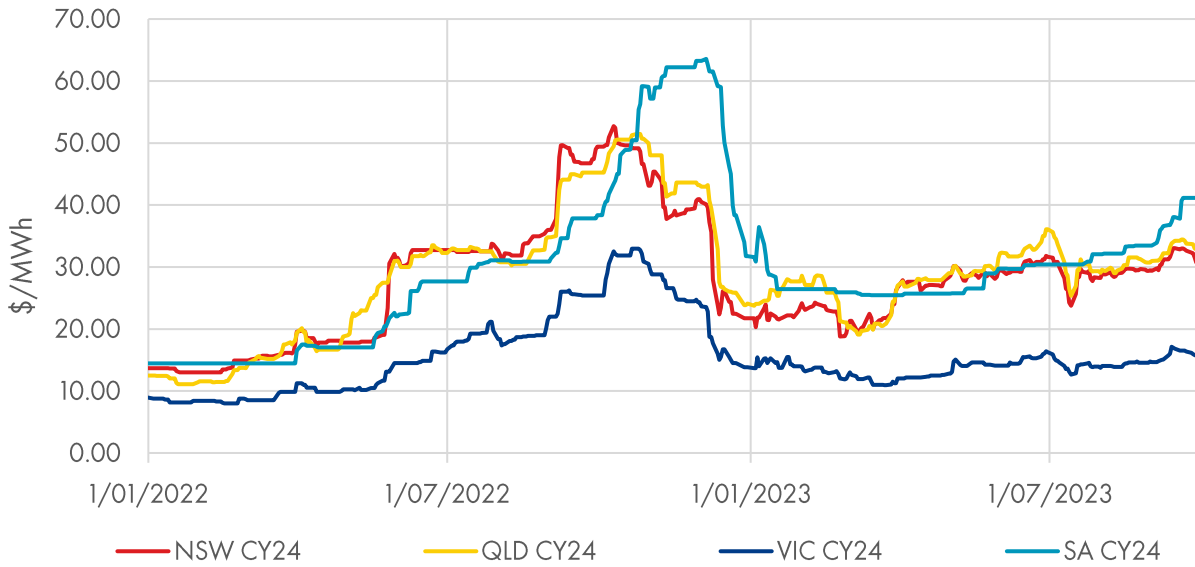
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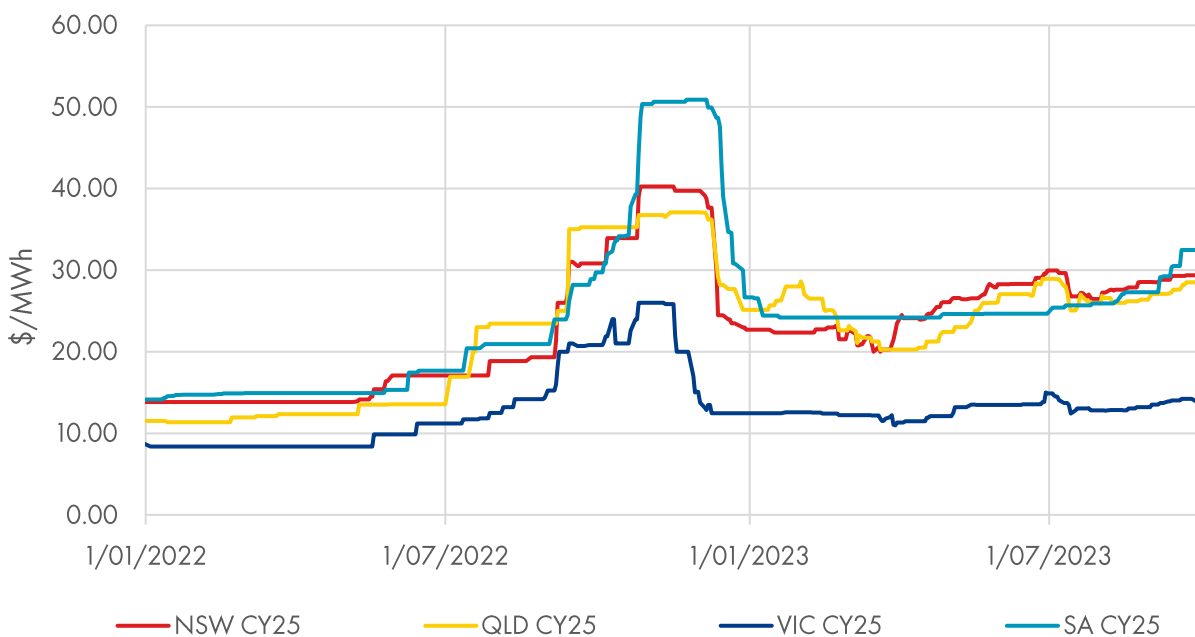
Cap Contract Market

Cap contracts in NSW, QLD and VIC started to see a sustained but mild decline in price compared to the highs in previous months. The bearish spot conditions had more of an impact on swap pricing than caps, as market participants continued to price in high volatility driven by El Nino and Positive IOD factors. SA CAP continued to price in very high volatility in line with historical outcomes, but further risk premium associated hotter temperature and, accordingly, lower wind associated with El Nino and Positive IOD.

Calendar Year 2024 (CY24)



Calendar Year 2025 (CY25)



Source: ASX data

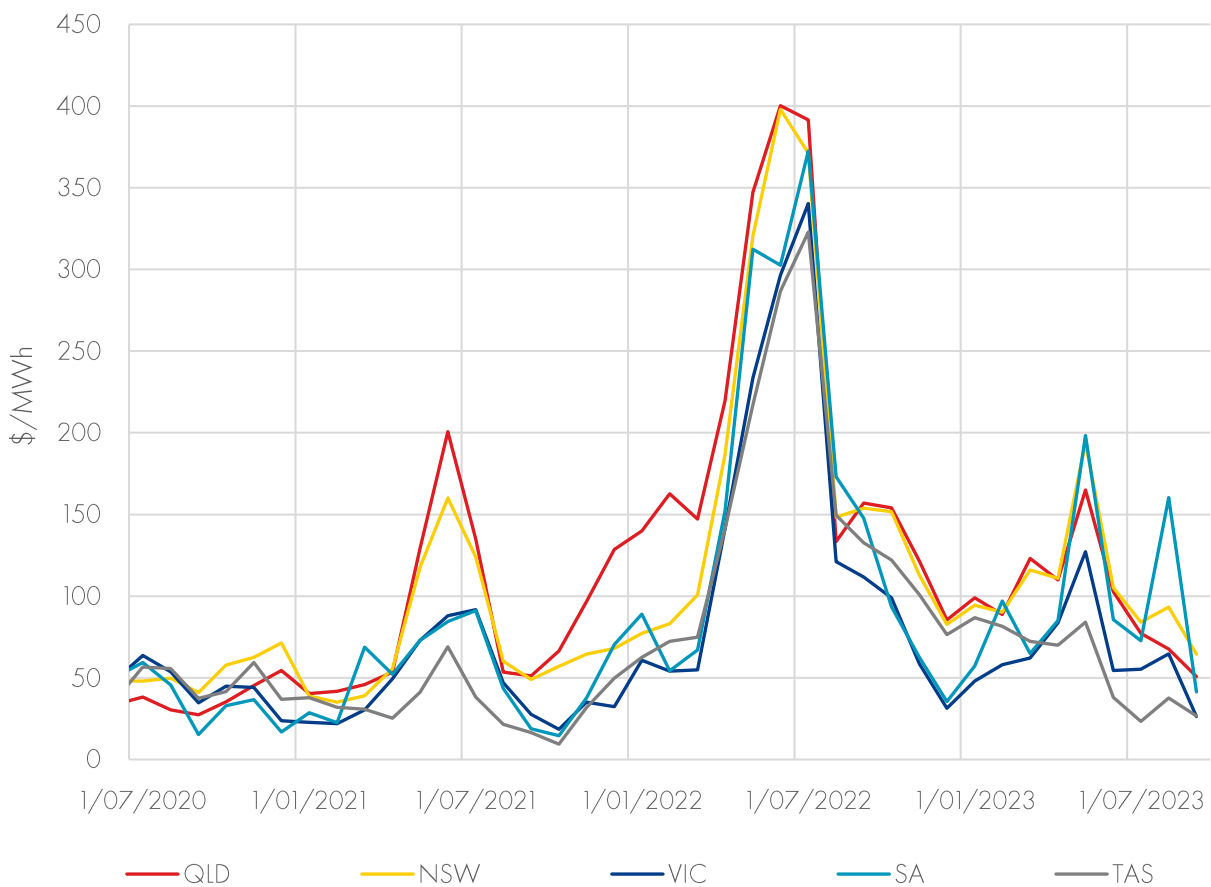
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Spot Prices: National Electricity Market

September saw mild spot outcomes across all states driven by a quick drop off in heating demand, a big increase in strong and stable renewable output (as expected during the shoulder season where weather conditions are most favourable), and a notable decrease in domestic spot gas prices. This meant that, despite the lower coal availability due to major planned and unplanned outages, the remaining coal generators had to compete with high renewable and low fuel cost (due to high storage levels and muted domestic gas demand) gas generation to maintain desirable baseload outputs. A few volatility spikes were seen in QLD, NSW and SA due to temporary transmission interconnector constraints.

September 2023

State	Average Spot Price	Max 5 Min Spot Price	5 Min Intervals at \$1,000 or Above	5 Min Intervals at \$0 or Below
QLD	50.77	15,004.02	6	2,659
NSW	64.54	16,599.89	4	1,338
VIC	26.31	526.16	0	2,546
SA	41.32	9,908.62	5	2,734
TAS	26.71	450.10	0	1,039



Source: NEM Spot Market - AEMO

Western Australia Energy Market

WEM STEM and Balancing Prices

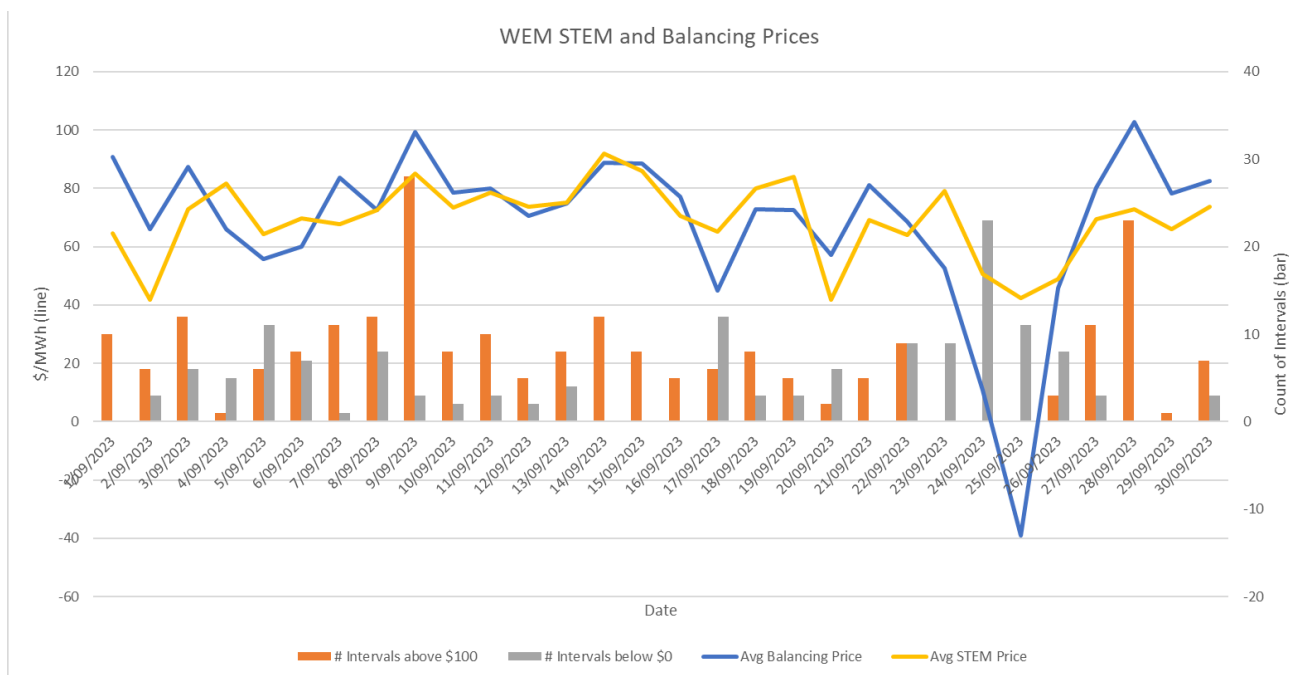
The (STEM) average flat price fell by 22% to \$63.90, and the average peak price dropped by 22% to \$82.66. The Balancing Market saw the average flat price increase by 31% to \$90.82, and the average peak price rose by 35% to \$92.16.

The STEM experienced six intervals above \$100 (compared to 11 last month), and 0 intervals below \$0 (versus 9 last month). In the Balancing Market, there were 10 intervals above \$100 (versus 9 in the month prior), and 7 intervals below \$0 (versus 0 intervals in the previous month).

September saw the final testing stages of 5-minute dispatch market – a key step in the [WEM Reforms](#) – ahead of a 1 October launch. This reform in the WEM sees the market moving away from a capacity market in favour of the physical market structure of the East Coast. The 5-minute financial settlement will be introduced later down the track.

The start of spring saw mild temperatures and high solar output, a combination that caused recurring record-breaking minimum operational demand in the WEM. Solar at times accounted for over 70% of total generation.

Coal supply issues in Collie (South-west WA) continued to plague baseload generators, with one of the two major coal suppliers remaining in the region, Griffin Coal, reportedly pushed into receivership and the neighbouring Premier coal mine facing extremely low stock. This meant coal imports from NSW continued to be required in the WEM.



Source: Western Australia Energy Market – AEMO

Emission Schemes

Large-scale generation certificate (LGC) spot contracts closed at \$51.75, \$2.25 lower than last month's close of \$54.00. The LGC compliance year (CY) vintages saw notable declines in the near-term contracts but increases in the later dated ones against their August closes.

- CY23 closed \$2.25 lower at \$52.75,
- CY24 closed \$0.25 higher at \$53.00,
- CY25 closed \$1.20 higher at \$46.20,
- CY26 closed \$4.00 higher at \$39.50,
- CY27 closed \$3.00 higher at \$28.50,
- CY28 closed \$1.50 higher at \$22.00, and
- CY29 closed \$0.50 higher at \$16.00.

Victorian Energy Efficiency Certificate (VEEC) spot contracts closed at \$85.50, \$0.25 higher than last month's close of \$85.25. VEEC quarterly vintages closed between \$85.5 and \$86. Creation continues to lag year-on-year.

Energy Savings Certificates (ESC) spot contracts closed at \$27.00, \$1.60 higher than last month's close of \$25.40. ESC quarterly vintages closed between \$27.5 and \$28.5. The jump in ESC pricing was driven by the [NSW regulator announcing significant changes](#) to one of the key creation mechanisms – heat pump water heating – contributing to the 20% year-on-year ESC creation seen this year. The key changes announced for consultation included:

- Decreasing the baseline assumption of hot water usage from 60L/day to 45L/day which would reduce creation per activity by 27% to 54%,
- Introducing a co-payment per hot water unit of \$200 for both residential and now business consumers, versus a \$30 co-payment for residential and \$0 copayment for businesses, to reduce the prevalence of high-pressure sales tactics and to ensure customers make informed decisions,
- Transitioning to the new rules three months after the changes are made and/or grandfathering in contracts made before the changes are implemented
- Changes are expected to be announced by end of 2023.

This led to ESCs jumping to a high of \$29, retracing to \$27 by the end of the month due to the long lead time for the proposed changes to take effect.

Small-scale Technology Certificates (STC) spot contracts closed at \$39.80, \$0.10 lower than last month's close of \$39.90. STC quarterly vintages closed between \$39.75 and \$39.8. The decline in spot STC prices coincided with the STC Clearing House achieving a surplus (in other words, has more certificates to sell at \$40/certificate than there is demand to buy) for the first time in approximately two years. As of writing, the [Clearing House](#) has approx. 300k certificates in surplus. However, the spot STC price did not drop dramatically as market participants expect creation to continue underperforming.

Gas Forward Market

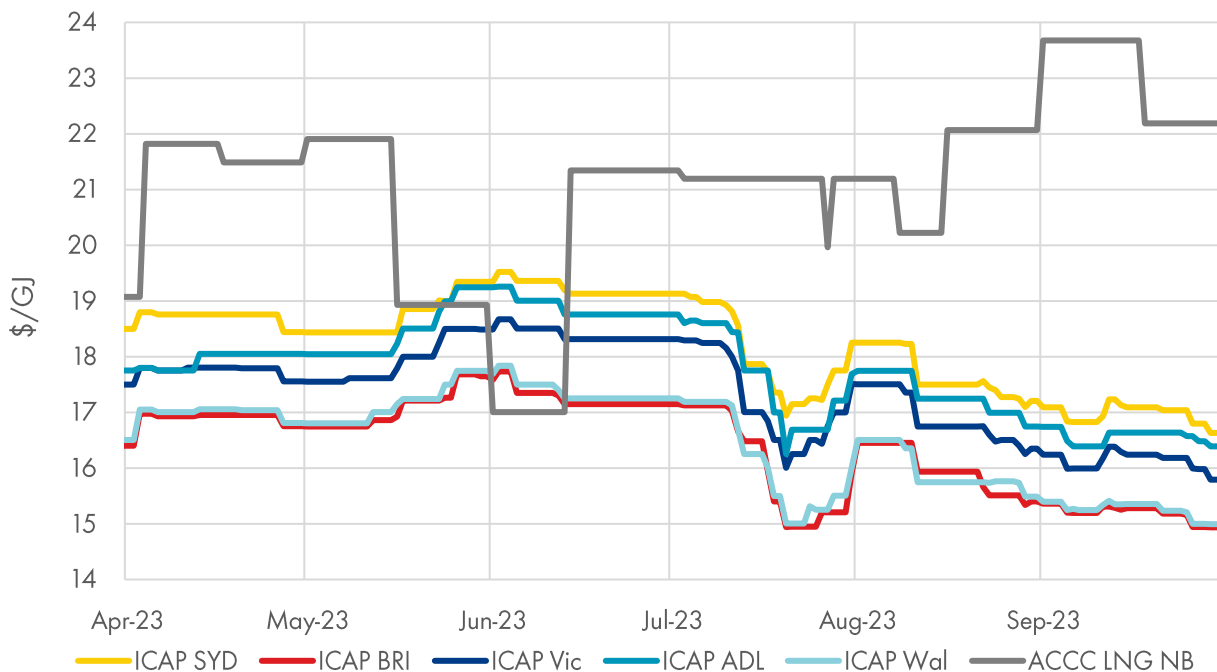
Calendar Year 2024 (CY24)

All domestic forward contracts for Calendar Year 2024 (CY24) decreased for the third consecutive month. The Victoria forward price closed the month at \$15.79/GJ, dipping below \$16.00/GJ for the first time this year. The ACCC LNG netback (NB) forward price remained at above \$22.00/GJ, representing a widening spread between international spot LNG prices and the Victorian domestic market of over \$6/GJ. Calendar Year 2024 forward market liquidity remains low following the commencement of the Mandatory Code of Conduct on 11 July and the end of the transitional period in early September.

September 2023, \$/GJ

Market	Period Low	Period High	Opening Price	Closing Price	Monthly Change	Monthly Change (%)
ICAP Brisbane	\$14.94	\$15.36	\$15.36	\$14.94	-\$0.43	-2.8%
ICAP Sydney	\$16.63	\$17.23	\$17.09	\$16.63	-\$0.46	-2.7%
ICAP Adelaide	\$16.39	\$16.74	\$16.74	\$16.39	-\$0.35	-2.1%
ICAP Victoria	\$15.79	\$16.39	\$16.24	\$15.79	-\$0.45	-2.8%
ICAP Wallumbilla	\$15.00	\$15.41	\$15.36	\$15.00	-\$0.37	-2.4%
ACCC LNG NB	\$22.18	\$23.67	\$23.67	\$22.18	-\$1.49	-6.3%

CY24 Flat Calendar Year | 1 April 2023 to date



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Source: ICAP Energy Gas Forward Price Curve Data, ACCC historical and forward short-term LNG netback price (<https://www.accc.gov.au/regulated-infrastructure/energy/gas-inquiry-2017-25/lng-netback-price-series>)

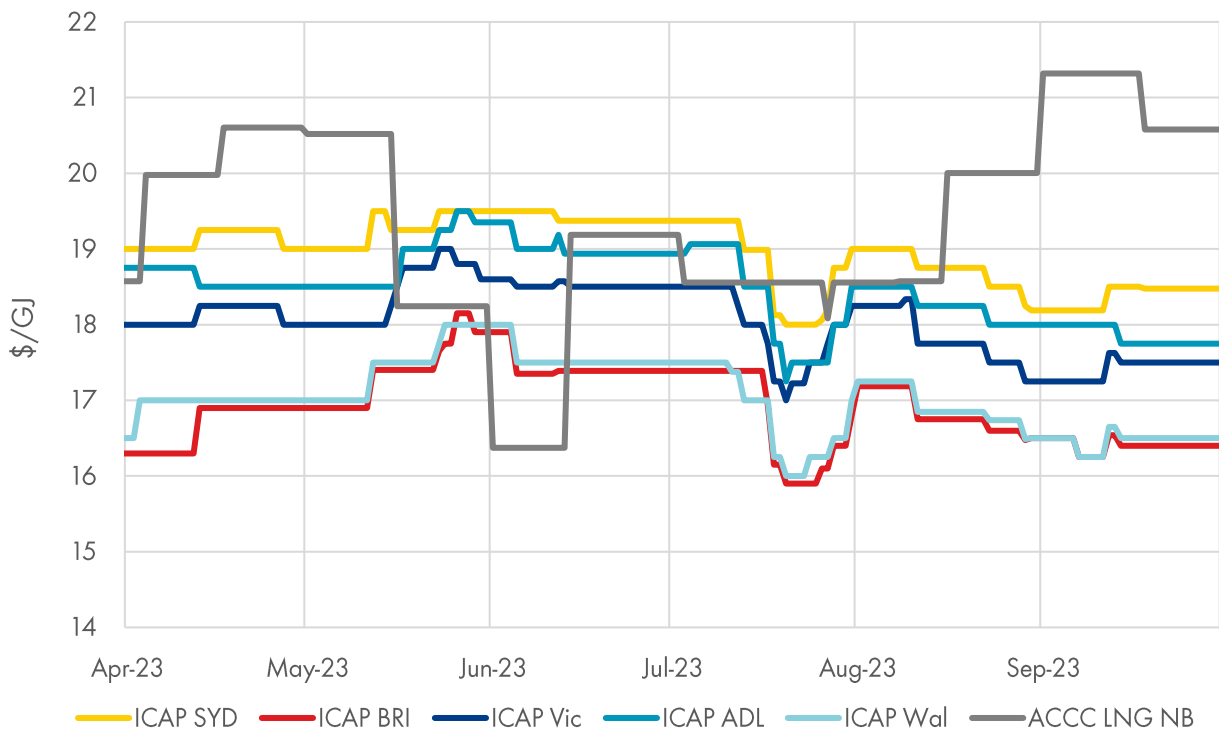
Calendar Year 2025 (CY25)

Domestic forward contracts for Calendar Year 2025 (CY25) bucked the Calendar Year 2024 (CY24) contract trend, with both the Victorian and Sydney contracts ending the month over 1% higher, whilst the Brisbane and Adelaide contracts decreased slightly. This represents a widening premium of the Victorian contract compared to the Brisbane contract of \$1.10/GJ, up from \$0.75/GJ at the start of the month. The ACCC LNG netback forward price declined, however still ending the month above \$20.00/GJ. The Calendar Year 2025 forward market continues to be affected by reduced liquidity. For the CY25 contract, the ACCC LNG netback forward price remains more than two dollars higher than all domestic markets.

September 2023, \$/GJ

Market	Period Low	Period High	Opening Price	Closing Price	Monthly Change	Monthly Change (%)
ICAP Brisbane	\$16.25	\$16.54	\$16.50	\$16.40	-\$0.10	-0.6%
ICAP Sydney	\$18.19	\$18.50	\$18.19	\$18.48	\$0.29	1.6%
ICAP Adelaide	\$17.75	\$18.00	\$18.00	\$17.75	-\$0.25	-1.4%
ICAP Victoria	\$17.25	\$17.63	\$17.25	\$17.50	\$0.25	1.4%
ICAP Wallumbilla	\$16.25	\$16.65	\$16.50	\$16.50	\$0.00	0.0%
ACCC LNG NB	\$20.58	\$21.32	\$21.32	\$20.58	-\$0.74	-3.5%

CY25 Flat Calendar Year | 1 April 2023 to date



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Source: ICAP Energy Gas Forward Price Curve Data, ACCC historical and forward short-term LNG netback price (<https://www.accc.gov.au/regulated-infrastructure/energy/gas-inquiry-2017-25/lng-netback-price-series>)

Spot Prices: East Coast Gas Market

Spot prices traded between \$4.80/GJ and \$11.43/GJ for the month of September. The Victorian Declared Wholesale Gas Market (DWGM) average 6am price was below \$9/GJ for the month, with an increase in spot volatility observed, as well as an increased price differential between the markets caused by physical infrastructure constraints and maintenance. On average, the Adelaide market traded over \$0.80/GJ higher than the Victorian market.

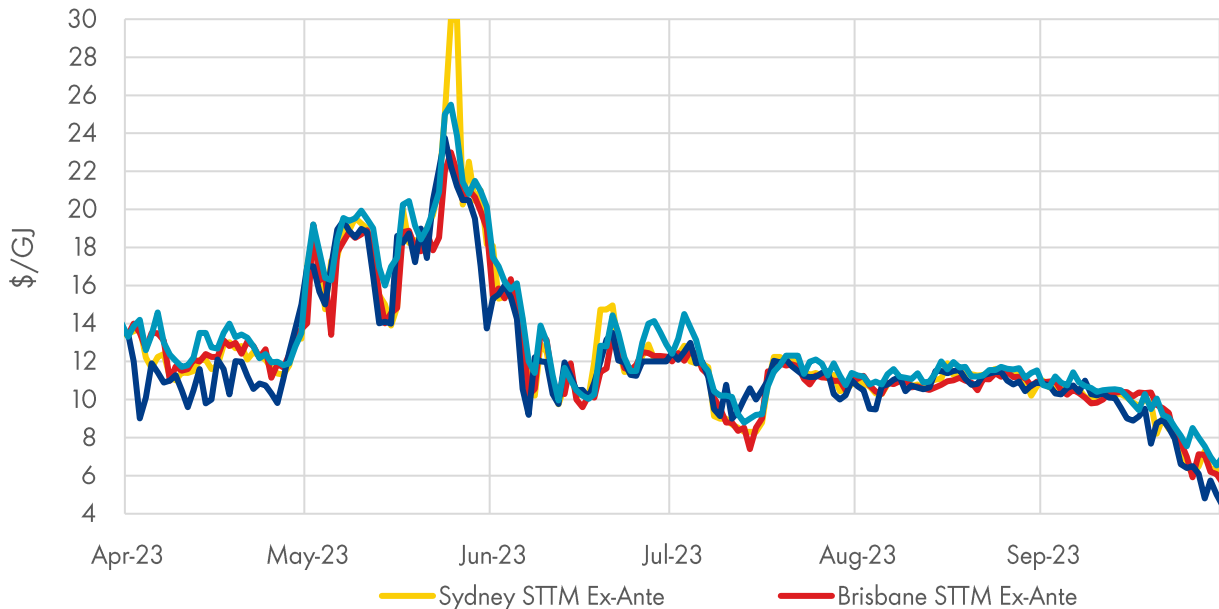
Temperatures in the southern load centre of Melbourne were above average throughout the month, with an early end to winter resulting in low gas demand for heating. Combined with unplanned operational issues at some of the Curtis Island LNG export facilities, these market fundamentals led to a relative oversupply of gas in the market, adding to an increasingly full inventory at Iona, which ended September at the end of the third quarter at 20.6PJ.

September 2023, \$/GJ

Market	Average Spot Price	Minimum Spot Price	Maximum Spot Price
Brisbane STTM ¹	\$9.36	\$5.91	\$10.99
Sydney STTM	\$9.21	\$6.15	\$11.00
Adelaide STTM	\$9.66	\$6.54	\$11.43
Victorian DWGM ² 6am	\$8.84	\$4.80	\$11.00

¹STTM = Short Term Trading Market, ²DWGM = Declared Wholesale Gas Market. The STTM and DWGM markets represent the daily balancing markets administered by AEMO, which primarily serve to balance wholesale supply with end consumer demand.

Gas Spot Prices | 1 April 2023 to date



Source: AEMO MarketData



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<https://www.shell.com/investors/disclaimer-and-cautionary-note.html>

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