



Australia | Week # 45 Issued 5 November 2020

Weekly Outlook

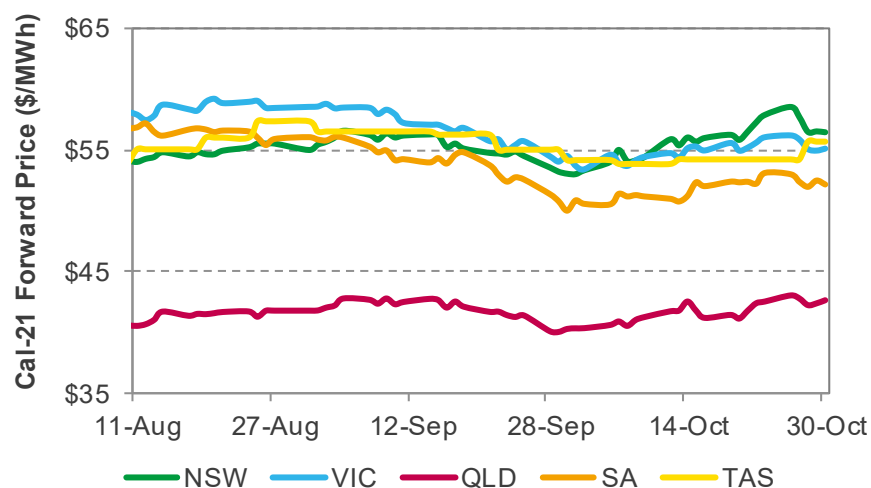
Price Movements

	Direction	Price	Weekly Change	% Change		Direction	Price	Weekly Change	% Change		
Electricity	NSW Electricity Cal-21 Flat (\$/MWh)	↓	\$56.43	-\$1.42	-2.46%	Environmental	Large-scale Generation Certificates (\$/certificate)	→	\$38.50	\$0.00	0.00%
	VIC Electricity Cal-21 Flat (\$/MWh)	↓	\$55.17	-\$0.94	-1.68%		Small-scale Technology Certificates (\$/certificate)	→	\$37.75	-\$0.15	-0.40%
	QLD Electricity Cal-21 Flat (\$/MWh)	→	\$42.60	\$0.10	0.24%		Victorian Energy Efficiency Certificates (\$/certificate)	↓	\$34.90	-\$1.00	-2.79%
	SA Electricity Cal-21 Flat (\$/MWh)	↓	\$52.17	-\$0.96	-1.81%		NSW Energy Savings Certificates (\$/certificate)	↓	\$27.05	-\$0.20	-0.73%
	TAS Electricity Cal-21 Flat (\$/MWh)	↑	\$55.70	\$1.48	2.73%						
	NSW Electricity FY-21/22 Flat (\$/MWh)	↓	\$55.31	-\$1.24	-2.19%	Sydney STTM Ex-Ante Gas (\$/GJ)	↓	\$5.51	-\$0.32	-5.51%	
	VIC Electricity FY-21/22 Flat (\$/MWh)	↓	\$49.35	-\$1.15	-2.27%	Victoria Wholesale BoD Gas (\$/GJ)	↓	\$5.02	-\$0.34	-6.41%	
	QLD Electricity FY-21/22 Flat (\$/MWh)	→	\$42.85	-\$0.15	-0.35%	Brisbane STTM Ex-Ante Gas (\$/GJ)	↓	\$5.84	-\$0.06	-0.98%	
	SA Electricity FY-21/22 Flat (\$/MWh)	→	\$49.45	-\$0.02	-0.05%	Adelaide STTM Ex-Ante Gas (\$/GJ)	↑	\$5.95	\$0.05	0.77%	
	TAS Electricity FY-21/22 Flat (\$/MWh)	↑	\$50.29	\$1.84	3.79%						
Forex	NSW Electricity Spot (\$/MWh)	↓	\$50.46	-\$26.73	-34.62%	Gas	Dec-20 LNG Japan Korea Marker (US\$/Mmbtu)		\$6.95		
	VIC Electricity Spot (\$/MWh)	↓	\$48.64	-\$3.26	-6.28%		Dec-20 LNG Japan Korea Marker (AU\$/GJ)		\$10.42		
	QLD Electricity Spot (\$/MWh)	↑	\$43.27	\$6.98	19.22%		Cal-21 ACCC LNG Netback (\$/GJ)		\$5.97		
	SA Electricity Spot (\$/MWh)	↓	\$37.38	-\$1.03	-2.69%		Sep-20 Brent Crude Oil (US\$/bbl)	↓	\$37.94	-3.83	-9.17%
	TAS Electricity Spot (\$/MWh)	↓	\$54.29	-\$4.90	-8.28%		Sep-20 Brent Crude Oil (AU\$/bbl)	↓	\$53.86	-4.86	-8.28%
	AUD/USD Exchange Rate	↓	0.7044	-\$0.01	-0.97%	Aug-20 Japan Crude Cocktail (¥/kL)		28,978			
	AUD/JPY Exchange Rate	↓	73.51	-\$0.96	-1.29%	Aug-20 Japan Crude Cocktail (AU\$/bbl)		62.67			



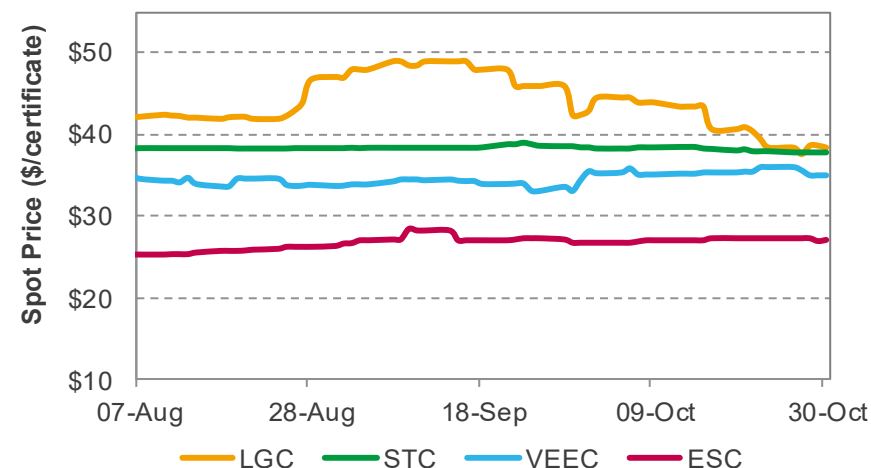
[Glossary of Terms](#)

Electricity Forwards Prices



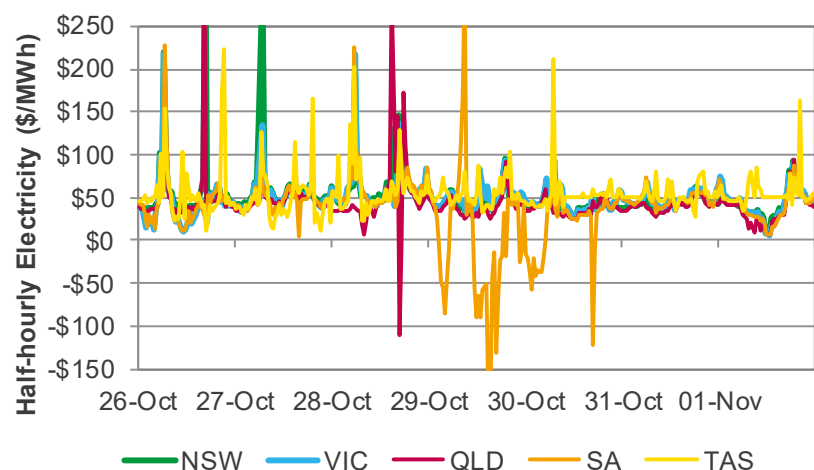
- The majority of Cal-21 forward prices fell across the NEM for the week ended 30th October 2020. Prices across the NEM are consolidating after the rise last week and are hovering near mid-September levels.
- In **NSW**, Cal-21 fell \$1.42 and closed at \$56.42/MWh. Q1-21 fell as its climb came to an end, falling \$1.75 to \$75/MWh. Q4-21 dipped \$1.25 to \$50 while its 60-day average rose to \$47.98. Q1-22 saw a slight fall of \$1.32 to \$73.4/MWh.
- Vic** Cal-21 fell \$0.94 and settled at \$55.17/MWh. Q3-21 saw a drop of \$1.75 to \$45.5, falling under the 60-day average of \$46. Remaining quarters had minor decreases of less than \$0.75 whereas Q3-21 fell to \$1.75 to \$45.5, falling back under the 60-day average of \$46 and Q1-22 fell to \$1.44 from \$72.69.
- Qld** Cal-21 contracts held steady at \$42.6/MWh, hovering \$1 above the 60-day average. Q1-21 saw a small rise and rose \$0.49 to \$58.99/MWh.
- SA** Cal-21 fell \$0.96 to \$52.17/MWh with Q1-21 plummeted \$3.4 and is hovering at \$75.6/MWh, \$5.2 below the 60-day average. Whereas, Q1-22 fell to \$70.14 after rising to \$72.25 mid-week. **Tas** Cal-21 prices rose \$1.48 to \$55.70/MWh.

Environmental Prices



- LGCs** held steady at \$38.50/cert with minor movement throughout the week. Trade volume rose from 79,000 to 125,000 LGCs. Cal-20 mirrored the spot and held at \$38.50/cert. Cal-21 rose \$0.20 to \$32.70/cert with the volume falling 25% to 90,000 certs. The **STC** spot price dropped \$0.15 to \$37.75/cert with certificate turnover more than doubling to 510,000 STCs, a 157.6% increase in traded volume week-on-week. Creation rose 44.2% to ~894,000. Cal-21 forwards fell and closed between \$37.90 and \$38.70/cert.
- VEECs** spot prices fell \$1 to \$34.90/cert, while weekly creation doubled to 83,000. With Victoria's restrictions eased, the Department of Environment, Land, Water and Planning (DELWP) announced via the [ESC](#) site that multiple activities have been restored and the planned phase down of certain activities have received a 3-month extension from end of March 2021 to end of June 2021. Cal-20 forwards averaged between \$35 and \$35.90, whereas Cal-21 fell and closed between \$34.50 and \$36.50/cert. **ESCs** fell \$0.20 to \$27.05/cert with weekly creation rising from 95,000 to 132,000. Cal-20 prices held and closed between \$27-\$27.20/cert while Cal-21 prices ranged between \$27.05-\$28.35/cert.

Electricity Spot Market



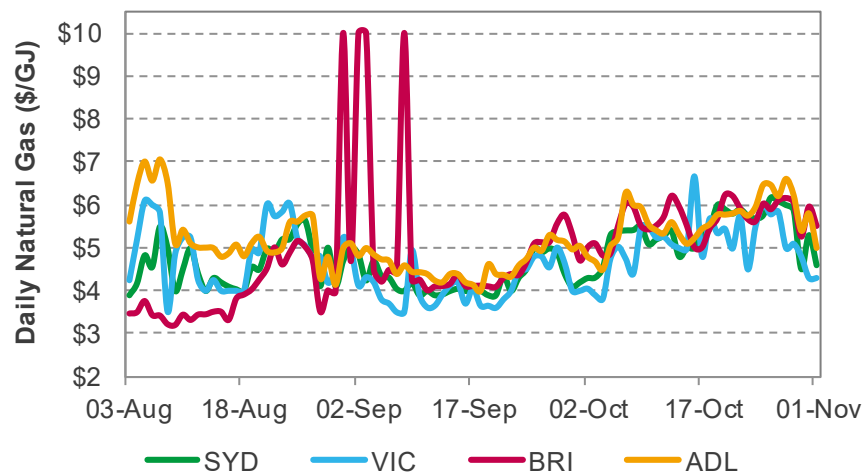
Electricity Spot Price Stats	NSW (\$/MWh)	VIC (\$/MWh)	QLD (\$/MWh)	SA (\$/MWh)	TAS (\$/MWh)
Underlying	50.28	48.64	43.15	37.36	54.29
Cap Payout	0.18	0.00	0.12	0.02	0.00
Average Flat	50.46	48.64	43.27	37.38	54.29
Average Peak	52.27	48.25	46.78	34.23	54.67
Average Off-peak	49.01	48.96	40.44	39.92	53.98
Max	360.87	218.15	339.39	305.43	222.90
Min	7.17	6.20	-111.65	-192.39	10.68

Source: AEMO, SE Global Research & Analytics

Electricity Spot Market

- The average weekly spot prices were mixed across the NEM for the week ended 01 November 2020.
- The **NSW** spot plummeted \$26.73 (34.62%) and averaged at \$50.46/MWh even though week-on-week demand rose 1.1%. Net coal-fired output held steady with a reported output of ~5400MW. (Eraring decreased output by 6% (~109MW) offset by Vales Point B increasing output by 19% (134MW) as it came out of maintenance.) Hydro output increased by 34% (~52.6MW) and wind output rose 28% (~112MW, covering 9% of the state's output), pushing out gas-fired generation and imports (which fell by 38%, ~54MW; and from 759MW to 717MW respectively), allowing spot prices to fall.
- Similarly, **Vic** fell \$3.26 (6.28%) to \$48.64/MWh while demand rose 1.6%. Net coal-fired output fell 3% (~85MW) as Yallourn W decreased output by 7% (80MW) due to unexpected maintenance, gas output fell 9% (~13MW), and hydro fell 13% (~53MW), generating ~353MW. Imports from SA fell and averaged at 107MW. However, wind output increased 27% (~170MW), contributing 16% of the state's generation and allowing spot to soften slightly.
- **Qld** spot rose \$6.98 (19.22%) to \$43.27/MWh as demand increased 2.2% and exports to NSW rose from 627MW to 665MW. Overall coal-fired output rose 2%, as Stanwell ramped up 18% (~175MW) as all units came online. Large-scale solar rose 19% (66MW), generating 418MW, approximately 6% of the states output. However, Kogan Creek remained offline throughout the week while gas fell 3% (~20MW) and wind output fell 14.5%.
- **SA** spot prices fell by \$1.03 (2.69%), averaging at \$37.38/MWh for the week while demand rose 1.7%. Gas-fired generation fell 3.8% (~23MW) while wind held steady and generated 42% of the state's output.
- **Tas** spot prices fell after last week's sharp rise, falling \$4.90 (~8.3%) to \$54.29/MWh as demand dipped 1.7%. Hydro output fell 22% (~233MW) with water levels falling a massive 4.5% to 44.4%. Hydro was responsible for ~845MW of the state's generation. Wind regained some strength and rose 26% (~25MW) and generated 12% of the state's output.

East Coast Gas Market



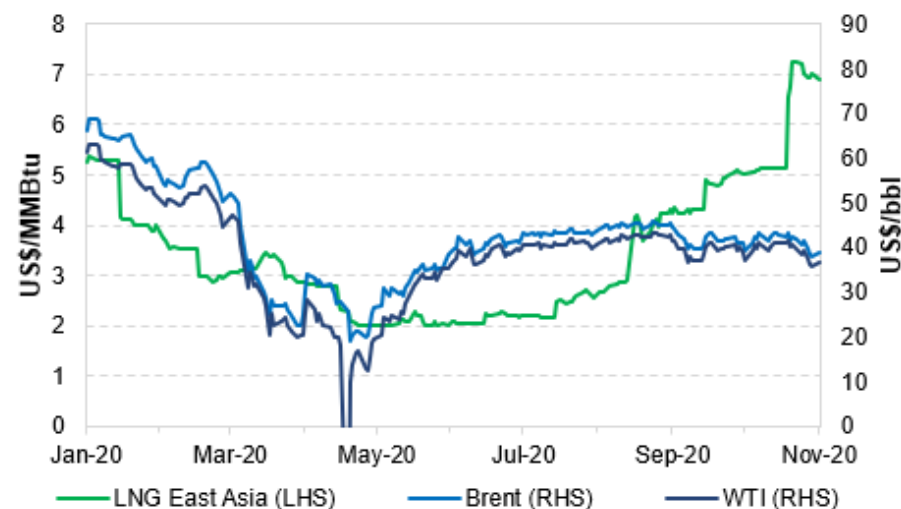
- Average weekly gas spot prices rose across the hubs for the week ended 1 November 2020. Prices varied between \$5.02/GJ and \$5.95/GJ.
- The average gas spot price at the **Syd** hub fell 5.5% (\$0.32) to \$5.51/GJ as average temps fell 2.5°C. Gas used for electricity generation fell 38% (~54MW), as reports show an average of 86.6MW was generated across the state.
- The average gas spot price in **Vic** hub fell 6.4% (\$0.34) to \$5.02/GJ while average temps rose 1.6°C. Gas-fired generation in the state fell 9% generating ~132MW, reports show higher gas-fired generation mid week.
- The average gas spot price at the **Bri** hub held steady at \$5.84/GJ as temperatures also held. Gas used for electricity generation fell 3% (20.3MW) with output varied depending on demand and weather conditions.
- The average gas spot price at the **Adl** hub held steady at \$5.95/GJ as average temps fell 1.9°C. Gas-fired generation output fell 3.8% (22.7MW) with an output of ~569MW, with generation spread evenly throughout the week.

On The Radar

Oil Prices Decline As COVID-19 Cases Rise

Oil prices have taken a hit falling just over 9% this past week amidst rising COVID-19 cases throughout the United States and Europe. While cases skyrocketed in key areas of the world, concerns about the impact on global oil demand has been the main price driver these last few months. Brent prices fell to USD\$37.94 on Friday 30th October 2020, a 5-month low. Declines these past few months suggest buying pressure is waning, as countries with leading economies like France and Germany head back into lockdown, which should reduce demand for oil.

As demand softened, supply has remained strong as OPEC+ countries maintained their output. OPEC+ countries will meet late November 2020 to discuss supply, with prices looking to break up or down depending on the meeting's outcome. Oil production in Libya, also a member of OPEC+, has surged after a long 8 month hiatus, jumping from 100,000 barrels per day (BPD) to 800,000BPD. An increase in OPEC supply and a new hit to demand as coronavirus cases rise have weighed on oil prices, which have fallen 8% in October to around \$38 a barrel.



★ 2020 Spot Prices for LNG, Brent and WTI
Source: GR&A

Word of the Week: Sayōnara

Sayōnara, Coal: Net Zero Commitments Impact Australia

China, Japan, and South Korea have announced commitments to becoming net zero. Together, these countries buy ~70% of Australia's coal exports.

China is the world's largest CO2 emitter by nearly double (~10GT vs. ~5.4GT from the US), with an estimated 65% of its electricity coming from coal-fired units. China imports 22% of Aus coal exports and 33% of Aus natural gas exports. It intends to reach net zero by 2060, and aims for emissions to peak before 2030. While China approved more new coal-fired generation capacity during the first half of 2020 than during 2018 and 2019 combined, it has committed to prioritising investments for a clean recovery.

Japan is the world's 5th-largest CO2 emitter (1.2GT) with ~32% of its electricity coming from coal. Japan imports 27% of Australia's coal exports (=61% of Japan's coal imports) and 41% of Aus natural gas exports. While Japan was heavily reliant on nuclear output, the 2011 Fukushima disaster has resulted in coal and natural gas making up for reduced nuclear output. Japan has committed to reaching net zero by 2050, but it is estimated by Japan's Renewable Energy Institute that coal must be phased out by 2030 to achieve this.

South Korea lands at 8th on the list of CO2 emitters at 0.65GT with roughly 40% of its electricity being generated from coal. South Korea imports 11% of Aus coal exports (which makes up 33% of SK's coal imports) and 9% of Aus natural gas exports. South Korea's Green New Deal includes some USD61.9 billion in funding to create 660k thousand jobs by 2025.

Meanwhile, ANZ joined CommBank, Westpac, NAB, and [many others](#) before it in announcing it will no longer finance thermal coal projects after 2030. ANZ will now screen new customers' revenue and will not lend if more than 10% of revenue comes from thermal coal mining or generation.

Last week we wrote about companies setting net zero targets. but we know from experience from [our own sustainability journey](#) and [helping clients on their sustainability journeys](#) that the road can be complex and fraught with barriers.

Labor Wins Queensland Election, QRET Build Continues

The incumbent Labor government has won the Queensland state government election on October 31, extending its number of seats to at least 50 out of 93 with three seats yet to deliver a clear result. Regardless, there will be a new Energy minister after current minister, Anthony Lynham, decided not to run in the election.

The level of commitment to the Queensland Renewable Energy Target (QRET) of 50% by 2030 was a clear difference in election commitments between Labor and the Liberal National Party. While LNP professes to support renewable energy including mandating investment by government-owned companies, it has not committed to a target. The Labor commitments are much more comprehensive and will now be progressed in the next four years. Key commitments are:

- Continuing progress towards the 50% QRET by 2030
- Investing \$145million to establish three renewable energy
- Supporting CopperString 2.0 (a new transmission line to connect the current standalone Mt Isa network to the NEM) including investing nearly \$15million to fast-track support for the project
- Supporting a hydrogen industry with \$10million in funding

All three government-owned energy companies in Qld (Cleanco, Stanwell and CS Energy) announced contracts with renewable projects in the last few months ahead of the election, supporting the construction of over 1,100MW of wind generation and 450MW of solar PV generation. It is likely that similar commitments will flow ahead of the next election, locking in progress towards the 2030 QRET well beyond the current period of government. The investment in renewable energy zones should make these more attractive for investment and reduce costs for new projects in these zones, allowing developers to offer lower prices for PPAs.

While CopperString 2.0 will increase NEM demand by adding demand in Mt Isa, it will also unlock significant renewable resources along its path and allow the Diamantina power station in Mt Isa to provide firming capacity to the NEM. It may also reduce grid constraints by increasing local demand for the output from current renewable energy project in Northern Queensland.