FORSYTH BARR

NEW ZEALAND EQUITY RESEARCH

4 JUNE 2020

Power Points
COVID Eliminated from Electricity — June 2020

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Looking at the electricity statistics for May 2020 and it is almost impossible to tell COVID-19 had an impact. May 2020 electricity demand was up +1.9% on the pcp and wholesale electricity prices averaged $134/MWh at Otahuhu (OTA), the second highest month average price in the past 14-months. Whilst we anticipated the electricity sector to be lightly impacted by COVID-19, the recovery has been faster than expected. We continue to like the sector with OUTPERFORM ratings on all of the electricity stocks.

Figure 1. Summary company valuation metrics

Company	Price	Target Price	Target Return	Rating	EV/EBITDA	PE	FY20 Gr Yld	EBITDAF NZ$m	Changes EBITDAF	Changes Chg	Changes Target Price	Changes Rating
CEN	$6.34	$8.15	34.7%	OUTPERFORM	12.6	20.2	7.6%	431	$0m	0.0%	+$0.00	-
GNE	$2.95	$3.30	17.8%	OUTPERFORM	14.3	26.9	7.9%	359	$0m	0.0%	+$0.00	-
MCY	$4.71	$4.95	8.6%	OUTPERFORM	15.3	27.9	4.7%	493	$0m	0.0%	+$0.00	-
MEL	$4.88	$4.80	2.8%	OUTPERFORM	16.2	24.8	5.6%	870	$0m	0.0%	+$0.00	-
TLT	$3.47	$3.50	0.9%	OUTPERFORM	9.6	32.0	0.0%	126	$0m	0.0%	+$0.00	-
TPW	$7.12	$7.50	9.9%	OUTPERFORM	15.3	30.0	6.3%	186	$0m	0.0%	+$0.00	-

Source: Company reports, Forsyth Barr analysis

Strong month for South Island generators

May 2020 was a good month for the South Island generators. Firm wholesale electricity prices and strong South Island hydro generation volumes (the highest since June 2019) will have benefitted Meridian Energy (MEL) and Contact Energy (CEN) in particular. In addition, it was a record month for geothermal generation, further benefitting CEN. However, the North Island hydro situation continues to be challenging, impacting Mercury (MCY) the most. National hydro storage is now 83% of average, with lake Taupo less than half of average storage for this time of year.

CEN is the best value, and we expect electricity to perform well over the coming months

We continue to like the sector. We see the sector performing well in both up and down markets. If the market falls, we expect the defensive nature of electricity to minimise the downside risk. If the market rises, the low interest rate environment will be a key driver of electricity share prices. However, the electricity sector yields remain more attractive than property and other bond proxies. In addition, the long-term outlook remains positive given the need to decarbonise transport and industrial processes over the coming decades. CEN is offering the best value at present (it is trading on the lowest multiples and offers the second best dividend yield), and in our view there is no obvious reason why it has materially underperformed its peers over the past year.

Still no news on NZAS

The main downside risk for the sector is the closure of NZAS. There has been no material news over the past month and the electricity sector and investors alike continue to wait for RIO's decision. Our view is unchanged, we believe NZAS will remain open. In addition, we do not read anything into the continued delay as there are several possible reasons for it, which we discuss later in the report.

Trustpower (TPW) and Tilt Renewables (TLT) FY20 results in line with expectations

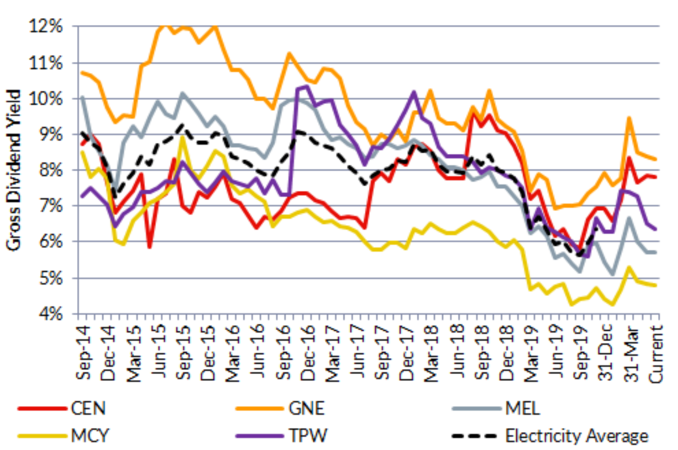
Whilst both TPW and TLT's FY20 operating EBITDAF results were down on the pcp, both declines were expected. TPW's result was impacted by lower hydro generation, lower ACOT revenue and increased operating costs. TLT's result was down due to the sale of its Snowtown 2 windfarm in December 2019. TPW's decision to trim its final dividend -1.5cps to 32.5cps was a minor surprise.

June 2020 Power Points

Electricity yields remain attractive vs. other high quality yield options

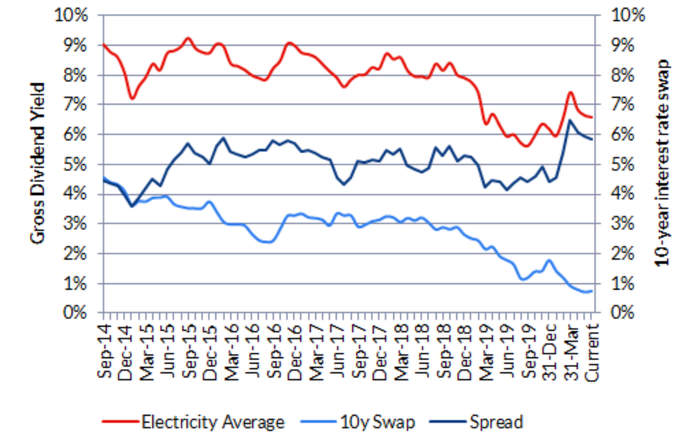
Over the past month the yield story has not changed materially. The gap between electricity gross dividend yields and the 10-year swap rate and other yield stocks has closed, but not significantly. The average sector gross dividend yield is down -0.3% to 6.6% since the end of April 2020 and the gap to the 10-year swap rate has fallen from 6.1% to 5.85%, which is still significantly higher than normal.

Figure 2. Electricity stock yields



Source: Thomson Reuters, Forsyth Barr analysis

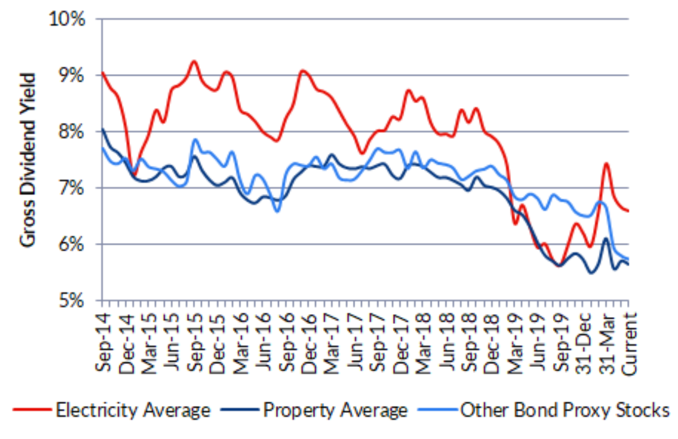
Figure 3. Relative yields



Source: Thomson Reuters, Forsyth Barr analysis

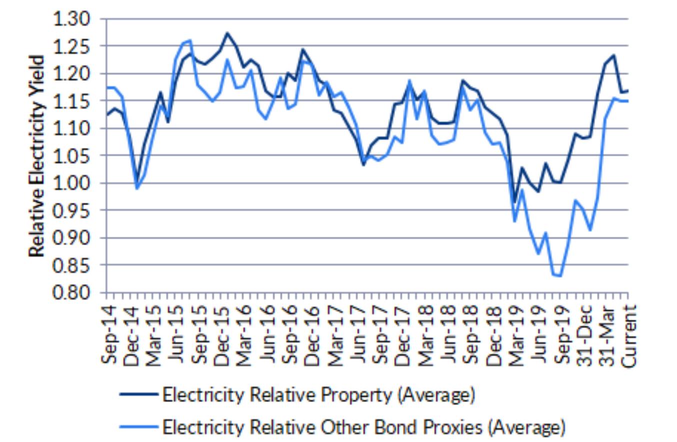
Relative to property stocks, the average electricity yield has fallen from 1.23x the average property gross yield at 30 April 2020, to 1.17x. The gap to other bond proxy stocks (Spark, Chorus and Vector) is unchanged at 1.15x.

Figure 4. Average sector yields



Source: Thomson Reuters, Forsyth Barr analysis

Figure 5. Electricity vs. other average sector yields



Source: Thomson Reuters, Forsyth Barr analysis

Still no news on NZAS future, economics little changed

The wait continues, with no news from Rio Tinto (RIO) regarding the fate of NZAS. There is no change to our view that NZAS will remain open and we do not read anything into the fact RIO has yet to make an announcement. It is one of those situations where arguments can be made on both sides. In the table below we note arguments (positive, neutral and negative) for what the delay might mean (and why there is a delay).

Figure 6. Arguments for NZAS closure

Bull arguments	Neutral arguments for the delay	Bear arguments
The delay can be viewed as positive. Given the COVID impacts on the aluminium sector it is odd that RIO hasn't already pulled the pin on NZAS, as it would make sense to close sooner rather than later given the deterioration in aluminium smelter economics.	RIO is more focussed on dealing with COVID related issues in the rest of its businesses than making a decision on NZAS.	Aluminium smelter economics have deteriorated with COVID and are likely to be negatively impacted for a period of time. If you believe RIO's statements that NZAS was unprofitable at the time it announced the Strategic Review in October 2019 (which we don't), then the issues will be signficant at present.
At the Australian RIO ASM held in early-May, ~2/3 of the questions were environment related. To the extent that the environment is a consideration (and RIO's public statements suggest environmental considerations are very high on its priority list), then closing a hydro-backed aluminium smelter makes little sense vs. closing a coal-backed smelter.	RIO is trying to squeeze more from the government. Billions has been spent in an attempt to save jobs, so what's a few million for NZAS? If this is the cause of the delay, the next question is to what extent is the government's answer crucial to open/close decision? (In our view it's not overly impactful).	No news is bad news. RIO may be reconsidering its position in light of COVID. i.e. it is erring from keeping NZAS open to closing it given the deterioration in the outlook.
NZAS has increased electricity demand (and therefore production) +2.6% during May 2020 and on 31 May consumed 99.7% of its 572MW electricity contract. Given the COVID environment, it is interesting that NZAS is lifting production; increasing production is counter to NZAS preparing to close.	RIO has another Strategic Review underway for its Iceland hydro-backed aluminium smelter and want to conclude both Reviews at the same time. The Iceland review commenced in February 2020 and is due to be completed by the end of June 2020 (although that may not mean much based on the NZAS experience).	
RIO is still in discussions with MEL. We would argue radio silence is more of a negative signal, whereas continued discussions at the very least suggests RIO hasn't made a final decision.		

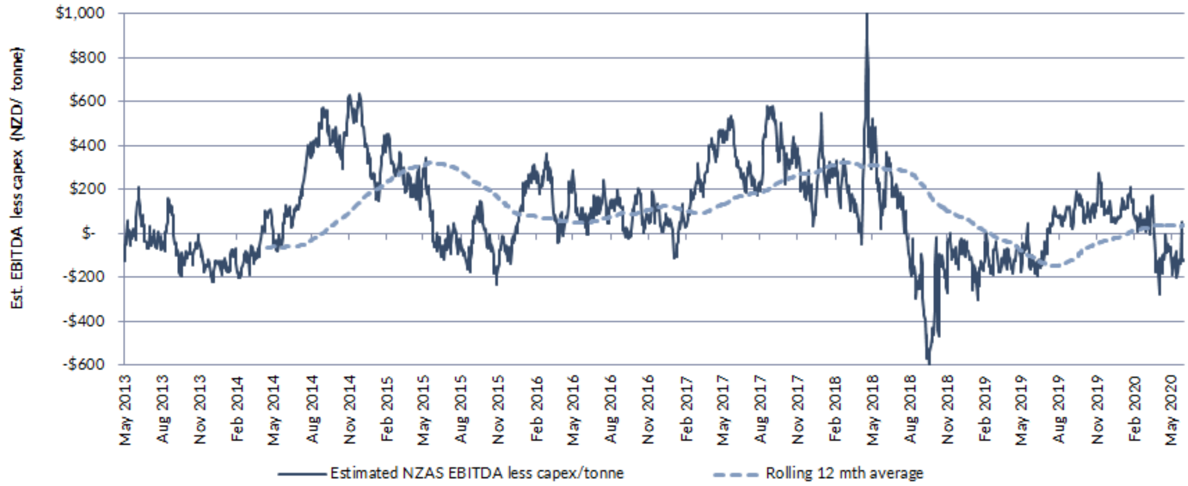
Source: Forsyth Barr analysis

The main reason we believe NZAS will remain open is the favourable competitive position hydro-backed aluminium has vs. coal-backed aluminium in an increasingly carbon constrained world.

No material change to smelter economics in May

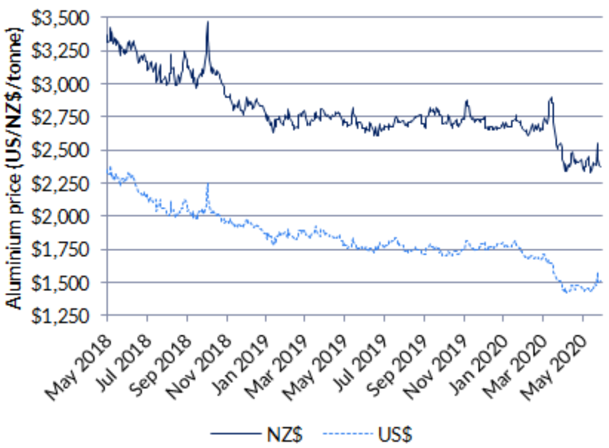
We estimate that the average cash operating loss in May 2020 was ~-NZ$3.5m, vs ~-NZ$3.0m in April 2020. These profitability estimates are before adjusting for the electricity price reduction from MEL and CEN (and any transmission on government assistance). We expect NZAS would be roughly cash neutral if it decides to stay open. Whilst it is not a strong position, profitability is no worse than mid-2018 to mid-2019. Aluminium prices (and the aluminium/alumina spread) are little changed (notwithstanding a one-day spike in late May).

Figure 7. Estimated NZAS EBITDA less capex/tonne



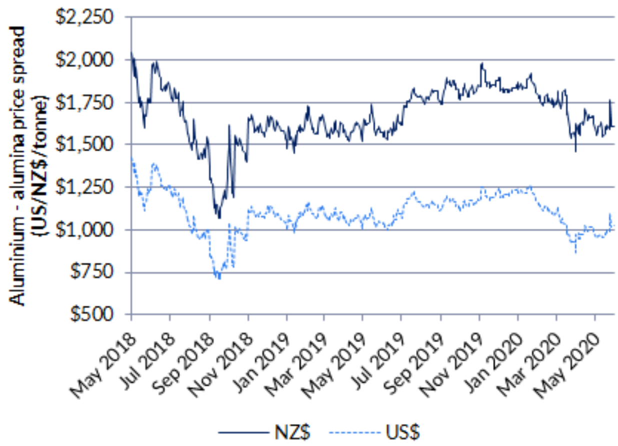
Source: Bloomberg, IRESS, Company reports, Forsyth Barr analysis

Figure 8. Aluminium price



Source: Bloomberg, Forsyth Barr analysis

Figure 9. Aluminium — alumina price spread

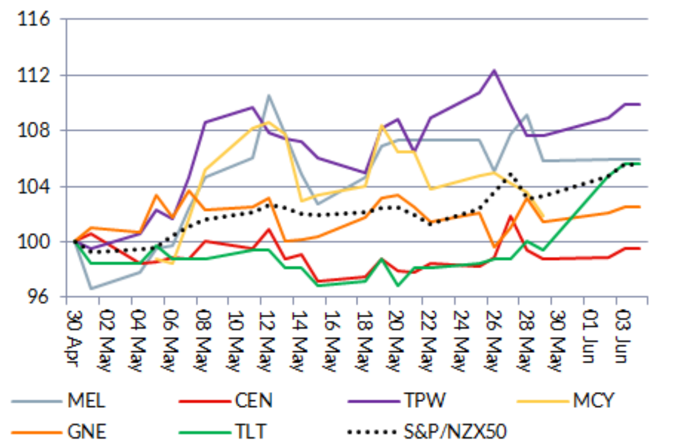


Source: Bloomberg, Forsyth Barr analysis

Share market performance: May 2020

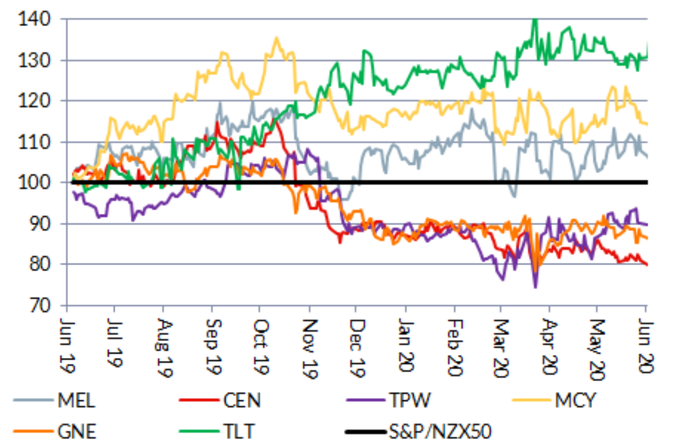
Markets recovered in May, with the NZX50 up +5.5% from 30 April to 3 June. TPW, TLT and MEL both beat the market in the month, up +9.8%, +5.6% and +5.9% respectively. MCY and GNE were also up over the month, but less so than the NZX50, reporting growth of +2.8% and +2.5%. Only CEN did not increase in May, down -0.5%.

Figure 10. Stock performance vs. S&P/NZX50C



Source: Thomson Reuters, Forsyth Barr analysis

Figure 11. 12 month performance relative to S&P/NZX50C



Source: Thomson Reuters, Forsyth Barr analysis

Market multiples and target returns

- Our electricity target prices are based on a combination of our DCF valuation (30%), market multiples (30%) and gross dividend yield (40%). We focus on year two earnings to avoid short-term hydrological conditions impacting the multiples. We continue to like the long-term outlook for the sector and maintain our view than NZAS will not be closing. We have all sector stocks (CEN, GNE, MCY, MEL, TPW & TLT) rated OUTPERFORM.

Figure 12. EBITDAF multiples

			Target	Target		Mkt Cap	EBITDAF (x)		EBITDAF - capex (x)	
Company	**Code**	**Price**	**Price**	**Return**	**Rating**	**$m**	**FY20**	**FY21**	**FY20**	**FY21**
Contact Energy	CEN	$6.34	$8.15	34.7%	OUTPERFORM	4,536	12.6	11.8	15.3	14.1
Genesis Energy (excl Kupe)	GNE	$2.95	$3.30	17.8%	OUTPERFORM	2,658	14.3	12.4	17.6	14.9
Mercury	MCY	$4.71	$4.95	8.6%	OUTPERFORM	6,403	15.3	14.6	18.0	17.1
Meridian Energy	MEL	$4.88	$4.80	2.8%	OUTPERFORM	12,507	16.2	17.7	17.4	19.1
Trustpower	TPW	$7.12	$7.50	9.9%	OUTPERFORM	2,228	15.3	14.3	17.6	16.3
Sector average							**14.7**	**14.0**	**17.2**	**16.2**
Tilt Renewables	TLT	$3.47	$3.50	0.9%	OUTPERFORM	1,629	9.6	12.5	10.4	13.9
Genesis Energy (incl Kupe)	GNE	$2.95	$3.30	17.8%	OUTPERFORM	3,060	12.0	10.6	14.2	12.3

Figure 13. PE multiples and dividend yields

	PE (x)		Adjusted PE (x)		Cash Div Yield		Gross Div Yield		Free Cash Flow Yield	
Company	**FY20**	**FY21**	**FY20**	**FY21**	**FY20**	**FY21**	**FY20**	**FY21**	**FY20**	**FY21**
Contact Energy	36.8	33.2	20.2	18.6	6.2%	6.2%	7.6%	7.7%	5.0%	6.2%
Genesis Energy (excl Kupe)	149.2	63.9	26.9	19.9	4.2%	4.6%	5.7%	6.3%	3.6%	5.6%
Mercury	47.7	38.3	27.9	24.3	3.4%	3.4%	4.7%	4.8%	1.2%	1.2%
Meridian Energy	38.8	47.4	24.8	28.2	4.4%	4.4%	5.6%	5.6%	3.9%	4.4%
Trustpower	36.2	28.5	30.0	23.6	4.6%	4.6%	6.3%	6.3%	3.5%	4.2%
Sector average	**51.7**	**40.6**	**25.7**	**22.7**	**4.5%**	**4.6%**	**6.0%**	**6.1%**	**3.5%**	**4.3%**
Tilt Renewables	827.1	100.2	32.0	29.3	0.0%	0.0%	0.0%	0.0%	2.9%	2.4%
Genesis Energy (incl Kupe)	86.3	44.3	19.3	15.4	5.8%	5.9%	7.9%	8.1%	5.9%	7.5%

Source: Forsyth Barr analysis

Note: In calculating the GNE excl Kupe multiples, the value of Kupe is assumed to be $410m. Debt and interest has been apportioned 10% to Kupe and 90% to Energy (in line with EV proportion) and dividend in line with adjusted NPAT.

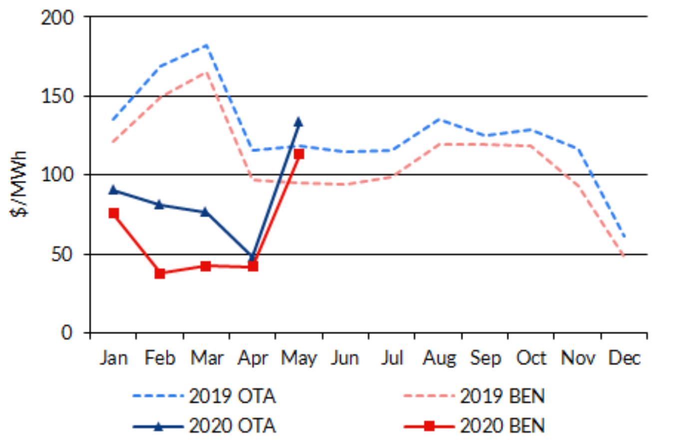
Wholesale electricity market: May 2020

Spot wholesale electricity prices and ASX futures

Sharp increase in wholesale prices

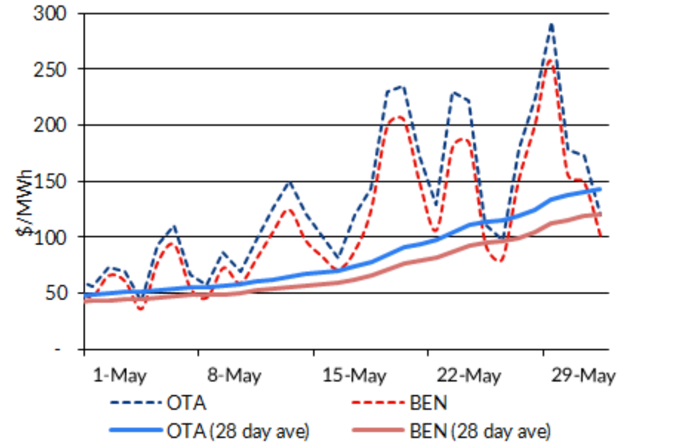
- The Otahuhu (OTA) average wholesale electricity price was $134/MWh in May, up +179% on April 2020 and up +13% on the pcp. Benmore (BEN) wholesale prices told a similar story, up +168% on the prior month to average $113/MWh. This increase vs. April is due to several factors including the sharp increase in energy demand toward the end of the month, soft wind generation volumes, a steady decline in hydro storage levels and CEN not offering TCC into the market.
- Wholesale prices were volatile through May, with OTA prices fluctuating between $43/MWh and $293/MWh and BEN prices bouncing between $36/MWh and $257/MWh.

Figure 14. Average monthly wholesale electricity prices



Source: NZX Energy, Forsyth Barr analysis

Figure 15. Average daily wholesale electricity prices

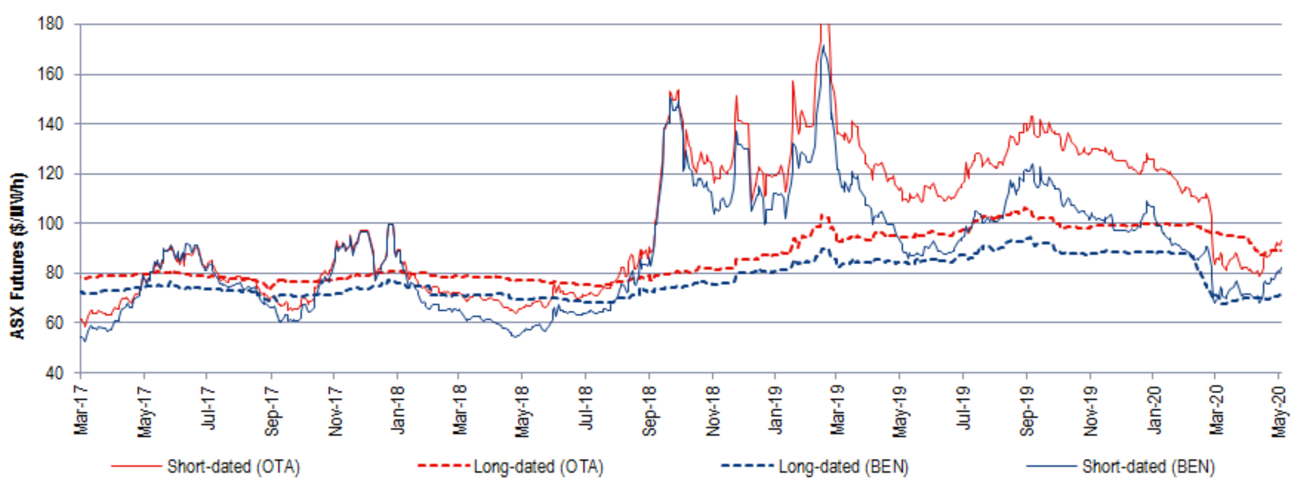


Source: NZX Energy, Forsyth Barr analysis

Short-dated futures bounce back

- Short-dated futures ticked up in May following declines since early March 2020. BEN short-dated futures were up +12% over the month to be $80/MWh as at 2 June, whilst OTA short-dated futures were up +11% to end the month at $90/MWh. This increase in short-dated futures is likely due to the decline in hydro storage levels in May.
- Long-dated futures were more stable over the month. BEN long-dated futures were up +2% and OTA futures were down -3% to end the month at $72/MWh and $89/MWh respectively.

Figure 16. ASX futures prices (last three years)



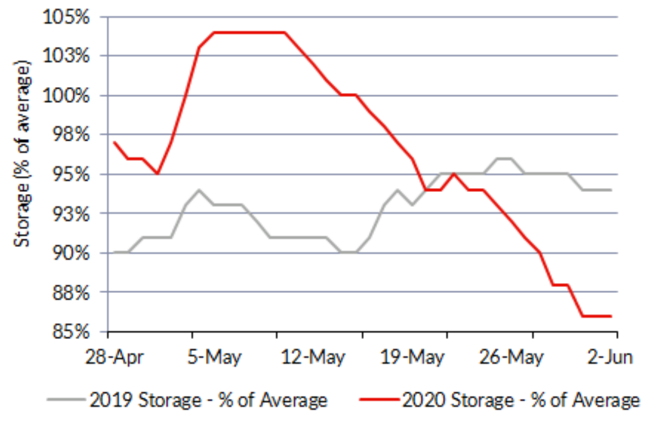
Source: Electricity Authority, Forsyth Barr analysis

Hydro storage volumes

Hydro lake storage levels decline sharply

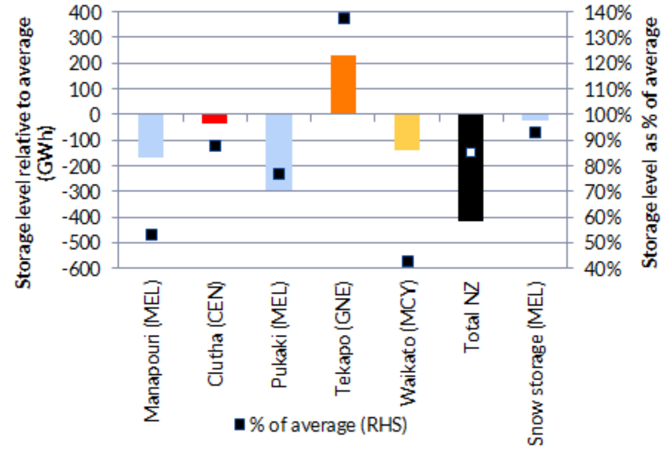
- Hydro storage levels came down sharply in May due to a lack of rain over the month. GNE's Tekapo storage is the only lake to remain significantly above average at ~138%. MEL's Manapouri has the lowest reported storage vs average for this time of year at ~53%. Total New Zealand hydro storage is now at ~85% of average.
- MEL's snow storage is currently at 362GWh, and is -27GWh below average for this time of year.

Figure 17. Average lake storage levels



Source: NZX Energy, Forsyth Barr analysis

Figure 18. Key storage lake levels relative to avg (as at 4 June)



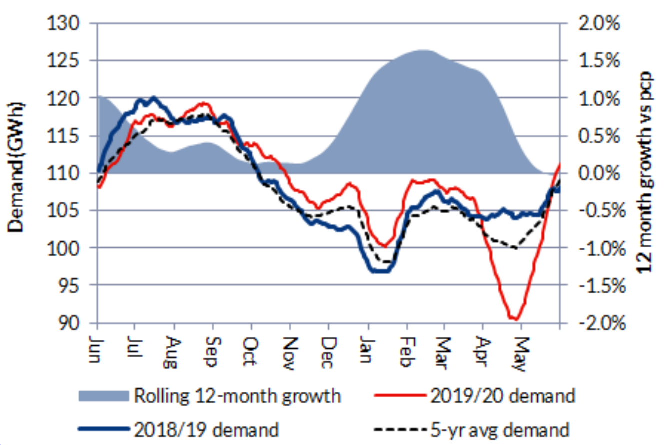
Source: EnergyLink, MEL, Forsyth Barr analysis

Demand and generation analysis

Generation rebounds

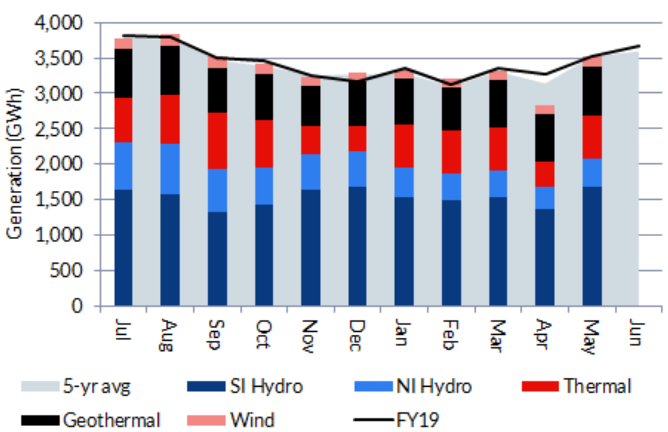
- Electricity demand for May 2020 averaged 110 GWh/day, which is a +1.9% increase on the pcp, a significant bounce from April's demand (-13% below pcp). This growth comes as demand increased sharply towards the end of the month as industry came back, residential demand stayed strong and Tiwai began to increase its demand again, up +2.5% on the prior month (although still down -6% on the pcp). Temperatures were also -1 degree Celsius (-5.5%) colder in May 2020 compared to May 2019, this will have caused part of the increase in demand. Compared to May 2018, when temperatures were about the same, May 2020 electricity demand is the same, which considering the COVID-19 backdrop is better than expected.
- Total New Zealand generation was 3,515GWh in May, which is a +24.3% increase from a weak April 2020, but is unchanged vs the pcp. The percentage of total generation from renewable resources was down from 87% in April to 83% in May, as both wind and geothermal generation market share declined sharply in the month, due to a big lift in South Island hydro generation. Although geothermal generation as a percentage of total declined, May 2020 was the record for most geothermal production with 702GWh of output in the month.

Figure 19. Rolling 28-day avg demand & rolling 12-m growth



Source: NZX energy, Forsyth Barr analysis

Figure 20. NZ generation (by technology) — fiscal year to June



Source: NZX energy, Forsyth Barr analysis

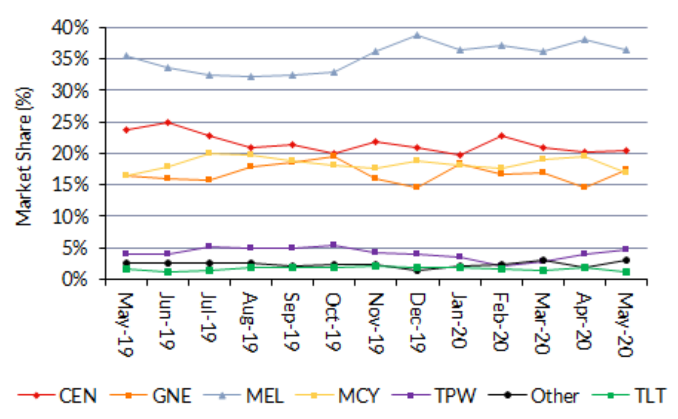
Generation market share — GNE recovers April losses

- GNE gained +3% market share over May to reach 17.4% of total generation, making back all of the lost market share from April plus some. TPW also had a good month, gaining +0.8% while TLT, MCY and MEL lost -0.8%, -2.6% and -1.6% respectively. CEN was largely unchanged. TLT's market share of 1.2% in May is its lowest since July 2019.

CEN — Clutha hydro back to more normal generation levels

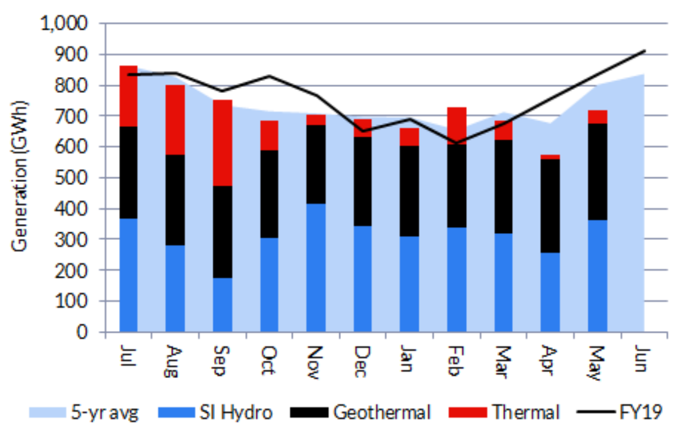
- Total CEN generation was 716GWh in May, a +25% increase from April, (albeit April was a low generation month), May is still down -14% on the pcp. This increase came largely from CEN's Clutha hydro generation increasing +41% as well as a record month for CEN's geothermal output. CEN's TCC unit remained offline for a second consecutive month (and is the reason CEN's generation is down on pcp). However, thermal generation for the month was up on April due to increased output from CEN's Stratford Peaker.

Figure 21. Monthly generation market share



Source: EnergyLink, Forsyth Barr analysis

Figure 22. CEN monthly generation mix (current, pcp & 5y avg)



Source: EnergyLink, Forsyth Barr analysis

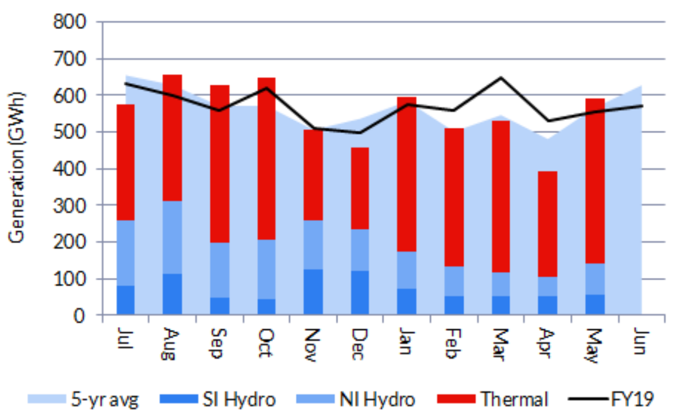
GNE — Thermal generation increases

- GNE generation was 589GWh in May, which is a +51% decrease on April and +6% up on the pcp. GNE's thermal generation was the key driver of this as it increased by +163GWh (+57%) over the month largely due to the increase in production from the Huntly thermal plant. GNE's North Island hydro (Tongariro) also doubled compared to April (-36% below average), although was down -4% vs May 2019. GNE continues to enjoy strong hydro storage levels with its Tekapo storage at 138% of average.

MCY — Small increase vs pcp

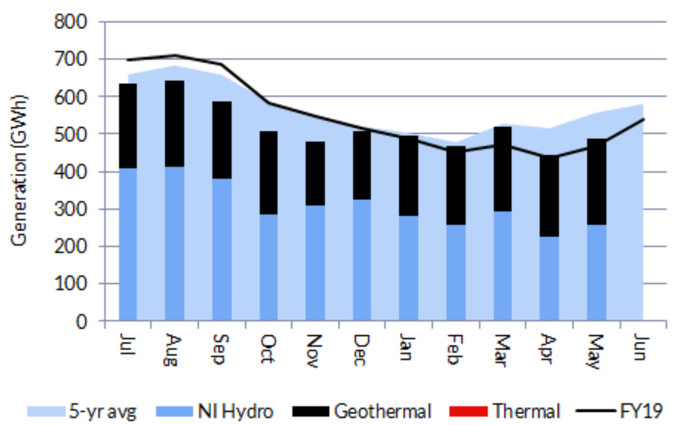
- MCY's May generation of 486GWh was up slightly on the pcp (+3.5%) and a +9.4% increase vs April. Although this is an increase compared to the prior month it is a smaller increase than the market average and this can be seen by MCY losing ~-2% market share in May. Hydro was the main driver of the up tick, increasing +15% (but still -17% below average), whilst MCY's geothermal generation was up +3.2%. MCY's FY20 guidance provided on 20 April indicated expected total generation of 3,800GWh, as generation for FY20 is now 3,470GWh, this means June has to be an average month to hit this guidance.

Figure 23. GNE monthly generation mix (current, pcp & 5y avg)



Source: EnergyLink, Forsyth Barr analysis

Figure 24. MCY monthly generation mix (current, pcp & 5y avg)



Source: EnergyLink, Forsyth Barr analysis

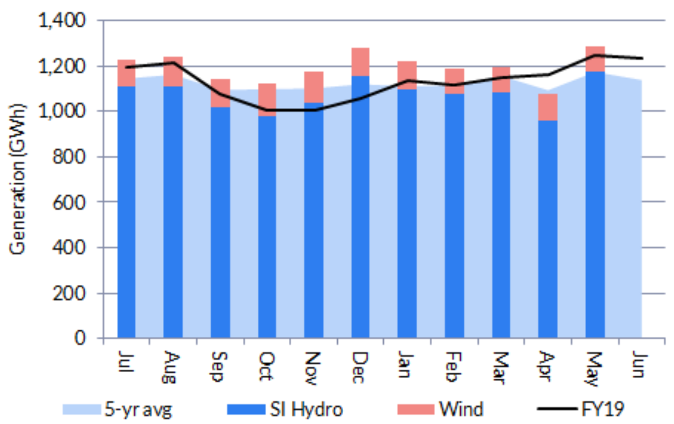
MEL — Strong hydro rebound

- MEL average daily generation was up +16% in May vs. the prior month, with total generation of 1,283GWh. Generation was boosted by strong hydro generation increases, with Waitaki and Manapouri generation up +17% and +35% vs the prior month respectively. Wind generation was down -8% on April and -14% on the pcp.
- MEL hydro storage is now below average, currently sitting at 1,373GWh, which is 82% of average.

TPW — Hydro down sharply

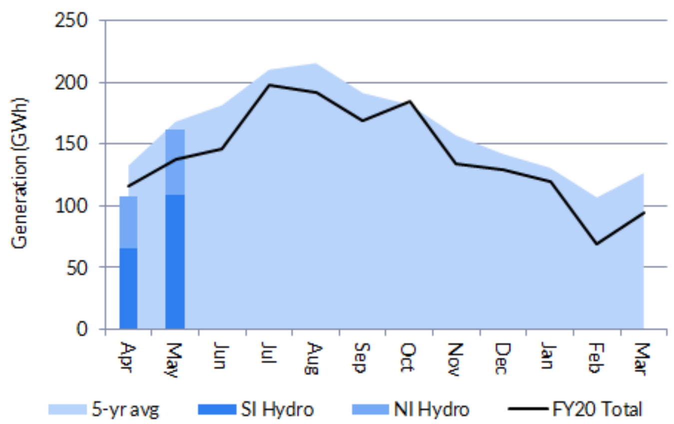
- We estimate that TPW generation was 161GWh in May, which is +17% on the pcp and +49% on April 2020. Both North Island and South Island hydro was up on the prior month (+24% and +66% respectively), however, North Island hydro was down -11% on the pcp while South Island hydro was up +38%. TPW's Waipori and Cobb hydro plants increased +220% and +111% on the prior month respectively, this follows both plants operating well below capacity since February, but still remain -5% below average.

Figure 25. MEL monthly generation mix (current, pcp & 5y avg)



Source: EnergyLink, Forsyth Barr analysis

Figure 26. TPW monthly generation mix (current, pcp & 5y avg)



Source: EnergyLink, Forsyth Barr analysis

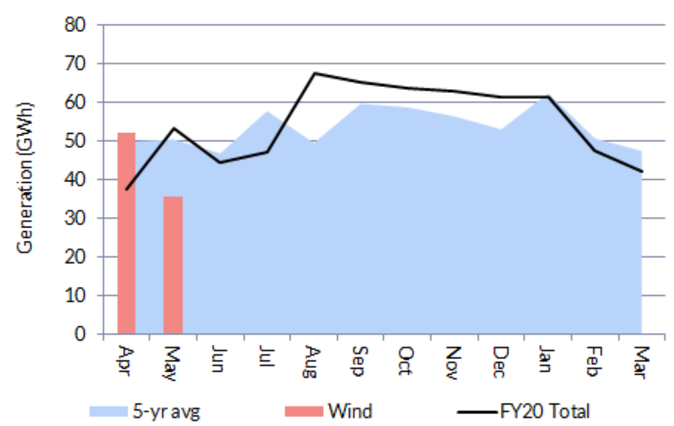
TLT — Generation down due to weak wind in May

- Estimated TLT generation was 42GWh in May 2020, which is the lowest generation since April last year. This generation amount is down -19% on the prior month and -21% on the pcp. Due to this TLT lost market share in May, currently sitting at 1.2% of total generation, the lowest amount since July 2019.

Generation prices — sharp GWAP increases across the board

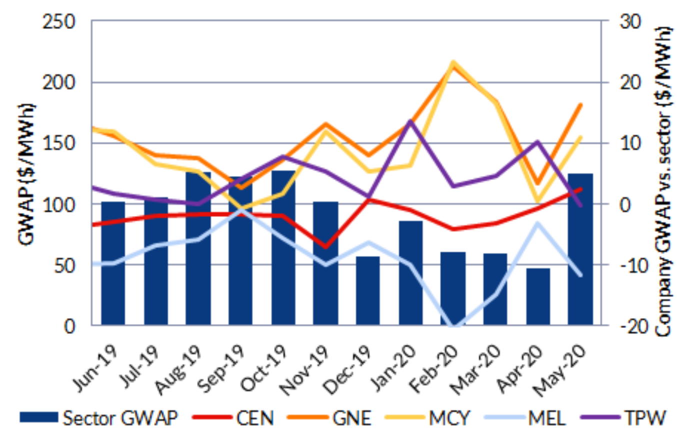
- The average generation weighted average price (GWAP) was $125/MWh in May, up +168% from $47/MWh in April. All of the big five generators had sharp increases in prices, with TPW's increase of +119% to average $125/MWh being the smallest increase. MCY, CEN, GNE and MEL average price received increased by over +150% to $136/MWh, $128/MWh, $142/MWh and $114/MWh respectively.

Figure 27. TLT monthly generation mix (current, pcp & 5y avg)



Source: EnergyLink, Forsyth Barr analysis

Figure 28. Avg generation weighted average price (GWAP)



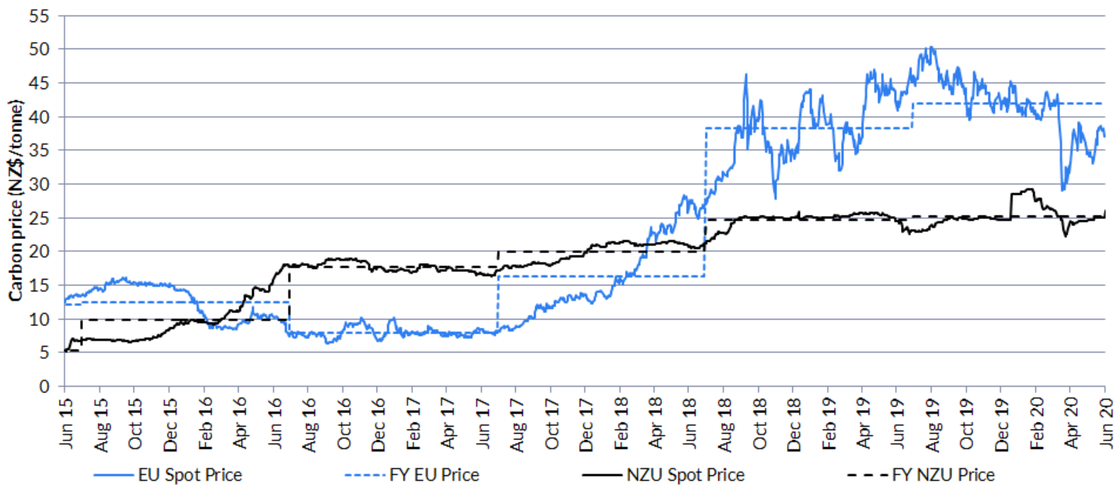
Source: EnergyLink, Forsyth Barr analysis

Carbon prices

NZ carbon prices — Unit prices slight up tick

- NZ carbon units ended May at $25.05/unit, after starting the month at $24.57/unit and peaking at $25.10/unit after the government's changes were announced. This is well below the recent highs experienced of over $29/unit after the government's announcement that it would remove the unit price cap in December 2019. These changes have now been through their second reading at parliament.
- EU carbon units increased slightly over the month to end at €21.4/unit (~NZ$39/unit), up from €19.6/unit (NZ$35/unit) at the end of April. The average EU carbon price has declined for five consecutive months, and now sits at NZ$35.9/unit.

Figure 29. Price of carbon (NZ$/tonne)



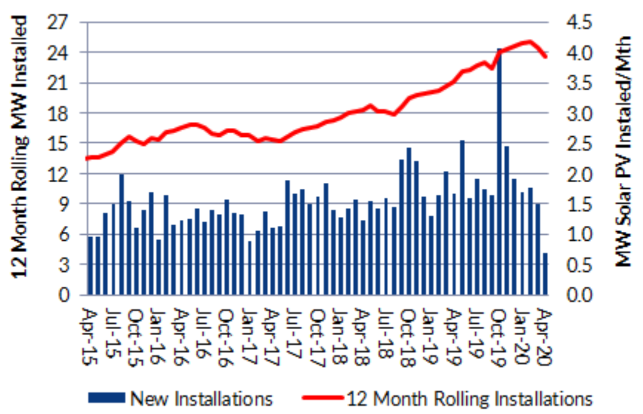
Source: Bloomberg, Forsyth Barr analysis

Solar PV installations

Rate of installation continues to decline

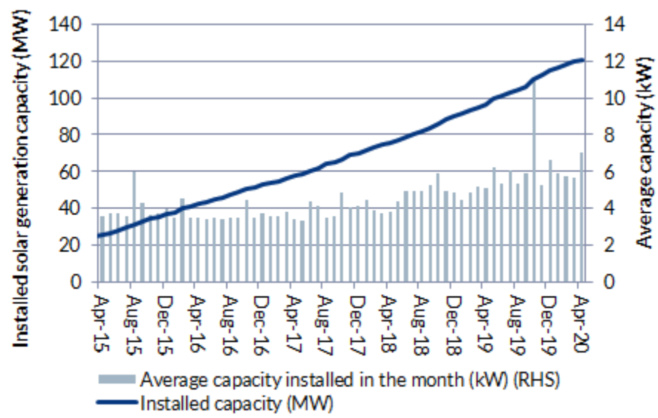
- There was 0.7MW of new solar capacity installed in April 2020 with +74 new solar connections. The sharp decline in capacity installed, down -53% from March, due to solar installations not being deemed essential under Alert Level 4 lockdown. Total solar capacity is now 120MW with 27,061 solar ICPs.

Figure 30. Solar PV capacity installed



Source: Electricity Authority, Forsyth Barr analysis

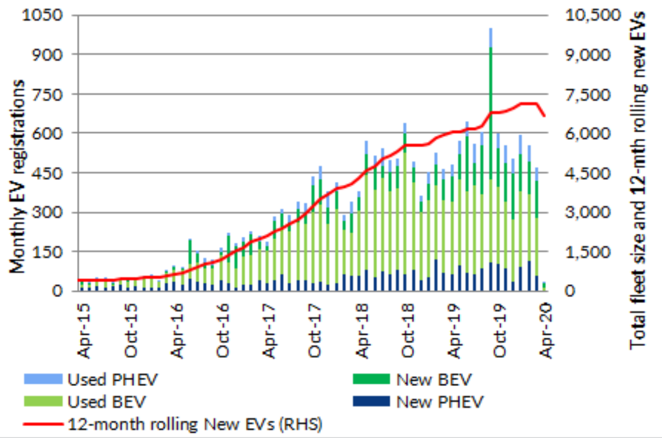
Figure 31. Average size of system and total capacity installed



Source: Electricity Authority, Forsyth Barr analysis

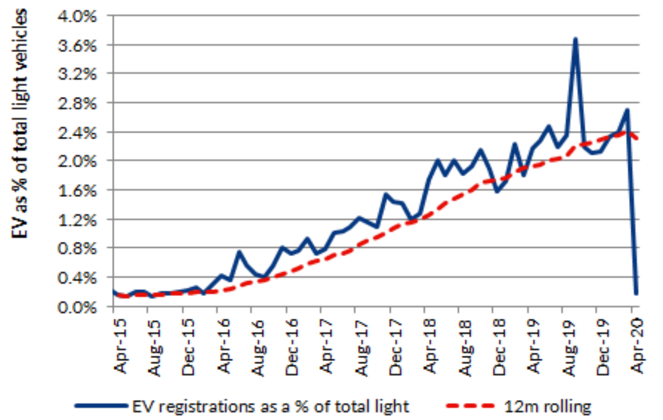
Electric vehicle (EV) registrations

Figure 32. EV registrations



Source: Ministry of Transport, Forsyth Barr analysis

Figure 33. EV registrations % of total light vehicle registrations

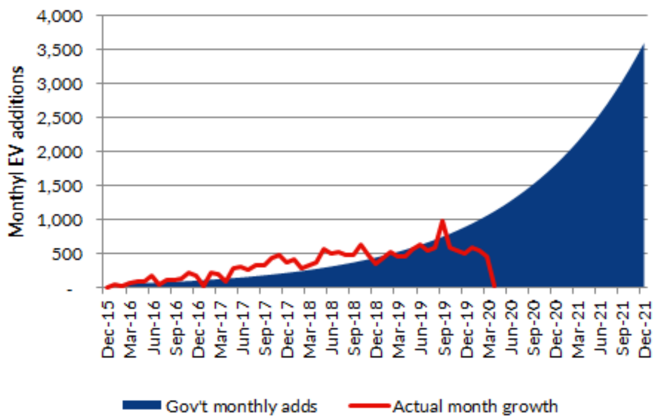


Source: Ministry of Transport, Forsyth Barr analysis

New EV registrations

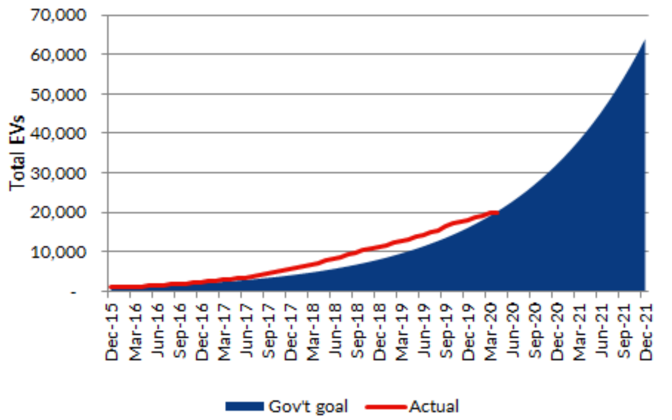
- Electric vehicle data for May 2020 has not been released at the time of publishing.

Figure 34. Monthly EV registrations vs. govt target



Source: Ministry of Transport, Forsyth Barr analysis

Figure 35. Total EVs registered vs. govt target



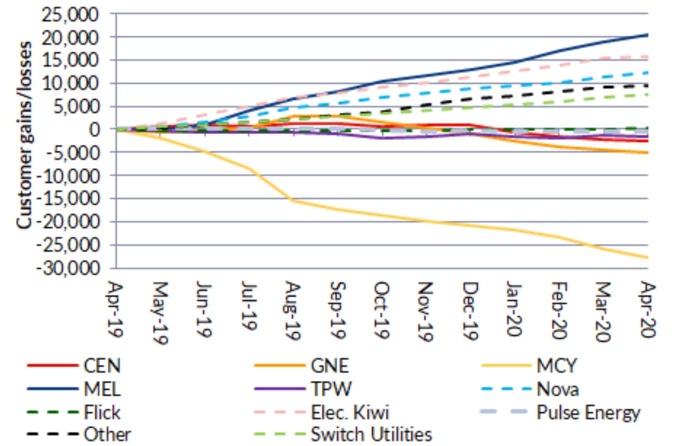
Source: Ministry of Transport, Forsyth Barr analysis

Retail electricity customers

MEL again the only big retailer to gain connections

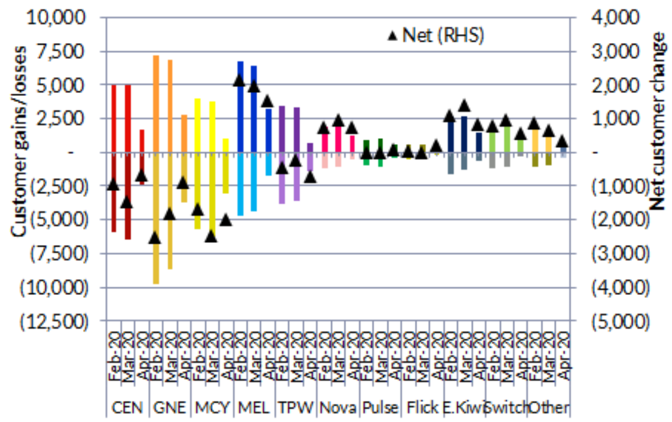
- MEL gained +1,469 connections in April as it continues its run of month on month market share gains. All of the other big five retailers lost electricity connections over the month; MCY had the worst month losing -1,898 customers making it 26 consecutive months of losses. CEN, GNE and TPW lost -460, -559 and -420 respectively.
- Nova had the best month of the tier 2 retailers, adding +734 connections. Electric Kiwi, Switch Utilities and Flick Electric all also made gains over the month, adding +584, +589 and +186 connections respectively, while Pulse Energy lost -18 connections in April. This is Flick's largest monthly increase in customer numbers since September 2018, and is likely due to its advertising campaign.
- MEL was also the only large retailer to gain customers through switching (which excludes market growth), gaining +1,518 connections in the April.

Figure 36. Cumulative 12-mth electricity customer gains/losses



Source: EA, Forsyth Barr analysis

Figure 37. Customer switches (excludes market growth)

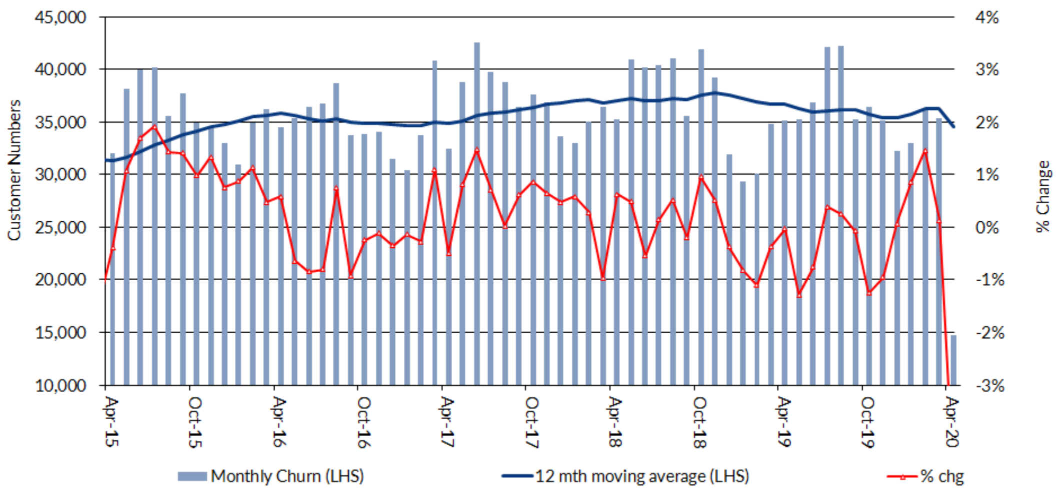


Source: EA, Forsyth Barr analysis

Connection churn

- There were ~15,000 customer switches in April 2020, which is down -58% on both the pcp and the prior month. This sharp reduction is due to Alert Level 4 lockdown. The number of switches by traders fell by -39% vs. March 2020, but it was moving switches which fell the most, down -69% mom.
- We can observe in gas switching numbers that April customer switching figures fell by a similar amount (-57%). These rebounded quickly in May and we expect this to happen with electricity customer switches when May numbers are reported next month.

Figure 38. Electricity connection churn



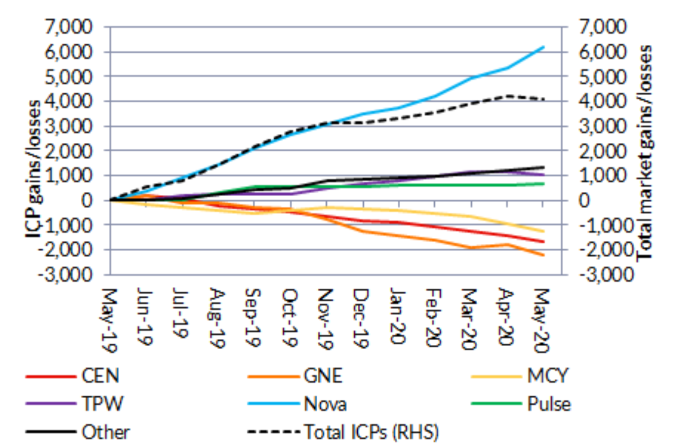
Source: EA, Forsyth Barr analysis

Retail gas customers

All big retailers lose market share to Nova in May

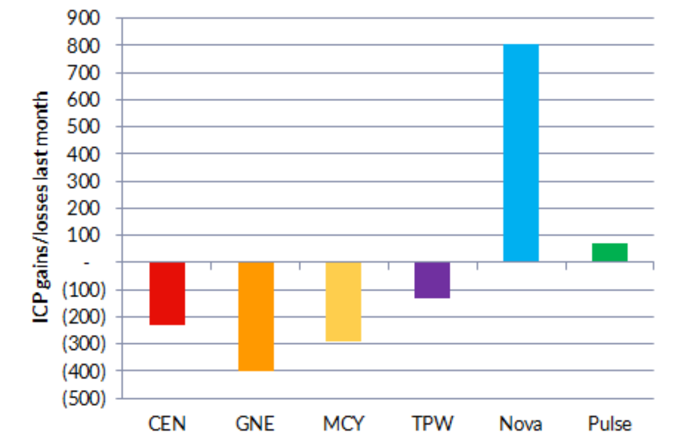
- TPW was the best of the big retailers, losing -134 gas connections, while CEN, GNE, and MCY lost -232, -403 and -290 connections respectively. Nova continues to dominate the market, adding +803 connections in May, which brings Nova's 12-month customer gains to +6,171. Pulse Energy also had a good month adding +68 gas customers since April.
- In April the number of customer switches between gas companies fell by -57% on the month prior. Switching rebounded +82% in May, however, switching numbers are still down -17% on the average of the 12-months prior.
- Since May 2019 TPW has added +1,041 customers and is the only big retailer to have gained connections over the past 12 months. CEN, GNE and MCY have lost -1,651, -2,203, and -1,266 connections over the year respectively.

Figure 39. Gas connection gains/losses over the past 12-months



Source: Gas Industry Co, Forsyth Barr analysis

Figure 40. Gas connection gains/losses in May 2020



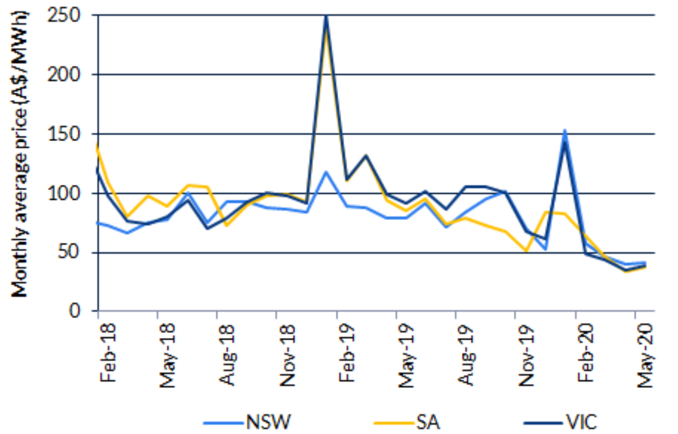
Source: Gas Industry Co, Forsyth Barr analysis

Australian electricity market

Wholesale electricity prices continue to trend down

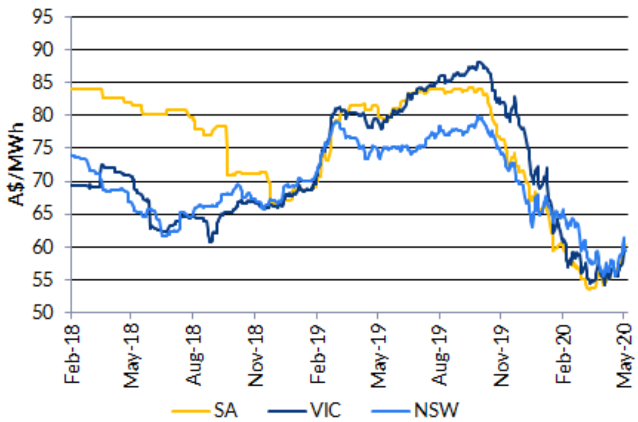
- NSW, SA and VIC wholesale electricity prices were all down sharply on the pcp, down -47%, -56% and -58% respectively. NSW averaged A$42.0/MWh throughout May which is only slightly above April which was the lowest monthly average wholesale electricity price for the state since early 2016. SA and VIC wholesale electricity prices averaged A$37.3/MWh and A$38.3/MWh over the month.
- FY21 futures were all up in May, with SA futures experiencing the largest increase, up +10% over the month to sit at A$60.2/MWh on 29 May. NSW and VIC FY21 futures increased +5% and +8% respectively to end the month at A$59.4/MWh and A$60.0/MWh.

Figure 41. Australian wholesale electricity price (A$/MWh)



Source: AEMO, Forsyth Barr analysis

Figure 42. Australian FY21 futures prices (A$/MWh)

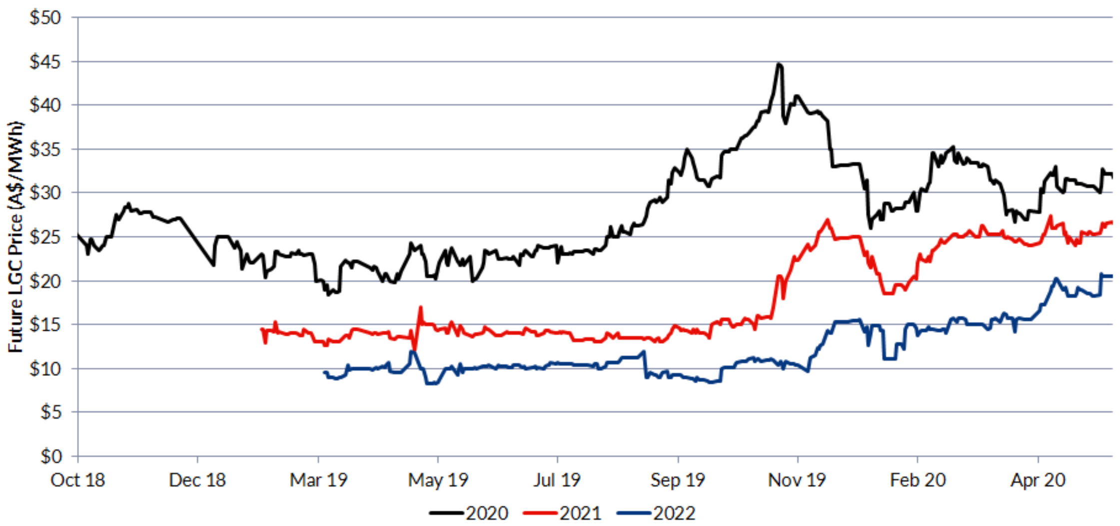


Source: Thomson Reuters, Forsyth Barr analysis

Renewable energy certificates (LGC) spot prices decline

- Spot LGC prices were up +6% in May, ending the month at A$32.5/MWh, after starting the month at A$31/MWh. Spot LGC prices have since increased again to A$32.8/MWh.
- 2021 LGC prices were also up slightly over the month, increasing from A$25/MWh to A$25.8/MWh and have since reached A $27.25/MWh. 2022 prices also rose, up +13% in May, to end the month at A$20.6/MWh.

Figure 43. Renewable energy certificate prices (LGC)



Source: Bloomberg, Forsyth Barr analysis

Key statistics

New Zealand electricity market statistics

Figure 44. Key statistics — New Zealand

	May-19	Apr-20	May-20	% Chg pcp	% Chg mom
Average Monthly Prices					
OTA avg ($/MWh)	$ 118.6	$ 48.0	$ 133.6	12.7%	178.7%
HAY avg ($/MWh)	$ 102.4	$ 44.3	$ 120.7	17.9%	172.7%
BEN avg ($/MWh)	$ 94.9	$ 42.1	$ 112.8	18.9%	168.3%
Avg Daily Generation (GWh)					
CEN	26.9	19.1	23.1	-14.2%	21.2%
% of NZ Generation	23.7%	20.4%	20.4%	-14.0%	0.3%
GNE	18.7	13.7	19.7	5.7%	44.5%
% of NZ Generation	16.5%	14.6%	17.4%	6.0%	19.6%
MCY	18.7	18.4	19.2	2.8%	4.7%
% of NZ Generation	16.5%	19.6%	17.0%	3.1%	-13.3%
MEL	40.3	35.8	41.4	2.8%	15.6%
% of NZ Generation	35.5%	38.2%	36.6%	3.1%	-4.3%
TPW	6.1	5.3	6.5	6.5%	22.9%
% of NZ Generation	5.4%	5.7%	5.8%	6.9%	1.7%
Daily Demand (GWh)					
Demand (excl Tiwai)	93.6	78.3	96.5	3.1%	23.3%
NZAS demand	14.4	13.2	13.5	-5.9%	2.5%
Total NZ Demand	108.0	91.4	110.0	1.9%	20.3%
Hydrology (% of average)					
Average hydro inflows	107%	80%	86%	-19.3%	8.2%
Average hydro storage	113%	95%	97%	-14.2%	2.3%
Month end hydro storage	134%	96%	86%	-35.8%	-10.4%
ASX futures as at:	**28-Feb-19**	**30-Apr-20**	**29-May-20**		
Short-dated OTA	$ 139.1	$ 81.4	$ 93.0	-33.1%	14.2%
Long-dated OTA	$ 94.6	$ 92.0	$ 89.4	-5.5%	-2.8%
Short-dated BEN	$ 124.8	$ 71.3	$ 82.2	-34.1%	15.3%
Long-dated BEN	$ 84.6	$ 70.1	$ 71.6	-15.4%	2.1%

Source: NZX Energy, EnergyLink, Thomson Reuters, Forsyth Barr analysis

Australian electricity market statistics

Figure 45. Key statistics Australia

	May-19	Apr-20	May-20	% Chg pcp	% Chg mom
Average Monthly Prices					
NSW avg (A$/MWh)	$ 79.1	$ 40.5	$ 42.0	-47.0%	3.6%
SA avg (A$/MWh)	$ 84.9	$ 33.7	$ 37.3	-56.1%	10.6%
VIC avg (A$/MWh)	$ 91.9	$ 35.0	$ 38.3	-58.3%	9.3%
Electricity Futures for FY21:	**29-May-19**	**29-Apr-20**	**29-May-20**		
NSW avg (A$/MWh)	$ 74.1	$ 56.5	$ 59.4	-19.8%	5.2%
SA avg (A$/MWh)	$ 81.1	$ 54.7	$ 60.2	-25.8%	10.1%
VIC avg (A$/MWh)	$ 79.0	$ 55.6	$ 60.0	-24.1%	7.9%
Spot and Future LGC Prices	**29-May-19**	**29-Apr-20**	**29-May-20**		
2020 (A$/MWh)	$ 22.8	$ 31.6	$ 32.0	40.7%	1.4%
2021 (A$/MWh)	$ 13.8	$ 25.5	$ 25.8	87.6%	1.2%
2022 (A$/MWh)	$ 9.9	$ 19.3	$ 20.6	108.1%	7.0%

Source: Bloomberg, AEMO, Thomson Reuters, Forsyth Barr analysis

Industry news

Listed sector company news

Contact (CEN)

- Rig-32 has now finished drilling work at CEN's Tauhara geothermal field after not operating during Alert Level 4. CEN expects the well-testing to be completed in July.

Genesis (GNE)

- GNE is being investigated for allegedly breaching the win-back ban introduced by the Electricity Authority (EA) that bans retailers from proactively trying to win back a lost customer for 180 days. GNE has said that it was "human error" which led to an attempt to win back a customer from Electric Kiwi, however, the matter is still under investigation and is expected to go before the Compliance Committee on 5 August.

Meridian (MEL)

- MEL's Australian arm has announced it is developing a 130MW capacity wind and battery storage project in New South Wales. MEL anticipates lodging the Environmental Assessment with the NSW Department of Planning, Industry and Environment in March 2021.
- MEL has said it expects that the benefits of the Clutha Upper-Waitaki Lines Project (CUWLP) will outweigh the costs regardless of if NZAS is to close or not. MEL says that Transpower's modelling significantly underestimates the benefits of enabling southern generation to be exported north, and that the project should go ahead in any scenario.

Mercury (MCY)

- The drilling at MCY's Rotokawa steamfield has now been completed and the make-up production well is finished.

Trustpower (TPW)

- David Prentice has had his contract extended for an extra 12 months and has now been appointed as CEO of TPW until the end of 2021.
- TPW's general manager of Technology and Delivery, Simon Clarke, is set to leave the company on 5 June after nine years. TPW's general manager of People and Capability, Melanie Dyer, is also leaving the company after six years on the executive team to take on a role at Port of Tauranga.
- TPW's CEO David Prentice has said they are looking to make the company more efficient using lessons learnt from the COVID-19 lockdown. Prentice said there has been next to no impact on generation capacity or customer services despite 750 TPW staff working from home, and that the ways of working observed during the past months may help drive effiencies going forward.
- TPW's FY20 result, reported on 27 May, was slightly below expectations, with EBITDAF down -16% on FY19 and the dividend cut by -1.5cps to 15.5cps. TPW has provided FY21 EBIDAF guidance of between NZ$190m and NZ$215m. For more detail on the result refer to our note *Trustpower, Cautious on COVID — FY20 Result Review* published 28 May.

Tilt Renewables (TLT)

- TLT has announced that it is exploring both gas and battery opportunities in Australia. TLT has examined sites in both Victoria and New South Wales for a potential 100MW gas plant, as well as the possibility for three battery projects for a total of 150MW of capacity in Victoria. TLT has also advanced its plans for a 20MW battery near its South Australian Snowtown wind project and a decision is expected to be made in 2020.
- Components for TLT's Waipipi wind farm have begun to arrive in New Zealand, with the project scheduled to be finished in the first quarter of 2021.
- TLT reported its FY20 result on 25 May, with operations broadly in line with expectations. NPAT of A$478m was largely due to the sale of TLT's Snowtown 2, and EBITDAF was down -17% on FY19 to A$117.5m. TLT has provided EBITDAF guidance of A$80m to A$95m. For more detail on the result refer to our note *Tilt Renewables, Focussed on Delivery — FY20 Result Review* published 26 May.

Political / regulatory news

- The Emissions Trading Reform Bill that was introduced in October last year has now been through its second reading in Parliament. The new rules introduced outline that there is a cap of 160 million tonnes of CO_2 equivalent greenhouse gases over 2021 to 2025, as well as a provisional emission budget for the same time period of 354 million tonnes. Other changes announced include price controls that act as a backstop when auctioning is introduced, with the aim of stopping prices going too low or too high, as well as the government extending participants access to the fixed price option (which is essentially the ceiling), to cover 2020 emissions. The scheme requires companies to match each unit of emissions they report with an allowance or credit paid to the government.
- The Electricity Authority (EA) has modelled the impact of a credit-relief plan for power retailers on the six largest electricity distributors. The scheme, which allows financially stressed retailers to defer distribution payments, could defer revenue of over NZ $4m for Vector, Powerco, Wellington Electricity Lines, Orion, Unison Networks and WEL Networks over a few months. The scheme came in to effect on 20 May and expires 20 February 2021, and states firms that were financially solvent on 31 December 2019 but will likely face liquidity issues in the next six months due to COVID-19 are able to apply.
- Electric Kiwi and Haast Energy have said that the EA should remove the price floor for wholesale electricity prices of zero dollars per megawatt-hour, citing that negative prices can be observed in other markets such as oil and banking. The EA said in early May that a preliminary decision around the related UTS would be published for consultation at the end of June.
- Transpower has released a consultation document on the Clutha Upper-Waitaki Lines Projects. The project's completion would mean excess generation in the South Island can be exported further north. MEL has responded as mentioned above.
- The EA has said that the number of enquiries around power bills remained the same under Alert Level 4 lockdown, however, the number of account disconnections decreased. The number of disconnections for non-payment comes as retailers chose to not disconnect customers during the five week period. The EA addressed this with retailers on 8 April in a letter asking them to treat any customer having difficulties as vulnerable and use disconnection as a last resort.

Other industry news

- Top Energy (TOP) is seeking urgent EA exemption to connect its Ngawha expansion to its own network. The expansion was originally intended to be connected to the grid, however, conversations between TOP and Transpower determined the cost to connect the added output to the grid would be too high. However, the firm needs exemption to connect the expanded capacity to its own network as the expansion puts TOP's total generation output on its own network at 57MW, breaking the EA's rules that state distributors are allowed no more than 50MW of generation that serve only their own network.
- Solarcity has said that the number of enquiries around solar and battery systems have increased by +30% since the country entered Alert Level 4.

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