

Power Points

Silver Linings – March 2020

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February 2020 was an interesting time for both the wholesale electricity market and the electricity stocks themselves. The combined effect of COVID-19 and rekindled NZAS closure fears has resulted in electricity stocks underperforming the market, creating buying opportunities. Our preferred stocks are Contact Energy (CEN), Genesis Energy (GNE) and Trustpower (TPW) which we are upgrading to OUTPERFORM. The wholesale electricity market was very volatile in February due to HVDC constraints, with the South Island prices less than half those in the North Island.

Figure 1. Summary company valuation metric

Company	Price	Target	Target	Rating	EV/EBITDA	PE	FY20	EBITDAF	Movements			
		Price	Return				Gr Yld	NZ\$m	EBITDAF	Chg	Target Price	Rating
CEN	\$6.75	\$8.00	24.3%	OUTPERFORM	13.0	20.8	7.1%	441	\$0m	0.0%	\$0.00	-
GNE	\$3.13	\$3.15	6.4%	OUTPERFORM	14.6	28.0	7.6%	366	\$0m	0.0%	\$0.00	-
MCY	\$4.80	\$4.60	-0.8%	NEUTRAL	15.1	27.7	4.6%	501	\$0m	0.0%	\$0.00	-
MEL	\$4.81	\$4.40	-4.1%	NEUTRAL	16.1	24.6	5.6%	864	\$0m	0.0%	\$0.00	-
TLT	\$3.26	\$3.70	13.5%	OUTPERFORM	13.9	17.5	0.0%	139	\$0m	0.0%	\$0.00	-
TPW	\$6.60	\$7.70	21.8%	OUTPERFORM	14.4	24.5	7.2%	187	-\$16m	-7.7%	-\$0.05	▲

Source: Company reports, Forsyth Barr analysis

COVID-19 and NZAS fear create buying opportunities

In the week beginning 24 February, COVID-19 and NZAS fears combined to cause a -4% to -13% decline in the generator/retailer share prices. For a sector with very little earnings risk to COVID-19 and with the 10-year Government bond rate falling ~-0.35%, the electricity stocks look more attractive from a value perspective than they did pre-COVID-19. In addition, the NZAS closure fears that have re-appeared are unfounded in our view. The losses reported by NZAS and the Pacific Aluminium division are due to high intercompany alumina prices and Rio Tinto is still in discussions with the sector and regulators, so the fact that no deal has been signed means little at this point. We maintain our view that NZAS is highly unlikely to close. In a carbon-constrained world, closing NZAS would be a mistake. We discuss these two points in further detail in our note *Still Calling the Smelter's Bluff*.

Wholesale electricity market volatile in February as HVDC outages roll on

The inter-island HVDC link was constrained to varying degrees all February. The constraints, combined with heavy South Island rain, resulted in a big inter-island wholesale electricity price split and volatile prices throughout the month. Benmore prices averaged \$38/MWh vs. \$81/MWh at Otahuhu, with daily average Otahuhu prices varying between \$27/MWh and \$148/MWh. Electricity demand was up +1.2% despite NZAS demand slipping -4.2%. Lake storage levels remain above average (116% at month end) and means there's unlikely to be any issues with low lakes this winter. Work on the HVDC link is expected to conclude on 9 April.

Upgrading Trustpower (TPW) despite guidance downgrade

We are upgrading TPW to OUTPERFORM from NEUTRAL. Whilst the ~\$17.5m FY20 EBITDAF guidance range downgrade in February was disappointing, it is for one-off (mainly low generation volumes) reasons. The rating upgrade is due to TPW's material share price decline (-14%) over the past four weeks with the lower guidance having only a -5cps impact on our target price.

March 2020 Power Points

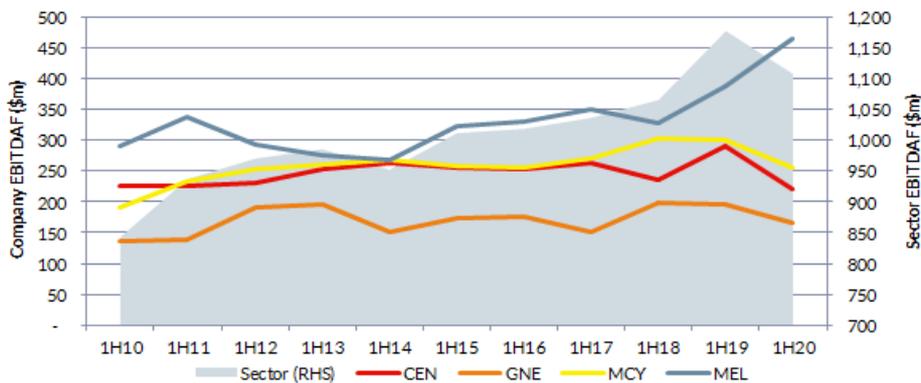
Reporting Season Wrap

Solid performance, down on the pcp, but that's an unfair comparison

Relative to the pcp, sector 1H20 EBITDAF was down -5.9% to \$1,108m with only MEL growing earnings. However, 1H20 was lapping a strong period for most businesses, with the Pohokura gas outage making a material difference to earnings in the October/November period in particular. In addition, both CEN and MCY had sold business units, so were lapping a period which included the benefit of discontinued operations.

1H20 sector EBITDAF was +3.9% ahead of 1H18 EBITDAF, so overall we view the 1H20 as another steady performance from the sector.

Figure 2. Historical company EBITDAFs



Source: Company reports, Forsyth Barr analysis

Reported operating earnings contained no surprises

1H20 earnings were in line with expectations. Sector EBITDAF came in +\$1m higher than our forecast at \$1,108m. However, dividends were slightly lower than our forecast, with both GNE and MEL erring on the conservative side.

Figure 3. Forecast vs actual 1H20 results

	EBITDAF				Dividend			
	1H20 F'cast	1H20 Actual	Diff	Diff	1H20 F'cast	1H20 Actual	Diff	Diff
	\$m	\$m	\$m	%	cps	cps	cps	%
CEN	220	221	+1	0.5%	16.00	16.00	-	0.0%
GNE	167	167	-	0.0%	8.60	8.525	-0.075	-0.9%
MCY	254	255	+1	0.4%	6.30	6.40	0.10	1.6%
MEL	466	465	-1	-0.2%	8.34	8.14	-0.20	-2.4%
Combined (\$m)	1,107	1,108	+1	0.1%	503	498	-5	-0.9%

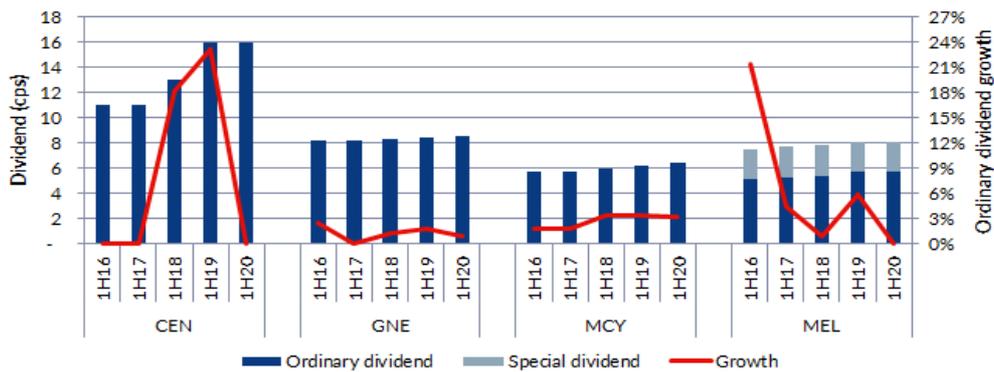
Source: Company reports, Forsyth Barr analysis

Playing it cautious with the dividend

Returning cash to shareholders has been a major theme for the generator/retailers and continues to be. However, both GNE and MEL erred on the conservative side. Only MCY surprised on the upside, and even then it left its FY20 dividend guidance unchanged, hence, all it has done is altered the interim vs. final dividend split.

GNE's +0.9% dividend increase is effectively the smallest it can provide under its dividend policy, highlighting it remains keen to lower gearing levels as soon as possible. MEL's rationale for leaving its interim dividend unchanged was the uncertainty over NZAS. In addition, its goal is to replace the current 4.88cps special dividend with an ordinary dividend, such that the total dividend is unchanged when the special dividends cease after 1H22. This goal is made more challenging if MEL increases its ordinary dividend.

Figure 4. Historic first half dividend



Source: Company reports, Forsyth Barr analysis

Modest forecast changes, but weighted to the downside

EBITDAF forecast changes were relatively minor (no more than +/-2% in FY20 and FY21), but were weighted to the downside. MCY downgraded FY20 EBITDAF guidance to \$500m from \$515m due to hydro generation tracking below average in the past few months. GNE effectively retained its guidance range (\$360m to \$370m) although it did take the top off (old FY20 EBITDAF guidance was \$360m to \$380m).

CEN and MEL do not provide guidance, however, CEN reiterated that normalised hydrology earnings should be around \$480m. But, FY20 and FY21 will be below that figure due to a weak 1H20 result and the effects of CEN not competing in the commercial market that has seen the greatest margin increase over the past 12-months.

Figure 5. Forecast changes

	FY20 Old	FY20 New	\$m chg	% chg	FY21 Old	FY21 New	\$m chg	% chg	FY22 Old	FY22 New	\$m chg	% chg
CEN	444	441	(3)	-0.6%	485	473	(12)	-2.6%	485	490	5	1.0%
GNE	362	366	4	1.1%	407	405	(3)	-0.6%	449	437	(12)	-2.7%
MCY	511	501	(10)	-1.9%	523	526	3	0.5%	552	554	1	0.2%
MEL	863	864	1	0.2%	808	807	(1)	-0.1%	806	808	2	0.3%
Combined	2,180	2,173	(7)	-0.3%	2,224	2,211	(13)	-0.6%	2,293	2,289	(3)	-0.1%

Source: Company reports, Forsyth Barr analysis

New build chat continues, with GNE unveiling a potential solar offering

A consistent theme across all of the generator/retailers was their new build options. MCY is building its Turitea wind farm, GNE has contracted for energy from the Waipipi wind farm and signalled it is in advanced discussions to contract for energy from a North Waikato solar farm.

CEN and MEL have their Tauhara (geothermal) and Harapaki (wind) development options. Whilst CEN and GNE indicated that Tauhara is contingent on NZAS remaining open, MEL is open to building its wind farm in Hawkes Bay, noting the favourable location.

Our analysis indicates that if all of the new build went ahead, it is effectively only replacing existing thermal generation. With the cost of thermal generation higher than the cost of building new renewable plant, displacement of thermal generation is what will take place subject to the level of demand growth. Any demand growth will see thermal generation utilisation increase in the first instance.

The table below highlights the importance of the Rankine Units to security of supply. Whilst its energy may not be required (in a no demand growth scenario), its ability to generate for peak demand will be required. We estimate that if all of the proposed projects are built, and both TCC and the Rankines close, installed capacity will increase +158MW. However, with much of the new generation intermittent in nature, the change of capacity from a security of supply perspective is -464MW – similar in scale to the Rankine units. For that reason we remain of the view that the Rankines will continue to play an important role in the electricity system for several years to come.

Figure 6. New build pipeline

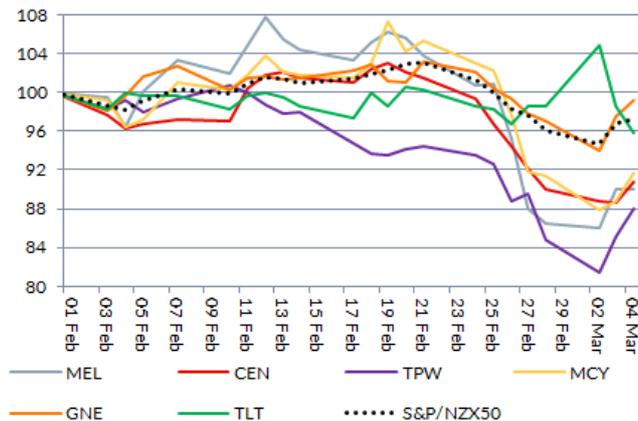
Name	Company	Generation technology	Where	MW Capacity	GWh production	When	Status
Junction Road	Todd Energy	Gas - Peaking	Taranaki	100	255	Apr-20	Under construction
Turitea Stage 1 (North)	Mercury	Wind	Manawatu	119	470	Jun-21	Under construction
Waipipi	Tilt Renewables	Wind	Taranaki	133	455	Sep-21	Under construction
Turitea Stage 2 (South)	Mercury	Wind	Manawatu	103	370	Jun-22	Committed
Total under construction/committed				455	1,550		
North Waikato	Unknown	Solar	Waikato	300	550	Dec-22	Working towards financial close
Harapaki	Meridian	Wind	Hawkes Bay	130	500	Mar-23	Working towards financial close
Tauhara Stage 1	Contact Energy	Geothermal	Taupo	140	1100	Dec-23	Working towards financial close
Likely build if NZAS remains open				1,025	3,700		
Closures/curtailment							
TCC	Contact Energy	Gas - CCGT	Taranaki	(367)	(1050)	Sep-22	
Unit 5 - Huntly	Genesis Energy	Gas - CCGT	Waikato	0	(1400)	~2023	
Rankine Units - Huntly	Genesis Energy	Coal/gas	Waikato	(500)	(1250)	???	
Total closures/curtailment				(867)	(3700)		
Change in energy position				158	0		
Estimated change in capacity				(464)			

Source: Company reports, Forsyth Barr analysis

Share market performance: February 2020

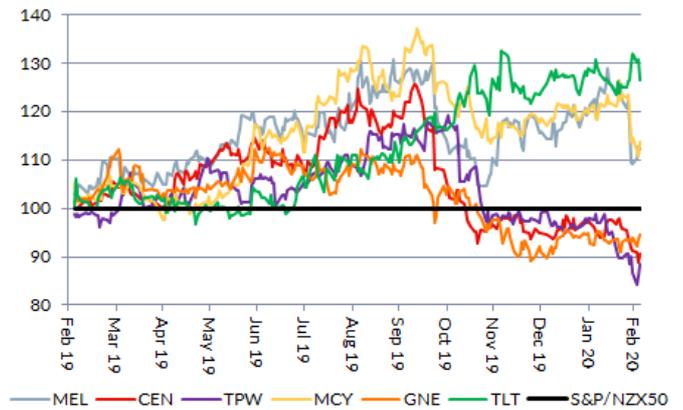
COVID-19 and NZAS closure fears saw all of the electricity stocks fall in February, with TPW performing the worst, down -12% from 31 January to 4 March. CEN, MCY and MEL fell -9%, -8% and -10% respectively. The best performer, GNE, dropped -0.8% and was the only electricity stock to outperform the NZX50, which was down -3%.

Figure 7. Stock performance vs. S&P/NZX50C



Source: Thomson Reuters, Forsyth Barr analysis

Figure 8. 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 that NZAS will not be closing. Our preferred stocks are CEN, GNE, TPW & TLT (OUTPERFORM), whilst the other stocks, MCY & MEL are NEUTRAL.

Figure 9. EBITDAF multiples

Company	Code	Price	Target	Target	Rating	Mkt Cap \$m	EBITDAF (x)		EBITDAF - capex (x)	
			Price	Return			FY20	FY21	FY20	FY21
Contact Energy	CEN	\$6.75	\$8.00	24.3%	OUTPERFORM	4,830	13.0	12.2	15.7	14.4
Genesis Energy (excl Kupe)	GNE	\$3.13	\$3.15	6.4%	OUTPERFORM	2,829	14.8	13.3	18.2	16.0
Mercury	MCY	\$4.80	\$4.60	-0.8%	NEUTRAL	6,532	15.3	14.6	18.0	17.0
Meridian Energy	MEL	\$4.81	\$4.40	-4.1%	NEUTRAL	12,328	16.1	17.3	17.3	18.7
Trustpower	TPW	\$6.60	\$7.70	21.8%	OUTPERFORM	2,066	14.4	13.0	16.6	14.8
Sector average							14.7	14.0	17.1	16.1
Tilt Renewables	TLT	\$3.26	\$3.70	13.5%	OUTPERFORM	1,530	13.9	16.9	15.0	18.5
Genesis Energy (incl Kupe)	GNE	\$3.13	\$3.15	6.4%	OUTPERFORM	3,217	12.2	11.0	14.3	12.7

Source: Forsyth Barr analysis

Figure 10. PE multiples and dividend yields

Company	PE (x)		Adjusted PE (x)		Cash Div Yield		Gross Div Yield		Free Cash Flow Yield	
	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21	FY20	FY21
Contact Energy	36.9	34.9	20.8	19.4	5.8%	5.8%	7.1%	7.1%	4.6%	2.9%
Genesis Energy (excl Kupe)	142.7	75.2	28.0	21.9	3.9%	4.1%	5.2%	5.7%	3.6%	5.0%
Mercury	46.6	37.1	27.7	24.0	3.3%	3.4%	4.6%	4.7%	1.3%	1.3%
Meridian Energy	38.8	45.6	24.6	27.3	4.5%	4.5%	5.6%	5.6%	3.4%	3.8%
Trustpower	27.9	22.9	24.5	20.5	5.2%	5.2%	7.2%	7.2%	2.9%	5.2%
Sector average	48.4	40.0	25.0	22.4	4.5%	4.6%	5.9%	6.0%	3.1%	3.6%
Tilt Renewables	3.1	12.7	17.5	22.4	0.0%	0.0%	0.0%	0.0%	3.1%	6.2%
Genesis Energy (incl Kupe)	79.6	46.2	19.7	16.2	5.5%	5.6%	7.4%	7.7%	5.7%	7.0%

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.

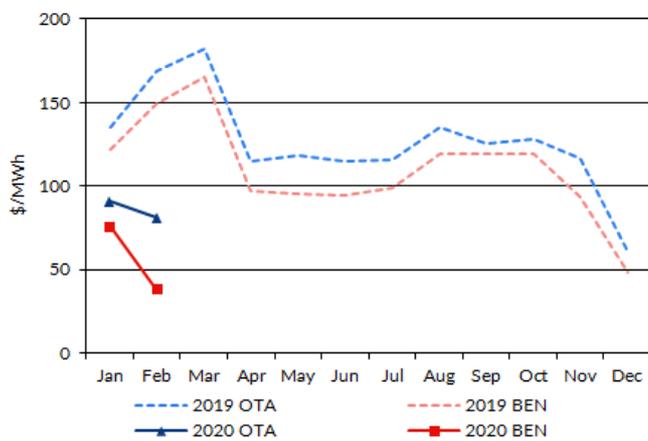
Wholesale electricity market: February 2020

Spot wholesale electricity prices and ASX futures

February brings more heavy rain to the South

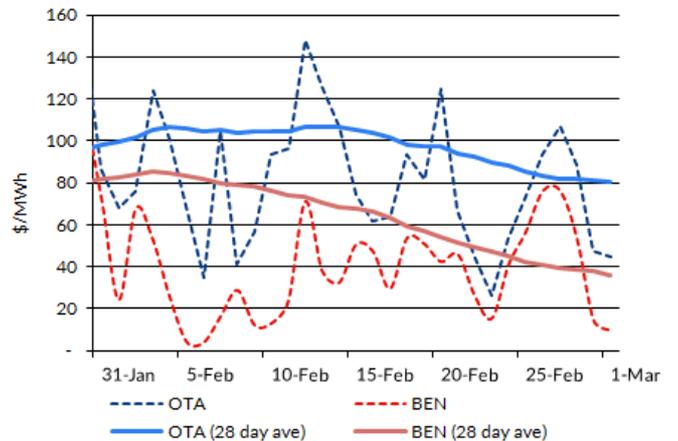
- Benmore (BEN) average wholesale electricity price was \$38/MWh for the month, down -50% from January. The low prices experienced in the South Island are due to the high levels of hydro inflows experienced in early February, and again in mid-February, combined with the ongoing HVDC constraints. Otahuhu (OTA) wholesale electricity prices were also down, averaging \$81/MWh in February.
- The price gap between the North Island (OTA) and South Island (BEN) is the effect of ongoing HVDC outages and constraints. The average wholesale price gap was \$43/MWh in February compared to \$15/MWh in January.
- Volatility in wholesale electricity prices increased in February as shown in Figure 11, with BEN prices fluctuating between \$4/MWh and \$77/MWh, while OTA prices were between \$41/MWh and \$148/MWh throughout February.

Figure 11. Average monthly wholesale electricity prices



Source: NZX Energy, Forsyth Barr analysis

Figure 12. Average daily wholesale electricity prices



Source: NZX Energy, Forsyth Barr analysis

Short-dated futures continue to decline

- Short-dated BEN futures experienced the largest percentage change over the month, down -10% from \$99/MWh at the end of January to \$89/MWh at the end of February. Short-dated OTA futures were also down in February, experiencing a -5% decline over the month to now sit at \$114/MWh. These short-dated futures declines are likely in response to the increased hydro inflows in the South Island.
- Both long-dated BEN and OTA were again unchanged this month and have remained around the same prices of \$88/MWh and \$100/MWh for the last three months.

Figure 13. ASX futures prices (last three years)



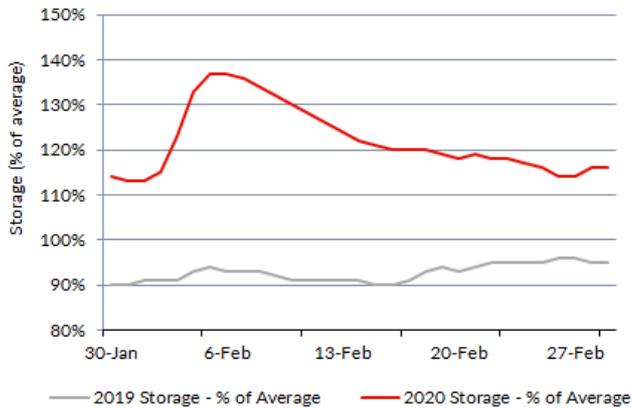
Source: Electricity Authority, Forsyth Barr analysis

Hydro storage volumes

Early February brings heavy rain to South

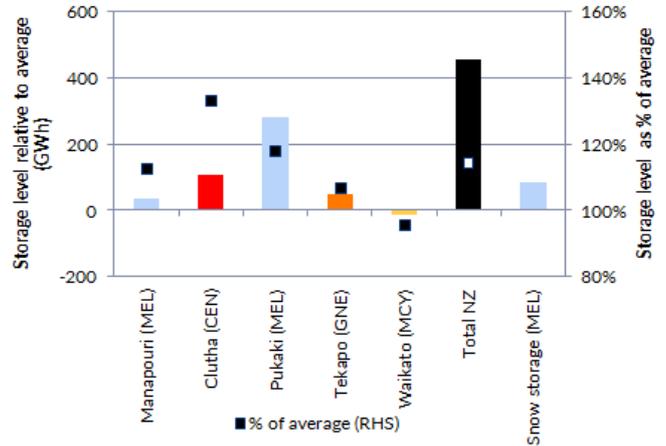
- Hydro storage levels were boosted in early February following heavy rain, with South Island hydro levels reaching 138% of average on 6 February. However, levels have now begun to return to normal, with total hydro storage now ~+14% above average. MCY's Waikato is the only key storage lake to not be above average for this time of year.
- MEL's snow storage is currently at 138GWh, and continues to be well above average, currently +84GWh above the average for this time of year.

Figure 14. Average lake storage levels



Source: NZX Energy, Forsyth Barr analysis

Figure 15. Key storage lake levels relative to avg (as at 27 Feb)



Source: EnergyLink, MEL, Forsyth Barr analysis

Demand and generation analysis

Demand continues to grow

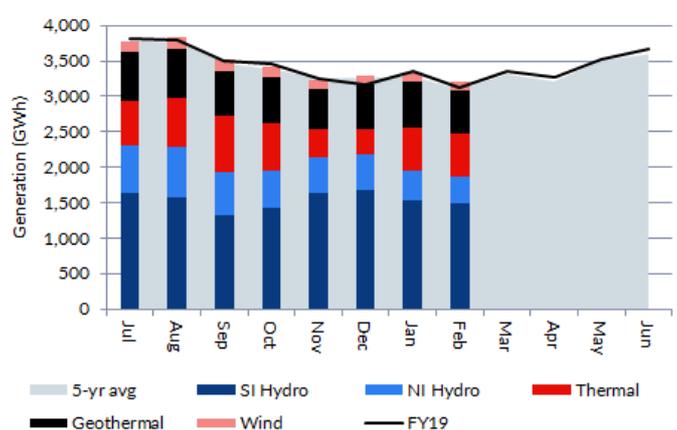
- Electricity demand for February 2020 averaged 107.8 GWh/day, which is a +1.2% increase from the pcp and makes it 7 months of consecutive pcp growth. This growth is despite NZAS electricity demand decreasing -4.2% on the pcp, with total NZ demand excluding Tiwai up +2.1% on the pcp.
- Total New Zealand generation was 3,198GWh in February, which is a -4.3% decrease from January 2020, but +2.5% increase on the pcp, due in part to 2020 being a leap year. The percentage of total generation from geothermal, wind and North Island hydro all decreased from the prior month, with the difference being made up by increases in both South Island hydro and thermal generation. This led to a decrease in the percentage of total generation from renewable sources of -1% to sit at ~81% in February.

Figure 16. Rolling 28-day average demand & rolling 12-m growth



Source: NZX energy, Forsyth Barr analysis

Figure 17. NZ generation (by technology) – fiscal year to June



Source: NZX energy, Forsyth Barr analysis

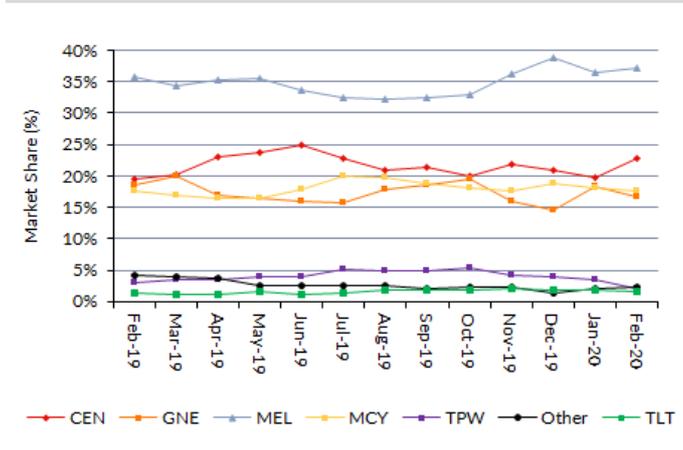
Generation market share – CEN rebounds from January

- CEN gained +3% in market share over February to reach 22.7% of total generation, which is its highest level since July 2019. TPW again lost generation market share (-1.4%) making it the fifth consecutive month of generation market share decline for the generator/retailer, and reaching its lowest ever generation market share at 2.2%. GNE had the worst month, losing -1.8% market share. MEL and MCY were relatively stable with +0.6% and -0.4% changes respectively.

CEN – Thermal generation increases

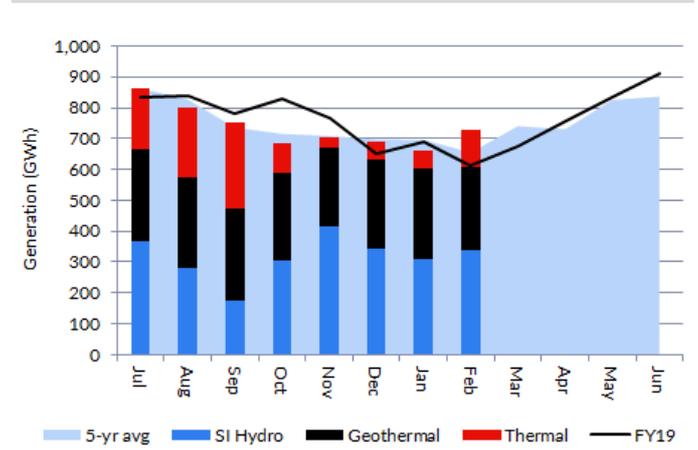
- Total CEN generation was 728GWh in February, which is a +11% increase from the prior month, and a +19% increase on the pcp. This increase came largely from South Island hydro and thermal generation, up +9% and +126% on the prior month respectively. The sharp increase in thermal generation is largely due to CEN's TCC unit coming back online after not being used in January.

Figure 18. Monthly generation market share



Source: EnergyLink, Forsyth Barr analysis

Figure 19. CEN monthly generation mix (current, pcp & 5y avg)



Source: EnergyLink, Forsyth Barr analysis

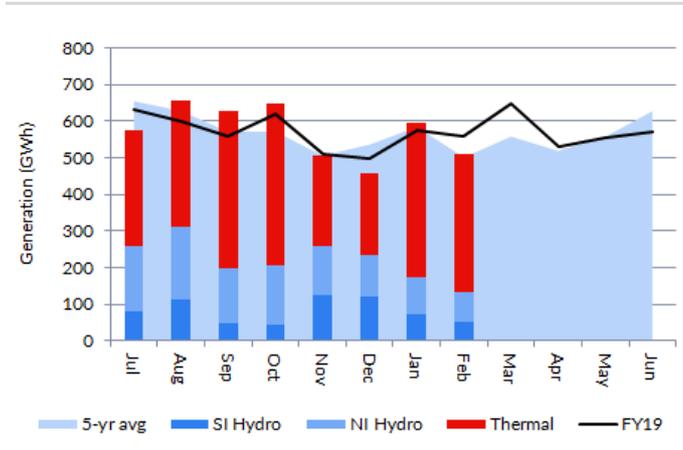
GNE – Generation down following January spike

- GNE generation was 530GWh in February, which is a -4% decrease from January. North Island hydro (Tongariro), South Island hydro (Tekapo) and thermal generation all experienced decreases over the month, down -18%, -31% and -11% respectively.

MCY – Hydro generation falls again

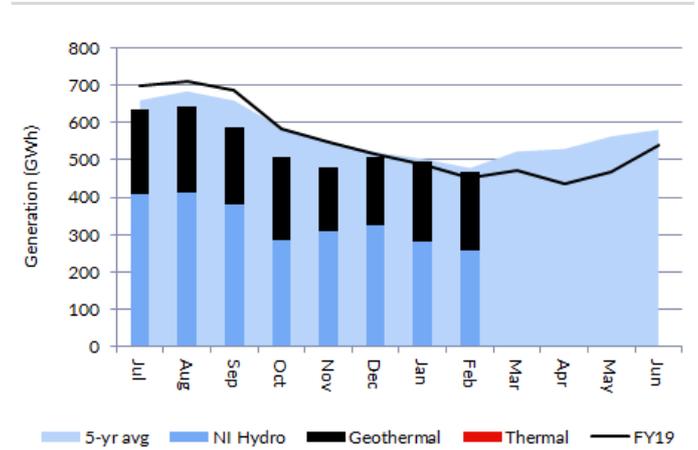
- MCY's February generation of 468GWh was a -6% decrease from January, and is MCY's lowest generation since April 2019. This decline is largely due to a decrease in hydro generation (-8% mom) from MCY's Waikato hydro facilities which generated 258GWh over the month. Geothermal generation was also down -4% over the month to produce 210GWh.

Figure 20. GNE monthly generation mix (current, pcp & 5y avg)



Source: EnergyLink, Forsyth Barr analysis

Figure 21. MCY monthly generation mix (current, pcp & 5y avg)



Source: EnergyLink, Forsyth Barr analysis

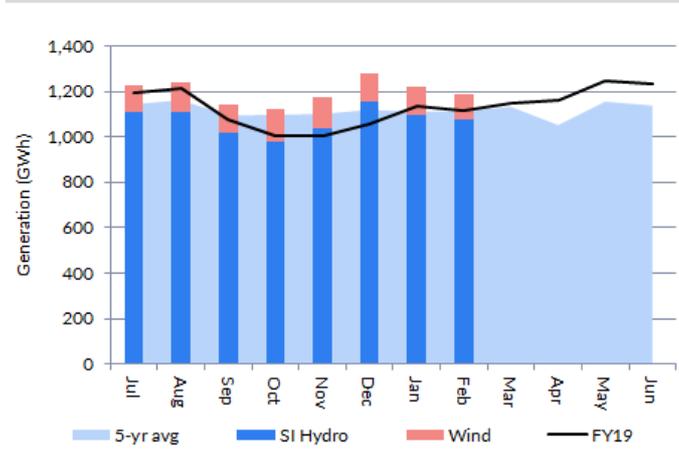
MEL – Weak wind in February

- MEL average daily generation in February was up +4% compared to the prior month and +2% on the pcp. Generation was boosted by hydro which was up +5% on the prior month, while wind generation was down -6% mom.
- MEL continues to enjoy above average hydro storage volumes, currently sitting at 2,145GWh, which is 117% of average. This helps protect MEL's hydro generation through the coming winter.

TPW – Hydro down sharply

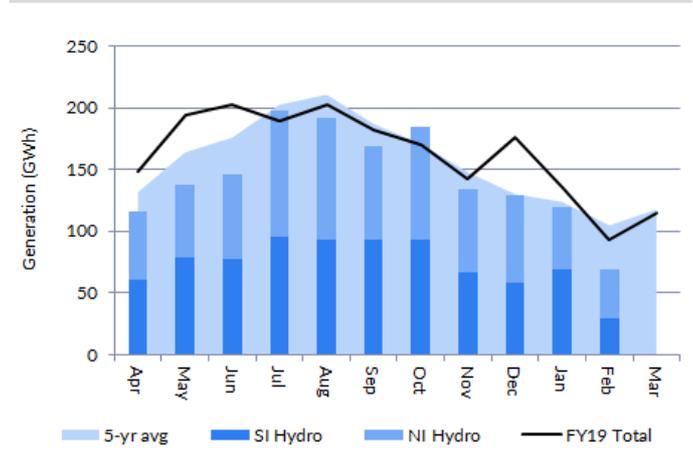
- We estimate that TPW generation was 69GWh in February, which is -26% down on the pcp and -42% down on the prior month. This is also TPW's lowest February generation ever, largely due to a sharp decline in generation from its South Island hydro facilities. In particular, TPW's Waipori and Cobb hydro plants had the large reductions in generation, down -82% and -79% respectively mom, this is due to TPW holding back water as a result of low prices in South Island.

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



Source: EnergyLink, Forsyth Barr analysis

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



Source: EnergyLink, Forsyth Barr analysis

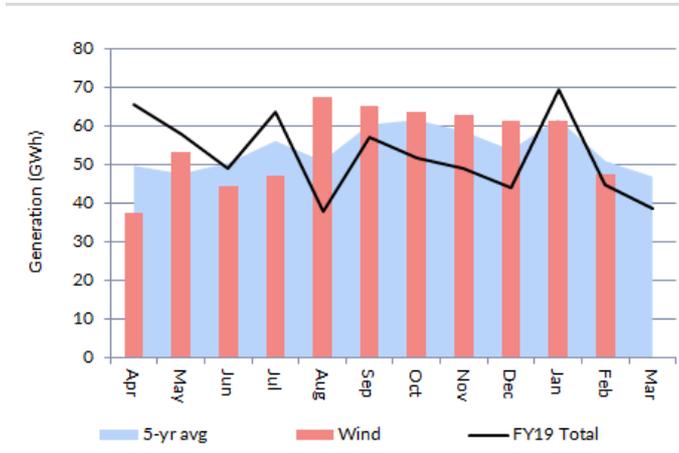
TLT – Generation down

- Following six months of above average generation, we estimate TLT generation has fallen to 48GWh, however, this is largely in line with average February production for TLT. Average daily generation was down -17% compared to the January 2020.

Generation prices – GWAP down in February from all five big generator/retailers

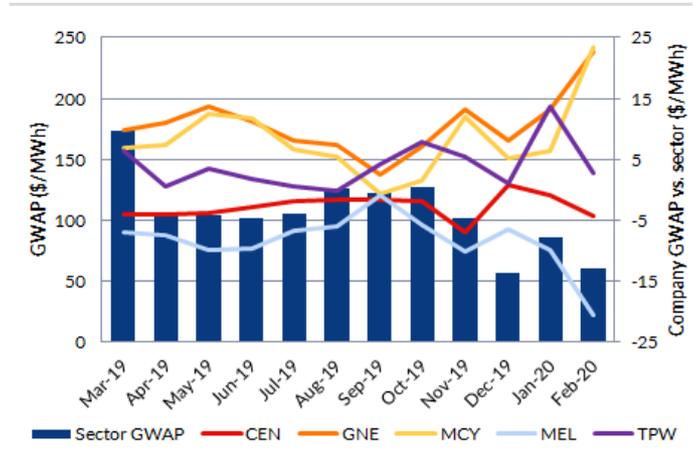
- The average generation weighted average price (GWAP) was \$60/MWh in February, down -30% from \$86/MWh in January. All of the big five generators experienced a sharp decline in prices. MCY had the highest GWAP at \$84/MWh, while MEL received the lowest GWAP over the month of \$40/MWh. CEN, GNE and TPW received \$57/MWh, \$83/MWh and \$64/MWh respectively.

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



Source: EnergyLink, Forsyth Barr analysis

Figure 25. Avg generation weighted average price (GWAP)



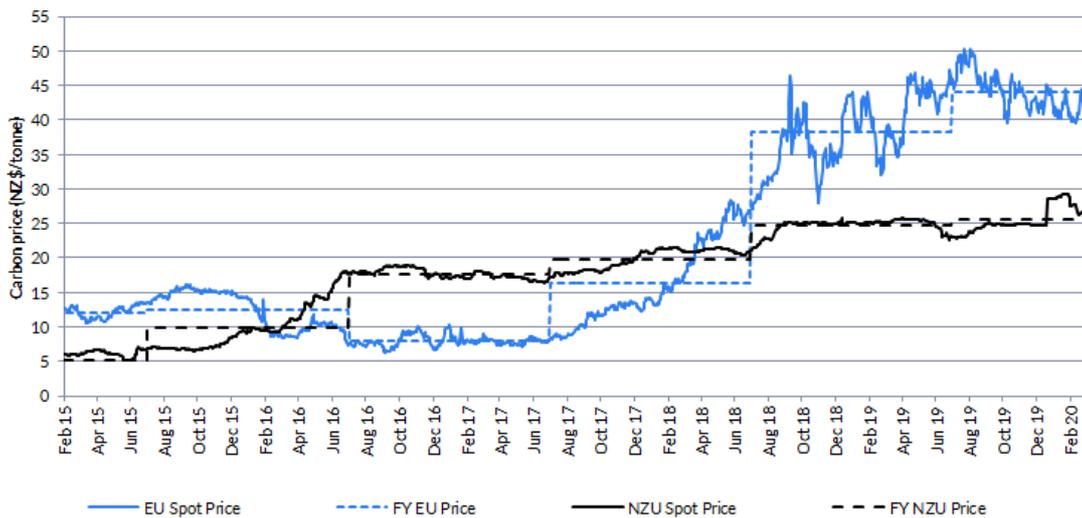
Source: EnergyLink, Forsyth Barr analysis

Carbon prices

NZ carbon prices — Unit prices soften following rally

- NZ carbon units ended February at \$26.50/unit, after starting the month at \$27.55/unit and peaking at \$27.80/unit. 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.
- EU carbon units fell slightly over the month to end at €23.6/unit (~NZ\$42/unit), down from €23.9/unit (NZ\$41/unit) at the end of January. The average EU carbon price continues to decrease, down from NZ\$41.6/unit in January to NZ\$41.1/unit in February.

Figure 26. Price of carbon (NZ\$/tonne)



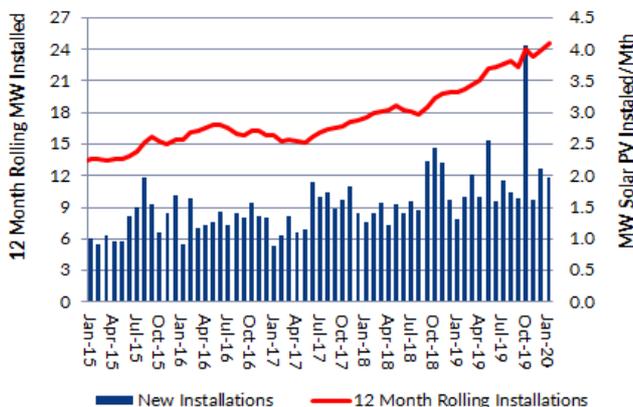
Source: Bloomberg, Forsyth Barr analysis

Solar PV installations

Rate of installation continues to decline

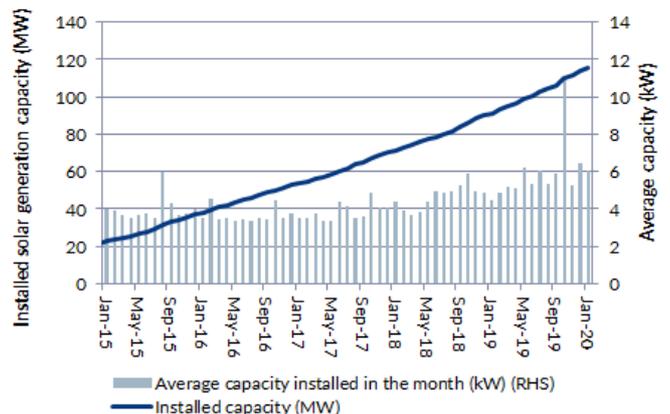
- There was 1.96MW of new solar capacity installed in January 2020 with 284 new solar connections. This is a -7% decrease in monthly MW installed compared to the prior month; however, it is a +50% increase on the pcp. Total solar capacity is now 116MW with 26,356 solar ICPs.

Figure 27. Solar PV capacity installed



Source: Electricity Authority, Forsyth Barr analysis

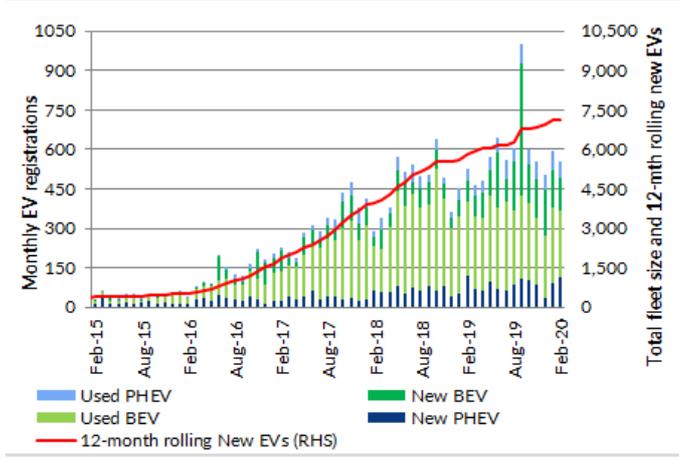
Figure 28. Average size of system and total capacity installed



Source: Electricity Authority, Forsyth Barr analysis

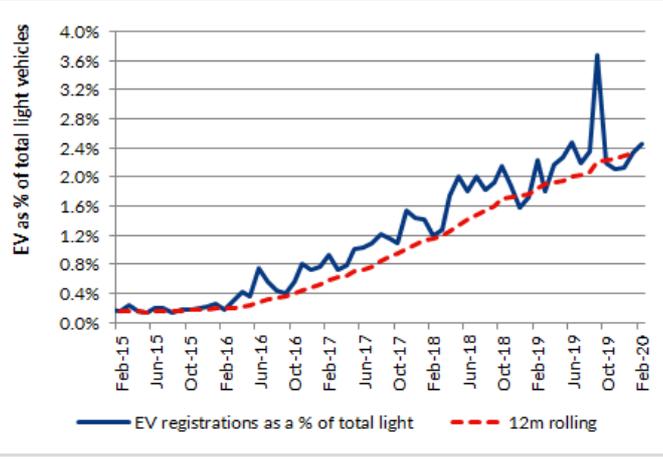
Electric vehicle (EV) registrations

Figure 29. EV registrations



Source: Ministry of Transport, Forsyth Barr analysis

Figure 30. EV registrations % of total light vehicle registrations

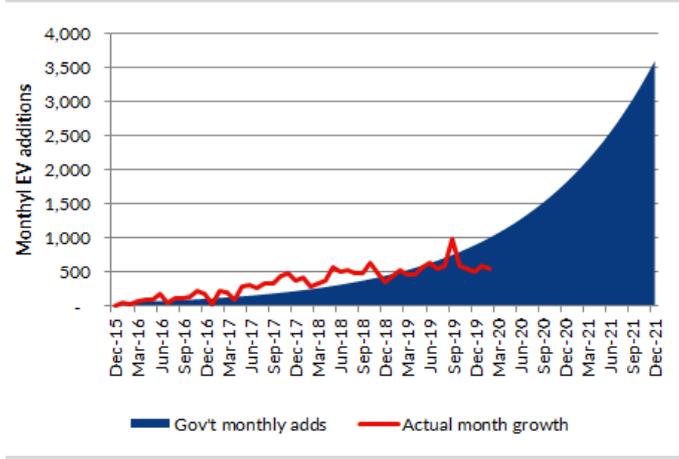


Source: Ministry of Transport, Forsyth Barr analysis

New EV registrations trending upwards

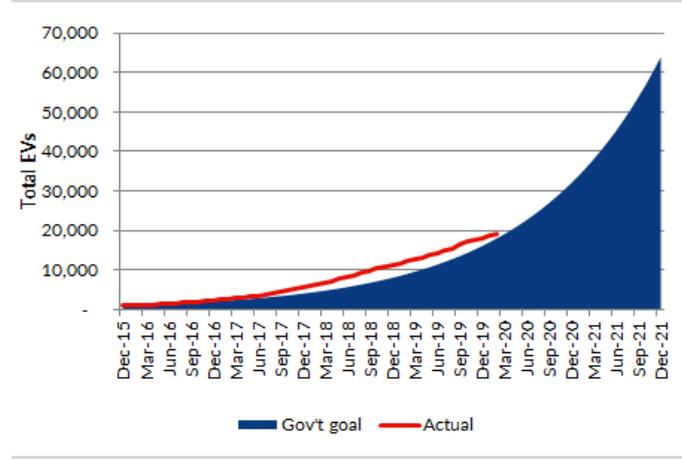
- In February 2020 there were 552 EVs registered, of which 237 were new. Overall the number of EVs registered is slightly below the prior months 594, however, the percentage of new EVs registered experienced a slight up tick of +4%. The total number of EVs registered is now ~19,300, which still remains slightly above the government's target, however, this gap continues to shrink.
- EVs made up 2.5% of new light vehicles registered in February 2020, which is up from 2.3% in January. The rolling 12-month percentage of EVs per light vehicle also continues to gradually climb and now sits at ~2.4%.

Figure 31. Monthly EV registrations vs. govt target



Source: Ministry of Transport, Forsyth Barr analysis

Figure 32. Total EVs registered vs. govt target



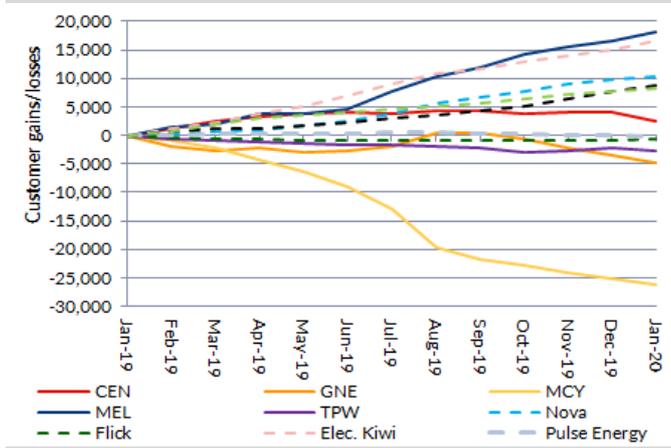
Source: Ministry of Transport, Forsyth Barr analysis

Retail electricity customers

MEL only big retailer to gain connections

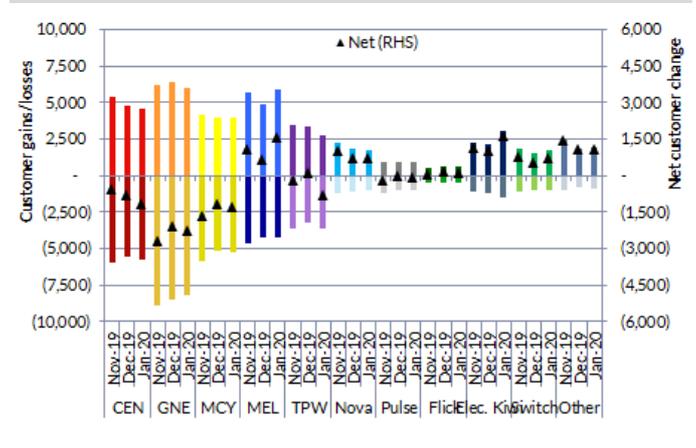
- MEL gained +1,414 connections in January as it continues its run of month market share gains. All of the other big five retailers lost electricity connections over the month; CEN had the worst month losing -1,653 customers, while MCY made it 24 consecutive months of losses with -1,075 connections lost in the month. GNE and TPW lost -1,323 and -410 respectively.
- Electric Kiwi had the best month of the tier 2 retailers, adding +1,471 connections. Switch Utilities and Todd Energy both also made gains over the month, adding +608 and +562 connections respectively, while Pulse Energy lost -148 connections in January.
- In January MEL was also the only large retailer to gain customers through switching (which excludes market growth), gaining +1,573 connections.

Figure 33. Cumulative 12-mth electricity customer gains/losses



Source: EA, Forsyth Barr analysis

Figure 34. Customer switches (excludes market growth)

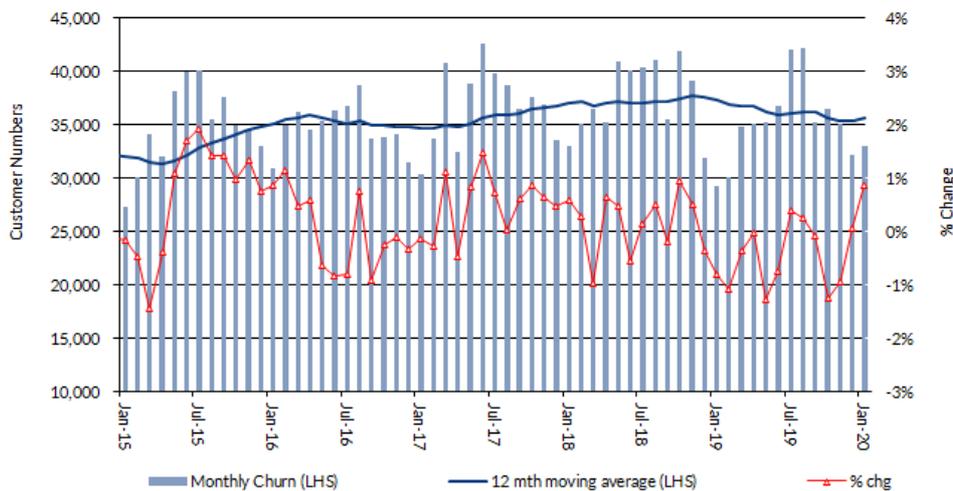


Source: EA, Forsyth Barr analysis

Connection churn

- There were ~33,000 customer switches in January 2020, which is a +12.5% increase on the pcp and +2.4% on the prior month. In general, December and January are months that usually experience lower switching numbers, and although this January was sharply up on the prior year, it is still well below the number of switches experienced in the middle of the year.

Figure 35. Electricity connection churn



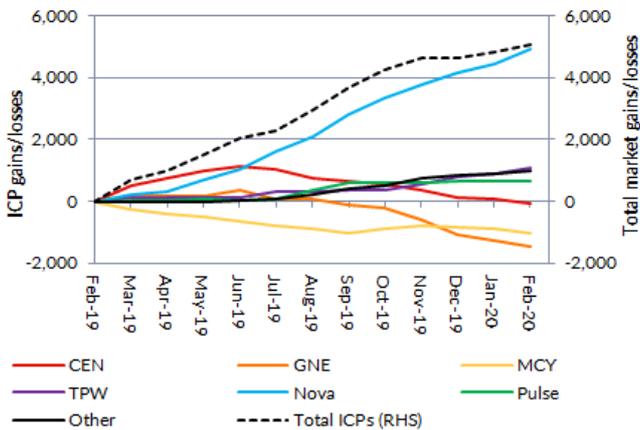
Source: EA, Forsyth Barr analysis

Retail gas customers

TPW continues to grow gas customer numbers

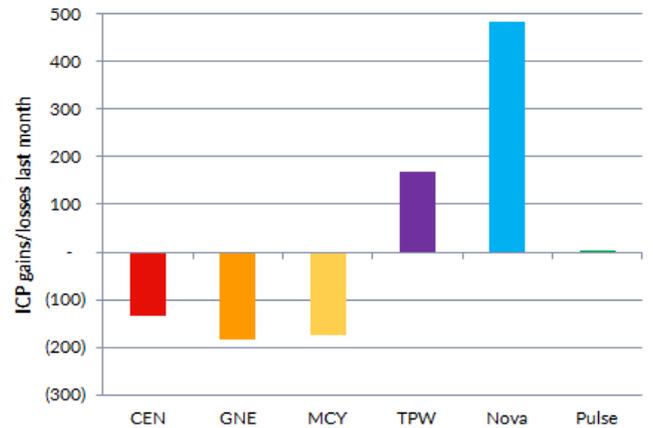
- TPW was the only big retailer to gain gas customers in February 2020, adding +170 connections over the month. CEN continued its run of losses, losing -134 connections, while both MCY and GNE had a difficult month as well, losing -176 and -185 connections respectively. Nova continues to gain connections, with an extra +482 added since January.
- Since February 2019 TPW is the only of the listed companies to gain gas connections, with +1,066 more over the 12 months. However, it is Nova again that is making the most gains in the industry with +4,912 extra connections added in the same time period. CEN is relatively similar having only lost -73 connections, while MCY and GNE have lost -1,045 and -1,453 gas connections respectively.

Figure 36. Gas connection gains/losses over the past 12-months



Source: Gas Industry Co, Forsyth Barr analysis

Figure 37. Gas connection gains/losses in February 2020



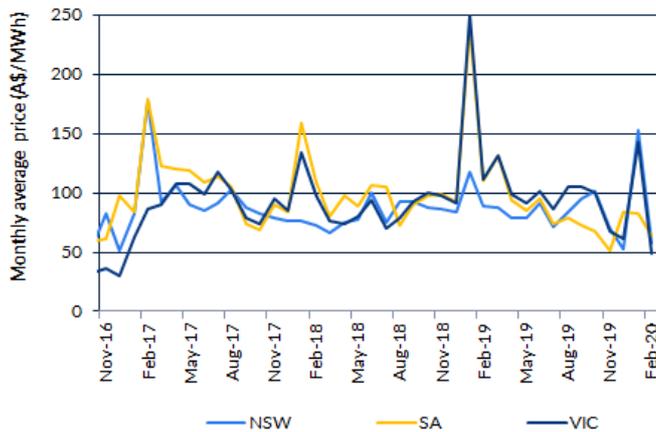
Source: Gas Industry Co, Forsyth Barr analysis

Australian electricity market

Wholesale electricity prices down on last year

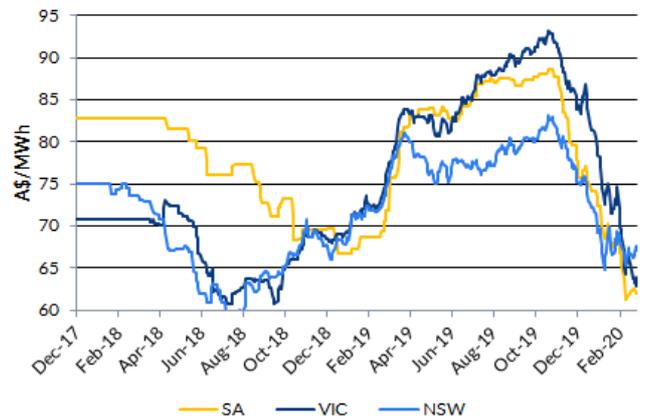
- NSW, SA and VIC wholesale electricity prices were all down sharply on the pcp, down -36%, -42% and -57% respectively. NSW averaged A\$57.5/MWh throughout February which is the lowest monthly average wholesale electricity price for the state since December 2016. SA and VIC wholesale electricity prices averaged A\$64.2/MWh and A\$48.3/MWh over the month.
- FY21 futures continue to decline. All were down again from January, with VIC futures experiencing the largest decline, down -16% over the month to sit at A\$62.9/MWh on 28 February. SA and NSW FY21 futures declined -9% and -3% respectively to end the month at A\$61.9/MWh and A\$67/MWh.

Figure 38. Australian wholesale electricity price (A\$/MWh)



Source: AEMO, Forsyth Barr analysis

Figure 39. Australian FY21 futures prices (A\$/MWh)

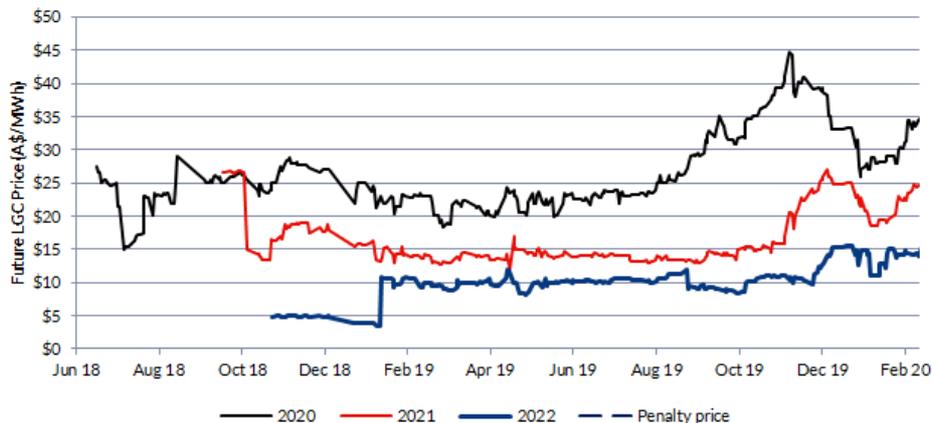


Source: Thomson Reuters, Forsyth Barr analysis

Renewable energy certificates (LGC) spot prices decline

- Spot LGC prices were down in February, ending the month at A\$33/MWh after starting the month at A\$36/MWh. The current spot is also down -3% on the pcp. Prices reached the month's peak of A\$36/MWh on multiple occasions but came off in the last week of the month.
- Long-dated LGC prices rose by +27% over the month to end at A\$25/MWh, finishing just below the peak of A\$25.25/MWh. 2022 prices also gained consistently over the month to end February +12% up on the end of January and now sit at A\$15.8/MWh.

Figure 40. Renewable energy certificate prices (LGC)



Source: Bloomberg, Forsyth Barr analysis

Key statistics

New Zealand electricity market statistics

Figure 41. Key statistics – New Zealand

	Feb-19	Jan-20	Feb-20	% Chg pcp	% Chg mom
Average Monthly Prices					
OTA avg (\$/MWh)	\$ 169.1	\$ 90.5	\$ 81.0	-52.1%	-10.5%
HAY avg (\$/MWh)	\$ 155.2	\$ 87.0	\$ 74.3	-52.1%	-14.6%
BEN avg (\$/MWh)	\$ 149.4	\$ 75.8	\$ 37.8	-74.7%	-50.1%
Avg Daily Generation (GWh)					
CEN	21.8	21.2	25.1	15.0%	18.2%
% of NZ Generation	19.6%	19.7%	22.8%	16.3%	15.5%
GNE	20.6	19.8	18.3	-11.5%	-7.8%
% of NZ Generation	18.5%	18.4%	16.6%	-10.5%	-9.9%
MCY	19.5	19.4	19.4	-0.7%	-0.1%
% of NZ Generation	17.5%	18.0%	17.6%	0.4%	-2.3%
MEL	39.9	39.3	40.9	2.4%	4.0%
% of NZ Generation	35.8%	36.4%	37.1%	3.5%	1.7%
TPW	4.9	5.8	3.8	-22.4%	-34.3%
% of NZ Generation	4.4%	5.4%	3.5%	-21.5%	-35.8%
Daily Demand (GWh)					
Demand (excl Tiwai)	91.7	92.1	93.6	2.1%	1.7%
NZAS demand	14.8	14.3	14.2	-4.2%	-0.7%
Total NZ Demand	106.5	106.4	107.8	1.2%	1.4%
Hydrology (% of average)					
Average hydro storage	89%	122%	123%	38.2%	0.2%
Month end hydro storage	86%	113%	116%	34.9%	2.7%
ASX futures as at:					
	28-Feb-19	31-Jan-20	28-Feb-20		
Short-dated OTA	\$ 139.1	\$ 120.8	\$ 114.6	-5.2%	-5.1%
Long-dated OTA	\$ 94.6	\$ 99.5	\$ 99.6	12.7%	0.0%
Short-dated BEN	\$ 124.8	\$ 99.1	\$ 89.0	-20.2%	-10.2%
Long-dated BEN	\$ 84.6	\$ 88.3	\$ 88.0	7.8%	-0.3%

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

Australian electricity market statistics

Figure 42. Key statistics Australia

	Feb-19	Jan-20	Feb-20	% Chg pcp	% Chg mom
Average Monthly Prices					
NSW avg (A\$/MWh)	\$ 89.2	\$ 152.3	\$ 57.5	-35.6%	-62.2%
SA avg (A\$/MWh)	\$ 110.7	\$ 83.2	\$ 64.2	-42.0%	-22.9%
VIC avg (A\$/MWh)	\$ 111.2	\$ 143.0	\$ 48.3	-56.5%	-66.2%
Electricity Futures for FY21:					
	28-Feb-19	31-Jan-20	28-Feb-20		
NSW avg (A\$/MWh)	\$ 73.8	\$ 69.4	\$ 67.0	-9.1%	-3.4%
SA avg (A\$/MWh)	\$ 70.7	\$ 68.4	\$ 61.9	-12.4%	-9.4%
VIC avg (A\$/MWh)	\$ 75.4	\$ 74.7	\$ 62.9	-16.5%	-15.8%
Spot and Future LGC Prices					
	28-Feb-19	31-Jan-20	28-Feb-20		
Spot (A\$/MWh)	\$ 34.0	\$ 36.0	\$ 33.0	-2.9%	-8.3%
2020 (A\$/MWh)	\$ 21.9	\$ 29.0	\$ 34.5	57.9%	19.0%
2021 (A\$/MWh)	\$ 13.1	\$ 19.8	\$ 25.0	91.6%	26.6%
2022 (A\$/MWh)	\$ 11.9	\$ 14.1	\$ 15.8	32.9%	11.7%

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

Industry news

Listed sector company news

Contact (CEN)

- CEN has announced that it has entered into a gas supply contract with OMV, and will receive 37PJ of gas between 2021 and 2025. This is in addition to CEN's 10PJ entitlement from the OMV Maui field, which OMV has said CEN will receive at least 6.3PJs of. CEN has also said it has secured 3.6PJ of gas from an undisclosed supplier for 2020.

Genesis (GNE)

- GNE has secured a forward gas supply from OMV which will begin in January 2021. The deal will supply GNE with ~14PJ of gas over the three year period of the contract.
- GNE has reported that it is in discussions around terms for a 300MW solar farm in Waikato, as it continues to seek to transition out of its base load thermal generation. GNE will not build the solar farm but will instead agree to buy all of the power produced. If it goes ahead, the solar farm is expected to generate 550GWh per year and come online in 2023.

Mercury (MCY)

- MCY has trimmed its full year guidance \$10m to an EBITDAF of \$500m for the financial year ending June 2020. MCY cites a decrease in generation due to dry conditions in its Taupo catchment as the cause of the downgrades.

NZ Windfarms (NWF)

- NWF reported revenue of \$7m in its first half financial results reported on 28 February, up from \$6.4m in the pcp, EBITDAF was also up from \$2m in the pcp to \$5.1m in 1H20. NWF cited improved generation conditions, as well as high wholesale price levels as key drivers in the improved first half performance.

Trustpower (TPW)

- TPW has decreased its 2020 full year guidance to an EBITDA range of between \$185m and \$195m, down from \$200m to \$215m. This is TPW's second guidance downgrade in three months. TPW attributes the downgrades to materially lower wholesale electricity prices, as well as a lower generation outlook for the remainder of the year.

Tilt Renewables (TLT)

- TLT has said that the re-powering of its Tararua wind farm stages 1 and 2 could nearly triple the electricity generated of the two stages as well as double the capacity of the whole site. The current two sites collectively produce 250Wh, with the re-powered site potentially producing between 550–650 GWh.

Vector (VCT)

- VCT delivered its 1H20 results on 25 February, announcing EBITDA of \$264.5m and a 30% partially imputed dividend of 8.25c per share. The result was in line with expectations but the imputation cut was more aggressive than expected.

Political / regulatory news

- The Electricity Authority (EA) has announced that the new rule banning retailers attempting to win back customers will be applied from 31 March. The ban, which was proposed by the EA in November 2019 (following the Electricity Price Review recommendations), bans these win-backs for a period of 180 days.
- The EA has proposed a change to the Transmission Pricing Methodology (TPM) which would allow large electricity consumers to seek a prudent discount on their transmission prices. Transpower customers are eligible if they can show that by-passing the grid energy supply would be commercially viable and feasible, even if it would be inefficient. The proposed changes would likely reduce the transmission charges of NZAS (we estimate by potentially ~\$25m), which is seeking reduced lines charges as well as discounted electricity prices after Rio Tinto (RIO) initiated a strategic review of the smelter in October 2019.
- The EA has said it will release its decision on the December 2019 undesirable trading situation (UTS) claim by the end of April. Grant Benvenuti has been leading the investigation since 13 January in his role as acting Market Performance Manager.

Other industry news

- Todd Generation began producing from one of its two 50MW turbines at its Junction Road gas peaker plant on 14 February. The construction of the plant which houses two natural-gas fired turbines was announced in July 2018 and is expected to be operating at its full commercial capacity in April 2020.
- Powerco has brought online a 2MWh battery at its substation just out of Whanagamata to provide standby to the town in what it says is a New Zealand first. The BESS system will power ~1,000 homes in the event of a power cut.

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