

Power Points

Pressures Rising – April 2021

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We see increasing pressures in the electricity sector with hydro storage levels declining to their lowest level for this time of year (58% of average) since the wholesale electricity market began, and this is being reflected in wholesale and near-term futures prices (both above NZ\$230/MWh). Whilst we believe the electricity market is generally performing as expected, we also expect regulators and politicians are keeping a close watch on the sector. The other area of focus is the S&P Global Clean Energy Index, which is set to rebalance after close on 16 April, resulting in unprecedented selling by ETF index trackers of Contact Energy (CEN) (~72m shares) and Meridian Energy (MEL) (~100m shares).

Figure 1. Summary company valuation metric

Company	Price	Target price	Target return	Rating	FY21			
					EV/EBITDA	PE	Gross Yld	EBITDAF
CEN	\$6.79	\$8.40	29.0%	OUTPERFORM	12.3	18.7	6.5%	481
GNE	\$3.47	\$3.85	16.0%	OUTPERFORM	13.6	22.6	6.6%	419
MCY	\$6.25	\$6.10	0.7%	NEUTRAL	19.0	29.3	3.8%	512
MEL	\$5.25	\$5.10	0.4%	UNDERPERFORM	21.6	34.4	4.3%	701
TLT	\$7.59	\$7.80	2.8%	NEUTRAL	37.9	54.6	0.0%	79
TPW	\$8.30	n/a	n/a	RESTRICTED	n/a	n/a	n/a	n.a

Source: IRESS, Forsyth Barr analysis

Hydro storage levels continue to fall and electricity prices continue to rise

Wholesale electricity prices and electricity futures prices remain elevated due primarily to record low hydro storage and ongoing gas supply issues. The market is responding as expected, with Genesis Energy's (GNE) coal units running hard and deals being done to ensure the most efficient gas plant is operating. However, without rain April will likely see further price rises, particularly with GNE's Unit 5 gas turbine out for planned maintenance for most of the month. If hydro shortages continue MEL will likely require NZAS to curtail demand - something NZAS will be loathe to do given current high aluminium prices and record operating earnings.

S&P Global Clean Energy (GCE) Index rebalance fast approaching

The S&P GCE Index will rebalance after close on 16 April 2021. We estimate that due to GCE Index rule changes, both CEN and MEL will see selling from the ETFs that track the GCE Index of ~9% and ~8% of their respective free floats. It is difficult to ascertain possible share price effects due to ETF selling and recent index changes have often seen little price movement on the day. That said, the scale of ETF selling in this instance is unprecedented. For more detail on the GCE Index rebalance please refer to our note *Electricity Sector – Crunching the Clean Energy ETF Numbers* published 22 March 2021.

CEN and GNE remain our preferred sector picks

Overall, we are neutral on the sector. Whilst its defensive characteristics are attractive, the average sector dividend yield remains low vs. bond rates and we see increasing regulatory/political risk. That said, our preferred pick, CEN, is attractive. It is trading on undemanding multiples, has a healthy and growing gross dividend yield of 6.5% (OUTPERFORM). GNE is also rated OUTPERFORM and is in the best position to take advantage of current dry hydro conditions. Mercury (MCY) has the best sector growth profile, but in our view that is priced in (NEUTRAL). Our least preferred stock is MEL (UNDERPERFORM). Whilst recent price declines means it offers better value than it has for a while, it faces a tough finish to FY21 and dividend growth is likely to be muted.

Forsyth Barr Limited is Trustpower's Financial Advisor on the strategic review of its retail business and will receive fees in connection with this role.

Political/regulatory reaction to rising prices and dry conditions needs to be monitored closely

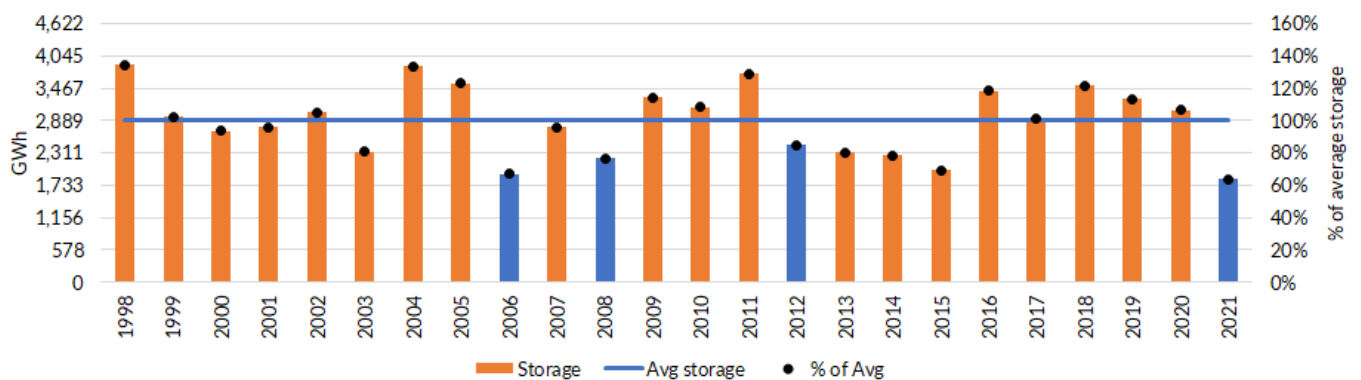
The next few months will be important for the electricity sector. Both wholesale and retail electricity prices are under pressure and will likely increase noise from certain segments of the sector. In addition the current dry hydro conditions coupled with the ongoing gas issues raises concerns about security of supply. We note that the 2008 dry year, which avoided a consumer savings campaign, still resulted in a wide-ranging market review resulting in several significant recommendation changes including virtual asset swaps, the sale of Tekapo A & B to GNE from MEL and various retail market changes that have been at least partly responsible for a plethora of new electricity retailers.

We continue to monitor the current situation closely, noting the risk of political/regulatory intervention is rising. We discuss in more detail below current wholesale electricity market conditions.

National hydro storage continues to deteriorate – wholesale electricity prices continue upwards trajectory

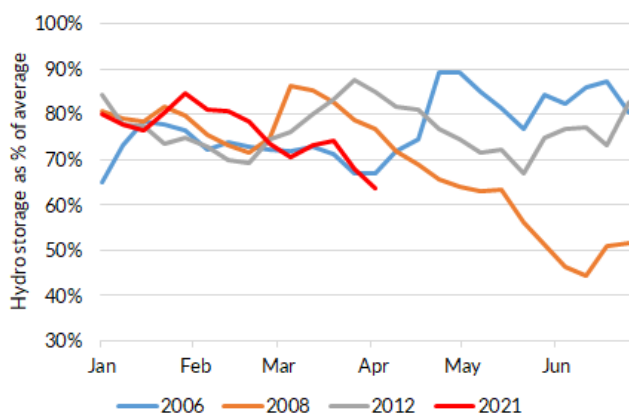
Hydro storage is now at its lowest point for this time of year since the wholesale electricity market commenced in 1996. On 1 April, national storage volumes were 1,839GWh, 64% of average (EnergyLink data).

Figure 2. National hydro storage as at 1 April 2021 (highlighted years had dry periods into winter)



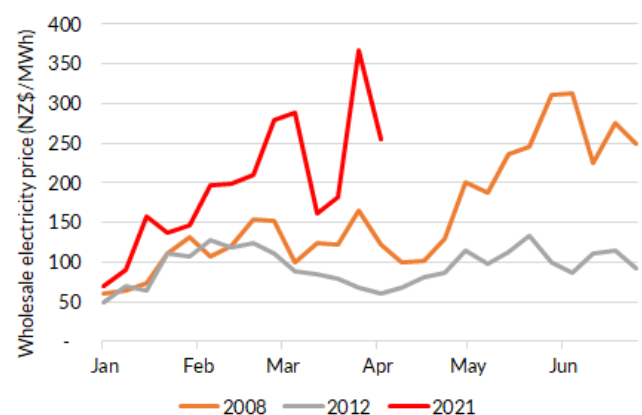
Source: EnergyLink, Forsyth Barr analysis

Figure 3. Hydro storage as a % of average



Source: EnergyLink, Forsyth Barr analysis

Figure 4. 7-day average wholesale electricity prices



Source: NZX Energy, Forsyth Barr analysis

In addition to the usual wholesale electricity price reaction, the market has responded in several ways:

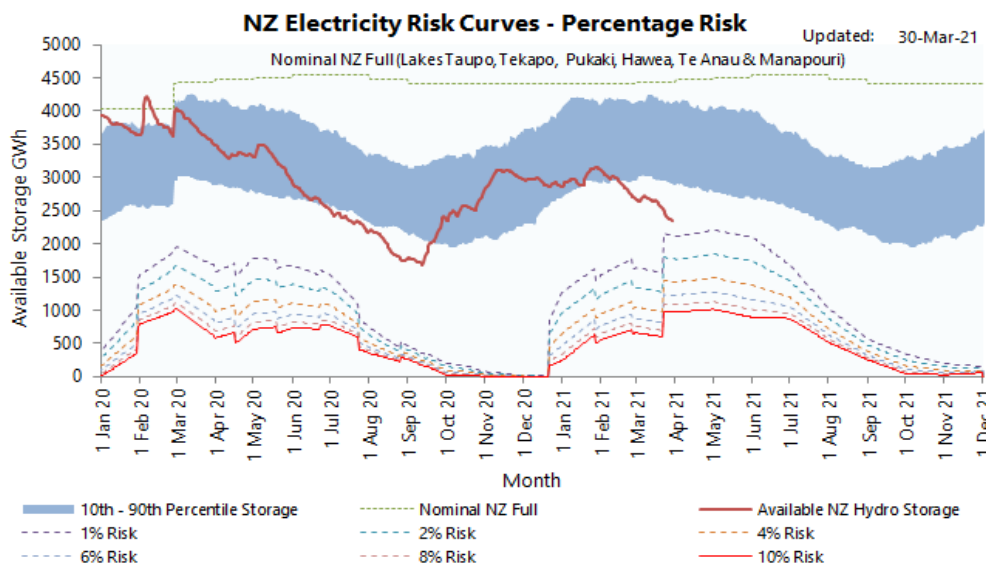
- CEN and Todd Energy have agreed to use Todd gas in CEN's more efficient Taranaki Combined Cycle (TCC) gas plant. This is a small win for both parties and has been done before.
- GNE has ramped up its coal-fired generation at Huntly, with the third unit providing much needed support. In March 2021, the Rankine Units produced more than 400GWh in a month for the first time since June 2012 at a capacity factor of ~80%.
- MEL has maxed out its swaption with GNE. The last 50MW of the 150MW swaption was called on 1 April (the first available date it could do so). CEN has also maxed out its 100MW swaption.
- MEL is poised to ask NZAS to reduce demand (hydro lakes need to fall a little further). That will save 250GWh over 3 months.

Gas availability continues to be problematic. CEN only started running TCC once it had completed its deal with Todd Energy and GNE had to temporarily shutdown Unit 5 for two days mid-month when the Kupe processing facility had an unplanned outage. That unplanned outage coincided with low wind generation, resulting in spot wholesale electricity prices averaging more than NZ\$400/MWh over the three affected days.

Hydro risk curves show ~150GWh of head room before 1% risk curve hit

Transpower's hydro risk curve analysis indicates NZ is close to breaching the 1% risk curve, with only 150GWh of spare storage. Whilst breaching the 1% curve is notable, in reality the dry conditions need to continue for 6-8 more weeks before the situation gets serious. The 10% risk curve is when a consumer savings campaign is launched – and if that were to take place, retailers are required to compensate consumers and the chance of political/regulatory intervention becomes high.

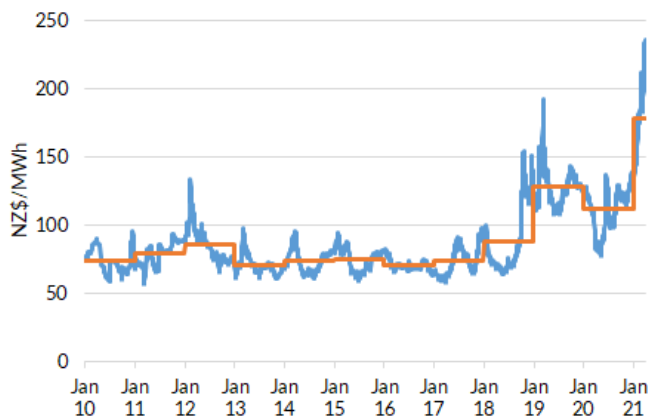
Figure 5. Transpower electricity risk curves



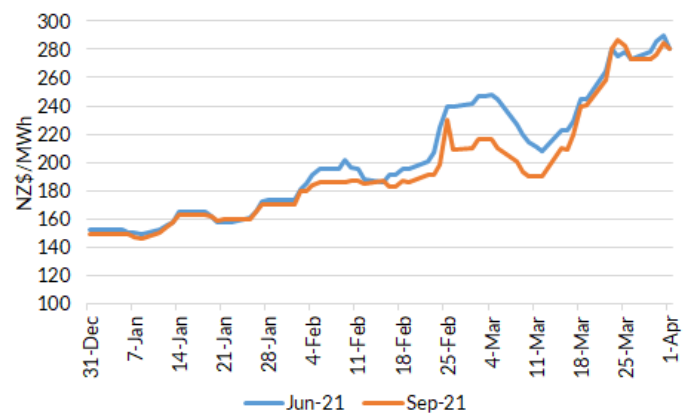
Source: Transpower

ASX Futures continue steady increase

The short-dated ASX futures price (i.e. the price for the next 12-months which is heavily influenced by fuel availability) has continued to trend upwards to record highs of ~NZ\$230/MWh. Driving the short-dated price higher are the winter quarters to 30 June and 30 September, both of which have increased ~+20% in March and almost +87% since the beginning of the year.

Figure 6. Short-dated ASX futures prices


Source: EMI EA, Forsyth Barr analysis

Figure 7. Winter 2021 ASX futures prices


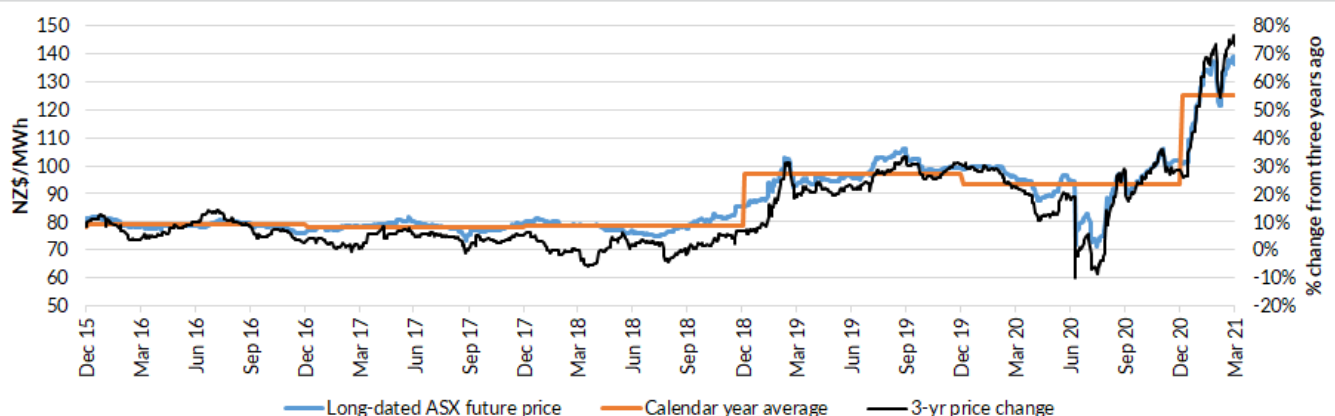
Source: EMI EA, Forsyth Barr analysis

In the current environment, GNE remains the best placed generator/retailer. Whilst it is impacted by gas availability, and the Unit 5 outage in April (which it will have hedged for), the third Rankine Unit provides GNE additional generation enabling it take advantage of the dry hydro conditions. MEL and MCY have the greatest downside risk to the dry conditions in their respective catchments.

Commercial customers facing bill shock, retail customers less so

The big increase in ASX futures prices is starting to bite for electricity customers, commercial customers in particular. Commercial customers rolling off three year contracts over the next six months are facing ~75%+ increases in the energy component of their electricity bills. After several years of futures prices hovering around ~NZ\$80/MWh, ASX futures prices started rising in September 2018 following the initial Pohokura gas production issues and have continued to increase ever since (except for July/August 2020 when the market was pricing in NZAS closure). Repricing electricity contracts now is therefore getting a massive increase in one hit. Commercial customers that take-on short-term hydro risk (i.e. seek to renew electricity contracts only a few months before the old contracts expire) are facing price rises of more than +100%.

The increases for retail customers are less severe, but are also starting to drive electricity price increases. Retailers tend to base the energy component of electricity bills on a rolling three-year basis, excluding the nearest 12-months, which smooths electricity price movements. The underlying energy price is ~\$90/MWh at present. In 2020, retailers were able to offset increases in the energy component of electricity bills with falls in lines charges. That is not possible in 2021, with the largest retail price increase announced thus far of +6%. Further energy price increases are inevitable in the coming years.

Figure 8. Long-dated ASX futures over the past five years


Source: EMI EA, Forsyth Barr analysis

Key Points from March 2021

Share market performance

- The main movement in the electricity stocks came from Tilt Renewables (TLT), which outperformed the NZX50C index +20% after it was announced the Australian company PowAR and Mercury (MCY) would acquire the business for NZ\$7.80 per share. Contact Energy (CEN) and Meridian Energy (MEL) have near-term downward price pressure as the market prepares for the S&P GCE Index changes and significant ETF selling.
- The average electricity sector yield remains low compared to the 10-year swap rate with the spread of 3.5% still ~100bp lower than the long-term average. CEN's dividend yield is the most attractive in the sector at 6.5%. Whilst slightly lower than GNE, it has more growth potential.

Wholesale electricity market

- **Wholesale prices** were flat in March 2021 vs. February 2021, but still very high, as a result of ongoing hydro and gas shortages. The average Otahuhu (OTA) price was NZ\$247/MWh and Benmore (BEN) NZ\$244/MWh, due in part to a price spike mid-month when there was a Kupe gas outage and little wind generation.
- **ASX futures** continue to lift and OTA short-dated futures hit record highs of ~NZ\$236/MWh at month end, driven by winter quarters to 30 June and 30 September 2021.
- **Hydro storage** is down to ~59% of average as at 6 April 2021, and is at its lowest level for this time of year in recent history. Pressure increases on the hydro storage in April due to a planned outage at GNE's Unit 5.
- **Electricity demand** increased +1.1% on the pcg, however, that was mainly due to the lock-down that commenced in late March 2020.
- **Generation mix:** As a result of increased thermal generation being required due to reduced hydro volumes, the percentage of generation from renewable sources fell to ~77%, compared to the five-year average of ~83%.
- **Planned outages:** GNE's Huntly Unit 5 is out for a planned maintenance from 1 April to 26 April. However, CEN has signed a gas tolling agreement for its Taranaki Combined Cycle (TCC) plant.

Retail customer numbers

- **Retail electricity customer** movements in February 2021 continued recent trends, with MEL the only large retailer to add more than 500 customers to its retail base. Both GNE and MCY lost more than -1,500 customers. CEN appears to be making a modest retail push as it added 300 customers.

Disruptive technology

- **Carbon unit prices:** The first auction for carbon units occurred in March 2021. The emissions units cleared at a price of NZ\$36/tonne, above the current fixed price option of NZ\$35/tonne for 2020 obligations. Bidding on units was more than twice that of the units available for purchase.

NZAS

- **NZAS profitability** increased materially in March 2021. We estimate that NZAS EBITDA minus capex averaged ~NZ\$905/tonne of aluminium, up from ~NZ\$683/tonne in February 2021 and reached a new spot record of NZ\$1,090/tonne in late March. This is on the back of strong aluminium prices, and a materially lower electricity contract.

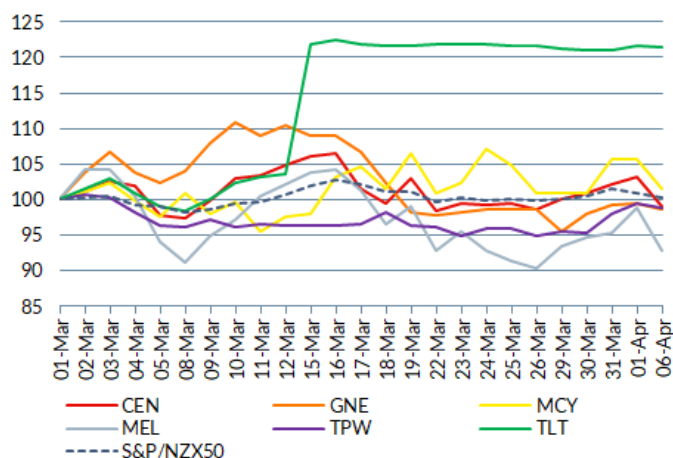
Share market performance and market multiples

Figure 9. Share market performance summary

Price (NZ\$)	31-Mar-20	26-Feb-21	31-Mar-21	Month performance		12 month performance	
				% chg	vs. benchmark	% chg	vs. benchmark
CEN	\$5.76	\$6.84	\$7.01	2%	1%	22%	-4%
GNE	\$2.52	\$3.50	\$3.49	0%	-2%	39%	13%
MCY	\$4.22	\$6.05	\$6.50	7%	4%	54%	28%
MEL	\$4.04	\$5.70	\$5.39	-5%	-6%	33%	8%
TPW	\$6.40	\$8.31	\$8.23	-1%	-3%	29%	3%
TLT	\$3.11	\$6.16	\$7.57	23%	20%	143%	118%
S&P/NZX50C	4,161	5,119	5,226	2%		26%	

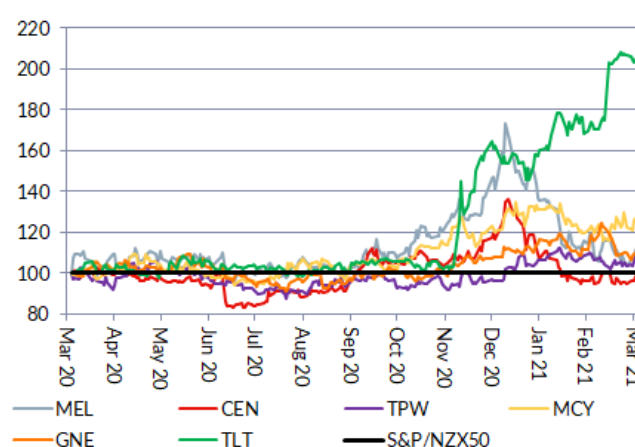
Source: Thomson Reuters, Forsyth Barr analysis

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

Figure 12. EBITDAF multiples

Company	Code	Price	Target Price	Target Return	Rating	Mkt Cap \$m	EBITDAF (x)		EBITDAF - capex (x)	
							FY21	FY22	FY21	FY22
Contact Energy	CEN	\$6.79	\$8.40	29.0%	OUTPERFORM	4,858	12.3	12.0	14.5	14.2
Genesis Energy (excl Kupe)	GNE	\$3.47	\$3.85	16.0%	OUTPERFORM	3,259	13.6	13.1	16.2	15.4
Mercury	MCY	\$6.25	\$6.10	0.7%	NEUTRAL	8,506	19.0	15.4	22.3	17.5
Meridian Energy	MEL	\$5.25	\$5.10	0.4%	UNDERPERFORM	13,456	21.6	20.4	23.6	22.2
Trustpower	TPW	\$8.30	n/a	n/a	RESTRICTED	2,598	n/a	n/a	n/a	n/a
Sector average							16.4	15.0	18.9	17.1
Tilt Renewables	TLT	\$7.59	\$7.80	2.8%	NEUTRAL	2,855	37.9	26.9	43.3	29.5
Genesis Energy (incl Kupe)	GNE	\$3.47	\$3.85	16.0%	OUTPERFORM	3,621	11.5	10.9	13.2	12.4

Source: IRESS, Forsyth Barr analysis

Note: Our electricity target prices are based on a combination of our DCF valuation (30%), market multiples (30%) and gross dividend yield (40%). Note: In calculating the GNE excl Kupe multiples, the value of Kupe is assumed to be \$225m. Debt and interest has been apportioned 5% to Kupe and 95% to Energy (in line with EV proportion) and dividend in line with adjusted NPAT.

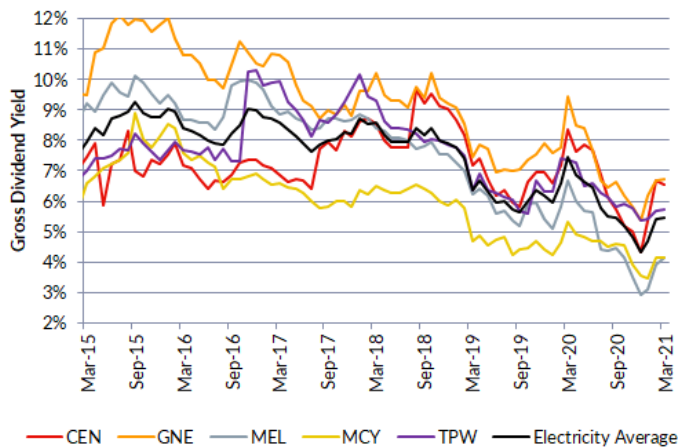
Figure 13. PE multiples and dividend yields

Company	PE (x)		Adjusted PE (x)		Cash Div Yield		Gross Div Yield		Free Cash Flow Yield	
	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22
Contact Energy	32.8	29.2	18.7	17.4	5.2%	5.4%	6.5%	6.8%	5.1%	2.6%
Genesis Energy (excl Kupe)	52.7	39.2	22.6	19.8	3.8%	3.9%	5.0%	5.3%	1.8%	2.2%
Mercury	45.6	38.3	29.3	24.6	2.7%	3.4%	3.8%	4.5%	1.9%	3.7%
Meridian Energy	63.0	55.5	34.4	32.0	3.2%	3.3%	4.3%	4.3%	2.1%	2.5%
Trustpower	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Sector average	47.2	39.5	25.6	22.8	3.7%	4.0%	4.9%	5.2%	2.7%	2.8%
Tilt Renewables	n/m	n/m	54.6	47.1	0.0%	0.0%	0.0%	0.0%	0.9%	3.9%
Genesis Energy (incl Kupe)	35.5	29.2	17.3	15.4	5.0%	5.1%	6.6%	6.8%	6.8%	7.6%

Source: IRESS, Forsyth Barr analysis

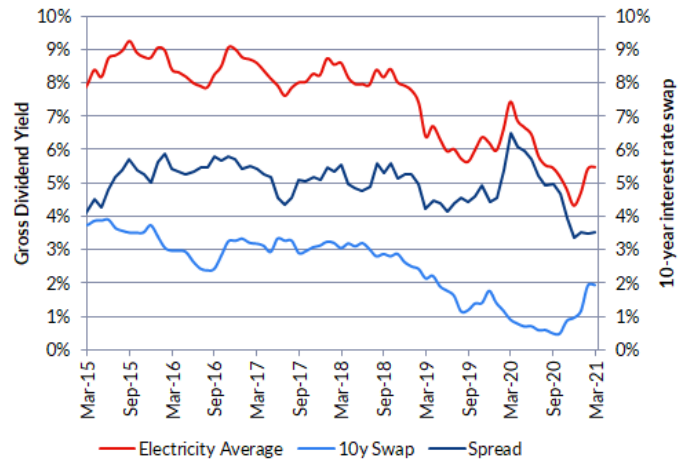
Electricity sector gross dividend yields

Figure 14. Electricity sector gross dividend yields



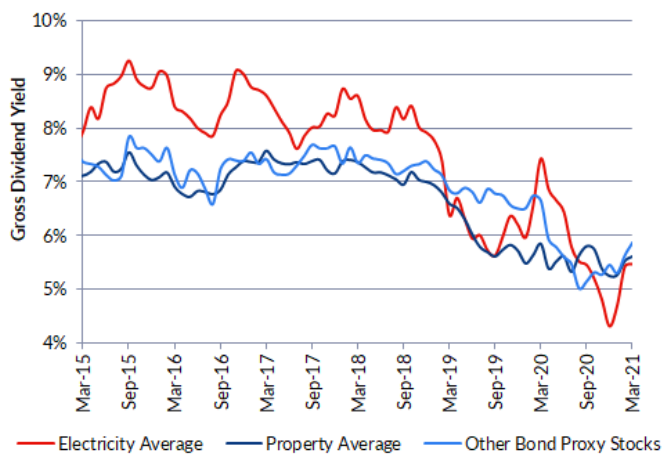
Source: Eikon, Forsyth Barr analysis

Figure 15. Electricity sector yield vs. 10yr swap rate



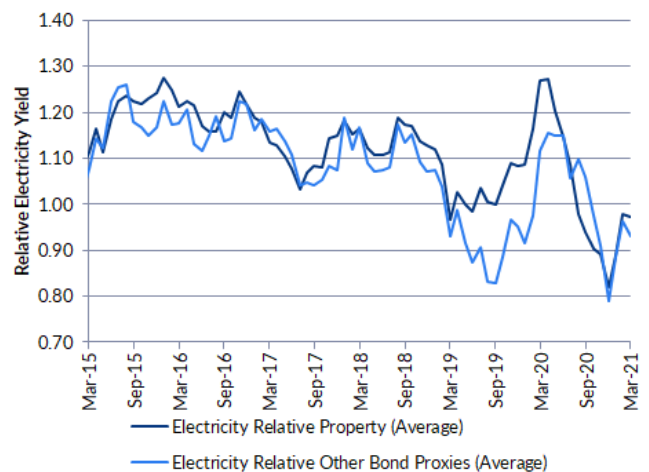
Source: Eikon, Forsyth Barr analysis

Figure 16. Electricity yields vs. property and other bond proxies



Source: Eikon, Forsyth Barr analysis

Figure 17. Relative yields



Source: Eikon, Forsyth Barr analysis

Figure 18. Company and sector gross dividend yields

	31-Mar-20	28-Feb-21	31-Mar-21	chg pcp	chg mom
CEN	8.3%	6.7%	6.5%	-181bp	-13bp
GNE	9.5%	6.7%	6.7%	-272bp	+4bp
MEL	6.7%	3.9%	4.2%	-251bp	+23bp
MCY	5.3%	4.1%	4.2%	-114bp	+3bp
TPW	7.4%	5.7%	5.7%	-164bp	+6bp
Electricity mean	7.4%	5.4%	5.5%	-196bp	+4bp
Property mean	5.9%	5.5%	5.6%	-23bp	+8bp
Bond proxy mean	6.7%	5.6%	5.9%	-78bp	+24bp

Source: Eikon, Forsyth Barr analysis

Note: Bond proxy stocks include: VCT, SPK, CNU

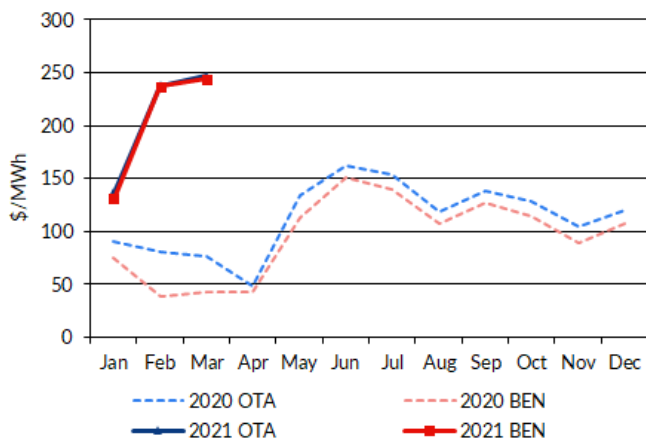
Figure 19. Company and sector spreads to 10y swap rate

	Mar-20	Feb-21	Mar-21	chg pcp	chg mom
10y swap	0.9%	1.9%	2.0%	+104bp	+1bp
CEN spread	7.4%	4.7%	4.6%	-285bp	-14bp
GNE spread	8.5%	4.8%	4.8%	-376bp	+3bp
MEL spread	5.8%	2.0%	2.2%	-354bp	+22bp
MCY spread	4.4%	2.2%	2.2%	-217bp	+2bp
TPW spread	6.5%	3.7%	3.8%	-268bp	+5bp
Electricity spread	6.5%	3.5%	3.5%	-300bp	+4bp
Property spread	4.9%	3.6%	3.7%	-127bp	+8bp
Bond proxy spread	5.7%	3.7%	3.9%	-182bp	+23bp

Source: Eikon, Forsyth Barr analysis

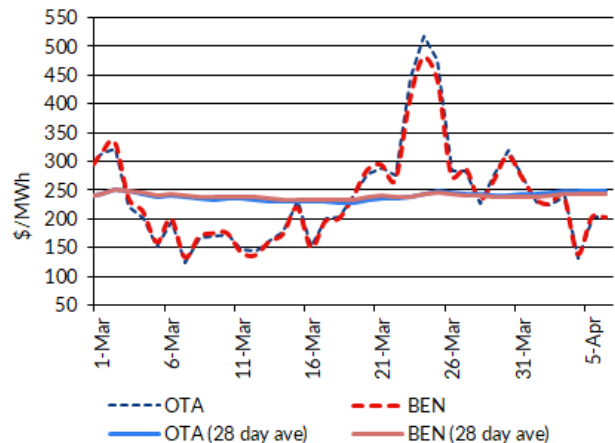
Wholesale electricity prices

Figure 20. Average monthly wholesale electricity prices



Source: NZX Energy, Forsyth Barr analysis

Figure 21. Average daily wholesale electricity prices



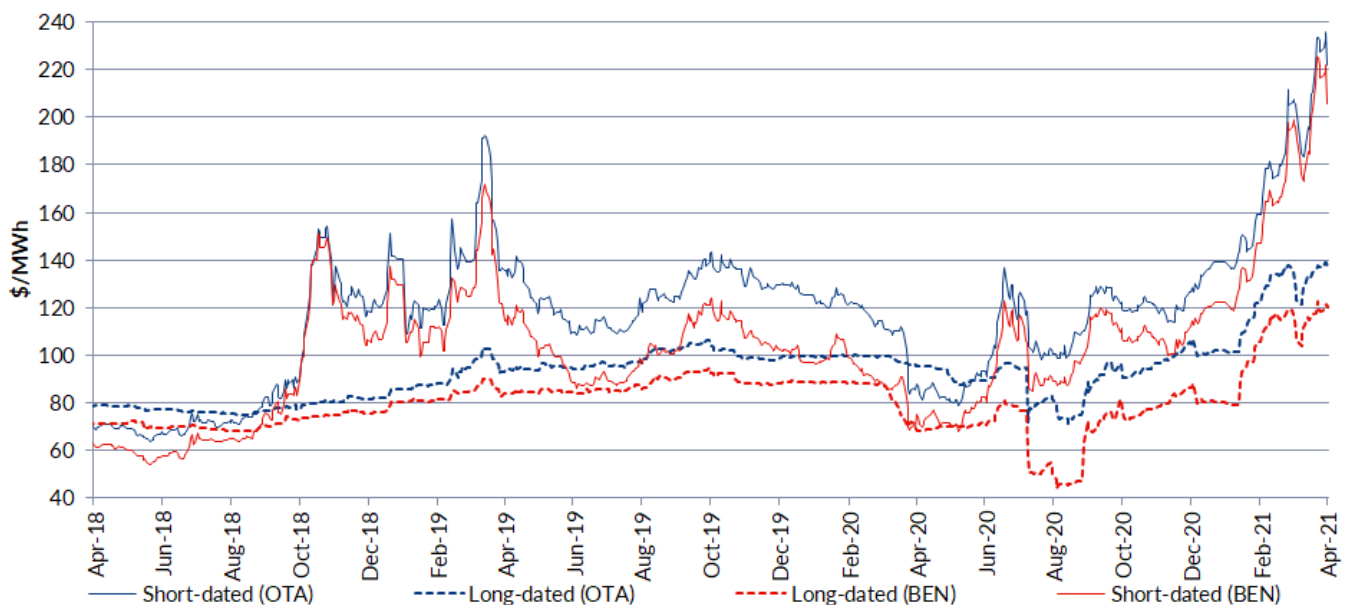
Source: NZX Energy, Forsyth Barr analysis

Figure 22. Average wholesale electricity prices

	Mar-20	Feb-21	Mar-21	% Chg pcp	% Chg mom
Otago (OTA) avg (\$/MWh)	\$77	\$238	\$247	222%	4%
Benmore (BEN) avg (\$/MWh)	\$42	\$237	\$244	476%	3%
OTA-BEN spread (\$/MWh)	\$34	\$1	\$3	-92%	203%

Source: NZX Energy, Forsyth Barr analysis

Figure 23. ASX futures prices (last three years)



Source: Electricity Authority, Forsyth Barr analysis

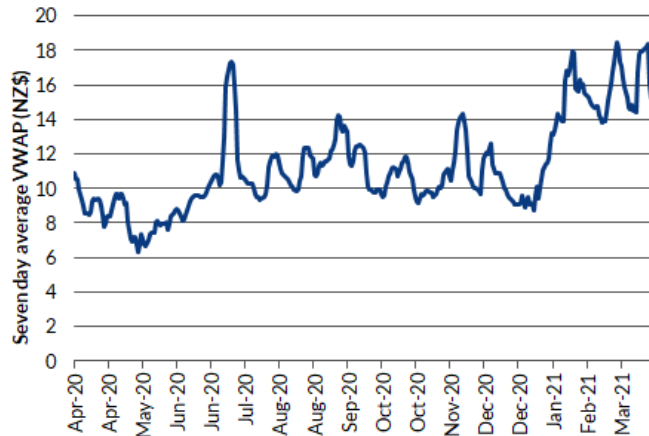
Figure 24. ASX futures (NZ\$)

	31-Mar-20	26-Feb-21	31-Mar-21	% chg pcp	% chg mom
Short-dated (OTA)	85	205	236	176%	15%
Short-dated (BEN)	70	194	222	218%	14%
Long-dated (OTA)	96	137	139	45%	1%
Long-dated (BEN)	70	118	121	74%	3%

Source: EA, Forsyth Barr analysis

Wholesale gas prices

Figure 25. 7-day volume weighted average gas prices (GWAP)



Source: EMS Tradepoint, Forsyth Barr analysis

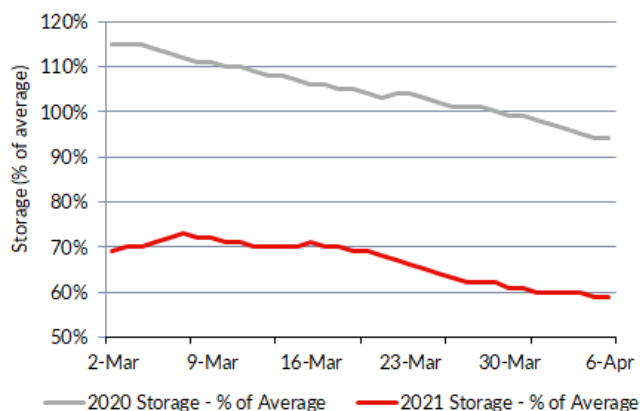
Figure 26. Spot and monthly VWAP (NZ\$)

	29-Mar-20	27-Feb-21	29-Mar-21	% chg pc	% chg mom
Spot price	11.3	18.8	18.2	60.5%	-3.5%
Monthly average	10.3	15.8	16.3	57.7%	3.5%

Source: EMS Tradepoint, Forsyth Barr analysis

Hydro storage volumes

Figure 27. Average lake storage levels



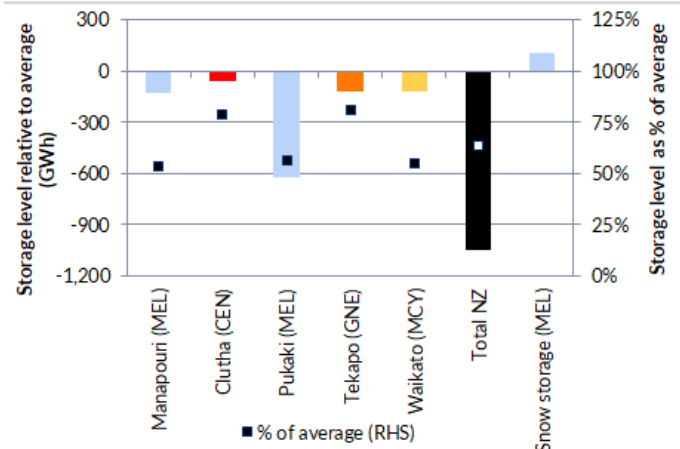
Source: NZX Energy, Forsyth Barr analysis

Figure 29. National hydro storage

	Mar-20	Feb-21	Mar-21	% chg pc	% chg mom
Average hydro inflows	86%	61%	78%	-10%	28%
% of maximum	70%	51%	43%	-39%	-16%
Average hydro storage	107%	78%	68%	-37%	-12%
Month end hydro storage	99%	70%	61%	-38%	-13%

Source: NZX Energy, Forsyth Barr analysis

Figure 28. Key storage lake levels relative to avg (as at 1 Apr)



Source: EnergyLink, MEL, Forsyth Barr analysis

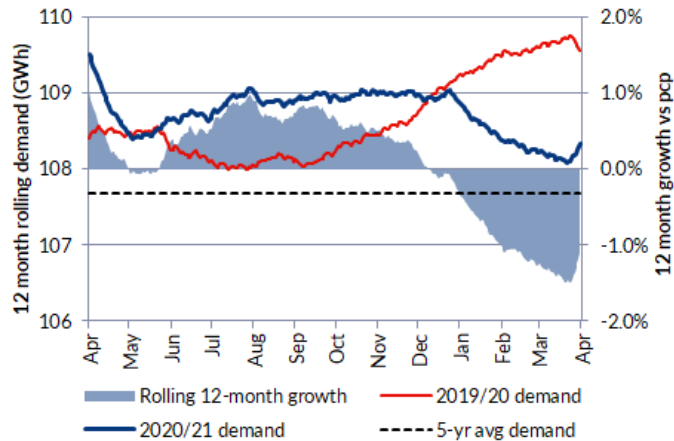
Figure 30. Key lake storage levels and total storage (as at 1 Apr)

System	Owner	Storage (GWh)	vs average (GWh)	% of average
Manapouri	MEL	148	-127	54%
Clutha	CEN	230	-63	78%
Pukaki	MEL	807	-623	56%
Tekapo	GNE	512	-121	81%
Taupo	MCY	142	-116	55%
Total NZ		1,839	-1,050	64%

Source: EnergyLink, Forsyth Barr analysis

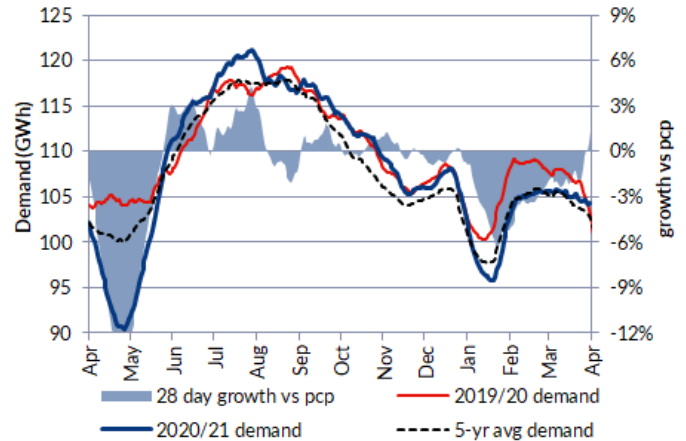
Demand and generation analysis

Figure 31. Rolling 12-month demand



Source: EMI EA, NZX Energy, Forsyth Barr analysis

Figure 32. Rolling 28-day demand



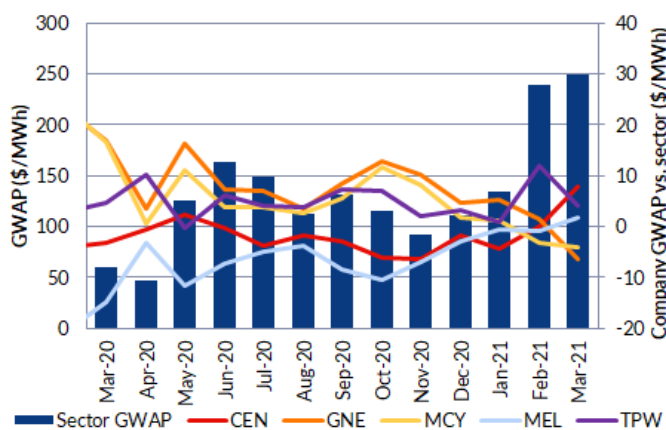
Source: EMI EA, NZX energy, Forsyth Barr analysis

Figure 33. Average national daily electricity demand (GWh)

	5-year average	Mar-2020	Feb-2021	Mar-2021	vs. 5-yr average	% chg pcip
NZ Demand	102.7	103.7	105.6	104.8	2.1%	1.1%
NZAS demand	14.0	14.1	13.6	13.7	-2.1%	-3.0%
NZ demand excl. NZAS	88.7	89.6	92.0	91.2	2.8%	1.7%
Max temp (Akl, Wgtn, Chch)	22.3	21.6	23.8	22.3	-0.1%	3.1%

Source: NZX Energy, Forsyth Barr analysis

Figure 34. Avg generation weighted average price (GWAP)



Source: EnergyLink, Forsyth Barr analysis

Figure 35. Monthly generation weighted average price (\$/MWh difference to national average)

	Mar-20	Feb-21	Mar-21	Abs % Chg mom
National Average	\$60	\$239	\$249	4%
CEN	(3)	0	8	7%
GNE	17	2	(7)	1%
MCY	16	(3)	(4)	3%
MEL	(15)	(1)	2	5%
TPW	5	12	4	1%

Source: EnergyLink, Forsyth Barr analysis

Figure 36. Average daily generation by technology (GWh)

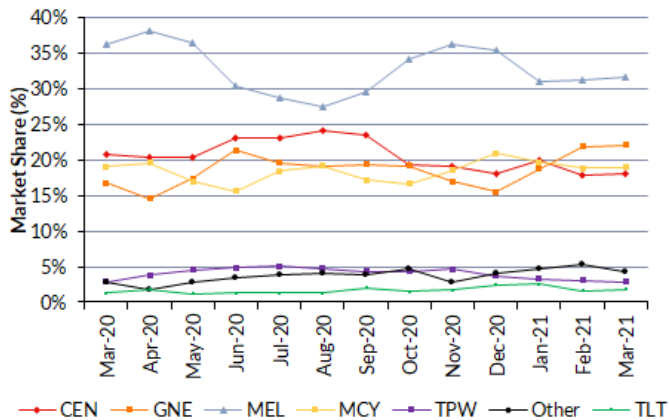
	Mar-20	Feb-21	Mar-21	% chg pcip	% chg mom
Cogeneration	3.1	3.5	3.4	11.6%	-1.0%
Geothermal	22.0	21.9	22.3	1.6%	2.0%
Thermal	15.8	20.8	21.7	37.7%	4.6%
Wind	3.5	4.4	4.5	26.9%	1.4%
NI Hydro	12.7	14.2	12.5	-2.0%	-12.1%
SI Hydro	49.1	44.9	44.0	-10.4%	-2.1%
Hydro	61.8	59.1	56.4	-8.7%	-4.5%
TOTAL	106.2	109.6	108.4	2.1%	-1.1%

Source: NZX, Electricity Authority, Forsyth Barr analysis

Figure 37. Generation market share by technology

	Mar-20	Feb-21	Mar-21	% chg pcip	% chg mom
Cogeneration	2.9%	3.2%	3.2%	0.3%	0.0%
Geothermal	20.7%	19.9%	20.6%	-0.1%	0.6%
Thermal	14.9%	19.0%	20.1%	5.2%	1.1%
Wind	3.3%	4.0%	4.1%	0.8%	0.1%
NI Hydro	12.0%	12.9%	11.5%	-0.5%	-1.4%
SI Hydro	46.2%	41.0%	40.6%	-5.7%	-0.4%
Hydro	58.2%	53.9%	52.1%	-6.2%	-1.8%
Total renewable	82.2%	77.9%	76.8%	-5.5%	-1.1%

Source: NZX, Electricity Authority, Forsyth Barr analysis

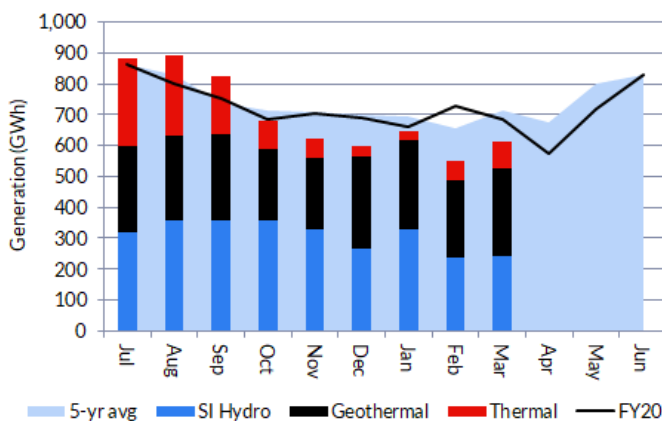
Figure 38. Monthly generation market share


Source: EnergyLink, Forsyth Barr analysis

Figure 40. Average daily generation (GWh)

	Mar-20	Feb-21	Mar-21	% Chg pcp	% Chg mom
CEN	22.1	19.6	19.7	-10.6%	0.5%
GNE	17.8	24.1	24.0	34.6%	-0.1%
MCY	20.2	20.6	20.6	1.7%	-0.3%
MEL	38.5	34.3	34.3	-10.9%	0.2%
TLT	1.4	1.8	2.0	44.7%	11.6%
TPW	4.4	5.2	5.1	15.8%	-1.4%

Source: EnergyLink, Forsyth Barr analysis

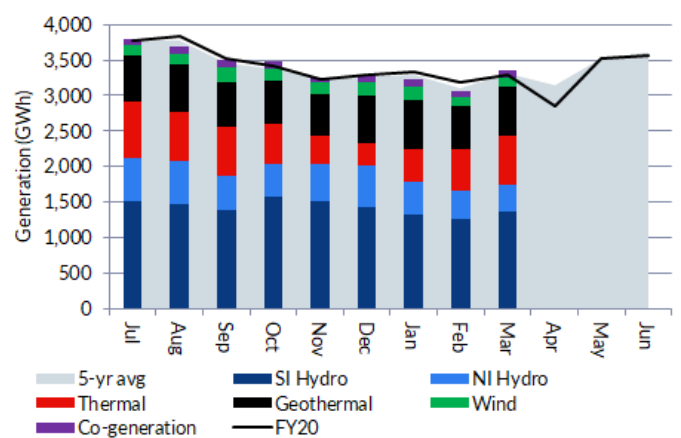
Figure 42. CEN monthly generation mix (current, pcp & 5y avg)


Source: EnergyLink, Forsyth Barr analysis

Figure 44. CEN average daily generation by source (GWh)

	Mar-20	Feb-21	Mar-21	% Chg pcp	% Chg mom	Mar 5-yr avg	% diff 5-yr avg
SI hydro	10.2	8.5	7.8	-24%	-8%	10.2	-24%
Geothermal	9.8	9.0	9.2	-6%	3%	9.3	-1%
Thermal	2.0	2.2	2.7	32%	23%	3.4	-22%
Total	22.1	19.6	19.7	-11%	0%	23.0	-14%

Source: EnergyLink, Forsyth Barr analysis

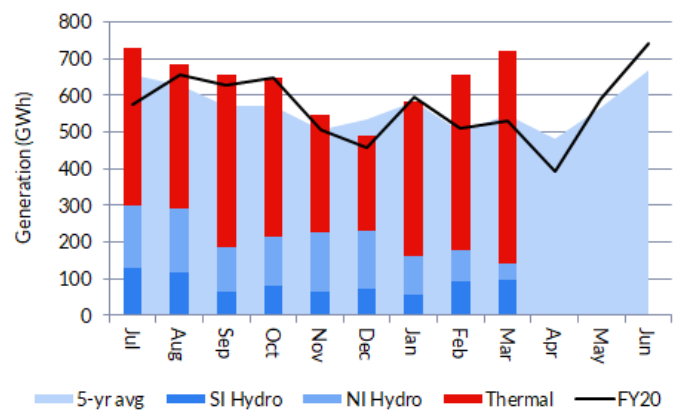
Figure 39. NZ generation (by technology)


Source: EnergyLink, Forsyth Barr analysis

Figure 41. Generation market share

	Mar-20	Feb-21	Mar-21	% Chg pcp	% Chg mom
CEN	20.8%	17.9%	18.2%	-2.6%	0.3%
GNE	16.8%	21.9%	22.2%	5.3%	0.2%
MCY	19.1%	18.8%	19.0%	-0.1%	0.2%
MEL	36.4%	31.3%	31.7%	-4.7%	0.4%
TLT	1.3%	1.6%	1.8%	0.5%	0.2%
TPW	4.1%	4.7%	4.7%	0.5%	0.0%

Source: EnergyLink, Forsyth Barr analysis NOTE: Absolute change

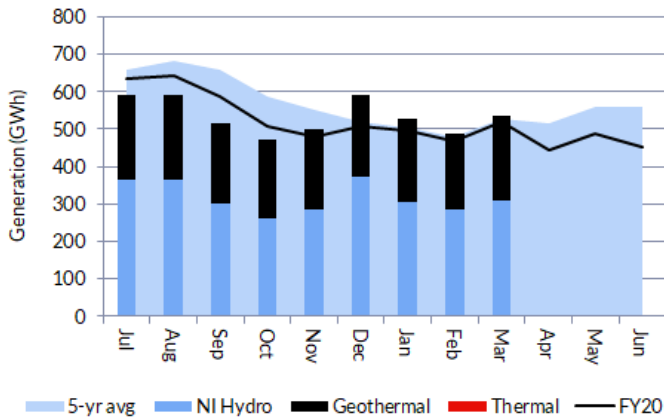
Figure 43. GNE monthly generation mix (current, pcp & 5y avg)


Source: EnergyLink, Forsyth Barr analysis

Figure 45. GNE average daily generation by source (GWh)

	Mar-20	Feb-21	Mar-21	% Chg pcp	% Chg mom	Mar 5-yr avg	% diff 5-yr avg
NI hydro	2.0	3.0	1.4	-32%	-54%	2.9	-53%
SI hydro	1.7	3.3	3.1	80%	-6%	2.8	12%
Thermal	13.4	17.1	18.7	40%	10%	12.9	46%
Total	17.1	23.4	23.2	36%	-1%	18.6	25%

Source: EnergyLink, Forsyth Barr analysis

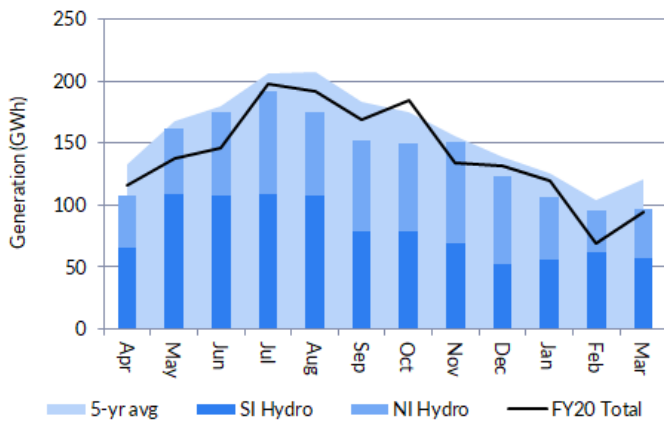
Figure 46. MCY monthly generation mix (current, pcp & 5y avg)


Source: EnergyLink, Forsyth Barr analysis

Figure 48. MCY average daily generation by source (GWh)

	Mar-20	Feb-21	Mar-21	% Chg pcp	% Chg mom	Mar 5-yr avg	% diff 5- yr avg
NI hydro	9.5	10.2	10.0	5%	-2%	9.9	1%
Geothermal	7.3	7.2	7.2	0%	0%	7.2	1%
Total MCY	16.7	17.4	17.2	3%	-1%	17.0	1%

Source: EnergyLink, Forsyth Barr analysis

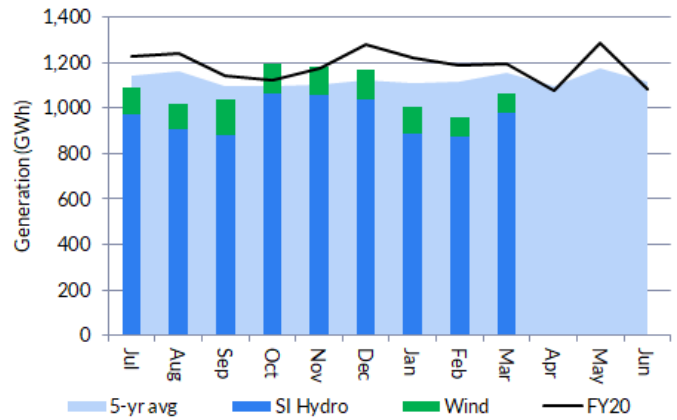
Figure 50. TPW monthly generation mix (current, pcp & 5y avg)


Source: EnergyLink, Forsyth Barr analysis

Figure 52. TPW average daily generation by source (GWh)

	Mar-20	Feb-21	Mar-21	% Chg pcp	% Chg mom	Mar 5-yr avg	% diff 5-yr avg
NI hydro	1.4	1.2	1.3	-11%	10%	1.8	-27.7%
SI hydro	1.6	2.2	1.8	16%	-18%	2.0	-8.4%
Total	3.0	3.4	3.1	3%	-8%	3.8	-17.5%

Source: EnergyLink, Forsyth Barr analysis

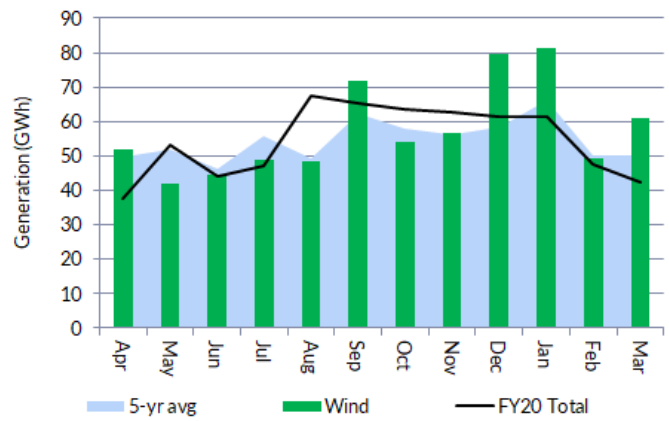
Figure 47. MEL monthly generation mix (current, pcp & 5y avg)


Source: EnergyLink, Forsyth Barr analysis

Figure 49. MEL average daily generation by source (GWh)

	Mar-20	Feb-21	Mar-21	% Chg pcp	% Chg mom	Mar 5-yr avg	% diff 5-yr avg
Wind	3.5	3.0	2.8	-20%	-6%	3.3	-15%
SI hydro	35.0	31.3	31.5	-10%	1%	34.0	-7%
Total	38.5	34.3	34.3	-11%	0%	37.3	-8%

Source: EnergyLink, Forsyth Barr analysis

Figure 51. TLT monthly generation mix (current, pcp & 5y avg)


Source: EnergyLink, Forsyth Barr analysis

Figure 53. TLT average daily generation by source (GWh)

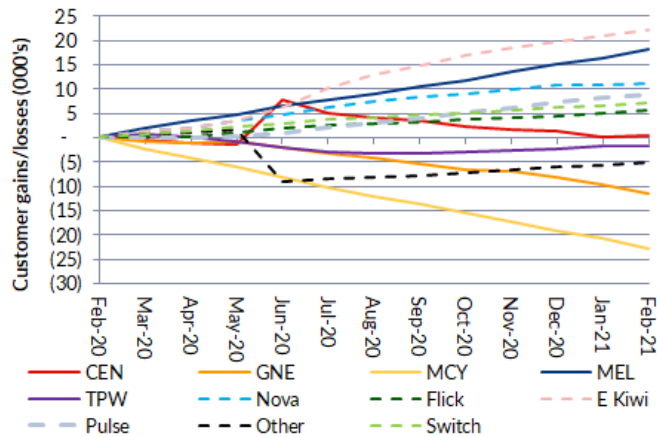
	Mar-20	Feb-21	Mar-21	% Chg pcp	% Chg mom	Mar 5-yr avg	% diff 5-yr avg
Wind	1.5	2.1	2.0	32%	-8%	1.6	21.9%

Source: EnergyLink, Forsyth Barr analysis

Retail markets

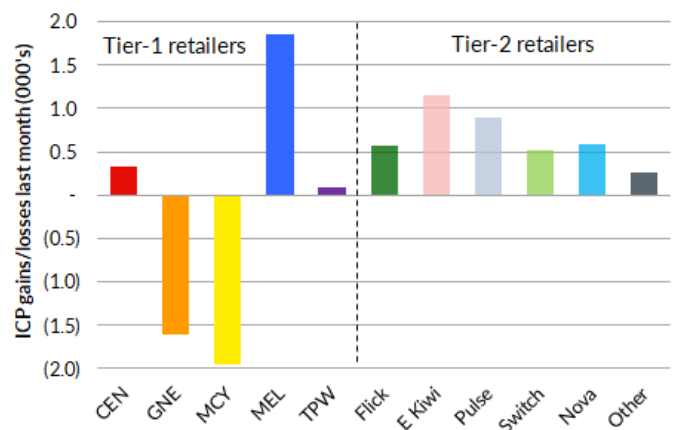
Retail electricity customers

Figure 54. Cumulative 12mth electricity customer gains/losses



Source: EA, Forsyth Barr analysis

Figure 55. Electricity connection gains/losses in February 2021



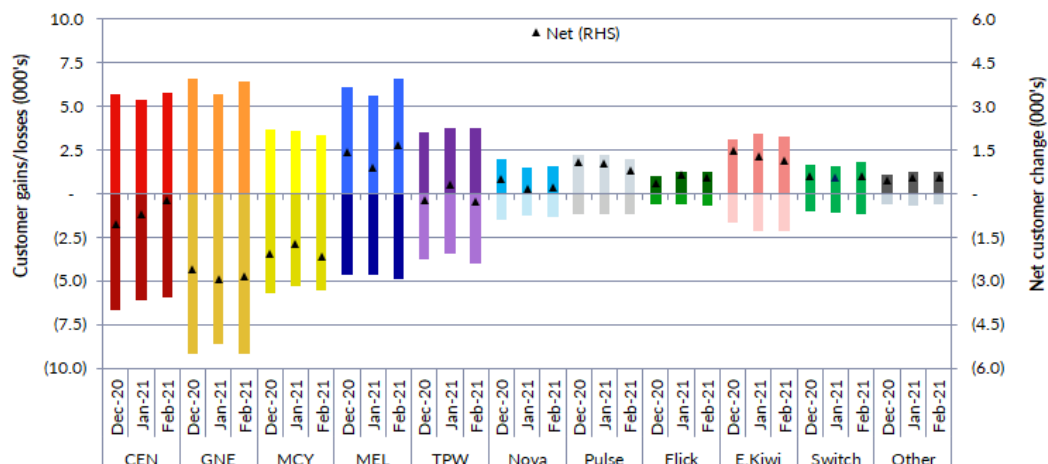
Source: EA, Forsyth Barr analysis

Figure 56. Electricity customer connection gains/losses (000's)

	Monthly connection gains/losses	% gained/lost	12 month cumulative gains/losses	Total customer connections	Market share
CEN	0.3	0.1%	0.4	413.9	19%
GNE	(1.6)	-0.3%	(11.4)	489.0	22%
MCY	(2.0)	-0.6%	(22.7)	335.7	15%
MEL	1.9	0.6%	18.1	338.1	15%
TPW	0.1	0.0%	(1.7)	265.6	12%
Total Tier-1 retailers	(1.3)	-0.1%	(17.3)	1,842.2	84%
Nova (Todd) Energy	0.3	0.3%	11.2	103.8	5%
Pulse Energy	0.9	1.1%	9.0	84.1	4%
Electric Kiwi	1.2	1.6%	22.2	74.7	3%
Switch Utilities	0.5	1.4%	7.1	37.6	2%
Flick Electric	0.6	2.3%	5.6	25.9	1%
Other	0.6	1.8%	(5.0)	32.5	1%
Total Tier-2 retailers	4.0	1.1%	50.1	358.6	16%
Total	2.7	0.1%	32.8	2,200.8	

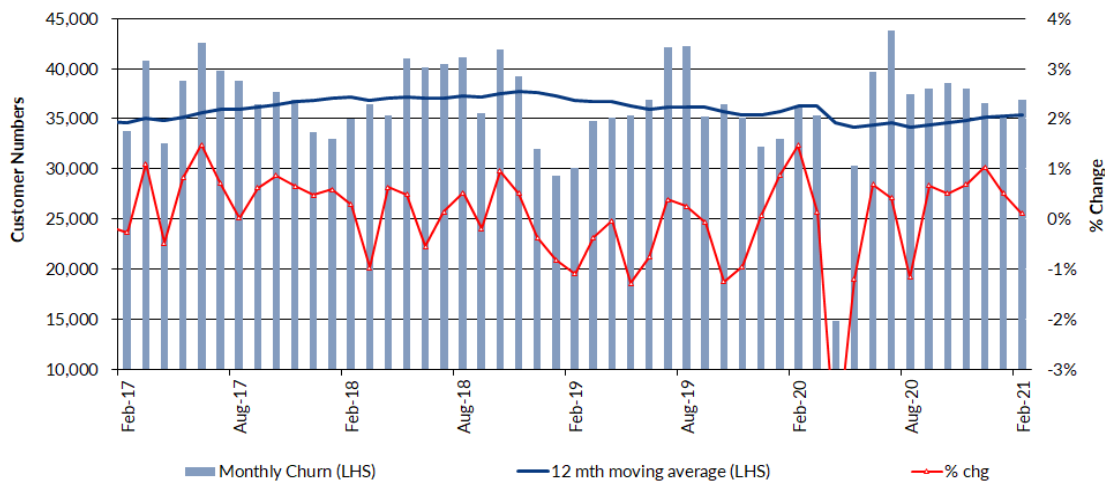
Source: EA, Forsyth Barr analysis

Figure 57. Customer switches (excludes market growth)



Source: EA, Forsyth Barr analysis

Figure 58. Electricity customer churn



Source: EA, Forsyth Barr analysis

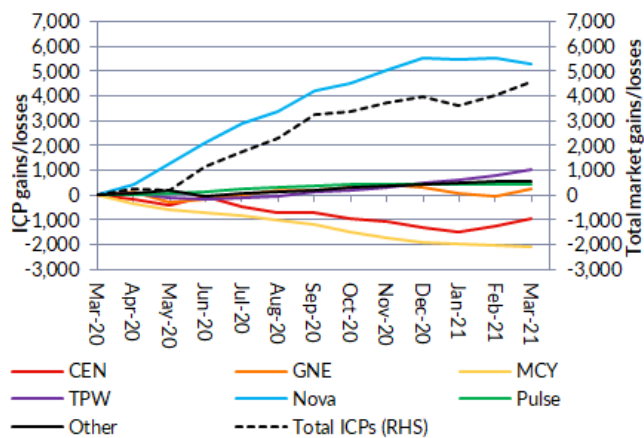
Figure 59. Monthly churn (000's)

	12-m average	% of churn	Jan-21	% of churn	Feb-21	% of churn	vs. 12-m average	% chg mom
Trader	11.5	32.6%	9.1	26.0%	9.9	26.9%	-13.6%	8.9%
Moving	23.7	67.2%	25.8	73.6%	26.8	72.8%	13.0%	3.8%
Half hour	0.1	0.2%	0.2	0.5%	0.1	0.2%	17.2%	-46.3%
Total	35.3		35.1		36.9		4.3%	4.9%

Source: EA, Forsyth Barr analysis

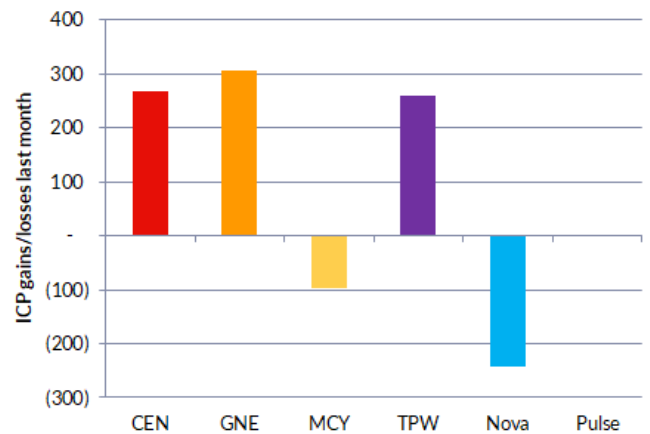
Retail gas customers

Figure 60. Gas connection gains/losses over the past 12-months



Source: Gas Industry Co, Forsyth Barr analysis

Figure 61. Gas connection gains/losses in March 2021



Source: Gas Industry Co, Forsyth Barr analysis

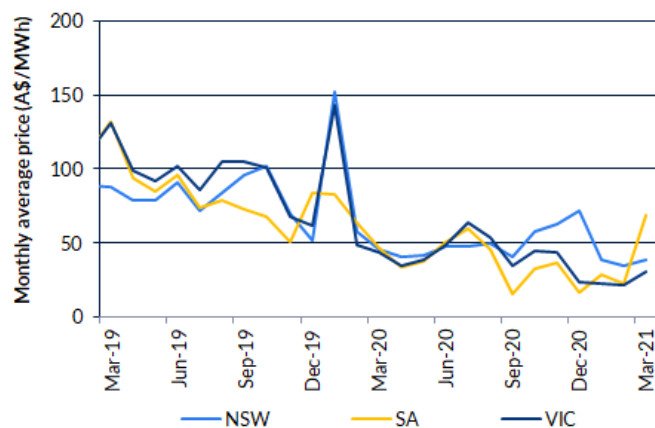
Figure 62. Gas customer numbers and switching (000's)

	Monthly customer gains/losses	Past 12 months gains/losses	Total gas connections	Market share
CEN	0.3	(1.0)	64.0	22%
GNE	0.3	0.3	102.7	35%
MCY	(0.1)	(2.1)	44.8	15%
TPW	0.3	1.0	35.4	12%
Total Tier-1 retailers	0.7	(1.7)	246.9	83%
Nova	(0.2)	5.3	41.3	14%
Pulse	0.0	0.4	5.5	2%
Other	(6.0)	0.6	2.4	1%
Total Tier-2 retailers	(6.2)	6.3	49.2	17%
Total	(5.5)	4.5	296.0	

Source: Gas Industry Co, Forsyth Barr analysis

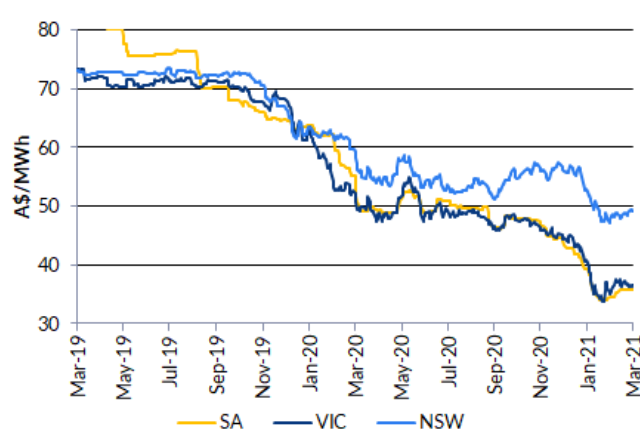
Australian electricity market

Figure 63. Australian wholesale electricity price (A\$/MWh)



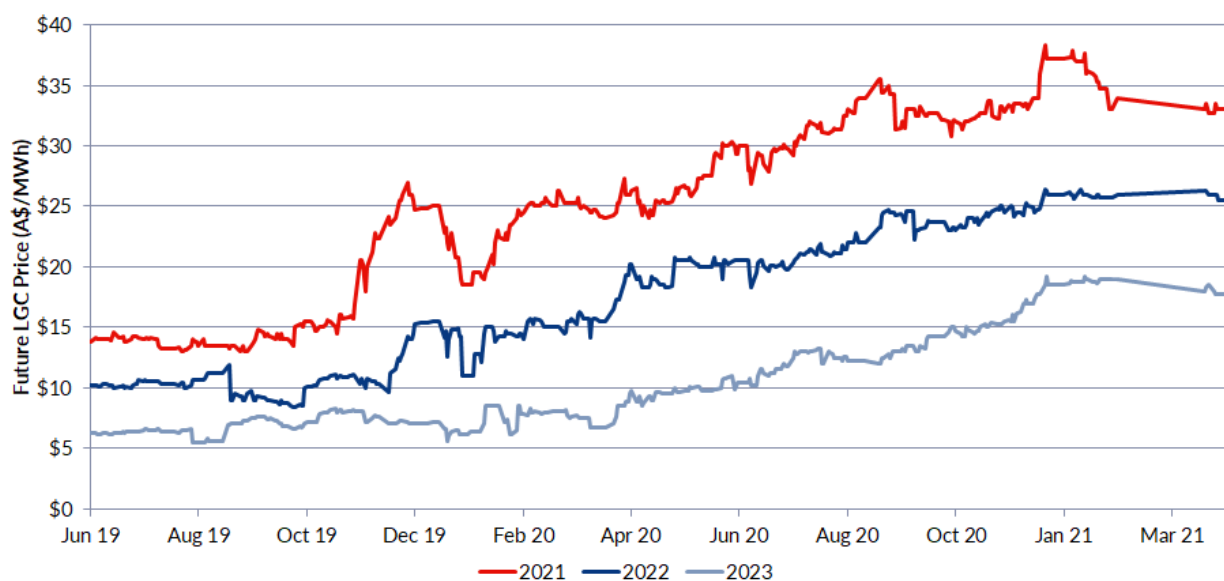
Source: AEMO, Forsyth Barr analysis

Figure 64. Australian 2021 futures prices (A\$/MWh)



Source: Thomson Reuters, Forsyth Barr analysis

Figure 65. Renewable energy certificate prices (LGC)



Source: Bloomberg, Forsyth Barr analysis

Figure 66. Key statistics Australia

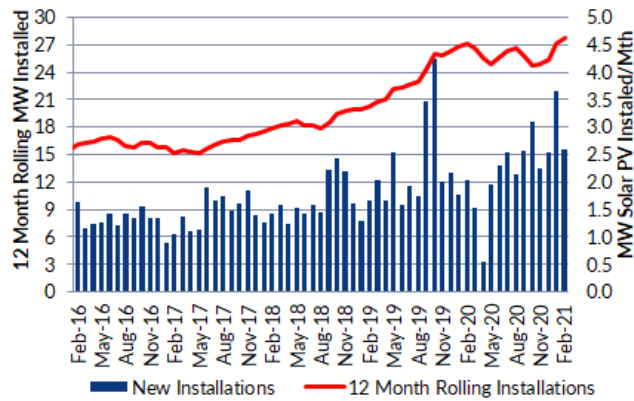
	Feb-20	Jan-21	Feb-21	% Chg pcp	% Chg mom
Average Monthly Prices					
NSW avg (A\$/MWh)	\$ 46	\$ 35	\$ 39	-16%	11%
SA avg (A\$/MWh)	\$ 47	\$ 22	\$ 69	46%	206%
VIC avg (A\$/MWh)	\$ 43	\$ 22	\$ 30	-30%	39%
Electricity Futures for 2021:					
	31-Mar-20	26-Feb-21	31-Mar-21		
NSW avg (A\$/MWh)	\$ 59	\$ 48	\$ 49	-17%	3%
SA avg (A\$/MWh)	\$ 55	\$ 34	\$ 36	-35%	4%
VIC avg (A\$/MWh)	\$ 52	\$ 36	\$ 36	-30%	1%
Spot and Future LGC Prices					
	31-Mar-20	28-Feb-21	31-Mar-21		
2021 (A\$/MWh)	\$ 25	\$ 33	\$ 33	35%	0%
2022 (A\$/MWh)	\$ 14	\$ 26	\$ 26	84%	-1%
2023 (A\$/MWh)	\$ 7	\$ 18	\$ 18	163%	-1%

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

Disruptive technology

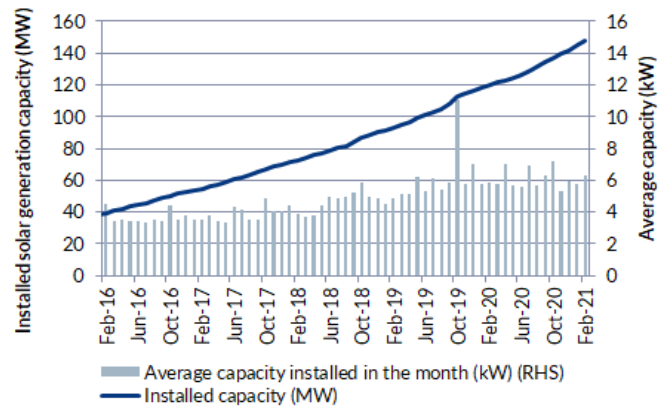
Solar PV installations

Figure 67. Solar PV capacity installed (MW)



Source: Electricity Authority, Forsyth Barr analysis

Figure 68. Average size of system and total capacity installed



Source: Electricity Authority, Forsyth Barr analysis

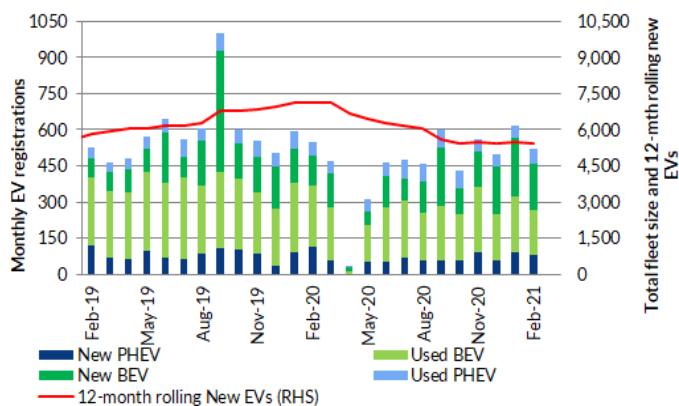
Figure 69. Solar installations and capacity installed

	Feb-20	Jan-21	Feb-21	% chg pc	% chg mom	12m rolling Feb-20	12m rolling Feb-21	Chg
MW Installed	2.0	3.7	2.6	27%	-29%	2.3	2.3	2%
New installations	354	275	367	4%	33%	4,112	4,160	1%
ICP upake rate (%)	1.2%	1.4%	1.4%	+17bp	+2bp	1.2%	1.3%	+17bp
Total installed capacity (MW)	120	145	148	23%	2%			
Total installations	27,042	30,744	31,138	15%	1%			

Source: Electricity Authority, Forsyth Barr analysis

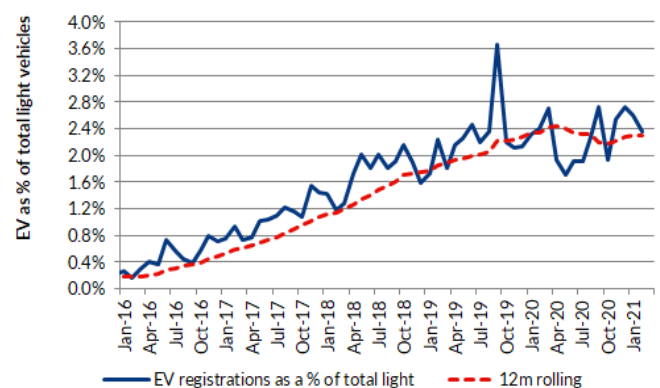
Electric vehicle (EV) registrations

Figure 70. EV registrations



Source: Ministry of Transport, Forsyth Barr analysis

Figure 71. EV registrations % of total light vehicle registrations



Source: Ministry of Transport, Forsyth Barr analysis

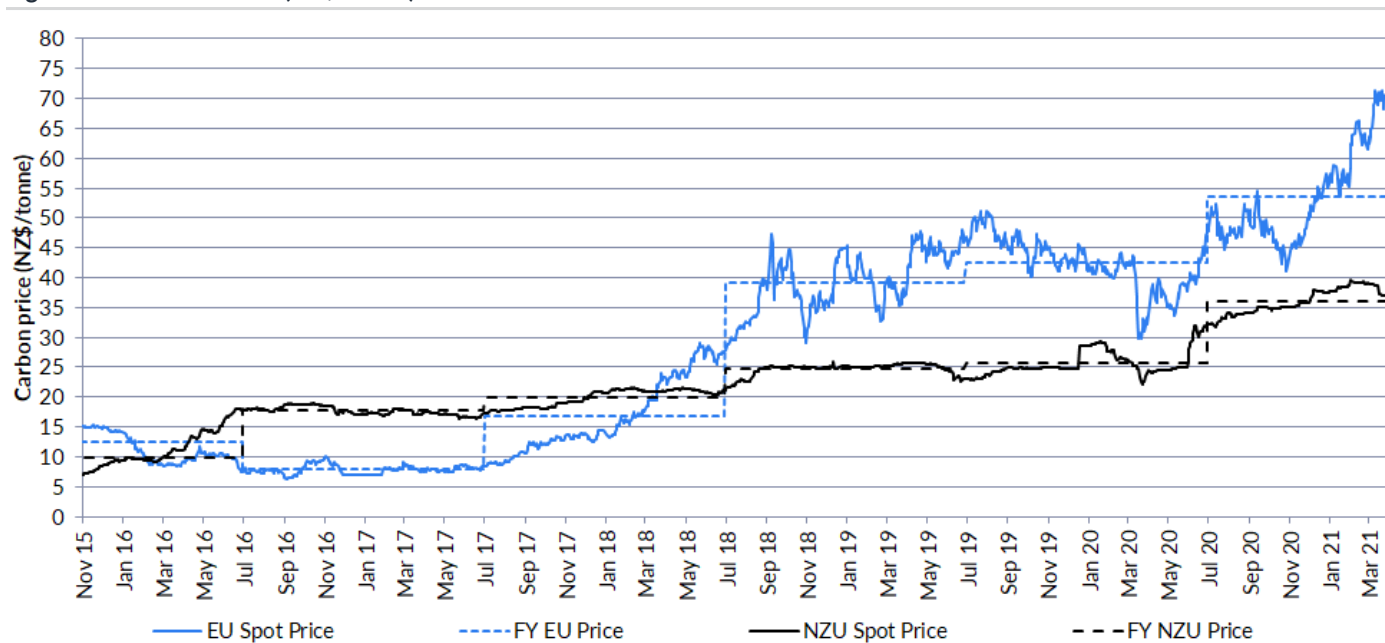
Figure 72. EV registrations

	Feb-20	Jan-21	Feb-21	% chg pc	% chg mom	12m rolling Feb-20	12m rolling Feb-21	Chg	Total
New EVs	237	336	273	15%	-19%	327	278	-15%	9,590
Used EVs	314	282	247	-21%	-12%	573	395	-31%	15,572
Total	722	764	662	-8%	-13%	900	673	-25%	25,162
as % of new vehicles	2.1%	2.4%	2.2%	+11bp	-22bp	1.9%	2.0%	+11bp	
as % of used vehicles	2.7%	2.8%	2.6%	-11bp	-27bp	2.7%	2.5%	-20bp	
as a % of total vehicles	2.4%	2.6%	2.4%	-3bp	-23bp	2.3%	2.3%	-5bp	

Source: MoT, Forsyth Barr analysis

Carbon prices

Figure 73. Price of carbon (NZ\$/tonne)



Source: Bloomberg, Forsyth Barr analysis

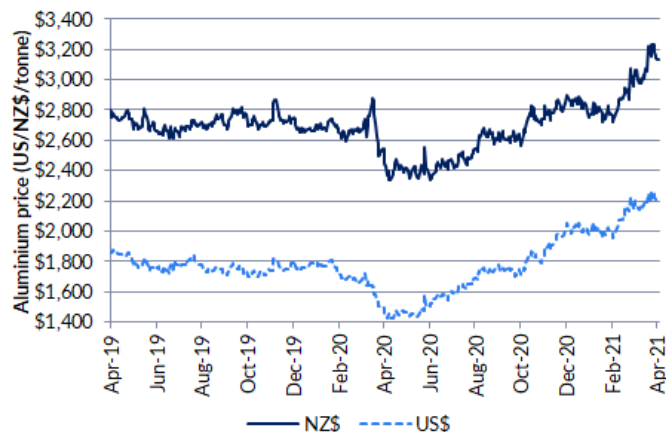
Figure 74. Carbon unit spot prices on last trading day of month

	31-Mar-20	26-Feb-21	31-Mar-21	% chg pcp	% chg mom	FY21 average price
NZ Carbon unit (NZ\$/tonne)	24.0	39.0	37.0	54%	-5%	36.1
EU Carbon unit (NZ\$/tonne)	33.4	62.2	71.5	114%	15%	53.6
EU Carbon Unit (EUR/tonne)	18.0	37.3	42.6	136%	14%	31.1

Source: Bloomberg, Forsyth Barr analysis

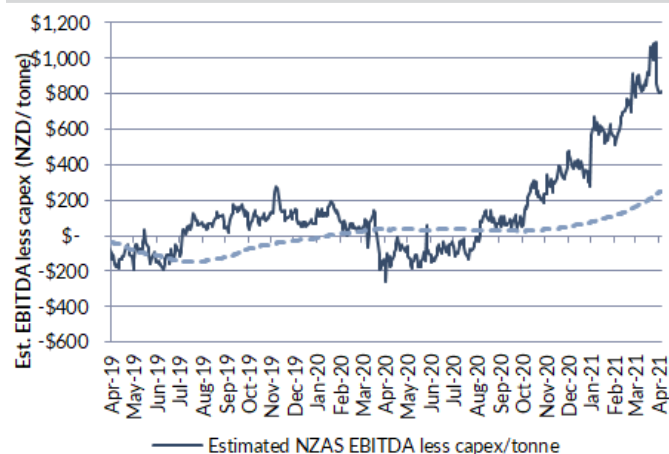
NZAS profitability

Figure 75. Aluminium price



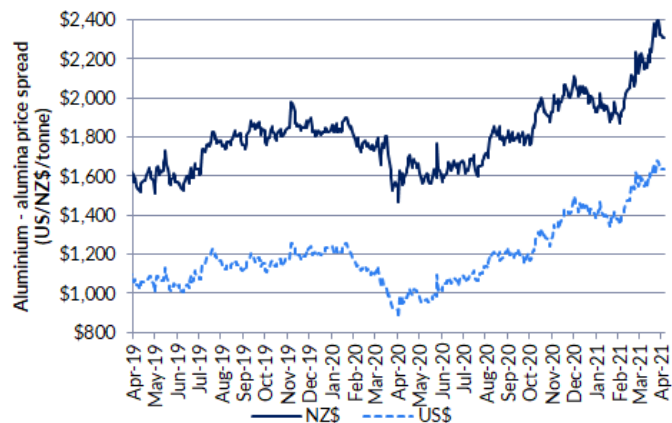
Source: IRESS, Bloomberg, Forsyth Barr analysis

Figure 77. Overall estimated EBITDA - capex/tonne



Source: IRESS, Bloomberg, Forsyth Barr analysis

Figure 76. Aluminium – alumina price spread



Source: IRESS, Bloomberg, Forsyth Barr analysis

Figure 78. Average aluminium price and NZAS profitability

(per tonne)	Mar-20	Feb-21	Mar-21	% chg pcp	% chg mom
LME Aluminium price (US\$)	2,679	2,868	3,078	15%	7%
LME Aluminium price (NZ\$)	1,610	2,080	2,192	36%	5%
Aluminium-alumina spread (US\$)	1,019	1,473	1,601	57%	9%
Aluminium-alumina spread (NZ\$)	1,695	2,031	2,249	33%	11%
(EBITDA-capex) (NZ\$)	(1)	683	905	n/a	33%

Source: Iress, Bloomberg, Forsyth Barr analysis

Industry news

Listed sector company news

Contact (CEN)

- CEN has purchased Taupo based Western Energy Services, which works on geothermal well intervention, field sampling and wireline and slickline diagnostics. The transaction was completed on 31 March 2021 for an undisclosed price.
- CEN has said that the Climate Change Commission (CCC) underestimates the impact geothermal has in reducing emissions in its submission on the CCC's draft report. CEN forecasts geothermal generation to grow at twice that of the CCC, saying that the CCC is overlooking investments in capacity and efficiency increases that are already underway.
- CEN has signed an agreement with Nova (Todd) Energy for a gas tolling agreement so that CEN's Taranaki Combined Cycle plant (TCC) can provide baseload generation whilst GNE's Unit 5 undergoes maintenance. CEN will purchase 3.6PJ at market prices and sell electricity back to Nova that it would have otherwise generated at its own plants.
- As part of an exclusive deal with Roaring40s Wind Power, CEN has said the companies will build a pipeline of wind projects over the next six years. The pipeline is expected to include large scale opportunities with generation capabilities of more than 150MW. CEN says the pipeline will compliment its existing hydro and geothermal assets to meet cross-country demand growth.

Genesis (GNE)

- GNE has said that the emissions trading scheme (ETS) could slow down decarbonisation and risks potentially undermining back-up generation needed for energy security. The company says the ETS should stay but that there needs to be adjustments made involving a "capacity or reserve-type market".

Meridian (MEL)

- MEL has said it supports the CCC's outline of how New Zealand can reach net-zero emissions by 2050. The CCC found in its draft report that a renewable energy target across all sectors will be more effective than a hard 100% renewable energy target.

Mercury (MCY)

- MCY is set to become New Zealand's largest wind farm owner after Purchasing all of Tilt Renewables' (TLT) New Zealand assets. MCY will sell its current ~20% share to Australian renewable energy investment fund PowAR, which is also acquiring Infratil's (IFT) 65.5% controlling stake. MCY will then purchase the New Zealand assets back off PowAR. The deal is expected to take another ~four months to complete, subject to OIO and FIRB approval in both New Zealand and Australia. For more detail please refer to our note *Mercury – Taking a Tilt at Wind* published 16 March 2021. We are positive on the deal.

Tilt Renewables (TLT)

- TLT is set to become a private company, with TLT's shareholders to receive NZ\$7.80 per share. For more detail on the sale please refer to our notes: *Tilt Renewables – Tilting Up, Up and Away*, *Infratil – Great Exit, Now for the Hard Part* and *Mercury – Taking a Tilt at Wind* all published 16 March 2021.

Political/regulatory news

- The Electricity Authority (EA) has released new Consumer Care Guidelines; merging the previously separate guidelines for vulnerable customers and for medically dependent customers into one guideline. The guidelines also include an update to the disconnection process, with retailers now having to contact a customer three times by the customers preferred method and twice using alternative methods before disconnection. Retailers have until 31 July to create a plan to align with the new guidelines.
- Transpower is exploring the issues that arise from grid-connected storage such as batteries or pumped hydro under the benefit-based transmission pricing methodology (TPM). Trustpower is taking submissions on how storage will interact with the TPM following a letter from CEN in December that argued benefit-based and residual charges risk undermining investment in batteries.
- The Clutha Upper Waitaki Lines Project (CUWLP) is now running ahead of schedule, and Transpower has said that the current outage on the Naseby-Roxburgh circuit will be extended by three weeks to ensure time savings are maintained and to reduce risks before winter. This will also mean that future outages on different sections will be completed earlier than expected.
- Climate Change Minister, James Shaw, has said that New Zealand will need to police carbon imports, but there is no decision yet on whether they will included in a review of free allocations under the ETS. This follows a decision from the European Parliament to apply a tax on imports from countries with lower carbon costs than that of the EU.

- The EA's draft decision has settled on a NZ\$13.70/MWh single offer price cap to remedy the Undesirable Trading Situation (UTS) from December 2019. There remains a consultation period on the draft decision to reset prices. Those long generation will pay to those long retail, however, no generator or retailer is materially better or worse off.
- Electric Kiwi has said that the EA's proposed response to the UTS falls short of what is needed and "rewards market manipulation". The retailer said that CEN and MEL will still be financially better off due to prices being higher than they should have been even after the EA has adjusted spot prices.
- Independent electricity retailers have said that there needs to be a high standard of trading conduct (HSOTC) investigation in to the December 2019 period which saw the UTS, but that this will be unlikely to fully penalise those who breached HSOTC rules. Both Flick Electric and Ecotricity have welcomed news that the EA is doing work on the wholesale market, and indicated that further market reforms will be needed.

Other industry news

- Mark Macfarlane has been appointed CEO at Todd Energy and Shell Todd Oil Services, as former CEO Joanna Breare has retired. Macfarlane has had roles at Exxon, Santos and other oil and gas operators globally.
- Firstgas intends to have a 100% hydrogen gas grid by 2050, initially mixing hydrogen into its network from 2030. Conversion to a hydrogen only grid would start from 2035 to give customers time to source appliances.
- MainPower has announced it is finalising the design of its 93MW Mt Cass wind farm. MainPower has said that NZAS remaining until 2024 provides enough certainty to go ahead with the wind farm.
- Fonterra has said that the CCC's goal to end coal use by 2037 requires more certain long-term gas supplies. The company has committed to halting the use of coal by 2037, but said without certainty of gas supply it may need to transitioning gas boilers and air heaters to renewable alternatives which would delay the transition to coal.
- A dairy farmer in Northland is seeking resource consent for a twin-turbine run of river hydro scheme in Northland. The proposed 3MW power station is ~10km north of Northpower's Wairua Falls hydro plant on the Wairua River.
- Z Energy (ZEL) has announced it has launched a new electricity retail brand, Z Electric. Customers receive 50 litres of petrol for joining and five litres for every NZ\$100 spent. Z is also the majority shareholder of Flick Electric.
- The Ministry of Business, Innovation and Employment (MBIE) has released its 'New Zealand Energy Quarterly', which shows that New Zealand's wind generation in the December 2020 quarter fell by -2.8% as a result of weak wind conditions. Hydro also fell by ~-3%, causing thermal to increase by +9% on the pcp.
- UK based Octopus Energy is planning on launching a New Zealand retail offering in mid-2021. Octopus has acquired Configurable, a New Zealand energy software to upgrade the capabilities of its Kraken smart grid network.
- The country's first ETS auction saw a price of NZ\$36/tonne and bidding for more than double that of units available. This price is above the NZ\$35/tonne fixed-price option available for 2020 obligations until 31 May. There are three more auctions planned for 2021.

Source: Energy News, Company reports, Forsyth Barr analysis

Contact Energy Limited (CEN)

Priced as at 06 Apr 2021 (NZ\$)					6.79
12-month target price (NZ\$)*					8.40
Expected share price return					23.7%
Net dividend yield					5.3%
Estimated 12-month return					29.1%
Key WACC assumptions					
Risk free rate					2.30%
Equity beta					0.84
WACC					5.4%
Terminal growth					1.5%
DCF valuation summary (NZ\$m)					
Total firm value					7,230
(Net debt)/cash					(1,201)
Less: Capitalised operating leases					
Value of equity					6,030
Profit and Loss Account (NZ\$m)					
Sales revenue	2,519.0	2,073.0	2,308.9	2,330.9	2,250.3
Normalised EBITDA	518.0	451.0	480.7	490.3	499.2
Depreciation and amortisation	(205.0)	(220.0)	(229.8)	(232.0)	(236.7)
Normalised EBIT	313.0	231.0	250.8	258.3	262.5
Net interest	(70.0)	(55.0)	(54.4)	(41.1)	(53.2)
Depreciation capex adjustment	102	119	119	123	126
Tax	(72.0)	(46.0)	(57.5)	(60.8)	(58.6)
Minority interests	0	0	0	0	0
Adjusted normalised NPAT	277.5	247.8	259.4	279.5	276.3
Abnormals/other	67	(123)	(117)	(123)	(126)
Reported NPAT	345.0	125.0	142.9	156.4	150.7
Normalised EPS (cps)	38.8	34.6	34.9	36.2	35.8
DPS (cps)	39.0	39.0	35.0	36.5	38.0
Growth Rates					
Revenue (%)	10.7	-17.7	11.4	0.9	-3.5
EBITDA (%)	8.1	-12.9	6.6	2.0	1.8
EBIT (%)	18.6	-26.2	8.6	3.0	1.6
Normalised NPAT (%)	21.4	-10.7	4.7	7.7	-1.1
Normalised EPS (%)	21.4	-10.7	0.7	3.7	-1.1
Ordinary DPS (%)	21.9	0.0	-10.3	4.3	4.1
Cash Flow (NZ\$m)					
EBITDA	518.0	451.0	480.7	490.3	499.2
Working capital change	(20.0)	(24.0)	(6.2)	18.6	17.4
Interest & tax paid	(111.0)	(118.0)	(134.0)	(121.2)	(124.7)
Other	14.0	32.0	0	0	0
Operating cash flow	401.0	341.0	340.5	387.7	391.9
Capital expenditure	(63.0)	(100.0)	(85.0)	(257.0)	(423.1)
(Acquisitions)/divestments	382.0	(6.0)	0	0	0
Other	0	0	0	0	0
Funding available/(required)	720.0	235.0	255.5	130.7	(31.2)
Dividends paid	(251.0)	(280.0)	(301.4)	(270.5)	(282.1)
Equity raised/(returned)	0	0	400.0	0	0
(Increase)/decrease in net debt	469.0	(45.0)	354.1	(139.8)	(313.3)
Balance Sheet (NZ\$m)					
Working capital	(3.0)	19.0	23.2	2.6	(16.9)
Fixed assets	4,097.0	4,001.0	3,860.2	3,889.2	4,079.6
Intangibles	425.0	406.0	406.0	406.0	406.0
Right of use asset	29.0	25.0	25.0	25.0	25.0
Other assets	132.0	173.0	173.0	173.0	173.0
Total funds employed	4,680.0	4,624.0	4,487.4	4,495.7	4,666.8
Net debt/(cash)	990.0	1,036.0	681.9	821.7	1,135.0
Lease liability	25.0	22.0	22.0	22.0	22.0
Other liabilities	883.0	940.0	914.5	891.8	875.5
Shareholder's funds	2,782.0	2,626.0	2,868.9	2,760.2	2,634.3
Minority interests	0	0	0	0	0
Total funding sources	4,680.0	4,624.0	4,487.4	4,495.7	4,666.8
Valuation Ratios					
EV/EBITDA (x)	11.7	13.0	11.9	11.3	11.1
EV/EBIT (x)	19.4	25.5	22.8	21.5	21.1
PE (x)	17.5	19.6	19.5	18.8	19.0
Price/NTA (x)	2.1	2.2	2.1	2.2	2.4
Free cash flow yield (%)	7.0	5.0	5.3	2.7	-0.6
Net dividend yield (%)	5.7	5.7	5.2	5.4	5.6
Gross dividend yield (%)	7.2	7.2	6.5	6.8	6.9
Capital Structure					
Interest cover EBIT (x)	4.9	4.8	5.0	7.0	5.3
Interest cover EBITDA (x)	7.4	8.2	8.8	11.9	9.4
Net debt/ND+E (%)	26.2	28.3	19.2	22.9	30.1
Net debt/EBITDA (x)	1.9	2.3	1.4	1.7	2.3
Key Ratios					
Return on assets (%)	9.8	4.6	5.3	5.4	5.3
Return on equity (%)	6.3	4.9	4.9	5.7	5.7
Return on funds employed (%)	9.3	4.4	5.1	5.2	5.0
EBITDA margin (%)	20.6	21.8	20.8	21.0	22.2
EBIT margin (%)	12.4	11.1	10.9	11.1	11.7
Capex to sales (%)	2.5	4.8	3.7	11.0	18.8
Capex to depreciation (%)	31	45	37	111	179
Imputation (%)	64	64	65	70	60
Pay-out ratio (%)	101	113	100	101	106
Operating Performance					
Hydro generation (GWh)	4,232	3,752	3,771	3,887	3,926
Geothermal generation (GWh)	3,257	3,331	3,139	3,324	3,457
Thermal generation (GWh)	1,422	1,360	1,279	1,138	977
Total Generation (GWh)	8,911	8,443	8,189	8,348	8,360
GWAP (\$/MWh)	129	100	143	146	130
Gas consumed (PJ)	13.9	13.2	12.2	10.8	9.3
Gas price (\$/GJ)	7.1	6.8	7.2	7.2	6.8
Retail electricity volumes (GWh)	6,554	5,694	5,257	5,194	5,201
Electricity customers (000)	411	418	401	401	401
Average usage/customer (MWh)	8.6	8.5	8.3	8.4	8.4
Average retail price (\$/MWh)	191	199	207	211	215
LWAP (\$/MWh)	136	108	157	160	142
LWAP/GWAP	1.06	1.08	1.10	1.10	1.09
Retail gas volumes (PJ)	3.1	3.0	2.9	2.9	2.9
Gas customers (000)	67	65	64	64	64
Average gas sales price (\$/GJ)	23.6	24.5	25.4	24.8	24.7

Genesis Energy Limited (GNE)

Priced as at 06 Apr 2021 (NZ\$) **3.47**

12-month target price (NZ\$)*	3.85
Expected share price return	11.0%
Net dividend yield	5.1%
Estimated 12-month return	16.0%

Key WACC assumptions	
Risk free rate	2.30%
Equity beta	0.84
WACC	5.5%
Terminal growth	1.5%

Spot valuations (NZ\$)	
1. DCF	3.85
2. Market multiple	3.72
3. Dividend yield	3.71

DCF valuation summary (NZ\$m)	
Total firm value	5,199
(Net debt)/cash	(1,182)
Less: Capitalised operating leases	
Value of equity	4,017

Profit and Loss Account (NZ\$m)	2019A	2020A	2021E	2022E	2023E
Sales revenue	3,410.0	3,354.5	3,791.4	3,621.4	3,457.7
Normalised EBITDA	369.4	355.6	419.2	441.0	434.6
Depreciation and amortisation	(201.7)	(209.8)	(203.7)	(210.0)	(208.5)
Normalised EBIT	167.7	145.8	215.5	231.0	226.2
Net interest	(77)	(71)	(59)	(56)	(54)
Associate income	0	0	0	0	0
Tax	(26)	(22)	(45)	(49)	(48)
Deprecation capex adjustment	96	101	97	109	108
Adjusted normalised NPAT	160	154	209	236	232
Abnormals/other	(101)	(108)	(104)	(109)	(108)
Reported NPAT	59	46	105	126	124
Normalised EPS (cps)	15.7	14.9		22.6	22.2
DPS (cps)	17.1	17.2	17.4	17.6	17.9

Growth Rates	2019A	2020A	2021A	2022A	2023A
Revenue (%)	48.0	-1.6	13.0	-4.5	-4.5
EBITDA (%)	2.5	-3.7	17.9	5.2	-1.4
EBIT (%)	8.3	-13.1	47.8	7.2	-2.1
Normalised NPAT (%)	24.6	-3.8	35.5	12.7	-1.6
Normalised EPS (%)	22.7	-5.0		12.7	-1.6
Ordinary DPS (%)	0.9	0.9	0.9	1.4	1.4

Cash Flow (NZ\$m)	2019A	2020A	2021E	2022E	2023E
EBITDA	369.4	355.6	419.2	441.0	434.6
Working capital change	(27.3)	21.8	17.2	15.0	(1.7)
Interest & tax paid	(123.1)	(119.2)	(84.1)	(119.5)	(118.8)
Other	15.1	(12.4)	(9.1)	0	0
Operating cash flow	234.1	245.8	343.3	336.5	314.1
Capital expenditure	(68.5)	(69.0)	(94.8)	(59.9)	(62.1)
(Acquisitions)/divestments	(0.2)	(7.6)	(3.9)	0	0
Other	0	0	0	0	0
Funding available/(required)	165.4	169.2	244.6	276.6	252.0
Dividends paid	(131.6)	(138.4)	(162.3)	(182.6)	(185.2)
Equity raised/(returned)	(1.3)	(0.1)	(0.4)	0	0
(Increase)/decrease in net debt	32.5	30.7	92.9	93.9	66.8

Balance Sheet (NZ\$m)	2019A	2020A	2021E	2022E	2023E
Working capital	111.8	99.4	83.4	68.3	70.0
Fixed assets	3,773.1	3,675.1	3,328.3	3,187.2	3,050.4
Intangibles	364.0	353.4	349.1	340.2	330.6
Right of use asset	0	0	0	0	0
Other assets	120.8	163.3	212.4	212.4	212.4
Total funds employed	4,369.7	4,291.2	3,973.2	3,808.1	3,663.5
Net debt/(cash)	1,293.1	1,334.9	1,242.7	1,148.7	1,082.0
Lease liability	0	0	0	0	0
Other liabilities	931.6	886.5	887.9	873.3	856.4
Shareholder's funds	2,145.0	2,068.0	1,842.6	1,786.1	1,725.1
Minority interests	0	1.8	0	0	0
Total funding sources	4,369.7	4,291.2	3,973.2	3,808.1	3,663.5

Valuation Ratios	2019A	2020A	2021E	2022E	2023E
EV/EBITDA (x)	13.1	13.7	11.5	10.9	11.1
EV/EBIT (x)	28.8	33.4	22.5	20.8	21.3
PE (x)	22.2	23.3	n/a	n/a	n/a
Price/NTA (x)	2.0	2.1	n/a	n/a	n/a
Free cash flow yield (%)	4.6	4.9	6.9	n/a	n/a
Net dividend yield (%)	4.9	5.0	5.0	5.1	5.1
Gross dividend yield (%)	6.4	6.5	6.6	n/a	n/a

Capital Structure	2019A	2020A	2021E	2022E	2023E
Interest cover EBIT (x)	2.1	1.9	3.5	4.1	4.2
Interest cover EBITDA (x)	4.8	5.0	7.1	7.9	8.1
Net debt/ND+E (%)	36.6	37.6	39.2	38.0	37.3
Net debt/EBITDA (x)	3.4	3.5	2.8	2.5	2.4

Key Ratios	2019A	2020A	2021E	2022E	2023E
Return on assets (%)	3.4	2.9	4.7	5.6	5.7
Return on equity (%)	3.0	2.6	6.1	7.1	7.2
Return on funds employed (%)	3.6	3.2	5.1	5.8	5.9
EBITDA margin (%)	10.8	10.6	11.1	12.2	12.6
EBIT margin (%)	4.9	4.3	5.7	6.4	6.5
Capex to sales (%)	2.0	2.1	2.5	1.7	1.8
Capex to depreciation (%)	34	33	47	29	30
Imputation (%)	80	80	80	90	90
Pay-out ratio (%)	109	116	n/a	78	80

Operating Performance	2019A	2020A	2021E	2022E	2023E
Renewable generation	2,835	2,340	2,578	2,724	2,724
Gas generation	2,586	3,121	2,618	2,553	2,114
Coal generation	1,410	1,340	2,150	1,139	767
Total GNE generation (GWh)	6,831	6,801	7,347	6,417	5,606
GWAP (\$/MWh)	143	114	164	164	148

Retail electricity	2019A	2020A	2021E	2022E	2023E
Electricity customers (000)	499	493	481	479	479
MM/SME volumes	4,077	4,111	3,989	3,939	3,941
TOU volumes	1,992	2,134	2,445	2,457	2,469
Total fixed price volumes (GWh)	6,068	6,245	6,433	6,396	6,411
Average MM usage/cust (kWh/yr)	8,126	8,272	8,184	8,214	8,230
Average FPVW price (\$/MWh)	210	212	212	212	213
LWAP (\$/MWh)	139	110	163	158	139
LWAP/GWAP	0.97	0.96	0.99	0.96	0.94
Line losses (%)	5.4	5.7	5.4	5.5	5.5

Kupe production	2019A	2020A	2021E	2022E	2023E
Gas production (PJ)	11.8	10.7	11.0	11.9	11.4
Oil production (k barrels)	472.9	374.3	350.4	497.3	432.8
LPG production (k tonnes)	50.6	46.6	47.6	50.7	48.2

	2019A	2020A	2021E	2022E	2023E
Kupe EBITDAF (\$m)	109	94	99	107	100
Energy EBITDAF (\$m)	260	262	320	334	335
GNE EBITDAF (\$m)	369	356	419	441	435

Mercury NZ Limited (MCY)

Priced as at 06 Apr 2021 (NZ\$)

6.25

12-month target price (NZ\$)*

6.10

Expected share price return

-2.4%

Net dividend yield

3.3%

Estimated 12-month return

0.9%

Spot valuations (NZ\$)

1. DCF

5.67

2. Market multiple

5.88

3. Dividend yield

6.04

Key WACC assumptions

Risk free rate

2.30%

Equity beta

0.84

WACC

5.5%

Terminal growth

1.5%

DCF valuation summary (NZ\$m)

Total firm value

8,952

(Net debt)/cash

(1,241)

Less: Capitalised operating leases

Value of equity

7,711

Profit and Loss Account (NZ\$m)	2019A	2020A	2021E	2022E	2023E	Valuation Ratios	2019A	2020A	2021E	2022E	2023E
Sales revenue	2,000.0	1,750.0	1,996.6	2,163.1	2,135.9	EV/EBITDA (x)	18.6	19.5	18.2	14.8	14.1
Normalised EBITDA	505.0	476.0	512.1	631.7	666.4	EV/EBIT (x)	31.2	33.2	30.9	24.3	23.2
Depreciation and amortisation	(204.0)	(214.0)	(219.3)	(247.4)	(264.6)	PE (x)	35.6	36.0	29.3	24.6	23.7
Normalised EBIT	301.0	262.0	292.9	384.3	401.8	Price/NTA (x)	2.4	2.3	2.4	2.1	2.2
Net interest	(75.0)	(54.0)	(46.0)	(61.1)	(67.5)	Free cash flow yield (%)	2.8	1.6	1.9	3.6	3.8
Associate income	1.0	18.0	9.6	1.7	1.9	Net dividend yield (%)	2.5	2.5	2.7	3.4	4.0
Tax	(73.0)	(41.0)	(63.7)	(93.0)	(96.1)	Gross dividend yield (%)	3.4	3.5	3.8	4.5	5.1
Depreciation capex adj	77.8	72.0	107.7	114.5	118.2						
Adjusted normalised NPAT	239.0	236.1	290.4	346.4	358.2	Capital Structure	2019A	2020A	2021E	2022E	2023E
Abnormals/other	118.0	(29.1)	(92.7)	260.5	(118.2)	Interest cover EBIT (x)	6.7	5.6	6.7	12.4	6.0
Reported NPAT	357.0	207.0	197.7	606.9	240.1	Interest cover EBITDA (x)	6.7	8.8	11.1	10.3	9.9
Normalised EPS (cps)	17.6	17.3	21.3	25.5	26.3	Net debt/ND+E (%)	61.8	63.2	63.6	56.1	57.8
DPS (cps)	15.5	15.8	17.0	21.5	25.0	Net debt/EBITDA (x)	2.2	2.4	2.2	2.0	1.9
Growth Rates	2019A	2020A	2021A	2022A	2023A	Key Ratios	2019A	2020A	2021E	2022E	2023E
Revenue (%)	11.2	-12.5	14.1	8.3	-1.3	Return on assets (%)	7.8	4.4	4.5	10.5	5.6
EBITDA (%)	-10.8	-5.7	7.6	23.4	5.5	Return on equity (%)	4.6	4.4	5.0	5.8	6.1
EBIT (%)	-17.7	-7.3	8.0	27.6	4.6	Return on funds employed (%)	4.7	3.9	4.4	5.2	5.5
Normalised NPAT (%)	-6.5	-1.2	23.0	19.3	3.4	EBITDA margin (%)	25.3	27.2	25.7	29.2	31.2
Normalised EPS (%)	-6.4	-1.2	23.0	19.3	3.4	EBIT margin (%)	15.1	16.0	15.1	17.8	18.9
Ordinary DPS (%)	2.6	1.9	7.6	26.5	16.3	Capex to sales (%)	6.1	12.7	11.4	7.0	8.1
						Capex to depreciation (%)	67	120	120	69	74
Cash Flow (NZ\$m)	2019A	2020A	2021E	2022E	2023E	Imputation (%)	100	100	100	80	70
EBITDA	505.0	476.0	512.1	631.7	666.4	Pay-out ratio (%)	88	91	80	84	95
Working capital change	2.0	92.0	(43.4)	(20.3)	(15.0)						
Interest & tax paid	(148.0)	(136.0)	(154.8)	(152.0)	(156.7)	Operating Performance	2019A	2020A	2021E	2022E	2023E
Other	2.0	(76.0)	72.0	0	0	Hydro	4,006	3,708	3,786	4,016	4,016
Operating cash flow	361.0	356.0	385.9	459.4	494.7	Geothermal	2,894	2,812	2,852	2,838	2,838
Capital expenditure	(122.0)	(223.0)	(226.7)	(151.2)	(173.3)	Wind	0	0	0	1,222	1,585
(Acquisitions)/divestments	215.0	0	44.0	(195.0)	0	Total MCY Generation (GWh)	6,900	6,520	6,638	8,076	8,440
Other	12.0	4.0	54.9	(2.5)	(2.7)	GWAP (\$/MWh)	139	110	159	156	136
Funding available/(required)	466.0	137.0	258.1	110.8	318.7	Electricity sales					
Dividends paid	(208.0)	(214.0)	(220.5)	(254.5)	(313.0)	Electricity customers (000)	373	348	329	333	339
Equity raised/(returned)	0	0	0	0	0	MM volumes	3,182	2,892	2,701	2,641	2,686
(Increase)/decrease in net debt	258.0	(77.0)	37.6	(143.7)	5.7	TOU volumes	1,319	1,469	1,812	2,079	2,178
						Total Fixed Price volumes (GWh)	4,501	4,361	4,514	4,721	4,864
Balance Sheet (NZ\$m)	2019A	2020A	2021E	2022E	2023E	Spot Sales	780	746	214	215	216
Working capital	63.0	(14.0)	28.4	48.7	63.7	Net CFD's	1,665	1,266	1,821	1,924	1,924
Fixed assets	5,528.0	5,898.0	5,866.0	6,542.4	6,449.9	Total Sales (GWh)	6,946	6,373	6,549	6,859	7,003
Intangibles	62.0	55.0	52.9	51.9	51.9	Average usage per cust (MWh/yr)	11.8	12.2	13.4	14.3	14.5
Right of use asset	0	0	0	0	0	LWAP (\$/MWh)	145	115	169	165	145
Other assets	521.0	587.0	458.7	262.9	267.6	LWAP/GWAP	1.04	1.05	1.06	1.06	1.06
Total funds employed	6,174.0	6,526.0	6,405.9	6,905.9	6,833.1	Average FPV price (\$/MWh)	113	118	124	127	127
Net debt/(cash)	1,096.0	1,149.0	1,144.4	1,288.1	1,282.5	Line losses (%)	5.1	4.9	4.9	4.9	4.9
Lease liability	0	0	0	0	0						
Other liabilities	1,498.0	1,575.0	1,580.4	1,584.2	1,590.0	Energy margin (\$m)	667	652	678	805	836
Shareholder's funds	3,580.0	3,802.0	3,681.1	4,033.6	3,960.6	Operating costs (\$m)	(199)	(190)	(185)	(188)	(184)
Minority interests	0	0	0	0	0	Other revenue (\$m)	37	14	19	14	14
Total funding sources	6,174.0	6,526.0	6,405.9	6,905.9	6,833.1	MCY EBITDAF (\$m)	505	476	512	632	666

Meridian Energy Limited (MEL)

Priced as at 06 Apr 2021 (NZ\$)

5.25

12-month target price (NZ\$)*

5.10

Expected share price return

-2.9%

Net dividend yield

3.2%

Estimated 12-month return

0.4%

Spot valuations (NZ\$)

1. DCF

4.57

2. Market multiple

5.11

3. Dividend yield

5.34

Key WACC assumptions

Risk free rate

2.30%

Equity beta

0.81

WACC

5.5%

Terminal growth

1.5%

DCF valuation summary (NZ\$m)

Total firm value

13,369

(Net debt)/cash

(1,655)

Less: Capitalised operating leases

Value of equity

11,714

Profit and Loss Account (NZ\$m)	2019A	2020A	2021E	2022E	2023E
Sales revenue	4,104.0	4,102.0	4,121.4	4,200.3	3,925.8
Normalised EBITDA	838.0	855.0	700.6	740.9	756.0
Depreciation and amortisation	(276.0)	(312.0)	(306.9)	(306.8)	(307.7)
Normalised EBIT	562.0	543.0	393.7	434.1	448.3
Net interest	(83.0)	(84.0)	(80.2)	(77.9)	(82.5)
Associate income & other	(7.0)	(219.0)	77.0	(24.0)	(12.0)
Tax	(133.0)	(63.0)	(109.1)	(93.0)	(99.1)
Minority interests	0	0	0	0	0
Reported NPAT	339.0	177.0	281.3	239.2	254.8
Abnormals/other	143.0	333.3	109.9	180.7	180.8
Adjusted normalised NPAT	482.0	510.3	391.3	419.9	435.6
Normalised EPS (cps)	18.8	19.9	15.3	16.4	17.0
DPS (cps)	21.3	19.3	16.9	17.1	17.4

Growth Rates	2019A	2020A	2021A	2022A	2023A
Revenue (%)	24.5	0.0	0.5	1.9	-6.5
EBITDA (%)	25.8	2.0	-18.1	5.7	2.0
EBIT (%)	41.2	-3.4	-27.5	10.3	3.3
Normalised NPAT (%)	33.6	5.9	-23.3	7.3	3.7
Normalised EPS (%)	33.6	5.9	-23.3	7.3	3.7
Ordinary DPS (%)	10.9	-9.2	-12.6	1.1	1.8

Cash Flow (NZ\$m)	2019A	2020A	2021E	2022E	2023E
EBITDA	838.0	855.0	700.6	740.9	756.0
Working capital change	(36.0)	49.0	(58.5)	9.0	6.7
Interest & tax paid	(200.0)	(251.0)	(255.4)	(215.0)	(225.5)
Other	33.0	(48.0)	10.0	(24.0)	(12.0)
Operating cash flow	635.0	605.0	396.7	510.9	525.3
Capital expenditure	(69.0)	(63.0)	(89.2)	(153.8)	(204.6)
(Acquisitions)/divestments	0	(2.0)	0	0	0
Other	0	0	0	0	0
Funding available/(required)	566.0	540.0	307.5	357.1	320.6
Dividends paid	(500.0)	(546.0)	(433.1)	(433.1)	(441.8)
Equity raised/(returned)	(2.0)	(2.0)	0	0	0
(Increase)/decrease in net debt	64.0	(8.0)	(125.5)	(76.0)	(121.2)

Balance Sheet (NZ\$m)	2019A	2020A	2021E	2022E	2023E
Working capital	(24.0)	(64.0)	(55.5)	(40.5)	(35.2)
Fixed assets	8,825.0	8,594.0	8,349.9	8,198.6	8,096.8
Intangibles	59.0	65.0	85.4	83.7	82.4
Right of use asset	0	0	0	0	0
Other assets	383.0	441.0	381.0	357.0	345.0
Total funds employed	9,243.0	9,036.0	8,760.8	8,598.8	8,489.0
Net debt/(cash)	1,424.0	1,616.0	1,638.5	1,714.5	1,835.7
Lease liability	0	0	0	0	0
Other liabilities	2,362.0	2,337.0	2,195.0	2,150.9	2,107.0
Shareholder's funds	5,457.0	5,083.0	4,927.3	4,733.4	4,546.3
Minority interests	0	0	0	0	0
Total funding sources	9,243.0	9,036.0	8,760.8	8,598.8	8,489.0

Valuation Ratios	2019A	2020A	2021E	2022E	2023E
EV/EBITDA (x)	17.8	17.5	21.5	20.4	20.0
EV/EBIT (x)	26.5	27.6	38.3	34.8	33.7
PE (x)	27.9	26.4	34.4	32.0	30.9
Price/NTA (x)	2.5	2.7	2.8	2.9	3.0
Free cash flow yield (%)	4.2	4.0	2.3	2.7	2.4
Net dividend yield (%)	4.1	3.7	3.2	3.3	3.3
Gross dividend yield (%)	5.1	4.8	4.3	4.3	4.3

Capital Structure	2019A	2020A	2021E	2022E	2023E
Interest cover EBIT (x)	6.7	3.9	5.9	5.3	5.3
Interest cover EBITDA (x)	10.1	10.2	8.7	9.5	9.2
Net debt/ND+E (%)	76.9	96.6	106.1	120.2	135.0
Net debt/EBITDA (x)	1.7	1.9	2.3	2.3	2.4

Key Ratios	2019A	2020A	2021E	2022E	2023E
Return on assets (%)	5.7	3.4	5.1	4.5	4.9
Return on equity (%)	6.1	6.3	4.3	4.9	5.4
Return on funds employed (%)	5.9	5.8	4.3	4.8	5.1
EBITDA margin (%)	20.4	20.8	17.0	17.6	19.3
EBIT margin (%)	13.7	13.2	9.6	10.3	11.4
Capex to sales (%)	1.7	1.5	2.2	3.7	5.2
Capex to depreciation (%)	28	22	31	54	72
Imputation (%)	66	75	85	80	80
Pay-out ratio (%)	113	97	111	104	102

Operating Performance	2019A	2020A	2021E	2022E	2023E
Hydro generation	12,326	12,758	11,257	11,701	11,701
Wind generation	1,244	1,466	1,446	1,430	1,430
Total NZ generation (GWh)	13,570	14,224	12,703	13,131	13,131
GWAP (\$/MWh)	123	89	148	146	123
Overseas generation (GWh)	730	642	753	810	810
Overseas GWAP (\$/MWh) (NZD)	269	381	297	296	308
Overseas customer numbers (000)	110	136	148	161	169

NZ electricity customers (000)	302	324	333	333	333
Average usage per cust (MWh/yr)	13.2	13.9	14.4	14.3	14.3
Mass market volumes	3,901	4,342	4,727	4,752	4,757
Time of use volumes	2,338	3,034	3,400	3,417	3,434
Total fixed price volumes (GWh)	6,239	7,376	8,127	8,169	8,191
NZAS sales	5,310	5,431	5,011	5,011	5,011
Sell CFDs	2,239	2,527	2,000	1,600	1,600
Buy CFDs	(1,965)	(2,731)	(3,739)	(2,500)	(2,250)
Total Sales (GWh)	11,823	12,603	11,399	12,280	12,551
Average FPV price (\$/MWh)	105	108	112	115	115

LWAP (\$/MWh)	132	95	158	152	130
LWAP/GWAP	1.07	1.06	1.07	1.04	1.05
Lines losses (%)	5.9	4.8	5.3	5.5	5.5

Tilt Renewables Limited (TLT)

Priced as at 06 Apr 2021 (NZ\$)

7.59

12-month target price (NZ\$)*

7.80

Expected share price return

2.8%

Net dividend yield

0.0%

Estimated 12-month return

2.8%

Key WACC assumptions

Risk free rate

2.30%

Equity beta

0.86

WACC

5.8%

Terminal growth

1.5%

Spot valuations (NZ\$)

1. DCF

3.50

3. n/a

n/a

3. n/a

n/a

DCF valuation summary (NZ\$m)

Total firm value

1,475

(Net debt)/cash

(158)

Less: Capitalised operating leases

Value of equity

1,317

Profit and Loss Account (A\$m)	2019A	2020A	2021E	2022E	2023E	Valuation Ratios	2019A	2020A	2021E	2022E	2023E
Sales revenue	193.3	170.2	135.4	184.1	183.9	EV/EBITDA (x)	28.1	27.4	43.0	34.6	35.2
Normalised EBITDA	134.8	117.5	73.1	103.0	101.5	EV/EBIT (x)	74.0	71.5	>100x	>100x	>100x
Depreciation and amortisation	(83.6)	(72.5)	(52.0)	(91.3)	(88.7)	PE (x)	48.2	71.6	55.3	47.4	45.9
Normalised EBIT	51.2	45.0	21.1	11.7	12.8	Price/NTA (x)	5.2	2.9	2.8	2.8	2.8
Net interest	(30.1)	(46.2)	(13.1)	(16.8)	(12.5)	Free cash flow yield (%)	2.8	1.5	0.7	3.1	3.1
Other	(2.0)	(8.5)	9.7	0	0	Net dividend yield (%)	0.2	0.0	0.0	0.0	0.0
Tax	(6.9)	(4.7)	(12.1)	1.5	(0.1)	Gross dividend yield (%)	0.2	0.0	0.0	0.0	0.0
Depreciation capex adjustment	55.4	46.9	27.0	59.5	57.5						
Normalised NPAT	69.0	47.4	48.2	55.9	57.7	Capital Structure	2019A	2020A	2021E	2022E	2023E
Abnormals/other	(56.8)	431.1	(20.3)	(59.5)	(57.5)	Interest cover EBIT (x)	1.7	1.0	1.6	0.7	1.0
Reported NPAT	12.2	478.4	28.0	(3.6)	0.2	Interest cover EBITDA (x)	4.5	2.5	5.6	6.1	8.1
Normalised EPS (cps)	14.7	10.1	12.8	14.9	15.3	Net debt/ND+E (%)	34.6	-54.6	17.2	10.9	3.3
DPS (cps)	1.1	0	0	0	0	Net debt/EBITDA (x)	2.6	n/a	2.7	1.1	0.3
Growth Rates	2019A	2020A	2021E	2022E	2023E	Key Ratios	2019A	2020A	2021E	2022E	2023E
Revenue (%)	22.4	-11.9	-20.5	36.0	-0.1	Return on assets (%)	3.3	2.6	1.2	0.7	0.8
EBITDA (%)	29.9	-12.8	-37.8	40.9	-1.5	Return on equity (%)	10.5	4.0	5.1	5.9	6.1
EBIT (%)	91.4	-12.2	-53.1	-44.8	9.6	Return on funds employed (%)	3.6	4.2	1.3	0.8	0.9
Normalised NPAT (%)	49.0	-31.3	1.8	15.8	3.3	EBITDA margin (%)	69.7	69.0	54.0	55.9	55.2
Normalised EPS (%)	-0.6	-31.3	27.1	15.8	3.3	EBIT margin (%)	26.5	26.4	15.6	6.3	6.9
Ordinary DPS (%)	-65.0	-100.0	n/a	n/a	n/a	Capex to sales (%)	47.0	189.7	285.7	3.8	3.9
						Capex to depreciation (%)	109	445	744	8	8
Cash Flow (A\$m)	2019A	2020A	2021E	2022E	2023E	Imputation (%)	0	0	0	0	0
EBITDA	134.8	117.5	73.1	103.0	101.5	Pay-out ratio (%)	7	0	0	0	0
Working capital change	0.6	39.8	(67.8)	(11.1)	(7.9)						
Interest & tax paid	(41.7)	(57.8)	(7.1)	2.2	1.6	Operating Performance	2019A	2020A	2021E	2022E	2023E
Other	(8.6)	(49.4)	36.0	0	0	Australia installed capacity (MW)	440	170	506	506	506
Operating cash flow	85.0	50.2	34.2	94.1	95.1	NZ installed capacity (MW)	197	197	276	330	330
Capital expenditure	(90.8)	(322.9)	(386.8)	(7.0)	(7.1)	TLT installed capacity (MW)	637	367	782	836	836
(Acquisitions)/divestments	0	455.0	0	0	0	Australia wind generation (GWh)	1,395	1,170	1,208	1,771	1,771
Other	0	(3.9)	(5.5)	(5.5)	(5.5)	NZ wind generation (GWh)	658	664	801	1,119	1,119
Funding available/(required)	(5.8)	178.3	(358.1)	81.6	82.5	TLT wind generation (GWh)	2,053	1,834	2,009	2,890	2,890
Dividends paid	(10.6)	0	0	0	0						
Equity raised/(returned)	259.9	(1.1)	(257.5)	0	0	Price assumptions					
(Increase)/decrease in net debt	243.5	177.3	(615.6)	81.6	82.5	Australia REC price (A\$/MWh)	78.3	65.2	26.4	25.9	22.8
						SA wholesale price (A\$/MWh)	81.0	56.0	39.4	44.6	42.9
Balance Sheet (A\$m)	2019A	2020A	2021E	2022E	2023E	VIC wholesale price (A\$/MWh)		85.8	55.5	53.9	49.5
Working capital	14.3	(38.3)	11.3	14.2	13.9	Australia PPA price (A\$/MWh)	94.8	94.5	56.7	57.8	58.9
Fixed assets	1,066.7	1,000.7	1,201.2	1,125.7	1,053.1	NZ PPA price (NZ\$/MWh)	64.8	63.7	65.7	67.2	68.3
Intangibles	0.5	0.5	0.5	0.5	0.5						
Right of use asset	0	13.4	124.5	124.5	124.5	Australia spot sales (GWh)	155	365	740	458	458
Other assets	114.3	9.0	115.6	115.6	115.6	Australia PPA sales (GWh)	1,239	805	467	1,313	1,313
Total funds employed	1,195.9	985.2	1,453.2	1,380.6	1,307.7	Australia spot revenue (A\$m)	34	53	35	22	21
Net debt/(cash)	346.4	(417.9)	196.7	115.1	32.6	Australia PPA revenue (A\$m)	117	76	27	76	77
Lease liability	22.9	125.5	129.2	129.2	129.2	Australia revenue (A\$m)	151	129	85	114	112
Other liabilities	170.6	94.3	179.6	192.2	201.5	NZ revenue (A\$m)	42	42	50	71	72
Shareholder's funds	656.0	1,183.3	947.8	944.2	944.4						
Minority interests	0	0	0	0	0	Australia EBITDAF (A\$m)	109	93	44	57	55
Total funding sources	1,195.9	985.2	1,453.2	1,380.6	1,307.7	NZ EBITDAF (A\$m)	25	24	30	46	47

* Forsyth Barr target prices reflect valuation rolled forward at cost of equity less the next 12-months dividend

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