



Meridian.

# Monthly Operating Report

October 2022

## October highlights

In the month to 15 November 2022, national hydro storage increased from **146%** to **149%** of historical average

South Island storage increased to **154%** of average and North Island storage decreased to **132%** of average by 15 November 2022

Meridian's October 2022 monthly total inflows were **70%** of historical average

Waiau catchment inflows in October 2022 were lower, at **58%** of historical average

Meridian's Waitaki catchment water storage at the end of October 2022 was **154%** of historical average

Water storage in Meridian's Waiau catchment was **73%** of average at the end of October 2022

Waitaki snow storage in late October 2022 was **109%** of historical average

National electricity demand in October 2022 was **3.1%** higher than the same month last year

October 2022 was dry and mild for much of the country. Rainfall was below average for most of the South Island and southern and western parts of the North Island

New Zealand Aluminium Smelter's average load during October 2022 was **573MW**

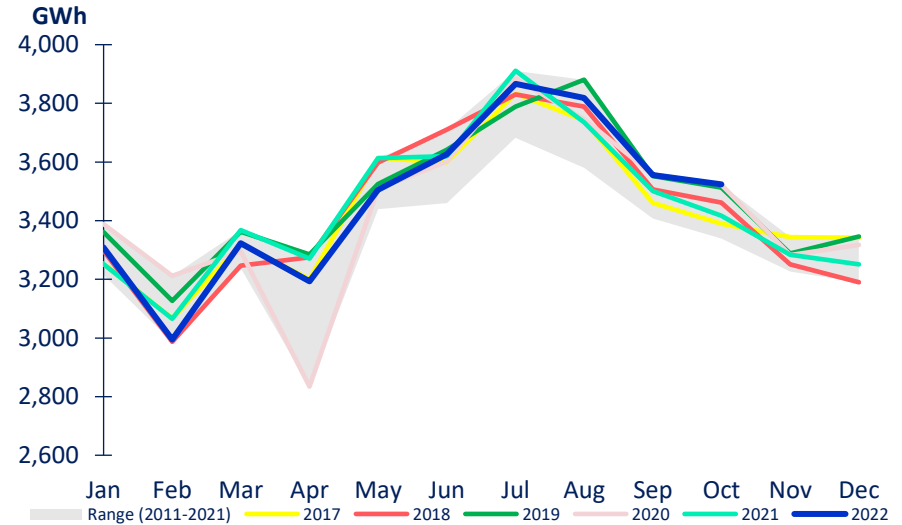
Meridian's New Zealand retail sales volumes in October 2022 were **11.0%** higher than October 2021

Compared to October 2021, segment sales increased in residential +2.5%, small medium business +23.9%, agricultural +27.4% and corporate +7.2%. Large business sales decreased -7.9%

## Market data

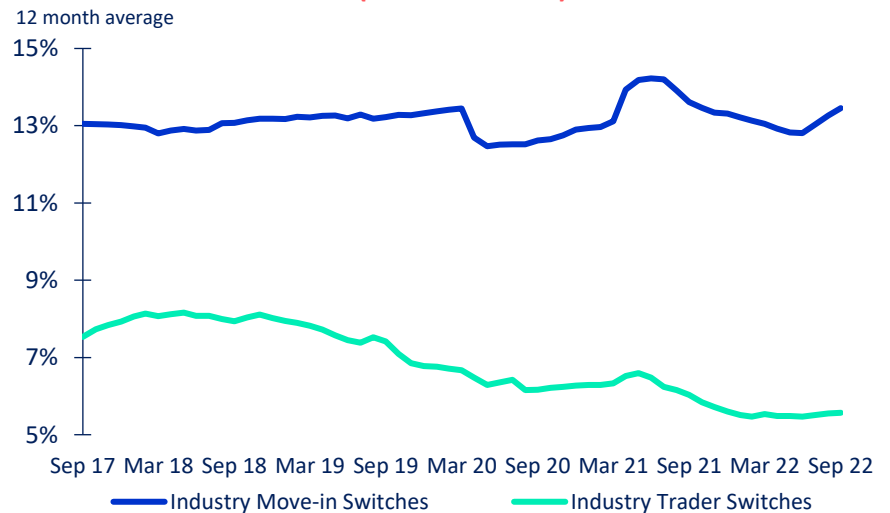
- National electricity demand in October 2022 was 3.1% higher than the same month last year
- October 2022 was dry and mild for much of the country. Rainfall was below average for most of the South Island and southern and western parts of the North Island
- Demand in the last 12 months was 0.2% lower than the preceding 12 months
- New Zealand Aluminium Smelter's average load during October 2022 was 573MW
- 12-month average switching rate of customers changing retailers but not moving ("trader" switch) was 5.6% at the end of September 2022
- 12-month average switching rate of customers moving and changing retailers ("move-in" switch) was 13.5% at the end of September 2022

### NATIONAL DEMAND



Source: Electricity Authority (reconciled demand)

### MARKET ICP SWITCHING (ALL RETAILERS)

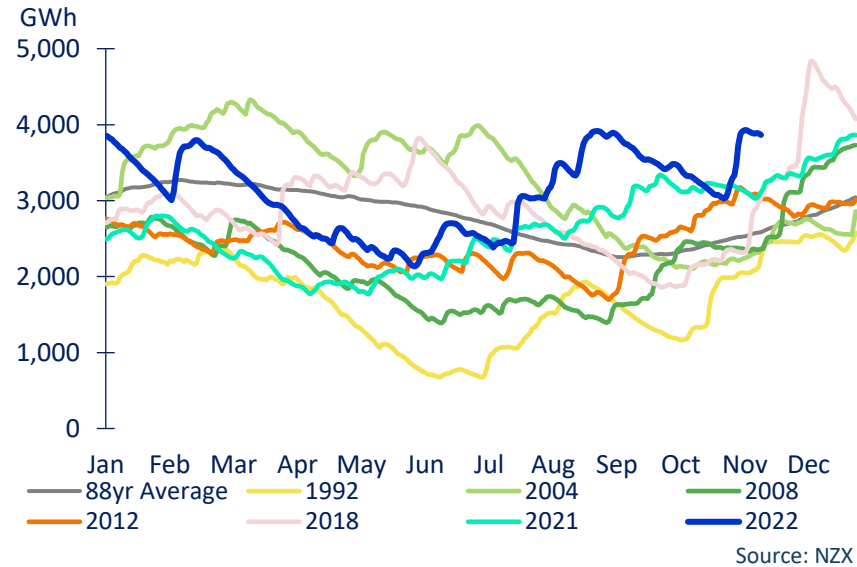


Source: Electricity Authority

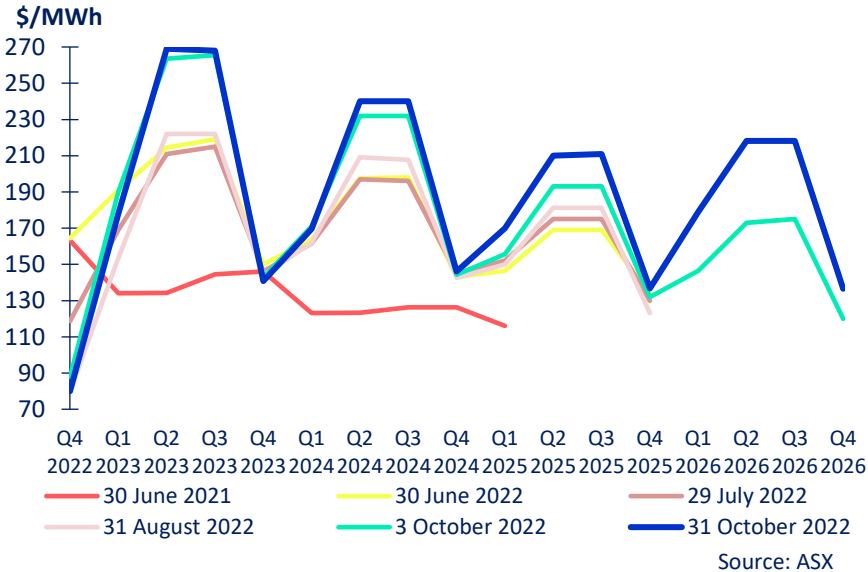
## Market data

- October 2022 saw increases in longer term ASX prices
- National storage increased from 146% of average on 7 October 2022 to 149% of average on 15 November 2022
- South Island storage increased to 154% of historical average by 15 November 2022. North Island storage decreased to 132% of average

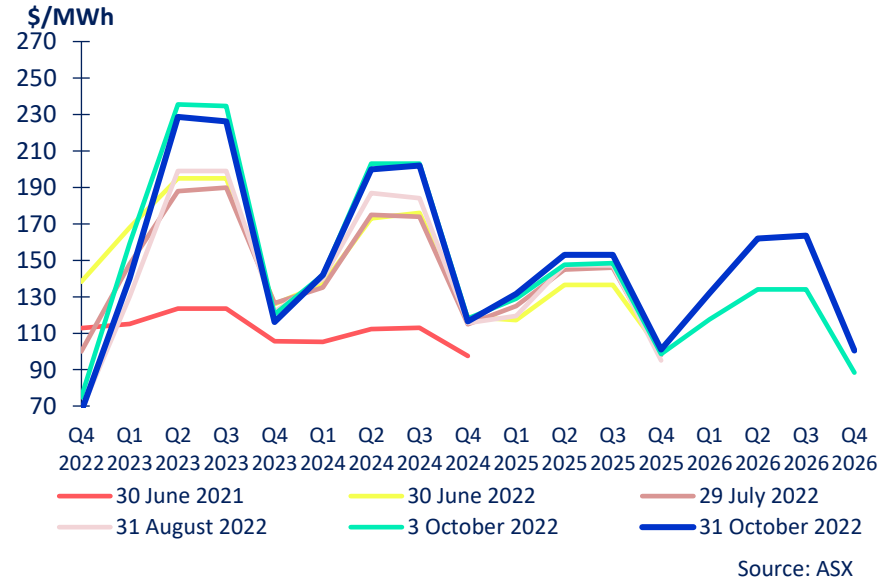
## NATIONAL HYDRO STORAGE (15 November 2022)



## OTAHUHU ASX FUTURES SETTLEMENT PRICE



## BENMORE ASX FUTURES SETTLEMENT PRICE

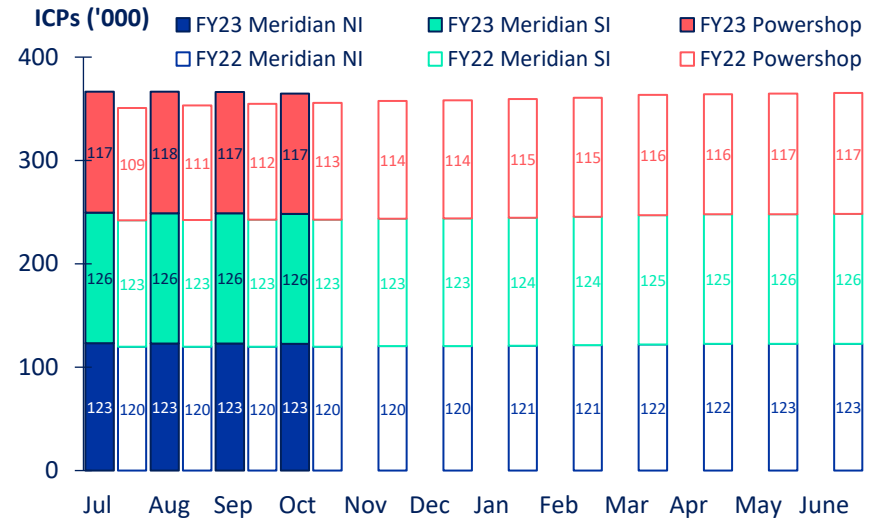


# New Zealand retail

- Meridian’s New Zealand customer connection numbers decreased -0.4% during October 2022 and have decreased -0.2% since June 2022
- Retail sales volumes in October 2022 were 11.0% higher than October 2021
- Compared to October 2021, segment sales increased in residential +2.5%, small medium business +23.9%, agricultural +27.4% and corporate +7.2%. Large business sales decreased -7.9%
- To date this financial year, retail sales volumes are 6.7% higher than the same period last year
- This reflects increased segment sales in: small medium business +15.5%, agricultural +13.3%, large business +16.3% and corporate +4.1%. Residential sales are -0.6% lower

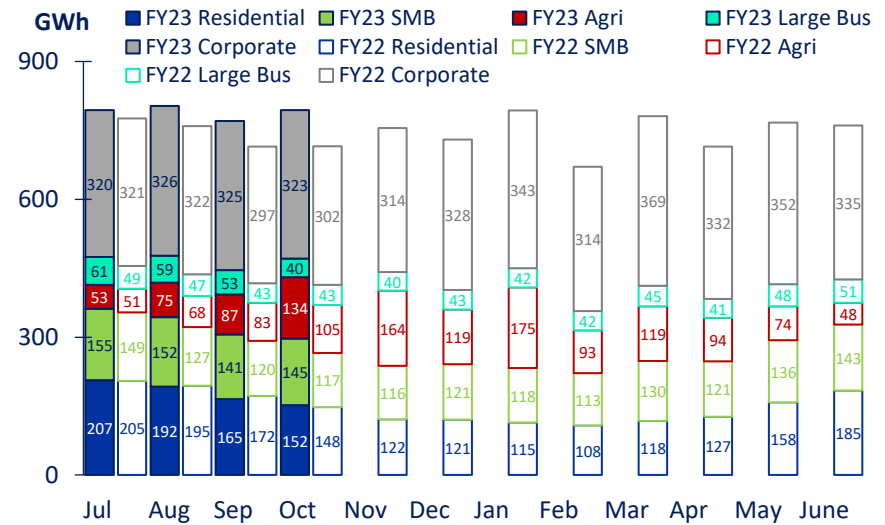
\*excludes volumes sold to New Zealand Aluminium Smelters and CFDs

## MERIDIAN'S NZ CUSTOMER CONNECTIONS



Source: Meridian

## MERIDIAN'S RETAIL SALES VOLUME\*

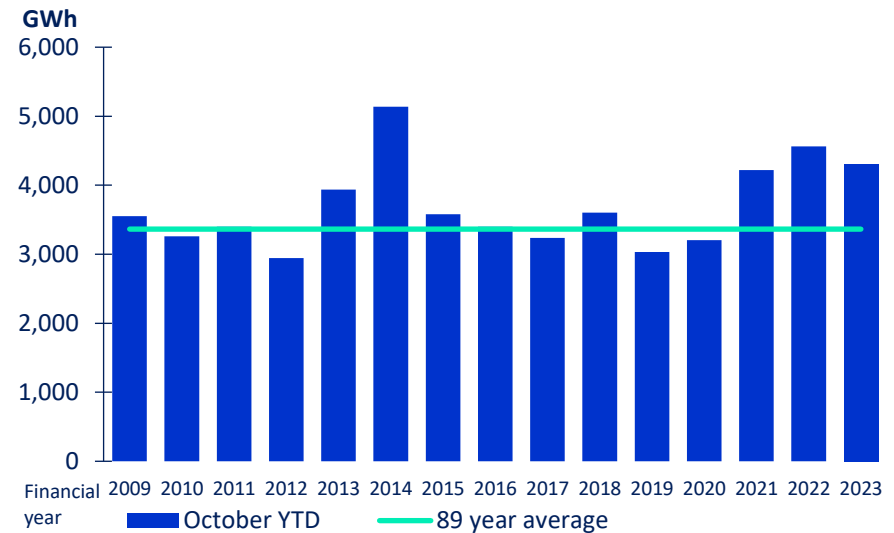


Source: Meridian

## New Zealand storage

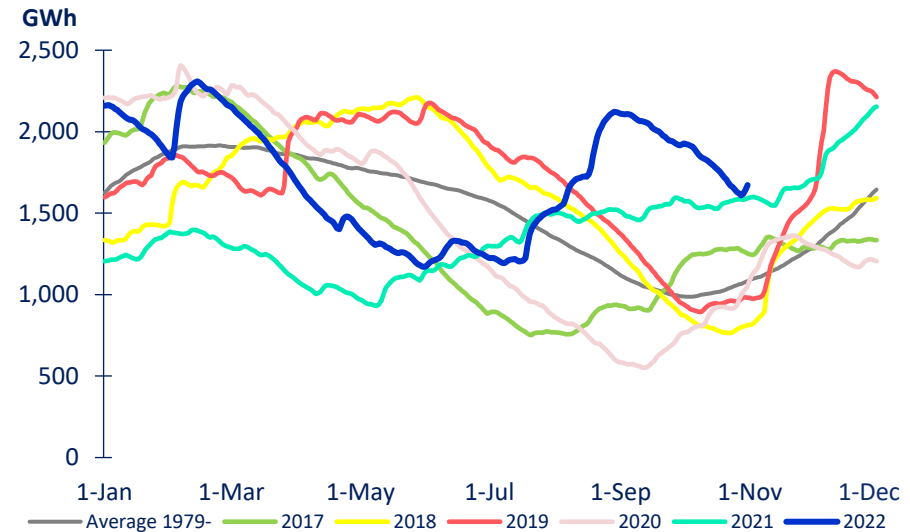
- October 2022 monthly inflows were 70% of historical average
- Waiau catchment inflows in October 2022 were lower, at 58% of historical average
- To date this financial year, inflows are 128% of historical average
- Meridian's Waitaki catchment water storage moved from 1,923GWh to 1,673GWh during October 2022
- Waitaki water storage at the end of October 2022 was 154% of historical average and 5% higher than the same time last year
- Water storage in Meridian's Waiau catchment was 73% of average at the end of October 2022
- Waitaki snow storage in late October 2022 was 109% of historical average

### MERIDIAN'S COMBINED CATCHMENT INFLOWS



Source: Meridian

### MERIDIAN'S WAITAKI STORAGE

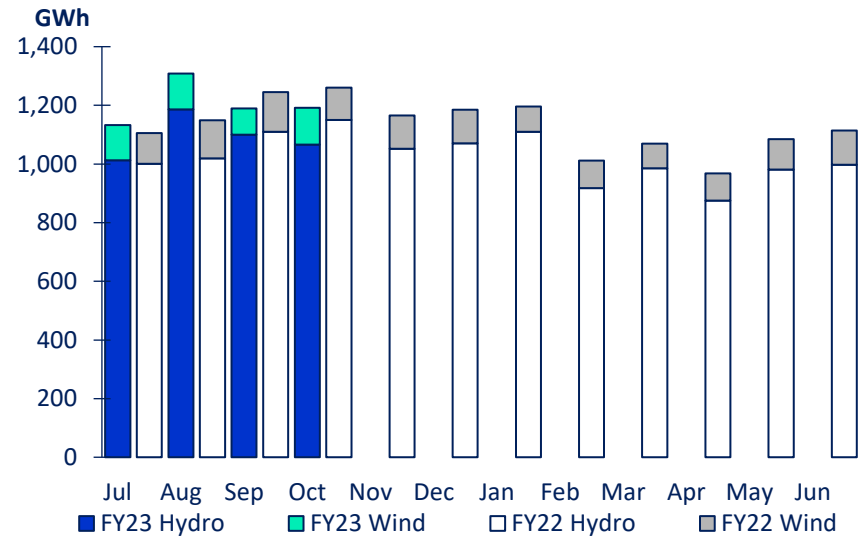


Source: Meridian

## New Zealand generation

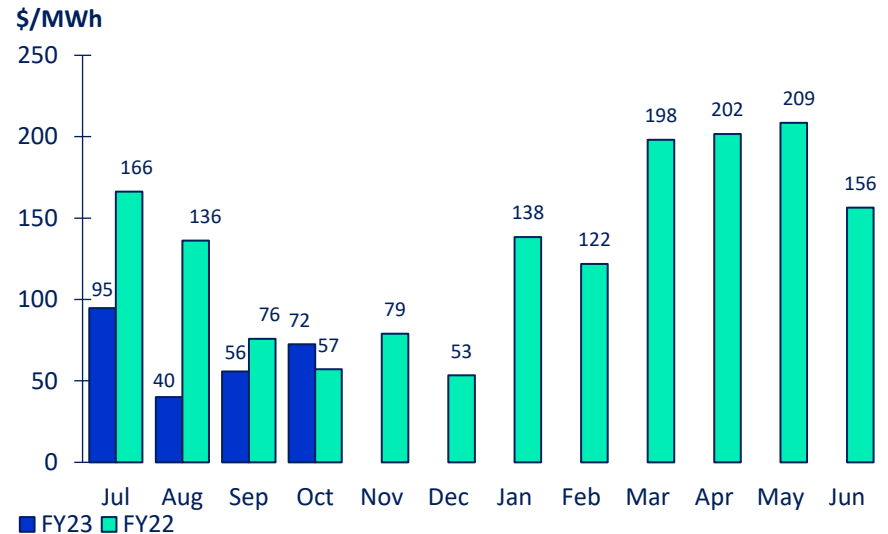
- Meridian’s New Zealand generation in October 2022 was 5.5% lower than the same month last year, reflecting lower hydro and higher wind generation
- To date this financial year, Meridian’s New Zealand generation is 1.3% higher than the same period last year, reflecting higher hydro and lower wind generation
- The average price Meridian received for its generation in October 2022 was 26.8% higher than the same month last year
- The average price Meridian paid to supply customers in October 2022 was 17.7% higher than the same month last year
- To date this financial year, the average price Meridian received for its generation is 39.2% lower than the same period last year and the average price paid to supply customers is 38.0% lower

### MERIDIAN'S NEW ZEALAND GENERATION



Source: Meridian

### MERIDIAN'S AVERAGE GENERATION PRICE\*



\*price received for Meridian’s physical generation

Source: Meridian

# New Zealand

	OCTOBER 2022 MONTH	OCTOBER 2021 MONTH	SEPTEMBER 2022 MONTH	AUGUST 2022 MONTH	4 MONTHS TO OCTOBER 2022	4 MONTHS TO OCTOBER 2021
<b>New Zealand contracted sales</b>						
Residential sales volume (GWh)	152	148	165	192	716	721
Small medium business sales volume (GWh)	145	117	141	152	593	513
Agricultural sales volume (GWh)	134	105	87	75	348	307
Large business sales volume (GWh)	40	43	53	59	213	183
Corporate and industrial sales volume (GWh)	323	302	325	326	1,293	1,242
<b>Retail contracted sales volume (GWh)</b>	<b>795</b>	<b>716</b>	<b>771</b>	<b>804</b>	<b>3,164</b>	<b>2,966</b>
Average retail contracted sales price <sup>1</sup> (\$NZ/MWh)	\$124.0	\$109.9	\$134.9	\$134.2	\$131.6	\$120.0
NZAS sales volume (GWh)	426	426	411	425	1,687	1,688
Financial contract sales volumes <sup>2</sup> (GWh)	257	374	176	281	904	1,102
Average wholesale & financial contracts sales price <sup>3</sup> (\$NZ/MWh)	\$56.5	\$62.3	\$50.5	\$60.4	\$58.3	\$69.6
Retail customer supply volumes (GWh)	847	764	823	843	3,347	3,127
Cost to supply retail customers (\$NZ/MWh)	\$82.8	\$74.6	\$64.5	\$49.1	\$76.8	\$131.8
Cost to supply wholesale customers (\$NZ/MWh)	\$70.7	\$51.2	\$49.7	\$40.2	\$64.7	\$98.4
Cost of financial contracts (\$NZ/MWh)	\$73.7	\$66.0	\$63.1	\$58.7	\$76.8	\$110.3
Total New Zealand customer connections <sup>4</sup>	364,700	355,760	366,285	366,599		

See page 10 for footnotes



# New Zealand

	OCTOBER 2022 MONTH	OCTOBER 2021 MONTH	SEPTEMBER 2022 MONTH	AUGUST 2022 MONTH	4 MONTHS TO OCTOBER 2022	4 MONTHS TO OCTOBER 2021
<b>New Zealand generation</b>						
Hydro generation volume (GWh)	1,066	1,150	1,101	1,187	4,366	4,280
Wind generation volume (GWh)	126	111	89	122	456	480
<b>Total generation volume (GWh)</b>	<b>1,192</b>	<b>1,260</b>	<b>1,190</b>	<b>1,308</b>	<b>4,822</b>	<b>4,760</b>
Average generation price <sup>5</sup> (\$NZ/MWh)	\$72.4	\$57.1	\$55.7	\$39.9	\$64.7	\$106.4
<b>New Zealand hedging</b>						
Hedging volume <sup>6</sup> (GWh)	350	327	352	425	1,555	1,301
Hedging cost average price (\$NZ/MWh)	\$103.3	\$93.6	\$116.7	\$122.0	\$119.2	\$116.2
Hedging spot revenue average price (\$NZ/MWh)	\$77.2	\$74.4	\$64.7	\$39.6	\$73.9	\$126.2
Future contract close outs (\$NZm)	\$5.4	-\$0.9	\$20.7	\$12.7	\$37.8	-\$1.4

See page 10 for footnotes

# New Zealand

	OCTOBER 2022 MONTH	OCTOBER 2021 MONTH	SEPTEMBER 2022 MONTH	AUGUST 2022 MONTH	4 MONTHS TO OCTOBER 2022	4 MONTHS TO OCTOBER 2021
<b>New Zealand costs</b>						
Employee and Operating Costs <sup>7</sup> (\$m)	21	18	20	20	80	70
Stay in Business Capital Expenditure (\$m)	3	3	4	4	14	13
Investment Capital Expenditure (\$m)	11	12	12	9	41	48
<b>Total Capital Expenditure (\$m)</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>13</b>	<b>55</b>	<b>61</b>

## Footnotes

- Contracted sales volumes and volume weighted average price received from contracted customers less distribution costs
- Derivatives sold excluding the sell-side of virtual asset swaps
- Average price of both NZAS sales volume and derivative sales volumes
- Meridian Retail and Powershop New Zealand installation control points (ICPs), excluding vacants
- Volume weighted average price received for Meridian's physical generation
- Over the counter and ASX contract volumes excluding the buy-side of virtual asset swaps
- Excludes electricity metering expenses, now reclassified into gross margin

# FY23 operating information

	Jul 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Q1 FY22	YoY change	Q2 FY22	YoY change	Q3 FY22	YoY change	Q4 FY22	YoY change
<b>New Zealand contracted sales</b>																				
Residential sales volume (GWh)	207	192	165	152									564	-8						
Small medium business sales volume (GWh)	155	152	141	145									448	+52						
Agricultural sales volume (GWh)	53	75	87	134									214	+12						
Large business sales volume (GWh)	61	59	53	40									173	+33						
Corporate and industrial sales volume (GWh)	320	326	325	323									970	+30						
<b>Retail contracted sales volume (GWh)</b>	<b>795</b>	<b>804</b>	<b>771</b>	<b>795</b>									<b>2,369</b>	<b>+119</b>						
Average retail contracted sales price (\$NZ/MWh)	\$133.3	\$134.2	\$134.9	\$124.0									\$134.1	+\$10.9						
NZAS sales volume (GWh)	426	425	411	426									1,262	-1						
Financial contract sales volumes (GWh)	190	281	176	257									647	-81						
Average wholesale & financial contracts sales price (\$NZ/MWh)	\$65.4	\$60.4	\$50.5	\$56.5									\$58.9	-\$13.5						
Retail customer supply volumes (GWh)	835	843	823	847									2,501	+138						
Cost to supply retail customers (\$NZ/MWh)	\$110.6	\$49.1	\$64.5	\$82.8									\$74.7	-\$75.6						
Cost to supply wholesale customers (\$NZ/MWh)	\$97.6	\$40.2	\$49.7	\$70.7									\$62.7	-\$51.7						
Cost of financial contracts (\$NZ/MWh)	\$120.6	\$58.7	\$63.1	\$73.7									\$78.1	-\$54.9						
<b>Total New Zealand customer connections</b>	<b>366,518</b>	<b>366,599</b>	<b>366,285</b>	<b>364,700</b>									<b>366,285</b>	<b>+11,475</b>						
<b>New Zealand generation</b>																				
Hydro generation volume (GWh)	1,013	1,187	1,101	1,066									3,300	+170						
Wind generation volume (GWh)	120	122	89	126									331	-39						
<b>Total generation volume (GWh)</b>	<b>1,133</b>	<b>1,308</b>	<b>1,190</b>	<b>1,192</b>									<b>3,631</b>	<b>+131</b>						
Average generation price (\$NZ/MWh)	\$94.7	\$39.9	\$55.7	\$72.4									\$62.2	-\$62.0						
<b>New Zealand hedging</b>																				
Hedging volume (GWh)	428	425	352	350									1,205	+231						
Hedging cost average price (\$NZ/MWh)	\$131.4	\$122.0	\$116.7	\$103.3									\$123.8	-\$0.0						
Hedging spot revenue average price (\$NZ/MWh)	\$113.0	\$39.6	\$64.7	\$77.2									\$73.0	-\$70.6						
Future contract close outs (\$NZm)	-1.1	12.7	20.7	\$5.4									32.4	+32.9						
<b>Meridian Group</b>																				
Employee and Operating Costs (\$NZ m)	19	20	20	21									80	+8						
Stay in Business Capital Expenditure (\$NZ m)	3	4	4	3									11	+1						
Investment Capital Expenditure (\$NZ m)	9	9	12	11									30	-6						
<b>Total Capital Expenditure (\$NZ m)</b>	<b>12</b>	<b>13</b>	<b>16</b>	<b>14</b>									<b>41</b>	<b>-5</b>						

# FY22 operating information

	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022	Q1 FY22	YoY change	Q2 FY22	YoY change	Q3 FY22	YoY change	Q4 FY22	YoY change
<b>New Zealand contracted sales</b>																				
Residential sales volume (GWh)	205	195	172	148	122	121	115	108	118	127	158	185	572	+70	391	+45	341	+39	470	+15
Small medium business sales volume (GWh)	149	127	120	117	116	121	118	113	130	121	136	143	396	+71	354	+55	362	+62	399	+30
Agricultural sales volume (GWh)	51	68	83	105	164	119	175	93	119	94	74	48	202	-3	387	-81	388	-88	216	-10
Large business sales volume (GWh)	49	47	43	43	40	43	42	42	45	41	48	51	140	-16	126	-7	128	-1	140	+14
Corporate and industrial sales volume (GWh)	321	322	297	302	314	328	343	314	369	332	352	335	940	+111	943	+88	1,026	+93	1,019	+51
<b>Retail contracted sales volume (GWh)</b>	<b>776</b>	<b>759</b>	<b>715</b>	<b>716</b>	<b>755</b>	<b>731</b>	<b>793</b>	<b>671</b>	<b>781</b>	<b>715</b>	<b>768</b>	<b>761</b>	<b>2,250</b>	<b>+233</b>	<b>2,202</b>	<b>+99</b>	<b>2,246</b>	<b>+105</b>	<b>2,244</b>	<b>+99</b>
Average retail contracted sales price (\$NZ/MWh)	\$122.6	\$124.0	\$123.2	\$109.9	\$109.8	\$105.2	\$111.2	\$115.5	\$116.6	\$122.8	\$128.5	\$127.0	\$123.2	+\$4.0	\$108.3	+\$3.8	\$114.4	+\$7.6	\$126.2	+\$7.2
NZAS sales volume (GWh)	426	426	411	426	412	426	426	384	426	402	418	412	1,262	+0	1,263	+0	1,236	+0	1,232	-18
Financial contract sales volumes (GWh)	197	297	234	374	280	208	280	244	249	178	203	219	728	+214	862	+376	773	+306	600	+161
Average wholesale & financial contracts sales price (\$NZ/MWh)	\$73.2	\$78.4	\$65.1	\$62.3	\$56.9	\$59.8	\$63.3	\$63.7	\$64.2	\$68.1	\$74.9	\$66.9	\$72.5	-\$3.3	\$59.8	-\$8.9	\$63.7	+\$0.9	\$70.0	-\$5.4
Retail customer supply volumes (GWh)	816	795	752	764	798	776	828	709	821	747	815	814	2,363	+246	2,337	+123	2,358	+114	2,376	+123
Cost to supply retail customers (\$NZ/MWh)	\$190.3	\$165.3	\$91.0	\$74.6	\$92.7	\$57.2	\$148.4	\$146.4	\$213.2	\$210.5	\$221.5	\$168.0	\$150.3	+\$8.4	\$75.0	-\$40.8	\$170.4	-\$53.1	\$199.7	-\$87.0
Cost to supply wholesale customers (\$NZ/MWh)	\$162.7	\$115.9	\$62.6	\$51.2	\$76.5	\$45.5	\$156.9	\$120.5	\$216.0	\$225.2	\$215.0	\$152.1	\$114.3	-\$10.9	\$57.5	-\$36.4	\$165.9	-\$45.6	\$197.3	-\$67.6
Cost of financial contracts (\$NZ/MWh)	\$159.9	\$137.5	\$104.8	\$66.0	\$78.8	\$68.2	\$160.4	\$117.0	\$180.6	\$219.0	\$207.7	\$157.1	\$133.0	+\$2.9	\$70.7	-\$34.0	\$153.2	-\$39.3	\$192.6	-\$70.9
<b>Total New Zealand customer connections</b>	<b>350,961</b>	<b>353,357</b>	<b>354,810</b>	<b>355,760</b>	<b>357,521</b>	<b>358,350</b>	<b>359,550</b>	<b>360,780</b>	<b>363,430</b>	<b>364,182</b>	<b>364,839</b>	<b>365,346</b>	<b>354,810</b>	<b>+26,208</b>	<b>358,350</b>	<b>+25,763</b>	<b>363,430</b>	<b>+25,379</b>	<b>365,346</b>	<b>+18,516</b>
<b>New Zealand generation</b>																				
Hydro generation volume (GWh)	1,000	1,020	1,110	1,150	1,052	1,071	1,110	918	986	876	982	998	3,130	+372	3,273	+119	3,014	+298	2,855	+185
Wind generation volume (GWh)	105	129	135	111	114	114	86	94	84	93	104	116	370	-16	339	-40	264	-23	313	-31
<b>Total generation volume (GWh)</b>	<b>1,105</b>	<b>1,149</b>	<b>1,245</b>	<b>1,260</b>	<b>1,166</b>	<b>1,185</b>	<b>1,196</b>	<b>1,012</b>	<b>1,070</b>	<b>968</b>	<b>1,085</b>	<b>1,114</b>	<b>3,499</b>	<b>+356</b>	<b>3,612</b>	<b>+79</b>	<b>3,278</b>	<b>+275</b>	<b>3,168</b>	<b>+154</b>
Average generation price (\$NZ/MWh)	\$166.2	\$136.1	\$75.8	\$57.1	\$78.9	\$53.4	\$138.4	\$121.8	\$198.1	\$201.5	\$208.5	\$156.4	\$124.1	-\$2.3	\$63.0	-\$38.2	\$152.8	-\$58.0	\$188.0	-\$79.7
<b>New Zealand hedging</b>																				
Hedging volume (GWh)	394	325	255	327	332	346	404	421	459	438	353	324	975	+122	1,004	+141	1,283	+195	1,115	+35
Hedging cost average price (\$NZ/MWh)	\$129.6	\$121.5	\$117.7	\$93.6	\$94.8	\$109.3	\$104.1	\$117.0	\$120.0	\$127.8	\$134.6	\$136.7	\$123.8	+\$18.5	\$99.4	+\$5.2	\$114.0	-\$1.2	\$132.6	+\$17.2
Hedging spot revenue average price (\$NZ/MWh)	\$164.1	\$140.7	\$115.6	\$74.4	\$88.3	\$69.2	\$168.3	\$138.8	\$205.9	\$197.5	\$217.2	\$161.2	\$143.6	+\$13.4	\$77.2	-\$32.5	\$172.1	-\$55.1	\$193.2	-\$68.0
Future contract close outs (\$NZm)	-0.7	0.1	0.2	-0.9	0.2	-0.1	-5.1	-1.5	10.0	-6.4	2.3	10.9	-0.5	+5.9	-0.8	+2.8	3.3	+13.0	6.8	+0.8
<b>Meridian Group</b>																				
Employee and Operating Costs (\$NZ m)	16	17	18	18	20	8	15	18	21	19	21	25	51	+3	46	-3	54	+7	65	+1
Stay in Business Capital Expenditure (\$NZ m)	3	3	4	3	6	2	-1	4	4	3	3	6	10	+1	11	+2	6	-2	13	+1
Investment Capital Expenditure (\$NZ m)	9	4	23	11	17	6	9	8	6	19	13	9	36	+25	34	+28	23	-14	41	+31
<b>Total Capital Expenditure (\$NZ m)</b>	<b>12</b>	<b>7</b>	<b>27</b>	<b>15</b>	<b>24</b>	<b>7</b>	<b>8</b>	<b>11</b>	<b>10</b>	<b>22</b>	<b>16</b>	<b>15</b>	<b>46</b>	<b>+26</b>	<b>46</b>	<b>+30</b>	<b>29</b>	<b>-16</b>	<b>54</b>	<b>+33</b>

# Glossary

Hedging volumes	buy-side electricity derivatives excluding the buy-side of virtual asset swaps
Average generation price	the volume weighted average price received for Meridian’s physical generation
Average retail contracted sales price	volume weighted average electricity price received from retail customers, less distribution costs
Average wholesale contracted sales price	volume weighted average electricity price received from wholesale customers (including NZAS) and financial contracts
Combined catchment inflows	combined water inflows into Meridian’s Waitaki and Waiau hydro storage lakes
Cost of hedges	volume weighted average price Meridian pays for derivatives acquired
Cost to supply contracted sales	volume weighted average price Meridian pays to supply contracted customer sales and financial contracts
Contracts for Difference (CFDs)	an agreement between parties to pay the difference between the wholesale electricity price and an agreed fixed price for a specified volume of electricity. CFDs do not result in the physical supply of electricity
Customer connections (NZ)	number of installation control points, excluding vacants
GWh	gigawatt hour. Enough electricity for 125 average New Zealand households for one year
Historic average inflows	the historic average combined water inflows into Meridian’s Waitaki and Waiau hydro storage lakes over the last 85 years
Historic average storage	the historic average level of storage in Meridian’s Waitaki catchment since 1979
HVDC	high voltage direct current link between the North and South Islands of New Zealand
ICP	New Zealand installation control points, excluding vacants
ICP switching	the number of installation control points changing retailer supplier in New Zealand, recorded in the month the switch was initiated
MWh	megawatt hour. Enough electricity for one average New Zealand household for 46 days
National demand	Electricity Authority’s reconciled grid demand <a href="http://www.emi.ea.govt.nz">www.emi.ea.govt.nz</a>
NZAS	New Zealand Aluminium Smelters Limited
Retail sales volumes	contract sales volumes to retail customers, including both non half hourly and half hourly metered customers
Financial contract sales	sell-side electricity derivatives excluding the sell-side of virtual asset swaps
Virtual Asset Swaps (VAS)	CFDs Meridian has with Genesis Energy and Mercury New Zealand. They do not result in the physical supply of electricity