Introductory Briefing for Incoming Ministers

Mark Verbiest – Chair
Neal Barclay – Chief Executive
November 2023

Contents

About Meridian

Meridian is an integrated electricity generation and retail company.

We are the largest company on the NZX and employ over 1000 people across New Zealand.

Meridian is majority owned (51%) by the Government and legislation precludes any other significant (>10%) shareholders.

We are New Zealand's largest generator:

- Committed to generating energy from 100% renewable sources: **wind, water, sun**
- 7 hydro stations (Manapōuri and six within the Waitaki Scheme)
- 5 wind farms, and another being built (Harapaki in Hawke's Bay)
- Commercial solar
- Supplying around 30% of New Zealand's total electricity needs.

About Meridian

We retail to over 363,000 customer connections under the Meridian and Powershop brands.

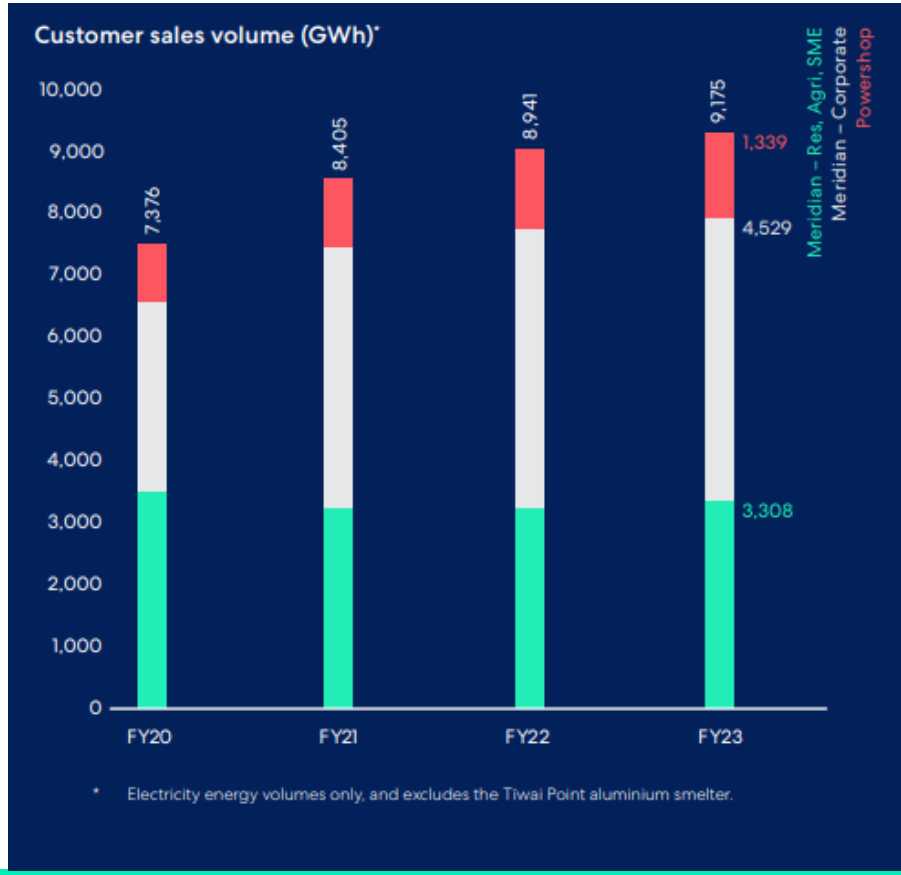
Meridian is the fastest growing large electricity retailer by share of customers over the past five years (ignoring Mercury's acquisition of Trustpower). Our growth is even more pronounced on a MWh basis as we are weighted towards larger customers.

In 2022 we sold our Australian business for A$740 million, realizing a NZ$214 million accounting profit. This allows us to focus on New Zealand investments.

Our Flux subsidiary builds software and brands for energy retail companies around the world.

Our electricity generation typically exceeds the amount consumed by our residential customers. We also enter financial agreements hedging the wholesale price exposure of large industrial consumers like the aluminium smelter and other retailers.

We also purchase financial products to manage our exposure to spot prices in dry periods when we cannot generate as much.



Development pipeline

Meridian has an ambitious, 4.7 GW pipeline of renewable energy infrastructure options and a set goal of having seven large-scale new renewable generation projects underway around Aotearoa by 2030 (what we are calling '7 in 7'). These include:

- **Harapaki Wind Farm** in Hawke's Bay. When completed this will be the second largest wind farm in Aotearoa powering up to 70,000 households. First power was produced in November this year and we expect to achieve full power in September 2024.
- **Ruākākā Energy Park** in Northland. The first stage is a 100MW battery the size of two rugby fields, which will provide additional reserve power and resilience to the national grid. The next stage will be a utility-scale solar farm on the same site.
- **Mt Munro Wind Farm** in northern Wairarapa. Resource consent application was lodged in May this year for a wind farm capable of producing enough energy annually to supply up to 42,000 households.

We also need to maintain our existing generation and resource consents. We recently lodged an application to reconsent the Waitaki scheme (New Zealand's largest hydro scheme and the majority of national storage).

Resource management framework

- Meridian supports the new Government's policy to repeal the Natural and Built Environment Act 2023 and the Spatial Planning Act 2023 and amend the Resource Management Act 1991 to make it easier to consent new infrastructure including renewable energy.
- Meridian was concerned that the transition to a new regime would increase uncertainty and make consenting and reconsenting renewable generation more challenging in the short term. This had the potential to be an impediment to the delivery of Meridian's ambitious generation development pipeline.
- To meet the needs of a decarbonising economy, the market consensus seems to be that the sector will need to build the equivalent of three to four medium-sized wind farms every year for the next 27 years. The consenting framework must enable this to occur at the required pace.
- There are adjustments that can be made to national direction under the RMA to better support and accelerate the consenting and reconsenting of renewable generation. The new Government's policy to establish a fast-track one-stop-shop consenting and permitting process for regional and national projects of significance could also assist.
- The sector has previously provided MBIE with a submission on detailed proposals to strengthen the National Policy Statement on Renewable Electricity Generation.
- Meridian would also support further changes to the RMA, such as increased consent durations and the elevation of emissions reductions and renewable electricity infrastructure to matters of national significance in Part 6 of the Act.
- RMA reform is of paramount importance to the electricity industry, and - by extension - end-consumers and New Zealand's decarbonisation objectives. Any reform ought to deliver genuine and tangible increases in the rate of consenting and reconsenting renewable electricity generation – otherwise it presents only an uncertainty and potential obstacle.

Meridian's electrification programme and climate action

- Meridian's Process Heat Electrification Programme helps large industrial customers switch from coal or gas to electricity. Agreements have been signed with Mataura Valley Milk, Alliance Group, Woolworks, ANZCO Foods Canterbury and Meadow Mushrooms together reducing around 130,000 tonnes of CO2e – the equivalent of a 60,000 cars annually. Further agreements are imminent.
- Meridian is investing in a nationwide network of EV chargers. These make EVs more appealing to motorists by helping to eliminate 'charging deserts'. We already have 237 of our Zero EV charge points available at convenient locations around Aotearoa and over 200 further points committed for installation.
- Demand response options help to reduce the need for fossil-fueled peaking. Meridian has 50 MW of instantaneous demand response available from the aluminium smelter, and further flexibility is available in a dry year. Meridian is actively working with its large customers to develop further demand response capacity, and has recently reached agreement for 27 MW instantaneous capacity with a large dairy processor.
- Meridian has committed to halve its gross emissions by 2030 – this includes all scope 1, 2 and 3 emissions. We do not have many direct emissions ourselves, over 95% of our emissions are scope 3 emissions from our supply chain. Meridian has been net zero carbon since 2019.
- We have converted all the light passenger vehicles in our fleet to electric.
- Meridian is a leader on climate-related financial disclosures. We have been making disclosures since 2019, well in advance of the new legislation mandating climate-related financial disclosures.

Emissions reduction policies

- Meridian considers the ETS to be the best policy tool to reduce greenhouse gas emissions in New Zealand and to enable the achievement of emissions targets and budgets. However, to be effective, the ETS must operate economy-wide and be calibrated to limit unit availability over time in line with targets and send increasingly strong price signals to reduce emissions.
- The Government should resist central planning type policy interventions where possible and rely on price signals, except where a failure of emissions pricing is identified. For example, emissions prices alone are not likely to be sufficient to incentivize the electric vehicle uptake needed to meet New Zealand's emissions targets. This is because:
  - meeting emissions targets requires low emissions vehicle purchase decisions now since vehicles entering the national fleet now will lock in their associated emissions for the next 30 years; and
  - emissions costs currently make up a relatively small portion of overall transport costs and, even if emissions prices increase significantly, consumers are likely to remain more motivated by the upfront capital costs of purchasing a vehicle rather than the whole of life costs including fuel, emissions, and maintenance costs.
- Meridian also supports measures to accelerate the roll-out of public charging infrastructure and improve the short-term economics of industrial decarbonization (until such time that emissions prices alone incentivize change).

The sector is well placed to deliver electricity generation investment

- The design of the wholesale electricity market sends the right incentives for investment in electricity generation to deliver a secure and reliable electricity supply at least cost to consumers.
- Just over 90% of New Zealand's electricity generation was from renewable sources in the four-quarter moving average to June 2023. Recent and planned investments in renewable generation are expected to lift that to around 96% renewable generation within a decade without any intervention.
- In previous years, electricity emissions represented only 6% of national emissions. That portion will quickly reduce as renewable investment occurs and baseload fossil-fuelled generation retires. The majority of energy related emissions are from transport and industrial process heat, not electricity generation.
- Meridian agrees with the Climate Change Commission that electrification of the national economy should be the primary focus to deliver substantial reductions in emissions. Government actions to prematurely squeeze remaining emissions out of the electricity sector would:
    - come at significant cost to taxpayers and/or consumers;
    - not achieve significant emissions reductions for the cost; and
    - be a step backwards if it pushed up electricity prices or reduced security of supply and therefore slowed electrification of the economy.
- The new Government's policy to cease work on the Onslow pumped hydro scheme should further improve investor confidence, particularly for private investment in peak capacity and dry year solutions.
- Analysis by the Boston Consulting Group estimates that $12.1 billion of private investment in new electricity generation will be required between now and 2030. The most immediate need is for investment in resources that can respond quickly to peak capacity needs (e.g. grid-scale batteries, gas peaking generation, and demand response).
- Meridian is investing in large scale demand response and a grid-scale battery in Northland. However, in the short-term, continuing to deliver a secure and low-cost electricity supply may also require investment in fast-start gas peaking generation and the upstream gas supply and flexible storage to support that generation.

Meridian's actions to support a secure supply of electricity in 2024

- The market experienced tight supply and demand conditions during Winter 2023 as peak demand increased.
- While there is plenty of generation capacity in the market, much of the existing thermal generation is slow-start and may struggle at to respond to peak price signals in a timely fashion.
- Underlying the peak capacity concerns is a lack of investment in peak capacity solutions over several years due (at least in part) to the threat of a large Crown investment in a pumped hydro scheme in the mid-2030s. Parties like Nova have said publicly that they would not go ahead with consented gas peaking developments while the threat of Crown intervention remains high.
- In the absence of such threats, we believe existing market signals send the right incentives for investment to deliver security of supply at least cost to consumers.
- The peak capacity challenge is certainly front of mind for everyone in the sector. For our part Meridian is:
    - investing in a 100MW battery at Ruakākā in Northland (commissioning expected in September 2024);
    - moving planned generation plant outages so that we maximise plant availability during winter;
    - making incremental increases in the peak capacity of existing hydro generation units at Benmore and Manapōuri power stations;
    - investing in intermittent renewable generation like the Harapaki and Mount Munro wind farms which will help meet peak demand when the wind is blowing;
    - investigating short term demand response options with the Aluminium Smelter as part of negotiations for a new electricity supply contract; and
    - in the longer term, working on a Southern Green Hydrogen facility that will operate extremely flexibly and will be able to offer both dry year and peak capacity back to the market.
- The Electricity Authority has also already implemented several improvements to enable better informed plant commitment decisions and is considering a new extended reserve service. Meridian supports this work.

New Zealand's Aluminium Smelter (NZAS)

- Meridian holds the contract to hedge the wholesale electricity price exposure of the smelter at Tiwai Point.
- NZAS announced in July 2020 that they would be closing. Meridian then negotiated a contract to extend the date of closure for four years.

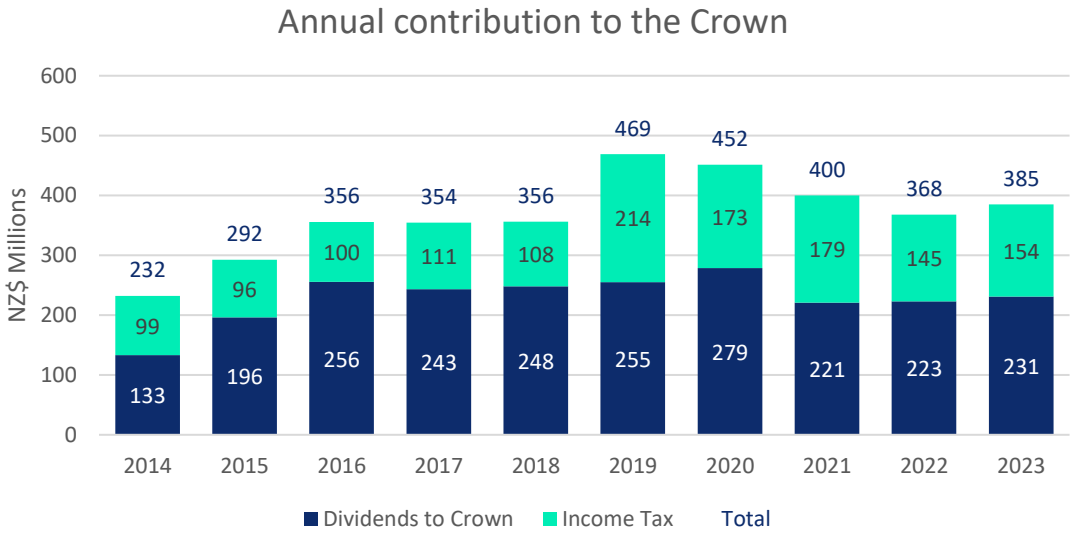
- This contract expires at the end of December 2024, although NZAS has announced that they see a pathway to continuing operations.
- Meridian has consistently said that before we would entertain a new contract with NZAS they will need to:
  1) be willing to pay a sustainable price;
  2) make a long-term commitment to New Zealand;
  3) be willing to provide sufficient flexible demand response to assist in managing dry year risk; and
  4) commit to environmental remediation of the smelter site.
- In April 2023 Meridian entered into a new demand response agreement with NZAS, which enables us to call on the smelter to reduce consumption by up to 50MW to reduce pressure on the electricity system. This demand response agreement is in place for 2023 and 2024 and has been approved by the Electricity Authority. Ultimately it helps to ensure that NZ will burn less coal by ensuring that Meridian's renewable power is available when demand peaks.

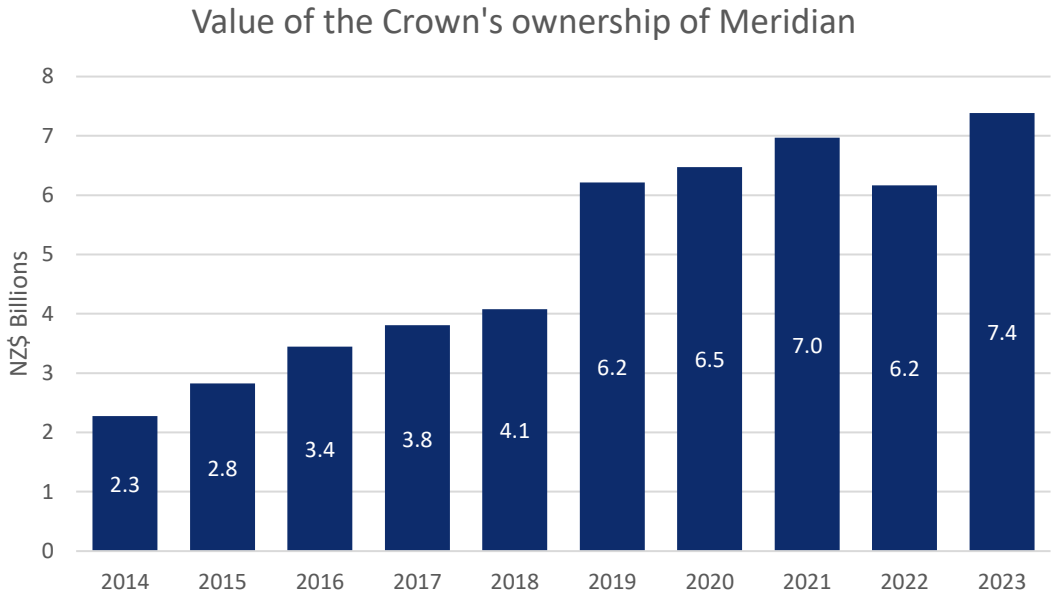
Southern Green Hydrogen

- Meridian, with the support of Ngāi Tahu, has selected Woodside Energy as the preferred partner to move forward to the development stage of the proposed Southern Green Hydrogen project in New Zealand.
- Mitsui & Co. is also in discussions to join the project and develop the potential market for ammonia offtake, with the aim of creating a world-class collaboration that covers the full hydrogen and ammonia supply chain.
- Any scenario with both aluminium and hydrogen production in Southland (i.e. an increase in existing demand) would be contingent on simultaneous renewable generation development and there are many development opportunities in the South Island.
- A key challenge for the future electricity system to overcome is the need for flexible resources that can alter their supply or demand in harmony with the electricity system to manage dry years without reliance on fossil fuels and ensure peak capacity is available on cold, dark, windless winter evenings.
- The electrolysis process to produce hydrogen is extremely flexible and can quickly and easily ramp electricity consumption up and down. The economics of any investment in hydrogen production in Aotearoa are finely balanced and we consider the key factor to be this flexibility. Financially rewarding that flexibility can reduce the total energy cost and make hydrogen production in New Zealand commercially viable.
- Our modelling indicates that flexible hydrogen production on this scale, combined with other dispatchable demand opportunities, and renewable spill can deliver 99 to 100 percent renewable electricity generation at no additional cost to taxpayers or electricity consumers.
- A green hydrogen plant would be a valuable addition to the Southland economy, creating jobs, supporting services, export earnings, and tax revenue for the Crown.

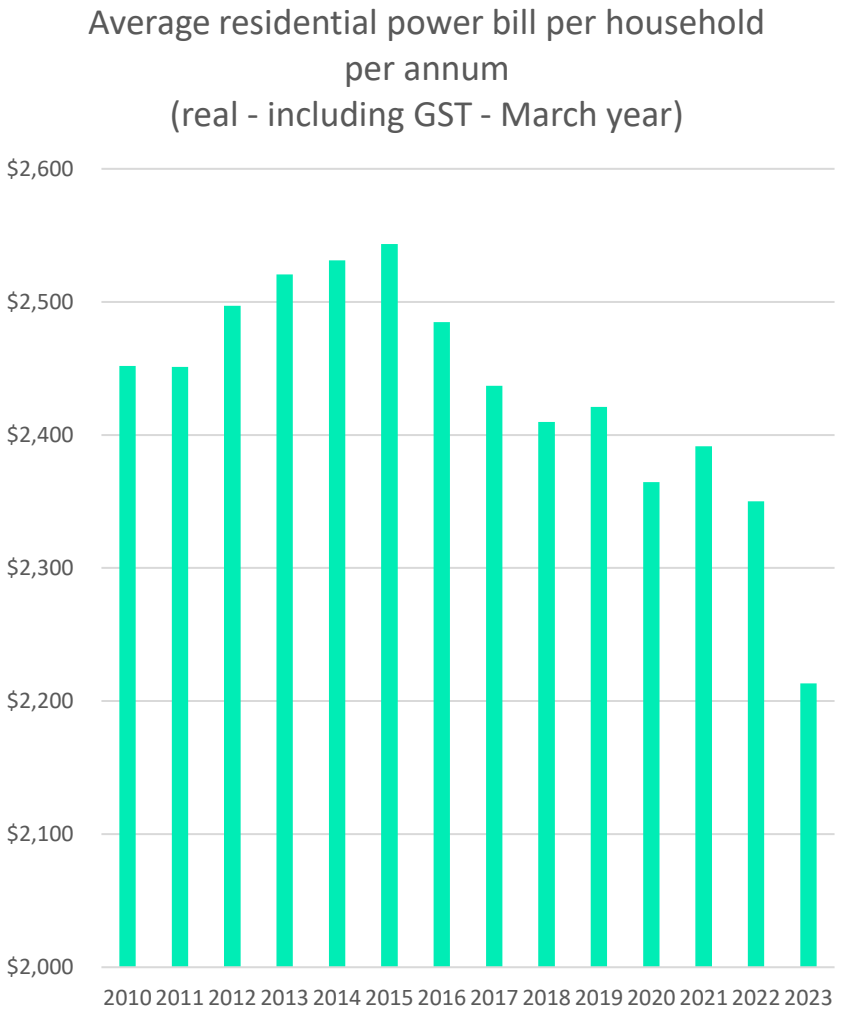
Meridian performance

- In the 2023 financial year:
  - Meridian Group EBITDAF increased by 10% on the prior year to $783 million.
  - Meridian reported underlying net profit after tax for the Group of $315 million, up 35% on the prior year.
  - Meridian paid $385 million to the Crown in the form of dividends and income tax.
- Meridian's share price (and therefore the value of the Crown shareholding) has performed well.





Electricity prices and competitive markets



New Zealand has one of the world's most competitive electricity markets.

There are now 38 different retailers (44 brands) compared to just 7 in 2006. Small and medium-sized retailers have a bigger market share than at any other time in New Zealand's history.

Competition is keeping prices low. The average annual power bill has been decreasing in real terms (CPI adjusted), now at $2213—the lowest it has been in over a decade. Average prices compare well with other countries with New Zealand in the lower quartile of the OECD.

New Zealand has an energy system consistently ranked one of the best in the world across measures of sustainability, security, and equity. The World Energy Council ranks our energy sector number eight in the world – the only country outside of Europe and North America in the top ten.

Source: MBIE