

# Climate Action Plan

Our purpose

Meridian’s purpose of **Clean energy for a fairer and healthier world** is at the centre of everything we do on our journey to a resilient, net zero future.

Our priorities

Renewable generation

Customer decarbonisation

Managing our emissions and ensuring resilience



Our key initiatives

**Renewable energy development pipeline**

Creating a pipeline of grid-scale projects ready for construction. First horizon “7x7” focused on 7 projects in the 7 years to 2030.

**Construction of new generation assets**

Beginning with Harapaki wind farm, we’re building new assets to increase supply from our existing 100% renewable energy asset base.

**New opportunities – hydrogen**

Advancing a new partnership opportunity to develop a green hydrogen centre to support decarbonisation in Aotearoa and abroad.

**Process heat**

Helping businesses replace fossil fuel boilers with electrode boilers and heat pumps.

**Electric vehicles and charging network**

Making it easier for NZers to drive electric.

**Demand flexibility**

Playing our part in creating a more flexible energy system that enables smarter use of electricity and widespread electrification.

**Construction emissions**

Reducing emissions as we build new generation assets, and our new offsetting commitment

**Half by 30\***

Our science-aligned gross emissions reduction target for Scope 1, 2 and 3 operational emissions. Halving total emissions by FY30 on a FY21 baseline.

**Forever Forests**

Our nature based response to grow a permanent, and over time 100% native, emissions sink.

**Climate risk and adaptation**

Our continued commitment to assess and manage our climate-related risks, including adaptation.

These key initiatives align with our commitment to contribute meaningfully to the United Nations (UN) Sustainable Development Goals (SDGs) where we can have most impact – such as SDG13 Climate Action. See our **Sustainability Policy** for further detail. Where we can’t reduce our operational emissions right now, we offset using Gold Standard Verified Emission Reductions and have done since FY19

\* Meridian’s operational emission boundary includes all Scope 1, 2 and 3 categories, excluding all one-time construction emissions from major projects and all activities that are capitalised as part of renewable energy projects. From our FY21 baseline (excluding Meridian Australia).

# Meridian's purpose of Clean energy for a fairer and healthier world is at the centre of everything we do.

## We take action to help Aotearoa transition to low-emissions, climate-resilient future so people, communities, businesses and our planet can survive and thrive.

The impacts of our changing climate are being felt today and the urgency to act has never been greater. Meridian continues to focus on making a material and positive impact to a net zero future, and ensuring we play our role in achieving a fair, equitable and inclusive transition.

### About this Climate Action Plan

This Climate Action Plan is about the action we're taking now and in the future to build our resilience to the impacts of climate change and readiness for a net zero world, and help achieve emissions reductions and system change across multiple sectors. Our Climate Action Plan is updated each year, so it reflects our strategy and actions informed by the most up-to-date data, knowledge and lessons.

To ensure we are on track, we have targets across our Climate Action priorities – Renewable generation, Customer Decarbonisation, Managing our emissions and ensuring resilience. We regularly monitor and share our progress against these targets.

This year our Climate-related Disclosure aimed for early voluntary alignment with the with new Aotearoa New Zealand Climate Standard. This builds on our voluntary Task Force on Climate-related Financial Disclosures since 2019 and helps identify and monitor climate-related risks and opportunities for Meridian.

We recognise that climate change is not going to be solved by one company, one person or one community. As the climate changes we will all need to change – in practice this means plan and prepare based on what we know today, and be ready to learn and adapt as we go.

### How we take action matters

- We take action to support an equitable transition to net zero, further mature our approach to climate change adaptation, and create enduring partnerships while achieving wider social and environmental outcomes
- We positively support the wellbeing of communities living close to generation assets. As we build our development pipeline, we create employment for local communities and invest in the region.
- We take action to support tangata whenua to be active kaitiaki of the lands and natural resources on which our business is based. As an organisation, we are building our cultural capability and are committed to developing trusted and mutually-beneficial relationships with iwi and hapu in the communities in which we operate.
- We are making it easier and more affordable for customers to access new energy solutions which provide and demand flexibility opportunities that reduce costs for electricity users over the longer-term.
- We help protect people and the planet as we buy products and services to operate and grow our business. Our participation in the United Nations Global Compact is one example of our commitment to continually improve our ethical sourcing practices.



# Renewable generation

Building on our existing 100% renewable energy generation base, our team is focused on accelerating the delivery of new renewable options.

## Renewable energy development pipeline

We are committed to investing in and growing New Zealand’s renewable energy generation capacity. Our 7x7 target involves delivering 7 new renewable energy construction projects in 7 years. Our current renewable generation capacity is 2.8GW and we have a pipeline options that will increase capacity by 1.0GW (or 36% of current capacity) by 2030 and a deep pipeline of 4.7GW (or 168% of current capacity) of advanced prospects that might start by 2050. This includes 200MW of grid scale battery capacity.

## Construction of new generation assets

Already, we are pleased to have begun construction at two sites. In August 2021, construction work began at our new Harapaki wind farm in the Hawke’s Bay, and in March 2023, work began at our Ruakākā Energy Park in Northland. The Energy Park includes the development of a 120MW+ solar farm, and the commissioning of our 100MW/200MWh Battery Energy Storage System (BESS) before the end of Q1 FY25.

As we build our assets, we put in place tangible measures at the project level to meaningfully contribute to local communities. We set requirements for our projects to measurably increase economic benefits, such as through:

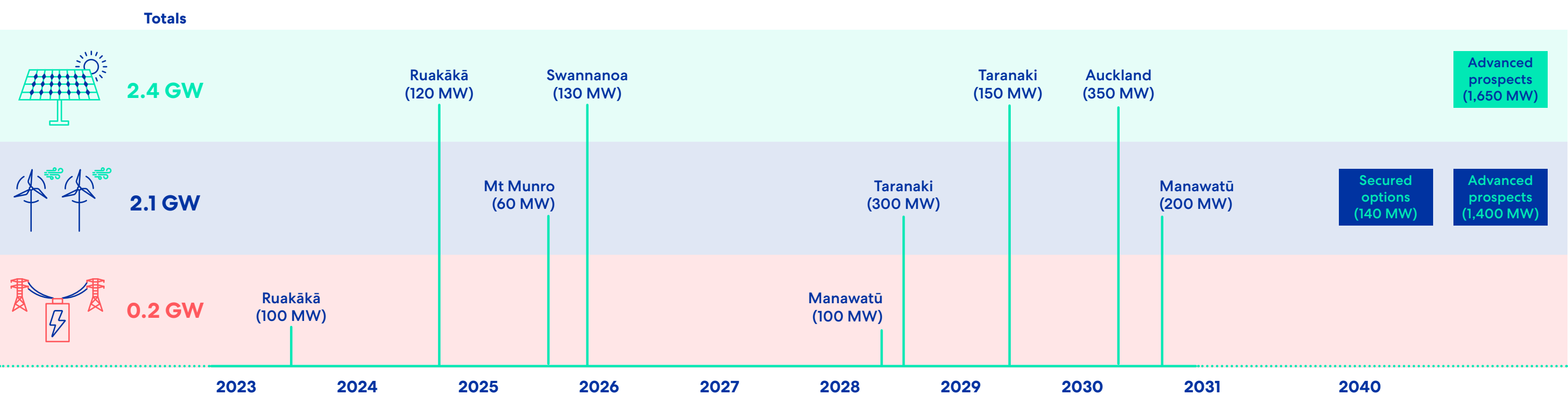
- local employment opportunities and investment
- working with iwi at our development sites
- supporting community-led initiatives through our Power Up Fund.

## New opportunities – hydrogen

The Southern Green Hydrogen project continues to progress, with the project proposing to produce up to 500,000 tonnes of green ammonia per annum. The negotiations to formalise the joint venture agreement between Woodside, Mitsui, and Meridian are nearing completion. This whole of life agreement will establish the principles by which the project is developed, constructed, and operated. Product marketing will initially focus on those international markets that see green ammonia as an important product for decarbonisation, with due consideration for the domestic market as and when that market has developed the necessary use cases and volumes.

This year we signed a Memorandum of Understanding (MOU) with key southern Ngāi Tahu Rūnanga, which will see us work together across a number of projects in the Murihiku/Southland region around green energy.

## Meridian’s development pipeline



### Building Resilience Spotlight

For our Battery Energy Storage System, Meridian is constructing an asset with resilience for a 1/1000yr flood event which goes above and beyond standard district council resource consenting requirements. We are also beginning to assess development options against potential climate impacts associated with Meridian’s climate scenarios, assessing hazards such as extreme rainfall and flooding.



# Customer decarbonisation

We are committed to helping reduce the carbon emissions of homes and businesses by developing and delivering products that help to make the energy transition.

## Process heat electrification

Our process heat electrification offer helps our customers to get off coal. By providing long term competitive price certainty and funding support plus partnering with businesses to develop transition plans and access co-funding, we’re supporting businesses to transition to low carbon fuel sources.

## Electric vehicles

Meridian is rolling out a nationwide EV Charging network called Zero to support the uptake of electric vehicles. Our home and business charging solutions support the much-needed uptake of private smart charging.

## Commercial scale solar

We support our large customers with commercial-scale solar solutions. We offer payment flexibility with a buy-now option or customers can choose a Power Purchase Agreement with no upfront capital costs and where we’ll design, install and maintain a solar system for you.

## Demand Flexibility

In our efforts to decarbonise Aotearoa by electrifying industry and transport, the demand for electricity is growing. With much of our energy supply reliant on intermittent renewable generation, this puts pressure on our electricity system. Demand Flexibility is about being smart with how and when we use electricity to enable a cost-effective decarbonisation journey – that still meets all our electricity needs. By working smartly with EV chargers, industrial heat processes, solar, batteries, hot water cylinders and our customers, we are creating market leading demand flexibility products enabled through a Virtual Power Plant and making things simple for customers to maximise uptake.

## Certified Renewable Energy

Meridian’s Certified Renewable Energy product enables customers to match their electricity consumption with our renewable energy generation through Renewable Energy Certificates and report their market-based Scope 2 emissions as zero. Net proceeds from Renewable Energy Certificates are then invested into our Decarbonisation Fund.

## Decarbonisation Fund

This Fund has been established to reinvest all net proceeds from RECs back into either business or community-led decarbonisation projects that reduce emissions and increase distributed generation. Community groups can apply for funds to help with the cost of purchasing EVs, installing EV charging, or adding solar panels to help lower energy bills.

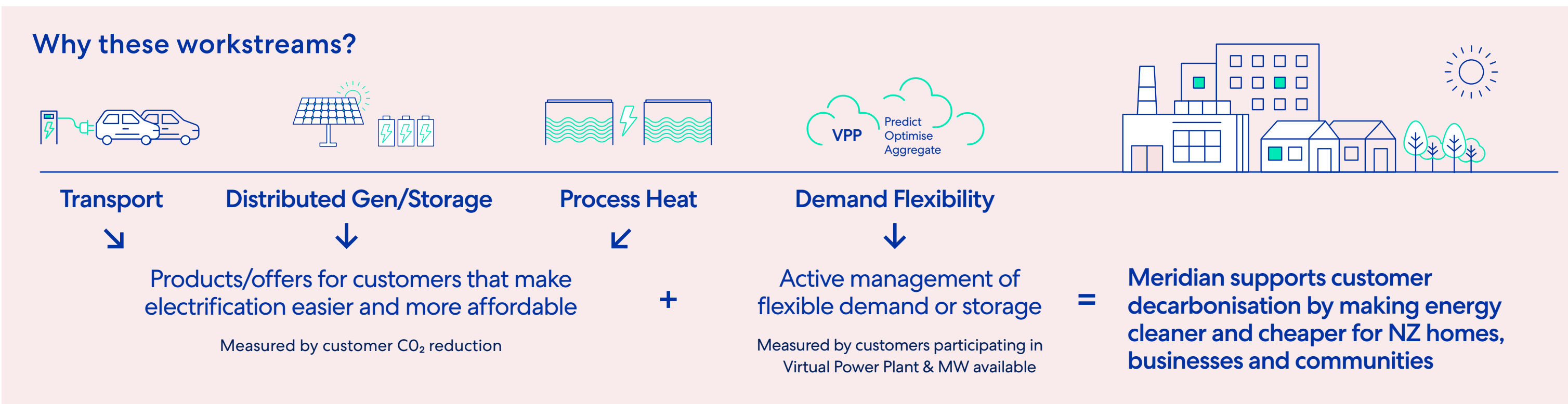
## Building Resilience Spotlight

An increase in uptake of distributed energy resources, such as, solar and batteries deployed at the source of the demand such as at homes or within the community, could provide the opportunity to build resilience in the event of extreme weather events.

## Our longer-term approach

We have a new team focused on Energy Innovation in our Retail business unit to help us better leverage climate-related opportunities. In 2024 we look forward to sharing our longer-term approach to targets and metrics that focus on our progress helping our customers lower their emissions and how we create more flexibility in the New Zealand power system.

We’re taking action to ensure customers can participate in the transition to net zero, without widening the gap for vulnerable customers or those facing energy hardship. This year we launched the Energy Wellbeing Programme to a pilot group of vulnerable customers to reduce the impact of four key drivers of energy hardship. In FY24 we will also be making it easier for customers to purchase EV chargers by making it possible for them to pay the costs back through their energy bill.





# Managing our emissions and ensuring resilience

Our priority is to reduce our own emissions and ensure we are prepared for the impacts of climate change. Where we can't reduce right now we offset, and are growing our own carbon sink to maintain a direct relationship with the atmosphere through our Forever Forests programme.



With our growing pipeline of development projects, we adopt an ‘always on’ carbon reduction mindset. In FY23 construction emissions accounted for about one quarter of our total emissions footprint – or 13,000 tonnes CO<sub>2</sub>e (tCO<sub>2</sub>e). How we build matters.

We know we can minimise the emissions from our construction activities and how important it is to decouple the growth of our development pipeline with growth in associated emissions – both during construction as well as operational life of our assets. Our priority remains to reduce emissions first. But in FY23 we were proud to adopt an expanded commitment to offset 100% of our business emissions, now including one-off construction emissions from renewable energy generation projects.

Our Harapaki Wind Farm is setting a new standard for the low-carbon design, construction and operation of wind farms across Aotearoa. In 2023 we introduced guidance for sustainable construction across our business to capture and build on the lessons from Harapaki so they can be applied to future projects, such as the Ruakākā battery project, and beyond.

So far we estimate Harapaki has reduced its emissions by between 15,000 and 20,000 tCO<sub>2</sub>e, with half of that coming from on-site actions during construction as result of an innovate-as-we-go approach. The other half of reduction comes from the design process, such as through reducing concrete and steel use. We also set sustainability key performance indicators relating to carbon impact reports, waste diversion, transport emissions targets and the delivery of continuous improvement initiatives.

## Building Resilience Spotlight

We are developing a standard design brief for operations and maintenance buildings and switch rooms – two structures which are common across our development sites. This will provide a ‘best practice’ starting point for future builds where resilience requirements are designed in early and consistently, and can be adapted as needed to reflect local environment considerations and geotechnical findings.





# Managing our emissions and ensuring resilience



Half by 30 is Meridian’s commitment to halve our operational emissions 2030. It includes underlying targets to halve Scope 1 and 2 emissions (i.e. those within our direct control), and halve Scope 3 emissions (i.e. those within our supply chain), where the majority of our operational emissions sit. Half by 30 excludes all one-time construction emissions from major projects and all activities that are capitalised as part of renewable energy projects.<sup>1</sup>

In FY22 we were pleased to receive verification from the Science Based Targets initiative (SBTi) that our Half by 30 underlying targets are science aligned. Meridian has also committed to set long-term emissions reduction targets with the SBTi in line with reaching net-zero by 2050. Meridian’s FY21 operational emissions were just above 30,000 tCO<sub>2</sub>e – that means we will reduce them to 15,000 tCO<sub>2</sub>e by FY30.

We have identified six areas on which to focus our action to lower operational emissions and have broken down these down again into three main time horizons.

Last year, we focused on initiatives where we have the most direct influence and within our direct control, this included:

- Salmon Farm electrification: This year we helped two salmon farms near Twizel switch from diesel generators to network electricity supply for their farm operations. This change should amount to 224 tCO<sub>2</sub>e being removed every year – the same impact as removing 77 cars from the roads!

- Internal Decarbonisation Fund established: Through the inaugural round of the Fund we supported the purchase of a new electric mower at our hydro assets.
- Air travel ambition: We set our sights on keeping our air travel emissions under 800 tCO<sub>2</sub>e, and developed new tools to track our monthly flight emissions data, and tools to help us make informed travel choices. We didn’t meet our budget this year, but will continue to challenge our behaviour and ambition.

Building on our momentum and lessons from FY23, in the year ahead we’re leaning further into delivery and implementation, and working with others where we have significant emissions sources in common, such as in land transport and fugitive emissions.

Please see **Meridian’s Greenhouse Gas Inventory** for a detailed breakdown of our emission sources.

A small icon of a spotlight.

**Building Resilience of Nature Spotlight**

We look to improve biodiversity outcomes through the climate action we take and recognise the role nature plays to build climate resilience. To play a stronger role in regenerating nature and making the world a healthier place this year we were proud to adopt a ‘nature positive ambition’ as well as a ‘no net deforestation commitment’ (see our *Biodiversity & Deforestation Commitment*).



Since 2019 Meridian has committed to investing in permanent forests in Aotearoa and the broader biodiversity and social benefits it provides. We have adopted a mixed model of exotics and natives, planting predominantly on our own land, and will transition these forests to 100% natives over time. We are incredibly proud of this programme and some recent highlights have included:

- securing all land required for the programme
- planting 300,000 stems to date with a further 600,000 ordered to plant in the coming 2023-24 seasons
- Received 2500 carbon credits from established projects at Manapōuri, Benmore, Aviemore, West Wind, and from partnerships with landowners

Meridian’s Forever Forest programme has been sized so from 2030, when we’ve achieved Half by 30, the forests will be removing the same amount of emissions that we produce and there will be less reliance on using offsets for the balance of our emissions.

To involve our people and communities, Meridian has held several planting events in partnership with the Christchurch Foundation for the Tūi Corridor project to bring native birds back into the central city. Meridian has also established two partnerships with landowners and iwi-based trusts to plant mixed model and native forests.

<sup>1</sup> Over 95% of our FY21 base year emissions are from Scope 3 sources.



# Managing our emissions and ensuring resilience



## Climate risk and adaptation

Underpinning all the actions we take are broader objectives and targets to help Meridian prepare and adapt to the impacts of climate change – both physical and transitional.

### Business processes

Meridian continues to embed climate change into business planning and decision-making processes in impactful and fit-for-purpose ways. Our Investment Committee terms of reference and initiative card templates include consideration of actual and potential climate-related impacts, and other company sustainability goals.

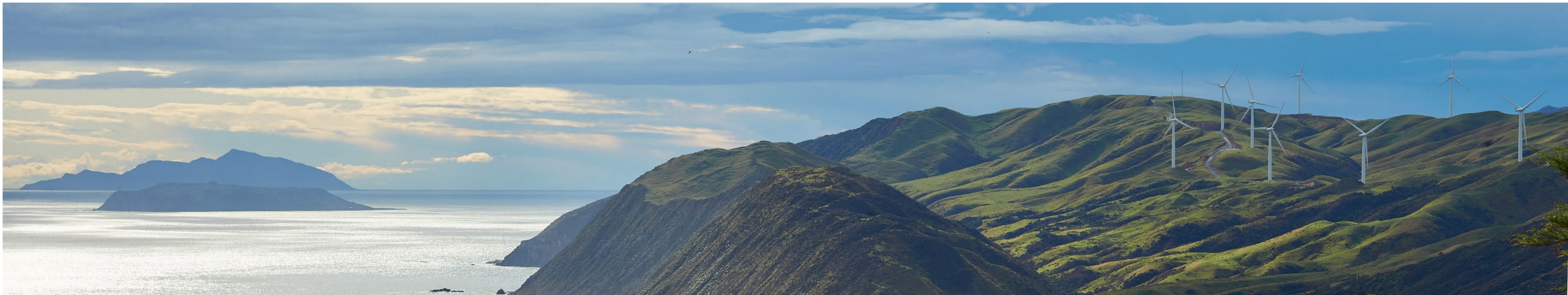
### Sector resilience

Meridian is playing our part to build electricity sector’s resilience. One way we’re doing this is by introducing greater flexibility and diversity into our energy generation capacity. We’re also supporting businesses and households to be more flexible in how they use power, bringing the potential to reduce peak load demand on the system, such as by piloting virtual power plant capacity and commercial solar. Our site assessments for new development sites also considers future climate scenarios – ensuring we’re building resilience into new sites. We’ll continue to use the latest available climate data and multiple scenarios.

### Building company-wide capability

Meridian is committed to growing understanding of climate risk and adaptation across our organisation. We’re undertaking capability and capacity gap assessments to understand future needs when it comes to role evolution and recruitment. We’re also committed to building capability of our key internal stakeholders on climate change risk and adaptation through an internal sustainability engagement programme, and risk monitoring training.







More detail on our targets and actions are available in our *Climate-related Disclosure FY23*.





# Managing our emissions and ensuring resilience

Half by 30 FY24 initiatives

	 Land Transport	 Farms	 Fugitive emissions	 Air travel	 Ferry and tug	 Waste
Emissions sources	Majority of emissions from suppliers and contractors, including transmission and distribution company maintenance (>80%), contractor fuel maintaining assets, meter reading, as well as Meridian's transport fleet, staff commuting emissions and rental car use.	Emissions from stock at our wind farms and from salmon farms located at our canals (sub-leases).	Emissions leakage from equipment such as transformers and switch gear, and air conditioning units Hydrofluorocarbon (HFC) and Sulphur hexafluoride (SF6) from Meridian assets and those in our supply chain (>80%).	Emissions from Meridian staff flights.	Ferry, tug boat and barge operating for Manapōuri staff, contractors and visitors.	Waste generated at our assets and offices.
FY24 initiatives	<p>Develop Meridian fleet transition plan which includes requirements and timelines to electrify our fleet, including charging infrastructure needs across our offices and assets.</p> <p>Work with EV vendors so we are ready for our fleet transition.</p> <p>Implement refreshed staff commuting offer to help staff reduce emissions.</p> <p>Explore options for smarter use of our fleet, informed by data analytics.</p> <p>Engage distributor and key lines company to begin exploring what a targeted, emissions programme looks like.</p> <p>Support businesses in our supply chain to electrify their fleet through Meridian's business charging proposition.</p>	<p>Finalise farm decarbonisation strategy and transition to implementation.</p> <p>Investigate salmon farm electrification solutions for remaining 25% of sites (moving energy use away from diesel).</p> <p>Generation-led focus group continues to identify emission reduction options. Including working with an agricultural consultant.</p>	<p>Implement SF6 Roadmap actions, including in FY24:</p> <ul style="list-style-type: none"><li>Pilot early leak detection via real-time monitoring to mitigate leakage risk.</li><li>Bring internal cost of carbon into Generation business case tools so costs considered in decision-making.</li><li>Engage distributor and key lines party to begin exploring what a targeted, emissions programme looks like.</li><li>On-going market and technology scan for SF6 alternatives.</li></ul> <p>Explore options for HFC-free HVAC systems at new Wellington office.</p>	<p>Continue to support staff to understand carbon impact of travel choices to maintain air travel emissions &lt;950 tCO2e</p>	<p>Agreement for supply of Ferry in place.</p> <p>Scope tug boat electrification options.</p>	<p>Commence 6-monthly corporate office waste audits to get higher quality data of waste streams.*</p> <p>Circular Economy Framework training with key business units.</p> <p>Implement key waste projects to catalyse culture change – including: oily rag diversion project, method insights bin roll-out, PPE recycling programme.</p> <p>Commence regular business unit reporting for hazardous and non-hazardous waste.</p>
FY24 target and/or milestone	<p>Meridian fleet transition plan developed.</p> <p>Refreshed staff commuting offer implemented. Commuting emissions &lt;FY23.</p> <p>All suppliers with material light transport emissions have been engaged with, are aware of our offer and understand the shared benefits of reducing their emissions.</p>	<p>Farm decarbonisation strategy enters implementation phase and emission reductions reported.</p> <p>Options for salmon farm decarbonisation confirmed.</p>	<p>SF6 Roadmap actions for FY24 implemented.</p> <p>Wellington Office HVAC approach confirmed.</p>	<p>&lt;950 tCO2e</p>	<p>Agreement for supply of ferry signed.</p> <p>Way forward for tug boat electrification agreed.</p>	<p>Waste audit programme commenced. At least 1 audit competed for each site.</p> <p>Business unit training commenced.</p> <p>Key waste projects implemented and impacts understood.</p> <p>Business unit hazardous and non-hazardous waste reporting occurring on a regular basis.</p>

Underpinning our Half by 30 initiatives are a range of supporting and enabling actions to support company-wide actions, summarised later in the Climate Action Plan.



# Managing our emissions and ensuring resilience

Completed
 Committed
 Planned
 Target
 Not completed

## Half by 30 Horizons One, Two & Three

	Baseline FY21	Land Transport	Farms**	Fugitive emissions	Air travel	Ferry and barge	Waste	Balance emissions***
	c. 30,600	11,500	5,400	1,600	620	230	220	11,000
FY22	<b>Horizon One: 27,400 tCO2e FY22-24</b>  Set architecture and advance on targeted new initiatives	<div><div>✔</div> 100% electrification of our light fleet (↓ 195 tCO2e so far)</div> <div><div>✔</div> Staff commuting offer refreshed</div> <div><div>✗</div> FY23 &lt; FY22 Commuting emissions</div> <div><div>C</div> Meridian fleet transition plan developed</div> <div><div>C</div> Staff commuting offer implemented</div> <div><div>C</div> Emissions actions with distributor and lines company confirmed</div> <div><div>C</div> Smarter fleet use options identified</div> <div><div>C</div> Support business in our supply chain to electrify their corporate fleet*</div> <div><div>T</div> 11,300pa (↓200)</div>	<div><div>✔</div> Electrify salmon farm use away from diesel (↓ 110 tCO2e estimated so far)</div> <div><div>✔</div> Discovery of focus group to identify options for farm diversification</div> <div><div>C</div> On-farm pilot underway and emission reductions reported*</div> <div><div>C</div> Remaining Salmon farms have confirmed options to move away from diesel</div> <div><div>C</div> Work programme for farm diversification options confirmed</div> <div><div>T</div> 4,400pa (↓1,000)</div>	<div><div>✔</div> SF6 Emissions Reduction Roadmap</div> <div><div>C</div> SF6 Roadmap FY24 actions implemented</div> <div><div>C</div> HVAC HFC-free options assessment in Wellington office</div> <div><div>T</div> 1,300pa (↓300)</div>	<div><div>✔</div> Air travel budget set</div> <div><div>✗</div> FY23 emissions &lt;800 tCO2e (actual 1,000 tCO2e)</div> <div><div>C</div> Maintain annual air travel emissions target</div> <div><div>T</div> 900pa (↑280)</div>	<div><div>C</div> Business case approved for Mararoa*</div> <div><div>P</div> Confirm supply of ferry</div> <div><div>C</div> Confirm tug emission reduction options</div> <div><div>T</div> 200pa (↓30)</div>	<div><div>✔</div> Circular economy Framework developed</div> <div><div>✔</div> Waste management practice stocktake</div> <div><div>C</div> Commence 6 monthly corporate office waste audits.*</div> <div><div>C</div> Circular economy framework training</div> <div><div>C</div> Implement key waste projects</div> <div><div>C</div> Regular business unit waste reporting</div> <div><div>T</div> 50pa (↓170)</div>	<div><b>9,250 (↓1,750)</b></div> <div>Actual emissions data from suppliers</div> <div><div>T</div> &gt;60%</div>
FY25	<b>Horizon Two: 21,600 tCO2e FY25-27</b>  Surge and achieve impact through the action of others	<div><div>C</div> 100% electrification of our light-commercial fleet</div> <div><div>P</div> Focus on electrification of supply chain medium-sized utility vehicles, and use demand flexibility and virtual power plants to lower ownership costs</div> <div><div>T</div> 8,800pa (↓1,500)</div>	<div><div>C</div> Implement appropriate farms decarbonisation strategy, aligned with Half by 30</div> <div><div>T</div> 4,000pa (↓400)</div>	<div><div>P</div> SF6 Roadmap phase where equipment is changed (pending future due diligence)</div> <div><div>T</div> 750pa (↓550)</div>	<div><div>P</div> Support efforts to advance domestic air craft decarbonisation</div> <div><div>T</div> 500pa (↓400)</div>	<div><div>P</div> Electrify Mararoa by end 2025 (mid-FY26)</div> <div><div>P</div> Implement tug emissions reductions</div> <div><div>T</div> 50pa (↓150)</div>	<div><div>P</div> Identify most material waste impacts across our value chain and develop action plan to address these</div> <div><div>T</div> 45pa (↓5)</div>	<div><b>7,500 (↓1,750)</b></div> <div>Actual emissions data from suppliers</div> <div><div>T</div> &gt;70%</div>
FY28	<b>Horizon Three: 15,300 tCO2e FY28-30</b>  Leaning in to harder to abate areas	<div><div>P</div> Focus on electrification on supply chain heavy fleet</div> <div><div>T</div> 6,000pa (↓2,800)</div>	<div><div>T</div> 2,700pa (↓1,300)</div>	<div><div>P</div> SF6 Roadmap implementation</div> <div><div>T</div> 700pa (↓50)</div>	<div><div>P</div> Explore market-based options for air travel decarbonisation</div> <div><div>T</div> 300pa (↓200)</div>	<div><div>T</div> 40pa (↓10)</div>	<div><div>P</div> Take action to address industry specific waste challenges</div> <div><div>T</div> 35pa (↓10)</div>	<div><b>5,500 (↓2,000)</b></div> <div>Actual emissions data from suppliers</div> <div><div>T</div> &gt;75%</div>
FY30								

\* Not completed in FY22.  
 \*\* One third of base year farming emissions related to renewable generation development sites, the balance being from existing land holdings.

\*\*\* Our enabling and supporting actions, which begin in FY23, will continue over the decade. For simplicity baseline and targets have been rounded to the nearest 100 (for values >1000) and the nearest 20 (for values <1000), all figures represent T CO2e. We expect increased data quality over time, including from our supply chain. This will affect our Half by 30 emissions profile.

We expect land transport and fugitive emissions to be most affected due to their size and significant proportion of Scope 3 emissions. We will report transparently, and never claim to have caused abatement driven by data quality improvements. See our Meridian Greenhouse Gas Inventories, for more detail.



# Managing our emissions and ensuring resilience

## Supporting and enabling actions

Our actions to embed Half by 30 action across the Company began in FY23 and we will continue to build on these each year.

- Internal emissions price: We will set an internal carbon price and pilot its operation to ensure the right outcomes are achieved.
- Performance incentives: We will create specific, measurable business key performance indicators and performance incentives to ensure Half by 30 targets are met.
- Grow business-wide capability: Assess Environmental Social and Governance (ESG) capability and capacity across the company to understand future needs.
- Half by 30 Fund: We will charge ourself for our self issued Renewable Energy Certificate for our Scope 2 energy consumption. This funding will support decarbonisation efforts within the company.
- Governance via our Half by 30 Governance Group comprising of members of Meridian's Executive Team.
- Work with suppliers to build their carbon capability and understanding of Meridian's sustainability commitments. Our focus is supporting emissions reporting and reductions in the goods and services we buy (e.g. balance emission).
- 1.5°C Advocacy: Contribute to the conversation on NZ's pathway to net-zero, including through Climate Leaders Coalition and submissions to government.

Our progress in FY23 included:

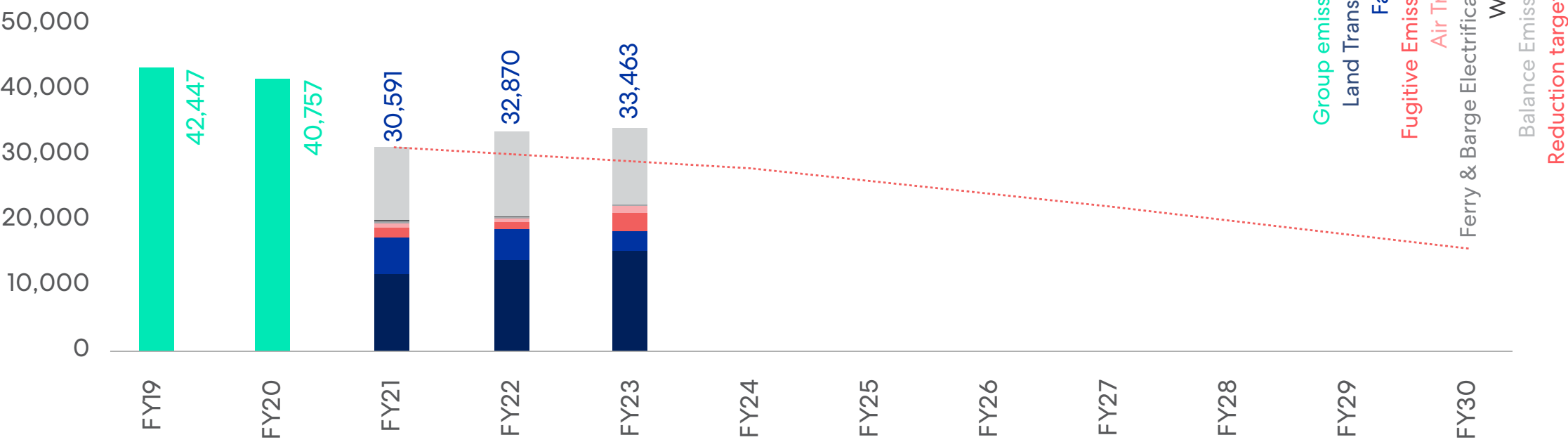
- Embedded Half by 30 into Meridian approval processes
- Half by 30 performance incentive in Exec scorecard and specific projects
- Environmental Social and Governance (ESG) education Programme
- Half by 30 Fund established
- Governance group established
- Supplier engagement programme commenced

## Emissions is FY23

After a significant reduction in operational emissions in FY21, emissions have risen over the last two financial years. Scope 1 emissions increased (primarily from fugitive emissions); Scope 2 emissions are reported under the market-based methodology and Renewable Energy Certificates are used where possible (reported as nearly zero in FY23); and Scope 3 emissions increased most materially (driven by our share of lines and distribution company maintenance). The emissions within our direct control increased in a number of areas including business travel and commuting emissions, which reflects pattern of working which is important to understand after Covid-impacted years of travel.

New spend based emissions factors became available in FY23 (previously published in 2014). The adoption of these factors resulted in a >5% change of our total emissions footprint, driven by impact to Land Transport focus area and Balance emissions. As a result we have restated our base year using these factors (↑600 tCO<sub>2</sub>e).

## Half by 30 Emissions Abatement Forecast



By focus area, emissions were:

Performance against targets for FY23	Baseline FY21	Actual FY22	Actual FY23
Land Transport	11,485	13,528	14,976
Farms	5,438	4,740	2,962
Fugitive emissions	1,572	1,041	2,727
Air travel	623	518	1,015
Ferry & barge electrification	229	213	217
Waste	225	103	35
Balance emissions	11,020	12,727	11,530
Group emissions	30,591*	32,870**	33,463***
FY30 reduction target	15,296	15,296	15,296

\* Scope 1 and 2 is 1,034 tCO<sub>2</sub>e, and Scope 3 is 29,557 tCO<sub>2</sub>e of total.

\*\* Scope 1 and 2 is 645 tCO<sub>2</sub>e, and Scope 3 is 32,226 tCO<sub>2</sub>e of total.

\*\*\* Scope 1 and 2 is 1,193 tCO<sub>2</sub>e, and Scope 3 is 32,270 tCO<sub>2</sub>e of total.

## Decoupling growth and emissions

We know there will be new sources of emissions in our footprint as we deliver our renewable development pipeline, and via our share of emissions associated with electricity sector growth in Aotearoa. We will continue to assess how to best report on this emissions growth and the reductions we achieve through these changes. For example, our on-farm emissions profile will change as we acquire and develop land for new assets:

Farm emissions (tCO <sub>2</sub> e)	FY21	FY22	FY23
Operational assets at FY21	3,650	2,941	2,634
New assets this decade	1,788	1,799	328

## United Nation's Sustainability Development Goals (SDGs)

The UN SDGs we focus on, as detailed in our Sustainability Policy, which align most closely with our actions in this climate action plan are:

