Certified Renewable Energy Impact and Transparency Report 2023





This report starts with a thank you





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# Powering positive change

# The first annual impact and transparency report on our Certified Renewable Energy product

Thanks to your support, in 2023 we were able to invest more than \$1 million into 14 inspiring community projects through our Community Decarbonisation Fund. This initiative, powered by the sales of our Renewable Energy Certificates (RECs), enables community groups to expand their impactful work while reducing their greenhouse gas emissions.

As New Zealand's largest renewable electricity generator, our goal is to help Aotearoa become a vibrant contributor to a net-zero world. But we won't get there alone. We need the energy, experience and influence of others to create change. We're proud to

be supported by our Certified customers. Together, we put action behind our purpose of clean energy for a fairer and healthier world.

It's now time to delve deeper into the Certified success story. We're excited to showcase the incredible work of these community groups and illustrate how the funding from the net proceeds of our Certified product has made a difference. We'll explain exactly how Certified works and its role in contributing to cutting greenhouse gas emissions across New Zealand.

We are proud to present our first impact and transparency report for Certified Renewable Energy, marking a milestone in our journey towards greater accountability and shared success.

# What we've achieved together

### The community projects we funded in 2023

Because of you, our Community Decarbonisation Fund is investing in electric vehicles, solar power and electrified heating for community groups up and down the country.



# Funded projects at a glance



PROJECTS FUNDED IN 2023



\$1,087,187
TOTAL FUNDED



1,700
TONNES OF CO<sub>2</sub> EMISSIONS



Meet the organisations making a positive impact in our communities





### Satisfy Food Rescue in Kaiapoi got an electric van

The good people of Satisfy Food Rescue have been supplying food banks, schools and other charities across the Canterbury region since 2014. So far, it has diverted 1.4 million kilograms of food, equivalent to four million meals. That's why we helped electrify their wheels!

Since Satisfy got the new van, it's rescued 49% more food when compared to the last quarter of 2023.

"Incorporating an EV into our fleet has been a game changer. The EV significantly reduces our fuel and maintenance expenses, allowing us to allocate resources more effectively towards our core mission of food rescue and distribution."

Phillipa Hunt, Satisfy Food Rescue Chair



# Solar panels for Ngā Manu Nature Reserve

The 14-hectare reserve first opened to the public in 1981 for education, conservation and preservation of native flora and fauna. It covers one of the largest remnants of coastal lowland swamp forest on the Kāpiti Coast. Highlights include a number of breed and release initiatives to conserve native birds and their habitat.

Our funding added solar panels to the visitor centre, education centre and nocturnal kiwi house. It also helped fund a new electric vehicle.

"This helped us get much closer to our zero-carbon goal. It's dramatically reduced our electricity bills. With the money saved, we can put that back into our conservation projects that are the core of our kaupapa."

— Anna McKenzie Hawea, Ngā Manu Nature Reserve General Manager

# Featherston Community Centre now has electric heating

The centre's been at the heart of the south Wairarapa community since 1992. It provides free assistance and advice with legal problems, finance, addiction and employment.

The team has recently committed to being more climate conscious and looking at the long term environmental impact of their choices. The building is diesel heated but is currently being renovated to update the heating system with highly efficient Mitsubishi electric-powered heat pumps.

It's expected to be 60% cheaper to run, which will save thousands of dollars a year that can go back into community wellbeing, resilience, education and growth.



# How Certified is making a difference

Our Community Decarbonisation Fund has invested more than \$1 million in electric vehicles, solar power and electrified heating for community groups up and down the country.

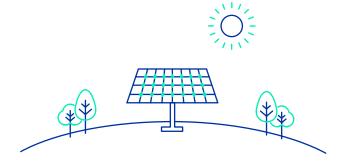
Ele	ectric	ve	hic	les

Organisation	Funding received	Organisation summary	<b>Project status</b>
Satisfy Food Rescue	\$61,710	This not-for-profit focuses on collecting unsaleable or surplus food from retailers, wholesalers or growers and delivering it to communities and charities who need it most in North Canterbury.	Completed
Tread Lightly	\$109,238	This charity focuses on inspiring New Zealanders to live sustainably. It provides environmental education to individuals, whānau and schools, including advice on reducing carbon emissions.	Near completion
Everybody Eats	\$41,465	In this organisation, volunteer chefs transform wasted food into restaurant quality meals for three pay-as-you-feel restaurants across Aotearoa.	Completed
Electrifying Conservation	\$72,000	The Trust represents 100 community groups and more	In progress



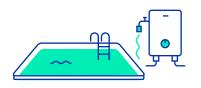
		live sustainably. It provides environmental education to individuals, whānau and schools, including advice on reducing carbon emissions.	
Everybody Eats	\$41,465	In this organisation, volunteer chefs transform wasted food into restaurant quality meals for three pay-as-you-feel restaurants across Aotearoa.	Completed
Electrifying Conservation (Southern Lakes Sanctuary)	\$72,000	The Trust represents 100 community groups and more than 1,000 volunteers who've been working for many years to protect and restore the declining biodiversity of the Southern Lakes region.	In progress
Blue Light Youth Driver Navigator	\$47,753	This charity delivers and supports a multitude of youth programmes all over Aotearoa. The driver programme is designed to help young people who may not have access to the right support to learn to drive.	Near completion
Te Ahi Kaa Training and Social Services Centre	\$92,000	Te Ahi Kaa Training and Social Services Centre Inc. is a Māori- led organisation dedicated to community wellbeing.	In progress

# Solar panels



Funding received	Organisation summary	Project status
\$36,610	This not-for-profit collects excess food from local retailers and restaurants and gives it to food banks in Canterbury.	In progress
\$58,095	This Wellington-based youth facility diverts male rangatahi from the criminal justice system and helps them build new lives in the community.	In progress
\$126,999	The 14-hectare reserve preserves one of the largest remaining coastal lowland swamp forests on the Kāpiti Coast.	Completed
\$101,875	A home away from home for families travelling to Christchurch for life-saving medical treatment.	Near completion
\$11,873	This organisation protects kiwi and other taonga species through its breeding and education programmes.	Completed
\$47,541	A Christian church seeking to make a difference in the community, including social and environmental outreach.	In progress
	\$36,610 \$58,095 \$126,999 \$101,875 \$11,873	\$36,610  This not-for-profit collects excess food from local retailers and restaurants and gives it to food banks in Canterbury.  \$58,095  This Wellington-based youth facility diverts male rangatahi from the criminal justice system and helps them build new lives in the community.  \$126,999  The 14-hectare reserve preserves one of the largest remaining coastal lowland swamp forests on the Kāpiti Coast.  \$101,875  A home away from home for families travelling to Christchurch for life-saving medical treatment.  \$11,873  This organisation protects kiwi and other taonga species through its breeding and education programmes.  \$47,541  A Christian church seeking to make a difference in the

#### **Electric heating**



Featherston Community Centre	\$165,025	This local community hub provides health and fitness, arts and crafts, music, community activities, and support services.	In progress
Northern Southland Community Pool	\$115,000	This organisation provides a community swimming pool in Lumsden.	In progress

**Total** \$1,087,187 (Includes GST claimed for)

### **How Certified works**

#### **About Renewable Energy Certificates (RECs)**

The emission of greenhouse gases from electricity generation is a major driver of global climate change.

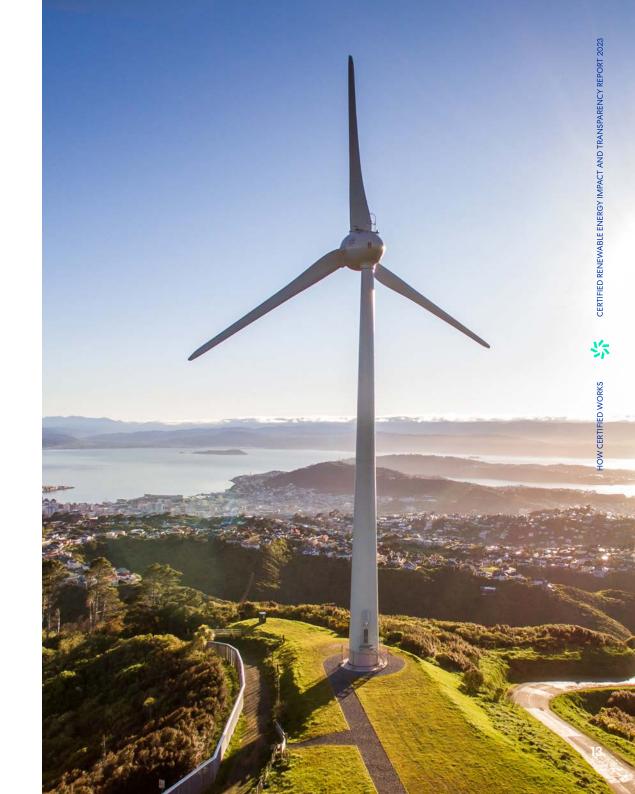
A range of internationally agreed initiatives are tackling this. One of them is Renewable Energy Certificates or RECs. Our REC product is called Certified Renewable Energy, also known as Certified.

#### It works like this:

- The 'Certified' electricity that customers buy from Meridian is matched on a monthly basis to the power put into the grid by our hydroelectric (water powered) power station and wind farms, which are independently verified as 100% renewable and releasing zero carbon emissions by <u>BraveTrace</u>.
- That process earns internationally recognised RECs.
- This allows our Certified customers to report their market-based Scope 2 emissions as zero (using the market-based reporting methodology, in accordance with the GHG Protocol's Scope 2 Guidance).
- Once the operating costs of the Certified product have been met, 100% of the net proceeds go into the Meridian Decarbonisation Fund.

 The Meridian Decarbonisation Fund consists of a business fund and a community fund. The business fund empowers Certified customers that meet specific criteria to use the net proceeds from their RECs to fund their own eligible electrification projects. However, most of the funding goes into the community fund to support grassroots community projects that reduce carbon emissions and provide a tangible positive impact to the communities they serve.

So far, 191 businesses across the country have taken part – accounting for 2,030 GWh of electricity.



#### The 'REC' difference in the electricity mix

Meridian is a 'gentailer'. We both generate electricity and retail electricity to households and business customers.

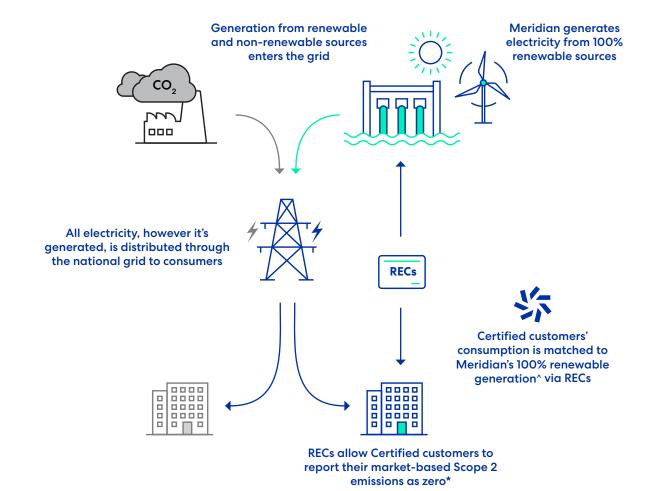
All the electricity in Aotearoa, however it's generated, is distributed through one 'national grid' consisting of the facilities and powerlines that get electricity to where it's needed.

According to the latest figures from the Ministry of Business, Innovation and Employment (MBIE), 88% of electricity generated in 2023 came from renewable sources like ours. This doesn't mean that all of New Zealand's electricity is always '88% renewable'. This varies at different times of the day and year. It depends on what generation systems are in use at the time to meet the overall

demand. This means everyone will receive a 'mix' of renewable and nonrenewable electricity from the grid.

What the REC process does is provide certificates that cover the amount of electricity our Certified customers purchase from us, by directly matching the portion of the electricity we generate from our select assets (which are independently verified as producing 100% renewable electricity) with the portion of the electricity Meridian retails to them.

We also have plans to increase the amount of 100% certified renewable electricity we generate and the proportion of renewable energy in the national grid by building more renewable generation and getting those assets certified



<sup>&</sup>lt;sup>1</sup> See Data tables for electricity

<sup>\*</sup>Using the market-based reporting methodology as per the GHG Protocol's Scope 2 Guidance

<sup>^</sup>Consumption is matched on a monthly basis to certain of Meridian's hydro stations or wind farms, which have been independently verified by BraveTrace as producing 100% renewable electricity

#### How emission 'scopes' work

There are internationally accepted ways of reporting on the different types of greenhouse gas emissions generated by a company or organisation:

**Scope 1** emissions are direct greenhouse gas emissions from sources a company owns or controls. This includes emissions from fuel combustion in boilers, furnaces, vehicles, etc.

**Scope 2** emissions are indirect emissions from the generation of electricity, steam and heating a company uses.

**Scope 3** emissions are all other indirect emissions that occur due to company activities. Scope 3 emissions are usually the largest portion of a company's carbon footprint. But they're the hardest to define and measure. They include emissions relating to the other products, services and materials the company buys to do its work. They include the emissions generated when people use their products and services. They cover waste disposal, other investments the company makes and more.

Renewable Energy Certificates, including those in our Certified product, enable our Certified customers to report the market-based Scope 2 emissions of the electricity in the certificate as zero – as per the market-based reporting methodology, set out in the Greenhouse Gas Protocol Scope 2 Guidance.





# Making sure we're getting it right

Anything to do with greenhouse gas reporting must be robust, accurate and transparent and our Certified product is no different.

All of Meridian's RECs are aligned with the GHG Protocol Scope 2 Guidance market-based methodology. The GHG Protocol is based on a 20-year partnership between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). It works with governments, industry associations, NGOs, businesses like ours and a host of other organisations. It's developed comprehensive global standardised frameworks to measure and manage greenhouse gas emissions.

Buying RECs and the ability to improve market-based Scope 2 emissions associated with that purchase is in line with both the <u>GHG Protocol</u> Scope 2 Guidance and the International Organization for Standardization for <u>Standardizations Greenhouse Gas</u> standard: ISO 14064-1:2018.

Renewable Energy Certificates are also endorsed by:

Science Based Target Initiative (SBTi): A corporate climate action organisation that enables companies and financial institutions worldwide to play their part in combating the climate crisis

#### CDP (formerly the Carbon Disclosure Project):

A not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impact.

<u>BCorp:</u> The non-profit network transforming the global economy to benefit all people, communities and the planet.

RE100 Climate Group: Our RECs that are linked to specific windfarms meet the standards set by RE100 Climate Group, the global corporate renewable energy initiative bringing together hundreds of large and ambitious businesses committed to 100% renewable electricity.



# What makes Certified different

'Additionality' is a vital aspect of the drive to cut greenhouse gas emissions. The concept of "additionality" refers to ensuring that an environmental project or mechanism, such as RECs, creates extra benefits that wouldn't have occurred without it.

RECs are a common tool used globally to support renewable energy. To be effective, it is important that RECs are coupled with projects that reduce emissions. We get that, which is why we're committed to making a real impact.

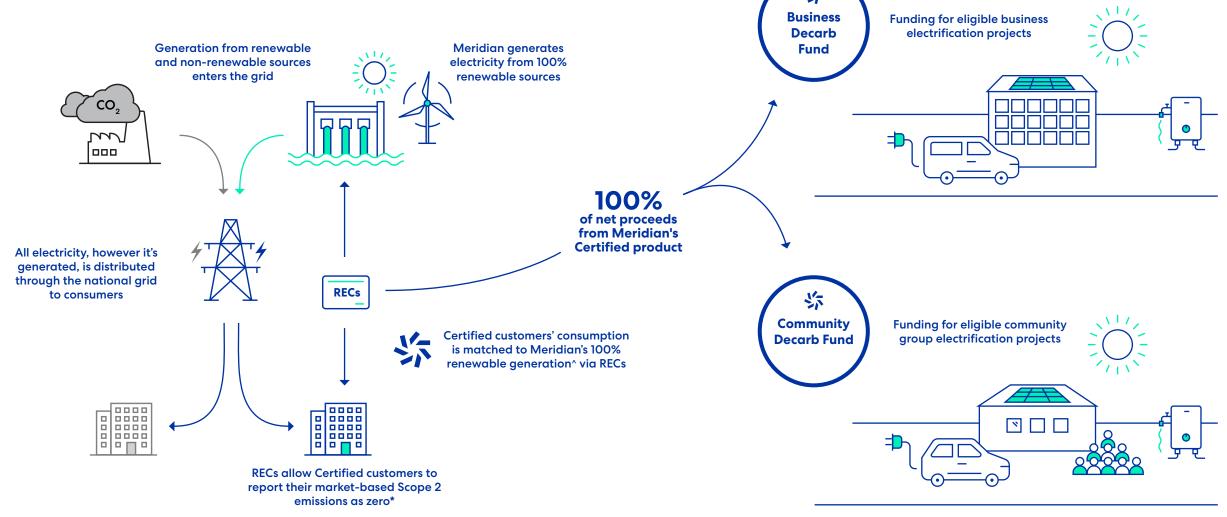
Our Decarbonisation Fund is an example of this. Through the fund, we invest 100% of the net proceeds from our Certified product into local projects that actively reduce or prevent carbon emissions.

This isn't just about funding; it's about empowering. We know that decarbonising Aotearoa will take collective effort and that prioritising decarbonisation is hard for many community groups. While they'd love to invest more in reducing carbon emissions, they need to prioritise their limited funding towards the important work they do. The Community Decarbonisation Fund is designed to help them on their decarbonisation journey.

For eligible businesses, it's about using the net proceeds from their RECs to fund eligible electrification projects within their own business.



# **How Certified works**



<sup>\*</sup>Using the market-based reporting methodology as per the GHG Protocol's Scope 2 Guidance

<sup>^</sup>Consumption is matched on a monthly basis to certain of Meridian's hydro stations or wind farms, which have been independently verified by BraveTrace as producing 100% renewable electricity



# Meridian's Community Decarbonisation Fund

Established in 2022, our Decarbonisation Fund dedicates 100% of the net proceeds from our Certified customers to decarbonisation projects throughout Aotearoa.

Initially, we collaborated with a small number of organisations in 2022, helping them install solar panels and acquire electric vehicles (EVs). Recognising the need for greater impact, we expanded our reach in 2023 by opening the fund to public applications for the first time, allowing us to support more organisations.

Moving forward, the fund will be open to organisations across the country to apply for funding for electrification and new renewable generation projects each year.

Eligible projects must meet requirements on carbon reduction targets, timing, feasibility and social benefits to the community.

### For projects to be eligible for funding they must:

- · result in reduced greenhouse gas emissions;
- be an electrification project or lead to the creation of new renewable generation;
- contribute directly to communities across Aotearoa; or
- be one that either wouldn't have occurred without the funding or a project that will occur sooner because of the funding.



EcoMatters' Green Transition | Video



## Reducing emissions and overheads

Beyond reducing carbon emissions, our Community Decarbonisation Fund also allows the organisations that receive funding to channel their other funds where they're needed most.

# How we calculate each project's emissions savings

For our calculations, we work with BraveTrace. It operates operates the New Zealand Energy Certificate System (NZECS), the country's official certification system for renewable energy purchases.

#### **Estimating avoided emissions**

Gaining an estimate of avoided emissions relies on a number of assumptions. This number represents the average greenhouse gas emissions usually generated by the activity being avoided - for example the emissions of a diesel vehicle that is being replaced by an EV.

For the community projects funded in 2023, BraveTrace has helped us estimate the emissions avoided in the entire lifetime of the EVs, solar panels or heating system projects that were funded.

The total came to about 7,000 MWh of fossil energy. That's equivalent to more than 1,700 tonnes of carbon dioxide emissions or removing 886 fossil fuel powered cars from the road for a year (each travelling an average of 12,000 km per year).

#### The stats so far

2,030

GWh OF CERTIFIED ELECTRICITY

191 **CERTIFIED CUSTOMERS** (CUMULATIVE)

**ALLOCATED TO THE COMMUNITY DECARBONISATION FUND** 

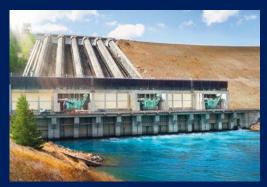
#### The electricity generating facilities we have certified for this process

#### 2023 Certified generation assets

- Benmore Hydro Station
- Brooklyn Wind Turbine

#### 2024 newly Certified generation assets

- · Harapaki Wind Farm
- · Te Uku Wind Farm
- · White Hill Wind Farm
- · Mill Creek Wind Farm
- West Wind Farm



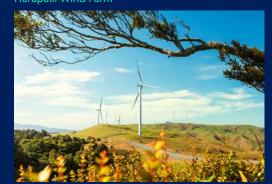
Benmore Hydro Station



**Brooklyn Wind Turbine** 



Harapaki Wind Farm



Te Uku Wind Farm



White Hill Wind Farm



Mill Creek Wind Farm



## What's next?

#### Supporting New Zealand's transition to net zero by 2050

In 2023, we introduced our Sustainability Framework and continued to focus on our Climate Action Plan.

This includes helping our customers reduce their greenhouse gas emissions and managing our own emissions. It's a team effort. We're working with local communities, customers and other businesses across the energy sector.

We've got ambitious plans to expand renewable electricity generation in New Zealand, focusing on seven major projects in seven years before 2030.

We have also committed \$10 billion in investment for the building of new renewable generation assets until 2050, with 20 new grid scale renewable energy projects underway, including seven new wind farms built by 2030.

Check out our full <u>Sustainability Policy</u> online to learn more.

We have committed \$10 billion in investment over the next 30 years to build new renewable generation.

# Renewable development pipeline



5.0GW (12TWh) of development options

2.7GW secured, 2.3GW in advanced prospects





# Spread the word

Ask your account manager for the Certified customer marketing toolkit. It's full of stories, imagery and videos to help you share the positive change you're helping to drive by being a Certified customer.

#### You're in good company

You belong to a community of notable companies, each dedicated to our shared goal of sustainability. Together, we are creating a meaningful impact.









































































