Invest in New Zealand

CLEANTECH

Invest New Zealand

NEW ZEALAND

FOREWORD FROM THE NEW ZEALAND GOVERNMENT

It is our great pleasure to introduce this Investment Prospectus, a comprehensive guide to the abundant opportunities that our nation offers to global investors.

New Zealand is renowned for its dynamic economy, innovative spirit and unwavering commitment to sustainable growth. Our location in the Asia-Pacific region, combined with a stable political environment and a highly skilled workforce, makes us an ideal hub for global business. We are dedicated to fostering a business-friendly climate, with policies that prioritise entrepreneurship, innovation and trade.

Reform of New Zealand's Overseas Investment Act has made investment into the country faster and more efficient. In addition, the 2024 Fast-track Approvals Act speeds up consent for infrastructure and development projects, and halves processing times for overseas investment consent applications. New investor visa settings welcome migrants who will invest here. And an increase in free trade agreements with our trading partners ensures further growth.

In 2025, the establishment of a new government agency, Invest New Zealand, will streamline processes for foreign investors, boosting capital investment in sectors such as banking, fintech, transport, energy and manufacturing.

Cleantech in New Zealand

By 2030, the global cleantech market is projected to be worth US$1 trillion. As demand for clean energy, sustainable materials and environmental management technology skyrockets, New Zealand is perfectly positioned.

Our cleantech sector is underpinned by world-class R&D capabilities, scientific and engineering talent, and a nimble regulatory environment that encourages innovation. Cutting-edge solutions are being developed here that will shape the world's landscapes, from renewable energy breakthroughs to sustainable agriculture. New Zealand is an ideal place to develop and deploy cleantech solutions, with unparalleled access to renewable energy, established manufacturing and supply chain capability, and a population of early adopters ready to test new technologies before they are launched to the world. And with a goal of net zero carbon emissions by 2050, we are committed to success.

We look forward to showing you what New Zealand has to offer.

Rt Hon Christopher Luxon
Prime Minister of New Zealand

Hon Todd McClay
Minister for Trade and Investment

Hon Simon Watts
Minister for Energy
Minister for Climate Change

GREENER HORIZONS

WELCOME TO AOTEAROA NEW ZEALAND

New Zealand is an innovative nation with big ambitions.

Ranked one of the best business environments on the planet, it's progressive, globally connected, and rich with potential.

New Zealand is a country known for its unique beauty, successful businesses, trusted government and stable, future-focused economy.

On our shores, you'll discover an abundance of natural resources, fertile land, plentiful oceans and unmatched access to renewable energy.

You'll also find an educated, accessible workforce and investment opportunities unlike anything else in the world.

The possibilities for growth are endless.
Don't miss your chance to be part of it.

AA1

LOW RISK BUSINESS ENVIRONMENT

Source: Allianz Country Risk Ratings (2024)

2ND

FOR GOVERNMENT INTEGRITY & FREEDOM OF TRADE

in the world

Source: Index of Economic Freedom (2024)

1ST

MOST PROSPEROUS COUNTRY

outside of Europe

Source: Legatum Prosperity Index (2024)

AN INVESTMENT DESTINATION YOU CAN TRUST

In a world of increasing uncertainty, New Zealand offers a stable business environment where you know you're in safe hands.

Consistently rated one of the easiest places in the world to do business, we're renowned for our economic and political stability, government integrity and freedom of trade.

We're also ranked one of the planet's most peaceful, most prosperous and least corrupt destinations.

New Zealand's economy has grown steadily over the past decade, consistently sitting above the OECD average. We've been named among the best investment environments in the world and awarded AA+ credit ratings from all three major global rating agencies.

Our business-friendly environment is built on a transparent regulatory system, with well-designed legislation, a stable currency and a simple, fair tax structure that supports capital development and R&D.

As a nation, we're innovation-focused, thinking outside the box and pushing boundaries to unlock new solutions.

Coupled with an educated, readily-available workforce, it makes New Zealand the ideal testbed for new technology and the perfect place for businesses to grow and scale.

And it's all backed by a trusted government that proactively promotes investment and supports advancement, removing barriers and unlocking sectors for faster growth.

1ST
FOR GOVERNANCE
outside Europe

Source: Legatum Prosperity Index (2024)

3RD
FOR CORRUPTION TRANSPARENCY
in the world

Source: Corruption Perception Index (2023)

4TH
MOST PEACEFUL COUNTRY
in the world

Source: Global Peace Index (2024)

6TH
FOR POLITICAL STABILITY
in the world

Source: Political Stability Index (2023)

8TH

BEST PLACE TO DO BUSINESS

in the world

Source: Economist Intelligence Unit Business Environment Rankings (2024)

3RD

FOR ECONOMIC FREEDOM

in Asia Pacific

Source: Index of Economic Freedom (2024)

TOP 2%

FOR REGULATORY QUALITY & CONTROL OF CORRUPTION

Source: World Bank Group Governance Indicators (2023)

3RD

FOR TAX COMPETITIVENESS

in the developed world

Source: International Tax Competitiveness Index (2024)

LONG-TERM VALUE, SUSTAINABLE OUTCOMES

With global demand for sustainable products and supply chains increasing, it makes financial sense to seek investment opportunities that measure up. You'll find them in New Zealand.

New Zealanders have a special relationship with the land and ocean. We understand that every decision we make can impact them, now and in the future.

Māori, the Indigenous people of New Zealand, have helped us shape these collective values. Māori place great value on kaitiakitanga (guardianship) - the understanding that our existence depends on nourishment from our land and seas, so we in turn must nurture our environment.

This drives us to create a prosperous, sustainable economy for tomorrow's generations, and to ensure our valuable resources continue to thrive.

New Zealand's commitment to sustainability is evident in our government's ambitious target to reach net zero carbon emissions by 2050, and by the fact that around 88% of our electricity is generated from renewable sources.

Being able to meet global carbon emission regulations provides a competitive edge for New Zealand businesses.

For investors, it offers long-term security, sustainable value, and investment opportunities that will deliver meaningful, purpose-driven results.

AROUND
88%
OF NZ'S ELECTRICITY IS FROM RENEWABLE SOURCES

Source: MBIE Energy in New Zealand (2024)

5TH
LARGEST GEOTHERMAL PRODUCER
in the world

Source: ThinkGeoEnergy's Top 10 Geothermal Countries (2023)

29%
NZ'S CLEANTECH SECTOR REVENUE GROWTH
for 2023 to 2024

Source: NZ Cleantech Report (2024)

4TH
BEST AIR QUALITY
in the world

Source: Environmental Performance Index (2024)

GLOBAL CONNECTIVITY IS IN OUR DNA

Being an island nation has made us resourceful, innovative and determined. It's also given us a globally-focused mindset that means the world is never far away.

New Zealand welcomes international partnerships and investment. In fact, for our businesses, working with the world to deliver global solutions is second nature.

We operate on free market principles and have one of the most open market economies on the planet, with an impressive network of global business connections and free trade agreements.

These not only generate significant trade and economic opportunities for New Zealand, but provide global investors with easier market access, reduced cost barriers, and a more stable investment environment.

New Zealand's advanced digital infrastructure places us in the top 20 countries for network coverage, 5G deployment and internet speeds.

Our data sovereignty regulations are closely aligned with international standards, including General Data Protection Regulation (GDPR). New Zealand was the first of 14 countries outside the EU to receive an adequacy decision under GDPR. This allows for personal data to flow from the EU and the European Economic Area to New Zealand without the need for further safeguards.

We also have a solid, agile supply chain and well-established sea and airfreight networks that connect us to the world.

New Zealand is a gateway to Australia, North America, Asia and the Pacific Islands. We fly daily to all the world's major cities, reaching Singapore, Hong Kong, San Francisco, Los Angeles, Vancouver, Shanghai and Tokyo overnight, and our extensive shipping routes take our products all around the globe.

New Zealand is one of the first countries in the world to see the new day. We're ideally placed to work across global time zones — spanning the daytime hours of Asia and America, and working while Europe sleeps.

Deploying your technology in New Zealand

If you're a global tech developer, New Zealand is the perfect base for your operations. You'll find European-style labour laws, right on the doorstep of Asia. In fact, New Zealand offers straight geographical runs into Asia, avoiding any political hotspots.

We're a growing nation of early adopters, open to thinking boldly and trying new things. It makes us the perfect place to test and grow your technology.

We offer easy access to renewable energy and greater visibility across the supply chain, so developing tech in New Zealand will better enable you to meet ESG regulations and reach your sustainability goals. And, with an abundance of existing waste supply chains, you'll find both the input and demand you need to create a clear pathway for your cleantech solution.

A SNAPSHOT: NEW ZEALAND'S KEY GROWTH SECTORS

New Zealand's diverse economy spans a wide range of sectors — many with strengths and advantages found nowhere else in the world. We believe New Zealand is particularly well-positioned for growth in these four sectors.

Cleantech

Global demand for cleantech is surging, driven by urgent efforts to combat climate change and achieve net zero carbon emissions. Investment in clean energy technology is set to skyrocket, with the market projected to reach US$1t by 2030. As a global leader in sustainability, New Zealand is at the forefront of this movement, with a highly skilled tech workforce, strong R&D commitment, and a track record of groundbreaking cleantech solutions. New Zealand is rapidly becoming a hub for impactful, scalable cleantech projects and, with a growing pipeline of new ventures, now is the perfect time to invest.

Aquaculture

Investing in New Zealand's aquaculture sector is an opportunity to tap into a rapidly growing global market, projected to expand at a compound annual growth rate (CAGR) of 5.4%.
New Zealand boasts one of the largest exclusive economic zones (EEZ) in the world, covering around 4.1 million square kilometres, providing an abundant and sustainable resource base. New Zealand has decades of expertise producing premium seafood, and a government committed to providing a supportive and accelerated regulatory environment. As aquaculture becomes a vital source of protein, our industry is set to reach NZ$3b by 2035.

Advanced transportation

New Zealand's unique geography and innovative mindset make it the ideal testing ground for transportation technology and the perfect place to deploy and scale cutting-edge solutions. Ranked highly in the 2024 Global Innovation Index for Infrastructure, New Zealand's forward-thinking regulatory environment balances safety with industry growth. We're also ranked fourth in the world for number of rocket launches, reinforcing our strength in both terrestrial and aerospace transportation. Supported by strong government and industry collaboration, our fast-growing advanced transportation ecosystem is continuously pushing the boundaries of what's possible, on Earth and beyond.

Renewable energy

With vast natural resources and ready access to renewable energy, New Zealand is positioned to lead the world's transition to a net zero carbon future. Currently, around 88% of our electricity is generated from renewable sources, yet only 30% of our industrial processes and transportation rely on clean energy — leaving a massive untapped opportunity. This potential is amplified by our ability to export renewable energy through food, metals, fuels and data. With strong government backing and growing demand, New Zealand's renewable energy sector is primed to scale at speed.

Learn more about sector opportunities here.

CLEANTECH: INVEST IN A SUSTAINABLE FUTURE

THE GLOBAL TRANSITION TO CLEANTECH

Global demand for cleantech is accelerating, fuelled by a collective effort to combat climate change and reduce reliance on fossil fuels. This is seeing cleantech emerge as a pivotal global investment category.

Cleantech is disrupting global industries that contribute to waste, pollution and climate change. Through innovation and fresh ways of thinking, cleantech solutions are transforming the areas of energy, transportation, waste and water management.

Conscious consumers driving cleantech growth

Motivated by concern about the impacts of climate change, consumers are increasingly seeking carbon-neutral products that contribute to a circular economy, minimise environmental harm, and leave a more sustainable world for future generations. This is reshaping markets and accelerating cleantech innovation.

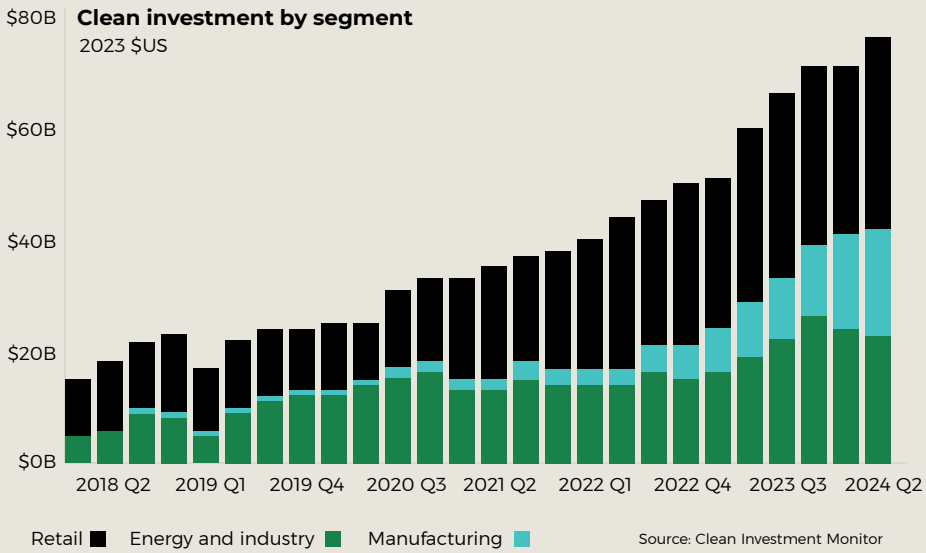
Meeting global sustainability targets requires cleantech solutions

The Paris Agreement is a landmark international treaty that aims to limit global warming to 1.5˚C above pre-industrial levels. To achieve this, greenhouse gas emissions must peak by 2025 and decline 43% by 2030, with a target of net zero by 2050. Cleantech innovation provides the tools needed for industries to meet these goals.

Increasing investment in cleantech

Investment in cleantech has steadily increased across all stages, from seed funding to growth equity, with notable acceleration from 2021 onwards.

Global investment in clean energy technology is projected to reach US$1 trillion by 2030.



- **Cleantech investment continues to trend upwards.** Retail (households and businesses) dominates investment levels. However, the manufacturing segment represents a smaller but fast-growing share.
- **Strong investor interest** exists in energy transition technologies, carbon capture and green manufacturing.
- **Record levels of private capital investment in cleantech,** nearing US$80 billion, were seen in mid-2024 — highlighting the growing prioritisation of sustainable initiatives.

Sources: TOP 10 Trends in Clean Energy Technology in 2024 (2024), S&P Global; New Zealand Clean Tech Report (2024), Callaghan Innovation; Cleantech 50 TO WATCH (2024), Cleantech Group; Three Kiwi cleantech startups make global top 50 to watch (2024), NBR; Connecting Kiwi cleantech ventures with global opportunities (2024), Callaghan Innovation; Cleantech 50 to Watch (2024), Cleantech Group.

New Zealand has seen a surge in innovations that address environmental challenges. From advancements in renewable energy to breakthroughs in sustainable agriculture, the demand for cleantech solutions continues to grow and shape the landscape.

NEW ZEALAND: AN EMERGING CLEANTECH POWERHOUSE

New Zealand has committed to achieving net zero carbon emissions by 2050, and we're already generating around 88% of our electricity from renewable sources.

New Zealand is uniquely positioned to lead the world in cleantech innovation. Our commitment to sustainability is deeply embedded, driving us to seek brave new solutions and creating the ideal location to cultivate smart cleantech innovations.

We're also a compelling destination for cleantech investment.

An incubator for international cleantech

New Zealand is a nation of early adopters, willing to give things a go. Together with our relatively small cities, cohesive regulatory framework and innovative mindset, it makes us the perfect sandbox for testing, developing and refining cleantech solutions.

As these technologies mature, they present scalable opportunities for international markets, positioning New Zealand as a global leader in sustainable innovation.

Kaitiakitanga: a culture of environmental stewardship

The Māori concept of kaitiakitanga, (guardianship of the environment), drives a long-term commitment to sustainability across New Zealand's industries.

It underpins national and local environmental policies, ensuring cleantech developments align with sustainable practices for future generations.

It also fosters responsible and ethical business practices, creating an environment where investments align with globally recognised environmental, social and governance standards.

Committed to net-zero emissions by 2050

New Zealand's net-zero carbon ambition is underpinned by robust policies like the Zero Carbon Act and the Emissions Trading Scheme.

With around 88% of our electricity already derived from renewable sources, New Zealand is poised to be one of the first countries to decarbonise its energy grid.

AgriZeroNZ is a world-first public-private partnership between the government and industry stakeholders. It focuses on using R&D to help farmers reduce methane and nitrous oxide emissions from livestock and soil management, while investing in innovative technologies and sustainable practices.

Explore New Zealand's cleantech growth subsectors

A SNAPSHOT OF NEW ZEALAND'S CLEANTECH SECTOR

New Zealand's cleantech sector is well-established – and it's growing at pace. We welcome investors, developers and entrepreneurs to invest in our innovative solutions, or use them to benefit their own businesses.

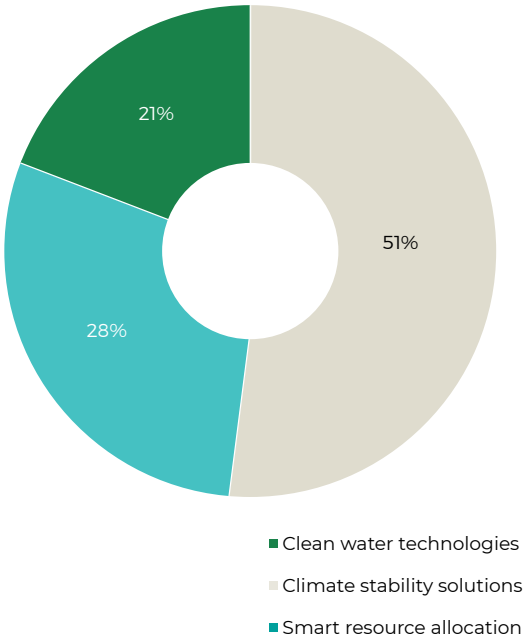
Our expanding cleantech industry encompasses bioenergy, future fuels, waste-to-value and innovative solutions that reduce negative environmental impacts or increase efficiency.

As industry shifts to decarbonise, greenfield opportunities are emerging, and early-stage companies are developing high-value solutions with significant global reach.

With revenue growth of 29% between 2023–2024 and planned capital raises of NZ$440 million in the year to March 2025, New Zealand's cleantech sector is proof that a sustainable investment can allow you to do good, and do well.

- NZ$291m revenue*
- Employs over 1,190 people*
- Capital expenditure: NZ$87m*
- R&D expenditure: NZ$112m*
- 29% sector revenue growth*

The focus of New Zealand cleantech companies



Learn more about New Zealand's Cleantech sector here.

Sources: New Zealand Clean Tech Report (2024), Callaghan Innovation

*(2023–2024)

NEW ZEALAND CLEANTECH: HIGH DEMAND AND STRONG SUPPORT

The development and delivery of cleantech solutions in New Zealand is accelerating, supported by a network of research institutes, universities and government agencies. It not only presents an exciting investment opportunity, but the chance to bolster existing technology with performance and efficiency gains.

Driving demand for cleantech adoption by New Zealand-based companies

Growing consumer demand
for carbon-free goods and services

Government regulatory drivers, such as the Emissions Trading Scheme (NZ ETS), which incentivises businesses to adopt cleaner technologies and reduce their carbon footprint.
(Find out more about our regulatory environment on p.42)

Carbon border adjustment mechanisms
for exporters

Cleantech opportunities:


Renewable energy from waste heat recovery systems


Waste-to-value recyling of industrial byproducts to support a circular economy


Water treatment and conservation


Energy generation and storage solutions

Carbon capture and storage


Sustainable manufacturing

Supporting development and delivery of cleantech solutions

Strong R&D network of research institutes and universities

Government support for innovation through agencies such as the Ministry of Business, Innovation and Employment, Ministry for Primary Industries, New Zealand Trade and Enterprise, and networks created by regional initiatives

Abundant local renewable energy (hydro, wind, geothermal power) and industrial waste byproducts

THE IDEAL BASE FOR YOUR CLEANTECH PROJECT

With abundant natural resources, a favourable regulatory environment, easy access to talent and advanced manufacturing capability, and an ingrained focus on sustainability, New Zealand is an appealing destination to deploy your own cleantech solution.

Untapped access to renewable energy	**Growing hydrogen economy**	**Ideal launch pad for global growth**	**Nimble government policy frameworks**	**Established manufacturing and supply chain capability**	**Easy access to waste-to-value feedstocks**
New Zealand generates approximately 88% of its electricity from renewable sources, including hydropower (57%), geothermal (18%), and wind (7%). Solar is expected to supply 6% by 2035.	New Zealand's hydrogen economy is steadily advancing, with refuelling stations being built and a national hydrogen action plan focused on developing domestic production. Our impressively high percentage of renewable electricity makes New Zealand well-suited for producing green hydrogen.	Strategically located in Asia Pacific, New Zealand is a gateway to high-growth regional markets. The country benefits from 15 free trade agreements, including the CPTPP and bilateral agreements with China, Japan and South Korea.	New Zealand's adaptable policy environment fosters cleantech innovation. Initiatives such as the Emissions Reduction Plan and support from government agencies help streamline regulations, accelerate project timelines, and provide essential funding for research and development.	New Zealand has well-developed supply chain infrastructure and advanced manufacturing expertise. Together with a skilled and innovative workforce, it ensures efficient scaling and deployment of cleantech projects.	New Zealand generates approximately 17 million tonnes of household and commercial waste annually. Organic waste streams, particularly from agriculture, provide abundant feedstocks for waste-to-energy and biomethane projects.

Sources: New Zealand's projected greenhouse gas emissions to 2050 (2024), Ministry for the Environment; Government climate-change work programme (2023), Ministry for the Environment; New Zealand's 2030 & 2050 Climate Targets (2024), Christina Hood.

NEW ZEALAND IS OPEN FOR CLEANTECH INVESTMENT

New Zealand's commitment to building a more sustainable future relies on the expansion of our cleantech industry. We're looking for investors to be part of this growth story.

1. Equity and debt investment
We invite equity and debt investments aligned with our goal of optimising efficiencies while minimising environmental impacts, allowing investors to participate in New Zealand's sustainable future.

2. Strategic partnerships
We welcome strategic partnerships with suppliers and financial institutions to enhance our capabilities and resources as we expand our cleantech initiatives.

3. Industrial projects
Numerous industrial projects are underway in New Zealand, focusing on advancing and expanding cleantech infrastructure. These initiatives present significant opportunities for collaboration and investment within the growing cleantech sector.

4. Market expansion
We're actively seeking enquiries from offshore companies wanting to deploy their technology or expand their operations in New Zealand, so they can make the most of our nation's competitive advantages in the cleantech space.

View more investment opportunities here.

MĀORI ARE INTEGRAL TO NEW ZEALAND CLEANTECH

Māori, the Indigenous people of Aotearoa New Zealand, offer distinctive cultural insights and an intergenerational commitment to environmental stewardship that aligns closely with sustainable cleantech development.

Partnering with Māori will unlock exciting, long-term investment opportunities.

With unique access to land, Māori organisations are well-positioned to support projects that enhance New Zealand's cleantech sector, creating mutually beneficial partnerships that drive both economic growth and sustainable development.

Intergenerational values like kaitiakitanga (guardianship) and rangatiratanga (self-determination) are at the heart of the Māori worldview. They confer a responsibility to protect the natural world and ensure a sustainable relationship between people and the environment.

For cleantech, this combination of economic opportunity and the preservation of natural resources for future generations presents an attractive investment proposition.

Collaborative cleantech partnerships

- **Government and private sector collaborations:** Māori organisations work with government bodies and cleantech firms to combine resources, expertise and funding. For example, companies like Geo40 are partnering with Māori trusts to develop sustainable energy projects that align with both economic goals and environmental stewardship.
- **Educational and technical training programmes:** Establishing technical training programmes with educational institutions equips Māori communities with the skills needed for cleantech careers, creating a readily available workforce aligned with sustainability goals.
- **Cleantech employment pathways:** By participating in cleantech projects, Māori communities gain access to new job opportunities in sectors like renewable energy infrastructure and environmental monitoring, contributing to local economic resilience.

Sources: Geo40 partner with Māori on world-leading energy project (2018), Geo40; Whāriki Māori Business Network (2024), Whāriki; New partnership supports Māori business innovation (2023), Callaghan Innovation; Whāriki and Callaghan Innovation enter partnership (2023), Callaghan Innovation; Partnering with Māori (2024), Invest New Zealand

"Whatungarongaro te tangata, toitū te whenua."

People come and go, but land remains.

Māori whakataukī (proverb)

CASE STUDY:

PIONEERING FUSION ENERGY

Māori-founded cleantech company OpenStar Technologies is developing its innovative reactor design to harness the power of nuclear fusion.

Regarded as a safer alternative to nuclear fission, nuclear fusion combines hydrogen atoms under extreme conditions to release energy, mimicking the sun's natural reactions. By using hydrogen as its primary input, fusion offers a virtually unlimited and emissions-free energy solution, making it a clean, sustainable alternative to fossil fuels and other conventional energy sources.

OpenStar is designing its pioneering 'levitated dipole' to be scalable and cost-effective, making its nuclear fusion technology more accessible and adaptable for long-term sustainable energy solutions.

Transformative clean energy with a values-based approach

OpenStar's commitment to a purpose-driven mission, rooted in Māori values, fosters a sense of responsibility not only to its technology but to the communities it serves.

The company's young, dynamic team has a flexible, collaborative culture that allows it to make advancements efficiently and at a lower cost, enabling rapid progress in the complex field of fusion.

Along with a commitment to sustainable principles, it's seeing OpenStar unlock exciting investment opportunities in the clean energy landscape, both within New Zealand and internationally.

Global progress in fusion energy

The worldwide push for fusion energy has attained significant milestones, such as plasma temperatures exceeding 100 million °C and positive energy gain.

Major international projects, including the International Thermonuclear Experimental Reactor, have laid the groundwork for fusion advancement. However, multiple approaches exist around the world in the race to achieve sustainable and scalable fusion energy.

OpenStar has positioned itself competitively on the global stage, establishing New Zealand as a real contender in the fusion energy sector.

Sources: Kiwi physicist puts New Zealand in the nuclear fusion race (2024), Newstalk ZB; Nuclear fusion start-up claims milestone with unconventional reactor (n.d.), Financial Times, Who we are (2024), Openstar Technologies Ltd; OpenStar's race for fusion energy hots up (2024), Business Desk

OpenStar founder Ratu Mataira descends from innovation. His grandmother Dame Kāterina Mataira pioneered the Māori language immersion schools that underpin today's revitalisation of te reo Māori. In his words:

“If she could do that, what is the measure of what you can do in a single life? For our generation — for my life — that challenge is climate change and the future of human prosperity. Fusion itself is only a technical solution, but these problems are more than technical. Saving te reo Māori wasn’t done via an app, AI or government intervention — it was done by people coming together with a sense of responsibility, courage and hope to protect what was most important to them. That’s OpenStar, and that’s me.”

NEW ZEALAND'S BIOENERGY POTENTIAL

UNLOCKING NEW ZEALAND'S BIOENERGY POTENTIAL

Bioenergy already plays a foundational role in New Zealand's energy landscape, contributing over 9% of the country's energy supply. However, significant untapped potential exists, thanks to our abundant natural resources and reliable feedstock from extensive forestry and agricultural assets.

Bioenergy is a significant global renewable energy source, playing a key role in the shift towards net-zero carbon targets.

In New Zealand, it is derived from biomass such as wood, organic waste, agricultural residues and animal manure. Often discarded, these waste materials can be converted into valuable energy sources such as electricity, heat or biofuels for transportation — delivering environmental advantages and strengthening economic resilience.

Bolstered by our solid infrastructure and innovative research ecosystem, New Zealand's bioenergy sector is poised for growth.

New Zealand's carbon reduction goal relies on bioenergy

New Zealand's current bioenergy use is approximately 50 petajoules (PJ), with an assumed immediate potential bioenergy demand of 150 PJ driven by the transition from coal in process heat applications, the rise of transport biofuels, and the potential replacement of natural gas.

The gap between current use and potential demand can be bridged by better use of existing biomass residues. Any shortfall can be met through strategies such as diverting low-value export logs, which make up 20% of the 23 million tonnes (157 PJ) exported annually.

Bioenergy applications

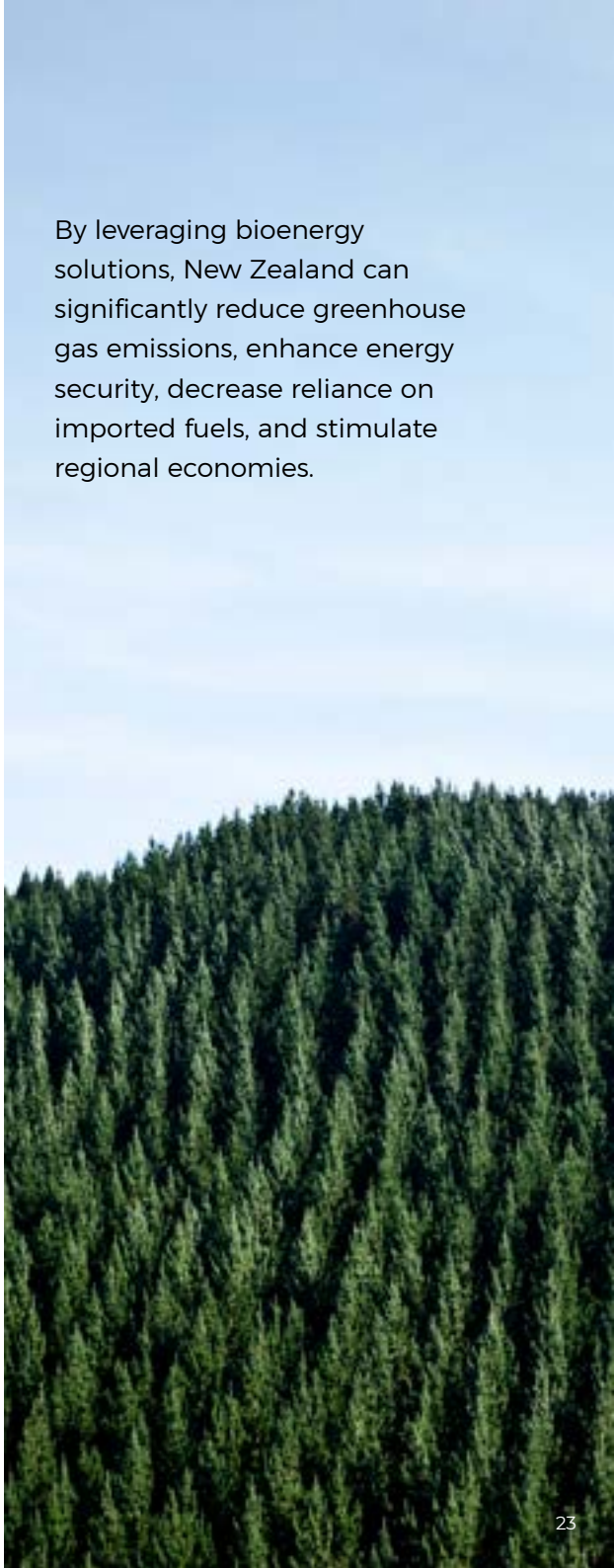
Electricity generation: Biomass-powered plants using wood waste or biogas are already established as reliable renewable power sources, with significant potential for grid-scale expansion.

Transportation: The global shipping and aviation industries are increasingly seeking low-carbon fuel alternatives. Biofuels derived from wood and agricultural waste provide a viable pathway to decarbonising international transport.

Industrial processes: Bioenergy can effectively replace fossil fuels in energy-intensive sectors such as pulp and paper manufacturing, dairy production and metal processing.

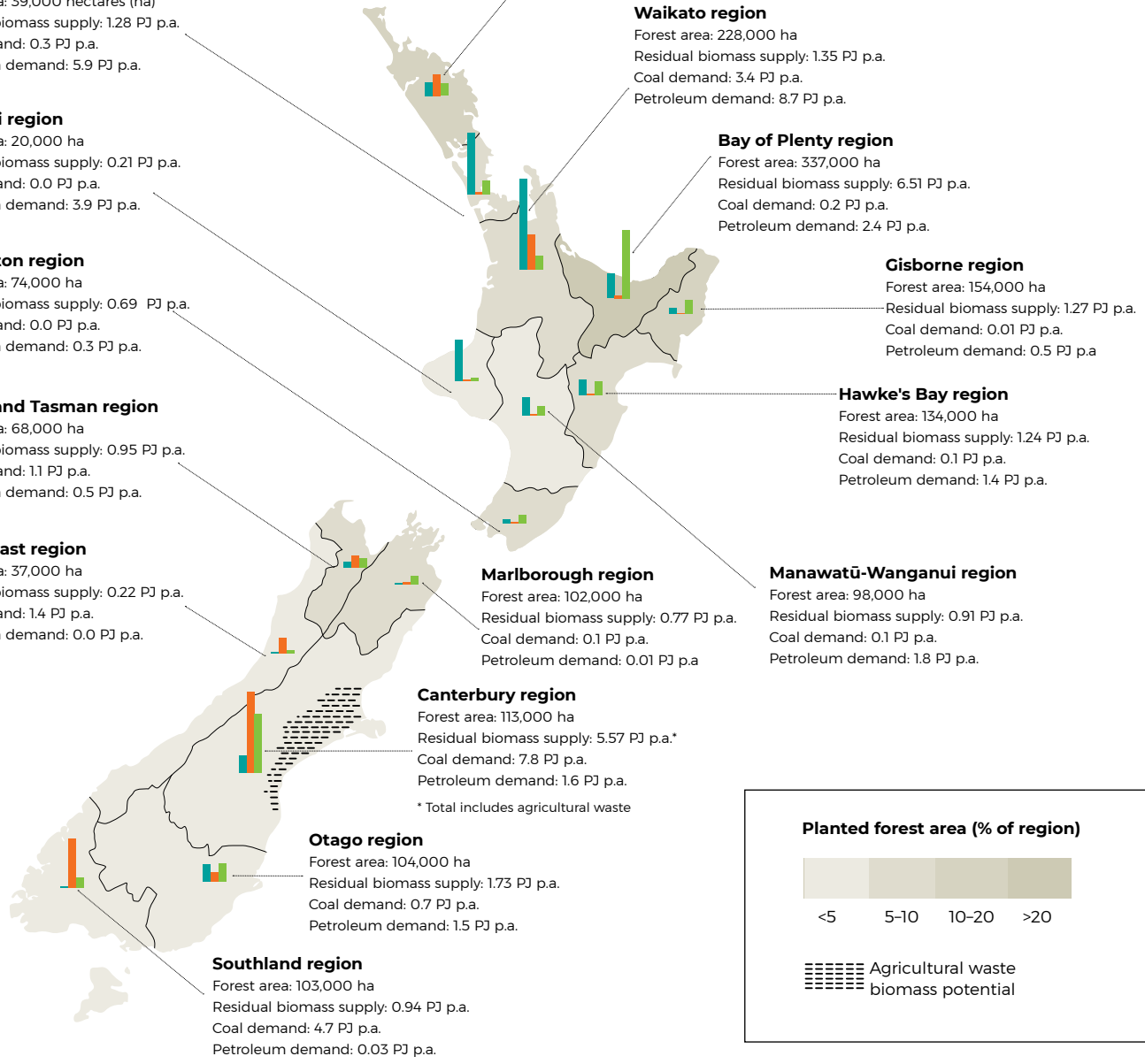
Agriculture: On-farm biogas systems can convert organic waste into heat and power, offering cost savings and emissions reductions for farmers.

By leveraging bioenergy solutions, New Zealand can significantly reduce greenhouse gas emissions, enhance energy security, decrease reliance on imported fuels, and stimulate regional economies.



Source: There is already adequate residue biomass for 30% of our energy demand (2022), BioEnergy Association of New Zealand.

Regional forestry zones and corresponding coal and petroleum demand



Northland region
Forest area: 188,000 ha
Residual biomass supply: 1.17 PJ p.a.
Coal demand: 2.0 PJ p.a.
Petroleum demand: 1.3 PJ p.a

Auckland region
Forest area: 39,000 hectares (ha)
Residual biomass supply: 1.28 PJ p.a.
Coal demand: 0.3 PJ p.a.
Petroleum demand: 5.9 PJ p.a.

Waikato region
Forest area: 228,000 ha
Residual biomass supply: 1.35 PJ p.a.
Coal demand: 3.4 PJ p.a.
Petroleum demand: 8.7 PJ p.a.

Taranaki region
Forest area: 20,000 ha
Residual biomass supply: 0.21 PJ p.a.
Coal demand: 0.0 PJ p.a.
Petroleum demand: 3.9 PJ p.a.

Bay of Plenty region
Forest area: 337,000 ha
Residual biomass supply: 6.51 PJ p.a.
Coal demand: 0.2 PJ p.a.
Petroleum demand: 2.4 PJ p.a.

Gisborne region
Forest area: 154,000 ha
Residual biomass supply: 1.27 PJ p.a.
Coal demand: 0.01 PJ p.a.
Petroleum demand: 0.5 PJ p.a

Wellington region
Forest area: 74,000 ha
Residual biomass supply: 0.69 PJ p.a.
Coal demand: 0.0 PJ p.a.
Petroleum demand: 0.3 PJ p.a.

Hawke's Bay region
Forest area: 134,000 ha
Residual biomass supply: 1.24 PJ p.a.
Coal demand: 0.1 PJ p.a.
Petroleum demand: 1.4 PJ p.a.

Nelson and Tasman region
Forest area: 68,000 ha
Residual biomass supply: 0.95 PJ p.a.
Coal demand: 1.1 PJ p.a.
Petroleum demand: 0.5 PJ p.a.

West Coast region
Forest area: 37,000 ha
Residual biomass supply: 0.22 PJ p.a.
Coal demand: 1.4 PJ p.a.
Petroleum demand: 0.0 PJ p.a.

Marlborough region
Forest area: 102,000 ha
Residual biomass supply: 0.77 PJ p.a.
Coal demand: 0.1 PJ p.a.
Petroleum demand: 0.01 PJ p.a

Manawatū-Wanganui region
Forest area: 98,000 ha
Residual biomass supply: 0.91 PJ p.a.
Coal demand: 0.1 PJ p.a.
Petroleum demand: 1.8 PJ p.a.

Canterbury region
Forest area: 113,000 ha
Residual biomass supply: 5.57 PJ p.a.*
Coal demand: 7.8 PJ p.a.
Petroleum demand: 1.6 PJ p.a.

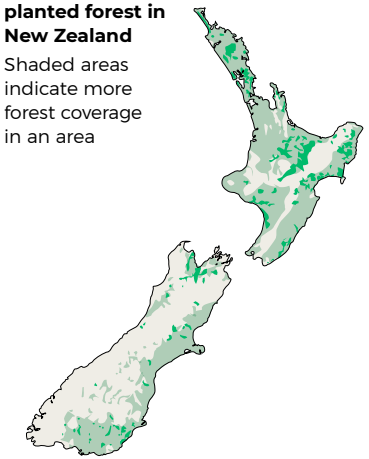
* Total includes agricultural waste

Otago region
Forest area: 104,000 ha
Residual biomass supply: 1.73 PJ p.a.
Coal demand: 0.7 PJ p.a.
Petroleum demand: 1.5 PJ p.a.

Southland region
Forest area: 103,000 ha
Residual biomass supply: 0.94 PJ p.a.
Coal demand: 4.7 PJ p.a.
Petroleum demand: 0.03 PJ p.a.

Distribution of planted forest in New Zealand

Shaded areas indicate more forest coverage in an area



All forestry data and resiual biomass fuel projections supplied by Scion.

Process heat demand figures are taken from the 2016 MBIE/EECA heat plant database. For notes regarding this database, please see the map on the left.

For commercial confidentiality reasons, regional totals do not include fiuel demand for some large industrial users.

Planted forest area (% of region)

Agricultural waste biomass potential

Regional fuel totals

Estimated process heat petroleum demand (incl. natural gas and liquid fuels)

Estimated process heat coal demand

Residual biomass energy supply (post-2035 projection)

Source: Biomass fuel switching opportunities for industrial process heat (2022), MBIE.

REPLACING COAL WITH TORREFIED PELLETS

Huntly Power station is in the Waikato region in New Zealand's North Island, situated near rail infrastructure and forestry assets.

Emerging technology to make torrefied wood pellets presents an opportunity for investors and developers to establish production facilities in New Zealand. This is underpinned by strong domestic demand and growing export potential.

By torrefying wood in a high temperature, oxygen-free environment, its properties are changed to produce a fuel that closely mimics coal. The resulting pellets are also more durable and water-resistant than coal, making them more suitable for shipping and being stored outside.

Thanks to their ability to replace coal as a like-for-like input in existing boilers, torrefied wood pellets can accelerate the transition to a decarbonised future by minimising up-front costs for boiler modification or replacement.

Demand for torrefied pellets

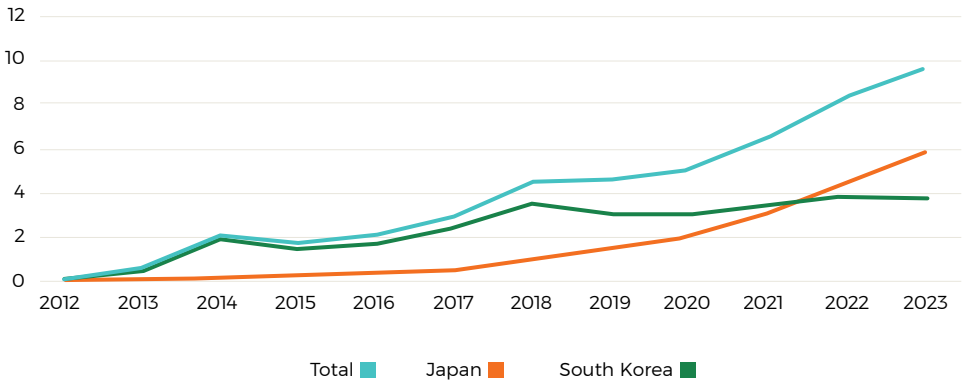
- **A substitute for coal at Huntly Power Station**
  A 953-megawatt thermal plant, Huntly Power Station (owned by Genesis Energy) is a cornerstone of New Zealand's electricity supply, particularly during periods when renewable sources, such as hydro and wind, face constraints.

- **Genesis Energy moving to torrefied wood**
  Following successful trials, Genesis is seeking 300,000 tonnes of torrefied pellets per year. To fulfil this requirement, multiple production sites are expected.

- **Projected export growth**
  Global demand for torrefied pellets is expected to follow white pellets as supply builds, while also offering the benefit of being more durable for transport and storage.

- **Decarbonisation commitments driving biomass demand**
  In 2023, Japan's total import of wood pellets escalated to 5.8 million tonnes, while South Korea imported 3.7 million tonnes. Japan is aiming for 5% of its total power generation share to come from biomass in 2030. This growth is indicative of the export potential for torrefied or black pellets from New Zealand.

Wood pellet imports from all sources (million tonnes)



Sources: Huntly Power Station – the future (2025, Genesis Energy; Transforming New Zealand's clean energy landscape with wood (2023), Beca; Share of energy consumption from renewable sources in Europe (2025), European Environment Agency; Leading consumers of energy from solid biomass in the European Union 2023 (2025), Statista.

BUILDING A BIOFUEL INDUSTRY

BIOFUEL FOR GREEN SHIPPING

Traditional shipping practices contribute significantly to global greenhouse gas emissions. As a country heavily reliant on exports carried by sea, New Zealand will look to biofuel to reduce its carbon footprint and meet climate change targets.

With increasing demand from key offshore markets looking to meet their own ambitious carbon aligned targets, and with 99% of New Zealand's trade by volume carried by sea, low-emission shipping is critical for our exporters.

Biomethanol is a promising green shipping fuel made by converting biomass into methanol. It has potential to help New Zealand achieve a more sustainable shipping industry, and presents a significant growth opportunity for investors.

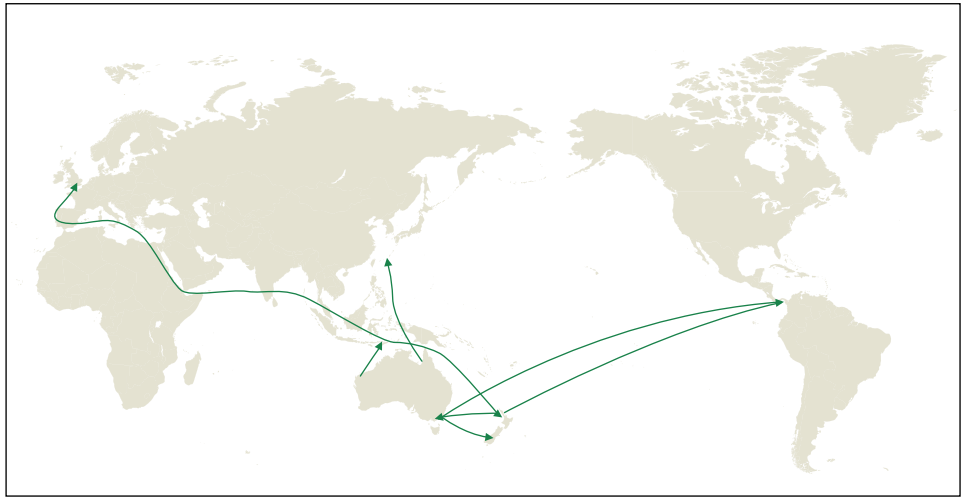
Biofuel to open up green corridors

Shipping companies are increasingly seeking supply of biofuels and biomethanol to support future 'green corridors' — routes for zero-carbon shipping.

In 2023, Zespri and international shipping company CMA CGM commissioned a feasibility study into setting up a low-emission shipping corridor between Tauranga (New Zealand) and Zeebrugge (Belgium) via the Panama Canal. Additional green corridors have been proposed between New Zealand and Australia, and New Zealand and Asia.

In 2024, a ship powered by biofuel derived from used cooking oil travelled between Hong Kong and New Zealand, showcasing the potential of biofuel.

Proposed green corridors



Sources: Drive towards low-emissions international shipping (2024), Zespri; Fresh Carriers Co., Ltd (FCC), and Zespri's first biofuel shipping trial (2024), Zespri.

BIOFUEL FOR SUSTAINABLE AVIATION

With major airlines like Air New Zealand aiming for net-zero emissions by 2050, sustainable aviation fuel (SAF) presents an opportunity to build a new industry in New Zealand.

SAF is a drop-in fuel derived from biological materials (BioSAF) or from a process using hydrogen and carbon dioxide (eSAF). There are multiple production pathways using different feedstocks, and many of these are available in New Zealand, including forestry residues, fibre logs, municipal solid waste, tallow and crop waste.

Air New Zealand is the country's major airline and currently uplifts 214 million gallons of jet fuel domestically each year. It is targeting a 10%+ SAF blend by 2030 and net-zero emissions by 2050, a commitment that will see local demand for SAF increase substantially.

Demand for biofuel in aviation

- **Global demand for SAF currently exceeds supply**
  This creates a unique opportunity for New Zealand to utilise its multiple feedstock options to develop domestic production capabilities for both local and export markets.

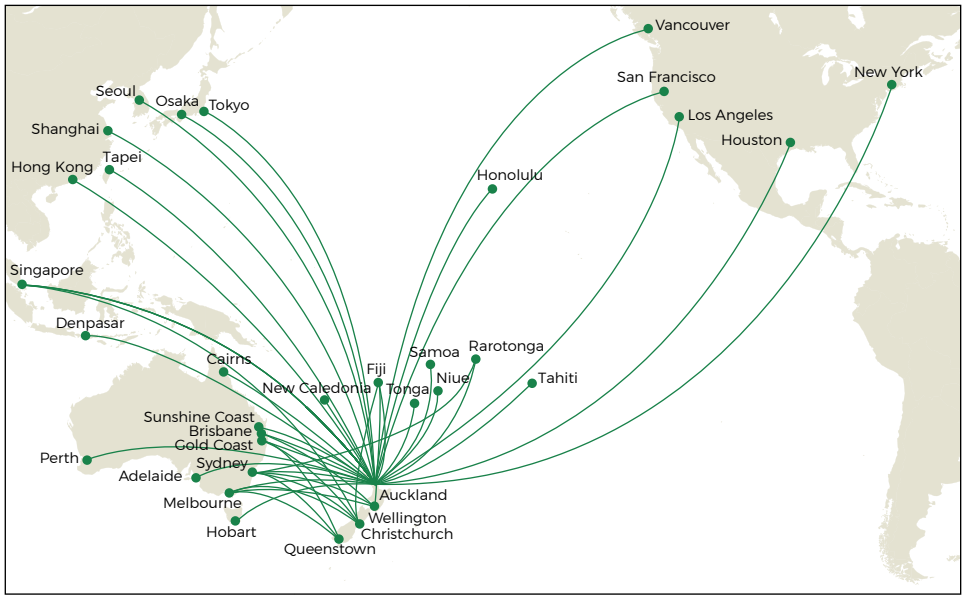
- **SAF will play a pivotal role in Air New Zealand's net-zero emissions strategy**
  The airline's commitment aligns with increasing global regulatory pressures, where governments are mandating higher SAF usage in aviation fuels. SAF will potentially contribute 35–45% of Air New Zealand's necessary reductions.

Regional breakdown of New Zealand jet fuel usage

Location	Gallons per annum
New Zealand total	214m
Auckland	174m
Wellington	16m
Christchurch	17m
Regional	7m

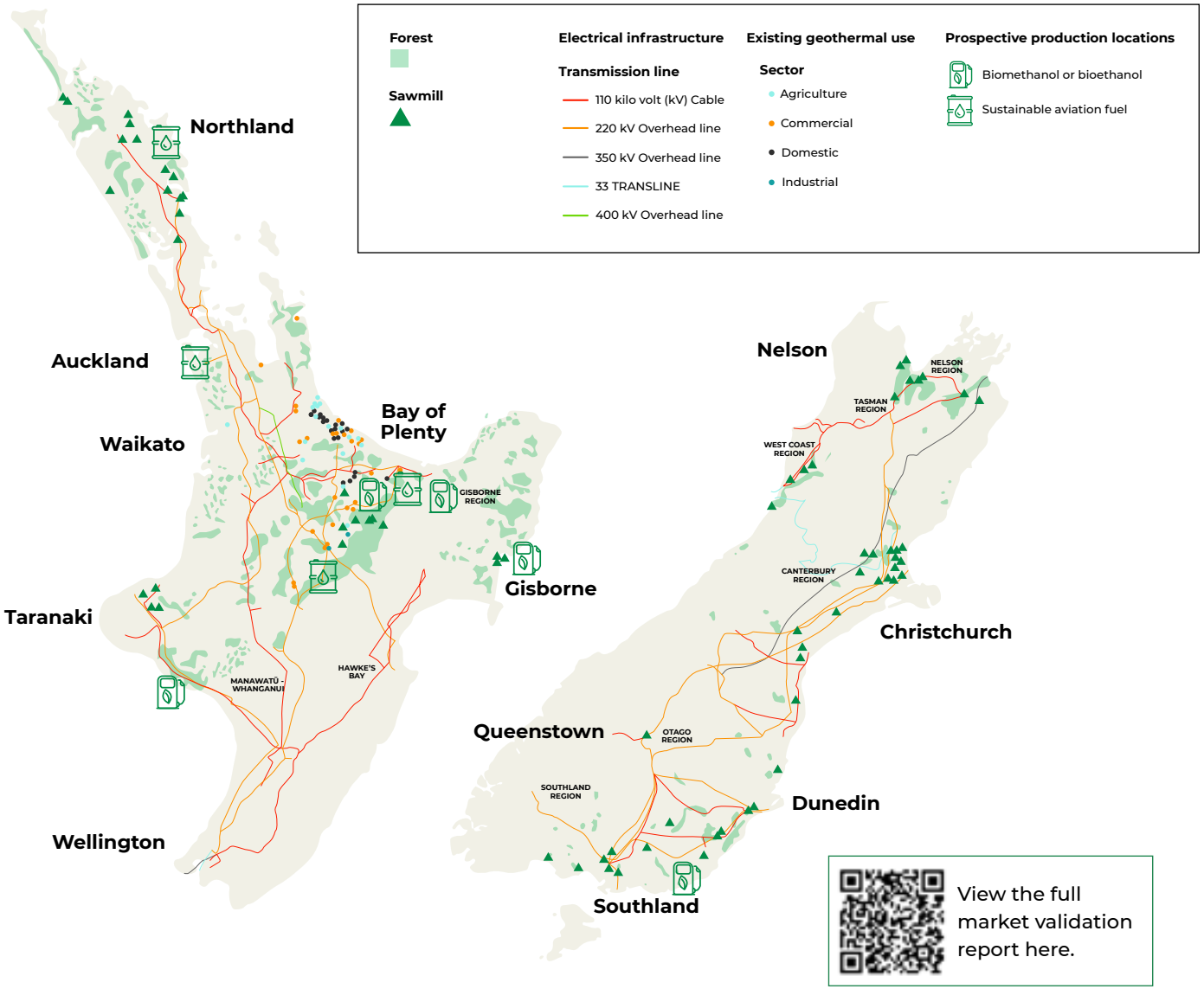
Statistics Provided, 2024, Air New Zealand

Air New Zealand international network map



Sources: Climate action (2025), Sustainable aviation fuel; Opportunity Statement (2024) Air New Zealand.

REGIONAL OPPORTUNITIES FOR BIOFUEL



View the full market validation report here.

Northland
Northland's proximity to a 170km fuel pipeline, running from Marsden Point to Auckland Airport, makes it an attractive location for a sustainable aviation fuel production plant.

Auckland
Glenbrook in South Auckland is advantageously close to New Zealand's largest airport, and also sits alongside a steel mill complete with rail, hydrogen and renewable energy connections.

Bay of Plenty
Feasibility studies show the Bay of Plenty region has New Zealand's highest level of biomass availability, for both bioSAF and biomethanol production. It's also positioned near rail and the Port of Tauranga, making it an attractive region for future fuel production.

The Port of Tauranga is New Zealand's largest export port, and is well positioned to be an earlier adopter of maritime biofuels.

Waikato
Proximity to rail, renewable energy, fresh water, biomass and heat from geothermal power fields presents potential for biofuel production in Waikato.

Gisborne, Taranaki, Nelson, Southland
As demand for biofuel grows, feedstocks produced in these regions could be transported in a hub-and-spoke-model. They could also be aggregated for various biofuel applications.

WASTE-TO-VALUE

NEW ZEALAND'S WASTE-TO-VALUE INDUSTRY IS GROWING

New technology and circular economy initiatives in New Zealand are opening opportunities to create value from waste streams. From developing biogas using anaerobic digestors and landfills, to mineral recovery, carbon capture and recycling facilities, the potential for investment is substantial.

New Zealand generates around 3.7 million tonnes of waste annually, with 40% sent to landfills. This presents diverse opportunities to create value through innovative waste to value solutions.

Food and organic waste into biogas, biomethane and biofertilisers
Coming from households, hospitality, supermarkets and agriculture (particularly in major urban centres and agricultural regions), food and organic waste can be transformed using anaerobic digestion, as seen at facilities like Ecogas's in Reporoa.

Diverting food waste from landfills reduces methane emissions and supports a circular economy by converting waste into energy and agricultural inputs.

Agricultural waste into biogas and fertilisers
Manure and effluent from dairy farms, meat processing plants and horticultural operations can be processed to produce biogas and fertilisers, reducing greenhouse gas emissions and addressing nutrient runoff issues.

Crop residues and processing byproducts can serve as feedstock for bioenergy production, supporting rural energy needs and sustainability goals.

Forestry waste into bioenergy, biochar or pellets
Residues and offcuts from logging operations and wood processing plants, mainly in forestry-dominated regions, can be converted into bioenergy, biochar or wood pellets for heating. Advanced bioplastics can be created from lignin and cellulose byproducts.

Scaling sustainable e-waste solutions
Electrical waste (e-waste) is New Zealand's fastest growing waste stream, with around 98,000 tonnes generated annually. Less than 2% is properly recycled, opening a significant opportunity to fund innovation and create a circular economy in this space.

Plastic waste into industrial fuels or new packaging
New Zealand generates 252,000 tonnes of plastic waste annually from consumer packaging, agricultural and industrial operations. Only 8.3% is recycled.

There is an opportunity to monetise this by turning low-grade plastics into industrial fuels or new packaging, or by investing in reusable packaging solutions – reducing reliance on virgin materials and driving circularity through closed-loop systems.

Source: Ecogas opens its flagship Reporoa Organics Processing Facility (2022), Ecogast; Agricultural waste an un-tapped source of energy (2023), Gas NZ

CASE STUDY:

CREATING VALUE FROM PLASTIC

New Zealand company NILO is using innovative technology to turn plastic into valuable industrial products.

The company is repurposing plastics that are typically non-recyclable, converting them into reusable, low-energy binding agents used in safer and more environmentally friendly products.

Its goal is to find large-scale, economically viable uses for plastic waste that ultimately give value to the waste itself. The initiative is expected to drive more widespread collection of plastic waste and help address the global plastic waste problem.

Environmental guardianship

NILO embraces the Māori intergenerational value of kaitiakitanga, or environmental guardianship. The company's process incentivises the collection of plastics, rewards collectors, reduces landfill waste, and minimises carbon emissions by diverting plastics from incineration.

Collaboration with IKEA

NILO has entered into a development and access agreement with IKEA, allowing Inter IKEA Group to use NILO's patented adhesive derived from plastic waste in the production of wood-based boards. This partnership highlights the commercial viability and potential impact of NILO's technology.

Globally recognised

NILO was named one of CleanTech Group's top 50 global cleantech companies to watch in 2024, acknowledging the company's significant contributions to addressing plastic pollution and commitment to creating a circular economy through innovative solutions.

Sources: Ikea invests in Auckland plastics deep tech firm Nilo (2023), Nilo; 2024 Cleantech 50 to Watch (2024), Cleantech Group.

CASE STUDY:

TURNING E-WASTE INTO PRECIOUS METALS

Mint's proven technology enables clean and sustainable recovery of valuable metals from urban mines, helping to pave the way for countries to achieve a circular economy.

The global electrical waste/e-waste market is projected to increase significantly, with an estimated 82 million tonnes generated by 2030.

Mint's innovative biorefinery model not only addresses the pressing issue of what to do with e-waste, but capitalises on the high concentrations of precious metals found in it.

It positions Mint as a circular economy leader, offering a sustainable solution that aligns with increasing regulatory pressures and consumer demand for environmentally responsible practices.

Recovering precious metals with low-carbon emissions

Using a patented bio-metallurgical process that combines chemistry and microbiology, Mint efficiently concentrates metallic values from e-waste and recovers precious metals such as copper and gold for reuse in consumer products. It not only reduces reliance on traditional mining but significantly lowers carbon emissions compared to conventional recycling techniques like smelting, which are energy-intensive and require large-scale operations.

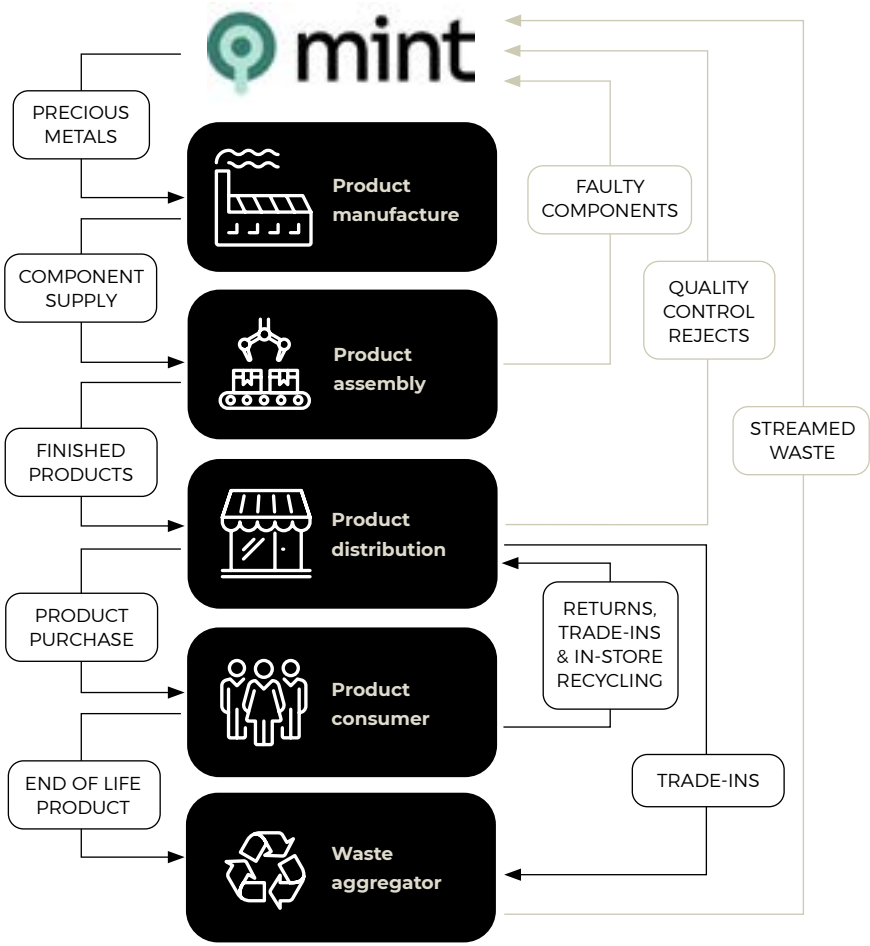
The company aims to establish biorefineries in major cities worldwide, to facilitate local processing of electronic waste and contribute to a more sustainable future.

Global accolades

Mint's commitment to sustainability has garnered international recognition. It was one of 100 companies recognised as a Technology Pioneer by the World Economic Forum, and won an award for Excellence in Energy and Renewables at the InnovationAus Awards in 2023.

Urban mining within the circular economy

Urban mining enables a full circular economy in precious metals, supplementing traditional scrap recycling.



Sources: The venture using microbes to turn e-waste into precious metals (2020), Centre for Innovation and Entrepreneurship; This company recycles gold from electronic waste (2021), World Economic Forum; Mint Innovation: Turning e-waste into gold (2025), Icehouse Ventures; Electronic waste generation worldwide in 2022, with a projection for 2030 (2024), Statista.

BIOMETHANE: A KEY ROLE IN NEW ZEALAND'S ENERGY FUTURE

A study by Beca, Firstgas, Fonterra and the Energy Efficiency and Conservation Authority explored the potential of biomethane in New Zealand, finding it to be an attractive growth opportunity and an exciting investment proposition.

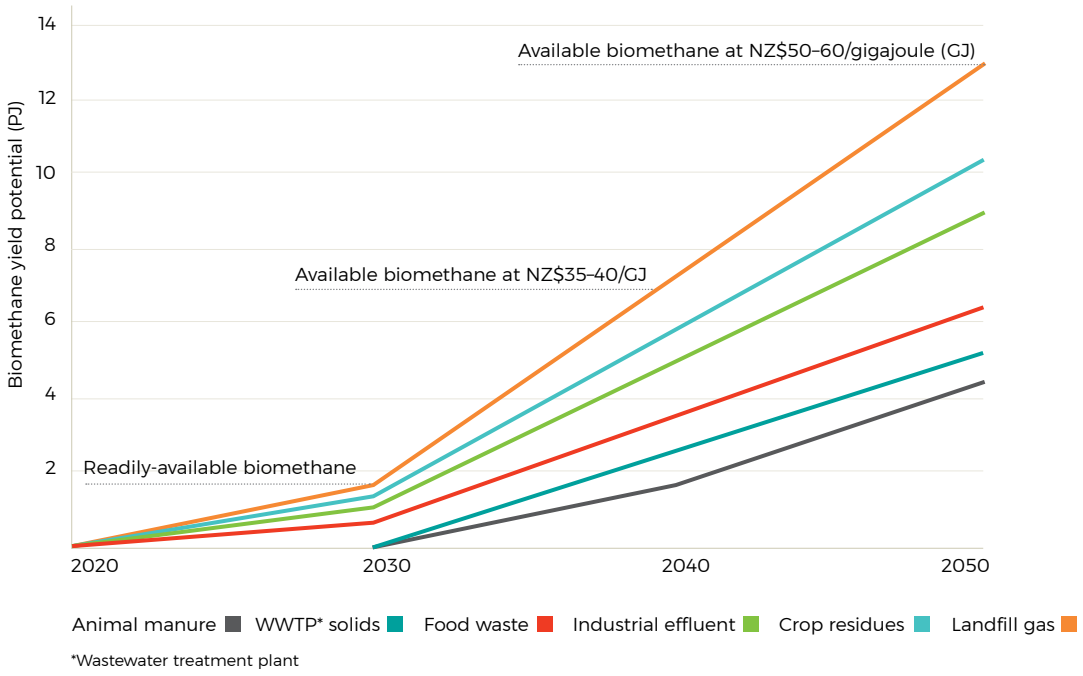
The study looked at biomethane's role in New Zealand's energy transition and its impact on our environment and economy. It identified several factors that point to the potential of New Zealand's biomethane sector.

Strong decarbonisation possibilities
Using existing and available organic wastes, up to 8% of New Zealand's natural gas demand could be met with biomethane, reducing annual emissions by 2% (1.5 million tonnes).

Untapped growth potential
Biogas and biomethane are untapped energy resources in New Zealand, positioning the country as an early-stage market for investment. With an achievable 13 PJ of biomethane in the long term, the market offers scalability and strong returns for first-mover investors.

Competitive economics, high returns and multiple revenue streams
Biomethane has the potential to become economically competitive as Emissions Trading Scheme prices rise and natural gas scarcity increases. Higher biomethane prices mean attractive margins for investors. The creation of 400,000 tonnes of green CO_2 also opens opportunities for exporting or sequestration, tapping into additional markets.

Forecast biomethane availability



*Wastewater treatment plant

Versatile applications

Biomethane can be used as a direct substitute for natural gas in heating and industrial processes, as well as a chemical replacement for fossil methane feedstocks. This versatility broadens its appeal across industries, making it attractive to diversified investors seeking exposure in energy, chemicals and industrial sectors.

Co-products with value

490,000 tonnes of high-quality digestate from food waste and crop residue, plus 2.7 million tonnes from manure digestion, provide opportunities for use in sustainable agriculture or as a sellable byproduct.

Source: Biogas and Biomethane in New Zealand (2021), Beca.

Biomethane's investment potential is vast – from funding biomethane-powered industrial plants to establishing partnerships with New Zealand-based firms to build production facilities or distribution networks.

POTENTIAL BIOGAS SOURCES ACROSS NEW ZEALAND

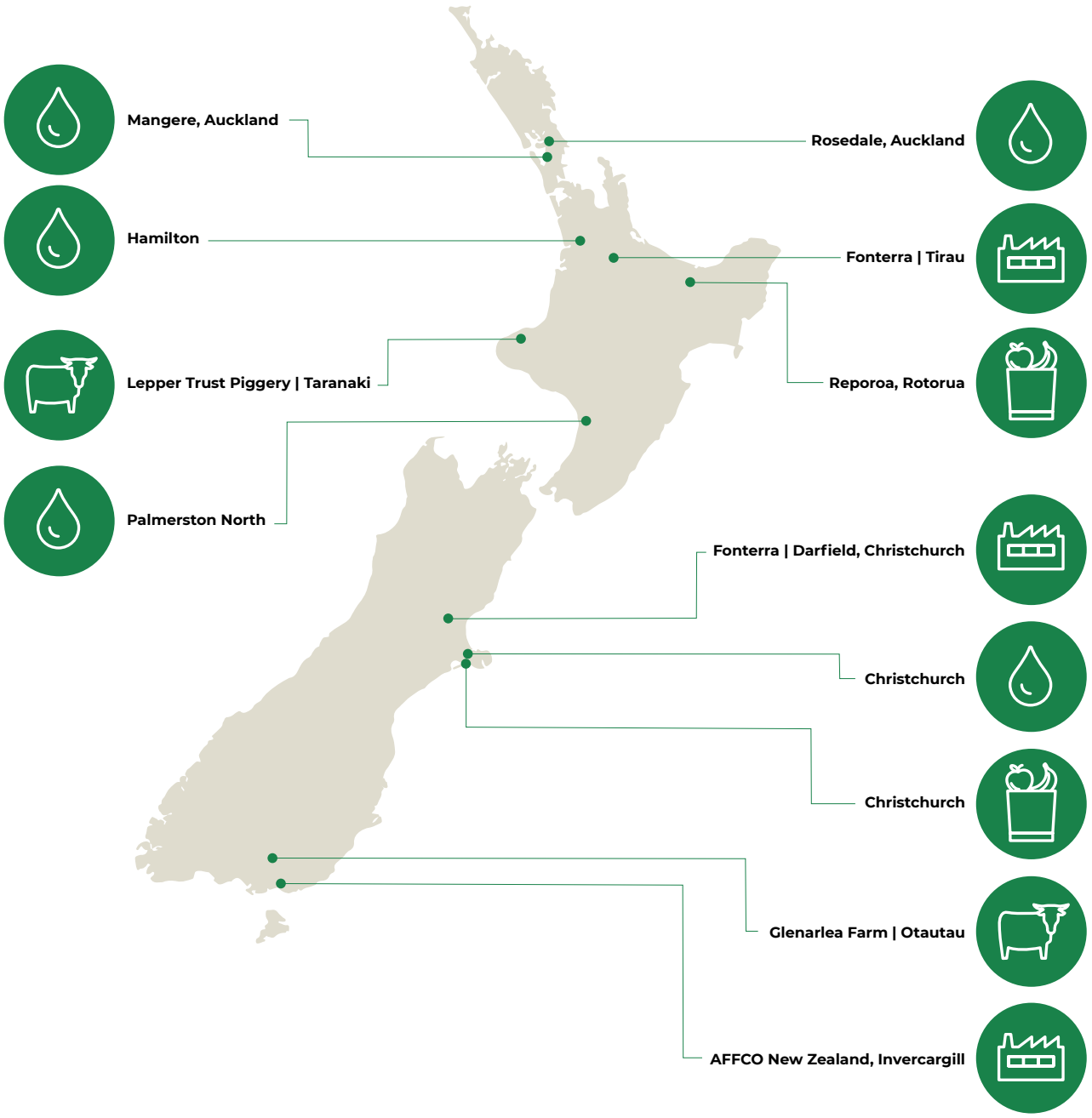
Sources of waste biogas feedstock can be found across New Zealand, demonstrating a robust ecosystem and huge untapped potential.

Municipal wastewater

Manure

Municipal organic waste

Industrial effluent



Sources: Waste to energy technology implications in the Aotearoa New Zealand context; www.waikatoregion.govt.nz/assets/WRC/TR202327.pdf.

CASE STUDY:

NEW ZEALAND'S FIRST BIOGAS UPGRADE FACILITY

In November 2024, renewable gas began flowing for the first time in New Zealand at an organics processing facility in Reporoa, where Ecogas and First Renewables had installed New Zealand's first biogas upgrade facility.

After food scraps and other organic wastes are transformed into biogas, this advanced system converts it into biomethane.

This biomethane is then injected into the Firstgas pipeline, providing a sustainable energy source for residential and commercial gas users. BioCO_2 is also produced, and supplied to a nearby glasshouse to enhance tomato growth.

By transforming a waste product into renewable gas, New Zealand is making strides toward environmental sustainability, energy security and economic development.

Powering up to 7,200 homes and benefiting the environment

Each year, the Ecogas plant will process 75,000 tonnes of food waste, or 25% of New Zealand's total food waste, producing renewable gas, 200 tonnes of biofertiliser and energy for local use.

Initial estimates indicate it can supply enough renewable gas to power 7,200 homes, while reducing CO_2 emissions by approximately 11,000 tonnes per year. And, because biomethane is chemically identical to natural gas, no modifications are required for existing gas users or their appliances.

Showcasing a successful implementation model

The initiative demonstrates biomethane production is not just theoretical but actively operational in New Zealand. Its success serves as a blueprint for replicating similar facilities in other regions of New Zealand.

It also presents an attractive opportunity for investors looking to expand operations or enter new markets.

Source: Using biogas technologies to reduce methane emissions (2025), Biogas; A waste to energy guide for New Zealand (2020), Ministry for the Environment; Renewable gas flows in New Zealand pipeline for the first time (2024), Ecogas.

CLEANTECH SOLUTIONS

CLEANTECH SOLUTIONS FOR GOOD

Drawing on deep R&D capability, New Zealand's cleantech sector is building innovative tech solutions that help organisations and industries lessen their environmental impact and drive efficiencies, right across the spectrum.

Our unique combination of scientific talent, entrepreneurial spirit and supportive government initiatives position New Zealand as a leader in developing unique, high-value clean technology that can have a global impact.

Many multinationals are already benefiting from New Zealand-designed hardware and software, bolting it into existing processes to make them more efficient or reduce carbon emissions.

For investors, it's an opportunity to invest early into innovative intellectual property in a sector and region of growth.

Where our cleantech is being used

You'll see New Zealand cleantech making an impact in businesses and industries across the world.

- Built environment
- Energy
- Recycling
- Food and agriculture
- Carbon management
- Mineral recovery
- Carbon capture
- Manufacturing
- Mobility
- Circular economy
- Novel materials
- Water treatment
- Robotics
- Biofuels

ENPOT
Aluminium's flexible future

CASE STUDY:

REINVENTING ALUMINIUM SMELTERS

EnPot's revolutionary technology is turning aluminium smelters into virtual batteries, capable of providing valuable storage and back-up power to the world's electricity grids in times of high energy demand or low generation.

EnPot's proprietary technology, developed at the University of Auckland, gives smelter operators the ability to turn energy consumption up or down by as much as 30%.

This allows them to take advantage of off-peak power prices and intermittent renewable energy sources to better match supply with demand, in cooperation with electricity generators and grid operators.

EnPot technology enables:

- stable modulation of +/-20% power consumption at any time, for any duration
- up to +/-30% power for long-term modulation with some process changes, for any duration.

Commercial installation
After successful trial installation, the technology was rolled out on a commercial scale by TRIMET, one of the largest aluminium producers in Germany and France. It was installed on a full potline of 120 pots at TRIMET's Essen Smelter in Germany to enable the smelter to shift power use by +/- 25%, and has been performing above expectations.

International success
Since then, EnPot has seen further international success, signing a landmark cooperation agreement with SAMI, a Chinese company providing aluminium reduction technology.
The two companies are now seeking opportunity for application of EnPot's patented deep modulation technology on aluminium smelters featuring SAMI's renowned patented pot technology.

Source: Commercial Rollout (2025), Enpot; EnPot and SAMI Sign Landmark Cooperation Agreement (2023), Enpot; Aluminium's Flexible Future (2025), Enpot.

Aspiring Materials

CASE STUDY:

PIONEERING CRITICAL MINERAL SOLUTIONS

Aspiring Materials is a leading innovator in the global critical mineral and materials industrial sector, with cutting-edge solutions that localise production and eliminate environmental impacts.

Aspiring Materials has pioneered a globally scalable process for the extraction of magnesium nickel, cobalt and manganese, along with a world class reactive silicon for cement applications. This closed-loop, zero-waste method transforms magnesium-rich rocks into high purity materials.

The technology is particularly impactful across industries such as water treatment, bio-processing, aeronautics, battery and cement, where it significantly reduces carbon footprints. One key product, magnesium hydroxide, has a range of applications and paves the way for low-cost magnesium metal production.

Expanding internationally
Aspiring Materials aims to expand its global reach by providing critical minerals that facilitate the transition to a low-carbon economy. The company's commitment to reducing the environmental impact of industries worldwide positions them as a crucial player in achieving net-zero emissions by 2050.

Globally recognised
Aspiring Materials has received notable recognition for its sustainable innovations.

- Part of a fellowship programme at Breakthrough Energy, an innovation accelerator founded by Bill Gates to support projects that demonstrate an ability to reduce 500 million tonnes of greenhouse gas emissions per year at scale.
- One of 10 companies selected to join PepsiCo's Asia-Pacific Greenhouse Accelerator programme and winner of the PepsiCo Associates' Choice Award.
- Frequently included in lists of start-ups to watch - including Cleantech Group's APAC Cleantech 25, HolonIQ's Indo-Pacific Climate Tech 100 and Australia & New Zealand Climate Tech 100 - and was a NZ Hi-Tech Award finalist for 2024.
- Selected for the Elemental Impact Accelerator in 2024, Cohort 13. Elemental aims to localise and scale impactful technologies around the world.

Source: Media Room (2024), Aspiring Materials.

SECTOR REGULATORY ENVIRONMENT

JOURNEY TOWARDS NET ZERO

The New Zealand government has implemented many initiatives and incentives to promote sustainable waste management and circular economy practices, including waste-to-value projects. For investors, this unlocks attractive opportunities in the cleantech and waste sectors.

Emissions Reduction Plan

- New Zealand's second emissions reduction plan (2026–2030) sets the foundation to meet our net-zero 2050 target as early as 2044, and delivers the first and second emissions budgets

Eight key policies are:

- enabling more renewable energy infrastructure through Electrify NZ (allowing faster consenting and passing offshore renewable energy legislation in 2025)
- recognising carbon capture, utilisation and storage in the New Zealand Emissions Trading Scheme (ETS)
- targeting a network of 10,000 electric vehicle charging points by 2030
- introducing agricultural emissions pricing by 2030 and incentivising the uptake of new technologies
- exploring private-sector partnerships to plant trees on low-conservation Crown-owned land
- introducing a regulated product stewardship scheme for refrigerants from 2025
- leveraging the Waste Minimisation Fund to enable resource recovery systems and infrastructure to process organic waste
- improving organic waste management and landfill gas capture to increase landfill gas recovery rates.

Carbon capture, utilisation and storage

- The government has agreed to create an enabling regulatory framework for Carbon capture, utilisation and storage (CCUS). CCUS provides an opportunity for industry to reduce net CO_2 emissions, such as that which occurs from the production of natural gas.
- At a high level, this framework will seek to ensure that business who sequester carbon are rewarded for each tonne of carbon avoided using the New Zealand ETS, whilst also ensuring that CCUS activities are undertaken safely and responsibly.
- The government is designing technical features of the regulatory regime, and will progress legislation to establish the CCUS regime in 2025.

Agricultural emissions pricing by 2030

- Commitment to a fair and sustainable pricing system for on-farm emissions by 2030.

  Key actions and policies include
  - the review of methane science and targets
  - accelerating the development of mitigation tools and technologies to reduce on-farm emissions
  - developing measurement of on-farm emissions for use by 2025.
- These actions and policies will ensure New Zealand reduces its agricultural emissions in a way that does not compromise exports or lead to emissions leakage.

Afforestation on Crown-owned land

- Exploring partnership opportunities to afforest or promote native forest regeneration on Crown-owned land that has low farming value and low conservation value.
- Where partnerships can occur under current law, the partnerships will be taken forward as soon as practicable.
- A second round of commercial negotiations on a site-by-site basis with interested parties may take place in 2025.
- Where partners are looking for the government to make changes to existing policy to support partnerships – such as changes to law – this will be subject to Cabinet's decision in 2025.

Introducing a Regulated Product Stewardship Scheme for refrigerants from 2025

- Draft regulations for a Regulated Product Stewardship Scheme for synthetic refrigerants, as part of the second Emissions Reduction Plan.
- The scheme will introduce data reporting and training requirements for the sale of bulk synthetic refrigerants and heating and colling equipment containing synthetic refrigerants.
- The scheme is expected to reduce the discharge to air of synthetic refrigerants, significantly reducing greenhouse gas emissions by allowing synthetic refrigerants to be better tracked.

Waste Minimisation Fund / Organic Waste

- New investment priorities for the Waste Minimisation Fund (WMF), which includes a focus on diverting organic waste from entering landfills.
- Re-opened in October 2024, the WMF is actively receiving and assessing applications that offer the potential to divert food waste, green waste, paper and cardboard, and construction and demolition timber waste from domestic landfills.
- The WMF accepts applications from New Zealand-domiciled entities for up to 40% grant funding for projects that offer impact and scale, and would not happen without government intervention.

Improving organic waste management

- Commitment to working with the waste sector to further investigate how to further reduce emissions from landfills.

  This includes:
  - investigating encouraging the diversion of organic materials from landfill
  - considering which landfill types accept which types of organic waste
  - reviewing the scope of landfills that require landfill gas capture systems.

FAST-TRACK APPROVALS ACT

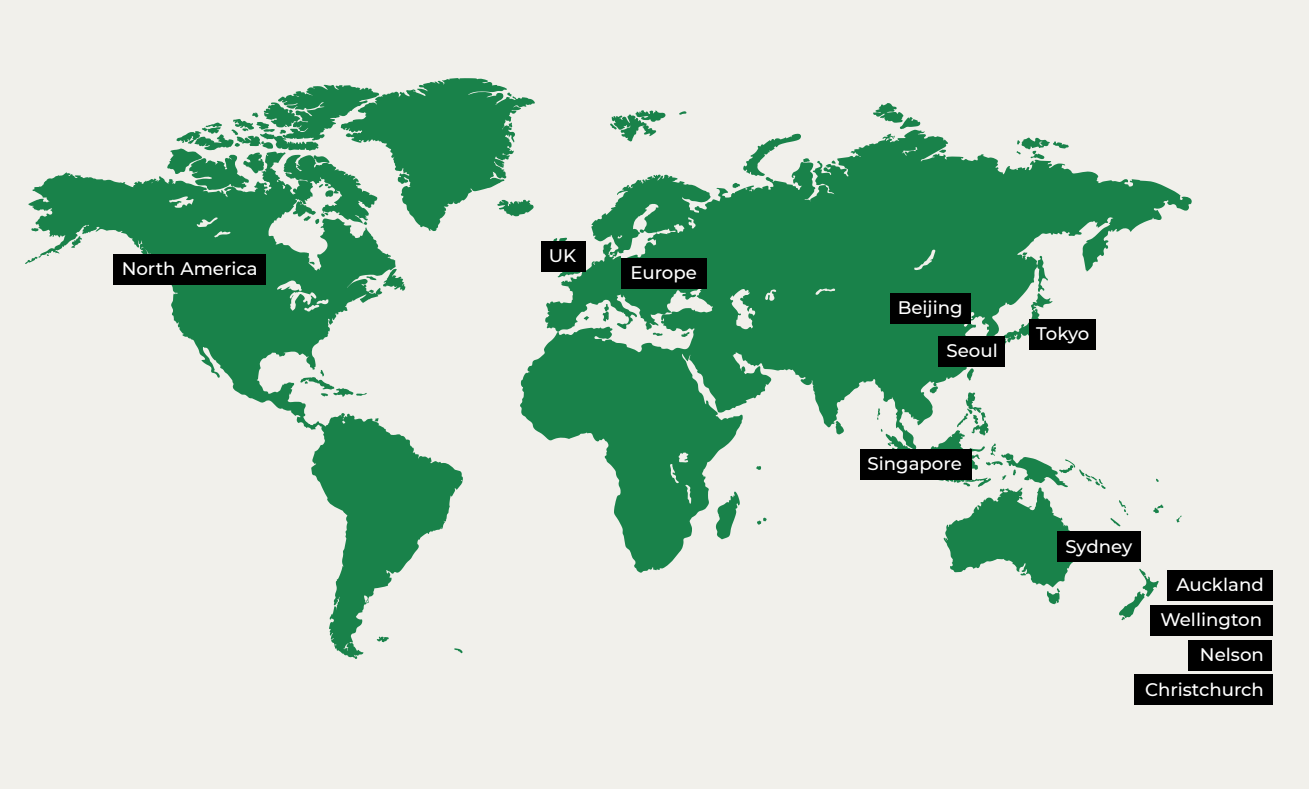
The Fast-track Approvals Act 2024 in New Zealand aims to streamline the process for approving infrastructure, housing and development projects, including those related to recycling and waste management.

The Act establishes a permanent fast-track approvals regime designed to expedite projects deemed of national or regional significance, which can include recycling and waste management initiatives that promise significant economic and environmental benefits.

Provisions relevant to recycling and waste management

- **Eligibility criteria:** Projects must demonstrate substantial national or local benefits, including those that support industries involved in recycling and waste management. This includes developments that promote climate change mitigation and address environmental issues.
- **Bypassing regulations:** The Act allows eligible projects to bypass standard consenting processes under various environmental laws, potentially facilitating quicker implementation of recycling initiatives that might otherwise face regulatory hurdles.
- **Decision-making:** An independent expert panel will assess applications for fast-tracking. This panel includes representatives from local authorities and iwi (tribal) authorities, ensuring community input in decisions that may impact local environments and resources.

INVEST NEW ZEALAND: A GLOBALLY INTEGRATED TEAM



Meet the Invest New Zealand team specialising in Cleantech sector opportunities.

Invest New Zealand's internationally connected, deal-focused team is your gateway to New Zealand's high-growth investment opportunities.

Our global investment specialists have deep industry connections across the country, offering independent, trusted advice and access to a pipeline of carefully prepared deals.

We work in deal teams, collaborating to originate opportunities and drive successful investment outcomes.

And, with teams based around New Zealand and the world, the advice and support you need is never far away.

We add value by:

- preparing a wide pipeline of investable deals across New Zealand's growth sectors
- developing the feasibility of business cases and deal collateral
- ensuring business model viability in a local market context
- connecting you with investments that match your requirements
- making connections to relevant partners up and down the supply chain
- facilitating partnerships with other parts of the New Zealand government and Māori entities, guiding you on when, where and how to connect.

NEW ZEALAND CLEANTECH. INVEST IN THE FUTURE.

New Zealand's cleantech sector stands out as a prime investment opportunity, thanks to our nation's commitment to sustainability, innovative mindset and existing global market integration.

Our cleantech ecosystem is thriving. Driven by the traditional Māori value of guardianship and aligning with global sustainability goals, it's set to grow exponentially – delivering transformative economic and environmental outcomes.

New Zealand is home to over 130 cleantech companies. Many are demonstrating global leadership in areas like recycling and waste transformation, highlighting the sector's capacity for scalable innovation.

As a nation, we're leading the world in renewable energy, with around 88% of our electricity already generated from renewable sources. Our abundance of natural resources, including hydropower, geothermal and wind, provides a solid foundation for cleantech developments in energy efficiency, waste recycling, water conservation and carbon capture technologies.

And it's all backed by a stable government, a secure investment environment, a transparent regulatory environment, and progressive policies that incentivise cleantech development – including waste minimisation programmes, support for clean energy projects, and a commitment to net zero carbon emissions by 2050.

So, if you're looking to invest in New Zealand's cleantech sector, we're ready to work with you.

Invest New Zealand supports companies, investors and investees to grow, enable and navigate New Zealand's cleantech opportunities.

Join us as we take this growing sector to the next level.

Learn more about New Zealand's Cleantech sector here.


37
95
01

Photography: Enpot, Geo 40, Getty Images, Miles Holden, Mint Innovation, NZ Story, Openstar Technologies Ltd, Robotics Plus, Tātaki Auckland Unlimited, Wellington NZ

www.investnewzealand.nz