

A GENERATION FROM NOW

Our long-term goals



Ministry for the
Environment
Manatū Mō Te Taiao

Our Mission



Environmental stewardship for a prosperous New Zealand

Tiakina te taiao kia tōnui a Aotearoa

Success Means

People are enabled to make and implement decisions that benefit society and the environment

ENABLING
a prosperous New Zealand

The use of the environment, including natural resources, is optimised for the betterment of society and the economy now and over time

OPTIMISING
a prosperous New Zealand

Risks to people and the environment are known, understood and well managed

MANAGING
a prosperous New Zealand

The capacity for the environment to sustain itself is safeguarded

SAFEGUARDING
a prosperous New Zealand

Underlying Principles

Mana Taiao, the power and prestige of the environment is evident and provides strength to the people, **Mana Tangata**.

Mauri Taiao is the well-being and life supporting capacity of the environment, which enhances and supports **Mauri Ora** the health and well-being of the people.

Mana and **Mauri** are interrelated, and one cannot be achieved without the other.

Message from our Chief Executive

We live in one of the most incredible places on earth, with an exceptional natural environment. It's one of the things we love about living here, and it underpins our way of life – our economy, our communities, and our culture.

And we can't take it for granted. All these things depend on healthy and productive land, fresh air, clean and accessible lakes, rivers and seas, and the wildlife found only here in Aotearoa.

The Ministry for the Environment's job is to make sure our environment supports New Zealand's prosperity – economic, social and cultural – without compromising it for future generations. We call this environmental stewardship, and it's really important.

Being a good steward means we need to take a long-term view, because typically the full implications of the choices we make only become clear generations later. You can see this today – serious erosion on the east coast of the North Island is a legacy of European settlement, when large tracts of bush were converted to pasture. In Canterbury, the effects of development a hundred years ago are still working their way through the waterways.

In the same way, the choices we make today will impact on the state of our environment, and the quality of life enjoyed by New Zealanders, decades from now.

So, what do we want New Zealand to look like 5, 10, 30 years from now and how do we get there? Included in this booklet is a set of outcomes that detail the long-term environmental goals we think are worth chasing, along with intermediate targets that will help us get there. I believe these to be aspirational but also realistic.

These targets may change over time as our data improves – our new environmental reporting regime for example will help identify progress and opportunities as we go.

We know we won't be able to achieve all our goals at once, and more importantly, we won't be able to achieve them alone.

I am looking forward to working with our many partners on areas of mutual concern where together we can make the biggest impact.

Ko te taiao he taonga tukuiho mo apopo. Our environment is a treasured gift that we inherit for the benefit of tomorrow.



Chief Executive, Ministry for the Environment

New Zealand's environment today

Key findings from Environment Aotearoa 2015



Air Āngi

We enjoy good air quality in most places most of the time. Air quality problems can occur, usually in winter in specific locations.

Airborne particles down 8% since 2006, leading to improved air quality

58% human-made airborne particles in 2013 were from burning wood and coal for home heating

Carbon monoxide emissions from transport have fallen 46% since 2001



Atmosphere and climate Kōhauhau and āhua o ngā rangi

Our climate shapes and supports our environment, economy, and way of life, but it is slowly changing.

UV light – high rates of melanoma due to UV exposure

Carbon dioxide concentrations over New Zealand have increased 21% since 1972

Temperature increased 0.9°C over the past 100 years

Global greenhouse gas emissions up 33% since 1990



Fresh water Wai

Fresh water is poorer in urban and agricultural areas, and very good in national parks, native bush, and tussock.

Nitrogen on land increased 29% since 1990, from livestock and fertiliser

Nitrogen in rivers up 12% since 1989, increasing the likelihood of slime and weeds

Water clarity has improved 14% since 1989



Land Whenua

Our land has undergone dramatic change since people arrived 700–800 years ago, affecting our biodiversity and land productivity.

49% of land was used for farming and forestry in 2012

192 million tonnes of eroded soil enters our waterways each year, affecting productivity and water quality

More than 94% of New Zealand is affected by possums, rats, and stoats



Marine Wai Tai

Our marine environment is diverse, but changes are affecting our native seabirds and marine mammals.

35% of our native seabirds are threatened with extinction

27% of our marine mammals are threatened with extinction

Coastal sea levels and acidity are rising

Overfishing has declined since 2009

*Where we
want to be
a generation
from now...*

Air – Āngi

Our vision is that New Zealand is a world leader in managing risks to human health and the environment that result from poor air quality.

Long-term outcomes	Long-term targets
The capacity of the environment to sustain itself is safeguarded	Adverse impacts of air pollution on environmental health are minimised
Risks to people and the environment are known, understood and well managed	Health impacts from poor air quality are minimised

Intermediate outcomes

Intermediate targets

Threats to environmental health are below threshold concentrations in priority locations

2020: All potential threats to environmental health are identified and a framework to identify at-risk locations is implemented

2030: All at-risk locations have targeted interventions in place

New Zealanders include air quality and thermal efficiency when making decisions about home heating

2020: A cross-agency central government framework is in place for managing indoor air quality

2020: Health impacts from anthropogenic (human-made) sources are reduced by 10% from 2012 levels

2025: The majority of people understand the sources and effects of poor air quality

Pollutants of concern to human health are managed within identified guideline values

2025: Priority barriers to meeting guideline values are identified and interventions are developed

2030: New Zealanders reduce harmful emissions to air and improve the thermal efficiency of their homes

Atmosphere and climate – Kōhauhau and āhua o ngā rangi

Our vision is that New Zealand has an innovative and productive economy, with fewer greenhouse gas emissions, and is resilient to the physical and economic impacts of climate change and adverse climatic events.

Long-term outcomes	Long-term targets
The capacity of the environment to sustain itself is safeguarded	New Zealand is carbon neutral by 2050, contributing to global efforts to reduce emissions
The use of the environment, including natural resources, is optimised for the betterment of society and the economy, now and over time	A carbon neutral New Zealand enables a more innovative and productive economy
Risks to people and the environment are known, understood and well managed	New Zealanders effectively manage the physical and economic impacts of climate change

Intermediate outcomes

Intermediate targets

New Zealand's net greenhouse gas emissions peak and begin to decline

Hydrofluorocarbons are phased out in New Zealand

2025: The vehicle fleet will comprise upwards of 250,000 (approximately 8%) of electric vehicles (including plug-in hybrids)

2030: More than half of our primary energy supply is from renewable sources

2035: New Zealand has reduced imports of hydrofluorocarbons by 85% below 2015 levels

2040: Net forest area has increased by 500,000 ha from 2015 levels

Greenhouse gas emissions are reduced through effective policies and pricing

Greenhouse gas emissions are decoupled from economic growth, providing opportunity and innovation

2020: Solutions are in place to target all emissions not responsive to a price on carbon

2020: There is a durable mechanism and effective pricing for greenhouse gas emissions

2030: New Zealand's greenhouse gas emissions intensity (per unit of GDP) is half of what it was in 1990

Climate change is included in risk management and investment decisions

2025: Businesses factor climate change into decision-making, future proofing investment and identifying opportunities

2025: All local authorities factor in and respond to projections of climate change impacts in their decisions, plans and investments

Fresh water – Wai

Our vision is that New Zealand increases the value from, and improves the quality of, our fresh water.

Long-term outcomes	Long-term targets
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The capacity of the environment to sustain itself is safeguarded	Freshwater ecosystems are healthy and resilient to pressures
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The use of the environment, including natural resources, is optimised for the betterment of society and the economy, now and over time	New Zealand gets best value from freshwater resources
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Risks to people and the environment are known, understood and well managed	Harmful health impacts from people's contact with fresh water are eliminated
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Intermediate outcomes

Intermediate targets

We understand water quality trends, and options for improvement in all water bodies that don't meet regional objectives

Water quality in priority water bodies is measurably improved

2020: The majority of priority sites have targets and clean-up plans in place

2020: We have good data about the drivers, pressures, state and impact of water quality, and its accessible to the public

2030: All water bodies have water quality and quantity limits set

2030: 100% of priority sites have clean-up plans in place and are on track

Management systems maximise the benefits of water use

2020: Robust timely and accessible data is available for managing water

2025: Tools are in place for tracking efficiency and productivity of water use

2025: A framework is in place for water users to apply good management practices for fresh water

2025: All regions have effective systems in place for iwi/hapū participation

2030: The community are active participants in the management of their freshwater bodies

New Zealanders know with confidence the safety of rivers and lakes for recreation and food gathering

2025: Comprehensive regional systems are in place to monitor those contaminants that affect the suitability of water bodies for recreation and food gathering

2030: New Zealanders know how safe all water bodies are for recreation and food gathering

Land – Whenua

Our vision is that New Zealand improves the quality of our soils and terrestrial ecosystems and increases the value from our land-based resources.

Long-term outcomes	Long-term targets
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The capacity of the environment to sustain itself is safeguarded

Soils and terrestrial ecosystems are healthy and resilient to pressures

The use of the environment, including natural resources, is optimised for the betterment of society and the economy, now and over time

New Zealand gets best value from land-based resources

Intermediate outcomes

Intermediate targets

Human-induced causes of soil loss and negative impacts on soil health are addressed

2020: All hazardous substances align with global classification requirements to support international trade
2020: The compliance and enforcement of environmental controls for hazardous substances improves from a 2016 baseline

Threats to environmental health are known and managed

2020: The use of substitute substances with reduced human and environmental impact are incentivised

The impacts of hazardous substances on the environment are understood and reduced

2020: Measures are agreed for soil health and soil loss. Baselines are established and effects of use are understood
2020: Key indicators and baseline conditions are in place for monitoring the health of soils and terrestrial ecosystems and the impact of new organisms
2030: Interventions are in place to improve biodiversity and manage threats to ecosystem health
2030: All hazardous substances have been reviewed to ensure they provide a net benefit to society
2030: Comprehensive targeted interventions are in place to improve soil health and reduce overall soil loss

Use and management decisions enhance the well-being of current and future generations

2020: National measures of land capability and natural capital are available to decision-makers
2020: Innovation and use of new organisms that contribute positively to the economy and society are encouraged and facilitated
2020: National mechanisms for assessing the implications of current and changing land uses are in place
2025: A mechanism is in place to identify the infrastructure and support requirements of significant land-use changes
2030: Land-use management system incentivises sustainable use of land

Land – Whenua

Continued

Long-term outcomes	Long-term targets
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Risks to people and the environment are known, understood and well managed

Risks from contaminated land, hazardous substances and new organisms are known and managed, proportional to risk

The risks from natural hazards to people, property and the environment are reduced (from a 2020 baseline)

Intermediate outcomes

Intermediate targets

Systems are in place to identify risks from contaminated sites and hazardous substances and new organisms

Natural hazard risks are effectively identified, communicated and managed proportional to risk

2020: Every region has up-to-date hazard maps and these are clearly influencing decisions on land use

2020: There is a clear national overview of how much risk from natural hazards exists, and where they are located. A baseline is established

2020: The costs resulting from natural hazards and amount of investment in risk management is measured. High impact low cost interventions are assessed and prioritised

2020: The number of premature deaths, lost activity days, and health complaints due to workplace exposure to hazardous substances is reduced by 25% from 2012 statistics

2020: All potentially contaminated HAIL sites are known and the creation of new HAIL sites is controlled (there are no new 'accidental' sites)

2025: Hazardous substances that cause chronic harm to people and environmental harm are known and monitored, and this information is used to reduce harm

2025: A consistent national framework for managing the disposal of waste to land is in place

2025: Potential risks to people and the environment are known and proportionally weighed up in new organism decision-making

2030: All known high risk HAIL sites existing in 2020 have been remediated or have a management plan in place

Marine – Wai Tai

Our vision is that New Zealand is a world leader in the sustainable management of marine ecosystems that support New Zealand’s marine life, society and the economy.

Long-term outcomes	Long-term targets
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The capacity of the environment to sustain itself is safeguarded	Marine ecosystems are healthy and resilient to pressures
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The use of the environment, including natural resources, is optimised for the betterment of society and the economy, now and over time	New Zealand gets best value from its marine-based resources
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Risks to people and the environment are known, understood and well managed	Improved water quality enables all New Zealanders to have access to healthy and safe coastal and marine areas
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New Zealand responds effectively to global trends impacting the marine environment

Intermediate outcomes

Intermediate targets

Threats to marine ecosystems are identified and actively managed

2025: The health of marine ecosystems is understood and has improved compared to 2015

2025: Fewer species are threatened or endangered due to human activity

2025: Targeted interventions are in place to preserve or restore the ecological integrity of high priority ecosystems

Marine resources are used in an increasingly sustainable and innovative way

2020: A representative network of marine protection that allows for varying levels of use is being applied

2020: There is a national (and ongoing) measure of the value provided by the marine environment to New Zealand

2025: New Zealand marine businesses increase their investment in research and are leaders in sustainable use of marine resources

Land- and marine-based waste from human activities is minimised

2020: Land- and marine-based waste discharge to the marine environment is monitored and understood

2020: A new tier 1 statistic enables the assessment and prioritisation of actions to address water quality in major estuaries, harbours and beaches

Risks to people and marine ecosystems due to water quality are reduced

2020: The extent and mechanisms of invasive species establishment is understood and action plans to eradicate problem species are in place

Global impacts on our marine environment are understood and New Zealanders can prepare and respond

2020: The range of sites for monitoring and reporting trends in ocean pH and temperature has increased significantly compared to 2015

2025: Local authorities act on cross-domain approaches that respond to trends in land- and marine-based waste entering the marine environment

2025: Acceptable water quality limits have been established for our major estuaries, harbours and beaches

2025: Marine businesses factor impacts from climate change into investment decisions

2030: The quality of water in at least 33% of major estuaries, harbours and beaches is improving

Urban – Tāone

Our vision is that New Zealand is a leader of environmentally sustainable cities, leveraging the benefits that cities offer while reducing the costs and impacts that they impose.

Long-term outcomes	Long-term targets
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The use of the environment, including natural resources, is optimised for the betterment of society and the economy, now and over time	Urban environments maximise social, cultural and economic exchange
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Intermediate outcomes

Intermediate targets

Urban form supports liveable, connected and productive urban environments that are adaptable to changing needs

2020: Frameworks are in place to support development of resilient, multi-functional and adaptive urban environments including infrastructure

2030: Urban environments are developed through coordinated urban and infrastructure planning

Environmental management system

To achieve our vision we need our social and environmental processes to work together effectively.

Long-term outcomes	Long-term targets
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People are enabled to make and implement decisions that benefit society and the environment	The environmental management system's processes and objectives are clear and provide certainties to users
	Environmental and social objectives are aligned, mutually beneficial outcomes and trade-offs are achieved, and intergenerational impacts are taken into account
	The environmental management system uses current science and leads international best practice

Intermediate outcomes

Intermediate targets

Institutions provide structure and direction that enable people to make enduring and effective decisions

The system is accessible to users

Collaborative relationships have developed a range of tools to complement directive interventions and achieve mutual benefits

Iwi/hapū are consistently enabled to give effect to kaitiakitanga

The role of urban environments as a component of the environmental management system is understood and leveraged to achieve economic, social and environmental outcomes

Appropriate and sustainable resource use is informed by current information

The environmental management system is continuously improved by adapting to changing circumstances

We have comprehensive data, information and knowledge in all environmental domains

2020: Good information and guidance is available for decision-making

2020: Regulatory framework for land use and management has been evaluated for effectiveness and consistency

2020: Barriers to understanding the environmental management system have been identified and addressed using technologies relevant to users

2020: Local, regional and national communities are well informed and understand the different systems, drivers and implications of resource management and use, and participate in decisions

2020: Regulatory bodies understand the range of values and incentives that drive behaviours and their impacts on environmental outcomes, and engage communities in decisions

2020: There is an effective framework for iwi/hapū engagement in resource management decisions

2020: Public institutions routinely share approaches to effectively enabling iwi/hapū to express kaitiakitanga

2020: Opportunities to coordinate urban development with environmental outcomes are identified

2020: Evaluation is consistently embedded in the environmental management system performance

2020: Guideline values and guidance documents are consistent with current science and international research, knowledge and practices

2020: We have robust data sets for all environmental domains

2025: Appropriate tools are in place which effectively measure Matauranga Māori

2025: Productive capability of natural resources is mapped and understood

2025: The environmental management system enables setting of environmental limits, and incentivises use within those limits

2030: The impact of the urban environment on natural resources is understood across domains and leveraged to achieve economic, social and environmental benefits

2030: National objectives and priorities guide decisions throughout the system

Working with our communities

The trends we see in our environment reflect the sum of the choices we as New Zealanders make every day. They reflect our collective impact, and require a collective response.

There are many different communities that make up New Zealand, all of which have an interest in and an impact on our natural environment.

A big part of our role is to bring people together, create opportunities for people to have a voice in the policy-making process, and provide the evidence we all need to make more informed choices and good decisions.

The Ministry also provides practical support for community action by managing funds for environmental projects and participation including the Community Environment Fund, the Waste Minimisation Fund, and the Contaminated Sites Remediation Fund. These can be used by local communities, councils, iwi, and NGOs for specific environmental improvement projects.

We engage with businesses to better understand how we can help them comply with government policy and the environmental challenges they face. We also work closely with councils to ensure the policies we develop are practical and are implemented effectively and consistently.

We recognise the special kaitiaki role that Māori play in the management of natural resources and we have established valuable relationships with iwi through the development of environmental policy.

Within the public sector we are part of the Natural Resources Sector, a group of eight government agencies (including the Ministry for Primary Industries, the Ministry of Business, Innovation and Employment, and the Department of Conservation) responsible for the policies which govern how we use different parts of the environment. By working together closely, our aim is to improve the productivity of our natural resources while reducing environmental impacts.

How you can engage with us

For further information about New Zealand's environment, our environmental laws and policies, funding sources, and how you can get involved please visit www.mfe.govt.nz.

Please also get in touch if you want to learn more about our work.

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