Nature Position Statement

The importance of nature

The Earth's natural resources comprise of the land, freshwater, oceans, our climate, and all the species that live in these environments. The variety of life on Earth (biodiversity) is a measure of the health and resilience of Earth's natural systems.

Nature provides us with clean air and water and fertile soil to grow food. More than half the world's GDP depends heavily on natural ecosystems¹. In Aotearoa New Zealand, it has been estimated that 36% of GDP is dependent on biodiversity and ecosystem services ².

Nature in Aotearoa New Zealand is unique in the world and makes a significant contribution to global biodiversity, as acknowledged in <u>Aotearoa New Zealand's Biodiversity</u> Strategy | Te Mana o te Taiao.

Biodiversity worldwide is declining. Changes in land use and management have resulted in habitat loss, and the introduction of invasive pests and diseases have resulted in species decline and extinction.

Climate change and biodiversity are directly linked – climate change drives biodiversity loss. Biodiversity restoration can bring both mitigation and adaptation benefits, making it a powerful tool for reducing or avoiding climate change impacts³.

Genesis' role to protect and restore nature

Genesis' purpose is powering a sustainable and thriving Aotearoa New Zealand. We aim to generate electricity from an increasingly renewable portfolio. We use water efficiently at our hydro stations; provide backup generation for Aotearoa New Zealand using gas and coal at Huntly Power Station, potentially transitioning to locally sourced biomass as this industry develops, and within the next year, we will add solar generation to our portfolio.

As well as operating in some of the most pristine parts of Aotearoa New Zealand, Genesis' value chain stretches to include the East and South Kalimantan regions of Indonesian Borneo, where we source coal to provide security of supply to Aotearoa New Zealand's electricity system, through to Europe where we source turbines and other equipment.

Our assets and their operations impact the environment, mana whenua, local communities and other users of the environment. We acknowledge and seek to understand and address these, particularly in relation to freshwater and biodiversity. Our position on water can be found here.



An increase in Whio breeding pairs shows improvement to quality of water and pest reduction in targeted areas.

https://www.weforum.org/press/2020/01/half-of-world-s-gdp-moderately-or-highly-dependent-on-nature-says-new-report/

² 'Biodiversity and Ecosystem Services A business case for re/insurance' (September 2020) Swiss Re Institute

https://www.swissre.com/dam/jcr:a7fe3dca-c4d6-403b-961c-9fab1b2f0455/swiss-re-institute-expertise-publication-biodiversity-and-ecosystem-services.pdf

³ https://www.doc.govt.nz/globalassets/documents/conservation/biodiversity/anzbs-2020.pdf

Genesis has a robust and well-established Environmental Management System in place to guide day-to-day operations, and through our resource consent mitigation and voluntary initiatives we work constructively in partnership with mana whenua and local stakeholders to contribute to meaningful environmental, cultural and community outcomes. We are committed to ensuring that environmental, social and cultural awareness and responsibility are cornerstones of the Company's business activities.

The low emissions future we are moving towards will need us to efficiently use our existing renewable generation infrastructure, as well developing more energy from renewable sources such as solar and wind. We will look for targeted positive outcomes for nature and communities as part of business decisions in the development of this new generation.

Our changing climate, and the need to ensure a low emissions, resilient future mean we need to consider how we can adapt to a changing climate such as increasing variability in storms, rainfall and water flows.

The role of forestry for carbon compensations is an important tool globally and domestically. It is essential to plant the right trees in the right places – maximising outcomes for forest owners, food production, biomass supply and enhancing biodiversity. Our obligations under the Emissions Trading Scheme are met through investment in growing and managing responsible forestation on non-productive land, which includes pest management and scope to increase outcomes for nature.

This Nature Position Statement aligns with the following United Nations Sustainable Development Goals:









Our approach

Genesis supports the 2050 vision of the United Nation's Kunming-Montreal Global Biodiversity Framework and the implementation of the Aotearoa New Zealand Biodiversity Strategy | Te Mana o te Taiao for the protection, restoration and sustainable use of biodiversity. We played an active role via the industry reference group in the development of Te Mana o te Taiao and will play our part to support its implementation.

Freshwater ecosystems are a material input to our business operations, and we have aligned our focus with UN Sustainable Development Goal SDG15 – Life on land: Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands as freshwater ecosystems are a material input to our business operations.

Alongside this Position Statement, we are developing a Biodiversity Plan that will evolve over time as international frameworks and standards develop.

Our approach to nature will:

 Have a positive impact in the key communities and ecosystems in which we operate.

Genesis operates power schemes with significant interactions with nature in the Central North Island Plateau, Waikaremoana, Tekapo and Raahui Pookeka Huntly.

We credibly contribute to positive outcomes in these communities and the catchments and ecosystems that we rely on for our operations, including via working with mana whenua on nature-focused initiatives.

2. Create opportunities to connect and engage

We create opportunities for our people and communities to enjoy nature; and for our people, customers and suppliers to support our biodiversity initiatives.

We do this through education and awareness about the programmes we support and by creating opportunities to engage our employee community. We'll encourage customers and suppliers to support this work through volunteering and donating.

3. Develop authentic and effective approaches for how we value and support nature

To empower a nature-positive future will require the country to shift from avoiding and minimising loss to a regenerative mindset. Genesis will work closely with mana whenua, business, government and the not-for-for-profit sector to understand priorities that we can contribute towards to help achieve this shift in the places where we operate.

This aligns with our <u>Sustainability Framework</u> principles of place-based, positive outcomes and working in partnership.

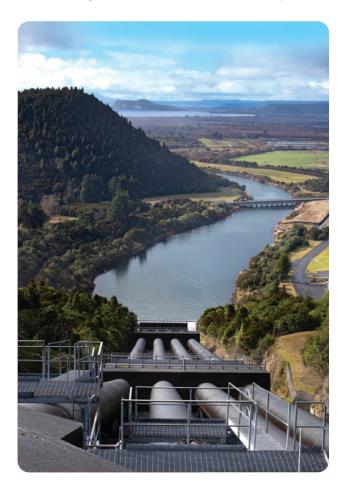
We will build on our existing environmental framework to further measure and set targets for environmental inputs and outcomes using frameworks like the Global Reporting Initiative and the Taskforce on Nature-related Financial Disclosure.



Caring for nature

In Aotearoa New Zealand, the sustainable management of natural and physical resources is governed by the Resource Management Act 1991 (RMA). The RMA requires action to avoid, remedy or mitigate any adverse effects resulting from activities. We take our environmental obligations seriously and work hard to achieve a high level of consent compliance across our generation sites.

We also support a range of initiatives on top of our consent requirements. While the initiatives are generally close to our generation sites, we're focussed on achieving the best outcomes for nature and sometimes this means protecting and enhancing areas outside of our immediate footprint.





Tikotiko arm of Lake Whangape

Consent required mitigation (Huntly Power Station)

Genesis funded a 4-hectare riparian planting project within the Tikotiko Bay of Lake Whangape. This work fed into a wider project at Lake Whangape involving Department of Conservation (DOC), Waikato Regional Council, Waikato-Tainui, Nga Muka Development Trust and Waahi Whaanui Trust and was delivered by Waikato RiverCare. The project aimed to protect lake water quality and improve adjacent wetland habitat, with funding support from the Waikato River Authority and Ministry for the Environment through the Government's Freshwater Improvement Fund.

Te Kauri Marae farm project – Lake Okowhao catchment

Over and above compliance

This project aims to protect and enhance a headwater gully/puna system and downstream farm drain which flow into the recently retired 6.5ha wetland area on the Waikato-Tainui owned farm, leased by Te Kauri Marae. Genesis funding contributes to the coordinating, purchasing, and planting of native plants within a Waikato River Authority backed project which aims to protect and restore waterways which flow into Lake Okowhao and discharge into the Waikato River.

Lake Kimihia

Consent required mitigation (Huntly Power Scheme)

Genesis provided funding to reinstate the minimum water level of Lake Kimihia, and to deliver on cultural and ecological aspirations for the site. This included increasing the area of open water, improving the aquatic habitat for fish species, including tuna (eels), and increasing the size and condition of the wetland margins, resulting in greater biodiversity, cultural, and recreational values for the site. Co-funders included the Jobs for Nature programme and the Ministry for Business, Innovation and Enterprise climate resilience programme. The project is delivered in partnership with Waikato River Authority, Waikato Regional Council, Waikato Tainui, Waahi Whaanui Trust, DOC and adjoining landowners.

Waahi wetland restoration

Over and above compliance

Working with our partners Waikato RiverCare and POU Ltd., the site across the road from Huntly Power Station will accommodate up to 12,600 plants across 3ha. Almost 2,000 of these plants were planted by 35 Genesis employees using their annual volunteering leave day. Restoration should provide greater filtration of water flowing into the Waahi stream which then flows directly into the Waikato River, just south of the Power Station.

Kiwi Forever programme

Over and above compliance

A 15-year partnership with Ngāti Rangi where high school students attend a week-long leadership in conservation programme, based at Tirorangi Marae and centred around mātauranga Māori.

Whakapapa intake Kiwi & Whio predator management regime

Over and above compliance

This programme was established in 2021 when 9 juvenile kiwi were returned to Tongariro Forest. It protects whio and kiwi by managing pest species through targeted trapping and monitoring.

Tokaanu Stream restoration project

Over and above compliance

The Tokaanu Stream Restoration Project is being undertaken by local hapū / community led Trust. The project aims to enhance water quality and indigenous biodiversity through eradication of pest plants, riparian planting and pest control. This project helps contribute to a wider vision of a healthy stream from the headwaters to the delta within Lake Taupō.

Wairehu Canal fish passage project

Over and above compliance

In addition to existing fish salvage measures at the Wairehu Canal, Genesis has committed further funding to support conservation of tuna heke (mature eels) and elvers (juvenile eels) within the catchment. Initiatives include creating elver ponds, investigating modification options for the intake structure to help improve tuna heke recovery and monitoring to inform future initiatives to facilitate fish passage.

Project River Recovery

Consent required mitigation (Tekapo Power Scheme)

Project River Recovery is a DOC - led programme in partnership with Genesis and Meridian to maintain and restore habitat in the Upper Waitaki Basin for the benefit of its native plants and animals, some of which can only be found in this region of Aotearoa New Zealand.

Whio Forever

Over and above compliance

Genesis has partnered with the Department of Conservation on the national Whio Forever programme since 2011, to fund predator trapping at 8 'security sites' to ensure the survival of the native whio / blue duck in the wild. Whio live in fast-flowing freshwater, and the programme enables more than 1,600km of river to be managed with trap-lines and drives broader biodiversity outcomes. The programme has achieved a 90% increase in native blue duck/whio breeding pairs in the wild since it started.

Waikato Rivercare

Genesis was a founding member of Waikato RiverCare in 1999 and is a long-term supporter of Waikato RiverCare restoration projects alongside other members including iwi, local councils, businesses and community groups. This charitable trust undertakes native habitat restoration along the lower Waikato River and associated catchments.