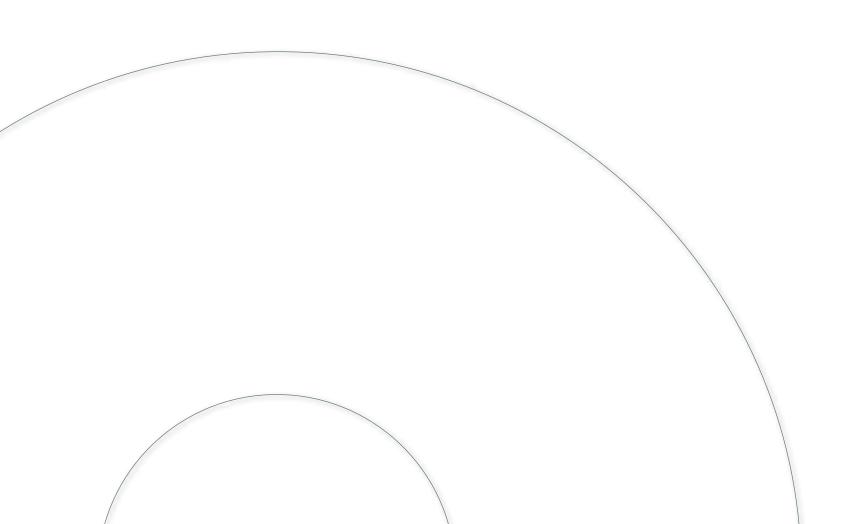
The Aotearoa Circle

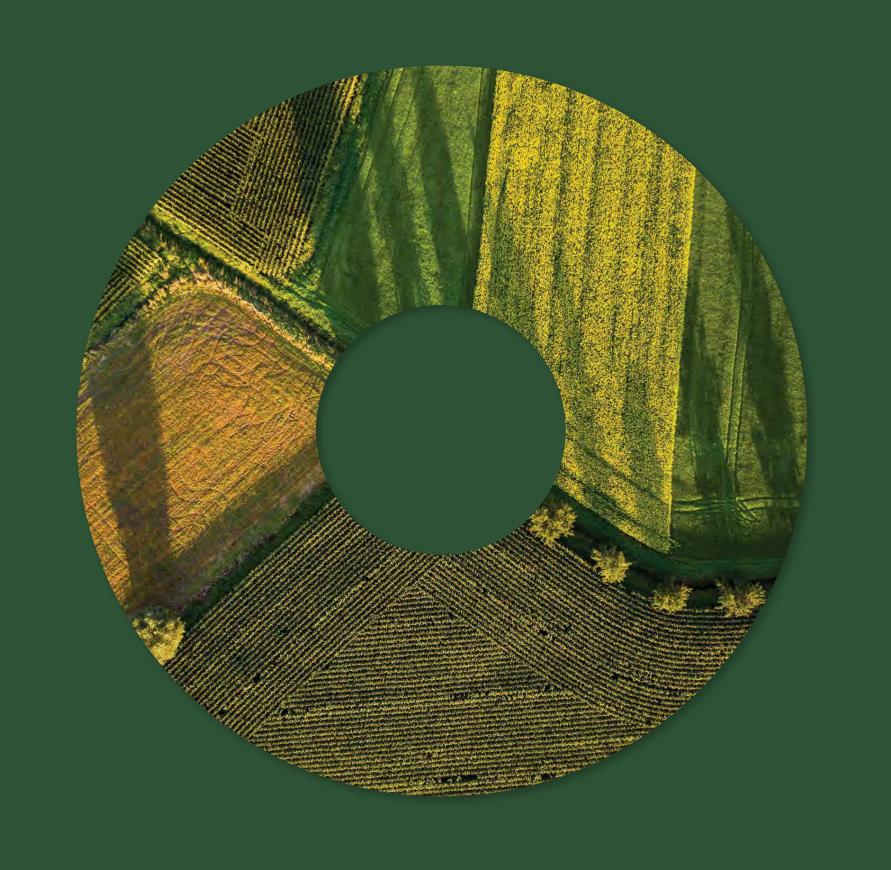
Mā te Kaitiakitanga ko te Tōnuitanga Prosperity Through Guardianship

The Aotearoa Circle Year in Review 2023

Contents



Introductions



Introduction from our Co-Patrons



Her Excellency, The Rt Hon Dame Cindy Kiro GNZM, QSO, DStJ, Governor-General of New Zealand

"The Aotearoa Circle values partnership across all sectors in Aotearoa New Zealand, acknowledging we must work together, and quickly, to address the threats to our survival and the survival of the natural world on which we depend for our wellbeing."



Sir Jonathon Porritt CBE

"As the Co-Chairs point out in their Introduction: "The Aotearoa Circle is a unique partnership. There is no equivalent anywhere else in the world". Which imposes an equally unique responsibility on all of us involved in the Circle to act, urgently and creatively, in ways that are commensurate with the twin biodiversity and climate crises bearing down on us"

Co-Chairs Introduction

Urgency. This is what our Rangatahi Advisory Panel (RAP) have challenged us to feel. 2023 is the first year of having our Rangatahi (youth) as a formal part of The Aotearoa Circle, and they have helped stoke the fires in our bellies, as we fight to restore New Zealand's natural resources.

We are indebted to them, these eight inspiring young people, drawn from The Aotearoa Circle's Leading Partners. There is no question we do feel a sense of urgency, but it can be easy to become absorbed in the work and risk losing sight of the bigger picture - the generations to come who will not thrive in a damaged world.

The inclusion of our Rangatahi in 2023 reflects our particular way of doing things. The Aotearoa Circle is a unique partnership. There is no equivalent anywhere else in the world. Here in New Zealand, we bring together public and private sector actors who care deeply about our natural world and understand that we cannot prosper without it.

Our country is uniquely dependent on nature for prosperity. Around 70% of our exports depend on our natural resources. Healthy oceans provide fish and shellfish. Healthy pastures provide high quality dairy products and meat. From the mountains to the sea, we need nature to thrive, so that we can.

We must work hard, not just to protect but to restore our natural capital, which is under threat from climate change and its associated extreme weather events, pollution, run off, invasive species, warming waters and more. We must focus on the future. Our mission is to restore Aotearoa's natural capital for future generations. Those generations represented by our Rangatahi Advisory Panel.

We must take action. There are many forms that action can take, all of them needed. In the case of The Aotearoa Circle, that action is to help change systems and the way we think as individuals and organisations.

These lessons have always been present in Te Ao Māori and we thank those who have helped us apply this framework to The Aotearoa Circle - the multigenerational view and the understanding that wairua (spirit) and waiora (wellbeing) must be at the centre of our thinking and action.

We want to thank you for reading this Year in Review, which outlines the actions we have taken as a partnership in 2023. It is easy, as we have said, to get absorbed in the work and to forget how much we have actually done. In 2023 our outputs included a Roadmap for Agri Sector Adaptation as well as Tourism Sector Adaptation, a groundbreaking legal opinion with Chapman Tripp about director obligations around nature related risks and the implementation of adaptation work in the seafood sector and more. And then there is the work begun, which will be concluded in 2024: our Transport and Energy Sector Climate Scenarios, our capital access work and a workstream looking at possible biotechnology impacts, challenges and opportunities.

There are many people to thank for this mahi. We wish to thank the outgoing co-Chairs, Volker Kuntzsch and Vicky Robertson. Volker remains an active part of The Circle as a Guardian. And we wish to thank all our Guardians (board members): Jane Taylor, Carolyn Tremain, David Carter, Simon Limmer, Penny Nelson and Emerging Director, Izzy Fenwick.

We acknowledge our co-Patrons, Her Excellency, the Governor General of New Zealand, Dame Cindy Kiro, and Sir Jonathon Porritt, who is also a co-founder of The Aotearoa Circle. We also acknowledge the hard work of The Circle team who have certainly had a busy year.

And we are deeply grateful to every Partner and friend of The Aotearoa Circle who contributed to the work you see summarised in this Year in Review. We believe every one of our Partners is sincere and focused in their efforts to change our systems and approach so our natural resources are restored. With their mauri intact, these resources will create a prosperous future for all, enabling us to sustain our people and communities and create a thriving economy with room for nature-positive growth.

We all feel a sense of urgency about this work. The world is changing fast and the extreme weather events of 2023 such as Cyclone Gabrielle must remove any lingering doubts about how fast we need to act. By working as partners, uniting the public and private sectors, we can deliver at speed, and this is what we seek to do.



Co-Chair Laurissa Cooney



James Palmer

Leading Partners

In 2023 we announced two new categories of partnership:

Premium Partners

In 2023, we were delighted to announce **Jane Taylor** as our first Premium Partner. A Premium Partner generously gives a philanthropic donation towards the purpose and vision of the Circle. Premium Partners can participate in any workstream of interest and are invited to all exclusive Circle events including our annual in-person hui and bi-annual Partner CEO and Board dinners.

Leading Partners

Key partners with priority access to all Circle workstreams, leadership groups, exclusive events, and an invitation to share their perspectives in Circle communication. Leading partners also have the opportunity to nominate one Rangatahi to represent their organisation on the Circle Rangatahi Advisory Panel, and participate in a boutique workstream, which in 2023 was the TNFD Bootcamp.

Our 2023 Leading Partners



















Rangatahi Advisory Panel

For younger New Zealanders, the degradation of our natural resources is more of an existential threat than for older kiwis, because it puts more of the years of their lives under a shadow. They have more to lose. Arguably therefore, their voices should be the dominant ones in any conversations about how we restore our natural capital. However, that is not usually how things work.

The Aotearoa Circle seeks to change that. We actively seek out the voices of our rangatahi (youth) to do three things:

- 1. Provide their insights, ideas, and perspectives in Circle workstreams, to ensure intergenerational outcomes are embedded in our decision making processes
- 2. Contribute to the development of our rangatahi by supporting and enabling them to better contribute to decision making while building their confidence and ability
- 3. Provide insights for The Aotearoa Circle's Leading Partners which will challenge, support and improve their long-term thinking and the outcomes of their work

We do all this via our Rangatahi Advisory Panel (RAP), a group of eight young New Zealanders drawn from our Leading Partners. These talented and committed young New Zealanders represent a cross section of Aotearoa and all are highly motivated and focused on better outcomes for their generation and others.

The RAP was managed and mentored by Izzy Fenwick. Izzy is the founder of The Fenwick Group and is also on the Circle Board as Emerging Director. Izzy has been focused on providing a supportive, growth-focused environment for our RAP which works seamlessly with their existing work commitments.

The RAP was officially announced at our March Partner Hui held at Parliament and we have since sought their input and guidance in two distinct areas:

Agri-Adaptation Workstream

Firstly, in our Agri Adaptation workstream where the Panel challenged the Leadership Group to go further faster, with truly bold, collaborative and ambitious action which goes beyond iterative gains to transformational ones. Specific recommendations in this workstream included:

- That the "hothouse" or most extreme of the climate scenarios be reinforced not as the final of three possible scenarios but actually prioritised as the most important of the three, communicating the sense of urgency required.
- The RAP challenged The Circle as a group to be world leaders in how we engage with technological innovations such as modern biotechnology and artificial intelligence, saying that the whole country will need to be brought on this journey.

TNFD Bootcamps

Secondly, our RAP was engaged in the Taskforce for Nature-related Financial Disclosures (TNFD) workstream. This became a great opportunity for the personal and professional development of our Rangatahi as the TNFD workstream itself is a "bootcamp" for the development of sustainability, finance and leadership professionals.

By the end of 2023, our RAP were able to engage in briefing sessions with executives at their Leading Partner organisation. These sessions enabled Rangatahi to share what they have learned over the year in a frank and constructive way, meeting the objective to challenge, support and improve the long-term thinking of our Partner organisations.

A new Panel is being selected for 2024 and we look forward to working with the successful applicants in the year ahead.



Our 2023 Rangatahi Advisory Panel at our March Hui, Parliament

What was their experience?

"One of my favourite things about being a part of the RAP it that it has provided me with an avenue to challenge my thinking. Being involved with work that is outside of what I would call my field of expertise has allowed me to think critically and broaden my mind. It has been interesting to me to see how the eight of us approach a piece of work differently and I think this has allowed us to have insightful discussions and provide some real value to The Aotearoa Circle. Most importantly though, I feel a real sense of achievement knowing we are involved with the Circle's important mahi and being able to have a seat at the table and represent the next generation." - Moragh Graham, ANZ

"I am a people person and I love connecting – being in the RAP has provided me with exactly that. I have hugely enjoyed connecting in with organisations that I wouldn't necessarily cross paths with, and building relationships with my team in the RAP." - Ginny **Ellis-Kirifi, Ministry for the Environment**

I've found this opportunity to be a great way to expand my horizons, build courage in challenging boundaries, grow technical knowledge, and expand my network of bold leaders. I was surprised by the genuine eagerness of senior leaders to actively seek and value the perspectives of the panel.

This experience further instilled a mindset of courageously questioning traditional approaches which is valuable to bring back to any businesses, encouraging innovation and embracing change.

I also greatly enjoyed gaining greater technical knowledge from joining workshops led by industry specialists and deep diving into innovative, new work programs across leading partner organisations - Tom Hyland, Fonterra

"I've really enjoyed the opportunity to take a look under the hood of some leading New Zealand businesses and provide fresh prospectives on challenges and opportunities facing their business. I also enjoyed the exposure to the diverse perspectives of other Rangatahi panel members."- Ryan MacArthur, Silver Fern Farms

"My experience being a part of the Rangatahi Advisory Panel has sealed in place my drive for calling out the need for organisations and companies to do better when it comes to our climate crisis and the inclusion of multiple perspectives on the matter. It has given me an opportunity to meet like-minded rangatahi that have similar thinking and will be making up the next generation of these organisations and companies, which gives me hope." - Hana Harris, Department of Conservation

"Being on the Rangatahi Advisory Panel has been so insightful, being privy to the awesome work being done by the Aotearoa Circle. I am also pleased to have met fellow rangatahi and senior professionals across sectors, who all share a common interest to do right by the public and the environment." - Jill Kwan, Westpac

"The current system often excludes rangatahi voice in climate decision-making, limiting their impact on decisions crucial to their future. The Rangatahi Advisory Panel addresses this gap, providing an opportunity to engage with rangatahi and underscore their role in decisions affecting tomorrow. Through my connection with Mercury, this platform also allows me to draw on a combination of values that seek to mobilise a range of different climate responses. On a personal level, as a rangatahi Māori I have an inherent whakapapa obligation to protect and sustain the environment. Thus, through this platform I am able to contribute my lived experiences and intergenerational knowledge to help amplify the voice of nature and climate." - Tyra Begbie, Mercury

"The Aotearoa Circle's RAP provides a platform where my voice can be heard and, together with fellow members, we can actively drive positive change across various initiatives in both the public and private sectors. It is incredibly fulfilling to be part of a programme and organisation that is committed to restoring and preserving Aotearoa's natural resources for future generations. The ability to contribute to thinking that impacts the future of Aotearoa is a remarkable privilege, and one that needs to be shared with more rangatahi." - Santhosh Chintapatla, Genesis.

Thank you to our 2023 RAP



Ginny Ellis-Kirifi Ministry for the Environment



Hana Harris Department of Conservation



Jill Kwan Westpac



Moragh Graham

ANZ





Silver Fern Farms





Santhosh Chintapatla

Genesis Energy



Tom Hyland

Fonterra



Tyra Begbie

Mercury



Agri-adaptation roadmap

We risk stating the obvious by saying that climate change adaptation in New Zealand's agriculture sector is urgent. Our Agri Sector Adaptation Roadmap laid that out clearly, pointing out that while we may wish otherwise, the realities of climate change are here.

Frightening and highly damaging weather events such as Cyclone Gabrielle in February remind us that the extremes will be more extreme and more frequent, as the world heats. These extremes are a major threat to Aotearoa New Zealand's food and fibre sector, which was worth \$53.3 billion in exports to the New Zealand economy in the year ending June 30, 2022¹. We are a country that is uniquely dependent on natural capital for a functioning economy. We quite literally cannot afford to be without it.

The Agri-Sector Adaptation Roadmap was launched on 7 June, 2023. It considered the sector-relevant climate scenarios and sub-sector specific risks. It looked at how to support the sector, given these risks. It included an understanding of the barriers to adaptation and produced a practical roadmap that will support the sector's adaptation to climate change.

A Te Ao Māori framework underpinned this work, as it does for all of the workstreams undertaken by The Circle. It builds on Te Ao Māori framework that was adopted by the Mana Kai initiative. It is a Māori view that the connections are real and significant between our food system, the land, our natural and altered environments, and the people. In this instance, we considered Mana o te Whenua (the natural energy of the environment), Mana Kai (sustenance from food) and Mana o te Tangata (harvesting and fair distribution of food).

This work was led by Co-Chairs Jenny Cameron, and Craig Ellison. PwC New Zealand were the Secretariat, guided by Annabell Chartres. The full report can be found here.

The business of disseminating the knowledge contained in the Agri Adaptation Roadmap is ongoing. A highlight in 2023 was Circle Director of Implementation, Jack Keeys presenting the roadmap at the special workshop at IFAMA E Tipu World Conference in June.

Three workstreams have emerged from the goals set by the Agri Adaptation mahi. These are biotech, capital access and vulnerability assessments.



Jenny Cameron

Co-Chair



Craig Ellison

Co-Chair



PwC

Secretariat

Summary of Roadmap



Goal 1: Enhanced knowledge and capability



Goal 2: Effective investment



Goal 3: Strategic use of data and technology



Goal 4: Industry-led innovation



Goal 5: Collaborative and resilient leadership

¹ Ministry for Primary Industries. (2022). Situation and Outlook for Primary Industries. Retrieved from www.mpi.govt.nz.

Biotechnology, an Aotearoa response to genetic technologies

A key goal identified in the co-designed Agri-Adaptation Roadmap is industry-led innovation, and how the sector can take advantage of innovative opportunities, such as ecosystem services and modern genetic technologies to lead the sector's adaptation response.

This workstream, launched in November 2023 sought to ask not what should Aotearoa do in the area of biotechnology, but what could we do? Our intention is not to be prescriptive, but to lay out the opportunities and challenges we will face, depending on which approach for the country to take on current biotechnology options and regulation.

Significant funding for this work has been provided by our partner, AGMARDT (The Agricultural and Marketing Research and Development Trust), which will allow for a 9-month workstream.

The Aotearoa Circle has appointed PwC to lead the delivery of this initiative alongside Circle partners, Māori/Iwi representation, and other subject matter experts. Specialist project delivery partners, and an implementation working group with broad representation are involved in this work. The Circle is also focused on keeping all of our Partners closely informed as the work progresses. We understand that biotechnology can mean different things to different people, and that for some, it is a controversial and sensitive topic. For that reason, we proceed with care, committing to thorough communication and to progressing in clearly defined steps.

The work is being held in two phases:

- 1. Conducting an environmental impact assessment on the use of 'modern genetic technologies' in the food system.
- 2. Developing an action pathway for the government and the sector to respond strategically and proactively to the increasing use of modern genetic technologies.

The aim is to create a sequenced list of actions that Aotearoa and the food system can take to respond efficiently and effectively, considering the potential risks. This list will address both a continued GE-free approach and the consequences of a decision to use GE in the food system.

The primary audience for this workstream includes government and private sector leaders who need information on the impact and role of biotechnology in Aotearoa New Zealand's food system, particularly what it could mean for climate change mitigation, adaptation, and native biodiversity protection.

The outputs of this workstream are intended to be made publicly available and the final deliverable is expected to be completed by April 2024.



AGMARDT

Funding Partner

Some of the organisations that have been interviewed for this work include:

- AgResearch
- Beef + Lamb NZ
- Biotech NZ
- Canterbury University
- Dairy NZ
- Department of Conservation (active observer)
- E Oho
- Environmental Protection Agency (active observer)
- FoodHQ
- Genomics Aotearoa
- Grasslanz
- Horticulture New Zealand
- Lincoln University
- Livestock Improvement Corporation
- Ministry for Primary Industries (active observer)
- Ministry for the Environment (active observer)
- Organics Aotearoa
- Pāmu (Landcorp)
- Plant & Food Research
- Scion Research
- Sir Jonathon Porritt
- Summerfruit NZ
- Te Kotahi Research Institute
- Te Puna Whakaaronui
- Zoetis / Apha NZ

Enhancing access to capital

Capital is one of the most crucial components of enabling nature restoration and climate change adaptation, with the banking system providing an opportunity to unlock direct and scaled investment into a proactive response to the climate crisis.

A second key enabling action identified in the Agri and Tourism Adaptation Roadmaps, is enhanced access to capital. Consultations with sector stakeholders highlighted a gap in the sustainable finance system.

There is a critical need to identify opportunities for improving capital access for those in the agriculture sector who are looking to adapt to climate change impacts.

The proposed actions for The Aotearoa Circle consisted of a three-phased, strategic conversation series:

Phase One:

The Aotearoa Circle partnered with the Centre for Sustainable Finance: Toitū Tahua, and Fit for a Better World to co-host a webinar 'Sustainable Finance in the Food System" which saw over 350 registrations. Our panel presentations included representatives from ANZ, ASB, BNZ, HSBC, Rabobank, and Westpac, covering the international lending landscape, domestic considerations, and practical examples of sustainable finance in New Zealand

A pre-webinar survey showed that over 50% of the audience had little to no understanding of sustainable finance, but over 70% intended to seek sustainable finance investments in the next 24 months.

Phase Two:

We hosted a banks-only workshop which discussed the lack of awareness regarding sustainable finance and adaptation finance, focusing on the need for better understanding, financial responsibility, and mechanisms.

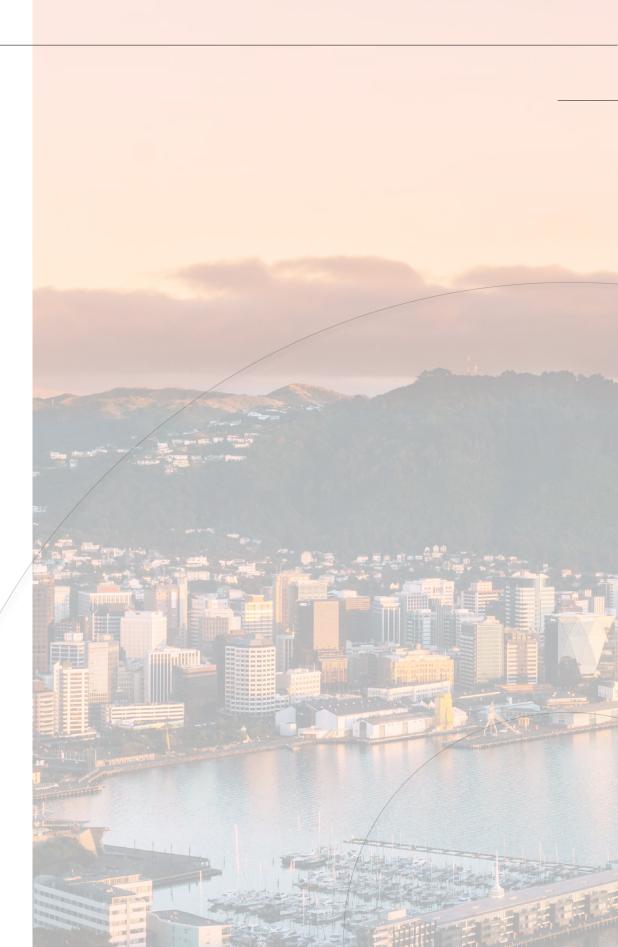
Phase Three:

Phase Three consisted of three targeted workshops with key stakeholders in the Agriculture, Tourism and Seafood sectors. The purpose of these sessions was to play-back opportunities identified in phase one and two, test assumptions, and collect any remaining insight required to understand the most impactful and priority next steps for the banking system.

As part of this workstream, we are developing a funding and finance ecosystem map, as a resource for our partners and the wider sector to use and distribute. This has been one of the priority requests from our workstreams, for the purpose of reducing the gap in awareness, with a single resource that outlines the various funding and finance options available, as well as their place in the wider landscape.

We are intending to release the output publicly and make this available for anyone to use, as well as being available on The Aotearoa Circle website.

For further information regarding ongoing efforts in sustainable finance for Aotearoa, visit the Centre for Sustainable Finance: Toitū Tahua website. Founded by The Aoteaora Circle in 2021, the Centre for Sustainable Finance: Toitū Tahua aims to accelerate an equitable, inclusive and productive financial system to enable a resilient and sustainable Aotearoa New Zealand. You can read their 2024 strategy here.



Seafood sector adaptation implementation

Aotearoa has one of the largest EEZ (Exclusive Economic Zone) in the world which means we have incredible marine resources on our doorstep, a privilege which carries a unique level of responsibility to care for Tangaroa and our kaimoana. In turn, the oceans care for us. Our seafood industry generates \$5.2 billion in economic output annually¹, supporting communities across the motu, particularly regional ones.

This has been our focus at The Circle for some time. Our marine workstream is one of our longest standing. We published Marine Climate Scenarios in 2020 and the following year released the Seafood Sector Adaptation Strategy. As a result, this mahi has now moved into the adaptation implementation phase.

Our Seafood Adaptation Strategy (SAS) work has been in phase 3.0 for over a year, led by Director of Implementation Jodie Kuntzsch and an Implementation Group (IG). The IG consists of true experts from our marine science community, the seafood companies and the regulatory bodies.

In 2023, the IG focused on vulnerability assessments for individual species, specifically hoki (a deepwater species), snapper (an inshore species) and salmon (aquaculture). They considered drivers of change, future visions, possible futures, adaptation options, sequencing, and enabling factors. They also looked at climate change projections, market forces, policy, and innovation.

Adaptation strategies for each of the three species were categorised into incremental, medium-term, and transformational strategies, with timelines and stakeholders identified.

We have since launched four pilots:

- Test the adaptation pathway process within the mussel sector and identify key decision points when tipping points are reached.
- Organisational level testing at seafood company Moana, using information from the snapper pathway to test with actual fishers, helping them become more resilient.
- Sector level testing with hoki, presenting the case study to the Deepwater Council (part of Seafood New Zealand), raising awareness of findings and adaptive pathway options.
- Awww research pilot programme in salmon focusing on collaborative opportunities and research programmes, led by Cawthron.

In addition to these specific pilot activities, The Circle and the IG are considering bigger, cross-sector challenges which are potential barriers to adaptation. Three initiatives are considered in the Circle's 2024 workplan, and are aligned with our tourism and agriculture adaptation plans:

- Capital Access
- Alternative Fuels
- Vulnerability Forecasting

Despite the maturity of the marine workstream for The Aotearoa Circle and the excellent progress in 2023, we recognise that the real work has only just begun. What we learn from this work with seafood sector stakeholders, will inform our work with other sectors and enable real world actions and results.

Toitū te marae a Tāne-Mahuta, toitū te marae a Tangaroa, toitū te tangata - If the land is well and the sea is well, the people will thrive.

Implementation Group Members:

- Bubba Cook, WWF
- · Charles Heaphy, Sealord
- Dr Dave Taylor, Aquaculture NZ
- · Jane Symonds, Cawthron Institute
- John Willmer, Fisheries Inshore NZ
- Megan Linwood, MPI
- Michelle Cherrington, Moana
- Dr Peter Longdill, Sanford
- Ruth Cook, MPI
- Stuart Yorston, Sealord
- Vonda Cummings, NIWA

With special thanks to:

- Jodie Kuntzsch, Moananui
- James Butler, Cawthron Institute
- Nick Craddock-Henry, GNS Science

¹ BERL: Business and Economic Research (2020) Commercial Fishing, Economic Contribution to New Zealand in 2020. Retrieved from www.berl.co.nz

Tourism adaptation roadmap

New Zealand is uniquely dependent on our natural capital to feed our people and fuel our exports. We are also particularly dependent on our natural capital to attract tourists to our shores. Pre-Covid, tourism generated a direct contribution to GDP of \$10 billion, or 3 percent.¹

On 24 March 2023 we released our Tourism Sector Climate Change Scenarios which was guickly followed on 24 May by our Tourism Adaptation Roadmap. Both were launched in an atmosphere of uncertainty for the sector, which was pummelled by Covid and still feeling the impacts of the year's extreme weather events such as Cyclone Gabrielle. Both documents featured this statement from our co-chairs, Laurissa Cooney, Penny Nelson and Tak Mutu:

"As we take flight again, Aotearoa New Zealand can follow regenerative pathways to safeguard our tourism brand promise and reputation, while ensuring we adapt to the impacts of climate change. A tourism sector that gives back to communities, gives back to Te Taiao, values the role mana whenua have as kaitiaki of people and place, and contributes to our prosperity and that of future generations."

The Roadmap identified five regenerative pathways to create resilience in our tourism sector.

Key objectives that emerge from these include:

- A tourism sector climate adaptation advisory body that supports and guides the sector to translate the climate science into operational outcomes and decision making.
- Funding is available to incubate innovative adaptive regenerative tourism activities.

- The sector is empowered with the knowledge and skills to adapt and prosper in a changing climate.
- Funding mechanisms are established to support the most vulnerable organisations to transition or manage retreat.

Following the launch of the Climate Scenarios and Roadmap, our Co-Chairs and members of the LG presented informative sessions at several conferences and events including an RTNZ Te Unga Mai workshop, a TIA Member webinar session, the 2023 Tourism Policy School event and of course our own Aotearoa Circle launch webinar attended by over 120 registrants.

The substantial amount of work required to release Climate Change Scenarios and Adaptation Pathways in the same year was made possible by a long list of distinguished technical experts, Te Ao Māori advisors, special advisors and our Leadership Group and three Co-Chairs. We thank them for their significant efforts.

Hāpai te Mauri o te Whenua, Hāpai te Mauri o te Wai, Hāpai te Mauri o te Tangata - When we build the life force of land and sea, the people will thrive.



Laurissa Cooney Director, Air New Zealand



PwC Secretariat



Penny Nelson Director General, DoC



Tak Mutu Director, MDA Experiences

Summary of Roadmap



Goal 1: Prioritised action and focus



Goal 2: Decision making and planning that prioritises nature and biodiversity



Goal 3: Building system resilience through courageous leadership



Goal 4: Advancing knowledge, skills and capability



Goal 5: Directed Investment

¹ Stats NZ (2022), Tourism Satellite Account Year Ended March 2022. Retrieved from www.stats.govt.nz

Legal opinion on nature-related risks

The Aotearoa Circle along with Circle Partner Chapman Tripp have produced a total of four significant pieces of work since The Circle was founded five years ago. These can be found here.

In 2023 we published an opinion which sought to provide clarity and direction on the legal duties of New Zealand directors in the area of nature-related risks.

Its conclusion was that Directors of New Zealand companies do have a duty to exercise reasonable care to ensure that their businesses are identifying foreseeable and potentially material nature-related risks that could affect their companies, and equally to take nature-related risks into account in their decision-making. This encompasses natural capital loss, ecosystem service decline and biodiversity loss, which may potentially impact any given business and in turn, the impact those businesses have on Aotearoa New Zealand's natural capital.

Considering natural capital in business decision making is a new area for many and we are aware that this opinion follows on relatively rapidly from the finding that climate change impacts should be considered. The Circle has undertaken work to ensure that this opinion is widely communicated and understood, not just with our Partners but with the wider New Zealand business community. We hosted both a pre-launch briefing session for our Partner CEOs and a panel-discussion webinar attended by over 200 participants. The Aotearoa Circle and Chapman Tripp also pre-briefed relevant ministers and MPs from both Labour and the National parties. The legal opinion was also covered by articles featured on Newsroom and RNZ.

This awareness of risk (and tools to assess it) has the dual benefit of protecting nature for future generations, as well as ensuring the enduring success of New Zealand organisations. We commend and thank the team at Chapman Tripp for their thorough and deeply thoughtful work and reiterate their view that prudent directors in sectors highly dependent on nature and the environment for their business model should be starting on the path to ensure their business is in a position to:

- · Identify dependencies on natural capital
- · assess their exposure to such risk, and
- manage any nature related risks that may have a financially material impact.

This 2023 legal opinion was published in March and is available here.



Nicola Swan

Partner, Chapman Tripp



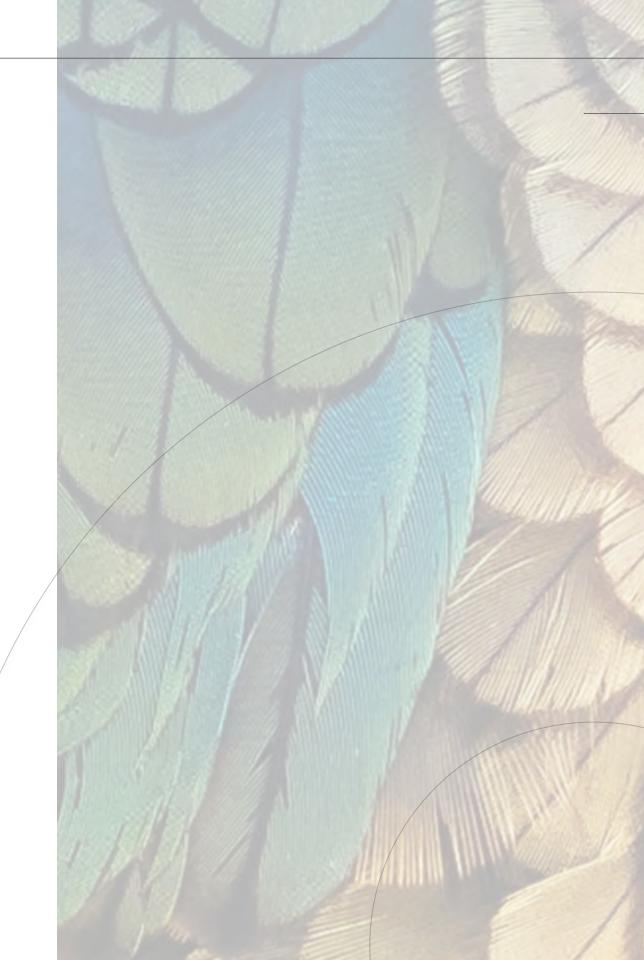
Alana Lampitt

Partner, Chapman Tripp



Chapman Tripp

Author



Energy sector climate change scenarios

Around 40% of New Zealand's Greenhouse gas (GHG) emissions come from our energy use, primarily in transport, manufacturing and the primary sector. Energy extraction can be harmful to our natural world (mining for example) and even building renewable energy infrastructure will impact natural resources such as land and water.

But the good news in Aotearoa, is that 87% of our electricity is generated from renewable sources.² This gives us the opportunity to lead in new technologies as we tackle the last 10 or so percent of our electricity production that is non-renewable and look at how we reduce emissions across the wider energy sector.

The genesis of our Energy Climate Scenarios work and our Transport Climate Scenarios is The Aotearoa Circle's 2021 Low Carbon Energy Roadmap. A key objective from that report is that our energy system is resilient, reliable and secure. If not, we cannot address key concerns such as developing an energy system that keeps whanau warm, dry and healthy. So while we know how much our energy sector currently contributes to our climate change problems, what impact does climate change potentially have on the sector?

The Energy Sector Climate Scenarios asks "how could climate change plausibly affect the Aotearoa energy sector?"

The workstream, with PwC acting as secretariat, kicked off in September 2023. Representatives from 13 leading organisations across the energy sector are involved in the ongoing work. We also wish to thank NIWA and the External Reporting Board (XRB) for offering their expertise to the group.

The aim is to take a broad view across the entire sector and make visible the potential impacts of climate change across the sector value chain. The outputs of this project will form a critical part of the inputs into individual organisations own risk assessments and scenario analysis.

Our work will apply the He Ara Waiora Te Ao Māori framework, which informed the development of the Low Carbon Energy roadmap. The He Ara Waiora framework puts wairua (spirit) at the centre of our considerations and reminds us that wellbeing should underpin our actions and decision making.

As we said then: **Ko au Te Taiao, ko Te Taiao ko au -** we are the environment and the environment is us.



PwC

Secretariat

1 EECA. (2023). New Zealand's Energy Related Emissions. Retrieved from www.eeca.govt.nz.

Leadership Group:

- Beca
- BlueFloat Energy
- Contact Energy
- Firstgas
- Genesis Energy
- Mercury
- Meridian Energy
- NIWA
- Orion Group
- Powerco
- Unison
- Vector
- Wellington Electricity

Wider Interest Group:

- Business New Zealand Energy Council (BEC)
- Bioenergy Association of NZ
- EECA
- Energy Resources Aotearoa (ERA)
- External Reporting Board (XRB)
- Gas Industry Aotearoa
- NZ Geothermal Commission

² MBIE. (2023). Energy in New Zealand 2023. Retrieved from www.mbie.govt.nz.

Transport sector climate change scenarios

New Zealand has ambitious goals for transport emissions. According to Te Manatū Waka we must reduce our transport emissions by 41% by 2035 and reach net zero by 2050 to satisfy the requirements of Aotearoa New Zealand's first Emissions Reduction Plan. The Ministry also says that in 2019, transport was responsible for 39% of New Zealand's CO2 emissions.¹

A warmer world is a world in which natural capital is at greater risk. The development of transportation systems almost always places stress on our natural environments. It is necessary to understand the impacts of climate change on our transport sector and is consequently, the impact the sector has on the natural environment in order to plan effectively for future transport systems that minimise environmental harm.

The workstream's objectives are to:

- Develop a shared vision of what the transport sector could look like under different climate futures.
- Translate global and national scenarios into relevant, tangible outcomes for the local transport sector.

- Develop a set of External Reporting Board (XRB) NZ Climate Standard aligned climate scenarios for the sector, which organisations can use as a tool for producing the required scenario analysis to support their disclosures, assessment and planning.
- Provide participants with the knowledge and skills to engage with their own organisations on the outcomes of this project.

As we write this Review, the work is ongoing, with an expected delivery date of March 2024.



KPMG

Secretariat

Leadership Group:

- Aurecon Group
- Freightways
- Kāinga Ora
- Kiwirail
- MOVE Logistics
- NZ Airports Association
- NZ Post
- Waka Kotahi (NZTA)
- Otago Regional Council
- Tadpole
- Te Manatū Waka | Ministry of Transport
- The Colonial Motor Company
- Tourism Holdings Limited (thl)
- Turners Automotive Group
- Wellington City Council
- External Reporting Board (XRB)
- Z Energy

Wider Interest Group:

- Air New Zealand
- Auckland Airport
- Auckland Council
- Auckland Transport
- CentrePort
- Hiringa Energy
- IAG
- LGNZ
- Mainfreight
- Maritime NZ
- Marsden Maritime Holdings
- Mondiale VGL
- Port Otago
- Ports of Auckland
- South Port
- Tadpole
- Te Waihanga | Infrastructure Commission
- Te Whatu Ora
- The Warehouse Group

¹ Ministry of Transport. (2022). Decarbonising Transport Action Plan, 2022-2025. Retrieved from www.transport.govt.nz.

Taskforce on nature-related financial disclosures bootcamp

Nature is everything: we only exist as part of nature - the air, water and food we need to survive. In Te Ao Māori, people are part of nature.

Around 70% of New Zealand's exports depend on our natural resources.¹ Many New Zealand businesses are well advanced on the journey to recognise the importance of climate to their future. They rely on the Taskforce on Climate-related Financial Disclosures (TCFD) to guide them in their reporting.

Officially released in 2023, the Taskforce for Nature-related Financial Disclosures (TNFD) is a new disclosure framework, with the overarching goal of redirecting global financial flows towards nature-positive outcomes. TNFDs are new, but their adoption is expected to happen faster than TCFDs and come in an environment of growing awareness and expectations. For example, New Zealand businesses exporting to Europe are increasingly aware of the expectations in that part of the world that they can account for and are minimising their impact on nature.

In 2023, The Aotearoa Circle committed to upskilling New Zealand businesses on applying TNFDs, offering a series of workshops for our Leading Partners, facilitated by PwC.

The Bootcamp series, aimed to educate and encourage participants to take early strides in understanding their naturerelated impacts, dependencies, risks, and opportunities, through a Te Ao Māori lens.

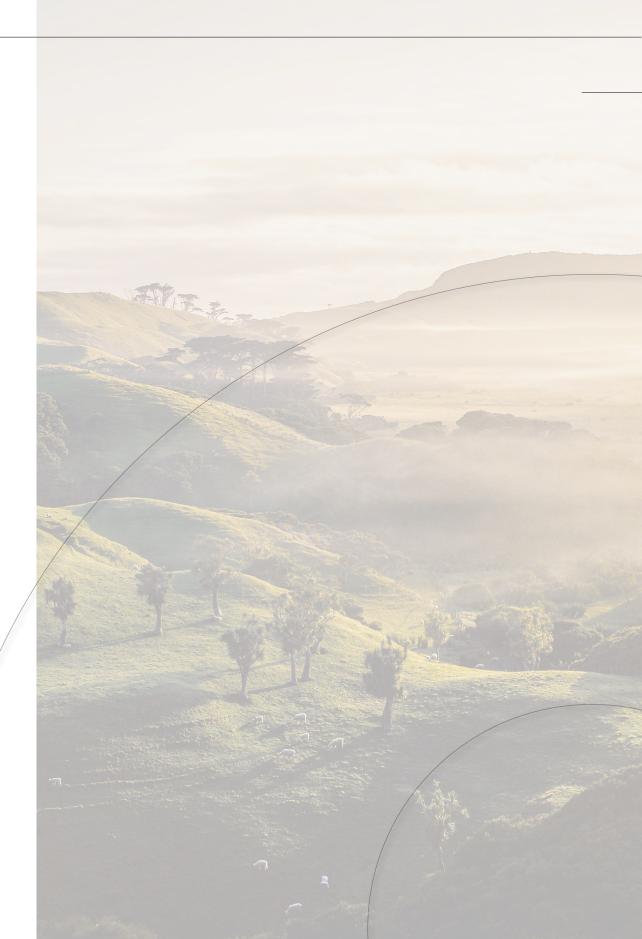
Our Rangatahi Advisory Panel members were invited to take part alongside the other sustainability, finance and leadership professionals participating.

The feedback from participants was excellent and in the year ahead, The Aotearoa Circle will continue to champion TNFD implementation, with a second bootcamp series due to launch in March 2024.



PwC

Secretariat



¹ Stats NZ. (2018). Environmental-economic accounts: 2018 (corrected). Retrieved from www.stats.govt.nz.



CEO Outlook, what does 2024 hold?

A brief look through this document will demonstrate how much work has come out of The Aotearoa Circle in 2023. This is thanks to the combined and formidable efforts of our Partners, Guardians, Co-Patrons, Rangatahi Advisory Panel, workstream contributors and general supporters. A busy 2023 followed a busy 2022.

So what does 2024 hold? Our wish for the year ahead is to tighten our focus in order to move faster. Nature cannot wait. Specifically, how do we take the work on the legal opinion and TNFD bootcamp in 2023 and do more to inform, upskill, and embed to drive implementation?

The responsible next step for us is to aid in the upskilling of New Zealand company directors and executives on TNFDs. We are working on a new programme to deliver this in 2024 as well as the level of ESG reporting being demanded around the world and what our exporters need to prepare for.

Also new in 2024 is a Natural Capital Regional Resilience project. This will bring together everything we have learned in transport, agri, energy, tourism, food, TNFDs and more to understand the natural capital value that a given region holds, including economic, social and cultural 'value'. The aim is to then lay over climate change scenarios to understand the true impacts and risks for that region and the opportunities to work collaboratively to address those issues. Once this pilot is completed, we will ask how the model can be scaled for all regions to understand the potential impact of declining natural capital.

We will continue working with the financial sector to enable easier capital access for adaptation for agri, tourism and seafood sectors, as well as complete the work on Transport and Energy Sector Climate Scenarios, and a second TNFD bootcamp. We will also complete the Biotech workstream that will consider the impact potential technologies could have on the environment.

Remaining is an opportunity to partner on a Green Shipping initiative and we will continue to scope this out early in the year.

The scale of the risks we face are easy to underestimate. Human beings tend to have an optimism bias. Many of us are reluctant to appear alarmist and we all know that without hope, we are more likely to give up on the changes we are able make.

But as our planet heats and our natural resources dwindle, it is no longer okay to assume we'll be okay. Without drastic and rapid action, we will not be.

Every Partner organisation and person who is part of The Aotearoa Circle cares about this. We feel the same urgency our Co-Chairs talk about in their introductory remarks in this document. Every bit of work we do helps, whether it is a voice at the board table reminding fellow directors about their nature-related obligations, or futurefocused local body politicians taking a long view of risk, or a CEO who sees the natural world as a stakeholder and makes decisions accordingly.

Singly and collectively, these sorts of actions make a real difference. The Aotearoa Circle aims to support more of them in 2024. And we thank you deeply for the contribution you made in the year just gone and for what you will do in the year ahead.

I would like to personally acknowledge the work of Directors - Implementation, Jodie Kuntzsch and Jack Keeys, who both left at the end of 2023 and Nadine Walker who left mid year. I am delighted that Fiona MacMillan and Hannah Dooley both joined Jess Hopkins and I in August. Much work happens behind the scenes and the sheer volume of work the team achieved is due entirely to their dedication & commitment to our vision. Thank you again to our Guardians, who volunteer their time to drive us forward and to our Partners and Secretariats who provide countless hours of support.



Chief Executive Vicki Watson



Premium Partner EnviroNZ

Jane Taylor EY Sealord

FENWICK Statistics New Zealand

Leading Partners HSBC Te Puni Kokiri

ANZ IAG Tourism Holdings Limited

Department of Conservation Kainga Ora Tourism New Zealand
Fonterra KPMG Wakatu Incorporation

Genesis Energy Land Information NZ Wellington City Council

Mercury LIC

Ministry for The Environment Local Government New Zealand

Silver Fern Farms Manaaki Whenua

Westpac Ministry of Business, Innovation and Employment

Zespri Ministry for Primary Industries

Ministry of Transport

Active Partners Moana New Zealand

AGMARDT New Zealand Trade and Enterprise

Air New Zealand Ngāti Whātua Ōrākei Whai Rawa Limited

ASB Bank NIWA

Auckland City Council Norwood

Bank of New Zealand Orion Group

Beca Pāmu BRANZ PwC

Cawthron Institute Rabobank

Chapman Tripp Ravensdown

Deloitte RealNZ

DNA Design

New Partners welcomed in 2023

Ākina Foundation

Alliance Ecology

Sanford

Aurecon NZ Limited

Contact Energy

Meridian Energy

Ministry of Foreign Affairs and Trade

New Zealand Post

T&G Global

Tonkin + Taylor

Governance and Team

Founder



Sir Rob Fenwick Co-Founder - The Aotearoa Circle

Co-Patrons



Her Excellency, The Rt Hon Dame Cindy Kiro, GNZM, QSO, DStJ Governor-General of New Zealand



Sir Jonathon Porritt Co-Founder - The Aotearoa Circle

Laurissa Cooney

Co-Chairs



Director - Air New Zealand, Accordant, Goodman Property Ltd, Ngā Tāngata Tiaki Chair - Tourism ITP Environment Chapter Zero Steering Committee Member



James Palmer Secretary for The Environment Te Hono Steering Committee

Guardians



Jane Taylor Deputy Chair - XRB Director - The Aspen Institute NZ, OTPP NZ Forest Investments Ltd



Volker Kuntzsch Former Co-Chair CEO - Cawthron Institute Director - Moananui



Carolyn Tremain CEO - MBIE Chair - Public Sector Auckland Career Board



David Carter Executive Chair - Beca Chair - University of Auckland Foundation Director - Meridian Energy



Simon Limmer CEO - Silver Fern Farms Director - The Lamb Company, Meat Industry Association



Penny Nelson Director-General - Department of Conservation

Emerging Director



CEO & Co-Founder - FENWICK Director & Co-founder - Futureful

Former Guardians

Fraser Whineray, 2019-2021 Sir Chris Mace, 2020-2021 Stephen England-Hall 2022

Former Patrons

Her Excellency, the Governor-General of New Zealand Dame Patsy Reddy

Founding Guardian

Vicky Robertson - Former Secretary for The Environment

Former Staff

Nadine Walker (until August 2023) Director of Engagement and Communications

Trustee



Circle Team



Vicki Watson Chief Executive



Hannah Dooley Executive Assistant



Jessica Hopkins Project Coordinator



Jack Keeys Director - Implementation



Jodie Kuntzsch Director - Implementation



Fiona MacMillan Director - Engagement and Communications

"We know what is happening, we know what we must do – now, we must simply do it."

- Sir Rob Fenwick, March 2020



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Join us at www.theaotearoacircle.nz