

### **Statement of Intent**

1 July 2022 - 30 June 2026



### Contents

Introduction	3
Nature and scope	4
Operating environment	5
A dynamic environment	6
Objectives	8
Overview	9
Goal for New Zealanders	10
What we will achieve	11
Sustainable New Zealand Antarctic Programme	15
Organisational Health and Capability	18
Scott Base Redevelopment	19



### Introduction

Antarctica and the Southern Ocean – Valued, Protected, Understood. Antarctica New Zealand's vision places the southern continent firmly in the hearts of New Zealanders.

<u>Value</u> the intrinsic and scientific values of Antarctica, and the governance provided through the Antarctic Treaty System, to ensure Antarctica's future as a natural reserve, devoted to peace and science.

<u>Protect</u> Antarctica to the highest international standards through our efforts to minimise environmental impact, leadership in protected area management and support for the conservation of human heritage in the Ross Sea region.

<u>Understand</u> that Antarctica and the Southern Ocean are fundamental drivers of the global climate system. Scientific research improves our capability to detect, predict and adapt to changing conditions and provide evidence to support environmental management and policy decisions.

This document sets out Antarctica New Zealand's strategic priorities for the next four years. It provides the foundation for our day-to-day work and guides the delivery of the Minister's expectations. Our strategic priorities are:

Maintain New Zealand's permanent operational presence in Antarctica

 The once in a generation project to redevelop Scott Base will maintain and enhance New Zealand's ability to deliver globally significant Antarctic research

Enhance New Zealand's Antarctic and Southern Ocean Science

· Successfully host the Antarctic Science Platform and continue to support high impact research

Strengthen New Zealand's Leadership and Cooperation in Antarctica

Work closely with other nations to deepen cooperation across operations and science and to support
 New Zealand's influence in the Antarctic Treaty system

**Protect Antarctic Environments** 

 Demonstrate strong leadership on environmental policy in Antarctica by focusing on finding innovative solutions to environmental management challenges

The highly inflationary environment we are currently facing impacts all aspects of our operations, including the Scott Base redevelopment project, and places significant pressure on delivery of the above strategic priorities over the four-year life of this document.

The Board of Antarctica New Zealand is pleased to present its Statement of Intent for the four years to 30 June 2026.

Sir Brian Roche Board Chair

29 June 2022

Dr Helen Anderson Board Member

29 June 2022

### **Nature and scope**

### **Antarctica New Zealand**

Antarctica New Zealand was established on 1 July 1996 by the New Zealand Antarctic Institute Act (NZAI Act), is based in Christchurch and supports operations in Antarctica via Scott Base.

Our principal functions under the NZAI Act are:

- a) To develop, manage, and execute New Zealand activities in respect of Antarctica and the Southern Ocean, in particular in the Ross Dependency
- b) To maintain and enhance the quality of New Zealand Antarctic scientific research
- c) To co-operate with other institutions and organisations both within and outside New Zealand that have objectives similar to those of Antarctica New Zealand

The NZAI Act requires us to perform these functions in a way that is consistent with:

- a) The need to conserve the intrinsic values of Antarctica and the Southern Ocean
- b) Active and responsible stewardship of the Ross Dependency for the benefit of present and future generations of New Zealanders
- c) New Zealand's international obligations
- d) The provisions of the Antarctica Act 1960 and the Antarctica (Environmental Protection) Act 1994
- e) The risks to personnel being minimised as far as is reasonable

### Vision

Antarctica and the Southern Ocean - valued, protected, understood.

### **Values**

People are the key to Antarctica New Zealand's success. This includes permanent and fixed-term staff; contractors and suppliers; seconded staff from the New Zealand Defence Force and our many strategic partners in Government, the research community and other national Antarctic programmes. We seek to create a high-performance organisation with a strong culture of shared beliefs:

Ka ngākau whiwhita tātou ki ā tātou mahi katoa - We are passionate about what we do Ka tiaki tātou i a tātou anō, ka tiaki hoki i te taiao - We care for each other and the environment Ka mahi tātou - We work together He ngākau pono ō tātou - We aspire to the highest standards Ka whai tātou i ngā taumata tiketike -We act with integrity

### Te Tiriti o Waitangi

Antarctica New Zealand will honour Ti Tiriti o Waitangi and give effect to its principles. Our organisation will increasingly imbue the essence of manaakitanga (care and respect) and kaitiakitanga (guardianship and protection) as we seek to ensure Antarctica remains as a continent set aside for peace and science.

Antarctica New Zealand will do this through delivery of our Māori Strategic Framework which aims to enhance the effectiveness of our work and will ground our work firmly in Aotearoa New Zealand. In particular, through the period of this SOI, we will:

- · develop a new base that reflects our heritage and culture
- weave Mātauranga Māori into Antarctic Science, including the Antarctic Science Platform
- · meet professional competencies
- · rethink our organisation's structures, frameworks and processes from a Te Ao Māori standpoint

### Minister

The Minister of Foreign Affairs is the Minister responsible for Antarctica New Zealand.

### **Operating environment**

### The context in which we work

Human fascination with the Southern Ocean and Antarctica began centuries ago when the curiosity of Polynesian navigators led them south. Tribal narratives1 relay explorer Hui Te Rangiora's description of ice floes as Te Tai-uka-a-pai ('sea foaming like arrowroot') and the journey of Tamarereti as he sought Te Tahu-nui-ā-Rangi (Aurora Australis).

New Zealand's connection continued when, more than 100 years ago, explorers and scientists left New Zealand ports to tackle the vast icy continent in their ambition to reach the Pole.

In 1957, Sir Edmund Hillary established Scott Base to support the Commonwealth Trans-Antarctic Expedition. Initially designed as temporary, the New Zealand Government recognised the facility's value and made it a permanent station for scientific research.

### The importance of Antarctica and the Southern Ocean to New Zealand

### Peace and security

• We value a safe and secure region to the south of New Zealand.

### Sovereignty

 New Zealand has maintained a right of sovereignty over the Ross Dependency since 1923 and is one of the twelve original signatories of the Antarctic Treaty in 1959.

### **Environment**

- We prioritise the environmental protection of Antarctica as a natural reserve, devoted to peace and science.
- New Zealand is committed to protecting the health, productivity and biodiversity of the Southern Ocean.

### Science

Understanding the role of Antarctica and the Southern Ocean in global systems forms the basis for key
decisions about how New Zealand will respond and adapt to climate change and other environmental
challenges.

### International influence

- New Zealand builds reputational benefits through environmental and policy leadership and by engaging in collaborative and policy relevant science.
- Antarctica New Zealand has a long-standing relationship with the United States Antarctic Program through the Joint Logistics Pool and scientific collaboration.

### **Economic**

 New Zealand's proximity to Antarctica provides economic opportunities, especially for Christchurch as one of five Gateway cities in the world.

<sup>&</sup>lt;sup>1</sup>Ngāi Rārua and Te Āti Awa

### A dynamic environment

We operate in a complex and changing environment. Key risks, opportunities and emerging context include:

### COVID-19 pandemic

Antarctica New Zealand's response to the pandemic to date has been to invoke an isolation strategy to ensure that COVID-19 did not reach Antarctica. This necessarily limited the size of the season deployment for 2020/21 and 2021/22 seasons. This strategy has been successful with no Antarctica New Zealand team members on ice contracting COVID-19.

It is difficult to predict pandemics, including COVID-19 and its variants. The community-based living arrangements at Scott Base and the lack of comprehensive medical support in comparison to New Zealand, continue to require caution. Risks to date have been mitigated by a range of interventions including predeployment isolation, testing regimes and PPE use.

Over the duration of this Statement of Intent, Antarctica New Zealand will continue to work to maintain the health and safety of employees, contractors, researchers and others. Previous efforts to maintain a COVID-19 free environment have been successful, however the nature of the pandemic is ever changing and Antarctica New Zealand will remain agile in its response. Pandemic mitigation will need to be a risk-based assessment balanced with the achievement of agreed organisational outputs.

Border management during the COVID-19 pandemic created significant complexities for gateway cities. Antarctica New Zealand takes a leading role in supporting other National Antarctic Programmes through Christchurch, and will continue to work alongside local and central Government to promote the city, one of only five gateways to Antarctica.

### Supply chain and cost escalation

COVID-19 has resulted in significant geographical shifts in supply and demand, which in turn has created problems for finely tuned global supply chains. Any weaknesses in supply chain pre-COVID-19 such as skill shortages, have been exacerbated by the pandemic. The war in Ukraine has created further challenges with constraints on supply and resulting cost escalation, notably fuel.

New Zealand is likely to see ongoing supply chain disruptions, including cancellation of routes, sustained volume disruptions and reduced access to necessary hardware including containers through the next 24 months.

It is expected that international shipping costs, which have seen an increase in costs over the past two years will remain high for the remainder of the year, and well into next year in response to the situation in Ukraine. Inflation to March 2022 is running at 6.9%, a 30-year CPI high. Fuel prices rose 8.8% for the March quarter and are up 32.3% for the year. Food prices for the last year were 7.6% more than for the year before. The unadjusted labour cost index rose to 4.8% in the March 2022 quarter. The Infrastructure Commission Te Waihanga is predicting 10% increase for the remainder of 2022. All aspects of our operations, including the Scott Base redevelopment project, are facing cost challenges.

We are managing these risks through a variety of cost control and containment measures, nevertheless it should be recognised there are significant pressures impacting the delivery in-full of strategic priorities included in this Statement of Intent.

### Antarctic tourism

The International Association of Antarctic Tour Operators (IAATO) sets out a voluntary code for tourism operators on the continent and in the seas surrounding Antarctica. Pre COVID-19, the number of tourists to Antarctica was 48,000, predominantly on cruise vessels departing from South America. Visitors to the Ross Sea region made up less than 1% of these numbers. Post COVID-19, there has been an indication of a significant increase of interest in Antarctica, and a transition of developed nations interests from accumulating assets to accumulating experiences. During the last 24 months, there has also been an increase of new cruise ships with polar code ratings. For the 2022/23 summer season tourist numbers are expected to exceed 100,000, a 43% increase over the 2019/20 season. Most passengers are from USA, closely followed by China.

There is expected to be an increase in tourism in the Ross Sea region - with departures from New Zealand/Australia, and from circumnavigating expeditions departing from South America to the Ross Sea, and back again.

### Antarctic science

Antarctica and the Southern Ocean are fundamentally important to the global climate system and have a major influence on New Zealand and global climate. Research in Antarctica and the Southern Ocean is imperative to improve our capability to detect, predict and adapt to changing environmental conditions, and support environmental management and conservation.

The seven-year, \$49 million Antarctic Science Platform, hosted by Antarctica New Zealand, is now mid-way through its term. The Platform provides stable funding to help New Zealand researchers achieve globally significant outcomes that advance our understanding of Antarctica's impact on the global climate system and how this might change in a warming world. It has been extremely successful in assisting research projects maintain continuity during the COVID-19 pandemic. The focus is now to support those projects to complete their data collection activities in Antarctica.

### New Zealand's Antarctic inter-continental transport capability

- The ice-strengthened tanker, the HMNZS Aotearoa, successfully undertook its maiden voyage to
  Antarctica in February 2022 delivering fuel and supplies to Scott Base and the United States McMurdo
  Station. The addition of a purpose-built, polar-class sustainment vessel, specifically able to operate
  deep into the Southern Ocean and Ross Sea with an ice-strengthened hull, is a significant addition into
  the NZ/US joint logistics pool.
- The current fleet of C-130H Hercules operated by the Royal New Zealand Air Force for tactical airlift
  operations is nearing end of life. A fleet of five C-130J-30 Hercules, scheduled for 2024, will replace the
  current fleet. We will support the NZDF to transition the C-130J-30 Hercules into Antarctic service.
- The NZDF's commitment to New Zealand's Antarctic programme sees more than 200 personnel annually involved across a variety of roles, including terminal operations at Harewood (Christchurch International Airport) and McMurdo (load and passenger processing, fuel delivery, ship off-load teams), light engineering teams for Scott Base, and Scott Base support personnel (plant operators, cargo handlers, communications & administration staff). Any challenges that the NZDF faces in resourcing this commitment, such as competing priorities, impact the success of the Antarctic programme.

### **Objectives**

Our strategic priorities have been agreed in consultation with the Minister of Foreign Affairs:

Maintain New Zealand's continuous and effective presence in Antarctica

- Maintain New Zealand's presence in the Ross Dependency through the safe year-round operations of Scott Base to high environmental standards
- · Redevelop Scott Base while continuing to support globally significant scientific research
- Work with the New Zealand Defence Force and others to ensure air and sea access to Scott Base is maintained

### Enhance New Zealand's Antarctic and Southern Ocean science

- · Support high impact research in Antarctica and the Southern Ocean that benefits New Zealand
- Support the implementation of 2021-2030 Aotearoa New Zealand Antarctic and Southern Ocean Research Directions and Priorities
- Host the Antarctic Science Platform and support it to be successful

### Strengthen Leadership and cooperation

- Work closely with other nations to deepen cooperation in Antarctic science, environmental protection and effective logistics; and to support New Zealand's continued influence within the Antarctic Treaty system
- Maintain strong relationships with Christchurch City representatives to promote and identify opportunities that strengthen Christchurch's position as the international gateway to the Ross Sea region.
- Increase awareness of New Zealand's activities in Antarctica and their relevance to the New Zealand public

### **Protect Antarctic Environments**

- Demonstrate strong leadership on environmental policy in Antarctica, in particular through the Committee for Environmental Protection
- · Focus on sustainability and reducing our environmental impacts
- Use the redevelopment of Scott Base to demonstrate exemplary environmental practices within the wider Antarctic Treaty System.

### Whole of Government approach

Antarctica New Zealand will work across boundaries in the collective interests of Government and support a whole of Government approach.

- The Ministry of Foreign Affairs and Trade (MFAT) is responsible for New Zealand's overall interests in Antarctica and the Southern Ocean. It is the policy lead on Antarctic related issues. We support these with our operational work, environmental and science leadership and international connections.
- The New Zealand Defence Force provides assets and resources to enable Antarctica New Zealand to operate. This is important to logistics sharing arrangements with the United States Antarctic Program and also with other Antarctic programmes operating in the Ross Sea region
- The Ministry of Business, Innovation and Employment (MBIE) has contracted us to host the Antarctic Science Platform as a Strategic Science Investment in Antarctic science. In 2022, we are jointly engaged in a mid-term review of this seven-year investment. This stable funding supports Antarctic and Southern Ocean research that maximises scientific and strategic benefits for New Zealand.
- We support the Antarctic scientific research of Crown Research Institutes, Universities and other science agencies.
- We support Land Information New Zealand to map areas of Antarctica of interest to New Zealand and we assist Maritime New Zealand with search and rescue coordination.
- We support the Antarctic Heritage Trust to conserve the historic huts of the early Antarctic explorers.
- We work closely with the Christchurch Antarctic Office (ChristchurchNZ) to support delivery of Christchurch's Antarctic Gateway strategy.



# Antarctica New Zealand Overview

Antarctica and the Southern Ocean - Valued, Protected, Understood

### Why

Vision

### Kaitiakitanga

New Zealand continues to play an influential role in the kaitlakitanga (guardianship) of Antarctica and the Southern Ocean as a natural reserve devoted to peace and science

### What

# Valued

# Responsible Stewardship

# Excellent Science

Understood

Scientific research delivers strategic and scientific impact

Protect Antarctic environments including their intrinsic values

Protected

### 5

### Enhance NZ's Antarctic and Southern Ocean Science

Southern Ocean research activities well coordinated with NZ-wide Antarctic and Ensure Antarctic Science Platform research is

How

Redevelop Scott Base.

Enhance the management of safety at Scott

Base by providing assurance as to how critical

risks are managed

effective presence in Antarctica

Maintain NZ's continuous and

Develop alternative funding streams to enhance the delivery of NZ Antarctic and Sothern Ocean research objectives

# Leadership and Cooperation

- environmental strategy for the Ross Sea region Review and update the Government's
- operating in the Ross Sea region Facilitate cooperation and collaboration amongst National Antarctic Programmes



# **Protect Antarctic Environments**

 Ensure science, environment and logistics 3-4 year plan. activities are well co-ordinated by developing a



## Our People

Christchurch City

Who

Science community

New Zealand Public

# Suppliers and contractors

Central government organisations

New Zealand Defence Force

National Antarctic Programmes

# Resources are committed and relationships strengthened through:

- Organisational Culture
- Christchurch's Antarctic Gateway Strategy
- International Linkages and Connections
- Engaging with the public

### Goal for New Zealanders

### New Zealand continues to play an influential role in the kaitiakitanga (guardianship) of Antarctica and the Southern Ocean

Cabinet has endorsed New Zealand's Statement of Commitment to Antarctica and the Southern Ocean which recognises that Antarctica has intrinsic value as a natural reserve, devoted to peace and science.

New Zealand values a peaceful, secure and safe region. For more than 60 years the Antarctic Treaty System (ATS) has proven to be an effective governance regime for Antarctica and the Southern Ocean. It has provided peace and security in the region based on principles of co-operation, scientific research and high standards of environmental protection.

Antarctica is part of New Zealand's heritage, and future. New Zealand has deep ties with the continent - it is an Antarctic claimant country, a gateway to the Ross Sea region and its environment is connected to Antarctica and the Southern Ocean.

Antarctica is an essential part of understanding global environmental systems, and is uniquely valuable for scientific research.

### What we will do to contribute to this

We contribute to the New Zealand's Statement of Commitment to Antarctica and the Southern Ocean, through a whole of Government approach, to:

- Support the Antarctic Treaty principles and strive to maintain a peaceful, nuclear free and protected continent.
- Prioritise the environmental protection of Antarctica and the Southern Ocean. We value healthy and productive ecosystems and are committed to protecting biodiversity.
- Lead and collaborate on scientific research of the highest standards.
- Strengthen Christchurch and New Zealand's role as a gateway to Antarctica and increase cooperation between all states operating in the Ross Sea region.

We support the Ministry of Foreign Affairs and Trade in the development and implementation of New Zealand Government policy relating to Antarctica and the Southern Ocean. In doing so we seek to ensure that the Antarctic Treaty System continues to be recognised as one of the appropriate mechanisms for the management and governance of the region.

Antarctica New Zealand's two main medium-term objectives (see pages 11-14) contribute to the accomplishment of this goal.

We will review and report on progress towards our shared goal with the Ministry of Foreign Affairs and Trade.

INDICATORS OF SUCCESS	CURRENT STATE	TARGET
New Zealand's record of performance in Antarctic forums, scientific research, operations and environmental stewardship.	Identify baseline measure in 2021/22.	New Zealand's record of performance in Antarctic forums, scientific research, operations and environmental stewardship increases.

### What we will achieve

### 1. Protect Antarctic and Southern Ocean environments

The Protocol on Environmental Protection to the Antarctic Treaty (1991) designates Antarctica as a 'natural reserve devoted to peace and science', commits to the 'comprehensive protection of the Antarctic environment and dependent and associated ecosystems' and sets out stringent rules to minimise impacts on the natural environment.

The Antarctic environment is experiencing increasing pressure from the expansion of human activity (through fishing, tourism and national programmes) and, more significantly, the effects of climate change. At risk are the science and natural environmental values that the international community currently places on Antarctica.

In the face of these increasing pressures, it is essential that New Zealand continues to play a leading role in maintaining the values of Antarctica as a natural reserve devoted to peace and science through wise management and governance of the region.

To support the New Zealand Government's objective of continuing to play a leading role in managing the Antarctic environment, Antarctica New Zealand has a crucial responsibility to understand these pressures and impacts, and to identify appropriate management and policy responses.

### What we will do to achieve this

### Contribute to influential Antarctic Treaty forums by:

- Supporting the work of the Antarctic Treaty System's Committee for Environmental Protection (CEP) by providing high-quality input to its meetings and intersessional work, and seek to hold leadership positions within the Committee as appropriate
- Working closely with the research community nationally and internationally to ensure the best available scientific knowledge is made available for use by the CEP as a basis for its decision making and advice
- Providing MFAT with high-quality and timely advice on environmental and other Antarctic policy matters
- Fostering collaboration with our Ross Sea region partners to ensure a cooperative approach to managing Ross Sea region environments.

### How we will demonstrate success

INDICATORS OF SUCCESS	CURRENT STATE 2022	TARGET
Aotearoa New Zealand holds leadership positions within the CEP.	Antarctica New Zealand's staff represent New Zealand at the annual CEP meeting.	Leadership of at least one intersessional contact group or CEP Vice Chair.
New Zealand's Antarctic research outcomes support national and international policymakers.	Aotearoa New Zealand's Antarctic and Southern Ocean Research Directions and Priorities was approved by Government in 2021.	Antarctica New Zealand supported research informs the Antarctic Treaty System strategic priorities measured by inclusion of the research in papers to the ATS meetings.
The state of the Ross Sea region environment is better understood and managed.	There are no tools or processes to effectively track the state of the Antarctic environment, environmental change and the effectiveness of management measures.	Regular monitoring and/or synthesis of information to understand the state of the environment and the effectiveness of current management measures is readily available and actively used to support timely environmental management actions.
The environmental impact of the Scott Base Redevelopment is minimal.	The Minister of Foreign Affairs approved the Comprehensive Environmental Evaluation of the Scott Base Redevelopment to proceed with the construction of the new base in 2021.	Scott Base is redeveloped meeting the parameters of the Comprehensive Environmental Evaluation and demonstrating exemplary environmental practices.

### 2. Enhanced scientific research in Antarctica and the Southern Ocean

Science is a central theme of the Antarctic Treaty and the Protocol on Environmental Protection to the Antarctic Treaty (1991) establishes Antarctica as a "natural reserve devoted to peace and science".

Antarctic and Southern Ocean research is fundamental to improving our understanding of the impact of environmental change in, on and around Antarctica, and the impacts of that change on the rest of the world. Enhanced understanding of Antarctic and Southern Ocean ecosystems and processes will improve our capability to detect, project and adapt to changing environmental conditions, and provide evidence to support environmental management and policy decisions.

Antarctica New Zealand's strategic leadership in Antarctic science includes hosting the Antarctic Science Platform and working closely with science funders to support high-quality scientific research, ensuring research is aligned with the Government's Antarctic and Southern Ocean Research Directions and Priorities.

In establishing the Antarctic Science Platform, Antarctica New Zealand has led the development of multidisciplinary research programmes that advance our understanding of Antarctica's impact on the global earth system and how this might change in a warming world.

Excellent, internationally-relevant research underpins leadership in the Antarctic Treaty System. Together with New Zealand researchers, Antarctica New Zealand supports national and international partnerships with world-leading researchers and National Antarctic Programmes. The resultant high-quality research outputs help deliver globally significant outcomes and strengthen New Zealand's reputation as an influential Antarctic Treaty partner.

### What we will do to achieve this

### Provide strategic science leadership

- Undertake a mid-term review of Aotearoa New Zealand's Antarctic and Southern Ocean Research Directions and Priorities 2021-2030 (in conjunction with MFAT)
- Work with science funding organisations to support the highest quality Antarctic and Southern Ocean research
- Host the Antarctic Science Platform and support it to be successful and ensure it is integrated with New Zealand's broader Antarctic research effort
- Facilitate cooperation amongst National Antarctic Programmes to improve the coordination, scope and range of logistics support and develop collaborative science programmes
- Support collaborations to incorporate Mātauranga Māori into New Zealand Antarctic research programmes
- Align New Zealand's research effort with policy and management needs

### Support world-class research in Antarctica

- Provide effective logistics support to enable researchers to achieve scientific objectives in Antarctica Ensure science, environment and logistics activities are well co-ordinated and planned
- Allocate resources on the basis of a strategic, transparent and objective allocation process where demand for logistics to support science exceeds supply
- Develop our logistics support capability to provide fit-for-purpose services to support a long-term world-leading Antarctic research programme
- Sustain field-based research and maintain existing long-term science programmes throughout the redevelopment of Scott Base
- Monitor the quantity and quality of outputs and outcomes from the programmes we support

### How we will demonstrate success

INDICATORS OF SUCCESS	CURRENT STATE 2022	TARGET
Antarctica New Zealand successfully hosts the Antarctic Science Platform.	Antarctica New Zealand is contracted as Platform host and key performance indicators agreed with MBIE.	The Antarctic Science Platform key performance indicators are met.
		Following the conclusion of the Antarctic Science Platform in June 2025, MBIE continues to see value in large-scale investment in New Zealand's Antarctic research.
The quantity and quality of Antarctic research produced by Antarctica New Zealand- supported researchers increases.	2020 baseline: Quantity – 63 peer-reviewed scientific papers were produced in the calendar year.	The number of peer-reviewed scientific papers increases over time.
moreases.	2020 baseline: Quality – 5,991 citations of 401 scientific papers published in the past 6 years have accumulated over the sixyear period.	The number of citations of peer- reviewed scientific papers increases over time.
Antarctica New Zealand supports relevant science.	Aotearoa New Zealand's Antarctic and Southern Ocean Research Directions and Priorities 2021-2030 was approved by Government in 2021.	Research supported by Antarctica New Zealand is aligned with the Government's Antarctic and Southern Ocean Science Directions and Priorities 2021-2030.
International science linkages are strengthened.	Two significant collaborative projects with the United States in the Ross Sea region are underway.	The number and quality of international collaborations with New Zealand research programmes increases.
Facilitate cooperation and collaboration amongst National Antarctic Programmes operating in the Ross Sea region.	New Zealand cooperates with National Antarctic Programmes operating in the Ross Sea region on a bilateral basis.	New Zealand cooperates operationally, scientifically and environmentally on a strategic basis with National Antarctic Programmes operating in the Ross Sea region.
Scott Base facilities are able to safely support current and future science needs.	The Government approved the implementation business case in 2021 for the redevelopment of Scott Base.	A Scott Base facility that is fit for purpose for the next 50 years that's able to support current and evolving science needs
		High-quality science is supported at Scott Base throughout the duration of the Scott Base Redevelopment project.

### **Sustainable New Zealand Antarctic Programme**

### As a kaitiaki (guardian) of Antarctica for New Zealanders today and tomorrow, sustainability is core to Antarctica New Zealand

We define sustainability at Antarctica New Zealand in the following four statements:

### 1. Our People: We work together safely

Health, safety and wellbeing underpin our organisational culture. We believe all injuries and occupational illnesses are preventable and that business excellence is linked to safe outcomes.

Rigorous management of risk with an unequivocal commitment to health, safety and wellbeing helps to protect all people working in the Antarctic Programme from harm. In 2020, the Health and Safety Management System was certified to ISO 45001:2018 for our Christchurch operations . We are committed to continually enhancing our systems, processes and standards to meet our commitment.

### 2. Our Environment: We protect New Zealand, Antarctica, and Southern Ocean ecosystems from risks associated with human activities

We place a high priority on excellent standards of environmental practice. Continuous improvements to biosecurity, waste management, spill prevention, and carbon management, have positive benefits for all the environments in which we operate. This approach, coupled with high standards of environmental impact assessment undertaken in accordance with the Antarctica (Environmental Protection) Act 1994 provides a rigorous means of minimising our impacts on the Antarctic environment.

The environmental management system, previously certified to Toitū enviromark diamond for 10 years is now certified to ISO 14001:2018. We continue to verify and manage our carbon footprint with the Toitū carbonreduce programme and have been doing so since 2010. In 2020, Antarctica New Zealand was included in the Carbon Neutral Government Programme (CNGP), an initiative set up to accelerate emissions reductions in the public sector.

Our focus on reducing our environmental footprint significantly enhances New Zealand's credibility as a leading operator in Antarctica, as does our approach to finding innovative solutions to environmental management challenges.

### 3. Our Community: We showcase Christchurch as the international gateway to the Ross Sea region

Christchurch is one of just five Antarctic gateway cities around the world. Antarctic related activities are a significant contributor to both the New Zealand and Canterbury economies. In conjunction with the Christchurch City Council's Antarctic Office, Antarctica New Zealand leverages its relationships to support opportunities for the city. Examples include providing an office rental subsidy to Antarctic programmes basing their logistics activities out of Christchurch and helping facilitate access to New Zealand whilst border restrictions were in place to prevent the spread of COVID-19.

Antarctica New Zealand also manages its relationships to ensure existing Antarctic activities remain in Christchurch, in particular the key relationship with the US Antarctic Program.

### 4. Our Future: We have the resources to meet our obligations to current and future New Zealanders

Antarctica New Zealand defines financial sustainability as having the financial capacity to achieve our objectives and future vision. To do this we must meet current and future obligations and commitments so as to meet the reasonable expectations of stakeholders, while maintaining sufficient capacity to withstand the unexpected.

In Budget 2021, the Government approved funding for the full costs of redeveloping Scott Base. This will ensure that New Zealand scientists have the facilities to conduct world-class Antarctic research safely and effectively for a further 50-years.

We ensure our financial systems are up-to-date, fit-for-purpose and supported by a robust system of internal controls to minimise the risk of error or fraud. Financial forecasts provide early indications of funding shortfalls to support future research programmes and we work with the science community to mitigate these as much as possible.

### What we will do to achieve this

### Improve health and safety

- New Zealand Antarctic programme activities are conducted safely
- · Health and safety systems are enhanced and accredited
- · Buildings, facilities and infrastructure are fit for purpose

### Minimise environmental impact

- Environment and carbon management systems are enhanced and certified
- Through the environmental impact assessment process all events impacts will be managed
- · Waste to landfill will be reduced

### Improve Antarctic related economic opportunities

- Support the ChristchurchNZ Antarctic Office to enable Antarctic-related networks to be more effective
- Use our knowledge and influence within the international Antarctic community to identify economic
- · opportunities for Christchurch organisations

### Ensure Antarctica New Zealand has sufficient resources to carry out its mandate

- Manage all expenditure to ensure value for money.
- Collaborate with researchers and other National Antarctic Programmes to seek opportunities to cost-share activities where feasible.
- In a highly inflationary environment, work with MFAT and Treasury to ensure the significant
- · pressures impacting the delivery in-full of strategic priorities included in this Statement of Intent are
- · managed.

### How we will demonstrate success in achieving this

INDICATORS OF SUCCESS	CURRENT STATE 2022	TARGET
New Zealand Antarctic programme activities are conducted safely.	There are no serious injuries or illnesses (rated at a critical risk level).	There are no serious injuries or illnesses (rated at a critical risk level).
New Zealand's Antarctic programme is an exemplar of sustainability.	Environmental Management System is certified to ISO14001:2018.  Toitū carbonreduce certified.	Maintain certifications.  Lead in Antarctic forums relating to measuring and managing carbon emissions.
Direct economic impact from Antarctica-related activities.	Direct economic impact from Antarctic-related activities in 2020 (Canterbury and wider New Zealand) is \$159 million (2019 – \$208 million). (Based on draft economic impact report – November 2021).	Direct economic impact from Antarctica-related activities returns to pre- COVID-19 levels in three years.
In a highly inflationary environment, New Zealand's Antarctic programme is funded appropriately.	Escalating costs and supply chain constraints, as a consequence of the COVID-19 pandemic and war in Ukraine, are impacting both our ongoing business activities and the Scott Base Redevelopment project.	Working with MFAT and Treasury, ensure the significant inflationary pressures impacting the delivery in-full of strategic priorities included in this Statement of Intent, are managed.

### **Organisational Health and Capability**

Antarctica New Zealand delivers high-quality outcomes for New Zealand science, environmental leadership and managing New Zealand's interests in Antarctica.

We are able to do this because of the calibre and dedication of the people who work for us. They include a mix of permanent and fixed-term staff, contractors, seconded staff from the New Zealand Defence Force, and our many strategic partners in Government. We recognise that in order to achieve success, employees need to be treated fairly and properly in all aspects of their employment. Antarctica New Zealand is committed to being a good employer.

### Staff feedback

We care about our staff and contractors' experiences within our organisation and take time to connect with them. All staff have regular opportunities for quality conversations with their team leader to review performance, recognise achievements, measure progress against goals and highlight risks and opportunities. Our annual engagement survey provides useful insights into the different experiences of our staff and helps to foster discussions on initiatives to enhance our organisational performance.

### **Seasonal Scott Base staff**

Because of the remote location in which we operate in Antarctica, we offer our seasonal Scott Base staff a variety of fixed-term employment options. These range from several-month roles for summer or winter only to 13-month roles across the year.

We actively encourage high performing Scott Base staff to return in future seasons. The role specific and Antarctic knowledge they bring back to the organisation is a significant factor in our success. We support returning staff to develop other skills during their time off ice. This may include project work at Antarctica New Zealand to assist with our seasonal planning.

### Leadership accountability and culture

Shared values form the core of our high performing culture where people thrive and develop together. Antarctica New Zealand is consistently building a common culture through values, using a team process model and having a strong focus on accountability. Health and safety and sustainability are fundamental in everything we do, and we are committed to fostering staff understanding and incorporation of tikanga and Te Tiriti o Waitangi principles.

### Risk management

We operate in a high-risk environment, where remoteness and extreme weather conditions are just some of the inherent dangers. We are committed to ensuring that our risk management practises support organisational performance and are embedded within our business processes. Effective risk management is essential for us to provide a safe environment for our people, protect the environment and safeguard our assets.

### **Business process improvement**

As the complexity of our activities in Antarctica increases we continuously look for ways to improve our business processes to ensure they remain efficient and effective.

### Information Management

Our greatest challenge is designing and operating business systems that work efficiently and consistently across the current low-bandwidth satellite link to Scott Base. We continue to look at ways to mitigate IT related risks in such a remote setting. Our Digital Strategy sets out a plan to address technology challenges both at Scott Base and in Christchurch with an immediate focus of upgrading of core functional systems.

We are continuing to enhance our records management system, staff training and awareness, and are completing paper and electronic disposal as we work to fully meet the requirements of the Public Record Act.

### **Scott Base Redevelopment**

Managing New Zealand's assets in Antarctica requires a highlyspecialised and cost-effective approach due to the length of the logistics chain, the condition of assets, and the physical environment at Scott Base.

### **Scott Base**

The current Scott Base includes 11 buildings which are the workplace and home of up to 86 people, including scientists and support personnel. Some team members spend up to 13 months living and working on site. Ensuring that facilities remain safe and functional is a critical activity for Antarctica New Zealand. The last major upgrade to Scott Base occurred nearly forty years ago, in the early 1980s. Now, the outdated buildings, equipment, and systems are past or nearing the end of their functional lives. The deteriorating facilities create increased health and safety risks, as well as operational issues that could compromise our science delivery capability and presence in Antarctica.

### **Scott Base Redevelopment**

The Scott Base Redevelopment project is addressing these risks with a safe and fit-for-purpose replacement. In Budget 2021, the Government approved funding for the full costs of the redevelopment and endorsed an Implementation Business Case. In addition, the Minister of Foreign Affairs approved a Comprehensive Environmental Evaluation and issued a permit to proceed with the construction of the new base. There are challenges resulting from extreme weather and complex inter-continental logistics. Risks inherent in a project of this scale in Antarctica, include a relatively short summer period when conditions are more favourable for outside work; air and sea transport challenges across almost 4000km; and the requirement to return all waste, equipment, materials, and eventually, the decommissioned existing base, back to New Zealand. The new Scott Base will comprise three modern, low-maintenance, interconnected buildings capable of accommodating up to 100 people at any one time. There will be one building for accommodation, dining and welfare, a second for science, event staging, and offices, and a third for engineering and storage.

### Pre-construction enabling works

The existing base will be modified to accommodate construction workers, support personnel, and scientists throughout the construction phase, which will conclude in March 2027. This work will provide accommodation for up to 160 people, and an efficient blend of new containerised and existing building services plant for the increased demand. The enabling works will address risks associated with the current infrastructure and assets that cannot be deferred until the new base is built. All enabling work investment decisions will ensure cost effectiveness. Collectively, new assets and those modified to support the transitional period will be managed through a new Asset Management Plan.

### Ross Island Wind Energy system upgrade

The Ross Island Wind Energy system (the wind farm) comprises of three wind turbines, a power distribution system and the ability to store renewable energy. This capability contributes to powering New Zealand's Scott Base and the United States Antarctic Program's McMurdo Station, as part of an international partnership between the two countries. The current wind farm will reach the end of its design life in 2030, but some components of the energy system are already obsolete, limiting system functionality. The upgrade of this asset was endorsed through the Scott Base Redevelopment Implementation Business Case and funded in Budget 2021. Following a feasibility study, Antarctica New Zealand has decided to replace the wind farm with a more reliable, safe and cost-effective grid. The three existing turbines will be upgraded to three larger and more powerful ones and it is anticipated that the new system will be capable of delivering 97.3% renewable energy to the new Scott Base.



Antarctica New Zealand
Private Bag 4745
International Antarctic Centre
38 Orchard Road, Christchurch, New Zealand
Tel 64 3 358 0200 Fax 64 3 358 0211

Join our journey









www.antarcticanz.govt.nz