

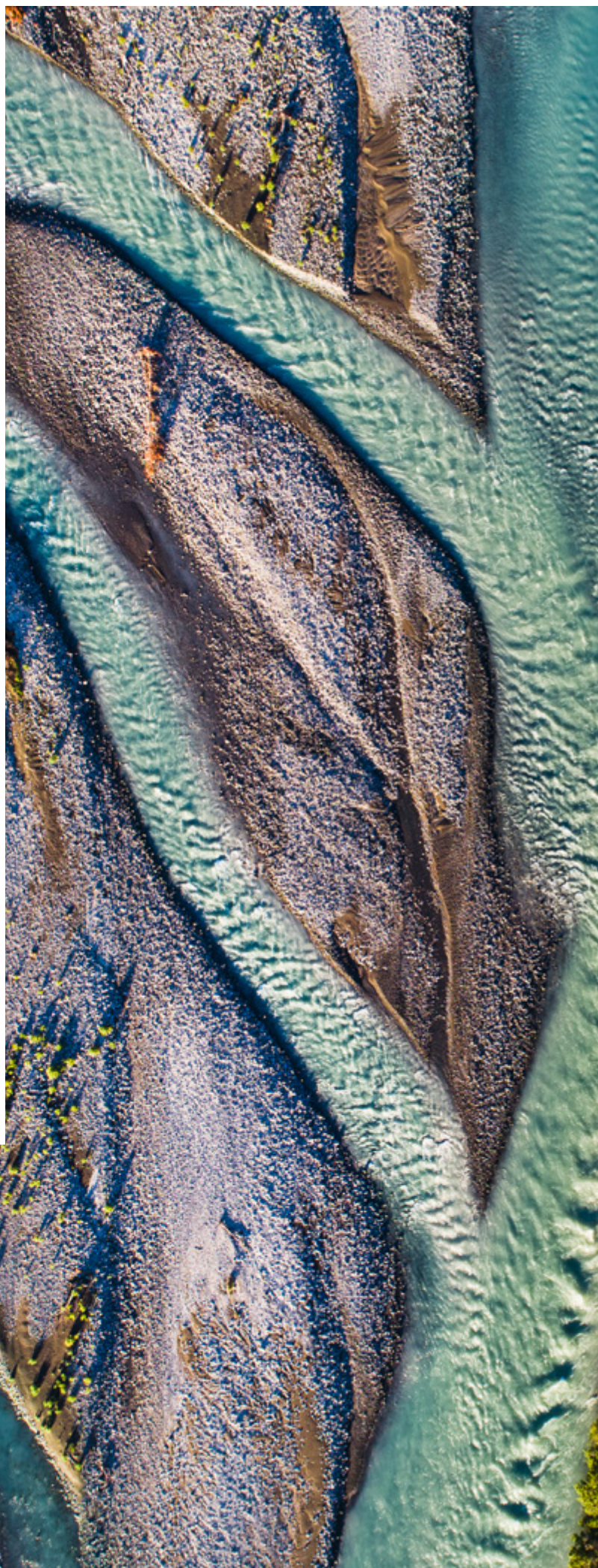
A close-up photograph of a hand cupped under a stream of water flowing over a mossy log. The water is clear and sparkling, and the surrounding environment is lush with green moss and foliage.

# **Climate-Related Disclosures**

Using the Task Force on Climate-Related  
Financial Disclosures (TCFD) framework



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An aerial photograph showing a dense forest of evergreen trees on the right side, with a river or stream flowing along the left edge. The trees are a mix of dark green and yellow-green, suggesting some autumnal change. The water is a light blue-grey color with visible ripples. The word "Contents" is centered in white text over the forest area.

# **Contents**





A

# About this report



Image: Waimea College, New Zealand





Beca is proud to share our first public climate-related disclosures report using the Task Force on Climate-related Financial Disclosures (TCFD) framework.

**Climate change is poised to have a huge impact on the business world, communities, and the environments we share.** The Financial Stability Board created the TCFD Guidelines to help companies and public entities identify, assess, and ultimately act on, the risks and opportunities presented by climate change.

We recognise the need to **take global action** on climate change. Motivated by our purpose to “make everyday better” and our values-driven culture, these climate-related disclosures demonstrate our commitment to aligning with international best practice in sustainability reporting. The insights from this process will help us continue to deliver transformational solutions together with our clients.

A child wearing a pink helmet and jacket is riding a pink bicycle on a red carpeted path. The path is flanked by modern, curved metal structures with vertical slats. The sky is clear blue.

B

# Executive Summary

Reporting requirements under the TCFD framework are organised under four main categories: Governance, Risk Management, Strategy, and Metrics and Targets. We used three climate scenarios to test the resilience of Beca's strategy to climate change.

The table below provides an executive summary of the key findings in this report, organised under each of the 11 TCFD recommended disclosure areas. Background about the TCFD framework and reporting requirements is provided in Section 3 of this report.



**TCFD disclosure area****Summary****Governance:** The organisation's governance of climate-related risks and opportunities

- |   |  |
|---|--|
| 1. Describe the board's oversight of climate-related risks and opportunities                    | The Beca Group Limited (BGL) Board oversee and are ultimately responsible for: <ul style="list-style-type: none"> <li>Group-wide risks, including those related to climate change</li> <li>Beca's Sustainability Policy.</li> </ul>  |
| 2. Describe management's role in assessing and managing climate-related risks and opportunities | The Executive Leadership Team (ELT) is responsible for establishing and implementing Beca's Enterprise Risk Management Process. A focus area for sustainability – including climate change – was recently added to the Risk Focus List reviewed by the ELT as part of this Enterprise Risk Management Process. |

**Risk Management:** How the organisation identifies, assesses, and manages climate-related risks and opportunities

- |  |  |
|--|--|
| 3. The organisation's processes for identifying and assessing climate-related risks  | A group of Beca's senior leaders attended a climate scenario analysis workshop in September 2021, to identify and assess Beca's priority climate-related risks and opportunities. We are looking to integrate this workshop into our Sustainability Programme of activities as an annual exercise.   |
| 4. The organisation's processes for managing climate-related risks   | Enterprise level: A risk item for sustainability (including climate change) was recently added to the ELT's Risk Focus List. This risk focus area will undergo a formal risk assessment in accordance with the ELT's wider Enterprise Risk Management processes. Project level: Beca has a suite of tools to identify climate-related risks for projects. These include climate-related risks identified in our bid/no-bid process (the work we chose to offer our services to clients on), and our Environmental Impact Assessment (EIA) screening (which is certified to the ISO 14001:2015 Environmental Management Standard). In FY21 we introduced seven key sustainability questions into our project delivery process to enable our people to have deliberate conversations about whether projects align with our purpose and sustainability direction. |
| 5. How processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management | Climate-related risks are already integrated into our project-level risk tools. We are currently in the process of further integrating climate-related risks into our enterprise risk management processes.  |

**Strategy:** The actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.

- |   |  |
|---|--|
| 6. Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term                               | After a scenario analysis workshop, the key risks and opportunities for Beca were found to be focused on: <ul style="list-style-type: none"> <li>Demand for services</li> <li>Reputational risks and opportunities</li> <li>Chronic physical impacts on markets and clients.</li> </ul>  |
| 7. Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning                        | Our climate-related risks and opportunities relate to our business and strategy in a number of key ways, including: <ul style="list-style-type: none"> <li>How we do our business</li> <li>Our social licence to operate</li> <li>The clients and communities we work with</li> <li>The services we offer to our clients to help them respond to their climate risks and opportunities.</li> </ul> <p>In our next TCFD report, Beca will further disclose the impacts of climate-related risks and opportunities on our business model and strategy over short, medium, and long term time horizons. We are also looking at appropriate ways to integrate TCFD reporting and our wider Annual Reporting processes.</p> |
| 8. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario | We used three climate scenarios, developed by the Network for Greening the Financial Sector (NGFS), to test the resilience of Beca's strategy to climate change. Due to the diverse nature of our business, it was found that Beca's strategy is relatively resilient to the impacts of climate change.  |

**Metrics and Targets:** The metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material

- |   |   |
|---|---|
| 9. The metrics used by the organisation to assess climate-related risks and opportunities   | We assess our climate risks and opportunities at the project-level through our suite of project delivery tools, including our EIA screening certified to ISO 14001:2015 standard.   |
| 10. The 3 Scopes of greenhouse gas (GHG) emissions (if appropriate), and the related risks  | Beca publicly discloses (via annual reporting) its Scope 1, 2, and 3 emissions.   |
| 11. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets | Beca's current emissions reduction target is a combined 32% reduction across all emissions by 2030 from a 2018 baseline (50% for Scope 1 and 2 emissions and 30% for Scope 3). Given growth, ongoing progress in emissions reductions and other business changes, Beca is proposing to undertake a re-baselining in FY23. |

01

# Who We Are

**Beca is one of the largest employee-owned professional services consultancies in the Asia Pacific region.** The nature of our business makes us incredibly diverse – in the services we provide, the markets and regions we operate in, and the range of clients, communities, partners and suppliers we engage with.



## Vision

Creative people together  
transforming our world

## Purpose

Make everyday better

## Values

Partnership, Tenacity,  
Enjoyment, Care

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## MARKETS

Industrial | Power and Energy | Buildings | Government |  
Defence and National Security | Transport and  
Infrastructure | Water

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## SERVICES

Advisory | Design | Digital | Engineering | Environmental

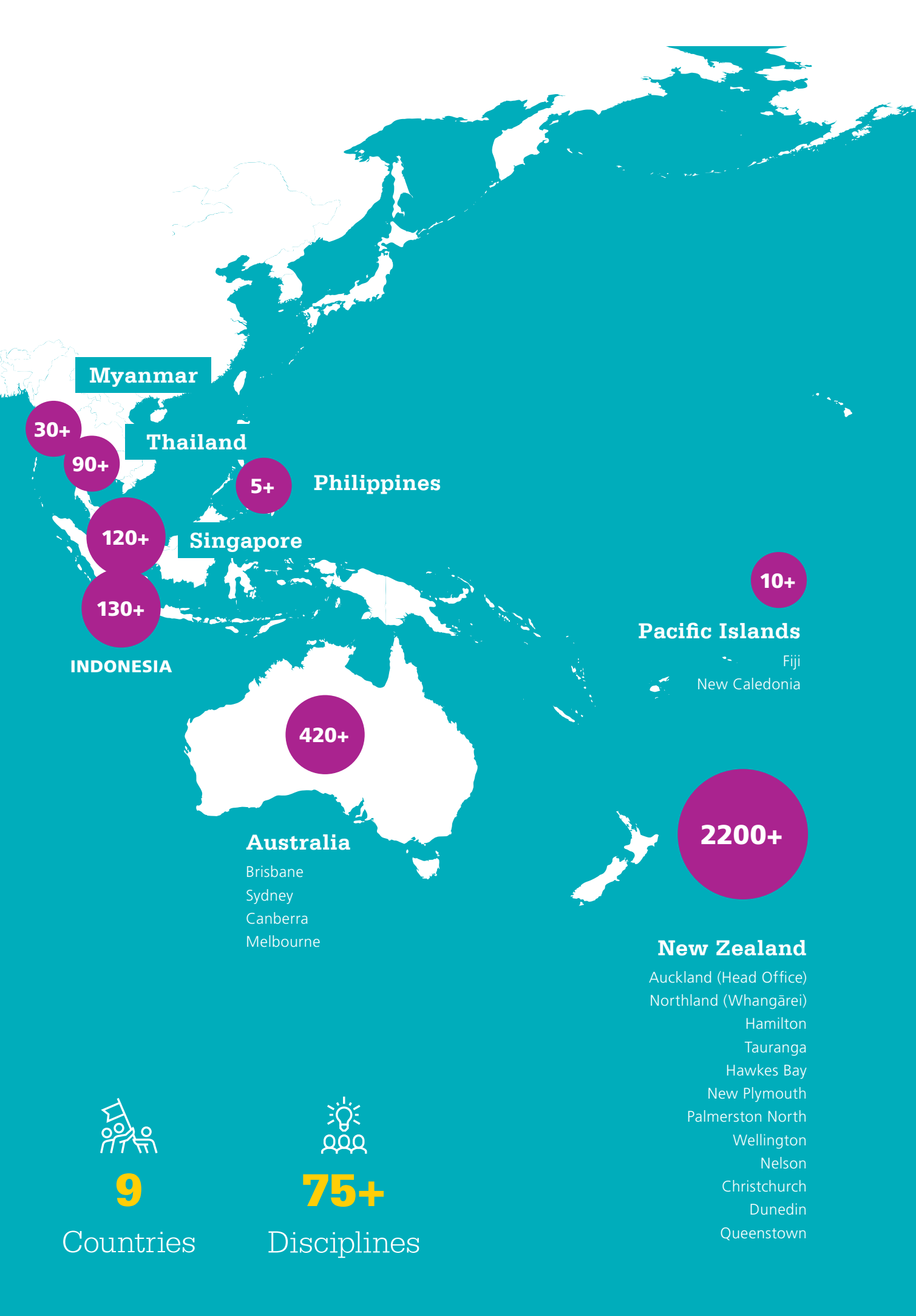


**3,000+**  
Employees



**22**  
Offices







# A message from the Chair of our Sustainability Oversight Group



**Amelia Linzey** | Executive Director

Sustainability is at the heart of what we do at Beca. This climate-related disclosures report (aligned with the TCFD framework) is an important milestone for our wider sustainability strategy.

Beca was one of the first cohort of 60 members of the Climate Leaders Coalition, when it was established in 2018, to promote collective action and leadership on climate change. This report demonstrates our commitments under the Climate Leaders Coalition's 2019 Statement, which requires signatories to assess and publicly disclose their climate change risks.

Assessing our climate-related risks (using the TCFD framework) is one of the many ways we can test the robustness of our business strategy, and ultimately enables us to act on our climate risks. This has benefits, not just for us as a business, but for the diverse range of clients we work with and for the worlds we touch.

Going forward, TCFD reporting will be an annual exercise for Beca, in parallel with our **Annual Sustainability Review**.





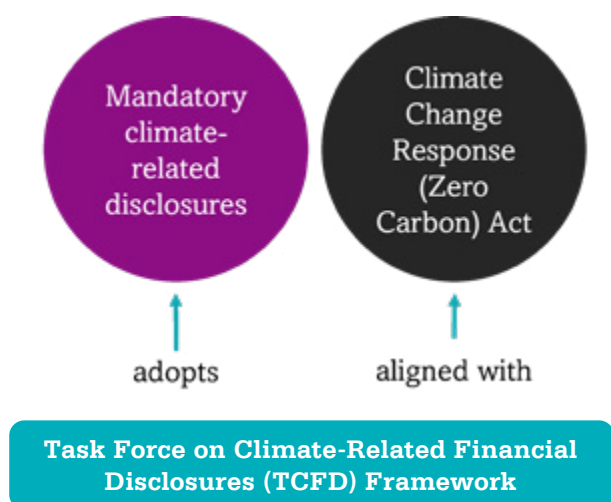




# The TCFD framework & climate-related disclosures reporting

The Task Force on Climate-Related Disclosures (TCFD) has developed a widely adopted framework for disclosing climate-related risks. Reporting under the TCFD framework is increasingly becoming mainstream for companies and public sector entities in Aotearoa New Zealand, Australia, the UK, the EU, parts of Asia, and the US.

## Aotearoa New Zealand's two parallel climate reporting regimes



*Figure 1. New Zealand's two parallel climate change reporting regimes*

### MANDATORY CLIMATE-RELATED DISCLOSURES USING THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) FRAMEWORK

In October 2021, New Zealand became the first country in the world to pass legislation making climate-related disclosures mandatory for around 150 entities. This legislation adopts the TCFD framework.

Beginning in 2023, climate-related disclosures using the TCFD framework will be required annually for banks, insurers, asset managers, and larger companies listed on New Zealand's Exchange (the NZX). Reporting will be governed by climate standards from New Zealand's independent accounting standard setter, the External Reporting Board (XRB).

Transition plans, as described by the TCFD's guidance issued in 2021, and adaptation plans will also be requirements of TCFD reporting in New Zealand. A transition plan lays out how an organisation aims to minimise climate-related risks and increase opportunities as the world transitions toward a low carbon economy, including by reducing emissions of its own balance sheet and that of its value chain. An adaptation plan explains how an organisation will respond to climate change's physical impacts, including to its value chain.

### REPORTING UNDER THE ZERO CARBON ACT

New Zealand's Zero Carbon Act, which was passed in 2019, requires the entire public sector and all lifeline utilities (around 600 organisations in total) to report climate-related information to the Ministry for the Environment (MfE), on behalf of both the Minister for Climate Change, and the Climate Change Commission (the Commission).





Image: Wainuiomata Sanctuary, New Zealand

MfE and the Commission each use the information to inform climate policy. In September 2020, MfE requested information from these entities to inform the country's first National Adaptation Plan.

Categories of information reported under the Zero Carbon Act are aligned with the TCFD framework. A TCFD report can normally be used to satisfy a lifeline utility's reporting obligations under the Zero Carbon Act.

## Moves towards mandatory TCFD reporting in other key Beca jurisdictions

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### AUSTRALIA

Australia has already seen a significant increase in voluntary disclosures, with 60+ companies in the AUX200 having released disclosures aligned with the TCFD framework. In June 2021, major investor networks released a plan for Australia to adopt mandatory climate-related disclosures over the next four years, with a proposed move to mandatory reporting by 2024.

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### SINGAPORE

In December 2021, the Singapore Exchange announced that mandatory climate-related disclosures would be phased in for SGX listed companies.

In the financial year commencing 2022, all SGX issuers must provide climate reporting on a 'comply or explain' basis in their sustainability reports. From FY23, TCFD reporting will be mandatory for financial, agriculture, and energy industry SGX companies. From FY24, mandatory disclosures will also apply to SGX companies in the materials and buildings, and transportation industries.

## TCFD reporting for Beca

As a predominantly employee-owned company, we are not required to undertake mandatory TCFD reporting in line with any upcoming legislation in Aotearoa New Zealand, or in other Asia-Pacific jurisdictions.

We recognise, however, that many of our clients – particularly in New Zealand – will be required to undergo mandatory TCFD reporting in the near future. At Beca, we are committed to keeping our clients in the middle of our business – including the commitment to 'walk in our client's shoes.' Voluntarily disclosing our climate-related risks and opportunities using the TCFD framework is just one of many ways we can demonstrate this commitment. The report will enable us to proactively respond to the challenges of climate change and continue to deliver enhanced sustainability outcomes together with our clients.

Beca's TCFD and climate scenario analysis services for our clients are led by Genevieve Smith and Matt Raeburn, who also led work on this report.



# Governance

This section describes Beca's governance processes for overseeing and managing climate-related risks and opportunities in accordance with 'Governance disclosure' items under the TCFD framework.

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## Governance disclosure areas

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Describe the Board's oversight of climate-related risks and opportunities

Describe management's role in assessing and managing climate-related risks and opportunities

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At Beca, the oversight, assessment and management of climate-related risks is incorporated into our overarching risk management processes. Beca's Sustainability Policy outlines our ongoing commitment to the sustainable transformation of our business.

## Describe the board's oversight of climate-related risks and opportunities

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### BECA GROUP LIMITED (BGL) BOARD

The Beca Group Limited (BGL) Board is responsible for maintaining corporate governance standards and monitoring the business and affairs of Beca Group. This includes setting strategic direction, establishing goals and managing and monitoring their achievement.

The BGL Board is ultimately responsible for Group-level risks, including those that relate to climate change. Specifically, the BGL Board is also responsible for Beca's Sustainability Policy and reviews Beca's sustainability objectives annually.



## Meet our Board members (As at 31 March 2021)



**David Carter | Executive Chair** has held a wide range of technical, management and corporate roles with Beca, including Chief Technical Officer, which has seen him involved in project work around the globe. David is a Fellow of Engineering New Zealand, a founding board member of the Sustainable Business Council, a NIWA (National Institute of Water and Atmospheric Research) advisory board member, a trustee of The University of Auckland Foundation and sits on The University of Auckland's Civil and Environmental Advisory Board.



**Amelia Linzey | Executive Director** is also our Group Director - Advisory, and Beca's Chief Planner. She is the Chair of our Sustainability Steering Group and represents Beca on the New Zealand Sustainable Business Council. She is a member of the New Zealand Planning Institute and Editor of the Planning Quarterly Journal.



**Catherine Drayton | Non-Executive Director (FCA)** has held a range of senior international positions in the professional services sector. Most recently, she serves as a Councillor of the University of Canterbury and holds a number of company directorships. Catherine retires from the Beca Group Limited Board on 31 March 2021 and has since been appointed Chair of the Guardians of the New Zealand Super Fund.



**David Papps | Executive Director** is a Chartered Professional Engineer with over 25 years' experience in water and civil infrastructure. He has specialist expertise in hydraulic and coastal engineering and project leadership experience from a number of significant water projects across Australia and New Zealand. David chairs Beca's Technical Advisory Group, responsible for technical excellence and practice leadership.



**Don Lyon | Executive Director** is our Chief Strategy and Operations Officer and member of our Sustainability Steering Group. Don oversees our Health, Safety and Environment programmes and our International operations, and chairs Beca Corporate Holdings Ltd and Beca International Consultants Ltd. Don retired from the Beca Group Limited Board on 31 March 2021.



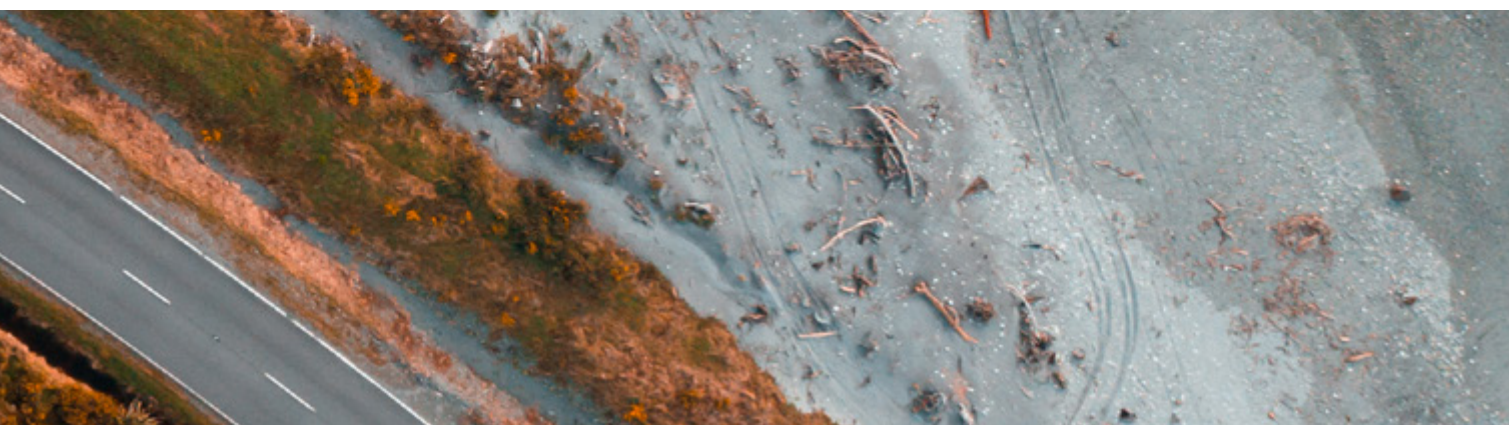
**Greg Lowe | Group Chief Executive** has overall accountability for the business operations of the Beca Group; leading delivery of Beca's global strategic objectives. He chairs the Business NZ Major Companies CEO Forum and the NZ Defence Industry Advisory Council and is a member of the King's College Board of Governors and a Fellow of Engineering New Zealand. In 1998, Greg was made an Officer of the New Zealand Order of Merit.



**Ross George | Non-Executive Director** is the founder and Managing Director of Direct Capital our minority shareholder and has been actively involved in private company investment in New Zealand and across Asia Pacific for over 30 years. He is also a director of Bayleys Real Estate, Fishpond, Qestrland and Perpetual Guardian.



**Thomas Hyde | Executive Director** is also our Group Director – Defence & National Security and Chief Digital Officer. He has held several roles during his time at Beca including leading the development of our strategic business consulting services, with a focus on helping clients exploit and adapt to technology-led disruption of their businesses.





# Describe management's role in assessing and managing climate-related risks and opportunities

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## EXECUTIVE LEADERSHIP TEAM (ELT)

Our Executive Leadership Team (ELT) is responsible for all operational aspects of Beca, as well as how we deliver value; working alongside the Board to provide the long-term strategic direction and vision for our future.

The Executive Leadership Team (ELT) are responsible for establishing and implementing Beca's Enterprise Risk Management Process. This process includes an annual review of the ELT's Enterprise Risk Focus List. Sustainability (including climate change) was recently added as a focus item to this Risk Focus List and is due to undergo a formal risk assessment, in line with our wider Enterprise Risk Management processes.

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## ELT MEMBERS AS AT 31 MARCH 2021 WERE AS FOLLOWS:

- Greg Lowe, (Chair) Group Chief Executive
- Amelia Linzey, Group Director – Advisory
- Anne Henry, Chief People & Culture Officer
- Clive Rundle, Group Director - Utilities
- Craig Lee, Managing Director Australia
- Craig Price, Chief Technical Officer
- Damian Pedreschi, Chief Customer & Markets Officer
- Darryl Lee-Wendelborn, Managing Director New Zealand
- Don Lyon, Chief Strategy and Operations Officer
- Jimmy Walsh, Group Director - Industrial
- Kevin Doherty, Group Director - Transport & Infrastructure
- Lee Ang Seng, Managing Director Singapore and Myanmar
- Mark Fleming, Chief Financial Officer
- Mark Spencer, Group Director - Buildings
- Thomas Hyde, Chief Digital Officer and Group Director - Defence & National Security

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## MANAGING DIRECTORS AND SUBSIDIARY BOARDS

Beca Group operates internationally, with legal entities established regionally. The ELT's Enterprise Risk Management Process addresses key business risks for the Group. This process encompasses risks of subsidiary companies. Subsidiary Company Boards are responsible for considering and adopting Beca's Sustainability Policy and Sustainability procedures in respective jurisdictions, with any necessary amendments.

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## AUDIT AND RISK COMMITTEE

The BGL Board's Audit and Risk Committee reviews the ELT's Enterprise Risk Management programme and the Group's audit functions and legislative compliance. Committee members are appointed by the BGL Board and attend quarterly meetings.

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## SUSTAINABILITY OVERSIGHT GROUP

Beca has a Sustainability Oversight Group (SOG) to carry forward sustainability matters within the company. The SOG is comprised of representatives from our Business Groups, our Board and Executive Leadership Team, including our Chief Technical Officer, Craig Price, and our Chief Strategy and Operations Officer, Don Lyon. The group is chaired by Board member Amelia Linzey. The Sustainability Oversight Group is responsible for:

- steering the implementation of works for the overall purpose of the sustainability programme
- overseeing the Annual Sustainability Action Plan (performance and delivery)
- identifying issues and opportunities with the delivery of the programme for both Beca's influence on clients ('handprint'), as well as Beca's business operations ('footprint').

Under the Beca Group strategy to Amplify Beca, the Sustainability Oversight Group is driving implementation of the sustainability programme. This is a broad programme of work, including areas such as financial sustainability, diversity and inclusion, social procurement and improving and embedding cultural awareness in the worlds we touch. There are two key focus areas of importance for the Beca Group:



### Decarbonisation



### Resilient and Adaptive Communities

These issues are relevant to both our own business operations and the work we do with our clients. Through our business operations, we are currently working to reduce our carbon emissions and help our clients do the same. We are also focused on helping the communities we work with be more resilient and adaptive to the impacts of climate change. Through the TCFD process, we are looking to understand our own climate risks and opportunities.







Image: Te Hono, New Plymouth Airport, New Zealand



# Risk Management

This section describes Beca's governance processes for identifying, assessing, and managing climate-related risks in accordance with 'Risk Management' disclosure items under the TCFD framework.



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## Risk Management disclosure areas

The organisation's processes for identifying and assessing climate-related risks

The organisation's processes for managing climate-related risks

How processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management

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## Identifying and assessing our climate-related risks

As part of our TCFD process, a group of Beca's senior leaders, which included members of the ELT, met in September 2021 to participate in a climate scenario analysis workshop.

Our climate scenario analysis workshop began by identifying, from a preliminary list, Beca's five priority climate-related risks and opportunities. In accordance with TCFD guidance, these priority risks and opportunities were tested under three climate scenarios.

The findings from this climate scenario analysis exercise are detailed in Section 6: Strategy. We are looking to integrate annual TCFD reporting, including an annual scenario analysis workshop to identify and assess climate-related risks, into our Sustainability Programme of activities.

## Beca's processes for managing climate-related risks and integration into our overall risk management

Beca Group manages climate risk within its wider risk management processes. Our risk management processes operate on all levels of the business, so that climate-related risks and opportunities are accounted for in both our projects and overall business strategy.

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## ENTERPRISE-LEVEL CLIMATE RISK MANAGEMENT

A risk item for climate change and sustainability was recently added to the ELT's Risk Focus List.

This risk focus area is due to undergo a formal risk assessment in accordance with the ELT's wider enterprise-level risk management processes. The outcome of this risk assessment will include a mitigation plan for sustainability risks (including climate change), at the enterprise level. Findings from our 2021 scenario analysis workshop may feed, where appropriate, into this enterprise risk assessment process.

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## PROJECT-LEVEL CLIMATE RISK MANAGEMENT

We recognise that our biggest opportunity to drive change lies in the advice our team of 3,000+ give clients every day. Beca has a suite of tools to identify climate-related risks for projects. These include climate-related risk screening items in our bid/no-bid process (the work we chose to offer our services to clients on), and our Environmental Impact Assessment (EIA) screening (which is certified to the ISO 14001:2015 Environmental Management Standard).

In FY21 we introduced seven key sustainability questions into our project delivery process. These will enable our people to have deliberate discussions on whether clients and/or project opportunities align with our purpose and sustainability direction. They also maximise sustainable outcomes for our clients. In FY21 these new processes have resulted in decisions not to pursue work, and in decisions to provide proposals for alternative approaches to projects.

Going forward, we are looking to further expand the process for managing climate-related and sustainability risks on projects. More about this can be found in Section 8 of this report: 'Next Steps: Our Strategic Response.'



# Strategy

This section describes Beca's priority climate-related risks and opportunities, their potential impact, and the resilience of our strategy. This section is outlined in accordance with the three 'Strategy' disclosure items under the TCFD framework.

## Strategy disclosure areas

Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.

Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.

Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

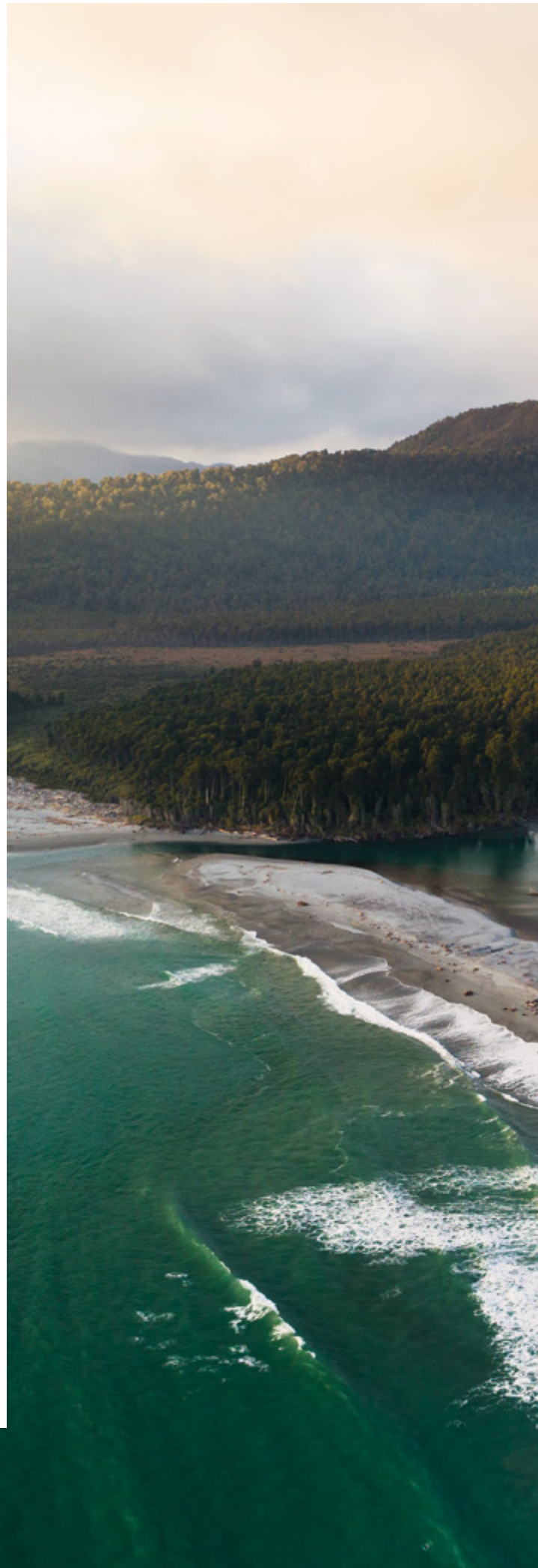
## IDENTIFYING CLIMATE RISKS AND OPPORTUNITIES USING THE TCFD FRAMEWORK

The TCFD framework categorises climate risks under physical risks and transition risks.

**Physical risks:** Risks posed to the company by potential physical impacts of climate change. The TCFD framework further categorises physical risks into acute and chronic risks. Acute risks are short-term events, such as storms, floods and other extreme weather events. Chronic physical risks are longer-term events, such as sea level rise.

**Transition risks:** Risks posed to the company by the transition to a net zero carbon economy. The TCFD framework identifies the following subcategories of transition risks: policy and legal, market, technology, and reputational risks.

**Opportunities:** The TCFD framework recognises that climate change and shifts towards a net zero economy may also present opportunities for business and other entities. Categories of potential opportunities include: increased resource efficiency, access to new markets, development of new products and services, increased resilience, and transition to lower-emissions energy sources.







## IDENTIFYING BECA'S PRIORITY CLIMATE-RELATED RISKS AND OPPORTUNITIES

In September 2021, a working group of Beca leaders participated in our first climate scenario analysis workshop. The workshop began with prioritising, from a preliminary list, five of Beca's most significant climate-related risks and opportunities (Table 1). The preliminary list included a minimum of four items for each of the physical risk, transition risk, and opportunity categories.

**Table 1: Beca's selected five priority climate-related risks and opportunities**

Risk	Description
Increased chronic physical impacts of climate change negatively impacts our markets and client operations	Increase in the occurrence and extent of the physical impacts from gradual climate change related events, such as sea level rise and coastal erosion, may disrupt our markets and our clients' operations, and prevent or delay their projects.
Failure to achieve our business operations carbon reduction targets negatively impacts our reputation	Risk to Beca's reputation if we fail to meet our business operations related carbon reduction targets.
Decreased demand for certain services	Changes in Government policy, regulatory / legislative environment or economic conditions leads to a decrease in demand for certain services (e.g. traditional services related to emissions-intensive sectors and activities)
Opportunity	Description
Enhance our reputation by becoming market leaders in climate-related services	Opportunity to gain a positive reputation by continuing to champion positive sustainability outcomes across all of our business lines.
Increased demand for our climate-related services	Increased demand for climate-related services. This includes specialist services, such as carbon accounting and climate risk assessment, in addition to the current climate-related services we offer across all of our business lines.

## CLIMATE SCENARIO ANALYSIS




Climate scenario analysis is the key strategic component of a TCFD report. The process tests an organisation's resilience to significant climate-related risks and opportunities against climate scenarios.

Beca's priority risks and opportunities were put through three climate scenarios. A climate scenario is a hypothetical trajectory used to test the materiality of a climate-related risk or opportunity. This trajectory is based on a particular policy narrative coupled with a science-based analysis of corresponding physical risks.

We used three scenarios developed by the Network for Greening the Financial Sector (NGFS) (Table 3). The NGFS is comprised of central banks – including in New Zealand and Australia – who contribute to developing climate and environmental risk management best practices. We chose three scenarios that would test the resilience of Beca's strategy, including extremes of physical and transition risks.



Table 2: NGFS Scenarios used in climate scenario analysis

Scenario	Climate Policy	Transition Risk Severity	Physical Risk Severity	Description
 <b>Imminent Transition</b>	Immediate and smooth	Initially high, then gradual and ordered	Low-Medium	Ambitious and stringent climate policies are introduced immediately and enacted to limit global warming to 1.5°C. Net Zero is reached by 2050. Significant innovation is spurred and there is fast change in technology.
 <b>Delayed Transition</b>	Delayed	Initially Low Severe after 2030	Medium-High	Policy is not enacted immediately, causing emissions to increase until 2030. When policies are enacted, they are stringent and abrupt. Emissions exceed the Paris Agreement's carbon budget temporarily and then decline rapidly after 2030.
 <b>Hot house world</b>	None	Low domestically Economically damaging internationally	Extreme	A world in which only current policies are preserved, and there is no significant action on climate change. This results in a "hot house world", where emissions lead to about 3°C of warming by 2080.

Risks and opportunities were given a materiality rating under each climate scenario (Table 3). Materiality ratings that were applied to risks and opportunities during scenario analysis:

- (i) **Are based on the concept of 'double materiality.'** Double materiality recognises that climate financial risks are influenced by long-term environmental and social factors. A reasonable person might consider information material for reasons other than direct financial repercussions: for example, the company's impact on climate change (as well as climate change's impact on the company). Therefore, these materiality ratings encompass both material financial risk and additional qualitative factors, such as reputational, operational and health and safety risks.
- (ii) **Refer to the level of risk severity under each scenario.** Transition and physical risks will exist under all three climate scenarios. Therefore the 'high,' 'moderate,' and 'low' ratings refer to the level of risk severity under each scenario.
- (iii) **Provide, to some extent, a framework for prioritising action as follows.**

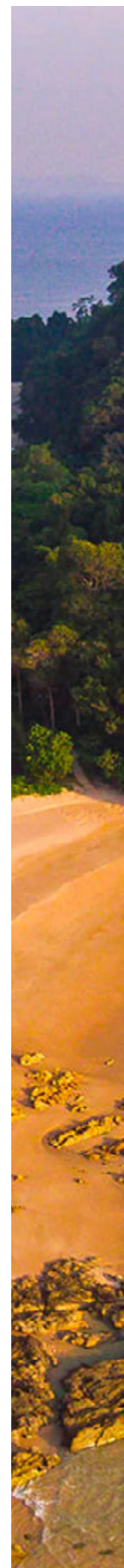
Rating	Action
<b>High</b>	Highest priority risks and opportunities. Beca should focus its risk management and opportunity pursuit efforts on these.
<b>Moderate</b>	Should be closely monitored but are not of highest priority.
<b>Low</b>	Are lower priority compared to 'moderate' risks and opportunities but should still be monitored.

### The impact of climate-related risks and opportunities on our business, and the resilience of Beca's strategy under different climate scenarios

Our climate-related risks and opportunities relate to our business and strategy in a number of key ways, including:

- How we do our business
- Our social licence to operate
- The clients and communities we work with
- The services we offer to our clients to help them respond to their climate risks and opportunities.

As a professional services consultancy business, the greatest impact we have is through the work we do with our clients to make everyday better. This is reflected in our priority climate-related risks and opportunities, which largely focus on our markets, clients, and services. However, we also recognise the importance of "walking the talk" by managing the risks and opportunities associated with meeting our own business operations carbon reduction targets.









**Table 3: Materiality ratings assigned for each climate-related priority risk and opportunity and under each scenario**

Risk / Opportunity	Imminent Transition	Delayed Transition	Hot House world
Increased chronic physical impacts of climate change negatively impacts our markets and client operations	Moderate	Moderate	High
Increased demand for our climate-related services	High	High	Moderate
Decreased demand for certain services (e.g. emissions intensive sector activities)	Moderate	High	Moderate
Enhance our reputation by becoming market leaders in climate-related services	Moderate	Moderate	Low
Negative impact on our reputation if we fail to meet our business operations carbon reduction targets	High	Moderate	Low

Our priority climate-related risks and opportunities relate to three key themes:

### 1. Physical impacts of climate change on markets and client operations

We recognise that both acute and chronic risks are interconnected, becoming more severe with climate inaction. Chronic physical risks, however, were identified as slightly higher priority for the nature of our business. A significant majority of our services relate to physical infrastructure. Chronic physical impacts from climate change, such as sea level rise and coastal erosion, are expected to affect coastal areas in most of the geographies we operate, including New Zealand, Australia, the Pacific, and parts of Asia. This has the potential to prevent, delay or disrupt projects for our clients, as the worlds we touch respond and adapt to a changing climate.

### 2. Shifts in service demand

A great advantage of Beca Group's business model is our broad range of business lines. Under each scenario, there would be shifts in service demand, which may negatively impact some areas of the business but be a great opportunity for others. Overall, our business is relatively resilient to these shifts.

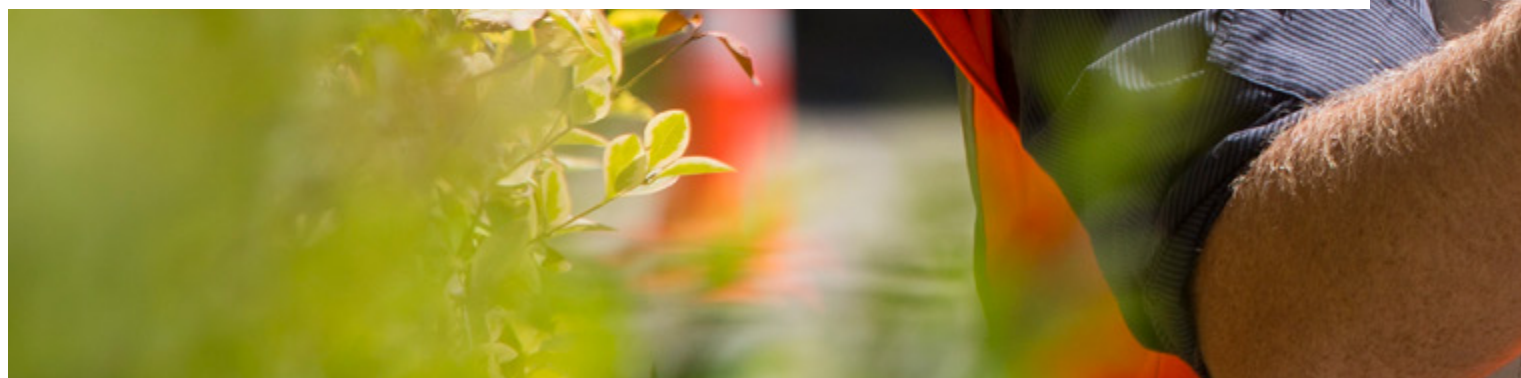
### 3. Reputational risk and opportunity

Client services-related reputational opportunities are a priority, but also depend on how we treat our own operational carbon emissions. We will be better positioned to offer services in climate change and decarbonisation if we can continue to demonstrate that these principles are applied to our own operations.

We will need to consider how to balance our growth aspirations with the management of our climate risks, particularly relating to our carbon emissions (e.g. air travel emissions).

### Next Steps

In our next TCFD report, Beca will further disclose the impacts of climate-related risks and opportunities on our business model and strategy over short, medium, and long term time horizons. We are also looking at appropriate ways to integrate TCFD reporting into our wider Annual Reporting processes.









# Metrics & Targets

This section describes the metrics and targets we use to assess climate-related risks and opportunities, and discloses our Scope 1, 2 and 3 greenhouse gas emissions. This section is outlined in accordance with 'Metrics and Targets' disclosure items under the TCFD framework.

## Metrics & Targets disclosure areas

The metrics used by the organisation to assess climate-related risks and opportunities

The 3 Scopes of greenhouse gas (GHG) emissions (if appropriate), and the related risks

Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets

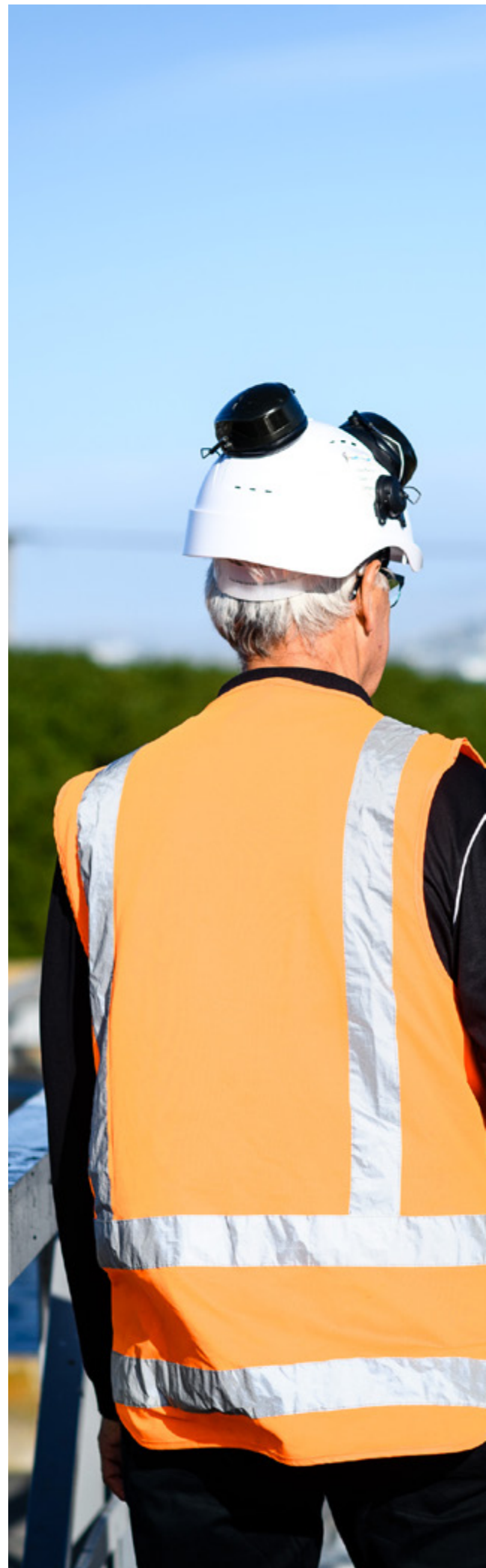
## Our Greenhouse Gas Emission Reduction Targets

We continue to publicly report on our carbon emissions as part of our commitment to the Climate Leaders Coalition. Our emissions reduction targets are in line with international best practice from the Science Based Target Initiative. They are:

- a 50% reduction in Scope 1 and 2 emissions by 2030 from a 2018 baseline, consistent with the aim of limiting planetary warming to 1.5 degrees; and
- a 30% reduction in Scope 3 emissions by 2030 from a 2018 baseline, consistent with the aim of limiting planetary warming to well-below 2 degrees.
- This results in a combined reduction target of 32% across all emissions.

Our emissions reduction targets take an absolute emissions reduction approach and include those emissions over which we have direct control, as well as all material Scope 3 categories including not only business travel, but also employee commuting and significantly all our purchased goods and services. We have deliberately taken an inclusive approach to accounting for Scope 3 emissions to provide the broadest opportunity to influence and reduce our emissions.

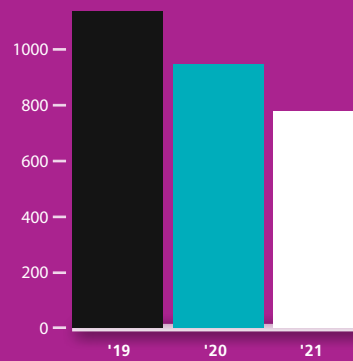
Given growth, ongoing progress in emissions reductions and other business changes, Beca is proposing to undertake a re-baselining in FY23.



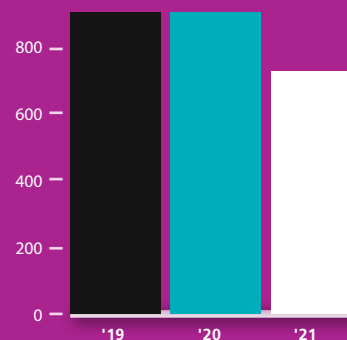




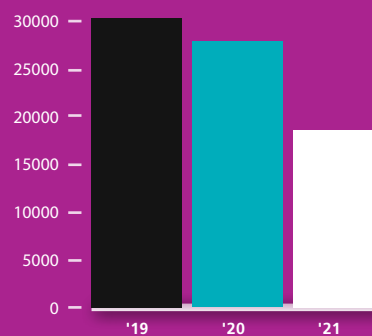
## TONNES OF CARBON DIOXIDE EQUIVALENT (tCO<sub>2</sub>-e)



SCOPE ONE



SCOPE TWO



SCOPE THREE

### Trends for FY21

- **Decrease** in air travel across all hubs due to COVID-19 travel restrictions imposed globally.
- **24% decrease** in land transport (fleet, rental cars, reimbursed mileage and taxis) against FY20.
- **Working from home** emissions were accounted for in the FY21 carbon footprint for the first time. Increased working from home is expected to have had flow-on impacts to employee commuting.
- **Significant decrease** in purchased goods and services spend. Largest reductions were seen in the hardware, office operating costs and entertainment categories.
- **Reductions** in our Australia and Asia building energy are likely due to effects of extended COVID-19 lockdowns. Limited reductions in building energy were seen in New Zealand, as buildings remained operational despite periods of reduced staff occupancy due to COVID-19.



# Next steps: Our strategic response

We will continue to develop specific mechanisms for assessing and managing climate-related risks on a Beca-wide level. We are currently in the process of conducting a full assessment of sustainability risks (including climate-related risks) with an ELT-led focus group. This assessment will then lead to a risk mitigation plan.

## Additional areas of focus include:

- Preparing annual climate-related disclosures using the TCFD framework and standards issued by New Zealand's External Reporting Board. Our TCFD reporting will include an annual climate scenario analysis exercise with Beca Group's leadership.
- Beca's next TCFD report will aim to align, where appropriate, with the External Reporting Board's (XRB's) reporting standards for climate-related disclosures. (The XRB will issue final reporting standards later in 2022). Beca will further disclose the impacts of climate-related risks and opportunities on our business model, and strategy over short, medium, and long term time horizons.
- Preparing a high-level 'transition plan' consistent with the TCFD's recent guidance. A transition plan lays out how an organisation aims to minimise climate-related risks and increase opportunities as the world transitions toward a low-carbon economy, including by reducing emissions of its own operations and those of its value chain.
- Preparing a high-level adaptation plan, consistent with international guidance, to address how Beca will respond to climate change's physical impacts to our footprint and handprint.
- Further expanding the process for managing sustainability risks on projects by assigning roles for sustainability leadership involvement at each job risk category.
- Continuing to drive change across our business operations to reduce our carbon emissions – with a specific focus on travel mobility choices for our staff, office energy efficiency, facilitating mode choice for staff commuting to work, and engagement with our top vendors in our supply chain.
- Continuing to embed sustainability into our business as usual systems and process at all stages of client engagement and project delivery, providing tools for our staff to measure and report on project level carbon impacts, and further expanding formal and informal programmes and networks of knowledge sharing across the business.





# Glossary of key terms

**Climate scenario:** A hypothetical trajectory used to test the materiality of a climate-related risk or opportunity. This trajectory is based on a particular policy narrative coupled with a science-based analysis of corresponding physical risks.

**Network of Central Banks and Supervisors for Greening the Financial System (NGFS):** The Network's purpose is to help strengthen the global response required to meet the goals of the Paris agreement, and to enhance the role of the financial system to manage risks and to mobilize capital for green and low-carbon investments.

**Opportunity:** The potential opportunities that climate change and the transition to a low carbon economy may present (e.g. for new services).

**Paris Agreement:** Also called the Paris Climate Accords, is a legally binding international treaty signed during COP 21 in Paris by 196 Parties. It sets targets to limit global warming to well-below 2°C.

**Physical risk:** Risks posed to the company by potential physical impacts of climate change (e.g. sea level rise and extreme weather events).

**Task Force on Climate-related Financial Disclosures (TCFD):** The Financial Stability Board created the TCFD framework to identify what 'better information' would help investors, lenders, and insurance underwriters to appropriately assess climate-related risks. The recommended disclosures under the TCFD framework cover an organisation's Governance, Strategy, Risk Management, and Metrics and Targets.

**Transition risk:** Risks posed to the company by transition to a net zero carbon economy (e.g. policy and technology changes).





Image: America's Cup Auckland Waterfront, New Zealand






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