

*Beatrice Tinsley Building, Christchurch, New Zealand*

# **Annual Sustainability Review**



A

---

## 2020/21 Key achievements

---

B

## About this review

---

01

## Who we are

---

02

## A message from our Group Chief Executive & Executive Chair

---

03

## Our business

[How we create value](#)

[Engaging our stakeholders](#)

[Sustainability governance](#)

[Beca group limited board](#)

[Executive leadership team](#)

---

04

## Creating value together with our clients – our handprint

[Sustainable urbanisation](#)

[Climate change adaptation and mitigation](#)

[Decarbonisation and resilience thought-pieces](#)

[Key project awards, recognitions and milestones](#)

---

05

## Creating value for our people

[Empowering and supporting our people](#)

[Developing our people](#)

[People awards](#)

[Our people in numbers](#)

[Health and safety](#)

[Community partnerships](#)

---

06

## Environmental performance – our footprint

[Greenhouse gas emissions](#)

[Managing our footprint](#)

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07

## Financial performance

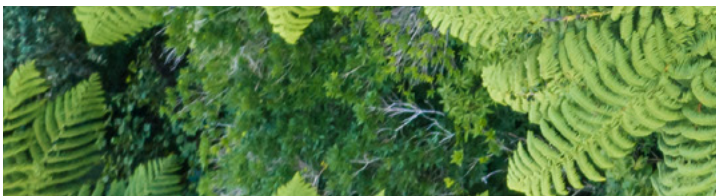
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### Appendices


[Appendix A: Key project awards, recognitions and milestones](#)

[Appendix B: People awards](#)

[Appendix C: GRI indicators summary](#)







**Cover Image:** The Beatrice Tinsley building pushes the boundaries of multi-storey timber-framed construction in Aotearoa New Zealand. Called Pres-Lam, it is a post-tensioned seismic, damage-resistant system that uses laminated veneer timber.

# Contents





A

# 2020/21 Key achievements





# Our focus areas

## Climate change

Reducing carbon emissions

## Sustainable urbanisation

Promoting liveable cities

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### BUSINESS HIGHLIGHTS

**Winner** of the 2020 Deloitte Top 200 Sustainable Business Leadership Award for New Zealand.

#### **Emissions decrease of 41%**

compared to our baseline FY18 and decrease of 31% from FY20, noting COVID-19 has been a significant contributor.

**Strategic Partnership** signed between Beca and the Indigenous Defence & Infrastructure Consortium in Australia.

**Beca Reconciliation Action Plan** (Phase 2: Innovate) submitted to Reconciliation Australia.

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### PEOPLE HIGHLIGHTS

Largest ever cohort of **31 women** put through our **'Growing Greatness'** programme.

First ever **Diversity Census** held to enhance **Belonging@Beca**.

Gender pay equity gap **reduced** from **2.1% to 1.2%**, based on the average full time pay within career levels.





# About this review





This FY21 Annual Sustainability Review reports on the Beca Group of companies' activities from 1 April 2020 to 31 March 2021. It builds on our reviews from the previous eight years which cover much of the detail about our operations, stakeholder engagement and how we create value.

We continue our primary focus on the two strategic areas of climate change and sustainable urbanisation. We actively work on reducing our carbon emissions and hence our footprint, and we continue to build upon the progress we made last year in deliberately helping our clients improve their sustainability performance, which we call our handprint.

This year's review highlights the progress we have made to date, our future targets, and how we are embedding these priorities into our business strategy. This review has been developed in consultation with our business groups.

If you have any questions or suggestions for improving this review or Beca's approach to sustainability, please contact [sustainability@beca.com](mailto:sustainability@beca.com).







# 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

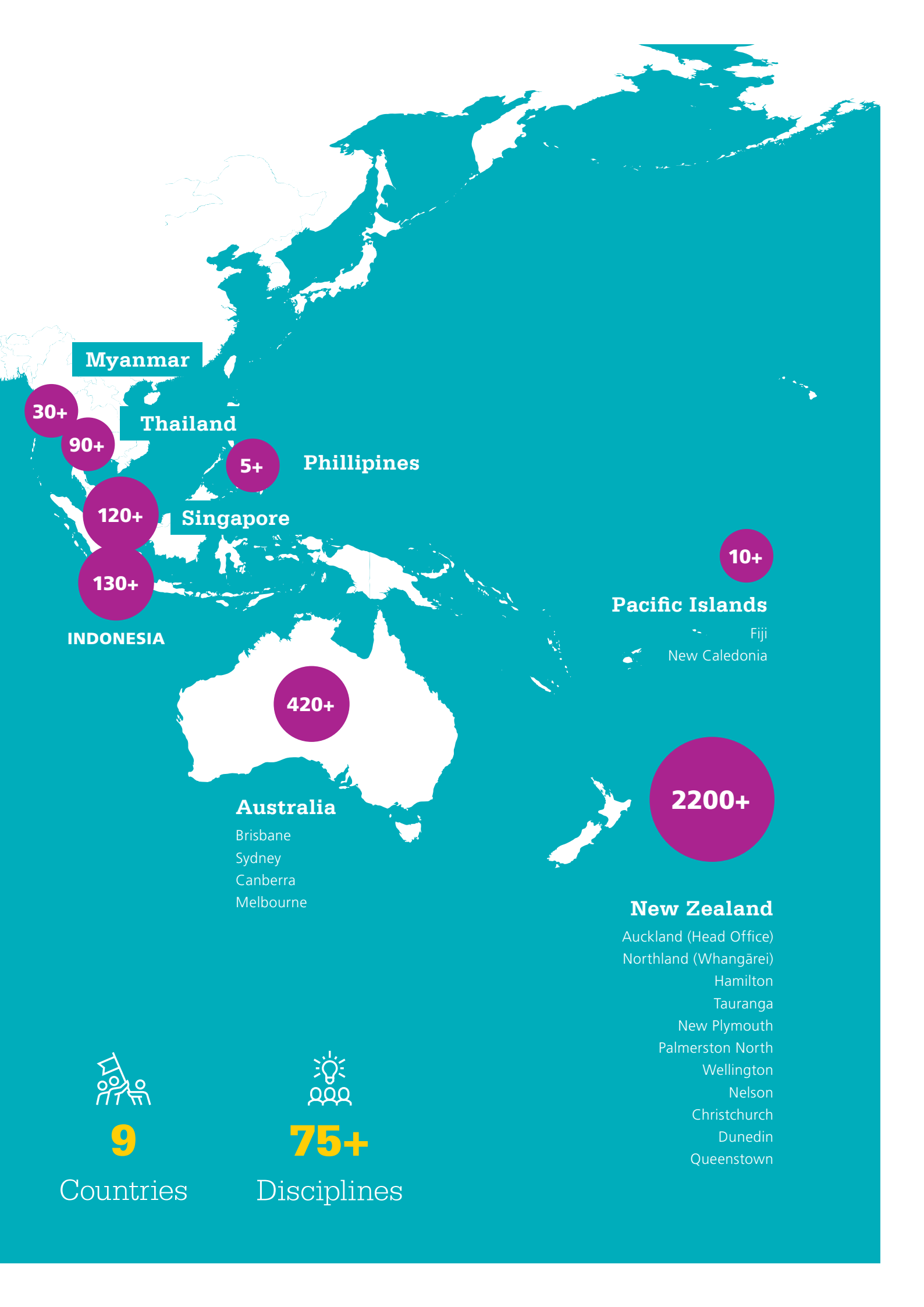


**3,000+**  
Employees



**22**  
Offices





Myanmar

30+

Thailand

90+

5+

Philippines

120+

Singapore

130+

INDONESIA

420+

Australia

Brisbane  
Sydney  
Canberra  
Melbourne

10+

Pacific Islands

Fiji  
New Caledonia

2200+

New Zealand

Auckland (Head Office)  
Northland (Whangārei)  
Hamilton  
Tauranga  
New Plymouth  
Palmerston North  
Wellington  
Nelson  
Christchurch  
Dunedin  
Queenstown



9

Countries



75+

Disciplines





02

# A message from our Group Chief Executive & Executive Chair



**Greg Lowe** CEO



**David Carter** Chair

This year we have continued to concentrate on progressing our two key sustainability areas: **climate change and sustainable urbanisation** (including adaptation and resilience). Our focus remains twofold.

**Firstly, on our footprint** – how we maximise positive outcomes for our people and communities and reduce environmental harm associated with our business operations.

**Secondly, on our handprint** – how we can enhance positive environmental and social outcomes through working with our clients to develop new, smarter ways of doing things.

It gives us a sense of pride that our ongoing focus on sustainability was recognised earlier this year by winning the Deloitte Top 200 Sustainable Business Leadership Award for New Zealand. The award recognises businesses that are working towards creation of long term environmental, social and economic value. In winning this award, the judges highlighted Beca's broad sustainability focus as a key element of our success.

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## RESPONDING TO MARKET TRENDS

The past 12 months have presented unique challenges and opportunities for Beca. In response to the COVID-19 pandemic we activated a targeted response focused on keeping our people safe and keeping our business strong. During this time Beca's core values of partnership, tenacity and care have come to the fore, as we have worked closely with our people and clients to collectively navigate the challenges presented by the ongoing COVID-19 pandemic.

Rather than see decarbonisation efforts put on hold as a consequence of the pandemic, it is pleasing to see that the recent market shift towards action on sustainability and decarbonisation has, if anything, accelerated progress. In New Zealand there have been significant policy changes including amendments to the Emissions Trading Scheme and the announcement of upcoming requirements for climate related financial risk reporting. In Australia, the Federal Government has substantially increased investment into sustainable technologies. In our Asian markets, environmental sustainability regulations are being strengthened, financial incentive programs to support sustainability efforts continue to be rolled out, and renewable energy research and deployment is growing.



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## CELEBRATING BECA 100

**In 2020 Beca celebrated 100 years of operation.** From the company's beginnings in 1920 when William 'Arthur' Gray first opened his consulting engineering business in Auckland, Beca has developed into one of the Asia Pacific Region's largest employee-owned professional services consultancies.

Over the past 100 years, Beca has helped shape the communities in which we live, with people all over the region having benefitted from the work we have done to make everyday better. Whether you're travelling over the Auckland Harbour Bridge, through the Waterview Connection, or looking out the window at iconic structures such as Duo or Marina One in Singapore, Macau Tower or Auckland's Sky Tower, Beca has been involved. As we launch into our second century, we look forward to continuing to redefine expectations, finding solutions and disrupting old models using smart thinking that draws on the diversity of our modern business.

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## PROJECTS AND INNOVATION

This year we have once again delivered some outstanding projects impacting the everyday lives of our communities. A selection is provided in Section 4. The challenges of COVID-19 have also provided an opportunity to showcase our digital strengths, enabling us to partner with our clients in the rapid deployment of digital solutions to address varying lockdown and compliance requirements across the markets in which we operate. Unsurprisingly, COVID-19 has heralded a step change in the adoption of digital technologies for everyone.

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## EMPOWERING EXCEPTIONAL PEOPLE

Our people are our greatest asset. We continue to have a sustained focus on the development of our people, supporting our leadership and our emerging talent. This year, our largest ever **cohort of 31 women completed our 'Growing Greatness'** programme, targeted at accelerating the careers of Beca women into senior leadership. We also extended our 'Amplify Essentials' leadership programme to over 450 business leaders.

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## DIVERSITY AND INCLUSION

The more diverse we are, the better our ideas, strategies and client solutions. This year we undertook our first ever Diversity Census, a demographic survey to understand who we are at Beca and to help inform the initiatives and conversations we need to create an environment where everyone can belong and succeed, regardless of our differences. As in previous years, we celebrated our LGBTTQIA+ community with a number of events held throughout Auckland Pride Month. Our New Zealand business, with support from the Beca

Rainbow Network, has also begun work towards Rainbow Tick certification to demonstrate and **enhance inclusivity for our LGBTTQIA+ employees.**

In our Australian business, our Reconciliation Action Plan has moved into Phase 2 'Innovate', focused on bridging the gap with Aboriginal and Torres Strait Islander communities by offering employment, training opportunities and developing strategic business partnerships, including our newly formed **partnership with the Indigenous Defence and Infrastructure Consortium (iDiC).**

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## HEALTH AND SAFETY

Over the past year, **we have truly lived our value of 'care' in looking out for each other**, our clients and our communities. Our focus on mental health and employee wellbeing continues to provide our people with the skills to positively support each other and remain socially connected despite the challenges of physical disconnection posed by the pandemic. Our proactive risk management approach has enabled all our offices to reopen under COVID-19 safe plans as and when government restrictions have allowed. We have also initiated a Workplace Transformation project to further develop our flexible work arrangements centred on employee wellbeing.

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## CARBON FOOTPRINT – OUR DEMONSTRATION OF WALKING THE TALK

We continue to track our carbon footprint and report publicly in line with our Climate Leaders Coalition commitments. For FY21, Beca Group's gross greenhouse gas emissions were estimated at 20,046 t CO<sub>2</sub>-e.

**This is a decrease of 41% compared to our baseline FY18, exceeding our current science-based target of 32% reduction (from a FY18 baseline) across all emissions by 2030.**

We recognise that this reduction is due in part to the COVID-19 pandemic which has led to a significant reduction in business travel and passenger kilometres flown. Notwithstanding, we intend to build on the innovations and lessons learned recently to reduce the need for business travel and sustain reductions in greenhouse gas emissions over the longer term.

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## FINANCIAL PERFORMANCE

Our financial performance measures show that our business remains financially healthy and prospects for the Group remain positive with a strong backlog and pipeline. A summary of financial performance can be found in Section 11.



# 03

## Our business

### HOW DO WE CREATE VALUE?

We don't have a typical value chain where raw materials are used to manufacture goods for sale.

Our value chain revolves around **our people**



  
**3.8M**

Passenger km  
travelled by air



**3000+**

People located  
across Asia Pacific.



It is only through the work of all of us (all 3,000+ employees) that we can create real value for us and our clients, their customers and the communities we serve.



Our creative people work together to combine their knowledge and expertise in design, delivery and advice to serve our clients with excellence.

As a large employer of graduates, we hire many people from Universities within the regions we operate.

We also hire talented people from the marketplace.



Our people are our **business**, which is why it makes sense to develop and enhance their skills for their roles today and tomorrow.



We do this by providing our people with **learning and development opportunities** and support for formal professional certifications. We also invest in the physical and mental wellbeing of our people, because if our people are engaged and satisfied, this ultimately leads to better service for our clients.



## Our Vision

Creative people together transforming the world.

## Our Purpose

**make  
everyday  
better.**

9 Countries



Delivering **probono work** to organisations and **not-for-profit** advisory boards  
Sitting on **community boards**  
Joining and working with **Professional institutes**  
Supporting **local charities.**



**Our people develop thought leadership**

and provide valuable insights on matters important to the broad market sectors we operate in, including public policy development

43,500m<sup>2</sup>

Office space



These communities are another important component of how Beca makes everyday better

22

Offices & countless communities



Our teams develop **new services, tools, systems** and processes that support us to maximise the positive environmental, social, cultural and economic impacts that we can have through our clients' projects – we call this our handprint.

32%  
by 2030

Reduced carbon footprint







## Engaging our stakeholders

In FY21, we again ran the Your Voice, Our Culture Survey to help us take the pulse of our people engagement. As in previous years, overall positive results were returned, emphasising Beca as a great place to work. While the survey results were generally positive, the Diversity factor, a measure of how well we believe our environment supports diversity dropped slightly from **79% to 77%**. The Belonging factor, a measure of individual sense of belonging and respect, also dropped slightly from **76% to 75%**, highlighting the need for further work in these areas.

During the year Beca has also focused on:

- Developing our People Absolutes - three habits we can all do to make everyday better for ourselves and each other, namely:
  - Clear shared expectations.
  - Regular real conversations.
  - Frequent useful feedback.
- Enhancing Belonging@Beca - including undertaking our first ever Diversity Census to inform the actions we need to take to better create an environment where everyone can belong.
- Refreshing our Flexible Working Guidelines and increasing flexible working across the business.







<b>Stakeholder</b>	<b>Engagement channels</b>	<b>Some highlighted interests and needs</b>
<b>Employees</b>	<ul style="list-style-type: none"> <li>• One-on-one career development</li> <li>• Surveys</li> <li>• Focus groups</li> <li>• Webinars</li> <li>• Workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Belonging</li> <li>• Job security</li> <li>• Leadership</li> <li>• Flexible working</li> <li>• Feedback</li> </ul>
<b>Clients</b>	<ul style="list-style-type: none"> <li>• Job Directors and Job Managers</li> <li>• Project teams</li> <li>• Client Relationship Managers</li> <li>• Direct feedback</li> <li>• Industry feedback</li> <li>• Project work</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding and meeting drivers, visions, and goals</li> <li>• Climate change</li> <li>• Digital advancements</li> <li>• Sustainability</li> <li>• Business resilience</li> <li>• Health and safety</li> </ul>
<b>Shareholders</b>	<ul style="list-style-type: none"> <li>• Shareholder Portal</li> <li>• Annual Shareholder meeting</li> <li>• Board communications</li> <li>• Consultation sessions</li> <li>• Q&amp;A sessions</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable business</li> <li>• Healthy dividends</li> <li>• Robust decision making</li> </ul>
<b>Iwi &amp; First Nations</b>	<ul style="list-style-type: none"> <li>• Direct feedback and engagement</li> <li>• Strategic partnerships</li> </ul>	<ul style="list-style-type: none"> <li>• Improve collective knowledge, understanding and cultural practices</li> <li>• Partnership</li> <li>• Employment and development opportunities</li> <li>• Reconciliation</li> </ul>
<b>Partners and suppliers</b>	<ul style="list-style-type: none"> <li>• Collaboration on our clients' projects</li> <li>• Corporate activities</li> </ul>	<ul style="list-style-type: none"> <li>• Mutually beneficial relationships</li> <li>• Trust</li> <li>• Integrity</li> </ul>
<b>Local communities</b>	<ul style="list-style-type: none"> <li>• Delivery of our clients' projects</li> <li>• Community partnerships</li> <li>• Pro-bono activities</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental health</li> <li>• Transparency</li> <li>• Giving back</li> <li>• Continuous communication</li> <li>• Thought leadership and change</li> </ul>
<b>Professional bodies and industry groups</b>	<ul style="list-style-type: none"> <li>• Involvement in professional institutes</li> <li>• Governance on Boards</li> <li>• Conferences and events</li> <li>• Mentorship</li> <li>• Sponsorship</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain professional standards</li> <li>• Giving back</li> <li>• Leadership</li> <li>• Social and environmental responsibility</li> </ul>



## Sustainability Governance

Our Sustainability Steering Group continues to meet regularly to lead the integration of key sustainability focus areas into our core business and market operations.

The group is made up 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**.

Under the Beca Group strategy to Amplify Beca, the Sustainability Steering Group is driving our twin focus areas:

- Climate change adaptation and mitigation of carbon emissions.
- Sustainable urbanisation (promoting liveable cities)

Our approach is guided by two perspectives:

- **Our Footprint:** the impact we have as a result of our operations. We seek to minimise our footprint.
- **Our Handprint:** the positive impact we can have through working with our clients. We seek to maximise our handprint.

Our Sustainability Leadership Team, comprising Amelia Linzey, Genevieve Smith and Dr Kate Meyer, is responsible for driving our footprint (Genevieve) and handprint (Kate) programme of activities across the business.

As a result of the unprecedented uncertainty brought by the COVID-19 pandemic, particularly in the first half of 2020, we paused and slowed a number of our sustainability workstreams, choosing to continue with a reduced number of activities. However, momentum in our markets and continuation of drive by our clients to embed sustainability practice into business operations, meant that efforts around our handprint continued to spread around the business.

FY21 saw rapid growth in our sustainability team which spans our business lines, market segments, and geographies. One of the unexpected positive outcomes of the Covid-19 lockdowns was the accelerated connectivity between members of this team globally. Over the next year, we are looking to restart many of our business sustainability change programmes with our better connected team.

In line with our decarbonisation roadmap, we continue to focus on emission reduction initiatives across our key activity areas of fleet, buildings, travel for business and travel to work, as well as our procurement processes.







Cover Image: The Beatrice Tinsley Building



# Beca Group Limited Board

The Board of Directors is responsible for maintaining high corporate governance standards and monitoring the business and affairs of Beca Group Limited, including setting strategic direction, establishing goals for management and monitoring the achievement of those goals.

## 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.



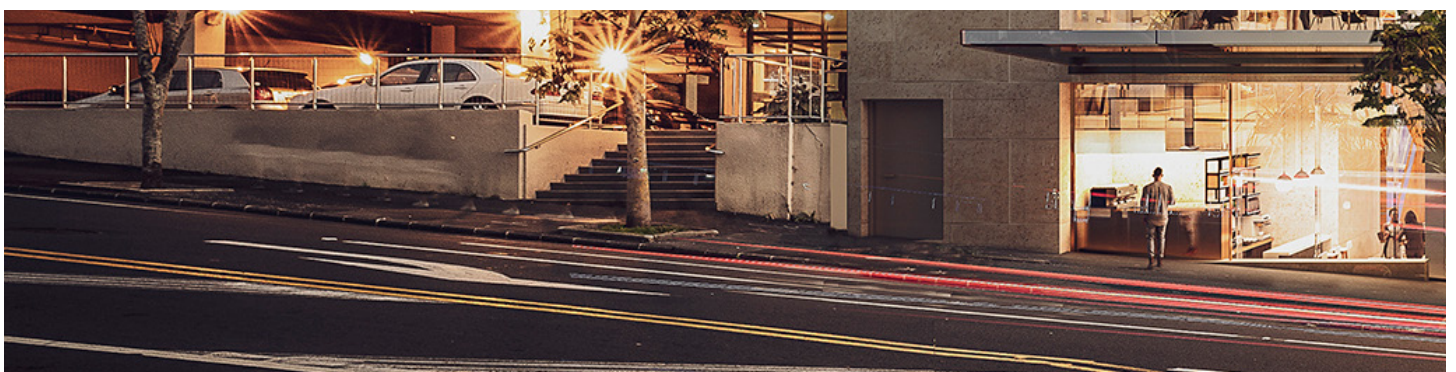
**Greg Lowe | Group Chief Executive** has overall accountability for the business operations of the Beca Group; leading delivery of Beca's global strategic objectives. He chairs the Business NZ Major Companies CEO Forum and the NZ Defence Industry Advisory Council and is a member of the King's College 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, Qestraland 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.



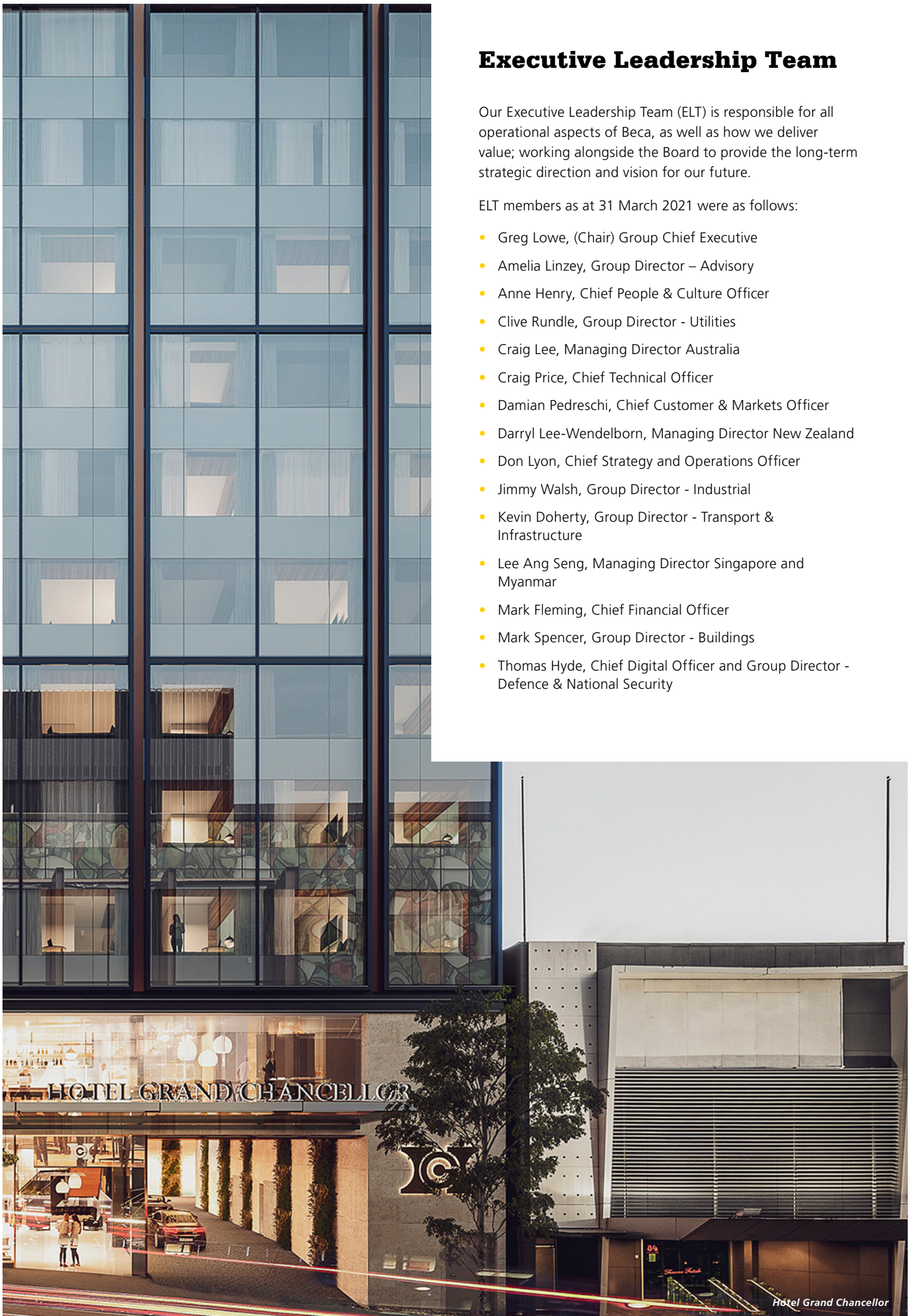


## Executive Leadership Team

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.

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



A man in a dark suit and glasses is shown in profile, looking towards the right. He is seated at a wooden table with another person whose arm is visible on the right. On the table are several large sheets of paper with diagrams or charts. A smartphone is also on the table. The background is a blurred office space with a window and some furniture.

04

**Creating value together  
with our clients – Our  
Handprint**





Motivated by our purpose to make everyday better and our values-driven culture, we're helping deliver transformational solutions and rising to the challenge of sustainability together with our clients.

Our handprint is focused on our business services in two main ways. Firstly, we have a team of specialists who deliver niche sustainability services to support our clients to meet their sustainability aspirations, and secondly, we have sustainability champions across the business to drive the integration of sustainability into all the work we do.

Our specialist services range from organisational level strategic advice and business change activities, to project governance and detailed project level design services, across the diverse market segments and geographies we touch.

Our sustainability champions have introduced sustainability in design workshops into our project delivery process, and have developed an internal 'Wikipedia' to support rapid uptake of sustainability consideration across all the work we do. In FY21 we introduced 7 key sustainability questions into our project delivery process to enable our people to have deliberate discussions on whether clients and/or project opportunities align with our purpose, sustainability direction, and ability to maximise our handprint. In FY21 these new processes have resulted in decisions not to pursue work, and in decisions to provide proposals for alternative approaches to projects.

One of our key priorities this year was to contribute to the ongoing discussion in New Zealand and beyond on how to achieve the best outcomes from the significant recovery and economic rebuild as we emerge from the COVID-19 pandemic. To this end we have delivered thought leadership articles, podcasts, webinars and conference presentations on where we see the biggest opportunities for decarbonisation that support economic recovery and broader social and environmental outcomes.



## Sustainable Urbanisation

Motivated by our purpose to make everyday better and our values-driven culture, we're helping deliver transformational solutions and rising to the challenge of sustainability together with our clients.

The snapshot of our projects that follows show how we seek to maximise our handprint in our focus area of sustainable urbanisation climate change adaptation and mitigation. To maximise our handprint in sustainable urbanisation, with a particular focus on climate change adaptation and resilience for communities.







## 36<sup>th</sup> America's Cup

The America's Cup, first contested in 1851, is the oldest trophy in international sport. When Auckland had the opportunity to host this historic event, an ambitious infrastructure project was launched to prepare the harbour edge for the competition. As custodians of the waterfront, Eke Panuku first engaged Beca to review options for potential infrastructure investment, and to help establish what soon became the Wynyard Edge Alliance, the vehicle that created the partnership between public and private entities equally motivated to leave a legacy for Auckland and NZ.

Sustainability is, in essence, a quality of legacy, of investing in things that will endure. In this respect, the 36<sup>th</sup> America's Cup infrastructure project has achieved several sustainability goals. As part of the project, a new park and public open spaces along the waterfront were created, increasing community access and interaction with Auckland's waterfront. The existing wharf, old and long-suffering, was also renovated to bolster its strength, yielding and resilience to climate change considerable carbon savings over complete wharf replacement.

The project yielded direct social outcomes beyond the new public-spaces. The Wynyard Edge Alliance strengthened connections across the sector as high-performing teams worked closely to deliver the infrastructure to extremely tight timeframes. A program called "My Edge" worked to improve communication and English language skills of the project's workforce, allowing them to gain more confidence and skills that will endure beyond the sporting event.

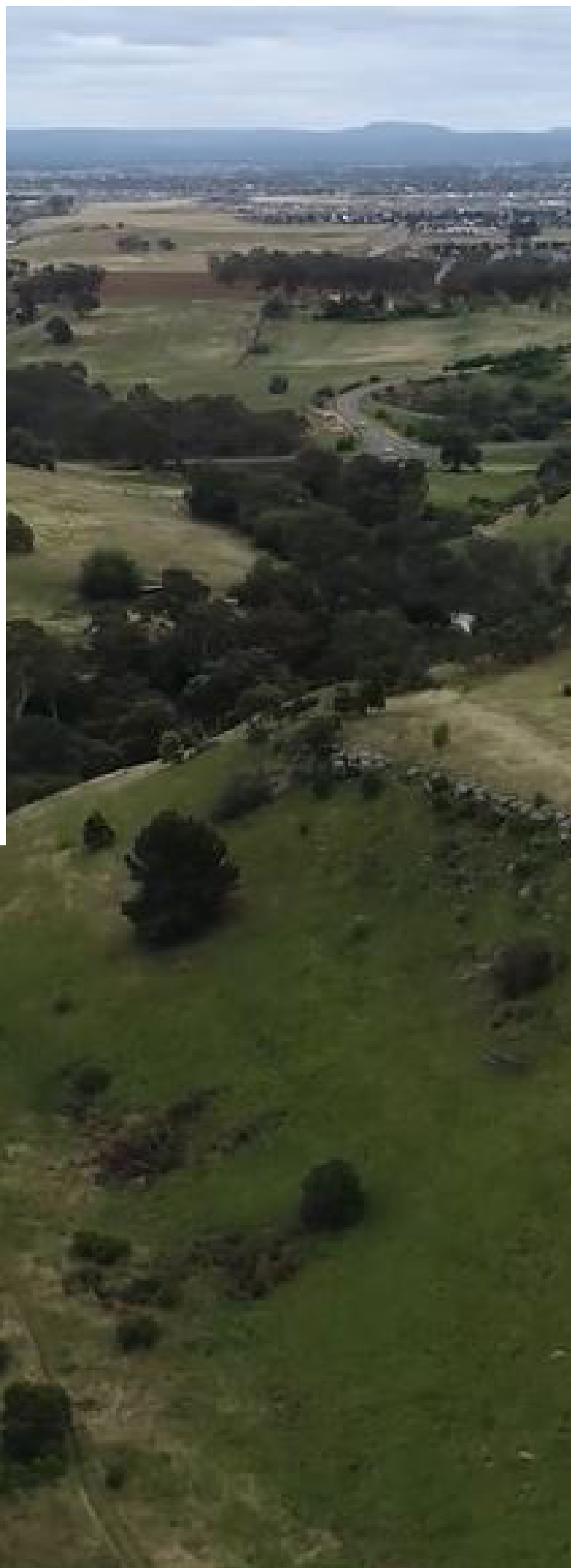
Thanks to the dedication and effectiveness of the Wynyard Alliance, the infrastructure was developed ahead of schedule. On day 7 of the 36<sup>th</sup> America's Cup, Emirates Team New Zealand gained the points they needed to win the competition. This would not have been possible without Beca's prompt focus on the community outcomes that this event helped catalyse, and the tireless work of the Wynyard Edge Alliance, who along with the national sailing team, worked hard to leave a legacy of leadership and excellence for the future of all New Zealanders.

## A 'WIN' for Recycled Water in Victoria

With the peri-urban areas surrounding Melbourne rapidly expanding, Greater Western Water is processing ever higher volumes of sewage through its Recycled Water Plants. Thirty kilometres to the south, farmers in the Parwan-Balliang agricultural district face the opposite problem: a scarce and insecure water supply for irrigation.

CH2M Beca, as a trusted advisor and engineering partner to Greater Western Water, were tasked with designing a solution that would enable Greater Western Water to better manage Recycled Water Volumes at its plants and improving community resilience delivering excess water to farmers in the Parwan-Balliang district. A series of new pipelines, pump stations, storage ponds and on farm infrastructure were designed by Beca to help achieve this goal.

With a focus on sustainability, the project considered many different routes, utilising an iterative approach to design enabling the team to work closely with Traditional Owners, Parwan-Balliang farmers and government stakeholders, to minimise impacts to areas of ecological and cultural value. Through the Western Irrigation Network, Greater Western Water is able to beneficially re-use water produced by its Recycled Water Plants, avoiding discharge of treated water to nearby waterways. Farmers, in turn, gain access to a steady, safe and secure water supply.









AWA-NUI-A-RANGI







## Te Hono – New Plymouth Airport

When we think of sustainability, what often comes to mind is the responsible use of material resources also critical to ensuring the sustainability of our communities and their connections to the whenua. However, our cultural sustainability and continuity is important to ensuring our communities and their connections to the whenua.

When the Beca team was engaged to undertake works at New Plymouth Airport, the scope was to expand the existing terminal to accommodate a larger volume of passengers. But as mana whenua advocated for an alternative vision, plans evolved. Puketapu were integrated into the design team and the development of a completely new edifice was driven by a deeply rooted sense of place to tell the creation story of Te Ātiawa iwi (of which Puketapu is a member).

Elements embedded in the design itself tell the story of Tamarau, a celestial being, who was so captivated by the earthly beauty of Rongo-ue-roa (terrestrial being) that he came down to meet her. Their union gave birth to a son named Awa-nui-a-rangi, the eponymous ancestor of Te Ātiawa. Two roofs over the building represent two elements meeting, one angled towards the sky and one towards the earth. Inside the building, where Rongo-ue-roa rises up externally to meet the building wall, she bursts into life on the internal cladding as a living wall of plants, a vibrant tukutuku panel and swaths of colourful art along the walls. A curved entrance acts as a welcoming embrace to Taranaki, or an affectionate goodbye. The building embodies cultural as well as material sustainability, with efforts to reduce environmental impact at the core of the project largely through energy efficiency. The new terminal was named Te Hono, for connection. Te Hono meets the functional needs of airlines and passengers while interrogating a compelling story that reflects a deeper human need to explore fundamental questions about belonging, identity and placemaking.





## **'FAST' Public Transport Connections for Western Sydney**

The Fifteenth Avenue Smart Transit (FAST) corridor is a city-shaping project, designed to deliver a high-quality public transport link between the Liverpool CBD and new Western Sydney International Airport, supporting the vision of the Greater Sydney Region Plan for the development of Liverpool as Sydney's third CBD. In Phase 1 of the project, Beca has collaborated with the Liverpool City Council, Group GSA and AT&L to lead development of the corridor's strategic concept, with fast, efficient and sustainable public transport at its core.

The strategic concept seeks to ground the project in sense of 'place', retaining the existing environmental characteristics of the area while minimising impact on adjacent communities and habitats. Three zero-carbon rapid transport options were workshopped as part of the design process, with trackless trams emerging as the preferred option. The project is underpinned by a defined set of objectives and a foundation of stakeholder engagement and agreement.

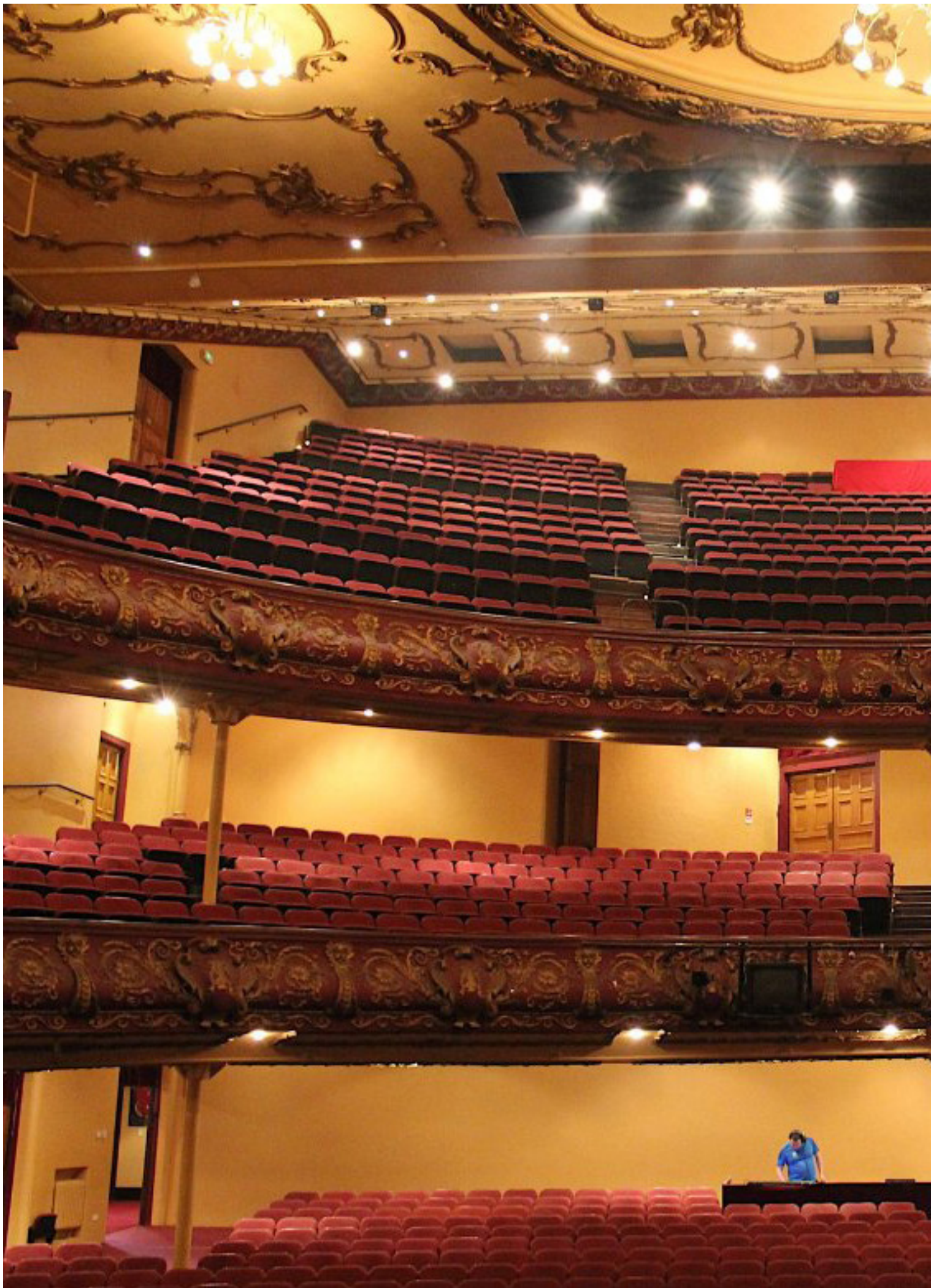
Phase 2 of the project, which will involve developing the design option, is currently on hold. Once complete, the FAST corridor aims to provide greater convenience, ease of travel and connectivity, making every day better for Sydney locals and tourists alike.















## Preserving Our Theatre History

The iconic St James Theatre in the heart of Wellington has seen many decades of change since it was built in 1912. Weakened by its many years, this Category 1 heritage building was deemed earthquake-prone in 2015. To support seismic strengthening of the Theatre, the Beca team has incorporated fluid viscous dampers, as well as other geotechnical strengthening measures, to increase the building's earthquake rating, supporting community resilience.

The challenges of working with such an old building were numerous, not to mention tales of a ghost lurking in the drapery. In addition to the cultural benefits of saving this iconic piece of Wellington's performing arts history, repairing and strengthening the Theatre includes significant carbon savings that come with avoiding a new build.





# Climate Change and Decarbonisation

## Greening Our Schools

Located just south of Nelson, Waimea College, one of the South Island's largest schools, was nearing capacity. The Ministry of Education was looking to build a new teaching block to accommodate a growing student body. Well aware that today's youth care deeply about the environment, a new eight-classroom teaching block presented an exciting opportunity to explore the utilisation of timber (as opposed to steel) in order to reduce the carbon cost of the building. Timber can be flexible, attractive, and most importantly, sustainable, when used in the right way.

Those who work on school projects know them to be at the pointy end of building design, where tight budget constraints meet rigorous design guidelines. Beca, working alongside Sheppard & Rout and Arthouse Architects, came up with a unique design that would enable the superstructure of the building to be made of timber with superstructure concrete removed completely and steel limited to the connections.

The move to timber means Waimea College's new teaching block has sequestered approximately 82 tonnes of CO<sub>2</sub>e from the atmosphere into sustainably forested timber. A further 190 tonnes CO<sub>2</sub>e of emissions were completely avoided by removing the concrete and steel from the superstructure. Following the successful completion of the project, the Ministry of Education has asked us to replicate the model in new teaching blocks at other schools. We believe this represents a new way forward for Australasian school design, meeting the challenges posed by climate change and the increasingly urgent transition to a zero-carbon world.















## Deakin University Microgrid

Deakin's Geelong Waurn Ponds Campus is the centre of the University's advanced manufacturing precinct. The Renewable Energy Microgrid, a \$23 million collaboration between Deakin University and AusNet Services, will provide a diversity of research opportunities that can simulate broader community and city environments, providing guidance to network operators and industry.

To support their research and sustainability target of net zero emissions by 2025, Deakin University engaged Beca to provide engineering services for the design of the microgrid. Beca developed the concept design, preparing technical specifications for the solar farm, Battery Energy Storage System and fibre optic cable system. Beca also supported Deakin's Project Delivery and Implementation Group with EPC contractor selection, and were Owners Engineer during the design, build and commissioning phases.

A 250-kW system within the large-scale solar farm was added to allow real time control of the inverter systems, enabling students and researchers to monitor real time generation of solar, to research different panel chemistries. Through this they will also get a better understanding of the economic benefits a microgrid can deliver not only to the campus, by offsetting site demand, but also to the wider community as Australia gradually transitions towards a decarbonised, sustainable energy future.

At its peak, the solar farm will make everyday better by generating over 12,000,000 kWh of energy per annum. Offsetting more than 12,000 tonnes of greenhouse gas emissions per annum, and meeting campus demand whilst reducing the University's electricity costs, by optimising generation and storage through an advanced microgrid control system.





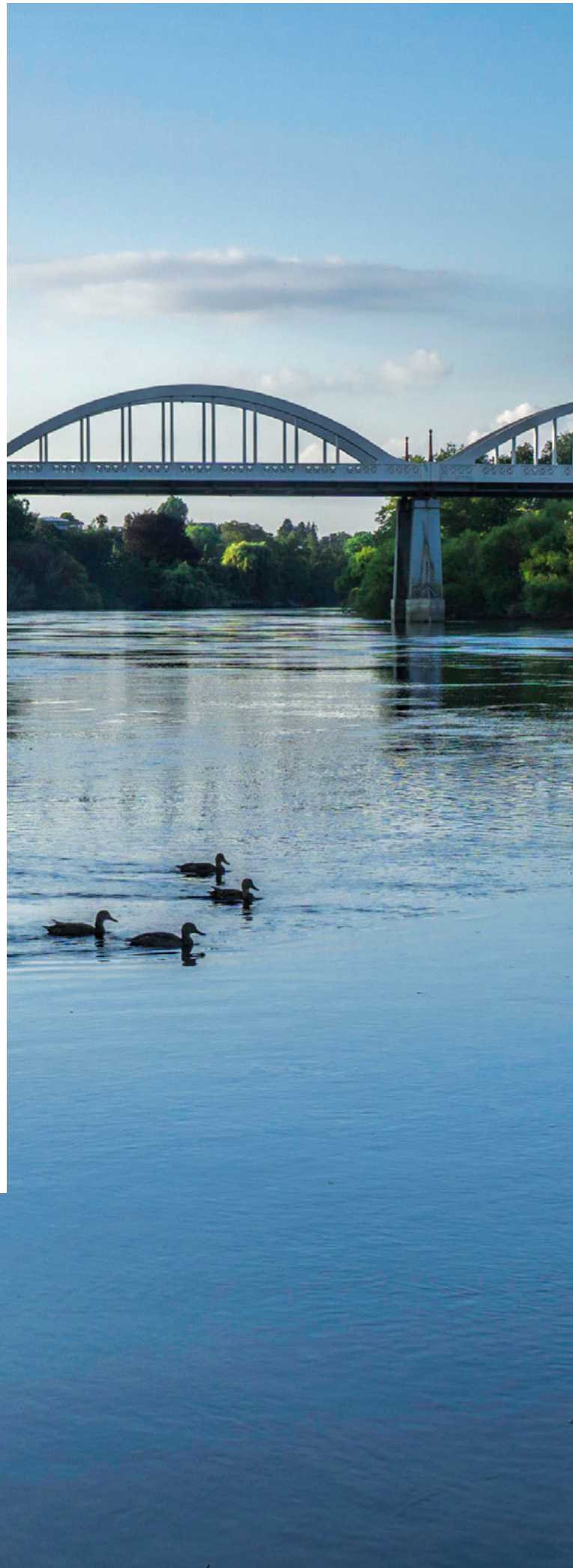
## Sustaining Auckland's Water Supply

With Auckland's growing population, the establishment of secure water sources has become more important than ever. A new water reservoir had been in Watercare's long-term plan for some time, however worsening drought, dipping dam levels, and long-range weather forecasts, led Watercare to a decision that more capacity was needed as soon as possible.

After considering several options for securing a larger water supply, Watercare settled on a water treatment plant that would process 50 megalitres a day from the Waikato River with a catchment size of 14,000km<sup>2</sup> and deliver it to the Auckland area. With an extremely tight timeline, the programme team had to develop new ways of working to shave years off the regular project development and delivery process. Beca, Watercare, construction partners and key suppliers were co-located to define and develop the plans, relying on digital tools reduce design time, provide better collaboration and create the platform for future value extraction. The team also put their minds to making the process as efficient as possible - cutting out unnecessary steps and structures. Through innovative ways of working and strong collaborative partnerships, a project that would normally take over 4 years was designed, consented, procured, constructed and commissioned in 12 months.

Triggered by the need for speed, the team innovated Watercare's Enterprise Model approach that is poised to revolutionise the way projects are developed and delivered. The resulting efficiency represents thousands of tonnes of carbon savings as well as millions of dollars of cost savings just from reduced overheads. Well-aware that they were developing a new way of working, team leaders ensured the programme documented new processes and tools to ensure that the learning that happened could be replicated.

As technology continues to advance and ways of working shift and change, this project was a unique opportunity to fast-track Beca's capacity for efficiency and develop sustainable working models that will be used far into the future.









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## INFRASTRUCTURE NZ - PREPARING FOR TECHNOLOGICAL CHANGE IN THE INFRASTRUCTURE SECTOR

Exciting innovations in technology are poised to completely transform the way infrastructure is planned, designed, constructed and maintained. Working with Polis Consulting Group, Beca had an opportunity to help inform New Zealand's response to this evolution through a research project with Te Waihanga (New Zealand Infrastructure Commission). The project considered how the infrastructure sector could prepare for the types of technologies expected in the next three decades.

For infrastructure, technology and sustainability go hand-in-hand. A holistic approach through digital twins can calculate and monitor carbon emissions throughout the asset lifecycle. In an era defined by the threats and challenges of climate change, decarbonisation and investing in facility infrastructure for recycling, water re-use and energy electrification will be pivotal in equipping the country to be more environmentally responsible. The report pointed to the importance of government-led initiatives in making this progress.

The advent of new data-collecting technologies can bring massive improvements in targeted cost and energy saving efforts, as well as the challenges of storing and managing the information. Integrating a Te Ao Māori perspective, the team highlighted the importance of Kete Mātauranga "basket of knowledge" in understanding all elements of sustainability. As part of this, a recommendation was a shift to a more open data environment and creating an independent data trust to govern information and reflect the principles of Te Tiriti o Waitangi.

This important work explored the ways New Zealand can move towards a technological and increasingly carbon neutral infrastructure sector, positioning the country to be globally competitive and a leader in infrastructure sustainability.







## Decarbonisation and Resilience Thought-Pieces

The following is a selection of thought-pieces prepared this year by forward thinkers in our business on topics ranging from the role of timber in future building design through to how integration of land use and planning can lead to carbon neutrality.

- Cushla Loomb, Spatial planning for coastal management.
- Simon Berry, Transport network operation and maintenance for future mobility.
- Emily Cambridge, Why a bike-friendly city is a more liveable city.
- Andre Kirstein, Thinking differently about timber.
- Steve Perkins, Rethinking Priorities: Top 10 smart building technologies for COVID-19.
- Eleanor Grant, Jack Timings & Sarah Bacon, A step change towards decarbonising industry: the tools required for transition.
- Dr Kate Meyer, Mark Jacob & Shane Gowan, Working towards a fossil-free future.
- Matt Kebbell, Paul Language & Corne Pretorius, How will the minerals and metals industry answer the call for greater sustainability?
- Dr Kate Meyer, The Commission's Challenge to NZ – how realistic and what do we think?
- Zsolt Krisztian David, The Promise of Indoor Farming (Parts 1-3).
- Beca Ltd, Why a Carbon Baseline is Critical to Understanding your Carbon Footprint.
- Mike Quirk & Scott Smith, Carbon-centric data centre design.
- Decarbonising for a prosperous New Zealand.
- Dr Kate Meyer, COVID-19: A catalyst for sustainable change.
- Scott Smith, Accelerating Building Decarbonisation.
- Jared Keen, Tacking the Carbon Challenge in New Build Schools.

Over the past 12 months, Beca has also launched a new podcast series; 'Getting to Carbon Positive', hosted by Dr Kate Meyer. Topics canvassed have included:

- John Blyth & Wharehuia Dixon, Māori Worldview – applying a Māori lens to decarbonisation and the COVID-19 rebuild.
- Andrea Rickard, Amelia Linzey & Stuart Bowden, Transport – transportation as a transition area to a low carbon economy.
- Shane Gowan, Adrian Dickison & Sarah Bacon, Industrial Products - insights in industrial product manufacturing.
- Peter McCafferty & Phil Robson, Electricity – electricity as a transition area in the COVID-19 rebuild challenge.
- Scott Smith & Andre Kirstein, Built Environment – transitions in the built environment.
- Dr Mark Dresser & Paul Robilliard, Agriculture and Forestry – sustainable food production and the growth of wood products.
- Eleanor Grant & Jimmy Walsh, Recovery of Waste - a key transition that could support the decarbonisation of New Zealand.
- Garry Macdonald, Rob Fullerton & Evie Wallace, Three Waters – insights on transitions in three water systems in New Zealand.
- Stuart Smith & Leif Klasseen, Social Infrastructure – how to get the organisational and societal changes we need, at the rates we need them.
- Thomas Hyde & Sue Bradley, Digital – the role digital and technology can have in helping us to decarbonise Aotearoa New Zealand and the opportunities this presents on a global scale.



## Key project awards, recognitions and milestones

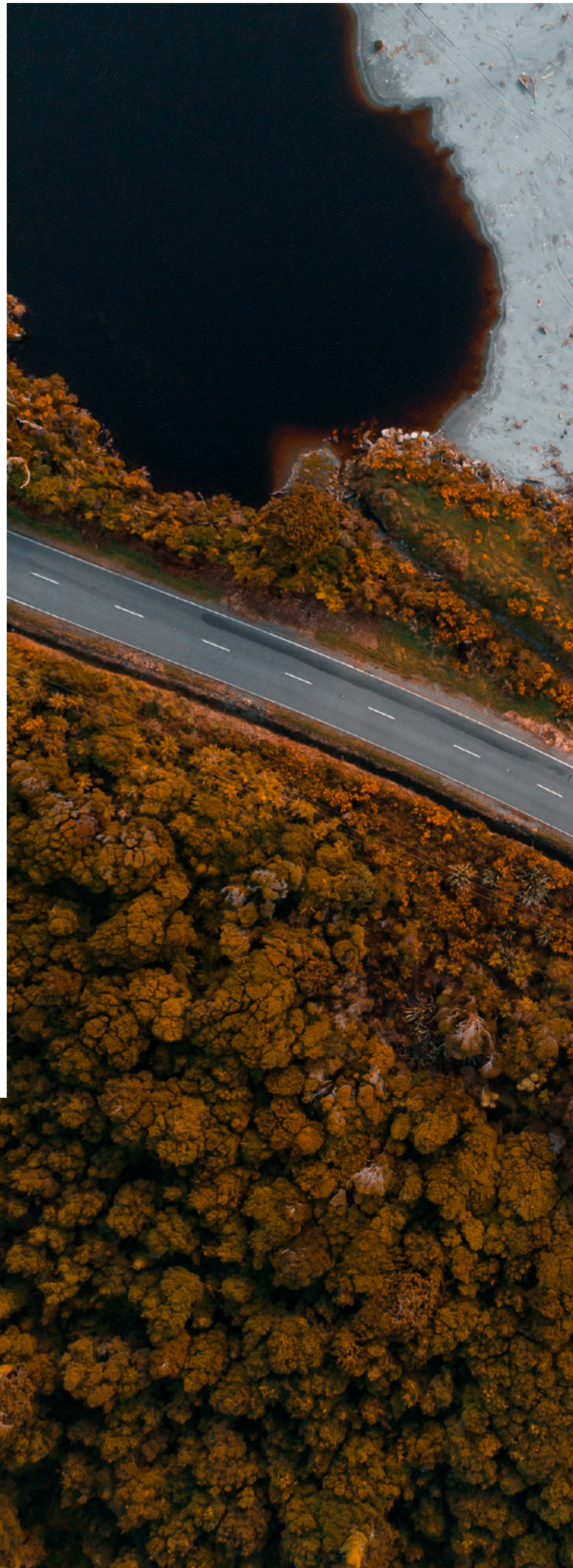
This year Beca's long-term commitment to sustainability has been acknowledged through receipt of the Deloitte Top 200 Sustainable Business Leadership Award. The award highlights businesses that are working towards creation of long term environmental, social and economic value.

The judges highlighted Beca's broad sustainability focus as a key element of our success, including:

- Our early incorporation of sustainable practices before this became 'mainstream';
- Our commitment to reducing our carbon emissions by 32% by 2030 – a target that encompasses not only those emissions we have direct control over, but also the indirect emissions from our full supply chain;
- Our work with clients to enable them to achieve their sustainability aspirations; and
- Our advocacy work driving market change, including our thought-piece on 'Decarbonising a Prosperous New Zealand', featured in our FY20 Annual Sustainability Review.

Our Group Chief Executive, Greg Lowe, was also recognised at the awards as one of three finalists in the CEO of the year category, and Beca was shortlisted for the Best Growth Strategy award.

In addition to our achievements at the Deloitte Top 200 Awards, we have continued to celebrate numerous project award wins together with our clients and partners. These awards showcase the awesome ability of our people to innovate across the numerous areas on which we work. For more detail on these exceptional project awards, please refer to Appendix A.









# 05

## Creating value for our people

Our creative people are our greatest asset. Together we are transforming our world and making everyday better.

### Empowering and supporting our people

#### What's important to us?

- Creating a diverse and inclusive workplace where everyone feels they can belong
- Psychological wellbeing
- Developing our people
- Health and safety

Over the previous year the challenges from the ongoing COVID-19 pandemic have prompted a rapid transition towards hybrid and flexible working. We have worked hard to maintain the health, safety and psychological wellbeing of our people over this difficult time, while drawing on the lessons of the pandemic to help us enhance our working environment.

#### Our goal:

Grow an environment where our people have equal opportunity to build a career that reflects their abilities and passions, where they believe in their potential, feel they belong, and can be their best selves.

#### Focus areas

- Valuing differences
- Enhancing our gender and cultural diversity

#### Key initiatives this year:

- We have launched our Kanohi Māori strategy - the culmination of many years of individual and small-group passions to bring Te Ao Māori (The Māori world) into the Beca way of life. Kanohi Māori will be led by our Te Kākano He Tōtara and Rākau Taumatua ohu working groups.
- We have continued to support women in leadership by putting 31 women through our 'Growing Greatness' programme.
- We have undertaken our first ever Diversity Census. The census has provided an overview of Beca's diversity and has helped us to better understand who we are.
- Our Australian business has instituted Reconciliation Action Groups in each of our offices. The intent of the groups is to enhance our relationships with, and knowledge of, the First Nations communities in which we operate.
- Beca Australia's Reconciliation Action Plan: Phase 2 'Innovate' has been submitted to Reconciliation Australia. The plan's goal is to bridge the gap with Aboriginal and Torres Strait Islander People by offering employment and training opportunities and developing business partnerships.



This year, Beca has seen a positive shift in the percentage of women at senior levels compared to FY20:

- Associates and Senior Associates – from 22% to 24%
- Principals and Senior Principals – from 14% to 18%
- Executive Leadership Team – from 7% to 20%

## PAY GAP

The below data on **pay gap** compares the median full-time equivalent remuneration for each country. Reporting is for countries where there are a larger number of employees.

	NZ	Australia	Singapore	Indonesia	Thailand
'21	<b>25.5%</b>	<b>28.5%</b>	<b>6.6%</b>	<b>35.3%</b>	<b>22.6%</b>
'20	<b>26.5%</b>	<b>27.5%</b>	<b>6.6%</b>	-	<b>24.5%</b>
'19	<b>26.7%</b>	<b>25.5%</b>	<b>2.3%</b>	-	<b>32.9%</b>
'18	<b>28.6%</b>	<b>31.4%</b>	<b>12.2%</b>	-	<b>31.3%</b>

## PAY EQUITY

The below data on **pay equity** is based on the average of Career Levels. Reporting is for countries where there is a larger number of employees.

	NZ	Australia	Singapore	Indonesia	Thailand
'21	<b>1.2%</b>	<b>-0.1%</b>	<b>4.0%</b>	<b>9.0%</b>	<b>1.8%</b>
'20	<b>0.51%</b>	<b>1.42%</b>	<b>1.92%</b>	-	<b>0.41%</b>
'19	<b>1.73%</b>	<b>1.76%</b>	<b>0.35%</b>	-	<b>1.67%</b>
'18	<b>2.87%</b>	<b>2.55%</b>	<b>4.59%</b>	-	<b>3.69%</b>

*\*Negative figure indicates women are paid more than men based on the average of career levels.*



## Developing our people

We continue to have a sustained focus on development of our people, supporting leadership, and our emerging talent. A summary of progress on our core programmes over the last three years includes:

- **Amplify Me:** This is the leadership development we provide for everyone. It focuses on self-leadership and encompasses Onboarding, Graduate Development and Mentoring. A highlight in FY21 was the Beca 100 online conference which was available to all team members celebrating Beca's 100 years and involving people from across our business in how we might shape our business for the future.
- **Amplify Others:** This is the development we provide for our people leaders. This year leader-led learning labs have been established to support peer learning and application to learning impact on the job. A Leaders Hub has been established on the intranet providing resources covering topics including hiring, career planning, development, performance, remuneration and promotions.
- **Amplify Beca:** This is development focused on succession and enterprise leadership. It currently includes a senior leader forum which brings together over 130 senior leaders to update, engage and prioritise together key strategic, commercial, people, delivery and client topics.

### Successful Outcomes:

- Approximately 550 graduates (over the previous 4 years) have taken part in our award-winning Graduate Development Programme.
- Our Amplify Essentials programme was delivered to over 450 people leaders with a satisfaction rating of 82%.
- Regular leader drop-in sessions have been established which focus on interviewing leaders fortnightly on topics that are relevant and of interest to them. Interviews are made available to all staff.

### Focus for FY22:

The COVID-19 pandemic has reinforced the need to continue to adapt and deliver our programmes in new and innovative ways that will deliver on business and client needs, while giving all our people the opportunity to learn wherever they are.

We have recently undertaken a Learning Review and this has highlighted some key focus areas for the future including development of a group level learning strategy, establishing governance for learning, integration and alignment. Targeted programmes (e.g. Intermediate Development) and leveraging mentoring and coaching more across our business will be key to building new capabilities and skills. We expect a strong continuing uptake on development delivered online with clearer alignment to strategy and business impact.





## People awards

Our people have achieved well-deserved recognition for their contributions to sectors they work in and showing leadership in their technical fields.

We have been happy to celebrate regional and national recognitions; from those just starting out in their career journeys, to the more well-seasoned veterans. Appendix B has more on these outstanding achievements.

[\*Akshat Malhotra awarded Outstanding Emerging Professional Award, Engineering New Zealand\*](#)

[\*Chris Oakes selected for the 2021 Roads Australia Fellowship Program \(October 2020\)\*](#)

[\*Courtney Chapman wins Women Leaders in Earthquake Engineering Award \(May 2020\)\*](#)

[\*Darryl-Lee Wendelborn & Philip Robins recognised as Fellows and Garry Macdonald recognised as a Distinguished Fellow of Engineering New Zealand \(February 2021\)\*](#)

[\*James Bones winner of an Award of Excellence at the 2020 NZiOB Awards for the Mt Eden Corrections Facility\*](#)

Lee Ang Seng appointed first Vice President of the SGBC (Singapore Green Building Council) board.

Lee Chuan Seng awarded the inaugural iBuildSG Distinguished Fellow Award by the Singapore Building Construction Authority (October 2020)

Royal Institute of Chartered Surveyors Valuation Team of the Year Award (July 2020)

Samir Govind received NZiOB Medal for sustained contribution and leadership to the industry.

Thomas Hyde named in the second annual CIO50 list.





An aerial photograph of a tropical coastline. In the foreground, a wide, golden-sand beach curves along the shore, with several large, dark, jagged rock formations protruding from the water's edge. The water is a vibrant turquoise color, with white foam from waves breaking against the rocks. In the background, a steep, lush green forested hillside rises from the beach, extending towards the horizon. The sky is a clear, pale blue. The overall scene is serene and picturesque.

# **Our people in numbers**



**Who we are in numbers strongly demonstrates our diverse and inclusive culture.** Our statistics are of those in our career framework, that is, permanent and fixed-term employees, as well as our Beca Group Limited (BGL) Board members.

## COUNTRY / BRANCH

### New Zealand

	2019	2020	2021
Auckland	1121	1196	1147
Christchurch	308	316	307
Dunedin	31	38	39
Hamilton	142	143	142
Whangarei	-	-	6
Nelson	13	14	20
New Plymouth	32	35	34
Palmerston North	10	11	10
Tauranga	238	271	274
Wellington	287	294	268
Queenstown	7	6	9
<b>Totals</b>	<b>2189</b>	<b>2324</b>	<b>2257</b>

### Australia

	2019	2020	2021
Adelaide	4	1	1
Brisbane	41	37	35
Canberra	22	24	21
Melbourne	261	256	254
Sydney	133	135	118
<b>Totals</b>	<b>461</b>	<b>453</b>	<b>429</b>

### Asia

	2019	2020	2021
Indonesia	114	117	131
Singapore	141	144	125
Thailand	114	113	93
Myanmar	40	42	38
Philippines	2	5	6
<b>Totals</b>	<b>411</b>	<b>421</b>	<b>393</b>

## Pacific Islands / other

	2019	2020	2021
New Caledonia	10	10	11
Fiji	4	2	1
Other	5	-	-
<b>Totals</b>	<b>19</b>	<b>12</b>	<b>12</b>

## NATIONALITIES

### Employees

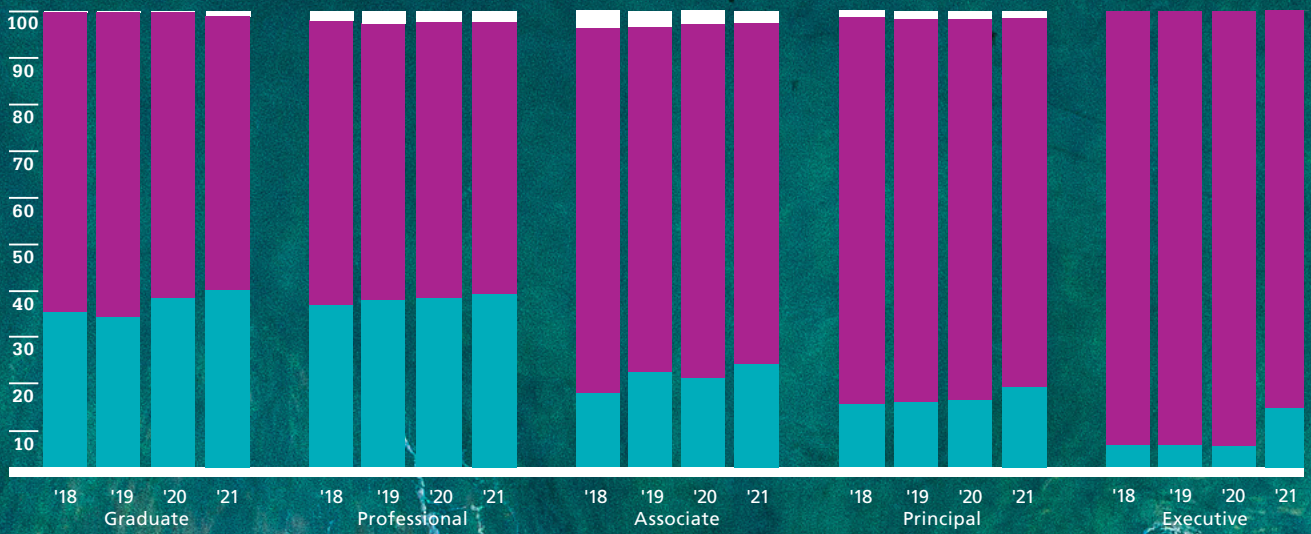
	2019	2020	2021
New Zealander	52.4%	51.0%	51.0%
Australian	9.6%	9.0%	9.0%
British	7.5%	7.0%	6.5%
Indonesian	3.3%	3.0%	4.0%
South African	2.3%	3.0%	2.8%
Malaysian	2.3%	2.0%	1.8%
Singaporean	2.3%	2.0%	2.0%
Thai	1.9%	2.0%	1.8%
Chinese	1.4%	2.0%	1.8%
Indian	1.6%	2.0%	1.8%
Myanmese	1.6%	2.0%	1.5%
American	0.8%	1.0%	1.0%
Filipino	0.8%	1.0%	1.0%
Irish	0.9%	1.0%	0.8%
Canadian	0.5%	1.0%	0.7%
Iranian	-	1.0%	0.5%
Unknown	5.3%	6.0%	5.6%
Other	4.7%	6.0%	6.0%



# Employees

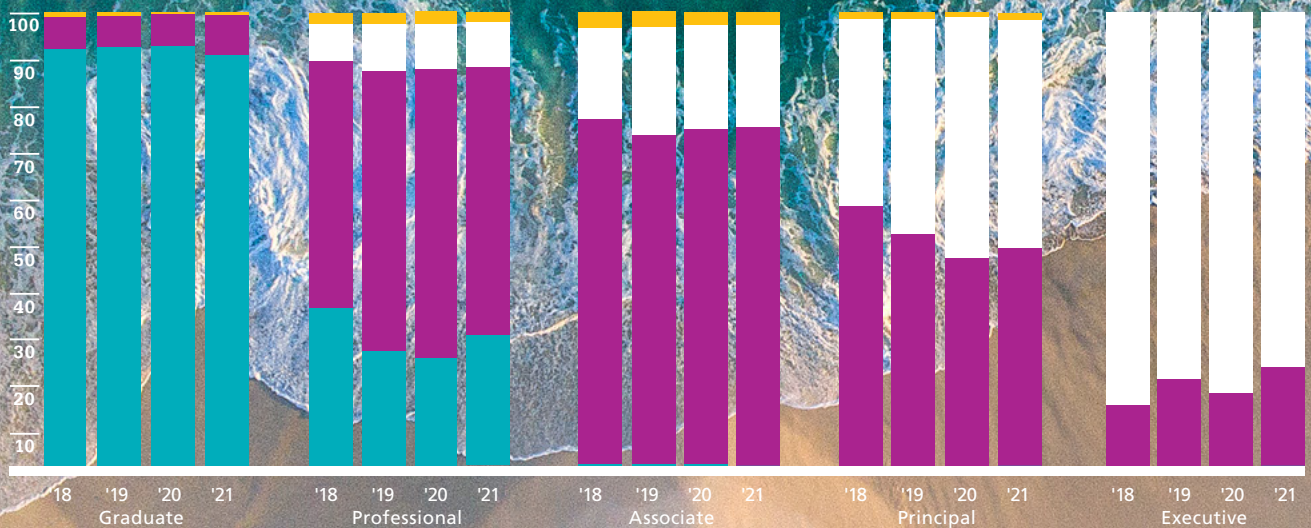
## GENDER

● Female ● Male ● Not Specified



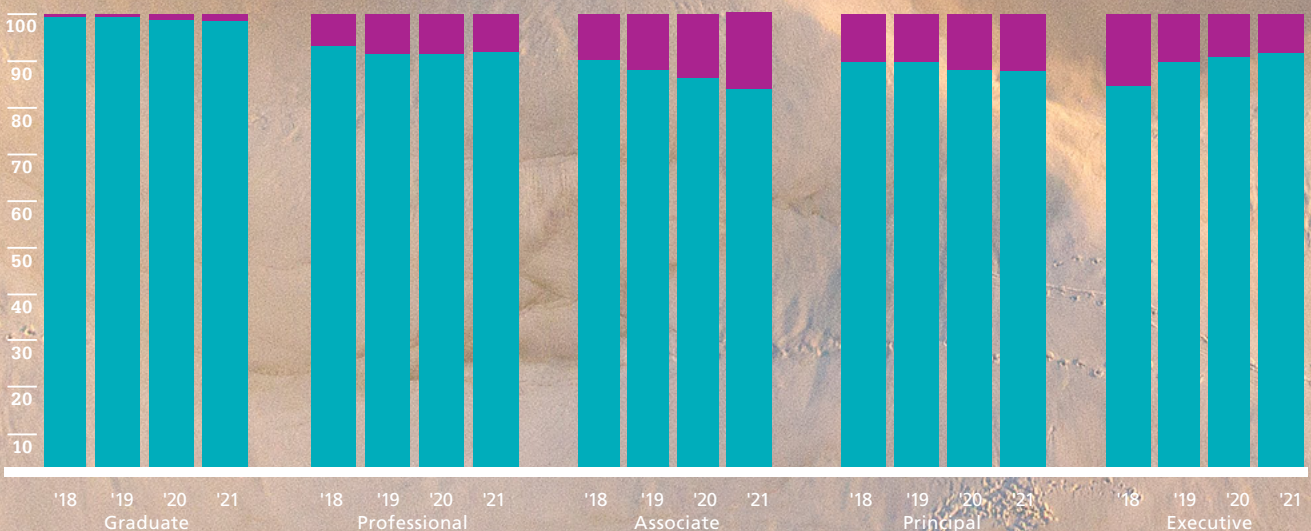
## AGE

● <30 ● 30 to 50 ● >50 ● Not Declared



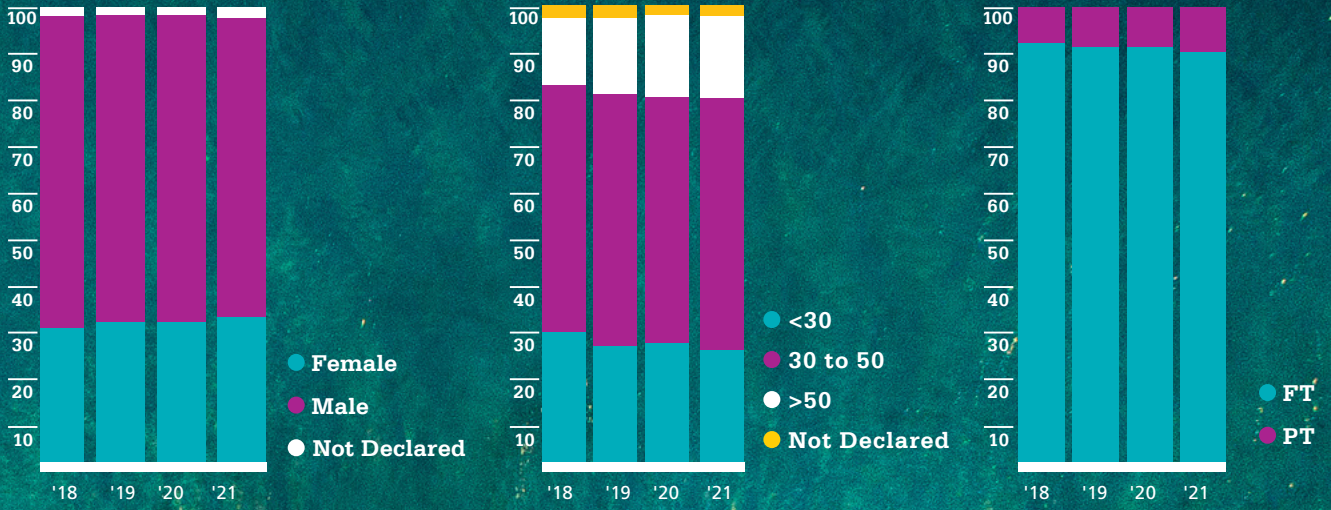
## FULL TIME/PART TIME

● Full Time ● Part Time



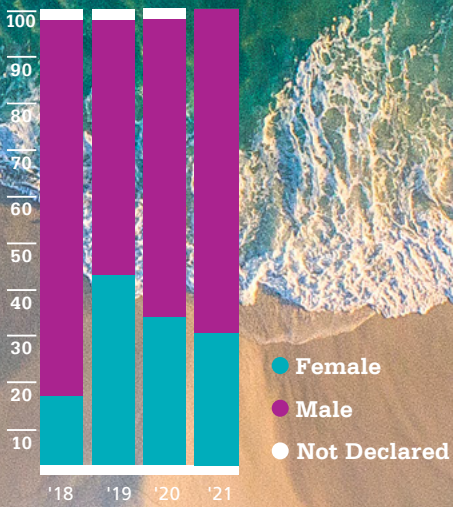


## ALL STAFF GENDER, AGE, FULL TIME/PART TIME



## Board Members

### GENDER



## Total Head Count

'18	'19	'20	'21
<b>3071</b>	<b>3132</b>	<b>3210</b>	<b>3091</b>





## Health and safety

### FY21 Objectives

- Embed our HSE behaviours through proactive leadership, increased awareness and positive messaging.
- Our key risks are understood and managed across the business with a specific focus on ergonomics and psychological health.
- Promote positive environmental protection through reducing our carbon emissions and achieving our group wide ISO14001 accreditation.

Despite the challenging year we have made good progress towards achieving most of our FY21 Group HSE Objectives. We have been able to adapt training to online delivery including Psychological Health workshops for our people leaders and Helping Others for our employees. Based on a 3-year rolling period (starting FY18) almost 1,500 people have attended Psychological Awareness training. We have seen an almost 190% increase in unique intranet page views about office HSE risks and ergonomics, and a 9% decrease in ergonomic related injuries.

### FY22 Objectives

Our focus continues to be on embedding our desired culture, reducing specific HSE risks and living our HSE behaviours, supporting the physical and psychological health, safety and wellbeing of our employees, and implementing positive environmental and sustainable solutions.

- Embed our HSE behaviours through proactive leadership, increased awareness and positive messaging.
- Actively encourage, support and educate our people to become healthier and happier versions of themselves.
- Our Key HSE Risks are understood and managed across the business.

We will undertake our bi-annual Group HSE Culture Survey in FY22 to inform specific actions and improvement initiatives in support of the HSE Objectives. We will also continue to respond to the COVID-19 pandemic in line with our objective to Keep our People Safe and Keep Our Business Strong.



## Community Partnerships

We proudly support our local communities including through pro-bono services, partnerships and strategic relationships. Great examples include:

### **Strategic Partnership – iDiC (Indigenous Defence and Infrastructure Consortium)**

This year Beca signed a strategic relationship agreement with iDiC. iDiC was established in 2016 as an Indigenous owned organisation that aims to develop sustainable future Indigenous and Torres Strait Islander owned and managed businesses. It achieves this by acting as a supply chain aggregator for Indigenous and Torres Strait Islander businesses seeking to participate in the delivery of long-term Nation building projects.

As one of iDiC's 12 key strategic partners the aim of our relationship is to facilitate, encourage and grow the Aboriginal and Torres Strait Islander business sector through employment, supply chain and cultural engagement across Beca.



Craig Lee and Adam Goodes



## Wainuiomata Sanctuary

Described by the BBC as “about as un-bird like as it is possible for a bird to be,” the Kākāpō is undoubtedly among the most unique and enigmatic avian species of the world. Once widespread throughout New Zealand, the world’s biggest and only flightless parrot now pads softly along the forest floor of just a few predator-free islands. To be reintroduced to the mainland, the Kākāpō would need a large sanctuary with mature rimu trees and no predators.

Currently in planning stages, the Wainuiomata Sanctuary would meet just these specifications, encompassing a valley of 3,350 hectares of intact lowland forests in the southern North Island. Due to the Wainuiomata Sanctuary’s high biodiversity value, ongoing pest management activities have already kept predator numbers low. Fencing the area would support further predator removal. The proposed fence would be 28km long, have an estimated price tag of 14 million dollars, and take 3 years to build. Beca had the opportunity to evaluate the feasibility of the proposed fence line, offering geotechnical expertise including assessing potential natural hazards, slope stability, access and drainage of the fence route.

The sanctuary would be fifteen times the size of Zealandia Sanctuary and the largest and most ambitious predator-free enclosure yet, providing habitat for many endangered and threatened species like the rowi kiwi, saddleback, hihi, kaka and kakariki. The Wainuiomata catchment would also protect various fish and invertebrates that live in the streams that ultimately supply 15% of Wellington’s water. It could also double the world’s population of Kākāpō by re-establishing them on New Zealand’s mainland, where the parrot would once again be free to clamber up trees and feast on the fruit of its beloved rimu tree.







## **Southern Pacific Indigenous Engineering Students Association**

In FY21 Beca provided a \$20,000 sponsorship donation, mentoring, and CV and interview coaching for the University of Auckland Southern Pacific Indigenous Engineering Students Association (SPIES).

Through Beca's ongoing relationship with SPIES we hope to increase our intake of graduates and interns of Pacific origin, supporting the wider engineering industry diversity agenda.

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### **BECA HAS CONTINUED TO SPONSOR A RANGE OF INDUSTRY EVENTS AND SCHOLARSHIPS INCLUDING:**

- Festival for the Future – a not for profit annual festival with a vision to empower young people to change the world.
- Techweek – sponsorship.
- Water New Zealand Conference – sponsor of the Young Water Professional of the Year award.
- Waikato Property Council – category sponsor of the Women in Property Award.
- Educational scholarships - University of Auckland, University of Canterbury, Ara Institute of Canterbury, WelTec & Waikato University. Educational scholarships for Ngāi Tahu tertiary students.
- Boon Street Art Festival
- Young Innovators Award – sponsorship.
- Wellington Regional Business Awards – category sponsor for the Gold Awards.
- Stormwater NZ Conference – Stormwater Young Professional Award.

We also provide donations to many charitable organisations including:

- OzHarvest – collection of non-perishable food items.
- Red Cross Pathways to Employment – a programme providing support to refugee students for tertiary education.
- Paws 4 Life Charitable Trust.



# 06

## Environmental Performance

### Greenhouse gas emissions

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

Our emissions reduction target takes an absolute emissions reduction approach and includes those emissions over which we have direct control, as well as all material Scope 3 categories including business travel, employee commuting and all our purchased goods and services. We have deliberately taken an inclusive approach to accounting for Scope 3 emissions to provide the broadest opportunity for influence and reduction of emissions.

#### Results:

For FY21, Beca Group's gross greenhouse gas emissions were estimated at 20,046 tonnes of carbon dioxide equivalent (t CO<sub>2</sub>-e).

This is a decrease of 41% compared to our baseline FY18 and a decrease of 31% from FY20, representing achievement of 2030 emissions target. Of this our NZ hub generated 10,624 t CO<sub>2</sub>-e, our Australian hub 5,496 t CO<sub>2</sub>-e, and our Asian hub 3,926 t CO<sub>2</sub>-e.

This year's GHG emissions were heavily influenced by the COVID-19 pandemic, which saw a number of our offices closed and many of our staff transitioning to remote working. While achievement of our 2030 emissions target is a milestone to be celebrated, our challenge for FY22 will be to harness the lessons of the pandemic to further reduce our emissions into the future.

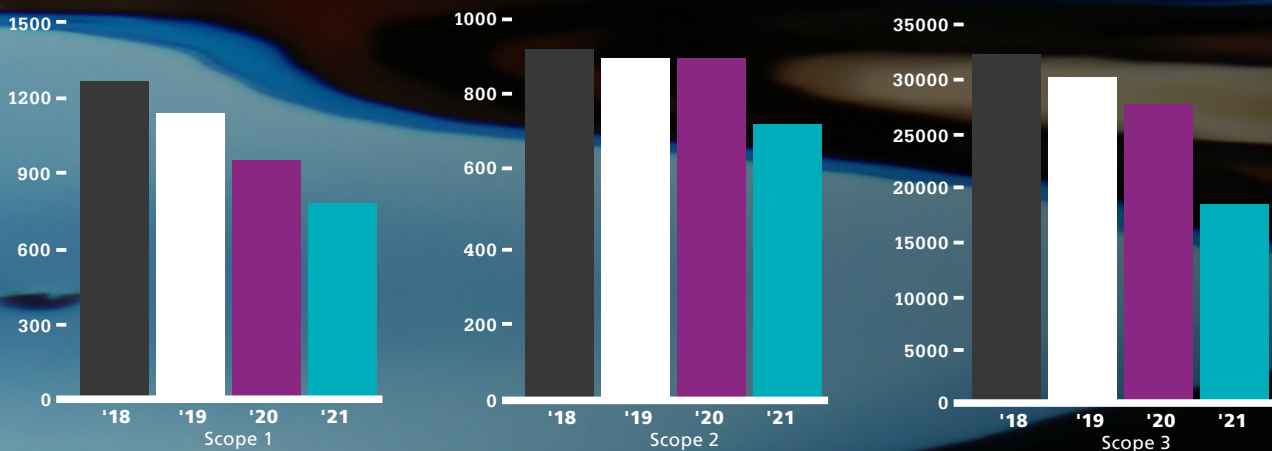
### Managing our impact

#### Focus areas for reductions in FY22 include:

- Drawing on the lessons from the COVID-19 pandemic to continue to challenge the way we do business while reducing our air travel, accommodation, and land-based transport.
- Continuing to engage with our goods and services providers to improve the influence over our supply chain emissions.
- Building energy efficiency through use of our B-Tune software.



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



### GREEN TEAMS

There were a number of highlights for our Green Teams in FY21. Our Singapore Green Team attained an Eco Office Certification Champion Award from the Singapore Environment Council. The award recognises the Green Team's initiatives to reduce carbon footprint and increase eco-consciousness, including institution of a monthly 'Zero Waste Day' to encourage reduction of single use plastics.

Our Green Teams across Australia and New Zealand continued to focus on raising awareness of sustainability issues within Beca and beyond. Key activities during the year included beach and river clean-ups, office rubbish audits, cycling challenges, tree planting and beeswax wrap making. In addition, our Green Teams undertook a variety of 'lunch and learn' sessions and ran several campaigns to highlight environmental issues and educate staff. All these initiatives helped us instil sustainability as part of everything we do.

### Trends FY21:

- Decrease in air travel across all hubs due to COVID-19 global travel restrictions.
- 24% decrease in land transport (fleet, rental cars, reimbursed mileage and taxis) compared to FY20.
- Working from home emissions were accounted for in the FY21 carbon footprint for the first time.
- Significant decrease in purchased goods and services spend. Largest cost reductions were seen in computer hardware, office operating costs and entertainment.
- Reductions in our Australia and Asia building energy were likely due to effects of extended COVID-19 lockdowns. No reductions in building energy were seen in New Zealand.

### Beca hub emissions **FY18-21**

<b>34,600</b>	<b>32,250</b>	<b>29,600</b>	<b>20,046</b>
'18	'19	'20	'21



# Financial performance

Beca delivered another impressive result for the year ending 31 March 2021, a significant achievement in the face of much uncertainty and disruption from Covid-19.

All of our business groups were successful in reporting higher net profit compared to the prior year, except for Digital where we made greater strategic investment.

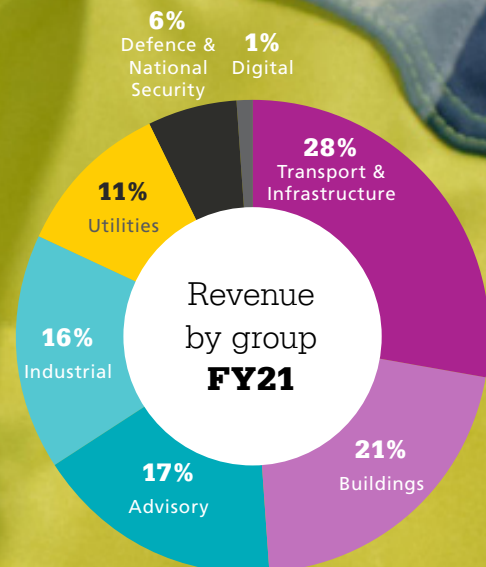
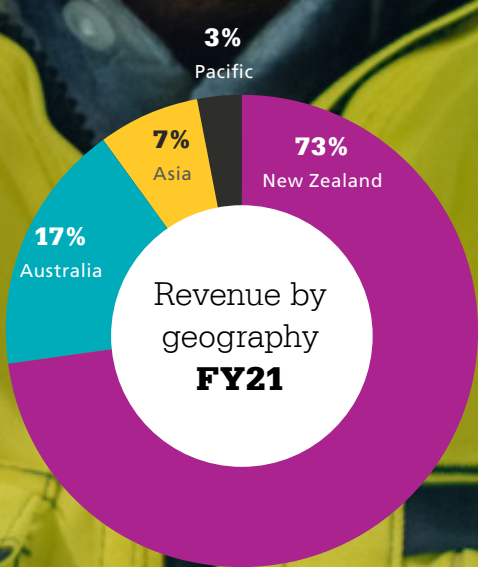
Geographically, our New Zealand business overall held up remarkably well over the year despite softness in those key markets most heavily impacted by Covid-19, with a higher year on year trading net profit. The net profit for our Australian business was significantly higher than the prior year and included the benefit of the Government JobKeeper subsidy. Of our three main operating companies, our Singapore operations were most impacted by Covid-19 with significant project deferrals and lower recovery of effort resulting in a trading loss, although the overall result was a net profit due to the contribution from the Government Job Support Scheme.

To date as a business overall we have successfully navigated the turbulence generated by Covid-19. Notwithstanding, ongoing disruption from the pandemic is still expected for the foreseeable future in many, if not most, of our locations and the global economy remains uncertain as many countries face significant ongoing difficulties in containing the pandemic.

We have a healthy, resilient business with strengthening strategic alignment that is driving improved performance, solid growth in most target markets, and more focused effort on accelerating progress on our five-year strategic goals.

<b>NZ\$ million</b> for the Year ended 31 March 2021	<b>New Zealand</b>	<b>Australia</b>	<b>Asia</b>
<b>Revenues</b>	<b>414.0</b>	<b>95.4</b>	<b>37.5</b>
<b>Operating costs</b>	Not disclosing	Not disclosing	Not disclosing
<b>Employee wages and benefits</b>	For commercial sensitivity reasons Beca Group chooses not to disclose wages or benefits publicly		
<b>Donations and community investments</b>	<b>0.8</b>	<b>0.1</b>	<b>-</b>
<b>Payments to/refund from Government</b> primarily income tax	<b>20.4</b>	<b>(2.7)</b>	<b>(4.2)</b>
<b>Total</b> monetary value received from the Government inc. tax relief, subsidies, investment grants, awards, assistance and incentives <b>NZ\$10.1m</b>			







**Appendix A**

# Key Project Awards, Recognitions and Milestones







**[Beca awarded the Deloitte Top 200 Sustainable Business Leadership Award](#)**

**[CH2M Beca and Western Water jointly awarded the Australian Water Association's 'Infrastructure Project Innovation Award \(Metro\)' Victoria for our creative use of digital technology across the Western Water network.](#)**

**[Finalist in the 2021 Beaton Client Choice Awards in two categories:](#)**

- Best Provider to Power & Utilities
- Best Built and Natural Environment Consulting Firm (\$200m+ revenue)

**[Beca Buildings team wins Hays Interdisciplinary Collaboration Award in the 2020 New Zealand Building Industry Awards](#)**

Beca Pty Ltd nominated as a finalist for the Naval Business of the Year, Consultancy Business of the Year and Estate and Infrastructure Business of the Year awards at the 2020 Australian Defence Industry Awards.

**[Beca Buildings received multiple awards at the Property Council of New Zealand Property Industry Awards 2020](#)**

The Talanoa Project shortlisted for the Inclusion, Diversity and Engagement Award and awarded a Commendation at the 2020 Commonwealth Association of Planners Awards.

**[Beca Group wins 2020 Gold Quill of Excellence Award from the International Association of Business Communicators](#)**

Beca receives a special award for continued support for the Wellington Region at the Wellington Gold Awards.

Beca announced as a finalist in the Most Innovative Hi-Tech Services Category at the NZ Hi-Tech Awards.

Te Hono – New Plymouth Airport Terminal wins Gold Pin of the Toitanga Awards at the Design Institute of New Zealand Best Design Awards 2020.

**[Beca wins the following awards at the 2020 Association of Consulting Engineers \(ACE\) New Zealand Awards Gala:](#)**

- Silver Award for the Bunnythorpe to Haywards Transmission Line Reconducting Project (delivered in partnership with Transpower).
- Silver Award for the Dudley Creek Flood Remediation Project (delivered in partnership with WSP).
- Merit Award for the Auckland Harbour Bridge Lighting Project (delivered by the Auckland Systems Management Alliance).

Beca Hamilton wins Best Professional Service in the Hamilton CBD at the Hamilton Central Business Association CBD Celebration Awards.



# People awards



Andre Kirstein highly commended at the 2020 NZiOB Awards, for the University of Auckland B507 Project

[\*Beca Awarded Randstad New Zealand's 'Most Attractive Employer' award in the Construction and Engineering Sector for the fourth year running.\*](#)

Blair Paterson, Stephen Witherden and David Barter nominated as finalists in the 2020 Australian Defence Industry Awards.

Briar Riddell selected as one of 10 women to join the first intake for the Women in Leadership Development programme in New Zealand.

Evie Wallace won Presentation of the Year and Young Author of the Year for her paper "IPCC Emissions Factors – Challenging a fortyfold jump in nitrous oxide."

Genevieve Steel named as a finalist in the prestigious Australian Defence Magazine Women in Defence Awards in the Rising Star Category.

Greg Williams voted President of IESANZ (Illumination Engineering Society of Australia and New Zealand).

[\*Kam Weng Yuen, Will Pank, Kevin Ip, Ronald Wessell and Liam Edwards invited to speak at the 2021 IABSE \(International Association for Bridge and Structural Engineers Congress in Christchurch\*](#)

Kristina Hermens elected to the Institution of Public Works Australasia (IPWEA) New Zealand board.

Lee Chuan Seng receives Distinguished Professional Engineer Award for 2020 from the Professional Engineers Board Singapore.

Lindon Jackson Highly Commended at the 2020 NZiOB Awards for the ANZ Raranga Project – Sylvia Park Tower.

[\*Ngata Tapsell & Stuart Bowden appointed to the Auckland Urban Design Panel.\*](#)

[\*Priscilla Steel appointed to the International Association for Public Participation \(IAP2\) Australasian Board of Directors\*](#)

The list recognises the top 50 senior technology executives in New Zealand who are driving innovation and influencing rapid change across their organisations and industries.







# GRI indicators summary



In completing this review, Beca has used the G4 Reporting Guidelines produced by the Global Reporting Initiative (GRI). These guidelines reflect good practice in sustainability reporting and we aim to report in accordance with the core G4 requirements. This table identifies where in the review you will find the information. The GRI component of the report has not been externally assured according to AA1000 AS/ISAE 3000.

Code	Description	Section
<b>Strategy and Analysis</b>	<b>G4-1</b> Statement from the most senior decision-maker of the organisation.	2. A message from our CEO and Chair
	<b>G4-3</b> Name of the organisation.	1. Who we are
	<b>G4-4</b> Primary brands, products and/or services.	1. Who we are 3. Our business
	<b>G4-5</b> Location of organisation's headquarters.	1. Who we are
	<b>G4-6</b> Number and names of countries where the organisation operates, and names of countries that are specifically relevant to sustainability	1. Who we are
	<b>G4-7</b> Nature of ownership and legal form.	1. Who we are
	<b>G4-8</b> Markets served including geographic breakdown, sectors served and types of customers	1. Who we are
	<b>G4-9</b> Scale of the reporting organisation including employees, number of operations, net sales, total capitalisation and quantity of products or services provided	1. Who we are 7. Financial Performance
	<b>Organisational Profile</b>	<b>G4-10</b> Total number of employees by contract and gender, total number of employees by region and gender
<b>G4-11</b> Total percentage of employees covered by collective bargaining agreements		Not listed
<b>G4-12</b> Organisation's supply chain		4. Our business
<b>G4-13</b> Any significant changes in the organisation's size, structure and ownership		1. Who we are 5. Creating value for our people
<b>G4-14</b> Whether and how the precautionary approach or principle is addressed by the organisation		3. Our business
<b>G4-15</b> Externally-developed economic, environmental and social charters, principles or other initiatives to which the organisation subscribed to		Not listed
<b>G4-16</b> List of memberships of association and national or international advocacy organisations in which the organisation holds a position on the governance body, participates in projects or committees, provides funding, views membership and strategic		Not listed







<b>Code</b>	<b>Description</b>	<b>Section</b>
<b>Identified Material Aspects and Boundaries</b>	<b>G4-17</b> All entities included in the organisation’s consolidated financial statements or equivalent documents, including any data that is not reported	B. About this review
	<b>G4-18</b> Process for defining report content and aspect boundaries and how the organisation has implemented the reporting principles	B. About this review
	<b>G4-19</b> All material aspects identified in the process for defining report content	3. Our business
	<b>G4-20</b> Materiality - whether the aspect is material to the organisation and any limitations	3. Our business
	<b>G4-21</b> For each material aspect, report the aspect boundary outside the organisation and whether the aspect is material outside of the organisation or not	Not listed
	<b>G4-22</b> Report the effect of any restatements of information provided in previous reports and the reasons for re-instatement	N.A.
	<b>G4-23</b> Any significant changes from the previous report	No change
	<b>G4-24</b> Provide a list of stakeholder groups engaged by the organisation	3. Our business
	<b>G4-25</b> Report the basis for identification and selection of stakeholders with whom to engage	3. Our business
	<b>G4-26</b> Organisations approach to stakeholder engagement including frequency and type	3. Our business
<b>Stakeholder Engagement</b>	<b>G4-27</b> Key concerns that have been raised through stakeholder engagement and how the organisation has responded	3. Our business
	<b>G4-28</b> Reporting period	B. About this review
	<b>G4-29</b> Date of most recent previous report	B. About this review
	<b>G4-30</b> Reporting cycle	B. About this review
	<b>G4-31</b> Contact point	B. About this review
	<b>G4-32</b> Report the “in accordance” option the organisation has chosen	B. About this review Appendix C. GRI indicators summary
	<b>G4-33</b> Policies and practice in place with regards to seeking external assurance	Appendix C. GRI indicators summary
<b>Governance</b>	<b>G4-34</b> Governance Structure and organisation, including committees of the highest governance body	3. Our business
<b>Ethics and Integrity</b>	<b>G4-56</b> Describe the organisation’s values, principles, standards and norms or behaviour behind codes of conduct and ethics	3. Our business






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everyday  
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