# Rebuilding Aotearoa New Zealand

June 2021

UNIVERSITY of OTAGO
Te Whare Wānanga o Otāgo
NEW ZEALAND

BUSINESS SCHOOL
Te Kura Pakihi

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* PBRF Quality Evaluation 2018.

# Rebuilding Aotearoa New Zealand

This issue focuses on sustainability and highlights some examples of the work that the Otago Business School is doing in this vital area of research.

The 2030 Agenda for Sustainable Development agreement set 17 global goals to achieve peace and prosperity for all. The Otago Business School was the first business school globally to explicitly commit to the goals and the University of Otago was the first New Zealand university to sign the international SDG Accord, and is actively contributing to these goals through its research, teaching and operations.

The 17 Sustainable Development Goals and 169 targets sets out the quantitative objectives across the social, economic and environmental dimensions of sustainable development. If achieved, these will mean the end to poverty, climate change and inequality in the world and ensure we are on the path to a sustainable future.

In this issue we present snapshots of the range of work on sustainability undertaken by the Otago Business School staff. Much of this work is in partnership with business, government and the community. We are committed to deepening our focus on these partnerships and on contributing to a better world.

# New ways of work and study for a brighter future

**Dr Chris Paton**
Department of Information Science

The COVID-19 pandemic has brought in a sea-change in how we can deliver high-quality education to students at a distance. Although it was incredibly disruptive and difficult to introduce a distance education response at such a large scale and in such a short time, the pandemic has shown the potential for a dramatic reduction in climate-changing carbon emissions from students travelling around the world to attend in-person courses.

So called "new ways of working", mean that businesses around the world are closing offices and employees are choosing to work from home for at least part of their working week. This saves businesses costs, but also means that carbon emissions are reduced and that families can spend more time together. When used carefully and in moderation, video-conferencing tools such as Zoom and Microsoft Teams, together with online project management and collaboration systems, have made a new way of working possible that perhaps would have been hard to imagine just 10 years ago.

Students, too, have had to spend more time at home instead of attending in-person lectures. Pre-recorded online lectures delivered through popular Massive Open Online Course platforms have been with us since before the pandemic, but the real advance has been the potential to deliver high-quality real-time lectures, tutorials and support for students at a university-level. Using video-conferencing tools and online collaborative platforms, students can interact with lecturers and classmates in a similar way to face-to-face courses. For many students with work and family commitments, this offers a level of access to university-level education and qualifications that wasn't previously possible.

As the demand for higher education continues to grow around the world, the option of offering distance courses could significantly mitigate the rise in climate changing emissions from increasing numbers of international students. Some will always prefer to study together in the close-knit community that a university campus offers, especially for undergraduate programmes. For many postgraduate students, however, distance learning may be more convenient and will certainly play an important role in reducing carbon emissions.

At Otago, we're now using the latest technologies to deliver an innovative fully online Digital Health programme. Clinicians and professionals who wouldn't be able to take a significant break from their careers now have the option of becoming qualified in Digital Health. The same tools developed for "new ways of working" mean that they can discuss the opportunities and challenges of digitising the healthcare sector in real-time with lecturers, expert guest speakers and their fellow students without the impact on the environment that long-distance travel would entail.

# Why study sustainability?

**Dr Muhammad Nadeem**
Department of Accountancy & Finance

With sustainability becoming a hot topic of discussion at every forum and business meeting, and in every government policy setting, it has never been more important to integrate sustainability education into our curricula. We need to teach our future change-agents to think how they can meet the needs of the present, without diminishing opportunities for the future. Not only will it empower them to question the unsustainable business practices which endanger the planet, but also educate them to take responsibility for their actions and to contribute their vision for a sustainable future.

Our students are living in an era of many challenges; climate change has threatened each and every being on this planet. Human actions have resulted in visible signs of large-scale environmental and social harm associated with climate change, ecosystem destruction, resource depletion and pollution – demonstrating that our way of living is 'unsustainable'. Therefore, change is not an option; it is an absolute necessity. We humans are part of the environment we live in, and our relationship with it is crucial to our own survival and that of all other living entities on our planet.

Aotearoa is blessed with geologically fascinating landscapes and unique flora and fauna. It is also home to many endemic species – if they are lost here, they are lost forever. The actions of each individual add up to the total effect of humanity on our planet's ecosystem. If our current unsustainable business practices are continued, climate change has the potential to cause massive social, economic and environmental damage through rising sea levels and an increasing incidence of extreme weather events. Under these conditions, teaching sustainability curricula should be a major focus of our educational institutions. Sustainability Accounting and Reporting, taught at the University of Otago, is one such example. Today's students will become tomorrow's policy makers. What we teach them today will affect their lifestyle choices in the coming years. Sustainability education will facilitate attitudinal and behavioural changes that will support a more sustainable future – a future that Aotearoa's unique biodiversity and ecosystem deserve.

# Making fashion sustainable

**Associate Professor Lisa McNeill**
Department of Marketing

Overconsumption of non-essential goods, and subsequent waste generation, has detrimental consequences for individual wellbeing and sustainability of the environment and exemplifies the damaging effects of excess waste producing economies. One of the key industries of overconsumption, fashion and textiles, is also one of the key industries of the New Zealand economy. Currently, it is estimated that one quarter of all global emissions stem from the manufacture and consumption of retail goods such as fashion apparel. Although consumers are increasingly well-educated regarding sustainability, overconsumption is still common within these product markets. In New Zealand, approximately four per cent of our landfill is fashion textiles, with approximately three-quarters of textiles manufactured in New Zealand ending up in landfill (compared to less than one per cent regenerated into new fibre and less than 12% reused).
If current consumption trends continue, the apparel market in New Zealand is forecast to grow to $8.1 billion in 2024, with non-New Zealand produced fast fashion products (those deemed the most detrimental in terms of social, economic and environmental concern) making up 54.3 per cent of the market.

It is estimated that in Western households consumers spend approximately $7,500 per year on non-essential impulse purchases of retail items including fashion apparel. Despite this, consumers themselves are thought to severely underestimate or understand the extent of their actual impulse purchasing. This underscores the most significant issue in addressing apparel overconsumption: the consumer attitude-behaviour gap evident amongst modern shoppers. However, impulsive and all other forms of shopping behaviour have recently undergone a significant disruption which has paused consumers' normal routines of consumption. The COVID-19 situation has interrupted cycles of purchasing around the world in several ways – the most significant in New Zealand was when the purchase of many goods was effectively put on hold when physical stores closed, local online stores were unable to ship product, and manufacturing here and overseas shut down. Retail data suggests, however, that this COVID-19 pause did not disrupt New Zealanders' fashion buying behaviour for long, with retail sales of apparel soaring to new heights as soon as stores re-opened, and textile waste continuing to mount. There is opportunity for New Zealand to lead the way in stemming this flow of goods to waste disposal, with locally developed fashion product stewardship programmes such as USEDFULLY® offering support to apparel manufacturers in shifting focus to low-carbon production systems, where textiles are used to their full potential. Future-thinking initiatives such as this tell us that there is hope for a fashion future that does not destroy our planet or country.

tvnz.co.nz/one-news/new-zealand/kiwi-fashion-labels-shifting-traditional-sales-methods-in-move-towards-sustainability

# Reconfiguring aviation for a climate-safe future

**Professor James Higham**
Department of Tourism

High transport emissions are a roadblock to global climate change mitigation. Before the closure of international borders and grounding of airline and cruise ship fleets, the global transport system produced a large and growing portion of the world's transport-related carbon emissions. In the year before the COVID-19 pandemic the total number of passengers carried on scheduled airline services increased 6.4 per cent to 4.3 billion. COVID-19 has presented a unique opportunity for structural reform of the airline and cruise industries, to achieve a climate-safe alternative to high volume, high carbon tourism.

Recent developments in Europe signal the need for aviation regime change. The French government has attached 'green conditions' to bailout terms for Air France, requiring the discontinuation of domestic flights on routes that compete with highspeed rail. To further advance changes in the aviation regime in response to the climate emergency, it will also be necessary to question the volume-based production of air passenger transportation. Our recent research has addressed the role that airline marketing communications play in shaping the *user practices and cultures* of air travel, in relation to demand volume and the turnover time of air travel consumption.

Analysis of the online marketing communications of selected airlines revealed three prominent tropes. We found that *adventure and discovery* were deployed to create consumers as travellers in differentiation to normalised understandings of the mass tourist. *Privilege* was used to construct cultural capital by conferring prestige and class distinction. Perhaps most notably, all airline communications used strategies to create a *sense of urgency* and fear of missing out on cheap flights, to accelerate air travel decisions. Time was deployed artificially through explicit references to closing flight sale and limited seat availability to create a sense of supply disruption and give an impression of resource scarcity.

Every part of our society and economy must be accountable to climate action if passing +1.5°C and the absolute limit of +2.0°C is to be prevented. Global aviation is no exception.

Our research reveals that airline marketing communications foster moral disengagement by promoting the personal benefits of air travel, while downplaying or suppressing altogether the ethical elements of consumption. From a consumer perspective, persuasive airline advertisements activate the desire for carbon intensive lifestyles, which recent research in Germany has shown to contradict the environmental values of consumers.

Parallels can be drawn between airline marketing communications and other industries that have used glamorisation, image, packaging and purchase incentives to encourage the (over) consumption of damaging consumer products. We now see emerging evidence of 'green shoots' in some airline marketing campaigns. The KLM 'Fly Responsibly' campaign introduces a social marketing nuance that mirrors efforts to reduce alcohol harm. It suggests that a flight (drink) or two is fine, but moderation is required to avoid flying (drinking) too much. While aviation will remain important to geographically distant destinations such as Aotearoa, interventions are likely to be needed to shift aviation away from volume demand, to a climate-safe model of production and consumption.

James Higham (University of Otago)
Paul Hanna (Surrey University)
Debbie Hopkins (University of Oxford)
Scott Cohen (Surrey University)
Stefan Gössling (Lund University)
Nicole Cocolas (University of Queensland)

# A tale of two cities: Lessons learned from Day Zero

**Dr Willem Coetzee**
Department of Tourism

A decline in rainfall due to climate change, poor maintenance of water infrastructure, unexpected population growth, positive tourist arrivals figures (pre-COVID-19), and an increase in accommodation to cope with visitor numbers were all factors that contributed towards *Day Zero* in Cape Town. For some parts of Aotearoa, these factors might sound very familiar.

In April 1990, the South African Water Research Commission warned that *"Water supplies for the city are expected to run dry in 17 years".* They might have missed the correct date by a few years but the warning was accurate – in November 2018, *"Day Zero!"* was imminent. Cape Town municipal water supplies were officially about to run dry, and everyone in Cape Town was limited to 50 litres of water per day. In 2019 the situation got worse, and the local government started to put emergency plans in place. The taps were scheduled to be turned off in a matter of weeks. At that point, people would have been limited to collect their daily allowance of 25 litres per person from 149 points around the city. Apart from the obvious environmental impacts, the social and economic effects were enormous.

Overnight, tourist numbers plummeted, events got cancelled, and residents started to campaign for people to "stay away". A sense of desperation was in the air, and world media commented that Cape Town might be the first city to run out of water in the modern era. Although many other cities are facing similar issues, Cape Town has got the message: *every drop of water counts.* Within months, the city had cut its water consumption from 1.2 billion to 515 million litres per day, setting the benchmark for cities worldwide. The one industry that started to *save-like-a local* was the tourism and hospitality industry. In my interviews with hotel managers, we identified more than 75 interventions to make hotels more water-wise.

Currently, stage one water restrictions are in place across Auckland. The city faces a decline in rainfall; from November 2019 to May 2021, average rainfall has been 1,879mm compared to the expected 2,553mm over this period. Dam levels are below the average storage levels, and water infrastructure needs urgent attention. Auckland is struggling to cope with population growth, and there is an increased demand for fresh water. We've also seen a rise in accommodation establishments to cope with the positive increase in visitor numbers (pre-COVID-19). It all sounds too familiar. Like Cape Town, Auckland faces grave risks to water security, economic security, job security, food security, and social security. The city needs to adapt to a "new normal," and we need a whole society approach to avoid a *Day Zero* in Auckland. Water consumption habits need to change in Aotearoa to ensure access to water and sanitation for all (Sustainable Development Goal 6).

# Financial pathways towards sustainability

**Dr Sebastian Gehricke**
Department of Accountancy & Finance

As the economy of Aotearoa recovers and transforms from the COVID-19 lockdowns, there must be a focus on sustainability. Recently the Aotearoa Circle Sustainable Finance Forum released its roadmap for action, outlining the pathways that New Zealand's financial system must pursue in order to become sustainable. One of the key recommendations is that of capability building for practitioners of the industry, the public sector, directors and managers and the public. Part of this recommendation is to *"incorporate sustainable finance into the formal education system".*

The Climate and Energy Finance Group (CEFGroup), led by Drs Diaz-Rainey, Roberts and Gehricke, is contributing to this transition substantially, leveraging the expertise of the academics involved. CEFGroup builds the capability of the not-for-profit, community trust and Iwi sectors, University of Otago finance graduates and the general public.

In 2019, CEFGroup partnered with the New Zealand Super Fund to launch the annual Assembly of Investment Chairs (AOIC). The AOIC is a free invite-only event for New Zealand charity, community trust, public sector superannuation fund and Iwi investment committee chairs with the aim of disseminating knowledge around how these entities can invest more sustainably. The first event was to disseminate knowledge from industry leaders and academics on sustainable finance and climate change. The second AOIC, in 2020, was focussed on Environmental, Social and Governance (ESG) investing for a COVID recovery and this year's event will focus on ESG investing for impact. ESG investing is synonymous to sustainable investing, that is, to make investment decisions, while considering and emphasising environmental, societal and governance practices and impacts. This year the group will also start to develop professional development courses in sustainable finance.

CEFGroup is also a leader in the Asia-Pacific region, and particularly in New Zealand, in developing a formal sustainable finance curriculum. The group has a long-standing master's level course; FINC 420 Climate and Energy Finance. This year a new course has been developed, as a first in New Zealand; FINC 399 Sustainable Investing. These courses, and more as resources allow, will enable our graduates to have the cutting-edge skills to excel and lead the industry into a sustainable future.

Lastly, CEFGroup is also starting to disseminate knowledge to a broader audience by distributing knowledge at community events. Dr Gehricke recently started this with a workshop at the Earthbeat festival at Te Atiu, which was well received.

# On the Case for Sustainability

**Dr Sergio Biggemann and Jude Chelliah**
Department of Marketing

The Otago Business School has a long and successful history hosting and participating in business case competitions locally, nationally and internationally. Six competitions in various formats have already been held since the start of the year, with another full schedule planned for semester 2.

Otago Case Competition Leader Jude Chelliah says: "As a critical pillar of business models, applying and measuring the value of sustainability in business cases has become a key consideration. Standout student competitors, academic leaders and industry specialists have all provided valuable training and expert knowledge in business sustainability."

She says a case competition gives students the chance to address a significant problem and think boldly, consider relevant business problems that companies face every day and, most importantly, position the actual circumstances where a combined problem of business survival and achieving sustainability are necessary.

"Case competitors are expected to come up with creative propositions that solve both problems."

She says most case competitions have a focus on sustainability and one of this year's case competitions will focus wholly on a social enterprise challenge.

"Students are given the opportunity to understand the challenges facing the business, analyse the data and specifics relative to the considerations of the United Nations Sustainable Development Goals and finally present their findings and strategy to business and academic leaders."

In July this year students will compete in a social challenge-related case competition at the Business School.

Dr Sergio Biggemann, Business School case study mentor since 2012, says: "Business case competitions help develop creative and innovative thinking, as well as decision-making skills that students will need to lead the economic recovery, by reimagining new paths of development that embrace not only economic recovery but also secure sustainability."

# Sustainable business futures through the DBA

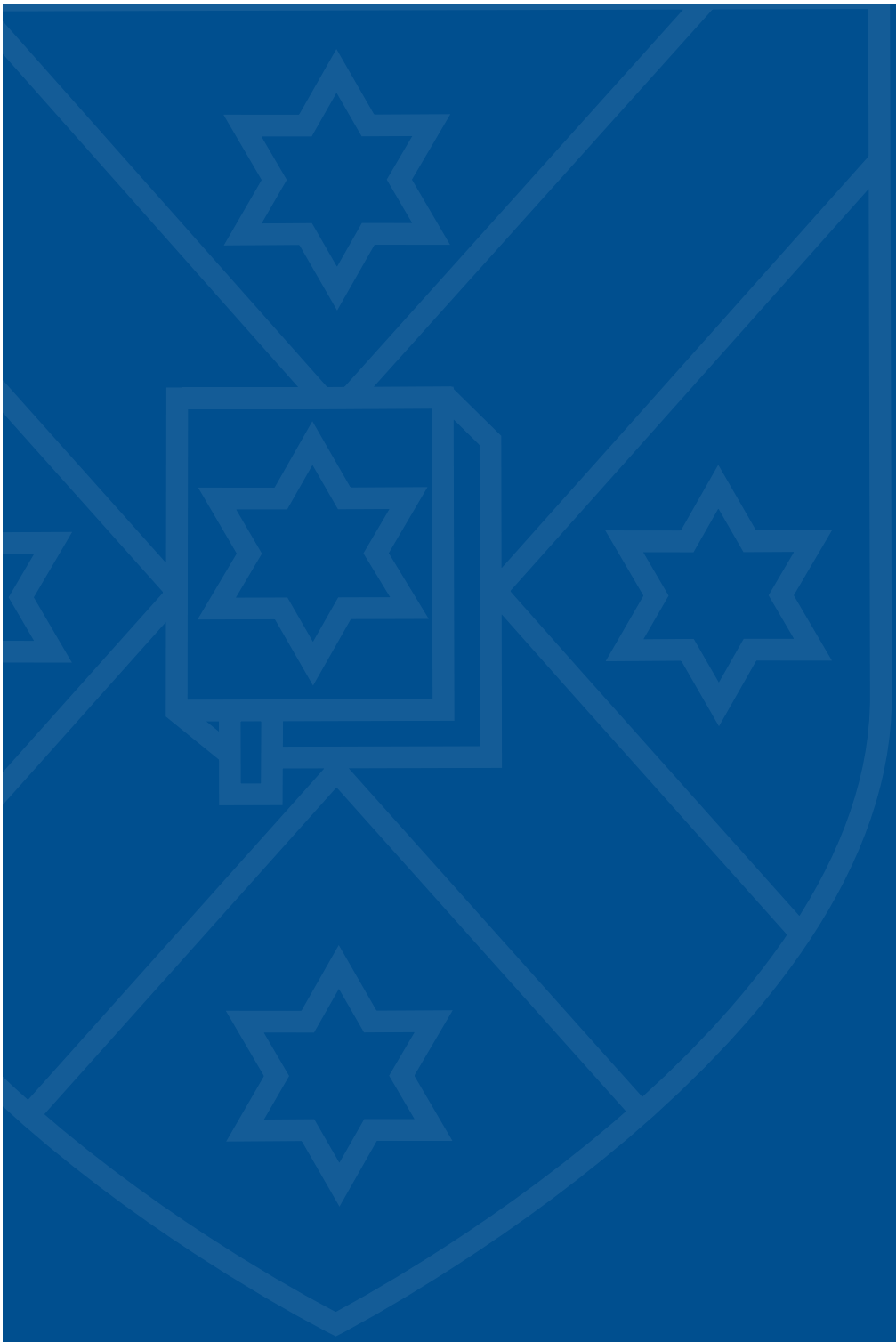
**Dr Sarah Carr**
DBA Programme Director

The call for businesses to become more sustainable is increasing and many companies are adopting what they call sustainable practices. Teaching sustainable business to students at the Otago Business School has been an area of importance for many years. As future employees and business owners, today's students will be positioned to make changes in the way business is done into the future.

The Doctor of Business Administration (DBA) degree is still relatively new for the Otago Business School. As the programme was developed, the Business School focused on including content specific to Corporate Social Responsibility and Sustainability. Of the three compulsory courses during the first year, one is dedicated to corporate social responsibility. This is a theme that many of the elective courses also pick up on, including the course on sustainable business. In line with the Global Goals for Sustainable Development we see sustainability holistically – environmental, social and economic. These three tenets are interconnected and need to be embedded in making change within organisations.

We often try to simplify the world around us but sustainability problems call for complexity and amplification. Through this programme we help the students explore how they can develop mental models that capture this complexity. We largely concentrate on the possibilities for change towards sustainability and how the students can become drivers of change in different contexts. This helps them to find solutions relative to their own business problems and world view.

As the DBA has developed there has been growing interest from the Pacific region. We see this as an opportunity to support not only student learning, but also the development of solutions to problems associated with the Global Goals for Sustainable Development throughout the region. This is very relevant for many of our Pacific students, who are senior public sector employees and are in a position to influence sustainable policy development in their own countries. This has resulted in several Pacific students taking a sustainability problem as the core focus for their research projects in the Otago DBA.



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