

# CLIMATE CHANGE AND SUSTAINABILITY

Summary Report FY20/21

# He mihi

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**Ka tangi te manu kōrero!  
Ka rongo te tangi kōrihi!  
Ka wāwā mai rā ki roto i te  
Wao-nui-a-Tāne! Tūturu whiti!  
Whakamaua kia tina!  
Haumie hui tāiki e!**

The bird's cry shall flow endlessly. Hear the melancholy song resonate, sourced from the inner domain of Tane. A permanent melancholy form. Fixed in alliance, yes fixed in alliance, gathered and woven together!

**E ngā mana, e ngā reo, e ngā  
karangatanga maha o te motu,  
taku hei iti nei, mā te hau e ripo hei  
hari i ngā kupu whakamaanawa e.**

To all authorities, all voices, the many affiliations, greetings. Let the swirling wind carry esteemed salutations.

**Kei ngā mate tuatinitini o te motu  
tangihia rā koutou. Haere ki te wā kāinga,  
haere ki te kāinga tūturu.  
Haere, haere, haere.**

We lament the passing of loved ones throughout the land. Return to the home of all time. Farewell, farewell, farewell.

**Tāmaki Makaurau Tāmaki Herenga  
Waka, kei te mihi. Ngā Mana Whenua  
me ngā waka ō ngā tai e wha,  
e mihi ana.**

We acknowledge Mana Whenua and their tribal authority in Tāmaki Makaurau Auckland. We also mihi to Mataawaka who have made Auckland their home.

**E tuku mihi maioha tēnei ki ngā  
mataawaka ō te motu ko koutou  
te puhiariki ō te waka nei  
Ki a koutou katoa ngā kaihoe  
ō te waka nei mo ngā tangata katoa.  
Tēnā koutou katoa.**

Sincere greetings to all those who decide which direction this waka takes. To you who strive to achieve the best results for all people. Greetings to you all.

**Mā te mahi ngātahi e taea ai ngā taumata.  
Nāku te rourou nāu te  
rourou ka ora ai te iwi.  
No reira noho ora mai,  
Mauri ora.**

We can achieve more by working together. With your basket and my basket, the people will thrive.

– Nā te Poari o (Auckland Unlimited)

# Foreword

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I am proud to share with you Auckland Unlimited's Climate Change & Sustainability Summary Report. Established on 1 December 2020, following a merger between Regional Facilities Auckland (RFA) and Auckland Tourism, Events and Economic Development (ATEED), Auckland Unlimited combines the power of Auckland's cultural richness with our successful destination management and economic development programmes. This report demonstrates our ongoing commitment to sustainability and climate resilience as we go forward as a new entity, regardless of the changing dynamics brought by the merger and the evolving challenges from COVID-19.

Our approach to climate change and sustainability as an organisation is about doing the right thing internally and externally. For example, as part of our corporate sustainability work, we measure and plan to reduce our emissions, and manage our environmental impacts. We also would like to ensure that our venues and public spaces continue to be climate resilient, inclusive, and accessible for all Aucklanders.

As the regional economic and cultural agency of Auckland Council, we contribute to and align with Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan by collaborating with council, other Council-controlled organisations (CCO's) and stakeholders to support programmes that help Auckland's transition to a resilient and regenerative economy. As with other parts of our programme, we will work closely with Auckland's priority industries as they transition towards a more sustainable future.

As we settle into our new organisational structure, we will take steps to develop an overarching climate change and sustainability strategy, with detailed targets and initiatives that will set our pathway towards not only being a low carbon, resilient organisation, but to continue to play a key role in supporting Auckland economy's transition.

This report highlights some of the actions and activities we have undertaken across Auckland Unlimited throughout the last financial year.



**Nick Hill**  
CHIEF EXECUTIVE  
Auckland Unlimited

# Contents

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<b>He mihi</b>	<b>2</b>
<b>Foreword</b> by Nick Hill	<b>3</b>
<b>About Auckland Unlimited</b>	<b>5</b>
<b>Our organisation’s climate and sustainability commitments</b>	<b>6</b>
<b>Auckland Unlimited’s corporate sustainability</b>	<b>7</b>
Taskforce on Climate-related Financial Disclosure (TCFD)	8
Corporate emissions	9
Environmental stewardship	11
<b>Building a low carbon, resilient economy</b>	<b>12</b>
Auckland economic climate change risk assessment	13
Climate innovation hub	14
Supporting sector transition to a low-carbon economy	16
Visitor economy sector	16
Screen sector	18
Low impact major events	19
<b>Next steps</b>	<b>20</b>



# About Auckland Unlimited

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Auckland Unlimited – Tāmaki Makaurau Auckland’s economic and cultural agency committed to making our region a desirable place to live, work, visit, invest and do business.

Auckland Unlimited was formed from a merger between Regional Facilities Auckland (RFA) and Auckland Tourism, Events and Economic Development (ATEED); it combines the power of Auckland’s cultural richness with our successful destination management and economic development programmes. Auckland Unlimited is one of four substantive Auckland Council controlled organisations (CCO).

Auckland Unlimited delivers a coordinated, region-wide programme to maximise cultural, social and economic benefits for Auckland residents and visitors. Driving investment and innovation, it supports Auckland businesses to thrive. Its work is undertaken in alignment with Auckland Council’s priorities and outcomes outlined in the Auckland Plan 2050, and the Auckland Council Economic Development Action Plan 2021-24. This includes contributing to Māori well-being and giving effect to the principles of Te Tiriti o Waitangi and the Treaty of Waitangi by continuing to integrate Māori culture as a key part of what the organisation represents and by promoting Māori economic and cultural outcomes.

In addition, to build a sustainable future focused organisation means that climate change response, Māori responsiveness, digital and data, and business resiliency are prioritised.

Auckland Unlimited’s purpose is: enriching cultural and economic life in Tāmaki Makaurau. It does this through pursuing the following strategic outcomes:

- Enhancing Auckland as a culturally vibrant city for all.
- Expanding economic opportunities for all Aucklanders.
- Providing an effective social, economic, cultural and environmental return on Auckland Unlimited’s investment.
- Enhancing Auckland’s local, national and global reputation and appeal.
- Increasing capital invested into Auckland for economic and cultural outcomes.

# Our organisation's climate and sustainability commitments

Auckland Unlimited plays a key role in the implementation of the economy section of Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan. Importantly, many of the objectives of the plan around resilience and economic sustainability have become even more urgent because COVID-19 has exposed some of the same vulnerabilities in our economy. As mentioned in the [Auckland Unlimited Statement of Intent \(SOI\) 2021-2024](#), the projects and programmes of work with businesses aim to support Auckland's transition to a more resilient and regenerative economy. Auckland Unlimited's corporate sustainability includes its contribution to Auckland Council group's emissions reduction target of 50% by 2030, and ensure Auckland Unlimited is prepared for the impacts of climate change.

Auckland Unlimited's Climate Change and Sustainability work has two components:

- Internal work with key stakeholders across Auckland Unlimited's assets and services to contribute to climate action and corporate sustainability. This focuses on building climate-resilience on Auckland Unlimited's assets and how it manages environmental, social, and economic aspects of its work programmes.
- External work with stakeholders across the Auckland region including businesses, council, council-controlled organisations and local boards to contribute to a sustainable Auckland. This focusses on how Auckland Unlimited can support and influence the local regions and sectors to decarbonise and build climate resilience. It continues leading with world's best practise in animal conservation, bringing people together to build a future for wildlife.

## INTERNAL

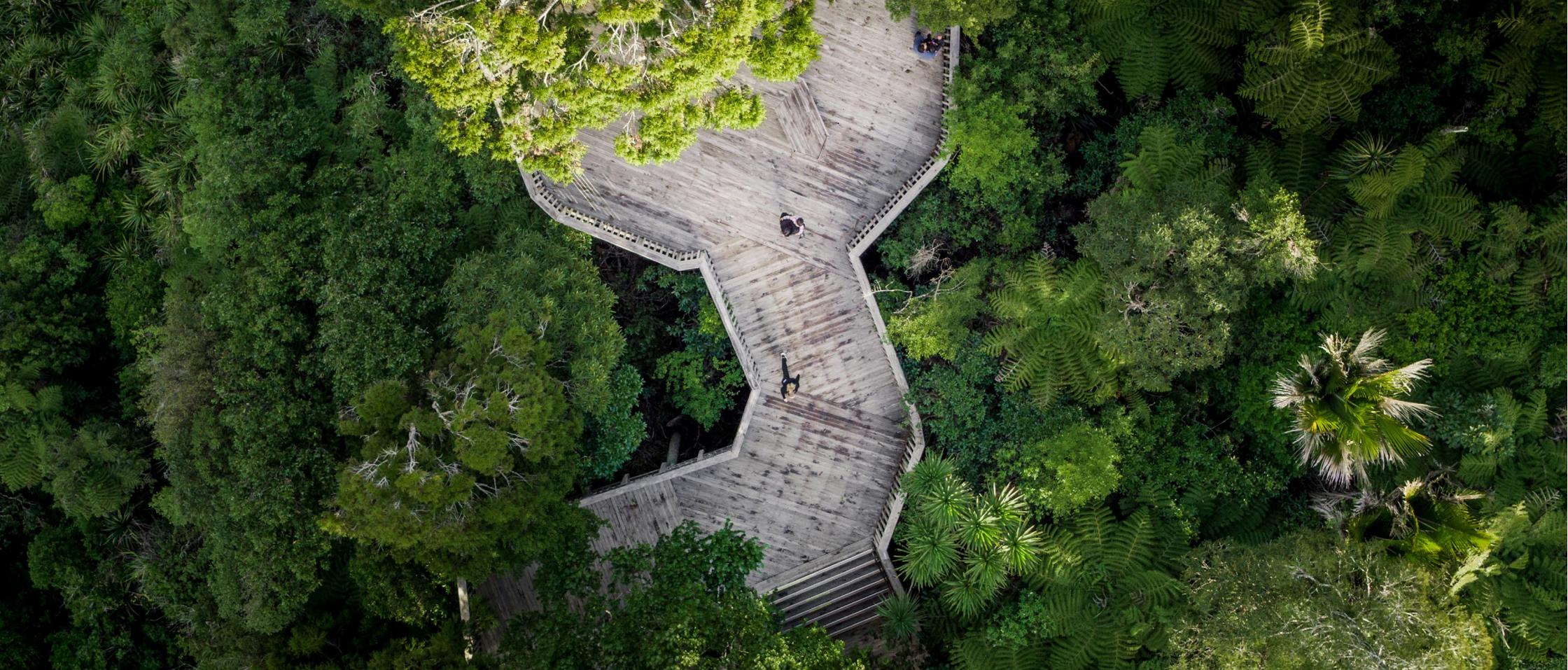
Contribution to climate action and corporate sustainability

- Annual measurement and verification of operational carbon emissions in accordance with ISO 14064-1:2006.
- Develop and implement an overarching emissions reductions plan (aligning with council group's emissions reduction target of 50% by 2030). This is to be done through a Toitū carbonreduce certification.
- Develop adaptation plans for the organisation (e.g. installation of water tanks for Auckland Zoo).
- Deliver on waste diversion from landfill targets (70-80% target depending on site or event – to be included in the environmental management system).
- Develop water and energy efficiency management plans for existing sites.
- Enable, support and deliver low-carbon events.

## EXTERNAL

Contribution to a sustainable Auckland

- Develop programmes to support businesses to transition to a low-carbon, resilient future including through regenerative economy practises and opportunities, and supporting investment in green technology and innovation.
- Develop a sectoral approach to decarbonise and build climate-resilience in collaboration with key partners. Initial sectors will focus on the visitor economy and screen sector.
- Establish a Climate Innovation Hub with a focus on examining pathways towards decarbonising Auckland's economy.
- Enable a space for environmental education and awareness, and wildlife conservation activities that will bring people together to build a future for wildlife.



## Auckland Unlimited's corporate sustainability

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It is important that Auckland Unlimited measures, manages and minimises the impacts of its operations – socially and environmentally. This means that it aligns its climate change and sustainability strategy to Te Tāruke-ā-Tāwhiri – Auckland's Climate Plan, and it means that it measures and verifies its operational carbon emissions in accordance with ISO 14064-1:2006. As a large organisation that delivers, hosts and sponsors events, waste is a critical issue to manage. Auckland Unlimited is also a big user of water and energy; therefore, an overarching resource efficiency plan is needed for its assets and services to

ensure it is not only reducing its emissions but it's optimising the use of precious resources. Across the organisation's various operational units, there is a lot of work already underway on community engagement and education, waste minimisation initiatives, influencing supply chains and reducing consumption of water and energy. However, there is room for more positive impact which will be explored in future planning and actions across the organisation.

## TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURE (TCFD)

In April 2021, the Financial Sector (Climate-related Disclosure and Other Matters) Amendment Bill was introduced to Parliament. Financial entities covered by the Bill (described as climate reporting entities) must make mandatory climate-related disclosures. Auckland Council is required to report under this Bill, as it is technically classified as a financial institution due to being a green bonds issuer. Auckland Unlimited – being a CCO of Auckland Council – is therefore also required to disclose its climate-related risks. Under the TCFD recommended guidelines, the climate-related issues are assessed in relation to (Source: [National Climate Change Risk Assessment for New Zealand](#)) :

- Physical risks: including direct damage to assets and networks, resources or supply chain impacts, liability due to failure to foresee and mitigate losses from any physical risks; and
- Transition risks and opportunities: including those associated with policy, legal, technological or market changes influencing supply and demand, customer expectations and reputation, as global and local systems transition to a low carbon economy.

Auckland Unlimited has made high-level disclosures as part of the [Auckland Council Group Annual Report- Volume 4](#) in FY 2019/20 and FY 2020/21. Alongside Auckland Council and other CCOs, Auckland Unlimited is preparing to deliver a more detailed TCFD report for FY 2021/22. Auckland Unlimited’s contribution entailed its verified emissions inventory, and a high-level review of the organisation’s risk management framework and climate-related risks identified through [Tāmaki Makaurau’s Economic Climate Change Risk Assessment](#).

This demonstrates Auckland Unlimited’s commitment to recognising climate change and the associated risks and opportunities, and shows it is working to better understand and manage its exposure. Auckland Unlimited sees TCFD reporting as an opportunity to:

- Improve and increase reporting of climate-related financial information
- Make better-informed decisions on where and when to allocate capital; and
- Better evaluate risks and exposures over the short, medium and long term.

The organisation’s current TCFD reporting does not meet the full requirements of the TCFD recommendations. In preparation for mandatory reporting by 2023, Auckland Unlimited has done a thorough independent assessment of the gaps in the current reporting. Additionally, the organisation has carried out a climate risk scenario analysis assessing the risks to assets and services using two different representative concentration pathways, RCP 8.5 and 4.5 (Figure 1).

In addition, a disorderly low carbon transition scenario has been assessed for Auckland Unlimited. The disorderly low carbon transition refers to a scenario where policies are delayed or conflicting across countries, or happen rapidly due to time limitation, or generally happen in unexpected and chaotic ways – and it would present significant economic challenges.

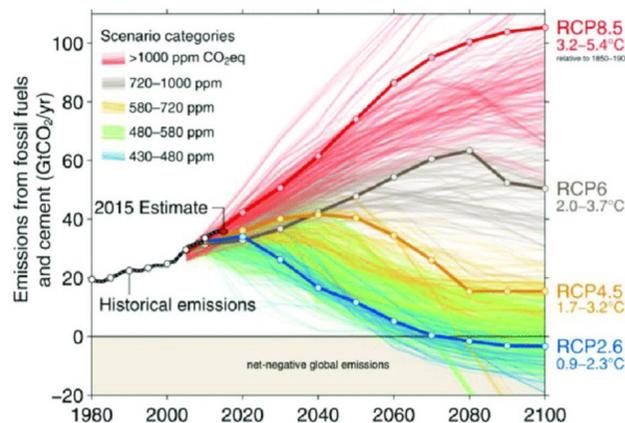


Figure 1: IPCC models for business as usual  
Credit: Neil Craik, University of Waterloo

“New Zealand is a world-leader in this area and the first country in the world to introduce mandatory climate-related reporting for the financial sector. We have an opportunity to pave the way for other countries to make climate-related disclosures mandatory”

- Minister of Climate Change, James Shaw

Auckland Unlimited has highlighted future actions to be implemented. These following high-level actions include:

- Integrate findings of the physical and transitional risk assessment into the pre-existing risk framework
- Develop an adaptation plan to track and manage progress on identified climate change risks.
- Develop a monitoring and evaluation plan closely tied to this adaptation plan to allow for transparent progress tracking to both internal and external stakeholders.
- Develop specific measures and targets to track climate risk and address transition risk across Auckland Unlimited’s assets.

## CORPORATE EMISSIONS

Auckland Council group has committed to reducing emissions by 50% by 2030, as part of its pathway toward net zero emissions by 2050. Auckland Unlimited measured its greenhouse gas (GHG) emissions as a new organisation in FY2020/21, although it was an unusual measurement year due to the merger of ATEED and RFA. Results were also reflective of the current context of New Zealand’s COVID-19 lockdowns and border closures.

Auckland Unlimited was awarded the world leading Toitū carbonreduce certification. Its programme requirements meet and exceed international standards and best practise.

Auckland Unlimited measured its GHG in accordance with ISO 14064-1:2006 and committed to managing and reducing its emissions across the organisation’s operations and assets.

The largest emissions sources Auckland Unlimited had in FY20/21 were electricity, gas and long-haul freight (Figure 2).

The organisation is in the process of reviewing its existing management and reduction plan that accompanies this base year inventory. The plan includes a range of actions, from data quality improvement to communications on how the different assets and services can play a part in reducing its corporate emissions.

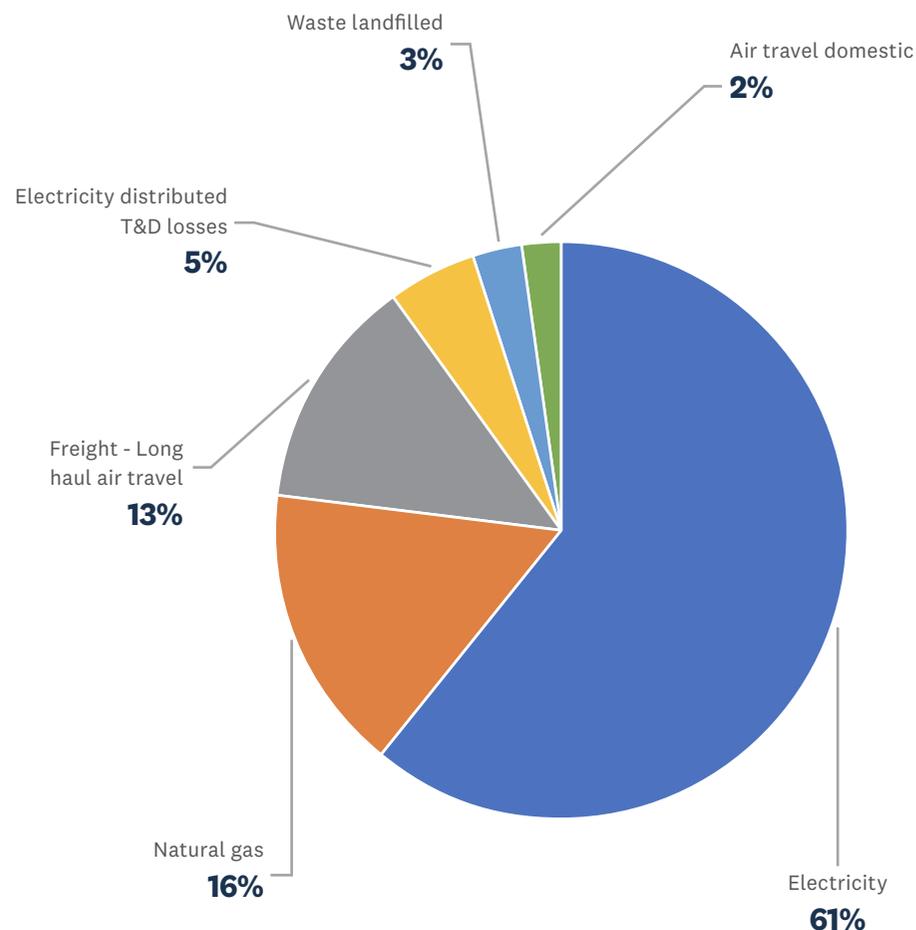


Figure 2: Auckland Unlimited’s Top 6 GHG emissions sources for FY20/21

“These are goals we must all take seriously. Our Toitū carbonreduce certification enables us to get a clear picture of where we are, and carve out a plan for where we can be.

It is important we all play our part to measure, track and improve.”

- Chief Executive, Nick Hill



## CASE STUDY TOITŪ CARBONZERO FOR AUCKLAND ZOO

Recognising the severe threat that human-induced climate change poses to life on Earth, and for the urgent need for the world's nations to prevent global warming of 1.5° Celsius above pre-industrial levels, Auckland Zoo is committed to ensuring it is not directly contributing to climate change.

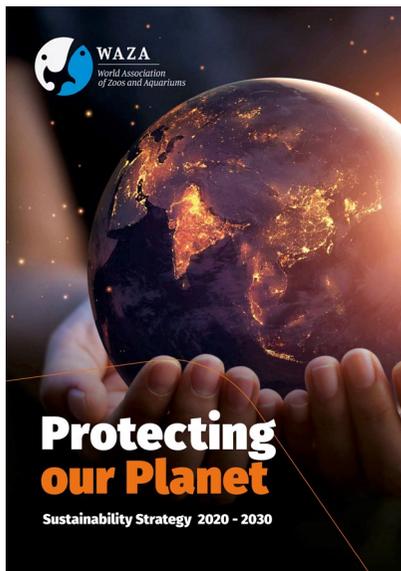
Auckland Zoo has been measuring and managing its carbon emissions with Toitū Envirocare since FY2015/16. The zoo developed a GHG emissions management and reduction plan and set targets with a commitment to reducing its absolute emissions annually – to achieve a 20% reduction by the end of FY2021/22. To fulfil its commitments to carbon neutral certification, the zoo purchases New Zealand Forest sequestration and restorations carbon credits to offset its residual emissions. Projects for reducing overall emissions include

- managing electricity emissions through initiatives such as the development of an Energy Efficiency Strategy, energy efficient designs incorporated into the planning phase for new buildings, and staff education campaigns;
- managing landfill waste emissions through the development of a waste strategy, implementation of a waste diversion system, and waste audits; and
- managing fleet fuel consumption by initiatives including maintenance and increased use of remote meeting technologies.

For 2020/21, Auckland Zoo achieved a 36% reduction in absolute emissions against base year (410tCO<sub>2</sub>e in FY2020/21, down from 637tCO<sub>2</sub>e in FY2015/16). The volume of waste sent to landfill during the year was reduced by 80% and emissions from the zoo's vehicle fleet was reduced by 9% (against a reduction target of 5%) from base year.

Auckland Zoo is one of the Auckland Unlimited institutions which has been leading in carbon measurement and reductions, having met the requirements of Toitū carbonzero certification for five years in a row. The Toitū carbonzero certification is one step further than the Toitū carbonreduce certification in which it neutralises its emissions by offsetting. Auckland Zoo has measured its GHG emissions in accordance with the requirements of ISO 14064-1:2006, committed to managing and reducing its emissions, and neutralised its remaining unavoidable emissions through the cancellation of an appropriate number of verified carbon credits in respect of the operational activities of its organisation.





Credit: The World Association of Zoos and Aquariums (WAZA)

## ENVIRONMENTAL STEWARDSHIP

Auckland Zoo's ongoing mission is to 'Bring people together to build a future for wildlife'. As a modern, zoo-based conservation organisation, Auckland Zoo demonstrates behavioural leadership to lead by example, and show how sustainable and environmentally friendly approaches and choices can be an option for all individuals and organisations across Tāmaki Makaurau Auckland. Through breeding programmes, conservation activities and educational outreach, the zoo continues to play a critical role in saving native and international species from habitat and climate-related loss.

As part of a global network of zoos leading with world's best practises, the purpose of wildlife conservation is commonly shared. The zoo provides an accessible gateway to reconnect people with nature, to enhance wellbeing, foster empathy, build optimism and mobilise social change for people to become powerful advocates for healthy communities and healthy ecosystems.

In 2020, The World Association of Zoos and Aquariums (WAZA) published its Sustainability Strategy 2020-2030. Titled 'Protecting Our Planet' the strategy provides a guide for zoos and aquariums in their journey towards integrating sustainability into their strategic thinking and their operational activities. It uses the framework of the United Nation's Sustainable Development Goals to help identify where zoos and aquariums can have the most influence and impact in their on-site and off-site programmes. As a member of WAZA, Auckland Zoo was involved in the development of Protecting Our Planet and has subsequently integrated the goals and objectives of this document into a reframe of its 2021-2026 Strategic Roadmap.

# Building a low carbon, resilient economy

The economy priority of Te Tāruke-ā-Tāwhiri, Auckland's Climate Plan has the goal to achieve "A resilient, low carbon economy, guided by our kaitiaki values, that supports Aucklanders to thrive". Auckland Unlimited has a vital role to play by implementing actions that will achieve this through projects and programmes that will support Auckland businesses to innovate and thrive. Auckland Unlimited acts on recommendations that are based on a strong evidence base – such as the Climate Change Commission's Advice and Tāmaki Makaurau Economic Climate Change. We are in the midst of establishing a Climate Innovation Hub and developing sectoral approaches to climate change and sustainability that will support Auckland's economy to decarbonise and build climate-resilience.

“With only decades left for decisive climate action towards net zero carbon by 2050, it is important for cities like Auckland to lead the way and stay the course for ambitious climate action”

- Mayor of Auckland, Phil Goff

## HOW IS AUCKLAND UNLIMITED SUPPORTING THE 'GREEN ECONOMY'?

The Invest Auckland team at Auckland Unlimited supports investors, multinational companies, and entrepreneurs to find business opportunities in Auckland. The 'green economy' is a focus sector, as the organisation attracts companies with clean and regenerative solutions – supporting a prosperous Auckland, while moving towards a net zero-emission and climate-resilient region.

Alongside continued business and investment attraction in the green economy, sustainability influences the team's work in all sectors. 'Greening' the construction, visitor, industrial and commercial sectors is a priority, as the team support clients looking to enter the New Zealand market to decarbonise Tāmaki Makaurau. This includes process heat solutions; transport; circular manufacturing solutions; plastic recycling; transport solutions; e-vehicle charging; e-transport solutions; and sustainable food and beverage processes.

Specific examples include assisting local electric jet company ZeroJet and circular design brand Critical with capital raising; and helping Australian company SAMI open Auckland operations to bring in more sustainable roading technologies.

## AUCKLAND UNLIMITED SUPPORTS BUSINESSES TO THRIVE

The Business & Enterprise team supports Auckland businesses to innovate and thrive through partnering and delivering programmes and projects that enhance Auckland's innovation ecosystem, support business growth, and enhance skills and talent. As part of these services, Auckland Unlimited enables businesses that are contributing to a more sustainable Auckland to grow. This includes supporting research and development (R&D) proposals to attain funding and providing access to the government COVID-19 Business support funding during 2020.

One of the many businesses Auckland Unlimited supported is [CarbonClick](#). Advisors successfully helped the company frame its R&D project to attain funding to grow the company through Callaghan Innovation's R&D co-funding programme.

'CarbonClick is a software company, using blockchain, AI and other technology to empower businesses and their customers to tackle global warming, by making carbon offsets simple and trustworthy.'



## AUCKLAND ECONOMIC CLIMATE CHANGE RISK ASSESSMENT

Auckland is already experiencing climate change impacts. During the past century, Auckland's mean annual temperature has increased by approximately 1.6 °C, and sea levels have risen by approximately 16cm. If global emissions continue to rise, sea levels are projected to continue to rise by up to one metre by the end of this century. To build climate resilience for the economy, Auckland needs to have the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate change that impact the economy. Building resilience to future climate shocks involves evaluating how climate change will create new, or alter current climate-related risks; then making plans to better cope with the identified risks.

Risks arising from climate change can be divided into two major categories: risks related to the transition to a low carbon economy, and risks related to the physical impacts of climate change. In this work, both have been considered.

This risk assessment was undertaken in two distinct phases. The first was undertaken between April and June 2020. The second between February and June 2021. Phase 1 was limited to risks and opportunities in relation to four priority sectors in the Auckland region. Limited engagement was undertaken due to COVID-19 restrictions. Phase 2 involved additional stakeholder engagement, expansion to consider risks to additional sectors (namely advanced manufacturing and technology) and specific consideration of risks and opportunities to Māori businesses. Literature available on the financial costs of not transitioning was also reviewed.

The result of this work has been formed into a technical report '[Tāmaki Makaurau economic climate change risk assessment](#)' that has been uploaded onto Knowledge Auckland. As part of this work, a report focused on Māori businesses '[Climate change in Tāmaki Makaurau: Understanding how risks and opportunities may be different for Māori Businesses](#)' has been published. These reports are excellent resources that can be used by businesses as a guide to identify the key relevant climate risks in their specific sectors, and to read about some of the actions identified by industries through the engagement workshops.

## CLIMATE INNOVATION HUB

Auckland's greenhouse gases can be broken down into five sectors: transport, stationary energy, industrial processes and product use, agriculture and waste – with transport and energy being the largest contributors (Figure 3) (Source: [Auckland's Greenhouse Gas Inventory to 2016](#)). As part of building an evidence base for Auckland's Climate Plan, Auckland Council developed an indicative emissions reduction pathway for reaching net zero by 2050 (Figure 4) (Source: [Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan](#)).

Although Auckland's emissions reduction targets relate to production-based emissions, it is important not to lose sight of reducing consumption-based emissions (e.g. consumption of goods and services, certain construction materials used in built environment and imported food). In addition, findings from the [Tāmaki Makaurau economic climate change risk assessment](#) have highlighted food systems and the built environment is most vulnerable to climate physical and transition risks – an essential focus to meet the needs of Auckland's growing population. Both pieces of evidence point to the key challenging areas of energy, transport, built environment and food.

To ensure Auckland meets its ambitious climate targets and to solve some of the climate challenges, there is a need for targeted climate innovation and collaboration across Auckland regions.

Auckland Unlimited has committed resources through the Long Term Plan to establish a Climate Innovation Hub – its key mission of activating climate innovation through collaboration and partnerships across sectors. The hub's model will be influenced by international examples such as [Climate-Kic Europe](#), [Climate-Kic Australia](#), and [Los Angeles Cleantech Incubator \(LACI\)](#). They have all demonstrated global best practise in activating climate innovation using a demand-led approach with key partners across sectors of central government, corporates, academia and local government.

It is important to act collectively in tackling the biggest climate challenges facing Auckland's economy. The hub will focus on four key areas in response to evidence-based findings: transport, energy, built environment and food. It will be demand-led, bringing together organisations motivated to make real world change by developing, demonstrating, and scaling solutions needed for a climate resilient and low-carbon Tāmaki Makaurau and Aotearoa New Zealand.

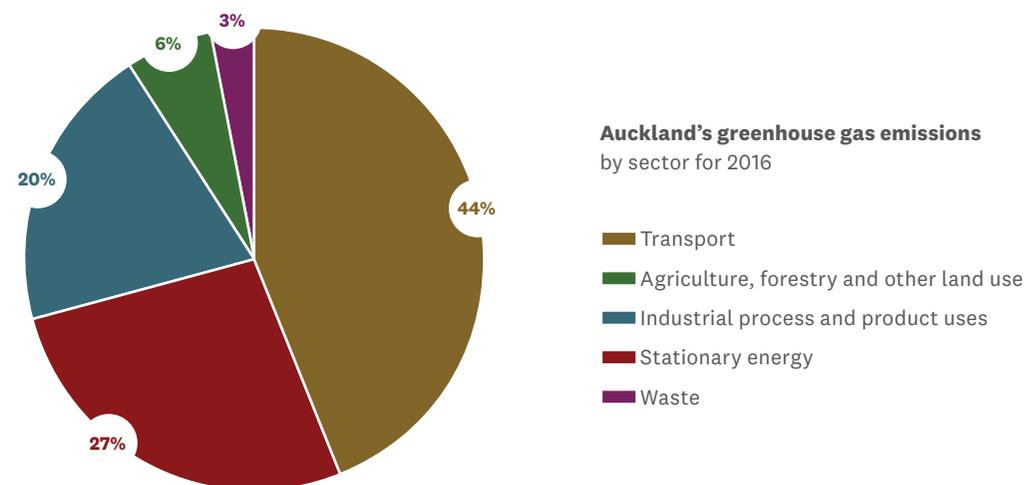


Figure 3: Auckland's Greenhouse Gas emissions by sector for 2016  
Credit: Auckland Council

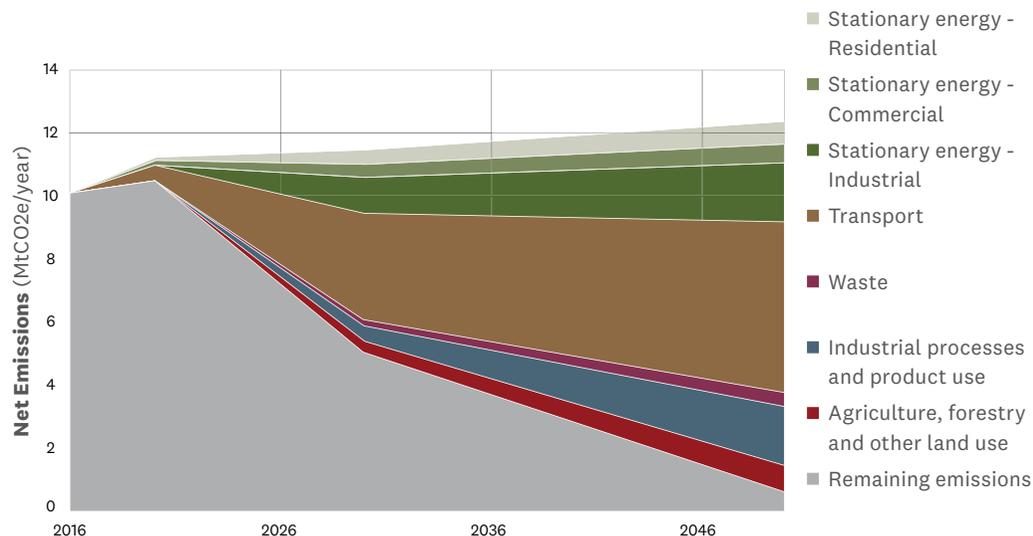


Figure 4: Indicative emissions reduction pathway for reaching net zero by 2050 for Auckland.  
Credit: Auckland Council

## **BUILDING A COMMUNITY OF INNOVATORS**

GridAKL John Lysaght, Tāmaki Makaurau's innovation precinct in Wynyard Quarter, seeks to attract a community of innovators to create social and environmental impacts. The community includes four environmental technology companies: Weather Radar, Crank, Karbon and For the Better Good. From the bottom-up, these active members of the community take part in a sustainability champions group. Made up of GridAKL John Lysaght residents, the group meets quarterly to identify solutions to reduce the precinct's environmental impact, enable a circular economy, and help the community become more sustainable. The precinct has a growing number of companies that are, or are becoming, B-Corp certified.

## **NZ CLEANTECH MISSION: MAKING IT HAPPEN FOR NEW ZEALAND**

Auckland Unlimited and partner organisations formed the [NZ CleanTech Mission Partnership](#). It aims to support the growth of globally competitive businesses that solve climate change, water quality and resource problems. Many high-technology businesses are based in Auckland and receive research and development, technology, and innovation support. Auckland Unlimited, together with the other NZ CleanTech Mission partners have committed to advancing and strengthening the connections in the New Zealand clean technology ecosystem and improve the commercialisation of clean technology research and development.

Together, the key partners commissioned independent research to compare New Zealand's clean technology innovators with innovators in other small, advanced economies across more than 30 technology types and analysed New Zealand's Climate Technology innovation ecosystem to identify opportunities and recommendations for improvement. The [New Zealand Climate Tech for the World](#) report found that New Zealand clean technology innovators require support to collaborate across sectors, work closely with large businesses and raise significant investment capital.





## Supporting sector transition to a low carbon, resilient economy

### Visitor economy sector

Auckland attracted 2.74 million international visitors in the year ending March 2019, prior to the COVID-19 pandemic and the associated travel restrictions. Although the sector is highly valuable to Auckland and New Zealand, the sector puts pressure on the environment and communities. Pre-COVID projected growth in tourism nationally had been linked to a wide range of adverse impacts, including increased greenhouse gas emissions, biodiversity loss, issues related to solid waste generation, degradation of water quality, changes to the landscape due to tourism infrastructure, and the loss of natural quiet (Source: [Pristine, popular... imperilled?](#)). While this projected growth has not yet been realised, because of COVID-19, the Parliamentary Commissioner for the Environment concluded that “business-as-usual growth had the potential to undermine the very thing that New Zealand’s tourism industry is based on – the quality of our natural environment” – and that fact remains unchanged (Source: [Not 100% – but four steps closer to sustainable tourism](#)).

In addition, climate change is a particularly critical risk for the visitor economy in Auckland, both in terms of climate physical risks (e.g. heat waves, droughts, fires, etc) and transitional risks (e.g. low carbon market and policy drivers).

To respond to these pressures, and to the [Destination AKL Recovery Plan](#), Auckland Unlimited has led a piece of work to gather an evidence base to better understand the strengths and weaknesses of Auckland’s visitor economy in terms of emissions, and sustainability more broadly. This informed the development of an action plan which will provide the visitor economy’s direction on recovering in a more considered, resilient, and low impact way.

## What is the emissions profile of Auckland's tourism sector?

Auckland Unlimited commissioned Dr Susanne Becken, a Professor of Sustainable Tourism at Griffith University, Australia, and Prof James Higham, Otago University and co-editor of the Journal of Sustainable Tourism to undertake an emissions footprint for Auckland tourism and provide recommendations for actions. Some key findings are below (Figure 5).

- Decarbonising tourism is a critical element of future-proofing the sector.
- While some methods of destination footprinting take a strictly territorial (geographic) approach, it is increasingly recommended as good practise that a destination considers the climate impact of transport emissions resulting from tourists getting to their place of visitation. These may count as indirect emissions, but are still an important element of a destination's carbon risk and liability.

### Bottom-up emissions of Auckland tourism

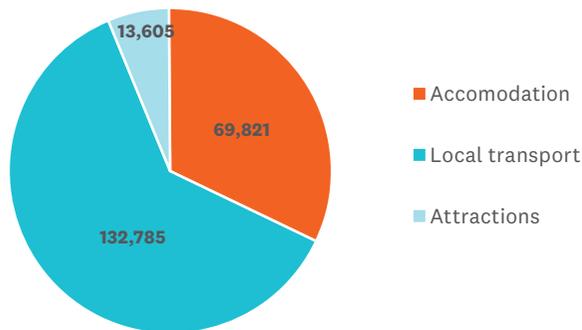


Figure 5: Overview of CO2 (in tonnes) Auckland tourism emissions by sector

Credit: Susanne Becken, Griffith University and James Higham, University of Otago

- Transport related to tourism industries was the largest contributor to the sector's emissions at 76.9%, with a significant part related to domestic air travel from Auckland. Accommodation contributed 16.9% of the total tourism footprint. Other tourism-related activities only made up 6.2% of emissions. Tourism's share of overall emissions in Auckland was 11.7%.

Full report can be found here: [The carbon footprint of Auckland tourism.](#)

## What is tourism's role in the community and what does it mean to have a regenerative visitor economy sector?

The New Zealand Tourism Research Institute at AUT University, provided a report assessing how to strengthen the community dimensions of Auckland tourism and provide recommendations for actions. Some key points have been included below.

- The pandemic offers a significant opportunity to transition to a visitor industry that mainstreams the social and community dimensions of sustainability. Applying regenerative and inclusive approaches to achieving true sustainability in Auckland tourism will link to and help to lead transformation happening in New Zealand and globally.
- The focus of government, tourism organisations and industry on destination branding and marketing, and the emphasis on enhancing the economic returns from tourism, have distracted attention away from the socio-cultural and community dimensions of sustainable tourism in New Zealand.
- To move towards a more inclusive 'community-centric' and regenerative approach to tourism, actions for social sustainability (along with relevant indicators and measurement frameworks) need to focus on ways that tourism can contribute to community wellbeing, and local quality of life.

Full report can be found here: [Towards sustainability: strengthening community dimensions of Auckland tourism](#)

## What economic climate change risks affect the visitor economy sector?

The 'Tāmaki Makaurau economic climate change risk assessment' work highlighted earlier in this report included the visitor economy as a key sector. Climate change poses a number of risks to the visitor economy. Impacts to critical lifeline infrastructure can disrupt service provision and reduce mobility, and other built assets can be damaged by hazards such as floods, fires and sea level rise. Changes to landscapes and ecosystems across the region and New Zealand are likely to impact the viability of certain tourism offerings, and changes to weather might impact the enjoyment people derive from their stays.

Stakeholders from the industry were shown the evidence base and the core actions, and asked to consider their relative priority, and how ready they are to implement the proposed changes. They were then shown the proposed actions that Auckland Unlimited could do, including the initial phasing of the activities, and asked to provide comments. Generally, the evidence base and the recommended actions were received well.



# Screen Sector

Executive summary from the [New Zealand Screen Sector Emissions Study](#) by ARUP: The Aotearoa New Zealand Screen Sector Strategy 2030 identifies a key goal to refresh Aotearoa New Zealand's screen sector environmental sustainability programme and create a social sustainability and wellbeing framework. This includes setting out the screen sector's commitment to government expectations on reducing carbon emissions, waste minimisation and relevant health and safety obligations – and to measure how the screen sector will contribute to reaching government targets with regard to national and international best-practice guidelines.

To help start this journey, Screen Auckland commissioned ARUP to estimate the carbon emissions of the New Zealand screen sector and lead a series of stakeholder engagement activities. This study provided insights on the opportunities and challenges the screen sector faces to transition towards low-carbon sustainable practise. In addition, the study provides a high-level estimate of the sector's carbon impact.

Using aggregate spending data, coupled with a representative emissions intensity value, a high-level carbon footprint of 307k tCO<sub>2</sub>e was calculated. This is 0.4% of New Zealand's 2018 gross GHG emissions reported by Statistics NZ of 78.9M tCO<sub>2</sub>e. However, if a consumption-based emission approach is adopted across New Zealand, the screen sector's contribution results in

0.5% of New Zealand 2017 consumption based emissions of 60.0M tCO<sub>2</sub>e reported by Statistics NZ. These initial estimates are designed to highlight the scale of emissions using published data, and it is recommended that further granularity is sought through improved data collection and the use of more detailed modelling approaches. Stakeholder interviews identified a broad range of opportunities including existing grassroots campaigns, the re-use of tested implementation frameworks, and successful on-location waste reduction strategies. However, there are challenges including the availability and standardisation of data, perceived financial costs, educational resources, tools to measure impact, and sector-specific environmental sustainability commitments from government.

Overall, the stakeholder engagement identified a strong desire to create a sustainable screen sector and seek guidance and resources to make this transition. Broader stakeholder engagement and in-depth analysis of carbon emissions will lay the foundations to develop a roadmap for transitioning to a low-carbon sector.

## NZ Screen Sector Estimated Carbon Impact

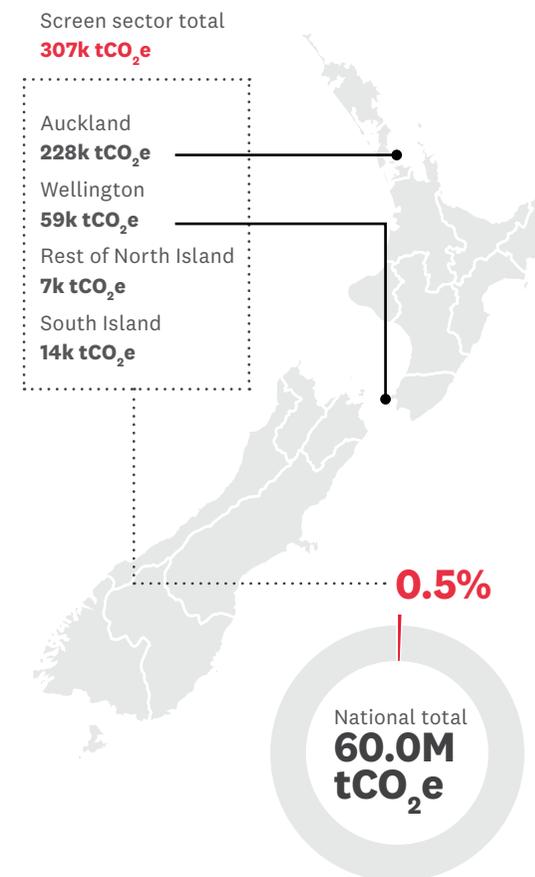


Figure 6: Overview of CO<sub>2</sub> (in tonnes) Auckland tourism emissions by sector

Credit: ARUP

# Low impact major events

Auckland Unlimited attracts, hosts and delivers major events which fosters social cohesion, instill community confidence and generate economic activity. However, due to their nature, they have an impact on the environment particularly around waste production and emissions. Auckland Unlimited has required waste minimisation measures across events it invests in on behalf of Auckland Council, and its own delivered cultural festivals have been exemplars for waste diversion from landfill. Tāmaki Herenga Waka Festival 2021 achieved 82% diversion from landfill – which exceeded the 70% target – due to extra efforts put into recycling foil use, which wasn't able to be done in previous years.

In addition to addressing waste, this was the first year Auckland Unlimited undertook carbon footprinting for two of its cultural festivals – with the intention of making them carbon neutral. This was going to be achieved via the Toitū carbonzero event operations certification, which includes third party verification and official offsets. Auckland Diwali Festival 2020 and 2021, and Auckland Lantern Festival 2021, were all on track to be carbon neutral and carbonzero event operations certified. However, due to COVID-19 Alert Level restrictions, all three events were cancelled or moved to be community or online based. Auckland Unlimited will continue on this path for future events, navigating through volatile level impacts.

Auckland Unlimited also invests in events as the host city. In 2021, Splore Festival, (regarded as a world leader in terms of its sustainability practices) was hosted in Tapapakanga Regional Park. In 2021, Splore had its Event Operations certified as carbonzero by Toitū. Splore is the first multi-day music and arts festival in Aotearoa to gain this certification.

Rally New Zealand has also been working on a number of sustainability projects, including native tree-planting at the Whitford property where the Battle of Jacks Ridge event is held; while WRC winner Hayden Paddon's electric rally car was on display to demonstrate the sport moving toward a more sustainable future.

Auckland Unlimited is the guardian for Auckland's largest range of cultural and economic places, facilities and collections and therefore needs to ensure that these provide an effective return for Aucklanders and visitors now and into the future.



Credit: Dane Scott Creative

# Next steps

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Auckland Unlimited will continue its contribution to Te Tāruke-ā-Tāwhiri : Auckland's Climate Plan's goals assessing and managing its own environmental and social footprint, and also work towards achieving the goals of the climate plan's economy priority.

Both legacy RFA and ATEED have made headway on community engagement and education, waste minimisation initiatives, influencing supply chains, measuring GHG emissions and reducing consumption of water and energy. However, now as Auckland Unlimited – the new cultural and economic agency for Auckland – the opportunities are great for ambitious leadership for climate resilience and sustainability across its facilities and events.

Auckland Unlimited will continue to build on the measurement, management and reduction of environmental impacts – including developing a corporate climate change and sustainability strategy that will set a cohesive vision for the organisation, and overarching resource efficiency and waste targets. It is also important to consider social impacts in this strategy and how it can contribute to a fairer and more equitable future for Auckland.

Auckland Unlimited will also continue its work towards supporting Auckland's transition to a low-carbon, resilient economy. It will do that through activating climate innovation through a virtual and physical hub, working in collaboration and partnerships with businesses to support a 'just' transition to a low carbon and resilient economy.



**For more information**

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