
Te Atakura First to Zero

2021 Update





Contents

Executive summary	4
Wellington city's emissions	6
The city targets	7
Delivering the plan - in partnership with others	8
Action areas to become a zero carbon city	10
Action area: Transport and urban form	11
Action area: Building energy	15
Action area: Advocacy	17
Action Area: City-wide initiatives	20
Action Area: The Council itself	22
Action area: Adaptation	23
Next steps	25
Appendix 1 - Status of current actions	26

On June 20, 2019, Wellington City Council adopted the following declaration:

Te wero

Toitū te marae a Tāne
Toitū te marae a Tangaroa
Toitū te iwi
Ngāi Tātou o Pōneke, me noho ngātahi
Whāia te aratika

Our challenge

Protect and enhance the realms of the Land and the Waters, and they will sustain and strengthen the People
People of Wellington, together we decide our way forward

Executive summary

In 2019 Wellington City Council declared a climate emergency and committed to ensuring Wellington city becomes a net zero carbon city by 2050 - including making the most significant reductions this decade to help limit global temperature increases to 1.5° Celsius above pre-industrial levels.

The last 12 months since the release of the implementation plan for Te Atakura - First to Zero have been significant in creating the foundations at both a local and national level to achieve Wellington City's targets for emissions reductions and address climate change adaptation. This is our first annual update of that plan, and provides a progress report on the actions we committed to under Te Atakura and how the city's emissions are tracking.

Increasing the ambition

We recognise the urgency with which we need to approach the implementation of Te Atakura and the importance of the next decade for emissions reduction. Accordingly, we have reset our 2030 reduction target to 57% of 2020 emissions, using the city guidance produced by the Science Based Target Initiative. We have also joined the Race to Zero pledge, an initiative that is seeking cross-sector support for higher levels of national ambition leading into the global climate action negotiations, referred to as COP26 (the United Nations' 26th "conference of the parties), in Glasgow in November 2021.

We can't do this alone

This plan update does not yet lay out a roadmap for how the city will achieve these goals. Partnerships and collaborations are being kicked off this year, through the Wellington Climate Lab initiative and other forums. These conversations are intended to develop new initiatives across the economy and society of Wellington, to supplement the actions that the Council can take as a local government authority. We see the Council's role as facilitating, city shaping, leading, and supporting all of Wellington to participate in this challenge. There is a long way to go, and a short period of time to get there.

Central government policy is key

The Te Atakura blueprint acknowledged the crucial role central government needs to play in order for Wellington to achieve its carbon reduction targets. The Climate Change Commission's advice to government has provided a strong indication of the policies, regulation and funding that are likely to be put in place at a national level, and Council is eagerly awaiting central government's draft National Emissions Reduction Plan, which has now been released and will be finalised by May 2022.

Our plan is fully funded

The initiatives outlined in this plan are fully funded in Council's 2021-2031 Long-term Plan, and continue to focus on the key action areas outlined in the implementation plan released in August 2020, with slight amendments. A full list of initiatives that have been considered, are in progress, under investigation, or have been investigated and discontinued, is included in the Appendix. All of these initiatives are underpinned by the climate action measurement framework and strong partnerships.

We encourage you to read this update and engage with us on climate change, particularly where you can help accelerate the journey to net zero.

Action areas to become a zero carbon city

Transport & urban form

We need immediate actions to change how we move around the city - to low-carbon options, supported by a compact urban form.

Advocacy

We must use our relationships and position to argue for stronger central and regional climate action, and better regulatory and policy frameworks.



Building energy

We need substantial gains in energy efficiency, and a shift from natural gas to renewable electricity.

City-wide actions

We must foster the innovation and creativity of Wellingtonians to develop and deliver solutions with support of Council.

Actions to lead by example

We must walk our talk and demonstrate leadership by reducing our own emissions. Council emissions arise from the stationary energy we consume, our landfill, and our supply chain.

Actions to adapt to the changing climate

We must support Wellingtonians in their journey to understand and prepare for climate change impacts, and ensure Council assets are resilient in the face of natural hazards exacerbated by climate change.

Wellington city's emissions

Wellington city's net greenhouse gas emissions¹ between 2001 and 2020 have fallen by 7%. This is an encouraging sign that our emissions have decoupled from economic growth and population growth, however the rate of reduction needs to significantly increase in order to limit global warming to 1.5 degrees as outlined in the Paris Agreement and the Climate Change Response (Zero Carbon) Amendment Act.

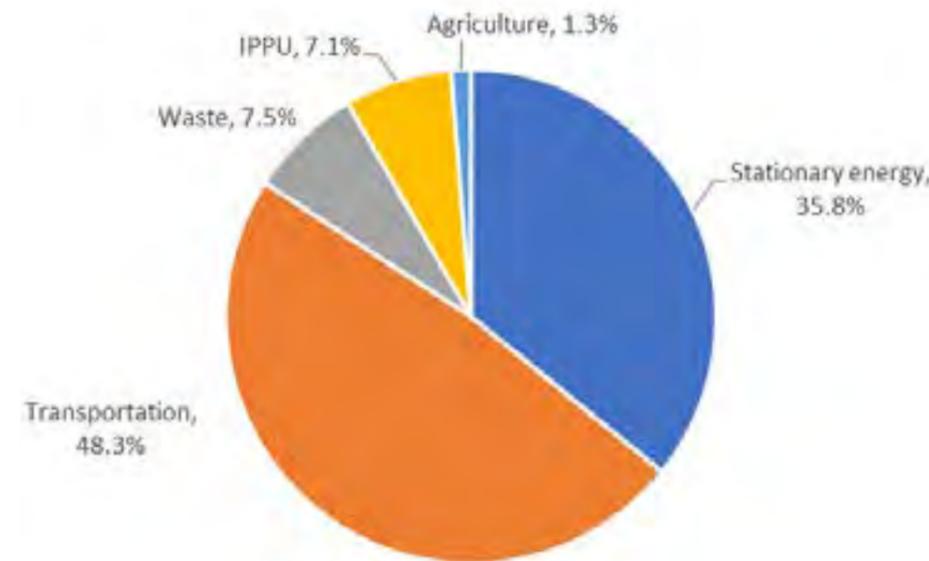
The city's greenhouse gas emissions inventory has been updated for the year ending 30th June 2020. Figure 1 provides a breakdown of the city's emissions. Total gross emissions for the year were 1,049,016 tCO₂e, dominated by road transport (petrol and diesel) and stationary energy consumption in homes, office buildings and industry (electricity and natural gas consumption).

Consumption based inventory

Our greenhouse gas inventory and the targets we set are focused on Scope 1 and 2 emissions². We don't include Scope 3 'consumption emissions', which refers to the emissions associated with producing, transporting, selling, using and disposal of the product. For example, in the Wellington Region, emissions from agriculture are small, yet as a region we consume significant amounts of meat and dairy.

While we don't currently calculate these emissions, we still want to reduce them. Our upcoming Waste Strategy for example, includes a focus on changing Wellingtonian's approach to purchasing, and supporting those choices through advocating for a transition to a waste-free, circular economy.

Figure 1: Wellington city's gross emissions split by sector (tCO₂e)



¹ Net emissions take into account carbon sequestration from forests. Gross reductions during this timeframe were higher (8%) however there was also an increase in forestry harvesting, leading to lower net reductions.

² Scope 1 emissions occur from sources located within the city boundaries, e.g. fossil fuel consumption for transport and heat, methane from organic waste and animals, and industrial product use (refrigerants and other chemicals). Scope 2 emissions occur from the use of grid-supplied electricity.

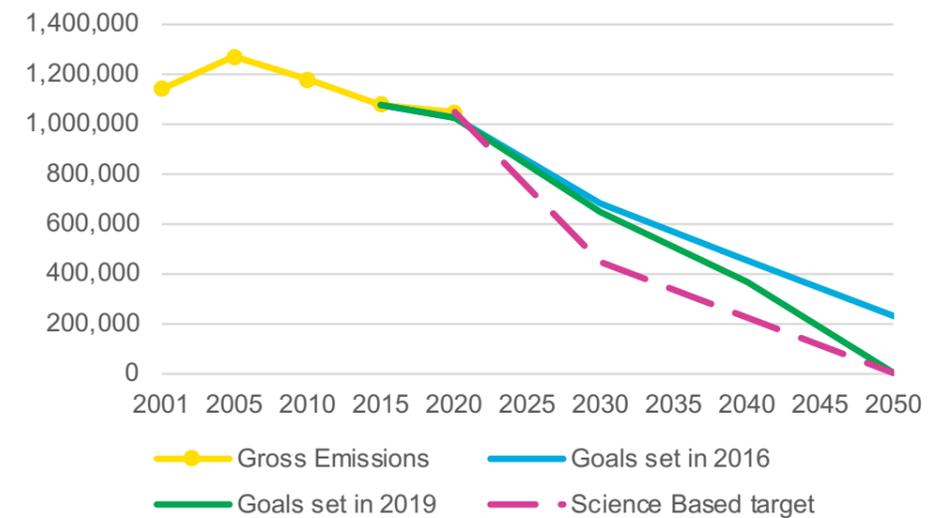
The city targets

The decade leading up to 2030 is recognised as a crucial timeframe in order to have a chance of staying below 1.5°C of global warming. For this reason, we have realigned our target to use 2020 as our baseline, and have re-set the level of ambition to meet the requirements for a science-based target. Using the One Planet City Challenge (OPCC) methodology for city target setting³, Wellington City needs to reduce its emissions by 57% between 2020 and 2030, and then continue to reduce to net zero carbon by 2050.

Resetting our 2030 target also allows us to commit to the Race to Zero pledge, a campaign to show that cities, businesses, universities and NGOs are all united in wanting the upcoming international climate action talks in Glasgow (COP26) to result in stronger national targets and climate action policies.

Figure 2 shows the previous targets set by Council in 2016 and 2019, and compares that to the new science-based target.

Figure 2 - Actual GHG reductions 2001-2000 and different pathways to 2050



³ Current best practice is to set a science-based target, which is a methodology developed by the Science Based Target Initiative to ensure that each sector of the economy is doing their part, that targets are equitable, and likely to meet the Paris Agreement ambition of limiting global warming to 1.5 degrees. We have used

the One Planet City Challenge (OPCC) methodology, as outlined in the SBTi's City Guidance document. SBTi-for-cities-guide.pdf (sciencebasedtargetsnetwork.org). Note that we used 2018 to set the target in alignment with the methodology, and then re-calculated it to use 2020 as the base year.

Delivering the plan - in partnership with others

Achieving our reduction targets will require a concerted effort from all parties that control or can influence emissions. This includes the Council delivering on its committed actions as well as providing the catalyst for new innovative thinking; central government delivering on plans to decarbonise both transport and electricity generation; and key emitters within the city implementing robust plans for decarbonisation.

Figure 3 summarises potential sources of emissions reductions based on existing, planned and funded initiatives, either led by Council or others, and modelling by the Climate Change Commission of the emissions reductions of their recommended policy settings that could be adopted by central government in the National Emissions Reduction Plan.

This highlights the importance of our role in advocating for policy change, and the investments we are making to foster innovation and support others to act. We will update this graph every year as we develop new actions or identify actions that others are taking that will impact on the city's emissions.

We can't do it on our own

The Council recognises that becoming a net zero carbon city will only happen with the support of our entire community. Both system transformation by the public and private sectors, and individual behaviour changes, are needed to achieve zero emissions - one without the other will not get us the necessary scale of change at the necessary pace.

Community engagement

Community feedback in Wellington on climate change and climate action has been consistent and overwhelmingly in favour. In 2019, 92% of survey participants asked if the Council should prioritise becoming zero carbon by 2050 answered "yes, it must be done no matter what." In 2020, our residents survey showed that 93% of residents were a little, somewhat, or very worried about climate change. The focus of community engagement for the coming year is to create connections for Wellingtonians between the way they live and move around the city, and the contribution those choices make to reducing carbon emissions.

Behaviour change

While the Council has the ability to create the potential for low-carbon living, Wellingtonians are the ones who will make that come alive in their day-to-day choices. We have a dynamic, committed community; with business, community groups and individuals already taking climate action. Council acknowledges it has a key role to play in supporting the work already underway, and facilitating more action over the coming decade, through practical support, and helping to facilitate changes in our lifestyles.

change mitigation and adaptation into Wellington Regional Growth Framework, which is creating a framework for development over the next 30-years that is low-carbon and resilient. These active collaborations with other councils within the Wellington Region, including mana whenua representation, are an opportunity for officers and Councillors from across the Wellington region to network, discuss issues, share information and achieve a regional approach to climate change mitigation and adaptation.

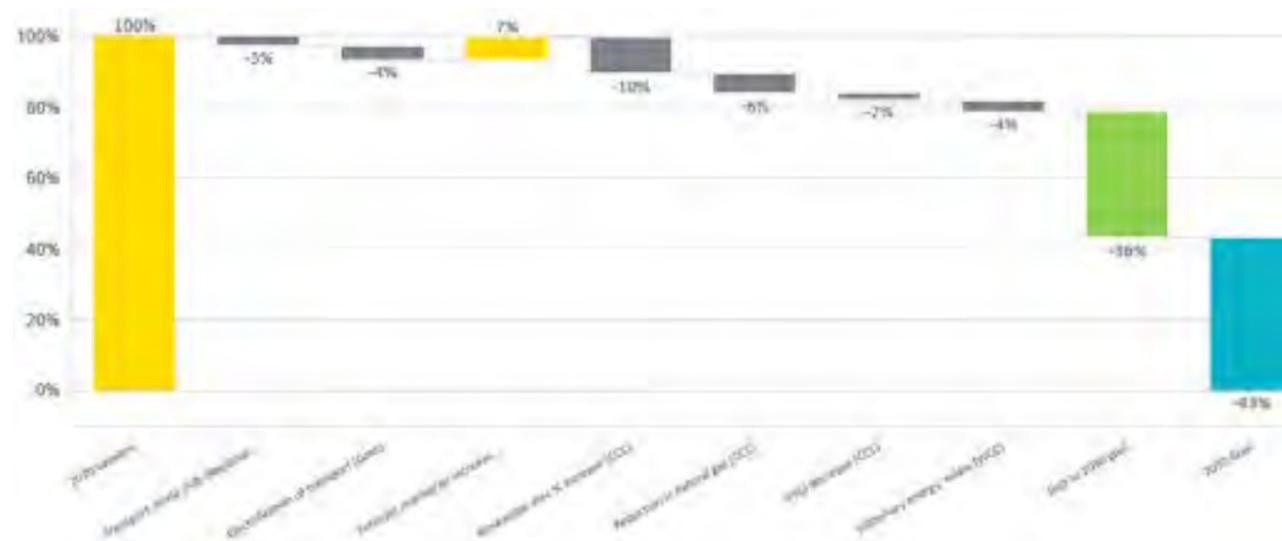
Te Atakura Steering Group

This group has been extremely valuable in providing feedback on the Council's plans, and the specific initiatives taken forward into consultation on WCC's 2021-2031 Long-Term Plan. Membership includes representatives from Wellington's educational institutions, iwi, business and community groups. Members bring a range of perspectives representative of the Wellington community including youth, health and wellbeing, communications, air travel and city connections, and business. In the coming year, the group will continue to meet to share ideas and support each other in the carbon reduction challenge.

Partnership with iwi

Climate change is recognised as a key issue for local tangata whenua Taranaki Whānui ki te Upoko o te Ika and Ngāti Toa Rangātira. Both iwi have mātauranga Māori, as well as narratives of the past climate, that will be important in developing their own responses to climate change but also in contributing to our collective knowledge. The Council will be working alongside the local iwi authorities to honour both its obligations under the Treaty of Waitangi and to ensure Te Atakura respects the knowledge of tangata whenua.

Figure 3 - Wellington city indicative emissions path



National leadership

The Climate Change Response (Zero Carbon) Amendment Act 2019 (ZCA) created the Climate Change Commission, which this year delivered its advice to government on carbon budgets and policy settings to achieve the goals of the Act. The government is required to respond and develop a national Emissions Management Plan by December 2021. In addition to this significant piece of work, the government is also planning significant reform of the Resource Management Act, splitting the Act into three parts: a Strategic Planning Act, a Natural and Built Environment Act, and a Climate Change Adaptation Act. How these acts will support the government's response to the climate emergency is not yet clear. Council is committed to advocating to central government for strong climate action policy - for more information on the priority advocacy initiatives refer to page 17.

Wellington Climate Lab

Several members of the Te Atakura Steering Group have been involved in the design of the Wellington Climate Lab and will carry that participation forward in the hope of creating impactful collaborations to deliver carbon reductions at scale and with urgency. This will be a key way in which we will capture the thinking of others.

Regional collaboration

The Council is a member of the Wellington Region Climate Change Forum, and through this forum is working on two of the Regional Growth Framework's workstreams - on carbon reduction and climate change adaptation. This work will integrate climate

Global partnerships

The Council is a member of several international initiatives in which we are recognised globally as a city leading on climate action and transparency. In 2021 Wellington was named the number one city worldwide for environmental security, in the Economist's Safe Cities Index 2021. This index considers how the city has incorporated sustainability parameters into its urban planning to reduce carbon emissions and manage climate risks. We are also part of the 100 Resilient Cities Network and the Global Covenant of Mayors.

In 2021 the Council joined the Race to Zero, pledging to:

- Publicly endorse the following principles:
 - We recognise the global climate emergency.
 - We are committed to keeping global heating below the 1.5° Celsius goal of the Paris Agreement.
 - We are committed to putting inclusive climate action at the centre of all urban decision-making, to create thriving and equitable communities for everyone.

- We invite our partners - political leaders, CEOs, trade unions, investors, and civil society - to join us in recognising the global climate emergency and help us deliver on science-based action to overcome it.
- Reach net zero in the 2040s or sooner, or by mid-century at the latest, in line with global efforts to limit warming to 1.5°Celsius.
- In advance of COP26, explain what steps will be taken toward achieving net zero, especially in the short - to medium-term. Set an interim target to achieve in the next decade, which reflects a fair share of the 50% global reduction in CO2 by 2030 identified in the IPCC Special Report on Global Warming of 1.5°Celsius.
- Immediately proceed to planning at least one inclusive and equitable climate action as listed on www.citiesracetozero.org that will help to place your city on a resilient pathway consistent with the 1.5° Celsius objective of the Paris Agreement and begin implementation no later than 2022.
- Report progress annually to CDP, from no later than 2022.

Action area: Transport and urban form

Road transport contributes about 34% of the city's emissions and is an area where we need to see significant reductions due to the challenges of other sources of transport emissions.

There are positive signs that the city is beginning to transition to low emissions modes of transportation and funding has been approved to support the delivery of key infrastructure to enable this. Crucially, central Government has put in place policies that will facilitate the uptake of low emission vehicles while the Climate Change Commission's advice to Government includes key recommendations for transport.

There have also been positive technological advances for both marine and aviation sectors in the last year to commence the shift to lower emission or zero emission forms of energy.

What's underway

Planning for Growth

The Planning for Growth project includes a range of key decisions that will influence the future of urban form in Wellington over the next 30 years.

The adoption of the Spatial Plan this year was the first significant step in this project, supporting the transformation of the city to accommodate an increased population while maintaining a compact and low carbon urban form. Medium to high density housing encouraged by this Plan, coupled with cost-efficient public transport delivered by Greater Wellington Regional Council and Let's Get Wellington Moving, will reduce travel distances, increase public transport use and active transport, and reduce city emissions.

The next step in the project is the District Plan. Wellingtonians will have the opportunity to provide feedback on the draft District Plan later this year.

Let's Get Wellington Moving (LGWM)

LGWM is a key programme of work for addressing transport emissions. Through investments in mass rapid transit and improving public and active transport LGWM will provide the infrastructure

to enable the shift to lower emissions modes of transport. The early focus of LGWM has been on improving the speed and reliability of bus travel times through the central city and creating a better environment for people walking or cycling.

Changes are already evident with speed limits on most streets within the CBD lowered from 50km/h to 30km/h to encourage more people to walk and cycle.

Three key business cases were released in the past year to lay the foundations for delivering the LGWM programme of work. These include:

- The City Streets Indicative Business Case with an investment of \$350m to improve public and active transport across 19 key routes into the city.
- The preferred option for the Golden Mile Single Stage Business Case has been agreed. This will transform the area, improving public spaces, removing car parks, prioritising pedestrians, giving priority to buses, and improving cycle safety.
- Proposed improvements for Thorndon Quay/Hutt Road with a focus on fast and reliable bus priority, better and safer cycleways, great places to walk, and reliable freight access.

Public engagement will occur later this year around the options for Mass Rapid Transit and strategic highway improvements.

Creating Streets for People - starting with people on bikes

Through the Long-term Plan, Council has committed an additional investment of \$226m over the next decade to deliver a connected city-wide bike network. This involves accelerating the development of a network of safe bike paths, lanes and connections so it is possible for more Wellingtonians of all ages and abilities to make some trips by bike or choose cycling as their main mode of transport. A refreshed draft Bike Network Plan will be consulted on later this year.

In the short-term parts of the network will be delivered through a transitional programme using lower cost, adaptable solutions so we can roll out an interim bike network and gain feedback in real time. This will help to inform future permanent changes while gaining benefits earlier.

Part of the city bike network will connect into Te Ara Tupua, the Wellington to Hutt Valley cycling and walking link to be built by Waka Kotahi NZ Transport Agency.

Key developments in the bike network in the last year include:

- Cobham Drive paths opened - new two-way bike pathway and separate footpath
- Evans Bay - Section 1, between Carlton Gore Road on Oriental Bay and around Evans Bay Parade as far as the National Institute of Water and Atmospheric Research (NIWA) at Greta Point, is under construction.

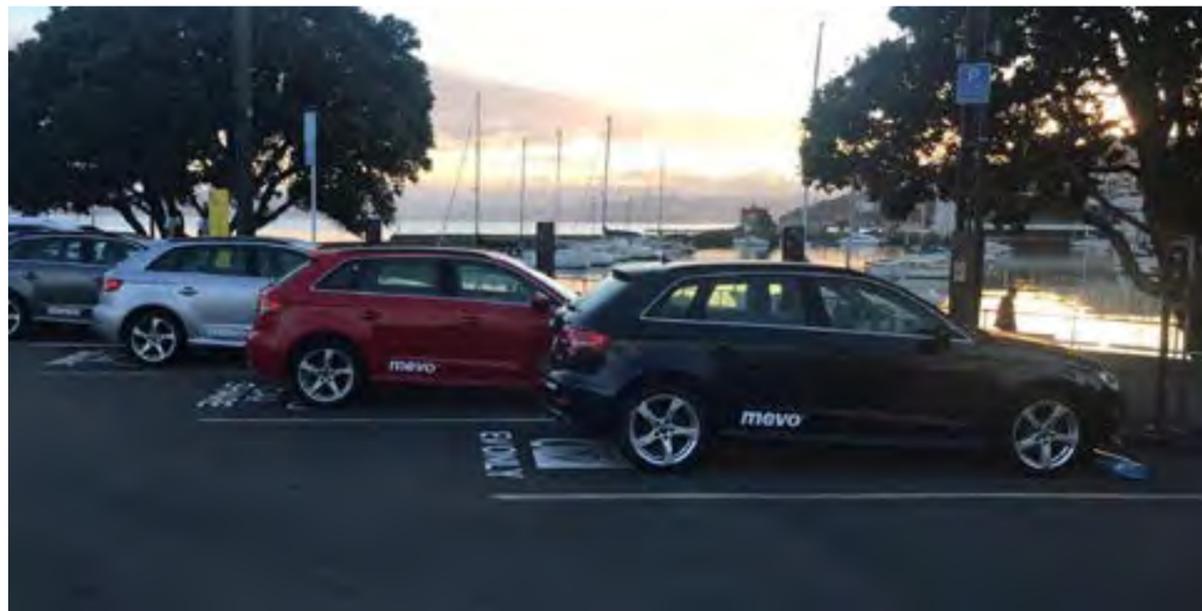
Increased number of cyclists commuting

The number of Wellingtonians commuting by bike continues to grow with the latest data showing more people than ever riding into the central city during the busy morning peak. The increases correspond to the parts of the city where the Council has built safer cycling routes.

The data from the latest cordon counts, which are done every year over five working days, monitors travel into the city between 7am and 9am. Latest figures show that on average 2,462 people a day biked into the city from key directions during that time.

While the COVID-19 pandemic has somewhat skewed cordon counting the last two years, cycling commuting behaviour based on these surveys has increased 50% since 2010.

Weekly totals from several key intersections are up, and are in some cases, the highest to date. Some of the biggest gains are from the east, where new bike and walking paths are progressively being developed.



Shared mobility

In order to facilitate an increase in the number of car share vehicles available in the city the Council has approved parking fee concessions and removed the cap on the number of vehicles that can utilise the parking concession. This will ensure there is sufficient parking space available to be used by car share schemes and keep costs manageable.

Car sharing schemes, Mevo and Cityhop, have proved popular with residents. Over the last year there has been a 75% increase in membership of the city's two car sharing schemes with over 12,000 members now accessing these services.

Micro-mobility has now been formalised in the city with the issue of two licences to e-scooter operators. This comes after the completion of an 18-month trial in December 2020, which allowed the Council to better assess how the schemes would work including consideration of safety, the number and duration of trips, where people go, and where scooters are parked.

Charged up Capital

The Council will be installing around 60 electric vehicle fast chargers across approximately 30 public locations around our city by June 2025. The chargers will form part of a network of chargers across the Wellington region in partnership with the Hutt City Council and the Energy Efficiency and Conservation Authority (ECCA). Over the next year the plan is to install 15 chargers in the Wellington city area.

Travel behaviour change

Over the last year the Council continued to work with partners across the city and region to encourage the uptake of active and sustainable transport choices. The focus has been on increasing bike parking around the city, funding the Active Workplace Travel grant, sponsoring local events and community bike workshops, managing the e-scooter-share programme, working on shared pathways markings and increasing bike safety, and supporting the local roll out of the Bikes in Schools programme.

Rise in the shared economy

New business models are emerging that provide access to a range of goods and services through a collaborative approach that offer convenience, improve equity and reduce environmental impacts - particularly waste and carbon emissions. Transportation is one of the more visible forms of the shared economy that we see on Wellington streets with Mevo and Cityhop offering car sharing services while Flamingo and Beam provide a micro-mobility solution with e-scooters. Users of these services benefit from access to modern vehicles and e-scooters without the costs and headaches of owning them. The city benefits from less vehicles on the roads with data showing that across the two car sharing schemes one car share vehicle now replaces 11 private vehicles.

Other services with sharing at their heart include Reusabowl (reusable bowl for takeaways), Again Again (cup lending), Mechanical Tempest (bike workshop), toy libraries, Designer Wardrobe (clothing rentals) and the Newtown Tool library (shared tool use). These services are all helping to reduce unnecessary emissions from the making, moving and disposing of products while offering convenience to their customers.

Marine/aviation

East by West ferries have completed the construction of an electric harbour commuter ferry capable of carrying 129 passengers which will operate between Queens Wharf and Days Bay. A corresponding charging station has also been constructed. The ferry will come into service in September 2021.

KiwiRail will be replacing the three Interislander ferries they currently operate with two new ferries from 2025. The ferries will have improved fuel efficiency and batteries that can be used during the last part of the journey and while at their berth saving around 40% of current emissions. The ferries will also have the ability to be shore powered when at berth. This will help to reduce a significant source of marine emissions for the city.

Sounds Air also announced plans to purchase electric planes, with the intention of using them on for their routes departing from and arriving in Wellington with Blenheim and Nelson. The airline is planning to have planes in the air by 2026 with charging infrastructure in place to support the operation.

What else is planned

Fossil fuel free streets

The Council is exploring the idea of fossil fuel free streets focusing on the central business district. A report will be delivered this coming year to consider how this concept could work. The intention is to build on the investment that is already being made in LGWM to create an inner-city area that supports active and zero emission modes of transport.

Key indicators of change

Indicators	2020 (as at 30 June)	2021 (as at 30 June)
Car Sharing - total members	7,512	12,955
Electric vehicles - total charge points	34	34
Residential	28	28
Fast Charges	6	6
Walking - number of pedestrians entering the CBD during peak times	9,157	10,375
Cycling - number of cyclists entering the CBD during peak times	2,475	2,462
Private vehicles - number of private vehicles entering the CBD during peak times	21,787	26,281
Bus passengers - number of bus passengers entering the CBD during peak times	11,285	11,392
Train passengers - number of train passengers from the North entering the CBD during peak times	14,504	14,254
Cycling - daily average of cyclist across the city based on cycling meters	6,372	7,765
Cycling - Kms of cycleways	37	38
Vehicle registrations - % of EVs in the city fleet	1%	1.4%

Action area: Building energy

Building energy is a key focus area of Te Atakura as stationary energy accounts for 36% of Wellington city's total carbon emissions, through the consumption of electricity and natural gas.

What's underway

Supporting home energy efficiency

Through the Long-term Plan the Council has included funding to continue to promote warm, dry homes. This will enable the expansion of the Home Energy Saver Programme to eventually achieve coverage of 30% of Wellington homes by 2029. Over the last year the Sustainability Trust delivered 833 assessments. The current target of 1,000 homes a year is being increased to 1,400 homes for this coming year.

The Council continues to support the EECA Warmer Kiwi Home scheme enabling low-income homeowners to receive insulation and heating retrofits. Over the last year 132 homes received insulation upgrades.

Both of these initiatives help to ensure that Wellingtonians, especially our most vulnerable populations, have comfortable, healthy homes to live in.

Neighbourhood Grids Trial

The trial involving a combined solar and battery system along with emergency water storage and gas bottles was a partnership between the Council, Contact Energy and Wellington Electricity. While the trial demonstrated the potential for community resilience it was concluded that a more durable business model would need to be established for it to progress further.

Home Energy Saver programme supports healthier homes

The city's ratepayers have been able to access free home energy assessments for the last eight years in a service provided by the Council and delivered by the Sustainability Trust. The hands-on assessment involves a thorough walkthrough of each home and a review of lighting, heating, insulation and ventilation, checking for any moisture and draught issues and identifying ways to minimise water and energy use. The advice that homeowners get is practical and provides simple changes homeowners can make to reduce their energy costs and contribute to reducing emissions.

What else is planned

Business Energy Saver Pilot

Funding has been approved to commence a five-year pilot to provide Wellington business owners and landlords with a free energy and carbon emission audit and action plan, and subsequently connect them with a solution provider. The pilot will target up to 180 businesses per year. The Council will now look for suitable partners to co-fund the pilot which will start in the second half of 2022.

Development contributions

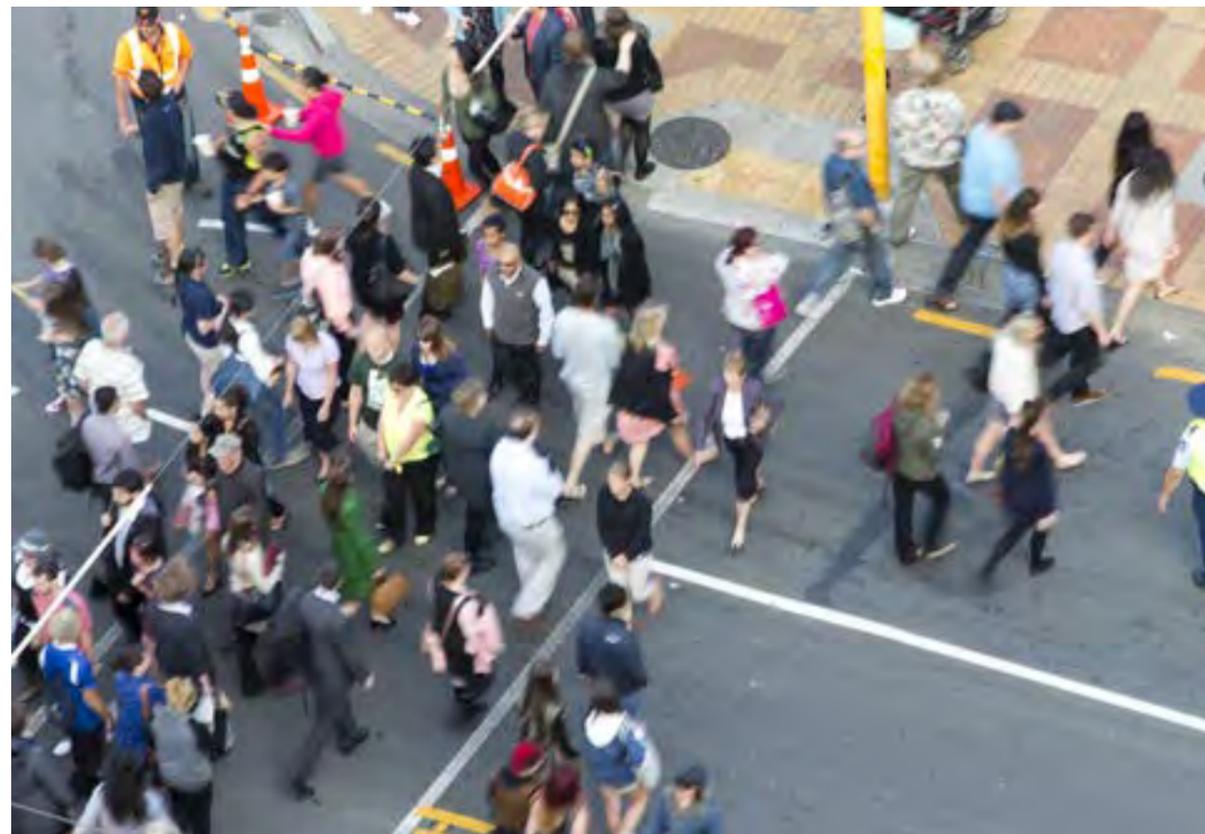
The current Green Building Remission will remain in place while a larger review of the Development Contributions policy is underway. Options to expand incentives will be put forward in 2022. There are currently four applications being processed for a Green Building Remission.

Supporting building sustainability improvements

Energy savings and emissions reductions will be achieved through the incorporation of sustainable design and planning requirements into the design guidance for the draft District Plan, which is out for consultation in late 2021.

Key success indicators

Indicators	2020 (as at 30 June)	2021 (as at 30 June)
Home energy saver - % of Wellington homes audited	5%	12,955
Warmer kiwi homes - total homes insulated since 2011	9,065	9,197



Action area: Advocacy

The past year saw the release of a number of significant policies and guidance relating to climate change. Headlining these was the Climate Change Commission’s advice to government and there were other actions taken by government that will help us to achieve our climate goals.

Climate Change Commission (CCC) advice to government

The Climate Change Commission’s draft advice to government was released in January 2021 for consultation with the final advice presented to the government in May 2021. The emissions budgets and the policy recommendations contained in this advice are crucial for creating the supporting and enabling actions we need at a local level. Our submission encouraged the CCC to be bold and to drive transformational change over the next 15 years, consistent with our own approach through Te Atakura - First to Zero. Specifically, we had five key messages:

- Be more ambitious in setting budgets
- Increase the speed and scale of the transport recommendations
- Prioritise the role of behaviour change
- Be clear that a significant increase in funding and support is required
- Recognise the significance of local governments’ contribution and role

The CCC’s advice is comprehensive and covers off a number of the advocacy initiatives we set out in Te Atakura.

Progress on key areas of advocacy

Transport and urban form

EV subsidies from central Government

The introduction of the clean car scheme on 1 July 2021 gradually introduces a regime that will provide the incentives to shift to electric, hybrid and lower emission vehicles while placing a fee on higher emitting vehicles. With around 34% of our city’s emissions coming from road transport, we had already signalled that strong government policies on EVs would be key to achieving our targets.

Hikina te Kohupara - Transport Emission Pathways to Net Zero by 2050

Following on from Climate Change Commission’s advice, the government sought feedback on options to accelerate the transport sector to meet the draft advice and recommendations and move to a net zero carbon transport system by 2050. Council has advocated through its submission for a pathway that aligns with the CCC’s recommendations and adopts a more aggressive reduction for transport emissions. Broadly the Council also sought to ensure there was appropriate support for public and active modes of transport and that mechanisms would be available to encourage a behaviour shift from private vehicles.

Fuel economy import standards

The government announced in January 2021 that a clean car import standard would be introduced. A target of 105 grams of CO₂e/km by 2025 is being phased in through annual targets that get progressively lower to give importers time to adjust. With the average vehicle in New Zealand having carbon emissions of around 171 grams/gCO₂e this is another key move to reduce transportation emissions.

Commercial scale production of biofuels

In June 2021 the Government began consultation on a proposal to increase the use of sustainable liquid biofuels to reduce greenhouse gas (GHG) emissions from transport. Biofuels are seen as a way to reduce emissions while the transition to electrification happens and to fuel forms of transport that are not easily electrified. Wellington would benefit from the proposal to gradually increase the percentage of biofuel in all fuels sold as well as specific applications of higher blend biofuels such as in heavy vehicles, aviation, rail or marine.

Road pricing

Road pricing is a potentially useful tool that could reduce congestion, make getting around the city easier, encourage more people onto public transport, and reduce emissions. It could be implemented via a small charge being applied to vehicles entering

the city at certain times of day. In August 2021 the Transport and Infrastructure Select Committee completed an inquiry into the use of Congestion Charging (a form of road pricing) in Auckland. WCC submitted to the Select Committee requesting that these tools be made available for cities other than Auckland. As a result, the committee recommended the government pass legislation allowing all cities to use congestion charging as well as investigate providing for low-emission zones.¹ We will continue to advocate for the government to follow the recommendation of the committee.

Building energy

Building for Climate Change Programme

The Ministry for Business, Innovation and Employment (MBIE) commenced consultation on the Building for Climate Change programme in September 2020 asking for views on proposals to increase the operational efficiency of buildings, and to reduce the embodied carbon across the lifecycle of buildings. Council has been involved in this consultation as well as plans to raise minimum levels of insulation for buildings. We continue to take part in ongoing consultation with MBIE, and advocate for stringent building code improvements to see new builds reach net zero carbon by 2030 and improving existing buildings.

Energy efficient government buildings

New expectations have been set for the public sector when leasing or building new office accommodation. This includes minimum energy efficiency ratings using NABERSNZ. With Wellington hosting the majority of government office space this will have a positive impact on energy emissions over time.

Waste

Waste Disposal Levy expansion

Council has advocated for a waste levy increase nation-wide, and supports the Ministry for the Environment's recent expansion plan to increase the waste levy and include all landfills between 2021-2024. With changes coming into effect from 1 July 2021 the levy will gradually increase by \$10 per year

and facilities that are currently excluded are being brought into the scheme. These moves will support the Council's goal of reducing waste at the Southern Landfill by a third by 2026.

Product stewardship for plastic packaging

Plastic packaging was included as one of six new priority products declared for regulated product stewardship in August 2021. This requires a product stewardship scheme to be developed and accreditation obtained. This will have the effect of removing plastic packaging from our landfills as the scheme comes into effect.

Construction and building waste

We continue to work with developers around waste minimisation on building sites, and advocate for construction and demolition waste minimisation requirements to be considered at a national level.

Other advocacy areas

All of government procurement

The announcement of the Carbon Neutral Government Programme has implications for public sector agencies procurement choices. The expectation is that all public sector agencies will be carbon neutral by 2025. As part of the programme all replacement and new vehicles are required to be electric or hybrid except under special circumstances. The Government has also this year released methodology for reducing carbon emissions in building and construction.

Policies we will continue to advocate for

There are a number of other policy areas that were identified in *Te Atakura - First to Zero* and we will continue to advocate for these on behalf of the city including:

- Proposed 2030 fossil vehicle importation ban
- Supporting sustained public and active transport investment
- Sustained investment in renewable energy and decentralised energy creation
- Reducing reliance on and use of natural gas
- Building performance certificates at residential point of sale
- NABERSNZ rating requirements for all commercial office buildings of 1,000sqm or more.

Action area: City-wide initiatives

Te Atakura included a number of enabling actions where the Council can play a role, whether that is supporting or partnering, to foster innovation and drive climate action from within the community. Over the last year the city has seen the launch of key new initiatives to enable more participation by businesses and residents to come up with solutions for addressing climate change and the creation of funding to harness these efforts.

What's underway

Wellington Climate Lab

Building on the work of the Council under the Zero Carbon Challenge and Climathon initiatives, Climate Lab is an evolving initiative that will support business and communities drive innovation and speed up climate action - at scale and with urgency. This initiative will provide the support structure for Wellington to become a global leader in climate change mitigation, and for the business community to embrace the emerging employment opportunities of a sustainable economy.

A design sprint to determine the structure of the Lab has been undertaken involving 50 cross-sector participants over four workshops.

Carbon farming

In FY21 the Council formed a partnership with Victoria University to establish forestry for carbon sequestration purposes in the Outer Green Belt. Council provided access to suitable land, and the university is undertaking the planting of 28,000 trees. The project enables researchers and students to learn what native species and planting methods will sequester the most carbon.

Climathon

This year's Climathon in Wellington focused on three climate challenges - waste, transport and food systems - chosen for their impact and urgency for the city. The winning ideas included a new approach to making events more sustainable, repurposing hotel linen, a smart disposal technology to help people make the right decisions on waste, a perennial cropping solution to bring more carbon and nutrients into the soil, and a clothing subscription service. To help bring the ideas to fruition the winners received both funding and access to courses and resources.

What else is planned

Te Akatura action investigation

The actions identified in the Te Atakura Implementation Plan, combined with the work of Let's Get Wellington Moving, and policy changes by central government, are still insufficient for Wellington city to meet its carbon reduction goals. There is a need to keep investigating what comes next, and to develop partnerships and initiatives that will deliver on the fast, significant and at scale reductions we need by 2030, and in the two decades after that. A dedicated funding stream has been approved over the next three years to support new idea development for city reductions, in addition to those ideas that come from the Wellington Climate Lab.

¹ https://www.parliament.nz/resource/en-NZ/SCR_115680/822b-f3a0a73ab30ad20c15c02adf334e1548bb67

Climate change culture - Wellington in 2030

FY22 will see the development and execution of a communications, engagement and behaviour change strategy to engage Wellingtonians in what climate action will mean for them as they live in and move around the city differently.

Climate and Sustainability Fund

The Fund is intended to support community groups and not-for-profit organisations to undertake climate action in their local communities. Fund application criteria and procedure is currently being developed alongside the Wellington Climate Lab. Applications are anticipated to be open in FY22.

Sustainable Food Programme

Projects being investigated for the coming year include community composting hubs, Maori food sovereignty, signing the Milan Urban Food Policy Pact, integrating a food lens into Council's Green Network Plan and District Plan, finalising Council's Sustainable Food Procurement Plan, and connecting with Regional Planning Meetings.

Future Living Skills programme

The Future Living Skills project is an in-house initiative to support behaviour change and promotion of a lower-carbon lifestyle. The project helps harness the growing demand by residents to take individual action on climate change and provides a range of social co-benefits. A programme leader will be appointed by the end of 2021 to lead the project.

Key success indicators

Indicators	2020 (as at 30 June)	2021 (as at 30 June)
tCO ₂ e sequestered annually in Council owned forestry (measured in carbon credits granted)	975	932



Action area: The Council itself

Alongside the city target, the Council has also set a target to reduce emissions to net zero by 2050. Emissions from Council operations reduced by 4% from FY19 to FY20. This was largely due to a 6% reduction in our major source of emissions from waste and landfill.

Council has put in place key actions or identified options to tackle the major sources of Council emissions from waste and stationary energy.

What's underway

Staff engagement

Reducing the Council's emissions is going to be a challenge that all the Council staff have a role in achieving. Planning staff engagement activities started in June this year. In addition to presentations on climate action to all staff, we have also established a rapidly growing Climate Action Champions Network with around 135 Council staff as members. The network look to empower staff members to become climate leaders, championing adaptation and mitigation across council's activity.

Work is also underway to embed climate action into the organisation's competency frameworks and training programmes, and various teams have been supported on progressing emissions reduction in the Council's supply chain.

Transport

EV first fleet

The goal of this project is to replace all Council's fossil-fuel-driven vehicles with zero emission, electric replacements, by 2030. More vehicles have been converted to EVs over the last year and currently 6% of the fleet is electric.

Flexible working

Council supports those staff who are able to work from home to do so up to 2 days per week, and is supporting of flexible working options where appropriate.

Building Energy

Energy Management Strategy

This project will contribute to the broader Council Emissions Reduction Plan over the next year.

A Sustainable Procurement Plan has been developed to partner with an electricity retailer to help us replace our hydrocarbon fuel sources with renewable alternatives, and reduce energy consumption. This is due to go through the procurement process late 2021 and commence July 1st 2022.

Natural Gas Displacement

A gas displacement strategy has been completed for the Council's largest sources of gas consumption, and the new Sustainable Procurement Plan to partner with an energy retailer will help us replace these hydrocarbon fuel sources.

Social housing

Through the Council's Housing Strategy and Action Plan we are seeking to achieve energy efficiency standards on new build developments, where possible.

A current example is the Harrison Street project which sees the redevelopment of a social housing site in Brooklyn. Due for completion at the end of 2022, this redevelopment is targeting a Homestar 6 rating.

As a commitment on delivering more energy efficient homes in future developments, the Council's Housing Development Team have all undergone Homestar Practitioner training and are committed to expanding their technical expertise in this area.

In our existing social housing stock, upgrades are necessary but not fully funded in Council's 2021-2031 Long-term Plan. Where possible, these upgrades will also include energy efficient and sustainability elements.

Climate smart buildings

The creation of a Climate Smart Building policy is underway, which will establish Environmentally Sustainable Design requirements for new Council building projects and will support the Energy Management Strategy to reduce emissions across existing Council buildings. Work on this policy will be completed in FY22.

It is anticipated that the policy will include committing to certify all new building projects and substantial upgrades over \$5M to minimum green building standards, requiring minimum sustainable design targets for projects below \$5M, developing a suite of supporting tools to upskill our people, and creating consistent internal processes to achieve the objectives.

As an example of what will soon apply to all our building projects, Tākina, the new convention centre, received 5-Star Green Star Design certification in 2021.

Climate smart buildings will also consider the integration of renewable energy generation and storage where this is feasible.

Smart buildings

The Wellington Museum and the City Gallery are great examples of smart buildings in action, with technology used to control the atmospheric conditions inside both buildings. With increased control over the temperature and better matching with how space is being utilised the technology has led to a reduction in annual energy consumption of these buildings by 37 percent and 25 percent respectively.

The programme reduced the building’s annual carbon emissions by 179 tonnes, which is equivalent to 30 New Zealand households. Like most energy efficiency initiatives, both projects paid for themselves within the first 18 months through the energy savings.

Waste

Sewage sludge processing solution

Removing sludge from the landfill will allow for waste minimisation efforts to be increased, as the current resource consent requires a specific amount of municipal waste to be mixed with the sludge for landfill stability. The Long-term Plan has identified the development of a new sewage sludge plant as the preferred solution. The Council is currently exploring the funding options to deliver this and begin building from 2023.

Waste reduction

Council’s Long-term Plan has set a clear priority for waste minimisation on food waste, biosolids and green waste. These waste types are the greatest contributors to emissions from our landfills due to their organic content which releases methane as it breaks down.

Para Kai is one initiative that is looking at how we can divert food waste from landfill. Commencing in October 2020, the trial has two parts. Roughly 450 households were recruited to try composting their food waste in either a compost bin, worm farm, or a bokashi system. And at the same time, a kerbside collection of binned food scraps is being trialled with 500 households. This pilot will be reviewed in Oct 2021 and the results brought to the Council for future consideration.

In 2021 the Council released a Waste Minimisation bylaw, requiring building projects of over \$2M to create and submit to Council a waste management plan.

In our Te Kainga programme (Council’s Housing Plan) we are ensuring that the developers we contract will recycle concrete from any future demolition, as well as recycling all of the waste from the Harrison Street building site. Council is also encouraging developers to divert clean demolition concrete instead of sending it to the landfill.

An updated Waste Strategy is currently being created, focusing on reduction of waste across the city and the transition to a circular economy.

What else is planned

Carbon measurement and management

This coming year Council is planning to improve measurement of Council emissions, and further develop carbon reduction opportunities for the organisation, including working with suppliers on carbon reporting as well as setting and achieving science-based carbon reduction targets.

Council will be working on an overall Emissions Reduction plan over the next year, which will combine aspects of the Energy Management Strategy and Council Smart Buildings policy, as well as looking at specific actions and emissions reduction potential across different Council working areas.

Water

Water metering was identified as a means of reducing water consumption and therefore energy use. This may be considered when the Three Waters reform has been concluded.

Procurement

Council’s procurement strategy was refreshed this year and includes consideration of a range of sustainable outcomes, including climate action. More work is planned for the coming year to embed these principles into the Council procurement processes and practice.

Governance

Templates for Council papers are currently being reviewed, and there are continuously improvements being made to how internal decisions are made, and the processes that need to be followed. More progress on this is expected in the coming year.

Key success indicators

Indicators	2020 (as at 30 June)	2021 (as at 30 June)
Waste - annual landfilled rubbish	97,745	89,287
Waste - diverted from landfill	17,900	18,174
Green waste	5,210	5,482
Commercial Food waste (Kai to Compost)	1,392	1,521
Recycling	10,679	10,568
Tip Shop removal	19	19
Scrap metal	571	557
Hazardous	29	27
Transport - % of Council fleet converted to EVs	5%	6%

Action area: Adaptation

Alongside the city's efforts to reduce emissions we are also accelerating efforts to manage the impacts of climate change that are already locked in. Like many other places around Aotearoa, Wellington has experienced another year with new extremes, including big swells on the South Coast, that highlight the vulnerability of our low-lying coastal communities, ecosystems and infrastructure.

What's underway

Over the last year there has also been considerable efforts to build our capacity to adapt to climate change across all levels of government, including at Wellington City Council.

The Council's climate adaptation work programme builds on its Resilience Strategy. Over the past few years there has been a range of actions implemented to reduce exposure to climate risks including improvements to stormwater infrastructure, maintenance of seawalls, and targeted community engagement with high-risk communities to begin planning for climate change. We have also been working to update the natural hazards maps included in the draft District Plan, which will give better access to information about future risks.

Central government has announced significant changes to create the necessary policy frameworks to better enable adaptation to the impacts of climate change including the first National Adaptation Plan being drafted, in response to the First National Climate Change Risk Assessment released in 2019. The Climate Adaptation Act is also due to be introduced as a Bill, which will likely provide greater clarity on complex issues associated with managed retreat and funding and financing adaptation across levels of government. The Ministry for the Environment is developing new national guidance for local governments on undertaking climate change risk assessments, which will support local climate risk assessments going forward.

What else is planned

The Greater Wellington Regional Council has also led significant efforts to support climate change adaptation for the region. The regional council produced updated climate change projections in 2019 which help to inform our approach. The Wellington Region Climate Change Forum is supporting the adaptation workstream of the Wellington Regional Growth Framework, which Wellington City Council is a part of alongside other local authorities and mana whenua. This forum will help ensure a consistent approach on climate change adaptation for councils in the region.

Wellington City Council has committed to an increased focus on adaptation, with a dedicated advisor for climate change adaptation appointed to support the work programme. Wellington City Council will lead the development of a Climate Change Risk Assessment for the greater Wellington region, develop a strategic approach to adaptation, and engage with communities to start preparing for climate change.

Collaborating with communities to adapt

Wellington City Council was selected a Bloomberg Champion City for the 2021 Bloomberg Global Mayors Challenge and received seed funding that enables the Council to develop a prototype of a two-way communication platform that will enable better engagement and collaboration between the Council, mana whenua and the community on adaptation planning. The project brings together climate science, community engagement, and technology - using our 'Digital Twin' we are developing, a photorealistic 3D model of the city similar to this one. The tool will be used to educate, engage and tell stories about the city as it was, as it is now and how it could be in the future, including the impact of climate change. Our goal is also to enable many more Wellingtonians to provide input into climate change adaptation planning.

Next steps

Over the coming months, we will be updating our website information on climate change, Te Atakura, and sustainability. We will also be producing updates on Te Atakura's progress annually. We are always keen to hear from Wellingtonians and other interested people and organisations. You can contact us at ClimateAction@wcc.govt.nz



Appendix 1: Status of current actions

Action	Focus area	Lead	GHG Reduction	Status
Let's Get Wellington Moving	Transport and urban form	WCC, GWRC, NZTA, Central Govt	Major	Underway
Creating Streets for People - starting with cycling	Transport and urban form	WCC, GWRC, NZTA, Central Govt	Major	Underway
Planning for Growth	Transport and urban form	WCC	Major	Underway
Travel behaviour change	Transport and urban form	WCC	Enabling	Ongoing
Car sharing	Transport and urban form	Business sector	Moderate	Ongoing
E-scooter sharing	Transport and urban form	Business sector	Minor	Underway
Charged up Capital - Public EV chargers	Transport and urban form	WCC	Moderate	Underway
Clifton Park charging hub	Transport and urban form	WCC	Minor	Absorbed into Charged Up Capital
Fossil fuel free streets	Transport and urban form	WCC, GWRC, NZTA, Central Govt	Enabling	Scoping
Incentivising city-wide flexible working	Transport and urban form	WCC, GWRC, NZTA, Central Govt	Major	More R&D required
Identify aviation and marine opportunities	Transport and urban form	Business sector	Unclear	More R&D required
Warmer Kiwi Homes	Building energy	EECA (10-20% top up by WCC)	Minor	Ongoing
Home Energy Saver	Building energy	Sustainability Trust	Minor	Ongoing
Neighbourhood grids	Building energy	Contact energy	Minor	Completed
Business Energy Saver Pilot	Building energy	WCC with delivery partner	Moderate	Scoping
Development contributions	Building energy	WCC	Minor	Scoping
Supporting building sustainability improvements	Building energy	WCC	Enabling	More R&D required
Te Akatura action investigation	City-wide	WCC	Enabling	Scoping
Wellington Climate Lab	City-wide	WCC, business sector, community sector, academia	Enabling	Scoping

Action	Focus area	Lead	GHG Reduction	Status
Zero Carbon Challenge and Climathon	City-wide	WCC, business sector, community sector, academia	Enabling	Absorbed into Climate Lab
Climate and sustainability fund	City-wide	Community Services	Enabling	Underway
Climate action campaign	City-wide	WCC	Enabling	Scoping
Future living skills programme	City-wide	Community Services	Enabling	Underway
Sustainable Food Programme	City-wide	WCC	Enabling	Underway
Accelerate opportunities to support carbon farming	City-wide	WCC	Enabling	Underway
Carbon measurement and management	Council	WCC	Enabling	Underway
Emissions Reduction Plan	Council	WCC	Enabling	Scoping
Sewage Sludge Solution	Council	Wellington Water	Major	Awaiting funding
Organics Collection Trial	Council	WCC	Minor	Underway
Waste Strategy Review	Council	WCC	Major	Scoping
EV First Fleet	Council	WCC	Minor	Underway
Energy Management Strategy and Plan	Council	WCC	Enabling	Scoping
Displacing natural gas	Council	WCC	Minor	More R&D required
Solar community facilities	Council	WCC	Minor	Scoping
Climate Smart Buildings policy	Council	WCC	Enabling	Underway
Flexible working	Council	WCC	Minor	Underway
Procurement	Council	WCC	Enabling	Underway
Improve Governance	Council	WCC	Enabling	Underway
Staff engagement	Council	WCC	Enabling	Underway

Climate Change Response Team
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Absolutely Positively
Wellington City Council
Me Heke Ki Pōneke