

**OUR CLIMATE FUTURE:
TE PAE TAWHITI O KIRIKIROA**
Supporting document

Setting our emissions reduction targets



**Hamilton
City Council**
Te kaunihera o Kirikiriroa

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INTRODUCTION

As part of Our Climate Future: Te Pae Tawhiti o Kirikiriroa, we are setting emissions reduction targets for Hamilton city and Hamilton City Council. The purpose of the city-wide targets is to measure progress towards and ensure we are successful in achieving outcome one and our overall vision of a low-carbon city. The targets for Hamilton City Council's operational emissions will keep us accountable in our organisation's own actions, and make sure we are leading the way for our community.

This document provides an overview of these targets, how they were set, and how we will measure progress towards them.

OUR EMISSIONS REDUCTION TARGETS

The targets outlined in Our Climate Future: Te Pae Tawhiti o Kirikiriroa are:

Emissions reduction targets for Hamilton City		
Year	Target	Explanation summary
2025	Turning point – Emissions peak at the very latest	Based on latest science and advice from the Intergovernmental Panel on Climate Change (IPCC), global emissions must peak by 2025 at the latest. We will ensure our city's emissions begin declining by this time, if not before.
2030	Minimum 30% reduction	We have put a Hamilton 'lens' over national modelling and think that as a city, we can push further than the modelled national response. As such, achieving a minimum 30% reduction in our city's emissions by 2030 will mean that we are pushing ourselves to do more in our climate change response and can put pressure on central government and other partners to help us.
2050	Minimum 82% reduction	We have put a Hamilton 'lens' over the national modelling and this has shown we need to aim for a minimum of 82% reduction in our city's emissions by 2030. This reflects our share of the national target of net zero by 2050.

Emissions reduction targets for Hamilton City Council's operational emissions		
Year	Target	Explanation summary
2030	50% reduction	We need to take responsibility as a Council and lead the community in emissions reduction. We have already started to reduce emissions and implement projects that will reduce our emissions further.
2050	Net zero	

WHY WE'VE CHOSEN THESE TARGETS

In setting these targets, we have considered Council's role in reducing emissions, the current international science, and central government's 2050 targets, first three emissions budgets and first Emissions Reduction Plan.

Our role

Hamilton City Council can have direct impacts on some emissions and influence other aspects of the city's climate change response. Examples of this include:

- Looking after and promoting the wellbeing of community – this includes social, economic, environmental and cultural wellbeing as outlined in the [Local Government Act 2002](#)
- Making changes through our city planning, transport planning, infrastructure, rates, and key services like rubbish and recycling
- Providing education through communications and engagements, to support our community and businesses to reduce emissions.

In other areas, we will need to encourage and advocate for climate action – for example, in instances where regional solutions or responses to the changing climate are more appropriate. So, our role also includes:

- Partnerships – working with other groups and organisations such as iwi, Waikato Regional Council, businesses, and community groups. For example, through our Futureproof partnership we are able to collaborate on sub-regional transport investment decisions
- Advocacy – pushing for stronger action, funding support, and investments from other organisations and entities (e.g., from central government)

Whilst there are actions we can take to reduce our emissions, we will also rely on others to act if we are going to be successful in achieving our city-wide emissions reduction targets. We will regularly review what actions are being implemented and continue to advocate for stronger action if required.

Current science

The global goal is to limit warming to 1.5 degrees Celsius, as outlined in the Paris Agreement – an international agreement of which New Zealand is a signatory. The latest research from the Intergovernmental Panel on Climate Change (IPCC) advised that in order to achieve this goal, global emissions must begin declining by 2025 at the very latest, then reduce by 43% by 2030 and be at net zero by 2050.

What does 'net zero' mean?

'Net zero' refers to reducing emissions as much as possible, with any remaining unavoidable emissions captured, for example through planting trees. 'Net zero' therefore does not mean there are no emissions produced – just that these are balanced by capturing them from the atmosphere.

Central government targets

In 2019 the Climate Change Response (Zero Carbon) Amendment Act set into law two long-term targets for Aotearoa New Zealand:

- Net zero emissions of all greenhouse gases other than biogenic methane by 2050
- 24 to 47% reduction of biogenic methane emissions by 2050

To guide them towards achieving these targets, central government uses emissions budgets – these are set amounts of emissions that are allowed to be released during a certain period, and act as ‘stepping stones’ towards the 2050 targets.

The Climate Change Commission were tasked with advising central government on the emission budgets and how they would be achieved. This advice was provided in June 2021. The advice included modelling of potential pathways that national emissions could follow, based on different scenarios and assumptions, to reduce from now until 2050 and achieve the targets outlined above.

In May 2022 the government announced the first three emissions budgets and the first [Emissions Reduction Plan](#), in line with Climate Change Commissions advice. The emissions budgets are as follows:

Budget period	2022-25	2026-30	2031-35
All gases	290 Mt CO ₂ e	305 Mt CO ₂ e	240 Mt CO ₂ e
Annual average	72/5 Mt CO ₂ e	61 Mt CO ₂ e	48 Mt CO ₂ e
<i>Note: Mt CO₂e – megatonnes of carbon dioxide equivalent</i>			

Table 1: Aotearoa New Zealand’s first three emissions budgets, as outlined in the first Emissions Reduction Plan.

The Emissions Reduction Plan contains strategies, policies, and actions for achieving the first three emissions budgets (2022-35). There is a key focus on the role of local government, and how councils will be fundamental in achieving the national emissions reduction targets.

Aotearoa New Zealand also has a commitment to the Paris Agreement (known as the ‘Nationally Determined Contribution’ or ‘NDC’), which is a target of 50% reduction of net emissions by 2030.

Actions outlined in central government’s first Emissions Reduction Plan mean that as a country, we will not achieve these targets through domestic action alone – we will need to rely on offshore emissions reduction action as well.

TARGETS FOR HAMILTON CITY

We have used the information above to inform the emissions reduction targets set for Hamilton city.

Emissions turning point by 2025

Our emissions must peak and begin reducing by 2025 at the latest, to align with the advice from IPCC. However, this does not mean that we will allow emissions to increase until this point. We are already working towards reducing emissions across the city, as set out in the 2020/21 and 2021/22 Climate Change Action Plans¹, and recognise that these efforts need to be furthered urgently.

¹ The 2020/21 and 2021/22 Climate Change Action Plans can be found on our [website](#).

Minimum 30% reduction by 2030

Using the modelling provided to central government by the Climate Change Commission, we have considered how Hamilton city's emissions may reduce from now until 2050. This is represented in Figure 1 (below), which shows a pathway for how Hamilton's emissions could reduce if central government applied all the advice from the Climate Change Commission. Based on this modelling, we could expect to see a reduction of 20% in Hamilton's city-wide emissions in 2030.

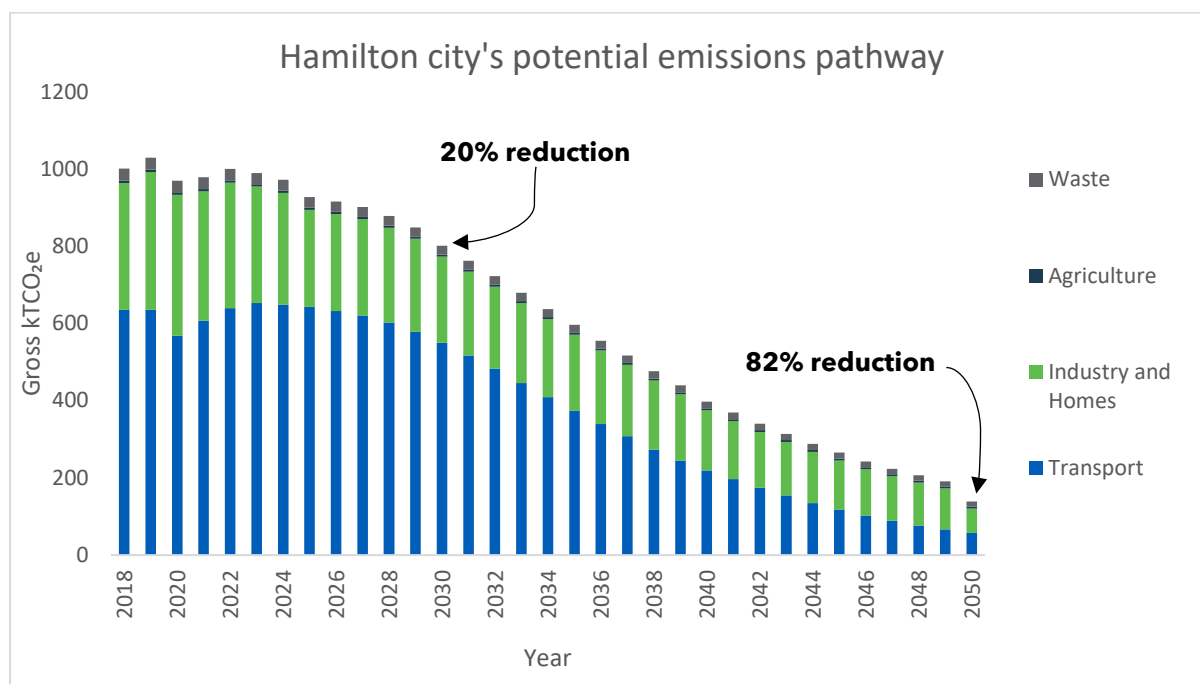


Figure 1: Hamilton city's potential emissions reduction pathways based on Climate Change Commission's advice (June 2021) to central government

Having assessed the first Emissions Reduction Plan released by central government in May 2022, we found that central government has accepted and is beginning to implement most of the advice from the Climate Change Commission. This means that the strategies, policies, and actions committed to by central government in the Emissions Reduction Plan – which include a number of actions for local governments – will get us on the journey to achieving the reductions outlined in the modelling above.

However, there are already a number of projects and initiatives planned for our city that have the potential to achieve further reduction beyond the pathway modelled in the graph above, and beyond what the government has planned in the first Emissions Reduction Plan. For example, consultation on Hamilton City Council's 2021-31 Long Term Plan showed that our community wanted more walking, biking, and scooting options to move around our city, so the Long Term Plan has \$55 million budgeted for a Biking and Micromobility Programme.

In addition, Hamilton is well positioned to make further impactful changes in our transport emissions, which are the main source of emissions in our city. Currently we have some of the highest car use rates for trip-making in the country, with 60% of all car trips in Hamilton being less than 5km (the equivalent of a 20-minute bike ride). However, the typography and geography of our city – that it's relatively flat and only approximately 7km at its widest and 13km at its longest – means that we

have a huge opportunity to better incorporate walking, biking, other micro-mobility modes, and public transport options². Whilst we have long term plans to create high quality infrastructure to support biking, we are also commencing work to implement low cost, simple to install solutions throughout the city to enable more people to safely travel by bike sooner.

We are also in the process of refreshing our transport strategy, Access Hamilton, that considers climate change and emissions in the development of our transport network and system, plus an updated Hamilton Urban Growth Strategy that considers where and how the city will grow, and how this will impact on our community's travel for work, education, and play. We also have a young population who are an integral part of creating a transport culture that is more active, and who are capable of being agents of change within the community if they are supported by the right strategies and actions by Council and its partners. These factors set us apart from the modelling provided by the Climate Change Commission and the actions in central government's first Emissions Reduction Plan, so we have therefore chosen a target that gets us further than the 20% reduction outlined in the graph above.

Finally, as an organisation, we acknowledge that while central government has set an international target in line with the Paris Agreement and limiting warming to 1.5°C, the action here in Aotearoa New Zealand is not enough to meet what the science is telling us. By setting a target for our city beyond what the modelling suggested, we will put more pressure on government to help us with achieving the emissions reductions needed.

In summary: In setting the 2030 target for Hamilton City, we applied a 'Hamilton lens' to the national modelling, considered the plans and programmes we already have in place, and the potential of our city to reduce emissions. As a result, we think we can push further than the modelling and central government suggestions, which indicates a 20% reduction by 2030. We have therefore set a target of 30% reduction for Hamilton city emissions by 2030.

Minimum 82% reduction by 2050

As before, we have used the modelling that the Climate Change Commission provided to central government and applied it to Hamilton city's emissions to calculate what reductions could be possible for Hamilton in 2050. This modelling shows that 82% reduction could be expected by 2050. Therefore, we have chosen to aim for this as a minimum; however, this target will be reassessed as the strategy is reviewed.

We have chosen to align with the modelling in this case to recognise that while our country is heading towards net zero emissions overall, this does not mean that Hamilton, as a growing city – and other urban areas across New Zealand, for that matter – must produce zero emissions. The government's 'net zero' goal will instead mean that while urban areas across the country must drastically reduce emissions as a priority, we will also need the assistance of other, more rural areas to balance and capture the remaining unavoidable emissions. The government has already signalled that although they will focus on domestic opportunities to capture these emissions, international opportunities will need to be used. As Hamilton has a limited amount of forestry available to capture emissions compared to other areas in New Zealand, we will need to further strengthen how we plan for and incorporate nature in our city and be visionary in maximising opportunities in this space.

² Hamilton-Waikato Area Mode Shift Plan, Waka Kotahi NZ Transport Agency. September 2020.
<https://www.nzta.govt.nz/assets/resources/keeping-cities-moving/Hamilton-Waikato-regional-mode-shift-plans.pdf>

In summary: In setting the 2050 target for Hamilton City, we applied a ‘Hamilton lens’ to the national modelling and considered the realistic opportunities that we have as an urban area to capture or offset any unavoidable emissions. As set out in the guiding principles of the strategy, we will focus on taking the right action, which means we prioritise avoiding new emissions, reducing unavoidable emissions, and seeing sequestration and offsetting emissions as a last resort. Achieving a minimum 82% reduction of our city’s emissions by 2050 will mean we do our share of the country’s net zero target, and therefore set us on the course for a ‘climate safe’ future.

TARGETS FOR HAMILTON CITY COUNCIL

Setting targets for Hamilton City Council’s operational emissions is key to ensuring that we remain committed to reducing our direct impact and leading the way for our community. Our organisation’s emissions are different to the city-wide emissions and are more directly within our control.

50% reduction by 2030

Reducing Hamilton City Council’s operational emissions by 50% by 2030 represents our organisation’s share of the global 2030 goal. This means that we have taken into account that New Zealand as a developed country, and Hamilton city as an urban area, have historically contributed more to global emissions compared to other lesser-developed countries and rural areas. We must therefore have ambitious targets to correct for this and drastically reduce operational our emissions going forward.

Net zero emissions by 2050

We have chosen to set a net zero target for our operational emissions by 2050 to further commit to leading the way for our city-wide climate change response. This target further pushes our organisation to look at opportunities to work differently and to be more efficient.

In summary: In setting emissions reduction targets for Hamilton City Council’s operational emissions, we have chosen to align with the science and do our part to reduce emissions and lead the way for our community and city to respond to climate change. We will monitor our emissions reduction and review these targets regularly. We will increase our ambition if possible.

MEASURING PROGRESS TOWARDS THE TARGETS

This strategy sets the targets and ambition for our city and organisation, but it is the emissions reduction pathways for our city and Council that will outline how we will achieve the targets set in the strategy.

Our city’s emissions reduction pathway will include the emissions impacts of all existing projects (as funded in the 2021-31 Long Term Plan), the impact of new or extended programmes, and the impact of central government initiatives. This will help to identify gaps in our emissions reduction plans and prioritise future actions and funding, to achieve the emissions reduction targets.

We will monitor our progress along the pathway annually, to ensure that projects are delivering the emissions reductions required, or take corrective action if needed. We will also complete an inventory of our emissions and produce an emissions profile for the city every three years (at a minimum), which will help to see how and what reductions are achieved in different sectors, and further inform decisions for our emissions reduction pathway process.