

Appendix 1: Recommended amendments to the Climate Change – General provisions

Section 42A recommended amendments shown in red underlined and marked-up text.

3.1A Climate Change

As of 2022, long term weather records show that seven of the past nine years have been amongst New Zealand’s warmest on record, with 2021 and 2016 being the two hottest recorded years. In the Wellington region, we have one of the highest rates of sea level rise in New Zealand due to the effects of global sea level rise, compounded by a regional trend of tectonic subsidence.

Predictions are for significant climate change impacts in the Wellington Region¹ significant impacts by 2090 if global greenhouse gas emissions are not significantly reduced. The annual regional temperatures, for instance, could increase by up to 3°C. The key highlights from the report include:

- Wellington and Wairarapa will experience a significant increase in hot days
- Frost occurrence, including in the high elevation areas, is projected to significantly decrease
- Spring rainfall will reduce by up to 15 percent in eastern areas
- Up to 15 percent more winter rainfall could be experienced along the west coast
- The risk of drought will increase in the Wairarapa
- More extreme rainfall events

Some changes are occurring faster than previously expected, such as sea level rise and ocean warming, leading to more frequent and energetic storms causing an increase in flooding, coastal erosion and slips in many parts of the region.

~~While historical emissions mean that we are already locked into continued global warming until at least mid-century, and longer for sea-level rise, there is still opportunity to avoid the worst impacts of climate change if we act urgently across all sectors to make significant reductions in global greenhouse gas emissions.~~

~~There is still an opportunity to limit warming to 1.5 °C if global net anthropogenic CO₂ emissions are reduced by 48 percent from 2019 levels by 2030 and a 99 percent reduction in CO₂ emissions is achieved by 2050 (these are median values). When all greenhouse gases are considered, global net emissions expressed as CO₂e must reduce by between 73 and 98 percent by 2050 to give a 50% chance of limiting warming to 1.5 °C with low or no overshoot.~~

In 2021 He Pou a Rangī the Climate Change Commission issued a call to all New Zealanders “to take climate action today, not the day after tomorrow”, concluding that

New Zealand needs to be proactive and courageous as it tackles the challenges the country will face in the years ahead. All levels of central and local government must come to the table with strong climate plans to get us on the right track, concluding that bold climate action is possible when we work together.

While this will require bold and decisive action, there is a need to act carefully, recognising that the costs **and benefits** of change will not be felt equally across our communities and that provision needs to be made for an equitable transition.

In 2019, Greater Wellington Regional Council declared a climate emergency, pledging to become carbon neutral by 2030 and to take a leadership role to develop a Regional Climate Emergency Response Programme, working collaboratively with **mana whenua/tangata whenua iwi**, key institutions and agencies to reduce **greenhouse gas emissions** and prepare for the unavoidable effects of climate change, supporting international and central government targets for **greenhouse gas emissions** reductions and adaptation planning.

The key areas of action required to address climate change are to:

1. Reduce gross **greenhouse gas emissions**. This includes transitioning as rapidly as possible from fossil fuels to renewable energy and recognising that methane reductions offer a significant opportunity for **limiting** global cooling in the **nearshort**-term.
2. Increase greenhouse gas sinks through carbon sequestration, while recognising that **due to the limitations of this approach, this is only a short-term solution, and** that the focus must be on reducing gross GHG emissions.
3. Take adaptation action to increase the resilience of our communities, the natural and built environment to prepare for the changes that are already occurring and those that are coming down the line. Critical to this is the need to protect and restore natural ecosystems so they can continue to provide the important services that ensure clean water and air, support indigenous biodiversity and ultimately, people.

The causes of climate change need to be addressed by internationally coordinated action, but our success depends on responses at national, local and individual levels.

The regionally significant issues, and the issues of significance to the Wellington region's iwi authorities for climate change are:

1. Greenhouse gas emissions must be reduced significantly, immediately and rapidly

Immediate, rapid, and large-scale reductions in **greenhouse gas emissions** are required to limit global warming to 1.5°C, the threshold to avoid significant impacts on the natural environment, the health and well-being of our communities, and our economy. Extreme weather events and sea level rise are already impacting our region, including on biodiversity, water quality and availability, and increasing the occurrence and severity of natural hazards. Historical emissions mean that we are already locked into continued warming until at least mid-century, but there is still an opportunity to

avoid the worst impacts if global net anthropogenic CO2 emissions are reduced by at least 50 percent from 2019 levels by 2030, and carbon neutrality is achieved by 2050. In the Wellington Region, the main sources of **greenhouse gas emissions** are transport (39 percent total load in 2018-19), agriculture (34 percent), and stationary energy (18 percent).

2. Climate change and the decline of ecosystem health and biodiversity are inseparably intertwined

Climate change is placing significant additional pressure on species, habitats, ecosystems, and ecosystem processes, especially those that are already threatened or degraded, further reducing their **resilience**, and threatening their ability to persist. This, in turn, reduces the health of natural ecosystems, affecting their ability to deliver the range of ecosystem services, such as carbon sequestration, natural hazard mitigation, erosion prevention, and the provision of food and amenity, that support our lives and livelihoods and enable mana whenua/**tangata whenua** to exercise their way of being in **the** Te Ao Tūroa, the natural world.

3. The risks associated with natural hazards are exacerbated by climate change

The hazard exposure of our communities, land, **mana whenua/tangata whenua sites**, **wāhi tapu**, infrastructure, food **security** (including mahinga kai), and water security is increasing because of climate change impacts on a range of natural hazards. Traditional approaches to development ~~that tend not to~~ have ~~not~~ fully considered the impacts on natural systems. ~~and our over-reliance on~~ Hard engineered protection works ~~that have not been designed to withstand the impacts of climate change, which will~~ inevitably become **compromised overwhelmed** and uneconomic to sustain, **will** **which can** ultimately increase the risk to communities and the environment.

4. The impacts of climate change will exacerbate existing inequities

The impacts and costs of responding to climate change will not be felt equitably, especially for **mana whenua/tangata whenua Māori**. Some communities have no, or only limited, resources to enable mitigation and adaptation and will therefore bear a greater burden than others, with future generations bearing the full impact.

5. Climate change threatens tangible and spiritual components of **mana whenua/tangata whenua Māori well-being**

Climate change threatens both the tangible and spiritual components of **mana whenua/tangata whenua Māori** well-being, including Te Mana o Te Wai and Te Rito o Te Harakeke, mahinga kai, and taonga species, and the well-being of future generations. Significant sites for **mana whenua/tangata whenua Māori**, such as marae, wāhi tapu and urupā, are particularly vulnerable as they are frequently located alongside the coast and fresh waterbodies.

6. Social inertia and competing interests need to be overcome to successfully address climate change

Many people and businesses lack the understanding, ability or support to make the changes needed to transition to a low-emission and climate-resilient future. It can be challenging for people and businesses to make the an understanding of the connection between their actions, greenhouse gas emissions and climate change and the ways that climate change it will impact their lives. In turn, this detracts from our ability to conceive of the changes we can make to help the transition to a low-emissions and climate-resilient future. Social inertia and competing interests are some of the biggest issues to overcome to address climate change.

Objective CC.1

By 2050, the Wellington Region is a low-emission and climate-resilient region, where climate change mitigation and climate change adaptation are an integral part of:

- (a) sustainable air, land, freshwater, and coastal management,
- (b) well-functioning urban areas environments and rural areas, and
- (c) the well-planning ed and delivery of infrastructure.

Objective CC.2

The costs and benefits of transitioning to a low-emission and climate-resilient region are shared fairly to achieve social, cultural, and economic well-being across our equitable between sectors and communities.

Objective CC.3

To support the global goal of limiting warming to 1.5 degrees Celsius, net greenhouse gas emissions from transport, agriculture, stationary energy, waste, and industry in the Wellington Region are reduced:

- (a) By 2030, to contribute to a 50 percent reduction in greenhouse gas emissions from 2019 levels, including a:
 - (i) 35 percent reduction from 2018 levels in land transport-generated greenhouse gas emissions,
 - (ii) 40 percent increase in active travel and public transport mode share from 2018 levels, and
 - (iii) 60 percent reduction in public transport emissions, from 2018 levels, and
- (b) By 2050, to contribute to achieving net-zero greenhouse gas emissions.

Objective CC.7

People and businesses understand ~~what the current and future effects of climate change and how this may impact them means for their future~~ and are actively involved in ~~planning and implementing~~ appropriate *climate change mitigation* and *climate change adaptation* responses.

Objective CC.8

Iwi and hapu Mana whenua/tangata whenua are empowered to ~~make decisions to~~ achieve *climate-resilience* in their communities.

Policy CC.8: Prioritising ~~the reduction of greenhouse gas emissions reduction over offsetting~~ – district and regional plans

District and regional plans shall ~~include objectives, policies, rules and/or methods to prioritise reducing greenhouse gas emissions in the first instance rather than applying offsetting, and to identify the type and scale of the activities to which this policy should apply.~~– prioritise reducing *greenhouse gas emissions* by applying the following hierarchy in order:

- a) ~~in the first instance, gross *greenhouse gas emissions* are avoided or reduced where practicable; and~~
- b) ~~where gross *greenhouse gas emissions* cannot be avoided or reduced, a net reduction in *greenhouse gas emissions* is achieved where practicable, with any offsetting undertaken as close to the source of the *greenhouse gas emissions* as possible; and~~
- c) ~~increases in net *greenhouse gas emissions* are avoided to the extent practicable.~~

Explanation: This policy recognises the importance of reducing gross *greenhouse gas emissions* as the first priority, then ~~reducing net *greenhouse gas emissions*, then avoiding increases in net *greenhouse gas emissions* to the extent practicable. and only using carbon removals to offset emissions from hard-to-abate sectors.~~ Relying heavily on ~~net-emissions through~~ offsetting will delay people taking actions that reduce gross emissions, lead to higher cumulative emissions and push the burden of addressing gross emissions onto future generations.

The intent is that Wellington Regional Council will work with city and district councils to provide coordination and guidance as to how to implement this policy, to ensure regional and district plan provisions to reduce *greenhouse gas emissions* from key emitting sectors in the region are co-ordinated and also complement national policy and initiatives. This work will consider issues such as scale, equity, and the type of activities to which offsetting should apply.

Method CC.1: Climate change education and behaviour change programme

Support, ~~and enable, and implement~~ climate education and behaviour change programmes, that include Te Ao Māori and Mātauranga Māori perspectives ~~in partnership with mana whenua/tangata whenua~~, to support an ~~equitable~~ fair transition to a low-emission and ~~climate-resilient~~ region.

Implementation: Wellington Regional Council.

Method CC.2: Develop ~~carbon emissions offsetting~~ guidance on reducing and offsetting greenhouse gas emissions

Wellington Regional Council will work with city and district councils and mana whenua/tangata whenua to develop guidelines to implement Policy CC.8 by the end of 2024, including how to prioritise reducing ~~gross greenhouse gas emissions~~ and when and how to allow for ~~greenhouse gas emissions~~ to be offset ~~Develop offset guidelines to assist with achieving the regional target for greenhouse emissions~~ where reduction cannot be achieved at the source.

Implementation: Wellington Regional Council.

Climate Change – Anticipated Environment Results

Net greenhouse gas ~~Carbon~~ emissions are reduced by 50 percent from 2019 levels by 2030 across the Wellington Region ~~and to achieve net-zero greenhouse gas emissions by 2050~~.

Climate Change – Definitions

Carbon emissions assessment

An evaluation of the carbon footprint which measures the total volume of greenhouse gases emitted at different stages of a project lifecycle.

Climate change adaptation

In human systems, the process of adjusting to actual or expected climate and its effects, in order to ~~moderate~~ ~~reduce~~ harm or take advantage of beneficial opportunities. In natural systems, the process of adjusting to actual climate and its effects. Human intervention may help these systems to adjust to expected climate and its effects.

Climate change mitigation

Human actions to reduce ~~greenhouse gas emissions~~ by sources or enhance removals by sinks of greenhouse gases. ~~Examples of reducing emissions by sources include~~

walking instead of driving, or replacing a coal boiler with a renewable electric-powered one. Examples of enhancing removals by sinks include growing new trees to absorb carbon, promoting and providing for active transport, and increasing public transport services and affordability.

Emissions

Greenhouse gases released into the atmosphere, where they trap heat or radiation.

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Greenhouse gases emissions

Atmospheric gases released into the atmosphere that trap or absorb heat and contribute to climate change. These gases covered by the Climate Change Response Act 2002 are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆) which are all covered by the Climate Change Response Act 2002.