

Regional Policy Statement Proposed Change 1 Hearing Stream Three Climate Change

Stage of hearing	Text colour
S42A report	Red
Rebuttal evidence	Blue
Right of Reply	Green

43.1A 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 Rangi 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.²

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](#) the focus must be on reducing [gross greenhouse gas GHG](#) emissions.
3. Take adaptation action to increase the resilience of our communities, and 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 role of the resource management system in the climate change response](#)

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

The resource management system plays a key role in helping to reduce *greenhouse gas emissions*. This section of the Regional Policy Statement sets out issues, objectives, policies and methods to help achieve a significant reduction in *greenhouse gas emissions* and improve the resilience of the Wellington Region to the effects of climate change. It is intended to complement the Climate Change Response Act 2002 and the range of actions and initiatives in Aotearoa New Zealand's Emission Reductions Plan and National Adaptation Plan prepared under that Act. This recognises that the achievement of *greenhouse gas emission* reduction targets, including those in Objective CC.3 of this statement, requires a range of actions, initiatives and financing tools that sit both within and outside of the resource management system.

Note that for the avoidance of doubt:

- [Objective CC.3 seeks to ensure that the management, use and protection of natural and physical resources in the Wellington Region contributes to the 2030 and 2050 regional *greenhouse gas emission* targets – it is not a limit nor intended as an allocation regime between different sectors.](#)

- [The climate change objectives, policies and methods in this Chapter do not apply to greenhouse gas emissions from aircraft.](#)

[Regionally significant climate change issues](#)

[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 \(18 percent\). Development of the renewable energy resources in the Region will be necessary to assist the transition from fossil fuel dependency and achieve the significant reductions in greenhouse gas emissions needed from these sources.](#)

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 Conventional 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 are likely to 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, resources and funding, ability or support to make the changes needed to transition to a low-emissions 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, t~~The Wellington Region is a low-emission and climate-resilient region, where climate change mitigation and 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 ~~and New Zealand's greenhouse gas emissions reduction targets, 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 net greenhouse gas emissions from 2019 levels by 2030, 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 by 2050.

Objective CC.4:

Nature-based solutions are an integral part of climate change mitigation and climate change adaptation, improving the health, well-being and resilience of people and communities, indigenous biodiversity, and the natural and physical resources environment.

Objective CC.5:

By 2030, there is an increase in the area and health of permanent forest, preferably indigenous forest, in the Wellington Region, maximising benefits for carbon sequestration, indigenous biodiversity, land stability, water quality, and social, cultural and economic well-being.

Objective CC.6

Resource management and adaptation planning increases the resilience of communities, infrastructure and the natural environment to the short, medium, and long-term effects of climate change.

Objective CC.7

People and businesses understand what the current and predicted future effects of climate change, and how these may impact them, means for their future how to respond to the challenges of climate change, and are actively involved in planning and implementing appropriate mitigation and adaptation responses.

Objective CC.8

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

4.3.3: Energy, infrastructure and waste

Delete the eighth paragraph of the chapter introduction as follows:

~~The New Zealand Energy Strategy (2007), the New Zealand Energy Efficiency and Conservation Strategy (2007) and the New Zealand Transport Strategy (2008) outline New Zealand's actions on energy and climate change. The objectives, policies and methods on energy in this Regional Policy Statement will assist with making progress towards national targets. There are, however, a number of targets — such as reducing carbon dioxide equivalent emissions from transport — where the Regional Policy Statement has limited influence.~~

4.3.8 Natural Hazards

A natural hazard is defined in the Resource Management Act as any atmospheric, earth or water related occurrence (including earthquake, tsunami, erosion, volcanic, and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) which may adversely affect human life, property, or other aspects of the environment. On their own, natural processes do not constitute a hazard. Natural events become hazardous when they may adversely affect human lives.

Regional, city and district councils all have responsibilities under the Resource Management Act to manage the significant risks from these natural hazards as a matter of national importance. Additionally, particular regard must be given to the effects of climate change when achieving the sustainable management purpose of the Act.

The Wellington Region has one of the most physically diverse environments in New Zealand. It is also one of the most populous regions and, consequently, our communities and the areas that we value are affected by a wide range of natural hazards. The hazard exposure of people and communities, the natural environment, businesses and the economy, food production (including mahinga kai), water security, property and infrastructure is increasing because of climate change. The impacts and costs of responding to natural hazards and climate change is not felt equitably. Some communities have no, or only limited, resources to enable mitigation and adaptation and will bear a greater burden than others.

With the exception of geothermal activity, the region is subject to all types of natural hazard events. Commonly, there are two or more hazards associated with a given event. For example, a rainstorm may cause flooding and landslips.

The three most potentially damaging and costly natural hazards events that can occur in the region are:

- Earthquake: High magnitude earthquake (7.0+) from the rupture of a local fault (especially the Wellington Fault) affecting Te Whanganui-a-Tara/Wellington city, Te Awa Kairangi/Hutt valley, Porirua, Kāpiti Coast and towns in the Wairarapa District.

- Flooding: Major river flooding in the Hutt valley, Kāpiti Coast and the central Wairarapa plains. Flooding is the most frequently occurring hazard event in the region.
- Tsunami: Large tsunami (particularly one that is locally generated) affecting low-lying areas around [Te Whanganui-a-Tara](#)/Wellington Harbour and the southern bays, settlements along the southern and eastern Wairarapa coast, [Te Awarua-o-Porirua](#) Harbour and the Kāpiti Coast.

Other natural hazards have more localised impacts but occur more frequently. These include:

- Localised flooding and inundation from streams and stormwater overflow. This can occur throughout the region in low-lying areas – such as Porirua – around tributary streams of the larger rivers – such as ~~the~~ [Te Awa Kairangi](#)/Hutt River – and in areas that have short steep catchments – such as Paekākāriki.
- Coastal erosion and inundation, often associated with storm surge, affects some seafront and low-lying coastal developments in the region. Some sections of the coastline are in long term retreat – such as Paekākāriki and Te Kopi. Other areas have episodes of erosion that form part of a cycle of erosion and deposition – such as Paraparaumu or Riversdale. Due to climate change induced sea level rise, it is expected that the areas impacted by coastal erosion and inundation will increase with time, and that this hazard will occur on a more frequent basis.
- Landslips in the hill suburbs of [Te Whanganui-a-Tara](#)/Wellington city, ~~the~~ [Te Awa Kairangi](#)/Hutt valley, Eastbourne, Wainuiomata, [Porirua](#), Paekākāriki and in the Wairarapa hill country.
- Drought, especially in central Wairarapa and the coastal hills between Flat Point and Castlepoint.
- Wildfire, particularly in hill suburbs on urban fringes near heavily vegetated slopes, including western and southern [Te Whanganui-a-Tara](#)/Wellington suburbs, Eastbourne, Wainuiomata, [Te Awa Kairangi](#)/Hutt valley and Porirua, and farmland in the eastern Wairarapa hill country.
- High winds that can occur throughout the region and cause widespread damage to buildings, infrastructure and forestry.
- Sedimentation and erosion of rivers and streams, river mouths and tidal inlets, that can exacerbate the flood risk by raising *bed* levels and undermining banks.

People's actions, including mitigation measures and ongoing development in areas at high risk from natural hazards, can cause or increase the risk from natural hazards. Examples include seawalls or groynes that can cause localised erosion of the adjacent shoreline and building on landslip prone slopes. Stopbanks and seawalls can also create a sense of security and encourage further development, increasing the extent and value of the assets at risk.

In the medium to long term, climate change effects ~~have the potential to~~ will increase both the frequency and magnitude of natural hazard events that already occur in the region.

A major consequence of climate change is sea level rise. ~~The sea level is expected to rise over half a meter by 2100.~~⁴ Based on the Intergovernmental Panel on Climate Change 6th assessment report, and measurements of vertical land movement, NZ SeaRise - Te Tai Pari O Aotearoa projects relative sea level in the Wellington region to rise between 0.8 – 1.3 m by 2100 but, 2.0 m of sea level rise by the end of the century cannot be ruled out.^[1]

Climate change will increase the frequency and magnitude natural hazards that already occur in the region and exacerbate the impacts and consequences from these events. For example, 30 cm of sea level rise on top of what has already occurred over the past 120 years, will mean that a 1 percent AEP (1:100 yr) coastal flooding event has the potential to occur every one to two years.

The main natural hazards associated with a rise in sea levels are coastal erosion and inundation. Sea level rise will also put increasing pressure on the coastal margin. As the shoreline adjusts, sediment will be redistributed around the coast and may cause shorelines to form new orientations. Beaches that are currently stable may begin to erode as the shoreline adjusts to a higher water level, while those that are currently eroding may experience an increased rate of retreat.

Climate change ~~is expected to~~ will increase the intensity and duration of westerly weather systems and reduce easterly conditions. This will exacerbate differences in the regional climate, by bringing higher rainfall to the west and reducing coastal rains in the east. It will also bring longer periods of northerly gales to the entire region, particularly in the spring months. Western and southern areas of the region may also have higher rainfall in the winter, increasing the landslide risk during wet winters, particularly in extreme rainfall events. This will put pressure on stormwater systems and flood protection works. Higher rainfall may also result in higher rates of sedimentation at river mouths and in estuaries, increasing the flood risk in those areas by raising the base level of the river *bed*.

It is also expected that central and eastern Wairarapa will become drier over the next 100 years. Droughts will occur more frequently and persist for longer periods. Research suggests that winter rainfall will decline in the long term, which may lead to a reduction in groundwater recharge rates and pressure on water resources. Dry conditions also result in a heightened risk of wildfire.

The regionally significant issues and the issues of significance to the Wellington region's iwi authorities for natural hazards are:

1. ~~Effects of~~ Risks from natural hazards

Natural hazard events in the Wellington region have an adverse impact on people and communities, the natural environment, businesses and the local economy, property and infrastructure.

2. Human actions can increase risk and consequences from natural hazards

People's actions, including mitigation measures and ongoing development in areas at risk from natural hazards, can cause, or increase, the risk and consequences from natural hazards.

3. Climate change will increase ~~both the~~ likelihood and consequences ~~magnitude and frequency of~~ from natural hazard events

Climate change will increase the likelihood and consequences risks from most natural hazard events that already occur within the region, particularly:

- (a) sea level rise, exacerbating the effects of coastal erosion and inundation, ~~and~~ river, pluvial and stormwater flooding in low lying areas, especially during storm surge tide events
- (b) increased frequency and intensity of storm events, adding to the risk from floods, landslides, severe wind, storm surge, coastal erosion and inundation
- (c) increased frequency of drought, placing pressure on water resources and increasing the wildfire risk.

~~1 Intergovernmental Panel on Climate Change (IPCC) (2007), *Climate Change 2007: The Physical Science Basis*. Summary for Policymakers. Contribution of working group I to the fourth assessment report of the IPCC, 18pp.~~

[1] IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, 31pp.

Objective 19

The risks ~~and consequences~~ to people, communities, ~~their~~ businesses, property, and infrastructure ~~and the environment~~ from natural hazards and the effects of climate change ~~effects~~ are ~~reduced~~ avoided or minimised.

Objective 20

Natural hazard ~~mitigation measures~~ and *climate change* ~~mitigation and~~ *adaptation* activities *minimise* the risks from natural hazards, and impacts on, *Te Mana o te Wai, Te Rito o te Harakeke* taonga species, sites of significance to mana whenua/tangata whenua, natural processes, indigenous ecosystems and biodiversity.

Objective 21

The resilience of our ~~€~~ communities, infrastructure ~~are more resilient to natural hazards, including the impacts and the natural environment~~ to natural hazards is

~~strengthened improved, including~~ to the short, medium, and long-term effects of climate change, ~~and sea level rise is strengthened,~~ and people are better prepared for the consequences of natural hazard events.

54.1: Regulatory policies – direction to district and regional plans and the Regional Land Transport Plan Strategy

Policy 2: Reducing adverse effects of the discharge of odour, smoke, dust and fine particulate matter, ~~and reducing greenhouse gas emissions~~ – regional plans

Regional plans shall include policies, ~~and/or~~ rules ~~and/or~~ methods that:

- (a) protect or enhance the amenity values of neighbouring areas from discharges of odour, smoke and dust; and
- (b) protect people's health from discharges of dust, smoke and fine particulate matter; ~~and~~
- ~~(c) support industry to reduce greenhouse gas emissions from industrial processes, and~~
- ~~(d) phase out coal as a fuel source for domestic fires and large scale generators by 2030.~~

Explanation:

Policy 2 seeks to protect neighbouring areas and people's health from discharges of contaminants into the air. ~~In addition, it seeks to support industry to reduce discharges of greenhouse gas emissions from industrial processes, and to phase out coal as a fuel source for domestic fires and large scale industrial boilers by 2030⁴.~~

Policy CC.1: Reducing greenhouse gas emissions associated with transport demand and infrastructure – district and regional plans

District and regional plans shall include objectives, policies, rules and/or methods ~~that~~ ~~optimise transport demand by~~ requiring all new and altered ~~land~~ transport infrastructure ~~to be is~~ designed, constructed, and operated in a way that contributes to ~~an efficient transport network, maximises mode shift, and~~ ~~reducing~~ ~~greenhouse gas emissions by~~ giving effect to a hierarchical approach (in order of priority), by:

- ~~(a) Optimising overall transport demand;~~
- ~~(b) Maximising mode shift from private vehicles to public transport or active modes; and~~
- ~~(c) Supporting the move towards low and zero carbon modes.~~
- ~~(a) Supporting~~ ~~Providing for, and concentrating,~~ development in locations to minimise travel distances between residential, employment and the location of other essential services, in combination with the delivery of multi-modal transport networks and infrastructure to serve developments; then
- ~~(b) Supporting~~ ~~Providing for and concentrating~~ development within ~~walkable catchments of public transport routes where practicable, and utilising existing space to remove barriers for access to walking, cycling and public transport; then~~
- ~~(c) Where~~ ~~Providing new infrastructure or capacity upgrades on the transport network, to prioritise walking, cycling and public transport, such as improved or new bus and~~

cycle lanes and measures, to prioritise the need of pedestrians, cyclists and public transport above the car.

Explanation

This policy requires transport infrastructure planning (including design, construction and operation) to consider and choose solutions that will contribute to reducing *greenhouse gas emissions*; by applying a hierarchy to all new or altered transport infrastructure that supports an efficient transport network, influences travel demand through ensuring development occurs in locations that can be best served by public transport and other low and zero-carbon transport modes. The hierarchy supports behaviour change through mode shift from private vehicles to public transport or active modes. This policy does not apply to aircraft, or activities undertaken at Wellington Airport which support aircraft activities, e.g. aircraft parking stands at the Airport.

Policy CC.2: ~~Travel choice assessment demand management plans~~ – district plans

By 30 June 2025, district plans shall include objectives, policies and rules that require subdivision, use and development to contribute to the reduction of *greenhouse gas emissions* by requiring consent applicants to provide a *travel demand management plans* to minimise reliance on private vehicles and maximise use of public transport and active modes for choice assessment that:

- a. demonstrates how the use of public transport and active modes will be maximised;
- b. demonstrates how the use of private vehicles will be minimised; and
- c. includes measures within the design of subdivision, use and development which achieves parts (a) and (b) above.

The requirement for a travel choice assessment must apply to all new subdivision, use and development over a specified travel choice development threshold as required by Policy CC.2A where there is a potential for a more than minor increase in private vehicles and/or freight travel movements and associated increase in greenhouse gas emissions.

Policy CC.2A: Travel choice assessment local thresholds – district plans

By 30 June 2025, district plans shall include local thresholds for travel choice assessments as required by Policy CC.2. As a minimum, city and district councils must use the regional thresholds set out in Table 1 as the basis for developing their own local thresholds. The regional thresholds in Table 1 will cease to apply when Policy CC.2A is given effect through a district plan. To contribute to reducing *greenhouse gas emissions* city and district councils must develop their own travel choice thresholds that are locally specific.

Table 1: Regional Thresholds

<u>Activity and Threshold per application</u>
<u>100 residential units located within a walkable catchment.</u>
<u>Commercial development of 2,500m² gross floor area</u>
<u>Greenfield subdivision over 100 residential units.</u>

Explanation

The regional travel choice thresholds have been developed as a minimum and as guidance to assist city and district councils in developing their local travel choice thresholds. Local travel choice thresholds are important to reflect the differences in connectivity and accessibility between rural and urban areas. In addition, local travel choice thresholds should reflect local issues, challenges and opportunities. Local travel choice thresholds ~~Location suitable development thresholds triggering a consent requirement for a travel demand management plan are to be developed by territorial authorities and~~ should apply to residential, education, office, industrial, community, entertainment and other land use activities that could generate private vehicle trips and freight travel. Development thresholds should specify the trigger level (for example, number of dwellings, number of people accommodated or gross floor area) where the ~~requirement for a travel choice assessment demand management plan requirement~~ applies.

Policy CC.3: Enabling a shift to low and zero-carbon emission transport – district plans

By 30 June 2025, district plans shall include objectives, policies, rules and methods for ~~enabling infrastructure that enable infrastructure~~ that supports the uptake of zero and low-carbon multi modal transport that contribute to reducing *greenhouse gas emissions*.

Explanation

District plans must provide a supportive planning framework (for example, permitted activity status) for zero and low-carbon multi modal transport infrastructure, such as public transport infrastructure, cycleways, *footpaths, walkways* and public EV charging network ~~for EV modes of transport~~.

Policy CC.4: ~~Climate-responsive resilient development urban areas~~ – district ~~and regional~~ plans

District ~~and regional~~ plans shall include *objectives*, policies, rules and *non-regulatory* methods to ~~provide for climate resilient urban areas by providing for actions and initiatives described in Policy CC.14 which support delivering the characteristics and qualities of well-functioning urban environments~~. *require development and infrastructure to be located, designed, and constructed in ways that provide for *climate change mitigation, climate change adaptation* and *climate-resilience*, prioritising the use of *nature-based solutions* and *informed by mātauranga Māori*.* ~~This includes by, as appropriate to the scale and context of the activity:~~

(a) requiring provision of urban green space, particularly canopy trees, to reduce urban heat and reduce stormwater flowrates:

- i. *prioritising the use of appropriate indigenous species, and*
- ii. *working contributing towards achieving a wider target of 10 percent tree canopy cover at a suburb-scale by 2030, and 30 percent cover by 2050,*

~~(b) requiring application of water sensitive urban design principles, hydrological controls, and other methods to improve water quality, overall environmental quality, minimise flooding and maintain, to the extent practicable, natural stream flows,~~

~~(be) requiring methods to increase water resilience, including harvesting of water at a domestic and/or community-scale for non-potable uses (for example by requiring rain tanks, rainwater reuse tanks, and setting targets for urban roof area rainwater collection),~~

~~(cd) requiring that significant adverse effects on the climate change mitigation, climate change adaptation and climate-resilience functions and values of an ecosystem shall be avoided, and other adverse effects on these functions and values shall be avoided, minimised, or remedied,~~

~~(de) promoting efficient use of water and energy in buildings and infrastructure, and~~

~~(ef) promoting appropriate design of buildings and infrastructure so they are able to withstand the predicted future higher temperatures, intensity and duration of rainfall and wind over their anticipated life span.~~

Explanation

~~Policy CC.4 directs regional and district plans to include relevant provisions to provide for climate-resilient development and infrastructure to respond to the predicted effects of climate change. The policy seeks that priority be given to the use of nature-based solutions, recognising the multiple-benefits they can provide for people and nature. It also seeks to manage any adverse effects of activities on the climate change functions and values of ecosystems.~~

~~For the purposes of this policy, climate-resilient urban areas mean urban environments that have the ability to withstand:~~

- ~~• Increased temperatures and urban heat island~~
- ~~• Increased intensity of rainfall and urban flooding and increased discharge of urban contaminants~~
- ~~• Droughts and urban water scarcity and security~~
- ~~• Increased intensity of wind, cold spells, landslides, fire, and air pollution~~

~~The policy is directly associated with Policy CC.14 which provides further direction on actions and initiatives to provide for climate resilient urban areas.~~

~~It is noted that other policies of this RPS also provide for actions and initiatives to deliver climate-resilient infrastructure and development urban areas, including Policy FW.3. This includes requirements to apply water sensitive urban design principles and hydrological control in urban development in Policy 14, Policy FW.3, and Policy FW.XX (Hydrological control in urban development).~~

Policy CC.4A: Climate-responsive resilient development – regional plans

Regional plans shall include objectives, policies, rules and non-regulatory methods to require development and infrastructure to be located, designed, and constructed in ways that provide for climate change mitigation, climate change adaptation and climate-resilience, prioritising the use of nature-based solutions and informed by mātauranga Māori. This includes, as appropriate to the scale and context of the activity:

(a) requiring the application of water-sensitive urban design principles and methods to improve water quality and overall environmental quality, including by requiring stormwater contaminants to be avoided or minimised in discharges to the stormwater network or to water,

(b) requiring stormwater flowrates and volumes to be managed to minimise flooding and to maintain, to the extent practicable, natural stream flow rates and volumes, and

(ae) requiring significant adverse effects on the climate change mitigation, climate change adaptation and climate-resilience functions and values of an ecosystem be avoided, and other adverse effects on these functions and values be avoided, minimised, or remedied.

Explanation

Policy CC.4A directs regional plans to include provisions to provide for climate-resilient development and infrastructure. The policy seeks that priority be given to the use of nature-based solutions, recognising the multiple-benefits they can provide for people and nature. It also seeks to manage any adverse effects of activities on the climate change functions and values of ecosystems.

It is noted that other policies of this RPS also provide for actions and initiatives to deliver climate-resilient infrastructure and development, including Policy FW.14 requirements to apply water sensitive urban design principles and hydrological control in Policy 14, Policy FW.3 and Policy FW.XX.

Policy CC.5: ~~Avoid increases in Reducing agricultural greenhouse gas emissions~~⁹ – regional plans

Regional plans shall include objectives, policies, ~~rules and/or~~ methods to support reductions in agricultural greenhouse gas emissions from 2019 levels to contribute to the Objective CC.3 2050 net-zero emissions target. ~~avoid changes to land use activities and/or management practices that result in an increase, in gross greenhouse gas emissions from agriculture.~~

Explanation:

As agriculture is the second largest emitter of greenhouse gases in the Wellington Region, contributing 34 percent of the region's greenhouse gas emissions, reducing emissions from the agricultural sector is critical to contribute to achieving Objective CC.3. While central government is taking the lead on the policy approach to reduce agricultural greenhouse gas emissions ~~through the use of a pricing mechanism (the~~

~~Emissions Trading Scheme~~, Policy CC.5 seeks to complement this by directing regional plans to include provisions to support reductions in agricultural emissions. This will be supported by non-regulatory Policy CC.15 and Method CC.8 that seek to support change and improved management practices at a farm level to reduce *greenhouse gas emissions*. ~~this policy sets a minimum expectation that there should be no increase in agricultural greenhouse gas emissions in the Wellington Region.~~

As of 30 November 2022, regional councils are able ~~to make rules~~ to control the discharge of greenhouse gases having regard to the effects on climate change. ~~This policy is intended to provide flexibility as to how agricultural greenhouse gas emissions are reduced through a future regional plan change process which A plan change process will determine the way in which Policy CC.5 is given effect to and~~ will need to consider issues such as equity and the relationship with the national ~~pricing~~ approach for agricultural *greenhouse gas emissions* to ensure that these are complementary.

Policy CC.6: Increasing regional forest cover and avoiding plantation forestry on highly erodible land – regional plans

Regional plans shall include objectives, policies, rules and/or non-regulatory methods that support an increase in the area and health of permanent forest in the region, maximising the benefits for carbon sequestration, indigenous biodiversity, land stability, water quality, and social, cultural and economic well-being, ~~to contribute to achieving net zero greenhouse gas emissions by 2050,~~ while:

- a. promoting and incentivising the planting or regeneration of permanent indigenous forest ~~representative of the natural type expected in the area over exotic species, particularly on highly erodible land and in catchments where water quality targets for sediment are not reached,~~ and
- b. avoiding plantation forestry on *highly erodible land*, particularly in catchments where water quality targets for sediment are not reached, and
- c. promoting and supporting the control of browsing pest animals in priority areas.

Explanation

This policy recognises that, while there is a need for increased forest extent across the Wellington Region to help achieve net zero emissions by 2050, offsetting through carbon sequestration is only a short-term solution and that there are significant risks associated with unfettered afforestation across the region. The policy directs regional plans to develop provisions that will support “right tree-right place”, seeking to ensure that an increase in forest extent for its sequestration benefits will be implemented in a way that maximises the co-benefits for indigenous biodiversity and aquatic ecosystem health, and provide for social and economic wellbeing as directed by Objective CC.5.

Clause (a) recognises the significant values of indigenous forest, along with the need for incentives to support their planting and natural regeneration.

Clause (b) responds to the high risk of harvesting forest in areas that are highly erodible and in catchments where waterways already have high sediment loads. The National Environmental Standards for Plantation Forestry enables regional plans to regulate plantation forestry for the purpose of protecting freshwater quality. Clause (c) recognises the importance of controlling browsing pest animals to ensure that forests are healthy and can therefore provide maximum benefits.

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

When giving effect to the climate change objectives and policies in the RPS, District and regional plans shall, where relevant, 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 co-ordination and guidance as to how to implement this policy direction. The intent is, to ensure regional and district plan provisions to reduce *greenhouse gas emissions* from key emitting sectors in the region support this hierarchy approach to reducing emissions where relevant and appropriate, are co-ordinated and also complement national policy and initiatives. This work will recognise the respective RMA functions of the Wellington Regional Council and city and district councils in relation to controlling *greenhouse gas emissions* from air discharges and land-use activities and the limited role of district plans in reducing *greenhouse gas emissions* from existing activities except at the time of redevelopment. This work will consider issues such as scale, equity, and the type of activities to which offsetting should apply.

Policy 7: Recognising the benefits from renewable energy and regionally significant infrastructure – district and regional plans

District and regional plans shall include objectives, policies, rules and/or other methods that recognize:

- (a) recognise the social, economic, cultural and environmental benefits of regionally significant infrastructure, and in particular low and zero carbon regionally significant infrastructure including:
 - (i) people and goods can travel to, from and around the region efficiently and safely and in ways that support the transitioning to low or zero carbon multi modal transport travel modes;

- (ii) public health and safety is maintained through the provision of essential services: - supply of potable water, the collection and transfer of sewage and stormwater, and the provision of emergency services;
 - (iii) people have access to energy, and preferably low or zero carbon renewable energy, so as to meet their needs;
 - ~~(iv) the provision of an efficient, effective and resilient electricity transmission network; and~~
 - ~~(iv)-(v)~~ people have access to telecommunication services.
- (b) recognise and provide for the social, economic, cultural and environmental benefits of energy generated from renewable energy resources and its transmission through the electricity transmission network, including:
- i. avoiding, reducing and displacing greenhouse gas emissions;
 - ii. contributing to the security of supply, resilience, independence and diversification of ~~our~~ energy sources and the transmission of this energy to communities, homes and businesses;
 - iii. reducing dependency on imported energy resources; ~~and~~
 - iv. using renewable resources rather than finite resources ~~reducing greenhouse gas emissions; and~~
 - v. the reversibility of the adverse effects on the environment of some renewable electricity generation technologies;
 - vi. providing for the economic, social and cultural well-being of people and communities.
- ~~(c) recognise the benefits of regionally significant infrastructure to support reductions in greenhouse gas emissions.~~

Explanation

~~Notwithstanding that renewable energy generation and regionally significant infrastructure can have adverse effects on the surrounding environment and community,~~ Policy 7 recognises that renewable energy generation and regionally significant infrastructure these activities can provide a range of local, regional and national benefits ~~both within and outside the region~~, including helping to reduce greenhouse gas emissions and provide essential services for the well-being of people and communities ~~particular if regionally significant infrastructure is a low or zero carbon development.~~

Policy 9: Promoting greenhouse gas emission reduction and uptake of low emission fuels – Regional Land Transport Plan Strategy Reducing the use and consumption of non-renewable transport fuels, and carbon dioxide emissions from transportation

The Wellington Regional Land Transport ~~Plan~~ Strategy shall include objectives and policies that promote ~~a reduction in:~~

- (a) a reduction of the consumption of non-renewable transport fuels; and
- ~~(b) the emission of carbon dioxide from transportation~~
- (b) a reduction of the emission of greenhouse gases, and other transport-generated harmful emissions, such as nitrogen dioxide; and

- (c) an increase in the uptake of low emission or zero carbon fuels, biofuels and new technologies.; and
- (d) the decarbonisation of the public transport vehicle fleet.

~~Including through prioritising public and active transport investment to serve future urban areas, to enable development in a sequential manner which minimises the risk of increasing car journeys in the region~~

Explanation

~~This policy provides direction to the Regional Land Transport Plan, acknowledging the role of the objectives and policies in that plan, in promoting a reduction in *greenhouse gas emissions* to decarbonise the transport system, promotes the uptake of low emission or zero carbon fuels and new technologies. Regionally, in 2019, transport was the biggest source of *greenhouse gas emissions*. Transport emissions accounted for 39 percent of total gross emissions. This policy does not apply to aircraft, or activities undertaken at Wellington Airport which support aircraft activities, e.g. aircraft parking stands at the airport.~~

~~Transportation is a significant and growing contributor to the consumption of nonrenewable fuels and the emission of carbon dioxide. In 2004, 86 per cent of the oil consumed in New Zealand was used by the transport sector. The transport sector also accounts for around 45 per cent of the country's carbon dioxide emissions. Carbon dioxide is a greenhouse gas that contributes to climate change.~~

~~Policy 10: Promoting travel demand management – district plans and the Regional Land Transport Strategy~~

~~District plans and the Wellington Regional Land Transport Strategy shall include policies to promote travel demand management mechanisms that reduce:~~

- a. ~~the use and consumption of non-renewable transport fuels; and~~
- b. ~~carbon dioxide emissions from transportation.~~

~~Explanation~~

~~Travel demand management includes a range of mechanisms – such as travel behavioural change programmes, road pricing tools and improvements to the efficiency of the existing network.~~

~~Land use planning is important in managing demand for travel. Land use patterns – such as higher density or mixed use development in areas close to good public transport links and community facilities, or community facilities and employment close to where people live – can reduce dependence on the private car, the need to travel and journey lengths. It is also important to ensure good connectivity within and between settlements to optimise walking, cycling and public transport~~

Policy 11: Promoting enabling energy efficient design and small and community scale renewable energy generation – district plans

District plans shall include policies and/or rules and other methods that:

- (a) promote and enable energy efficient design and the energy efficient alterations to existing buildings;
- (b) enable the development, operation, maintenance and upgrading of installation and use of domestic scale (up to 20 kW) and small and community scale distributed renewable energy generation. (up to 100 kW); and provide for energy efficient alterations to existing buildings.;

Explanation

Policy 11 promotes energy efficient design, energy efficient alterations to existing buildings, and enables the development installation of domestic small and community scale and renewable energy generation (up to 100kW).

Energy efficient design and alteration to existing buildings can reduce total energy costs (i.e., heating) and reliance on non-renewable energy supply.

Small scale distributed renewable electricity generation means renewable electricity generation for the purpose of using electricity on a particular site, or supplying an immediate community, or connecting into the distribution network. (from NPS-REG 2011).

Small and community-scale renewable energy generation provides a range of benefits, including increasing local security of supply, energy and community resilience, and providing for the well-being of people and communities. Small and community-scale renewable energy generation also plays an important role in reducing greenhouse gas emissions and meeting national and regional emission reduction targets.

~~Orientation, layout and design can have a significant influence on the energy efficiency of developments.~~

~~Improved energy efficiency can be achieved by:~~

- ~~1. Enabling everyday services – such as shops, schools, businesses and community facilities to be accessed by walking and cycling.~~
- ~~2. Enabling easy access to public transport services.~~
- ~~3. Locating and designing infrastructure and services to support walking, cycling or the use public transport.~~
- ~~4. Enabling the efficient use of the sun as a source of power and heating.~~
- ~~5. Incorporating renewable energy generation facilities – such as solar panels and domestic scale wind turbines.~~

~~Small scale distributed renewable energy generation facilities (up to 20 kW for domestic use and up to 100 kW for small community use) include solar generation particularly for water heating and wind turbines used for on site or domestic purposes. Energy efficient alteration may include alterations of buildings for the installation of solar water heating systems or domestic scale wind turbines.~~

Policy EIW.1: Promoting affordable high quality active mode and public transport services – Regional Land Transport Plan

The Wellington Regional Land Transport Plan shall include objectives, policies and methods that promote equitable and accessible high quality active mode infrastructure, and affordable public transport services with sufficient frequency and connectedness, including between modes, to encourage a reduction in the dependency and use of private vehicles for everyday living. for people to live in urban areas without the need to have access to a private vehicle. for people to live in urban areas without the need to have access to a private vehicle.; by contributing to reducing greenhouse emissions.

Explanation

This policy provides direction to the Regional Land Transport Plan, acknowledging the role of the objectives and policies in that plan, to promote mode shift from private vehicles to public transport and active modes by providing connected, accessible, affordable and extensive multi modal infrastructure and services.

Policy 29: ~~Avoiding inappropriate~~ Managing subdivision, use and development in areas at risk from natural hazards – district and regional plans

Regional and district plans shall manage subdivision, use and development in areas at risk from natural hazards as follows:

~~Avoiding inappropriate~~ Managing subdivision, use and development in areas at risk from natural hazards – district and regional plans

~~Regional and district plans shall:~~

- (a) identify areas affected by natural hazards; and
- (b) use a risk-based approach to assess the consequences to new or existing subdivision, use and development from natural hazard and climate change impacts over at least a 100 year planning horizon which identifies the hazards as being low, medium or high;
- (c) include hazard overlays, objectives, polices and rules to manage new and existing subdivision, use and development in those areas where the hazards and or risks are assessed as low to medium-moderate; and
- (d) include hazard overlays, objectives, polices and rules to avoid new and manage existing subdivision, use and-or development and hazard sensitive activities where the hazards and risks are assessed as high to extreme, unless there is a functional or operational need to be located in these areas.

Explanation

Policy 29 establishes a framework to:

1. identify natural hazards that may affect the region or district; and then
2. apply a risk-based approach for assessing the potential consequences to new or existing subdivision, use and development in those areas; and then
3. develop provisions to manage subdivision, use and development in those areas.

The factors listed in Policies 51 and 52 should be considered when implementing Policy 29 and when writing policies and rules to manage subdivision, use and development in areas identified as being affected by natural hazards.

Guidance documents that can be used to assist in incorporating a risk-based approach to hazard risk management and planning include:

- Risk Tolerance Methodology: A risk tolerance methodology for central, regional, and local government agencies who manage natural hazard risks. Toka Tū Ake | EQC (2023);
- Planning for natural hazards in the Wellington region under the National Policy Statement on Urban Development, GNS Science Misc. Series 140 (2020);
- NZCPS guidance note: Coastal Hazards, Department of Conservation (2017);
- Coastal Hazards and Climate Change: Guidance for Local Government, Ministry for the Environment (2017);
- Risk Based Approach to Natural Hazards under the RMA, Prepared for MfE by Tonkin & Taylor (2016);
- Planning for Risk: Incorporating risk-based land use planning into a district plan, GNS Science (2013);
- Preparing for future flooding: a guide for local government in New Zealand, MfE (2010);
- Guidelines for assessing planning policy and consent requirements for landslide prone land, GNS Science (2008);
- Planning for development of land on or close to active faults, Ministry for the Environment (2003) and;
- Other regional documents and strategies relating to the management of natural hazards.

~~The process of identifying ‘areas at high risk’ from natural hazards must consider the potential natural hazard events that may affect an area and the vulnerability of existing and/ or foreseeable subdivision or development. An area should be considered high risk if there is the potential for moderate to high levels of damage to the subdivision or development, including the buildings, infrastructure, or land on which it is situated. The assessment of areas at high risk should factor in the potential for climate change and sea level rise and any consequential effect that this may have on the frequency or magnitude of related hazard events.~~

~~Examples of the types of natural hazards or hazard events that may cause an area or subdivision or development to be considered high risk include – but are not limited to – fault rupture zones, beaches that experience cyclical or long-~~

~~term erosion, failure prone hill slopes, or areas that are subject to serious flooding.~~

~~The factors listed in policies 51 and 52 should be considered when implementing policy 29 and writing policies and rules to avoid inappropriate subdivision and development in areas at high risk.~~

~~Most forms of residential, industrial or commercial development would not be considered appropriate and should be avoided in areas at high risk from natural hazards, unless it is shown that the effects, including residual risk, will be managed appropriately.~~

~~Hazard mitigation works can reduce the risk from natural hazards in high hazard areas.~~

~~To give effect to this policy, district and regional plans should require assessments of the risks and consequential effects associated with any extensive structural or hard engineering mitigation works that are proposed. For a subdivision or development to be considered appropriate in areas at high risk of natural hazards, any hazard mitigation works should not:~~

- ~~• Adversely modify natural processes to a more than minor extent,~~
- ~~• Cause or exacerbate hazards in adjacent areas to a more than minor extent,~~
- ~~• Generally result in significant alteration of the natural character of the landscape,~~
- ~~• Have unaffordable establishment and maintenance costs to the community,~~
- ~~• Leave a more than minor residual risk, and/or~~
- ~~• Result in more than minor permanent or irreversible adverse effects.~~

~~Examples of how this may be applied to identified high hazard areas include: fault rupture avoidance zones 20 metres either side of a fault trace; setback distances from an eroding coastline; design standards for floodplains; or, requirements for a geotechnical investigation before development proceeds on a hill slope identified as prone to failure.~~

~~This policy promotes a precautionary, risk based approach, taking into consideration the characteristics of the natural hazard, its magnitude and frequency, potential impacts and the vulnerability of development.~~

~~Guidance documents that could be used to assist in the process include:~~

- ~~• Risk Management Standard AS/NZS 4360:2004~~
- ~~• Guidelines for assessing planning policy and consent requirements for landslide prone land, GNS Science (2008)~~
- ~~• Planning for development of land on or close to active faults, Ministry for the Environment (2003)~~
- ~~• Coastal Hazards and Climate Change: A Guidance Manual for Local Government in New Zealand, Ministry for the Environment (2008)~~
- ~~• Other regional documents relating to the management of natural hazards.~~

~~This policy also recognises and supports the Civil Defence Emergency Management principles – risk reduction, readiness, response and recovery – in order to encourage more resilient communities that are better prepared for natural hazards, including climate change impacts.~~

~~Policy 29 will act to reduce risk associated with natural hazards. The risks are to people and communities, including businesses, utilities and civic infrastructure.~~

~~This policy and the Civil Defence Emergency Management framework recognise the need to involve communities in preparing for natural hazards. If people are prepared and able to cope, the impacts from a natural hazard event are effectively reduced.~~

Chapter 4.2: Regulatory policies – matters to be considered

Policy CC.9: Reducing greenhouse gas emissions associated with ~~transport infrastructure subdivision, use or development~~ – consideration

~~When considering an application for a resource consent, notice of requirement, or a change, variation or review of a regional or district plan, particular regard shall be given to whether the subdivision, use ~~and or~~ development ~~have~~ ~~has~~ been planned ~~in a way that contributes to reducing greenhouse gas emissions by to optimise~~ ~~optimising~~ overall transport demand ~~by giving effect to its the hierarchical approach in order of priority within Policy CC.1 (a)–(c)~~, maximising mode shift from private vehicles to public transport or active modes, ~~and supporting the move towards low and zero-carbon modes in a way that contributes to reducing greenhouse gas emissions.~~~~

Explanation

~~This policy requires regional and district councils to consider whether subdivision, use and development proposals have fully considered all options to reduce *greenhouse gas emissions* as far as practicable. ~~For example, EV charging infrastructure, car share infrastructure, provision for bus stops and a transport network designed to support public transport or active modes. This policy does not apply to aircraft, or activities undertaken at Wellington Airport which support aircraft activities. e.g. aircraft parking stands at the airport.~~~~

Policy CC.10: Freight movement efficiency and minimising greenhouse gas emissions – consideration

~~When considering an application for a resource consent, notice of requirement, or a change, variation or review of a regional or district plan for freight distribution centres and new industrial areas or similar activities with significant freight servicing requirements, particular regard shall be given to the proximity of efficient transport networks and locations that will contribute to efficient freight movements and minimising associated greenhouse gas emissions.~~

Explanation

This policy requires decisions for freight land use or servicing to consider transport efficiency to contribute to minimising greenhouse gas emissions. This policy does not apply to aircraft, or activities undertaken at Wellington Airport which support aircraft activities. e.g. aircraft parking stands at the airport.

Policy CC.11: Encouraging ~~whole~~ of life greenhouse gas ~~carbon~~ emissions assessment for transport infrastructure – consideration

Encourage ~~When considering an application for a resource consent, notice of requirement, or a change, variation or review of a regional or district plan, a whole of life carbon greenhouse gas emissions assessment~~ is to be provided with resource consent applications to Wellington Regional Council and city and district councils for all new or ~~upgraded altered~~ land transport infrastructure. ~~as part of the information submitted with the application.~~ This information will assist with evaluating the potential *greenhouse gas emissions*, options for reducing direct and indirect *greenhouse gas emissions* and whether the infrastructure has been designed and will operate in a manner that contributes to the regional target for a reduction to transport-related greenhouse gas emissions.

Explanation

This policy encourages a *whole of life carbon greenhouse gas emissions assessment* for new or ~~upgraded altered~~ land transport infrastructure. This assessment will provide information and evidence on predicted emissions to enable assessment of impacts and options in the context of regional targets to reduce *greenhouse gas emissions*. Waka Kotahi has a tool providing accepted assessment methodology. ~~This policy does not apply to aircraft,~~ or activities undertaken at Wellington Airport which support aircraft activities. e.g. aircraft parking stands at the airport.

Policy CC.12: Protect, enhance and restore ecosystems that provide nature-based solutions to climate change – consideration

~~When considering an application for a resource consent, notice of requirement, or a change, variation or review of a district or regional plan, a determination shall be made as to whether an activity may adversely affect a nature-based solution to climate change and particular regard shall be given to avoiding adverse effects on the climate change mitigation or adaptation functions.~~

~~Explanation: Nature-based solutions are critical components of the region's climate change response. This policy seeks to protect the functions that they provide to support climate change mitigation and/or mitigation.~~

Policy CC.13: Managing agricultural gross greenhouse gas emissions – consideration

~~When considering an application for a resource consent, associated with a change in intensity or type of agricultural land use, particular regard shall be given to:~~
~~(a) reducing gross greenhouse gas emissions as a priority where practicable, and~~
~~(b) where it is not practicable to reduce gross greenhouse gas emissions, achieving a net reduction in greenhouse gas emissions, and~~
~~(c) avoiding any increase in gross greenhouse gas emissions.~~

~~**Explanation:** As agriculture is the second largest emitter of GHG in the region, contributing 34 percent of the region's GHG emissions, reducing emissions from this sector is critical to contribute to achieving Objective CC.3. As of 30 November 2022, consent authorities may have regard to the effects of discharges into air of greenhouse gases on climate change in considering an application for a discharge permit or coastal permit. Where resource consent is required in association with a change in land use intensity or type of agricultural land use, the policy requires a hierarchy of effort, seeking to reduce gross greenhouse gas emissions in the first instance, followed by achieving a net reduction, with a minimum expectation that any increase in gross emissions is avoided.~~

Policy CC.14: Climate-responsive resilient ~~development urban areas~~ – district and city council consideration

When considering an application for a resource consent, notice of requirement, or a change, variation or review of a district ~~or regional~~ plan, ~~require seek that~~ development and infrastructure is located, designed and constructed in ways that ~~provide for~~ *climate change mitigation, climate change adaptation and climate-resilience*, ~~provide for actions and initiatives, particularly~~ prioritising the use of *nature-based solutions* and ~~informed by mātauranga Māori~~. This ~~includes~~ *by, as* appropriate to the *scale and context of the activity*:

~~(a) maintaining, enhancing, restoring, and/or creating urban green space at a range of spatial scales to provide urban cooling, including, providing urban green space, particularly canopy trees, to reduce urban heat and reduce stormwater flowrates:~~

~~i. prioritising the use of appropriate indigenous species, and~~

~~ii. contributing working towards achieving a wider target of 10 percent tree canopy cover at a suburb-scale by 2030, and 30 percent cover by 2050,~~

~~(b) the application of water sensitive urban design principles, hydrological controls, and other methods to integrate natural water systems into built form and landscapes, to reduce flooding, improve water quality and overall environmental quality, minimise flooding and maintain, to the extent practicable, natural stream flows,~~

~~(bc) methods to increase water resilience, including by requiring harvesting of water at a domestic and/or capturing, storing, and recycling water at a community-scale for non-potable uses (for example by requiring rain tanks, rainwater re-use tanks, and setting targets for urban roof area rainwater collection),~~

~~(cd) protecting, enhancing, or restoring natural ecosystems to strengthen the resilience of communities to the impacts of natural hazards and the effects of climate change, avoiding significant adverse effects on the climate change mitigation, climate change adaptation and climate-resilience functions and values of an ecosystem, and avoiding, minimising, or remedying other adverse effects on these functions and values,~~

(de) ~~providing for~~ promoting efficient use of water and energy in buildings and infrastructure, and

(ef) ~~promoting appropriate design of~~ buildings and infrastructure ~~that so they~~ are able to withstand the predicted future higher temperatures, intensity and duration of rainfall and wind ~~over their~~ anticipated life span.

Explanation

Climate change, combined with population growth and housing intensification, is increasingly challenging the resilience and well-being of **urban** communities and natural ecosystems, with increasing exposure to natural hazards, and increasing pressure on water supply, wastewater and stormwater infrastructure, and the health of natural ecosystems.

This policy identifies the key attributes required to **ensure that development and infrastructure provide for ~~develop~~ climate-resilience in urban areas** and requires district **and regional** councils to take all opportunities to provide for actions and initiatives, particularly nature-based solutions, that will prepare our **urban** communities for the changes to come. **Managing stormwater runoff following intense rainfall events and contaminants from urban development also contributes to the achievement of Policy CC.14 and these matters are addressed through the requirements of Policies 40 and 42.**

Policy CC.14A: Climate-responsive development – regional council consideration

When considering an application for a resource consent, or a change, variation, or review of a regional plan, **require seek** that development and infrastructure is located, designed, and constructed in ways that provide for **climate change mitigation, climate change adaptation and climate-resilience**, prioritising the use of **nature-based solutions** and informed by **mātauranga Māori**. **This includes by, as appropriate to the scale and context of the activity:**

~~(a) the application of water sensitive urban design principles and methods to improve water quality and overall environmental quality, including by avoiding or minimising stormwater contaminants in discharges to the stormwater network or to water,~~

~~(b) managing stormwater flowrates and volumes to minimise flooding and to maintain, to the extent practicable, natural stream flows, and~~

(ae) avoiding significant adverse effects on the *climate change mitigation, climate change adaptation and climate-resilience* functions and values of an ecosystem and avoiding, minimising, or remedying other adverse effects on these functions and values.

Explanation

Climate change, combined with population growth and housing intensification, is increasingly challenging the resilience and well-being of urban communities and natural ecosystems, with increasing exposure to natural hazards, and increasing pressure on water supply, wastewater and stormwater infrastructure, and the health of natural ecosystems.

This policy identifies the key attributes required to ensure that development and infrastructure provides for climate-resilience and requires the regional council to take all opportunities to provide for actions and initiatives, particularly nature-based solutions, that will prepare our communities for the changes to come.

It is noted that other policies of this RPS also provide regulatory requirements to deliver climate-resilient infrastructure and development to apply water sensitive urban design principles and hydrological control including Policies 14, Policy FW.3, Policy FW.XX and Policy 42.

Policy 39: Recognising the benefits from renewable energy and regionally significant infrastructure – consideration

When considering an application for a resource consent, notice of requirement or a change, variation or review of a district or regional plan: ~~particular regard shall be given to:~~

- (a) recognise and provide for the social, economic, cultural, and environmental benefits of energy generated from renewable energy resources and its transmission through the electricity transmission network; and
- (b) recognise the social, economic, cultural, and environmental benefits of other and/or regionally significant infrastructure, including in particular where it contributes to reducing greenhouse gas emissions; and
- (c) have particular regard to protecting *regionally significant infrastructure* from incompatible subdivision, use and development occurring under, over, or adjacent to the infrastructure; and
- (d) recognise and provide for the operational need and functional ~~the need for of~~ renewable electricity generation activities to be in particular locations, including the need facilities to locate where the renewable energy resources exist; and
- (e) recognise the benefits of utilising the significant wind, solar and marine renewable energy resources within the region and the development of the electricity transmission network to connect the renewable energy resource to distribution networks and end-users.

Explanation

~~Notwithstanding that renewable energy generation and regionally significant infrastructure can have adverse effects on the surrounding environment and community,~~ Policy 39 recognises that renewable energy generation and regionally significant infrastructure these activities can provide a range of environmental, economic, social and cultural benefits locally, regionally and nationally, particularly to including where it contributes to reducing *greenhouse gas emissions* as sought by Objective CC.3. These benefits are outlined in Policy 7.

The benefits of energy generated from renewable energy resources include:

- Security of and the diversification of our energy sources
- Reducing our dependency on imported energy resources – such as oil, natural gas and coal
- Reducing greenhouse gas emissions
- Contribution to the national renewable energy target

The benefits are not only generated by large scale renewable energy projects but also smaller scale, distributed generation projects.

The benefits of regionally significant infrastructure include:

- People and goods can efficiently and safely move around the region, and to and from
- Public health and safety is maintained through the provision of essential services – such as potable water and the collection and transfer of sewage or stormwater
- People have access to energy to meet their needs
- People have access to telecommunication services

Energy generation from renewable energy and regionally significant infrastructure (as defined in Appendix 3) can provide benefits both within and outside the region.

Renewable energy generation and regionally significant infrastructure can also have adverse effects on the surrounding environment and community. These competing considerations need to be weighed on a case by case basis to determine what is appropriate in the circumstances.

When considering the benefits from renewable energy generation, the contribution towards national goals in the New Zealand Energy Strategy (2007) and the National Energy Efficiency and Conservation Strategy (2007) will also need to be given regard.

Potential significant sites for development of Wellington region's marine and wind resources have been identified in reports 'Marine Energy – Development of Marine Energy in New Zealand with particular reference to the Greater Wellington Region Case Study by Power Projects Ltd, June 2008' and 'Wind Energy – Estimation of Wind Speed in the Greater Wellington Region, NIWA, January 2008'.

Policy 39(a) shall cease to have effect once policy 9 is given effect in a relevant district or regional plan.

Policy 39(b) shall cease to have effect once policy 8 is given effect in a relevant district or regional plan.

Policy 51: Avoiding or Minimising the risks and consequences of natural hazards – consideration

When considering an application for a resource consent, notice of requirement, or a change, variation or review to a district or regional plan, the risk and consequences of natural hazards on people, communities, their property and infrastructure shall be avoided or minimised, and/or in determining whether an activity is inappropriate particular regard shall be given to:

- (a) ~~the frequency and magnitude~~ likelihood and consequences of the range of natural hazards that may adversely affect the ~~proposal or development~~ subdivision, use or development, including residual risk those that may be exacerbated by climate change and sea level rise;
- ~~(b) the potential for climate change and sea level rise to increase in the frequency or magnitude of a hazard event;~~
- (c) whether the location of the subdivision, use or development will foreseeably require hazard mitigation works in the future;
- (d) the potential for injury or loss of life, social and economic disruption and civil defence emergency management implications – such as access routes to and from the site;
- (e) whether the subdivision, use or development causes any change in the risk and consequences from natural hazards in areas beyond the application site;
- (f) minimising effects on the impact of the proposed subdivision, use or development on any natural features that may act as a buffer to or reduce the impacts of a from natural hazards event; and where development should not interfere with their ability to reduce the risks of natural hazards;
- ~~(g) avoiding inappropriate subdivision, use or development and hazard sensitive activities where the hazards and risks are assessed as high to extreme; in areas at high risk from natural hazards, unless there is a functional or operational need to be located in these areas;~~
- (h) appropriate hazard risk management and/or adaptation and/or mitigation measures for subdivision, use or development in areas where the hazards and risks are assessed as low to moderate hazard areas, including an assessment of residual risk; and
- (i) the allowance for floodwater conveyancing in identified overland flow paths and stream corridors; and
- (j) the need to locate habitable floor areas levels of habitable buildings and buildings used as places of employment above the 1% AEP (1:100 year) flood level, in identified flood hazard areas.

Explanation

Policy 51 aims to minimise the risk and consequences of natural hazards events through sound preparation, investigation and planning prior to development. This

policy reflects a need to employ a precautionary, risk-based approach, taking into consideration the likelihood of the hazard and the vulnerability of the development.

- Typical natural hazards in the region include, but are not limited to:
- Flooding and inundation (river, stormwater, coastal)
- Earthquake (groundshaking, amplification, liquefaction, ground displacement)
- Coastal hazards (erosion, storm surge, tsunami)
- Mass movement (landslip, rockfall)

Other site specific hazards may become apparent during the course of an assessment for a proposal or development; however, those above are the most serious hazards to consider.

Policy 51 refers to residual risk, which is the risk that remains after protection works are put in place. Stopbanks, seawalls and revetments and other engineered protection works can create a sense of security and encourage further development. In turn, this increases the extent and value of assets that could be damaged if the protection works fail or an extreme event exceeds the structural design parameters.

Policy 51(g) will cease to have effect once policy 29 has been given effect to in the relevant district plan.

The term areas at high risk refers to those areas potentially affected by natural hazard events that are likely to cause moderate to high levels of damage to the subdivision or development, including the land on which it is situated. It applies to areas that face a credible probability of experiencing significant adverse impacts in a hazard event — such as such as fault rupture zones, beaches that experience cyclical or long term erosion, failure prone hill slopes, or areas that are subject to repeated flooding.

Policy 51(i) requires that particular regard to be given, in identified flood hazard areas, to the need to locate floor levels above the expected level of a 1 in 100 year flood or 1% annual exceedance probability (AEP), to minimise damages. It also recognises that access routes should be located above this level, to allow evacuation or emergency services access to and from a site. The clause uses the 1% annual exceedance probability as a minimum standard, allowing for the possibility that it may need to be higher in certain areas, depending on the level of risk.

To promote more resilient communities that are better prepared for natural hazards, including climate change impacts, there is a need to support the Civil Defence Emergency Management principles of hazards and/or risk reduction, readiness, response and recovery.

Reduction is concerned with minimising the adverse impacts from natural hazards through sound planning and management. Readiness is about preparing for hazard events before they occur and involves local authorities,

~~civil defence emergency management and the community. An important way to achieve this is through public education and by providing information and advice in order to raise awareness of natural hazard issues. Response and recovery are the important functions carried out by local authorities and civil defence emergency management during and after a civil defence emergency.~~

~~The policy recognises the need to involve the community in preparing for natural hazards. If people are prepared and able to cope, the impacts from a natural hazard event are effectively reduced.~~

Policy 52: Avoiding or Minimising adverse effects of hazard mitigation measures – consideration

When considering an application for a resource consent, notice of requirement, or a change, variation or review of a district or regional plan, for hazard mitigation measures, particular regard shall be given to:

- (a) ~~the need for structural protection works or hard engineering methods;~~
- (b) whether ~~non-structural nature-based solutions, soft engineering, green infrastructure, room for the river or~~ Mātauranga Māori or soft engineering options provide a more appropriate ~~or suitably innovative~~ solution;
- (c) ~~avoiding structural protection works or~~ hard engineering methods unless it is necessary to protect existing development, regionally significant infrastructure or property from unacceptable risk and the works form part of a long-term hazard management strategy agreed to by relevant authorities that represents the best practicable option for the future;
- (d) the long-term viability of maintaining the structural protection works a hard engineering approach with particular regard to how climate change may increase the risk from natural hazards over time;
- (e) adverse effects on Te Mana o te Wai, mahinga kai, Te Rito o te Harakeke, taonga species, natural processes, and the local indigenous ecosystems and biodiversity;
- (f) sites of significance to mana whenua/tangata whenua, including those identified in a planning document recognised by an iwi authority and lodged with a local authority or scheduled in a city, district or regional plan;
- (g) a no more than minor increase in the change in natural hazard risk to nearby areas as a result of changes to natural processes from the hazard mitigation works;
- (h) the cumulative effects of isolated hard engineering structural protection works;
- (i) any residual risk remaining after mitigation works are in place, so that they minimise reduce and or do not increase the risks from ~~of~~ natural hazards.

Explanation

Policy 52 recognises that the effects of hard engineering protection structures can have adverse effects on the environment, increase the risks from natural hazards over time and transfer the risks to nearby areas. It provides direction to consider lower impact methods of hazard mitigation such as non-structural, soft engineering, nature-

~~based solutions green infrastructure, room for the river~~ or Mātauranga Māori options, that may be more appropriate, providing they can suitably mitigate the hazard.

Objective 19 seeks to reduce the risks and consequences from natural hazards, while Objective 20 aims to ensure activities, including hazard mitigation measures, do not increase the risk and consequences from natural hazards. Policy 52 promotes these objectives.

Having established there is a need for protection works, non-structural and soft engineering methods should be the first option for hazard mitigation. Soft engineering methods may include, for example; hazard avoidance or controlled activity zones; setback or buffer distances; managed retreat or land retirement; a 'do nothing' policy; restoration projects for wetlands, dunes or hillslopes prone to flooding, slipping or erosion.

~~Activities such as river bed gravel extraction which may assist in the avoidance or mitigation of natural hazards are also a consideration under this policy.~~

~~Structural measures or hard engineering methods can have significant environmental effects and should be considered as the least desirable option for natural hazard control. Where there is an unacceptable risk to development or property, there may be a place for structural measures or hard engineering methods, if they are part of a long-term hazard management strategy that includes other measures. Policy 51 will need to be considered alongside policy 52(c) when deciding whether a development faces an unacceptable risk or not.~~

~~The risk that remains after protection works are put in place is known as the residual risk. Stopbanks, seawalls, and revetments and other engineered protection works can create a sense of security and encourage further development. In turn, this increases the extent and value of assets that could be damaged if the protection works fail or an extreme event exceeds the structural design parameters.~~

Chapter 4.4: Non-Regulatory Policies

Policy CC.7: Protecting, restoring, ~~and~~ enhancing and sustainably managing ecosystems ~~and habitats~~ that provide nature-based solutions to climate change – ~~district and regional plans non-regulatory~~

~~District and regional plans shall include objectives, policies, rules and/or methods that provide for nature-based solutions to climate change to be part of development and infrastructure planning and design.~~

~~Work with and support landowners, mana whenua/tangata whenua, and other key stakeholders to protect, restore, ~~or~~ enhance or sustainably manage ecosystems that provide nature-based solutions to climate change.~~

Explanation

~~Development and infrastructure planning and design should include *nature-based solutions* as standard practice, including green infrastructure, green spaces, and environmentally friendly design elements, to manage issues such as improving water quality and natural hazard protection. *Nature-based solutions* can perform the roles of traditional infrastructure, while also building resilience to the impacts of climate change and providing benefits for indigenous biodiversity and community well-being.~~

~~Policy CC.7 recognises the value that natural ecosystems can provide as *nature-based solutions* for climate change. This policy recognises the critical importance of working with and supporting landowners and other key stakeholders to improve the health and functioning of ecosystems that provide benefits for nature and the wider community. Methods CC.6 and CC.9 will support the implementation of this policy.~~

Policy CC.15: Improve rural resilience to climate change – non-regulatory

Support rural communities in their climate change adaptation and mitigation efforts, including by:

- (a) providing practical and easily accessible information on climate change projections at a local level,
- (b) promoting and supporting land management practices and/or land uses. [including nature-based solutions](#), that improve *resilience* to climate change, [including rural water resilience and food security including nature-based solutions](#),
- (c) promoting and supporting land management practices and/or land uses that will reduce gross greenhouse gas emissions,
- (d) giving preference to climate change efforts that also deliver benefits for indigenous biodiversity, land, fresh and coastal water.

Explanation

This policy promotes and supports low emission agriculture and increased rural resilience to climate change.

Policy CC.16: Climate change adaptation strategies, plans and implementation programmes – non-regulatory

~~Regional, city and district councils should, [under the Local Government Act 2002](#),~~ partner with mana whenua / tangata whenua and engage local communities in a decision-making process to develop and implement strategic *climate change adaptation* plans that map out management options over short, medium and long term timeframes, using a range of tools and methods ~~that may include including,~~ but [are](#) not limited to:

- (a) Te Ao Māori and Mātauranga Māori approaches;
- (b) Dynamic adaptive planning pathways or similar adaptive planning approaches;
- (c) ~~City, d~~ District or regional plan objectives, policies and rules that address subdivision, use and development for areas impacted by climate change and sea level rise;
- (d) Options for managed retreat or relocation;

- (e) A consideration of *Te Mana o te Wai* ~~and *Te Rito o te Harakeke*~~;
- (f) Hazard mitigation options including soft engineering, ~~green infrastructure or room for the river~~ *nature-based solutions* and methods to reduce the risks from natural hazards exacerbated by climate change and sea level rise; and
- (g) Equitable funding options required to implement the programme.

Explanation

Policy CC.16 provides a range of options for development and implementation of adaptation strategies or plans to suit a particular programme or local circumstances. In some instances, the outcomes may require implementation as objectives, policies, and rules in regional or district plans, but this is not expected to be a requirement.

[This policy should be read in conjunction with Policy CC.15 and Method CC.8 that address rural resilience to climate change, food and water security.](#)

Policy CC.17: Iwi climate change adaptation plans – non- regulatory

Regional council will assist mana whenua / tangata whenua in the development of *iwi climate change adaptation* plans to manage impacts that may affect Māori relationships with their whenua, tikanga and kaupapa Māori, sites of significance, wai Māori and wai tai values, mahinga kai, wāhi tapu and other taonga.

Explanation

Policy CC.17 recognises that climate change will disproportionately affect Māori, especially as a lot of Māori land is located in hazard prone areas near rivers and the coast. This policy directs the regional council to assist mana whenua / tangata whenua, where appropriate, with the development of iwi-led *climate change adaptation* plans.

Policy CC.18: Increasing regional forest cover to support climate change mitigation: “right tree-right place” – non-regulatory

Promote and support the planting and natural regeneration of *permanent forest* to maximise the benefits for carbon sequestration, indigenous biodiversity, erosion control, freshwater and coastal ecosystems, and the social, *cultural*, and economic well-being of local communities, *including by:*

- (a) ~~Priority should be given identifying where~~ to promote ~~ing~~ and incentivise ~~ing~~ the planting and regeneration of permanent indigenous forest *representative of the natural type expected in the area* in preference to exotic species, and
- (b) ~~prioritising planting and regeneration of permanent indigenous forest and associated browsing pest animal control particularly~~ on highly erodible land and in catchments where water quality targets for sediment are not reached *and in areas where it will support significant indigenous biodiversity values.*

Explanation

Policy CC.18 promotes the planting of trees to contribute to achieving net zero emissions by 2050, while seeking an increase in forest extent that maximises the co-benefits for

indigenous biodiversity, land stability, aquatic ecosystem health, and social and economic well-being, as directed by Objective CC.5

Policy 65: ~~Supporting and encouraging~~ Promoting efficient use and conservation of resources – non-regulatory

~~To promote~~ Support and encourage the conservation and efficient use of resources by:

- (a) applying the 5 Rs (~~3R~~Reducing, Reusing, Recycling, Recover, ~~recycling~~ and Residual waste management);
- (b) reducing organic waste at source from households and commercial premises;
- (c) increasing the diversion of wastewater sludge from wastewater treatment plants before deposition to municipal landfills;
- (d) requiring encouraging efficient municipal landfill gas systems;
- (e) increasing the proportion of energy generated and used from renewable sources;
- (ef) using water and energy efficiently; and
- (fg) conserving water and energy.

Explanation

Policy 65 supports and encourages~~promotes~~ the efficient use of resources to reduce emissions. The policy endorses the waste hierarchy, supports increasing generation and use of renewable energy and also promotes similar principles for efficient water and energy use.

~~For waste, using resources efficiently means following the waste hierarchy: reducing unnecessary use of resources, including reducing packaging; reusing unwanted goods that are still ‘fit for purpose’; recycling new products from waste materials; and recovering resources (such as energy) from waste before disposing of the remaining waste safely. If resources are used efficiently, the amount of unwanted materials disposed of at landfills and at sewage treatment plants will be reduced.~~

~~Similar principles apply for reducing energy demand and conserving energy. This includes minimising the use of energy, reducing the need to use or being more efficient in use.~~

~~Some of the ways to efficiently use or conserve water include reducing water demand and wastage by:~~

- ~~• Setting targets for reducing leakage from reticulated water supplies within each district~~
- ~~• Providing information to water suppliers and water users on how to conserve water and use it as efficiently as possible~~
- ~~• Providing information about long-term rainfall and drought predictions~~
- ~~• Investigating the use of transferable water permits~~

~~Leaks from water reticulation systems can waste over 15 per cent of treated water. Water supply authorities already have programmes for repair and maintenance, and~~

it is vital that targets are set so that development of such programmes continues and water wastage is reduced.

Water efficient household appliances and garden watering tied to garden needs, along with fixing dripping taps and planting locally appropriate plants, are some of the ways that people could make the water delivered to their house go further. Greywater irrigation and recycling, and the use of rainwater tanks, are ways that households can make more efficient use of water.

Weather predictions can help people prepare for possible weather extremes, for example by buying in stock feed or ensuring water reserves are at full capacity. Transferring water permits, or parts of water permits, allows allocated water to be used by as many people as the resource can sustain.

Policy FW.8: Land use adaptation – non regulatory

Promote and support water resilience and *climate change adaptation* in land use practices and land use change including:

- a. Preparing and disseminating information about *climate-resilient* practices,
- b. promoting water resilience in *Freshwater Farm Plans*,
- c. supporting primary sector groups and landowners in researching and promoting *climate-resilient and lower emission* land uses and pathways to move to new land uses, and
- d. prototyping, researching, and promoting *nature-based solutions that support water resilience, such as swales and bunds.*

Explanation

Policy FW.8 promotes and supports *water resilience and climate change adaptation* in land use practices and change.

Chapter 4.5.2 – Non-regulatory methods – information and guidance

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 *avoiding, 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 *the hierarchy approach to reducing greenhouse gas emissions* in Policy CC.8 by the end of 2024, including how to prioritise *avoiding and 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*

Implementation: Wellington Regional Council.

Method CC.3: Travel ~~choice assessment demand management plans~~

~~Where requested, t~~The Wellington Regional Council will assist city and district councils with determining land use thresholds for triggering a **requirement for a travel choice assessment** ~~Travel Demand Management Plan requirement~~, as well as guidelines for a ~~Travel choice assessment Demand Management Plan~~ that city and district councils can provide to developers to assist them with mitigating the travel movements and associated greenhouse gas emissions arising from new subdivision, use and development.

Implementation: Wellington Regional Council.

Method CC.3A: Whole of life carbon greenhouse gas emissions assessment

Develop guidance to support the development of **whole of life carbon greenhouse gas emission assessments**, in accordance with Policy CC.11.

Implementation: Wellington Regional Council

Method 14: Information about natural hazard and climate change effects

Undertake research, prepare and disseminate information about natural hazards and climate change effects in order to:

- (a) guide local authority planning and decision-making; and
- (b) raise awareness and understanding of natural hazards **and climate change**

Implementation: Wellington Regional Council, city and district councils and Civil Defence Emergency Management Group*

Method 17: Reducing waste and greenhouse gases emissions from waste streams
Information about waste management

Work in partnership with mana whenua / tangata whenua and with city and district councils, the waste management sector, industry groups and the community to:

- (a) reduce organic matter at source, and
- (b) work towards implementing kerbside recovery of organic waste from households and commercial premises, and
- (c) encourage development opportunities for increasing the recovery of biogas from municipal landfills, and
- (d) increase the diversion of organic waste (sludge) from the waste stream before deposition to municipal landfills.

Implementation: Wellington Regional Council, iwi authorities, city and district councils.

Method 22: Integrated hazard risk management and climate change adaptation
planning Information about areas at high risk from natural hazards

Integrate hazard risk management and climate change adaptation planning in the Wellington region by:

- (a) developing non-statutory strategies, where appropriate, for integrating

hazard risk management and *climate change adaptation* approaches between local authorities in the region;

- (b) supporting the development of ~~developing~~ consistency in natural hazard provisions in ~~city~~, district and regional plans;
- (c) assisting mana ~~whenua~~/tangata whenua in the development of iwi *climate change adaptation* plans; and
- (d) Preparing and disseminating ~~Prepare and disseminate~~ information about classifying risks from natural hazards as low, medium and high to ensure regional consistency.

Implementation: Wellington Regional Council and city and district councils*

Method 23: Information about natural features to protect property from natural hazards

Prepare and disseminate information about how to identify features in the natural environment that can offer natural protection to property from the effects of erosion and inundation.

*Implementation: Wellington Regional Council * and city and district councils*

Method 33: Identify sustainable energy programmes

Identify sustainable energy programmes, to improve energy efficiency and conservation, reduce emissions of carbon dioxide and minimise the region's vulnerability to energy supply disruptions or shortages.

Implementation: Wellington Regional Council and city and district councils*

5.4 – Non-regulatory methods – identification and investigation

Method CC.4 Prepare a regional forest spatial plan

By December 2024, prepare a regional forest spatial plan, ~~U~~using a partnership approach with mana whenua/tangata whenua and other key stakeholders, as appropriate, to identify where to promote and support planting and natural regeneration of *permanent forest* and associated browsing pest animal control, including how to give effect to Objective CC.5 and ~~address~~ contribute to achieving water quality targets for sediment, to inform the requirements of Policy CC.6.

This plan to include:

- a. a target for an increase in *permanent forest* extent in the Wellington Region to support achieving Objective CC.5,
- b. evaluation of the potential impacts of increased afforestation on rural production and social well-being, and development of an approach that will maximise the environmental, social, and economic benefits,
- c. ways to implement and support capability for increasing the area of indigenous forest, including the provision of incentives.
- d. identification of the types of indigenous forest to prioritise for re-afforestation, including links to the strategic indigenous biodiversity targets and priorities identified through Policy IE.3 and Method IE.3, and
- e. use of high-resolution spatial data to support identification of areas appropriate for permanent or plantation forestry, site-appropriate indigenous forests and other planting types,

~~(e)(f)~~ a process to monitor and report on changes in the extent and health of permanent forest.

Implementation: Wellington Regional Council*, city and district councils *at their discretion*

Method CC.5: ~~Confirm Review~~ regional response to reducing agricultural greenhouse gas emissions

~~Monitor changes in agricultural land use and land management practices and review the regional policy approach by~~ By 31 December 2024, Wellington Regional Council confirm the preferred policy approach and timeframe option to implement Policy CC.5, taking into account changes in agricultural land use and land management practices, responding to any predicted changes in *greenhouse gas emissions* from the agriculture~~al~~ sector~~ion~~ in the Wellington Region, regulatory and non-regulatory responses, and relevant ~~any new~~ national policy direction and initiatives.

Implementation: Wellington Regional Council.

Method CC.6: Identifying nature-based solutions for climate change

By 30 June 2024, the Wellington Regional Council will, in partnership with mana whenua/tangata whenua and other stakeholders as appropriate, identify ecosystems in the Wellington Region that should be prioritised for protection, enhancement, and restoration for their contribution as a *nature-based solution* to climate change, including those that:

- (a) sequester and/or store carbon (e.g., forest, peatland),
- (b) provide resilience to people from the impacts of climate change, including from natural hazards (e.g., coastal dunelands, street trees, and wetlands), and
- (c) provide resilience for indigenous biodiversity from the impacts of climate change, enabling ecosystems and species to persist or adapt (e.g., improving the health of a forest to allow it to better tolerate climate extremes).

Implementation: Wellington Regional Council

Method CC.7: Advocating for the use of transport pricing tools

Actively advocate to the Government to introduce new regulatory functions or tools for councils to manage congestion and greenhouse gas emissions within major urban areas through use of pricing tools and/or taxes.

Implementation: Wellington Regional Council

5-4-5.5 – Non-regulatory methods – providing support

Method CC.8: Programme to support low-emissions and climate-resilient agriculture-non-regulatory methods

By June 2024, develop and start implementing a targeted climate change extension programme, with mana whenua/tangata whenua and relevant stakeholders, to actively promote and support changes to reduce agricultural *greenhouse gas emissions* and increase rural land use resilience to climate change, including by:

- (a) providing practical and easily accessible information on projected climate change impacts at a local level,

- (b) providing base data held by the regional council to support the development of farm greenhouse gas emission profiles.
- (c) promoting and supporting actions to reduce agricultural gross-greenhouse gas emissions and/or increase climate resilience.
- (d) identifying appropriate areas and species for tree planting/natural regeneration in farm plans as part of implementing the regional spatial forest plan (see Method CC.4),
- (e) identifying other on-farm nature-based solutions that will increase the resilience of a farm system and/or catchment to the effects of climate change, (f) identify and assist catchment groups and water user groups in the development of adaptation plans and
- (fg) supporting central government and industry climate change programmes/initiatives.

Implementation: Wellington Regional Council

Method CC.9: Support and funding for protecting, enhancing, and restoring indigenous ecosystems and nature-based solutions

Provide support, and seek new sources of funding, ~~for to incentivise or implement~~ programmes, including mana whenua/tangata whenua led programmes, that protect, enhance or restore the priority ecosystems identified by Methods IE.23 and CC.76 for their indigenous biodiversity values and/or their contribution as nature-based solutions to climate change.

Implementation: Wellington Regional Council

Method CC.10: Establish incentives to shift to ~~active low and zero-carbon multi modal transport~~ and public transport

Establish, support and promote a range of incentives for uptake of ~~low and zero-carbon-zero and low-carbon~~ multi modal transport, including public transport, to reduce greenhouse gas emissions, and to support an equitable and inclusive transition.

Implementation: Wellington Regional Council

Method 56: Assist the community to reduce waste and use water and energy efficiently

Assist the community to adopt sustainable practices to:

- (a) reduce, reuse or recycle waste;
- (b) use water and energy efficiently; and
- I conserve water and energy.

Implementation: Wellington Regional Council and city and district councils

6-5: Monitoring the Regional Policy Statement and progress towards anticipated environmental results

Topic	Objectives	Anticipated environmental results (AER)
<p>Climate Change</p>	<p>Objective CC.1</p> <p>By 2050, <u>The Wellington Region is a low-emission and climate-resilient region, where <i>climate change mitigation</i> and <i>climate change adaptation</i> are an integral part of:</u></p> <ul style="list-style-type: none"> (a) <u>sustainable air, land, freshwater, and coastal management,</u> (b) <u>well-functioning <i>urban areas environments</i> and <i>rural areas</i>, and</u> (c) <u>The well-planned planning and delivery of infrastructure.</u> 	<p><u>1. All AERs for Objectives CC.3-CC.7 are relevant.</u></p> <p><u>2. By 2030, all new development (both greenfield and brownfield) and infrastructure is located, designed and constructed in ways that support reduction in greenhouse gas emissions and provides for climate-resilience, including features as described by Policies CC.4 and CC.4A.</u></p>
	<p>Objective CC.2</p> <p>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 <u>equitable between sectors and communities.</u></p>	<p><u>1. By 2030, all sectors and parts of the communities are realizing the benefits of transitioning to a low-emission and climate-resilient region.</u></p>
	<p>Objective CC.3</p> <p>To support the global goal of limiting warming to 1.5 degrees Celsius <u>and New Zealand’s greenhouse gas emissions reduction targets, net greenhouse gas emissions from transport, agriculture, stationary energy, waste, and industry in the Wellington Region are reduced:</u></p> <ul style="list-style-type: none"> (a) <u>By 2030, to contribute to a 50 percent reduction in net greenhouse gas emissions from 2019 levels by 2030, including a:</u> <ul style="list-style-type: none"> <u>(i) 35 percent reduction from 2018 levels in land transport-generated greenhouse gas emissions,</u> 	<p><u>1. Net greenhouse gas Carbon emissions are reduced to contribute to a by 50 percent reduction from 2019 levels by 2030 across the Wellington Region and to achieve net-zero greenhouse gas emissions by 2050</u></p>

	<p>(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 by 2050.</p>	
	<p>Objective CC.4: <i>Nature-based solutions are an integral part of climate change mitigation and climate change adaptation, improving the health, well-being and resilience of people and communities, indigenous biodiversity, and the natural and physical resources environment.</i></p>	<p>1. By 2030, nature-based solutions are provided for as standard good practice in new development and infrastructure.</p> <p>2. By 2030, ecosystems that provide nature-based solutions to climate change in the Wellington Region have been identified and work is underway with supportive landowners, mana whenua/tangata whenua and other key stakeholders to protect, enhance, and restore them.</p>
	<p>Objective CC.5: <i>By 2030, there is an increase in the area and health of permanent forest, preferably indigenous forest, in the Wellington Region, maximising benefits for carbon sequestration, indigenous biodiversity, land stability, water quality, and social, cultural and economic well-being.</i></p>	<p>1. The regional forest spatial plan, as described in Method CC.4, has been developed and there is an increase in the area of <i>permanent forest</i> in priority areas identified in this plan.</p>
	<p>Objective CC.6: <i>Resource management and adaptation planning increases the resilience of communities, infrastructure and the natural environment to the short, medium, and long-term effects of climate change.</i></p>	<p>1. By 2030, community-based adaptation plans have been developed for areas assessed as facing high risks from natural hazards and climate change.</p>
	<p>Objective CC.7: <i>People and businesses understand what the current and predicted future effects of climate change, and how these may impact them, means for their future how to respond to the challenges of climate change, and are actively involved in planning and implementing appropriate mitigation and adaptation responses.</i></p>	<p>1. Public surveys show an increased public awareness of the effects of climate change in the Wellington Region and support for, and uptake of, appropriate mitigation and adaptation responses.</p>
	<p>Objective CC.8: <i>Iwi and hapu Mana whenua/tangata whenua are empowered to make decisions to</i></p>	<p>1. Greater Wellington has partnered with mana whenua/tangata whenua to</p>

	achieve climate-resilience in their communities.	<u>prepare climate change adaptation plans, focusing on the most at risk areas within their rohe.</u>
Natural Hazards	<p>Objective 19 The risks and consequences to people, communities, their businesses, property, and infrastructure and the environment from natural hazards and the effects of climate change effects are reduced <u>avoided or minimised.</u></p>	<p>1. Regional and district plans <u>have:</u></p> <p>(a) identify areas at high risk from natural hazards; <u>used a risk-based approach to assess hazards and risks to new or existing subdivision, use and development from natural hazard and climate change impacts over at least a 100 year planning horizon;</u> and</p> <p>(b) contain policies and rules to avoid subdivision and inappropriate development in those areas. <u>included hazard overlays, objectives, policies and rules to manage or avoid new or existing subdivision, use and development in those areas.</u></p> <p>2. There is no new subdivision and inappropriate development in areas at high risk from natural hazards</p>
	<p>Objective 20 Natural hazard <u>mitigation measures</u> and <u>climate change mitigation and adaptation activities</u> <u>minimise</u> the risks from natural hazards, and impacts on, <u>Te Mana o te Wai, Te Rito o te Harakeke taonga species, sites of significance to mana whenua/tangata whenua, natural processes, indigenous ecosystems and biodiversity.</u></p>	<p>1. There is no increase in the risk from natural hazards as a result of subdivision, use or development (including mitigation works).</p> <p>2. Where hazard <u>mitigation and climate change mitigation</u> measures are employed, there is a greater number and range of soft engineered measures <u>nature-based solutions</u> used, that achieve <u>integrated management and broad environmental outcomes.</u></p>
	<p>Objective 21 The resilience of our €communities, <u>infrastructure,</u> are more resilient to natural hazards, including the impacts and the natural environment <u>to natural hazards is strengthened</u></p>	<p>1. <u>Over 75 per cent of the community surveyed has an understanding of the consequences from local natural hazards.</u></p> <p>2. <u>Over 75 per cent of the</u></p>

	<u>improved including to the short, medium, and long-term effects of climate change, and sea level rise is strengthened, and people are better prepared for the consequences of natural hazard events.</u>	<u>community surveyed is prepared for natural hazard events.</u>
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Climate change adaptation

In human systems, actions and processes to 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.

Climate-resilience/Climate-resilient/Resilience and Resilient (in relation to climate change or natural hazards)

The capacity and ability of natural and physical resources, including people, communities, businesses, infrastructure, and ecosystems, to withstand the impacts and recover from the effects of climate change, including natural hazard events.

Emissions

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

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. A reference to greenhouse gas emissions means “gross” greenhouse gas emissions unless otherwise expressed as “net greenhouse gas emissions” or “net-zero”.

Hazard risk management strategy

A strategic approach for the management of the risks from natural hazards to minimise or reduce the overall risk of social, environmental and economic harm and adverse effects from natural hazards. It includes some or all of the following elements; hazard and hazard risk identification, impact assessment, potential mitigation works

(costs/impacts/maintenance), assessment of environmental effects, assessment of alternate options, cost-benefit analysis, budget allocation; community engagement and implementation plan. The scale of a hazard risk management strategy should be commensurate to the size of the proposed development or activity.

Hazard sensitive activity

Means any building that contains one or more of the following activities:

- community facility
- early childhood centre
- educational facility
- emergency service facilities
- ~~hazardous facilities and major hazardous facilityies~~
- healthcare activity
- kōhanga reo
- marae
- residential activity
- retirement village
- research activities
- visitor accommodation

Highly erodible land

~~Means land at risk of severe mass-movement erosion (landslide, earthflow, and gully) if it does not have a protective cover of deep-rooted woody vegetation. Land classified as very high (red) according to the erosion susceptibility classification in the National Environmental Standards for Plantation Forestry 2017.~~

~~**Large scale generators**~~

~~Any boiler, furnace, engine or other device designed to burn for the primary purpose of energy production having a net heat or energy output of more than 40Kw, but excluding motor vehicles, trucks, boats and aircraft. This definition excludes domestic fires.~~

~~**Major hazard facility**~~

~~Has the same meaning as the Health and Safety at Work (Major Hazard Facilities) Regulations 2016 - means a facility that WorkSafe has designated as a lower tier major hazard facility or an upper tier major hazard facility under regulation 19 or 20.~~

~~**Minimise**~~

~~Reduce to the smallest amount reasonably practicable. Minimised, minimising and minimisation have the corresponding meaning.~~

Nature-based solutions

~~Actions to protect, enhance, or restore~~ Use and management of natural ecosystems and processes, or and the incorporation of natural elements into built environments ~~use of engineered systems that mimic natural processes, to reduce greenhouse gas emissions, support climate change adaptation and/or strengthen the resilience and~~

well-being of humans people, indigenous biodiversity, and the natural and physical resources environment to the effects of climate change.

Note: “nature-based solutions” is an umbrella term that encompasses concepts such as green infrastructure (including as defined in the National Planning Standards), green-blue infrastructure, and water-sensitive urban design.

Note: Examples could include:

Reducing greenhouse gas emissions (climate change mitigation):

- planting forests to sequester carbon
- protecting maintaining managing peatland in a way that retains its carbon stores, avoids soil loss and associated land subsidence

Increasing Strengthening resilience and providing for (climate change adaptation)

- a. providing resilience for people
 - planting street trees to provide relief from high temperatures reduce urban heat
 - restoring coastal dunelands to provide increased resilience to the damaging effects of storms surges linked to sea level rise
 - leaving space for rivers to undertake their natural movement and accommodate increased floodwaters
 - the use of water-sensitive urban design principles and methods, such as rain gardens to manage contaminants and reduce stormwater runoff in urban areas
 - retaining wetlands and planting swales on farmland to slow runoff, reduce flood peaks, retain base flows, and protect water quality
- b. providing resilience for ecosystems and species
 - restoring indigenous forest to a healthy state to increase its resilience to increased climate extremes
 - leaving space for estuarine ecosystems, such as salt marshes, to retreat inland in response to sea level rise.

Optimise transport demand

Optimise transport demand means:

(a) Influencing demand spatially and reducing trip length; then

(b) Creating choices to travel via sustainable modes and reduce emissions; then

(c) Designing and delivering development in a way that supports sustainable modes and an efficient transport network.

Organic waste

Wastes containing carbon compounds that are capable of being readily biologically degraded, including by natural processes, such as paper, food residuals, wood wastes, garden and plant wastes, but not inorganic materials such as metals and glass or plastic. Organic wastes can be decomposed by microorganisms into methane, carbon dioxide,

nitrous oxide, and simple organic molecules (plastic contains carbon compounds and is theoretically organic in nature, but generally is not readily biodegradable).

Permanent forest

~~For the purpose of the RPS permanent forest is a forest established for long term forest cover and is not intended to be harvested. —Forest actively managed to maintain continuous canopy cover.~~

Plantation forestry

A forest deliberately established for commercial ~~harvest~~ purposes, being:

- (a) at least 1 ha of continuous forest cover of forest species that has been planted and has or will be harvested or replanted; and
- (b) includes all associated forestry infrastructure; but
- (c) does not include—
 - (i) a shelter belt of forest species, where the tree crown cover has, or is likely to have, an average width of less than 30 m; or
 - (ii) forest species in urban areas; or
 - (iii) nurseries and seed orchards; or
 - (iv) trees grown for fruit or nuts; or
 - (v) long-term ecological restoration planting of forest species; or
 - (vi) willows and poplars space planted for soil conservation purposes.

Small scale and community scale renewable energy (in relation to electricity generation)

~~Has the same meaning as in the National Policy Statement for Renewable Energy Generation 2011: small and community scale distributed electricity generation~~
mMeans renewable energy electricity generation for the purpose of using electricity on a particular site, or supplying an immediate community, or connecting into the distribution network.

Travel Choice Assessment demand management plan

~~A travel choice assessment demand management plan demonstrates how the subdivision, use and development has considered and incorporated accessibility and connectivity to active transport, sustainable transport modes and supports redistribution of demand from private car use to active and sustainable transport modes. sets out interventions and actions to influence travel behaviour, with the aim of minimising travel demand or redistributing demand from traditional car usage to more sustainable transport modes for new subdivision, use and development. A travel demand management plan should include mitigation measures that so that planned subdivision, use and development is designed and implemented to maximise quality of life for people without access to a private vehicle, reducing the demand for vehicle trips and associated externalities like greenhouse gas emissions. For example, a travel demand management plan for a new retail development might promote cycle parking~~

facilities and a delivery service, as an intervention to promote travel with low carbon emissions.

Walkable catchment

A walkable catchment is an area that an average person could walk from a specific point to get to multiple destinations. A walkable catchment consists of a maximum 20 minute average walk, or as otherwise defined in district plans.

Water-sensitive urban design

The integration of planning, engineering design and water management to mimic or restore natural hydrological processes in order to address the quantitative and qualitative impacts of land use and development on land, water and biodiversity, and the community's aesthetic and recreational enjoyment of waterways and the coast. Water-sensitive urban design manages stormwater at its source as one of the tools to control runoff and water quality. The terms low impact design, low impact urban design and water-sensitive design are often used synonymously with water-sensitive urban design.

Whole-of-life carbon greenhouse gas emissions assessment

An evaluation of the total greenhouse gas emissions of a proposal ~~carbon footprint~~ which measured in tonnes of carbon dioxide equivalent units, derived from assessing the emissions associated with all elements of the proposed project over its entire life. ~~the total volume of greenhouse gases emitted at different stages of a project lifecycle.~~