

Report 19.292
Date 8 August 2019
File CCHSTR-5-64

Committee Council
Author Andrea Brandon, Programme Lead Climate Change
Jake Roos, Climate Change Advisor

What is a Climate Emergency? (Information Paper)

1. Purpose

To present background information to the Environment Committee in considering the ‘Climate Emergency’ movement. This will help inform elected members prior to making a decision on this issue at the 21 August Council meeting.

2. Background

At their meeting on 20 May, the Greater Wellington Regional Council (GWRC) Climate Change Working Group unanimously agreed that GWRC should join other councils in declaring a climate emergency. On 20 June the Environment Committee considered the recommendation, prepared by Cr Sue Kedgley, Chair of the Environment Committee and Cr Roger Blakeley, Chair of the GWRC Climate Change Working Group. Staff were asked to bring more information to the 8 August Environment Committee meeting.

At the GWRC Climate Change Working Group on 21 June it was agreed that the paper to the Environment Committee would focus on background information related to the climate emergency movement, with a further paper with issues and options presented to the 21 August Council meeting.

3. Climate Change

Climate change is arguably the biggest environmental challenge we have ever faced and it affects everyone in the region. It is widely acknowledged that climate change is already impacting ecosystems and communities around the world, with increasingly frequent and severe storms, floods and droughts; melting polar ice sheets; sea level rise and coastal inundation and erosion; and impacts on biodiversity including species loss and extinction.

The 2018 Special Report on the impacts of 1.5 degrees Celsius (°C) of global warming above pre-industrial levels prepared by the Intergovernmental Panel on Climate Change (IPCC) concludes: limiting global warming to 1.5°C would require ‘rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems. Global net human-caused emissions of carbon dioxide (CO₂) would need to fall by about 45 percent from 2010 levels by 2030, reaching ‘net zero’ around 2050. This means that any remaining emissions would need to be balanced by removing CO₂ from the air’¹.

The world is currently on course to be approximately 4°C warmer than it was in preindustrial times by the year 2100, a situation that would regularly make outdoor conditions across large areas of the tropics lethal to humans without the protection of air-conditioning, severely reduce global food production and cause multi-metre sea level rise that would inundate large areas of human settlement. This scale of climate disruption is likely to lead to dramatic reductions in human population and eco-system collapse.² The probability of this outcome will increase as long as net emissions of greenhouse gases continue.

The United Nations Framework Convention on Climate Change (UNFCCC) was established to stabilise greenhouse gas concentrations in the atmosphere to a level that will prevent dangerous human interference with the climate system. Despite a near universal membership of 196 Parties to the UNFCCC, global emissions of human induced greenhouse gas emissions continue to rise. The New Zealand Government’s response to climate change has ramped up over the last 18 months³ in order to drive a whole of government transition to a low greenhouse gas emissions economy and ensure a climate resilient future.

While these actions are important, there is mounting concern that the urgency required to address climate change, identified in the 2018 IPCC Special Report, requires a more rapid response than either the international or national process will deliver. Concentrations of greenhouse gases in the atmosphere are now higher than any time in the last 3 million years⁴, and annual global greenhouse emissions, including carbon dioxide and methane, continue to increase as a result of human activities.^{5,6}

4. How climate change is impacting the Wellington region

Greater Wellington Regional Council has commissioned research to analyse tide gauge records in the region in order to understand the trends in local sea level. The research shows that since records began in 1890, sea level has been rising at an average rate of 2.2 mm/yr. That sums up to an increase of nearly

¹ <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ippc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

² <https://www.ipbes.net/news/ipbes-global-assessment-summary-policymakers-pdf>

³ Initiatives include the proposed Climate Change Response (Zero Carbon) Amendment Bill, currently before the House, which sets a new emissions reduction target for 2050 and establishes a Climate Change Commission, along with amendments to existing climate change policies to strengthen the national response.

⁴ <https://www.nbcnews.com/mach/science/carbon-dioxide-hits-level-not-seen-3-million-years-here-ncna1005231>

⁵ <https://www.iea.org/geco/emissions/>

⁶ <https://climatenexus.org/climate-change-news/methane-surge/>

30cm over this period and represents over 30% of the tide range. In addition, records of vertical land motion measured by continuous GPS, show that the region is currently subsiding tectonically at rates equal to that which sea level is rising, ie, around 2 mm/yr. Thus, at present, the relative sea level trend is effectively double the long term annual average.

This sea-level rise is already having impacts on our activities and infrastructure in coastal areas. The Cook Strait/Wellington areas and the east coast of the region are more vulnerable to storm inundation and rates of coastal erosion due to their smaller tidal range when compared to other parts of New Zealand. We are also seeing an upward trend in temperature across the Wellington Region.

Even if greenhouse gas emissions are stabilised globally, sea-level and average daily temperatures will continue to rise. Rainfall is projected to increase in the west of the Wellington Region and decrease in the east of the region. Heavy rainfall events are projected to increase across the region while inland Wairarapa is likely to become more drought prone. Extreme weather events are predicted to occur more frequently across the region. Changes in ocean acidity may have significant impacts on New Zealand fisheries and aquaculture into the future.

As sea levels rise, total storm inundation levels will threaten low-lying areas of Wellington central city, potentially large areas of Petone and Seaview, and to a limited extent Evans Bay and smaller areas of the Miramar Peninsula. Along the Kapiti Coast, sea level rise and total storm inundation levels will threaten Otaki Beach, low-lying areas of Waikanae and Paraparaumu Beach, and narrow margins of the Porirua Harbour, especially the CBD.

More importantly, these changes will all impact on our core business. Changes to the climate will exacerbate the impacts and risks on Wellington Region's indigenous biodiversity, primary industries, biosecurity, fresh water security and wildfire incidence. Our coastal, low lying and flood prone communities and infrastructure will become more vulnerable. In fact, no one will be immune, as both rural and urban economies and communities in the Wellington region are being and will be more adversely affected as time goes on.

5. What is a Climate Emergency?

The concept of a 'Climate Emergency' and the 'Climate Mobilisation Movement' were first described in a paper Published in April 2016 by United States-based psychologist Dr Margaret Klein Salamon.⁷ She and the activist groups that form the broad 'climate mobilisation movement', such as the Extinction Rebellion, School Strike 4 Climate and the Sunrise Movement define their objectives as:

'...for governments to declare a climate emergency and mobilise society-wide resources at sufficient scale and speed to protect civilisation, the economy, people, species, and ecosystems (from the climate crisis).'

⁷ <https://www.theclimatemobilization.org/emergency-mode>

The goals of the movement are:

- To build public awareness that we are in a climate emergency which threatens life as we know it
- To demand that governments declare a climate emergency as a public signal indicating that governments and society will be mobilised in emergency mode until the emergency passes; and
- To demand a climate mobilisation of sufficient scale and speed to protect everything we want to protect⁸

Proponents of declaring a climate emergency explicitly cite the USA’s society-wide mobilisation to defeat the Axis powers during World War II as the example of the scale, speed and competency which is required to successfully address the climate crisis. They characterise an emergency response as being starkly different from ‘business as usual’, in that addressing the emergency becomes the affected societies’ number one priority, rather than just one of many competing priorities.

Recently Prof Joseph Stiglitz, recipient of the Nobel Prize for Economics in 2001, voiced his support for a WWII-style climate emergency mobilisation, saying ‘the climate emergency is our third world war’.⁹

In more recent work, Klein Salamon (2019)¹⁰ examines the theoretical discussion of what emergency mode is, compared with the normal business-as-usual mode, to illuminate what actions would look like if a climate emergency is declared (see Table 1).

Table 1 - Characterisation of ‘normal mode’ versus ‘emergency mode’

	Normal mode	Emergency mode
Priorities	Many balanced priorities	Solving the crisis = One top priority
Resources	Distributed across priorities and saved for future	Huge allocation of resources towards solution
Focus	Distributed across priorities	Laser-like focus
Self-esteem source	Individual accomplishment	Contributing to the solution

5.1 What are the legal implications of declaring a climate emergency?

There is no legal definition of the term ‘climate emergency’ in New Zealand legislation (eg, under the Civil Defence and Emergency Management Act 2002). As the declaration has no legal status, there is no precise definition of what constitutes action to meet such an emergency.

⁸ <https://climateemergencydeclaration.org/about/>

⁹ <https://www.theguardian.com/commentisfree/2019/jun/04/climate-change-world-war-iii-green-new-deal>

¹⁰ <https://www.theclimatemobilization.org/emergency-mode>

As far as we are aware, declaring a climate emergency does not carry any legal obligations on the organisation declaring it. However, legal liability regarding climate change is a very complex issue.

In March this year, Local Government New Zealand (LGNZ) commissioned Jack Hodder QC to look at the legal risks that councils faced by either recognising or ignoring the threat of climate change in their decision-making. He found a growing number of cases brought by frustrated communities and individuals around the world, and concluded it was only a matter of time before similar actions were taken here.¹¹ It has just been announced that the Thames-Coromandel District Council is being taken to court over its decision in April **not** to sign a declaration on climate change.¹²

5.2 The reaction to the declarations

There have been positive and negative reactions to governments and councils declaring climate emergencies. Key themes are that it is a symbolic, political, but empty gesture on the negative side through to being seen as an important step in increasing action for climate change. Professor Bronwyn Hayward, a Lead Author of the 2018 IPCC Special Report, warned that the use of alarmist language can induce paralysis and panic rather than action. Links have been made to a decline in mental health as people feel hopeless about the enormity of the problem, a condition that has been called 'climate grief'. Some communities are more vulnerable than others, and contributing to their grief could have negative consequences for mobilising action. There will equally be consequences for communities where no action is taken to adapt to the impacts of climate change. Declaring a climate emergency does serve a purpose as a 'call to action' that has moral and leadership force. The current surge in declarations has certainly raised the profile of climate change and brought the issue into focus in the media.

6. Who has declared?

The first government body to declare a 'climate emergency' was the municipality of Darebin in Melbourne, Australia in December 2016. As of 1 July 2019, 717 jurisdictions in 16 countries have declared a climate emergency. Populations covered by jurisdictions that have declared climate emergencies amount to over 135 million citizens, with 40 million of these living in the United Kingdom¹³ ¹⁴. Cities making declarations include London, Bristol, Vancouver and Basel.

At the time of writing this paper, eleven councils in New Zealand had declared, including four in the Wellington region (ie, the Kāpiti Coast District Council, Wellington City Council, Hutt City Council and Porirua City Council) and three regional government organisations (ie, Environment Canterbury,

¹¹ <https://www.lgnz.co.nz/assets/Uploads/f488365773/Climate-change-litigation-Whos-afraid-of-creative-judges.pdf>

¹² <https://www.msn.com/en-nz/news/national/council-taken-to-court-over-lack-of-action-on-climate-change/ar-AADMuKE?ocid=spartandhp>

¹³ <http://www.caceonline.org/councils-that-have-declared.html>

¹⁴ These statistics are increasing on a daily basis and are likely underreporting the true numbers taking this action

Auckland Council and Hawkes Bay Regional Council). Many other councils across New Zealand are also considering making declarations.

On 28 May 2019 Green Party Member of Parliament (MP) Chloe Swarbrick attempted to pass a motion to declare a national climate emergency in Parliament, but this was defeated by opposition MPs.

6.1 What additional actions have been taken by those declaring climate emergencies? Have they switched into emergency mode?

The level of increased ambition announced by the New Zealand councils that have declared a climate emergency to date has been variable. Some have announced new and additional actions while others have referred to their existing work programmes upon declaring their emergencies. The most common additional action has been decisions to set targets for reducing emissions.

Beyond New Zealand's shores, we see a similar range of responses to the climate emergency declarations by various national and sub-national jurisdictions. The most common additional action has been to announce an emissions reduction target of some sort at the same time as the declaration.

None of the actions taken following these declarations could be considered as reflective of an emergency mode (Table 1). We have not seen a single response that has elevated climate change to its government's or council's top priority, or mobilised 'huge' resources, with a laser-like focus.

Announcing a climate emergency, therefore, has no precedent set that would require unprecedented action, the reprioritising of resources and/or decisions to stop funding projects to be taken.

GWRC is taking considerable action on the climate crisis (see **Attachment 1**) when compared with most other councils around the country, as shown in a recent stocktake of climate change mitigation activities taken by LGNZ¹⁵. One exception is that GWRC does not have any formal emissions reductions goals, either for the organisation or for the region. A carbon neutrality target for the organisation is however being considered.

7. Next steps

GWRC is holding an emissions reduction target workshop on 9 August to agree a target for the organisation.

Following the workshop, officers will prepare a paper for the 21 August Council meeting that will take a regional view of the actions GWRC could take, including:

1. Internal actions, the organisation's carbon neutral target and cost implications (largely on mitigation)

¹⁵ <https://www.lgnz.co.nz/assets/Uploads/f4cafb5ec0/46628-LGNZ-Summary-of-Emission-Reduction-7-Proof-FINAL.pdf>

2. Regional actions, influence and collaboration (which also includes adaptation)
3. Our role in Central government advocacy (mitigation and adaptation); and
4. Tabling any recommendations from the 8 August Environment Committee meeting including whether to declare a climate emergency or not

8. Recommendations

That the Environment Committee:

1. *Receives the report*
2. *Notes the content of the report*
3. *Notes that GWRC is holding an emissions reduction target workshop on 9 August*
4. *Notes that a full paper will be prepared to go to Council on 21 August*

Report prepared by:

Jake Roos
Consultant

Report prepared by:

Andrea Brandon
Programme Lead
Climate Change

Report approved by:

Tracy Plane
Manager, Strategic &
Corporate Planning

Report approved by:

Luke Troy
General Manager,
Strategy

Attachment 1: GWRC's existing climate change work programme

GWRC recognises the significant role we play in responding to climate change and the challenges that brings to our region. The effects of climate change carry tough economic and social implications for our communities, with increased risks to settlements, infrastructure and ecosystems from rising seas, storms and flooding.

GWRC's strategic approach to climate change is to align and coordinate climate change actions across GW's responsibilities and operations. We have created a climate change strategy for the region. Our strategy is to build on work programmes already underway, raise awareness of climate change drivers and impacts, and help to co-ordinate regional effort through collaboration and partnerships. Actions that have been implemented or are in progress are summarised below within three key strategic areas:

- 1. Cleaning up our own act**
- 2. Working with others in the region to influence emissions reductions and improve our resilience**
- 3. Advocating for action**

Cleaning up our own act

GWRC is acting to reduce GHG emissions across all its areas of influence, including its own operations. The following actions have been taken or are underway:

- Climate change effects must be considered in all council and committee reports, and officers are provided with guidance and training on how to carry this out
- GWRC's treasury risk management policy has been amended to drive the divestment from any direct investment in fossil fuel extraction industries and investigate existing non-direct investment, with a view to prevent future investment where practical
- Establishing a GWRC Climate Change Working Group
- GWRC has an electric-first vehicle policy for all corporate fleet renewals
- Planning for substantial reforestation on its land as a part of the One Billion Trees programme
- Setting a target date for achieving carbon neutral status as an organisation
- Taking the opportunities to minimise emissions of its new central Wellington offices, joining the CEMARS emissions management and reduction scheme and disclosing its climate relating risks through the Carbon Disclosure Project, and to be included in the Annual Report recognising Council's fiduciary duty
- Announcing its ambition to be the first region in New Zealand with an all-electric bus fleet, and through the recent procurement process, has facilitated the

introduction of 10 electric double-decker buses to Wellington, with a commitment to introduce another 10 in 2020 and a further 12 in 2021

- Influencing the procurement process for the new bus operating contracts, resulting in over 50% of the region's oldest buses being replaced with modern low emission buses delivering improvements in both environmental and customer experience outcomes
- Developing of a pathway to transition to a fully electric bus fleet

Working with others to reduce emissions and improve regional resilience

GWRC understands the importance of working alongside others to achieve resilience and ease the transition to a low emissions economy for our region. We are actively pursuing opportunities to build climate action by working with others through the following projects:

- Commissioned NIWA to prepare a "Wellington Region climate change projections and impacts" report in 2017. Convening the Wellington Region Climate Change Working Group, made up of elected representatives of the nine Wellington Councils
- Supporting various collaborative projects that have emerged from this group on both mitigation and adaptation, including the coastal adaptation subgroup, the draft EV Support Strategy and the 2050 Emissions Calculator
- Leading the Regional Natural Hazards Strategy and since 2010 has included climate change considerations in its flood hazard assessments (ie, increased rainfall intensity and sea level rise)
- Providing data and research on projected regional climate impacts across the region including:
 - Publishing seasonal climate updates on the website
 - Providing a regional sea level rise and storm surge impact modelling tool
- Investing in high quality public transport services throughout the region
- Partnering in the Lets Get Wellington Moving programme, the transformation of the transport network in Wellington City, including a substantial shift to public transport, walking and cycling
- Developing a coastal erosion plan for Queen Elizabeth Park
- Influencing its CCOs and investments to manage their greenhouse gas emissions
- Convening the Wellington Region Erosion Control Initiative, running the Warm Greater Wellington home insulation scheme and the Take Charge business pollution prevention programme, participating in the Permanent Forests Sink Initiative and undertaking riparian and wetland protection and planting programmes

Advocating for action

GWRC regularly takes part in advocacy (for example to central government, and via proposed remits to LGNZ) to encourage others to increase their efforts in addressing the climate crisis.

Specific actions include:

- submitting to the Environment Select Committee on the proposed Climate Change Response (Zero Carbon) Amendment Bill
- submitting to Local Government New Zealand's Climate Change Mitigation Reference Group on the stocktake of Council's actions related to climate change mitigation, and the sector's position on the topic
- submitting to the Ministry for the Environment on amendments proposed to the Emissions Trading Scheme (NZ ETS) and PFSI settings
- the submission of Remit to 2018 AGM of Local Government New Zealand (LGNZ): "GWRC asks that LGNZ, consistent with the Local Government Position Statement on Climate Change 2017 and the Local Government Leaders' Climate Change Declaration 2017, advocate to all major banks that they transition away from investments in fossil fuel industries, and consider opportunities for long-term investments in low- or zero-carbon energy systems." The Remit was lost by 5% of vote
- the submission of Remit to 2019 AGM of LGNZ: "That LGNZ recommends to Government that they establish an independent experts group to develop a new funding policy framework for adapting to climate change impacts as recommended by the Climate Change Adaptation Technical Working Group (CCATWG). This new experts group would be supported by a secretariat and stakeholder advisory group." The Remit was passed by 95% of vote

GWRC has five staff who effectively work on climate change-related matters. These are the Programme Lead – Climate Change (1.0 FTE), Climate Change Advisor (0.8 FTE), Senior Environmental Scientist (Climate Change) (1.0 FTE), Senior Policy Advisor (Hazards) (1.0 FTE) and Sustainability Coordinator (0.6 FTE). These staff work across all of GWRC's business to lead and advise on climate change opportunities and risks.