**Climate Impact Statements**
**Guidance on consideration of climate change in decision making**
**Version 0.3, March 2020**

**Why include a mandatory climate impact statement in Council reports?**
Council has acknowledged that climate change is a serious issue that needs significant attention from Horizons Regional Council. Horizons is a signatory to the Local Government Leaders' Declaration on Climate Change; we have a Memorandum of Understanding with territorial authorities within our region. These, taken together, commit us to action. Climate change is a strategic priority for Horizons.

Including a mandatory climate change section in Council reports ensures that we integrate climate impacts into our decision-making processes.

This guidance provides a framework for staff to considering potential climate impacts – whether in writing advice for Council, or in developing new projects or programmes of work. Guidance will evolve as our strategy for responding to climate change develops, or national legislation changes.

**What do you need to consider?**
If your item is of a purely administrative nature (e.g. standing orders) there may be no climate impact. An appropriate statement could be:

> *As this report deals entirely with administrative matters, there is no climate change impact.*

If climate change is a principal factor in your report, detailed analysis should be included in the body of the paper. Provided this discussion is explicit and easy to locate, an appropriate statement could be:

> *Climate change implications associated with this decision are discussed in section XX of the report.*

In most other cases, you will need to describe how the decision will impact emissions and / or how the decision will be affected by a changing climate. The table below sets out the questions you should consider.

In completing this statement you should be clear about limitations in the information available. Acknowledging uncertainty is a key part of decision-making on climate change impacts.

| Impact on emissions (mitigation) | Opportunities | Impact of a changing climate (adaptation) |
|---|---|---|
| What is the impact of the decision on greenhouse gas emissions? | What steps could be taken to reduce net emissions? What steps could be taken to build the resilience of ecosystems, communities, infrastructure, or management systems? | Do changing climatic conditions or changing natural hazards affect this decision? |
| **Climate Impact Statement** | | |
| • How will the decision impact greenhouse gas emissions?<br>• What impact will a changing climate have on the decision?<br>• What impact will the decision have on our resilience to a changing climate?<br>• Does the decision align with our strategic approach to climate change? | | |

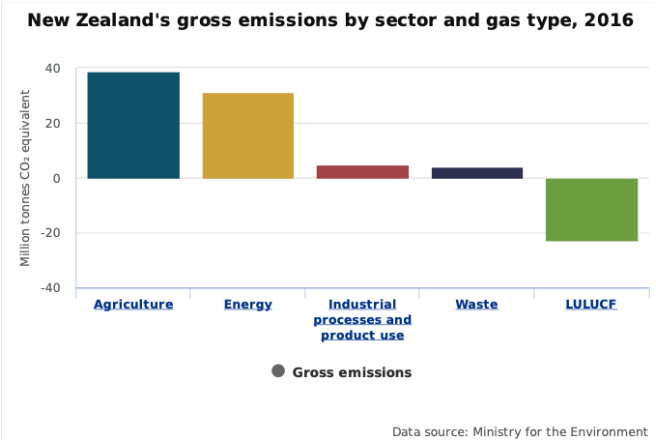
**Impact on emissions**

We need to consider whether decisions have an impact on emissions – directly from Council activities, or more widely in the region. Projects are currently underway to estimate greenhouse gas emissions across the region, and proposed to calculate Horizons' corporate footprint. Council is considering, but has not yet set, emissions targets.

*Regional emissions*

Until we complete a regional emissions inventory (due in June 2020), national emissions targets and inventories provide a useful point of reference.

Around half of New Zealand's gross emissions are carbon dioxide, mostly from the energy sector. About half of that amount (roughly a quarter of the total) comes from transport; manufacturing and construction are the next largest source of carbon dioxide emissions. Emissions from the electricity grid are relatively small, because of our high proportion of renewables.




Agriculture accounts for the other half of gross emissions – mostly methane (and to a lesser extent, nitrous oxide) from livestock farming.

A proportion of gross emissions are offset by carbon sequestration, mostly through the growth of trees (shown in 'LULUCF' – land use, land-use change, and forestry – in the table above). This proportion has been decreasing nationally, as gross emissions increase and plantation forests reach maturity and are harvested. Horizons work programmes that establish woody vegetation (SLUI, riparian planting, etc) will contribute to carbon sequestration.

The Zero Carbon Act has set national emissions reduction targets:

- Zero net emissions of all greenhouse gases (except biogenic methane – methane emissions from waste and agriculture) by 2050.
- Reduce emissions of biogenic methane to 24–47 percent below 2017 levels by 2050, including a 10 percent reduction by 2030.

Note that the 'zero-carbon' target *excludes* methane emissions from agriculture but *includes* sequestration through forestry.

*Corporate emissions*
While we are yet to complete a full corporate emissions inventory, the available information suggests that the most significant sources of emissions directly under Horizons' control are associated with vehicle use and office facilities (lighting, heating and cooling).

While it will be difficult to quantify the impact of most decisions / initiatives at this stage, it is important to show you have thought through the implications for emissions and any opportunity to mitigate a rise in emissions. Decisions may involve both increases and reductions in emissions – for example, planting trees creates a carbon sink but driving a few saplings to a remote site in a truck burns diesel. You may need to make a judgement about which effect predominates, in which case your reasoning should be set out in this section.

Identify in your report which category applies from the table below:

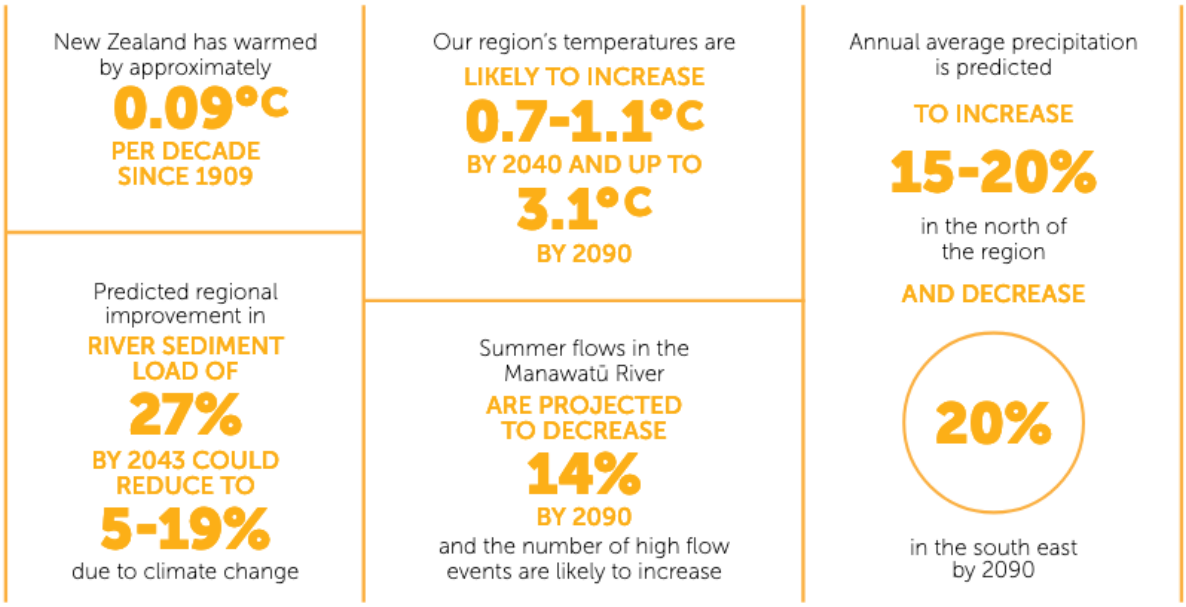
| **Impact on emissions** | **Examples** |
|---|---|
| *No or minimal impact* | • Information-only reports<br>• Governance procedures |
| *Potential increase* | • Decisions relating to infrastructure<br>• Procurement that locks in future emissions |
| *Potential reduction* | • Planting programmes<br>• Decisions supporting public transport |

Example text for a decision affecting climate change mitigation:

> *This decision is likely to result in a <reduction/no impact/increase> in greenhouse gas emissions.*
> If known, *The primary source of the emissions will come from* <explain primary emission source>. If relevant, *Options for <further reducing/reducing/mitigating> the emissions include: < list >.*
> [If an increase in greenhouse gas emissions is expected to occur from this decision, please briefly explain what practicable actions can be taken to reduce emissions. Discuss the reasoning for the recommended option being chosen over other options (e.g. costs, timeframes, practicality, technology, accountability, scale of impact etc). If known, provide an estimate of the emissions. ]

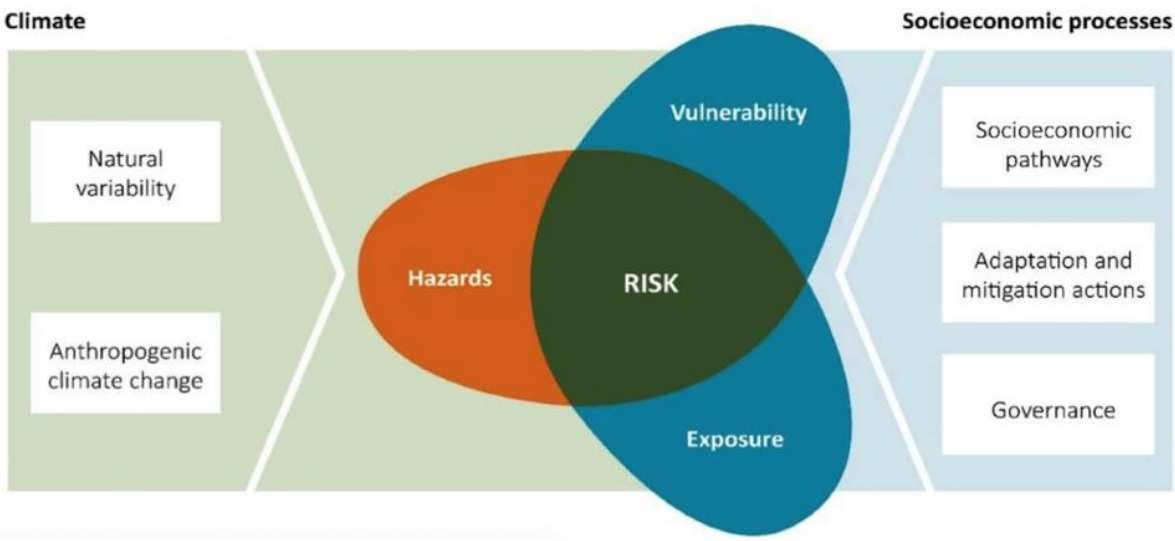
**Impact of a changing climate**

Next, consider whether a decision will be affected by changes in climate, or will reduce or increase exposure to natural hazard risks associated with a changing climate. Likely impacts for our region are shown in the infographic below. Further resources are available at: http://www.horizons.govt.nz/managing-natural-resources/climate




Sea-level rise, more intense storm / rainfall events, longer dry spells, less frosts, and more hot days will impact on many of Horizons' activities.

The goal of adaptation is to adjust to the effects of a changing climate. The risks associated with climate change can be characterised in terms of 'hazards', 'exposure' to those hazards (of people, property and infrastructure; of species and ecosystems), and 'vulnerability' – how sensitive communities (or ecosystems) are to change and how able they are to cope and adapt. These factors are illustrated in the diagram below:




**Components of 'risk' in the context of climate change (NCCRAF (2019))**

The things we do – or don't do – may affect how exposed the region's communities are to changing hazards, and how well we are collectively able to respond to them. It is important to consider both environmental and human aspects in the risks and potential solutions.

Your report should show how the decision will affect our resilience to a changing climate, by choosing one of the options below. You should also describe the nature of any impact and the timeframe over which effects are anticipated.

| **Impact of a changing climate** | **Examples** |
|---|---|
| *No or minimal impact* | • Community engagement |
| *Likely impacted* | • Freshwater management<br>• Biosecurity |
| *Responds to a changing climate* | • Land-use opportunities<br>• Flood management design |

Example text for a decision with implications for climate change adaptation:

> *This decision will <increase/have no impact on/reduce> the ability of the Council or region to proactively respond to the impacts of climate change now or in the future.*
> [Briefly explain how this decision is expected to have an impact on the ability of the Council or region to anticipate and proactively respond to climate change impacts that are already happening or are expected to happen. Please describe any likely climate-related risks, identify who is likely to be affected and how, and how those affected have been or will be included in the decision-making process. Explain how potential climate impacts have shaped the range of actions considered. ]
>
> The decision *is/is not likely to be affected by higher emission scenarios or more rapid climate changes.*
> [Consider vulnerability to higher emission scenarios or faster changes to the climate with regard to impact, cost or timing].

**Horizons' Climate Action Strategy**

We are developing a strategy in response to climate change across the region. Once it is finalised, all statements should identify whether the decision / initiative contributes to that strategy, and how. Until such time as the strategy is formally adopted, consider whether the decision sought aligns with the objectives proposed.

Example text for all statements:

> *The decision will contribute to the following Horizons' Climate Action Objective[s]:*

*Objectives*

- Build the resilience of communities and our environment to the effects of a changing climate.
- Support the transition to a sustainable, zero-carbon regional economy by 2050.
- Ensure central- and local-government efforts are aligned to the needs of our region.