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# RMA (ENERGY AND CLIMATE CHANGE) 2004 AMENDMENT

Under the Resource Management (Energy and Climate Change) Amendment Act 2004, three new matters were inserted into section 7 under Part II of the RMA:

- (ba) – The efficiency of the end use of energy;
- (i) – The effects of climate change; and
- (j) – The benefits to be derived from the use and development of renewable energy.

The bolded amendment supports New Zealand's climate change policy, which aims, *inter alia*, to "manage the risks, opportunities and impacts arising from the effects of climate change".

Before the 2004 Amendment, there was already an implicit requirement to take account

of climate change effects under Part II of the RMA, particularly under sections 30(1) and 31(1) which treat "the avoidance or mitigation of natural hazards". The new matter in section 7 provides a clear mandate for councils to consider climate change effects when reviewing policies and making decisions on the development and use of natural and physical resources.

## WHAT IS CLIMATE CHANGE?

Climate change is defined as "a change of climate that is attributed directly or indirectly to human activity.. and that is in addition to natural climate variability observed over comparable time periods"<sup>2</sup>. While in past millennia natural climate changes have been gradual, in the last 50 years Earth's atmosphere has been heating up at an unprecedented rate - an effect known as global warming. When this warming starts to affect the climate, it is known as "climate change".

Increased greenhouse gas concentrations have already started to affect the climate in ways that will take time to reverse. Even if significant global action is taken now to reduce these, a degree of climate change is inevitable in our lifetime. New Zealand, as a country heavily dependent on agriculture and tourism for its revenue, can expect to be affected by even small changes in climate.

## CLIMATE CHANGE EFFECTS IN NEW ZEALAND

We cannot predict exactly what climatic changes will occur in New Zealand over future decades, both because of uncertainties around levels of future greenhouse gas emissions and incomplete knowledge about the processes governing climate and natural climate variability. Changes in rainfall, temperature and sea level will also vary from region to region. However, the trend of change is well accepted. For example, on average, New Zealand can expect the following climate change effects:

- A rise in sea level. It is recommended that councils plan for a 20cm rise in sea level by





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2050, and a 50cm rise by 2100.

- Average temperatures across the country are projected to increase about 1°C by the 2030s and about 2-3°C by the 2080s.
- More rain is likely to fall in the west of the country and less in the east.
- Westerly winds are likely to become more prevalent.
- Extreme weather events such as floods, droughts and storms will become both more frequent and more intense.

## CONSIDERATION OF CLIMATE CHANGE EFFECTS

The Ministry for the Environment has developed up-to-date information on climate change impacts for New Zealand by region<sup>3</sup>. It is recommended that councils use this as a basis for assessing the effects and consequent risks/

opportunities of climate change, unless more detailed localised modelling is available.

Climate change considerations are unlikely to drive local government action on their own. Rather, they may modify an outcome. Councils should therefore consider climate change effects within the context of existing processes.

As a rule of thumb, wherever current climate (e.g. rainfall) is significant to an activity, hazard or plan, expected future climate should also be assessed for its impact. In particular, councils are advised to consider whether climate change has significant implications for natural hazard management, land-use planning and the design and location of new infrastructure. Where effects are negligible, no action will be necessary, although periodic review of climate change effects may still be required.

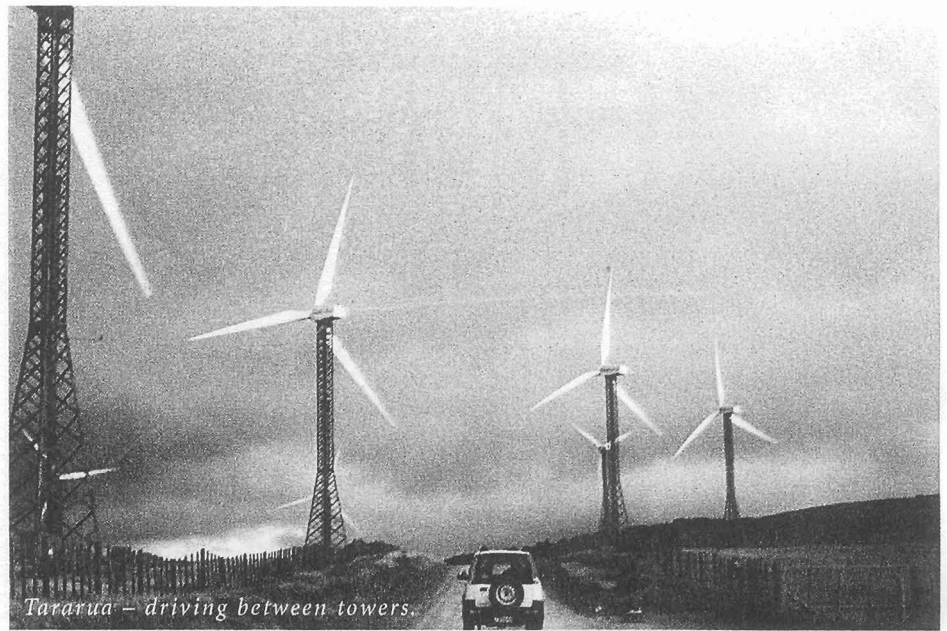
## IDENTIFICATION OF SIGNIFICANT CLIMATE CHANGE EFFECTS

Key factors to take into account when assessing whether climate change is likely to have a significant impact on a particular activity, hazard or plan include:

1. Duration of issue being addressed. Local government decisions have a range of implications in terms of time horizons. Climate change should be considered for all decisions enduring 30 years or longer.
2. Presence of a particular 'driver'. Climate change considerations are particularly important for infrastructure decisions. Any significant investment should be preceded by a risk assessment that includes climate change implications and a cost-benefit analysis. It is

worth integrating climate change effects into infrastructure design where the resulting asset 'life-cycle' costs are less than the expected additional costs from premature retirement of the asset or unprogrammed upgrades.

3. Location of issue being addressed. Some locations are particularly vulnerable to climate change. Decisions on significant activities near the coast should consider expected sea-level rise over the next century, as well as other consequential effects such as increased coastal erosion and salt water intrusion into aquifers. Development in flood plains should factor in potentially reduced flood return periods and greater peaks.
4. Extent of issue being addressed. Decisions that involve, for example, a single building are less likely to have fundamental implications than decisions with wider scope. The exception is where a small development sets a precedent, leading to acceptance of subsequent applications.
5. Nature of issue being addressed. An activity may be affected by a single climate change parameter, or by complex parameters with multiple effects and implications over time. The latter should be addressed at policy level, with decision-making applied consistently over time.



## DECISION - MAKING

### FRAMEWORKS

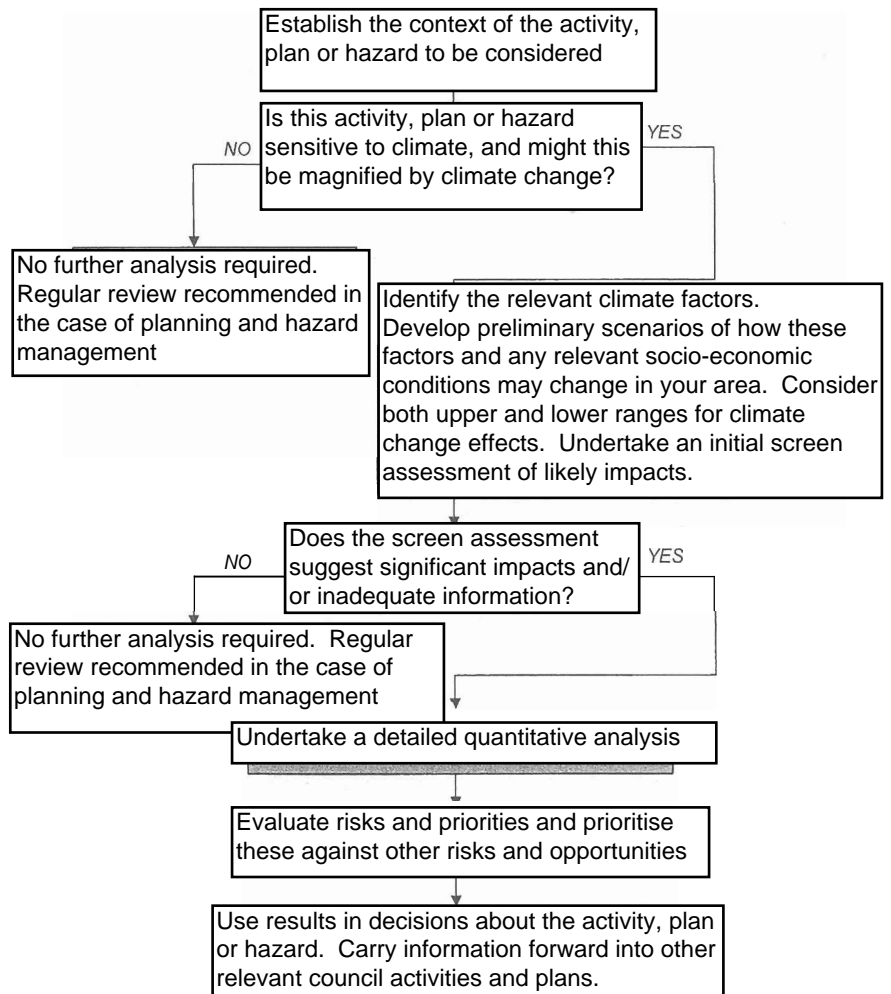
Councils may find it helpful to use a series of 'decision-making steps' (identified in the adjacent diagram) to assess the relevance of climate change to a particular activity, hazard or plan.

### RESPONSE FRAMEWORK

Councils have been considering climate change effects since the early 1990s. Their responses may be classified into eight categories:

- Bear losses – "Do nothing". The costs of adapting to climate change effects are considered too high in relation to the risk/expected damages.
- Share losses – Have the wider community share the costs of losses (e.g. compensation to property-owners for a strategy of progressive retreat in cases of increasing coastal erosion).
- Modify the threat – Exercise control over the environmental risk e.g. modify flood prevention works or seawalls.
- Prevent effects – Avoid exacerbating/creating new risks by "down-zoning", increasing

### DECISION - MAKING STEPS





restrictions/imposing prohibitions to avoid intensification or commencement of at-risk development, and designing assets to cope with future climate conditions.

- Change use – Encourage or require changes in land use away from high-risk use to uses not susceptible to a changing climate.
- Change location – Direct development away from areas susceptible to a changing climate.
- Research – Support research into new technologies to minimise risks from a changing climate and new methods of adaptation.

## RESPONSE OPTIONS

In the context of the RMA, there are two ways in which particular regard may be given to the effects of climate change:

1. As an integral part of making decisions on resource consent applications and notices of requirement under the RMA.
2. In proactively reviewing RMA policy statements and plans to identify whether more explicit and/or up-to-date policies are required.

### RMA policy-making

Under the 2004 Amendment, councils have a responsibility to assess the impact of climate change effects on their area and investigate possible responses *where effects are expected to be significant*.

While climate change may appear a long-term - and therefore low-priority - matter, *today's* decisions on land-use can bring about changes that affect councils' ability to mitigate future

climate change effects. Land use planning decisions should therefore integrate consideration of future climate and cover a sufficiently long-term horizon, particularly given the permanency of structures and the expectations and values inherent with increased development.

### RMA plans

As all district plans have policies/provisions on natural hazards, climate change effects can largely be addressed by reviewing current policies/mitigation methods in light of information on expected future climate.

For many councils, the impending ten-year review of first generation RMA plans provides an opportunity to review policies/provisions in light of the new section 7 matter:

- When plans are scheduled for review, studies on local climate change effects can be programmed to ensure the necessary data/supporting technical information is available? for policy analysis.
- Where climate change effects are expected to be significant, particularly for hazards, explicit policies should be formulated for plans of relevance – district plans, regional coastal plans, and floodplain management plans.
- A review of significant local resources can help to prioritise the resources most in need of protection from climate change effects.

As can be expected, regulatory controls (such as building setbacks, minimum floor areas and levels, restricted development areas, special zones or management areas etc) are a key method

for addressing the effects of climate change under RMA plans. Non-regulatory methods also apply (e.g. use of "buffer" reserves in coastal areas, guidelines/codes of practice, and covenants and consent notices on the title (e.g. "no build" areas, or vegetation retention requirements). *Resource Consent Applications/Notices of Requirement*

The 2004 Amendment requires all persons making decisions on resource consent applications and notices of requirements to have particular regard to the effects of climate change. Pre-2004 Environment Court decisions took a similar line in cases where climate change effects were likely to exacerbate natural hazards (for example, *Bay of Plenty Regional Council v Whakatane District Council A003/94*, or *Skinner v Tauranga District Council A163/2002*).

Those preparing/assessing resource consent applications should explicitly consider whether climate change effects are a potentially significant issue to address for design/location, and what consequent mitigation measures might be required.

## CONCLUSION

The climate is changing. The 2004 Amendment to the RMA directs councils to take into account the effects of climate change when making decisions. Information on expected climate change effects in New Zealand is now available, as is guidance on how best to use this. As a rule of thumb, wherever *current* climate is significant to an activity, hazard or plan, expected *future* climate should also be assessed for its impact.

In terms of its primary impact, climate change is largely expected to modify the risk from weather-related natural hazards. Such hazards are already comprehensively addressed in all district plans and in many regional plans. Councils should therefore consider climate change effects within the context of existing risk assessment processes. Similarly, the methods available to councils to respond to the effects of climate change are generally those contained with the toolbox for natural hazard management.

## FOOTNOTES

1. Statement of Intent 2004-2007, Ministry for the Environment
2. Article 1, United Nations Framework Convention on Climate Change [UNFCCC].
3. Detailed information on climate change effects can be found on the NZ Climate Change Office website at <http://www.climatechange.govt.nz/resources/local-govt/index.html>.