



Innovations for climate response

A kete for local government to help
inform robust and just decision making

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National
SCIENCE
Challenges

THE DEEP SOUTH

Te Kōmata o
Te Tonga



Ōtākou
Whakaihu Waka
UNIVERSITY OF OTAGO

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Centre for Sustainability

Introduction

Local government in Aotearoa New Zealand (AoNZ) plays a key role in environmental planning and regulation, transport, infrastructure, and responding to natural hazards and extreme weather events. Consequently, regional and district/city councils have an important role in responding to climate change. There is some national guidance, legislation and policy to support councils in undertaking these responsibilities. However, councils are relatively new to climate change response and this – combined with rapid policy shifts, outdated legislation, and increasing extreme weather events – creates uncertainty about their exact roles and responsibilities. This kete supports councils to take climate action that is informed by *robust* and *just* decision making. The kete:

- identifies recent climate response by participating councils
- describes associated benefits of these actions
- provides guidance on aspects for councils to consider when making decisions about climate response.

Climate response is often framed in terms of mitigation and/or adaptation. Mitigation usually refers to ‘actions or activities that limit emissions of greenhouse gases (GHGs) from entering the atmosphere and/or reduce their levels in the atmosphere’ (IPCC 2023). Adaptation usually refers to ‘[t]he process of adjustment to actual or expected climate and its effects’ (IPCC 2019, p. 118). In this kete we often refer to ‘climate response’ and/or ‘climate action’ to mean both of these kinds of actions because they are increasingly understood as interconnected. Throughout the kete we use the following graphics to indicate when a practice is more likely to support mitigation, adaptation, or both:



Can support mitigation



Can support adaptation

This kete is focused on *robust* and *just* decision making for climate response as research shows that considering these factors leads to better outcomes for people and the environment (Klinsky et al. 2016).

By *robust*, we mean decisions that:

- can account for uncertainty and complexity
- are informed by a broad knowledge and information base, including mātauranga
- are organisationally systematic, not isolated (e.g. embedded throughout an organisation rather than falling to one staff member or a small team)
- are long term (i.e. take into account long term trends and relationships rather than a quick fix)
- are collaborative (e.g. aligned with others’ goals, or takes their aspirations into account)
- foster holistic outcomes (i.e. have multiple co-benefits, rather than fixing one aspect of a problem)
- operate within an enabling regulatory framework.

By *just* we mean decisions that:

- do not create more inequitable outcomes, and ideally improve well-being and equity
- reflect obligations and responsibilities under the Treaty of Waitangi /te Tiriti o Waitangi¹
- distribute the costs and benefits from climate change, as well as rights and responsibilities

- recognise that decisions on the distribution of costs must account for existing inequalities and differences in exposure to harm
- consider the interests of the public and future generations alongside individual and corporate interests.

Making robust and just decisions is complex and often politically contested. Throughout this kete we use the following graphics to indicate when a practice is more likely to support a robust and/or just response.



Can support robust decision making



Can support just decision making

St Clair, Dunedin. Photo: John Morton

Background: Research approach and methods

As we were developing this research proposal, local government and mana whenua told us that climate change presents an unprecedented challenge to their governance and decision making. Many talked about ‘just trying things out’ as they adjusted their decision making processes or engagement to grapple with new challenges. Our research team were inspired by these innovations, and we designed this research to track changes in practices across local authorities and mana whenua in three case study areas over two years (2022–2024). For our research we used qualitative methods and kaupapa Māori approaches. Mana whenua, territorial authorities, and regional councils in three case study areas were the key research partners² and included:

- **Taranaki:** Ngāa Rauru Kīitahi (iwi); South

Taranaki District Council, New Plymouth District Council, Taranaki Regional Council

- **Bay of Plenty:** Ngāi Tamawhariua, Te Rereatukāhia marae and kāinga; Maketu iwi collective led by Ngāti Whakaue; Bay of Plenty Regional Council, Western Bay of Plenty District Council
- **Otago:** Aukaha (Kāi Tahu consultancy), Kāti Huirapa ki Puketeraki, Dunedin City Council, Otago Regional Council

This kete draws mainly from our interviews with council staff, but is also informed by our kōrero (conversation) with mana whenua research partners.

For more details please see *Supplementary Document: Robust and just decision making for local government climate response* <https://hdl.handle.net/10523/36197>

¹ This includes recognising the injustices caused through colonisation for Māori and associated legacies where Māori, their assets, livelihoods, and taiao (environment) are at greater risk from climate change (Awatere et al. 2021).

² The research team also engaged with other organisations, including Waikato Regional Council, Whanganui District Council, and Te Ruunanga o Tuupoho (representing ngāa hapuu oo Tuupoho). This kete draws on data from over 50 interviews, multiple hui, and document analysis.

Practices to support climate response decision making

CLIMATE CHANGE RISK ASSESSMENTS

 **Adaptive**
 **Robust**
 **Just**

These assessments generally involve using down-scaled climate projections to guide understanding of sea level rise and inundation, climatic changes (such as temperature, and precipitation distribution and intensity), and from these, the anticipated effects on council infrastructure, activities, and wider communities.

Benefits

- Uses an established process to develop shared understandings about the impacts of climate change and can help build relationships across different councils
- Helps build clearer narratives for the public about climate change risk and what counts as 'robust' knowledge
- Could be used to inform just decision making (e.g. combining risk assessment data with socio-economic vulnerability to prioritise action)
- Provides a pragmatic starting point for councils, especially if there is limited appetite or uncertainty from elected members about whether/what to prioritise
- Helps frame climate response as collective learning across organisations and can help to bring colleagues and communities along

Things to consider

- How to design the process to include *and* value a wide range of knowledge (e.g. Western science, mātauranga Māori, and local knowledge)
- Acknowledge and address what risk looks like in te ao Māori
- How to communicate scientific uncertainty in the risk assessments
- Data format and resolution – ensure that outputs from the process are in formats that fit with existing council systems and processes (e.g. GIS layers)
- Timeliness – early discussions with mana whenua are especially important to enable sufficient time for engagement
- Managing transparency to make sure everyone is working with the same information

PLAN CHANGES (DISTRICT AND REGIONAL PLANS)



Adaptive



Robust

These changes include new rules about land use, building, and development in District/ Regional Plans to reduce exposure to hazards or manage impacts of climate change (e.g. new building set-back rules and minimum floor levels, freshwater rules, and land use practices to reflect increasing risks from flooding, coastal erosion and sea level rise).

Benefits

- Uses existing Resource Management Act (RMA) processes (including council committees and processes) to respond to climate change-related hazards
- Can help build understanding of climate change impacts within council and wider community
- Is one of the few existing legislative levers councils currently have to reduce the potential for maladaptation, stranded assets, and other associated socio-economic risks of climate change

Things to consider

- How proposed changes may impact communities (e.g. implications for insurance – like insurance retreat, increase in risk based insurance pricing and associated flow on effects for community such as mortgage defaults and devaluation of assets)
- Ensuring robust evidence supports decisions to provide confidence and supports a council's position should litigation follow
- How to manage community backlash and expensive litigation and appeals
- How to manage implications for local government 'liability' for permitting development in known natural hazard areas

EMISSIONS PROFILES AND AUDITS



Mitigative



Robust

Includes quantifying, monitoring and reporting on council operational emissions, and/or wider district and regional emissions.

Benefits

- Provides a pragmatic starting point to establish a baseline and then reduce operational emissions (i.e. start with what each council can readily control)
- Helps distribute responsibility for climate response across council, rather than relying on one staff member or small team
- Provides evidence of council leadership to the wider community and – where monitoring of targets and accountability is transparent – can help build social licence for further action
- Can provide a good news story for climate action to communities

- Can be used strategically to bring colleagues and elected members ‘on the journey’
- Can play a key role in turning climate strategies and declarations into action by helping to prioritise options using evidence for new business cases and investment in Long Term Plans and Annual Plans (e.g. decarbonisation of vehicle fleets, gas boilers, organic waste infrastructure)
- Councils don’t need to wait on central government legislation, or wider community mandate to act; actions can often be done as business as usual (BAU) in Long Term Plan and Annual Plan processes (e.g. when replacing assets, submitting maintenance plans)
- Can be a relatively uncontentious and a low risk place to start climate response

Things to consider

- Whether emissions-related work is undertaken by internal staff or external consultants
- External consultants may be seen as more credible than internal staff by colleagues and ratepayers, but they are also expensive and may not necessarily know more than staff
- Deciding what to include and exclude from council’s ‘operational emissions’ (e.g. emissions associated with public transport that displace private transport, landfill emissions, wastewater treatment plant emissions)
- Lowering council’s operational emissions (COCs) will usually lower wider community emissions (WCEs) because of the services councils provide – but in some instances COCs may increase while WCEs decrease (e.g. increasing public transport = higher council emissions, but lowers community transport emissions)
- Consider how to explain complexities such as increases and decreases in COCs and WCEs
- How emissions reduction plans connect with other councils’ plans in your region and how you will share knowledge and align actions across council jurisdictions

REORGANISING ROLES AND INTERNAL STRUCTURES WITHIN COUNCILS



Adaptive



Mitigative



Robust

Reorganising includes restructures and changes to reporting lines, functions and focus, and work programmes; identifying new capabilities and roles; and shifts towards a greater emphasis on collective learning and upskilling.

Benefits

- Values a wider range of knowledge and skills that can enable more robust decision making
- Can facilitate shifts towards more collaborative relationships with mana whenua and community groups

Things to consider

- Balancing the benefits of changes with wellbeing impacts on staff where workload is increased, or role altered

- Whether resources, expertise, data, personnel, and knowledge be shared across and/or within councils to avoid reinventing the wheel or duplicating work.
- Recognise that climate response is part of wider socio-cultural shifts and that cultural change is often uncomfortable and may be resisted by some staff
- What activities can be de-prioritised to focus on climate response

Practices to support collaboration for climate response

WORKING IN PARTNERSHIP WITH MANA WHENUA



Adaptive



Robust



Just

While there is increasing recognition of the relationship local government has with mana whenua as treaty partners there is uncertainty about what this means in practice – and there may be resistance to these shifts amongst elected members and/or community members. Nevertheless, research shows that Māori are likely to be experience a greater range of impacts from climate change (Awatere et al. 2021). Partnership requires acknowledging that decisions significantly affecting Māori should be led or co-designed by Māori.

Benefits

- Can improve relationships between mana whenua and councils
- Can increase knowledge exchange, especially when early understandings of mana whenua concerns are raised and addressed
- Can improve council understanding of te ao Māori and be incorporated into decision making
- Can improve council understanding of past activities relating to the land subject to adaptation, and how Māori relationships to that land have been affected by colonial processes, so the past can be acknowledged and addressed as appropriate

Things to consider

- Whether relationships are at appropriate levels, recognising the mana of both Māori organisations and councils
- Ensuring mana whenua are not treated as just ‘another stakeholder’, but rather as partners
- How projects can be co-designed and resourced appropriately
- How mana whenua want to be supported in Māori-led adaptation projects and what resources can be shared
- What mātauranga Māori exists and whether it has been appropriately incorporated in the project (with mana whenua involvement)
- Whether risk assessments and basic adaptation information appropriately included mana whenua and te ao Māori perspectives, and mātauranga; and what omissions a Western knowledge perspective might engender

- The history of the land involved in adaptation, Māori relationships to it, and colonial processes that affected it
- Funding arrangements – where projects directly involve mana whenua the partners are not contractors or volunteers, but have shared control and influence over project budgets and must be resourced appropriately
- Relationships between and with both mana whenua and mātāwaka (a term frequently referring to Māori who are not mana whenua in their area of residence)

LOCAL GOVERNMENT REGIONAL CLIMATE CHANGE STAFF FORUMS

 **Adaptive**  **Mitigative**  **Robust**

Regional climate change forums where staff from each council in a region regularly meet to share their climate data, discuss work programmes, and align activities where possible.

Benefits

- Identifies shared information needs in order to avoid duplication and inefficiency
- Can build relationships and trust through sharing knowledge
- Can help to align work programmes, communications, and community engagement processes across different councils
- Can help build awareness of the downstream consequences of decisions being made in one council for another (e.g. the impact of changing a regional plan for territorial authorities' district plans)
- Can help build awareness of the internal dynamics and politics within and across different councils
- Can help establish an evidence base that supports collective action

Things to consider

- Who to include in climate change staff forums (e.g. council staff, elected members, mana whenua, community representatives), and how these groups connect back to internal council processes
- Whether those people included have the capacity and are resourced to engage effectively
- Who should be involved in collaborative arrangements; also who benefits and what are the costs
- Governance arrangements across multi-agency forums when the time comes to make decisions and allocate budgets

COMMUNITY ADAPTATION FUNDS

 Adaptive  Mitigative  Just

Allocating resources to support community-led mitigation and adaptation projects.

Benefits

- Enables rather than dictates by using a community development-led approach where council supports people/communities who are ready and build on what is already under way
- Can prompt a 'halo effect' – building and sharing knowledge and distributing climate response(s) beyond council through wider community
- Supports climate response at local scales that resonate with how people actually experience climate change
- Can support mana whenua and community groups and networks to become the 'stable vessels' through which trust and understanding is built to help with undertaking more difficult climate-related conversations at another time

Things to consider

- Criteria – whether contestable funding is appropriate for communities and mana whenua, or whether a partnership model is more appropriate
- How funded actions can be supported beyond one-off projects (e.g. how actions can connect to other council processes like emergency management, plan reviews, Long Term Plan budgets)
- Recognising when communities are 'ready' to partner and take action

COMMUNITY ENGAGEMENT, RELATIONSHIP BUILDING AND SUPPORTING COMMUNITY LED ADAPTATION

 Adaptive  Robust  Just

Shifting away from episodic engagement focused on discrete sets of options, to longer-term relationship building, transparency, accountability and trust with affected communities.

Benefits

- Can build relationships between communities and council staff, and improve council staffs' understanding of community knowledge, experiences, the well-being impacts of climate change and adaptation options, concerns, and aspirations for the future
- Can enable more robust decision making by resourcing a wider range of people and communities to feed into council processes
- Can support the sharing of knowledge and building trust, particularly with groups that councils historically struggle to connect with council operations, such as lower socio-economic groups

Things to consider

- Existing levels of trust amongst different sectors of affected communities
- What past events, actions, inaction need to be addressed/acknowledged to build trust
- Who shows up and who doesn't
- How council staff can reach those who don't usually show up; and creative ways to connect with such people and meet them in their own community spaces or environments
- Resourcing requirements and balancing what you let go of or de-prioritise to enable new support
- What kind of communication will work best for the diverse communities involved – and whether multiple strategies are needed

Practices that support translating information into climate response

LONG TERM PLANS AND ANNUAL PLANS

 **Adaptive**
 **Mitigative**
 **Robust**
 **Just**

Using Long Term Plans and Annual Plans to budget and allocate resources for climate response.

Benefits

- Helps distribute responsibility for climate response activities across each council, rather than relying on one staff member or small team
- Helps embed climate response in each council's primary resource allocation process
- Can help to 'de-politicise' climate response and normalise investment in response as BAU
- Can help with opportunities for shifts in infrastructure investment (e.g. increasing investment in actions that have co-benefits for people and nature – like green infrastructure, nature-based-solutions etc.)

Things to consider

- Which processes and templates are used to embed climate response in Long Term and Annual Plan processes (can range from complex to simple)
- Showing awareness of the history and legacy of specific places where a climate response is planned : this is particularly important for just decision making with mana whenua – and may need to look backward and forward beyond 3-year political terms
- Whether significant resourcing may be needed and the implications of this
- Moving to different kinds of investment in infrastructure (e.g. green and nature-based-solutions) may require new cost-benefit analyses and engagement with communities to manage the social licence for change

NEW FUNDING MODELS FOR CLIMATE RESPONSE

Adaptive Mitigative

With significant infrastructure deficits, high inflation, and a high cost of living, some councils are using alternative revenue tools to fund climate response. Implications for just and robust decision-making are uncertain at this early stage.

Benefits

- Can fund some climate action without increasing rates
- Can be used to fund projects that create multiple co-benefits
- Provides a good news story for councils and communities
- Can jump-start investment in climate response

Things to consider

- Emerging nature of these funding and financing streams – they can be volatile and unpredictable
- Adopting alternative tools requires elected member support and a certain tolerance for risk

What could further support local government climate responses?

The practices described in this kete provide examples to build on as councils in AoNZ navigate climate response. However, this research reflects other work that identifies national level changes are needed to further enable local government in AoNZ to respond to climate change (e.g. Hanna et al. 2017; Expert Working Group on Managed Retreat 2023; Peart et al. 2023; Review into the Future for Local Government 2023). Key changes needed include:

- amending Local Government Act 2002 to acknowledge the significance and importance of local governments' te Tiriti O Waitangi obligations that accompany roles and responsibilities that have been devolved to them from central government
- clearer legislative certainty relating to climate change hazards and existing use rights to reduce litigation and paralysing fears of it
- appropriate resourcing for mana whenua groups and capacity building – even when there is resourcing (e.g. funding) available, there are often not the people on the ground to respond
- a national framework for managed retreat that outlines processes, mechanisms and criteria for property acquisition, responsibility, and how funding and costs will be allocated
- clarification of responsibilities and relationships between regional councils and territorial authorities, especially for hazards in relation to climate response.

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Innovations for
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