

# Incorporating principles of justice into climate adaptation

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For a summary of this report, see “Just Adaptation: what does justice mean, and how can it guide adaptation planning and decision-making?” This is available on the [Deep South project page](#).

## 1. Introduction

Climate change adaptation (hereafter, adaptation) has become widely integrated as a key response to climate change by international organisations and state governments, including in Aotearoa New Zealand (Bassett and Fogelman, 2013, Ministry for the Environment, 2022). While adaptation can take various forms, it typically occurs through top-down, expert-led, and institutionalised decision-making processes (IPCC, 2022, Juhola et al., 2022). Adaptation is typically incremental (involving gradual adjustments) or reactive (responding to unforeseen events and immediate impacts) (IPCC, 2022). These processes are generally protective, aiming to secure existing systems against the effects of climate change (such as sea-level rise and increased extreme weather events) and related risks (such as flooding, erosion, and inundation) (Rouse et al., 2017, IPCC, 2022). Technological and hard engineering solutions are typically prioritized, such as the construction of sea walls, stopbanks, and early warning systems (Schipper, 2020, Rouse et al., 2017).

As adaptation is being implemented, it is becoming understood that prevailing strategies can often, intentionally and unintentionally, generate negative outcomes and consequences for targeted groups and others. Additionally, common approaches as discussed above can actually increase susceptibility to harm. This process is referred to as maladaptation (Schipper, 2020, Juhola et al., 2016). Potential issues with these approaches include:

Unjust processes might include:

- **Prioritisation of advantaged groups' interests:** the protection of high value property or infrastructure may affect others' interests, such as a sea-wall disrupting public access, recreation, and the gathering of seafood, or worsening erosion on adjoining properties, and ecosystem degradation.
- **Exclusion of groups that are susceptible to harm:** if decision-making process exclude or are inaccessible to people that are the most susceptible to harm, the design and delivery of adaptation measures won't cater well to their needs and interests.
- **Short-term thinking:** adaptation approaches that respond to proximate, or immediate, causes of risk, rather than addressing the root causes and considering future generations, will have a limited effectiveness

(Schipper, 2020, Malloy and Ashcraft, 2020, Shi et al., 2016, Juhola et al., 2016).

Unjust outcomes might include:

- **Limited benefits:** protective measures may only help a few people.
- **Reinforcement of susceptibility to harm:** existing inequalities may be increased.
- **High costs to the community:** engineered solutions may be expensive to construct and have a relatively short lifespan.
- **Generation of conflict:** the issues above can lead to outcomes that are less accepted by affected individuals and groups, leading to conflict between groups or between communities and councils.
- **Ineffectiveness:** protective measures may be undermined or unable to cope with unanticipated climatic change and degradation due to age and inadequate upkeep;

- **Unsustainable solutions:** can be carbon intensive, natural resource intensive, and cause ecological degradation (Schipper, 2020, Malloy and Ashcraft, 2020, Shi et al., 2016, Juhola et al., 2016).

There is a growing acknowledgement that adaptation policy, planning, and projects must be founded on ideas of justice, also sometimes referred to as fairness, equity, and equality, to avoid these and other challenges (Bulkeley et al., 2014). It has become widely accepted that climate change is an issue of justice, as those most susceptible to harm have often contributed least to the causes of climate change and are often also subjected to historic and ongoing marginalisation. This discrimination arises from many factors including race, ethnicity, gender, class and ability (Araos et al., 2021, Shi et al., 2016). International climate agreements including the Paris Agreement (2015) and the Glasgow Climate Pact (2021) and frameworks like the United Nations Sustainable Development Goals (2015) acknowledge ideas of justice in adaptation and use terms such as climate justice, just transitions, equity, equality. The United Nations calls for attention to “common but differentiated responsibilities” and “specific needs and special circumstances” in relation to vulnerability to the effects of climate change (United Nations Framework Convention on Climate Change [UNFCCC], 2022, p21). At a state level, governments are also using similar language and ideas (Araos et al., 2021).

The presence of this language represents a growing acknowledgement of the need to engage with justice in adaptation. However, what justice in adaptation means, and evidence of how, or to what extent, it is shaping climate change response remains largely absent. Use of this language alone has little capacity to address challenges and effect change. Language must be translated into policy, planning and action.

## 2. Adaptation justice in Aotearoa New Zealand

The need to engage with justice in adaptation is already evident in the Aotearoa New Zealand context. While the effects of climate change will occur across the country, communities including lower socio-economic groups and Māori are likely to be more susceptible to harm (IPCC, 2022, Ihirangi, 2021, Awatere et al., 2021). The Manaaki Whenua Landcare Research and Ngā Pae o te Māramatanga report, *‘He huringa āhuarangi, he huringa ao: A changing climate, a changing world’* (Awatere et al., 2021) assesses climate risks faced by whānau, hapū, iwi and Māori businesses, highlighting significant risks to ecosystems and biodiversity, Māori enterprise, human health, and Māori culture. For example, Māori owned land and valued infrastructure including marae and urupā are dominantly located in low-lying coastal areas that are likely to be impacted by erosion, inundation, and saltwater intrusion due to sea-level rise (IPCC, 2022, Awatere et al., 2021). Displacement from these areas is likely to affect ‘identity, social cohesion, and Māori well-being’ (Awatere et al., 2021, p9). This susceptibility to harm is not exclusively because of exposure to sea-level rise and other effects of climate change, but is compounded by ongoing patterns of marginalisation that constrain the capacity of groups to cope.

In Aotearoa New Zealand, responsibility for responding to climate change falls primarily on local governments, both regional councils and territorial authorities (district and city councils) (Bell et al., 2017, MfE, 2022, Rouse et al., 2017). Legislation including the Resource Management Act 1991 (RMA), the Local Government Act 2002, and the Civil Defence and Emergency Management Act 2002 identify local government as having roles and responsibilities to related to climate change, framed around the avoidance or mitigation of natural hazards (Bell et al., 2017, Willis, 2014). To enact these roles and responsibilities, there are various guidelines for local government, including the Ministry for the Environment’s *Coastal Hazards and Climate Change* (Bell et al., 2017) guidelines for long-term strategic planning and decision-making. New legislation and policy is continually being introduced, including the National Adaptation Plan (2022) and the proposed Climate Adaptation Act (as one of three Acts to replace the Resource Management Act). The introduction of new policy, ongoing legislative reform, and relative newness of government climate change response creates uncertainty for local governments in determining their roles and responsibilities and the efficacy of current adaptation approaches. Consequently, decision-makers need guidance on the potential issues that may be embedded within current strategies and plans, and how these challenges can be overcome to enable better opportunities and outcomes for communities.

To this end, this report provides guidance to researchers, policy makers, and others navigating engagement with justice in adaptation. Synthesizing findings from a review of literature on justice in adaptation, or ‘just adaptation,’ this report identifies the meanings of justice in adaptation, outlines overarching ways of achieving justice in adaptation, and provides guidelines for how these ideas can be engaged with in the policy sphere in the Aotearoa New Zealand context.

## 2.1 The extra dimension of Te Ao Māori and Te Tiriti

In the Aotearoa context, central government and local authorities also have responsibilities to mana whenua under Te Tiriti o Waitangi that must be upheld in adaptation actions (Ihirangi, 2021). Te Tiriti o Waitangi requires emphasis on the protection of Māori needs and interests. Māori authors highlight particular problems in western approaches to adaptation that are clear when considering issues from a te ao Māori and mātauranga Māori perspective. Māori know and understand themselves as deeply connected to and within relationships of responsibility to care for all life in their whenua, land. This is known as kaitiakitanga. This relationship extends across human and non-human or more-than-human life and generations (Winter, 2019, Ihirangi, 2021). Some critiques of western approaches include the prioritising of (some) humans and short term solutions at the expense of particular groups of humans, non-human life, and future generations (Watene, 2016, Winter, 2019, Tschakert et al., 2021, Winter, 2021). This has many implications for the way that adaptation happens. It is the place of experts in te ao Māori to say what full consideration of Māori ideas of just adaptation might be and as such is beyond the scope of this paper. Instead, we offer considerations for local governments to apply in relation to established approaches to just adaptation, to analyse whether they are making space for Māori to lead adaptation.

### 3. Concepts of just adaptation

In this section, we outline the understandings of just adaptation found in our review of literature on justice and injustice in adaptation and indicate how each relates to adaptation planning.

As Table 1 illustrates, understandings of just adaptation have largely been developed through the application of theories of justice to the adaptation context. Most common are theories of distributive and procedural justice and justice as recognition. Theories of justice as recognition, the capabilities approach, and transformational adaptation have become more popular in recent years in acknowledgement of the limitations of distributive and procedural theories alone and of prevailing adaptation planning. Restorative and intergenerational theories are included because they have received little attention in adaptation planning, but warrant consideration. We also include understandings of just adaptation related to settler-colonial injustice and Indigenous and racial justice. Although not necessarily using the term ‘just adaptation,’ critical and BIPOC (Black, Indigenous, people of colour) scholars emphasize the importance of racial and Indigenous justice in climate change response. While we have separated each idea for illustrative purposes, many are genealogically linked and overlap significantly.

Across theories of justice and concepts of just adaptation, questions are often framed in connection with rights and responsibilities. Rights can be considered in terms of rights to live in particular ways, to benefits, and to avoid and be protected from harm. Responsibilities can relate to assigning responsibility for enable or maintain rights, causing harm, and responding to or resolving harm i.e. paying for costs (Bulkeley et al., 2014). There are a variety of ways in which rights and responsibilities are justified. Some significant examples include:

- Historic responsibility: actors have historic responsibility for present situations if they have benefitted from historic actions i.e., benefiting from the industrial development that has contributed to climate change may mean responsibility for causing harm and paying for costs.
- Human rights: people have the right to basic rights and freedoms including the right to life, equality, and freedom from discrimination.
- Rights to development: people have the right to sustainably develop out of poverty.
- Environmental rights: people have the right to an environment that enables human wellbeing

(Schlosberg, 2012, Young, 2011, Bond and Barth, 2020, Bulkeley et al., 2014).

Questions of rights and responsibilities are important, as individuals and communities have certain rights, and local governments have certain responsibilities to uphold them. Depending on the understanding of just adaptation engaged with, different rights and responsibilities are prioritised.

**TABLE 1 |** Concepts of just adaptation

<b>Concept of justice</b>	<b>Definition: How the concept relates to justice, fairness, equity</b>	<b>Application: How to apply this thinking in adaptation planning</b>	<b>Relevant literature</b>
Ti Tiriti context	<p><b>What is the issue:</b> Aotearoa New Zealand was founded on Te Tiriti/Treaty of Waitangi which includes commitments by the Crown to Māori. These have historically been ignored and Māori marginalised. Climate change brings new challenges for Māori that could lead to further marginalisation.</p> <p><b>How justice is achieved:</b> Adaptation planning is committed to Te Tiriti o Waitangi, including protecting the rights and interests of Māori and rights to tino rangatiratanga.</p>	<p>Adaptation planning:</p> <ul style="list-style-type: none"> <li>- Upholds commitments of Te Tiriti o Waitangi</li> <li>- Recognises tino rangatiratanga through partnership decision-making between the Kawanatanga sphere (the Crown) and the Rangatiratanga sphere (Māori) of governance</li> <li>- Supports and protects Māori values, interests, and aspirations</li> <li>- Is future focused, intergenerational</li> <li>- Respects and is appropriately informed by Te Ao Māori</li> <li>- Respects and appropriately draws on mātauranga</li> <li>- Enables Māori to be kaitiaki in their rohe</li> <li>- Addresses past (and ongoing) harms through appropriate compensation or reparations (determined by communities in question)</li> </ul>	<ul style="list-style-type: none"> <li>- Foundations in Te Tiriti o Waitangi, Te Ao Māori and Mātauranga Māori</li> <li>- Literature on Te Ao Māori and environmental justice (Winter, 2022, Watene, 2016)</li> <li>- Literature on Te Ao Māori, climate change, and adaptation (Ihirangi, 2021, Pirini and Morar, 2021, Parker, 2020, Awatere et al., 2021, Paul, 2020, Bargh and Tapsell, 2021, Johnson et al., 2022, Iorns, 2019, Tunks, 1997, Carter, 2019)</li> </ul>
Justice as recognition	<p><b>The issue:</b> Susceptibility to harm from climate change and adaptation is connected with patterns of disadvantage towards groups and their identities and perpetuated through social, political, and economic systems and institutions.</p> <p><b>How justice is achieved:</b> Challenging the systems and institutions that perpetuate inequality/inequity by recognising groups and their different identities - in particular historically marginalised groups and their needs, interests, knowledges, world views etc. This occurs through the creation of participatory equality and redistribution to address inequality/inequity.</p>	<p>Adaptation planning:</p> <ul style="list-style-type: none"> <li>- Engages with a broad understanding of susceptibility to harm</li> <li>- Recognises that contestation/dissent is key to successful adaptation</li> <li>- Redistributes goods to address inequalities/inequities (e.g., unequal access to education, healthcare).</li> </ul> <p>Groups that are susceptible to harm:</p> <ul style="list-style-type: none"> <li>- Are prioritised</li> <li>- Have their identities and cultures recognised</li> <li>- Have participatory equality, meaning agency to influence decision-making</li> </ul>	<ul style="list-style-type: none"> <li>- Foundations in theories of justice (Fraser, 2000, Young, 2011)</li> <li>- Literature on theory of justice as recognition in climate change and adaptation (Chu and Michael, 2019, Chu and Cannon, 2021, Bulkeley et al., 2014, Shi et al., 2016, Juhola et al., 2022, Bond and Barth, 2020)</li> </ul>

<p>Distributive justice &amp; Equity</p>	<p><b>The issue:</b> Benefits and burdens of climate change and adaptation are not fairly distributed. This includes unequally distributed goods, such as resources, education, health, income, wealth, opportunities, social position that all contribute to the capacity to adapt. Burdens are disproportionately experienced by groups that do not have the goods to adapt - often historically marginalised groups.</p> <p><b>How justice is achieved:</b> Creating fair distributions and equitable outcomes. Uplifting groups that are susceptible to harm through the redistribution of benefits, burdens, and goods</p>	<p>Adaptation planning:</p> <ul style="list-style-type: none"> <li>- Assesses the distribution of climate change impacts and groups that are susceptible to harm</li> <li>- Assesses the distribution of adaptation impacts (benefits and disbenefits) and groups that are susceptible to harm</li> <li>- Prioritises groups that are susceptible to harm and their rights, needs, and interests</li> <li>- Assesses what is needed to avoid harm and adapt (e.g., safe and sustainable living environments, financial assistance) and reallocates accordingly</li> <li>- Determines who/what should bear responsibility and allocates burdens i.e., responsibility to pay for adaptation costs.</li> </ul>	<ul style="list-style-type: none"> <li>- Foundations in theories of justice (Rawls, 1972)</li> <li>- Literature on distributive justice in climate change and adaptation (Juhola et al., 2022, Wenta et al., 2019, Chu and Cannon, 2021, Lindley, 2011, Page, 2008)</li> </ul>
<p>Procedural justice &amp; Inclusion</p>	<p><b>The issue:</b> Many institutional processes involved in climate change and adaptation decision-making cannot create fair distributions and fair outcomes because they lack transparency, accountability, and inclusive participation - particularly of historically marginalised groups. Recognition that exclusion from decision-making processes is connected to susceptibility to harm.</p> <p><b>How justice is achieved:</b> Fair processes of decision-making are achieved through transparency, accountability, and inclusivity of groups, their identities, needs, interests, knowledges, and world views. Inclusion of groups that are susceptible to harm is prioritised.</p>	<p>Adaptation planning:</p> <ul style="list-style-type: none"> <li>- Assesses who is included in processes and who is excluded</li> <li>- Recognises groups that are susceptible to harm and their identities, voices, needs, interests, knowledges, and worldviews</li> <li>- Uses mechanisms to enable groups that are susceptible to harm to participate (i.e., financial assistance, capacity building)</li> <li>- Participation is open and accessible to a wide range of the public (especially marginalised groups)</li> <li>- Participation is ongoing</li> <li>- Processes are transparent and engender trust</li> <li>- Processes are accountable</li> <li>- Assesses and justifies who/what should bear responsibility</li> </ul>	<ul style="list-style-type: none"> <li>- Foundations in theories of justice (Rawls, 1972),</li> <li>- Literature on procedural justice in climate change and adaptation (Juhola et al., 2022, Chu and Cannon, 2021, Wenta et al., 2019, Holland, 2017, Bond and Barth, 2020, Paavola and Adger, 2006)</li> </ul>

<p>The Capabilities approach</p>	<p><b>The issue:</b> Susceptibility to harm is related to the capabilities, or real opportunities, that people have to secure basic needs and to lead lives that they deem to be of value (to flourish). Climate change and adaptation affect people’s capabilities. Capabilities are unevenly distributed, with historically marginalised groups often having the least capabilities.</p> <p><b>How justice is achieved:</b> People determine for themselves the capabilities that they need to secure basic needs and to flourish. Capabilities are redistributed to uplift groups that are susceptible to harm.</p>	<p>Groups that are susceptible to harm:</p> <ul style="list-style-type: none"> <li>- And their identities and cultures are recognised.</li> <li>- Have political capabilities (agency and influence over decision-making processes).</li> <li>- Participate in decision-making processes.</li> <li>- Participate in assessment of their own susceptibility to harm (what capabilities are affected/are needed)</li> <li>- Participate in design of strategies to reduce their own susceptibility to harm (secure and protect capabilities).</li> </ul>	<ul style="list-style-type: none"> <li>- Foundations in theories of justice (Sen, 1974, Nussbaum, 2003)</li> <li>- Literature on procedural justice in climate change and adaptation (Schlosberg, 2012, Satyal et al., 2021, Watene, 2016)</li> </ul>
<p>Transformational/transformativ adaptation</p>	<p><b>The issue:</b> Susceptibility to harm cannot be adequately addressed through incremental adjustment to climate impacts, business-as-usual development pathways, and (partial) participation in decision-making processes. This susceptibility is rooted in power dynamics and relationships that shape how people understand themselves, others, and their environments.</p> <p><b>How is justice achieved:</b> Ongoing process of challenging and transforming structures (social, cultural, political, economic) and power relations that are the root cause of susceptibility to harm and environmental degradation. Aims to create conditions for people who are susceptible to harm to have agency – meaning control over adaptation processes and decisions that affect them. A fundamental shift towards sustainable and equitable development pathways.</p>	<p>Adaptation planning:</p> <ul style="list-style-type: none"> <li>- Creates new systems and processes for adaptation decision-making</li> <li>- Engages with a broad understanding of susceptibility to harm</li> <li>- Ensures environmental sustainability</li> <li>- Is community-led</li> </ul> <p>Groups that are susceptible to harm:</p> <ul style="list-style-type: none"> <li>- And their different values and interests are recognised</li> <li>- Have agency, meaning: <ul style="list-style-type: none"> <li>- Control of rules, processes, and decisions that they and their environments are affected by</li> <li>- Adaptation serves their needs and interests</li> <li>- Freedom from overt domination and oppression</li> <li>- Being well-informed</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Foundations in adaptation literature (Fedele et al., 2019, Holland, 2017, Pelling, 2011, O’Brien, 2012, Tschakert et al., 2013, Schlosberg et al., 2017, Paavola and Adger, 2006)</li> </ul>



Intergenerational justice	<p><b>The issue:</b> Future generations will be affected by adaptation decisions made today. The needs of present generations are commonly prioritised over future generations and this is reflected in prevailing climate change response.</p> <p><b>How is justice achieved:</b> Each generation does its fair share to enable members of succeeding generations to satisfy their needs, avoid serious harm, and have the opportunity to enjoy things of value.</p>	<p>Adaptation planning:</p> <ul style="list-style-type: none"> <li>- Prioritises the interests of groups that are susceptible to harm</li> <li>- Takes a forward-looking approach to responsibility</li> <li>- Does not compromise the rights and needs of future generations (e.g., to basic rights, to healthy living environments, to wellbeing)</li> <li>- Does not compromise the ability to adapt in the future (e.g., by failing to address climate change or creating maladaptation)</li> <li>- Is consistent with avoiding dangerous climate change</li> </ul>	<ul style="list-style-type: none"> <li>- Foundations in Indigenous knowledges and world views (Winter, 2022)</li> <li>- Applied (differently) in western theories of justice (Caney, 2005)</li> <li>- Literature on intergenerational justice in climate change and adaptation (Paavola and Adger, 2006)</li> </ul>
Restorative justice	<p><b>The issue:</b> Climate change, and prevailing approaches to adaptation, have already caused harm to people, place, resources and relationships.</p> <p><b>How is justice achieved:</b> Compensating for or repairing harm and restoring relationships between individuals and communities that have been affected by harmful actions.</p>	<p>Adaptation planning:</p> <ul style="list-style-type: none"> <li>- Restores relationships and trust</li> <li>- Offers compensation and reparation to communities that are susceptible to harm due to historic and ongoing marginalisation (i.e. harms of colonisation to indigenous peoples)</li> <li>- Offers compensation and reparation to communities that have been disproportionately harmed by climate change and/or adaptation</li> <li>- Fosters collaboration in adaptation planning, including groups that have been harmed or are susceptible to harm</li> <li>- Fosters community engagement in decision making processes</li> <li>- Provides resources and support for community-led adaptation efforts</li> <li>- Encourages collaboration and cooperation between different stakeholders including governments, NGOs, businesses, and communities</li> <li>- Changes processes to avoid future harm</li> </ul>	<ul style="list-style-type: none"> <li>- Foundations in Indigenous knowledges and world views</li> <li>- Also applied (differently) in western theories of justice (Zehr, 2002)</li> <li>- Literature on restorative justice in climate change and adaptation (Juhola et al., 2022, McCauley and Heffron, 2018, Robinson and Carlson, 2021)</li> </ul>

<p>Setter-colonial injustice; Indigenous justice; racial justice</p>	<p><b>The issue:</b> The climate crisis is not new for Black, Indigenous and people of colour (BIPOC) who have experienced related harms (e.g., loss of land, environmental degradation) through colonisation, slavery, and other oppressive practices. Climate change is a continuation of colonial and/or racial injustice on top of historic harms.</p> <p><b>How is justice achieved:</b> Adaptation justice can only be achieved through recognition of oppressive power structures (including colonialism and racial capitalism) as the root causes of interconnected issues of climate, social, cultural, racial, and Indigenous injustice.</p>	<p>Adaptation planning:</p> <ul style="list-style-type: none"> <li>- Actively disrupts systems that perpetuate injustice</li> <li>- Recognises and respects BIPOC and cultures that have been historically marginalised (and continue to be)</li> <li>- Takes an interconnected approach to injustice (solutions address interconnected issues e.g., gender violence, food sovereignty, cultural integrity, land threats)</li> <li>- Enables BIPOC groups to lead adaptation justice</li> <li>- Addresses past harms through appropriate compensation, reparations (determined by communities in question)</li> <li>- Is forward looking and establishes conditions for long-term wellbeing</li> <li>- Maintains and restores health and wellbeing of environments to sustain and secure future generations</li> <li>- Distributions of benefits and burdens across generations</li> </ul>	<ul style="list-style-type: none"> <li>- Foundations in BIPOC knowledges and worldviews and critical scholarship</li> <li>- Literature applying these ideas to environmental justice (Pulido and De Lara, 2018, Tschakert et al., 2021, Steel and Whyte, 2012)</li> <li>- Literature applying these ideas to climate change and adaptation (Chakraborty and Sherpa, 2021, Whyte, 2013, Paul, 2020, Bargh and Tapsell, 2021, Ihirangi, 2021)</li> </ul>
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## 4. Achieving just adaptation

There is a lot of overlap across these concepts. For example, many approaches are concerned with aspects of *equity* — that some people are already marginalised or already impacted by climate change, and that adaptation responses can make those inequities worse. *Inclusion and participation* in decision-making are often identified as ways to address justice concerns. Several propose that *susceptibility to harm* is not exclusively about exposure to climate risks but is interrelated with historic marginalisation. Consequently, it is becoming accepted that adaptation planning must be developed in recognition of and response to these patterns of marginalisation. In the following three subsections, we outline three core approaches based on strong themes that appear repeatedly and provide guidance on how each can be engaged with in local government adaptation planning. These approaches are, achieving justice through (1); redistribution; (2) fair processes; and (3) recognition of structural injustice. Each approach recognises the interconnection between patterns of marginalisation and susceptibility to harm, but responds in differing ways. We advise that just adaptation is only possible when it is multidimensional, engaging with all three approaches.

It should be recognised that prevailing concepts of environmental, climate, and adaptation justice draw primarily of western knowledge and worldviews. Critical scholars and BIPOC authors emphasize that this fails to disrupt the hierarchy in which historically marginalised groups, identities, knowledge, and worldviews, are considered secondary to a western lens (Tschakert et al., 2021, Pulido and De Lara, 2018). In the approaches below, we draw on critiques from critical scholarship and BIPOC authors in an attempt to guide local government in creating space for effective te Tiriti relationships and partnerships in climate adaptation work as well as to enable groups and communities that are susceptible to harm to shape adaptation planning.

### 4.1. Achieving justice through redistribution

Associated with equity and distributive justice, susceptibility to harm from climate change and adaptation can be related to what is sometimes referred to as “goods”. These goods include resources, education, health, political agency, opportunities, income, wealth, and social position that can assist or enable individuals and groups to avoid, mitigate and recover from harm (Satyal et al., 2021, Chu and Cannon, 2021, McManus et al., 2014). Access to goods reflect pre-existing patterns of inequality, with historically marginalised groups often having the least goods to adapt.

Through this lens, just adaptation means redistributing goods to alleviate susceptibility to harm. At the international level, redistribution is commonly debated in relation to the disproportionate climate burdens experienced by Least Developed Countries (LDCs); their lack of access to goods to avoid, mitigate, and recover from harm; and their right to certain goods including climate finance and adaptation aid. This debate can be reflected at the local level, where similar burdens, lack of access, and rights concern poor and historically marginalised groups.

Employing this approach in adaptation planning means assessing who is most in need, what they are in need of, and providing access to these goods. It also means forward planning to assess how climate change may affect access to goods. For example, access to income, job opportunities, sustainable living environments, and public facilities for extreme climate events, should be assessed in the context of how they will be affected by climate change (Chu and Cannon, 2021). Adaptation planning should also assess how adaptation strategies may affect access to goods through maladaptation. Maladaptation can be avoided or accounted for through redistribution. Overall, the provision of access to goods is underlined by the aim to uplift groups that are the most susceptible to harm.

**TABLE 2 |** Redistribution: considerations for adaptation planning:

<b>Considerations</b>	<b>Te Tiriti context</b>
<p>Identifies how climate change benefits and burdens are distributed. This means:</p> <ul style="list-style-type: none"> <li>- Identifying who benefits from climate change</li> <li>- Identifying who carries the burden of climate change impacts, and whether this is part of a broader and/or historic pattern of susceptibility to harm</li> <li>- Identifying who is susceptible to harm from climate change</li> </ul>	<ul style="list-style-type: none"> <li>- Identifies how Māori are affected by distributions of climate change benefits and burdens</li> <li>- Accounts for historic marginalisation</li> <li>- Protection of Māori communities from the negative impacts of climate change (Bargh and Tapsell, 2021)</li> </ul>
<p>Identifies how adaptation benefits and burdens are distributed. This means:</p> <ul style="list-style-type: none"> <li>- Identifying who benefits from adaptation initiatives</li> <li>- Identifying who is susceptible to harm from maladaptation</li> <li>- Identifying whether those who carry the benefits and burdens of adaptation initiatives are part of a broader and/or historic pattern of how benefits and burdens are distributed</li> </ul>	<ul style="list-style-type: none"> <li>- Identifies how Māori are affected by distributions of adaptation benefits and burdens</li> <li>- Protection of Māori communities from maladaptation</li> </ul>
<p>Allocates responsibility. This means:</p> <ul style="list-style-type: none"> <li>- Identifying who should pay for and facilitate redistribution of goods</li> <li>- Justifying grounds for responsibility</li> </ul>	<ul style="list-style-type: none"> <li>- The Crown takes responsibility for past and ongoing breaches to Te Tiriti o Waitangi</li> <li>- Crown provision of funding to account for breaches</li> </ul>
<p>Redistributes goods to groups that are susceptible to harm to enable adaptation. This may include (but is not limited to):</p> <ul style="list-style-type: none"> <li>- Financial assistance</li> <li>- Access to income</li> <li>- Access to job opportunities</li> <li>- Access to safe, sustainable living environments</li> <li>- Access to public facilities for extreme climate events</li> </ul>	<ul style="list-style-type: none"> <li>- Redistribution of resources and funding to account for inequalities/inequities faced by Māori access to goods, services and opportunities and full participation in decision-making processes (Iorns, 2019, Awatere et al., 2021, Ihirangi, 2021)</li> </ul>

<p>Adaptation planning recognises and actively protects rights and interests. This means:</p> <ul style="list-style-type: none"> <li>- Ensuring that current inequalities are not worsened, and ideally are improved, because of adaptation</li> </ul>	<ul style="list-style-type: none"> <li>- Protection of taonga – ensuring Māori continue to have rights and relationships with their lands, forests, fisheries, and other resources.</li> <li>- Maintaining kaitiakitanga – protection of Māori relationships with places and tikanga and mātauranga Māori that underpin this</li> <li>- Protection and recognition of mātauranga Māori</li> <li>- Partnership with Māori in decision-making processes (i.e. deciding how resources are allocated and used)</li> </ul>
<p>Adaptation planning reassesses susceptibility to harm throughout planning and project implementation and redistributes accordingly. This means rectifying potential and actual maladaptation</p>	<ul style="list-style-type: none"> <li>- Creating opportunities for Māori to provide feedback on efficacy of adaptation outcomes in relation to Crown commitments to principles of te Tiriti.</li> </ul>

#### 4.1.1. Further considerations:

- Redistribution of outcomes addresses the symptoms of susceptibility to harm, but may fail to address the root causes of susceptibility to harm and build adaptive capacity
- Redistribution typically relies on government decision making processes which may not recognise the needs of historically marginalised groups and does not engender autonomy, self determination or tino rangatiratanga
- Central governments are commonly viewed as the appropriate scales and actors to exercise rights and responsibilities; however, this may obscure other scales and actors including regional and local governments; iwi, hāpu or rūnanga, and whanau; community groups; private corporations; and NGOs.
- Redistribution often fails to give emphasis to process. If processes by which adaptation planning occurs are not fair, just outcomes cannot be achieved.

#### 4.2. Achieving justice through fair processes

The processes through which adaptation occurs create, reinforce, and exacerbate inequalities (Barth et al., 2023, Malloy and Ashcraft, 2020). *Recognising Te Tiriti, procedural justice, recognition justice, Indigenous justice, and the capabilities approach* all highlight that without fair processes of decision-making, redistribution will not be just. Adaptation planning processes are commonly top-down, expert-led, involve minimal participation. Additionally, historically marginalised groups may face barriers including discriminatory policies or attitudes, lack of access to information, cultural or language barriers, and lack of political representation. Consequently, the voices, needs, and interests of historically marginalised groups are likely to be absent from decisions made through these processes. This can result in inappropriate adaptation planning, alienation of communities, and can reinforce inequality (Malloy and Ashcraft, 2020, Barth et al., 2023).

Responding to these issues, just adaptation means creating fair processes to address susceptibility to harm and historically embedded injustices. For decision-making processes to

be fair, they must be inclusive, participatory, and transparent. The ability to participate meaningfully requires ‘political capabilities,’ which means access to the resources, opportunities, freedoms, and institutions, that enable participants to be recognised as legitimate political agents and have influence over decision making processes (Malloy and Ashcraft, 2020). Emphasis is placed on the inclusion and participation of historically marginalised groups who are the most susceptible to harm (Paavola and Adger, 2006).

**TABLE 3 |** Fair processes: considerations for adaptation planning:

<b>Considerations</b>	<b>Te Tiriti context</b>
Adaptation planning assesses participation in decision-making processes. This means: <ul style="list-style-type: none"> <li>- Identifying who is included, speaking/actively participating, and what is spoken</li> <li>- Identifying absences</li> </ul>	<ul style="list-style-type: none"> <li>- Identifying whether mana whenua partners are included, who is speaking/actively participating, what is spoken</li> </ul>
Adaptation planning involves meaningful participation. This means: <ul style="list-style-type: none"> <li>- Participation goes beyond consulting and informing</li> <li>- Participation is collaborative and continuous through policy design, planning, implementation, and evaluation</li> <li>- Cultivating relationships of trust, accountability, and reciprocity</li> </ul>	<ul style="list-style-type: none"> <li>- Recognising and giving effect to rangatiratanga</li> <li>- Recognising giving effect to Te Tiriti principle of partnership with Māori by engaging Mana Whenua as full partners</li> <li>- Recognising Tikanga Māori</li> <li>- Including Māori in all stages of decision-making</li> </ul>
Adaptation planning enables the meaningful participation of groups that are susceptible to harm. This means: <ul style="list-style-type: none"> <li>- Assessing barriers to participation</li> <li>- Providing resources and support to make participation accessible (i.e., information, transportation, translation services)</li> <li>- Building political capabilities</li> </ul>	<ul style="list-style-type: none"> <li>- Incorporating and valuing Māori perspectives and knowledge</li> <li>- Protection of Māori interests and values</li> <li>- Creating space for Māori engagement such as hui and wānanga and using engagement methods that are accessible culturally appropriate.</li> </ul>
Adaptation planning involves regular evaluation and opportunity for change. This means: <ul style="list-style-type: none"> <li>- Creating opportunities to assess fairness of processes</li> <li>- Creating opportunities to address uncertainty and change (i.e., changes in environmental conditions; changes in susceptibility to harm)</li> </ul>	<ul style="list-style-type: none"> <li>- Creating opportunities for Māori to provide feedback on efficacy of adaptation processes in relation to Crown commitments to principles of te Tiriti.</li> </ul>

#### 4.2.1. Further considerations:

- Being able to voice one’s perspective and concerns does not ensure power to shape adaptation decisions. If relationships are poor at the outset, then effort must be put into building trust prior to difficult decisions being made to ensure meaningful participation (Barth et al., 2023).
- Rather than reforming existing processes, new or different decision-making processes may be necessary.
- Fair processes do not necessarily address the root causes of susceptibility to harm.

### 4.3. Achieving justice by recognising and addressing structural injustice

Recognising and addressing structural injustice is central to theories including justice as recognition, transformation, and the related work of critical and BIPOC scholars. Like fair process, this approach seeks to address susceptibility to harm, but focuses on where that susceptibility derives from historically embedded social, cultural, economic and political processes that have and continue to systematically marginalise groups and limit meaningful participation in institutionalised decision-making processes. These systemically embedded forms of discrimination and marginalisations are termed structural injustice, and addressing them means going further to confront the root causes of the consequent susceptibility to harm (Schlosberg, 2007).

In this approach, the uneven distribution of climate change benefits and burdens; the risk of maladaptation, the lack of meaningful engagement in adaptation decision-making processes; are the result of structural injustice. This means social, economic, and political arrangements that create unfair distributions of resources, opportunities, and power through embedded privileging of particular identities, systems of knowledge, and ways of being in the world. Advantage and disadvantage is often related to race and ethnicity, gender, class, ability, and other factors (Young, 2011).

Climate change and adaptation are issues of structural injustice because these unfair distributions of resources, opportunities, and power are major contributors to climate change and also limit historically marginalised groups' ability to adapt to climate impacts. For example, wealthy nations' reliance on fossil fuels and failure to regulate greenhouse gas emissions are major contributors to climate change. At the same time, these nations have more resources, opportunities, and power to adapt to climate change. Even within wealthy nations like Aotearoa, wealthy communities have greater resources, opportunities, and power to adapt to climate impacts. Meanwhile, these structural arrangements mean historically marginalised groups face greater climate change impacts and also have reduced ability to adapt to these impacts.

Consequently, responding to climate change and adaptation requires acknowledging and addressing the underlying structures that create and perpetuate injustices (Schlosberg, 2012). A structural injustice approach seeks make space for multiple identities, systems of knowledge, and ways of being in the world to inform how climate change is understood and responded to (Chakraborty and Sherpa, 2021). Within this approach, there are a range of ideas about how this should be approached. Some focus on past harms, others are forward looking. Some seek to reform existing systems, while others seek to create new ones.

#### 4.3.1. Further considerations

- The topic of Te Tiriti and adaptation cannot be done justice within this report and. As a topic in its own right, it requires much fuller exploration by experts in Te Ao Māori.

**TABLE 4 |** Recognising and addressing structural injustice: considerations for adaptation planning:

<b>Considerations</b>	<b>Te Tiriti considerations</b>
<p>Adaptation planning recognises and actively addresses the context and history that has created susceptibility to harm. This means:</p> <ul style="list-style-type: none"> <li>- Solutions are informed by this context and history</li> </ul>	<ul style="list-style-type: none"> <li>- Identifying the impacts of colonisation for Indigenous peoples</li> <li>- Identifying past and ongoing breaches of Te Tiriti</li> <li>- Recognise and actively address inequalities/inequities resulting from historic injustices (including land loss, environmental degradation, unequal access to goods, services and opportunities, unequal meaningful participation in decision-making)</li> <li>- Ensures that inequalities/inequities are not reproduced (Parker, 2020, Ihirangi, 2021)</li> </ul>
<p>Adaptation planning recognises and actively addresses the systems that perpetuate susceptibility to harm. This means:</p> <ul style="list-style-type: none"> <li>- Disrupting systems that perpetuate susceptibility to harm (i.e., settler-colonial government practices; economies and industries reliant on exploitation of the environment)</li> <li>- Supporting the establishment of new systems and approaches.</li> </ul>	<ul style="list-style-type: none"> <li>- Recognise and actively address structural inequities to enable meaningful partnership with Indigenous groups</li> <li>- Establishing new systems and processes (Parker, 2020, Ihirangi, 2021, Bargh and Tapsell, 2021)</li> </ul>
<p>Adaptation planning recognises and engages with intersecting issues. This means:</p> <ul style="list-style-type: none"> <li>- Developing solutions that actively address existing needs and inequities (i.e., gender equality; access to education; food security and sovereignty).</li> </ul>	<ul style="list-style-type: none"> <li>- Ensures that inequalities/inequities are not reproduced (Parker, 2020, Ihirangi, 2021)</li> </ul>
<p>Adaptation planning prioritises groups that are susceptible to harm, their identities; needs; priorities; and interests. This means:</p> <ul style="list-style-type: none"> <li>- Co-developing plans with groups that are susceptible to harm.</li> <li>- Groups and communities define their own adaptation needs; priorities; interests; and solutions</li> <li>- Recognising connection between susceptibility to harm and axes of difference (i.e. gender, race, ethnicity, poverty, ableism, LGBTQIA+/takatāpui)</li> </ul>	<ul style="list-style-type: none"> <li>- Ensures that inequalities/inequities are not reproduced (Parker, 2020, Ihirangi, 2021)</li> </ul>
<p>Adaptation planning recognises and respects multiple knowledges and world views. This means:</p> <ul style="list-style-type: none"> <li>- Recognising local knowledge, lived-experience, traditional environmental knowledges, Indigenous knowledges (and more) as legitimate in their own right</li> <li>- Developing adaptation solutions that are appropriately and ethically informed by relevant knowledges and worldviews</li> </ul>	<ul style="list-style-type: none"> <li>- Recognising and giving effect to mana whenua knowledges, worldviews, and values</li> <li>- Engagement with Indigenous knowledge is always led and determined by Indigenous groups: supports knowledge sovereignty</li> <li>- Recognises that Indigenous groups, places, knowledge, and interests are diverse (Blackett et al., 2022, Ihirangi, 2021, Bargh and Tapsell, 2021, Awatere et al., 2021).</li> </ul>



<p>Adaptation planning is place-specific. This means:</p> <ul style="list-style-type: none"> <li>- Local, place-based planning</li> </ul> <p>Empowering, community-led, bottom-up decision-making</p>	<p>Adaptation planning recognises and giving effect to Māori connection to historic lands. This means:</p> <ul style="list-style-type: none"> <li>- Recognising and giving effect to Tino Rangatiratanga</li> <li>- Recognising and giving effect to kaitiakitanga</li> <li>- Active protection of taonga (Ihirangi, 2021).</li> </ul>
<p>Adaptation planning is forward looking. This means:</p> <ul style="list-style-type: none"> <li>- Recognising the rights of future generations</li> </ul> <p>Supporting the establishment of conditions for long-term well-being (particularly of groups that are susceptible to harm)</p>	<ul style="list-style-type: none"> <li>- Support the resurgence of Indigenous culture, knowledge, and practices - establish the conditions for Indigenous people to flourish (Ihirangi, 2021).</li> </ul>

## 5. Conclusion

The effects of climate change and the ways that governments choose to engage in adaptation have significant implications across society, having the potential to entrench inequalities or address them. Ideas of just adaptation illustrate potential ways that governments can develop responses that address inequalities. In this report, we have outlined these key understandings, synthesized ideas into three core approaches, and provided recommendations for implementation in the Aotearoa New Zealand context. In implementing these recommendations, we highlight that they are not exhaustive and that decision-makers should turn to the original references for further insight. Overall, we encourage local governments to engage with an understanding of just adaptation as enacting their responsibility to facilitate through resources, opportunities, and power, the creation of space for people to determine just futures for themselves.

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