

# Think globally, act cooperatively: Progressing offshore mitigation for Aotearoa New Zealand

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## Document information

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### Disclaimer

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## Executive summary

Cooperation between countries is key to avoiding the most severe impacts of climate change. Under current policies, the world will face temperatures of 3°C above pre-industrial levels by 2100. Developing countries hold three-quarters of the cost-effective mitigation needed in 2030 under 1.5°C pathways, but currently lack the capability to make it happen and historically have contributed least to the problem. If higher- and lower-income countries fail to work together to unlock that mitigation, the world will lock in dangerous climate change. Providing conventional climate finance to lower-income countries is crucial but is not the only option – nor has it been sufficient so far.

### **The Paris Agreement encourages countries to cooperate**

Under the 2015 Paris Agreement, countries can cooperate to accelerate emissions reductions through further technical support and targeted investment. Aotearoa New Zealand deliberately pledged to deliver a more ambitious 2030 Nationally Determined Contribution than what was feasible domestically, with the difference to be met by supporting other countries to reduce their emissions beyond their Paris targets (referred to in this paper as “offshore mitigation”). But by mid-2024, New Zealand had yet not advanced mitigation agreements with other countries. This begs the question: why has New Zealand not progressed further?

### **New Zealand lacks broad public support for offshore mitigation**

We identified four competing mindsets in New Zealand that are paralysing progress on offshore mitigation. At the extremes, *Dismissive Detractors* oppose offshore mitigation on the grounds it disadvantages New Zealand, whereas proponents of *Least-Cost Compliance* support unlimited use of offshore mitigation to avoid domestic disruption. Under the *Carbon Colonialism* mindset, offshore mitigation risks exploiting vulnerable countries and communities. The *Domestically Driven* mindset presumes offshore mitigation would displace domestic progress and should only be an option of last resort.

### **The solution lies in a *Climate Cooperation* mindset**

A fifth mindset, *Climate Cooperation*, could overcome the divide. Here, funding offshore mitigation would boost New Zealand’s global climate contribution beyond what is possible at home, while maintaining ambitious domestic mitigation, benefiting lower-income countries, and serving both national and global interests. For this mindset to succeed, the Government would need to:

- explain the benefits to New Zealanders of funding offshore mitigation to help meet NDCs
- recognise the co-benefits alongside the costs of both domestic and offshore mitigation
- adopt strong standards and safeguards for offshore mitigation
- use offshore mitigation to complement, not displace, ambitious domestic mitigation.

The gains from adopting a *Climate Cooperation* mindset are summarised in the figure below.

**Government actions are needed now**

Next steps for the New Zealand Government could include making clear policy and funding commitments to offshore mitigation, taking a portfolio approach supported by partnerships and pilot initiatives, and clarifying the roles of the private sector and carbon markets in supporting mitigation transfers.

**Climate cooperation is a global imperative for the long term**

No country, including New Zealand, can prevent dangerous levels of climate change alone. Instead, countries must work together over the long term under strong multilateral frameworks. If done well, funding offshore mitigation through 2030 and beyond could accelerate global mitigation and sustainable development, build international relationships, create new market opportunities, and enable shared learning. To achieve these outcomes, decision-makers and the public will have to understand, value, and support the national and global benefits of climate cooperation.

## Summary haiku

Cooperation  
boosts emissions reductions  
benefiting all



## How *Climate Cooperation* overcomes the divide on offshore mitigation

	C L I M A T E C O O P E R A T I O N M I N D S E T			
Dimension	National interest	Cost-effectiveness	Equity	Mitigation ambition
Solution	Delivers the benefits to New Zealanders of funding offshore mitigation to help meet NDCs	Recognises the co-benefits alongside the costs of both domestic and offshore mitigation	Applies strong standards and safeguards for offshore mitigation	Uses offshore mitigation to complement, not displace, ambitious domestic mitigation
Gains	<ul style="list-style-type: none"> <li>• Boosts New Zealand's credibility in multilateral and trade agreements</li> <li>• Creates new market opportunities</li> <li>• Contributes to global security, equity, and prosperity</li> </ul>	<ul style="list-style-type: none"> <li>• Boosts value for money from both domestic and offshore mitigation</li> <li>• Keeps New Zealand's economy on track with decarbonisation</li> <li>• Positions New Zealand for future climate targets</li> </ul>	<ul style="list-style-type: none"> <li>• Boosts global equity outcomes</li> <li>• Accelerates global mitigation and sustainable development</li> <li>• Incentivises host-country mitigation with greater co-benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Boosts global mitigation outcomes</li> <li>• Supports a just transition domestically and internationally</li> <li>• Delivers mutual gains from cooperating with other countries</li> </ul>
Outcome	<b>Strategic balance between domestic and offshore mitigation</b>			

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## Introduction

Since the 1992 United Nations Framework Convention on Climate Change (UNFCCC), Aotearoa New Zealand has joined with 196 other countries to prevent dangerous levels of human-induced climate change and adapt to climate change impacts in ways that support sustainable development. Like most other high-income countries, New Zealand cooperates with other countries through joint activities, climate finance, technology transfer, and capacity building.

This cooperation could also include the use of market approaches under Article 6 of the Paris Agreement. These approaches enable a “host” country to transfer mitigation beyond its own Paris target (called a Nationally Determined Contribution, or NDC) to a “buyer” country which funds the host’s extra mitigation effort. In New Zealand’s context, such mitigation transfers are referred to as “offshore mitigation.” When done with integrity, this exchange of mitigation for funding can create co-benefits for both hosts and buyers while accelerating global progress.

## **New Zealand faces a significant gap to meet its 2030 NDC**

Under the Paris Agreement, New Zealand has committed to a revised 2030 NDC to reduce net emissions 50% below 2005 gross emissions<sup>1</sup> and to take responsibility for cumulative emissions during 2021–2030. Under current policies, New Zealand faces a significant gap to meet its 2030 NDC.

Bridging that gap solely through domestic action was never intended and remains infeasible without severe disruption. Opting not to meet the 2030 NDC would worsen global emission outcomes, undermine multilateral governance, raise serious reputational risks, weaken global cooperation, and impact international relations and trade agreements. Supporting some level of offshore mitigation while maintaining ambitious domestic decarbonisation would enable New Zealand to deliver its committed global climate contribution, which goes beyond what is possible domestically. This would be consistent with principles of a just transition.

New Zealand's position is not unique. Many countries face challenging gaps to reach their 2030 NDCs. And even if all countries were successful with their own NDCs, a huge gap would remain in global action needed to limit temperature rises to 1.5°C. It is the responsibility of all countries to acknowledge and address that gap.

## **This paper examines how offshore mitigation can improve climate outcomes**

This paper outlines the context, challenges, and enablers for international cooperation through offshore mitigation as part of New Zealand's contribution under the Paris Agreement. The paper shifts from global to local scales as follows:

- Part 1 explains the global gaps in mitigation, climate finance, and equity and outlines how cooperation under the Paris Agreement can help address these gaps. It also explores how other countries are already using Article 6.2 of the Paris Agreement.
- Part 2 reviews New Zealand's climate change commitments and discusses its domestic mitigation gap.
- Part 3 looks at New Zealand's options under Article 6 and identifies four competing mindsets that are paralysing progress on offshore mitigation: *Dismissive Detractors*, *Least-Cost Compliance*, *Carbon Colonialism*, and *Domestically Driven*. It demonstrates how a fifth mindset, *Climate Cooperation*, could overcome the divide, helping New Zealand to deliver what it has promised to do under the Paris Agreement in ways that support integrity, cost-effectiveness, and equity. It concludes with next steps for the Government.

This paper does not recommend how much New Zealand should pay for offshore mitigation or how the costs should be distributed. Those are important considerations for future research.

## **This paper was informed by research, interviews, and dialogue**

This paper builds on previous research by Motu Research in collaboration with the Environmental Defense Fund (United States), Centro Cambio Global UC (Chile), and Perspectives Climate Group (Switzerland) (see <https://climateteams.org/>). It was informed by desktop research, interviews, and discussions through Motu's 2023 International Climate Cooperation Dialogue, which brought together a small group of cross-sector stakeholders participating in their individual capacity. This paper is intended to help inform decision-making and action on climate change in New Zealand and other countries looking to achieve collective gains through cooperation under Article 6 of the Paris Agreement.





## Part 1:

# Global cooperation on climate change

## The global gaps

Collectively, countries are far off track to achieve the global temperature goal under the Paris Agreement: limiting temperature rises to well below 2°C relative to pre-industrial levels and pursuing efforts for 1.5°C. This was reinforced under the first global stocktake of progress under the Paris Agreement which was completed in late 2023 (UNFCCC Secretariat, 2023). The importance of the 1.5°C goal has been demonstrated in multiple scientific assessments (IPCC, 2018, 2023).

Changing course will require bridging three critical, interrelated gaps.

### The first gap is in global mitigation

The global mitigation gap is evident in the implementation as well as the setting of existing targets. Collective current policies (as of late 2023) put the world on a pathway to temperature rises of 3°C above pre-industrial levels. The 2030 NDCs under the Paris Agreement would reduce this to 2.5–2.9°C. On a cost-effective pathway consistent with a rise of 1.5°C, global net emissions must be reduced by 42% by 2030 relative to 2019 levels (United Nations Environment Programme, 2023).

Calculations by the Environmental Defense Fund (EDF) based on modelling by the European Commission's Joint Research Centre (Keramidas et al., 2021) suggest that developing countries hold over three-quarters of the cost-effective mitigation needed in 2030 under 1.5°C pathways.<sup>2</sup>

### The second gap is in climate finance

Maintaining a pathway for 1.5°C will require meeting global climate finance needs estimated at US\$8.5 trillion per year by 2030, and US\$10 trillion per year over 2031–2050. This is a huge increase from 2020/2021 levels of US\$1.3 trillion per year (Climate Policy Initiative, 2024).<sup>3</sup> This must be met from a mix of public and private sources. Much of this needs to flow to low- and middle-income countries.<sup>4</sup>

Both the public and private sectors have been slow to mobilise climate finance. This is partly because of the capacity, technology, and infrastructure gaps as well as investment risks and returns in low- and middle-income countries. However, political will in high-income countries is a significant factor.

In 2009, developed countries committed to mobilise US\$100 billion per year in climate finance to developing countries by 2020, but this was not achieved until 2022 (OECD, 2024).<sup>5</sup> Under the Paris Agreement, the climate finance goal was extended through to 2025 and setting a new goal is on the agenda for COP29 in November 2024. Countries have yet to develop a clear framework for defining and monitoring climate finance at a global level.

### The third gap is in equity

Human-induced climate change is a collective problem that requires collective solutions. All of life depends on atmospheric stability, but impacts from atmospheric changes are produced and experienced unevenly. All countries are part of the problem to some degree; however, their respective contributions and capabilities to respond vary widely.

No single country acting alone can prevent dangerous climate change. Climate change brings new meaning to the concept of global interdependence and underscores the deep inequality that persists. Chancel et al. (2023) shows that the bottom 50% of the world's population contributes only 12% to global emissions but will be exposed to 75% of relative income loss in 2030 due to climate change.<sup>6</sup> Modelling by Kotz et al. (2024) similarly demonstrates that committed climate damages through 2050 are expected to be significantly larger in countries with smaller historical cumulative emissions and in regions with lower current income per capita.

## Cooperation under Article 6

Article 6 of the Paris Agreement recognises countries may choose to cooperate in implementing their NDCs to allow for higher ambition and promote sustainable development and environmental integrity. Article 6 presents two market approaches (defined in Articles 6.2 and 6.4) and one non-market approach (defined in Article 6.8):

- **Article 6.2:** Cooperative approaches through government agreements (i.e. bilateral or multilateral) involving the transfer of internationally transferred mitigation outcomes (ITMOs)
- **Article 6.4:** A supervised (i.e. centrally governed) crediting mechanism that promotes mitigation and sustainable development through ITMOs; this could involve public and private entities authorised by participating governments
- **Article 6.8:** A framework to promote non-market approaches in the context of sustainable development and poverty eradication, including mitigation, adaptation, finance, technology transfer, and capacity building.

### The Article 6 rulebook was negotiated to deliver positive outcomes

Under the Article 6 rulebook, countries agreed to prevent double counting of mitigation transfers that can count toward NDCs or other international mitigation purposes. This is achieved by requiring corresponding adjustments (CAs) under which the volume of ITMOs is added to the seller's greenhouse gas inventory and subtracted from that of the buyer. Distinctive rules apply to the two market approaches.<sup>7</sup>

When done with integrity, the use of market approaches under Article 6 could reduce global emissions beyond what is economically feasible under domestic-only NDCs. Modelling studies have suggested the collective cost of meeting the 2030 NDCs under the Paris Agreement could be reduced 40–60% through the full use of the Article 6 market mechanisms (United Nations Environment Programme, 2021). Recent research (Piris-Cabezas et al., 2023) suggests that international market cooperation under Article 6 and REDD+<sup>8</sup> could deliver twice the amount of global mitigation relative to current (2021) Paris pledges over 2020–2035 with no increase in costs.

## Focus on Article 6.2

It will take time to design and implement the new mechanism under Article 6.4, but Article 6.2 is already operational. While some of the Article 6.2 agreements developed to date reflect approaches that initially evolved under the Kyoto Protocol framework, others are breaking new ground. At a high level, approaches can be distinguished by whether they are:

- bilateral, minilateral,<sup>9</sup> or multilateral
- led by governments or by private-sector (or other) entities in partnership with governments
- implemented at the project, sectoral, or national level or through an emissions trading system.

According to the UNEP Copenhagen Climate Centre (2024), there is a growing pipeline of bilateral projects and activities under Article 6.2.<sup>10</sup> As of 3 September 2024, there were 90 bilateral agreements supporting 141 projects between 11 different buyer countries and 48 host countries. Japan's Joint Crediting Mechanism (JCM) accounts for 119 of the projects. The Appendix provides examples of Article 6.2 agreements to date. The first issuance of ITMOs under Article 6.2 occurred in December 2023 under the Thailand–Switzerland agreement for the Bangkok E-Bus Programme. This totalled 1,916 ITMOs covering the period from October to December 2022.

## Article 6 and the voluntary carbon market

Voluntary carbon market (VCM) mechanisms enable entities to buy carbon credits for use outside government compliance mechanisms. Note a key distinction in defining VCM credits is their use by buyers for purposes beyond government compliance. The mitigation underlying VCM credits may have been generated inside or outside government policy frameworks or market mechanisms. VCM credits have been used conventionally for offsetting to help meet buyers' own emissions reduction targets or make carbon neutral claims. VCM credits issued outside government policy frameworks typically have been certified by independent organisations and transactions managed through non-government registries.<sup>11</sup>

International efforts are underway to develop consistent, high-integrity standards for voluntary mitigation, clarify how it is accounted for relative to the Article 6 framework, and support credible voluntary claims.<sup>12</sup> At this early stage of Article 6, various kinds of voluntary claims can be made using VCM credits, either with or without CAs from host countries, provided that status is reported transparently.<sup>13</sup> Trading of mitigation carrying CAs with unilateral authorisation has begun (Collins, 2023; Gibson & Szabo, 2024; Manuell, 2024a, b).







## **Part 2: New Zealand's climate change commitments**

### **International commitments**

New Zealand has been a consistent, strong supporter of international cooperation on mitigation. Given New Zealand contributes less than 0.2% of global emissions, it is dependent on the rest of the world to act to prevent dangerous levels of climate change. New Zealand's small size does not exempt it from contributing its share of global mitigation, but it does reinforce its powerlessness to change global climate change outcomes acting alone. It also provides the motivation to take a strong role in supporting global progress through multilateral frameworks.

#### **New Zealand's NDC is evolving over time**

New Zealand's initial NDC, confirmed in 2016, was to reduce net emissions 30% below 2005 gross emissions and take responsibility for cumulative emissions during 2021–2030 (New Zealand Government, 2016). This had followed the 2015 submission of an intended NDC that was provisional on negotiated outcomes for land-sector rules and access to carbon markets (New Zealand Government, 2015).

In 2021, New Zealand submitted a revised 2030 NDC to reduce net emissions 50% below 2005 gross emissions,<sup>14</sup> resulting in a provisional NDC budget over the period of 571 million tonnes of carbon dioxide equivalent<sup>15</sup> (Mt CO<sub>2</sub>e) (New Zealand Government, 2021). In both cases, the Government stated it would meet the NDC through a combination of domestic emissions reductions, domestic removals, and offshore mitigation. The provisional NDC budget will be adjusted over time to reflect changes in inventory methodologies.<sup>16</sup> The Government will report New Zealand's progress to date under its 2030 NDC when it submits its first biennial transparency report to the UNFCCC by the end of 2024.

Under the Paris Agreement, future NDCs will cover five-year periods and must show progressive ambition. New Zealand is expected to announce its second NDC covering 2031–2035 by February 2025.

### **New Zealand has committed to climate finance**

Under the Paris Agreement, New Zealand committed to provide climate finance of NZ\$1.3 billion over 2022–2025 to developing countries with a strategic focus on the Pacific and on adaptation (Ministry of Foreign Affairs and Trade, 2022).<sup>17</sup> The Government has signalled its intention to commit to post-2025 climate finance in the context of COP29 in November 2024.

### **New Zealand cooperates directly with other countries**

New Zealand has bilateral cooperation agreements on climate change with other countries. Several of these include cooperation on international carbon markets. As recent examples, in April 2024, the Government announced commitments to exploratory efforts supporting further bilateral cooperation on climate change mitigation with Singapore, Thailand, and the Philippines (Luxon & Lee, 2024; Luxon & Marcos, Jr., 2024; Luxon & Thavisin, 2024). While each of these potentially could be relevant to Article 6 activities, the joint statement with the Philippines was the only one to mention Article 6 explicitly.

### **New Zealand's trade agreements address climate action**

Climate change issues also feature in New Zealand trade agreements, including the Comprehensive and Progressive Agreement for Trans-Pacific Partnership,<sup>18</sup> the New Zealand–United Kingdom Free Trade Agreement,<sup>19</sup> the New Zealand–European Union Free Trade Agreement,<sup>20</sup> and the Agreement on Climate Change, Trade and Sustainability.<sup>21</sup> Embedded in these trade agreements are statements reinforcing parties' international climate change commitments, promoting environmental integrity, and encouraging cooperation for mutual benefit. It is important to note that these agreements do not strengthen or modify New Zealand's Paris Agreement commitments.

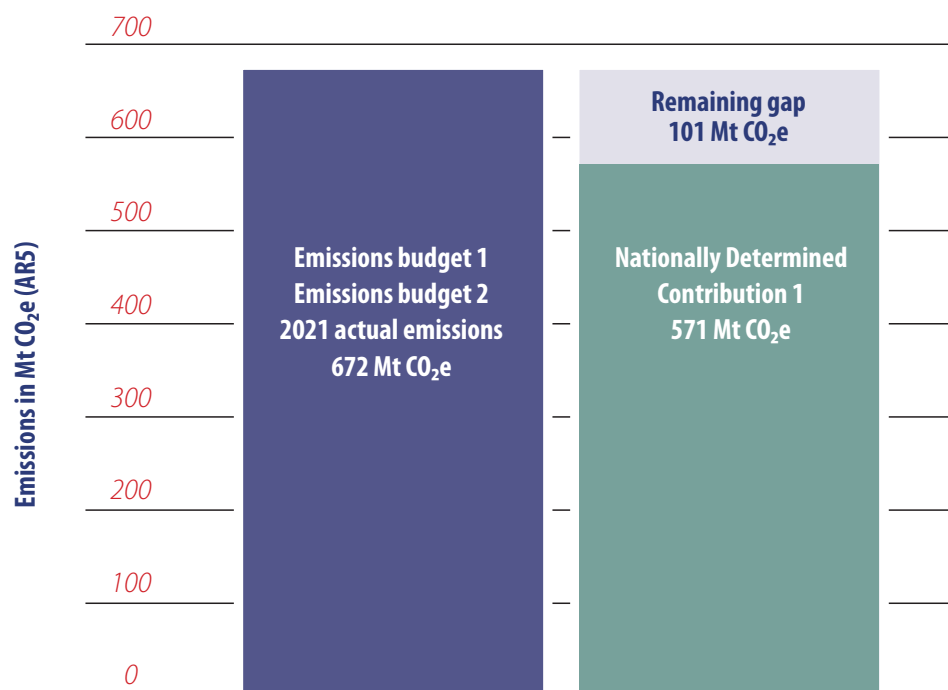
## **Domestic contribution**

Under the Climate Change Response Act 2002 (CCRA), New Zealand has a 2050 emissions reduction target supported by five-yearly<sup>22</sup> emissions budgets and emissions reduction plans. The 2050 target is to reduce biogenic methane emissions<sup>23</sup> by at least 24–47% below 2017 levels (including a reduction of at least 10% by 2030) and achieve net-zero emissions for all other gases. This target is to be sustained indefinitely post-2050. Emissions budgets are to be achieved primarily through domestic action. Within the CCRA framework, the ceiling for New Zealand's domestic net emissions under the 2030 NDC will be defined by the sum of 2021 net emissions and the first two emissions budgets for 2022–2025 and 2026–2030. Under current policy settings, this equates to 672 Mt CO<sub>2</sub>e (Ministry for the Environment, 2024a).

### **New Zealand faces a gap between domestic emissions budgets and the 2030 NDC**

The Government is projecting a significant gap between the 2030 NDC and actual domestic net emissions over 2021–2030. The size of this gap remains uncertain, but it could be about 100 Mt CO<sub>2</sub>e.<sup>24</sup> Government estimates for the cost per tonne of offshore mitigation range from central estimates of NZ\$41 (NZ\$38–43) for emerging and developing economies, NZ\$95 (NZ\$89–102) for established carbon markets, and NZ\$227 (NZ\$212–243) for advanced economies. Combining volume and price scenarios produces a range in total costs for offshore mitigation from NZ\$3.3 billion to NZ\$23.7 billion over 2021–2030 (The Treasury & Ministry for the Environment, 2022).

**Figure 1: The mitigation gap to reach New Zealand's 2030 NDC**



Source: Ministry for the Environment (2024a). Note the provisional NDC budget of 571 Mt CO<sub>2</sub>e is subject to revision.

**Successive governments intended for offshore mitigation to help bridge the gap**

This gap was anticipated. At the time the NDC was first developed in 2015, the National-led coalition Government was aware from modelling that up to 210 Mt CO<sub>2</sub>e could need to be obtained offshore at an estimated price of NZ\$46 per tonne, totalling roughly NZ\$9.7 billion (Infometrics, 2015).<sup>25</sup> When the NDC was revised by the Labour-led coalition Government to a more ambitious level in 2021, the projected size and potential costs of the gap were assessed by officials. Acquiring offshore mitigation was explicitly factored into the Government’s decision on the revised NDC (Shaw, 2021).

It is possible – and highly desirable – to do further mitigation domestically beyond the current emissions budget pathway through and after 2030 (Climate Change Commission, 2024a). However, analysis by both the Government and the Climate Change Commission suggests that bridging the full gap to meet the 2030 NDC domestically would contribute to severe social and economic costs and lead to an unjust transition (Climate Change Commission, 2021; Shaw, 2021, 2023).

Clearly, important needs and opportunities exist for New Zealand to support offshore mitigation as a means of helping bridge both the immediate national gap to reach its 2030 NDC and the longer-term global gap to achieve the temperature goal of the Paris Agreement.







## **Part 3: Moving forward under Article 6.2**

### **Government options for offshore mitigation**

Since 2015, successive New Zealand governments have not entered into any agreements to obtain offshore mitigation under Article 6 or included appropriations or liabilities for offshore mitigation in their budgets. Recent analysis by McGuinness & Ng (2024) has challenged the Government's current approach to budgeting for mitigation obligations under the Paris Agreement, with a focus on offshore mitigation. To improve transparency and decision-making under the 2030 NDC, they recommended the Government report both a financial liability covering commitments to purchase offshore mitigation that have accrued to date under the 2030 NDC (from 1 January 2021 to the present) and a contingent liability covering future commitments to purchase offshore mitigation (through 31 December 2023) in the annual budget statements.<sup>26</sup>

#### **Governments have taken initial steps toward Article 6 participation**

Previous governments have laid some policy groundwork for participation in Article 6. In 2019, the Government developed a framework for international carbon market cooperation with principles for ensuring the value and integrity of offshore mitigation applied under the Paris Agreement (Ministry for the Environment, 2019). In 2022, the Government identified three potential mechanisms under Article 6 that could be used to help meet the 2030 NDC (The Treasury & Ministry for the Environment, 2022):

1. direct investment in offshore emissions reductions activities (e.g. through bilateral or multilateral agreements)
2. investment in international carbon funds (e.g. the Asian Development Bank's Climate Action Catalyst Fund)
3. purchasing from other established emissions trading schemes (ETS), including linking the New Zealand Emissions Trading Scheme (NZ ETS) with these schemes.



In mid-2023, the Government approved an NDC strategy which prioritised domestic action to help meet the 2030 NDC. The balance was to be achieved through offshore mitigation supporting sustainable development outcomes and resilience in the Asia-Pacific region. The Government signalled intentions to reduce reliance on international cooperation to meet New Zealand’s future NDCs (Shaw, 2023). As of this writing, the new Government (elected in 2023) had not yet announced its policy on offshore mitigation.

**Both country agreements and international funds are viable options for offshore mitigation**

New Zealand has the capability to develop successful bilateral and multilateral agreements under Article 6.2 but has not progressed any to date. Joining multilateral initiatives in the form of international carbon funds or other approaches could help reduce complexities and transaction costs for New Zealand. In this case, governance boards or other oversight mechanisms would determine the scope and integrity of funds’ eligible activities. New Zealand could still exercise discretion over which mitigation it chose to support from the options available.

**Linking the NZ ETS with other systems would be challenging**

Purchasing mitigation through another jurisdiction’s ETS – with or without ETS linking – has the appeal of involving a clearly defined and monitored source of supply. This would operate under Article 6.2. Linking the NZ ETS to other systems with NZ ETS participants as the direct buyers would add significant complexity to procuring offshore mitigation and could interfere with the proper functioning of the NZ ETS market. The alternative would be for the New Zealand Government to obtain the mitigation, either from another government operating an ETS or by standing as a buyer in that jurisdiction’s ETS market. Placing the full cost of purchasing offshore mitigation only on NZ ETS sectors – whether through NZ ETS surrender obligations or redirection of a share of NZ ETS auction revenue – could constitute a disproportionate burden relative to other emitting sectors and taxpayers.

At the international level, accounting for ETS linking under Article 6.2 using CAs could be managed but would require careful consideration (Hynes & Schneider, 2023). A significant consideration here is that the most mature and stable ETSs that offer the best outlook for linking are in other higher-income countries. Offshore mitigation through that channel would not deliver sustainable development benefits in the lower-income countries that need them the most and would involve relatively high abatement costs.

**The Government could facilitate voluntary uses of offshore mitigation**

While Article 6.2 agreements operate between governments, it would be possible for the New Zealand Government to make offshore mitigation available to New Zealand entities wishing to use it for voluntary purposes, either to meet their own targets or to contribute toward meeting New Zealand’s NDC beyond the scope of emissions budgets. This is option is being used by Switzerland and Singapore to help regulated entities meet their compliance commitments – which is a different context from voluntary carbon markets.



## Public mindsets on offshore mitigation

For all participating countries, offshore mitigation agreements under Article 6.2 pose technical, procedural, and institutional challenges. A key technical challenge is determining the potential for additional mitigation beyond the host country’s NDC. International rulemaking has been slow, with greater impact on Article 6.4 than Article 6.2. Both host and buyer governments need to build the capacity to set enabling domestic policies and negotiate and implement offshore mitigation agreements that will safeguard environmental integrity, sustainable development, human rights, and the rights of indigenous peoples.

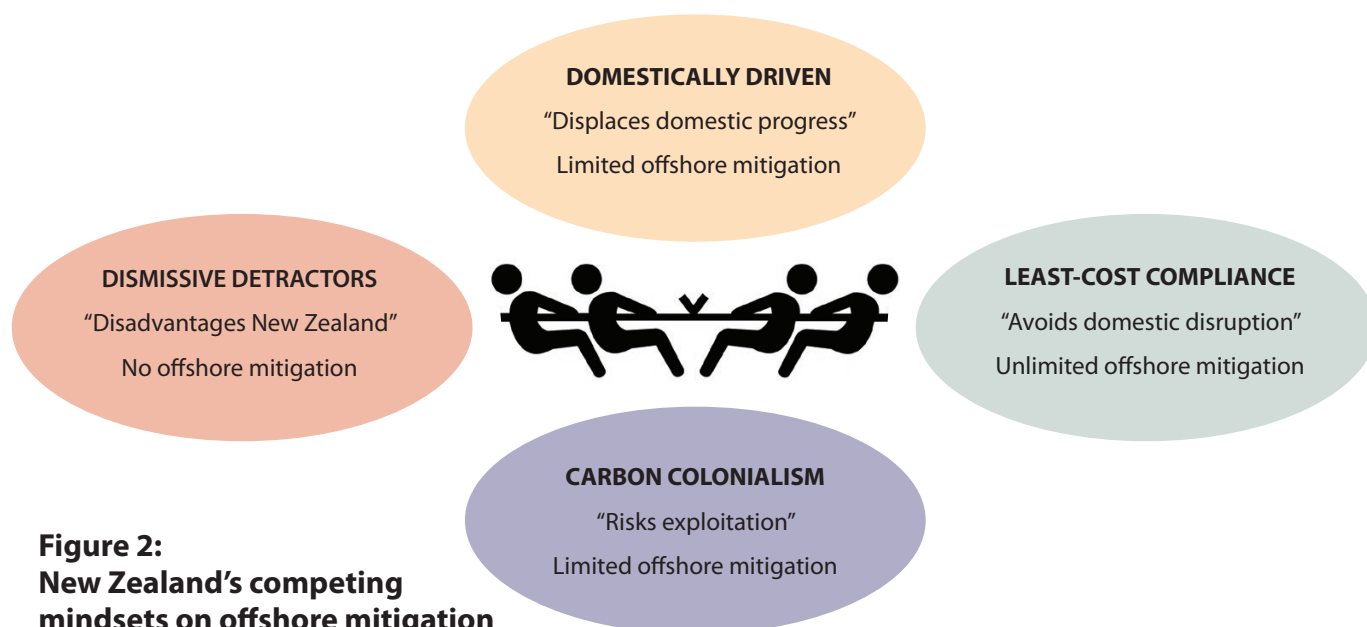
Multiple technical and capacity building initiatives are underway internationally to support Article 6 activities.<sup>27</sup> The growing pipeline of government agreements under Article 6.2 demonstrates that these challenges are being overcome, offering insights and prototypes for designing future agreements.

### In New Zealand, public opposition is a key barrier to progressing offshore mitigation

Alongside these challenges lies a further barrier that is proving hard to overcome in New Zealand’s context: securing public support for funding offshore mitigation. Issues of political economy lie at the heart of making international cooperation work under Article 6.2 and they will need to be better understood and addressed for progress to be made. Through research and analysis informed by stakeholder dialogue and interviews, we have identified five high-level mindsets across New Zealand’s public discourse on offshore mitigation. We have named these mindsets *Dismissive Detractors*, *Least-Cost Compliance*, *Carbon Colonialism*, *Domestically Driven*, and *Climate Cooperation*. These mindsets and their underlying arguments are detailed in Table 1.

### Four competing mindsets

The first four mindsets in Table 1 currently dominate New Zealand’s public discourse on offshore mitigation. The *Dismissive Detractors* mindset, which supports zero offshore mitigation, reflects the lowest concern about meeting New Zealand’s NDC. Both the *Carbon Colonialism* and *Domestically Driven* mindsets support only limited offshore mitigation because of perceived risks to global equity and domestic progress, respectively. In contrast, the *Least-Cost Compliance* mindset supports unlimited offshore mitigation to avoid domestic disruption, and this intensifies opposition from those already resistant to offshore mitigation. These four competing mindsets have paralysed New Zealand’s progress to date on offshore mitigation under Article 6.2 (see Figure 2).



**Figure 2:**  
New Zealand’s competing  
mindsets on offshore mitigation



**Table 1: New Zealand's five mindsets on offshore mitigation**

MINDSET	SAMPLE ARGUMENTS
<p><b>Dismissive Detractors:</b> Funding offshore mitigation disadvantages NZ.</p> <p>» No offshore mitigation</p>	<ul style="list-style-type: none"> <li>• NZ is too small to make a difference on climate change.</li> <li>• The NDC demands more than NZ's "fair share" of global effort.</li> <li>• Failing to meet the NDC would be better than funding "dodgy" mitigation offshore.</li> <li>• The money would be better spent in NZ on other priorities.</li> </ul>
<p><b>Least-Cost Compliance:</b> Funding offshore mitigation avoids domestic disruption to meet the NDC.</p> <p>» Unlimited offshore mitigation</p>	<ul style="list-style-type: none"> <li>• Global least-cost outcomes are economically efficient.</li> <li>• NZ should align its mitigation costs with major trading partners.</li> <li>• NZ's producers should not face high mitigation costs if they are relatively efficient.</li> </ul>
<p><b>Carbon Colonialism:</b> Funding offshore mitigation risks exploiting vulnerable countries and communities.</p> <p>» Limited offshore mitigation</p>	<ul style="list-style-type: none"> <li>• Trading emissions "commodifies" the climate.</li> <li>• It is unjust to buy "low-hanging fruit" from lower-income countries.</li> <li>• Past crediting mechanisms have fallen short on sustainable development, human rights, and the rights of indigenous peoples.</li> </ul>
<p><b>Domestically Driven:</b> Funding offshore mitigation risks displacing domestic progress.</p> <p>» Limited offshore mitigation</p>	<ul style="list-style-type: none"> <li>• NZ should reduce its own emissions first and foremost.</li> <li>• More mitigation offshore will mean less mitigation and fewer co-benefits at home.</li> <li>• NZ should not risk dependence on other sovereign states to help meet its NDC.</li> <li>• Offshore mitigation would produce less climate benefit than domestic action.</li> </ul>
<p><b>Climate Cooperation:</b> Funding offshore mitigation boosts NZ's global climate contribution beyond what is possible at home.</p> <p>» Strategic balance between domestic and offshore mitigation</p>	<ul style="list-style-type: none"> <li>• Cooperating to meet climate targets strengthens multilateral frameworks and creates new market opportunities.</li> <li>• Accelerating domestic mitigation delivers valuable outcomes in NZ.</li> <li>• Accelerating offshore mitigation contributes to global security, equity, and prosperity.</li> <li>• Combining domestic and offshore mitigation improves global mitigation outcomes.</li> </ul>

## Reasons for public resistance

Recent polling (Ipsos, 2023) shows that 80% of New Zealanders are concerned about the impacts of climate change that are being seen both at home and overseas. Compared to the rest of the world, New Zealanders are more likely to agree that we can't fully tackle climate change unless all countries work together (78% versus 75%), it is right that developed countries who have produced the most carbon emissions should pay more to solve the problem (69% versus 62%), and developed countries should do more to combat climate change (76% versus 70%).

There is a striking disconnect between New Zealanders' strong support for the outcomes being sought by international cooperation under Article 6 and resistance toward its actual use. Our research and analysis suggest four key reasons for this.

### The first reason is slow progress with domestic mitigation

Although previous and current governments endorsed domestic emissions budgets through 2035, updated modelling suggests that under existing and proposed policies, New Zealand is at risk of missing the second emissions budget (2026–2030) and off track to meet the third emissions budget (2031–2035) and 2050 target (Climate Change Commission, 2024b; Ministry for the Environment, 2024a). This modelling is uncertain – but so too has been consistent government commitment to mitigation policies that will have a meaningful impact across the economy.

Even people who might otherwise support some level of offshore mitigation would likely prefer to “get New Zealand's own house in order first” before venturing offshore. However, the lead time necessary to negotiate agreements under Article 6.2 and mobilise additional mitigation in host countries means that New Zealand will need to focus on both domestic and offshore mitigation at the same time to deliver on its international commitments.

### The second reason is a focus on immediate costs

Conventionally, Governments, emitters, and taxpayers have tended to focus on the immediate costs and not the full long-term benefits of funding domestic and offshore mitigation compared to other funding demands. It is true that all expenditure has an opportunity cost that must be considered by decision-makers. Unlike many other spending options, the direct and indirect payoffs from funding mitigation accrue for decades and even centuries, across public and private entities and economic sectors, both within and beyond New Zealand. Those payoffs are not valued strategically under budget assessments that assume short time horizons and narrow boundaries, apply inappropriately high discount rates, and overlook co-benefits that cannot be monetised. Furthermore, the uneven distribution of those payoffs politicises decisions about the allocation of mitigation costs, given an absence of public consensus about who should pay and why.

The fundamental consideration here is that the New Zealand Parliament ratified the Paris Agreement because it satisfied a national interest analysis (Ministry for the Environment, 2016). Accordingly, New Zealand needs to scale its mitigation funding to deliver on its targets and decide who should bear the costs. Both domestic and offshore mitigation could be considered as essential and complementary parts of an equitable global climate contribution from New Zealand that serves both national and global interests.

### **The third reason is a fear of repeating past experience**

Under the Kyoto Protocol framework, New Zealand used high volumes of low-integrity and low-cost offshore mitigation to help meet its international targets with the goal of least-cost compliance. From 2008 to mid-2015, participants in the NZ ETS could use unlimited units from Joint Implementation and Clean Development Mechanism projects to meet their ETS obligations. As a result, the domestic market reflected low international emissions prices. In the absence of a binding domestic limit or stringent domestic price incentive, New Zealand's gross emissions changed little for over a decade.

The questionable climate and sustainable development benefits of offshore mitigation under the Kyoto Protocol mechanisms alongside domestic inaction pre-2021 damaged New Zealand's international reputation and contributed to widespread public scepticism of offsetting as an effective climate solution (Leining et al., 2019; Simmons & Young, 2016). Importantly, Article 6 creates an opportunity to improve on past experience within the more comprehensive framework of the Paris Agreement.

### **The fourth reason is siloed thinking about international cooperation**

When it comes to offshore mitigation, decision-makers typically have overlooked the nuanced thinking that underpins New Zealand's long-standing bipartisan commitment to international aid and trade. Through aid, New Zealand acts cooperatively and sends funding offshore to reduce poverty and contribute to a more secure, equitable, and prosperous world (Ministry of Foreign Affairs and Trade, n.d.-f). Through trade, New Zealand recognises its reliance on strong commercial links with other countries, multilateralism, and the rule of law to deliver sustainable and inclusive economic development (Ministry of Foreign Affairs and Trade, n.d.-e).

Given the similarities, it would seem logical for this cooperative spirit to extend to New Zealand's climate action under its NDC. Instead, international cooperation through mitigation transfers has been managed primarily as an instrument of target compliance rather than development support for lower-income countries.

### **The four dominant mindsets reflect legitimate policy dimensions**

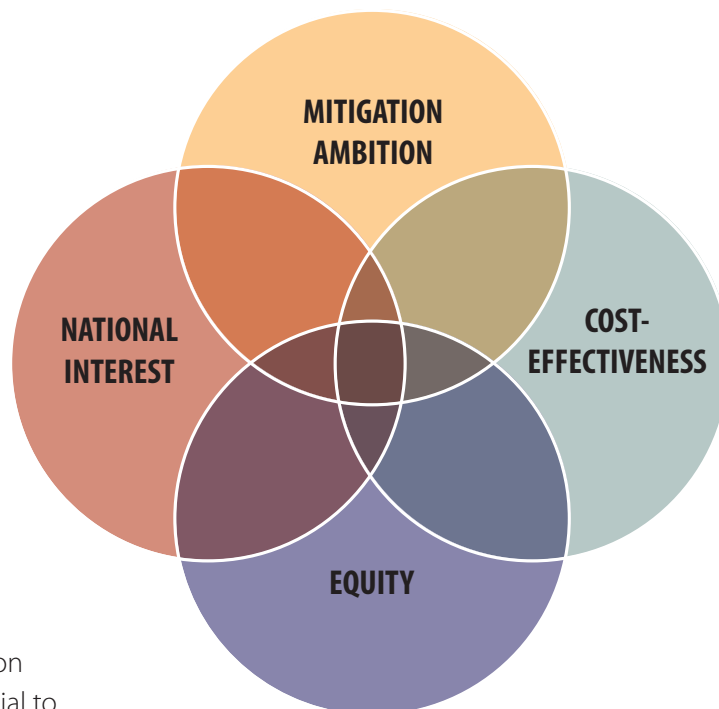
The four dominant mindsets reflect key dimensions that legitimately belong in decision-making on offshore mitigation. As shown in Figure 3 below, these include mitigation ambition, cost-effectiveness, equity, and national interest.

Each mindset applies different perspectives and priorities across these dimensions. For example:

- offshore mitigation is considered cost effective under the *Least-Cost Compliance* mindset but not the *Dismissive Detractors* mindset because respective proponents reach different conclusions about what best serves national interests
- the *Carbon Colonialism* mindset prioritises the potential risks to global equity above the potential gains to global equity from funding offshore mitigation
- the *Domestically Driven* mindset prioritises cost-prohibitive domestic mitigation over more cost-effective global mitigation, even if the latter could do more to bridge the global mitigation gap for 1.5°C.



**Figure 3:**  
**Key dimensions for decision-**  
**making on offshore mitigation**



### **The shift to *Climate Cooperation***

The *Climate Cooperation* mindset is distinctly underrepresented in current public discourse on offshore mitigation. However, it has the potential to overcome the divide among dominant mindsets by delivering an effective and equitable balance between domestic and offshore mitigation in ways that serve both national and global interests. It offers practical solutions to address the concerns behind each of the four dominant mindsets and could deliver substantial gains as a result. These are elaborated in the next section.



## Enablers for actioning offshore mitigation

As the three global gaps widen and the compliance date for the 2030 NDC draws nearer, there is even greater urgency for countries such as New Zealand to move at pace with international cooperation under Article 6.2. Overcoming the barriers to implementation will require addressing the legitimate concerns behind the four dominant mindsets and demonstrating how offshore mitigation will work in practice.

### Addressing public concerns

#### Outcomes should serve the national interest

To counter the arguments of *Dismissive Detractors*, the Government will need explain the benefits to New Zealanders of funding offshore mitigation to help meet NDCs. Climate change is a direct threat to New Zealand's environment, economy, and society, as well as a threat multiplier for other leading issues that matter to New Zealanders.<sup>28</sup> It also threatens New Zealand's Pacific neighbours and broader trade partners and allies. Meeting New Zealand's targets would improve climate outcomes, support its international credibility, and reinforce multilateral frameworks on which its security depends. It could also create new market opportunities and strengthen trade relations.

Conversely, failing to meet its targets would worsen climate outcomes and could impact negatively on New Zealand's international reputation and trade relations. It would also set New Zealand back when it comes to meeting future NDCs with progressive ambition.

Offshore mitigation can produce outcomes that are similar to those from international aid and trade. New Zealand can point to a long and proud history of development support for lower-income countries and the same kinds of rationales should apply to helping them decarbonise: improving global security, equity, and prosperity because that is in everyone's interests.

#### Both co-benefits and costs of mitigation should be recognised

To avoid the pitfalls of *Least-Cost Compliance*, the Government will need to recognise the co-benefits alongside the costs of both domestic and offshore mitigation. Offshore-only mitigation would deprive New Zealand of potential high-value and long-term returns on domestic mitigation investment.<sup>29</sup> New Zealand would risk being left behind in the global energy, industrial, and agricultural transitions, affecting its competitiveness and trade relations. New Zealand producers are already feeling increasing pressure to demonstrate their climate credentials to secure financing and trade deals in key markets (Chapman Tripp, 2024).<sup>30</sup>

The quality, costs, and co-benefits of both domestic and offshore mitigation can vary widely by source and activity. To meet its own interests as well as those of host countries, New Zealand should seek to secure high value for money from funding both domestic and offshore mitigation, not simply the lowest cost per tonne of emissions reduced.



### **Offshore mitigation should be subject to strong standards and safeguards**

To address *Carbon Colonialism* concerns, the Government will need to adopt strong standards and safeguards for offshore mitigation. This has been widely acknowledged in government policy documents, but putting it into practice may prove challenging given the diversity of NDCs across developing countries and the uncertainties surrounding the future development of the new mechanism under Article 6.4.

The Government must ensure that activities used by host countries to generate mitigation transfers deliver genuine benefits to the climate, are consistent with principles of sustainable development, and uphold international conventions for human rights and the rights of indigenous peoples. The negotiation process under Article 6.2 creates an opportunity for hosts and buyers to work together to enhance the value of their agreements and incorporate transparent reporting requirements and other safeguards for host-country outcomes. This incentivises host-country mitigation with greater co-benefits.

In the context of New Zealand's historical responsibility for emissions and relative wealth, supporting lower-income countries to accelerate mitigation and sustainable development is consistent with widely accepted principles of equity. Host countries can be expected to use their low-cost mitigation opportunities to meet their own unconditional NDCs and direct the incremental funding mobilised by Article 6 toward mitigation activities with greater costs.

When developing mitigation agreements, New Zealand should seek genuine partnerships that reflect host country priorities for mitigation and sustainable development and deliver positive outcomes for capacity building, technology transfer, labour markets, and community wellbeing.

### **New Zealand should stay on track with its own mitigation pathway**

To shift *Domestically Driven* mindsets, the Government will need to use offshore mitigation to complement, not displace, ambitious domestic mitigation. Global progress depends on using both in tandem while avoiding extremes. Domestic-only action at very high cost would not maximise New Zealand's global climate contribution or support a just transition domestically or internationally. A way forward lies in shifting the purpose and impact of offshore mitigation from a narrow view of "offsetting" (meaning substitution) to the expanded value of "boosting" (meaning augmentation).

Making this claim credible would require a demonstration of real progress and integrity to achieve the domestic mitigation that is technically and economically feasible under New Zealand's NDCs. This may be a precondition to interest by host countries in negotiating mitigation agreements. If buyers ask of hosts what buyers are failing to do themselves, hosts may rightfully refuse to oblige.

The Government would also need to demonstrate the tangible cooperation benefits of offshore mitigation and their alignment with outcomes that are similar to international aid and trade.

Further research would be useful to understand current public perceptions of offshore mitigation and identify factors that would increase public support.

Figure 4 illustrates the shifts in mindset enabling *Climate Cooperation*, and the associated gains.



**Figure 4: How *Climate Cooperation* overcomes the divide on offshore mitigation**

C L I M A T E C O O P E R A T I O N M I N D S E T				
Dimension	National interest	Cost-effectiveness	Equity	Mitigation ambition
Solution	Delivers the benefits to New Zealanders of funding offshore mitigation to help meet NDCs	Recognises the co-benefits alongside the costs of both domestic and offshore mitigation	Applies strong standards and safeguards for offshore mitigation	Uses offshore mitigation to complement, not displace, ambitious domestic mitigation
Gains	<ul style="list-style-type: none"> <li>• Boosts New Zealand’s credibility in multilateral and trade agreements</li> <li>• Creates new market opportunities</li> <li>• Contributes to global security, equity, and prosperity</li> </ul>	<ul style="list-style-type: none"> <li>• Boosts value for money from both domestic and offshore mitigation</li> <li>• Keeps New Zealand’s economy on track with decarbonisation</li> <li>• Positions New Zealand for future climate targets</li> </ul>	<ul style="list-style-type: none"> <li>• Boosts global equity outcomes</li> <li>• Accelerates global mitigation and sustainable development</li> <li>• Incentivises host-country mitigation with greater co-benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Boosts global mitigation outcomes</li> <li>• Supports a just transition domestically and internationally</li> <li>• Delivers mutual gains from cooperating with other countries</li> </ul>
Outcome	<b>Strategic balance between domestic and offshore mitigation</b>			

## Demonstrating how offshore mitigation will work

### **The Government should make policy and funding commitments**

To accelerate progress under Article 6.2, the Government should begin by making clear policy and funding commitments to offshore mitigation. This could involve formulating and publicly releasing a concrete international cooperation strategy supported by negotiation mandates and Crown appropriations for offshore mitigation. This is an urgent requirement so the public can understand the approach being used for offshore mitigation, officials can advance their work programme on mitigation agreements, and other governments can include New Zealand in their own assessments of potential partners under Article 6.2.

In making decisions on offshore mitigation, the Government must uphold its obligations to Māori under Te Tiriti o Waitangi.<sup>31</sup> Both policy and funding commitments could be phased over time to enable adaptive approaches, build confidence, and manage fiscal impacts. The Government should consider carefully how the costs of offshore mitigation should be distributed effectively and equitably. This will be essential for maintaining social license.

### **The Government should take a portfolio approach**

To manage risks and leverage resources, the Government should take a portfolio approach supported by partnerships and pilot initiatives. New Zealand has a large gap to meet its 2030 NDC, and limited resources to do it. Building a diverse portfolio of sources across different approaches and multiple host countries could be used to hedge risks around the supply and cost of offshore mitigation.

For a small country like New Zealand, partnering with other buyer countries to negotiate agreements could generate further cooperation benefits by reinforcing the credibility of commitments and leveraging expertise and funding to deliver transformational mitigation at scale in host countries. Demonstrating proof of concept through pilot activities or an initial agreement could help with building government capacity as well as public support for broader efforts. Learning by doing with others could lower risks while producing valuable insights that could help inform the development of larger-scale mitigation agreements as well as future NDCs and other forms of international cooperation.

### **The Government should clarify the roles of the private sector and carbon markets**

To mobilise private-sector interest and investment in offshore mitigation, the Government should clarify the roles of the private sector and carbon markets in supporting mitigation transfers. Even when mitigation agreements under Article 6 operate between governments, private-sector actors could still play important roles in providing investment, assisting with contracting, and supporting technology transfer and market development. The private sector could serve as champions for undertaking offshore mitigation activities that build on existing relationships and produce genuine trade and other benefits for New Zealand.

Furthermore, Article 6 creates both challenges and opportunities for conventional compliance and voluntary carbon markets affecting the private sector. As discussed above, there would be numerous complexities to using the NZ ETS for the purpose of purchasing offshore mitigation to help meet the 2030 NDC. Government policy direction is required to mobilise the private sector in support of Article 6.

## Conclusion

The need to reduce global emissions is urgent so that the Paris Agreement’s temperature goal remains within reach. The magnitude of emissions reductions required is neither possible nor desirable through unilateral state action. More global progress could be made cost-effectively and equitably by supporting higher amounts of lower-cost mitigation in developing countries through international cooperation.

New Zealand bears responsibility for its past as well as ongoing emissions. It faces a considerable challenge to achieve its 2030 NDC and its progress will be scrutinised internationally through biennial transparency reports. Delivering on the 2030 NDC through domestic action alone would be highly disruptive to the New Zealand economy, threatening a just transition across sectors, regions, and communities. Failing to meet the 2030 NDC would short-change the climate system, and could raise significant risks for international relations and trade agreements.

New Zealand is also required to set future five-year NDCs that show progressive ambition, with the next one due in February 2025. The challenge – and opportunity – facing all countries is to apply the Paris Agreement’s call for progressive ambition to both domestic action and international cooperation.

Offshore mitigation under Article 6 can be used strategically to boost New Zealand’s global climate contribution beyond ambitious domestic mitigation, provided the challenges and risks are managed. Government action is needed as a matter of urgency to build a portfolio of supply options under Article 6.2 that will deliver genuine benefits to the climate while supporting sustainable development, human rights, and the rights of indigenous peoples.

Securing public support for funding offshore mitigation will depend on demonstrating real progress in domestic mitigation as well as the benefits of cooperating with other countries in ways that serve both national and global interests.





## Appendix: Examples of agreements under Article 6.2

The following are examples of agreements to date under Article 6.2. They have been selected to demonstrate the diversity of approaches being taken. A comprehensive list of agreements under Article 6.2 is available from: <https://unepccc.org/article-6-pipeline/>.

### Japan Joint Crediting Mechanism (JCM)

The JCM is a project-based bilateral offset crediting mechanism initiated by the Government of Japan to facilitate the diffusion of low-carbon technologies. The Government of Japan initiated discussions about the JCM with developing countries in 2011 (METI Agency for Natural Resources and Energy, 2021). As of April 2024, Japan had established JCM partnerships with 29 countries.<sup>32</sup> JCM credits are being used to close Japan's 2030 NDC gap of approximately 100 Mt CO<sub>2</sub>e (Government of Japan, 2024b). During 2016–2023, credits were issued for 739,153 tonnes of CO<sub>2</sub>e across 41 projects (Government of Japan, 2024a). As of February 2024, 72 projects had been registered as JCM projects within a broader portfolio of project activities (Government of Japan, 2024b).

### Switzerland–Ghana Bilateral Agreement

The Swiss Confederation is building a portfolio of bilateral agreements under Article 6.2 to obtain mitigation to help meet its 2030 NDC. Thirteen agreements were in place as of February 2024 (Swiss Federal Office for the Environment, 2024).<sup>33</sup> A third-party private organisation, the KliK Foundation,<sup>34</sup> has been mandated to identify, develop, and fund mitigation projects under these agreements using fees collected on motor fuel. It anticipates sourcing at least 20 Mt CO<sub>2</sub>e of offshore mitigation by 2030 (KliK Foundation, 2024). As one example, the Switzerland–Ghana Bilateral Agreement was signed in November 2020 (Swiss Confederation, 2020). Its provisions seek to ensure the additionality of credited mitigation with no double counting, address alignment with sustainable development, and exclude nuclear energy and carbon-intensive technologies or practices. As of February 2024, eight projects had been registered in Ghana involving green cooking, solar and biomass energy, electric vehicles, rice production, waste management, and green cooling. The annual emissions reductions from those projects were reported at about 1.3 Mt CO<sub>2</sub>e (KliK Foundation, 2024; UNEP Copenhagen Climate Centre, 2024).

### Climate Action Catalyst Fund (CACF)

The Climate Action Catalyst Fund (CACF) is a multiple-partner, partner-governed trust fund comprising governments. This fund was launched by the Asian Development Bank (ADB) in November 2021. The fund intends to catalyse voluntary cooperation under Article 6 with the aim of supporting ADB member countries to meet their NDC targets. The CACF is aiming to mobilise over US\$100 million from national and subnational governments or their agencies, as well as from public and private sector entities in ADB's member countries. Projects can either receive up-front payments or payments can be made on delivery (ADB, 2022).

### ETS linking between the European Union and Switzerland

The ETS linking agreement that was negotiated between the European Union (EU) and Switzerland and entered into force in 2020 contained provisions designed to enable recognition of net mitigation transfers within the framework of Article 6. The mechanism for doing so will be established by a joint committee with both Swiss and EU representatives. This had not been established as of November 2023 (Hynes & Schneider, 2023).

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## Endnotes

- 1 Gross emissions exclude the forestry sector and net emissions include the forestry sector.
- 2 EDF determined that 76% of emissions reductions needed in 2030 would efficiently occur in developing countries under modelled pathways compatible with limiting temperature increases to 1.5°C (S. Kerr, personal communication, March 18, 2023).
- 3 In this study, estimates of climate finance needs include “the investment required in climate mitigation and adaptation solutions as part of the broader capital requirements under a net zero scenario.”
- 4 For example, financial investment in clean energy is more predominant in high-income countries (Khanna et al., 2023).
- 5 Note that OECD’s methodology focused on specific types of climate finance flows from developed to developing countries (i.e. bilateral and multilateral public climate finance, climate-related officially supported export credits, and private finance mobilised by bilateral and multilateral public climate finance). This methodology differs from that applied by the Climate Policy Initiative, which assessed global climate finance needs under a different set of definitions.
- 6 This is based on recent annual emissions, not cumulative historical emissions.
- 7 The Article 6.4 mechanism is intended to deliver an “overall mitigation of global emissions” and (pursuant to Article 6.6) direct a “share of proceeds” towards the costs of administration and adaptation by the most vulnerable developing countries. Countries are “strongly encouraged” – but not required – to apply these provisions to Article 6.2 as well. At COP27 in 2022, countries introduced a distinction under Article 6.4 between (a) emissions reductions that are authorised by the host country for transfers to other countries with corresponding adjustments and that can count toward NDCs or other international mitigation purposes (“authorised A6.4ERs”); and (b) emissions reductions that do not carry corresponding adjustments and continue to count toward the host’s NDC (“mitigation contribution A6.4ERs”).
- 8 Reducing emissions from deforestation and forest degradation.
- 9 Minilateral initiatives involve smaller numbers of countries and can offer greater speed and flexibility in decision-making compared to multilateral initiatives.
- 10 For a current list, see <https://unepccc.org/article-6-pipeline/>.
- 11 Under the carbon market framework of the Kyoto Protocol, Kyoto units could be applied for either compliance or voluntary purposes and the international registry system guarded against double counting across regimes.
- 12 For example, see TSVCM (2021), Voluntary Carbon Markets Integrity Initiative (2023), and Integrity Council for the Voluntary Carbon Market (2024).
- 13 For example, see Gold Standard (2024), Verra (2024), and Voluntary Carbon Markets Integrity Initiative (2023).
- 14 This was equivalent to a reduction in net emissions of 41% below 2005 gross emissions using the same accounting method as applied to the initial NDC.
- 15 Carbon dioxide equivalent is a metric used to compare the warming impact of different greenhouse gases relative to carbon dioxide using global warming potentials (GWPs).
- 16 Note the NDC applies a modified target accounting approach for the land use, land-use change, and forestry sector which evolved from the Kyoto accounting methodology used in previous periods. It also includes net emissions from Tokelau.
- 17 The Government’s international climate finance strategy for this period provides for 50% of climate finance to go to the Pacific and 50% toward promoting adaptation.
- 18 This entered into force in December 2018 and involves New Zealand plus 11 other economies. The parties affirmed their commitments to implement the multilateral environmental agreements which they have ratified. The parties also acknowledged the need for collective action to transition to a low-emission economy and called for cooperation to address matters of joint or common interest, including market and non-market mechanisms (Ministry of Foreign Affairs and Trade, n.d.-b). See chapter 20 of the agreement.
- 19 This entered into force in May 2023. As part of affirming their commitment to implementing the Paris Agreement, the parties agreed to promote environmental integrity in the development of international carbon markets (Ministry of Foreign Affairs and Trade, n.d.-d). See chapter 22 of the agreement.
- 20 This entered into force in May 2024. In addition to affirming their commitments to implement the UNFCCC, Paris Agreement, and NDCs, the parties agreed to refrain from actions and omissions that would materially defeat the object and purpose of the Paris Agreement. They also committed to promote environmental integrity in the development of international carbon markets (Ministry of Foreign Affairs and Trade, n.d.-c). See chapter 19 of the agreement.
- 21 This initiative involves New Zealand, Costa Rica, Fiji, Iceland, Norway, and Switzerland with the aim of demonstrating the use of trade to further climate change and sustainable development outcomes. Key focus areas include voluntary eco-labelling, elimination of tariffs for environmental goods, commitments for environmental services, and elimination of fossil fuel subsidies. Negotiations concluded in July 2024 (Ministry of Foreign Affairs and Trade, n.d.-a).
- 22 The first emissions budget and emissions reduction plan covered a shorter period of 2022 through 2025.
- 23 These are methane emissions from agriculture and waste.
- 24 The size of the gap varies with changes to domestic emissions projections and recalculation of the provisional NDC. The Treasury & Ministry for the Environment (2022) estimated the gap could range from a low of 88 Mt CO<sub>2</sub>e to a high of 114 Mt CO<sub>2</sub>e. In July 2024, the Ministry for the Environment (2024a) reported a gap with existing measures of 97 Mt CO<sub>2</sub>e in a range from 76 to 119 Mt CO<sub>2</sub>e. Proposed policies in the second emissions reduction plan could reduce this gap to 93 Mt CO<sub>2</sub>e. Both studies assumed an emissions budget for the 2030 NDC of 571 Mt CO<sub>2</sub>e, which is likely to change in the future due to methodological adjustments in the national greenhouse gas inventory.
- 25 Note this was a very conservative estimate, as it did not account for domestic forestry removals or for emerging technologies.
- 26 Refer to the study for further explanation of the legal and accounting complexities.
- 27 A list of current capacity building initiatives on Article 6 is maintained by UNEP Copenhagen Climate Centre (2024).

- 28 For a list of the issues New Zealanders are most concerned about, see Ipsos (2024). As of August 2024, the top twenty (in descending order) are: inflation/cost of living, healthcare/hospitals, the economy, crime/law-and-order/social violence/anti-social behaviour, housing/price of housing, poverty/inequality, climate change, unemployment, education, household debt/personal debt, petrol prices/fuel, transport/public transport/infrastructure, drug/alcohol abuse, race relations/racism, environmental pollution/water concerns, issues facing Māori, immigration, taxation, population/overpopulation, and defence/foreign affairs/terrorism. Although climate change is listed a distinct issue, the impacts of climate change and climate change policies can exacerbate aspects of the other issues.
- 29 For example, modelling from the Climate Change Commission shows that under an ambitious domestic decarbonisation pathway, the increase in short-term investment across road and air transport, buildings, and process heat would produce substantial long-term payoffs beyond 2034 from reduced costs of operation (Climate Change Commission, 2024a).
- 30 For example, this study reports that active or proposed measures for mandatory climate-related disclosures cover more than 60% of world GDP. Active or proposed measures for mandatory environmental, social, and governance reporting apply to 80% of New Zealand's exports by value, and active or proposed carbon border adjustment mechanisms (e.g. EU, UK, US, Australia, and Taiwan) apply to 40%.
- 31 This is the document signed in 1840 which guides the relationship between the Crown and Māori, the indigenous people of New Zealand.
- 32 As of April 2024, these included Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia, Mexico, Saudi Arabia, Chile, Myanmar, Thailand, the Philippines, Senegal, Tunisia, Azerbaijan, Moldova, Georgia, Sri Lanka, Uzbekistan, Papua New Guinea, the United Arab Emirates, Kyrgyz, Kazakhstan, and Ukraine.
- 33 As of February 2024, these included Peru, Ghana, Senegal, Georgia, Vanuatu, Dominica, Thailand, Ukraine, Morocco, Malawi, Uruguay, Chile, Kenya, and Tunisia.
- 34 Foundation for Climate Protection and Carbon Offset KliK

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