

Boosting voluntary climate action in Aotearoa New Zealand - an overview

CATHERINE LEINING AND DOMINIC WHITE MARCH 2021

Report commissioned by EECA (The Energy Efficiency and Conservation Authority)



Foreword

EECA is pleased to have commissioned Motu to investigate, and then prepare this report, exploring new approaches to incentivise and future-proof voluntary carbon mitigation in Aotearoa New Zealand in line with the Paris Agreement, the Climate Change Response Act 2002, as well as evolving market expectations.

Worldwide, a conversation is happening about what the voluntary carbon market could look like from now on, how to address previous shortcomings and how to scale it up to a 100 times its current size. We believe there is no reason why Aotearoa couldn't lead the way, as it already has on many occasions.

There is no question that, domestically, the pace of decarbonising the economy needs to pick up, as has been reinforced by the Climate Change Commission.

Through our work across sectors and with some of the largest energy users in Aotearoa, we at EECA know that the tools and technologies already exist to do this, and there are untapped cost-effective domestic opportunities, especially in clean and clever energy use.

As our economy continues to recover from the pandemic, it seems even more important to fund projects in Aotearoa to accelerate the energy transition, rather than buying offshore credits. A domestic voluntary carbon market would also improve trust by bringing the outcomes of the spending closer to New Zealanders, as trust is key in the success of any voluntary action.

Motu's Voluntary Mitigation Dialogue in 2020, which brought together a group of cross-sector experts and stakeholders, was invaluable in forming the foundation of this work. We thank them for their input and sustained interest in solving this challenge.

When EECA commissioned this work, we were acutely aware of the problems and the opportunities, and we wanted to kick-start collective thinking about practical solutions for the country. It has taken great work by sector experts to produce this report, and we now look forward to being a key contributor in the discussions with a wider range of stakeholders to continue this conversation and so move faster towards a clean energy transition in Aotearoa.

Andrew Caseley EECA CEO

Motu Economic and Public Policy Research is an independent economic research institute which never advocates an expressed ideology or political position.

A charitable trust, Motu is founded on the belief that sound public policy depends on sound research accompanied by well-informed and reasoned debate.

Motu is the top-ranked economics organisation in New Zealand. It is in the top ten global economic think tanks, according to the Research Papers in Economics (RePEc) website, which ranks all economists and economic research organisations in the world based on the quantity and quality of their research publications.

It also ranks in the top ten climate think tanks in the world according to the International Center for Climate Governance.

Our work can be found on our website <u>www.motu.nz</u>.

Motu

'Voluntary mitigation' means reducing emissions and increasing removals of greenhouse gases (GHGs) beyond government requirements (including requirements in the New Zealand Emissions Trading Scheme (NZ ETS)).¹

Past approaches to voluntary mitigation will not work in the new context of the Paris Agreement and domestic climate change policies. Current policy uncertainty and inconsistent market practices are slowing progress and creating risk for market participants.

To help support decision making in Aotearoa New Zealand, this paper proposes an innovative two-track system aimed at scaling up voluntary climate action. This new system would benefit organisations and central/local government. As a next step, it is essential to test this proposed system in key markets — and ensure its compatibility with evolving international standards.

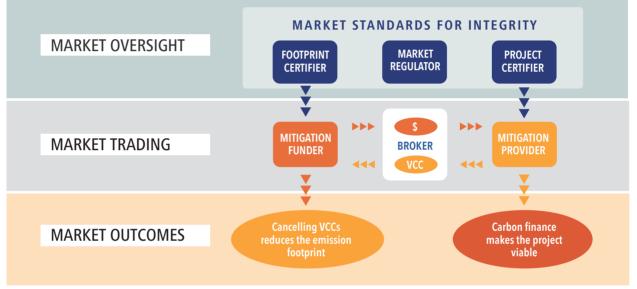
> The ideas in this paper were informed by two meetings of Motu's Voluntary Mitigation Dialogue in 2020, funded by the Energy Efficiency and Conservation Authority (EECA), a New Zealand Crown entity. The dialogue brought together a group of cross-sector expert individuals to explore options for the future of voluntary mitigation in Aotearoa New Zealand. This paper does not reflect the views of reviewers or dialogue participants, their organisations, the project funder, or He Pou a Rangi (the New Zealand Climate Change Commission). *The full paper is available from <u>www.Motu.nz</u>.*



How voluntary mitigation works

Voluntary mitigation can happen within an organisation's own boundary and supply chain — and also outside of an organisation's boundary, using the voluntary carbon market (VCM) or other mechanisms. As shown in Figure 1, the VCM brings organisations with emission reduction and removal opportunities together with organisations prepared to finance those organisations' mitigation efforts. Organisations can also support voluntary mitigation by partnering in mitigation projects, providing other forms of support and marketing low-emission goods and services.

Figure 1: How the voluntary carbon market works



Note: \$ = *carbon finance; VCC* = *voluntary carbon credit.*

How voluntary mitigation helps organisations and Aotearoa

Voluntary mitigation is integral to organisations being able to:

- demonstrate environmental/social responsibility and leadership
- retain social license to operate
- manage exposure to climate-related risk
- increase their market advantage.

Voluntary mitigation can speed up investment, innovation and action to reduce GHG emissions domestically. Those actions can support an equitable transition to a low-emission economy, generate valuable co-benefits and help the New Zealand Government find local ways to meet its Paris Agreement target (referred to as a Nationally Determined Contribution, NDC) and so reduce reliance on offshore mitigation.

New approaches are necessary for recognising voluntary mitigation

Past approaches to crediting voluntary mitigation will require adjustment for compatibility with the Paris Agreement and domestic climate change policies. Organisations, markets and regulators need to know that future claims to voluntary mitigation will have environmental integrity, transparency and credibility — at home and overseas. In Aotearoa, clarifying government policy and market practice is essential to support organisations which already have voluntary targets and/or carbon-neutral commitments.

Bridging the policy gap for voluntary mitigation in Aotearoa

To help bridge the policy gap, this paper presents a straw proposal for an integrated framework to help organisations make transparent, credible and widely accepted claims to voluntary mitigation — and to benefit from due recognition for their efforts.

The foundation of the framework is ambitious mitigation targets for organisations' own net emissions within their boundary and supply chain. Beyond this, organisations could choose to engage in mitigation external to their own boundary and supply chain, domestically or overseas, using two tracks (Figure 2). **Carbon Horizon:** Financing (or otherwise supporting) GHG mitigation beyond government requirements to help bridge the gap to *meet* Paris NDCs.

Carbon Frontier: Financing GHG mitigation *beyond* Paris NDCs.

Figure 2: A two-track system for voluntary mitigation in Aotearoa New Zealand

Organisations' own emissions Track 1: Carbon Horizon Requires organisations to set internal mitigation targets (Scopes 1, 2 and 3) in line **Track 2: Carbon Frontier** with the temperature goal > Bridges the gap to meet Paris NDCs of the Paris Agreement. > Provides certification or carbon credits for financing or otherwise > Supports global mitigation supporting external GHG mitigation beyond Paris NDCs beyond government requirements > Provides carbon credits with > Focuses on cooperation with shared corresponding adjustments claims to mitigation for financing external > Enables a Carbon Contribution, GHG mitigation beyond Carbon Neutral, or Carbon Positive government requirements claim with Horizon status. > Focuses on single claims to mitigation > Enables a Carbon Neutral or Carbon Positive claim with Frontier status.

How this system interacts with government targets

The Horizon track would enable organisations to receive and share recognition for doing cooperative mitigation activities in a range of sectors that go beyond government requirements and help meet NDCs — rather than mitigating beyond NDCs.

Under the Frontier track, external voluntary mitigation claimed by an organisation could not also count toward a government's NDC and would need to carry a 'corresponding adjustment' from the project's host country. This track would suit organisations wanting to increase global mitigation beyond NDCs or make carbon-offsetting or carbon-neutral claims in markets requiring Paris-compliant corresponding adjustments.

If the New Zealand Government decides to provide corresponding adjustments, then domestic voluntary mitigation qualifying under Carbon Frontier could involve higher costs than Carbon Horizon. If the New Zealand Government does not provide corresponding adjustments, then the Carbon Frontier track would be restricted to offshore mitigation carrying corresponding adjustments from the host government. Organisations could make differentiated carbonneutral² claims under either track. Under a **Carbon Neutral (Horizon)** claim, organisations would achieve a net-zero contribution toward the government's NDC. Under a **Carbon Neutral (Frontier)** claim, organisations would achieve a net-zero impact on global emissions. In both cases, the claim would need to have a clearly defined organisational boundary, scope of emissions coverage and time period. Those that mitigated beyond net-zero emissions could make a respective **Carbon Positive** claim. Under the Horizon track, organisations could also claim a **Carbon Contribution** for mitigating beyond their own boundary and supply chain, without offsetting emissions to the level of net zero or beyond.

Before going ahead with this approach, the acceptability of these claims (given evolving international standards) would need to be tested in domestic and international markets.

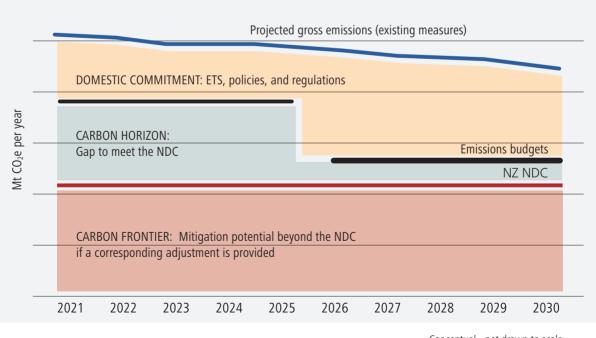


Figure 3: Conceptual additionality zones for Carbon Horizon and Carbon Frontier voluntary mitigation

Conceptual - not drawn to scale

How this system addresses additionality

The term 'additionality' refers to if voluntary mitigation projects generate climate benefits that go beyond 'business as usual' – including government requirements. In Aotearoa, Carbon Horizon activities would help bridge the gap between implementing

How reporting would work

Organisations would be encouraged to use 'dashboard' reporting as best practice which distinguishes between emissions and removals — and internal and external mitigation. Organisations could also report net emissions. Improved reporting of coimpacts of mitigation activities would help with their accurate valuation by mitigation funders. This could government policy and meeting the NDC whereas Carbon Frontier activities would need to be additional to meeting the NDC (Figure 3).

incentivise voluntary mitigation that delivers important benefits for iwi/Māori, communities and regions as part of an equitable transition to a low-emission economy. To be eligible for voluntary claims, voluntary carbon credits or alternative certification of mitigation would need to be reported in a recognised registry, to avoid double claiming.

Who could participate in a two-track system for voluntary mitigation

Voluntary domestic mitigation activities could potentially be done by the private, public, NGO and/or community sectors. Organisations providing independent certification of voluntary mitigation claims would need to be accredited, stick to

Advantages of this two-track system in Aotearoa

While keeping the conventional option of external offsetting³ through the VCM, the proposed system expands the scope of eligible voluntary mitigation to include recognition for more diverse forms of cooperation, shared gains and greater valuation of environmental, social, cultural and economic cobenefits. The proposed system is scalable for the global transition toward net-zero emissions.

In the past, external offsetting was sometimes seen as a least-cost option to comply with government requirements or achieve 'green' credentials for marketing purposes. In this proposal, organisations internationally recognised standards and meet any further government requirements. Existing VCM service providers — both domestic and international — would be welcome to participate on those terms.

would focus first on reducing net emissions within their boundary and supply chain. External voluntary mitigation would extend climate benefits beyond what is feasible for reduction within their own boundary. Participation in voluntary mitigation would not exempt organisations from government compliance obligations.

Moving forward, we could reinvent voluntary mitigation as one means for achieving highest-value climate change outcomes for Aotearoa.



Some practical examples of how this could work

Recognition for voluntary mitigation could help get worthwhile projects over the line. Provided they went beyond regulatory requirements, the first three hypothetical examples below would qualify for Carbon Horizon unless the Government agreed to provide a corresponding adjustment under the NDC. The fourth example would fall outside the scope of Aotearoa's NDC so would not require a corresponding adjustment to generate a climate benefit beyond the NDC.

Example 1: Changing the outcome of energy investment decisions

A firm is evaluating boiler options. A biomass boiler would cost \$2 million more than the fossil fuel alternative. While the firm would prefer biomass, the near-term business case does not support it, leaving the firm with the choice of deferring the decision or investing in the higher-emission option. If the VCM could mobilise carbon finance of \$1 million, the project could reduce emissions by 90,000 tCO₂e⁴ during the asset lifetime. This would correspond to an incremental carbon cost of \$11/tCO₂e under the VCM. (Note: Numbers are illustrative only.)

Example 2: Overcoming barriers to energy efficiency

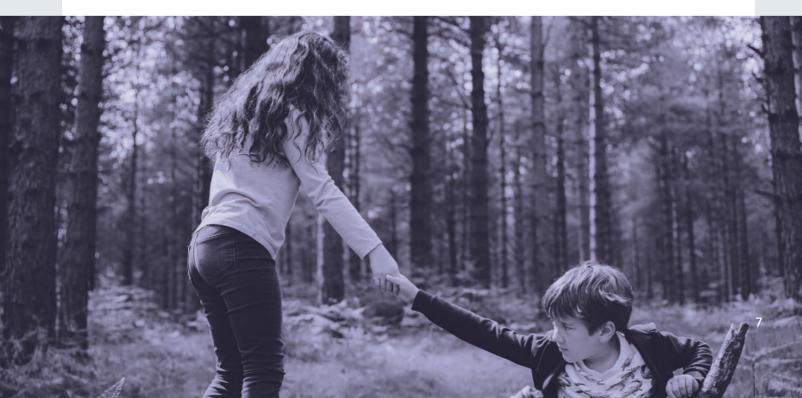
A local government invites businesses to help capitalise a revolving loan fund for energy efficiency improvements in low-income households. Households receive a zero-interest loan which they repay over time from their rates drawing from the energy cost savings. The supporting businesses can claim a pro rata share of the emission reductions generated by the project portfolio over time. Applying standardised parameters for defining eligible project activities, demonstrating their additionality and calculating emission benefits minimises transaction costs per household. A bulk supply agreement reduces the cost of materials and installation. By providing up-front finance and technical support beyond the scope of current government programmes, the project overcomes both price and non-price barriers to accelerate energy efficiency gains, improve health outcomes and reduce household power bills.

Example 3: Boosting native forest carbon sequestration

A landowner is considering establishing a permanent native forest on marginal land but cannot make the business case work. If the landowner can mobilise additional impact investment reflecting the combined value of carbon sequestration, biodiversity and other ecosystem services and cultural amenity from native afforestation, the business case will become viable.

Example 4: Incentivising small-scale forest carbon sequestration

An NGO seeks to plant native trees at scales below the eligibility threshold for crediting under the NZ ETS or under Aotearoa's NDC. Organisations helping to finance the planting receive certification of their carbon contribution, which they can report to Board members, shareholders and consumers.



How to make this happen here in Aotearoa

In Aotearoa, the Government is considering its policy options for voluntary mitigation. This has broader implications for producers marketing carbon-neutral goods and services overseas, the implementation of the Carbon Neutral Government Programme announced in December 2020, and organisations participating in other compliance mechanisms (e.g., CORSIA⁵ for international aviation).

Advancing a two-track approach for voluntary mitigation needs further research, leadership, experimentation — and collaboration across diverse stakeholders and iwi/Māori. It also needs ongoing communication with international markets and thought leaders on these issues.

Leaders of organisations need to engage with policymakers to shape the future of voluntary mitigation in Aotearoa. With further development, this proposed system could help organisations get due recognition for going beyond government requirements to help Aotearoa transition to a successful low-emission economy.

For more information, contact:

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- ¹ In this paper, we assume both reducing emissions and increasing removals of GHGs have a role to play in voluntary climate action. We acknowledge this convention is not universally applied and the balance between voluntary emission reductions and removals may shift over time.
- ² This paper does not differentiate between the terms 'carbon neutral' and 'net zero.' We acknowledge this convention is not universally applied.
- ³ In this paper, the term 'offsetting' applies to claiming external mitigation to neutralise or otherwise compensate for an organisation's residual emissions under its internal mitigation target. We acknowledge this convention is not universally applied.
- ⁴ Tonnes of carbon dioxide equivalent.
- ⁵ Carbon Offsetting and Reduction Scheme for International Aviation.



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