

Emission trading

“But crucially, [NZ ETS] market participants have no idea what the future balance of supply and demand in the market will look like. It is useless as a guide to the kind of investment decisions that need to be made to deliver a low-emissions future.... The [Motu] model is designed to strike a balance between the certainty investors need and the flexibility and adaptability required to cope with inevitable shocks.” *Brian Fallow, NZ Herald, 9 June 2017*

Since 2013, Motu has worked on the multi-disciplinary programme “Shaping New Zealand’s Low-Emission Future”. This involves significant research, stakeholder dialogue, and international exchange to explore New Zealand’s potential pathways, policy options and practical actions for transitioning to a successful low-emission economy.

This booklet highlights some of the work that has emerged from the programme. More information is available from <http://motu.nz> and from our blog, New Zealand’s Low-Emission Future, at <http://low-emission-future.blogspot.co.nz/>.

Kerr, Suzi, et al. 2017. “*An Effective NZ ETS: Clear Price Signals to Guide Low-Emission Investment.*” Motu Note #27. Wellington: Motu Economic and Public Policy Research.

There are practical ways to change the New Zealand Emissions Trading Scheme (NZ ETS) so it delivers clear and predictable emission price signals. The following changes would make the NZ ETS a more effective driver of transformational low-emission investment enabling New Zealand to achieve its emission reduction targets: a cap on emission units, a price band (price ceiling and price floor), long-term trajectories for the cap and price band, government management of international trading, and provision of independent expert advice.

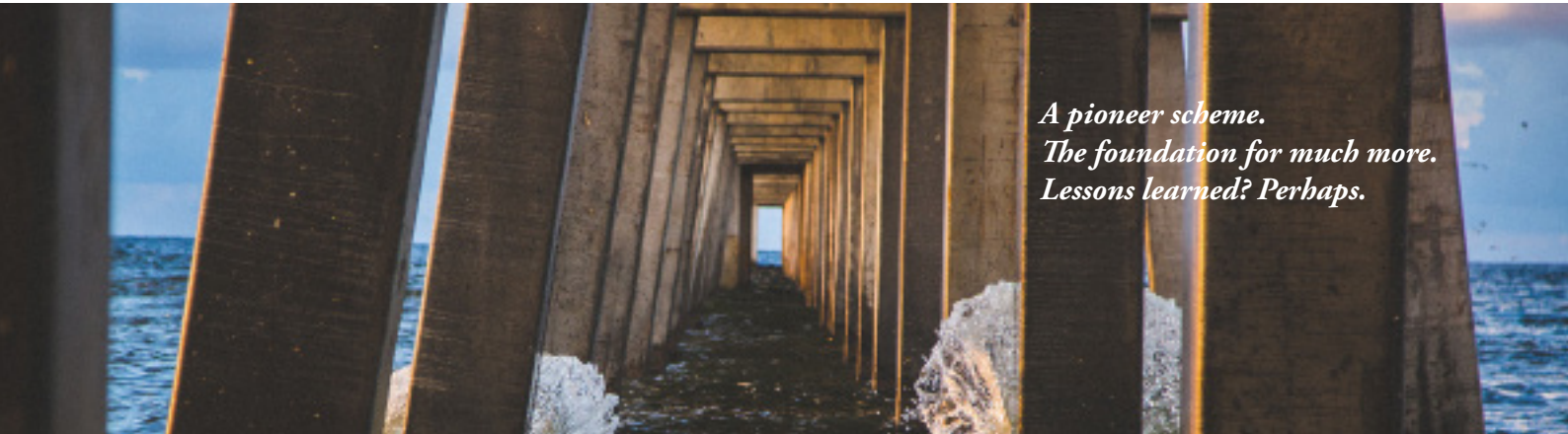
This proposal offers the Government the necessary tools to shape New Zealand’s pathway for reducing emissions, and offers emitters and low-emission investors greater certainty to help them plan for the future. It focuses on system architecture, leaving to Government the political decisions about domestic emission reduction and price ambition.



*Smart investment needs
clear ETS price signals.
Set caps with price bands.*

Leining, Catherine and Suzi Kerr. 2016. “*Lessons Learned from the New Zealand Emissions Trading Scheme.*” Motu Working Paper 16-06. Wellington: Motu Economic and Public Policy Research.

The New Zealand Emissions Trading Scheme (NZ ETS) was launched in 2008 following more than a decade of policy deliberation on how emission pricing could support New Zealand’s contribution to international climate change mitigation efforts. Reflecting the unique emissions and economic profile of New Zealand, New Zealand’s regulatory culture, and lessons learned from earlier environmental markets, including within New Zealand, it pioneered many ETS features. While the NZ ETS may have had a small impact on the forestry sector, officials have found no evidence that it has contributed significantly to domestic mitigation. From 2012 through to mid-2015, participants predominantly met their NZ ETS obligations by purchasing overseas Kyoto units at low cost. The NZ ETS did enable the government to meet New Zealand’s international obligations for the first commitment period of the Kyoto Protocol (2008–2012) with a substantial unit surplus. In 2015, the NZ ETS delinked from the Kyoto market and it currently operates as a domestic-only system. The system requires changes to align with New Zealand’s Nationally Determined Contribution (NDC) under the 2015 Paris Agreement and to effectively support New Zealand’s decarbonisation pathway.



*A pioneer scheme.
The foundation for much more.
Lessons learned? Perhaps.*

Partnership for Market Readiness (PMR) and International Carbon Action Partnership (ICAP). 2016. “[*Emissions Trading in Practice: A Handbook on Design and Implementation*](#).” Washington, DC: World Bank. Contributing authors include Suzi Kerr and Catherine Leining.

An emissions trading system is a policy tool and it can be designed to achieve a range of outcomes – environmental, economic, and social. This handbook sets out a ten-step process for designing such a system. At each step, there are a series of decisions or actions that will shape major features of the system.

This work is a synthesis of input from over 100 practitioners and experts from four continents, reflecting both the latest theoretical insights and best practices from existing emissions trading systems. At least 35 countries, 12 states or provinces, and seven cities, covering 40% of global GDP, have ETSs. Additional systems are under development in a wide range of locations. This is the first ever handbook designed to provide a generically useful way forward that can be used immediately in places like Egypt, Chile, Colombia, and Mexico, to help them design a system that will work for their local conditions.

*ETS design
can be adapted for use
by many countries.*



Carver, Thomas, Patrick Dawson and Suzi Kerr. 2017. “[*Including Forestry in an Emissions Trading System: Lessons from New Zealand.*](#)” Motu Working Paper 17-01. Wellington: Motu Economic and Public Policy Research.

Carbon sequestration by forestry continues to be an important part of New Zealand’s contribution to its global obligations to reduce emissions and ETS prices over the last year have been high enough to make forestry profitable again. This paper describes the policy changes to the NZ ETS since 2008 that directly affect forestry; assesses the effectiveness of the scheme; explores who is benefiting from it; and outlines issues facing forestry in the NZ ETS moving forward.

Forest owners have responded to the financial incentives from the NZ ETS in a rational way. Both afforestation and deforestation decisions appear to have been influenced by the emissions price and/or expectations about the emissions price in the future. However, the scheme has been beset by challenges. A weak price signal, coupled with ongoing policy uncertainty, has limited the effectiveness of the scheme in achieving its forestry goals. Prospects going forward are more positive, particularly if the current reform of the ETS can create clear, predictable price signals and better manage the complexity of forestry rewards and liabilities, particularly as faced by smaller landowners who could potentially participate and reforest.

*Few new trees planted.
Low price limited effect.
Can reform fix this?*




Leining, Catherine, Corey Allan and Suzi Kerr. 2017. “[*Evolution of the New Zealand Emissions Trading Scheme: Sectoral Coverage and Point of Obligation.*](#)” Motu Working Paper 17-05. Wellington: Motu Economic and Public Policy Research.

This paper provides a conceptual foundation for design decisions on ETS coverage and points of obligation, and explores the history of and rationale for the specific design choices that have been made in this regard in New Zealand.

When it was launched in 2008, the NZ ETS pioneered the design concept of implementing an ETS across all sectors of the economy (e.g. stationary energy, transport, industrial processes, forestry, waste and biological emissions from agriculture) and all six major greenhouse gases (GHGs). This reflected New Zealand’s relatively unique emission profile among industrialised countries and its interest in finding effective, efficient, and equitable solutions to the challenge of meeting its international emission reduction targets. Further innovations at the time were the selection of predominantly upstream points of obligation in the energy sector, with the potential for some major downstream energy users to opt in voluntarily, and the selection of a default processor-level obligation in the agriculture sector, with the option to shift to a farmer-level obligation.

As of 2017, the entry of biological emissions from agriculture has been deferred indefinitely. Otherwise, the proof of concept on both broad sectoral coverage and upstream points of obligation has been demonstrated through practical experience.

A photograph showing a group of sheep grazing in a field of tall green grass. The sheep are scattered across the frame, some looking towards the camera. The background is filled with dense green foliage.

*Emission pricing
can have more effect, when it
reaches far and wide.*


Leining, Catherine, Judd Ormsby and Suzi Kerr. 2017. “[*Evolution of the New Zealand Emissions Trading Scheme: Linking*](#).” Motu Working Paper 17-06. Wellington: Motu Economic and Public Policy Research.

This paper examines New Zealand’s experience with linking and de-linking its ETS. It finds that the considerable opportunities to a small ETS market from linking can be negated if the environmental, economic and political risks are not managed strategically. It also highlights some of the technical and political challenges of negotiating bilateral linking agreements. New Zealand’s future policy on ETS linking, and more generally support for international mitigation as part of our global contribution, should ensure the integrity of New Zealand’s contribution to global mitigation and support strategic domestic decarbonisation in the longer term.

Although the New Zealand government has explored bilateral ETS linkages, none has come to fruition to date. As of 2017, the NZ ETS operates as a stand-alone system with a substantial participant-held NZU bank as the legacy of past linking. The government now faces important decisions about the future of unit supply in the NZ ETS and linkages to international markets.

*Cooperation
lowers mitigation costs,
but linking is hard.*





*Motu means “island.”
Our research rises above
uninformed debate.*

Motu receives core grant funding for this programme from the Aotearoa Foundation. Other funding contributors to various programme activities include Air New Zealand, the British High Commission, the Korean Forest Service, Meridian Energy, Ministry for the Environment, Ministry for Primary Industries, New Zealand Productivity Commission, Parliamentary Commissioner for the Environment, Te Pūnaha Matatini, Tindall Foundation and Z Energy.

More information is available from <http://motu.nz> and from our blog, New Zealand’s Low-Emission Future, at <http://low-emission-future.blogspot.co.nz/>.