







AUSTRALIA: AN EMISSIONS TRADING CASE STUDY











Australia

The World's Carbon Markets: A Case Study Guide to the new Australian Emissions Reduction Fund

Last Updated: May 2015

Note: At the time of writing, Australia's Emission Reduction Fund is still under development.

Brief History & Recent Developments

Year	Event
1994	Australia ratifies UNFCCC
2007	Australia ratifies Kyoto Protocol
2008	Australian Government proposes CPRS
2010	CRPS delayed until 2013
2011	New Government PM Introduces Clean Energy Future Package
2011	Clean Energy Act, Climate Change Authority Act & The Clean Energy regulator Act enter into force
2012	Carbon Pricing Mechanism established under the Clean Energy Act
2013	Australian Prime Minister Anncounces reapeal of the Clean Energy Act 2011 and the introduction of the Direct Action Plan
2014	Clean Energy Act repealed in the Senate

Table 1: Key Dates

In 2013-14, Australia's total greenhouse gas (GHG) emissions were 548 million tonnes of carbon dioxide equivalent (tCO_2e). In that period, the largest sources of GHG emissions were electricity generation (33% of total emissions), transport (17%) and direct combustion of fuels (17%). Despite their position as a major industrialised country with one of the highest levels of GHG emissions in the world, Australia was one of the last Annex I countries to ratify the Kyoto Protocol³ (December 2007) to the United Nations Framework Convention on Climate Change (UNFCCC).

In light of its commitments under the UNFCCC, the Copenhagen Accord and the Cancun Agreements, Australia has set a national **emissions reduction target** of 5% below 2000 levels by 2020.⁵ Under the Kyoto Protocol's first commitment period, Australia's Quantified Emission Limitation and Reduction Objective (QELRO) was set at 108% of 1990 levels⁶ and for the second commitment period, Australia's QELRO is to limit average annual emissions to 99.5%

of 1990 emission levels over an eight-year period, by 2020 (although the government has yet to ratify the Doha amendment underpinning the second commitment period, as of May 2015). A public consultation on Australia's emissions reduction target that ended on 24 April, 2015, and the government is planning to announce its target in mid-2015.

In July 2008, Australia's government proposed the *Carbon Pollution Reduction Scheme* (CPRS)⁹ which outlined the initial framework for the establishment of an Australian Emissions Trading System (ETS). The ETS was initially intended to cover 767 facilities, accounting for 80% of Australia's GHG emissions. The Parliament introduced three bills on the CPRS in May 2009, October 2009 and February 2010. While the first two bills were passed by the House of Representatives, they failed to gain approval from the Senate. The last bill (CPRS Bill 2010) was introduced into the Senate in February 2010 but lapsed in September that year as a new parliamentary session began.¹⁰

In September 2011, former Prime Minister Julia Gillard introduced the *Clean Energy Future Package* which was adopted in November that year. The 19-act package was intended to aid Australia in meeting its national climate pledges under the Copenhagen Accord¹¹ as well as to encourage low-carbon investment and innovation. The Package was based on three legislative pillars: ¹²

- The Clean Energy Act 2011¹³ which introduced and oversaw the Carbon Pricing Mechanism (CPM),
- The *Clean Energy Regulator Act 2011*¹⁴ which set up a new body administrating the now-repealed CPM, renewable energy policies, the national GHG and energy reporting and renewable energy policies, the *Carbon Farming Initiative* (which passed in July 2011) and, more recently the *Emission Reduction Fund*, and,
- The *Climate Change Authority Act 2011*¹⁵ establishing the Climate Change Authority monitor the Package and to provide periodic recommendations to parliament.

The *CPM* came into force on 1 July 2012 and but was repealed two years later, on 17 July 2014, following a change in government. The CPM initially began with a fixed carbon price at which permits could be bought from the government and was the foundation for the development of an Australian ETS, which was expected to be established in 2015. The fixed carbon price was initially set at AUS\$23 per tonne of CO₂e and increased at a rate of 2.5% per year (in real terms).

Once the CPM transitioned to an ETS, it was intended to link with the EU ETS on 1 July, 2015. It would have covered approximately 60% of Australia's GHG emissions and five main sectors: energy, oil and gas, industrial processes, fugitive emissions processes and waste. 16

However, after the Liberal-National Coalition won the Parliamentary elections in September 2013, Prime Minister Tony Abbott announced that the 2011 Clean Energy Act would be repealed, thereby dissolving the CPM and the planned ETS. The repeal was passed in the House of Representatives in November 2013 and in the Senate in July 2014, after several thwarted attempts. 17

With the new government came a new policy: *the Direct Action Plan*, which is intended to meet the 5% reduction by 2020. The centrepiece of the Plan, and the government's main tool to achieve future emission reductions, is the *Emission Reduction Fund*¹⁸(ERF) which aims to provide financial incentives to reduce emissions through investments in new and more efficient technologies. The Fund is budgeted to cost AUD\$2.55 billion over four years, starting from April 2015. The ERF will purchase emissions reductions that are offered by business, local councils, or any other member of the community via reverse auctions.

The ERF expands on the existing *Carbon Farming Initiative* (CFI) framework a domestic land-based offset programme which was originally established in 2011 to serve the now-defunct CPM. The CFI framework provides the necessary information to credit emissions reductions, streamline existing processes and simplify the use of methodologies. In October 2014, the *Carbon Farming Initiative Amendment Bill 2014*¹⁹ was passed, which automatically transitioned all existing CFI projects to the ERF with no changes to CFI methodology determinations. The Clean Energy Regulator²⁰ is the government agency with which all project proponents interact and is responsible for registering projects, running auctions, managing contracts and issuing Australian Carbon Credit Units (ACCUs).²¹

Summary of Key Policy Features

SCOPE & COVERAGE: The ERF covers projects from a wide range of sectors: agriculture, building, electricity, fuel combustion, forestry, industry, transport, and waste. These projects can generate abatement by reducing or avoiding emissions of methane (CH₄), nitrous oxide (N₂O), or by converting CH₄ into carbon dioxide (CO₂).²²

STRUCTURE OF THE EMISSION REDUCTION FUND: There are three main elements which frame the ERF Programme; crediting emission reduction, purchasing emissions reductionand the safeguard mechanism.

Crediting emission reductions

The first step for a proponent is to register their emissions reduction projects. The proponent must use an approved methodology to estimate the GHG emissions reduction of the project. There are two categories of methodologies: ²³

- Activity methods: for specific emissions reductions activities.
- Facility-wide methods: which use existing data under the National Greenhouse and Energy Reporting (NGER) Scheme to encourage emissions reductions from a wide range of activities. The aim is to be applicable to a wide variety of projects.

Existing CFI methodologiess are available under the ERF. Proponents must register their emission reduction project with the Clean Energy Regulator, who will then evaluate the proposal to determine that reductions are "real and additional". The project must be new (not have been implemented before it has been registered) and not funded by another government programme to avoid double counting. ²⁴ If the Regulator approves the project, it can later be issued with ACCUs pending verification of the reductions. The Regulator credits projects for a single defined "crediting period", which is the period of time over which a project can generate ACCUs. Emission reduction projects will have a crediting period of seven years while sequestration projects will have a crediting period of 25 years. ²⁵

Project reports can be submitted every six months or more frequently if there is an agreement with the Regulator. This situation occurs when a project proponent already has a contract with the Regulator. Thus, the frequency and timing of reporting will rely on a specific schedule defined by the contract.

From July 2015, existing CFI will be automatically transitioned to the ERF. ²⁶ Proponents of these projects will have the choice to continue to use the methodology version which was in force when their project was approved or to apply for the ERF method.

Purchasing emissions reductions

This step is divided into two parts: submitting an auction bid, and contracting with the government. The ERF's goal is to purchase emissions reductions for the government at the lowest cost across the economy. Reverse auctions are conducted by the Clean Energy Regulator. The Clean Energy Regulator conducts **reverse auctions** to find and purchase the lowest-cost emissions reductions available on behalf of the Government.

Submitting an auction bid: After projects have been approved by the Regulator, proponents are required to submit a bid to sell emissions reductions on the basis of price per tCO₂e. Bids must adhere to the following requirements:²⁷ they must relate to the whole project; there must be only one bid per project and per auction; a successful project cannot be re-offered at a later auction; and there is a minimum bid size of 2,000 tCO₂e per year on average over the life of the contract (except for existing CFI projects).²⁸ This threshold can be adjusted by the government over time.

To determine which projects are selected, the Regulator will apply a *benchmark price* – that is the maximum amount the government will pay for emissions reductions. Thus, only bids costing less than this benchmark price will be considered, and only 80% of the volume offered will be bought. The benchmark price will be set for every auction and will be determined according to several factors such as the overall emission reductions objective, the cost per tCO_2e observed in previous auctions, and the amount of funding allocated at previous auctions.

An exception to the auctioning procedure occurs when projects that can deliver emission reductions greater than 250,000 tCO₂e per year (on average), or 1.25 million tCO₂e or more over the contract period, are submitted. In these cases, a contract can be sealed between the project proponent and the government without using the auction system.²⁹

The first ERF auction took place on 15 and 16 April 2015. 30 In total, the government has contracted to buy more than 47.3 million tCO₂e of reductions, at an average price of AUD\$13.95/t CO₂e from 144 projects. 31 The total value of the contracts was AUS\$660 million, which is 35% of the fund's total budget. 32 Up to four auctions are scheduled to take place during the ERF's first year (July 2015–June 2016). The Regulator then will publish an indicative forward schedule of auctions for the subsequent year.

Entering into a contract: Successful bids will be automatically entered into a carbon abatement contract with the Regulator, which agrees to purchase emissions reductions from the project at the bid price. The project proponent is obliged to deliver the bid quantity of emission reductions.

Carbon abatement contracts are framed within a five year time span however, the government does allow for alternate contract lengths. This flexibility enables the government to establish contract arrangements that help meet the needs of the business and ensure the achievement of emission reduction goals.

The project proponent can choose to either delivering the expected emission reductions from its own project, or buy ACCUs from another registered project. Once verified the Regulator will pay the agreed price whether the emissions reductions have been achieved by the contracted project or by another registered project.

Safeguarding emissions reductions

The **Safeguard Mechanism's** objective is to ensure that emissions reductions acquired by the ERF are not offset by significant emissions increases elsewhere in the economy. This Mechanism will encourage businesses to keep emissions below historical levels, is administered through the existing mandate of the *National Greenhouse Gas Energy Reporting Act 2007* (NGER Act) and will come into force on 1 July 2016.³³

A consultation to determine the final features of the Safeguard Mechanism, such as investment protocols and compliance standards, ended in April 2015.³⁴ Rules and regulations for the policy are expected to be drafted in July 2015, released in October 2015 and enter into force on 1 July, 2016.

The Mechanism will be applicable to facilities with direct emissions above 100,000 tonnes of $CO_{2}e$ a year, representing approximately 140 large businesses, and will cover almost half of Australia's emissions. ³⁵ Baseline emissions will reflect the highest level of reported emissions for a facility over the historical period 2009-10 to 2013-14 ³⁶ and are informed by previous data collected under the NGER Act. ³⁷

In the March 2015 consultation paper, the government proposed establishing more flexibility for businesses by including in the ERF framework: ³⁸

- a requirement that facility emissions remain below their baselines;
- a "net emission" approach allowing businesses to voluntary use carbon offsets;
- · an exemption in the case of exceptional circumstances which would increase emissions of a facility
- a range of enforcement options to deter non-compliance including civil penalties as a final sanction; and
- setting a multi-year compliance period whereby a facility could exceed its baseline in one year, so long as average emissions for the period remain below the baseline.

REPORTING AND VERIFICATION OVERVIEW:

Reporting of projects

The first reporting period begins at the start of the crediting period for the project. Each subsequent reporting period must then begin at the end of the previous reporting period. These periods have minimum and maximum lengths according the type of the projects: ³⁹

- For sequestration projects, the reporting period must be between six months and five years,
- For emission avoidance projects, the reporting period must be between six months and two years.

Verification of projects

The Clean Energy Regulator can require proponents to obtain;

- an initial audit at the beginning of the crediting period,
- at least three audits over crediting periods and
- additional audits based on the Regulator's risk-based approach.⁴⁰

In addition, within the Safeguard Mechanism rules, the Regulator can ask that an application can be accompanied by an audit report.⁴¹

COMPLEMENTARY MEASURES: In order to reach its 2020 emissions reduction target, the government implemented several complementary measures on renewable energy, energy efficiency and voluntary carbon markets.

The *Renewable Energy Target* (RET) commenced in January 2001 to encourage investments into large-scale renewable power stations and the installation of small-scale renewable energy projects. The (mandatory) target aims to ensure that at least 20% of Australia's electricity supply will come from renewable sources of energy by 2020. 42 To achieve this goal RET legislation sets yearly targets for large-scale renewable generation. The RET focuses only on electricity generation and thus does not directly target emissions.

In a 2014 report reviewing the RET, the programme was criticised for being too costly, in that it promotes renewable energy over "alternative, lower cost options for reducing emissions that exist elsewhere in the economy". ⁴³ However, it was also noted that the RET met its objective, having almost doubled output from large-scale renewable electricity generators since its implementation. Output from small-scale systems has already exceeded the 2020 target. The RET is projected to see renewables account for a 26% share of electricity by 2020. ⁴⁴ The initiative is independently complemented by the Australian Renewable Energy Agency (ARENA), established in 2012, with a goal to support renewable energy projects, by streamlining and coordinating administration, funding research and development towards the commercialisation of renewable technologies. ⁴⁵

The National Carbon Offset Standard (NCOS) serves the voluntary market, ensuring the integrity of the offset available to consumers and businesses. ⁴⁶ The programme also offers information to businesses and consumers to help them determine their carbon footprint, and provides information on carbon neutral products. The Carbon Neutral Program provides a mechanism based on the NCOS to gain carbon neutral certification. As part of the ERF, the government has committed to align the Carbon Neutral Program with broader government policy. A consultation on this had just closed at the time of writing.

The National Strategy on Energy Efficiency (NSEE) was establish in 2009 (last updated in 2010) and is part of a comprehensive 10-year strategy to accelerate energy efficiency improvements cost-effectively across the Australian economy. ⁴⁷ The National Partnership Agreement on Energy Efficiency ⁴⁸ gives effect to the NSEE by outlining specific actions to be undertaken by the Commonwealth, State and Territory Government and is the overarching intergovernmental agreement supporting NSEE.

What Distinguishes this Policy?

UNIQUE ISSUES

- 1. Change in political view regarding emissions trading system: the Clean Energy Act 2011, and with it, a national emissions trading scheme, was repealed in 2013 following a change in government
- 2. **Absence of GHG emissions cap:** the *Emissions Reduction Fund* provides incentives for emissions reduction activities across the Australian economy. Contrary to the previous policy, however, the ERF is distinguished by an absence of an emission cap for covered sectors.
- **3. Reverse auctions:** in order to purchase emissions reductions at the lowest cost across the economy, the Clean Energy Regulator conducts reverse auctions to purchase emissions reductions at the lowest available cost.

CHALLENGES

1. Uncertainty on the achievement of the 2020 GHG emissions reduction target: the United Nations Environment Programme reported in 2014 that Australia is unlikely to meet its 2020 target – and is in fact, (since the CPM was repealed), on course to emit 710 million tCO₂e, well above the 555 million tCO₂e required to meet the 5% reduction target. 49

Author Acknowledgements

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The authors would like to thank Emilie Alberola for very helpful comments and information for this case study. We take full responsibility for any remaining errors.

Disclaimer: The authors encourage readers to please contact the CDC Climat Research, EDF and IETA contacts with any corrections, additions, revisions, or any other comments, including any relevant citations. This will be invaluable in strengthening and updating the case studies and ensuring they are as correct and informative as possible.

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