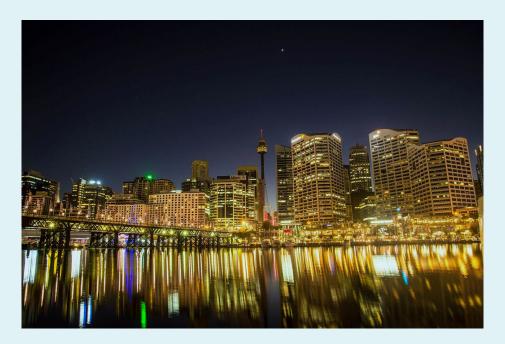
# AUSTRALIA: A DIRECT ACTION CASE STUDY





### Australia The World's Carbon Markets: A Case Study Guide for Practitioners



#### Background

Australia is the 16th largest emitter globally (2014), with emissions per capita in the order of 17.3 tonnes per person (2015). As a signatory to the Kyoto Protocol, Australia has a 2020 emissions reduction target of five per cent below 2000 levels. This target has been built upon in Australia's NDC which outlines an emissions reduction target of 26-28 per cent below 2005 levels by 2030.

In July 2008, Australia's government proposed the *Carbon Pollution Reduction Scheme* (CPRS) which outlined the initial framework for the establishment of an Australian Emissions Trading System (ETS). 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 Accord as well as to encourage low-carbon investment and innovation. The Package was based on three legislative pillars:

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- The Clean Energy Regulator Act 2011 which set up a new body administrating the now-repealed CPM, renewable energy policies, the national GHG and energy reporting and renewable energy policies, the Carbon Farming Initiative (which passed in July 2011)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

The CPM came into force on 1 July 2012 but was repealed two years later, on 17 July 2014, following a change in government. The CPM initially began with a fixed carbon price of AUD\$23 per tonne at which permits could be bought from the government, and was designed to transition to a floating price ETS after three years. In August 2012, Australia and the EU also agreed to establish a one-way, buy-only link with the EU ETS that would start at the end of the fixed price period from 1 July 2015 as the first step towards a full bilateral link by 1 July 2018. However, after the Liberal-National Coalition won the Parliamentary elections in September 2013, then Prime Minister Tony Abbott announced that the 2011





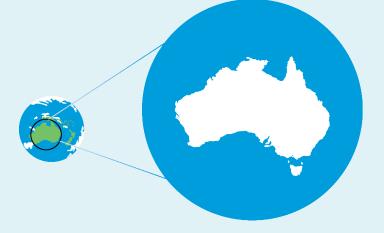
Clean Energy Act would be repealed. The Parliament repealed the Act on 17 July 2014, thereby dissolving the CPM and the planned ETS. The repeal did not affect the Clean Energy Regulator Act or the Climate Change Authority Act.

With the new government came a new policy: the Direct Action Plan, which was intended to meet the 5% reduction goal by 2020. The centrepiece of the Plan, and the Government's main tool to achieve future emission reductions, is the Emissions Reduction Fund (ERF). The ERF has three elements: crediting, purchasing and safeguarding emissions reductions. The crediting and purchasing component forms the basis of a government fund established to purchase emissions via reverse auctions. Projects under the previous Carbon Farming Initiative (CFI) transitioned automatically into the ERF. The ERF was established with AUD\$2.55 billion and the first auction was conducted in April 2015, with subsequent auctions in November 2015 and April 2016. To date, AUD\$1.733 billion has been contracted to deliver 143.2 million tonnes of abatement at an average price

of AUD\$12.10. A fourth auction was recently announced for November 2016. For projects registered under the ERF, the Clean Energy Regulator issues Australian Carbon Credit Units (the same units as issued under the previous Carbon Farming Initiative) for verified emissions reductions delivered. Once credits have been issued they can be purchased by the Government through the ERF or sold to organisations that choose to offset their emissions.

The safeguard mechanism is also a component of the Direct Action Plan and commenced operation on 1 July 2016. The safeguard mechanism applies absolute emissions baselines to facilities exceeding 100,000 tCO2-e/ year. Currently 154 facilities have had baselines allocated; however all may not be covered under the safeguard mechanism in FY16. The option exists to apply for a calculated baseline which reflects projected levels of production rather than historical emissions. Calculated baselines are then adjusted performance. based on actual Businesses with facilities covered under the safeguard mechanism are required to keep emissions at or below

allocated baselines which represent the historical highpoint for a facility during the FY09-FY14 period (financial year being 1 July to 30 June). A separate sectoral-baseline applies to the electricity generation sector which if exceeded will result in the application of individual facility baselines. The safeguard mechanism aims to ensure that emissions reductions purchased by the Government are not offset by significant increases in emissions above business-as-usual levels elsewhere in the economy. The safeguard mechanism is designed with a number of provisions which allow baselines to be adjusted to accommodate economic growth, natural resource variability and other circumstances where historic emissions are not representative of future emissions performance. Covered facilities can also apply to average emissions over a three-year period, allowing the baseline to be exceeded in one year, as long as average emissions over the three years are below the baseline. These provisions and any subsequent baseline adjustments are subject to review and approval by the Clean Energy Regulator.



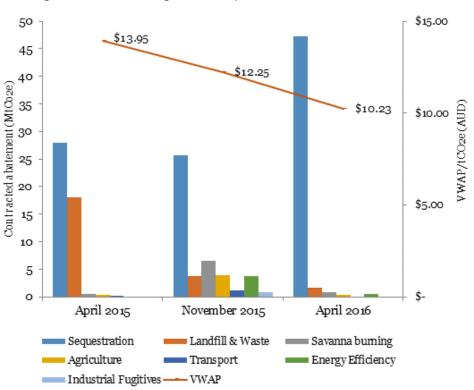
# Summary of Key Policy Features

Long-Term Reduction Goal	Economy wide commitment to 5% below 2000 levels by 2020 and 26 to 28% below 2005 levels by 2030 (as outlined in NDC).
Сар	Emissions are not capped across the economy, although the safeguard mechanism requires covered facilities to keep net emissions at or below baseline levels.
Compliance Periods	The safeguard mechanism has annual compliance periods with the option to apply for multi-year compliance periods of up to 3 years
Greenhouse Gases Covered	Safeguard mechanism covers carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulphur hexafluoride (SF₅) and HFCs.
Sectors Covered	ERF covers projects in: agriculture, building, electricity, fuel combustion, forestry, industry, transport, and waste. The safeguard mechanism covers a range of sectors including power generation, mining & resources, oil and gas extraction, gas supply, manufacturing (including metals, cement and lime) transport (air, sea, rail and road), heavy and civil engineering and waste.
Number of Entities Covered	Not applicable to the ERF. safeguard mechanism has allocated baselines to 154 facilities, though not all will be covered in FY16.
Point of Regulation	Clean Energy Regulator
Threshold	Under the ERF, there is a minimum bid size of 2,000 tCO2e per year on average over the life of the contract. The threshold coverage under the safeguard mechanism is 100,000 tCO2e per year.
Average Carbon Price	The volume weighted average price for each of the ERF auctions has been AUD\$13.95 (auction 1), AUD\$12.25 (auction 2) and AUD\$10.23 (auction 3). The average price across the three auctions equates to AUD\$12.10.
Allowances Allocation	Under the ERF, credits are issued to registered projects for delivered verified abatement. Credits can be purchased by the Government through the ERF reverse auctions.
Carbon Leakage Provisions	The safeguard mechanism is intended to ensure that emissions abated by the ERF are not displaced by a significant rise in emissions above business- as-usual levels elsewhere in the economy.
Use of Revenues	ERF does not generate revenues, funding is sourced from Government revenue. Under the safeguard mechanism, covered businesses are subject to a range of discretionary, graduated enforcement options. The final sanction is a civil penalty to a maximum amount of AUD\$1.8 million.
Price/Market Control Measures	Under the ERF, the Clean Energy Regulator conducts reverse auctions to find and purchase the lowest-cost emissions reductions available on behalf of the Government. To determine which projects are selected, the Regulator applies a benchmark price (undisclosed) – that is the maximum amount the government will pay for emissions reductions. The Regulator also applies a variable volume abatement threshold which allows up to 100 per cent of the abatement below the benchmark price to be contracted.

Offsets	The Clean Energy Regulator has issued over 26 million Australian Carbon Credit Units (ACCUs) for projects registered under the ERF. Currently over 143 million tonnes of abatement are contacted to be delivered under the ERF.
	Under the safeguard mechanism, facilities that emit above their allocated baseline can buy Australian Carbon Credit Units (ACCUs) to ensure net emissions remain at or below baseline levels. Currently there is no provision for the use of international units; however their role in the safeguard mechanism are likely to be reviewed in 2017.
Linkages	N/A
Market Regulation and Oversight	The Clean Energy Regulator administers both the ERF and safeguard mechanism. The Regulator is in charge of purchasing emission reduction units via reverse auctions on behalf of the government under the ERF and determining facility emissions baselines and administering compliance under the safeguard mechanism.
Complementary Policies	<ul> <li>Australia has additional policy measures in place to promote the deployment of renewable energy and improve energy efficiency. Under Australia's Renewable Energy Target scheme, over 23 per cent of Australia's electricity will come from renewable sources by 2020.</li> <li>Australia's National Climate Resilience and Adaptation Strategy 2015 considers a range of adaptation and resilience initiatives across key sectors including coasts, cities and the built environment, agriculture, forestry and fisheries, water resources, natural ecosystems, health and wellbeing, disaster risk management, and resilient and secure regions.</li> <li>The Australian Government is commencing the development of a range of policies that will reduce emissions into the post-2020 period, including a National Energy Productivity Plan with a National Energy Productivity Target of a 40% improvement between 2015 and 2030, the investigation of opportunities to improve the efficiency of light and heavy vehicles, and the enhanced management of synthetic greenhouse gas emissions under ozone protection laws and the Montreal Protocol.</li> </ul>
Enforcement/Penalties	Compliance under the safeguard mechanism includes discretionary and graduated enforcement options. These include: the use of offsets (ACCUs) to keep net emissions below allocated baselines. Multi-year monitoring across a two or three-year period, enforcement options including issuing infringement notices, accepting enforceable undertakings and seeking injunctions to rectify an emissions exceedance. The final sanction is a civil penalty to a maximum of AUD\$1.8 million.
Banking	Covered facilities can use a net emissions approach through the use of ACCUs to offset emissions above allocated baselines.
Monitoring and Reporting	<ul> <li>For contracted projects under the ERF, reporting periods can be from every six months to two years (up to five years for sequestration projects and as short as one month if net abatement is less than 2,000 tonnes for the period). The first reporting period begins at the start of the project's crediting period. Each subsequent reporting period must commence at the end of the previous reporting period.</li> <li>The Clean Energy Regulator can require proponents to obtain;</li> <li>an initial audit at the beginning of the crediting period,</li> <li>at least three audits over crediting periods and</li> <li>additional audits based on the Regulator's risk-based approach.</li> <li>In addition, within the safeguard mechanism rules, the Regulator can ask that an application can be accompanied by an audit report.</li> </ul>

### **Carbon Price Evolution**

The Emissions Reduction Fund operates through reverse auctions designed to purchase abatement (in the form of ACCUs) at lowest cost. Prior to the auction, the Clean Energy Regulator determines an undisclosed benchmark price, bids above which are excluded. The auctions are single round, sealed bid so sequential bidding is not an option. Project participants making bids do not see what others are bidding. Each bid made at the auction relates to one or more projects registered for the ERF. If a participant's bid is successful, the participant will automatically enter into a contract with the Regulator on behalf of the Commonwealth of Australia covering the project(s) related to the bid. The Regulator has the flexibility to vary the volume of abatement purchased to ensure lowest price, known as the *variable volume abatement threshold*. With this structure, the volume weighted average price per tonne of abatement has declined over the course of the three auctions, from AUD\$13.95 in the first auction (April 2015) to AUD\$10.23 in the most recent (April 2016) auction.





The primary source of abatement contracted to date under the ERF has been land based forestry projects, with over 100 MtCO2e contracted to date. Other sources of abatement such as landfill and waste, savanna burning, agriculture, energy efficiency and transport have featured in the three auctions. Taken together, over 41 MtCO2e has collectively been contracted from these sources of abatement.

Source: Clean Energy Regulator, 2016. ERF volume weighted average price at auction. Available at: cleanenergyregulator.gov.au

### **Commentary on Market Functioning**

Over the course of the three auctions, the ERF has purchased over 143 million tonnes of abatement from domestic emissions reduction projects at an average price of AUD\$12.10 per tonne. Of the initial AUD\$2.55 billion committed to the ERF, AUD\$816 million remains with an auction planned for November 2016. The ERF has contracted abatement from 348 projects. Other project types have been contracted under a range of the 32 methodologies released to date by the Department of the Environment and Energy (formerly Department of the Environment). Contract lengths for projects range from one to ten years,

meaning some abatement will be delivered post-2020.

The safeguard mechanism may assume a greater share of the emissions reduction task in the post-2020 period to meet Australia's NDC target of 26-28 percent below 2005 levels by 2030. The safeguard mechanism has allocated baselines to 154 facilities, however not all will be covered in FY17 (1 July 2016 to 30 June 2017), the mechanism's first year of operation.

The Government has planned a review of the ERF and safeguard mechanism in 2017 is likely to consider a range of elements including the operation of both policy instruments, the role of international units under the safeguard mechanism and the progress made toward meeting Australia's international obligations. The review will have important bearing on the forward direction of both the ERF and safeguard mechanism.

## What Distinguishes this Policy?

#### **UNIQUE ASPECTS:**

emissions trading scheme, was repealed in 2014 following a change in government.

Reverse auctions: the ERF operates through a reverse auction process. Bids to sell abatement from registered

Change in political view regarding emissions trading system: the Clean Energy Act 2011, and with it, a national

projects to the Government are made on a per-tonne price. Successful bids are selected as those below the (undisclosed) benchmark price set by the Regulator and within the variable volume abatement threshold.

GHG emissions limits on large facilities: the safeguard mechanism assigns absolute emissions baselines to facilities with emissions over 100,000 tCO2e per year.

#### **CHALLENGES**

Future policy setting and alignment with 2030 GHG emissions reduction target: Australia's 2030 emissions reduction target of 26-28% below 2005 levels by 2030 will require a reduction in emissions below business as usual levels. This in turn will need to be reflected in the policy suite, including the Safeguard Mechanism which currently sets baselines at historical emissions highpoints.

Transitioning from Government funding to private sector funding of emission reduction: The government funded ERF was established with a AUD\$2.55 billion and after three auctions AUD\$816 million remains. As the emission reduction task in Australia increases the public funding of abatement will need to shift to the private sector to do the heavy lifting. This will mean the safeguard mechanism will need to evolve to an effective market mechanism where baselines are set to below business as usual and require covered entities to purchase of credits and be the parties responsible for driving the demand for domestically generated credits.

## **Author Acknowledgements**

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