Making domestic offsets available for European / international trade: the Australian Case

Patrick Bürgi, Director Public Sector
Berlin, 27 September 2016
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<td><strong>Australia‘s domestic offset scheme</strong></td>
<td>05</td>
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<td><strong>Double counting</strong></td>
<td>07</td>
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<td><strong>Linking</strong></td>
<td>09</td>
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</table>
Our solutions

- Carbon Credit Solutions
- Renewable Energy Solutions
- Sustainability Advisory
- Green Finance
Developing solutions worldwide
Our Past: 10 years of Creating Global Impact

80 million+ tCO₂e saved

500+ projects developed in renewables, forestry, agriculture, industry and households

100,000+ GWh renewable energy produced

15,000+ km² saved forest from deforestation

70,000 jobs created in developing countries

55,000+ km² land protected or restored

$10 bn+ clean energy investments mobilised in emerging markets
ca. 20% Market share after 3 ERF auctions

69 registered projects

56 regeneration
8 savannah burning
3 avoided deforestation
1 reforestation
1 composting
Australia‘s domestic offset scheme
Australia’s climate policy suite
INDC target of 26-28% reduction by 2030 compared to 2005

- Emissions Reduction Fund (ERF)
  - Three elements; crediting, purchasing and safeguarding emissions reductions
  - $2.55b to start with and $800m remaining for future auctions

- Safeguard Mechanism
  - Places emissions baselines on heavy emitting facilities (>100,000 tCO$_2$-e/year)
  - Commenced 1 July 2016

- Renewable Energy Target
  - 23.5% renewable energy by 2020

- National Energy Productivity Plan
  - Economy-wide work plan to deliver a 40 per cent improvement in Australia’s energy productivity by 2030

Source: Carbon Market Institute (CMI)
How Australia will meet its 2030 target

The climate policies to meet the 26-28% emissions reduction (on 2005 levels)

Source: Carbon Market Institute (CMI)
Overall ambition and challenges

Climate Action Tracker assessment of policy projections vs INDC

Source: Climate Action Tracker
Emission Reduction Fund

Key principles

• Landowners, traditional owners and businesses that store carbon in trees and soil can earn Australian Carbon Credit Units (ACCUs)

• The Australian Government pays for the carbon credits

• All projects are independently audited and meet Australian Government regulations

• 2 types of credits:
  – Kyoto ACCUs (domestic & potentially international compliance/voluntary markets)
  – Non-Kyoto ACCUs (voluntary markets only)
Emissions Reduction Fund
Eligible project types

- **Land-use sector**
  - Vegetation management – avoided clearing, regeneration, reafforestation, savanna burning
  - Agriculture – beef herd cattle, piggery and dairy manure methane capture & combustion

- **Transport** – aviation, land and sea transport

- **Waste and wastewater** – landfill gas, alternative waste treatment

- **Energy Efficiency** – commercial buildings, lighting, industrial energy and fuel efficiency, facilities

- **Mining, oil & gas** – coal mine waste gas, oil & gas fugitives
Emission Reduction Fund
Project overview

Source: Clean Energy Regulator
### Emission Reduction Fund Facts & figures

#### National Cumulative figures as at 31 August 2016

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of registered Emissions Reduction Fund projects</td>
<td>631</td>
</tr>
<tr>
<td>Total number of Australian carbon credit units issued</td>
<td>2,696,6843</td>
</tr>
</tbody>
</table>

#### Emissions Reduction Fund contracts

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of carbon abatement contracts</td>
<td>309</td>
</tr>
<tr>
<td>Total number of Australian carbon credit units delivered under contract</td>
<td>10,760,114</td>
</tr>
</tbody>
</table>

*Source: Clean Energy Regulator*
### Emission Reduction Fund

**Project types**

<table>
<thead>
<tr>
<th>Method type</th>
<th>Registered projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>energy efficiency</td>
<td>41</td>
</tr>
<tr>
<td>industrial fugitives</td>
<td>11</td>
</tr>
<tr>
<td>savanna burning</td>
<td>69</td>
</tr>
<tr>
<td>transport</td>
<td>7</td>
</tr>
<tr>
<td>facilities</td>
<td>0</td>
</tr>
<tr>
<td>agriculture</td>
<td>33</td>
</tr>
<tr>
<td>vegetation</td>
<td>343</td>
</tr>
<tr>
<td>waste</td>
<td>127</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>631</strong></td>
</tr>
</tbody>
</table>

*Source: Clean Energy Regulator*
Emission reduction fund auctions

Contracted abatement

143 million tonnes

Volume of abatement by method

- Vegetation: 98.5 million tonnes
- Landfill and waste: 21.8 million tonnes
- Agriculture: 8.8 million tonnes
- Savanna burning: 8 million tonnes
- Energy efficiency: 4.2 million tonnes
- Industrial fugitives: 0.77 million tonnes
- Transport: 1.2 million tonnes

348 projects contracted to date

- NT: 13
- QLD: 112
- NSW: 164
- VIC: 20
- ACT: 0
- SA: 5
- WA: 16
- TAS: 5
- Multi-state projects: 8
- National projects: 5

Average price per tonne of abatement

- Auction 1: $13.95
- Auction 2: $12.25
- Auction 3: $10.23
- Combined: $12.10

Contracts awarded

309 total

Source: Clean Energy Regulator
Project development

Some examples

Avoided deforestation

Human-induced regeneration

Landfill management

Savannah burning
Regenerating vegetation.

Regenerating vegetation => Mature vegetation
### Emissions Reduction Fund

#### Avoidance of double counting (1/2)

<table>
<thead>
<tr>
<th>Type of double counting</th>
<th>Safeguards</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Double selling</strong></td>
<td>Public registry with unique identification of projects and all transactions</td>
<td>Double selling virtually impossible; environmental integrity unimpaired</td>
</tr>
<tr>
<td><strong>Double issuance</strong></td>
<td>“no double counting test” to avoid multiple issuances of the same unit (e.g. under different standards)</td>
<td>Double issuance virtually impossible; environmental integrity unimpaired</td>
</tr>
<tr>
<td><strong>Double claiming</strong></td>
<td>Non-Kyoto ACCUs</td>
<td>Environmental integrity is not impaired, as ERs from voluntary domestic projects are not accounted for in national GHG inventory</td>
</tr>
</tbody>
</table>

**Kyoto ACCUs**

(1) Purchased by the government: KACCUs transferred and cancelled by government  
(2) Sold on the secondary market: Tracking of transfers through registry  
(1) Environmental integrity not impaired; units only claimed by the government  
(2) Units can be claimed only once

Source: adelphi
# Avoidance of double counting (2/2)

<table>
<thead>
<tr>
<th>Type of double counting</th>
<th>Safeguards</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double monetisation</td>
<td>Activities generating non-Kyoto ACCUs are not reflected in Australia’s Kyoto accounts. ACCUs may only be traded domestically.</td>
<td>Environmental integrity not impaired; units are not reported in Australia’s inventory (no impact on AAUs or RMUs). As credits must not be sold outside Australia, the issue of AAU or RMU cancellation does not arise.</td>
</tr>
</tbody>
</table>

Kyoto ACCUs:
(1) Export: Government exchanges credits for AAUs, ERUs or RMUs
(2) Domestic use / sale on domestic market: double counting provisions in safeguard mechanism

Environmental integrity is not impaired due to clear double counting provisions.
Linking prospects

• Linking subject to policy decisions and demand/supply dynamics

• Currently basically no exports of domestic offsets to price gap between ERF prices and international voluntary markets

• Main long-term interest in importing international units (to a limited extent) in order to meet 2030 climate targets

However

• Provisions and mechanisms for export of ACCUs already in place

• Theoretical potential in land-use sector of around 500Mt CO$_2$e, which could not only make a significant contribution to domestic targets but also create room for exports

• Oversupply of ACCUs under ERF possible, depending on outcomes of 2017 policy review (stringency of safeguard mechanism & link to ERF + additional government funds for ACCUs auctions)
The Safeguard mechanism requires Australia’s largest emitters to keep emissions within baseline levels.

- 100,000 tCO₂ threshold
- Covered *facilities* must keep emissions below historical highpoint (FY09-14)
- Approx. 140 facilities
- Separate sectoral baseline for power generation
2017 Climate Policy Review

- Department to establish Terms of Reference for Cabinet
- Formal review process to commence early 2017
- Outcome/recommendations by November 2017
- Key issues and focus areas
  - **ERF - Crediting and Purchasing:** future funding,
  - **Safeguard mechanism:** conditions and criteria for baseline setting and alignment with the international target
  - **International trade in carbon and use of international units:** supply and demand of domestic and international units
Thank you

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thesouthpolegroup.com
Back-up slides:
ERF auction mechanism
ERF project examples
1. The Clean Energy Regulator has a benchmark price (ceiling) that it will not accept bids above.

2. CER identifies the bid(s) that straddle the 50% of volume offered at the auction.

3. All bid(s) below the straddling bids are selected.

4. Straddling bid(s) and bids above the straddling bid(s) are selected using the CER's bid analysis tool when determining value for money.
Clearing in Queensland.
Mechanical Clearing.
Livestock suppression.
Map accuracy checks.
Main requirements.
Human-Induced Revegetation.

The project area must have:

1. Non-forest cover.
2. Forest potential.
3. A history of suppression of vegetation, such as heavy grazing, clearing or feral grazers.
4. A change of management leading to the removal of vegetation suppression. This could include grazing rotation, lower stock levels or cessation of clearing.

Mourachan did not meet the HIR key criteria as clearing was undertaken over 10 years ago and livestock levels are sustainable.

The ‘Native Forests from Managed Regrowth Method’ was chosen instead, as it has much simpler requirements.
Generally, areas with ‘forest cover’ are ineligible under the methodology.

‘Forest cover’ includes forest with:

- Trees that are 2 metres high.
- 20% canopy.
- Area of 0.2 ha.
Mourachan.
Forest cover.
Mourachan. Forest cover.
Mourachan.
Results.

- Area of eligible land regenerating: 6,025 ha.
- Typical model commencement date (date we show that regeneration started): 1 January 2007.
- Aiming for reduction of woody debris in the baseline scenarios.
- Project commencement date (date that project starts): 31 October 2016.
- Date of first issuance of credits: 31 October 2016.
- With our $8 net options, the 220,000 ACCU option would include a return of an estimated $1.76 million.

Note: 27 CEAs are not included in this calculation, as they are all smaller than 20 ha. The total excluded area is 151.7 ha.

<table>
<thead>
<tr>
<th>Date</th>
<th>Initial calculations</th>
<th>MCD shifted to July 2007</th>
<th>Baseline debris reduced by 50%</th>
<th>Combined: MCD shifted and Baseline debris reduced</th>
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<tbody>
<tr>
<td>31-Oct-16</td>
<td></td>
<td></td>
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<tr>
<td>31-Oct-17</td>
<td>-117,905</td>
<td>-57,359</td>
<td>-53,718</td>
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<tr>
<td>31-Oct-19</td>
<td>-69,703</td>
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<tr>
<td>31-Oct-20</td>
<td>-44,207</td>
<td>17,627</td>
<td>19,980</td>
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<td>31-Oct-21</td>
<td>-18,768</td>
<td>19,800</td>
<td>25,439</td>
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<tr>
<td>31-Oct-22</td>
<td>6,189</td>
<td>22,805</td>
<td>24,957</td>
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<tr>
<td>31-Oct-23</td>
<td>23,826</td>
<td>21,571</td>
<td>23,826</td>
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<td>31-Oct-24</td>
<td>19,641</td>
<td>20,295</td>
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<td>31-Oct-25</td>
<td>22,269</td>
<td>19,127</td>
<td>22,269</td>
<td>19,127</td>
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<tr>
<td>31-Oct-26</td>
<td>20,976</td>
<td>17,951</td>
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<tr>
<td>31-Oct-27</td>
<td>19,771</td>
<td>16,908</td>
<td>19,771</td>
<td>16,908</td>
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<tr>
<td>Total</td>
<td>112,672</td>
<td>156,084</td>
<td>176,859</td>
<td>220,271</td>
</tr>
</tbody>
</table>
Mourachan.
Requirements.

- Provision of evidence for audit purposes; proof of acquisition and related land management data.
- No further clearing or significant impacts to vegetation.
- Simplistic annual reporting.
Quilpeta Regeneration Project
Case Study

The project issued **50,399 ACCUs** for the first reporting period.

At the $12.25 average price in auction two, that is **$617,387** in revenue.

The landholder is using these funds to improve their pastoral business model.
The Mulga Lands.  
Ecological assets.

The Mulga Lands Bioregion is home to a variety of threatened flora and fauna, including:

- 9 threatened plant species.
- 5 threatened mammal species, including the endangered Greater Bilby (*Macrotis lagotis*).
- 7 threatened bird species, including the elusive nocturnal Night Parrot (*Pezoporus occidentalis*), which has been so rarely sighted in the wild it was assumed to be extinct until 2013.
- 2 threatened reptile species.

Photo source: http://australianmuseum.net.au/greater-bilby
The Mulga Lands.
Threats and degradation.

- Large amount of continuous clearing.
- Low biophysical naturalness of the landscape.
- Poor connectivity of forest remnants confined mainly to major landscape features in eastern parts.
- Change in hydrology with changes to infiltration and run-off due to soil degradation from grazing pressure.
- Threatened biodiversity.
- Very low proportion of land in protected areas.