Australian Government
Department of Industry, Science, Energy and Resources

Emissions Reduction Fund

Current methods and opportunities for leucaena

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Overview

- Australia's Emissions Reduction Fund
- Agricultural methods under the ERF
- Opportunities for Leucaena
- Process to develop new methods under the ERF
- Livestock research underway
- Livestock emissions framework

The Emissions Reduction Fund

- Economy wide, voluntary scheme to reduce emissions and help Australia meet its targets
- $2.55 billion initially made available for Government to purchase emissions reductions + an additional $2 billion from Climate Solutions Fund in 2019
- Supports businesses and communities to reduce their emissions, lower their energy costs, increase their productivity and deliver valuable co-benefits

The methods

- Methods are legislative instruments made by the Minister and disallowable by Parliament
- They are the rulebooks which set out:
  - How to undertake a project and calculate carbon credits
  - Responsibilities and obligations of project participants (measure, verify, report)
- Methods must meet the Offsets Integrity Standards, as assessed by the independent Emissions Reduction Assurance Committee (ERAC)
- The Offsets Integrity Standards are specified in legislation (the Carbon Credits Act)

The Offsets Integrity Standards

Is the activity beyond business as usual?
Is the abatement unlikely to occur in the ordinary course of events?

Can the emissions reductions be measured and verified?
Can estimates be accurately measured and are they capable of being verified?

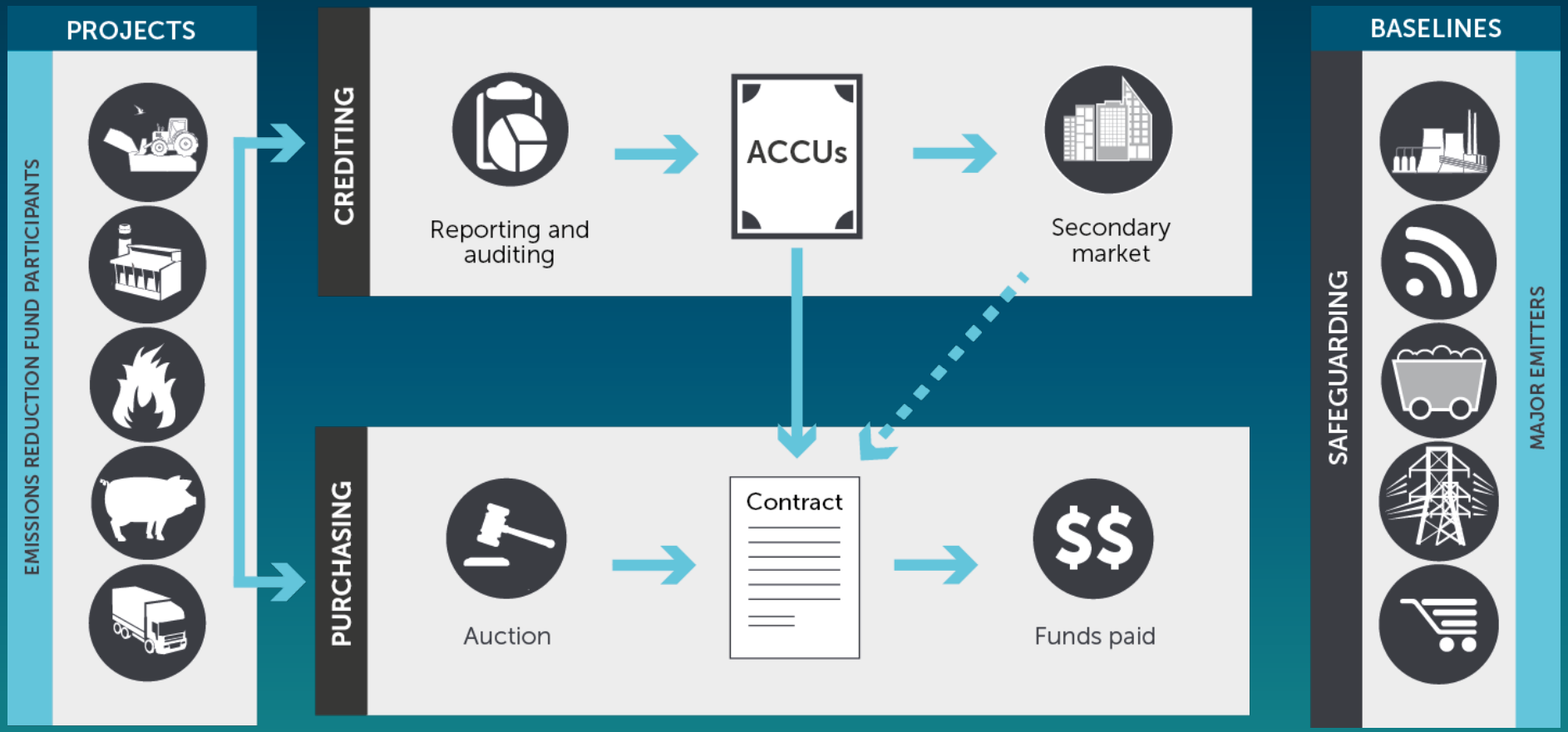
Is the abatement eligible?
Does the method align with Australia's greenhouse gas inventory approaches and international reporting obligations?

Is it supported by evidence?
Is the method supported by clear and convincing evidence?

Are material emissions from the activity deducted?
Are emissions that would occur as a result of the activity deducted when working out the estimated abatement from the project?

Are the estimates conservative?
Is there evidence to demonstrate estimates, projections and assumptions are conservative?

How it works


PROJECTS
EMISSIONS REDUCTION FUND PARTICIPANTS
CREDITING
Reporting and auditing
ACCUs
Secondary market
PURCHASING
Auction
Contract
Funds paid
BASELINES
SAFEGUARDING
MAJOR EMITTERS

Agriculture and vegetation methods

- Beef cattle herd management
- Reducing greenhouse gas emissions by feeding nitrates to beef cattle
- Reducing greenhouse gas emissions by feeding dietary additives to milking cows
- Reducing greenhouse gas emissions from fertiliser in irrigated cotton
- Animal effluent management method
- Soil carbon

- Human-Induced regeneration
- Avoided clearing of native regrowth
- Native forest from managed regrowth
- Plantation forestry
- Reforestation and afforestation
- Reforestation by Environmental or Mallee Plantings
- Savanna fire management

Opportunities for Leucaena

- Improved productivity
  - Leucaena is an eligible activity under the beef cattle herd management method

- Methane mitigation
  - New method needed to credit direct impacts of leucaena on methane generation

  - To develop method we need to understand:
    - dose-response relationship
    - how to estimate emissions on-farm
    - data needed to support abatement estimates

Developing new ERF methods

- Annual call for method development priority ideas
- Minister decides which activities to prioritise each year based on:
  - potential uptake and the likely volume of reduced emissions
  - whether emissions reductions can be estimated at an acceptable cost and to a reasonable degree of certainty
  - whether it could have an adverse impact on society, the environment or the economy
  - whether it could be better supported by other government measures
  - alignment with broader government priorities
- Clean Energy Regulator then develops priority methods within 12 months
  - co-design process with industry, potential end-users, scientists, technical experts and the ERAC
  - ERAC release all methods in draft for public consultation

2022 Method Priorities

- Minister announced priorities earlier this month
  - transport
  - hydrogen
  - integrated farm method
  - carbon capture use and storage
  - savanna fire management

- Government will also progress R&D to support the development future ERF methods
  - Livestock feed technologies which reduce emissions
  - Expanding eligible agricultural waste feedstocks for biomethane
  - Direct air capture technologies, which absorb carbon from the atmosphere for re-use or permanent storage underground.

Livestock Feed Technology Research

- Includes feed supplements (e.g. 3NOP, asparagopsis) and alternative forage feeds (e.g. Leucaena)

- MERiL
  - $4 million grant program for further research on supplements and forage feeds to improve evidence base on emissions reductions and productivity benefits
  - $1 million grant to Meat and Livestock Australia to support development of a livestock emission framework

- LESsGAS
  - $20 million grant program to identify and evaluate mechanisms to deliver supplements to grazing animals (95% of the national herd)

Livestock Emissions Framework

- Provide an approach for accounting for emissions and emissions reductions from the use of feed technologies and improved herd management practices in Australian livestock
  - beef cattle, dairy cattle and sheep.
- Aims to support:
  - updates to the NGGI,
  - potential ERF methods (subject to prioritisation)
  - carbon neutral certification
- Generic framework being developed by Integrity Ag & Environment with support from Meat and Livestock Australia and livestock emissions researchers.
- Specific dose-response relations or coefficient will then need to be developed for each feed technology.

Contact us

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