

# Corporate integrity and action in Australia's expanding carbon markets

*2021 Educational Seminar Series*

## Preliminary Webinar: Carbon Market Fundamentals

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Wednesday 6 October, 2021



**Carbon  
Market  
Institute**



# 2021 Virtual Seminar Series

## Overview

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**Wednesday October 6**

Preliminary Webinar: Carbon Market Fundamentals

**Friday October 8**

Seminar 1: Domestic Market Developments & Innovation

**Friday October 15**

Seminar 2: Market Supply – Project Development, Methods & Integrity

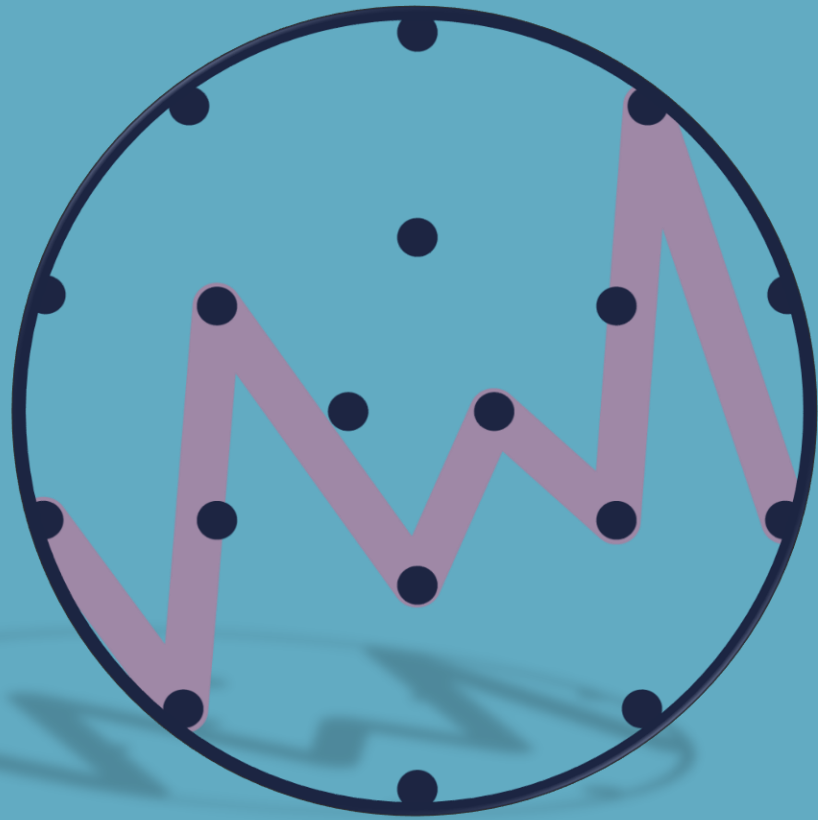
**Friday October 22**

Seminar 3: Corporate Engagement – Market Strategies, Investment & Due Diligence

**Wednesday October 27**

Seminar 4: Trading & Procurement – Engaging in Domestic & International Markets

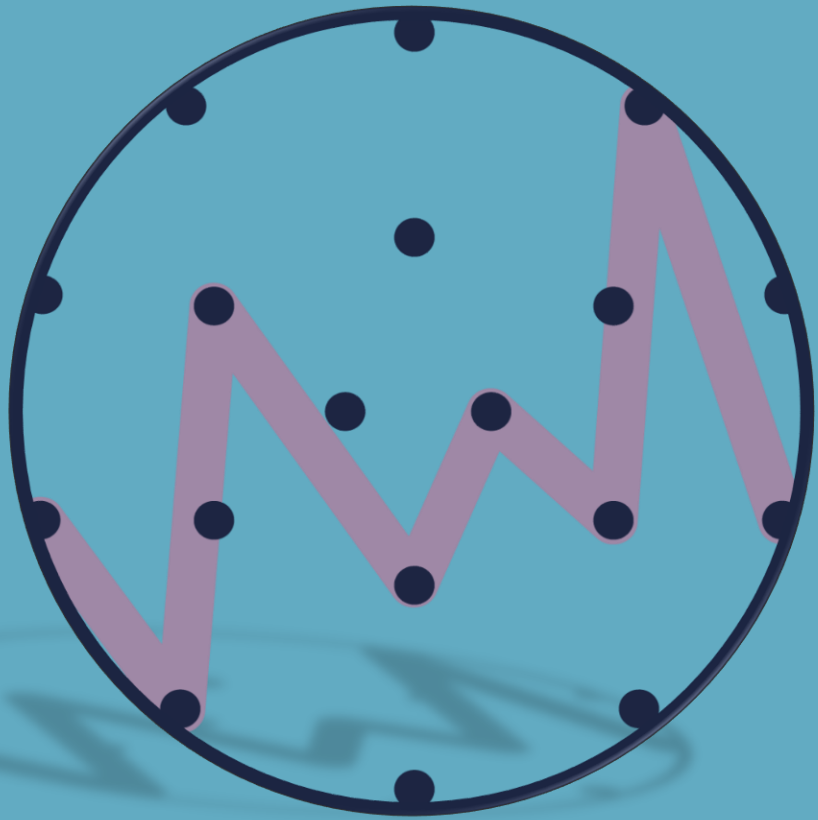
*\*All seminars commence at 12pm (AEDT)*



# Preliminary Webinar: Carbon Market Fundamentals

## Speakers

- **Shakir Rahman**  
Assistant Manager, Economic Analysis, Clean Energy Regulator
- **Brad Kerin**  
General Manager, CMI
- **Gloria Karaiskos**  
Director, Climate Change, CMI



**About CMI**



# About Carbon Market Institute

## Our 2050 Vision

A prosperous, climate-resilient, net-zero emissions world.

### Speaking for business leading the transition

to a net-zero emission economy, sharing knowledge, building capacity and catalysing opportunities.

### Stewards of Australia's carbon market

building integrity and related effective policies, supporting their continued evolution and integration with global markets

### Championing the Paris Agreement and TCFD

framework of climate and net-zero emission goals, and mechanisms for increasing ambition, international cooperation and investment.





8TH ANNUAL



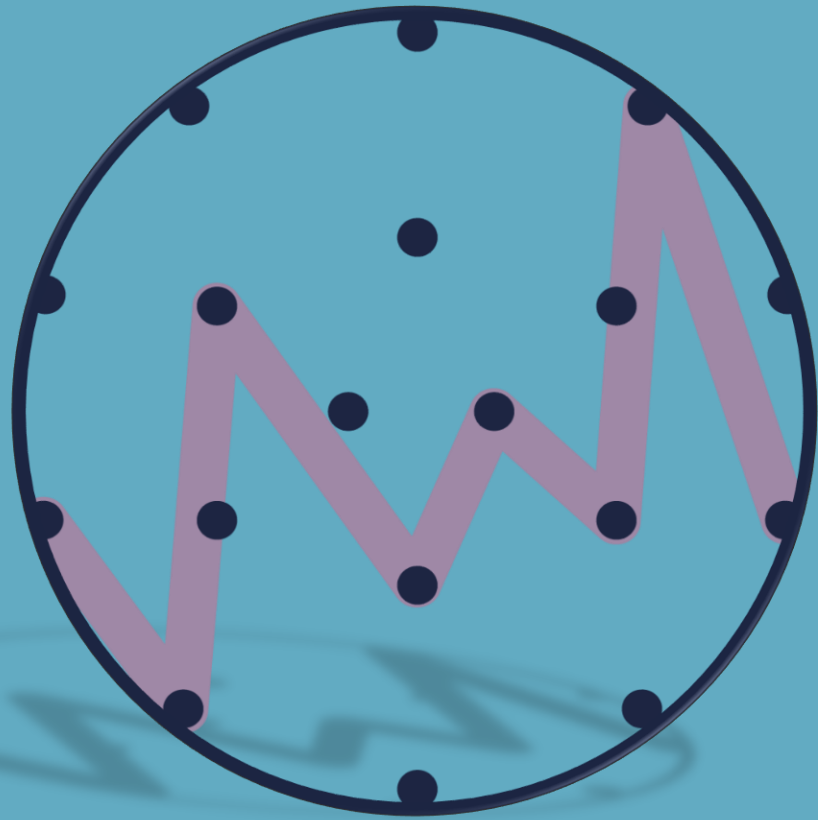
**Australasian  
Emissions  
Reduction  
SUMMIT 2021**

9-10 DECEMBER | ICC SYDNEY



# DESTINATION ZERO & BEYOND

[summit.carbonmarketinstitute.org](https://summit.carbonmarketinstitute.org)



# Introduction to Carbon Markets





# What are Carbon Markets?

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‘...if pollution is free, there will be more of it...’

– Catherine McKenna, Former Environment Minister of Canada



# What are Carbon Markets?

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## **Carbon Markets**

Increasingly ambitious legal, financial and regulatory policy frameworks that attribute an economic value to the sequestration of, or avoidance of carbon emissions.



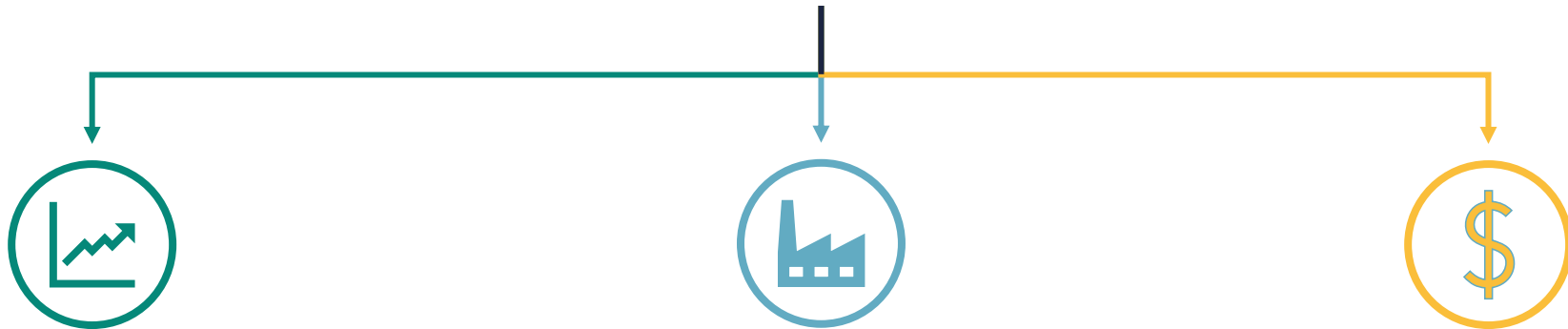
# What are Carbon Markets?

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## Carbon Markets

Increasingly ambitious legal, financial and regulatory policy frameworks that attribute an economic value to the sequestration of, or avoidance of carbon emissions.



**Increase demand for emissions reductions and climate action**

**Leverage public policy frameworks to drive economic decarbonisation at lowest cost**

**Incentivise private sector investment in emissions reductions at scale**



# Global Market Signals

## The Paris Agreement



→ Limit increase in the global average temp to “well below 2°C ... **pursue 1.5°C**”

→ National **targets must be reviewed** every 5 years (ratchet mechanism)

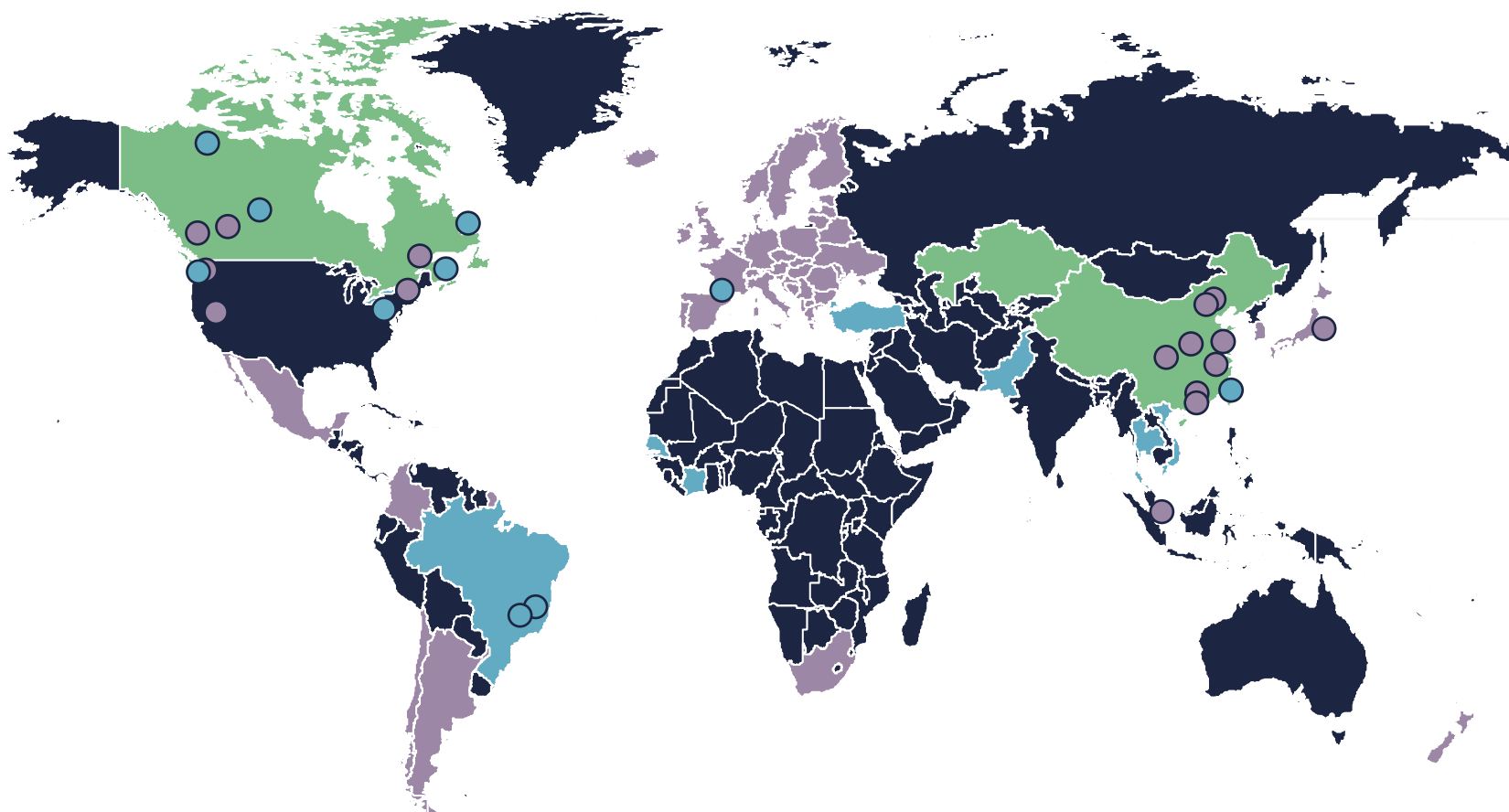
→ **‘Paris Rulebook’** agreement to be reached at COP26 (Glasgow, Nov 2021)



# Global Carbon Markets

## National and subnational initiatives

Summary map of national or subnational carbon pricing initiatives that are implemented, scheduled or under consideration



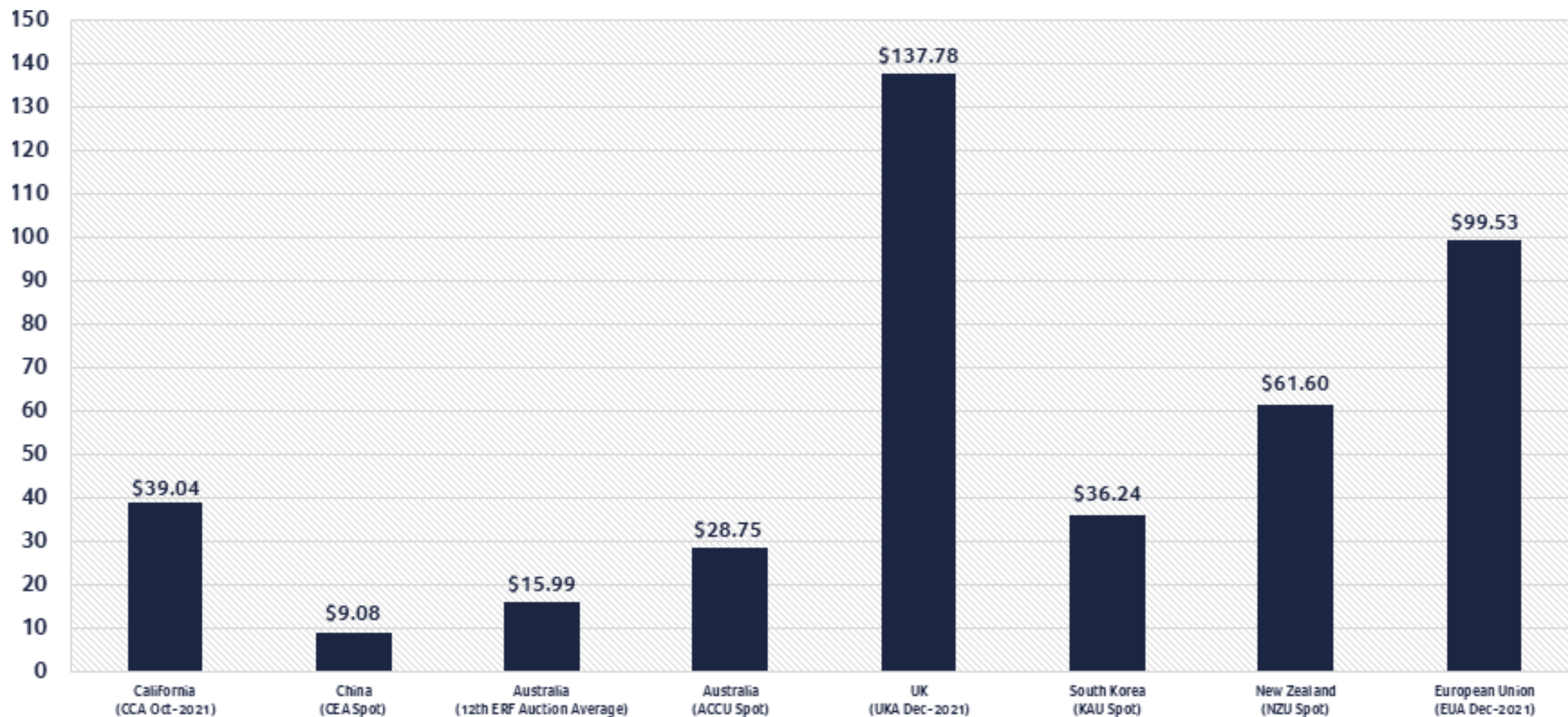
- **64** carbon pricing initiatives implemented or scheduled for implementation, with another **23** under consideration.
- **45** national jurisdictions are covered by these carbon pricing initiatives, with another **13** under consideration.
- **35** subnational jurisdictions are covered by these carbon pricing initiatives, with another **9** under consideration.

*Source: The World Bank Carbon Pricing Dashboard, (April 2021)*



# Global Carbon Prices (AUD)

## Markets valuing carbon



Sources: CER | TFS Green | Jarden | Carbon Pulse | KRX | ICE | Commtrade  
ACCU Auction (13/4/2021); CEA (30/9/21); ACCU Spot, CCA, UKA, EUA (1/10/21); NZU (4/10/21)  
RBA exchange rates as at 1/10/2021





# The Offset Marketplace

## Emission reductions



CLEAN  
ENERGY  
REGULATOR

**Australian Carbon Credit Unit  
(ACCU)**

**Gold  
Standard®**

*Climate Security & Sustainable Development*

**Voluntary Emission Reduction  
(VER)**



**Emission Reduction Tons  
(ERT)**



**United Nations  
Framework Convention on  
Climate Change**

**Certified Emissions Reduction  
(CER)  
Removal Unit (RMU)**



**Verified Carbon Unit  
(VCU)**



**CLIMATE  
ACTION  
RESERVE**

**Climate Reserve Tonne  
(CRT)**



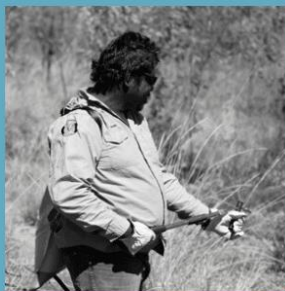
# Emissions Reduction Projects

## Generating carbon credits

- Activities that reduce emissions can generate carbon credits.
- Projects and the carbon credits they generate are verified under different international standards.
- Projects can also provide co-benefits (social, cultural, economic and other environmental outcomes).



+ Vegetation



+ Savanna Burning



+ Agriculture



+ Landfill & Waste



+ Industrial Fugitives



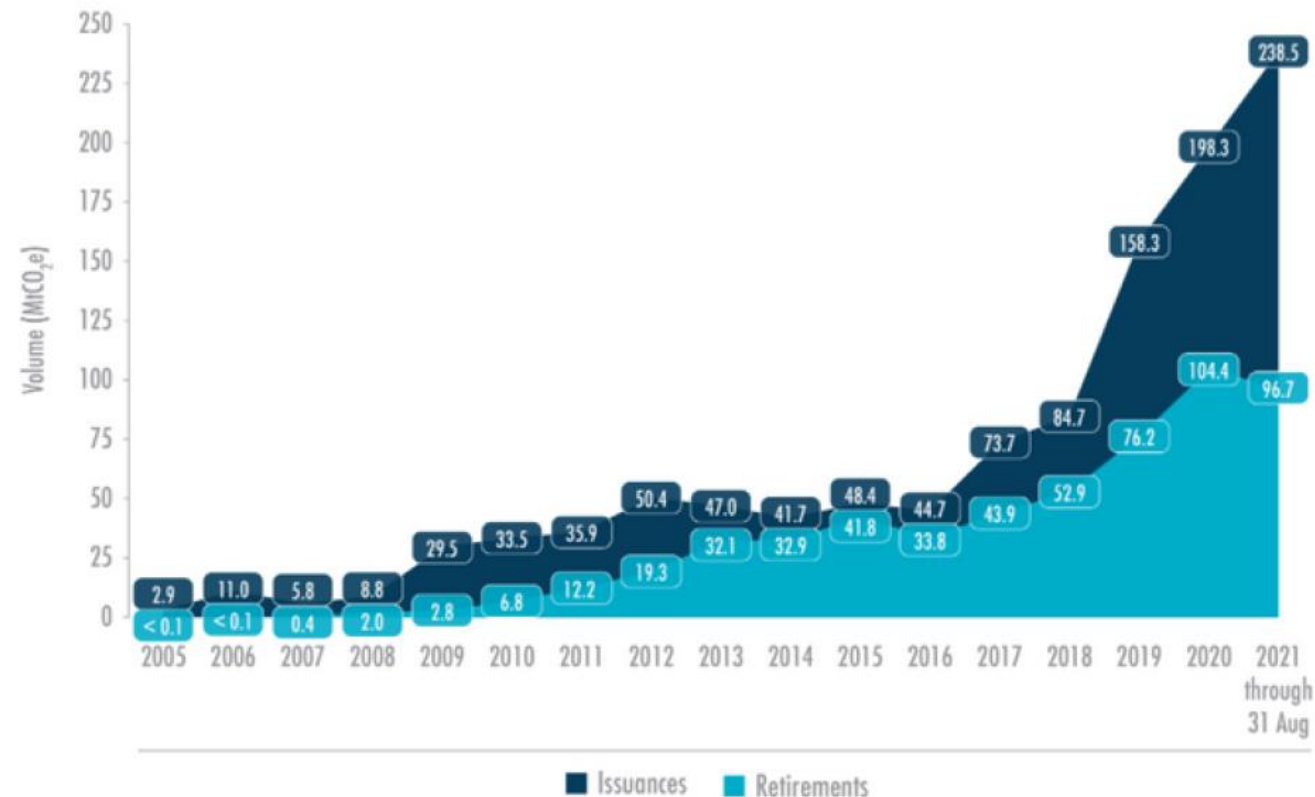
+ Energy Efficiency



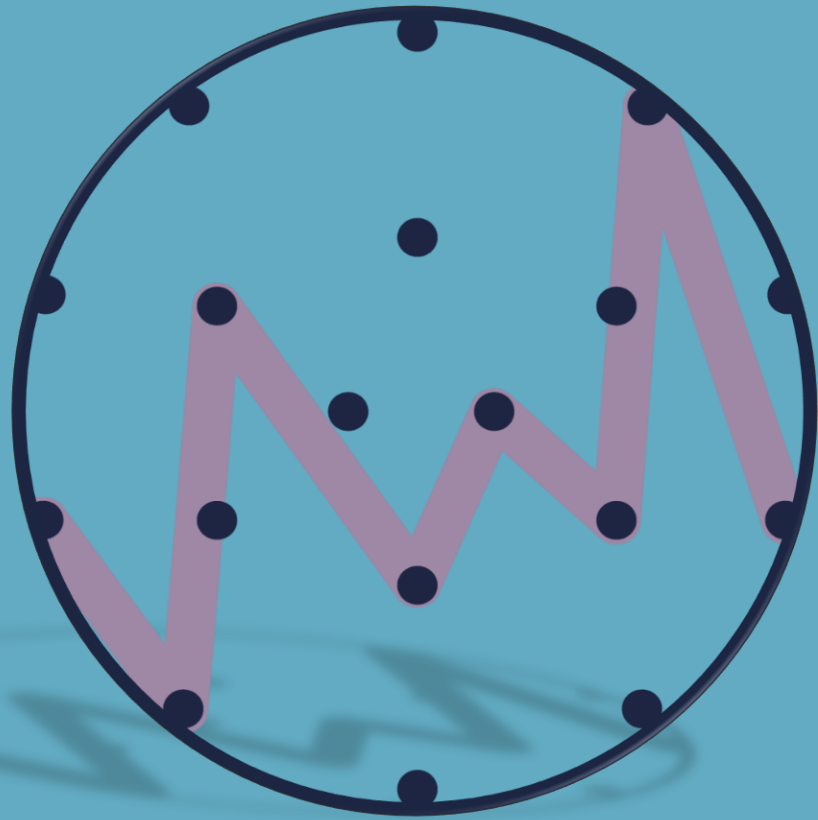
# Carbon Market Developments

## Global growth and investment

- Global activity in the **voluntary carbon market** is rapidly expanding.
- New initiatives are developing to **scale the market** and **drive integrity**.
- Rules on carbon market mechanisms (**Paris Rulebook, Article 6**) will be a focus at COP26.



*Ecosystem Marketplace, Insights Report: State of the Voluntary Carbon Markets 2021, Instalment 1 (September 2021) <https://www.ecosystemmarketplace.com/>*



# Australia's Carbon Market & Policy Landscape



# Australian Policy Landscape

## Federal & State policies

### Federal Climate Policy

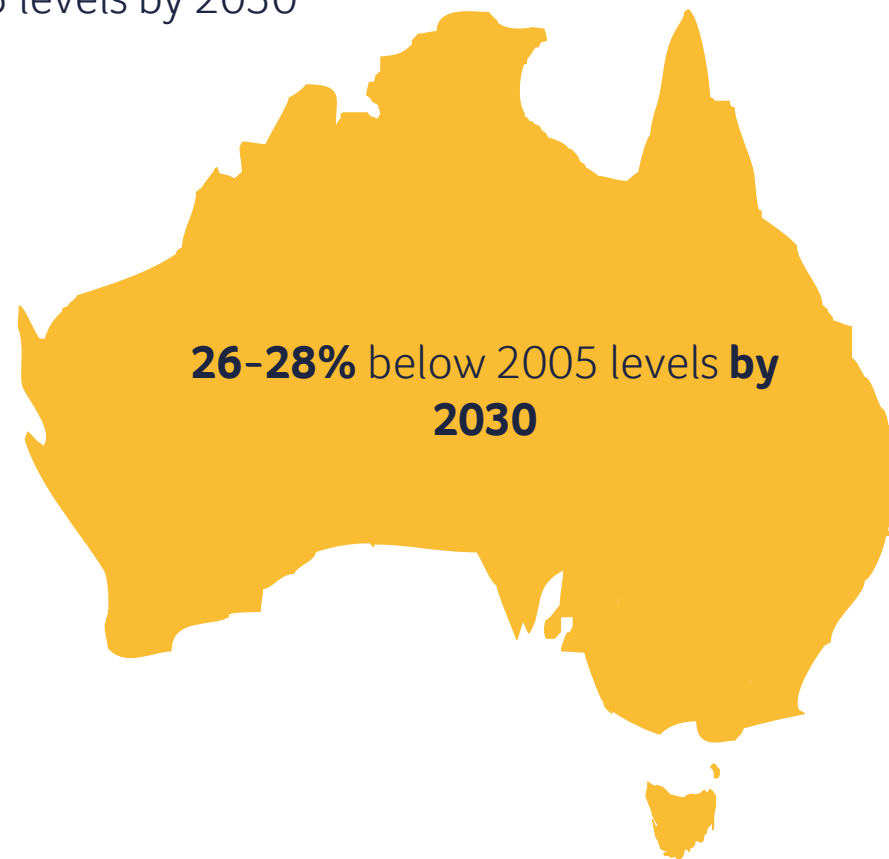
- National emissions reduction target of 26–28% below 2005 levels by 2030
- Long-term policy review (due in 2021)
- Technology Investment Roadmap

### Key Market Policy Mechanisms & Schemes

- Emissions Reduction Fund (ERF)
- Renewable Energy Target (RET)
- National Greenhouse & Energy Reporting (NGER) scheme
- Safeguard Mechanism

### State Developments

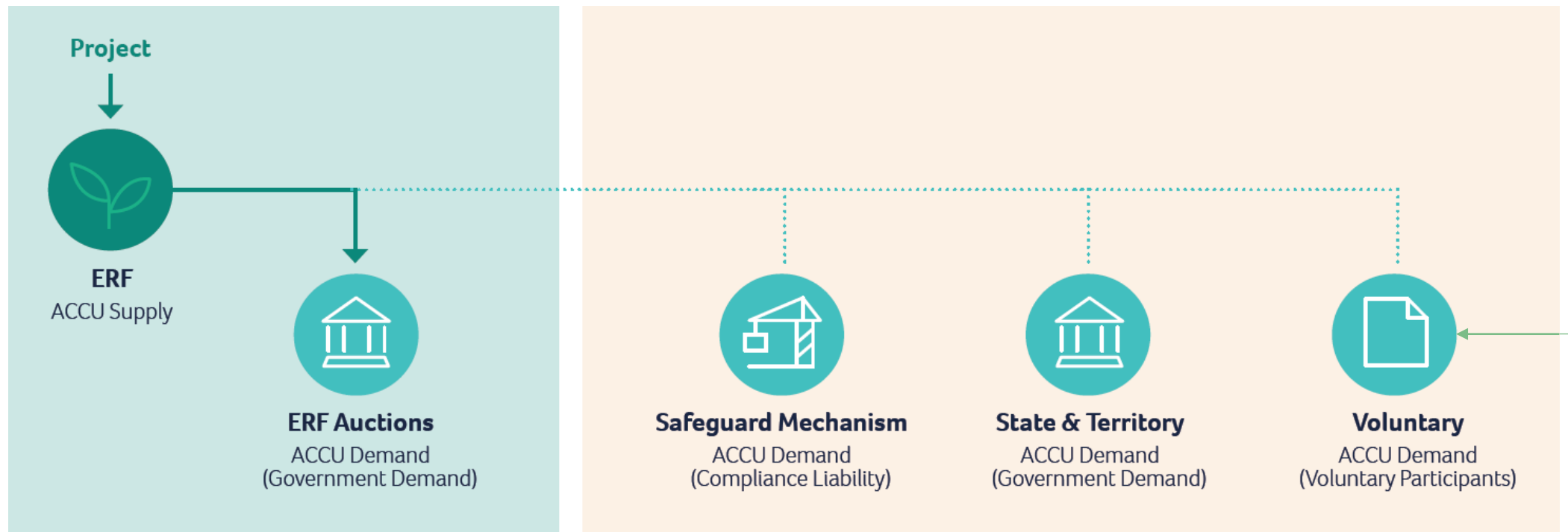
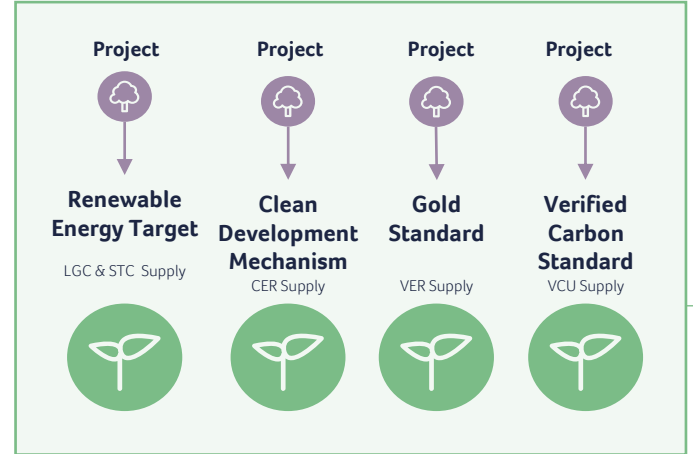
- Queensland Land Restoration Fund
- WA Carbon Farming and Land Restoration Program
- NSW 50% reductions by 2030





# Australian Carbon Market

## Compliance & Voluntary Activity

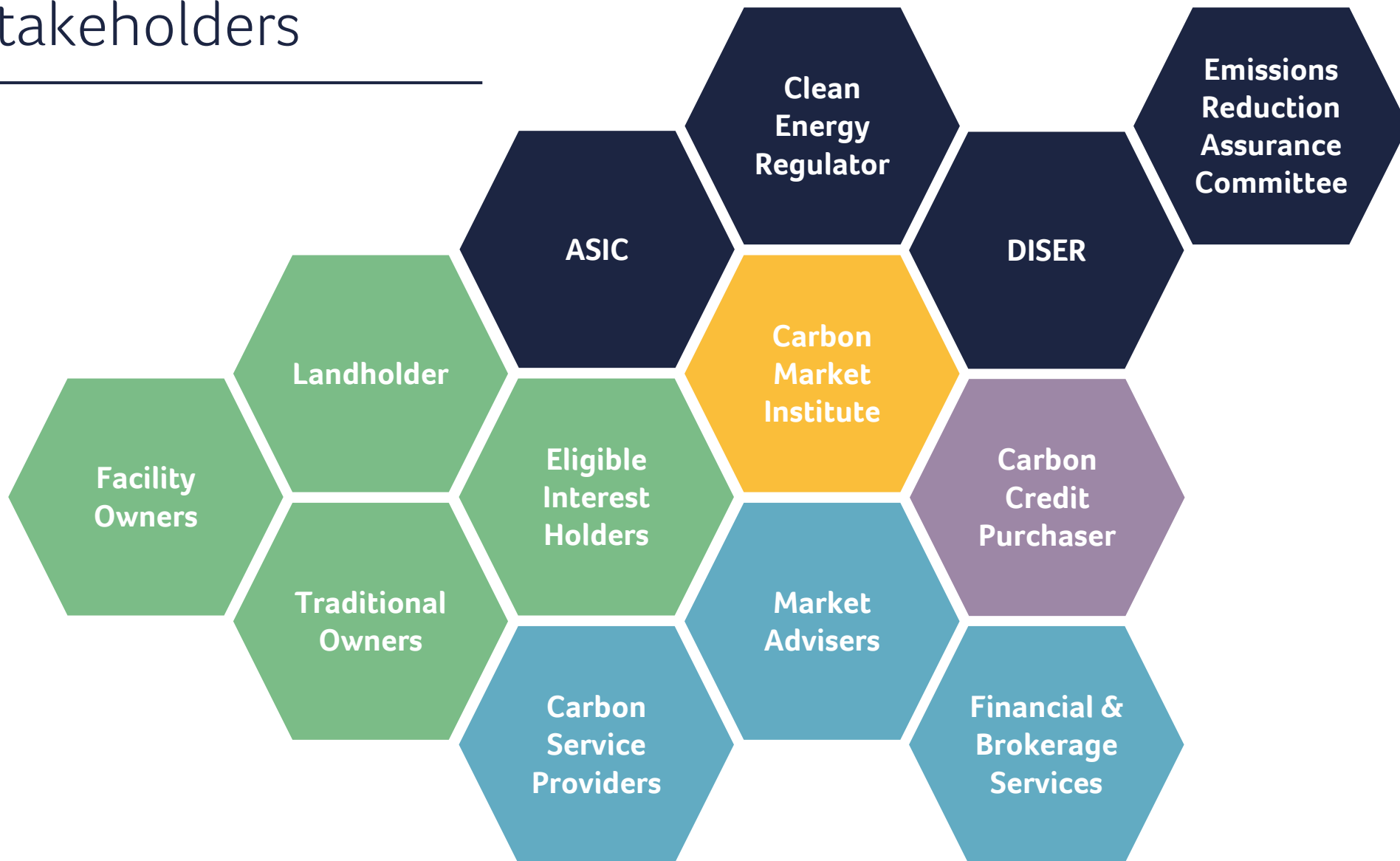






# Australia's Carbon Market

## Key Stakeholders





# Australian Carbon Industry **Code of Conduct**



Australian  
Carbon Industry  
**Code of Conduct**  
FOUNDATION SIGNATORY



Australian  
Carbon Industry  
**Code of Conduct**  
SIGNATORY



Australian  
Carbon Industry  
**Code of Conduct**  
GOVERNMENT PARTNER



Australian  
Carbon Industry  
**Code of Conduct**  
FOUNDATION SIGNATORY



ABORIGINAL  
CARBON FOUNDATION



REDUCING  
CARBON  
BUILDING  
COMMUNITIES



AI CARBON  
Australian Integrated Carbon



CO<sub>2</sub>  
Australia



CORPORATE  
CARBON  
...NEW MARKET SOLUTIONS



Australian  
Carbon Industry  
**Code of Conduct**  
SIGNATORY



DLF  
RESOURCES  
PTY LTD





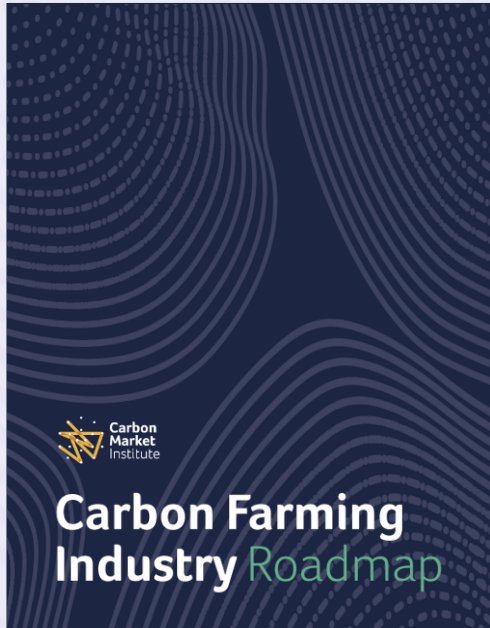
Australian  
Carbon Industry  
**Code of Conduct**  
GOVERNMENT PARTNER



**Queensland**  
Government



**NSW**  
GOVERNMENT



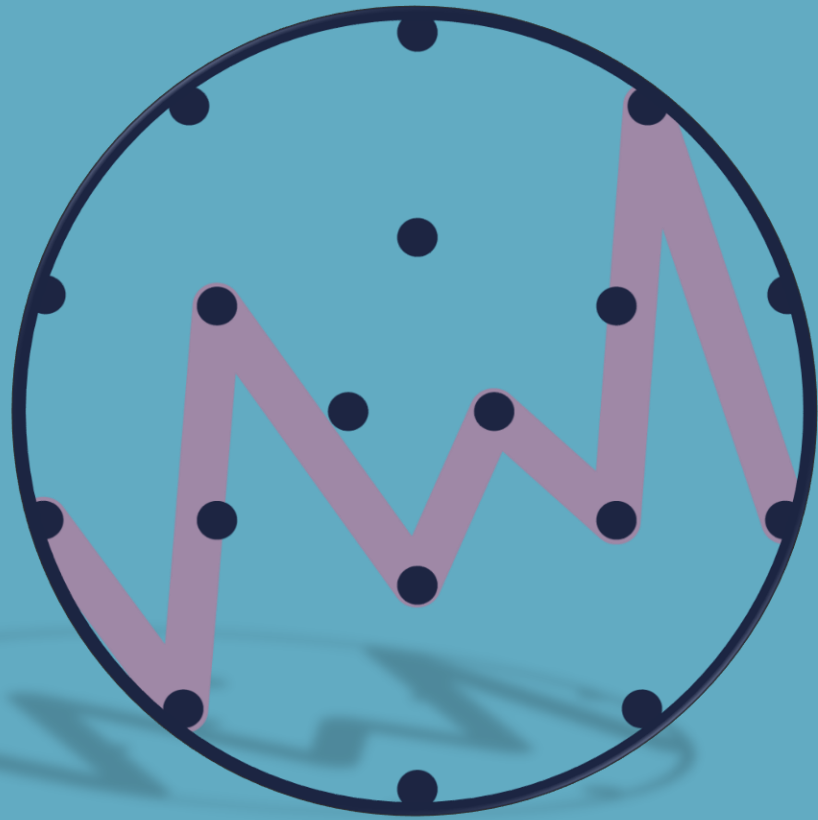
[carbonmarketinstitute.org/roadmap](https://carbonmarketinstitute.org/roadmap)



# Australian Carbon Industry **Code of Conduct**

[carbonmarketinstitute.org/code](https://carbonmarketinstitute.org/code)





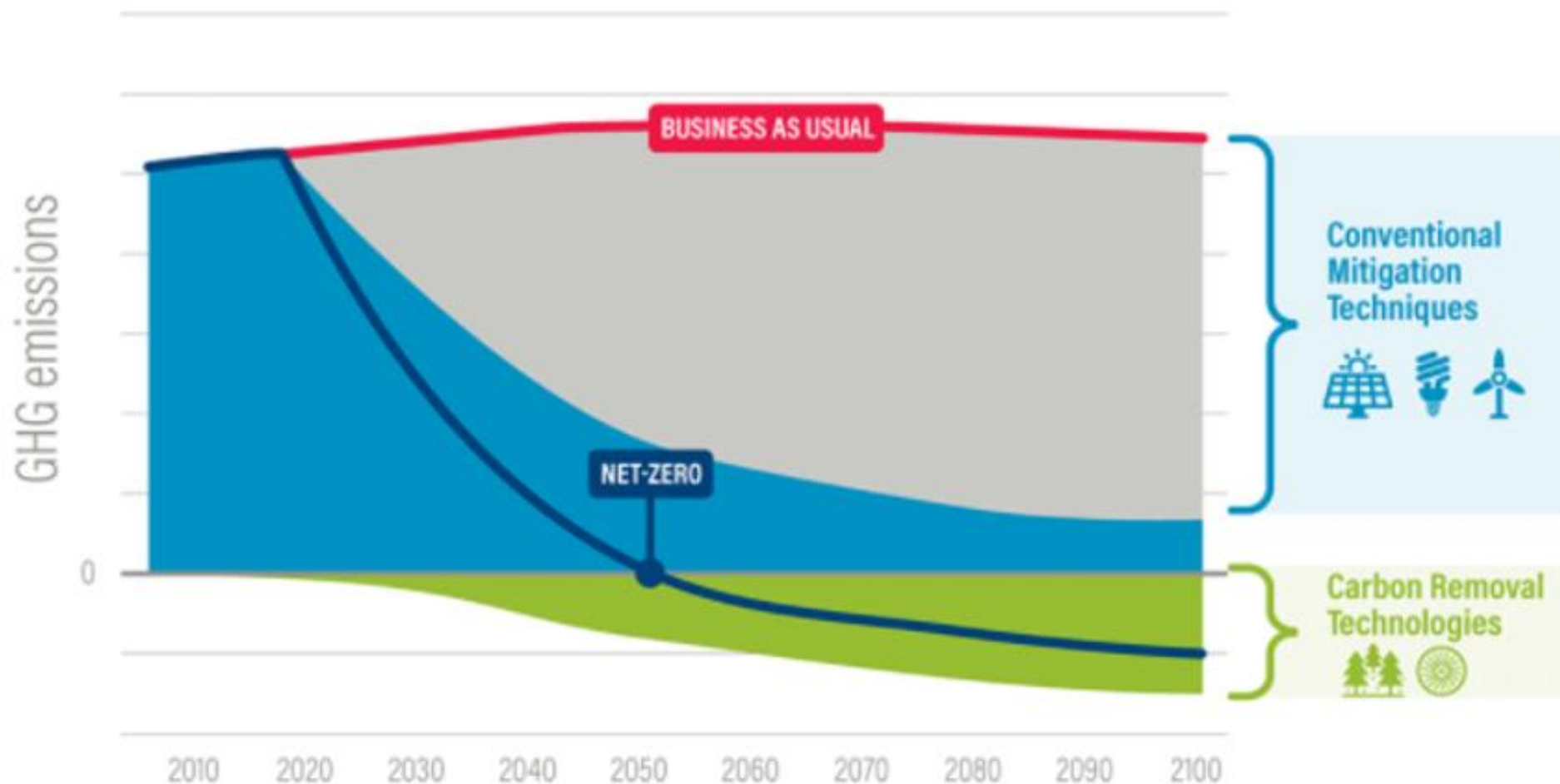
# Corporate Transition Pathways & Market Opportunities





# Staying below 1.5°C

## Net-zero and net-negative emissions





# Global Market Signals

## Corporate Drivers

**Climate Risk = Financial Risk = Business Risk**

**Climate-related  
Physical,  
Transition &  
Legal Risks**

**Regulatory &  
Prudential  
Drivers**

**Directors  
Fiduciary  
Obligations**



# Pathways to Action

## Market Opportunities

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**1**

Understand your  
emissions profile  
& climate-risk  
exposure



**2**

Develop a  
climate strategy  
& identify targets  
& goals



**3**

Implement the  
strategy and  
communicate  
performance



# Corporate Transition

## Responding to climate change

**Targets &  
Pathways**



**Strategy &  
Disclosure**



**Market  
Approaches**





# Corporate Transition

## Responding to climate change

### Targets & Pathways



Net-zero emissions target

Interim targets

Activity (scope 1, 2, 3) coverage

Informed by science  
(Paris aligned – 1.5°)

### Strategy & Disclosure



Governance

Transition Strategy

Climate-related data and  
information (transparency)

Public policy advocacy

### Market Approaches



Carbon offset strategies

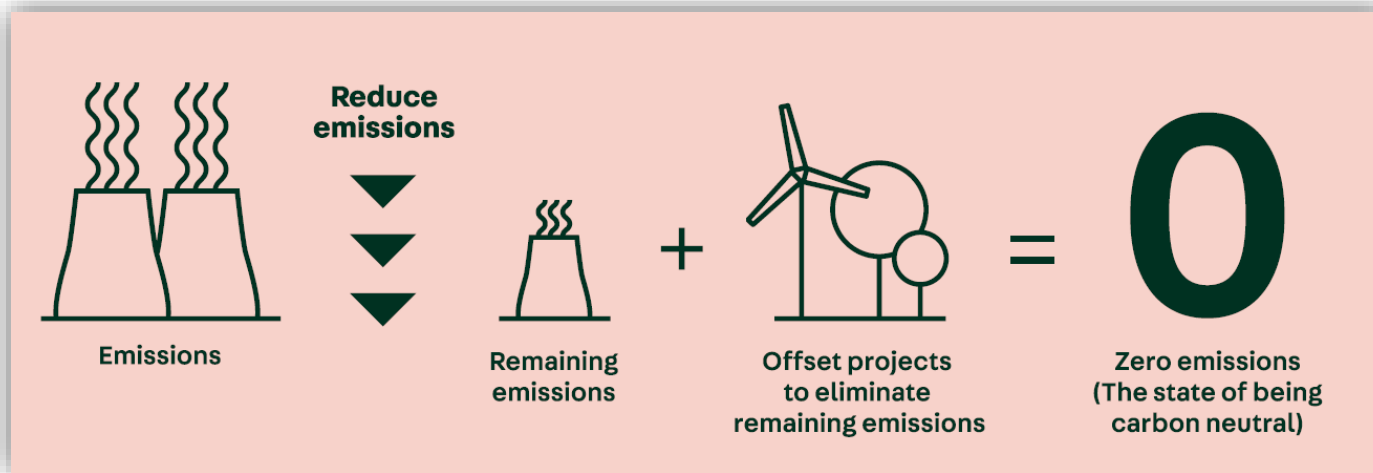
Investment in decarbonisation

Internal carbon price

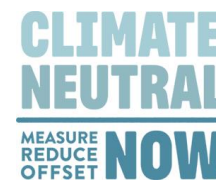
Value chain engagement



# Carbon Neutrality Certification Schemes



*Source: Climate Active*







# Corporate Ambition & Investor Expectations

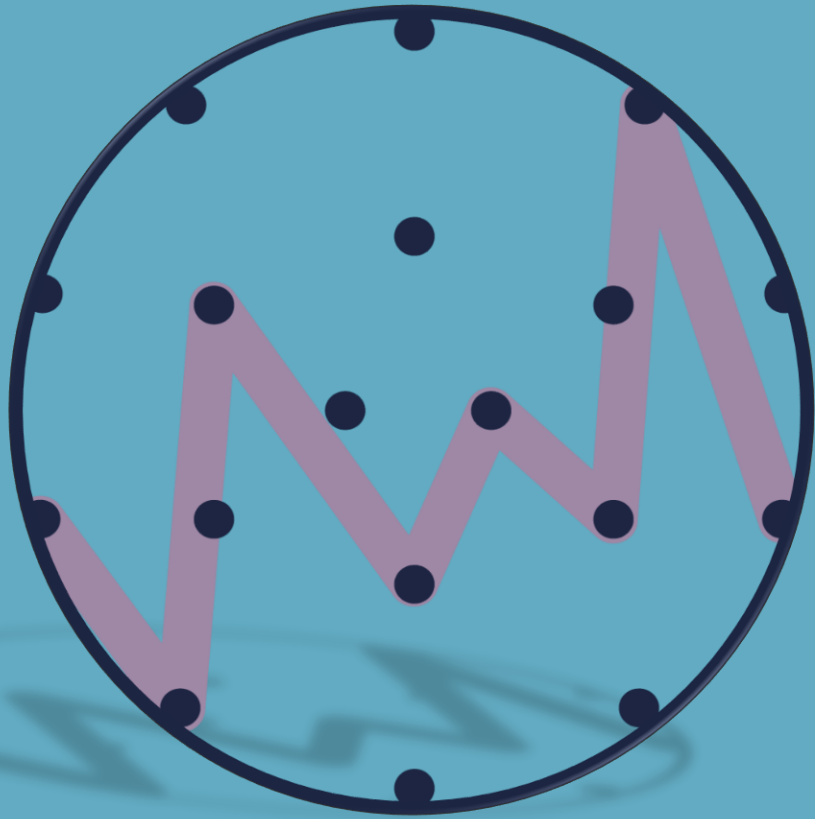
## Voluntary Market Growth

**Voluntary corporate commitments, investments, targets and actions are increasing.**

**+**

**Investor, regulatory and stakeholder expectations are increasing.**





# Australia's Domestic Carbon Market Schemes

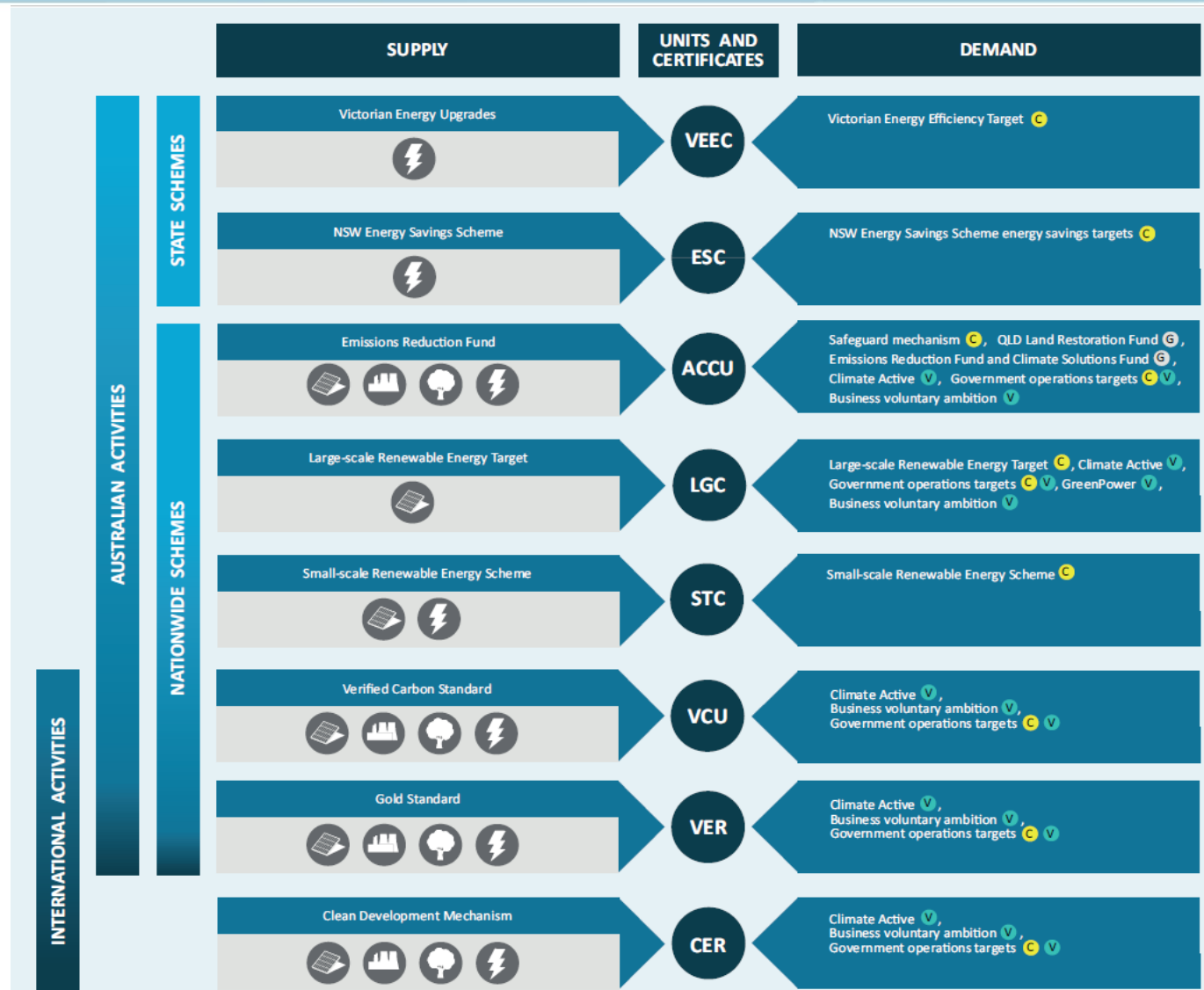
**Shakir Rahman**

Assistant Manager, Economic Analysis, Clean Energy Regulator

# Corporate integrity and action in Australia's expanding carbon markets

Clean Energy Regulator

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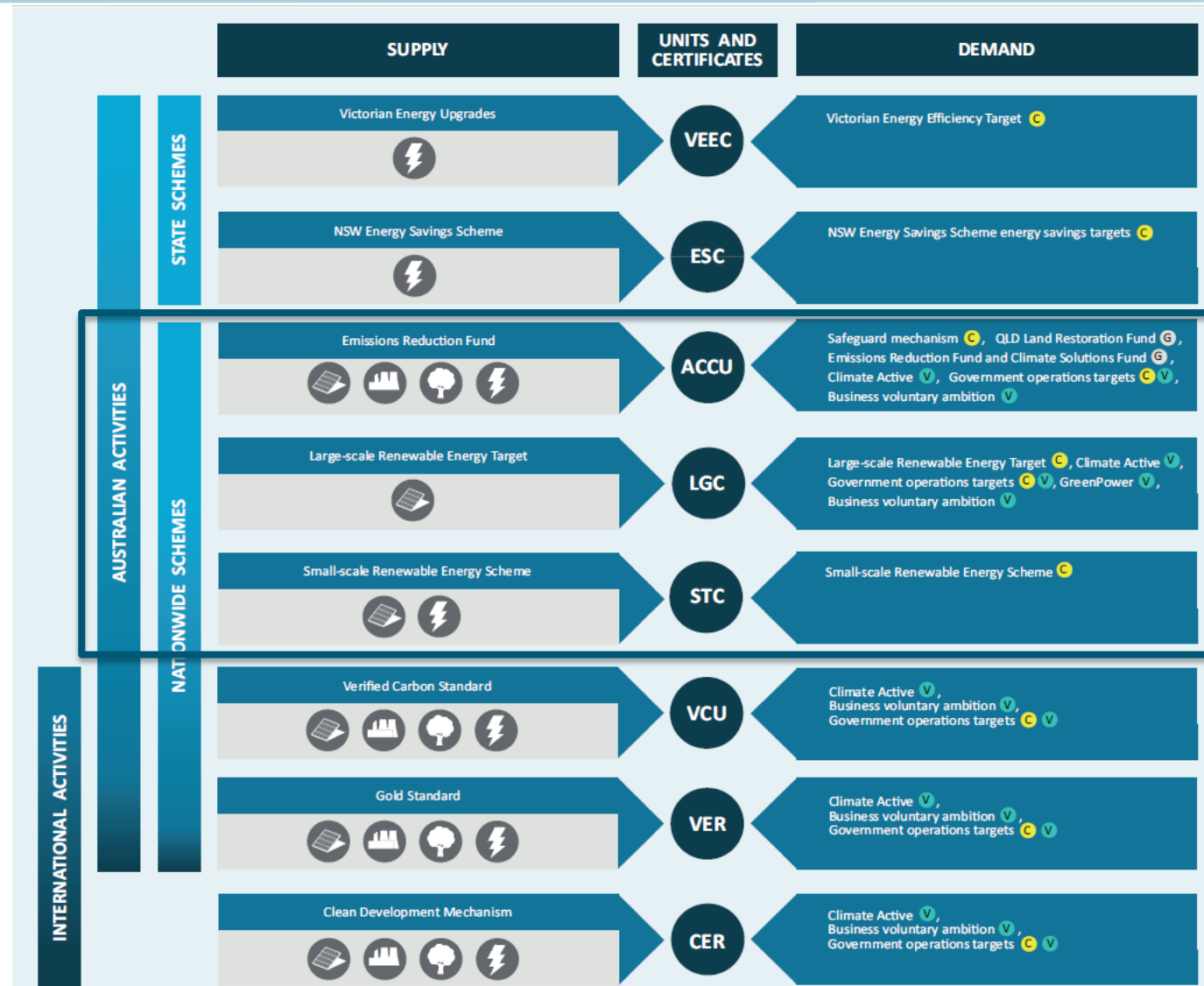


#### Demand




- C** Compliance demand from government legislation
- G** Government purchasing of units or certificates
- V** Voluntary demand from governments, businesses and individuals for voluntary targets

#### Emissions reduction actions





- Energy efficiency – actions that reduce consumption of electricity and natural gas
- Renewable energy – electricity generation that displaces thermal electricity
- Emissions avoidance – actions that avoid emissions including methane destruction
- Carbon sequestration – actions that sequester and store carbon



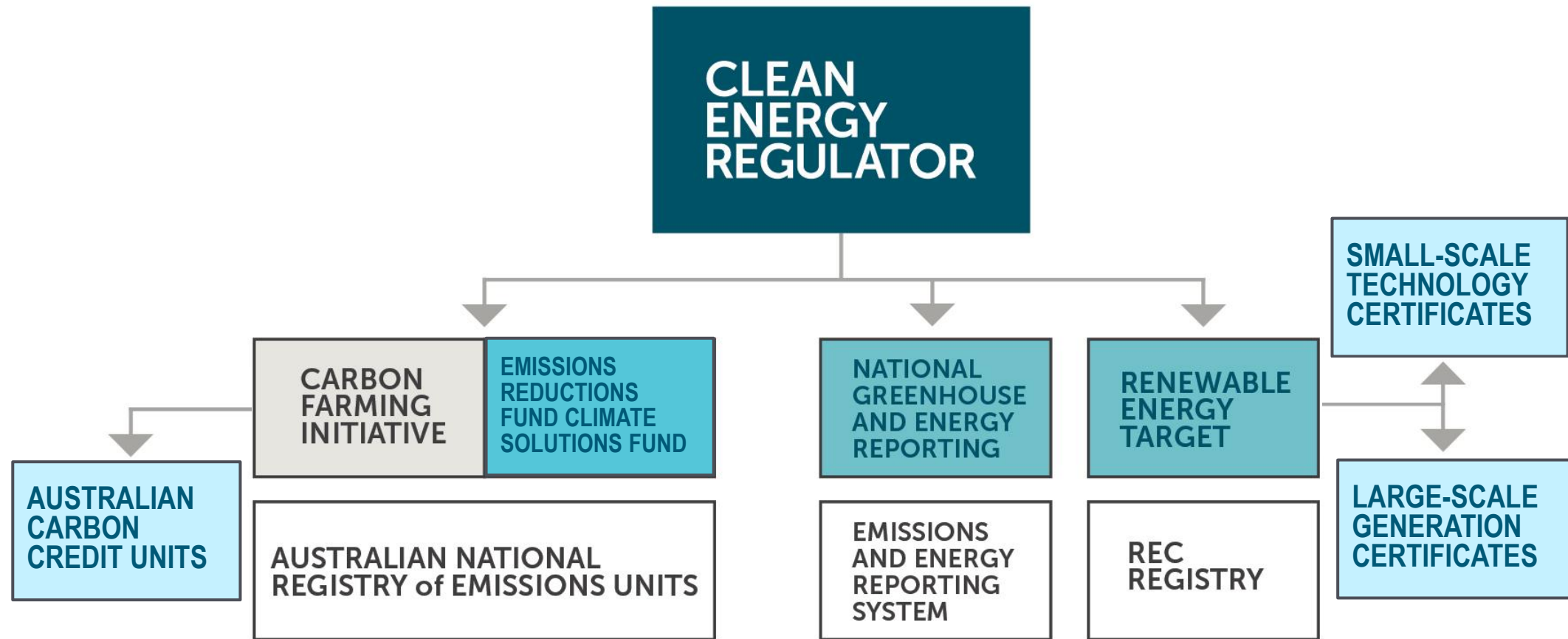
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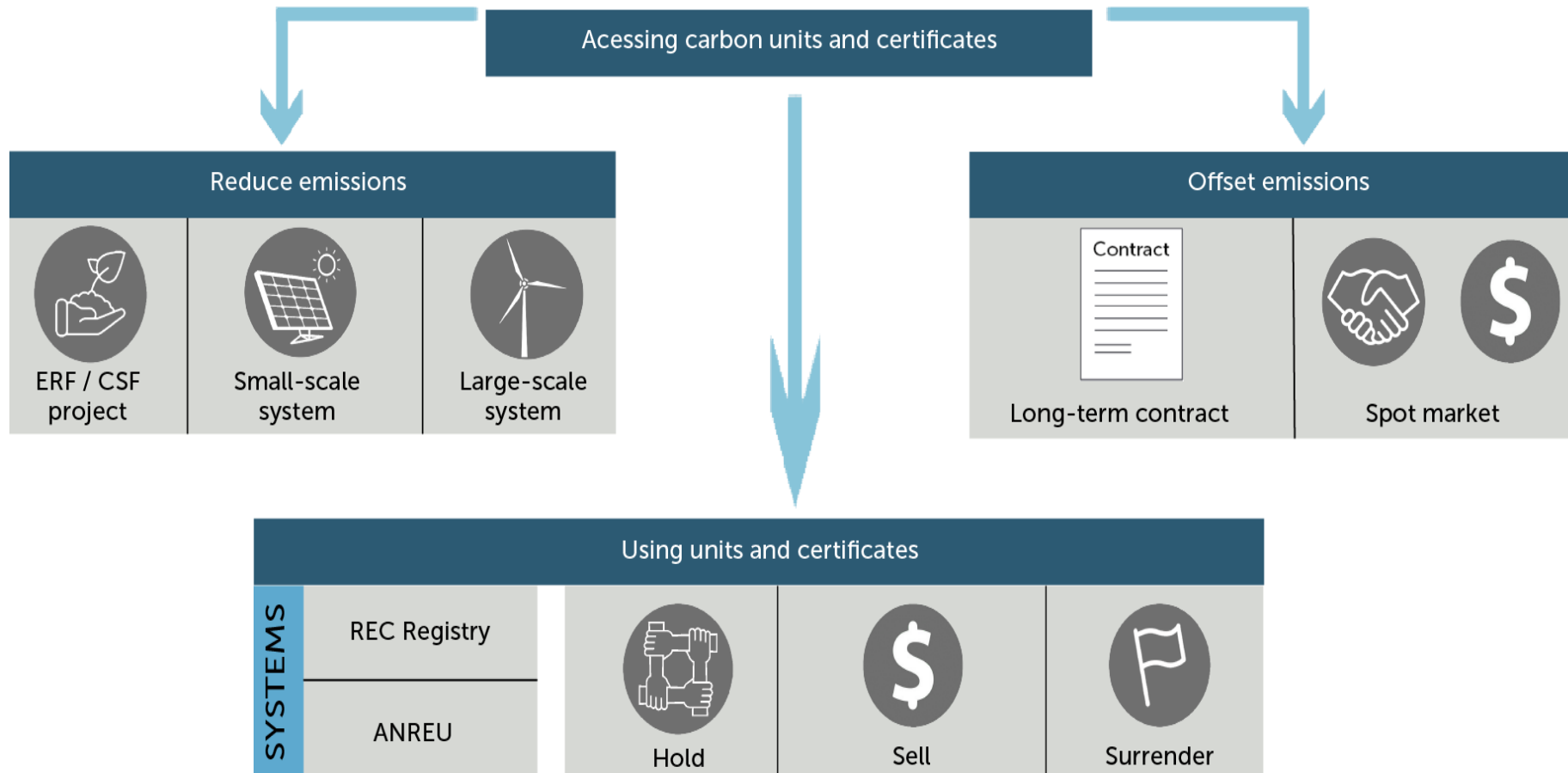
# Accelerating carbon abatement for Australia



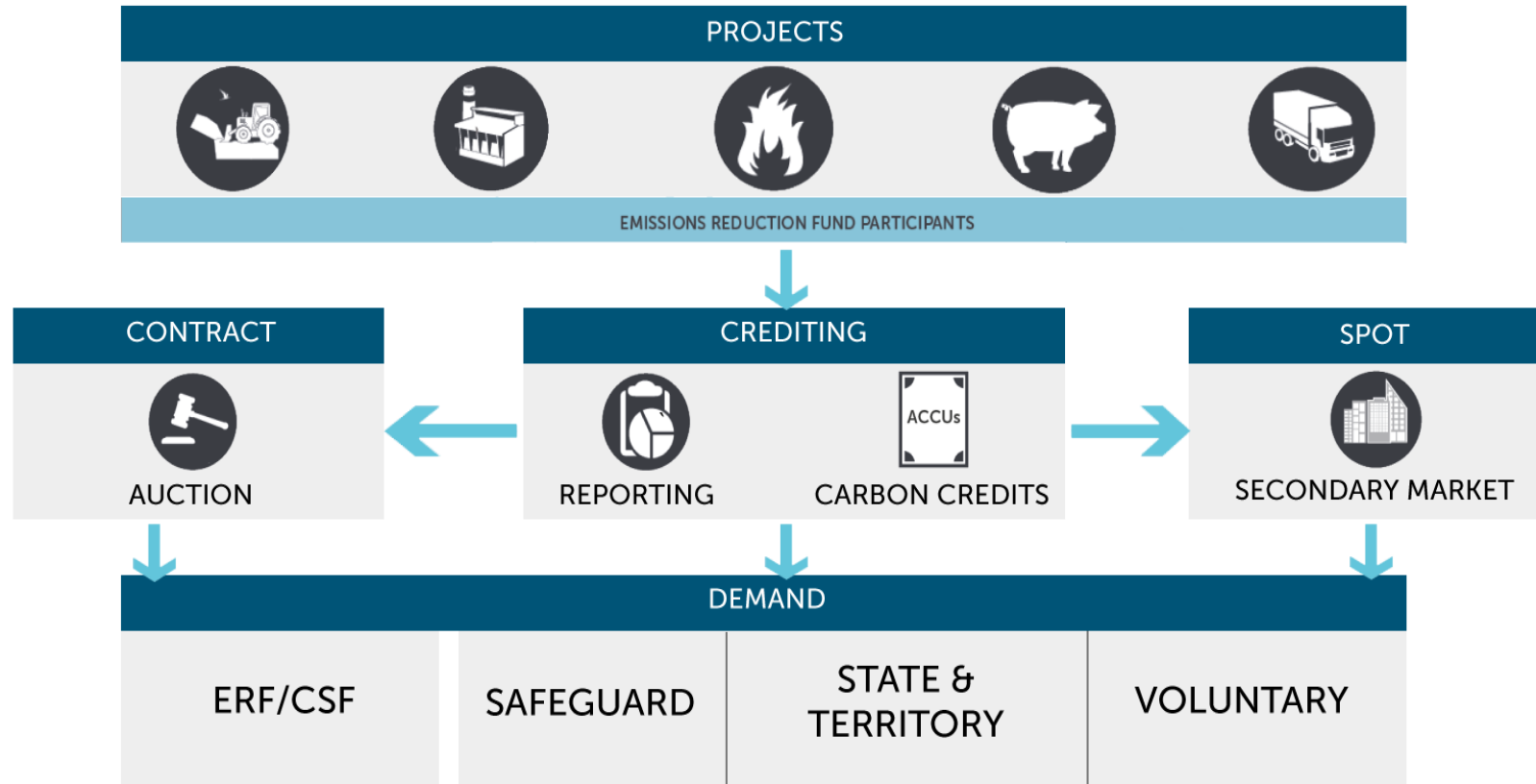
## Australia's carbon units and certificates

- **Australian Carbon Credit Unit (ACCU)**
  - > 1 tonne of CO<sub>2</sub> equivalent sequestered or avoided
- **Large-scale Generation Certificate (LGC) and Small-scale Technology Certificate (STC)**
  - > 1 megawatt hour of electricity generated from renewable energy, displacing electricity from fossil fuel generation

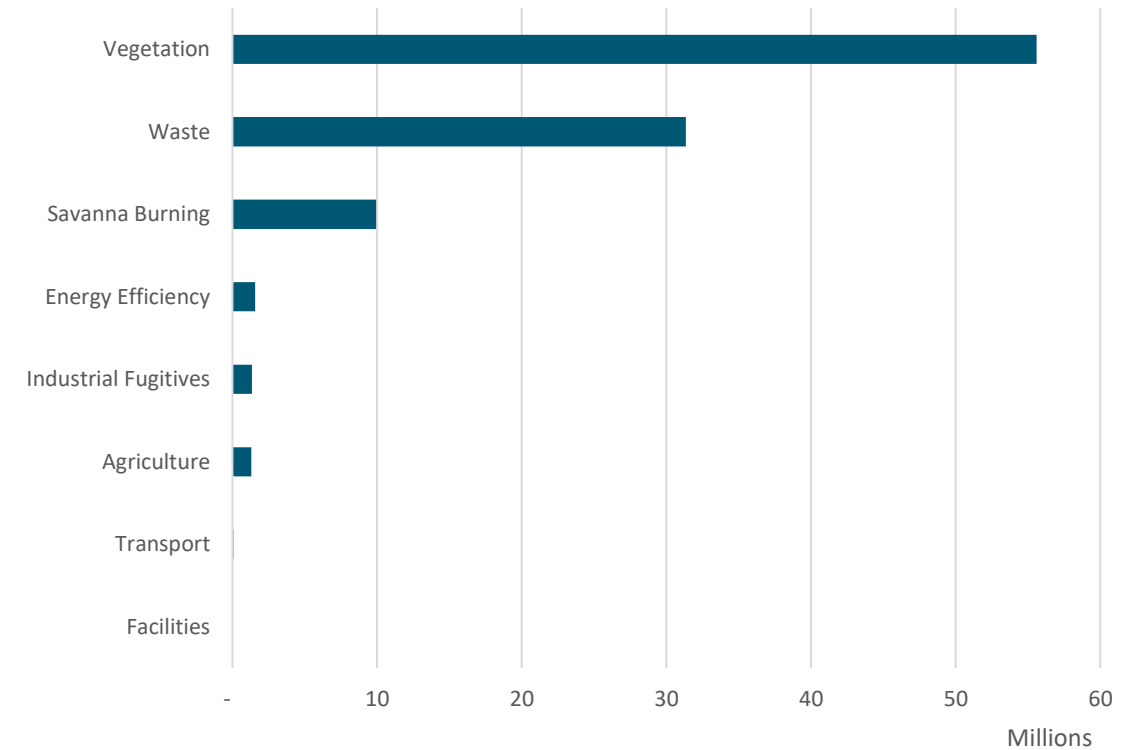
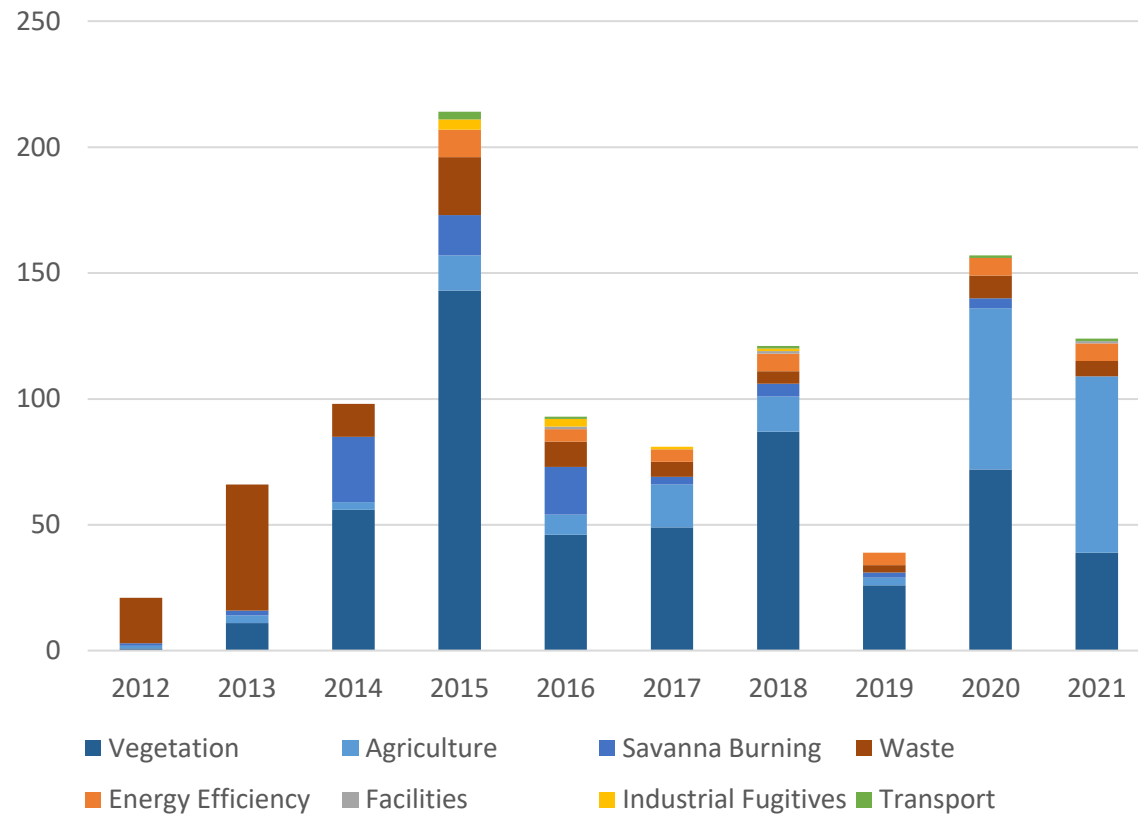




# Overview of the ACCU Market



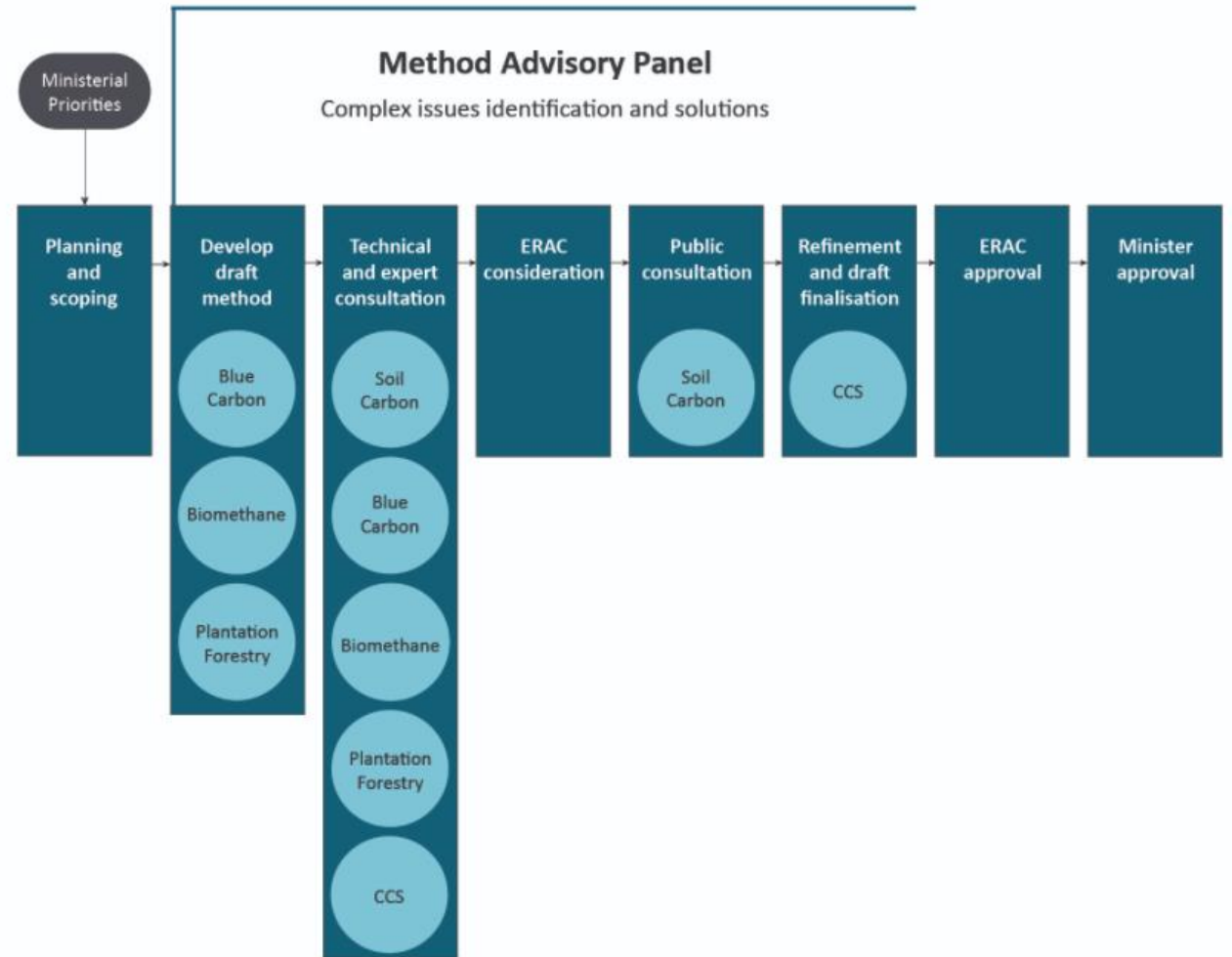
## ERF projects registered and ACCUs issued by method type



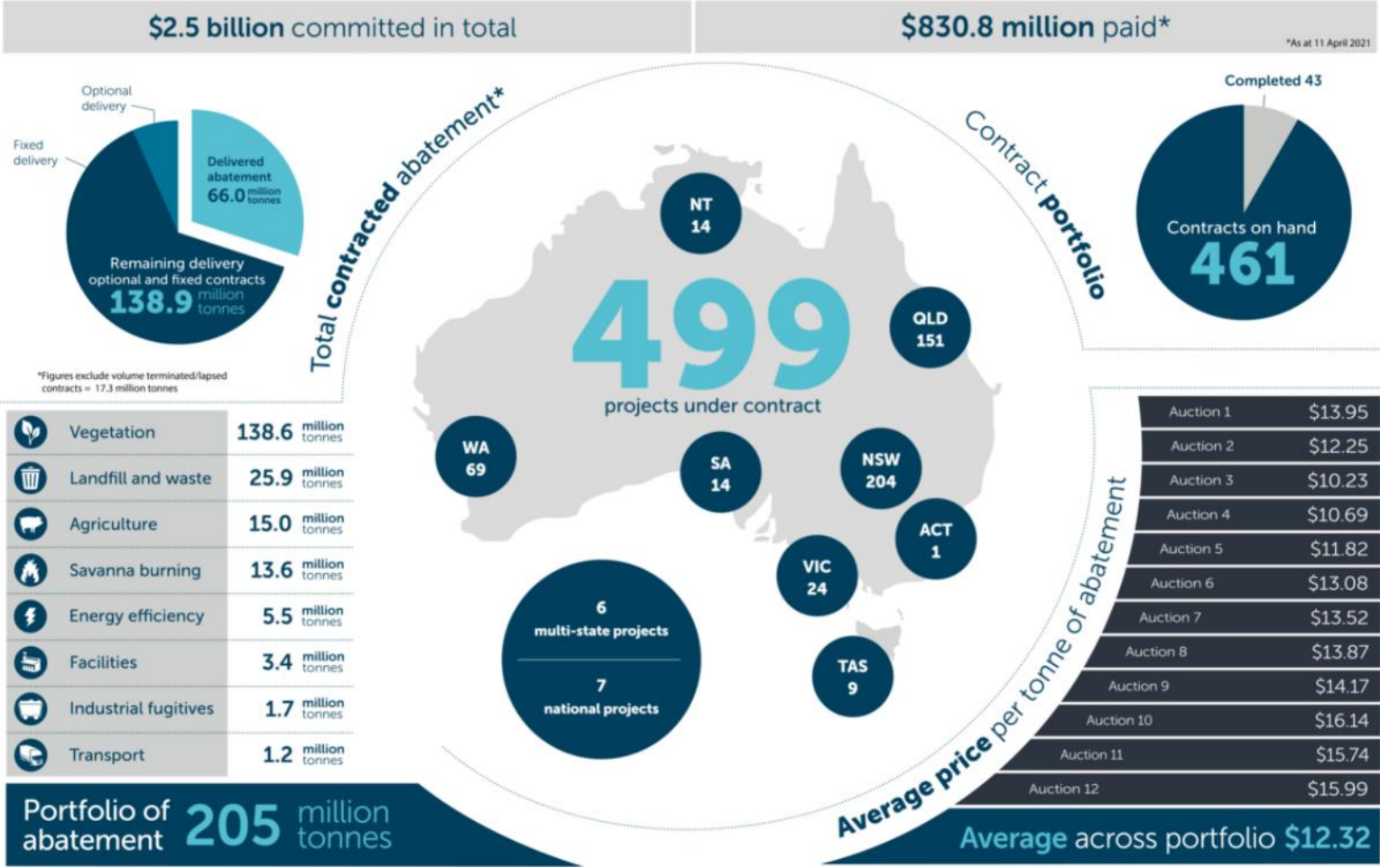
## Method development priorities 2021

- Soil carbon
- Carbon capture and storage
- Biomethane
- Plantation forestry
- Blue carbon

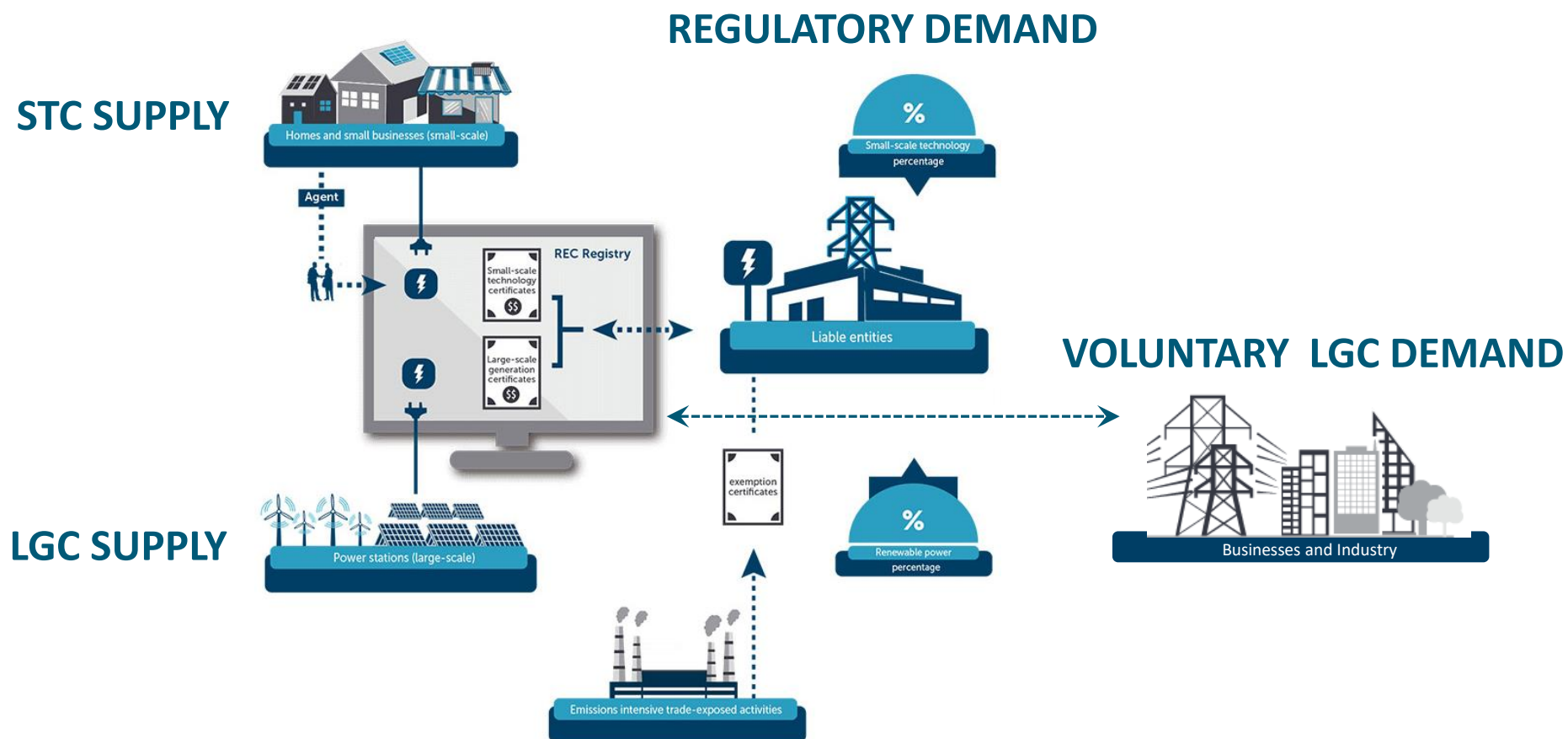
### Method development tracker



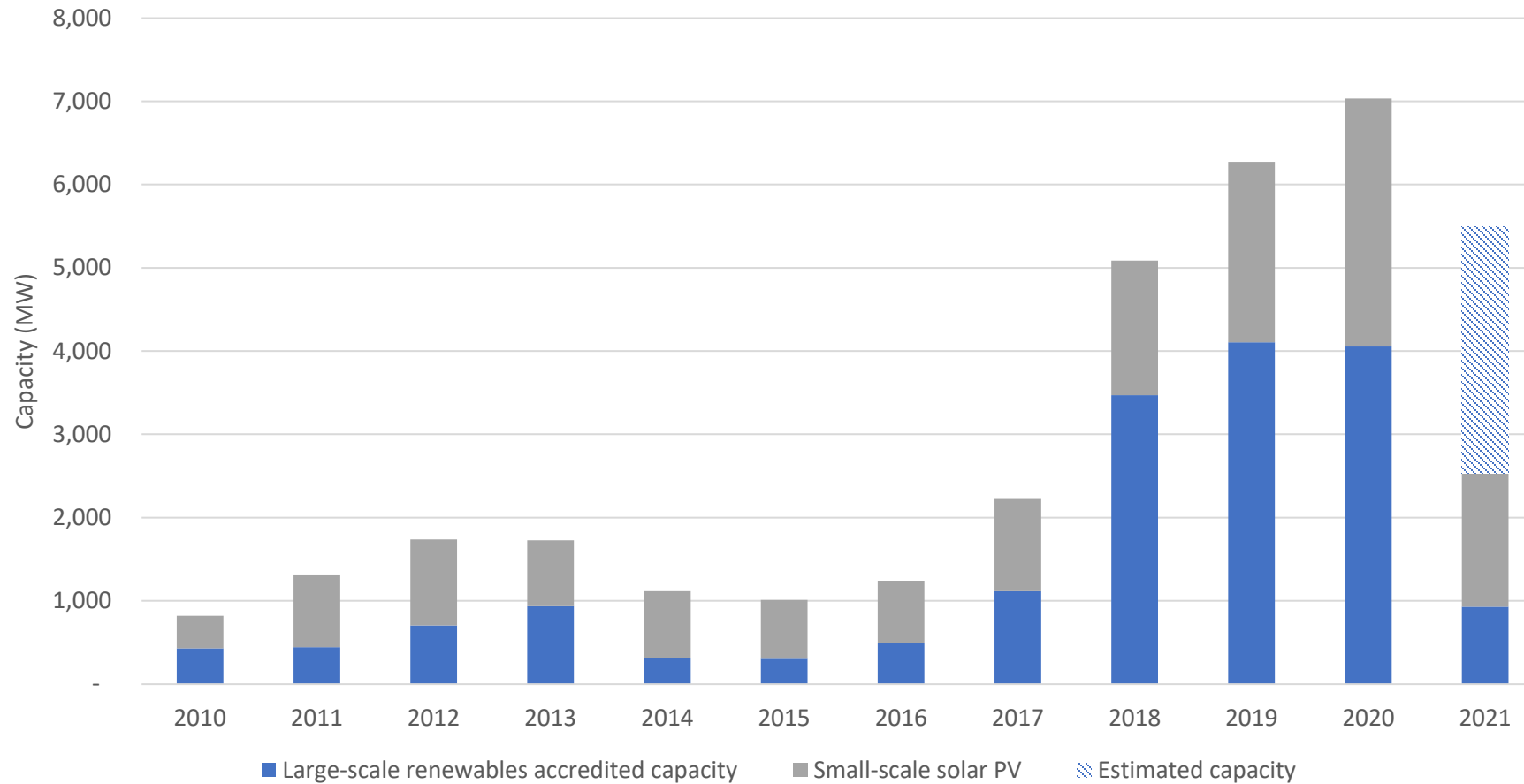
# ERF contract portfolio



# Overview of the STC and LGC markets

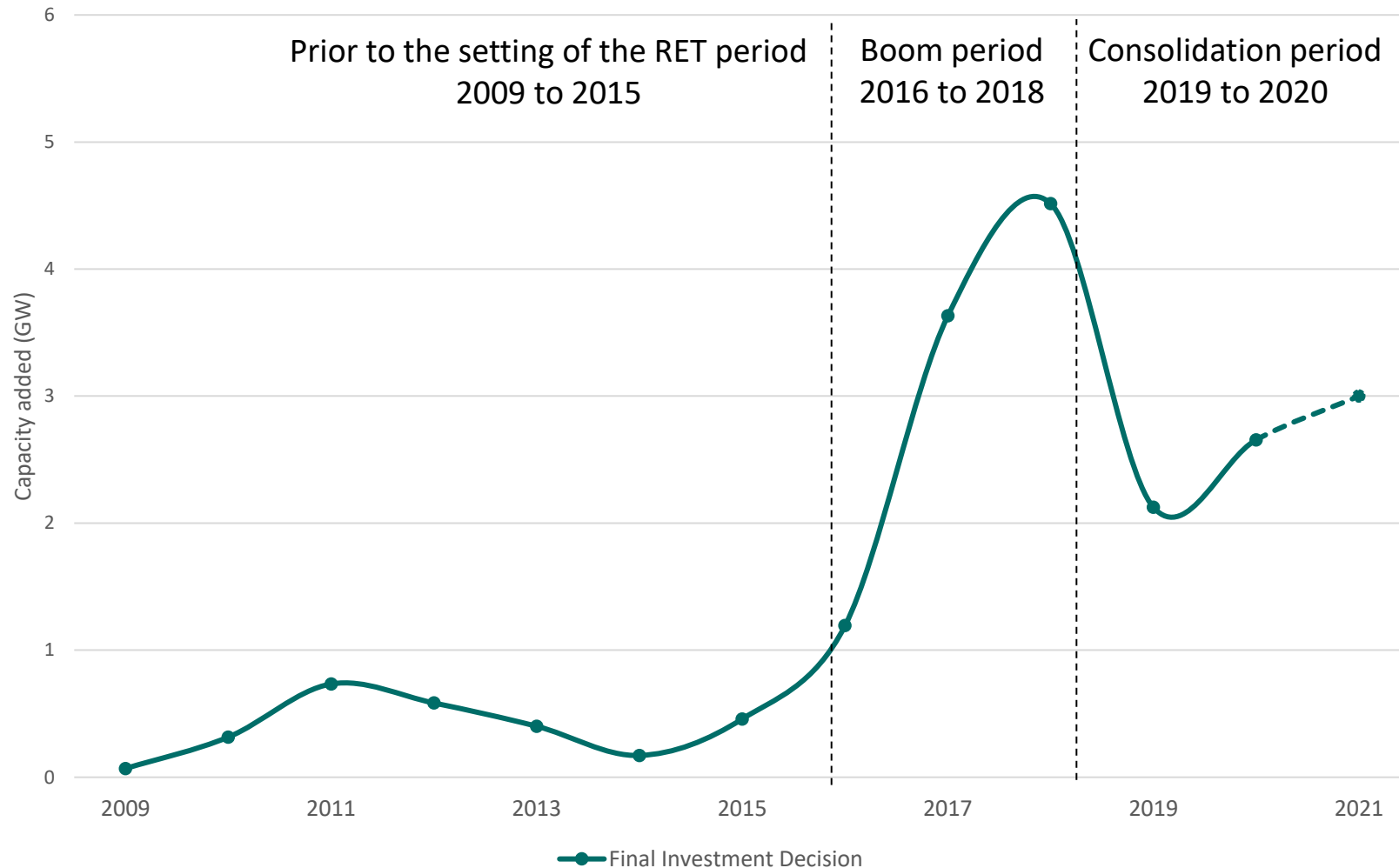


# Estimated installed renewable energy capacity

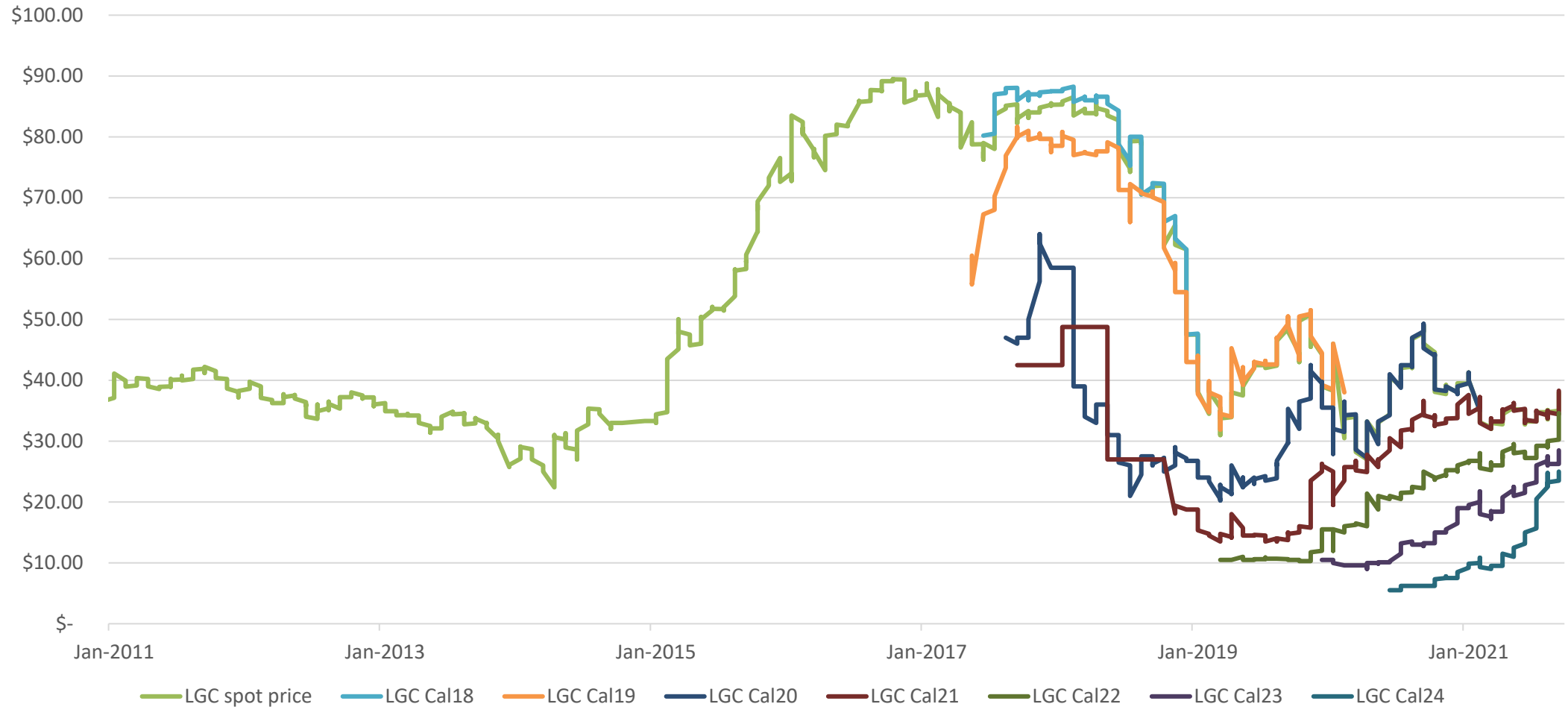




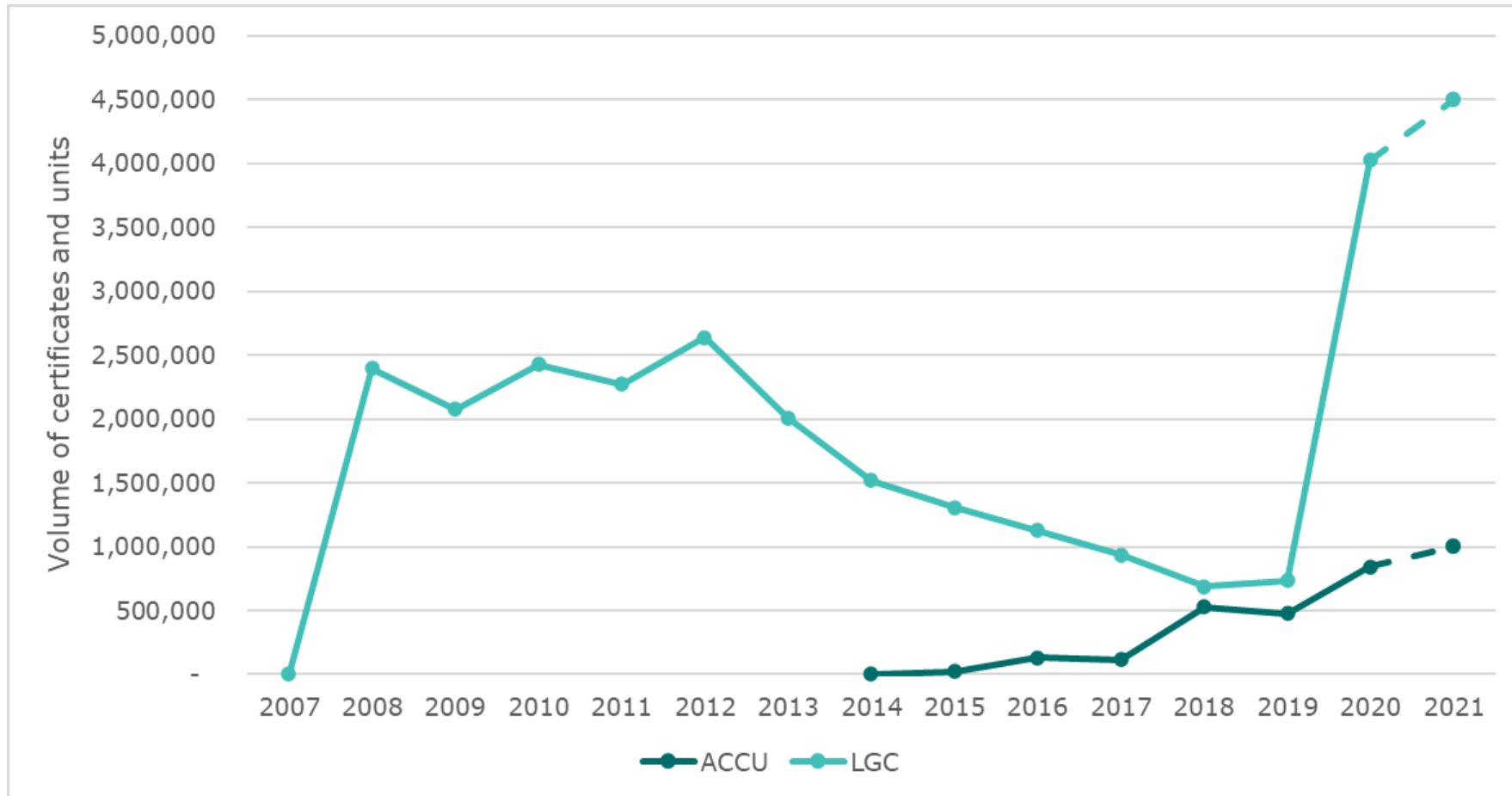
# Large-scale wind and solar investment




## LGC prices – spots and forwards



## Voluntary demand of ACCUs and LGCs



# Sourcing and trading ACCUs and LGCs

**Client Portal**

Client Portal

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Sign Up

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[2 Applicant details](#)

[3 Security details](#)

**Client Portal**

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**1. Definitions**

**Account** means an electronic account used to access the Client Portal.

**Account Holder** means a person who is the holder of an account.


**Acts and Regulations** means all legislation relating to the Clean Energy Regulator's functions.

**Online Tools** means the Regulator's online tools, including:

- a. Client Portal;
- b. Emissions and Energy Reporting System;
- c. Information Portal;
- d. REC Registry;
- e. STC Clearing House;
- f. Renewable Energy Target (RET) Calculator;
- g. Australian National Registry of Emissions Units (ANREU);
- h. Online forms; and
- i. any other tool or facility the Regulator may use.

**Portal or Client Portal** means the internet-based system used to access the Client Portal.

**REC Registry** means one or more of the following:

**REC Registry**

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**Impacted by recent bushfires or flooding? Community wellbeing and safety is everyone's concern. The Clean Energy Regulator will work with you to manage scheme entitlement or reporting obligations. Email us at [enquiries@cleanenergyregulator.gov.au](mailto:enquiries@cleanenergyregulator.gov.au) or call 1300 553 542.**


**The REC Registry is an online system that:**

- facilitates the creation, registration, transfer and surrender of large-scale generation certificates (LGCs) and small-scale technology certificates (STCs);
- tracks the ownership and status of all certificates;
- provides access to the STC clearing house, and
- maintains various public registers as required by the *Renewable Energy (Electricity) Act 2000* (the REE Act).

All certificates must be created in the REC Registry before they can be bought, sold traded or surrendered.

You must hold an account and be registered as a REC Registry user to create, view or transfer certificates. If you do not have an account, you can [apply for an account](#).

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**Australian National Registry of Emissions Units**

Username:  Password:

The Australian National Registry of Emissions Units (ANREU) is administered by the Clean Energy Regulator. ANREU is a system designed to meet one of Australia's commitments under the Kyoto Protocol. The Protocol requires each country with an emission reduction target to establish a national registry to ensure accurate accounting of the issuance, holding, transfer, acquisition, cancellation, retirement and carry-over of Kyoto units.

ANREU supports the issuance, holding, transfer, and acquisition of Australian Carbon Credit Units (ACCUs) issued under the Australian Government's [Emissions Reduction Fund](#).

The Clean Energy Regulator is an independent statutory authority established by the [Clean Energy Regulator Act 2011](#) to administer climate change law and operates as part of the Environment portfolio.

The Clean Energy Regulator administers the [National Greenhouse and Energy Reporting System](#) (NGERS), the [Emissions Reduction Fund](#) and the [Renewable Energy Target](#).

Organisations or individuals that wish to hold Kyoto units in Australia, or ACCUs are required to have an ANREU account. If you wish to open an ANREU account please follow this link: [Get more information on opening an account](#)

Registered users may login to ANREU.

View publicly available reports for the Registry.

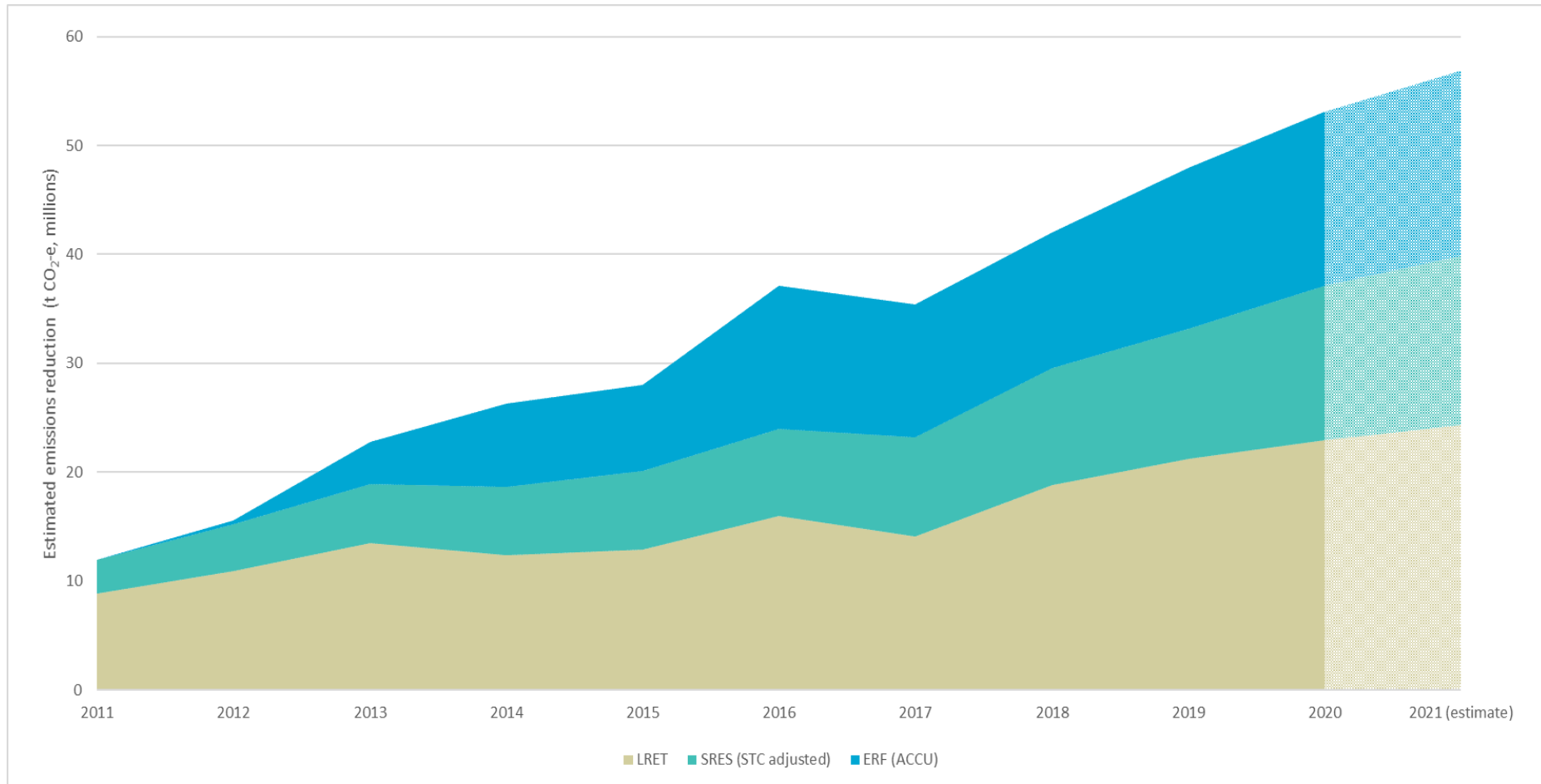
Contact the ANREU Administrator

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# Emissions Reduction from ERF and RET, 2011 to 2021



# Have a question?

Economic Analysis team

Clean Energy Regulator

[markets@cleanenergyregulator.gov.au](mailto:markets@cleanenergyregulator.gov.au)





# Market Resources

## Online

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**CMI's Carbon Marketplace**

[carbonmarketinstitute.org/markets](https://carbonmarketinstitute.org/markets)

**Clean Energy Regulator Markets Hub**

[cleanenergyregulator.gov.au/Infohub/Markets](https://cleanenergyregulator.gov.au/Infohub/Markets)

**CER Quarterly Carbon Market Reports**

[cleanenergyregulator.gov.au/csf/market-information/Pages/quarterly-Market-report.aspx](https://cleanenergyregulator.gov.au/csf/market-information/Pages/quarterly-Market-report.aspx)

**Carbon Industry Code Of Conduct**

[carbonmarketinstitute.org/code](https://carbonmarketinstitute.org/code)

**CMI's Factsheets**

[carbonmarketinstitute.org/fact-sheets](https://carbonmarketinstitute.org/fact-sheets)

**Climate Active Carbon Neutral Certification**

[climateactive.org.au](https://climateactive.org.au)

### CONTACT US

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**Economic Analysis Team, Clean Energy Regulator**

[markets@cleanenergyregulator.gov.au](mailto:markets@cleanenergyregulator.gov.au)





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