



**Australian Government**  
**Clean Energy Regulator**

# Certification and carbon markets – a prerequisite for hydrogen growth

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Clean Energy Regulator

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# Policy interventions map



## Supply

Create, test and prove supply chains

Investment, project finance and grants

## Enabling

Facilitating Markets - Hydrogen Certification

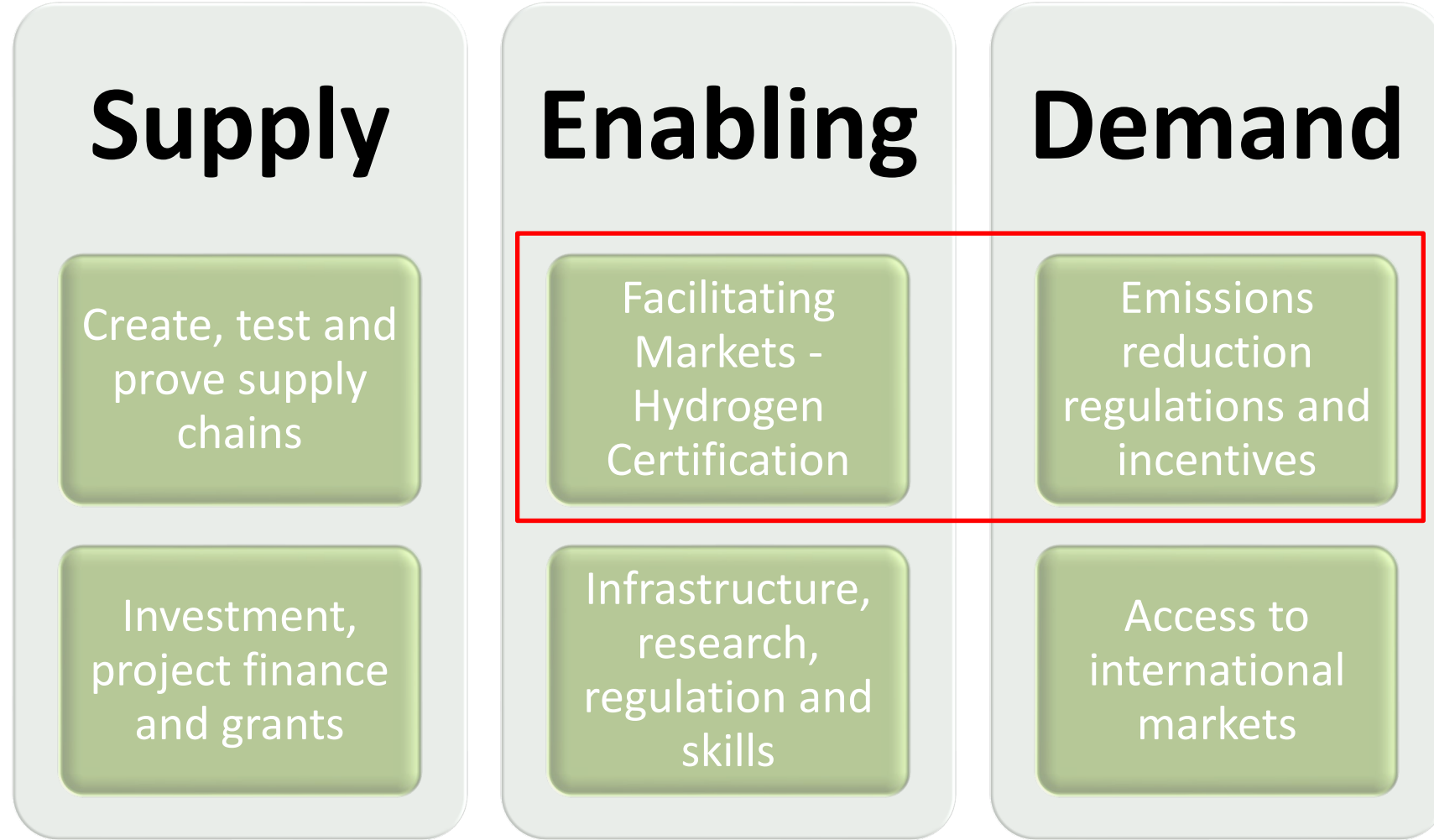
Infrastructure, research, regulation and skills

## Demand

Emissions reduction regulations and incentives

Access to international markets

# Policy interventions map

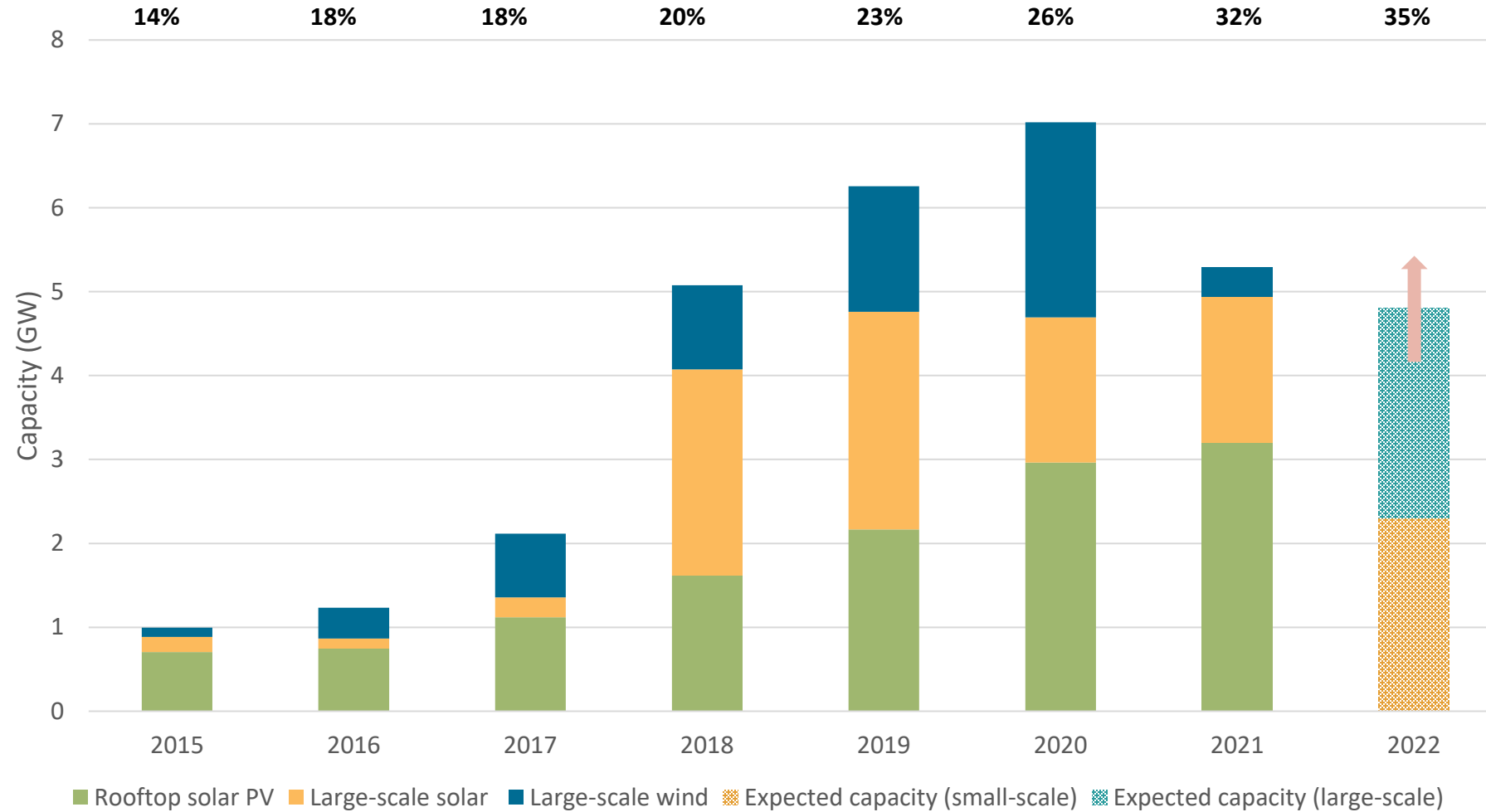


# What can we learn from Australia's renewable energy rapid growth?

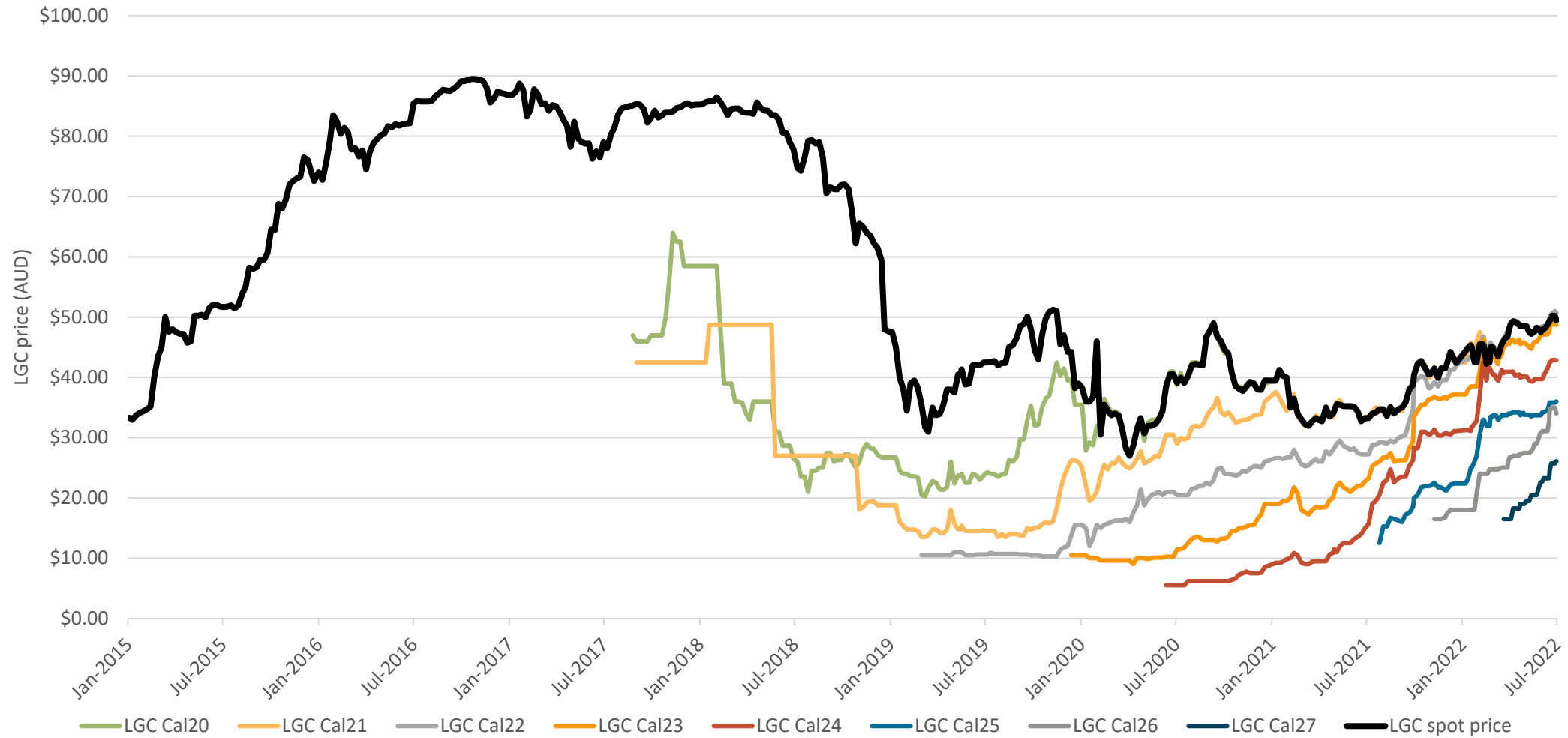


# Renewable investment Australia

RE % of total generation



# Large-scale generation certificate (LGC) spot and forward prices

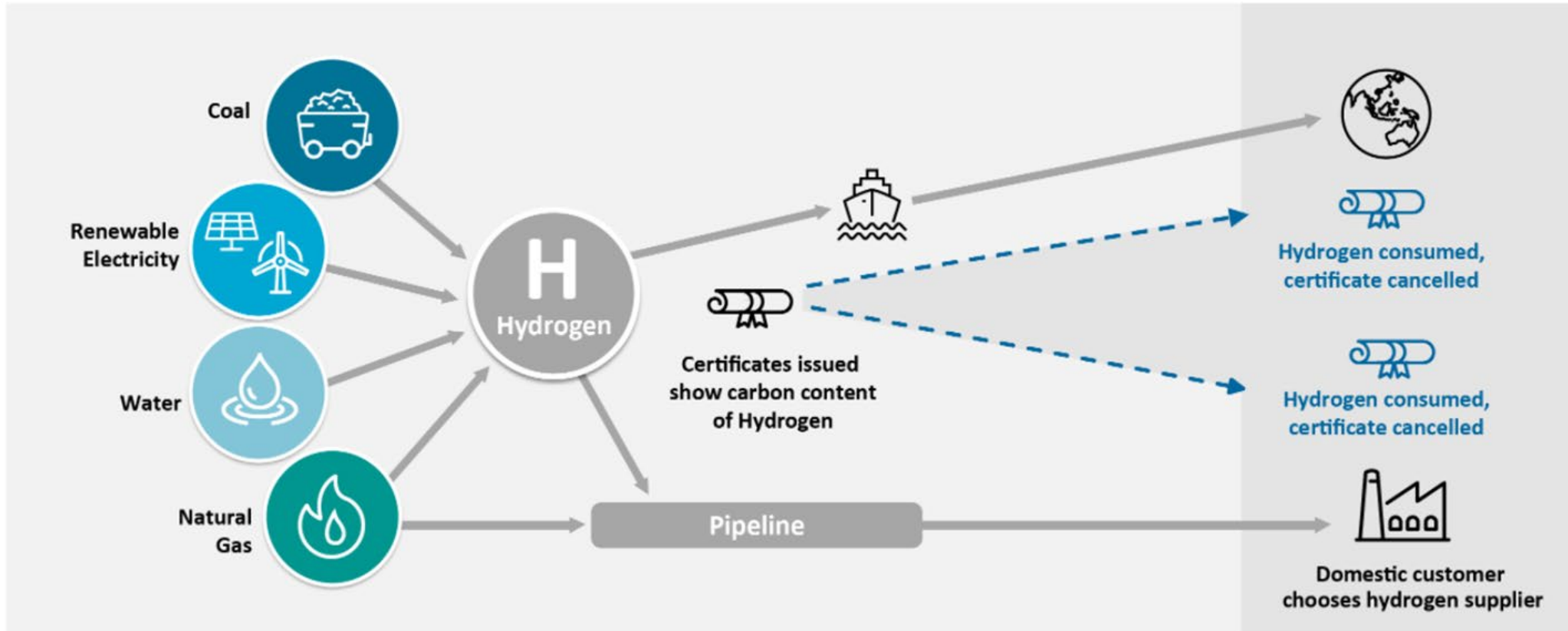


# Facilitating Markets



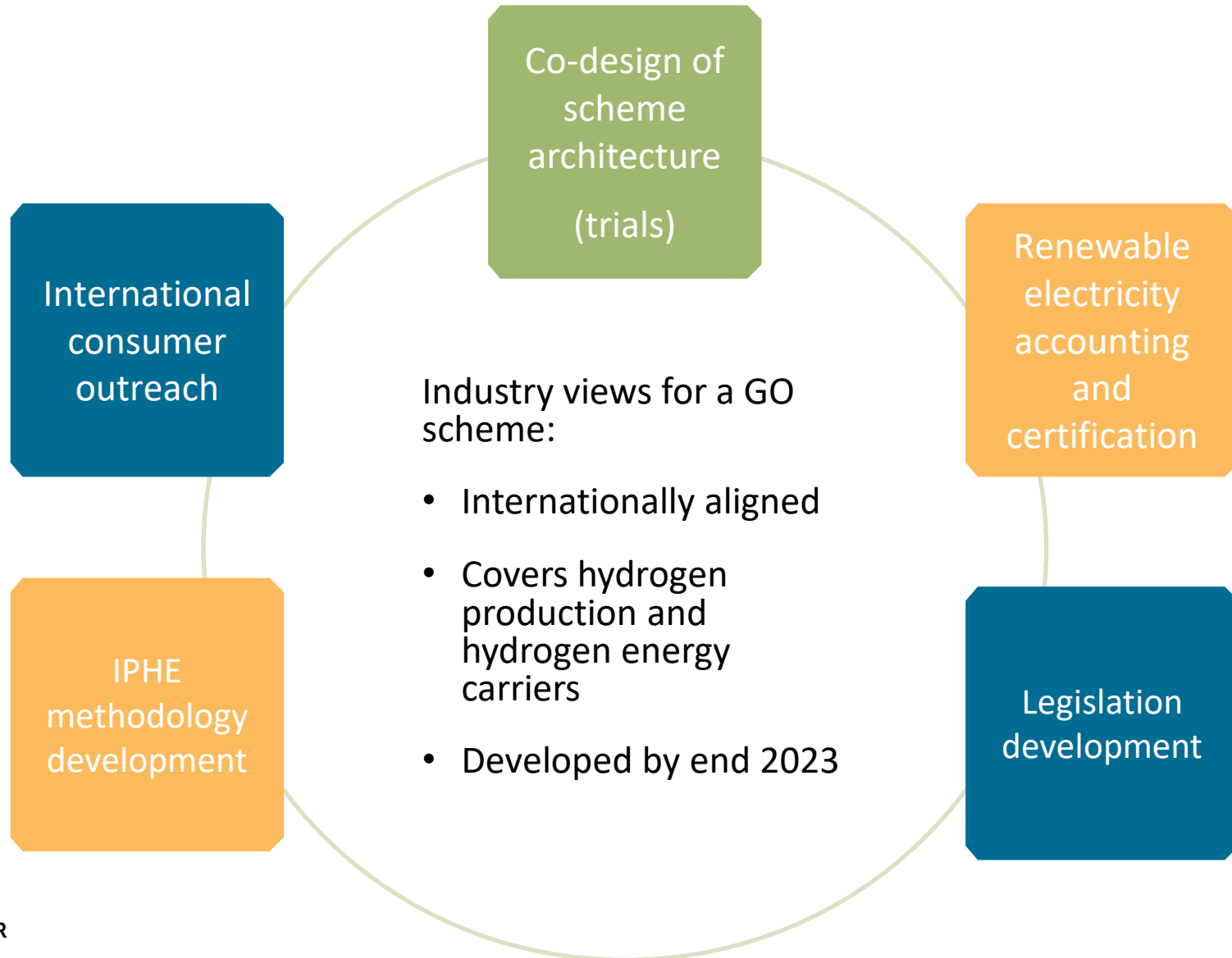
# Guarantee of Origin

Purpose: to build confidence in the world marketplace for low emissions Australian products.

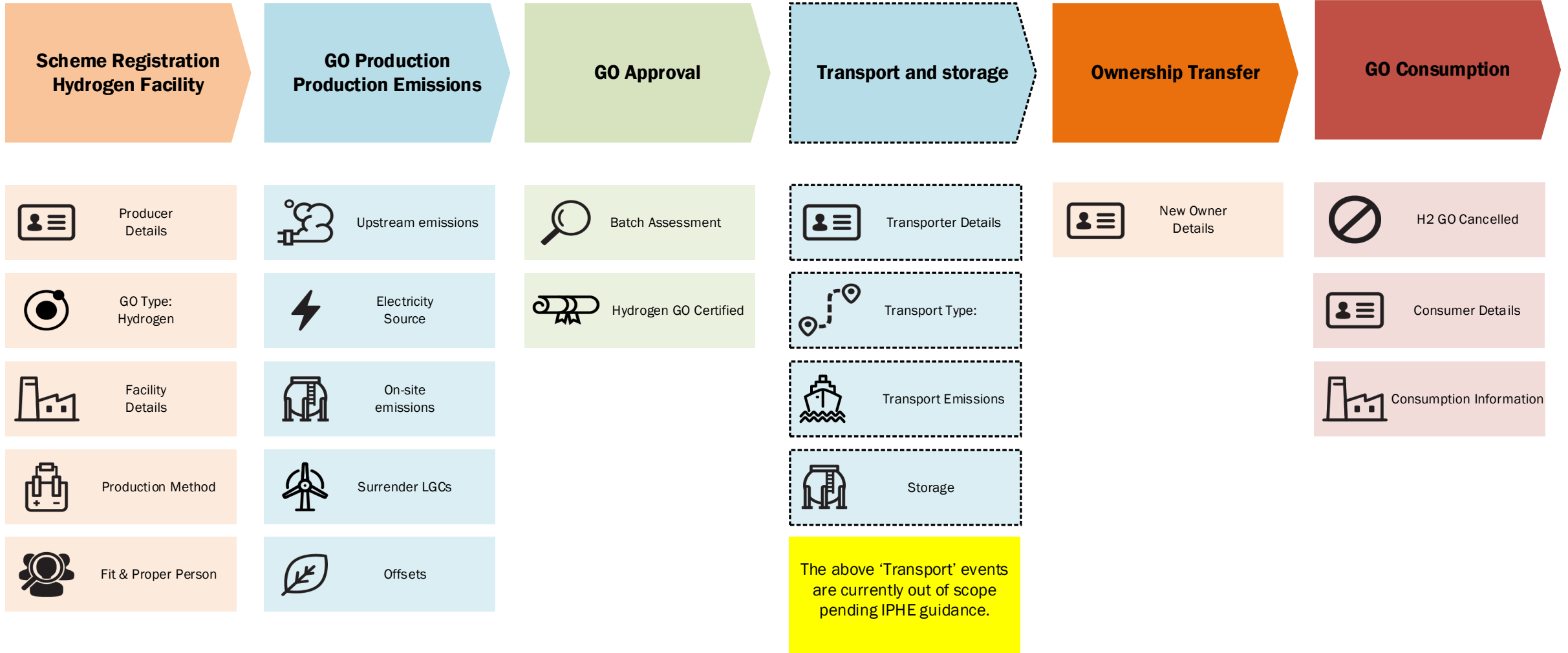




# GO scheme development – policy design underway



# Supply chain emissions trackability



# Guarantee of Origin Trials- Commenced December 2021

*Goal: Test the IPHE carbon accounting framework and calculate emissions for real-world projects*

- 20 companies participating with hydrogen projects across SMR, electrolysis and coal gasification
- Phase 1 complete for hydrogen
- Phase 2 commencing examining:
  - storage and transport of hydrogen emissions
  - hydrogen carriers, ammonia, liquid hydrogen and LOHCs

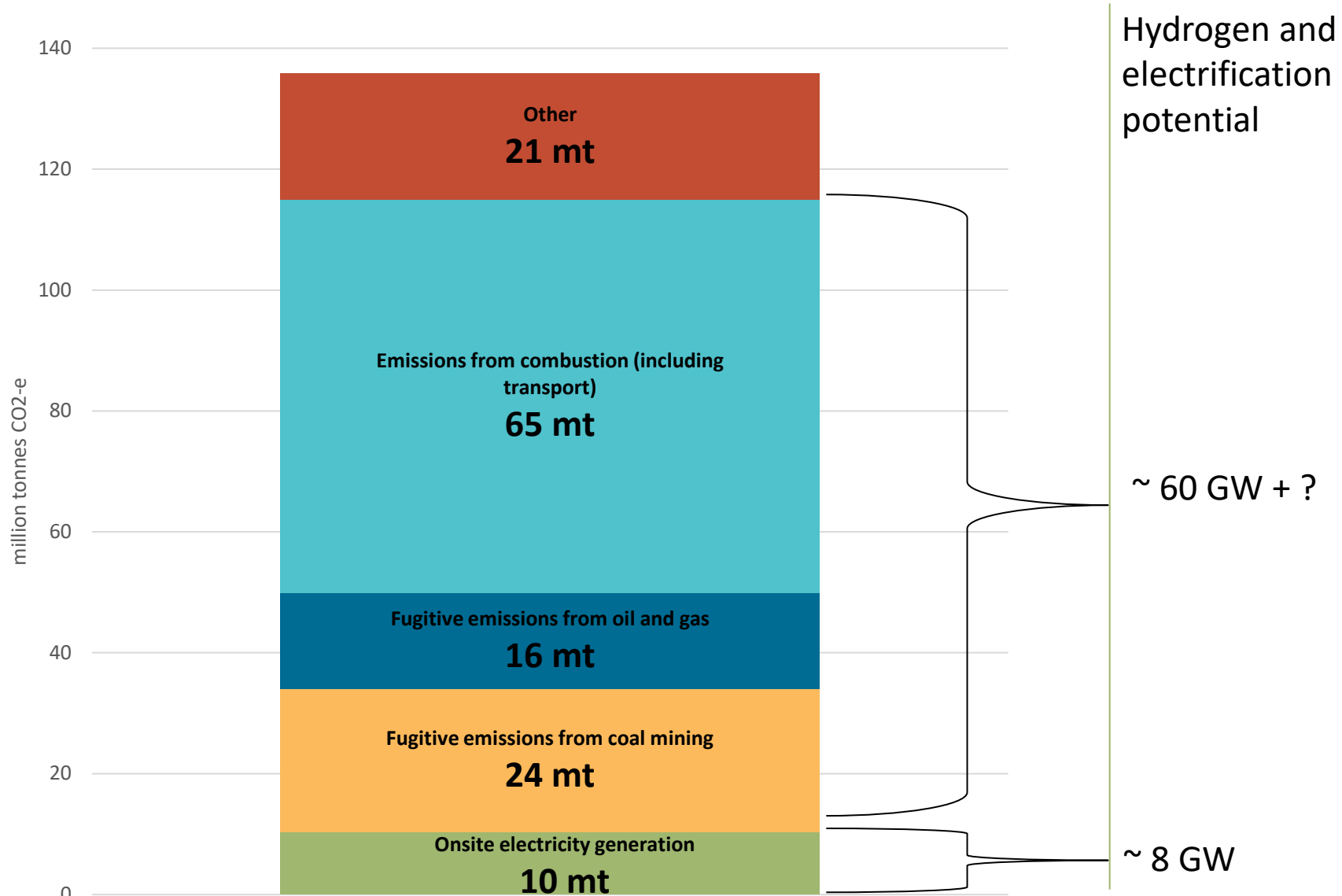


Susio Frontier, the world's first liquefied hydrogen carrier, moored at the Port of Hastings, Victoria in January 2022. Image courtesy of HySTRA

# Demand Side support



# Safeguard Mechanism – baselines to descend



# Hydrogen Use method – Australian Carbon Credits

- The method will credit the abatement from displacing high emissions fuels with clean hydrogen
- Proposed to require the use of clean hydrogen, either on-site or by injection into a gas distribution network in Australia
- To be delivered in 2023

ACCU spot price  
(22 August 2020)

**\$28.00**

1 ACCU = 1 tonne CO<sub>2</sub>-e

# Thankyou

- Guarantee of Origin:
  - [Guarantee of Origin \(cleanenergyregulator.gov.au\)](http://cleanenergyregulator.gov.au)
- [Australia's Hydrogen Strategy:](https://www.industry.gov.au/data-and-publications/australias-national-hydrogen-strategy)
  - <https://www.industry.gov.au/data-and-publications/australias-national-hydrogen-strategy>

