



# The Hydrogen Era of Shipping

202504

# Climate Impact Corporation (“CIC”)

**A leading developer, operator and investor in energy transition focusing on renewable energy production and solutions**

**An integrated solution to solve the energy, water and carbon issues**



Water



Energy



Carbon



## Green Hydrogen Projects in Australia



**20GW**



**1,000,000T**  
Green Hydrogen

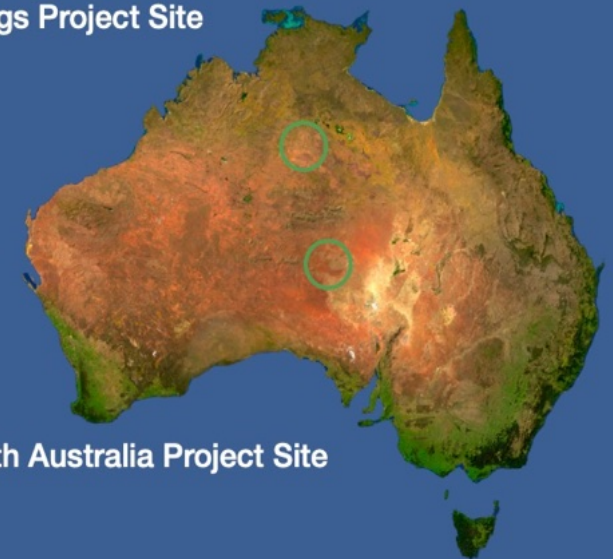


**5.67mT**  
Green Ammonia



**2027**

Green Springs Project Site



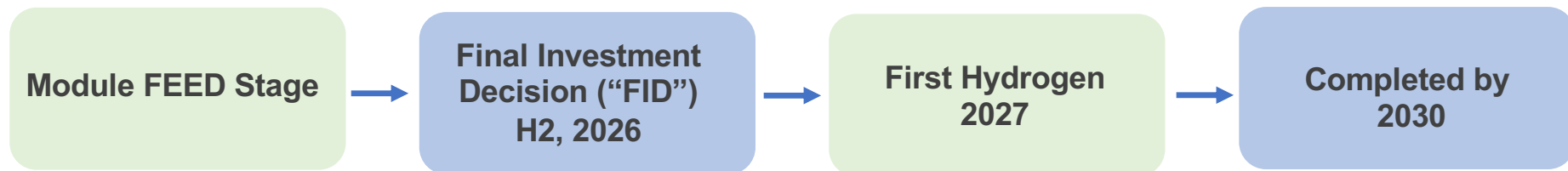
South Australia Project Site

Besides the two flagship projects, we are developing a **Pilot Project in Northern Territory**, Australia

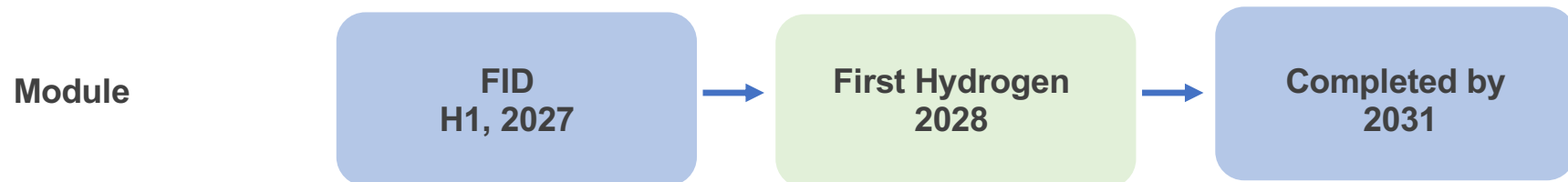
- The first gas fired power plant in Australia to use green hydrogen (TGen project )

## Green Hydrogen Projects - Fast Delivery

### Green Springs project in Northern Territory



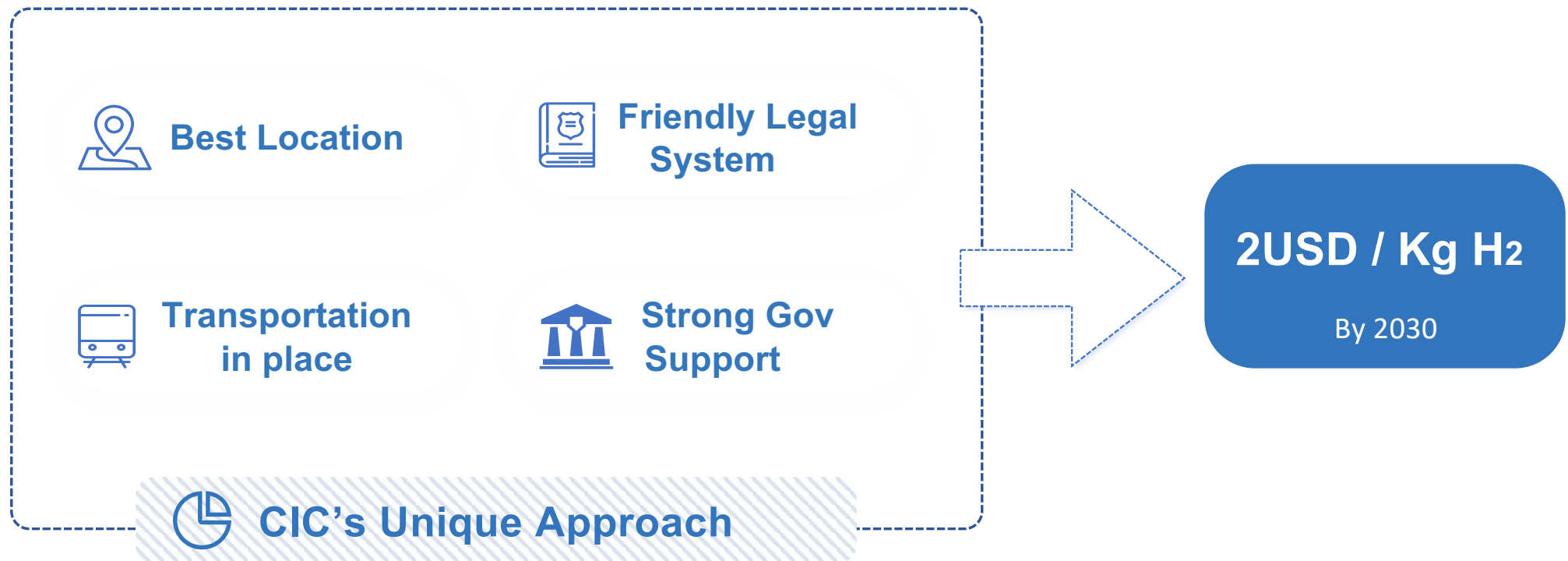
### Great Southern project in South Australia



### Pilot Project in Northern Territory ("TGen" Project)

- Target first module on site before the end of this year
- Commissioning expected in H1 2026, and formal production in H2 2026

## Why Australia - one of the lowest LCOH



# Unique Modular Approach — Design Once, Build Many

PV Solar



ALK/AEM/PEM  
Electrolyser



AWG



## Our modular solution



Scalable  
Deployment

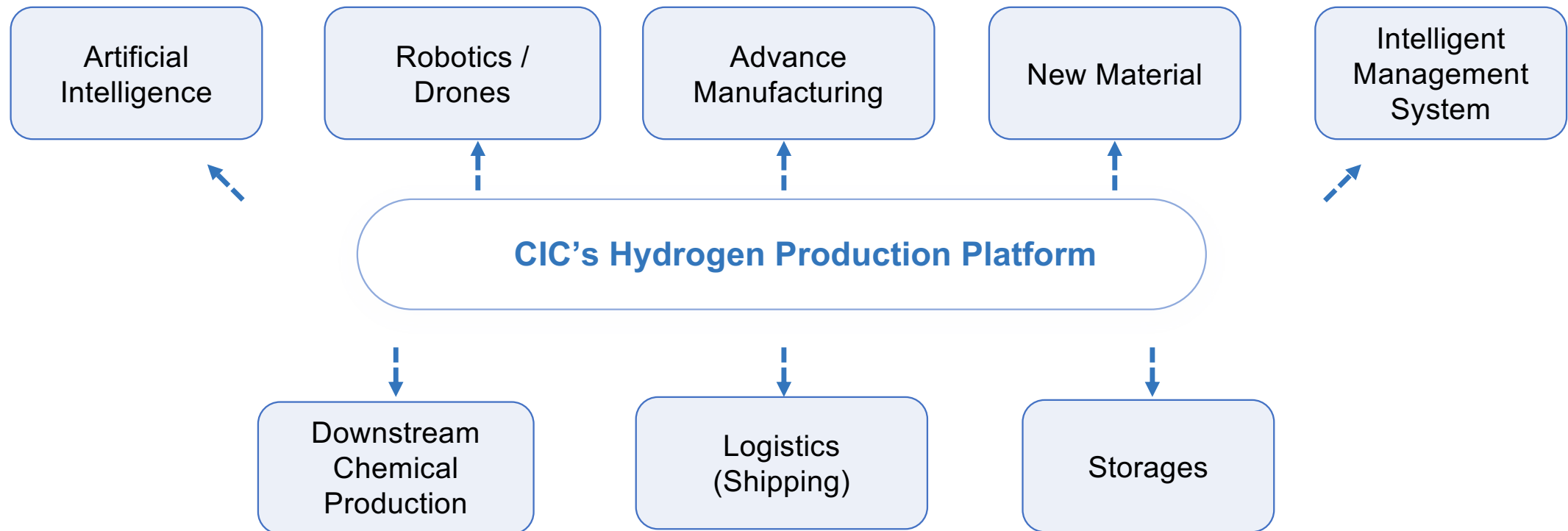


“Lego”

- ✓ Easier
- ✓ Faster
- ✓ Cheaper

## Integrated Supply Chain — A strong platform to deliver innovative solutions

**Innovation driven, complete value chain and strong ecosystem to deliver the green energy solutions**



## Strategic Partners — World Class

### Development / Support



### Equipment / Production

**TOPSOE**

**SUNGROW**

**JinKO** *Solar*



**gen-hy**

**CIMC**

### Shipping

**Purus**

### Storage





## Green Shipping—— Pathway to Decarbonization

***Speed is the key, and we are right here to strategically partner with the marine industry to provide the green fuel needed and to build a greener future together.***



### What CIC can offer

Green Ammonia / Methanol

Competitive Pricing

Large Quantity to Deliver before 2030



### Where to cooperate

Ship Green Fuel to Clients Globally

Steady Supply and Offtake

Green Port - Eco System



# Green is Power

[www.cic-hydrogen.com](http://www.cic-hydrogen.com)

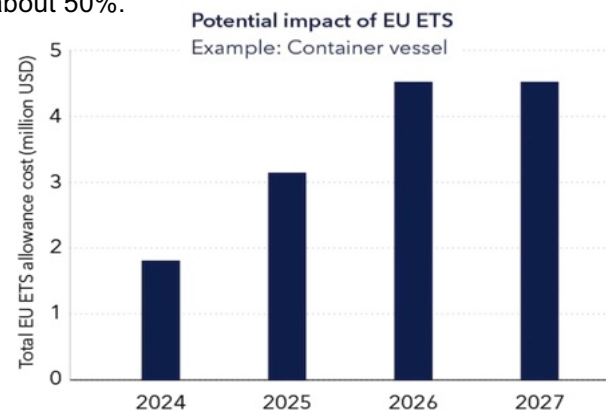
[Info@cic-hydrogen.com](mailto:Info@cic-hydrogen.com)

Sydney | Singapore | Darwin | Hong Kong | Adelaide

# Stringent Regulations Driving Fuel Transition, Green Ammonia/Methanol Critical for Maritime Decarbonization

## Compliance Pressure and Economic Impact

- It is calculated that shipping will rack up total FuelEU penalties of **€1.345 billion** in 2025 through analysis of the 13,000 vessels over 5000gt trading within and into the EU/EEA that are subject to the regulation.
- EU ETS will lead to additional costs for the industry of roughly up to **€10 billion** a year once fully implemented in 2026, due to the need to acquire carbon credits corresponding to GHG emissions. This will effectively increase fuel-related costs by about 50%.



Source: Hamburg-based maritime technology firm, DNV



## Green Ammonia & Methanol

- ✓ EU and IMO Maritime Policy-driven
- ✓ Huge emission reduction potential
- ✓ Increasing technological maturity

Together, they form the 'Dual Engines' for the shipping industry to achieve the 2050 net-zero target!

# FuelEU Maritime Regulation

**Applicable to:** Ships above 5,000 gross tonnage, covering 50% of the energy used during EU port calls and voyages.

**Emission reduction targets:**  
2% reduction by 2025, 6% by 2030, 31% by 2040, and 80% by 2050.

To connect to **onshore power supply** for their electrical power needs while moored at the quayside, unless they use another zero-emission technology



**The FuelEU maritime regulation will oblige vessels above 5 000 gross tonnes calling at European ports**  
(with exceptions such as fishing ships):



Vessels >5 000 gross tonnes

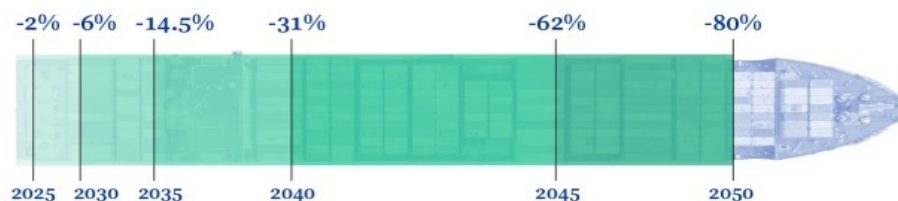


of all ships



of CO2 emissions from the maritime sector

*Annual average carbon intensity reduction compared to the average in 2020*



Source: European Commission



# IMO Accelerating Maritime Decarbonization Process



## Total Emission Reduction Targets

- **By 2030:** The total annual **GHG emissions** from international shipping to be reduced by at least 20% (striving for 30%) , **CO2 emissions per transport work** to be reduced by at least 40% , compared to 2008 levels. Uptake of **zero or near-zero GHG emission** technologies, **fuels and/or energy sources** to represent at least 5%, striving for 10%, of the energy used by international shipping.
- **By 2040:** Annual GHG emissions to be reduced by at least 70% (striving for 80%).
- **By 2050:** Achieve net-zero emissions and strive for complete phase-out.



## Implementation in Short, Medium, and Long-term Phases

### Short-term measures (*implemented/determined before 2023*):

- Mandatory technical measures such as the Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII).
- Technical review of short-term measures to be completed by 2026.

### Medium-term measures (*2023-2030*):

- **Basket Measures:** A. Technical element - phased reduction of greenhouse gas intensity standards for marine fuels. B. Economic element: Market-based carbon emission pricing mechanisms (such as carbon tax or emissions trading system).
- Other measures: Improved Life Cycle Assessment (LCA) guidelines for fuels, safety assessments, port infrastructure support, etc.
- **Timeline:** Basket measures to be developed by 2025, effective by 2027.

**Long-term measures (*after 2030*):** To be further developed as part of the 2028 strategy revision.

Source: IMO RESOLUTION MEPC.377(80)