

September 2023



Accelerating the Low CO₂ Ammonia Adoption

LUIS SARRÁS
International Green Hydrogen Vice President



AES Global Presence

MISSION

Accelerating the future of energy, together.

4

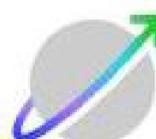
MARKET-ORIENTED STRATEGIC BUSINESS UNITS

32,326 Gross MW in Operation*

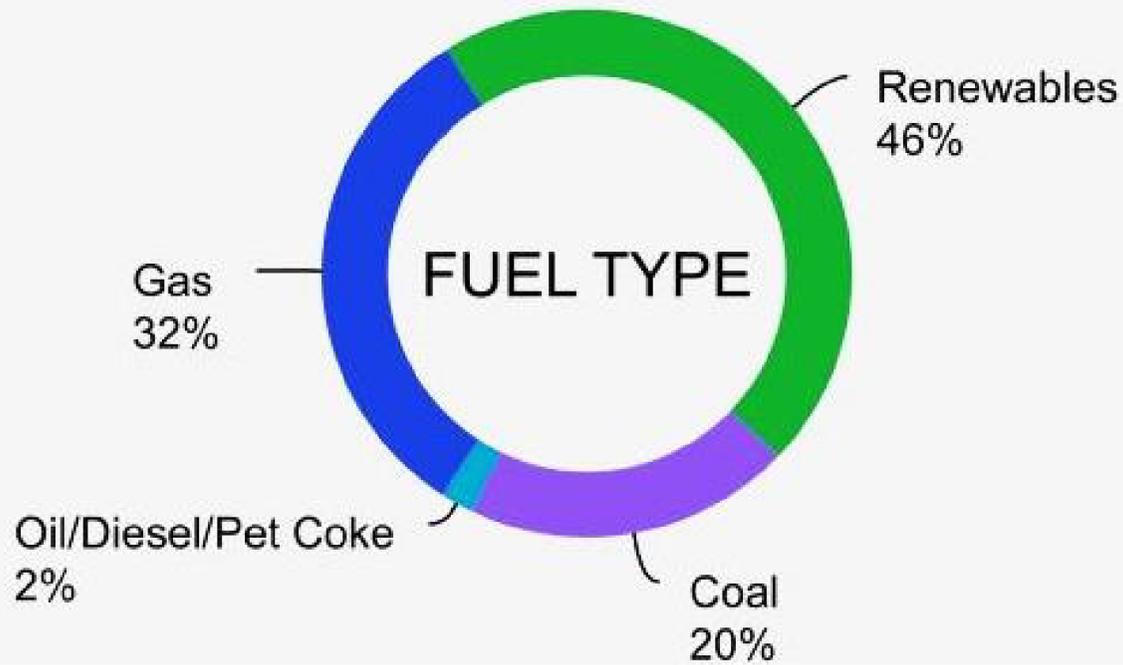
Generation Capacity Under Construction 5,453MW

VALUES

 Safety first

 Highest standards

 All together



\$12.6B
TOTAL 2022 REVENUES

\$38B
TOTAL ASSETS OWNED & MANAGED

AES IS ENERGIZED BY A GLOBAL WORKFORCE OF APPROXIMATELY

9,100 PEOPLE

6

UTILITY COMPANIES

AES Serves
2.6M
UTILITY CUSTOMERS

*23,494 proportional MW (gross MW multiplied by AES' equity ownership percentage)

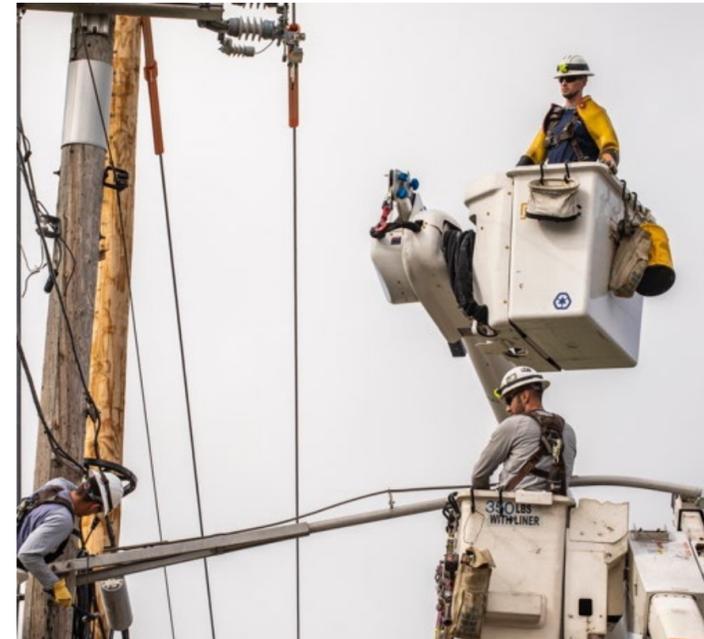


The New Strategic Business Units (SBUs)

Renewables



Utilities



Energy Infrastructure



New Energy Technologies



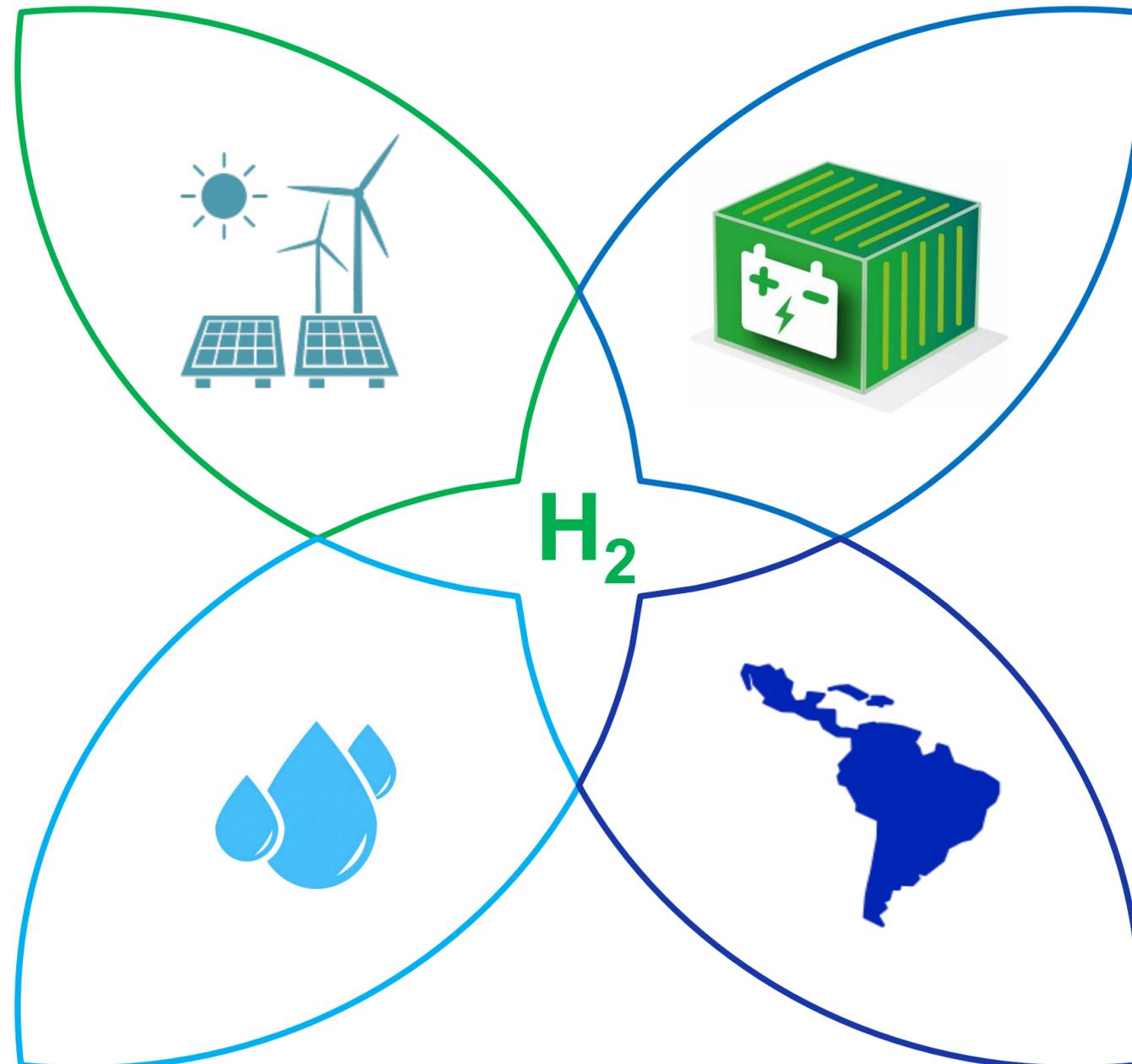
AES Experience for Low CO₂ Ammonia

Renewable Energy

- Leader building & operating renewable projects.
- Large portfolio of existing assets and projects.

Water Desalination

- Expertise developing & operating water desalination projects.



Energy Storage

- Leader developing and operating energy storage projects.
- Fluence – partnership AES and Siemens.

Key Locations

- Existing assets & projects in most competitive regions for solar & wind power.

Partnership Strategy

1

Strategic Equity & Offtake Partnerships

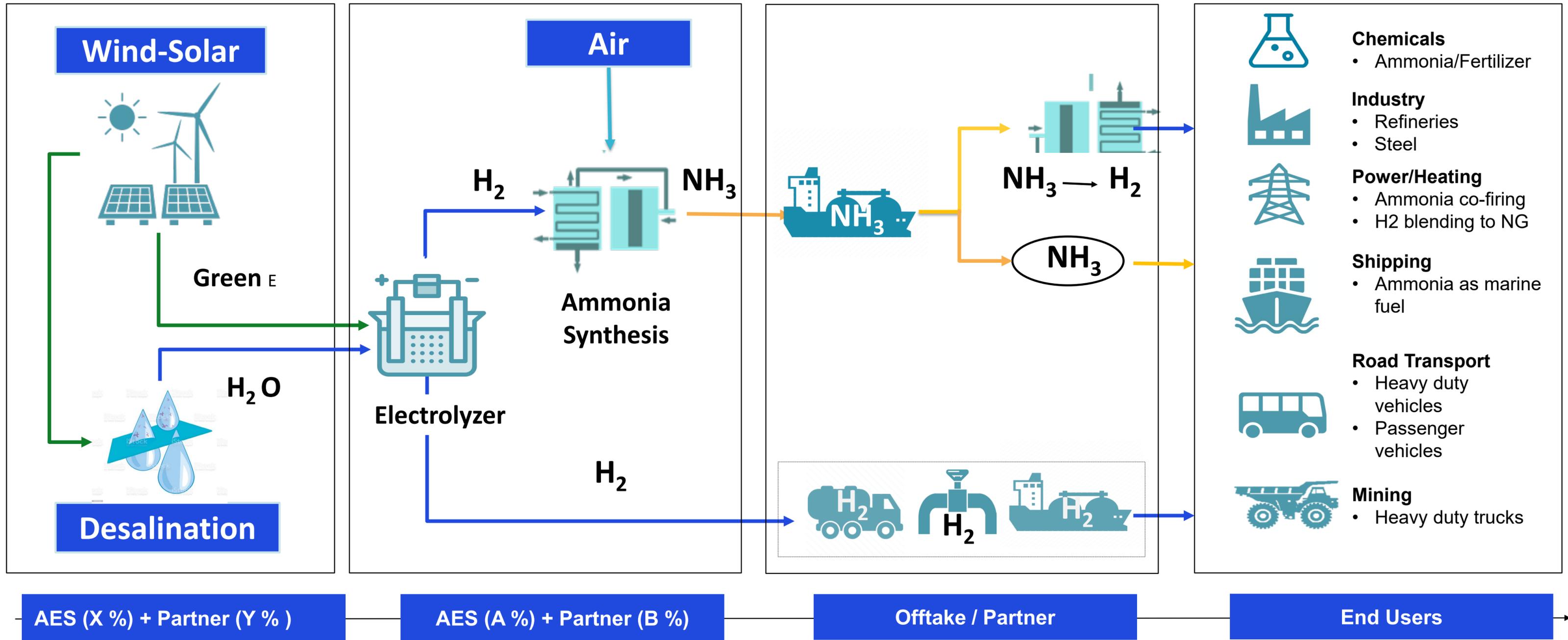
De-risk opportunities by guaranteeing creditworthy developers and off takers

2

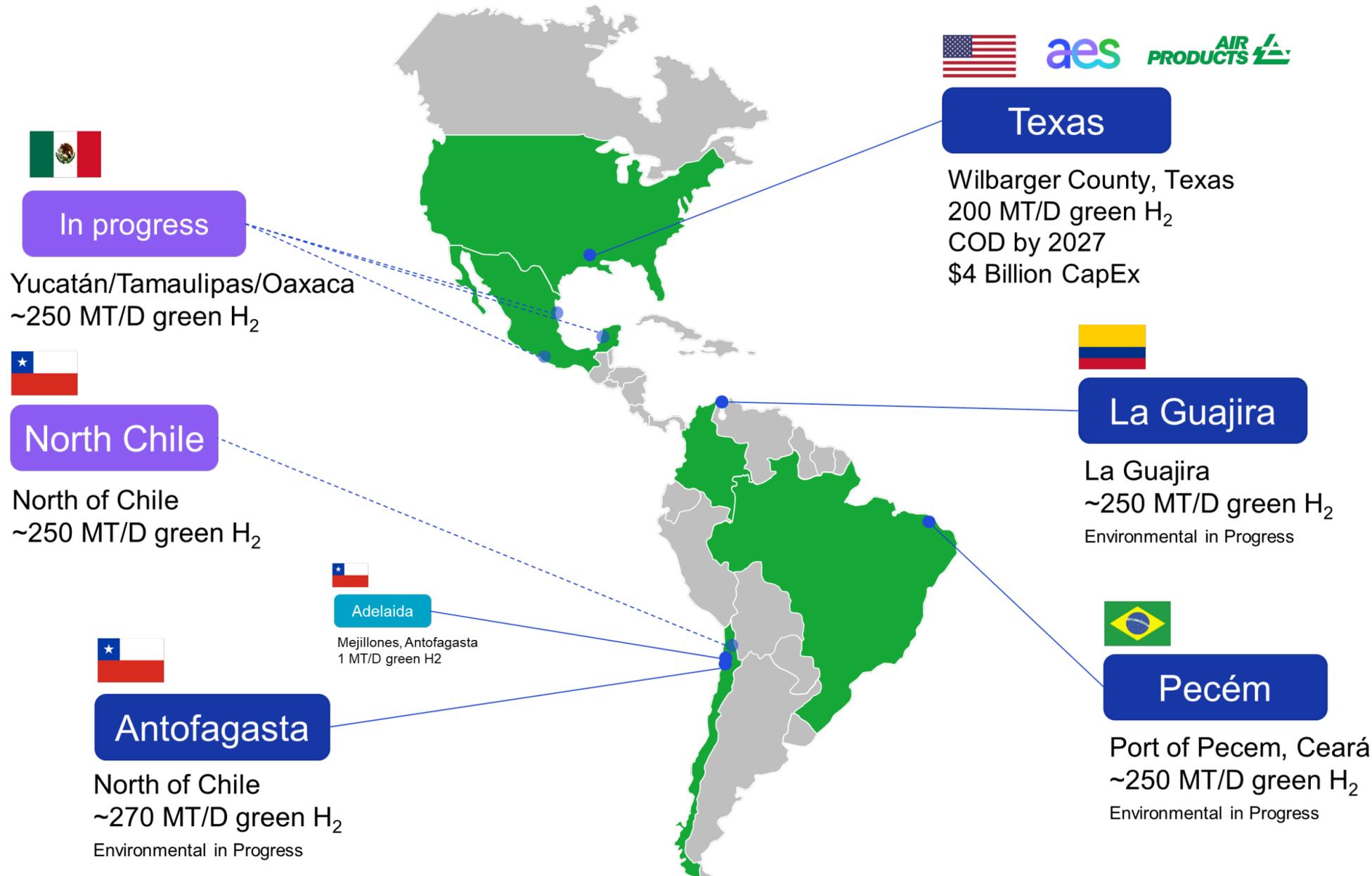
Production Innovation Partnerships

Build competitive advantage by optimizing renewables & electrolysis integration

Business Model



AES Low CO₂ Hydrogen/Ammonia Pipeline



2030 Vision
1200 MT/D
 H₂ production

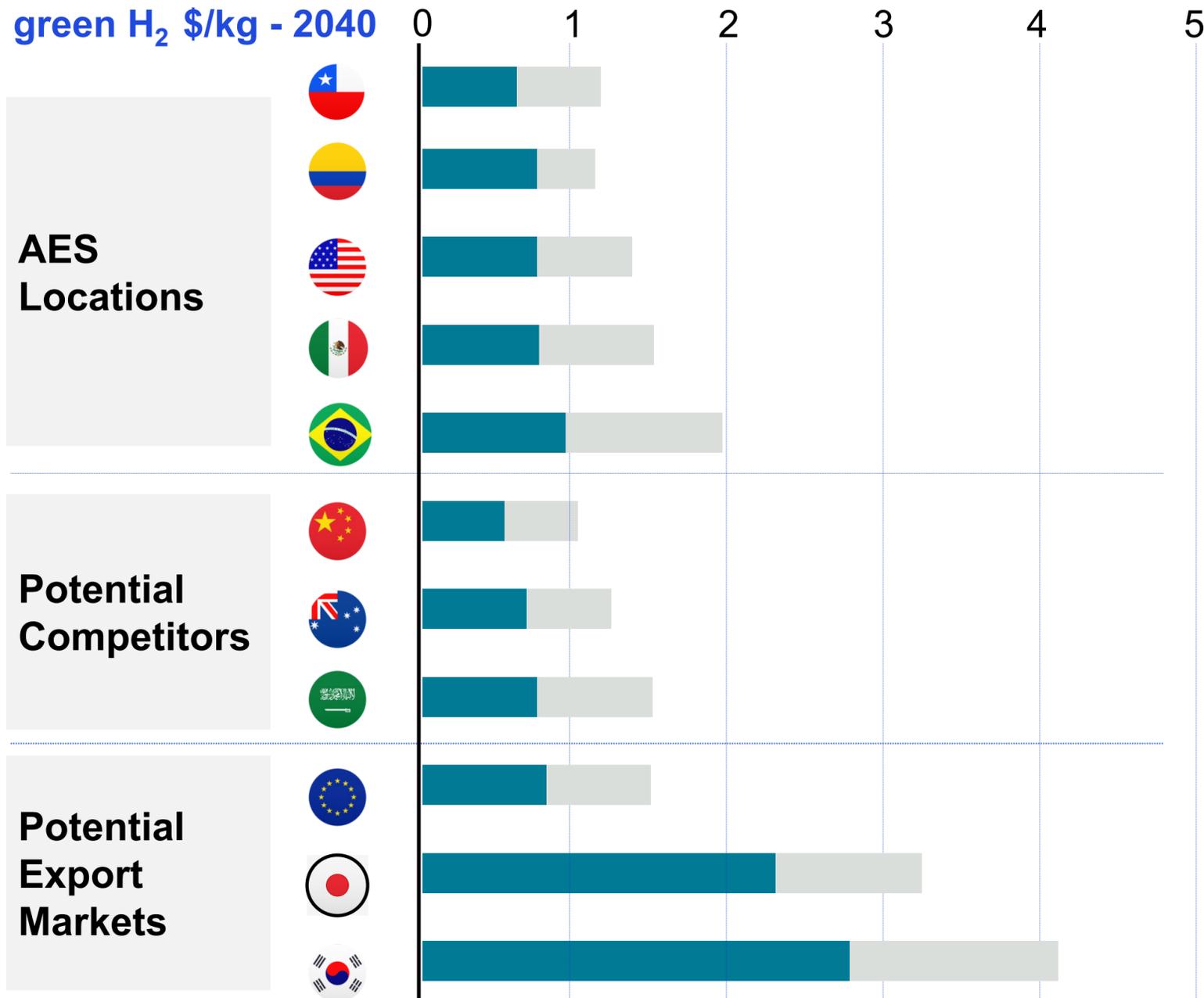
Opportunity
\$20B
 total capital needs for 1200 MT/D¹
 inclusive of hydrogen plant and renewables investment

- Projects
- Prospects
- Pilots

1. Capital requirements inclusive of hydrogen plant and renewables required; AES equity expected to be 5% of total capex after debt and partner equity. MT/D = metric tons per day



The Potential of The Americas



- South America can provide 35% of global Green Hydrogen
- The Americas have the most competitive LCOEs globally
- The region will support global diversification of energy production

Source: Adapted from IRENA & Accenture

This price of hydrogen is considered until the outlet of electrolyzer

■ Optimistic ■ Pessimistic

The Largest Green Hydrogen Project in US

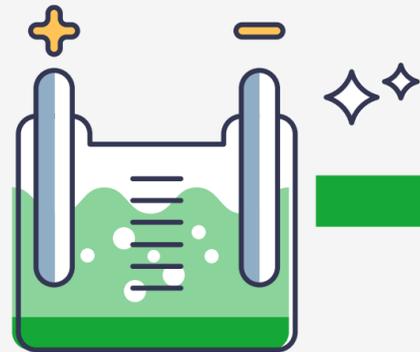
Upstream

Wind and Solar

Installed capacity ~1.5 GW

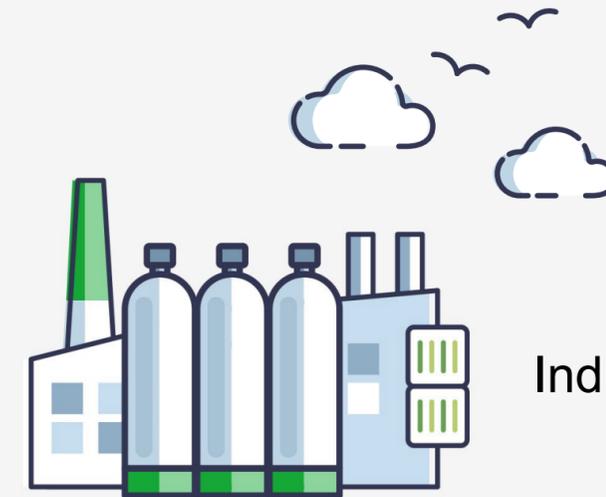


Electrolyzers capable of producing **over 200 MT/D** of green hydrogen



Downstream ✨

Hydrogen



Industrial market

Hydrogen



Heavy duty transportation market

Total Investment: \$4 billion

Commercial Operation: 2027

Location: Wilbarger County, Texas

Hydrogen Production JV: 50:50 Air Products and AES

Hydrogen Offtake and Marketing: 100 % Air Products

Avoids more than 50 million metric tons of CO2 over the project's lifetime, the equivalent of avoiding emissions from nearly 5 billion gallons of diesel fuel

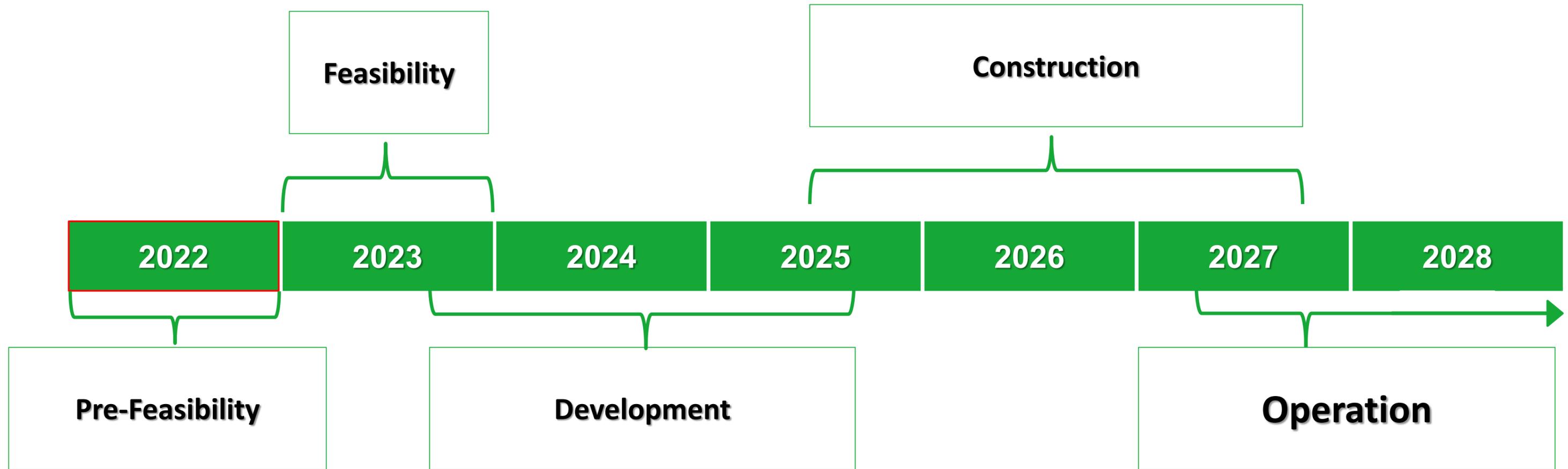
To Be Prepared for Deliver Before 2030



Most industries and regulations have initial targets for 2030 to reach carbon neutrality goals.



Need to Act Now – Project Timeline



Takeaways



Experienced company accelerating the availability of low CO₂ Ammonia

Early COD based on advanced stage of development in the best world locations in The Americas

Strong business model to increase competitiveness, de-risking financially and technologically its low CO₂ ammonia projects

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THANK YOU

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