Shaping the global **energy transition.**

H2Global: Bringing the clean H2 market to fruition

June 2025

H2Global

The H2Global
Set-Up

A non-profit foundation with a for-profit intermediary

Research, instrument development & outreach

Corporate donors

Government grantor

Philanthropic grantor

H2Global Stiftung

Independent H2Global Stiftung holds 100% ownership of Hintco. The "firewall" between donors engaged in the foundation and Hintco prevents conflict of interest.

Auction preparation & implementation

Hintco

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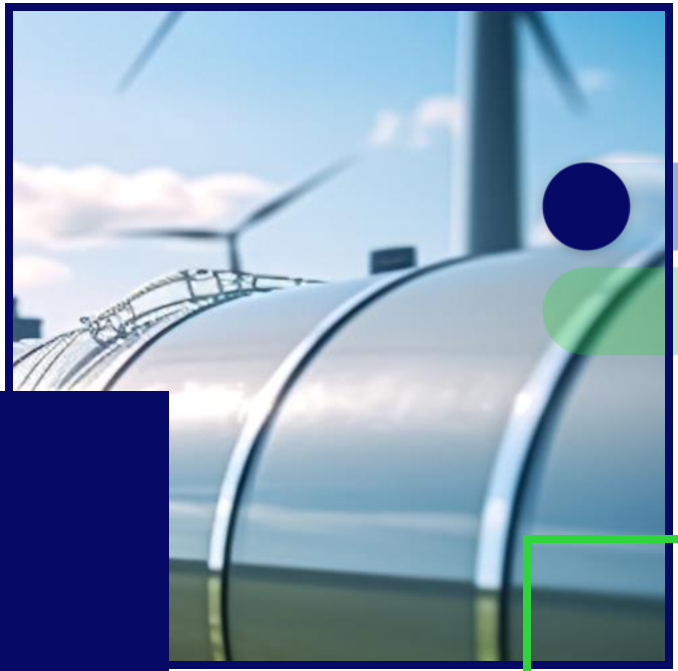
Funds the price gap

Governments, Climate/Dev. Finance

Funding body, grant authorities

Research



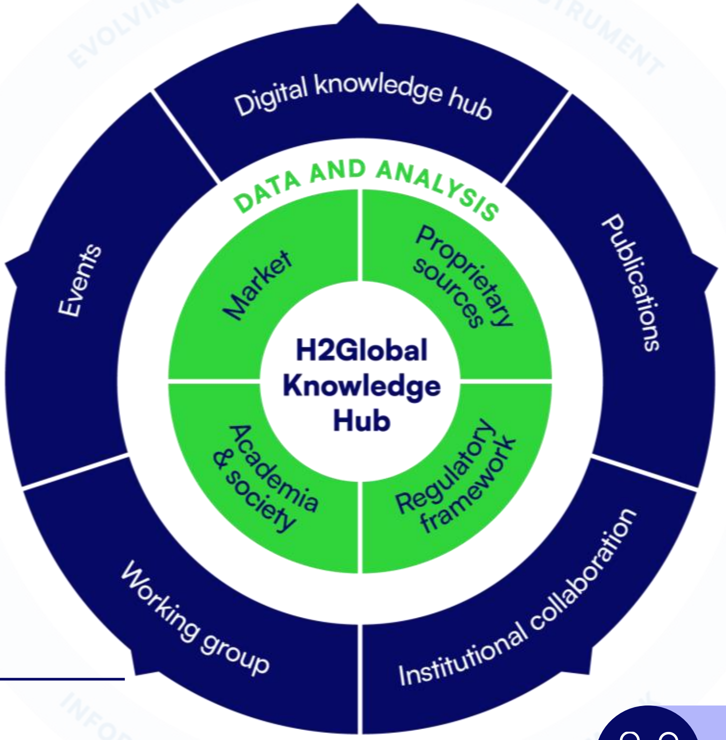
H2Global supports the clean hydrogen market creation through targeted research activities

Knowledge dissemination

- Starting with basic knowledge on the general role of clean hydrogen in the energy transition
- Adding new and advanced insights over time

Engaging with industry

Practical insights into the hydrogen economy



Reports

THE WORLD BANK

CGEP

IRENA International Renewable Energy Agency

THE OXFORD INSTITUTE FOR ENERGY STUDIES

OECD

iea

Research collaboration with:

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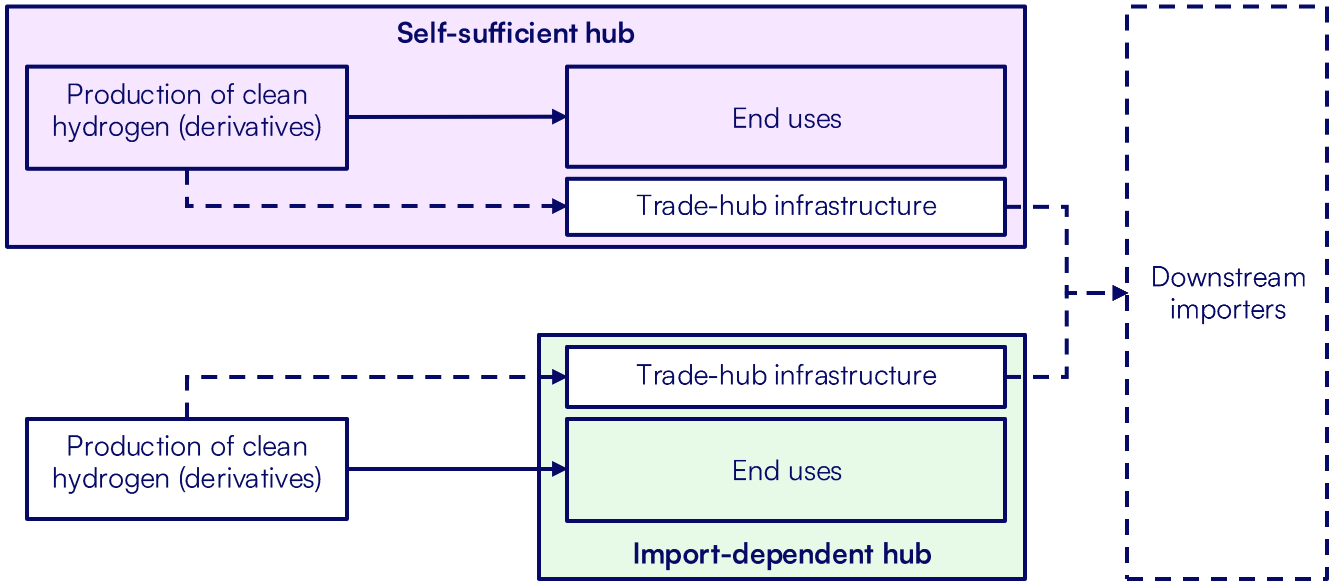
Infrastructure access and security of supply
are tackled in distinct ways by the two demand hubs



The development of a **trade hub** is not directly related to offtake and thus an optional feature

SELF-SUFFICIENT HUBS

- Supply matches demand within the hub
- Infrastructure requirements are lower since distances are relatively short within the hub

IMPORT-DEPENDENT HUBS

- Focus investment in the development of import terminals and/or transport corridors

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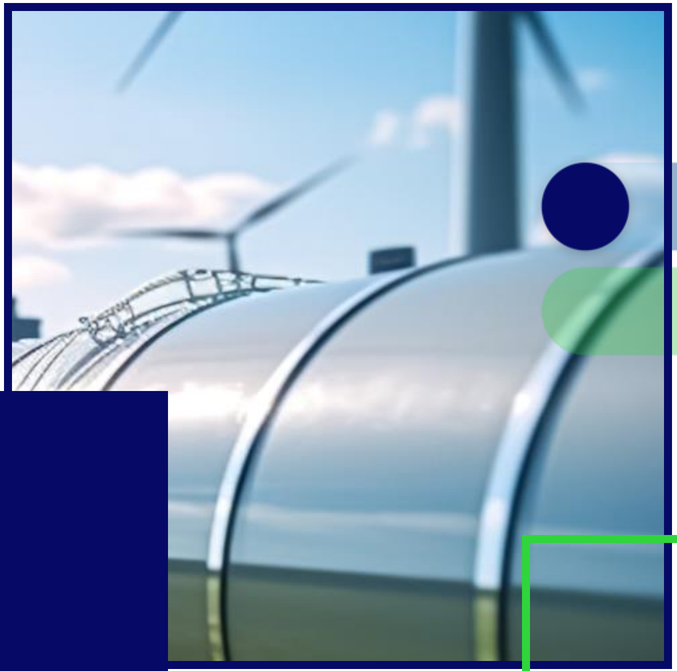
Recommendations

Challenge	Self-sufficient hubs	Import-dependent hubs
Cost-of-difference	— Support capital expenditure (CAPEX) for carbon capture, usage and storage (CCUS) assets and local renewable hydrogen production. — Support operational expenditure (OPEX) for operational costs of CCUS and sourcing sustainable energy.	— Support CAPEX for reconfiguring industrial assets to consume clean hydrogen. — Support OPEX for procuring clean hydrogen as a fossil fuel replacement.
Infrastructure access	— Invest in short-distance pipelines to connect production and consumption within the hub.	— Provide CAPEX for mid- and long-distance pipelines and terminals to facilitate hydrogen imports.
Supply security	— Monitor local production and incentivize increased capacity to meet demand.	— Develop infrastructure to connect the hub with domestic or international hydrogen production sources.
Value-chain coordination	— Create matchmaking platforms for within-hub supply chains.	— Support collective procurement through auctions and international cooperation with exporting countries.
Flexibility needs	— Implement fallback options to allow companies flexibility during fluctuating hydrogen availability.	
Research & development needs	— Support experimental regulation (e.g., reallabor/living-lab models) to foster new business models and innovative hydrogen solutions.	
Ease of doing business	— Establish one-stop shops for permitting and administrative procedures within the hub to streamline setup for new projects.	

The clean hydrogen **opportunity**



Clean hydrogen: targets and ambition vs reality

Electrolyzer capacity **(GW)**

560 Required to meet Paris targets by **2030**

520 Announced projects

230 in feasibility phase

20 with FID

IEA 2024

1.6 in operation

Clean H2 quantity **(Mtpa)**

65 required by 2030

49 announced clean H2 production by 2030

26 excluding early-stage projects

3.4 of production with FID

IEA 2024

Investment & subsidy **(USD)**

100 trillion in institutional capital invested in OECD countries in 2019

25 trillion Global investment required in clean H2 value chain until **2050**

OECD 2021; OECD, World Bank 2024

363 billion public subsidies made available in Americas, Europe, Middle East, Africa, and Asia Pacific

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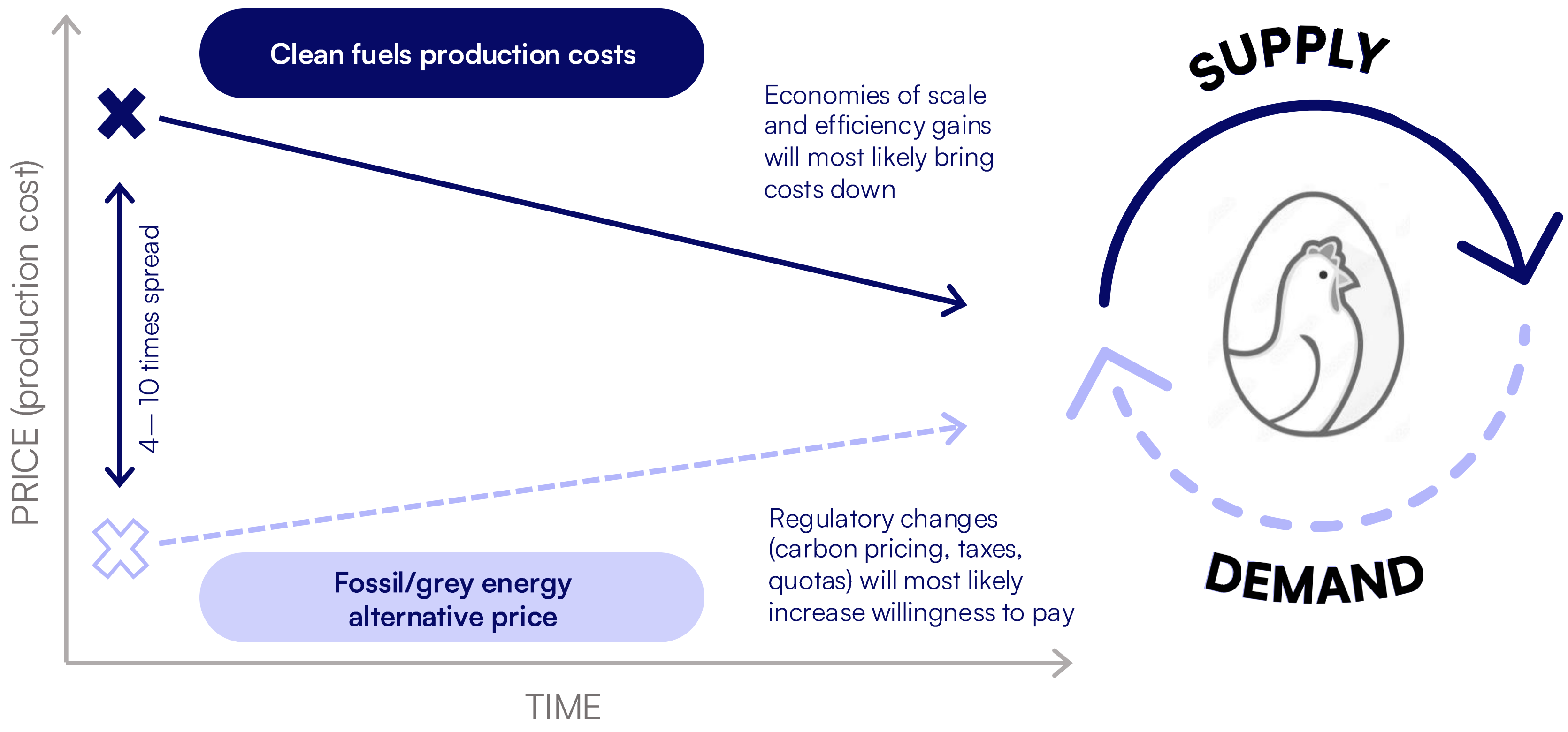
Clean fuels "Offtake-Conundrum"



- Despite several announcements there are **no long-term and cost-covering offtake**
- Without offtake there is **no Final Investment Decision** (FID)
- Expected **decrease of production costs** delays FID further

- Without regulatory stimulus, **there is no/limited willingness to pay a "green premium"**
- Without supply security at price-comparable conditions, there is **no demand uptake**

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The H2Global **Mechanism**

H2Global's mechanism promotes timely and effective market creation for green commodities such as clean hydrogen

Key elements

Investment Security	Defined System	Cost of Difference compensation	Competition
Creating business cases and investment security.	**Long-term purchase agreements over 10 years.**	**Financial compensation of Cost of Difference.**	**Double-auction: Market-based bidding procedures on the supply and demand side.**
Shifting the timing of market creation by promoting the market ramp-up until a viable low-carbon market has developed.	Clear definition of max. funding volume, products, geography and (sustainability) criteria by funding body.	Set up of an intermediary — the **H**ydrogen **Int**ermediary **Co**mpany. Hintco	Minimization of the price difference to be compensated by public funds.

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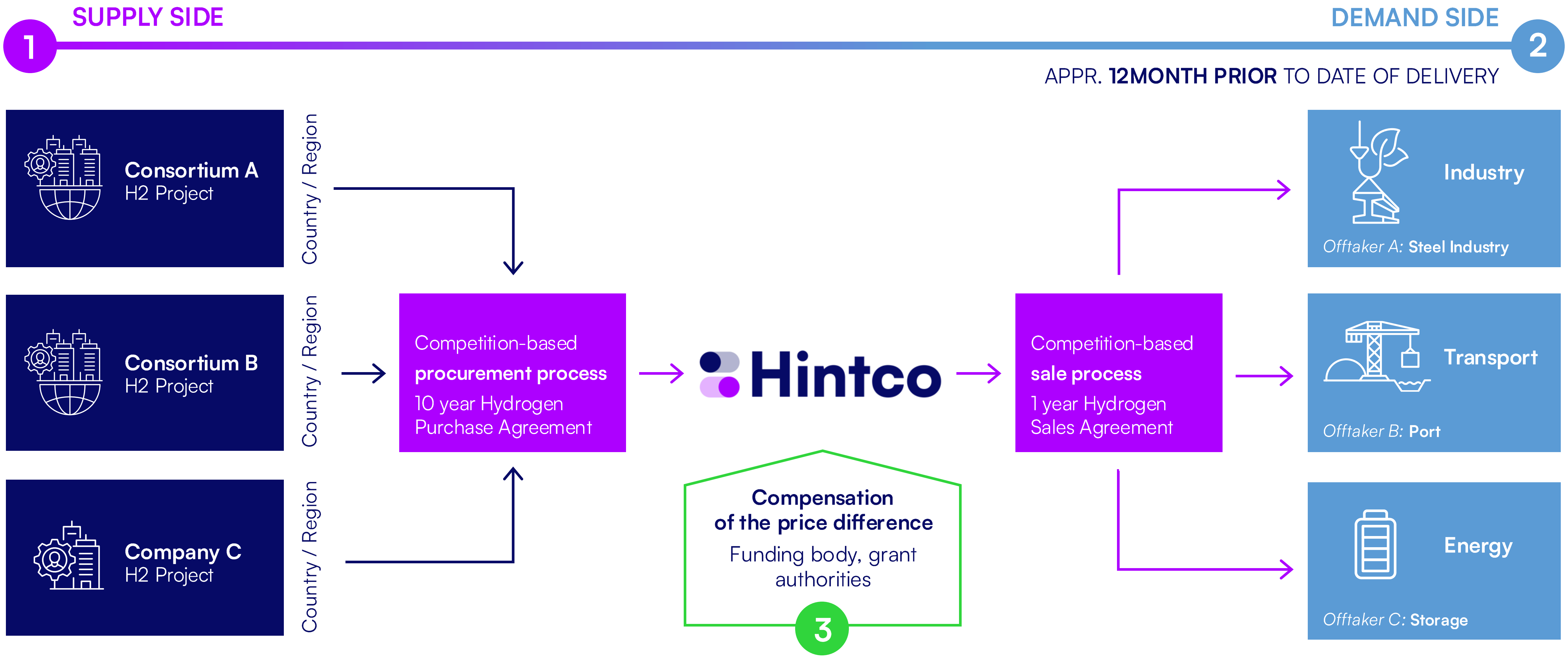
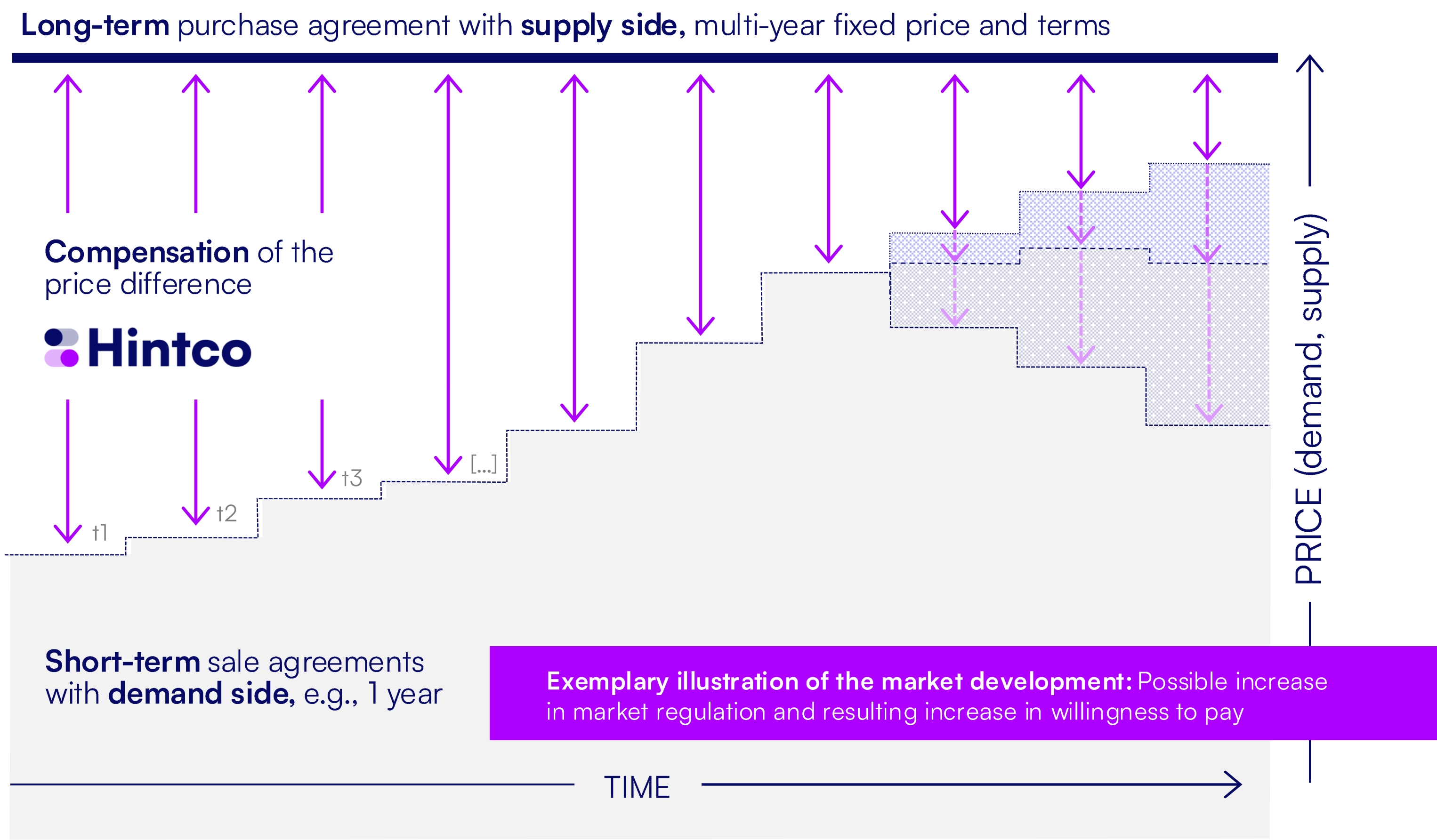
The Double-Auction Sequence



The H2Global market-driven compensation mechanism ensures the most efficient use of funds for maximum impact

H2Global auctions **uncover supplier** and **offtake pricing dynamics.**

To create **liquidity** and support market development, **short-term** and **broad-based price signals** are **decisive.**



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Demand and supply countries can design their H2Global tenders individually, or join forces

H2Global Tender

Customizable regarding:
- Geography (global, regional, national)
- H2 product selection
- Product and sustainability criteria

Adaptable to different targets:
- Price optimization
- Promotion of clean technologies
- Energy security
- Decarbonization of specific sectors
- Development policy

IMPORT OR LOCAL	JOINT IMPORT	EXPORT	JOINT IMPORT / EXPORT
Demand country	Demand country / Demand country	Supply country	Supply country / Demand country
Price difference	Price difference	Price difference	Price difference
Hintco	Hintco	Hintco	Hintco
Supply Side / Demand side	Supply Side / Demand side	Supply Side / Demand side	Supply Side / Demand side

Clean fuel product flow →   Funds →

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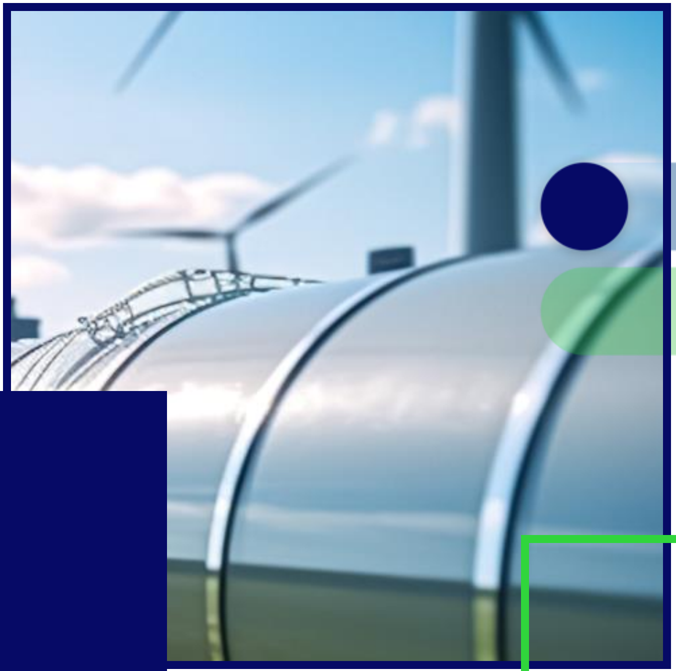
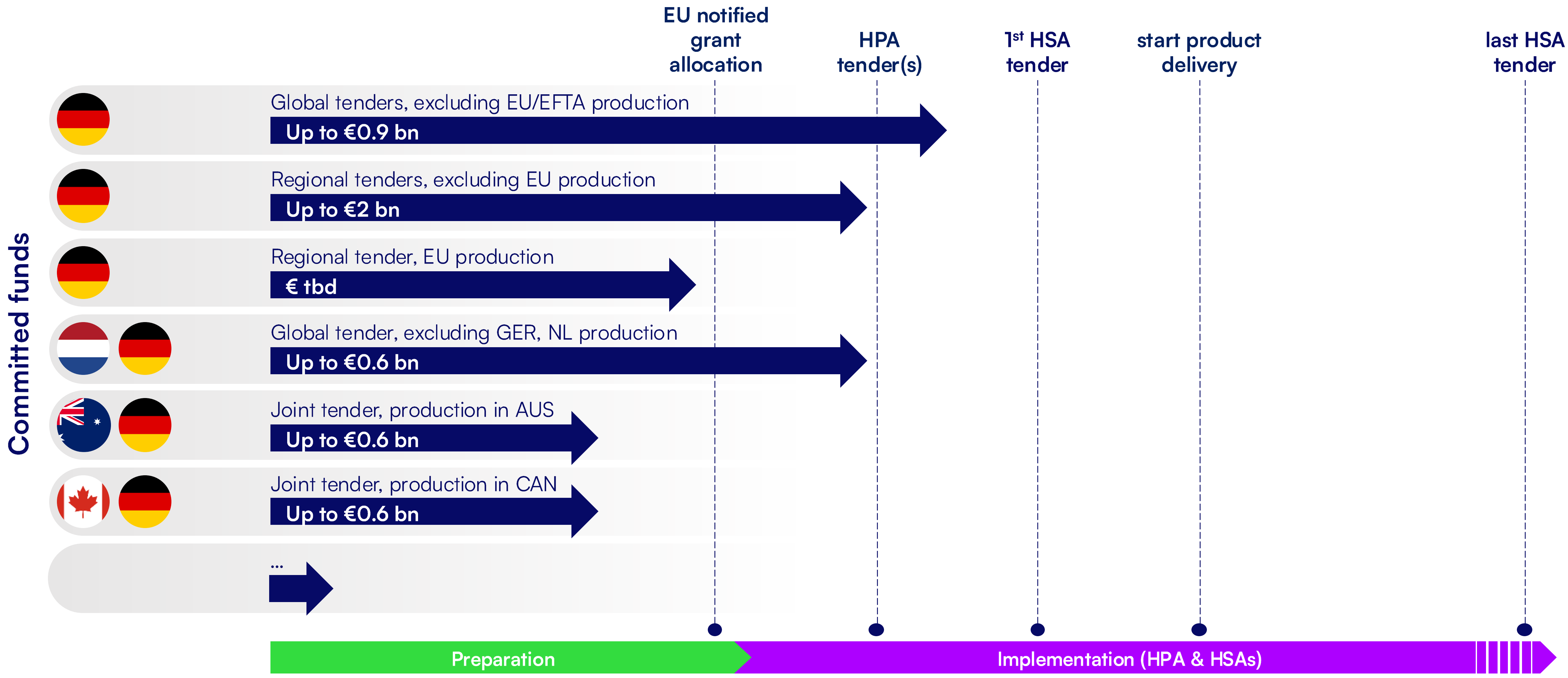
H2Global: Tenders and international cooperation



€5.86 bn have been committed/earmarked so far to H2Global tenders



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First results of H2Global pilot auction

Die Bundesregierung

EUR 900m

Hintco

Pilot auction powered by the H2Global mechanism

Lot 1 | Renewable ammonia

Lot 2 | Renewable methanol (ongoing)

Lot 3 | E-SAF (closed)

EUR 900m

HPA — Winning Bidder — Fertiglobe — Egypt Green Hydrogen

Renewable ammonia supplier:	**Fertiglobe PLC**
Project location:	**Suez Canal Economic Zone, Egypt**
Average product price:	**811 €/t**
Total contract price:	**1,000 €/t**
Total volumes until 2033:	**up to 397,500 t**
Planned first delivery:	**2027**

Detailed information on the first results, please visit: https://www.hintco.eu/lot-1-renewable-ammonia

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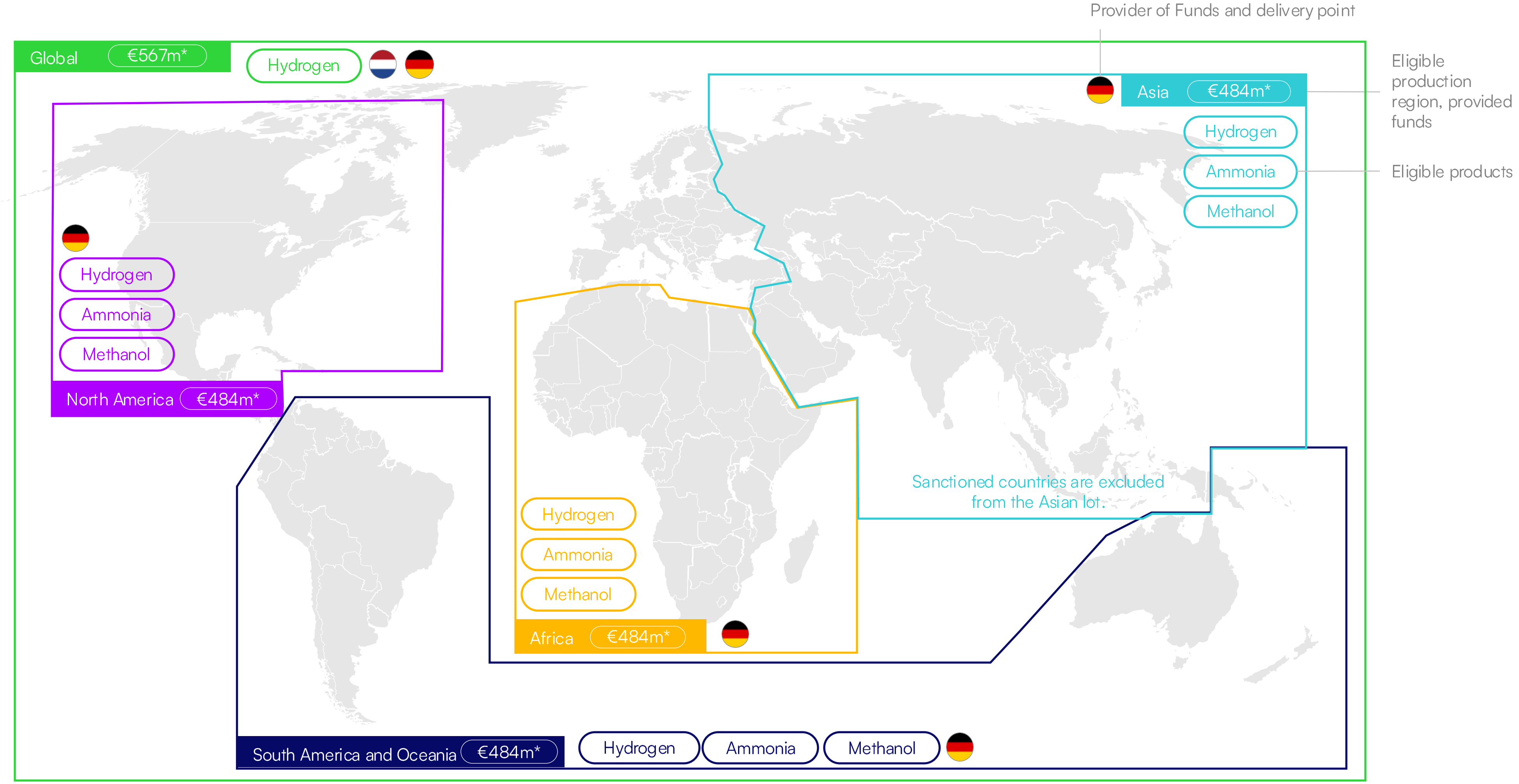
Second H2Global auction round of EUR 2.5bn now underway

The next H2Global auction round will include:

- **Four regional lots** for the supply of RFNBO hydrogen, or RFNBO ammonia, or RFNBO methanol,
- Along with **one global lot** for the supply of RFNBO hydrogen.

Bidders are free to choose their **preferred mode of transport** (final product, LOHC, LH2, etc.) to the designated delivery point.

Bidders can participate with a single project in both regional and global lots.



The funding countries, Germany and the Netherlands, as well as sanctioned countries are excluded from the global lot on the supply side.

*An increase of up to €587 million per regional lot / up to €597 million for the global lot and aduration extension to 2037 is foreseen. However, since the German government's 2025 budget, which is relevant for these alternations, is still pending, the volumes and durations stated above are the current status as of end of February 2025.

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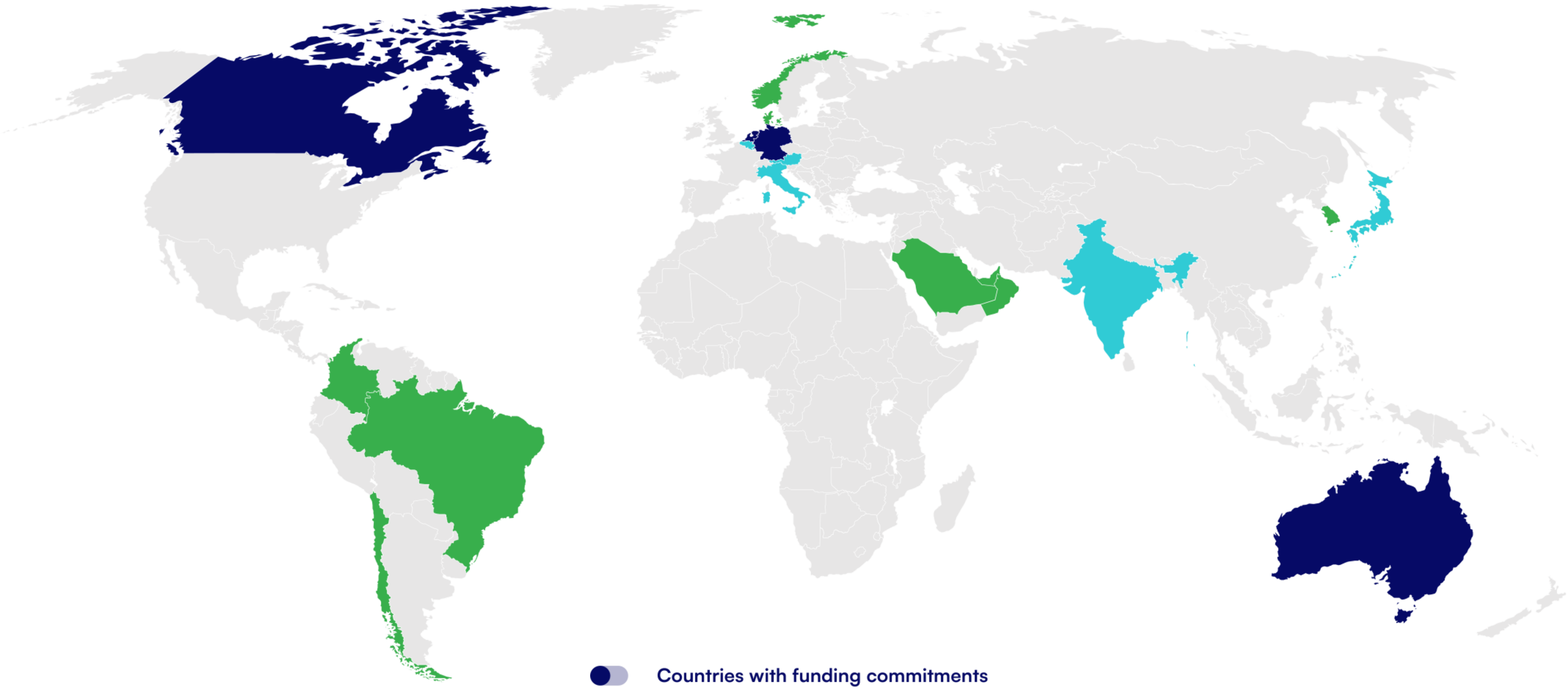
H2Global worldwide



- Australia
- Austria
- Belgium
- Brazil
- Canada
- Chile
- Colombia
- Denmark
- Germany
- India
- Italy
- Japan
- Luxembourg
- Netherlands
- Norway
- Oman
- Saudi Arabia
- South Korea
- UAE

Countries with funding commitments

Countries in active discussions to use the H2Global mechanism

Countries with ongoing knowledge exchange

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