

Shaping the global energy transition.

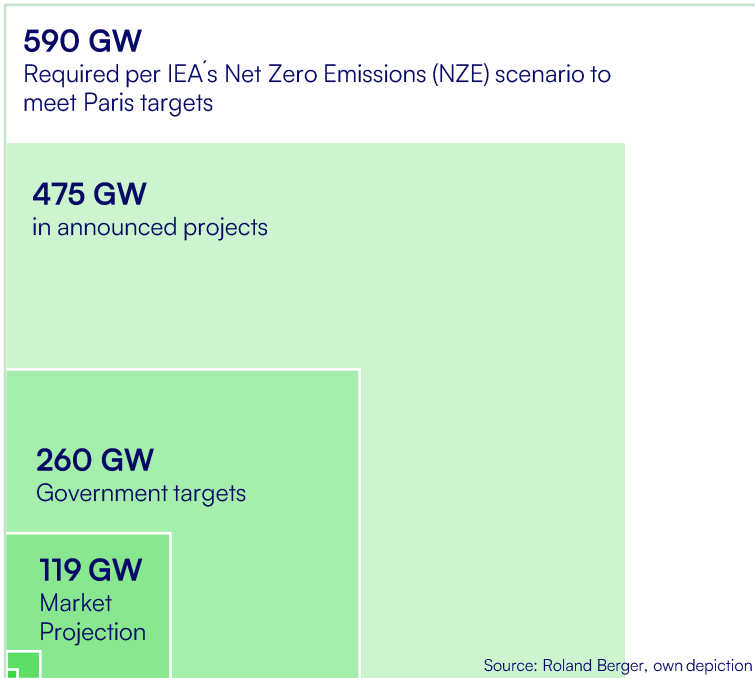
H2Global: Bringing the Clean H2 Market to Fruition

August 2024

The Clean Hydrogen Opportunity

Clean Hydrogen: Ambitions vs. Reality (2023)

Cumulative global installed electrolyzer capacity through 2030



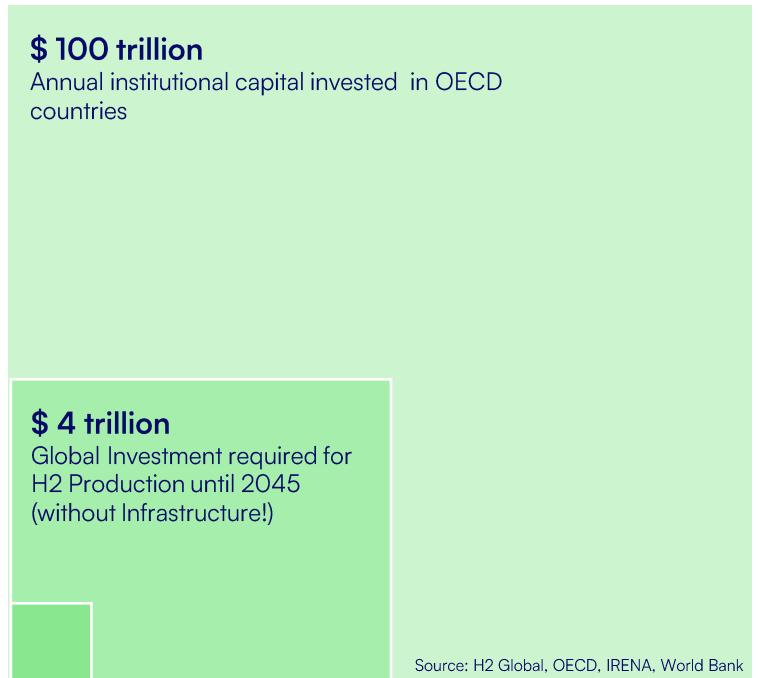
< 5 GW under construction

< 1 GW in operation

Clean hydrogen projects



Investment Required vs. Public Funding and Institutional Capital available



\$ 100 billion

Public subsidies made available in all OECD countries + China

The Clean Hydrogen Market Myth

WELL-FUNCTIONING MARKET TRAITS



Price Transparency



Liquidity



Legal Security / Rules based



No market barriers

VS

REALITY



- Tap in the dark: No pricing signal on supply or demand side, hence no market price
- Indexes only on „assumption base“



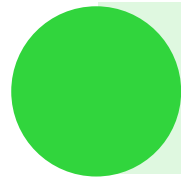
- Very limited number of transactions, large volumes only
- Over the Counter (Otc) and „point-to point“ only



- Standards and certification schemes hardly in place
- Insecurity in terms of recognition and methodologies

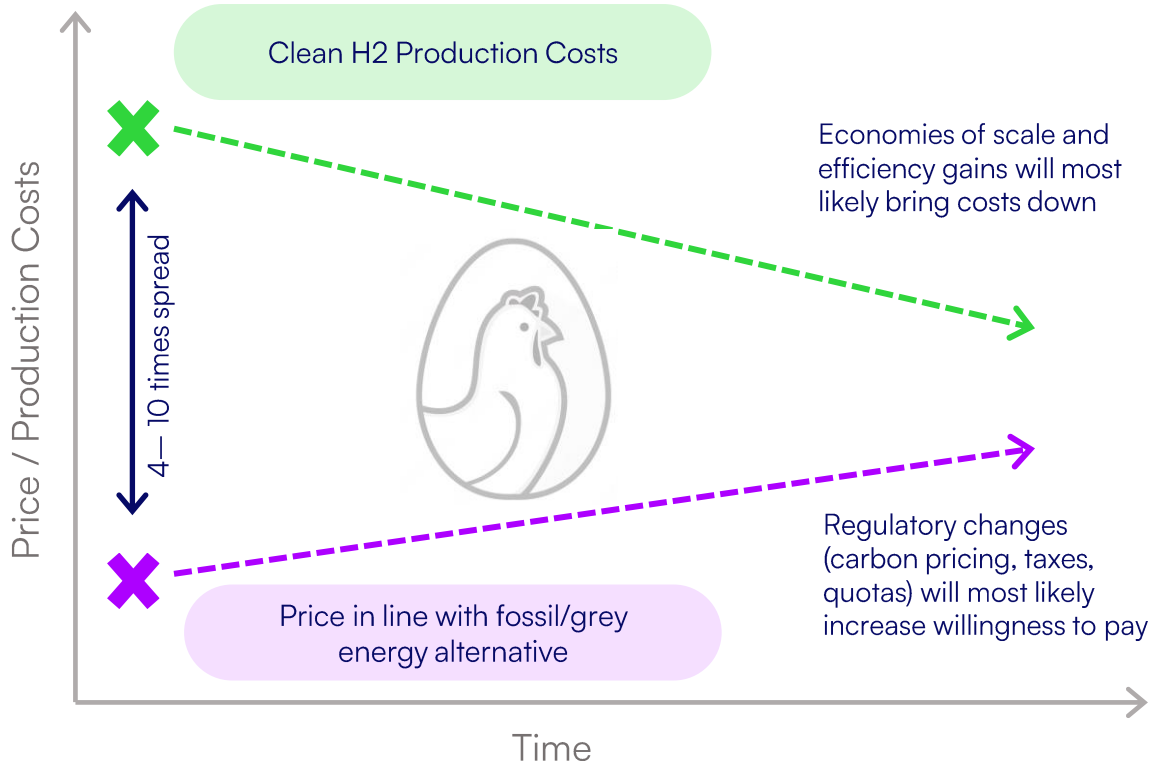


- High entry barriers



Before talking about **Market Ramp-Up** we need to talk about **Market-Creation.**

Green Commodities' "Offtake-Conundrum"



SUPPLY

- 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

DEMAND

- 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**

The H2Global Mechanism

H2Global's mechanism promotes timely and effective market ramp-up of green commodities such as clean hydrogen

Key elements

Bridging



Creating business cases and investment security.

Shifting the timing of market creation by promoting the market ramp-up until a viable low-carbon market has developed.

Defined System



Long-term purchase agreements over 10 years.

Clear definition of max. funding volume, products, geography and (sustainability) criteria by funding body.

Cost of Difference



Financial compensation of Cost of Difference.

Set up of an intermediary — the **Hydrogen Intermediary Company**.



Competition-based



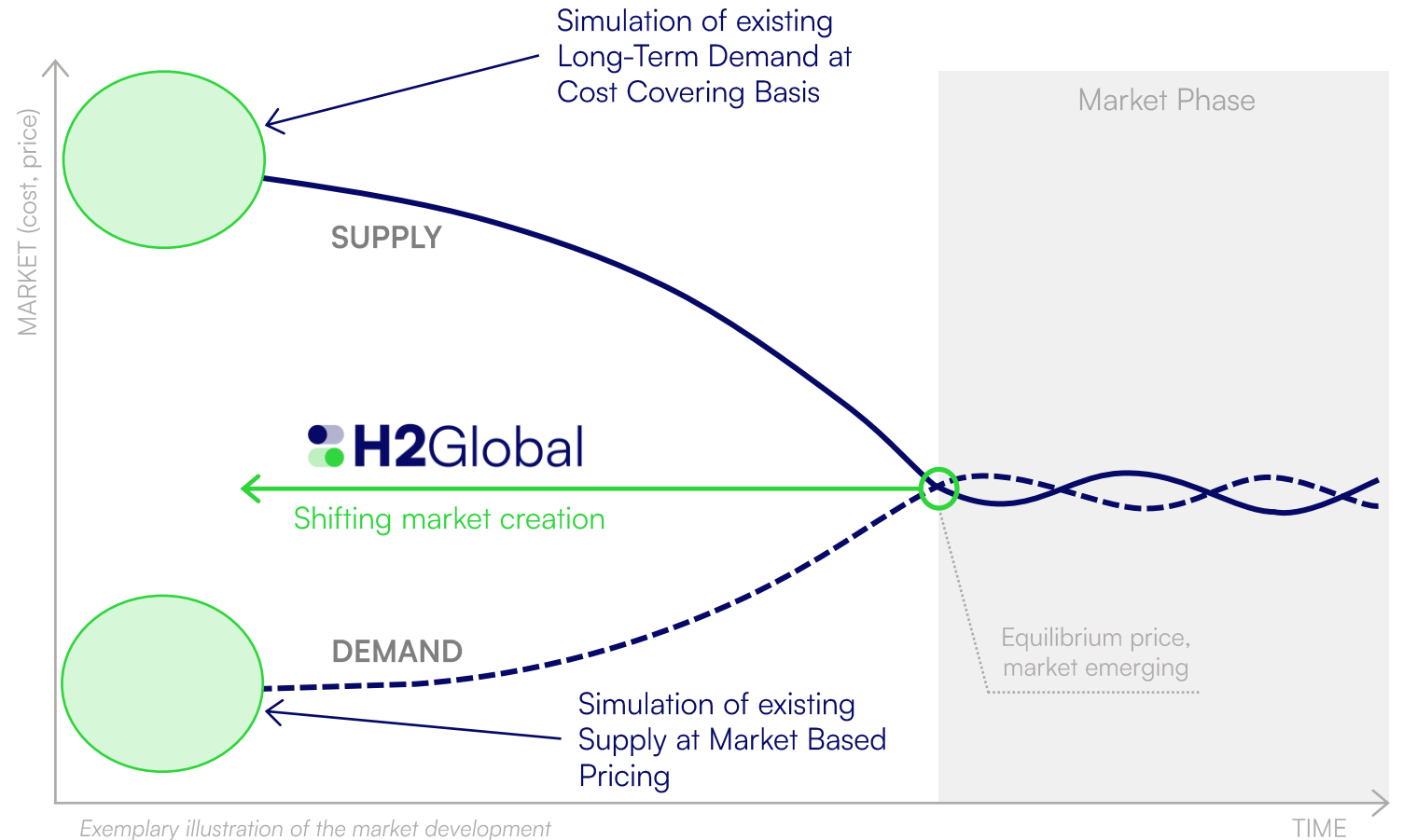
Double-auction: Market-based bidding procedures on the supply and demand side.

Minimization of the price difference to be compensated by public funds.

Market simulation has a catalytic effect and shifts market creation forward

Simulate to Create

Immediate creation of simulated market on supply and demand side.



The Double-Auction Sequence



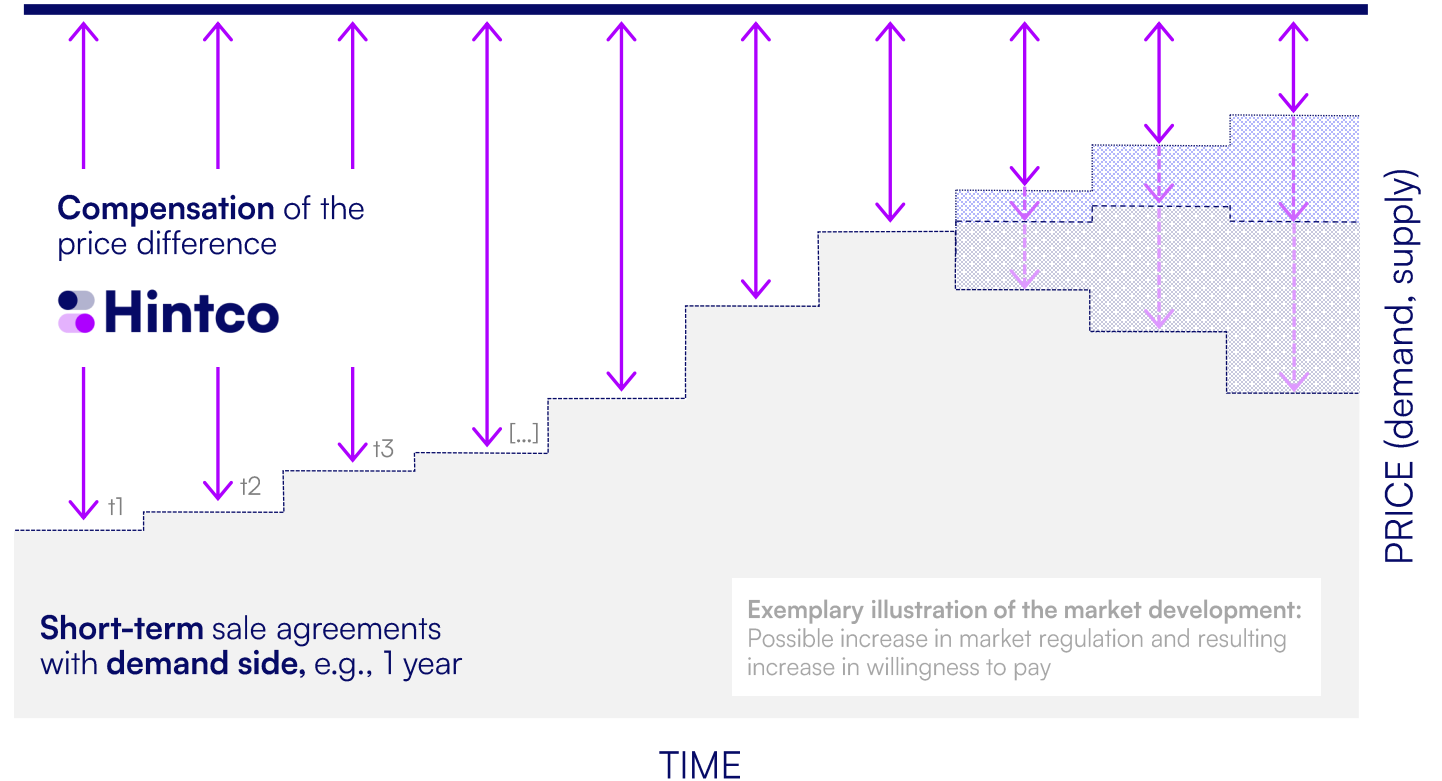
The H2Global market-driven compensation mechanism ensures the most efficient use of funds for maximum impact

Core value of H2Global's auction design:

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

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

Long-term purchase agreement with **supply side**, multi-year fixed price and terms



The H2Global mechanism is flexible and can be customized according to funders' objectives

Customized regarding:

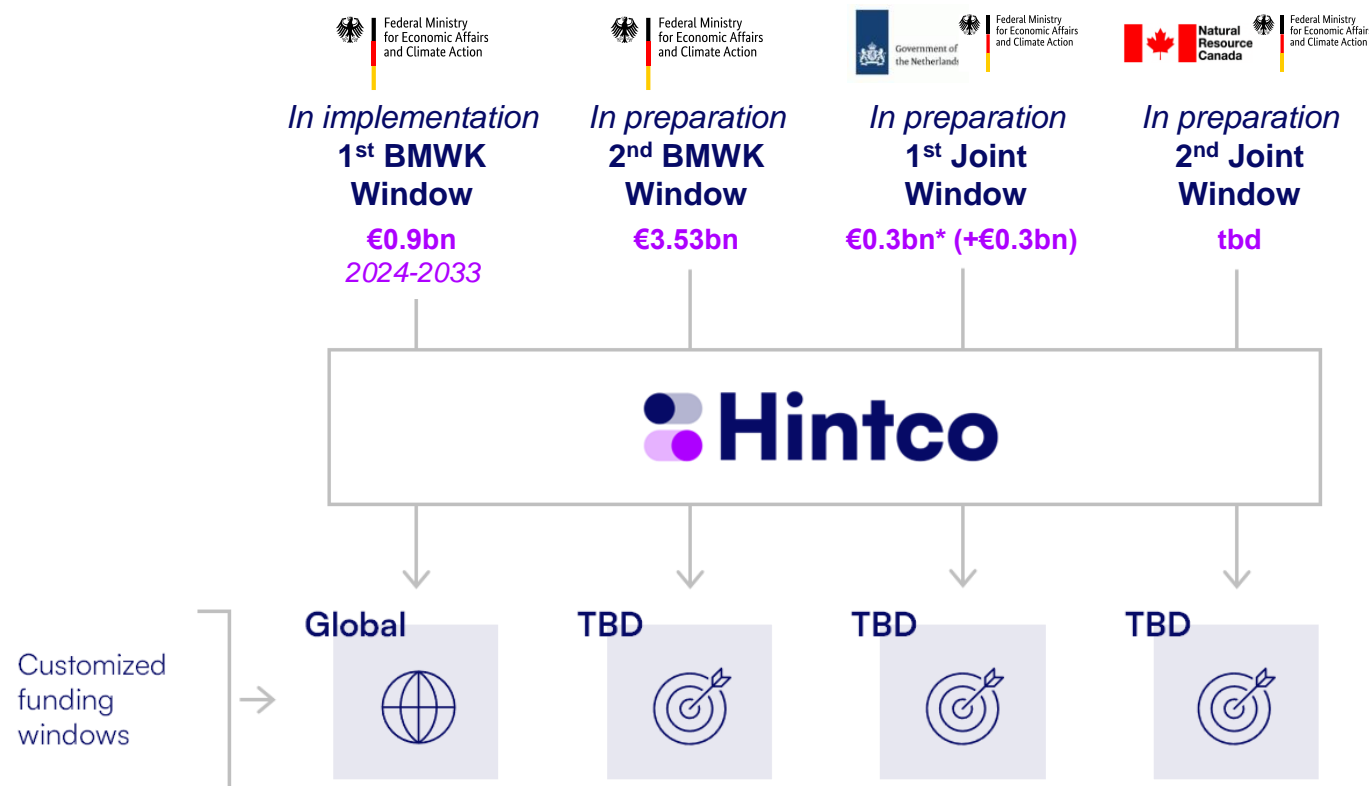
- Geography (global, regions, countries)
- H2 product selection
- Product and sustainability criteria

Adaptable to targets:

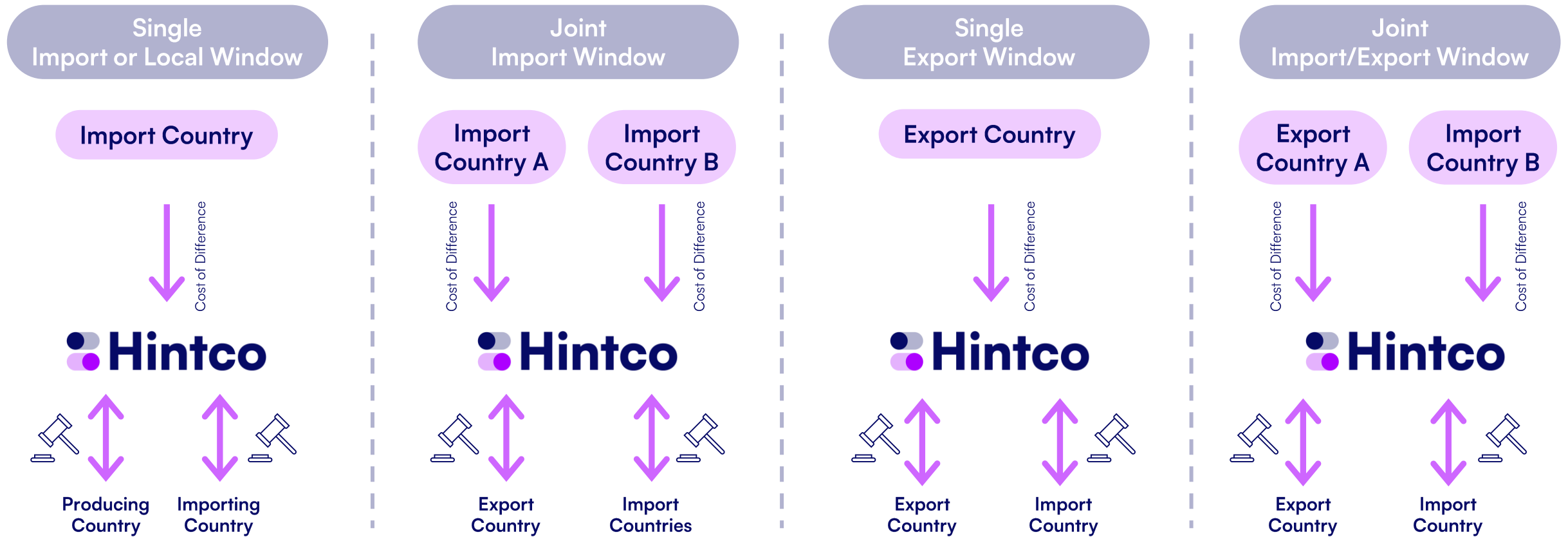
- Price optimization
- Promotion of green technologies
- Energy security
- Decarbonization of specific sectors
- Development policy

4 H2Global Funding Windows are currently in the works.

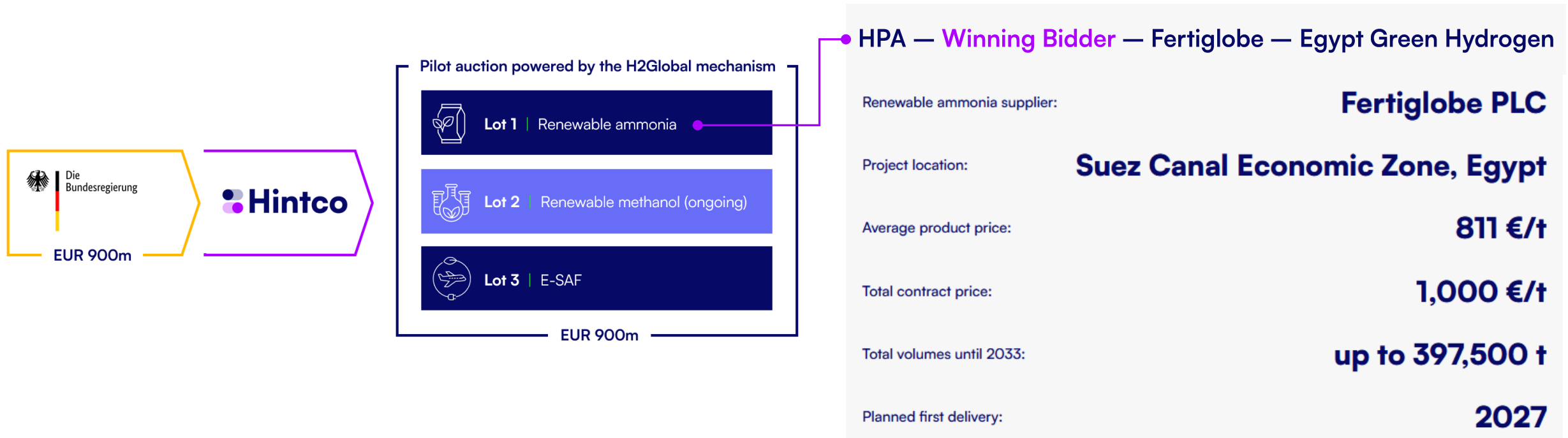
To date, **€4.73 billion** has been committed or earmarked* for the H2Global funding mechanism.



Exporters and importers of clean hydrogen can all make use of H2Global's funding windows



First results of H2Global pilot auction



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

H2Global's 2nd tender EUR 3.53bn + EUR 0.3bn in preparation: BMWK public consultation* ongoing

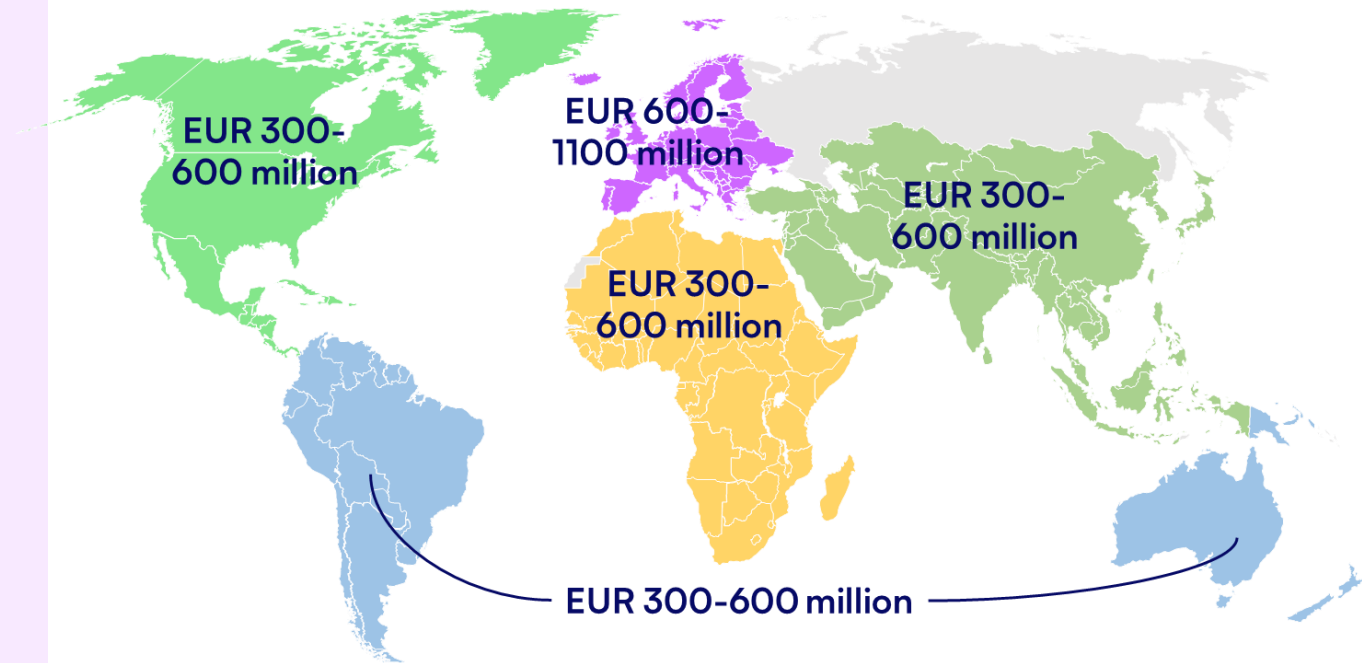
Objectives of funding window*

- Support market creation and FID
- Discover real market prices
- Diversify supply geographies and increase security of supply

Design*

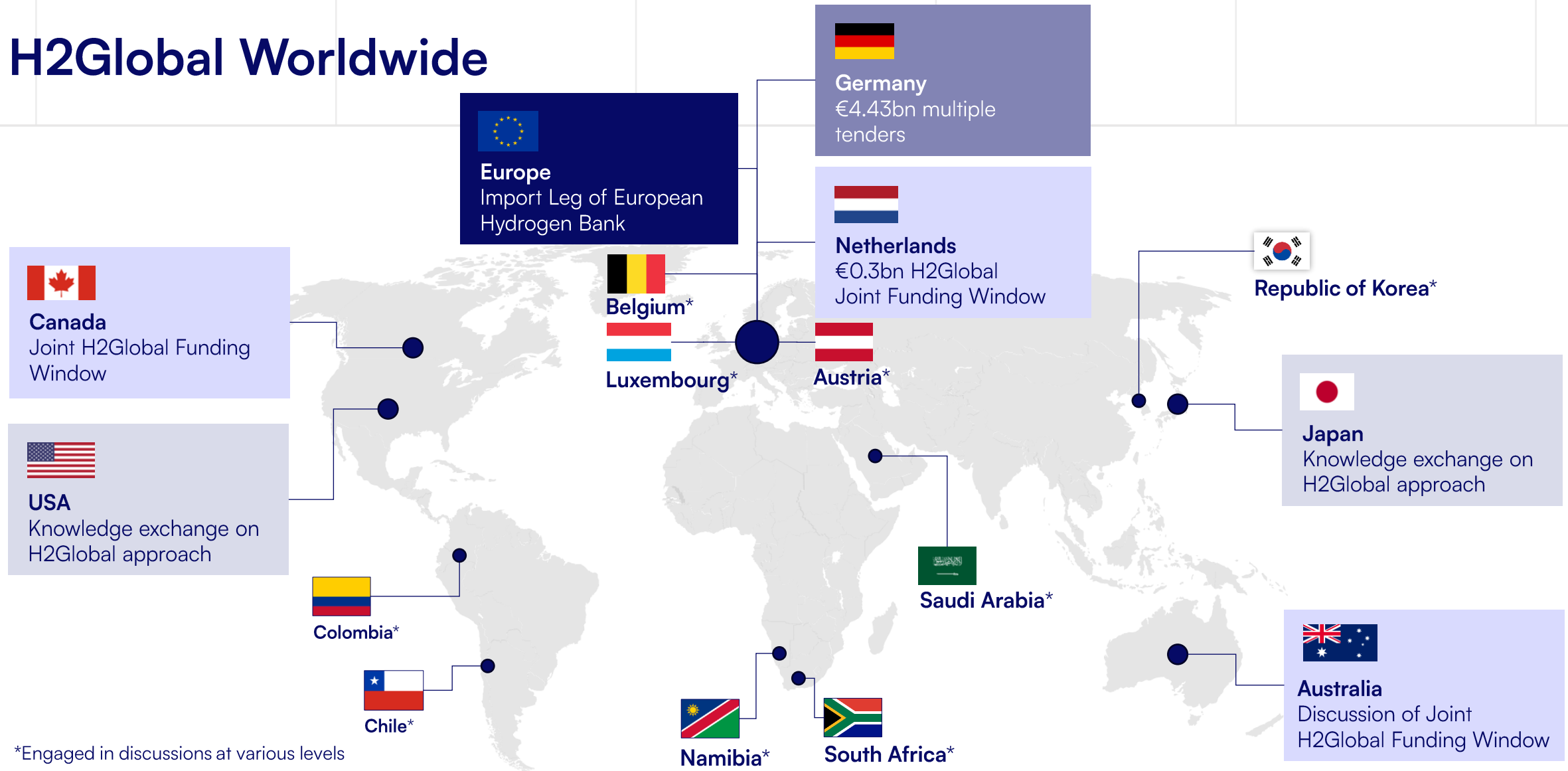
- Application of RFNBO criteria of RED II and Delegated Acts
- Product-specific, vector-open and product-open design
- Point of first delivery: GER or NL
- HPA:
 - 10y tenor (2026-2036)
 - fixed price
 - awarded by price and quantity criteria
- HSA: shorter-term contract tenor awarded by price

Global lot: EUR 600 million (EUR 300 million from the Dutch government)



*Information is based on the BMWK's public consultation publication (11 June to 22 July 2024). All information is subject to changes in the tender documents. Countries under sanctions are excluded from participating in the auctions.

H2Global Worldwide



*Engaged in discussions at various levels

The H2Global Set-Up

A non-profit foundation with a for-profit intermediary

H2Global Stiftung

Research, instrument development & outreach

“Firewall” between donors engaged in the foundation and Hintco prevents conflict of interest



71 Donors from the private sector across Europe and the world

Independent H2Global Stiftung holds 100% ownership of Hintco

Hintco

€€€

**Governments,
Climate/Dev. Finance**
Funding body, grant authorities

Auction preparation & implementation

Funds the price gap



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