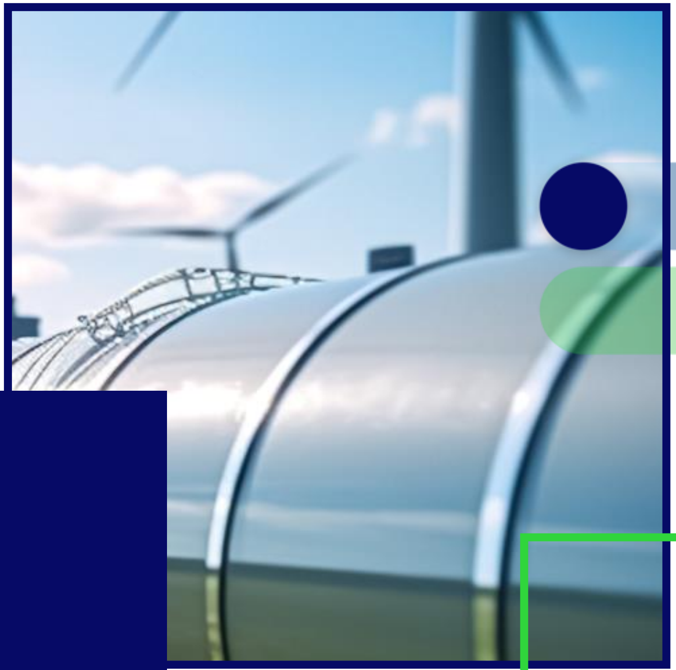
Shaping the global **energy transition.**

H2Global: creating clean shipping fuels markets

September 2024

H2Global

Clean fuels **market status**



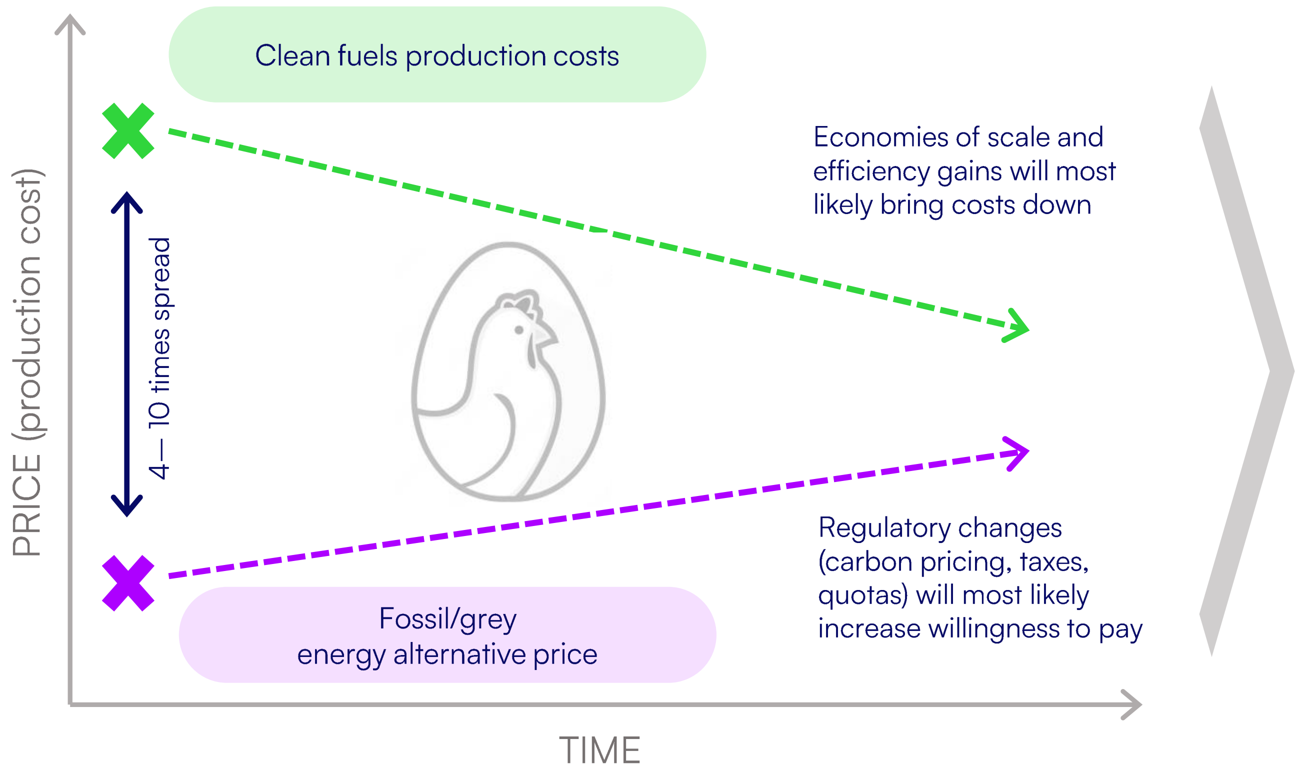
Market creation first, then market ramp up.

Functioning markets have:	Clean fuel markets currently have:
Price transparency	• No clear pricing signal on supply or demand side • Indexes based on assumptions
Liquidity	• Limited number of transactions, large volumes only • Over the Counter (OtC) and "point-to point" only
Legal security / rules based	• Lack standards and certification schemes • Insecurity in terms of recognition and methodologies
Low market barriers	• High entry barriers

KEY TAKEAWAY

Clean fuel markets are nascent, and to meet climate targets we need to accelerate their creation.

Clean fuels "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**

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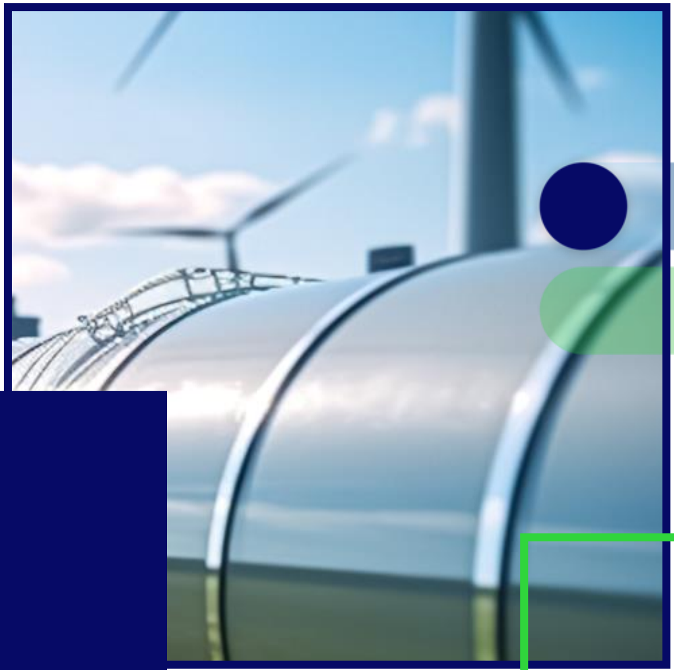
The H2Global **mechanism**



H2Global's mechanism promotes timely and effective market creation for clean fuels

Key elements

Investment Security

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 compensation

Financial compensation of Cost of Difference.

Set up of an intermediary — the **H**ydrogen **Int**ermediary **Co**mpany.

Hintco

Competition

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

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

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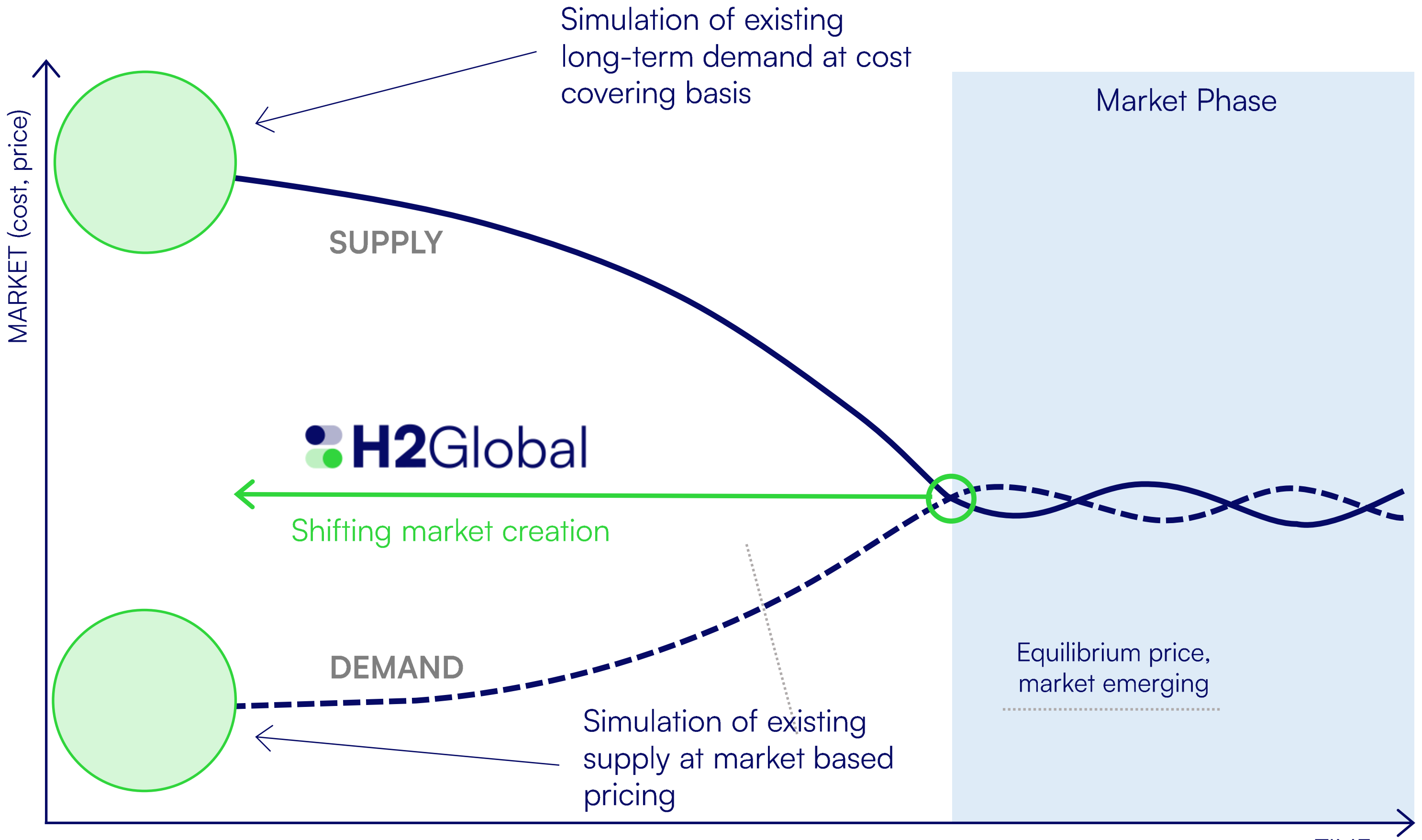
Market simulation has a catalytic effect and shifts market creation forward

Simulate to create

Immediate creation of **simulated market** on **supply** and **demand side.**



Exemplary illustration of the market development

KEY INSIGHT

H2Global stands as the sole active global green market maker.

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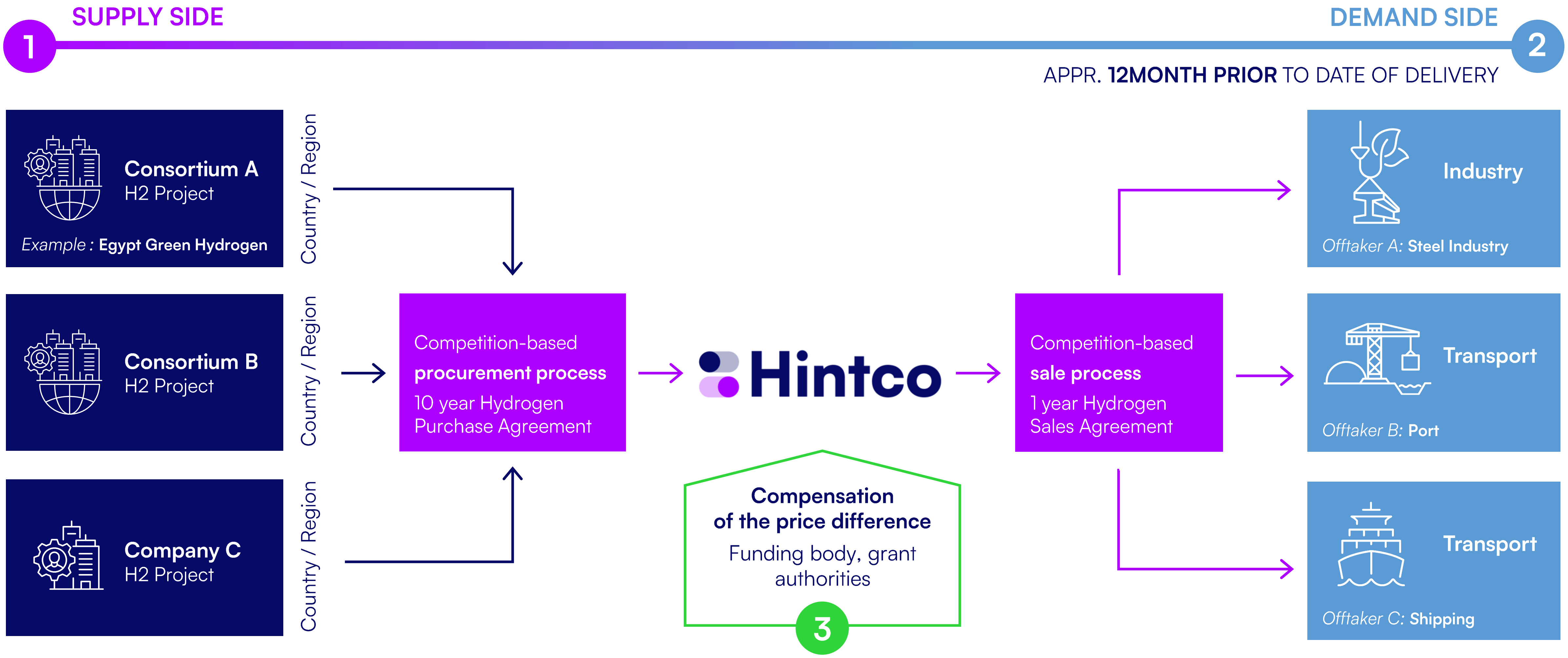
The double-auction sequence



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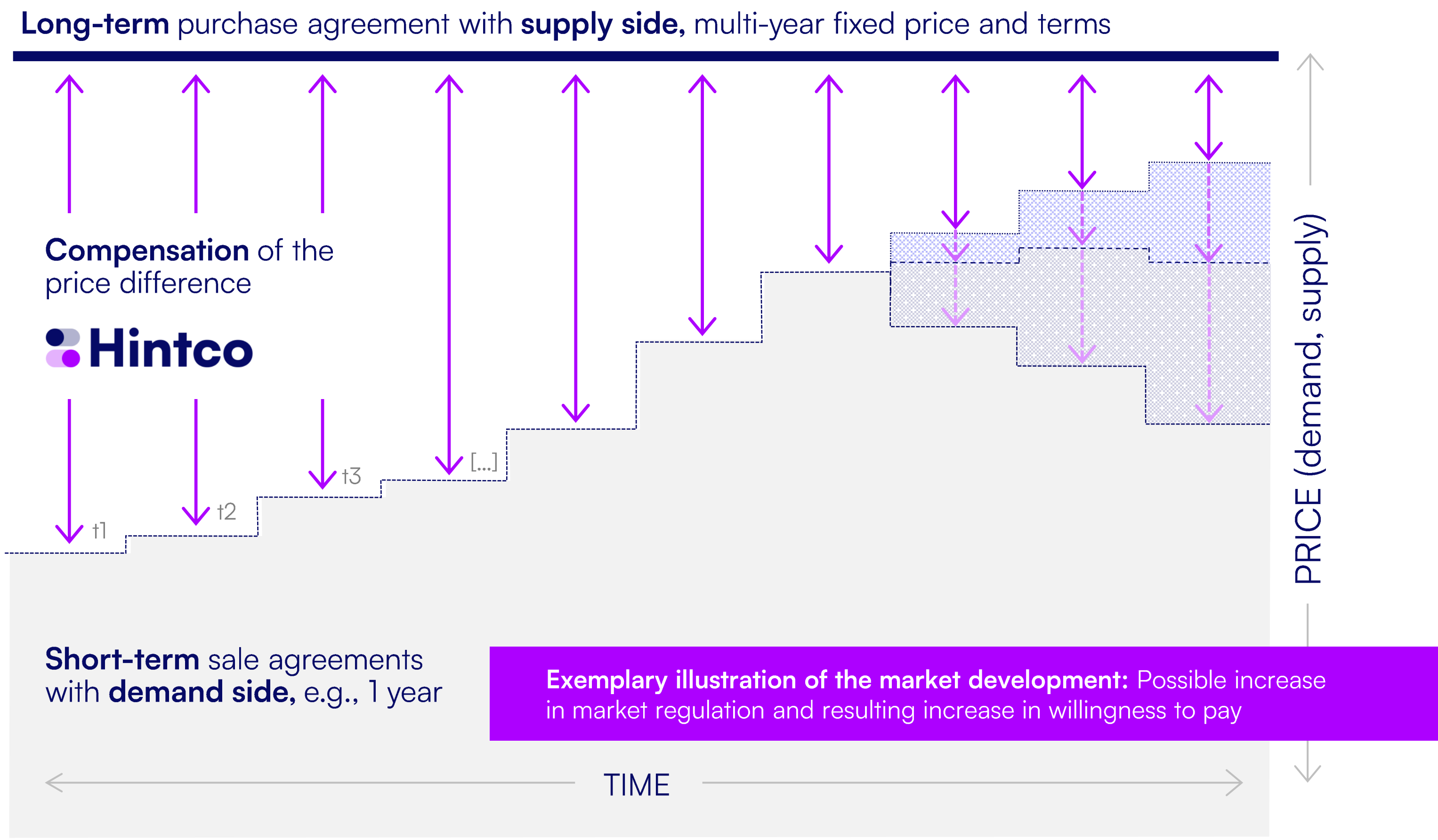
The H2Global market-driven compensation mechanism ensures the most efficient use of funds for maximum impact

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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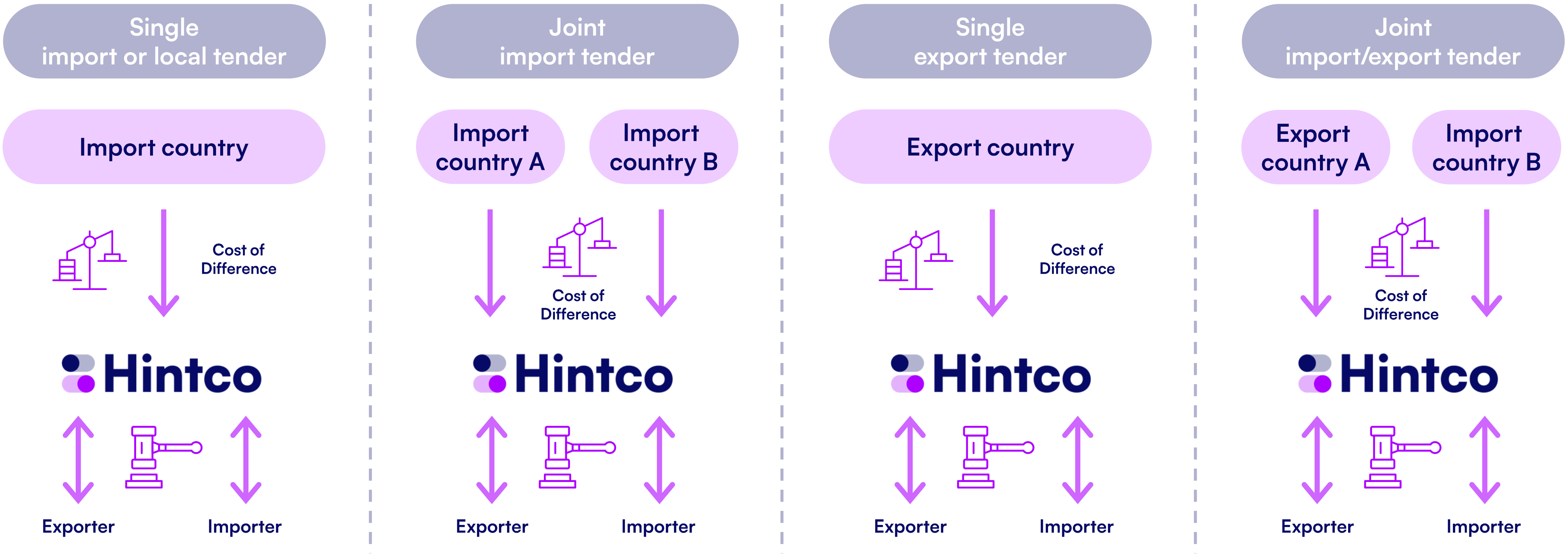
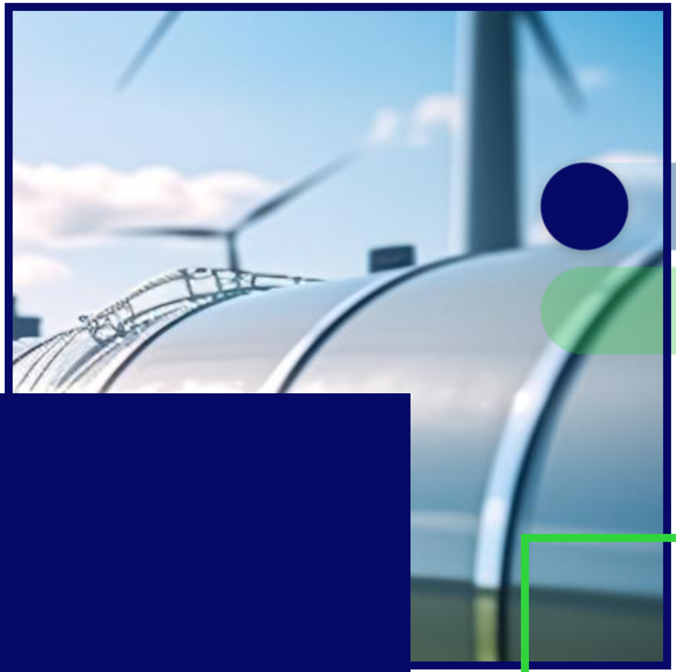
Exporters and importers of clean fuels can all make use of H2Global tenders





H2Global: Tenders and international cooperation

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

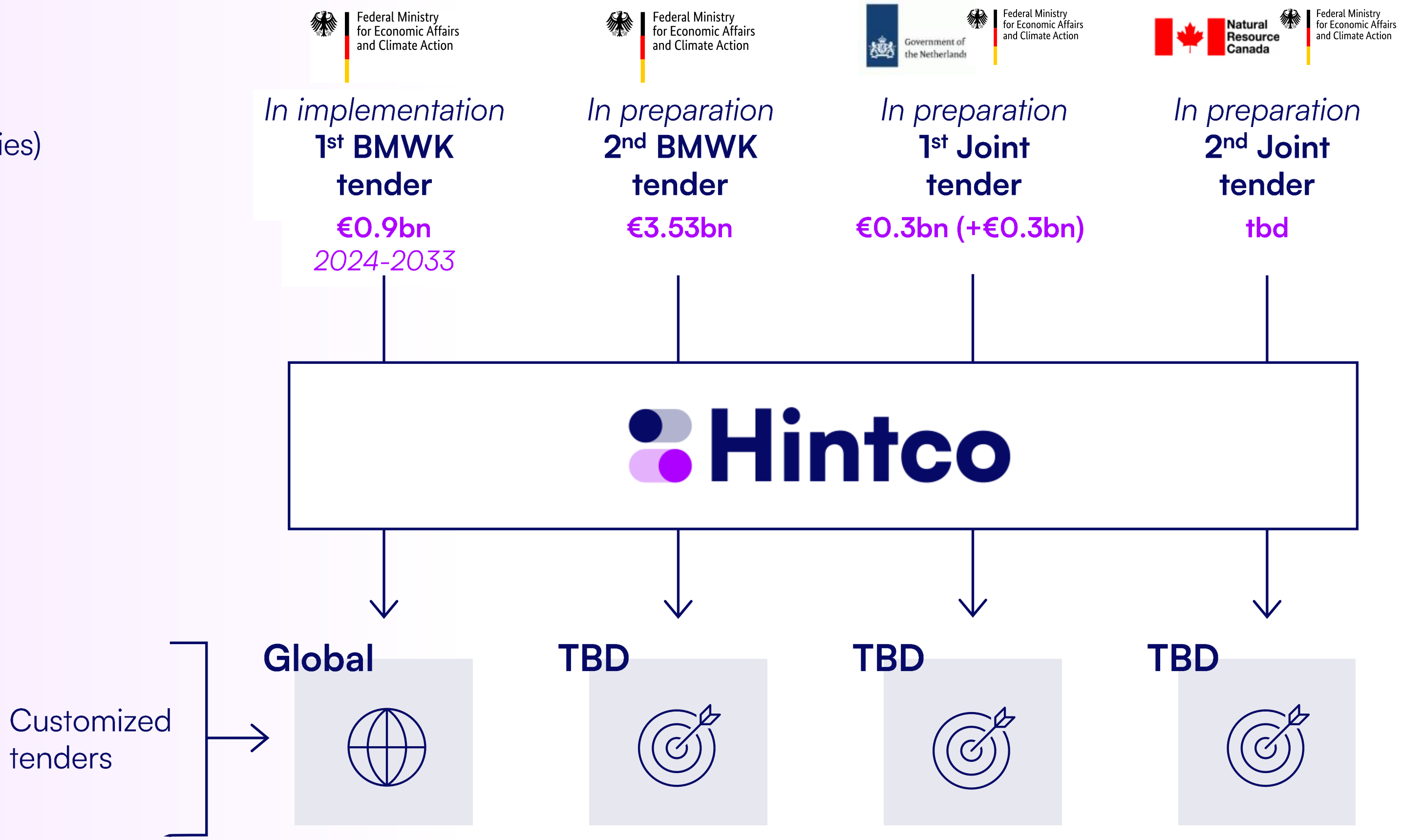
To date, ***€4.73 billion*** *has been committed and* ***€0.9 billion*** *earmarked for the H2Global tenders*

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



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

H2Global's 2nd tender EUR 3.53bn + EUR 0.3bn in preparation

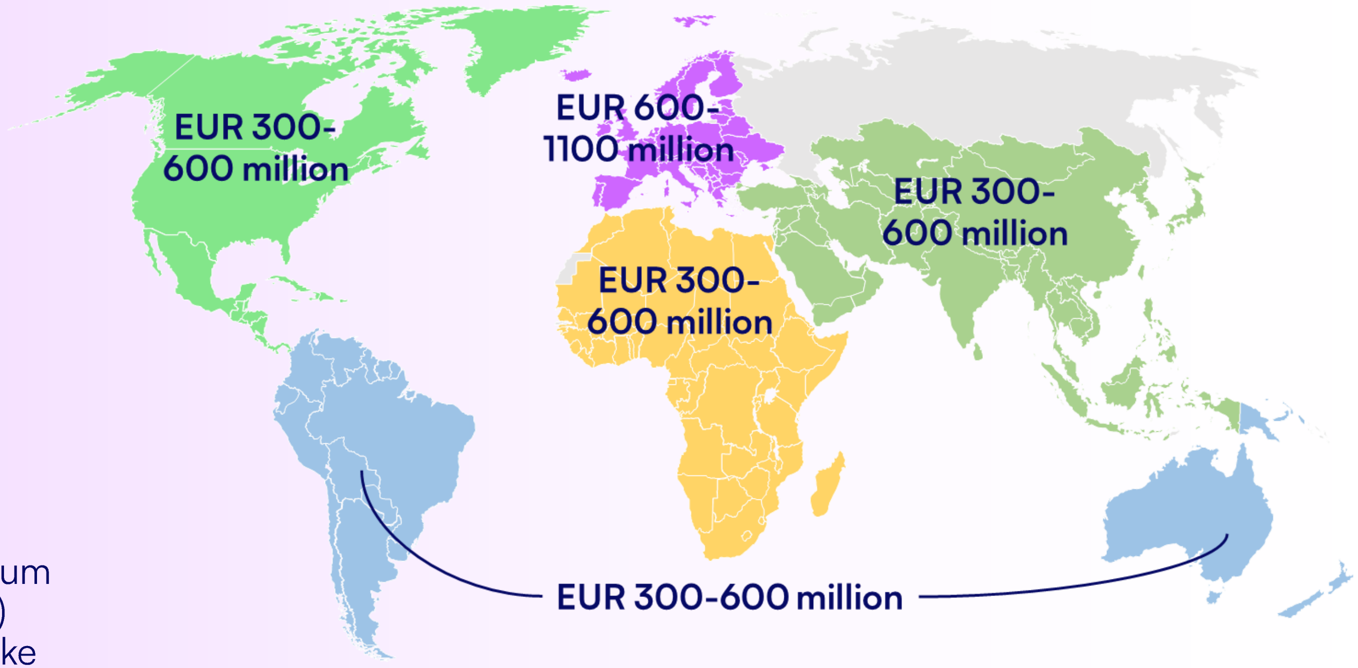
Objectives of tender*

- 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
- Vector-open or product-open design
- Point of first delivery: GER or NL
- HPA:
    - 10 years (2026-2036)
    - fixed price
    - awarded by price per ton or energy (70%) and maximum volume or basic volume plus optional quantities (30%)
    - Marginal bidder will be offered reduced volume to make maximum use of the budget
- HSA: "significantly shorter" contract duration awarded by price

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



*Information is based on the BMWK's market 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.

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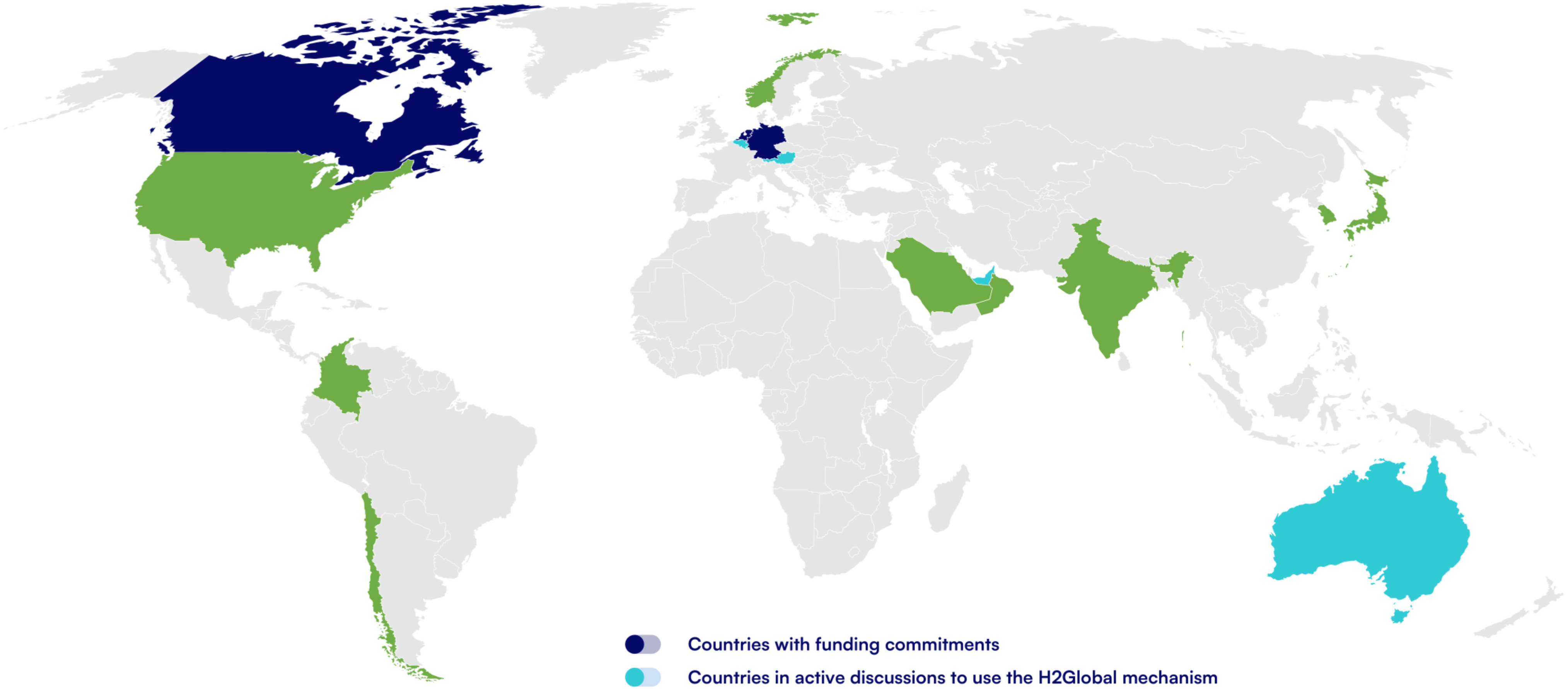
H2Global worldwide



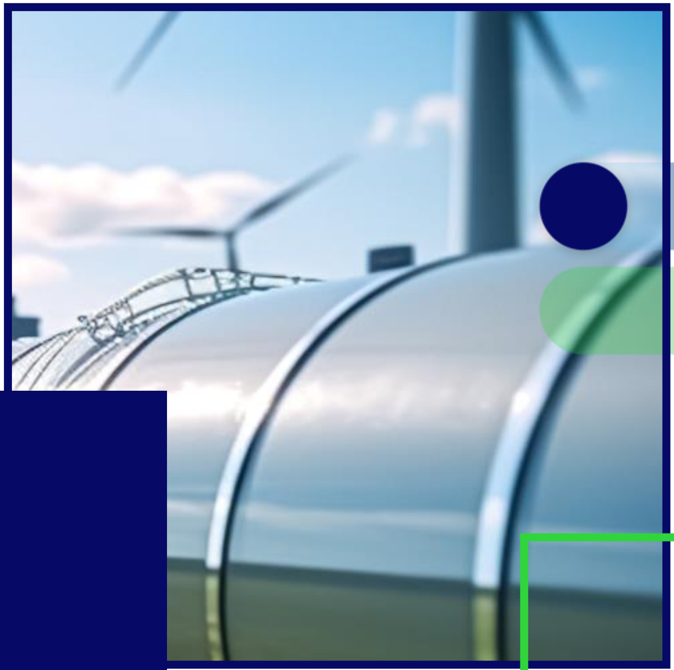
Countries with funding commitments

Countries in active discussions to use the H2Global mechanism

Outreach countries

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

The H2Global **set-up**



A non-profit foundation with a for-profit intermediary

Research, instrument development & outreach

Corporates

H2Global Stiftung

Government

Die Bundesregierung

Philanthropy

BEZOS EARTH FUND

Auction preparation & implementation

Hintco

Funds the price gap

€€€

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

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