BioBased Circular

Market creation

EU Strategy/Acts/Regulations

- Industrial Accelerator Act
  - Chemical Industry Action Plan
- BioTech Act II
- Circular Economy Act
- Ecodesign & Sustainable Product Regulation
- Packaging & Packaging Waste Regulation
- Construction Products Regulation
- End-of-life Vehicles Regulation

Critical Chemical Alliance

300+ Organizations involved

- Chemical companies, associations, national/regional governmental, NGO's, etc

The Alliance's mandate

- is to preserve and modernise strategic production capacities and value chains, decarbonise the sector, reduce dependencies and attract the right skills.
- It will place a particular emphasis on the needs and challenges of SMEs through dedicated guidance tools, fostering cooperation.
- The Alliance will also facilitate discussions on key trade challenges, such as global level playing distortions, supply chain dependencies, and intellectual property rights issues, by helping the industry and the Commission to detect potentially harmful import surges at an early stage.

Critical Chemicals Alliance

Strategic Molecules & Sites

- Methodology for assessing criticality for molecules and sites
- Recommendation for matrix of critical and strategic molecules and sites across EU

Trade

- Trade monitoring and import surges reports
- Trade defence measures
- Cooperation agreeents on partnerships that provide feedstock access or market opportunities

Modernisation & Investment

- Reforms and funding mechanisms to support modernisation of critical production
- Early-warning reports, identifying risks of plant closures

Lead Markets

- Priority end-markets for market-pull measures, including socio-economic assessment
- Package of proposed solutions

WG4: Lead markets

Presented by:

Janine van KAMPEN

Policy Officer on Sustainable Chemistry
Ministry of Economic Affairs and Climate Policy
The Netherlands

WG4: Lead markets

Mandate to elaborate and assess the impacts of market-pull measures for:

a) **low-carbon products**, defined based on their product carbon footprint;
b) **sustainable carbon products**, from non-virgin fossil sources, including biomass, recycled waste, and captured CO_2 or CO.

Conclusions:

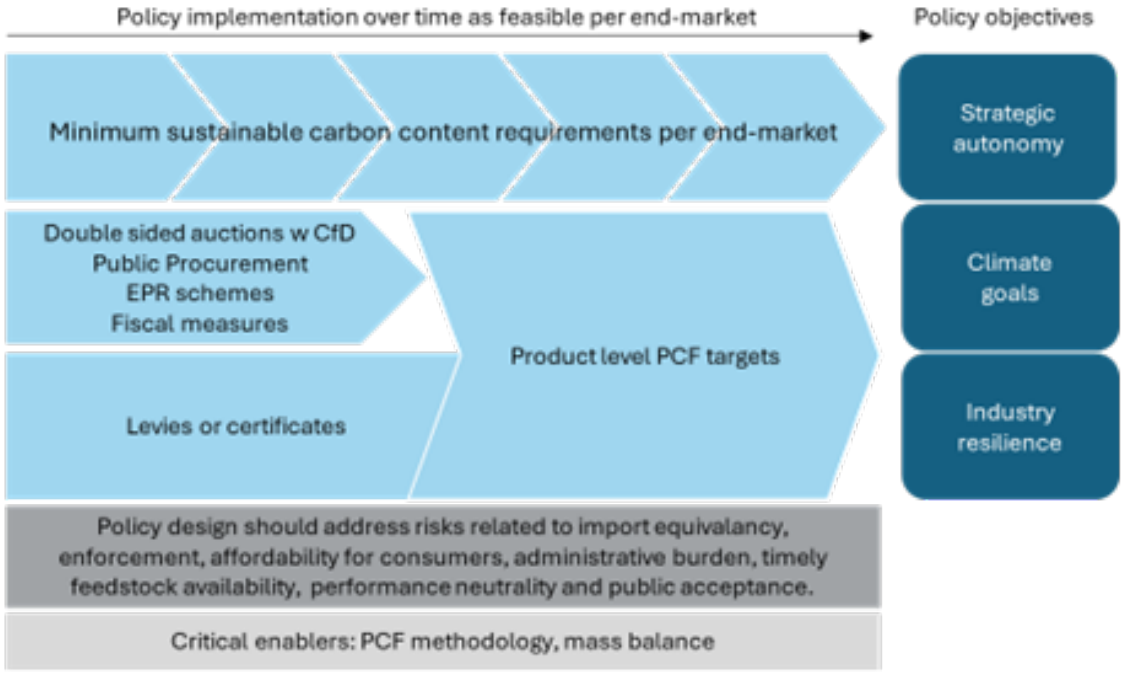
- No single policy will be sufficient
- Phased approach is needed with measures for short, medium and long term
- Combination of end-market specific and horizontal measures, for low-carbon and sustainable carbon products
- No consensus within the Working Group on individual policy options.

Intern gebruik

WG4: Policy options

Policy options reviewed:

- Product level product carbon footprint targets
- Minimum sustainable carbon content requirements per end-market
- Levies or certificates
- Temporary supporting policies:
  - Double sided auctions with contracts for difference
  - Public procurement
  - ERP schemes
  - Fiscal measures



Simplified illustration of the potential staged implementation of discussed policy options over time.

Intern gebruik



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The Critical Chemicals Alliance

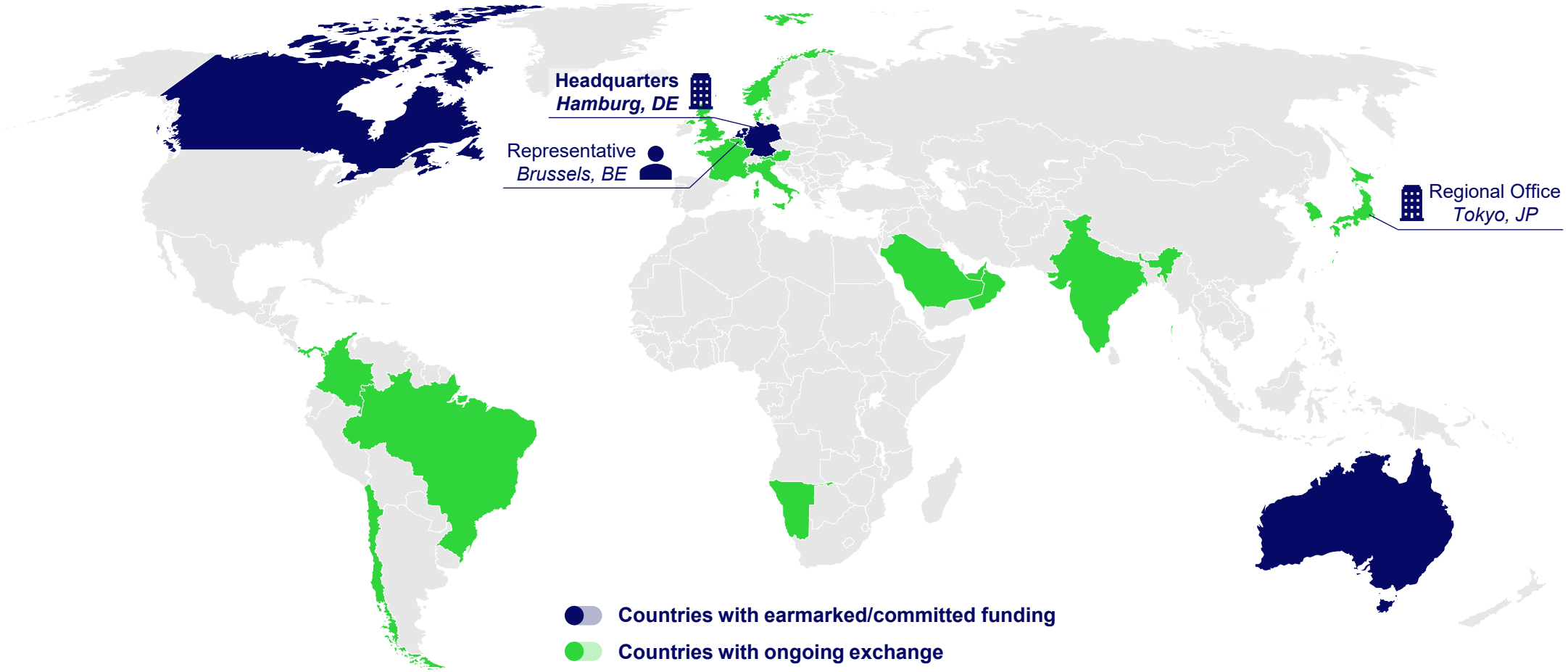


Decarbonizing hard-to-abate sectors through H2Global double-sided auctions

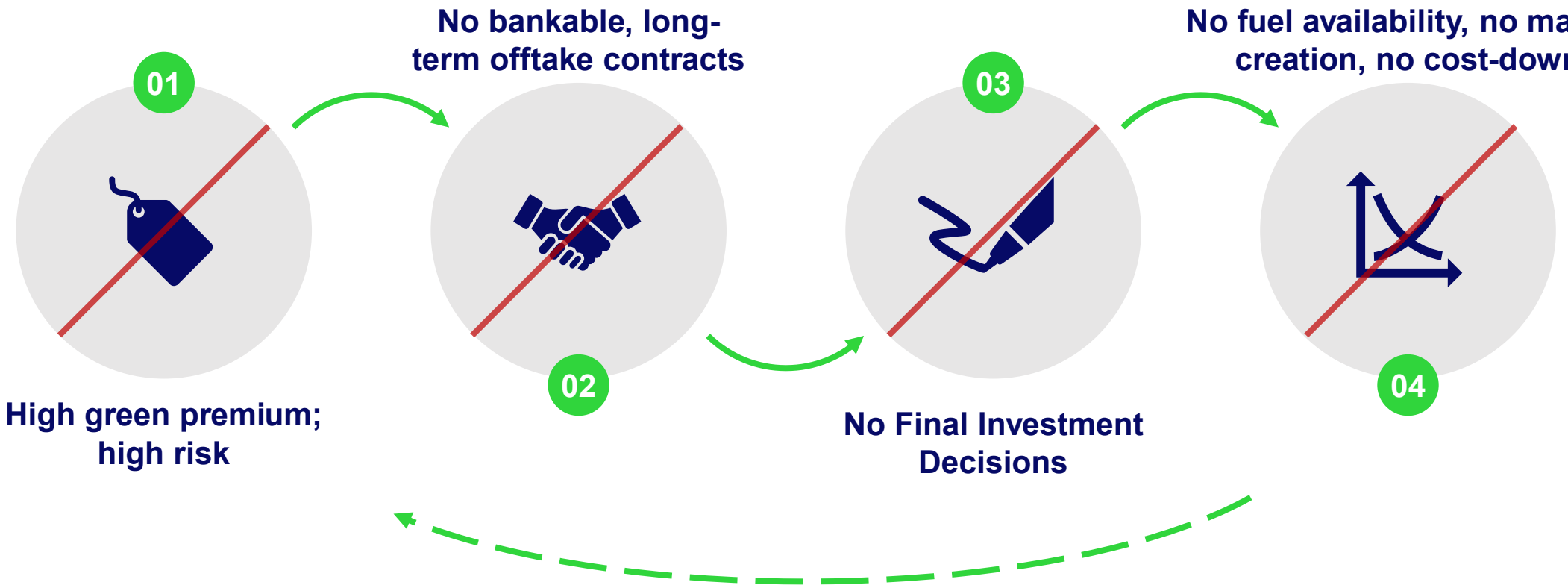
Olivia Staudenmayer
Project Manager, EU-Engagement

H2Global

About us – The H2Global Foundation: not-for-profit, with a global footprint

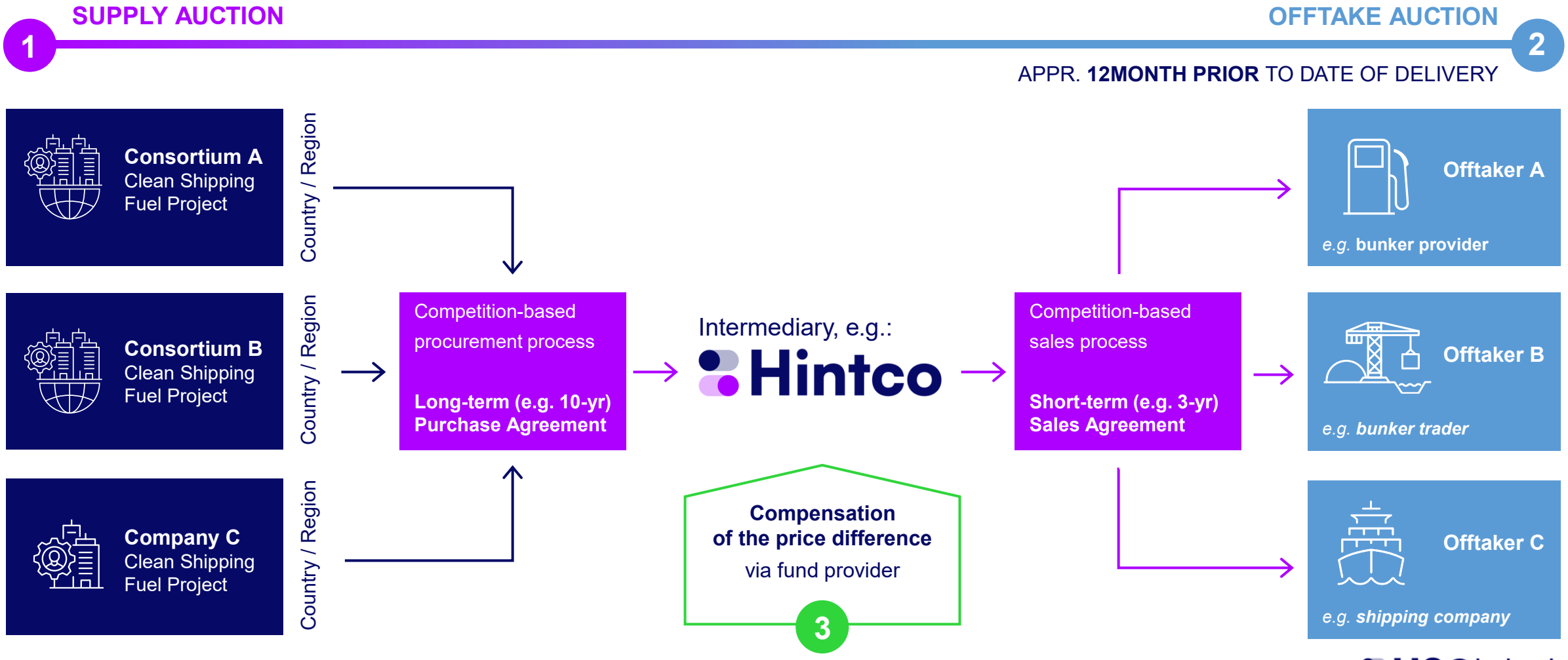


For clean fuels to become a viable business, a smart and efficient instrument is needed to bridge the market failure



H2Global

The H2Global's double auction mechanism supports the kickoff of the sector through a government-backed market intermediary



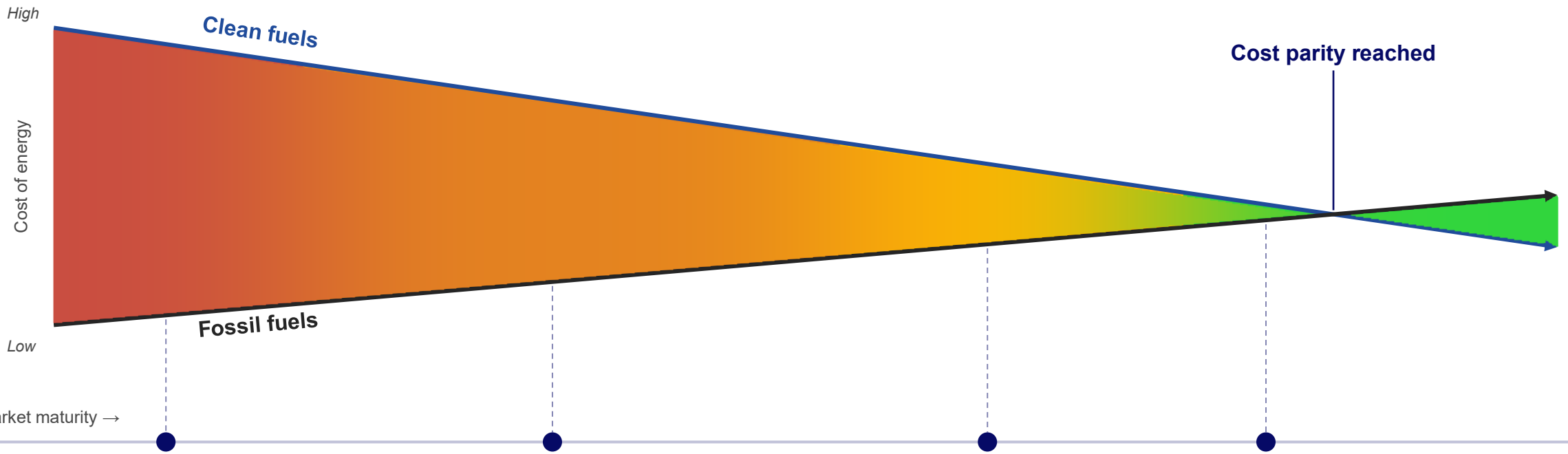
H2Global

H2Global's mechanism resolves fundamental market failures, accelerating the emergence of liquid markets



H2Global

The instrument should be used to form the clean market and to start the scale-up



Stage 1 **Inception**

No market yet

- **Grants and pilots**
- **Venture capital**

Stage 2 **Formation**

Large cost gap, no reference price

Double-sided auctions

Complementary/alternative mechanisms

- **Capex support**
- **Concessional debt**
- **Infrastructure funds**

Stage 3 **Scaling**

Self-sustaining growth

Complementary/alternative mechanisms

- **CfDs**
- **Loan guarantees**
- **Book-and-claim EAC markets**

Stage 4 **Maturity**

Liquid market, no public support

- **Hedging instruments**
- **Exchanges and price indices**
- **Private capital**

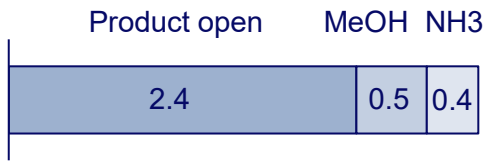
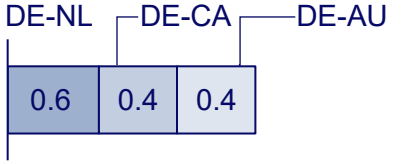
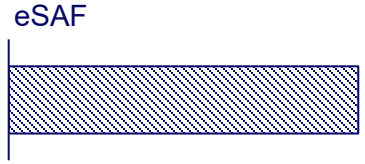
H2Global



The H2Global Double-Sided Auction in practice

H2Global

USD ~9 bn for H2Global tenders have been earmarked, committed or are considered by a range of governments around the world

	UNILATERAL TENDERS FOR GERMANY	BILATERAL TENDERS W. OTHER COUNTRIES	MULTI-LATERAL INTERNATIONAL TENDERS
Earmarked / committed funding in bn EUR			
Status	EUR 2.4bn — **Product open:** Evaluation of bids[1] EUR 0.4bn — **Ammonia:** First HPA signed EUR 0.5bn — **Methanol:** Tender process underway	EUR 0.6bn — **H2 (vector open):** Tender process underway EUR 0.4bn — **Product TBD** Preparation ongoing[2] EUR 0.4bn — **Product TBD** Preparation ongoing[2]	EUR <2.2 bn — **eSAF:** Political negotiations ongoing[3]

The specified **funds are available to bridge the gap between the purchase and sale price**.

Learn more at: https://hintco.eu/

[1] HPA winner Asian lot identified [2] Earmarked but not yet committed. [3] At this point in time, H2Global eSAF GmbH (a subsidiary of H2Global Holding) is mandated to support Germany's state aid notification process with the European Commission.

H2Global

Two auctions awarded for long-term offtake of an ammonia project in Egypt and India



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**
Ramp-up phase starting in:	**2027**
Binding deliveries from:	**2028**



Renewable ammonia supplier:	**AM Green**
Project location:	**Kakinada, India**
Average product price:	**tba €/t**
Total contract price:	**tba €/t**
Total volumes:	**tba t**
Ramp-up phase starting in:	**2027**
Binding deliveries from:	**2029**

For detailed information on auction results, please visit: HPA Auctions - Hintco

H2Global

An eSAF Early Mover Coalition has been set up in 2025 to implement the mechanism on the eSAF sector

Context: Launch of e-SAF EMC



Status: 8 + 1 EU member states joined



since 2026

- **GER, LUX & AUS have committed up to 2.1bn EUR to an eSAF double-sided auction for European production.**
- **France has proposed an eSAF DSA in its draft budget for 2027.**

H2Global

In 2026, H2Global and partners have set up of the eSMF Early Mover Initiative, focusing on clean shipping fuels

Objective

- Addressing the urgency for action **and providing efficient, tested solutions** to support early movers in shipping

Next Steps

- Engaging with member states to **set up a coalition** of early movers
- Working with the European Commission to **assess implementation pathways**

The European Commission and national governments can replicate the best practice of pooled funding to accelerate the market scale-up of clean shipping fuels and infrastructure.

Elyse
Hy five
moeve
Ammonia Europe
France Hydrogène
HPA Hamburg Port Authority
samskip
Yara Clean Ammonia
HAVILA VOYAGES
SASHA Coalition
BERGEBULK moving mountains
H2V
H24
T&E
CMB.TECH
HÖEGH AUTOLINERS
MPC CONTAINER SHIPS
The Decarb Hub
DFDS
Hydrogen Europe
MGH energy
EUROPEAN ENERGY
H2Global

How would you set up a H2Global double-sided auction for the chemical sector?

- Most straightforward: E-methanol tender…
- Other ideas?



H2Global

Creating value by Verpact

29 oktober 2026

How to create demand, using EU-legislation



www.verpact.nl

verpact

This is how we close the value chain

Producers who use recyclates get a discounted fee

Stimulating **design for recycling**

Motivating consumers to seperate their waste better

Making agreements with local authorities on good and clean collection

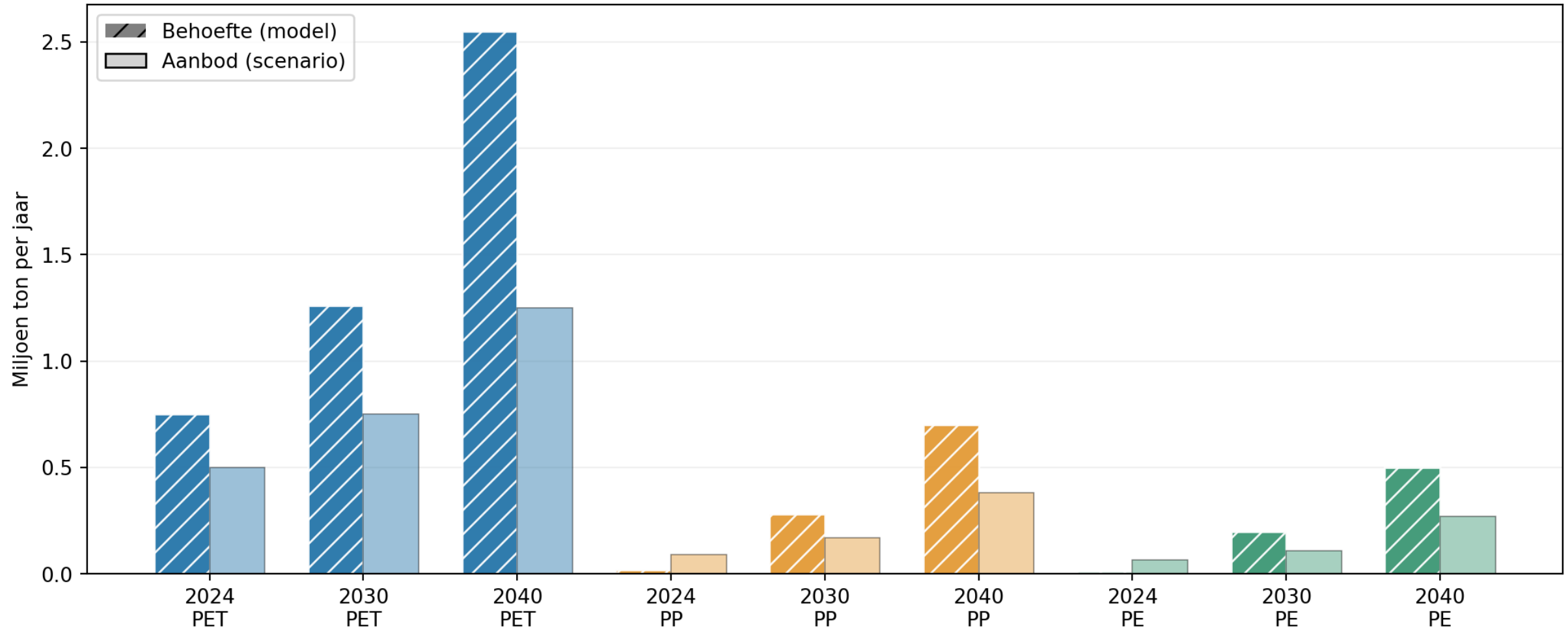
Collaboration with sorters and recyclers for innovation

verpact

PPWR targets for plastic packaging | Plastic

		2025	2030	2040
CRITICAL TARGETS				
Recycling plastic	(EU, PPWR)	50%	55%	
Application of post-consumer recycled content- Contact Sensitive				
Plastic beverage bottles – all plastics	(PPWR)		30%	65%
Other packaging – PET	(PPWR)		30%	50%
Other packaging – other plastics	(PPWR)		10%	25%
Application of post-consumer recycled content- Non- Contact Sensitive				
Other packaging *(not mentioned above)*	(PPWR)		35%	65%

Foodgrade / Contact sensitive plastics, Europe, demand & supply

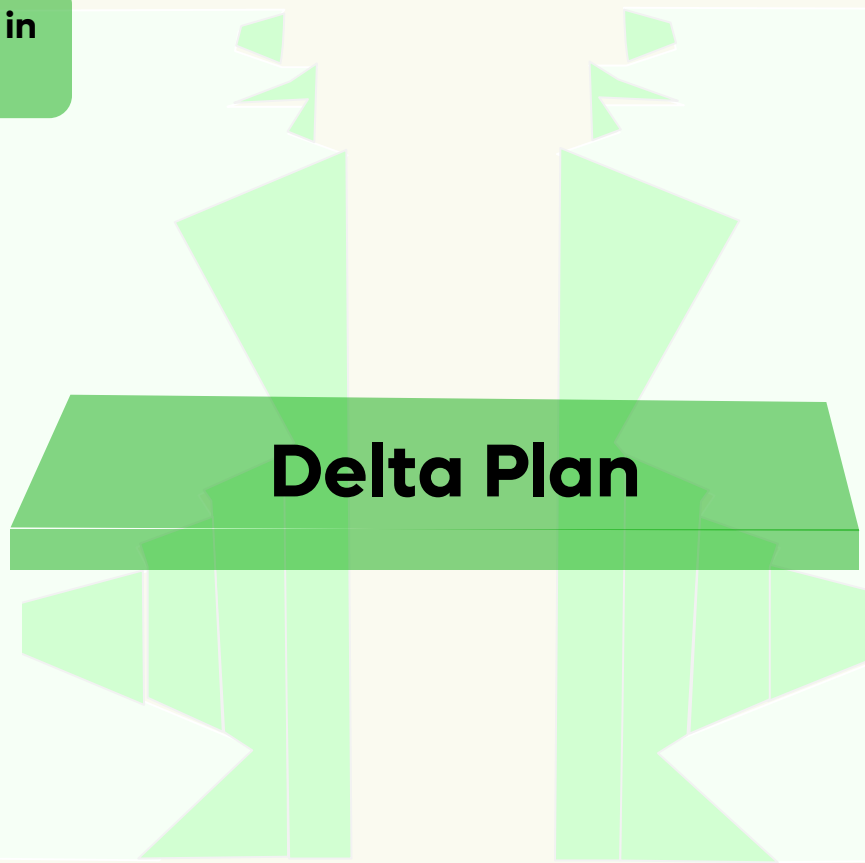


Source: Plastics Recyclers Europe (2025), Plastics Recycling Industry Figures 2024; Smithers (2025), The Future of PCR for Food-grade Applications to 2029; Verordening (EU) 2025/40, artikel 7.

Deltaplan is to bridge the gap between supply and demand

Supply: the production of plastics in NL has decreased sharply

- Several plastic recyclers went bankrupt: **loss of 3 million tonnes of production capacity**
- **Intended investments** in biobased plastics and novel recycling technologies are **paused or cancelled**
- **Gap** between the **prices** of recycled plastic versus virgin plastics



Demand: is expected to double from 2022 to 2030

- PPWR set **targets for the use of PCR in plastic packaging** from ca. **10% in 2022** in NL (actual realisation) to circa **20-25% in 2030** (weighted average)
- The SUP / PPWR / Food Contact Regulation **set specific quality criteria** for the PCR and packaging
- **Increase of the recycling target** from 50% in 2025 to 55% in 2030
- Snowball effect: possible demand for circular plastics possible from other industries
- **Availability** of recycled plastics

Deltaplan Circulair Plastic Packagings

Commitment Producers (brand-owners)

- Commitment from brand-owners for recycled content, bio based and chemical recycling
- Start of Circular Plastics Bank
- Growthpath towards 2030

Supported by Verpact by:

EPR fee modulation

- Extra impuls for recyclable packagings
- Increase of discount for higher recycled content (PCR)

Innovation

- Innovation program for mismatch supply and demand
- Connecting external financing (such as CPNL program)
- Support scaling promising technologies

Circular Plastics Bank

Matchmaking

- Transparancy in the whole supply chain
- Actively connect demand and supply
- Connecting industries

Certifying

- Origin
- Full traceability in the supply chain
- Connecting to Fee Differentiation





verpact

Model for Fee Modulation Plastic 2027

verpact

Starting rates 2027

Rigid plastic	€ 1,22
Flexible plastic	€ 1,32



Per kg plastic

Preconditions | Applicable conditions

Circular plastics
Deployment of recyclate & biobased drop-ins

All plastics >

Recyclate: PCR
Biobased: drop-ins >

Deployment of recyclate & biobased drop-ins — Can amount to € 0,78

Per disposable unit

Design for recycling

≥70% **Rigid**
PET, PE, PP & PE/PP

≥70% **Flexible**
PE, PP & PE/PP >

Preconditions
- ☐ Correct dimensions
- ☐ No interferants
- ☐ No cement or silicons >

Mono	€ 0,10
Colour	€ 0,10
Labels	€ 0,10
Recyclecheck	€ 0,10

If the disposable unit or material is not eligible for a discount but does contribute to the objectives of the Plastic Guide, then check out the **innovation traject**!

Total discount per kilo of plastic Can amount to **€ 1,18**.


Matchmaking
Different parties.
Same goal.
A circular future.
> 16.000 tons
this year
Producers
Converters
Recyclers
Logistics
Retailers
Governments
Innovation
Collaboration
Sustainability
Impact
New business
Circular economy

Thank you



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Verpact

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