Argus sample report

Argus Hydrogen Analytics

Q1 2026

About this report

Argus Hydrogen Analytics provides a medium to long-term analysis for clean hydrogen, covering demand, supply and costs.

The Argus Hydrogen Analytics service includes a quarterly PowerPoint PDF report and Excel dataset with annual forecasts for demand, supply and production costs to 2040.

Subscribers receive a PowerPoint PDF written by our experts plus the accompanying Excel data files.

This is a sample of the full report only.

To find out more about the full Argus Hydrogen Analytics service, click here to get in touch.

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Key features

Policy and regulation updates
Understand how evolving policy impacts hydrogen market development

Demand forecast
Global demand forecasts to 2040 covering established sectors (refining, ammonia/fertilisers) and emerging markets (maritime, aviation, power generation, steel, road transport)

Supply forecast and project review
Forecasts of global supply and analysis of upcoming blue and green hydrogen capacity

Production and fuel-switching costs
Forecasts for blue and green hydrogen across 30+ global locations, including fuel-switching cost comparisons

Downloadable datasets
Quick access to our extensive datasets via the client portal, including the latest data, all downloadable in Excel format

Access to analysts
Speak to the experts behind Argus' long-term market analysis

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Demand

Supply

Trade (carrier demand)

Production costs

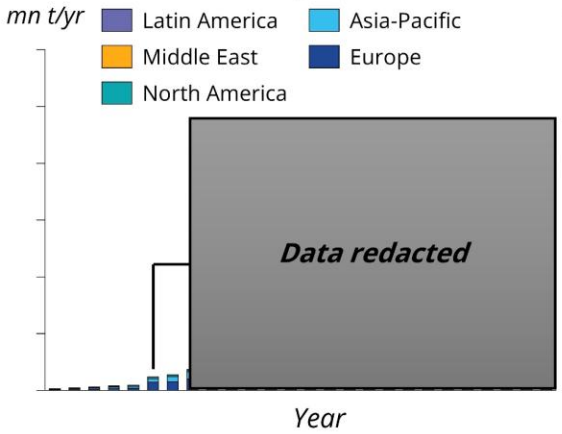
Spotlight

Executive summary: Demand

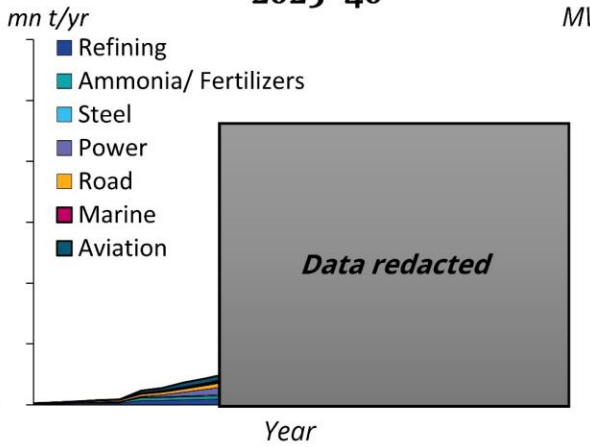
Argus expects demand for hydrogen will be dominated by the EU's refinery sector in the short-to-medium term, but demand in the aviation and marine sectors accounts for [redacted] pc of demand in the long-term

1. [redacted]
2. [redacted]
3. [redacted]
4. [redacted]
5. [redacted]

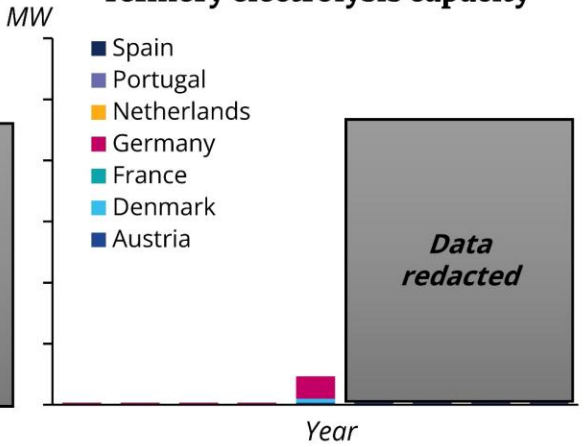
1. Hydrogen demand by region, 2025-40



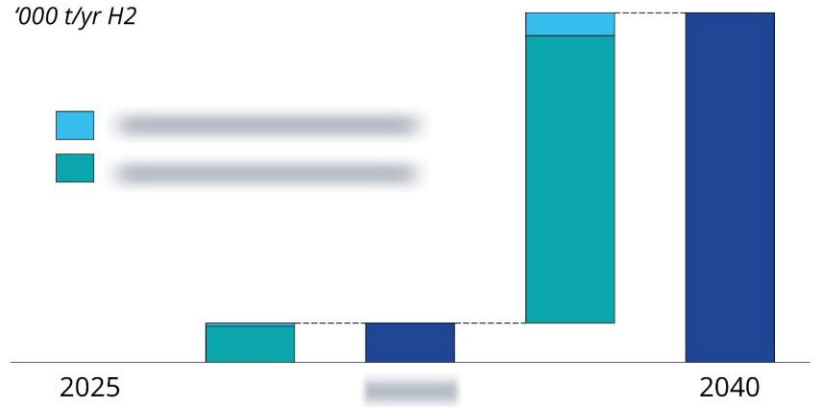
2. Hydrogen demand by sector, 2025-40



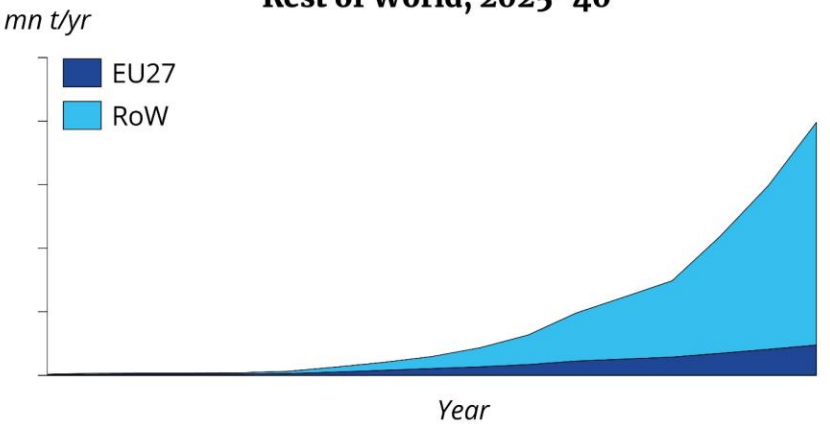
3. EU's firm/operational refinery electrolysis capacity



4. Hydrogen demand in aviation growth in Europe, 2025-40



5. Hydrogen demand in marine fuels in EU vs Rest of World, 2025-40



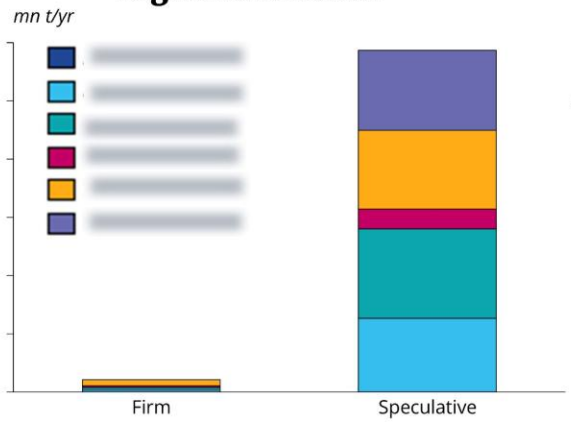
Source: Argus Media – Consulting Services

Executive summary: Supply

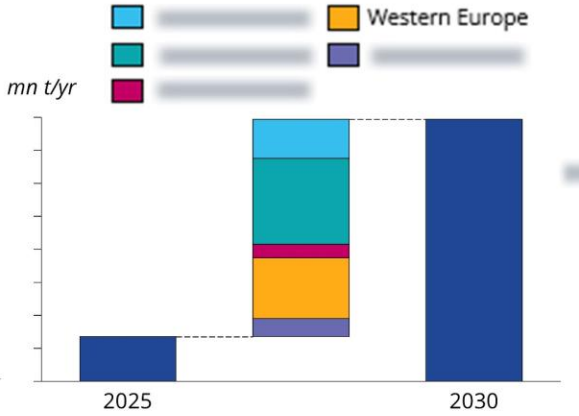
Argus forecasts hydrogen capacity to reach [redacted] mn t/yr by 2030, of which [redacted] pc is expected to be green

1. [redacted]
2. [redacted]
3. [redacted]
4. [redacted]
5. [redacted]

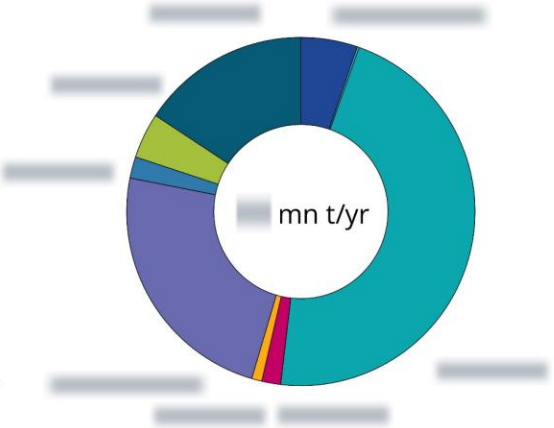
1. Hydrogen capacity by region and status



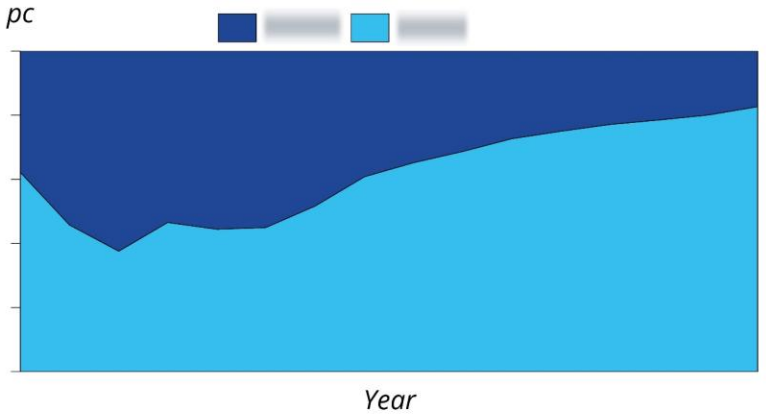
2. Hydrogen capacity growth, 2025-30



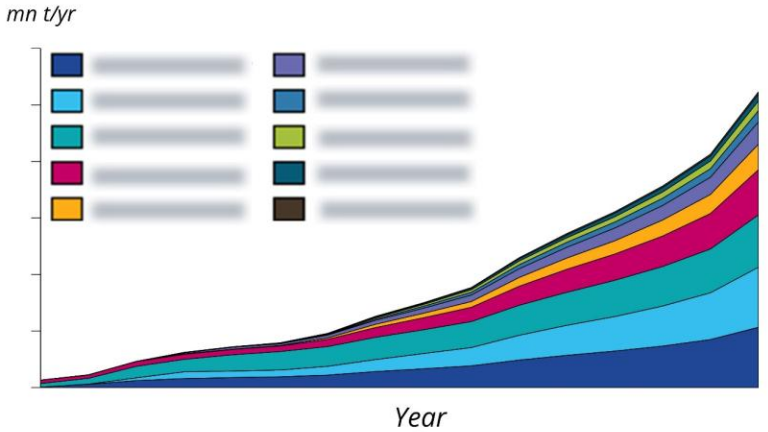
3. Firm hydrogen capacity by end-use, 2030



4. Share of global capacity by hydrogen type, 20[redacted]



5. Global capacity by region, 2025-40



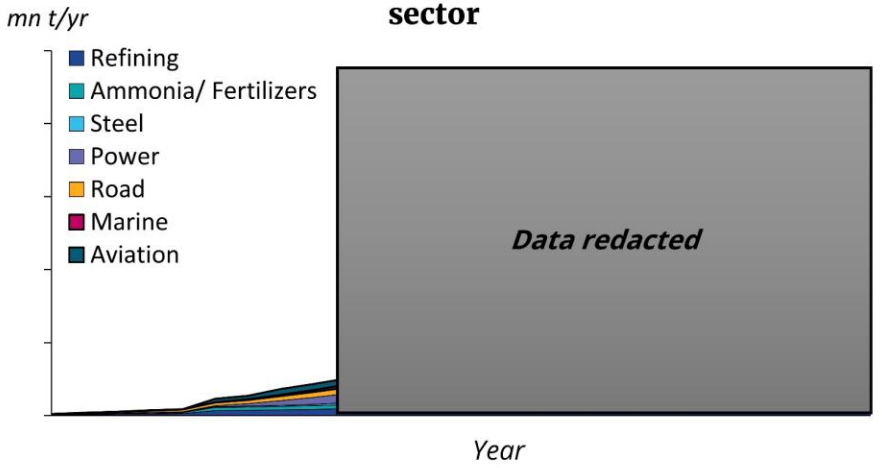
Source: Argus Media – Consulting Services

Global hydrogen demand

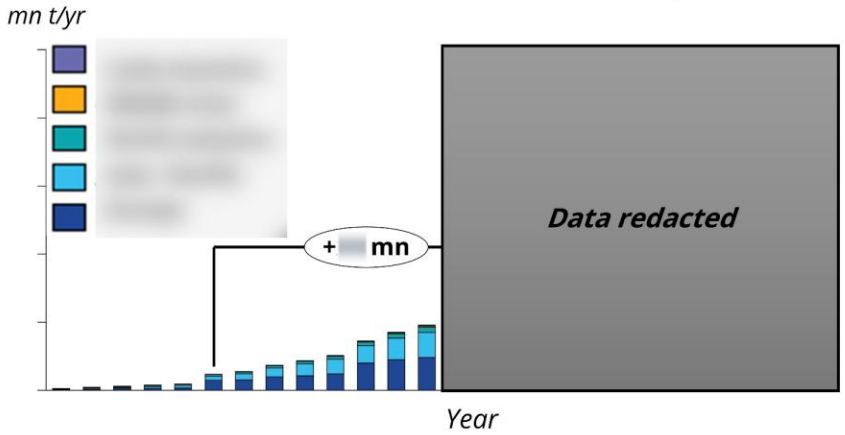
Argus' forecasts [redacted] mn t/yr of clean hydrogen by 2040; marine and aviation e-fuels are majority of demand in the long-term

[redacted]

Low-carbon hydrogen demand by end-use sector



Low-carbon hydrogen demand by region



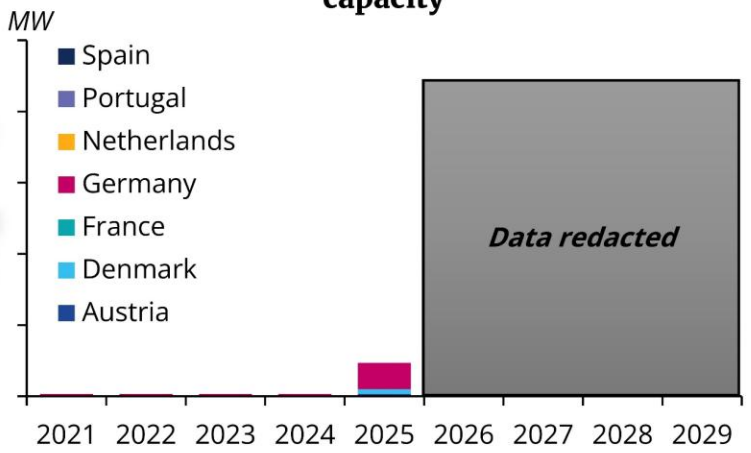
Source: Argus Media – Consulting Services

Europe refinery demand

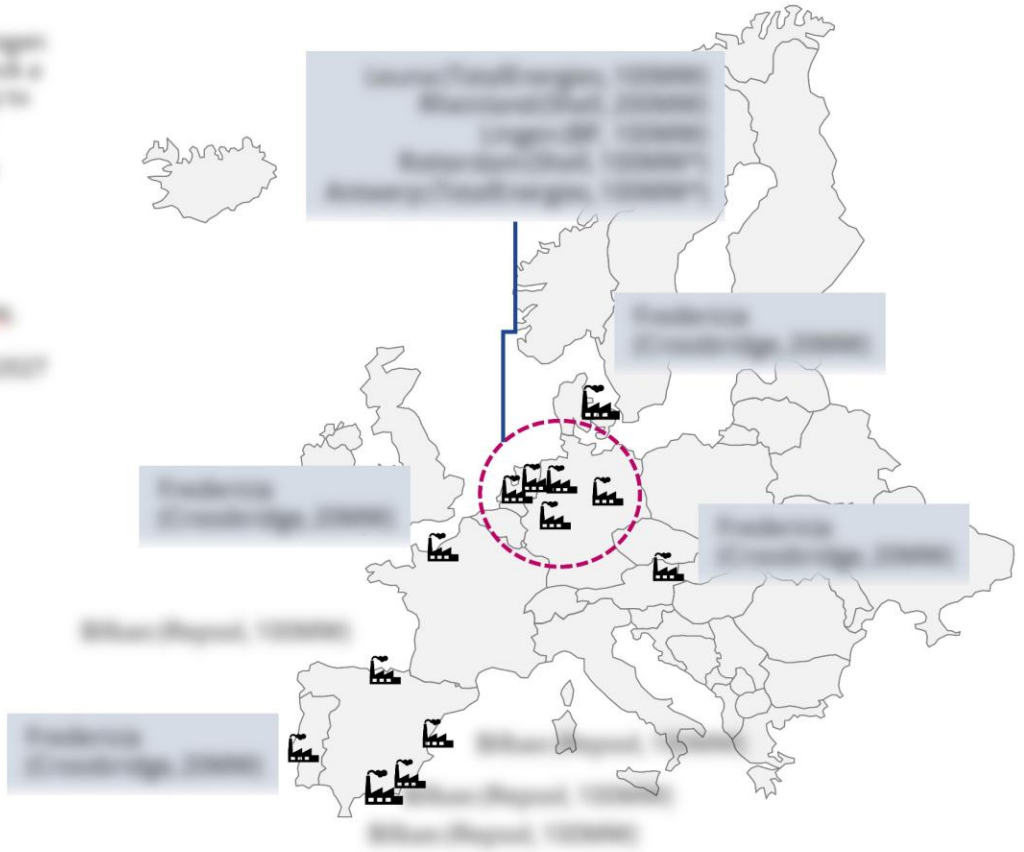
REDIII transport transposition drives green hydrogen use in refineries; nine refinery operators starting up electrolysis capacity before 2030

Europe currently has around 12mn bpd of refining capacity, which primarily consumes grey hydrogen for its hydrotreating and hydrocracking operations. The REDIII mandates for RFNBO use in industry and transport is expected to drive the shift from grey to green hydrogen in the EU's refining system. Most European countries have not yet announced plans for transposing the REDIII industrial mandate; instead, they have focused on transposing the REDIII transport mandate. Details of the country-level transpositions have been incorporated into the forecast.

EU's firm/operational refinery electrolysis capacity



Refinery-linked green hydrogen projects with FID, under construction or operational



** Estimated as only a portion of the capacity is to be consumed into refining*

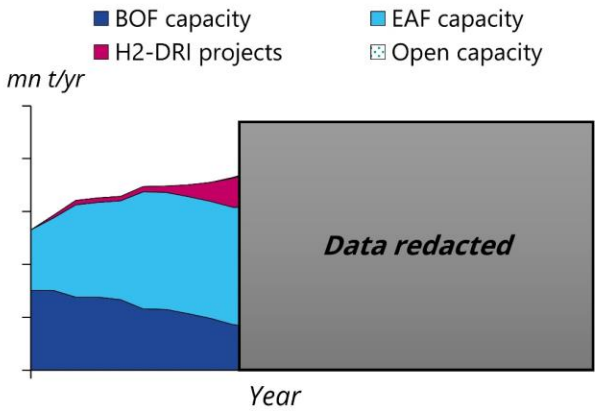
Source: Argus Media - Consulting Services

Europe steel demand

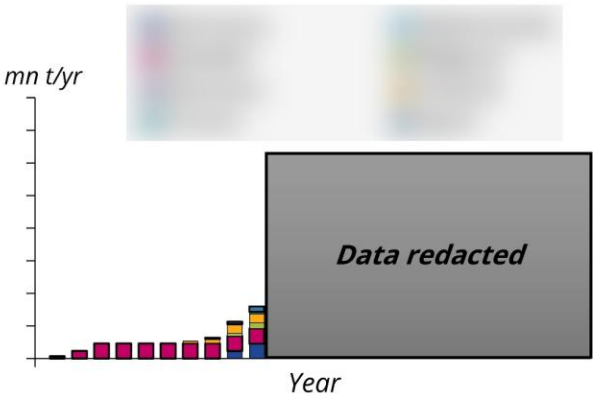
Argus forecasts hydrogen use for steel production will account for [redacted] pc of Europe's total steel production by 2040

[redacted]

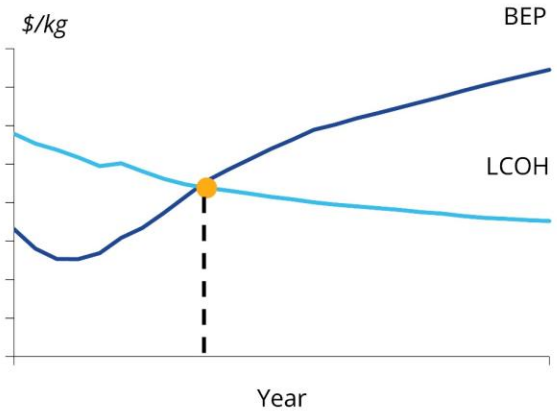
EU steel production by technology



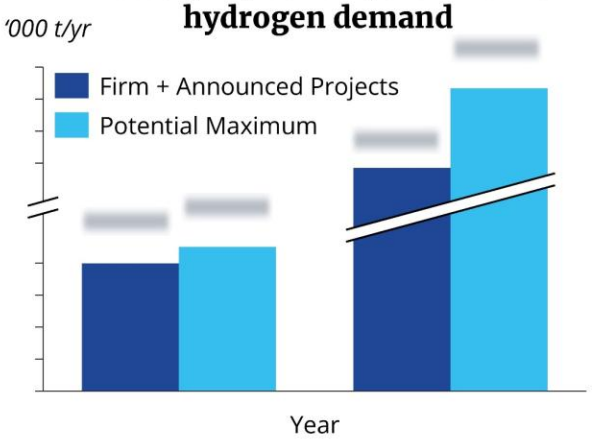
Hydrogen demand in steel production by country



EU LCOH and steel BEP, 20[redacted]



EU steel projects vs. potential max hydrogen demand



Source: Argus Media - Consulting Services

Global power demand

South Korea's recent ammonia co-firing policy change reduces hydrogen demand for power generation in Asia, but the region still expected to account for [illegible] pc of global power generation demand by 2040

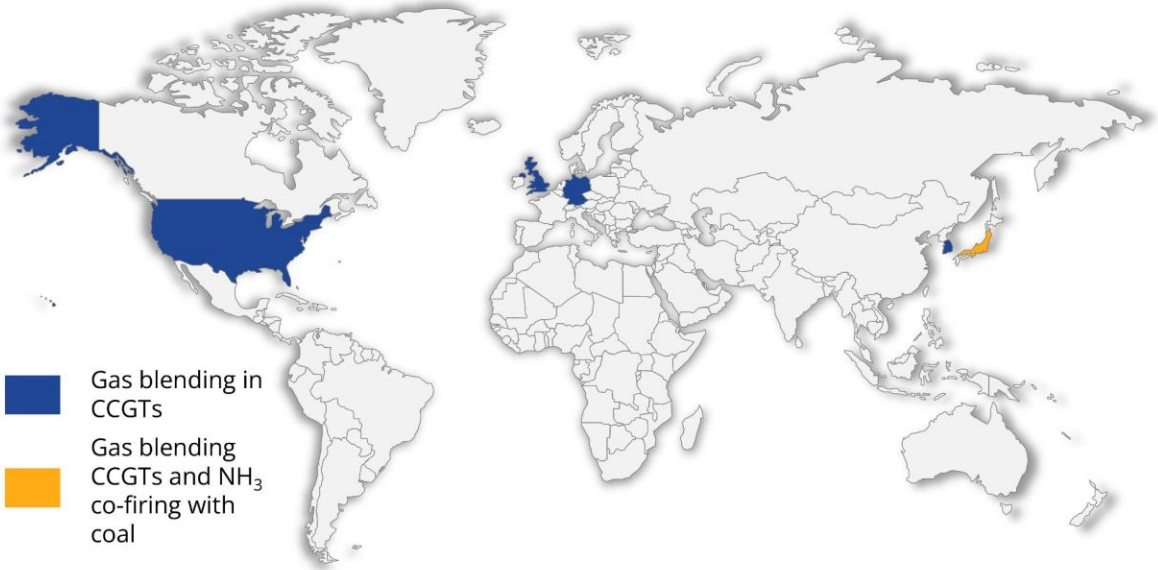
[illegible]

[illegible]

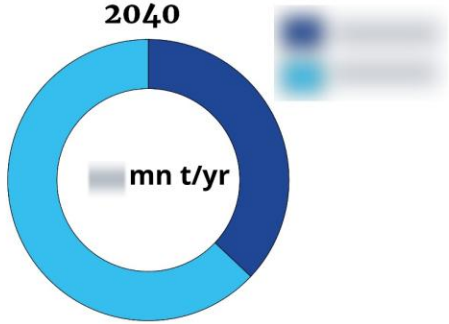
[illegible]

[illegible]

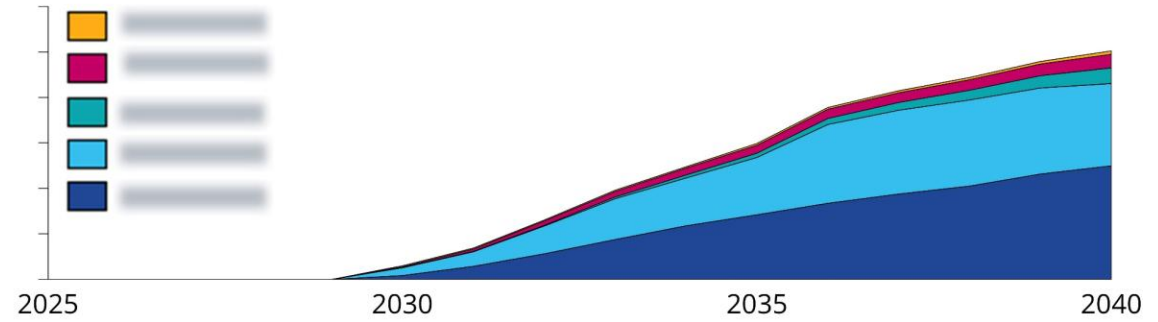
Countries with hydrogen demand for power generation



Hydrogen demand in power generation by technology, 2040



Demand from power generation by country, 2025-40



Source: Argus Media – Consulting Services

Global low-carbon hydrogen capacity

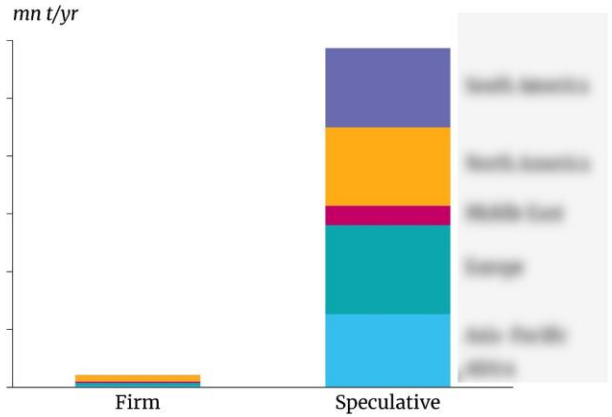
Tracked capacity exceeds [redacted] mn t/yr following new project announcements, although firm capacity remains at [redacted] mn t/yr

Argus tracks over 1,500 low-carbon hydrogen projects worldwide. Mapped here is 'firm' low-carbon hydrogen capacity; meaning it is either currently operating, has taken FID, or is in construction. Only plants with a production capacity of 10,000 t/yr or more are included here.

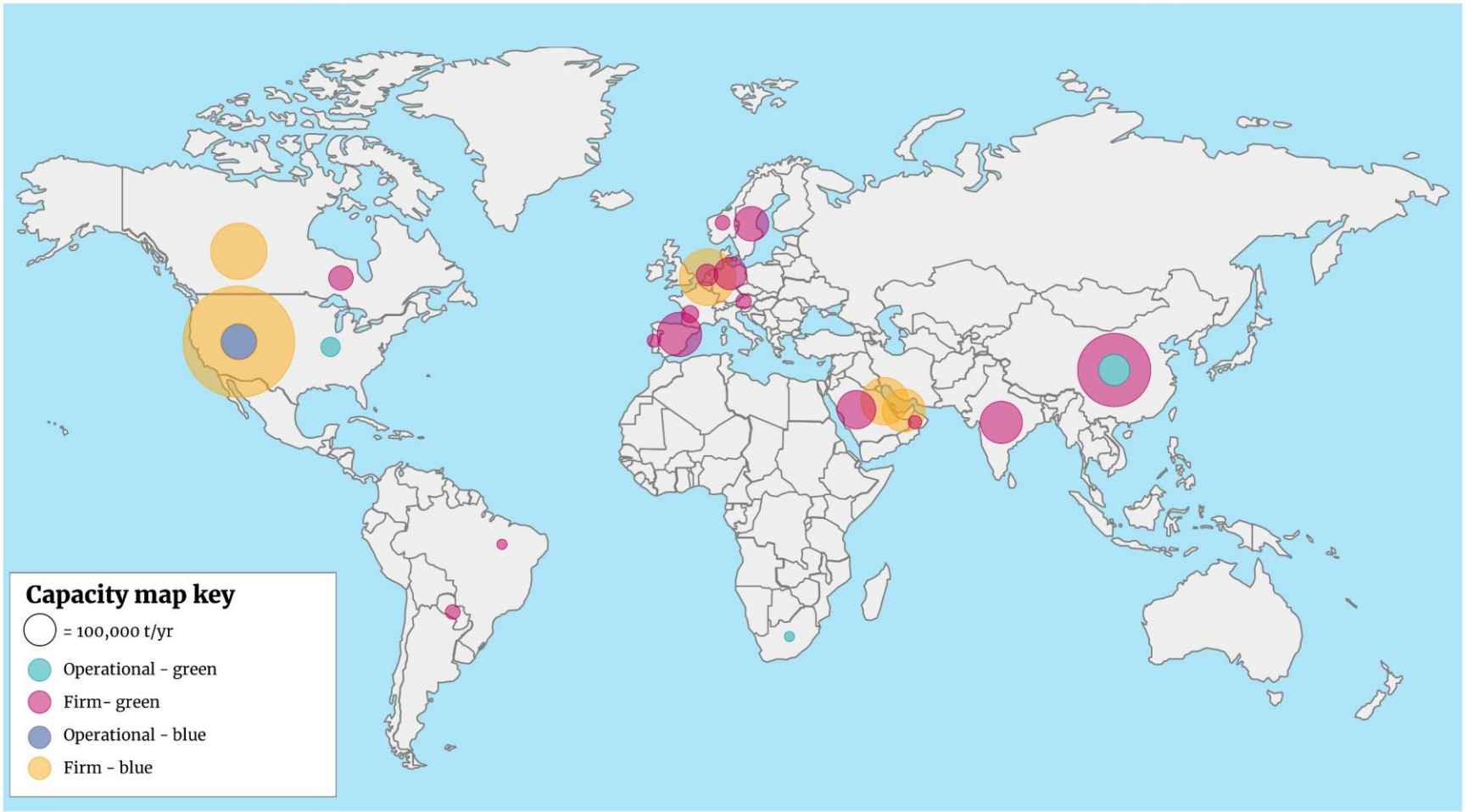
[redacted]

[redacted]

Hydrogen capacity by rating



Firm low-carbon hydrogen capacity



Source: Argus Media – Consulting Services; Argus Hydrogen Future Fuels

Global hydrogen supply

Argus' forecasts that global hydrogen capacity will reach [redacted] mn t/yr by 2040, with [redacted] pc being green capacity

Argus Hydrogen Future Fuels tracks over [redacted] mn t/yr of announced production capacity globally. Of this, less than [redacted] pc is 'firm' (defined as capacity that has reached a positive financial investment decision (FID), is under construction or is currently operating.

[redacted]

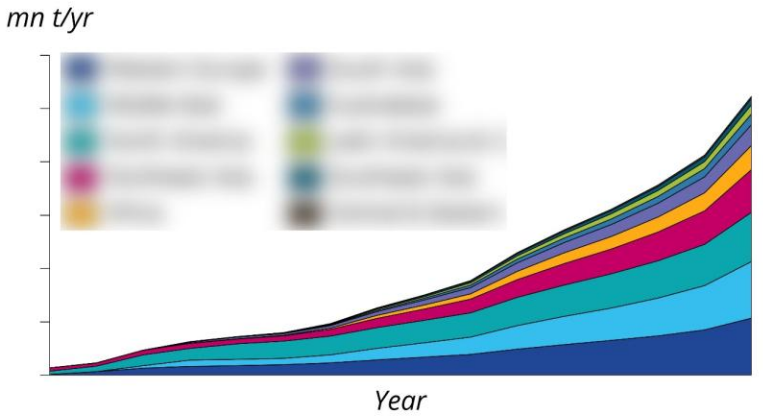
Recent advancements in green hydrogen projects

- [redacted]
- [redacted]

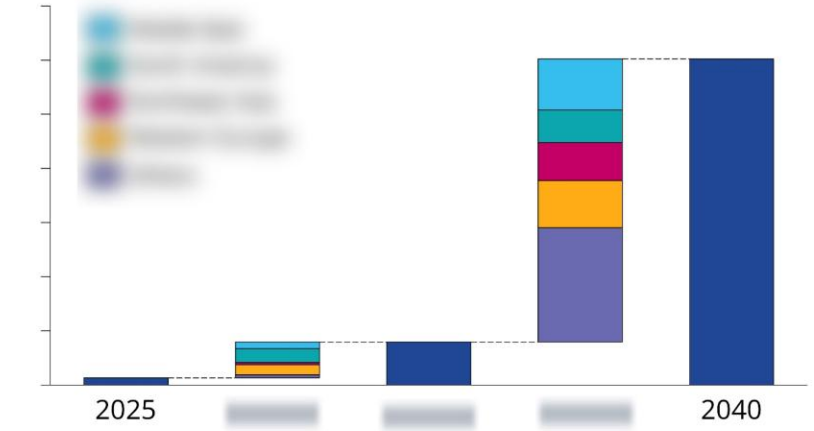
[redacted]

[redacted]

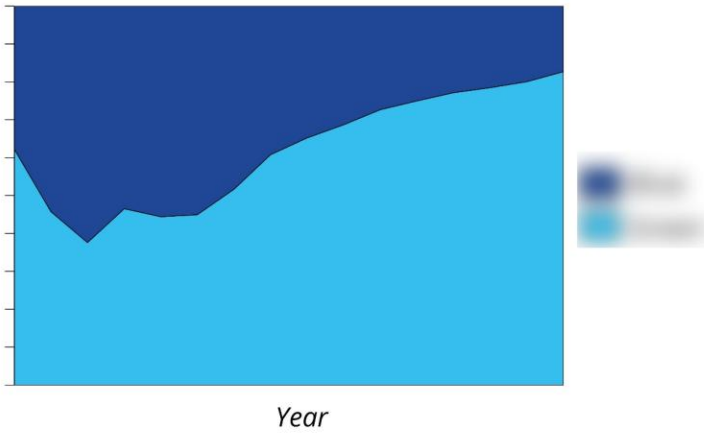
Global capacity by region, 2025-40



Hydrogen capacity growth by region, 2025-40



Share of global capacity by hydrogen type, 2025-40

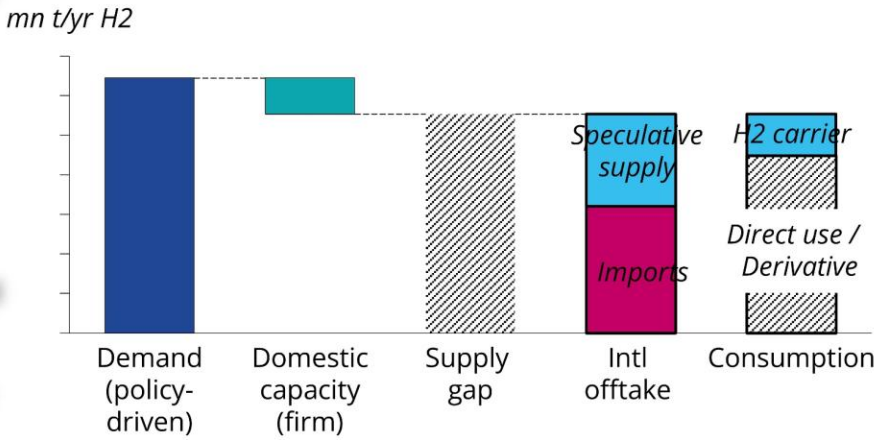


Source: Argus Media – Consulting Services

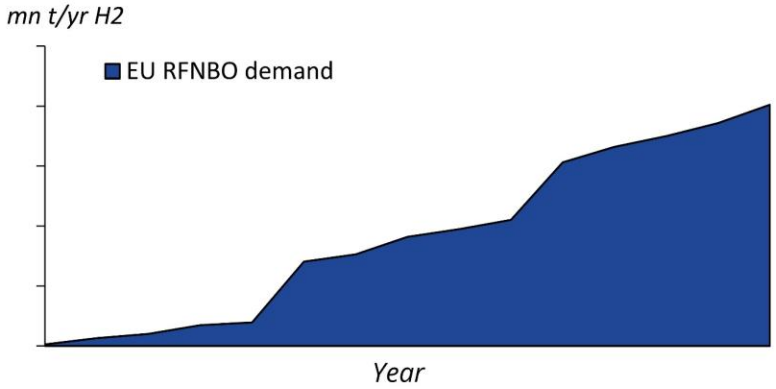
Europe hydrogen carrier demand

REDIII mandates for RFNBO use is driving demand for green hydrogen, necessitating hydrogen imports to meet demand

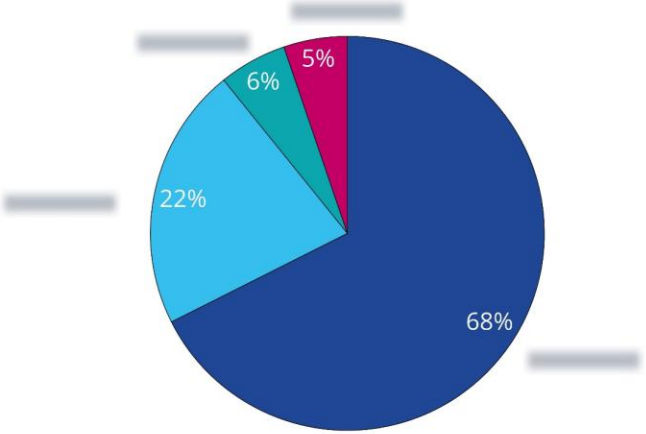
Hydrogen carried demand breakdown, 20



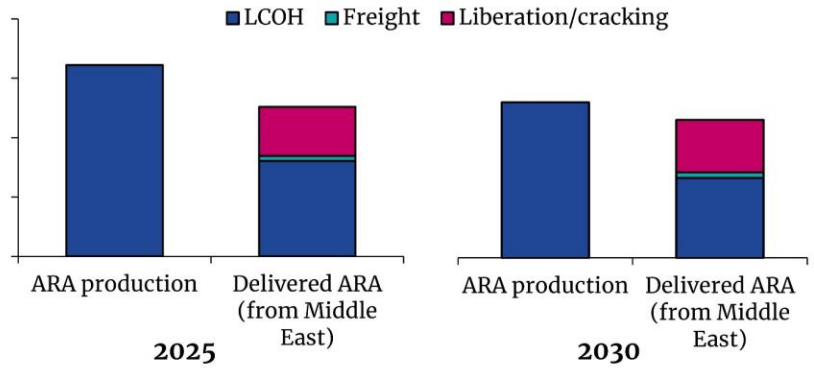
Europe RFNBO demand, 20



Production capacity by end-product,



Cost comparison of green hydrogen in Europe, 2025 vs 2030



Source: Argus Media - Consulting Services

Levelised cost of green hydrogen

Europe sets the LRMC with Saudi Arabia and China among the cheapest with costs in [redacted] of less than [redacted]

[redacted]

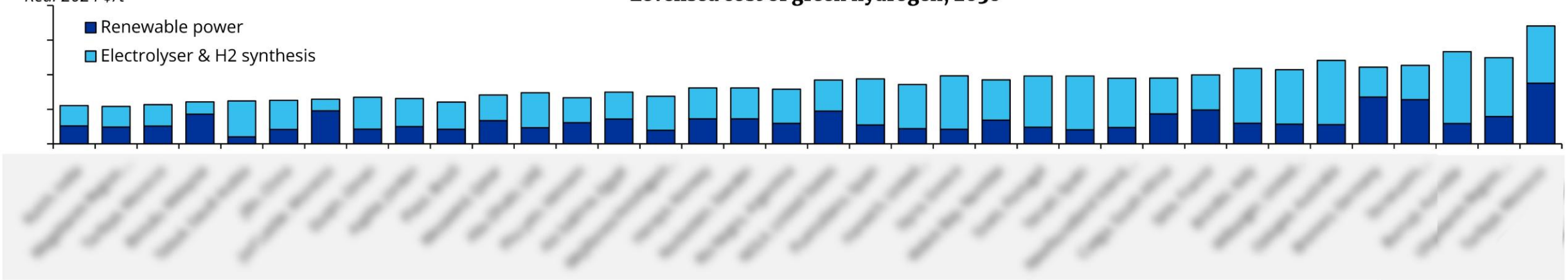
[redacted]

[redacted]

[redacted]

Real 2024 $/t

Levelised cost of green hydrogen, 2030



Source: Argus Media – Consulting Services

Spotlight: Hydrogen policy updates this quarter

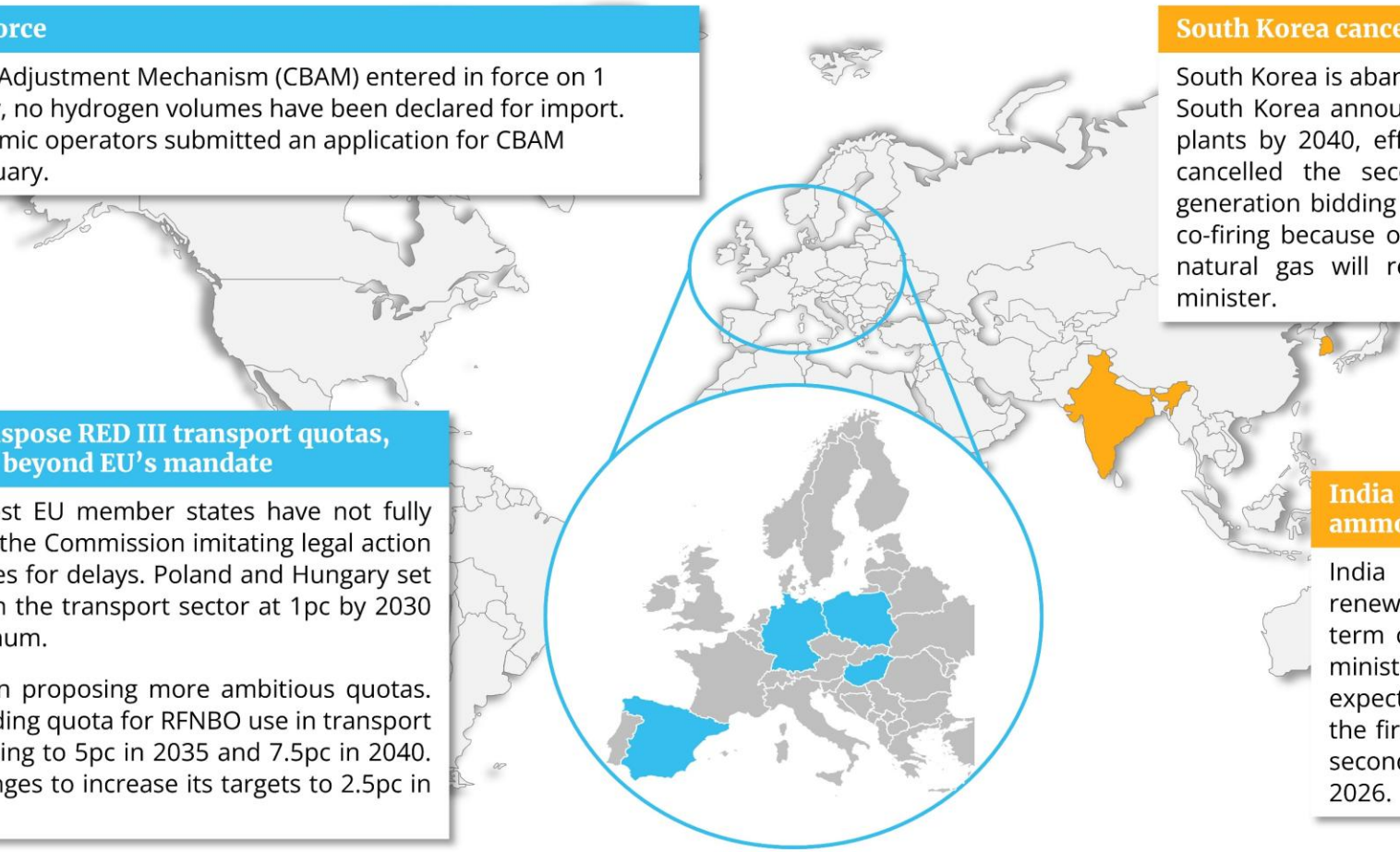
Majority of EU member states have not transposed RED III targets; South Korea moving away from ammonia co-firing with coal

EU CBAM enters into force

The EU's Carbon Border Adjustment Mechanism (CBAM) entered in force on 1 January. As of 14 January, no hydrogen volumes have been declared for import. More than 12,000 economic operators submitted an application for CBAM authorisation on 1-7 January.

South Korea cancels ammonia co-firing with coal

South Korea is abandoning plans for co-firing ammonia with coal. South Korea announced plans to phase out all coal-fired power plants by 2040, effectively ruling out co-firing ammonia. Seoul cancelled the second round of its clean hydrogen power generation bidding market to subsidise hydrogen and ammonia co-firing because of this policy change. Co-firing hydrogen with natural gas will remain in place, according to the relevant minister.



EU member states transpose RED III transport quotas, Spain and Germany go beyond EU's mandate

As of January 2026, most EU member states have not fully transposed RED III, with the Commission imitating legal action against 26 member states for delays. Poland and Hungary set quotas for RFNBO use in the transport sector at 1pc by 2030 in line with the EU minimum.

Spain joined Germany in proposing more ambitious quotas. Spain is proposing a binding quota for RFNBO use in transport at 1.5pc in 2030, increasing to 5pc in 2035 and 7.5pc in 2040. Germany is mulling changes to increase its targets to 2.5pc in 2034 and 8pc in 2040.

India starts planning for second green ammonia tender

India intends to launch another round of renewable ammonia tenders in the medium term once the first round is completed. The ministry of new and renewable energy (MNRE) expects that signing supply agreements for the first round and evaluating feasibility for a second round could take another until mid 2026.

Source: Argus Media – Consulting Services

Spotlight: REDIII transposition update

EU countries finalising REDIII RFNBO transport quotas but continue to avoid industry quotas

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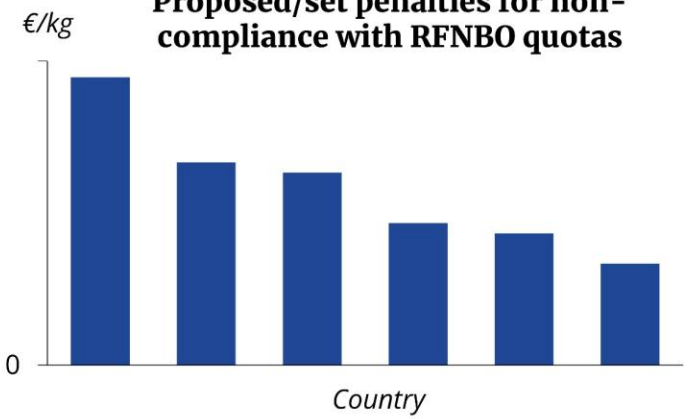
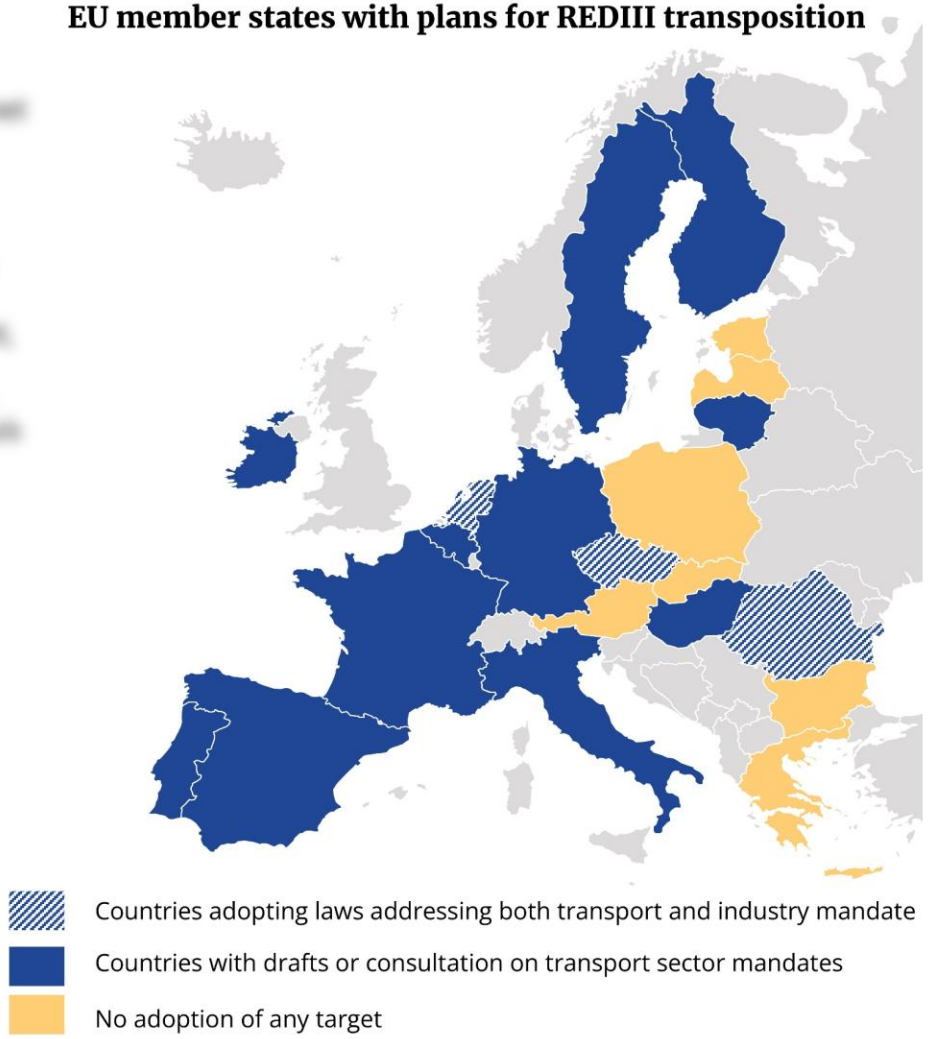
Proposed/set penalties for non-compliance with RFNBO quotas



EU member states with plans for REDIII transposition



Source: Argus Media - Consulting Services

Spotlight: Korea's cancellation of clean ammonia co-firing with coal

Argus forecasts the cancellation of ammonia co-firing in coal plants will reduce hydrogen demand by [redacted] mn t/yr by 2040

Support for ammonia co-firing in power generation in Korea is waning:

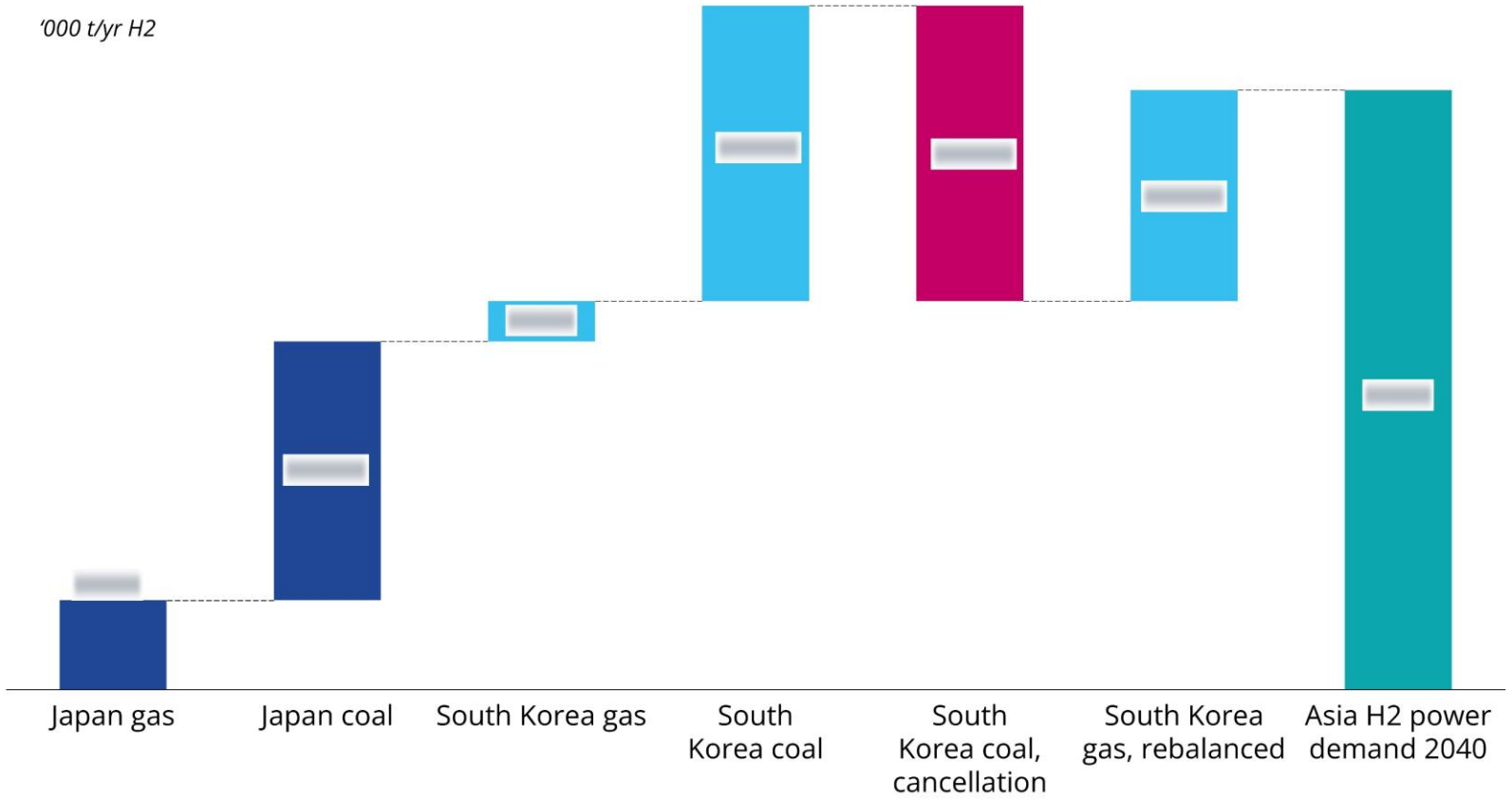
- In Oct-25, South Korea's energy minister recommended Korea should no longer pursue ammonia co-firing for power generation.
- The Korea Power Exchange cancelled the second round of its clean hydrogen power generation bidding tender on the last day for bid submissions. The process will be relaunched but likely excluding ammonia co-firing.
- South Korea's new government announced it intends to accelerate the phase-out of coal assets by 2040, rendering 15-year ammonia offtake contracts untenable.

Argus has verified from discussions with industry participants that companies in South Korea are indeed stepping back from plans for ammonia co-firing in coal-based assets. While some demand could emerge, it is expected to be negligible.

Argus' forecasts for hydrogen demand in Asia reflect this update. Hydrogen demand for co-firing in coal-based power plants was forecast at [redacted] mn t/yr in 2040, a peak point as coal-fired generation was then expected to decrease.

Plans for co-firing hydrogen with natural gas will remain in place. South Korea's energy minister said: With an increasingly fast coal phase-out, Argus instead forecasts that hydrogen blending in CCGTs will meet South Korean hydrogen and clean energy targets previously allocated to coal co-firing. This still results in up to [redacted] t/yr of lost demand because of aging gas plants.

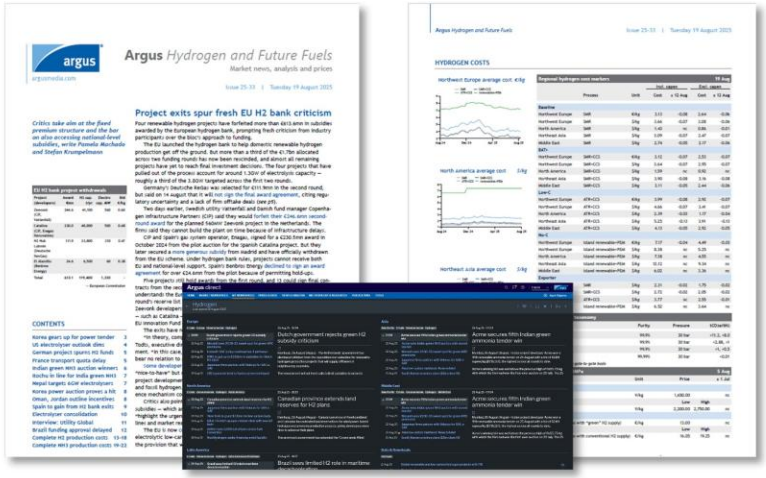
Demand breakdown for hydrogen in Japan & South Korea power sectors, 2040



Source: Argus Media – Consulting Services

Argus hydrogen portfolio

Price reporting / Current market coverage



Hydrogen Future Fuels Data & Downloads

- EU member state REDIII implementation
- Global hydrogen projects with FID
- Global hydrogen subsidy auction tracker
- Global electrolyser orders and manufacturing capacity
- Global hydrogen production and electrolyser capacity targets
- Global planned hydrogen DRI steelmaking plants
- Global renewable hydrogen-based SAF production sites
- Global e-methanol production facilities
- Global planned ammonia cracking facilities
- Plus more...

Analytics (forecast to 2040)

Argus *Hydrogen Analytics:* Quarterly forecasts for low-carbon hydrogen across eight potential end-use sectors in around 50 countries globally out to 2040

Multi-client studies (→ ~2050)

- **Part 1:** Asia-Pacific and the Middle East
- **Part 2:** Europe and Africa
- **Part 3:** Americas

Bespoke consulting

Bespoke consulting assignments provide strategic advice and long-term market analysis for low-carbon fuels. Recent credential include (additional on request):

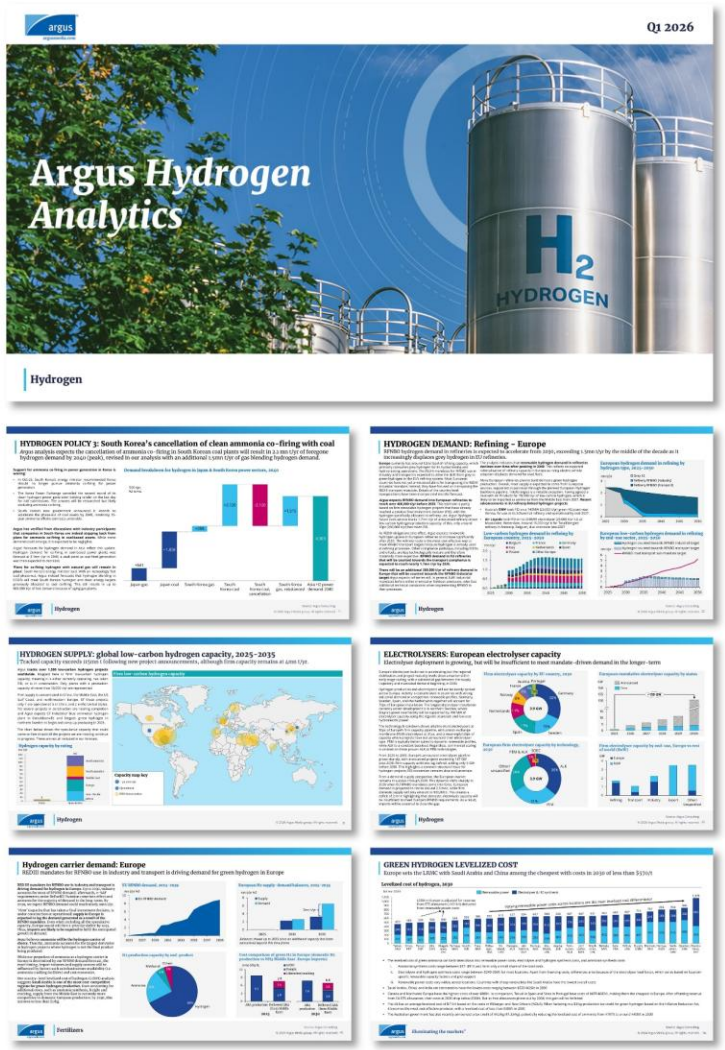
- Green hydrogen/ammonia pricing
- Landed cost of hydrogen and its derivatives
- Impact of CBAM
- Decarbonisation strategy
- Gas diversification
- Future fuels strategy
- Clean ammonia lenders report

Related services

Source: Argus Media – Consulting Services

Argus *Hydrogen Analytics*

Forecasts for low-carbon hydrogen demand, supply and production costs to 2040, updated quarterly



Content

Executive summary

Demand

Traditional end-uses
- Ammonia
- Refining

New end-uses
- Aviation
- Marine fuels
- Power generation (coal co-firing and CCGT)
- Road transport (fuel cell EV)
- Steel

Supply
- Blue and green hydrogen capacity maps
- Blue and green hydrogen supply forecast by status
- Blue and green hydrogen supply forecast by region

Trade
- Net supply-demand balances by region
- Hydrogen carrier demand in Europe and Asia

Production costs
- Levelised cost of hydrogen (LCOH) by country
- Fuel-switching costs by country and sectors

Spotlights

Key features

- **Update frequency:** quarterly
- **Geographical coverage:** Global
- **Time period:** annual forecast to 2040
- **Deliverables:** PDF report, Excel dataset and price forecasts via API
- **Expert access:** Ad hoc access to *Argus* experts to discuss report contents
- **Approximate number of slides:** 50-60

Data & Downloads

- Low-carbon hydrogen demand by sector and country
- Green and blue hydrogen capacity by country
- Levelised cost of hydrogen by country
- Fuel-switching costs by sector and country

Spotlight examples

- EU Member State REDIII transposition update
- South Korea's cancellation of clean ammonia co-firing with coal
- H2 Global auction project analysis
- Green steel developments

Source: Argus Media – Consulting Services

Argus *Hydrogen Analytics*

Data & Download provides supply, demand and production cost data to 2040

Data & Download - Table of Contents

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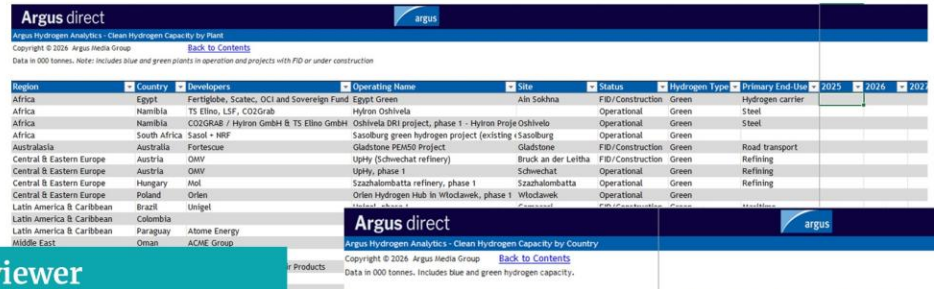
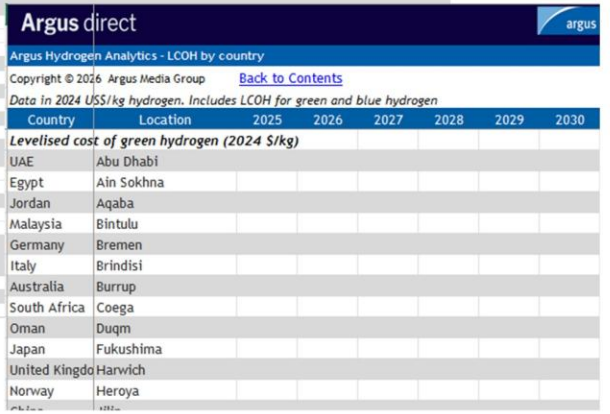
ARGUS HYDROGEN ANALYTICS | ISSUE - MAY 2026

Worksheet name	Description	Frequency
Viewer	Data viewer for capacity, demand and levelised cost of hydrogen (LCOH)	Quarterly
Clean Capacity by Plant	Blue and green hydrogen capacity (operational, FID and under construction) by plant, 2025-2040	Quarterly
Clean Capacity by Country	Blue and green hydrogen capacity by country, 2025-2040	Quarterly
Total Clean Consumption	Clean hydrogen consumption by country, 2025-2040	Quarterly
Clean Demand - Ammonia (traditional)	Clean hydrogen demand from the "traditional" ammonia sector	Quarterly
Clean Demand - Refining	Clean hydrogen demand from the refining sector, by country	Quarterly
Clean Demand - Road (FCEV)	Clean hydrogen demand from the road tr	
Clean Demand - Power Gen	Clean hydrogen demand from the power	
Clean Demand - Steel	Clean hydrogen demand from the steel se	
Clean Demand - Marine Fuels	Clean hydrogen demand from the marine	
Clean Demand - Aviation (e-SAF)	Clean hydrogen demand from the aviatic	
LCOE - Solar PV	Levelised costs of energy from solar PV 2	
LCOE - Wind	Levelised costs of energy from wind 202	
Base setups	Power generation mix and levelised cost	
Electrolyser costs	Electrolyser costs breakdown 2025-2040	
LCOH breakdown	Levelised cost of green and blue hydroge	
LCOH by country	Green and blue hydrogen production cos	
Fuel switching costs	Fuel switching costs for all sectors, by c	
Production costs - Aviation (e-SAF)	Production costs for the aviation (e-SAF)	

Data & Download – Data viewer

Data & Download – Data tabs





Country	Location
UAE	Abu Dhabi
Egypt	Ain Sokhna
Jordan	Aqaba
Malaysia	Bintulu
Germany	Bremen
Italy	Brindisi
Australia	Burrup
South Africa	Coega
Oman	Duqm
Japan	Fukushima
United Kingdo	Harwich
Norway	Heroya

Source: Argus Media – Consulting Services

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