



European Hydrogen Strategy European Clean Hydrogen Alliance

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EU and Hydrogen – helicopter view

EU Green Deal

- achieving climate neutrality in 2050
- Around 50% reduction by 2030

Hydrogen Strategy for a climate neutral Europe

- exploring the potential of clean hydrogen to help the process of decarbonising the EU economy in a cost-effective way

Industrial Strategy for Europe

- making Europe's industry climate-neutral by 2050
- maintaining our global competitiveness and a level playing field, while enhancing Europe's industrial and open strategic autonomy
- shaping Europe's digital future

European Clean Hydrogen Alliance

- co-operation platform for European Hydrogen industry
- development of a significant project pipeline
- delivering investments across MS borders

Hydrogen Strategy – 3 phases

- **4 GW** of renewable hydrogen electrolyzers
- Replace **existing hydrogen production**
- Regulation for liquid hydrogen markets
- Planning of hydrogen infrastructure
- Scale-up to **all hard-to-decarbonise sectors**
- Expansion of hydrogen-derived **synthetic fuels**
- EU-wide infrastructure network
- An open international market with € as benchmark

2024

2030

2050

- 40 GW of renewable hydrogen electrolyzers
- New applications in steel and transport
- Hydrogen for electricity balancing purposes
- Creation of “Hydrogen Valleys”
- Cross-border **logistical infrastructure**

Scaling up renewable hydrogen production

and in a transitional period low-carbon hydrogen, through:

- Supporting producers through support mechanisms
- Develop a EU-wide hydrogen infrastructure

Producers

- Common low-carbon threshold for hydrogen production facilities
- Certification of renewable and low-carbon hydrogen
- Revision of the Emission Trading Scheme
- Carbon Contract for Differences
- Market-based support schemes for renewable hydrogen
- Liquid markets with commodity-based hydrogen trading

Infra-structure

- Network of refuelling stations through Alternative Fuels Infrastructure Directive
- Revision of the TEN-E and internal gas market legislation to ensure interoperability, common quality standards, and cross-border operational rules
- Revision of TYNDPs to ensure full integration of hydrogen infrastruct.

Fostering Renewable hydrogen demand

and in a transitional period low-carbon for

- Replacing existing hydrogen production (70-100 MT of CO₂eq/yr)
- Green fertilisers and green steel
- Local buses, commercial fleets, or specific parts of the rail network
- Heavy duty road vehicles
- In the longer term, maritime and aviation

Supporting
end-
consumers

- EU strategy on clean steel
- Sustainable and Smart Mobility Strategy

Creating
markets

Certification of renewable and low-carbon hydrogen
Specific end-use sectors quotas of renewable hydrogen /
derivatives
Hydrogen infrastructure access to all consumers
Open and competitive hydrogen market with sold price
signals

European Clean Hydrogen Alliance



- Launch on 8 July
- Involving all active stakeholders in the clean hydrogen ecosystem, bringing together supply and demand as well as society/NGOs
- 600 members to date – more in the pipeline

Sign European Clean Hydrogen Alliance Declaration at :

<https://ec.europa.eu/growth/industry/policy/european-clean-hydrogen-alliance>

European Clean Hydrogen Alliance

Kick-starting the EU Hydrogen Industry to achieve the EU climate goals



Mission

- build up a robust pipeline of projects
- establish an investment agenda
- Integrate the hydrogen value chain across Europe
- implement the new European hydrogen strategy
- Massively scale up production and demand for clean hydrogen

The blueprint estimates investments of €430 billion by 2030

The Alliance Round Tables

- Put the focus on the specific issues of the pillar & industrial subsectors
- Chaired by CEOs
- Including all stakeholder groups
- Entrusted with building up the project pipeline / possible IPCEIs
- Identifying regulatory bottlenecks hindering implementation
- Defining dependencies on other RTs

Hydrogen Production

Transmission & Distribution

Mobility Applications

Industrial Applications

Energy Applications

Residential Applications

The European Hydrogen Forum

- Broad conference taking place on 26/27 November in the context of the EU Hydrogen Week
- Thursday = political level debates
- Friday = project day
- Virtual event with 50 match-making tables
- Investor pitching and company presentations

Further information

European Clean Hydrogen Alliance declaration :

<https://ec.europa.eu/growth/industry/policy/european-clean-hydrogen-alliance>

European Clean Hydrogen Alliance web-site :

<https://www.ech2a.eu>

European Hydrogen Forum :

<https://www.fch.europa.eu/european-hydrogen-week>

Hydrogen Valley information :

<http://s3platform.jrc.ec.europa.eu/hydrogen-valleys>