



# Hydrogen Europe Research

Policy Working Group

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12 JULY 2024

# Agenda

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3. **EU institutional activities**
  - European elections results and political groups
  - Next steps on the institutional renewal
  - Deal found on the EU top jobs
  - Roadmap on Hydrogen Valleys
  - Maroš Šefčovič at the Hydrogen Council Event in Berlin
  - Plenary of ENNOH, news from ENTSO-G and ENTSO-E
  - Chile/EU cooperation
  - Launch of new EU initiatives
4. **Opportunities**
5. **Data & reports**

The background of the slide features a light gray, semi-transparent image of water droplets and bubbles. The droplets are of various sizes and are captured in motion, with some appearing to be merging or splitting. The overall effect is a soft, textured background that suggests purity and movement.

# UPDATE ON HER POLICY ACTIVITIES

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# Joint Statement co-signed by HER

- Launched by **EARTO** and **Business Europe**
- Urges EU Institutions to increase the RD&I budget and to make pan-European excellent cross-border collaborative RD&I the cornerstone of FP10.
- Support to PPP.
- 110 signatories



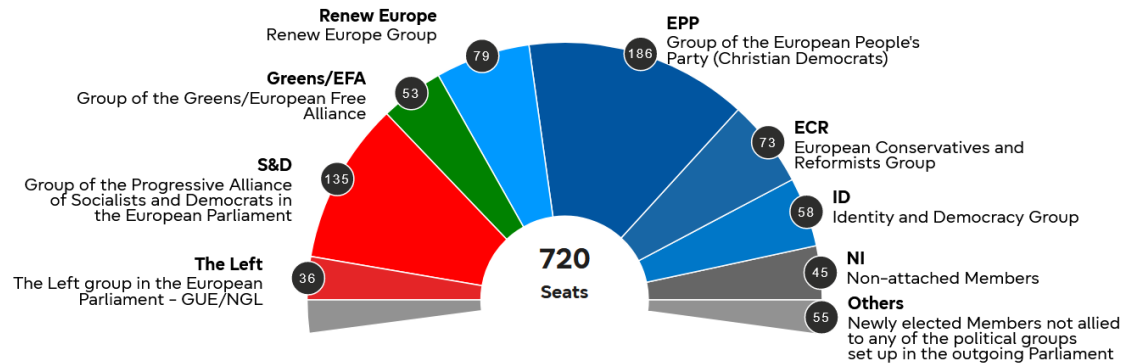
<https://hydrogeneuroperesearch.eu/joint-statement-for-an-ambitious-fp10/>

The background of the slide features a soft-focus, monochromatic image of water droplets and bubbles. The droplets vary in size and are scattered across the frame, with some in sharp focus and others blurred. The lighting creates highlights and shadows on the surfaces of the droplets, giving them a three-dimensional appearance. The overall color palette is light and airy, with various shades of gray and white.

# EU INSTITUTIONAL ACTIVITIES

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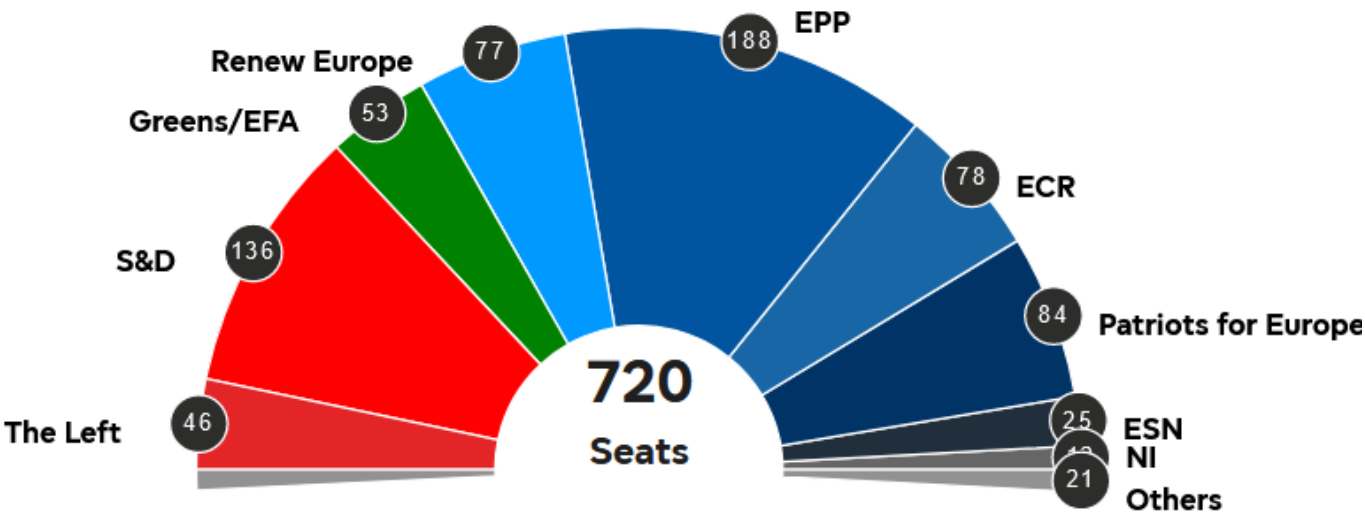
# European elections results and political groups



**Current majority EPP-S&D-Renew still dominant - 400/720 seats.**

**Biggest loss for Renew and the Greens.**

## Provisional results after the vote 10/06



## Creation of the 'Patriots for Europe' group

- 84 MEPs from 12 national far-right and sovereignist right-wing political groupings (FR, HU, IT, CZ, ES, NL, AT, BE, PT, DK, GR, LV)
- Against federalist tendencies, fight against the Green Deal and "green ideology"

## Creation of 'Europe of Sovereign Nations' group

- 25 MEPs from 8 political parties (DE, BG, FR, PL, SK, LT, CZ, HU) – the German AfD being the biggest party (14).

## Political groups one month later

# Next steps on the institutional renewal



*Ongoing national processes to nominate commissioner candidates*

Source: E3G

# Deal found on the EU top jobs



**Ursula Von der Leyen**

*EU Commission  
President  
(EPP, DE)*



**António Costa**

*EU Council  
President  
(S&D, PT)*



**Kaja Kallas**

*HR/VP for Foreign  
Affairs  
(Renew, EE)*



**Roberta Metsola**

*Expected to remain  
President of the EP  
for the next 2.5 years  
(EPP, MT)*

- Heads of states from EPP, S&D and Renew negotiated a deal on the top EU jobs
- Qualified majority decision reached during the EU Council of 27-28 June.
- Next step will be during the first plenary of the newly elected EP: approval of **Ursula von der Leyen (18/07)** and election of **Roberta Metsola (16/07)** by MEPs.



# Publication of a roadmap on Hydrogen Valleys



**REPowering the EU with Hydrogen Valleys – [roadmap](#) published on 24 June 2024.**

The Staff Working Document takes stock of the achievements to date, and outlines the measures being implemented to have **at least 50 Hydrogen Valleys under construction or operational in the EU by 2030.**

- ▶ **Multiplying H2 valleys** – 98 hydrogen valleys globally with 67 located in the EU, 17 are supported by the Clean Hydrogen Partnership.
- ▶ **Scaling up supply and stimulating demand** – done via various EU funding: Green Deal Call in Horizon 2020, Innovation Fund, 65 hydrogen infrastructure projects under the CEF, the Hydrogen Bank auctions
- ▶ **Strengthening cooperation and synergies at EU and global level** – 4 IPCEIs have been approved; approval of aid measures to produce renewable H2; H2 IWG under the SET Plan; ambitious objectives under the Mission Innovation cooperation (100 large scale H2 valley worldwide by 2030)
- ▶ **Building a hydrogen knowledge and skills community** – role of the European Hydrogen Academy and the NZIA Net Zero Academy on hydrogen.

# Maroš Šefčovič at the Hydrogen Council Event in Berlin



Vice-President of the EC  
Maroš Šefčovič

## Speech at the Hydrogen Council Event in Berlin – 11 June 2024

- Reaffirmed the EC support for the development of H<sub>2</sub> production on a European scale;
- Hopes that the next parliamentary term would continue along this path;
- Called for the European hydrogen sector to be strengthened along the entire value chain;
- Referring to the results of the European Hydrogen Bank's first auction, he **acknowledged the comments and criticisms raised by the industry** – to be addressed for the second auction
- **Wishes to use the experience gained from the EU platform for joint gas procurement to establish joint hydrogen procurement.**

# Plenary meeting of ENNOH

Held on 18 June the **Plenary meeting of the European Network of Network Operators for Hydrogen (ENNOH)**, created as set out in the revised regulation in the ‘gas’ package, adopted by the EU Council in May.

*“Hydrogen is critical for EU’s decarbonisation & competitiveness. ENNOH will be in charge of planning & developing the future European H2 infrastructure network”*

## Next steps:

- The official launch of ENNOH will take place in the first half of 2025.
- The network should be fully operational by 2027, after the official creation of the association.



Kadri Simson  
Commissioner for Energy

# ENTSO-G publishes the list of projects for the TYNDP

## ENTSO-G published the [list of projects](#) to be included in its Ten-Year Network Development Plan 2024 (TYNDP 2024)

- Objective: improving the resilience of the network and supporting Europe's energy transition
- Submission is a prerequisite for the Projects of Common Interest/Projects of Mutual Interest (PCI/PIM) application for hydrogen infrastructure projects.

### Key numbers:

- 326 projects submitted, 202 focus on hydrogen
- 29 projects were submitted under other sub-categories, covering the smart gas network and CO<sub>2</sub> infrastructure.

## In Germany

The EC approved a German scheme (app €3 billion, loans) to support the construction of the **Hydrogen Core Network (HCN)** - including the repurposing for hydrogen transport and building new hydrogen pipelines and compressor stations. It will be financed by TSOs selected by the German federal network agency.

**The first major pipeline should be operational from 2025, and the entire HCN should be operational by 2032.**

Conclusions of the 10<sup>th</sup> Energy Infrastructure Forum, ENTSO-E: Forum held in June. Some conclusions connected with hydrogen:

- Highlighting the need for integrated and optimised network planning, taking into account the synergies between “*electrons, heat and molecules*”
- Inviting Member States to include **renewable capacity dedicated to *offshore* hydrogen production in their updated non-binding *offshore* commitments** (also taking into account maritime spatial planning requirements).
- ENTSO-E is invited to incorporate these data into future *offshore* plans and to work with ENNOH, ENTSOG and stakeholders to draw up these plans.

# Continued cooperation Chile/EU on hydrogen

- Kadri Simson, Commissioner for Energy, participated to the '**Global Gateway Investment Agenda - Team Europe Initiative RH2 Development Chile**' event in Chile on 1 and 2 July.
- The Commissioner said that the EU was open and ready to engage in renewable hydrogen trading, and that Chile would be a leading partner.

*"We believe that Chile is already at the forefront of the energy transition. It can further position itself as a hub for renewable hydrogen, a forerunner on the international market and an exporter of renewable hydrogen to Europe."*

## EU funding for H2 activities in Chile:

- '**Global Gateway**' - €216M
- '**Team Europe**' - €8M

Chile has set itself a target of 100% clean energy by 2050.



# Launch of new EU initiatives

## LAUNCH OF THE PV NET-ZERO ACADEMY

- It is the first of the EU Academies to be established under NZIA.
- **100,000 workers** to be trained over the next 3 years to address ongoing labour and skills gap in the sector.
- **€9 million** to fund the 'Academy', ran by the EIT
- NZIA academies aim to develop learning content and programmes in collaboration with industry in order to ensure the necessary skills / workforce for Europe's net-zero technologies value chains - Hydrogen Academy upcoming.

## LAUNCH OF EUROPEAN INNOVATION CENTER FOR INDUSTRIAL TRANSFORMATION AND EMISSIONS

- INCITE aims at promoting the uptake of innovative technologies to achieve decarbonisation, depollution, increased resource efficiency and circular economy in large industrial plants.
- Key focus on steel and cement industries for the initial efforts.
- Key element of new Industrial Emissions Directive.
- Based in Seville, Spain, operated by JRC–Seville, in cooperation with DG ENV, with support from DGs RTD, CLIMA, ENER, GROW

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# OPPORTUNITIES

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# Canada joins the Horizon Europe programme

- On 3 July 2024, Canada signed the association agreement with **Horizon Europe Pillar II**.
- Total contributed amount: €96,4 million
  - **2024: €16.1 million**
  - **2025 €21.4 million**
  - **2026: €26,8 million**
  - **2027: €32,1 million**

**New opportunities for partnering with Canadian organisations within Horizon Europe.**



## APPLICATIONS FOR MEMBERS OF THE NEW TECHNOLOGY COUNCIL FOR ADVANCED MATERIALS

- On 5 July the EC launched a [call for applications](#) to select members of the new Technology Council for Advanced Materials, new materials with improved properties.
- Focus on funding, skills, regulation and infrastructure, responsible for assessing the potential for synergies with regional ‘innovation valleys’.
- Who? Representatives from Member States’ research and industry ministries, academia, research and technology institutions, social partners, industry and the Commission.
- **Deadline: 9 September.**

## EMISSIONS TRADING SYSTEM (ETS) – PERMANENT EMISSIONS STORAGE THROUGH CARBON CAPTURE AND UTILISATION

- [Consultation](#) on permanent emissions storage through CCS and CCU
- Initiative based on the revised ETS Directive.
- Objective: et the conditions under which these GHG emissions can be considered as permanently chemically bound in a product so that they do not enter the atmosphere under normal use and under any normal end-of-life activity.
- **Deadline: 16 July.**

# Funding developments



## HYDROGEN BANK AUCTIONS

- The budget for the second auction, scheduled for Q4 2024 will be **€1.2 billion**
- The European Commission will be presenting rules for calculating the greenhouse gas savings achieved by low-carbon hydrogen.
- Whether financed by European or national funds, the EU currently has **254 renewable hydrogen production projects**, of which 170 are in operation and 84 under construction.

## INNOVATION FUND

- **€173 million to 18 cleantech projects** awarded in June.
- Set to support European companies in bringing innovative technologies to the market in areas of:
  - renewable energy
  - energy storage
  - energy-intensive industries.



# Funding developments

## Modernisation Fund

Awardees shared on 24/06.

**€2.967 billion to support 39 energy projects** in 10 EU Member States.

Investments will support the modernisation of:

- energy systems
- improving energy efficiency
- reducing GHG emissions in energy, industry and transport sectors



## Upcoming CETPartnership call

Opening [call](#) on **19/09** – 2 stages application with a final submission: 29/01. Budget: €130 million

Not all topics listed below are covered by all countries – to be checked case by case:

- ▶ Energy data spaces & interoperability
- ▶ Energy system flexibility: renewables production, storage & system integration
- ▶ Advanced renewable energy (RE) technologies for power production
- ▶ Carbon capture, utilisation and storage
- ▶ **Hydrogen and renewable fuels**
- ▶ Heating and cooling
- ▶ Geothermal energy technologies
- ▶ Integrated regional energy systems
- ▶ Integrated industrial energy systems
- ▶ Clean energy integration in the built environment



## European Research Council

Publication of [ERC 2025 Work programme](#).  
The programme highlights:

- ▶ Funding opportunities
- ▶ Amounts allocated to calls for projects
- ▶ Timetable for grant competitions
- ▶ ERC's funding conditions
- ▶ Member States can support excellent, proposals which could not be funded due to budgetary constraints, using the ERDF.

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# REPORTS & DATA

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# Reports recently published

Publication of a [Report on science, research and innovation performance in Europe](#) by the EC.  
R&I investment in has increased, but remains far from the European target of 3% of GDP.



- the EU ranks well in the world in terms of scientific output (surpassed only by China)
- 10% of the most cited publications worldwide
- knowledge base relatively more diversified in innovation than that of other innovators



- the EU is less specialised in key productivity-enhancing technologies than China and the US
- the venture capital market in Europe is limited compared to other regions of the world

Regarding R&D in defence and security, defence investment is mainly focused:

- On equipment procurement and on the later stages of defence technology development;
- Rather than on R&D, on fundamental research and on the technology testing phase

The authors recommend, among other things, **bridging the gap between civil and military R&D**, so that the EU can fully exploit the potential of dual-use technologies and maximise the potential of technological investments.

# Reports recently published

- [European Innovation ScoreBoard 2024](#), EU Publications
- [2024-2034 Research, Development and Innovation roadmap for a carbon-neutral Europe](#), ENTSO-E: it details the ten-year mission to overcome the current challenges and details the long-term investment and technology objectives to achieve a carbon-neutral Europe. Focus on:
  - Power Grids
  - Digitalised power systems
  - One-System of integrated systems
- [Cleaning up steel in cars: why and how?](#), Transport & Environment (T&E): measures the CO2 emissions saving made possible by using steel produced from green hydrogen and electric arc furnaces in steel production; and the price impact of shifting to green steel for cars, taking into consideration carbon pricing mechanisms.
- [Report on Energy and climate transition: How to strengthen the EU's competitiveness](#), BusinessEurope: setting out 7 recommendations for urgent action among them one on hydrogen:
  - (3) "Secure the hydrogen value chain: Call for investment certainty and safeguarding of industrial demand for green hydrogen"

# THANK YOU!



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Research**

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**Next meeting to be scheduled:  
27 September  
25 October  
29 November**

**<https://hydrogeneuroperesearch.eu/>**