MONITORING REPORT

9 JULY 2020

SUMMARY

INSTITUTIONAL DEVELOPMENTS

HYDROGEN STRATEGY

- Renewable hydrogen is the Commission's priority, "clean" hydrogen remains an option
- Clean Hydrogen Alliance launched, gas industry at the forefront

SECTOR INTEGRATION STRATEGY

- European Commission presents strategy to decarbonise EU energy through system integration

ENERGY STORAGE

- Members of the Committee on Industry, Research and Energy call for a comprehensive strategy for energy storage

EU FUNDING

- European Commission publishes the first Innovation Fund calls for proposals
- European Investment Plan finances renewable energy projects in Spain and Austria

NEWS FROM THE SOLAR ECOSYSTEM

HYDROGEN

- Renewable industry and civil society organisations call European Commission to "choose renewable hydrogen"

LATEST UPDATES

INSTITUTIONAL DEVELOPMENTS

HYDROGEN STRATEGY

Renewable hydrogen is the Commission's priority, "clean" hydrogen remains an option

The European Commission published its Hydrogen Strategy on 8 July, in order to develop this technology with the objective of increasing the share of hydrogen to 13-14% in the EU's energy mix.

Renewable hydrogen will be the Commission's priority. Using *"mainly wind and solar energy"*, this is the *"most compatible option with the EU's climate neutrality and zero pollution goal"*, the Commission says. This will also enable economic growth and competitiveness for the EU, which is why renewable hydrogen should be deployed at large scale, starting today. The European Commission plans enabling framework conditions to support the development of wind and solar plants for gigawatt-scale renewable hydrogen production by 2030. However, *"low-carbon"* hydrogen - based on nuclear or fossil-fuels electricity - remains an option on the short and medium-term, to support the transition.

To get there, the development of hydrogen capacity is foreseen in three phases :

- By 2024: 6 GW of renewable hydrogen electrolysers, production of 1 million tonnes of renewable hydrogen
- 2025-2030: 40 GW of renewable hydrogen electrolysers, production of 10 million tonnes of renewable hydrogen
- 2030-2050: renewable hydrogen technologies should reach maturity and be deployed at large scale.

Before 2030, the European Commission evaluates investments in electrolysers at around 24-42 billion euros, additionally to 220-340 billion euros to scale up and directly connect 80-120 GW of solar and wind energy production capacity to the electrolysers to provide the necessary electricity. Overall, investments in production capacities would be somewhere between 180 and 470 billion euros by 2050.

SOURCES

- Hydrogen strategy for a climate-neutral Europe, 8 July (here)
- European Commission, press release, 8 July (here)

Clean Hydrogen Alliance launched, gas industry at the forefront

The Clean Hydrogen Alliance, launched as part of the European hydrogen strategy, is meant to bring together representatives of public authorities, industries and civil society. The Alliance's objective is to foster investment and give visibility to existing clean hydrogen projects.

The Alliance is open to *"all stakeholders with activities of significant relevance for renewable and low-carbon hydrogen"*. But already, representatives of the gas industry seem to be over-represented. Several stakeholders, including the European Environmental Bureau and MEP Michael Bloss (Greens/EFA, Germany), fear that the Alliance will not support renewable hydrogen as much as it is planned by the EU Hydrogen Strategy. In the official declaration on the launch of the

SOURCES

- Website of the European Clean Hydrogen Alliance and Declaration, 8 July (here)
- European Commission factsheet on the Clean Hydrogen Alliance, 8 July (here)
- Application form to join the Alliance (here)

Alliance, the European Commission acknowledged concerns about industry dominance and stated that a *"balanced representation"* of all stakeholders will be ensured. Stakeholders will be invited to CEO roundtables, and will participate in the Annual Hydrogen Forum. The first governing board meeting will take place in September, and the first Forum will be organised in December.

NEXT STEPS

- **September I** First governing board meeting
- **December I** First EU Hydrogen Alliance Forum
- **June 2021 I** Second EU Hydrogen Alliance Forum

SECTOR INTEGRATION STRATEGY

European Commission presents strategy to decarbonise EU energy through system integration

Alongside the EU Hydrogen Strategy, the European Commission also published the Strategy for Energy System Integration, which also aims to pave the way for a transformed European energy system in order to achieve climate neutrality by 2050.

The current model is characterised by silos in energy consumption in transport, industry, gas and buildings where each sector has its own value chain, rules, infrastructure, planning and operations. This strategy aims to establish new links between sectors and to exploit technological advances.

Three main pillars shape this strategy. First, the strategy wants to bring more circularity in the energy system, by using wasted heat or other products to create energy for other sectors (eg: by connecting data centers, which produce excess heat, to district heating networks). Another goal is to accelerate the electrification of energy consumption while building on a largely renewables-based power system. In this regard, a stated goal of the Strategy is to increase the share of electricity in final energy consumption to 30% by 2030 and 50% by 2050 (from 23% today). Finally, for sectors where electrification is difficult, the strategy promotes low-carbon fuels, such as renewable hydrogen and sustainable biofuels and biogas.

To meet these objectives, the strategy sets out 38 actions including revising existing legislation (eg: Trans European Networks in Energy and Transport Regulations, Renewable Energy Directive), providing financial support to research and deployment of technologies, and issuing guidance to Member States on fiscal measures to name a few.

SOURCES

- European Commission, Powering a climate-neutral economy: An EU Strategy for Energy System Integration, 8 July (here)
- European Commission, press release, 8 July (here)
- European Commission video, EU Energy System Integration Strategy, 8 July (here)

ENERGY STORAGE

Members of the Committee on Industry, Research and Energy call for a comprehensive strategy for energy storage

The European Parliament's plenary is set to vote on 10 July on an own-initiative report put forward by the ITRE Committee (Industry, Research, Energy). The report, on a comprehensive European approach to energy storage, aims to enable a massive increase of storage capacity in order to cope with the surge of electricity demand (expected to double by 2050) and the EU's ambitions for renewable energy (55% share of renewable by 2030).

The report makes recommendations to the European Commission and Member States to fully explore the storage potential of the EU. Most

SOURCES

- Report on a comprehensive European approach to energy storage, 2 July (here)

importantly, these include setting up a European Commission task-force across Directorate-Generals *"to develop a comprehensive strategy for energy storage"*. This task-force should notably analyse the *"life cycle of all available storage alternatives with a focus on their carbon footprint"*.

The Report also points out to regulatory barriers hampering the development of storage capacity, such as the double taxation of storage providers that could be remedied in the upcoming revision of the Energy Taxation Directive. Likewise, the report identifies a revision of State Aid guidelines and of Projects of Common Interest as possible ways forward.

Finally, the report also makes recommendations on specific storage solutions, such as chemical Storage (Power to X), electrochemical storage, mechanical storage, thermal storage and decentralised storage (consumers).

For context, an own-initiative report of the European Parliament is not legally binding on other institutions, and as the Parliament cannot put forward legislation, such a report may not lead to any significant change. However, the President of the European Commission Ursula von der Leyen has pledged to put forward a legislative proposal when a resolution is adopted by the Parliament.

EU FUNDING

European Commission publishes the first Innovation Fund calls for proposals

The European Commission has published the first call for proposals under the Innovation Fund. This new EU fund will finance innovative low-carbon technology projects through revenues from the auctioning of allowances under the EU Emissions Trading System. For the 2020-2030 period, 10 billion euro will be allocated to this fund.

The first call for proposals will grant a total of 1 billion euro to large-scale projects of a total capital expenditure above 7,5 million euro. The projects should develop breakthrough technologies for renewable energy (including solar energy), energy-intensive industries, energy storage, and carbon capture, use and storage.

According to the call for proposals, a project may be considered innovative if it differs from products normally offered by existing suppliers; it is not currently offered as a standard; its expected outcomes are innovative compared to existing solutions; or it is further advanced from previously conducted demonstrations. *"Activities that help stimulate the construction and operation of innovative renewable energy"* technologies are explicitly mentioned as eligible.

The evaluation of applications follows a two-stage process. During the first stage, projects are assessed on their greenhouse gas emission avoidance potential, their degree of innovation, and the maturity of the project. During the second stage, the scalability and cost efficiency of the 70 pre-selected projects are also assessed.

SOURCES

- European Commission, press release, 3 July (here)
- Innovation Fund, first call for proposals, 3 July (here)

NEXT STEPS

- **29 October I** Deadline for submission of applications
- **Q1 2021 I** Publication of evaluation results
- **Q2 2021 I** Deadline for submission of applications for the second stage
- **Q4 2021 I** Information on second stage evaluation results
- **End of 2021 I** Award of the grants

European Investment Bank finances two renewable energy projects in Spain and Austria

The European Investment Bank (EIB) will provide funds to two renewable energy projects in Europe. The Spanish Cabrera photovoltaic solar plant, the largest solar plant in Andalusia, will be provided with 43.5 million euros. This project ambitions to provide energy to around 145.000 households per year and create 350 jobs during construction. In Austria, 63 million euros will be made available for the construction and operation of two wind farms (Prinzendorf III and Powi V).

This funding is backed by the European Fund for Strategic Investment (FESI) which supports SMEs and startups in meeting the EU's economic and environmental goals. *"Investing in renewable energies is crucial to meet the goals of the European Green Deal and to reach climate neutrality by 2050"*, said European Commissioner for the Economy Paolo Gentiloni.

SOURCES

- European Commission, *"Green recovery: EIB finances the largest solar project in Andalusia, Spain"*, 26 June (here)
- European Commission, *"Investment Plan for Europe: EIB finances Austrian wind farms of Windkraft Simonsfeld"*, 26 June (here)

NEWS FROM THE SOLAR ECOSYSTEM

HYDROGEN

Renewable industry and civil society organisations call European Commission to "choose renewable hydrogen"

The "Choose Renewable Hydrogen" initiative, gathering NGOs and industry representatives including SolarPower Europe, have sent a letter to the European Commission, calling for the Hydrogen Strategy to focus on renewable energy to develop a competitive electrolyser industry. According to the letter, *"the EU renewable hydrogen success story can only be achieved by enacting a clear commitment towards renewable hydrogen as the only clean hydrogen"*, but *"the potential of renewables in Europe remains largely untapped"* to reach decarbonisation of sectors that are difficult to electrify.

The EU hydrogen Strategy, which was published on 8 July, focuses on hydrogen produced from renewable sources, and acknowledges that a combination of wind and solar energy is the *"most compatible option with the EU's climate neutrality and zero pollution goal"*. However, "grey hydrogen" is also favoured in the short to medium term as a transition solution.

USEFUL LINKS

- Choose Renewable Hydrogen, *"A future-proof EU Hydrogen Strategy delivering on the green recovery"*, 3 July (here)

AGENDA

EU INSTITUTIONS

16/07 Meeting of the Committee on Industry, Research and Energy (ITRE)
On the agenda: Exchange of views with Mr Peter Altmaier, German Minister for Economic Affairs and Energy

17-18/07 Special European Council
On the agenda: Proposal for a new recovery instrument and for the multiannual financial framework (MFF) for 2021-2027
More information: here

22-24/07 European Research and Innovation Days
More information: here

Sept-Oct European Commission publishes its assessments of National Energy and Climate Plans (NECPs)

04-05/11 The Business Booster by EIT InnoEnergy
More information: here

SOLAR ECOSYSTEM

29/09 SolarPower Europe - SolarPower Summit 2020
More information: here