



## FOCUS ON HYDROGEN: EU FUNDING PROGRAMMES FOR ENERGY PROJECTS

The EU has recently approved the budget for a number of funding programmes which could help kick-start the clean hydrogen economy in Europe. In this briefing, we outline the potential sources of financial support for developers of hydrogen projects.

### BUDGETING FOR HYDROGEN

On 17 December 2020, the European Council (the Council) adopted the regulation laying down the EU's multiannual financial framework (MFF) for 2021-2027. The new MFF sets a long-term budget of €1,074.3 billion plus a €750 billion Next Generation EU (NGEU) recovery instrument to both of which a 30% climate target is applicable – i.e. approximately €600 billion will be made available for the green transition. Consequently, clean energy projects are expected to be a major focus for investment in this period.

On 8 July 2020, the European Commission (the Commission) adopted a new dedicated strategy for hydrogen in Europe. The Commission noted that the deployment goals of 2024 and 2030 outlined in the strategy would require a strong investment agenda, exploiting synergies and ensuring coherence of public support across the different EU funds and EIB financing. Hydrogen is featured as a key sector to benefit from the aforementioned €600 billion support under the new MFF and NGEU as it can contribute to achieving the EU Green Deal objectives.

To date, several innovative hydrogen projects have received grants for studies and works through EU funding instruments such as Rephyne that will install and operate the world's largest hydrogen electrolyser or the Oyster project which will lead to the development of a marine electrolyser system designed to be integrated with offshore wind turbines. The way forward for the development of hydrogen projects in the EU seems to be quite promising given the Commission's upcoming legislative proposals coupled with the multiple sources of EU funding described below in greater detail.

### NEXT GENERATION EU (NGEU)

NGEU is a €750 billion temporary recovery instrument, which will be channelled through the EU's long-term budget for 2021-2023. The funds will be invested across several programmes, and will be distributed to EU countries and beneficiaries in the form of grants (€390 billion, of which €5.6 billion will be for guarantees) and loans (€360 billion) through the following

#### EU investment agenda

- By 2030, investments in electrolysers could range between €24 and €42 billion
- €220-340 billion required to scale up and directly connect 80-120 GW of solar and wind energy production capacity by 2030
- 39,700 km European Hydrogen Backbone requires total investment of €43-81 billion by 2040

#### Key EU funding programmes

- **RRF**: €672.5 billion in loans and grants
- **JTF**: €17.5 in grants
- **InvestEU**: EU budgetary guarantee of €26.2 billion
- **CEF**: €25.81 billion in grants
- **Horizon Europe**: €95.5 billion in grants

#### Important deadlines

- 30 April 2021: RRP submission
- 31 August 2021: ERC advanced grant (€626 million)

#### State aid considerations

- EU funds managed and awarded by Member States may be subject to EU State aid rules
- No State aid rules apply to EU funds managed and granted directly by the Commission

funding programmes: Recovery and Resilience Facility (RRF), REACT-EU, Rural development, Just Transition Fund, InvestEU, rescEU and Horizon Europe.

## **RECOVERY AND RESILIENCE FACILITY (RRF)**

The RRF will make €672.5 billion in loans and grants available to support reforms and investments undertaken by Member States. Member States must prepare a Recovery and Resilience Plan (RRP) setting out a coherent package of reforms and public investment projects. To benefit from the support of the RRF, these reforms and investments should be implemented by 2026. Member States must submit their final RRP to the Commission between 1 January and 30 April 2021. The Commission will adopt a decision by way of implementing act within four months of the official submission of the RRP, setting out the financial contribution allocated to the Member State.

Upon completion of the relevant agreed milestones and targets indicated in its RRP, the Member State can present a request to the Commission for a disbursement of financial support. RRF is a funding tool that will be appropriate for currently mature hydrogen projects, as 70% of the grants must be committed to the Member States in the years 2021 and 2022 and the funded actions should be implemented within the following five years.

## **JUST TRANSITION MECHANISM (JTM)**

The Just Transition Mechanism addresses the social and economic effects of the transition to a climate-neutral economy, focusing on the regions, industries and workers who will face the greatest challenges, and mobilising at least €150 billion, through its three pillars:

### **Just Transition Fund (JTF)**

The Just Transition Fund is a key element of the European Green Deal and the first pillar of the JTM. It is a new instrument with an overall budget of €17.5 billion, of which €7.5 billion is from the MFF and €10 billion from the NGEU.

The JTF aims to alleviate the social and economic costs resulting from the transition to a climate-neutral economy, through a wide range of activities directed principally at diversifying economic activity and helping people to adapt in a changing labour market (primarily in the so-called "coal regions in transition").

In order to unlock funding from the JTF, Member States must prepare a Territorial Just Transition Plan (TJTP) identifying eligible territories that are expected to be the most negatively impacted by the green transition, in line with their national smart specialisation strategies and National Energy and Climate Plans.

### **InvestEU**

The InvestEU Programme builds on the success of the Investment Plan for Europe and the European Fund for Strategic Investments (EFSI). It comprises an EU budgetary guarantee of €26.2 billion, distributed across the following policy windows:

- Sustainable infrastructure: EUR 9.9 billion

- Research, innovation and digitisation: EUR 6.6 billion
- SME: EUR 6.9 billion
- Social Investment and skills: EUR 2.8 billion

At least 30% of the investments under InvestEU will contribute to meeting EU objectives on climate action, providing for a dedicated Just Transition Scheme (Pillar 2 of the JTM) to generate additional investments for the benefit of regions with an approved TJTP.

Project promoters should apply directly to the EIB, to national and regional promotional banks, or to the national offices of International Financial Institutions such as the EBRD or the Council of Europe Development Bank. At that stage, financial partners should submit a proposal to the Commission to apply for an EU guarantee.

### **EIB public sector loan facility**

This facility consists of a grant and a loan component. With the contribution of €1.525 billion for the grant component from the EU budget and EIB lending of €10 billion from its own resources, the aim is for the EIB public sector loan facility to mobilise €25-30 billion in public investment over the 2021-2027 period.

### **INNOVATION FUND**

The Innovation Fund focuses on highly innovative technologies and big flagship projects within the EU that can lead to significant emission reductions. It is about sharing the risk with project promoters to help with the development of first-of-a-kind highly innovative projects.

The Innovation Fund aims to finance a varied project pipeline, finding an optimal balance of a wide range of innovative technologies in all eligible sectors and Member States, Norway and Iceland. At the same time, the projects need to be sufficiently mature in terms of planning and the business models as well as the financial and legal structure. The Fund supports cross-cutting projects on innovative low-carbon solutions that can lead to emission reductions in multiple sectors, for example, through industrial symbiosis. The Innovation Fund is also open to small-scale projects with total capital costs under €7.5 million. The next call for proposals is expected to be launched in 2022.

### **CONNECTING EUROPE FACILITY**

On 12 March 2021, the Council and the European Parliament reached provisional agreement on the second edition of the EU's flagship programme, the Connecting Europe Facility (CEF 2). CEF 2 will continue to fund key projects in the areas of transport, digital and energy. It will run from 2021 to 2027, with a significant overall budget of €33.71 billion.

The budget for each sector will be allocated as follows:

- transport: €25.81 billion (including €11.29 billion for cohesion countries)
- energy: €5.84 billion

- digital: €2.06 billion

Synergies between CEF Energy and CEF Transport will be harnessed to fund dedicated infrastructure for hydrogen, repurposing of gas networks, carbon capture projects and hydrogen refuelling stations.

CEF Energy primarily provides funding to Projects of Common Interest (PCIs), which are key electricity and gas infrastructure projects selected by the Commission every two years – to be included in the so-called "PCI lists" adopted in the form of delegated acts – and governed by the TEN-E Regulation 347/2013. This Regulation is currently under review and the revised Regulation is expected to enter into force in early 2022. Consequently, hydrogen infrastructure projects will be eligible to apply for CEF funding if they are included in the 6<sup>th</sup> PCI list, to be adopted in 2023.

## **HORIZON EUROPE**

Horizon Europe is an EU research and innovation framework programme that will run until 2027. It has a budget of €95.5 billion (including €5.4 billion from the RRF). The first Horizon Europe Strategic Plan (2021-2024), which sets out key strategic orientations for the support of research and innovation, was adopted on 15 March 2021. The work programme for the European Research Council (ERC) was adopted on 22 February 2021, and the European Innovation Council (EIC) was formally launched on 18 March 2021. The ERC supports frontier research, cross disciplinary proposals and pioneering ideas in new and emerging fields through competitive funding, while the EIC supports breakthrough technologies and innovations to create new markets and scale up internationally. The next ERC call will open on 20 May 2021.

Horizon Europe will support European Partnerships in which the EU, national authorities and / or the private sector jointly commit to support the development and implementation of a programme of research and innovation activities.

The Commission will also provide targeted support to build the necessary capacity for the preparation of financially sound and viable hydrogen projects, where this is identified as a priority in the relevant national and regional programmes, through dedicated instruments (e.g. InnovFin Energy Demonstration Projects, InvestEU) possibly in combination with advisory and technical assistance from the Cohesion Policy, from the EIB Advisory Hubs or under Horizon Europe.

## **STATE AID CONSIDERATIONS**

Member States must comply with state aid rules, the primary objective of which is to prevent undue distortion of competition. State aid normally arises in situations of funding from state resources. However, State aid may also arise from use of EU resources which are managed at Member State level.

Consequently, EU funding managed and awarded by the Member States through the relevant national managing authorities (e.g. ERDF, RRF) will be subject to the EU State aid rules, *i.e.* there will be a procedure of review and approval whereby the aid should meet the criteria set out in the relevant State aid Guidelines.

By contrast, in the case of EU funds managed and granted directly by the Commission, no State aid rules apply, and the funds can be granted as soon as the selection process and final eligibility checks are completed.

## **ABOUT**

Focus on Hydrogen is a Clifford Chance briefing series covering hydrogen-related developments globally. 1.008 is the standard atomic weight of hydrogen.

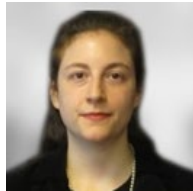
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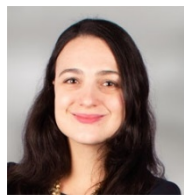
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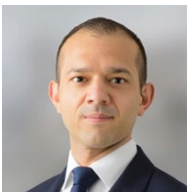
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