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ANNEX

ANNEX

to the

Commission Decision

**on the signing on behalf of the European Commission of the Joint Declaration on
Hydrogen Valleys - Moving the hydrogen economy from niche to scale**

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Joint Declaration on Hydrogen Valleys

Moving the hydrogen economy from niche to scale

The European Commission has set an ambitious goal for Europe to become the first climate neutral continent by 2050. The transformation towards a green, competitive and net-zero economy requires fundamental structural changes and breakthrough technologies.

The European Green Deal maps out this transformation and places renewable hydrogen as one of the priority areas where innovative and market-ready technologies are needed to accelerate the phasing-out of fossil fuels and to ensuring economic and social welfare to EU citizens. Following the war of aggression in Ukraine, hydrogen is also seen as crucial to ensuring the continent's energy security.

The REPowerEU Communication takes the ambition of the European Green Deal to the next level. Its Hydrogen Accelerator sets out a strategy to double the previous EU renewable hydrogen target to 10 million tons of annual domestic production, plus an additional 10 million tons of annual hydrogen imports by 2030. In addition, the European industry, supported by the European Commission, committed to a tenfold increase of its electrolyser manufacturing capacities by 2025.

Meeting the ambitious targets set by the REPowerEU and the Hydrogen Accelerator will require the EU to significantly upscale its hydrogen economy. Hydrogen Valleys are one of the best answers to this challenging task as they bring together clean hydrogen production, storage, distribution and end-use into fully functioning and sustainable local or regional value chains. In doing so, they create ecosystems where research and innovation can be tested in real time and find immediate use leading to further advances in the hydrogen sector. Hydrogen Valleys are a strong instrument to showcase how the EU hydrogen economy works at the local level for citizens.

To accelerate this game-changing development, substantial investments in research and innovation are needed as well as a joint public and private effort. Horizon Europe, the EU's Framework Programme for Research and Innovation (R&I), supports the Clean Hydrogen Joint Undertaking with EUR 1 billion, matched by the same amount from industry and research partners. Furthermore, the European Commission has allocated an additional EUR 200 million for Hydrogen Valleys, as part of REPowerEU. This will bring the EU closer to doubling the number of Hydrogen Valleys across Europe.

Increasing the number of Hydrogen Valleys in Europe

Today, we already have several Hydrogen Valleys across Europe that showcase the hydrogen ecosystem locally by bringing together all the elements of hydrogen production, storage, transportation, and end-use in a single place.

However, for Europe to remain a frontrunner in rolling out Hydrogen Valleys, we – the European hydrogen industry, scientific community, and European regions, together with the

European Commission - commit to stepping up and accelerating joint actions in the following areas:

1. Reinforcing the research and innovation agenda for clean hydrogen by providing a strategic framework aimed at accelerating the development and deployment of Hydrogen Valleys, build on strong European and national commitments and supportive policies for development and deployment of clean hydrogen technologies for the decarbonisation of the energy, transport and buildings sectors as well as for the hard-to-abate industries.

To this end, the European Commission will present its Roadmap on Hydrogen Valleys in May 2023 to accelerate the deployment of Hydrogen Valleys across Europe.

More broadly, all signatories will further support a European Research Area for hydrogen through the optimal alignment of EU, national and regional initiatives, capitalising on and expanding the existing research and technology infrastructures and developing synergies through the SET Plan and its supporting co-funded Clean Energy Transition Partnership.

2. Continued investments in research and innovation for clean hydrogen technologies including via the Clean Hydrogen Joint Undertaking under Horizon Europe. Thanks to the EU investments in hydrogen through the public-private partnership during successive EU R&I Framework Programmes, the EU is now a world leader in multiple hydrogen technologies. The success of the private-public partnership's implementation of the research and innovation priorities in hydrogen will continue to depend on the steady allocation of resources of all relevant stakeholders and on attracting additional private investors.

3. Maximise funding impact by working together to strengthen synergies between the Clean Hydrogen Joint Undertaking and other EU public private partnerships including the Knowledge and Innovation Communities of the European Institute of Innovation and Technology EIT, in particular EIT InnoEnergy, other EU funding instruments, such as Cohesion policy funds, the Innovation Fund, and national and regional funding instruments. Aligning EU funding rules and raising awareness about all the available funding options for research, innovation and development is of paramount importance.

4. Promote knowledge sharing and partner matchmaking to build on the existing experience and accelerate successful development of new projects, including via different European platforms such as the Hydrogen Valley Smart Specialisation Partnership, the Clean Hydrogen Knowledge Hub, or through Hydrogen Europe and Hydrogen Europe Research. For instance, the European Hydrogen Week, a yearly event that takes place in Brussels, offers another great opportunity for stakeholders to engage with each other, to take stock of the progress and offer lessons learnt.

5. Stimulate the development of education and training for skills, building on the existing initiatives across the EU. It is necessary to work together and at all levels to prepare the European workforce for the scale up of the hydrogen economy. Understanding the skills trends and needs and designing training programmes to match these will be one of the top priorities in the coming years. The success in this area will have implications not only for European competitiveness but for the general acceptance of hydrogen technologies.

Engagement within ERASMUS+, the future European Hydrogen Skills Alliance and the Deep Tech Talent Initiative of the European Institute of Innovation and Technology will provide a good basis for a coordinated European effort on promoting and advancing hydrogen skills.

6. Spearhead the development of Hydrogen Valleys as steppingstones to incubate and grow a European - and by extension global - hydrogen economy Regional hydrogen networks and interconnections between Hydrogen Valleys, for instance through Projects of Common Interest and Projects of Mutual Interest under the TEN-E framework and / or under the Interregional Innovation Investment Instrument of the Cohesion Policy, are of particular importance to jumpstart the European hydrogen economy and increase the resilience of the energy system. Furthermore, Hydrogen Valleys, a European concept, are spreading across the globe. As such, we welcome and are ready to support the Mission Innovation's Clean Hydrogen Mission, working in synergies with the Clean Energy Ministerial's Hydrogen Initiative, to build a global clean hydrogen economy in which Hydrogen Valleys will play a central role.

We, undersigned stakeholders, hereby join efforts to support and accelerate the research, development, demonstration and deployment of Hydrogen Valleys and the related infrastructure, as outlined in this Declaration, to achieve the targets set in the European Hydrogen Strategy and REPowerEU and pave the way towards a climate-neutral, circular, competitive, and energy-secure economy in Europe.