

## Manifesto for the development of a European "Hydrogen Technologies and Systems" value chain

The Kingdom of Belgium, the Republic of Bulgaria, the Czech Republic, the Kingdom of Denmark, the Federal Republic of Germany, the Republic of Estonia, the Hellenic Republic, the Kingdom of Spain, the French Republic, the Republic of Croatia, the Italian Republic, the Grand Duchy of Luxembourg, the Republic of Hungary, the Kingdom of the Netherlands, the Kingdom of Norway, the Republic of Austria, the Republic of Poland, the Portuguese Republic, Romania, the Republic of Slovenia, the Slovak Republic, the Republic of Finland, and the Kingdom of Sweden are pursuing ambitious low-carbon and renewable hydrogen goals and are planning to contribute with incentives to build a sector of excellence in Europe.

We agree that hydrogen applications and technologies can contribute both to the creation of sustainable industrial jobs and to the attainment of Europe's energy and climate targets in line with the Paris Agreement. We recall the European Commission's communication on "A hydrogen strategy for a climate-neutral Europe" and the Council conclusions "Towards a hydrogen market for Europe."

We recognise the importance of promoting cross-border collaboration and of working on large-scale joint investment projects in order to support the development and deployment of hydrogen technologies and systems, particularly in hard-to-abate sectors where hydrogen and its derivatives are either the only available or the most cost-efficient decarbonisation solution, and of fostering a liquid, sustainable and contestable European hydrogen market in the near future as well as supporting export industries. The joint projects shall include sectors along the whole hydrogen value chain, notably (i) the safe and sustainable low-carbon production of hydrogen, where emphasis should be given to hydrogen from renewable sources, and its derivatives, (ii) equipment manufacturing (incl. electrolysers and equipment for heavy-duty mobility, such as light commercial vehicles, buses, trucks, hard-to-electrify railways, shipping or aviation), (iii) solutions for hydrogen storage, transmission and distribution (incl. refueling stations along roads, rails and ports), and (iv) industrial applications of hydrogen (incl. the decarbonisation of industrial facilities). Projects should encompass research, development, innovation activities, first industrial deployment and the largescale roll-out and broad implementation of related installations, factories and networks, based on a clustered approach where possible, in order to achieve an initial range of significant hydrogen-based GHG-emission reductions, thereby being of great importance for the environment, energy, and transport strategy goals of the Union. To this end, we strive to promote the realisation of "Important



Projects of Common European Interest on Hydrogen Technologies and Systems" (IPCEI on Hydrogen), as recommended in the report of the Strategic Forum for IPCEIs on the 6 key strategic value chains, and chiefly on the "Hydrogen Technologies and Systems" key value chain.

We invite all other interested EU and EFTA member states to join this initiative, which is open to countries willing to participate in the construction of the IPCEI on Hydrogen. The objective of the IPCEI on Hydrogen is to guarantee Europe's technological leadership, to allow European companies to take the lead on the emerging markets for hydrogen, and to build a European framework for the emergence of a hydrogen value chain. At the same time, the objective is a significant contribution to the reduction of greenhouse gas emissions and facilitating the integration of renewable sources in the participating Member States in accordance with their National Energy and Climate Plans.

We commit to launching the IPCEI on Hydrogen and to initiating the next steps in coordination with the European Commission, the European Clean Hydrogen Alliance and European industry. With a view to this aim, we envisage the following indicative schedule for a first wave of the IPCEI on Hydrogen:

- Match-making workshops: February and March 2021
- Drafting of chapeau: starting immediately after the match-making
- Pre-notification: May 2021
- Notification: possibly in November 2021 (aiming at final decision by the end of 2021)
- Start of project implementation: 2022

## 17th December 2020

The Kingdom of Belgium the Kingdom of Denmark the Hellenic Republic the Republic of Croatia the Republic of Hungary the Republic of Austria Romania the Republic of Finland

the Republic of Bulgaria the Federal Republic of Germany the Republic of Estonia the Kingdom of Spain the Italian Republic the Kingdom of the Netherlands the Kingdom of Norway the Republic of Poland the Republic of Slovenia the Kingdom of Sweden

the Czech Republic the French Republic the Grand Duchy of Luxembourg the Portuguese Republic the Slovak Republic