



EU strategy on hydrogen in the context of energy diplomacy

Luca Polizzi
*DG Research & Innovation
Clean Planet Directorate
Policy Officer
Research and Innovation Policy on Hydrogen*

R&I is essential for building up a successful hydrogen economy

3 macro priorities: Production/ Storage, transport and distribution/ Utilisation

How:

- improving **technology**
- increasing **efficiency** of the whole value chain, from production to final use
- preparing for deployment through **demonstration** in industrial environment
- **decreasing costs** through developing improved production and business processes
- enhancing **sustainability**
- indicating **skills** needs and **regulatory barriers**

What is going on?

- **Horizon Europe** initiatives relevant for the Hydrogen Strategy: new European Partnership, synergies with other Horizon Europe actions, European Innovation Council, European Institute of technology, Co-fund with Member States
- Work on **Single Basic Act part for the Clean Hydrogen Partnership** and respective **Work Programmes** (AWP/MAWP) is progressing – Flagship approach
- Member States' **Agenda Process on the ERA Pilot on Green Hydrogen**, supported by the Commission
- **R&I investment agenda**
- Contribution to the **European Alliance on Hydrogen**
- **International priorities**

The way forward is to connect the dots

- Along the value chain, **improving R&I support to deployment** and listening to industry needs
- Developing critical **synergies** with other relevant policies and programmes: skills agenda, infrastructure needs, evidence-based input for prioritisation and for regulatory frame revision – Inter Partnership Assembly
- Developing **synergies with national and regional actors**, using the ERA frame – hydrogen ERA Pilot and hydrogen valleys (flagship)
- Support to develop **new skills across the entire value chain** - Skills Pact needing to be extended for Hydrogen as an ecosystem by itself
- **What about “synergies inside MS teams themselves”?** (synergies between various representations, ERA, SRG of the JU, SET Plan etc...) – links with the Agenda Process

Also with a Commission Staff Working Document

Commissioner Gabriel asked for a **Staff Working Document on the contribution of EU R&I and science-driven actions on hydrogen to the Hydrogen Strategy.**

This SWD aims at:

- **Complementing MS initiatives**
- Getting an overview on related EU R&I initiatives
- Identifying improvements needed
- Complementing the Member States' initiative on the agenda process on the R&I Pilot on Hydrogen

Tentative time table: to be issued for **December 2021**

The international dimension of hydrogen

- **Mission Innovation 2.0** – clean hydrogen mission
 - Accelerate the building of a global clean hydrogen economy by reducing end-to-end clean hydrogen costs to USD \$2 per kg by 2030 – developing Hydrogen Valleys worldwide
- **Commission Communication** – Renewed partnership with the Southern Neighborhood - A new Agenda for the Mediterranean – February 2021
 - Joining forces to fight climate change, decrease harmful emissions, use resources sustainably and speed up the green transition (hydrogen production as a new strategic priority in the Neighborhood)
- **IPHE** – International Partnership for Hydrogen and Fuel Cells in the economy
 - 19 member countries - to facilitate and accelerate the transition to clean and efficient energy and mobility systems using Hydrogen and fuel cell technologies across applications and sectors
- **CEM** – Clean Energy Ministerial
 - shape the global clean energy agenda and advance the deployment of specific clean energy technologies and solutions.

THANK YOU for your attention!

Contact points:

Hélène CHRAYE, HoU RTD C1

Jeroen SCHUPPERS, DHoU, RTD C1

Martin GIEB, RTD C1

Luca POLIZZI, RTD C1