Flash report: Meeting of Hydrogen Europe (HE) representatives with DG Henrik Hololei

Date: 12/03/2018
Participants: Henrik Hololei [redacted]

The Chair of Hydrogen Europe [redacted] thanked HH for DG MOVE's support for Hydrogen until now. She highlighted that hydrogen is a sustainable solution, but there are still several challenges for further integration like

- a robust research on future generation hydrogen technologies
- an investment on maturing second generation hydrogen technologies
- an acceleration for mass market uptake

She also emphasised that there is currently an increasing interest in Europe for hydrogen, nevertheless Europe needs to act quickly because in particular China has a large market that enables it to act quickly on the technology; Europe, unlike for batteries, should maintain technological leadership.

Other points made by the HE participants throughout the meeting:

- A balanced approach between decarbonisation technologies is required without having to pick winners and losers -technological neutrality should be maintained; e.g. for transport, fuel cell and battery-electric can be complementary
- A continuation of the current PPP approach is needed to help Europe to reach market uptake. Some current successes of the FCH JU are
  - Forklifts have reached mass market. E.g. in Belgium, Colruyt is switching to fuel cell powered forklifts thanks to FCH JU project
  - Taxis are expected to reach mass market before 2025
  - New HE members come from the gas sector thanks to synergies developed by the JU
- Heavy duty trucks run on batteries have several constraints, Hydrogen is a solid solution
- Hydrogen creates an ecosystem that addresses multi-sectorial applications that enables thinking outside silos and links different sectors (esp. energy and transport)
  - Full decarbonisation can only be achieved with sectoral integration
  - Steel industry needs big volumes of hydrogen; chemical industry provides hydrogen that could be used also in transport
- Coordination is one of the key successes of the FCH approach since it involves Member States, EC, infrastructure, vehicles, different sectors and supply and demand. The JU can be used for coordination
- The European value chain is strong and currently Europe is a world leader in electrolysers

In answering the DG's question about what needs to be done to keep leadership and deploy the technologies, HE members proposed the following

- Integrated approach between vehicles and infrastructure
- Bring down the price of hydrogen (currently about 9.5€/kg; from below 6€/kg it will be competitive for several sectors)
- a deployment of minimum 50,000 vehicles/year to reach critical mass since after reaching the right volume, fuel cell electric vehicles cost the same or less compared to battery electric vehicles
- Increase use of joint procurement tools: procuring >50 hydrogen refueling stations could drastically decreases the cost per stations
- cities and regions should think more globally and consider hydrogen innovation chains/systems for decarbonizing/reducing emissions

- EC could investigate attempts by municipalities to try to source (unsuccessfully) only from local/national manufacturers
- Some European manufacturers (e.g. Daimler who had been leading in car technology) do not deliver products; EC could take initiative and invite Daimlers CEO to discuss
- Regulation differs across MS (some based on EU legislation -ENER/ENV) and pose several constraints -these hurdles need to be overcome in order to convince gas station owners to install refueling stations (e.g. some MS require large radius around refuelling stations to be unoccupied, based on legal provisions for big industrial installations).

The DG stated that he is fully supportive of Hydrogen and its market uptake, especially since several patents are European and Hydrogen industry is a paragon of European innovation.