

Meeting with EDF, Fortum and UPM

19 May 2021

Participants

- [REDACTED], EDF
- [REDACTED], Fortum
- [REDACTED] UPM
- Joan Canton (Cabinet Breton)

Summary

The meeting was used to present the main results of a study prepared by Aurora with the support of Arcelor Mittal, EDF, Fortum and UPM on hydrogen.

The key findings could be summed up as follows:

- Meeting the EU hydrogen demand in a cost-effective way requires the support of electrolytic hydrogen produced from all sources of renewable and decarbonized electricity
- Such an approach allows for a hydrogen production cost decrease compared to a scenario where only hydrogen produced with additional renewables is supported as:
 - o more projects can be developed in the short/medium term at a more efficient costs for society
 - o electrolyzers with higher load factors greatly improves projects' economics whilst contributing to building flexibility across sectors
 - o with a life-cycle assessment approach, the overall CO2 emissions are lower
 - o there is less reliance on imports from outside the EU which add long distance transport costs and increases CO2 emissions
- A key first step will be to clarify the definitions of different types of hydrogen, with CO2 emissions as a key criteria, and ensure a robust EU-wide certification scheme.

Regarding additionality, EDF, Fortum and UPM indicated that in their views, this approach is not suited in particular if it should become the basis for EU hydrogen legislation and apply to other sectors such as industry where there is an urgent need to replace the volumes of grey hydrogen with green and low carbon hydrogen. Restricting hydrogen volumes by introducing the additionality principle in industry would only slow down the replacement of fossil hydrogen with clean hydrogen.

The Commission explained the ongoing work as part of the Clean Hydrogen Alliance and on the preparation of the fit for 55 legislative package.