

PRESS RELEASE

EU project STORE&GO discusses the potential of the Power-to-Gas-technology storing renewable power with key stakeholders from politics and industry

Brussels, October 18, 2018 – The European large-scale energy storage project STORE&GO intensifies the political dialogue in Brussels to show that the Power-to-Gas-technology is the key enabler for a CO₂-neutral European energy system. As part of a political dinner yesterday evening the STORE&GO consortium discussed with key stakeholders from the European Commission, industry and research the potential of Power-to-Gas-applications in the European energy system as an important step in the energy transition.

“The STORE&GO project as a reality lab exemplifies the integration of large amounts of renewable energy sources. Integrating such large amounts of renewable energy poses technological difficulties, as those sources, like wind and solar, are volatile and generate electricity intermittently. Thus, at times there will be a surplus of energy when there is no demand for it, and vice versa. Storing large amounts of electrical energy from renewable sources will enable countries to deal with long lasting periods without sufficient wind and sun available“, said Gerald Linke, chairman of the German Association for Gas and Water (DVGW).

Power-to-Gas is a key technology in the transition of energy systems into a green, low carbon world by converting renewable power into renewable gases. It is a reliable and efficient way to store energy and to support fluctuating energy supplies from wind and sun. Therefore it could play a fundamental role to reach climate targets in time in all energy consuming market segments. Green gases produced by Power-to-Gas can be supplied to end consumers via the existing gas infrastructure.

“Our future energy systems will be based on intermittent renewable energy sources. These systems will need large scale energy storage in order to ensure the security of supply. Chemical energy carriers provide the highest energy density and especially gas provides the highest existing storage capacity as well, so it seems obvious to use surplus of renewable energies for the creation of synthetic natural gas (SNG) by Power-to-Gas technologies. While the technical feasibility has been shown in several research projects, the new Horizon 2020 project STORE&GO aims to bring the technology to a level to be integrated in the daily operation of European energy grids“, stated Ulco Vermeulen, Member of the Executive Board of the Dutch Gasunie.

In order for the European Union to meet the assigned target of reducing CO₂ emissions by at least 40 per cent by 2030 compared to 1990 and by 80–95 per cent by the year 2050, the majority of fossil and nuclear energy must be replaced with renewable energy. As renewable sources tend to be volatile and generate energy intermittently, long-term storage will be required.

„The technology is ready but needs to be tested under real conditions. Therefore three demo plants are built and operated in Germany, Italy and in Switzerland. This will allow to evaluate different technologies and to demonstrate technical maturity of Power-to-Gas. The European Commission and the Swiss Government are setting the right scene by supporting research in this field with 24 million euros and paving the way to bring innovative Power-to-Gas technology to an industrial stage. The project will define a roadmap allowing politics to set an appropriate political framework and industry to invest into this technology at a larger scale“, commented Dimosthenis Trimis, CEO of the DVGW Research Centre at Engler-Bunte-Institute of the Karlsruhe Institute of Technology (KIT).

About STORE & GO

The international project STORE&GO was launched in 2016 as part of Horizon 2020, the European Union's research and innovation program. The focus of research is on the production of renewable gases via methanation, then storing them on an industrial scale for the purpose of enabling cost-effective operations. In addition to the technological issues involved, economic and legal elements are addressed. Research is carried out using three different power-to-gas concepts at three sites in Germany (Falkenhagen), Italy (Troia) and Switzerland (Solothurn). The plant operation are complemented by extensive accompanying research activities in technological, economic and legal areas. These activities will help to reduce barriers for the market entry and to accelerate the market uptake of Power-to-Gas storage technologies. The project consortium comprises 27 partners from six European countries. The STORE&GO project is running for four years (2016-2020) with a total budget of approx. 28 million euros.

More information:

https://cordis.europa.eu/project/rcn/200559_en.html

<https://www.storeandgo.info>

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