## **ACER – Energy Community Webinar Series**

10 March 2021



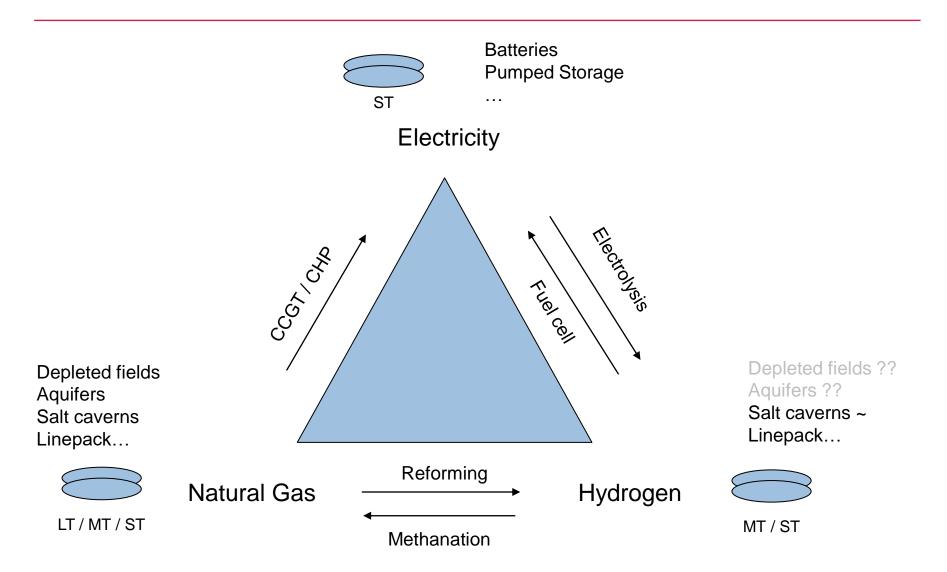
## **European Federation of Energy Traders**

Hydrogen:
Pan-European Cooperation,
Sector Integration



## **Energy Vector Interaction**





## **Sector Integration, Sector Coupling**



- The hydrogen market does not exist in isolation. There will be three interconnected physical markets, each with a requirement for physical balance, with the ability to convert energy from one form to another.
- Commercially, they will be increasingly seen as a single system (as long as the markets are established properly). But also interact with markets for environmental instruments (ETS, GOs, Certificates,...)
- Conversion and storage in alternative forms will compete with flexibility in production and demand – markets can optimise if allowed to work! Grid stability and seasonality are key issues.
- Confusion of regulation If electricity is used to produce hydrogen, then the storage
  of that hydrogen (whether or not converted back into electricity) is covered by the
  Electricity Directive?!
- Must be careful when regulated assets are competing with private investment e.g. electrolysis as a means of providing balancing services in electricity and hydrogen production.
- Risk of creating isolated national markets need to establish common framework for European hydrogen market.
- Who pays will be important. Recovering TSO revenues from declining gas volumes and initially low levels of hydrogen throughput, with appropriate incentives for repurposing or decommissioning – these will require a new framework where costreflectivity must be weighed against other objectives.