

P2G in future energy system

Production

- The expected hydrogen demand cannot be generated in Germany alone. 100% self-sustenance is too far from reality
- We must build up a sustainable domestic market
- Import must not be at the expense of the exporting country
- Investment at the start of the chain in renewables as a pre-condition
- Excess electricity alone is not enough: the need for H2 will be higher
- Decentralised or centralised production?
- Where will it be produced? Close to generation or close to load?
- Quantity availability? Question of the actual generation potential
- We need a roadmap which clearly defines which capacities production facilities must have
- Set sustainability standards and introduce certification system; thereby taking into consideration social and governance factors of potential exporters
- In order to cover the additional electricity demand, renewables must be massively expanded
- Couple the expansion of GW-capacities of electrolyzers with RES expansion
- Organise the market ramp-up until 2030 and build up international partnerships
- Develop solutions for large, medium-sized and small facilities
- Generation potential - with consideration for sustainability standards - should be holistically and internationally outlined

Usage

- Energy demand must be reduced, so that covering it becomes possible / Efficiency first
- Openness to technology vs. Prioritisation/exclusion of sectors or applications
- Quantity availability? Question of actual demand
- Introduction of a green-gas-quota?
- Cost development of DAC (Direct Air Capture) - Carbon source?
- Ensure clarity for investments
- Concrete roadmap for all sectors
- Certification system for green gases so that value to customers becomes clear
- Adequate CO2 pricing system capable of steering
- Independent studies to realise an objective picture of actual demands

Regulation & market design

- Needs clear market design and regulatory framework
- New development of regulatory/market designs which enable us to think in an integrated, cross-system way
- International hydrogen market will build up
- Sensible to first build up a strong domestic market
- How can we integrate alternative sales markets?
- Who carries which costs through which mechanism?
- How will the future hydrogen market look with regard to liberalisation and integration?
- How can we bring hydrogen markets together?
- Evaluate and improve regulations: e.g. approval procedures, infrastructure planning, rating as ultimate consumer, concretisation of an Energy Industry Act (EniWG in German) for hydrogen transport
- Foster and price flexibility
- Create locally differentiated investment incentives
- Revision or reform of levies, charges and fees
- Adequate CO2 pricing capable of steering
- Development of a market: design across energy carriers, taking into account the costs of infrastructure

- High level of agreement
- High need for discussion
- Open questions
- Recommendations to politics
- Next steps





