

QualyGridS – Standardized qualifying tests of electrolysers for grid services

Introduction and project targets

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Motivation

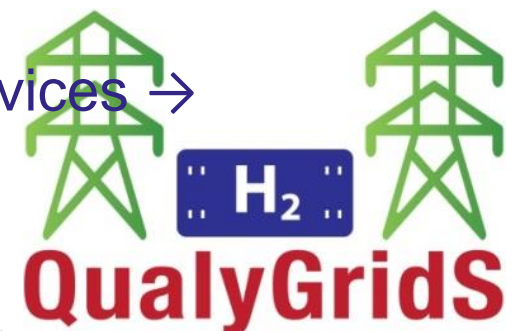
- EU Green Deal for decarbonisation
- New: German hydrogen strategy for massive green hydrogen ramp-up, also other countries
- Support hydrogen ramp-up and future grid situation by grid services for water electrolyzers
- Strong market entry of electrolyzers today still limited by costs
- Performing electricity grid services → improved revenues for electrolyzers
- Approved and standardised electrolyser tests to verify which service an electrolyzer can perform → help OEMs and customers
- Market analysis for electrolyzers and grid services → identify business models



[1]



[2]

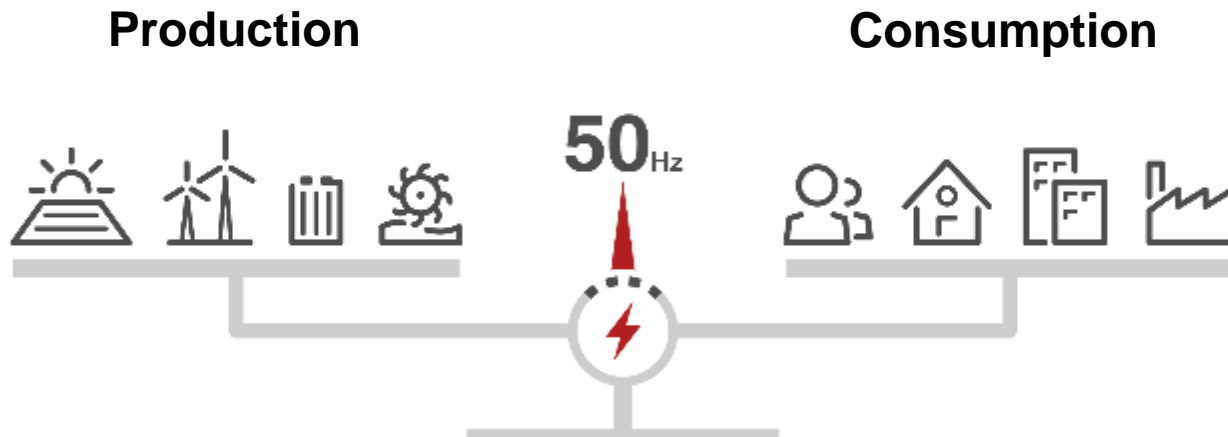
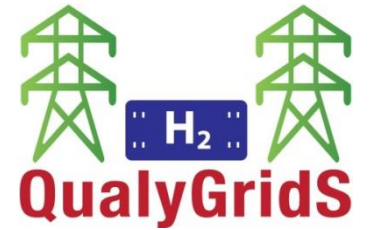


[1] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_de

[2] https://www.bmwi.de/Redaktion/DE/Publikationen/Energie/die-nationale-wasserstoffstrategie.pdf?__blob=publicationFile&v=16

Motivation

Electricity grid services



Objectives



- Review of electrical grid service requirements
- Testing protocols ready for international standard + Performance Indicators
- State of the art PEM and alkaline electrolyser systems tests for protocol and electrolyser qualification
- Get performance data of SoA electrolysers
- Analysis of business models and market opportunities in EU states, assessing H₂ costs reductions
- Project results communication and interaction with relevant stakeholders