From HyPerformer to Hydrogen Economy in North-West Europe

Alexander Malchus, EWE AG

1 11/24/2020

EWE – one of the largest companies in North West Germany



Image: EWE AG

2 24.11.2020

2019

Sales of EUR 5.7 billion Profit of EUR 127.5 million Average number of employees 8,831 1.4 million electricity customers 0.7 million gas customers 0.7 million telecommunications customers

Active in Germany and Poland





EWE regions

3 24.11.2020

Green Hydrogen in the North West Region

Why the region of EWE has perfect conditions for Hydrogen

- Share of renewable energies in the EWE power grid already today above 90% (Germanys target of 2050)
- Grid constraints caused by renewable energies (e.g. curtailment and excess energy) can be seen in the region today
- The region can provide offshore power production, ports, logistics, industries and required infrastructure
- The region connects all relevant parts of the hydrogen supply chain (production, storage, electricity and gas grids)

EWE is active in...

- Sector coupling (heat, power, mobility, industry) and linking gas and power grids
- Hydrogen readiness of required infrastructure (e.g. pipeline grid and storage facilities)
- Usage of green hydrogen in industry and transport
- Large scale storage of green hydrogen in salt caverns



The potential of hydrogen



Timeline for introduction of hydrogen technology



7 11/24/2020







Quelle: NOW GmbH

HyWays for Future: Hydrogen Region in the North West



Market activation with a focus on transport applications

9 11/24/2020



FWF

Overview of investment intentions

Investment intension in:

- 10 MW electrolysis
- 6 fueling stations
- 1 trailer filling stations
- 1-2 trailers
- 20 buses
- > 100 cars
- > 100 trucks
- 20 Garbage vehicles
- many more projects



Market development in model region

Focus on heavy goods traffic for the time being



Estimated Market development 2022 – 2030



Hydrogen Region North West Germany

Joint approach as Important Project of Common European Interest



- Create a hub, that will secure hydrogen production capacities for an Intra-European energy market
- Development of an trans-european
 hydrogen infrastructure in the region and beyond
- Enable first markets for green hydrogen in industry and transport
- Connecting HyWaysForFuture and HEAVENN
- Sharing lessons learned with the political level



Thank you! "Hy Five"

Alexander Malchus Political Affairs EWE AG 26122 Oldenburg Germany www.ewe.com

13 24.11.2020