

Siemens



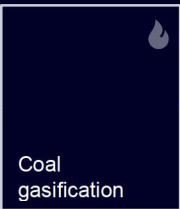
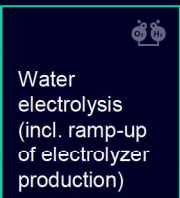
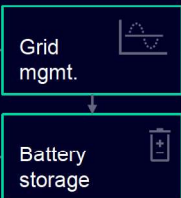
Making green hydrogen production scalable and efficient



Siemens covers the whole hydrogen market

Production

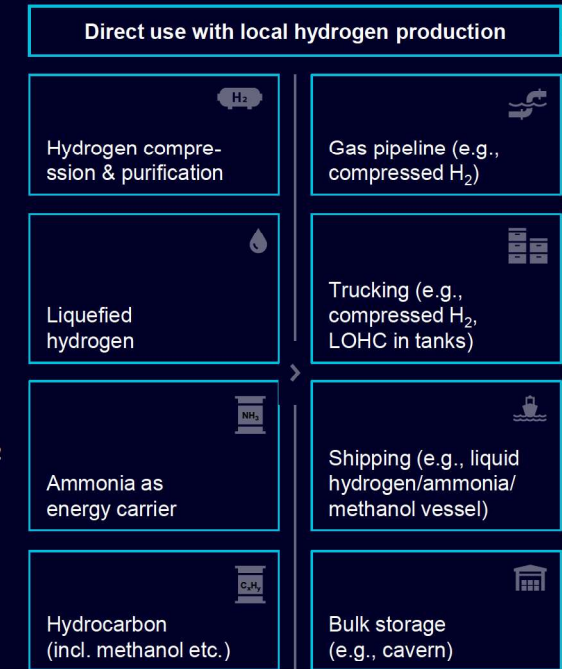
Energy source



Blue and grey | Green (New)

Distribution

Pre-transportation processing

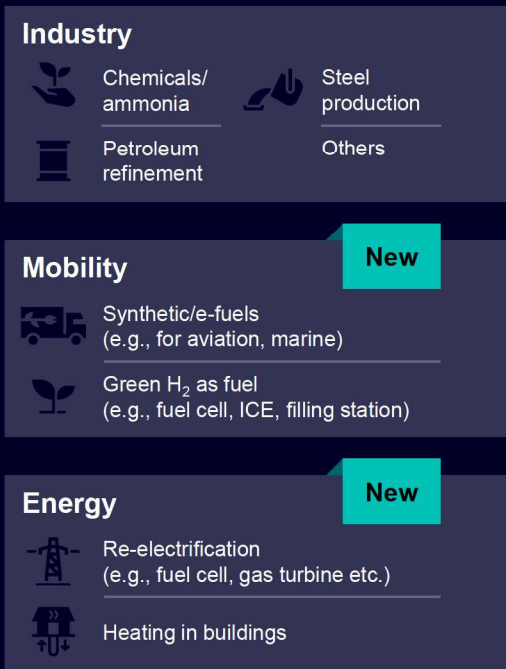


Storage & transportation

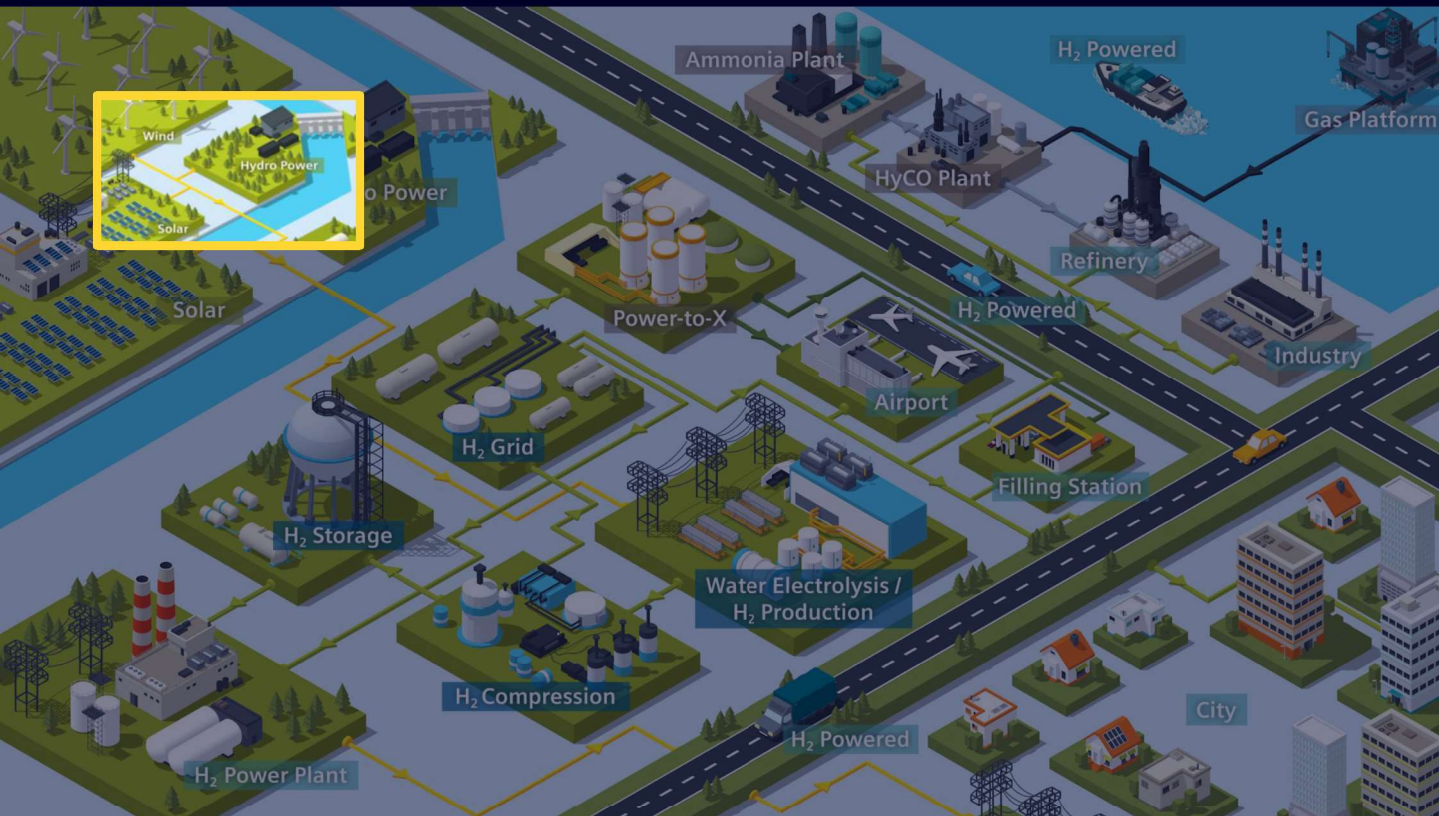


Usage

End sectors



Where is Siemens already supporting the Hydrogen adoption?



01

Controls for wind turbines, solar arrays and Hydroelectric

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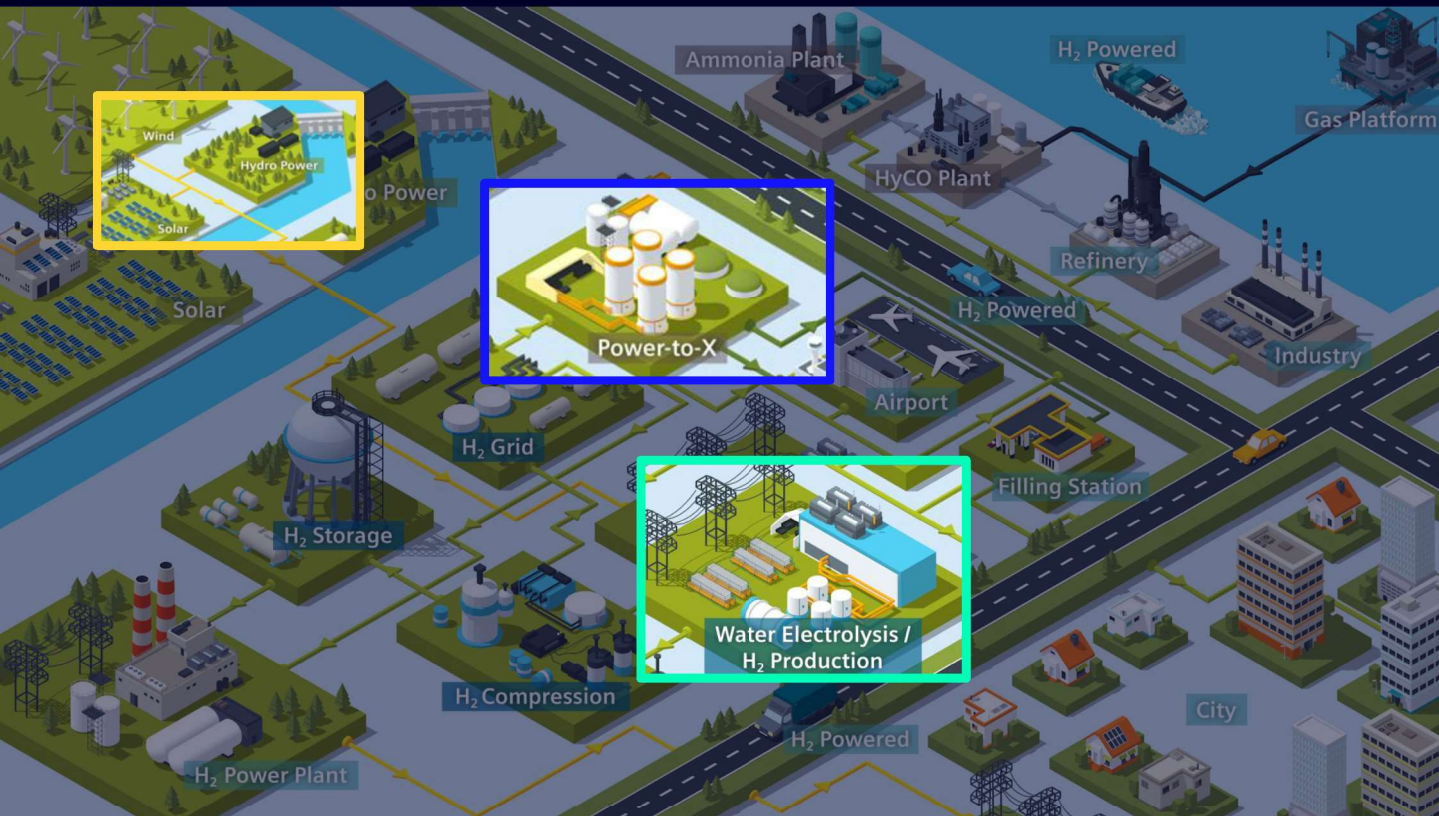
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Controls for wind turbines, solar arrays and Hydroelectric

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Smart grid solutions for hydrogen production plants along with electrification and control powered by the digital twin

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Realized projects to produce methanol or sustainable fuels from hydrogen and CO₂

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First projects in execution to enable H₂ supply for ammonia, steel and glass plants

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Supporting multiple OEMs for automation and cloud control of H₂ filling stations

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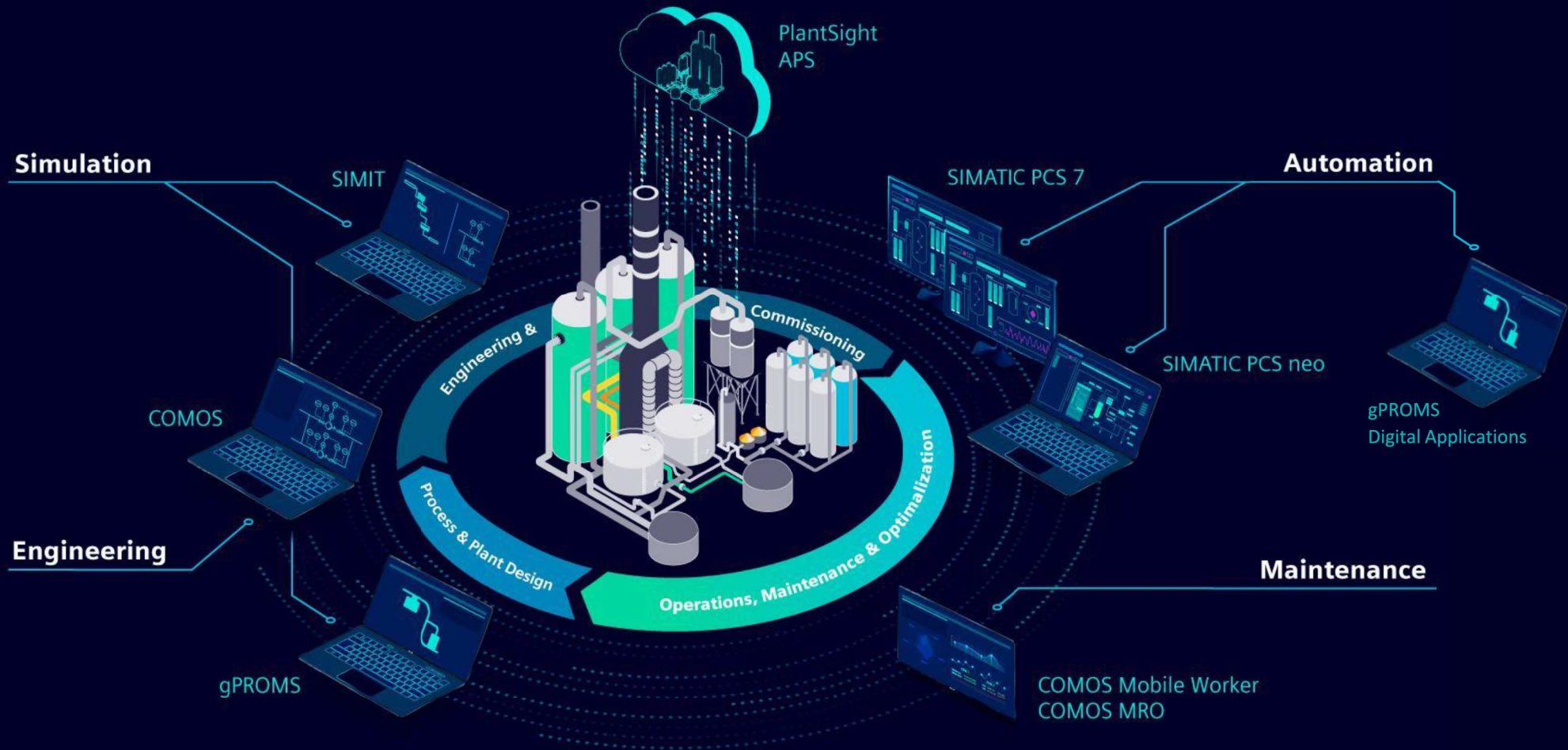
05

Supporting multiple OEMs for automation and cloud control of H₂ filling stations

06

Working with manufacturers of fuel cells and stacks to automate and scale up production facilities

A holistic Digital Twin over the entire lifecycle



Wunsiedel WUN H2: building and operating green hydrogen plant

Siemens as planner, EPC and co-operator

Customer • Siemens Financial Services, Rießner Gase GmbH and SWW Wunsiedel

Project information • The plant was commissioned in the summer of 2022
• General contractor for the entire plant: Siemens AG
• Electrolyser supplier: Siemens Energy

Siemens solution • Electrification, Automation, Instrumentation from Siemens
• Silyzer 300 by Siemens Energy
• PCS 7, Process Analyzers, Instrumentation

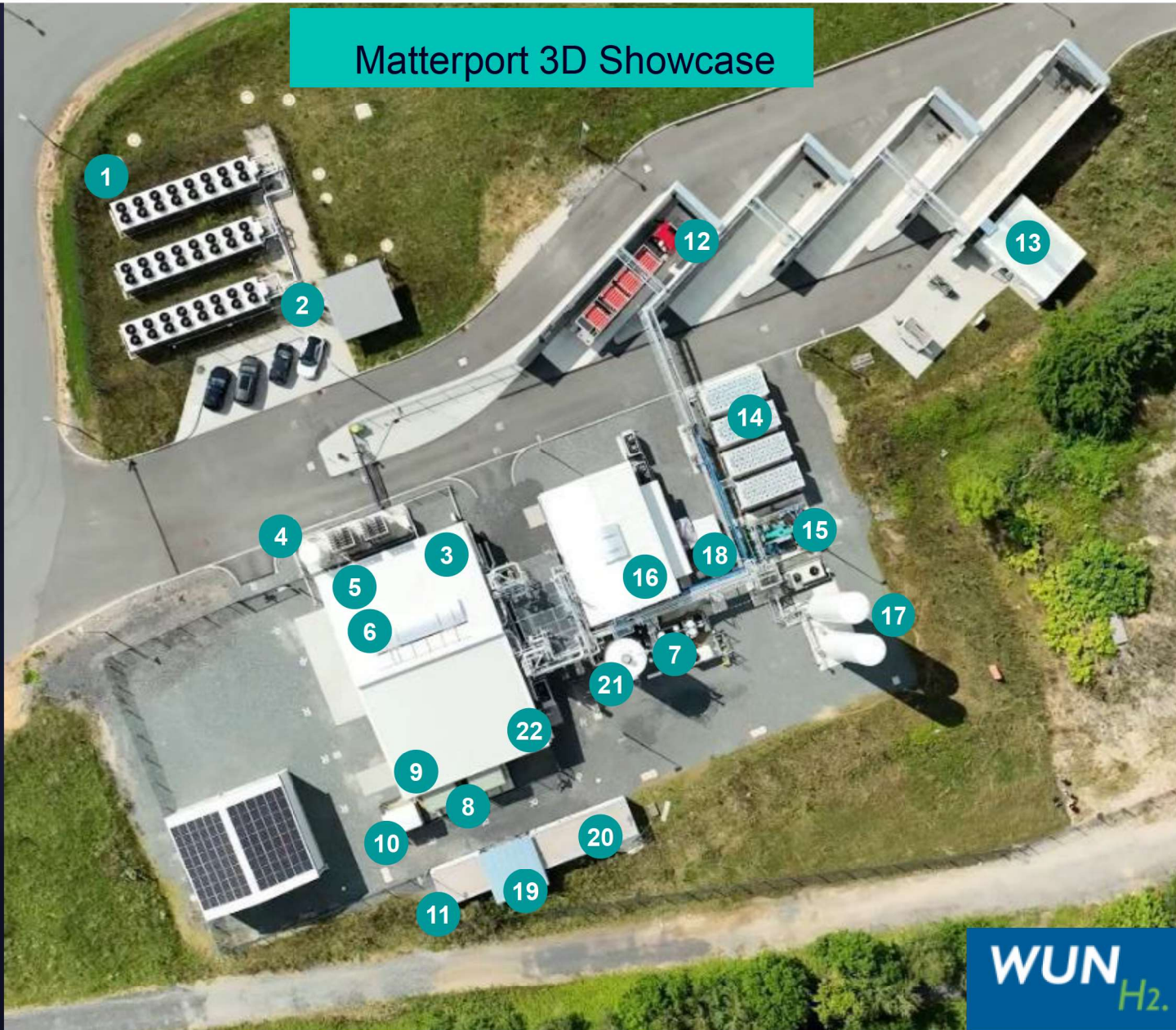
Customer value • Produce up to 1.350 tons of H2 and save of up to 13.500 tons CO2
• Supply Northern Bavaria, Thuringia and neighboring part of Czech Republic with H2



Aerial View

1. Hybrid V-Cooler for Process Water
2. Pumps for Cooling station
3. Process Water Purification
4. Nitrogen Tank and purging unit
5. Fresh Water Demineralization
6. Electrolyzer
7. DeOxo Dryer
8. 2 x Elektrolyzer Transformer
9. Rectifier
10. Reactive Power Compensation
11. Energy Supply

Matterport 3D Showcase



12. Tube Trailer Filling Stations

13. Purity Analytics Pre / post Filling

14. HP Storage

15. HP Compressor

16. MP Compressor

17. MP Storage

18. Transfer Station

19. Mains transformer

20. 2MW Auxiliary Power Trafo and LV Distribution

21. LP Buffer Storage

22. Control Room

WUN
H₂.

SIEMENS

| Thank you!

For more information please visit:

www.siemens.com/hydrogen



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