



H2 Allianz
Südniedersachsen

Netzwerk- und Öffentlichkeitsarbeit für das Thema Wasserstoff

South Lower Saxony: Hydrogen region to become

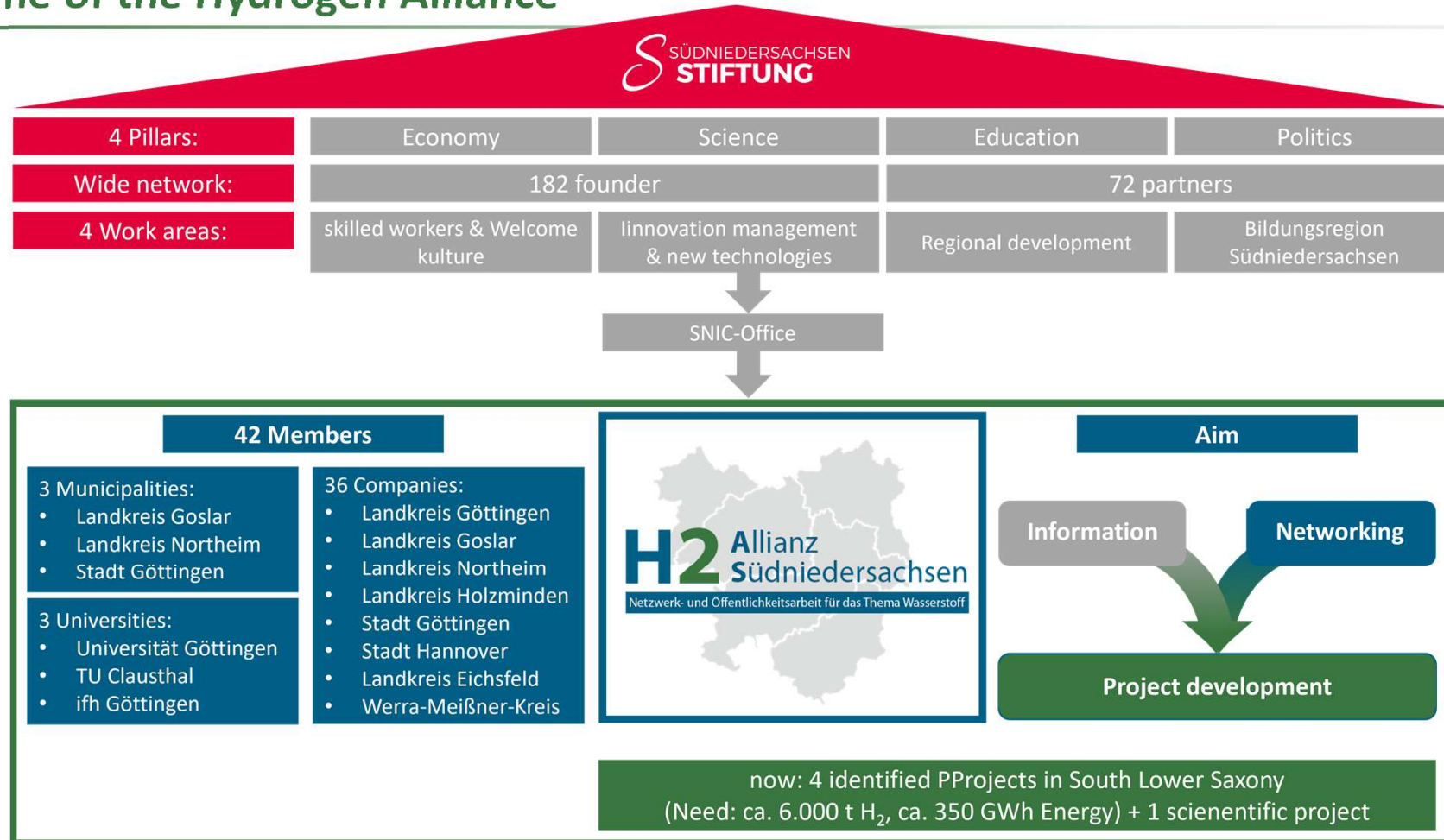
Dr. Peter Oswald

Projektleiter der SüdniedersachsenStiftung

Hydrogen Alliance South Lower Saxony

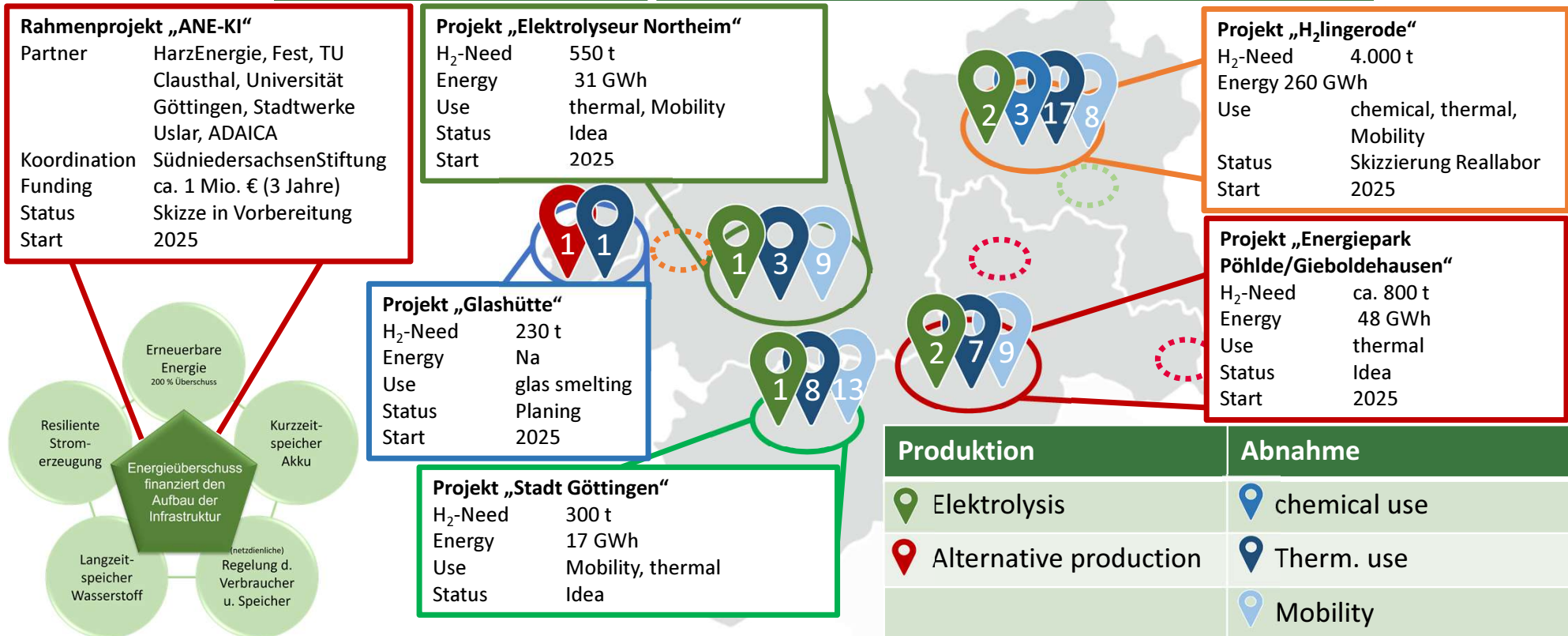
- 1.) What is the hydrogen Alliance south lower saxony?
- 2.) Hydrogen-Project 101
- 3.) Why is a local network for Hydrogen useful?

Frame of the Hydrogen Alliance



Projects in south lower saxony

now: 4 identified PProjects in South Lower Saxony
(Need: ca. 6.000 t H₂, ca. 350 GWh Energy) + 1 scientific project



Hydrogen Alliance South Lower Saxony

- 1.) What is the hydrogen Alliance south lower saxony?
- 2.) Hydrogen-Project 101**
- 3.) Why is a local network for Hydrogen useful?

Hydrogen Value chain

Supplier

Re-Newable
Electricity

Water

400 t hydrogen
need 10.000 t water, only 3.600 will
be converted

Operator

Elektrolyser
3 MW

Products:

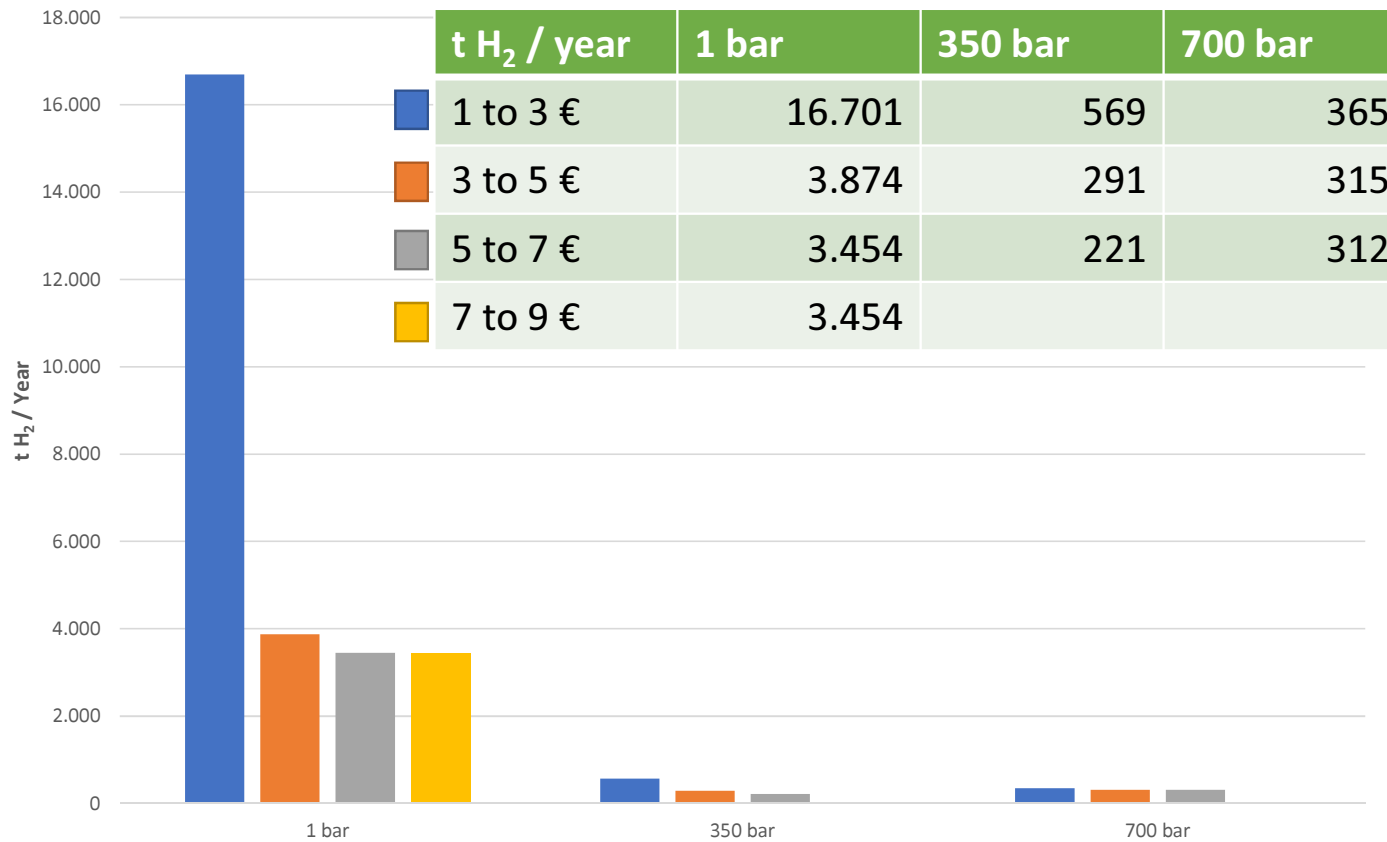
- H₂ (ca. 400 t)
- O₂ (ca. 3200 t)
- Heat

Customer

Customer H₂

Customer O₂

Customer



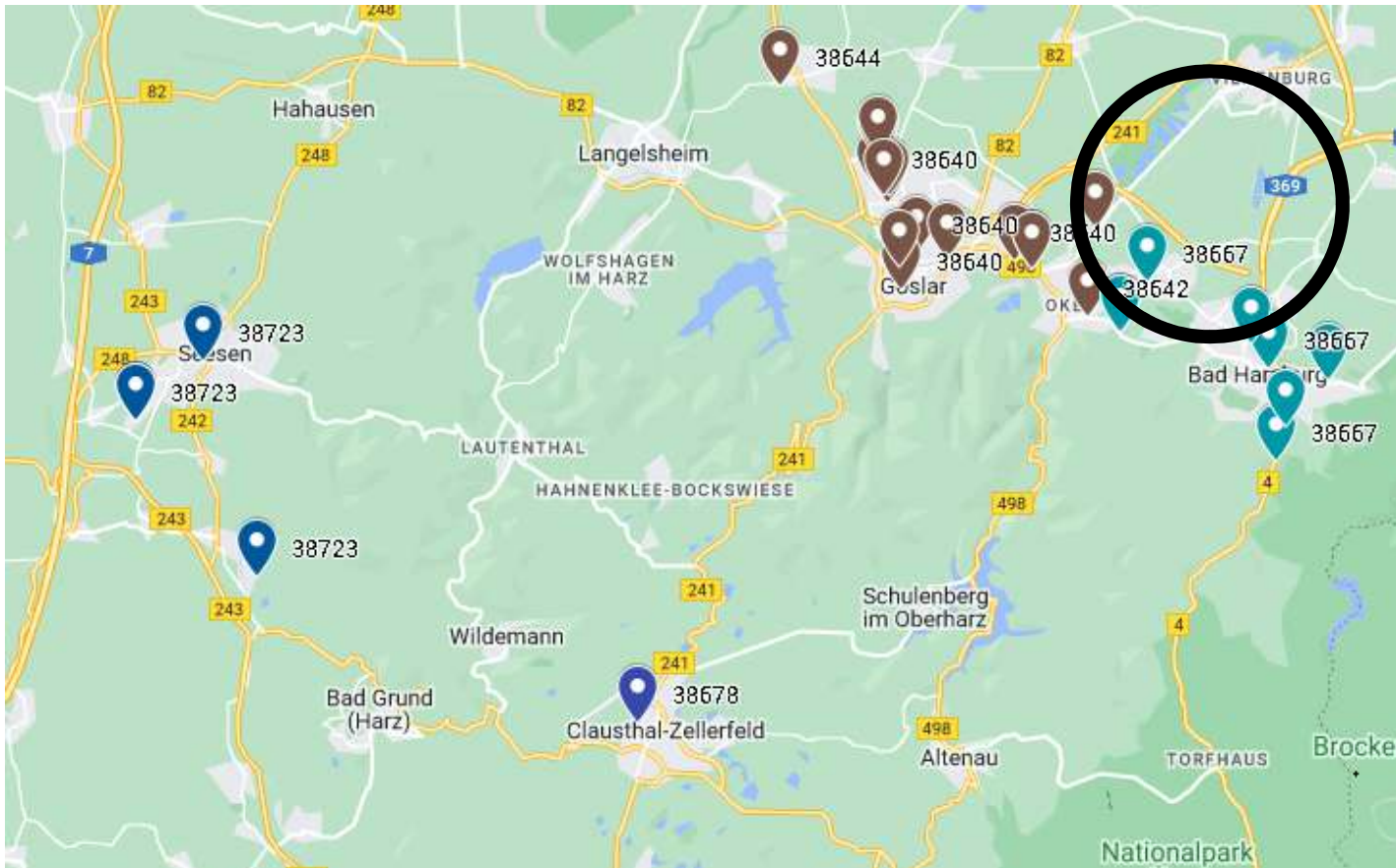
Customer

Supplier

Operator

Finance

Customer - Region Goslar



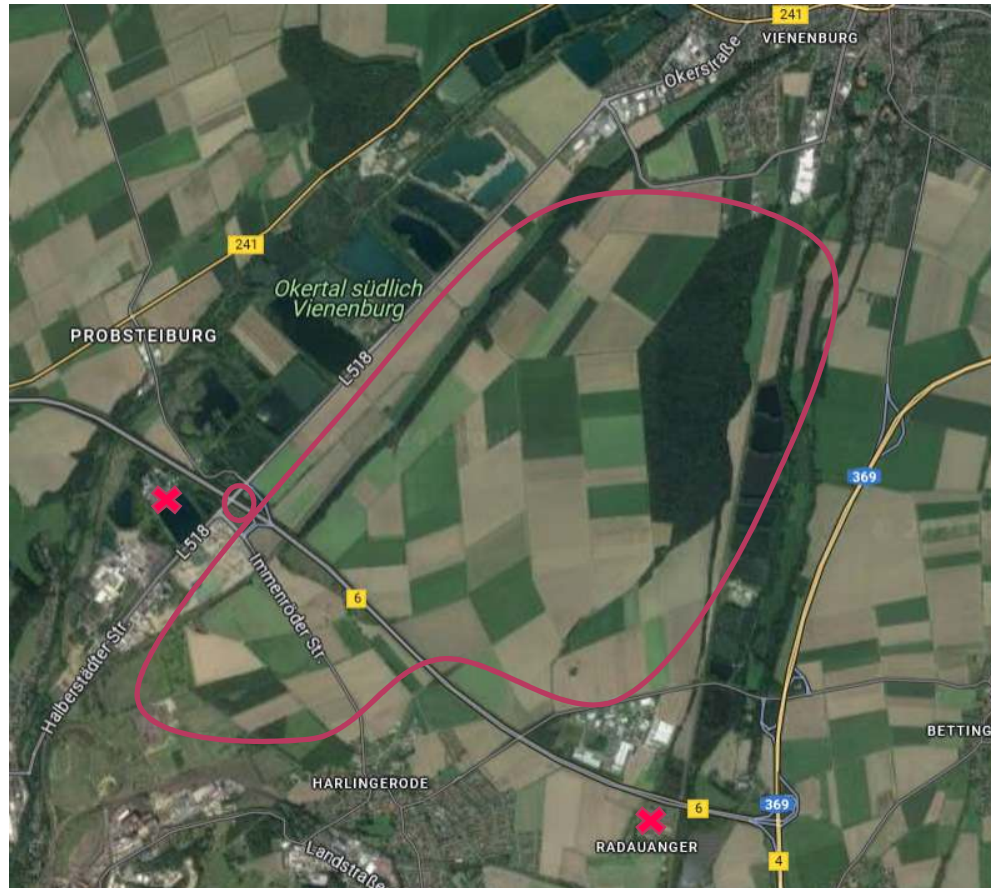
Customer ✓

Supplier

Operator

Finance

Supplier - Energiepark H₂ringerode



Customer ✓

Supplier ✓

Operator ✓

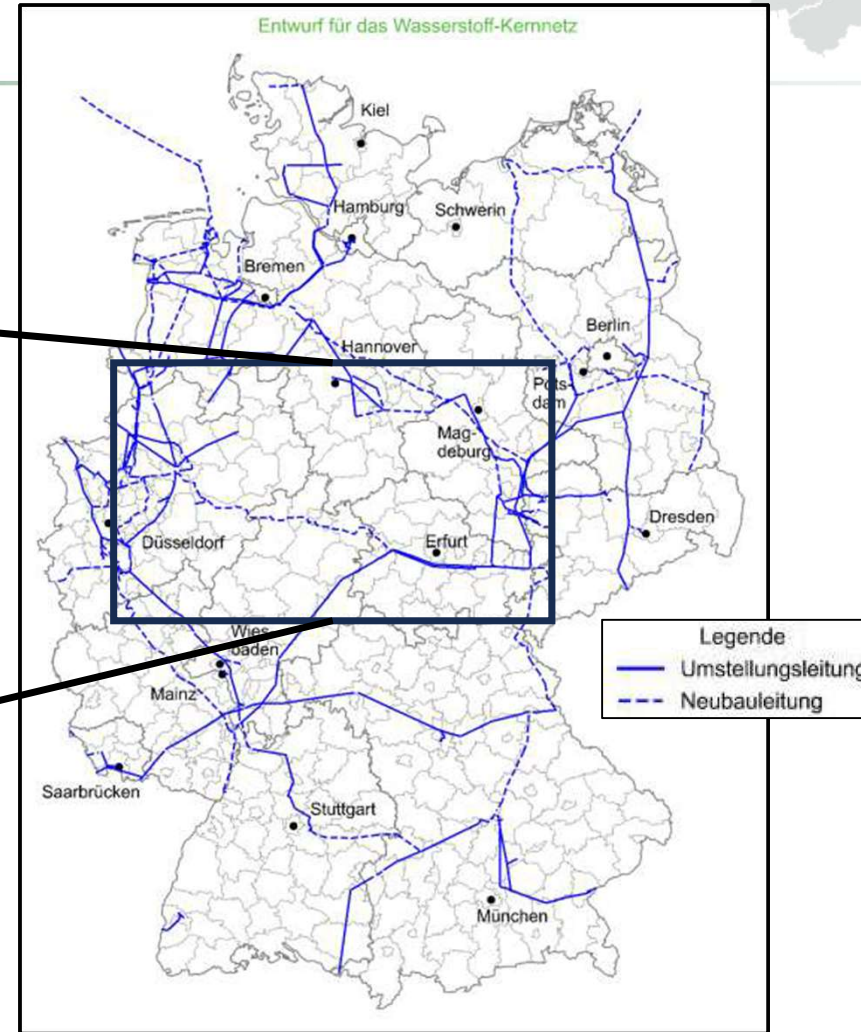
Finance ✓

✗ Sewage plant (Oxygen)

Hydrogen Alliance South Lower Saxony

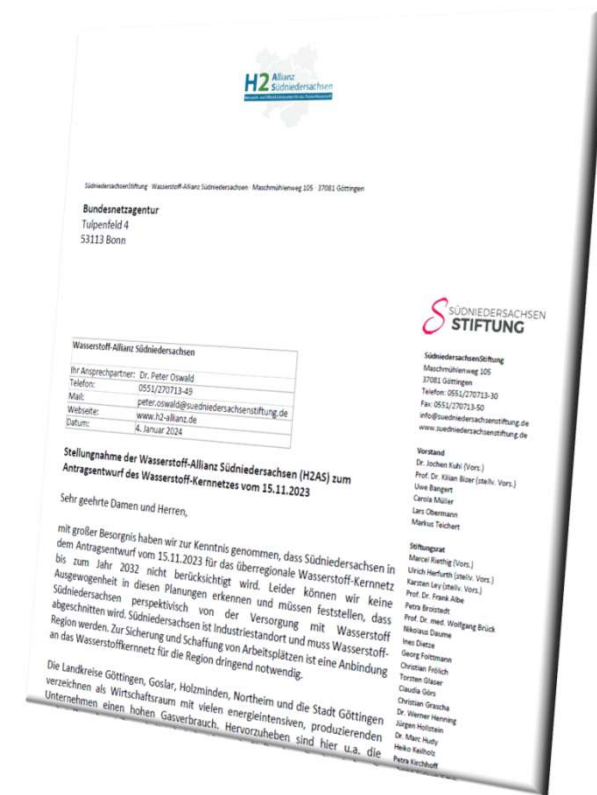
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Hydrogen core net



Hydrogen core net

Supporter



Members of H2AS





Herzlichen Dank!

Dr. Peter Oswald

Projektleitung
H₂Allianz-
Südniedersachsen

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Use of hydrogen

Mobility

Chemical use

Thermal use

Electric heat not ideal, if:

- High temperature with low tolerance
- High investment
- Technical issues

1 kg H₂ = 33-40 kWh

55 kWh

