



Transferforschung  
Wasserstoff

**dena**  
Deutsche Energie-Agentur

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*Colombian – German Dialogue on  
Re-Industrialization via Renewable Hydrogen*

# Living Labs for the Energy Transition- Transfer Project Hydrogen

Konstantin Brosch- Senior Expert Hydrogen and Synthetic Energy Carriers

# Living Labs for the energy transition- Transfer Project Hydrogen

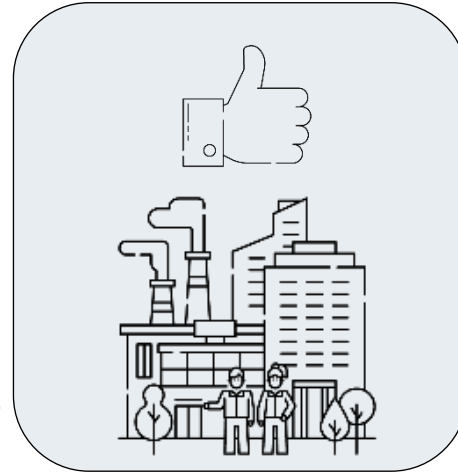
## Prerequisite

Supported by the BMWK

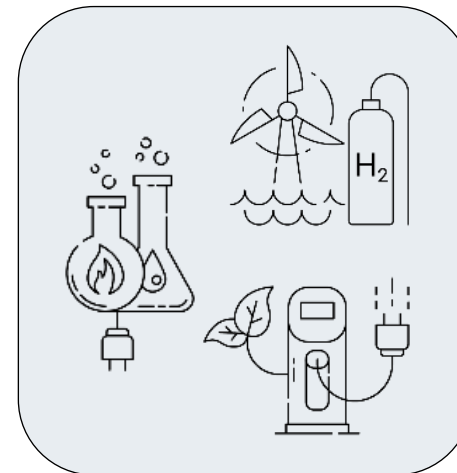
Application and research of hydrogen technologies on a large industrial scale

Scientific support by Consortium Trans4Real

## Objectives of the living labs



Demonstration of feasibility



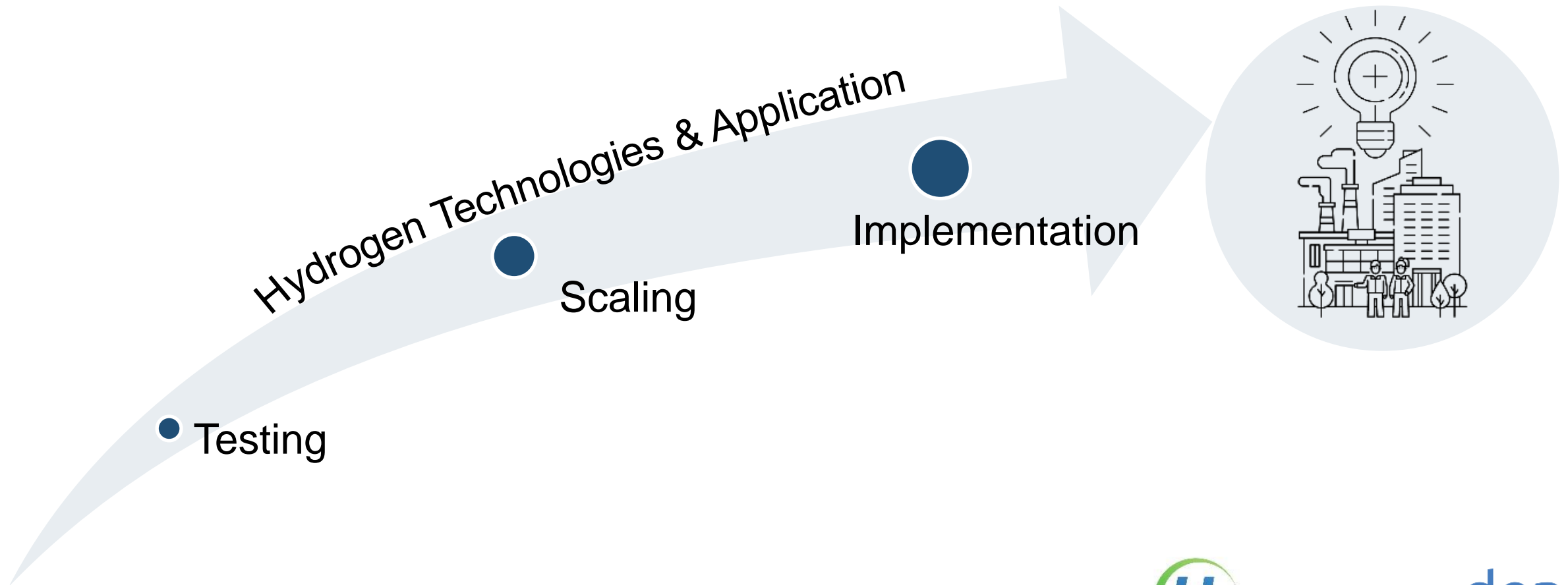
Research into system coupling and system integration



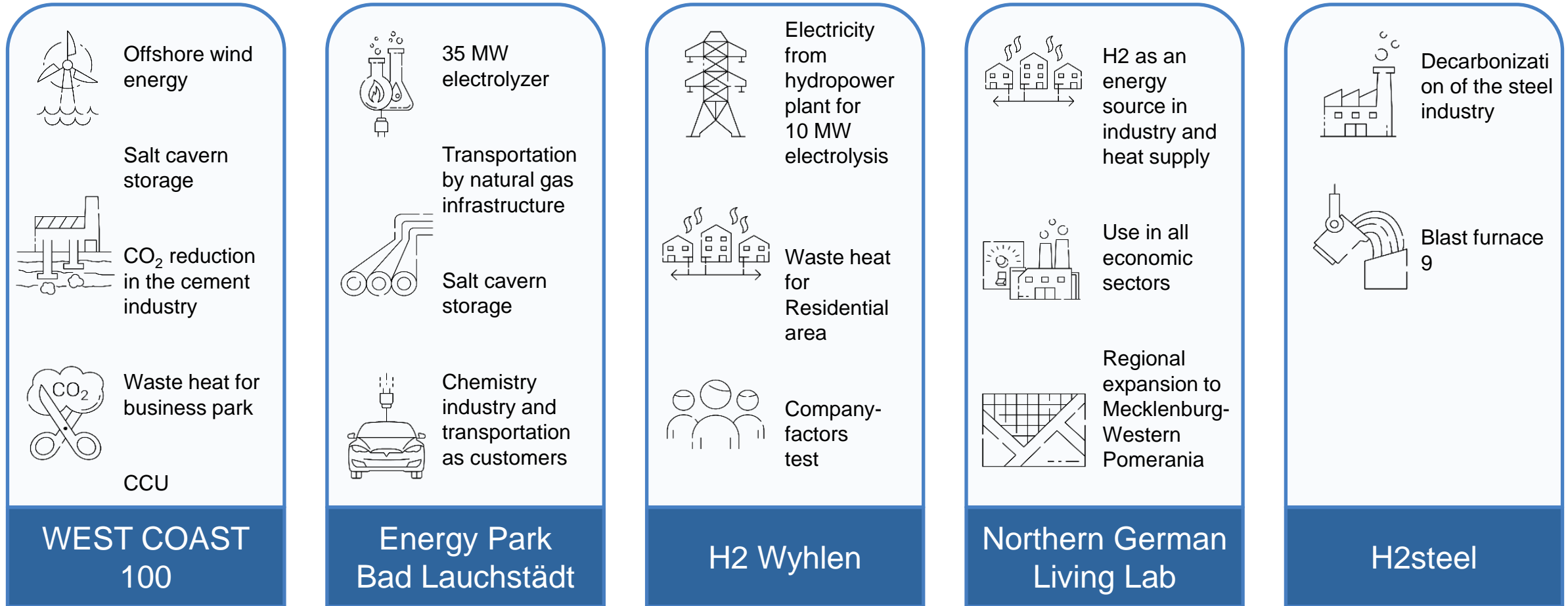
Knowledge transfer for standardization, harmonization and regulation

# The overarching goal of hydrogen transfer research in the context of living labs hydrogen

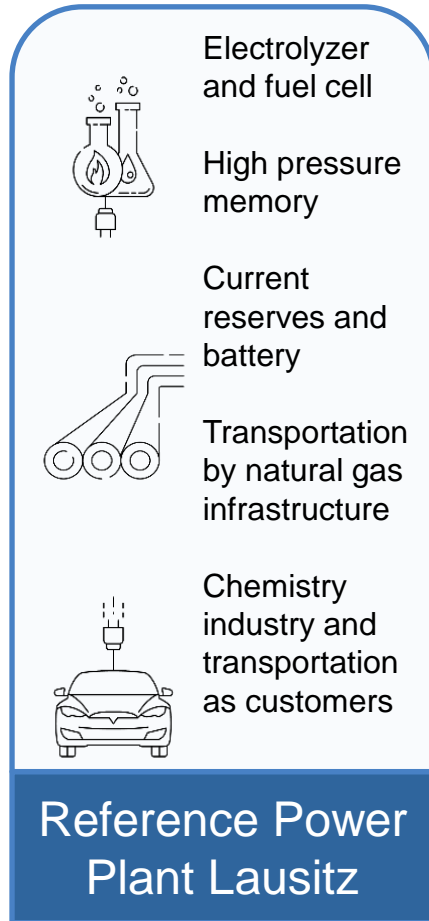
Accelerating the hydrogen market ramp-up through



# Living Labs represent the entire hydrogen value chain

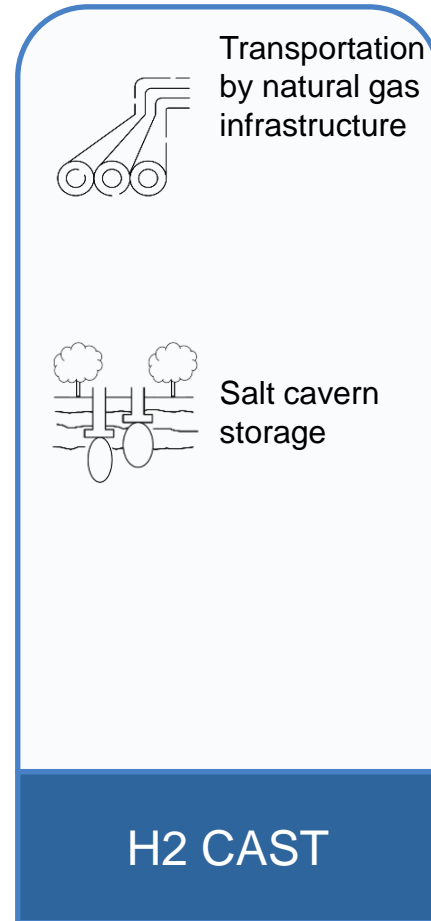


# Living Labs represent the entire hydrogen value chain



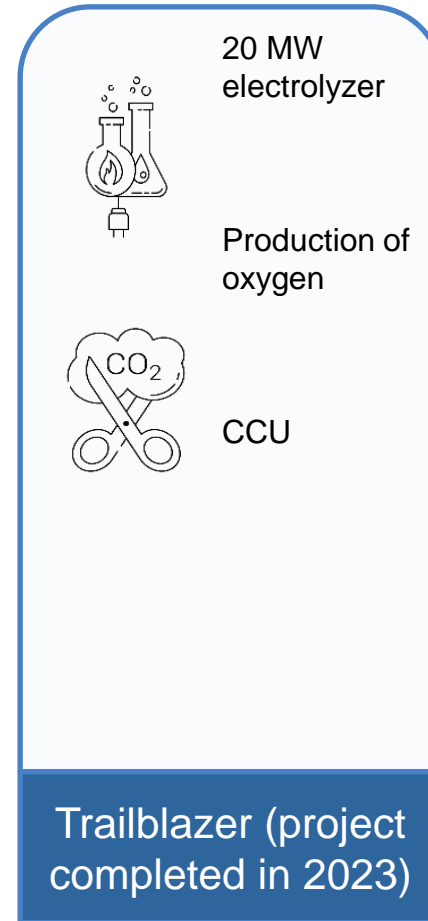
Electrolyzer and fuel cell  
High pressure memory  
Current reserves and battery  
Transportation by natural gas infrastructure  
Chemistry industry and transportation as customers

Reference Power Plant Lausitz



Transportation by natural gas infrastructure  
Salt cavern storage

H2 CAST




20 MW electrolyzer  
Production of oxygen  
CCU

Trailblazer (project completed in 2023)



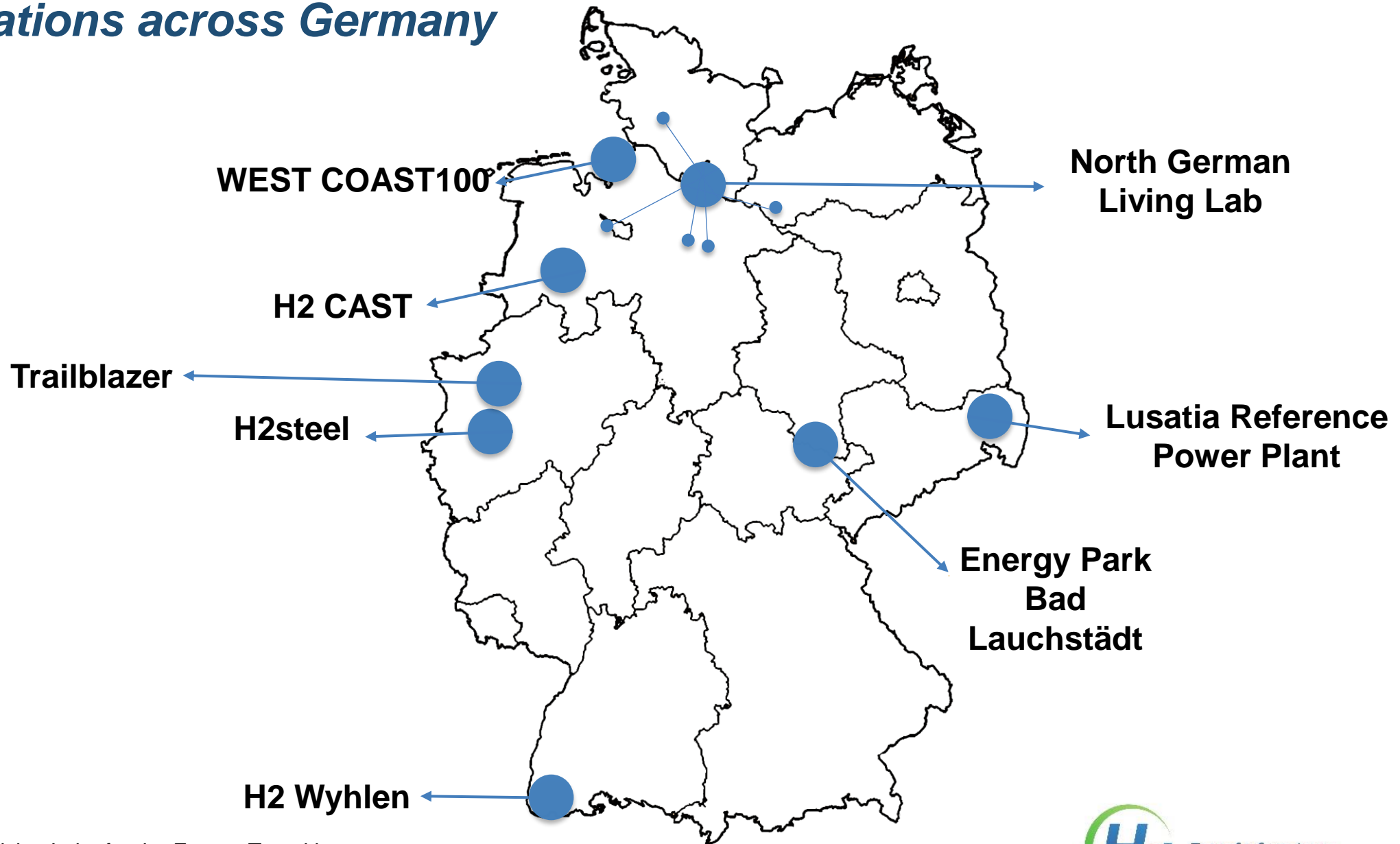
Part of the project, but not a „living lab“



Standardization roadmap for hydrogen technologies

DIN

# Locations across Germany



# Dena supports research & pilot projects

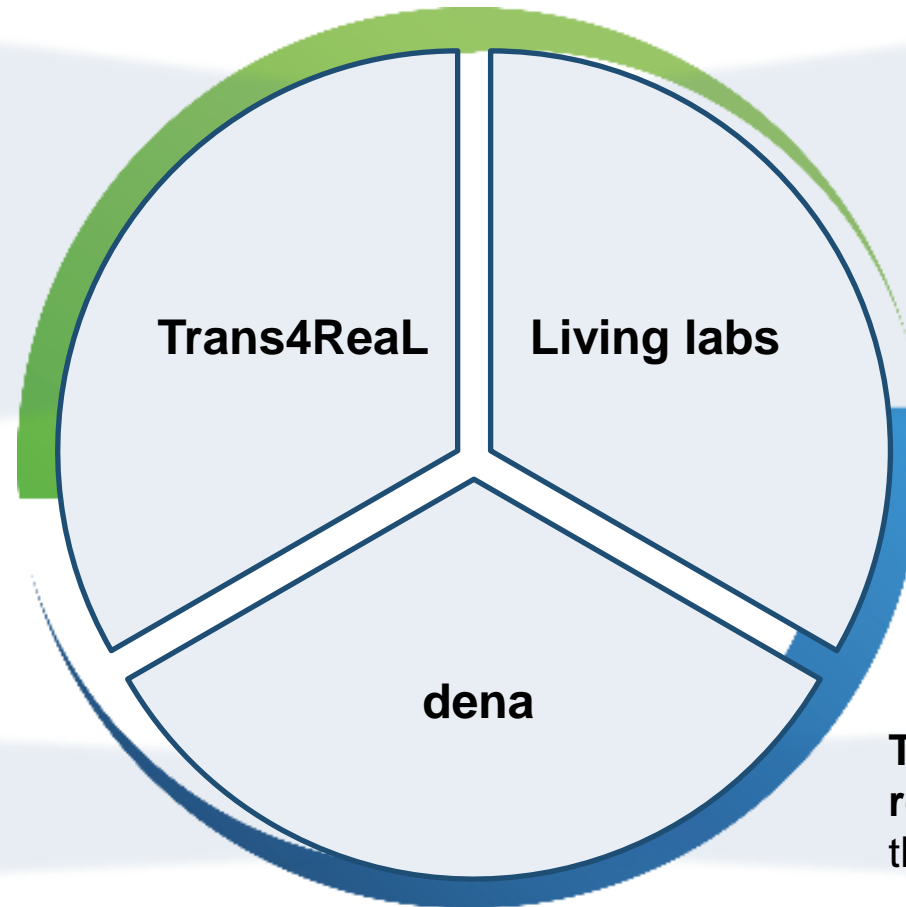
## Networking and communication within the project

**Accompanying the living labs** through scientific transfer research around the "Trans4ReaL" consortium.

→ **Synthesis of the findings** from the living labs

**Communication and networking measures**

→ e.g. workshops, conferences, regional conferences, publications



**Testing new technologies** and business models under real conditions and on an **industrial scale**

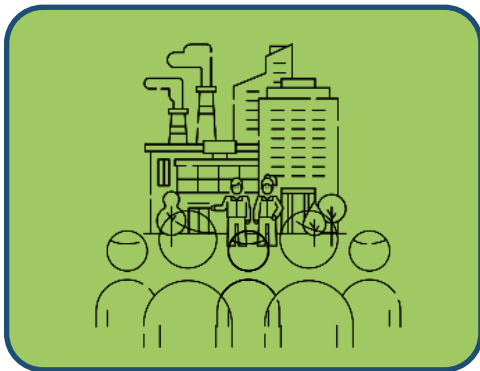
**Transfer & abstraction of research results** from the sphere of research to the public sphere, e.g. via Podcasts

# Outlook 2024



## Selection of communication activities

- **Podcast Season 2 (topics):** FIDs & financing, certification, resources
- **Youtube videos:** Market ramp-up, public acceptance of new technologies
- **Flyers, brochures, factsheets:** "The transfer research introduces itself", "Hydrogen and energy transition, how the change succeeds", "Innovation in real laboratories"



## Networking & deep dive exchange formats

- **Regional conference (Q3)-** 2023 regional conference was held in Western Germany
- **Workshops & Webinars** (2 x per year, probably Q2/3)



# THANK YOU VERY MUCH

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