



International Partnership
for Hydrogen and Fuel Cells
in the Economy

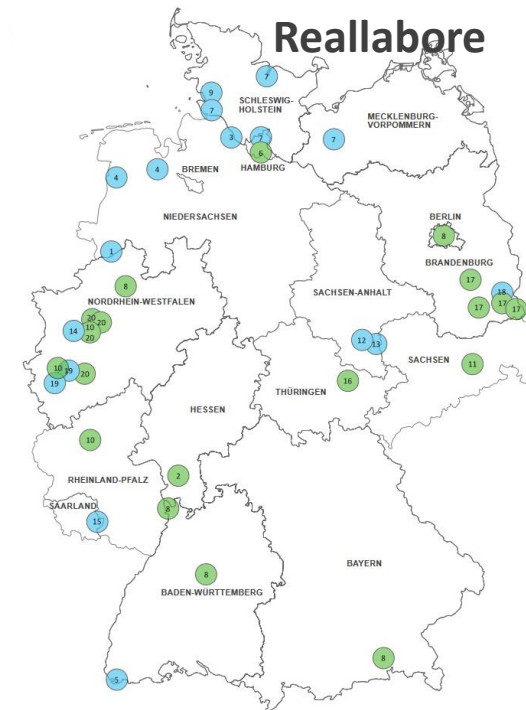
Germany Update

32nd IPHE Steering Committee Meeting
23 – 24 October 2019
Seoul, Republic of Korea

Announcements and/or New Initiatives *Germany*

A **National Hydrogen Strategy** is under development by four ministries: BMWi, BMVI, BMBF and BMZ. The National Hydrogen Strategy will be introduced in December and will contain the framework for further activities of the German Government towards hydrogen technologies until 2030.

11 large-scale R&D projects (**Reallabore**) and 9 hydrogen regions (**HyLand**) have been announced by the BMWi and the BMVI. The projects are addressing first markets of FCH technologies in transportation, energy and industry.



Examples of Lessons Learned and Impact *Germany*

Program initiative, policy, regulation or mandate	Lessons Learned/Outcomes
Subsidies within the NIP for the deployment of hydrogen technologies in the transportation sector	<ul style="list-style-type: none"> • Isolated funding for single components not suitable • Integrated, flexible funding activities – Hyland • Sector coupling has to be considered to get early business cases
Demonstration projects for Power-to-Gas technologies within different funding programs (>50 systems deployed)	<ul style="list-style-type: none"> • Step 1: Demonstration is required for the integration of large-scale PtG systems • e.g. ‘Reallabore’, Hybride project, Element One project • Step 2: Long-term mechanisms for hydrogen business cases in targeted markets • e.g. Renewable Energy Directive II, CO2 reduction targets for the transport sector



Thank you



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Highlight to Include in IPHE Newsletter *Germany*



The **HyLand** programme addresses regions for the integration of FCH technologies at scale. The programme is part of the National Innovation programme hydrogen and fuel cell technology and funded by the Federal Ministry of Transport and Digital Infrastructure. In the first phase 9 regions were selected for the development of an integrated concept (picture on the right).



Status of Applications and Goals *Germany*

Application	Status (As of October 2019)	Goal (For 2020)
Fuel cell vehicles	530	n.a.
Hydrogen stations	76	100 (400)
Fuel cell buses	22	n.a.
Electrolyzers	> 55 MW	n.a.
Fuel Cell Truck	2	n.a.
Telecom backup units	> 400	n.a.
Trains	2	n.a.

