

# HYDROGEN.



HYDROGEN  
ENERGY  
STORAGE

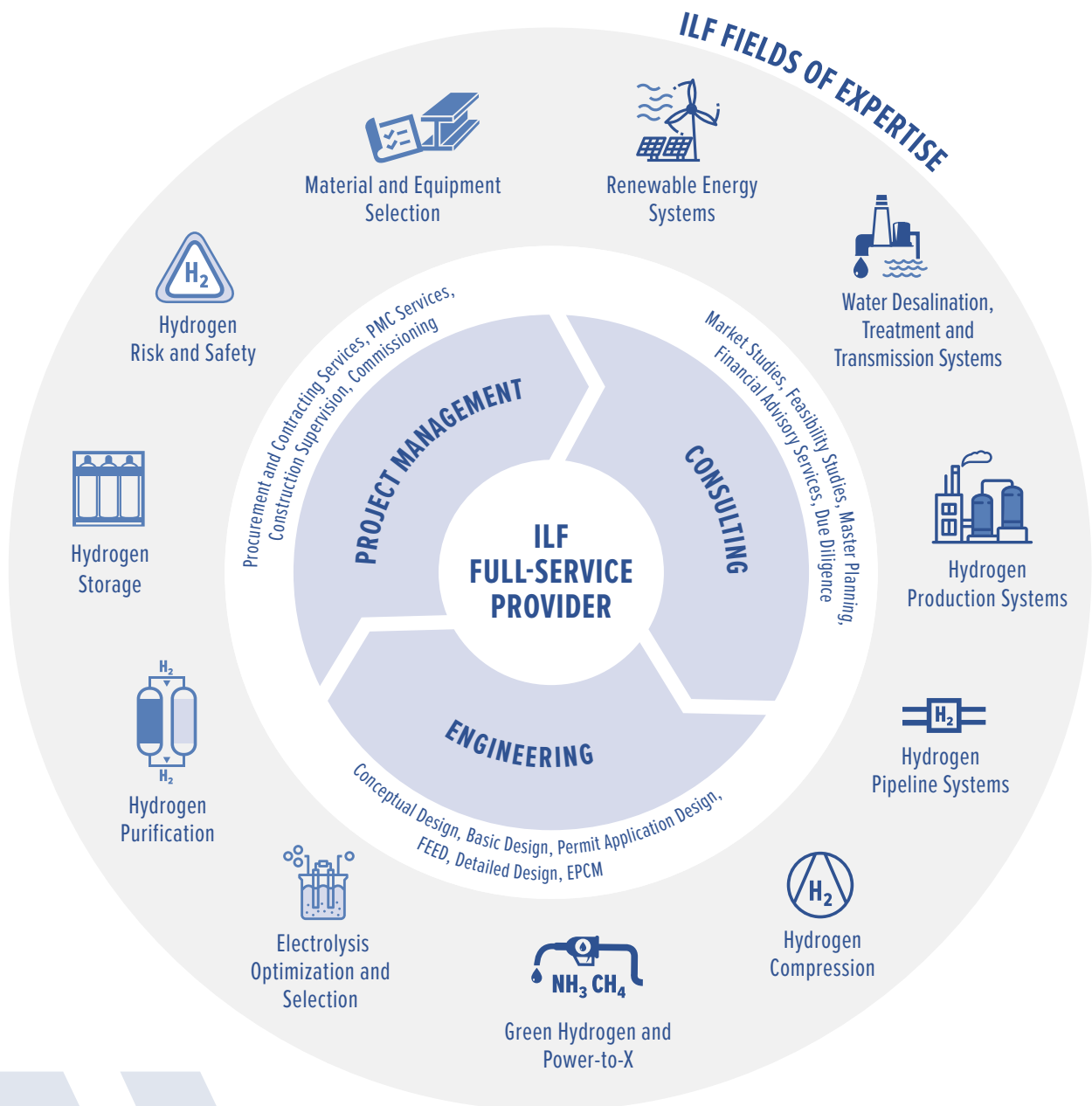
ENGINEERING EXCELLENCE.



# HYDROGEN

Hydrogen, as a crucial element of the new energy landscape, has been the focus of worldwide attention in recent years. While the topic is not entirely new, the energy carried by this gas is seen as a revolutionary impetus for the ongoing energy transition. Over the last years, ILF has developed a number of innovative concepts for pipeline and plant/facility design, ranging from very small applications to sophisticated, mega-scale concepts.

ILF's extensive engineering expertise covers the entire hydrogen value chain, including the design of facilities for renewable electricity generation and water treatment, as well as hydrogen production, storage and transport.



**SHAPE THE FUTURE WITH US!**  
**#ENGINEERSFORHYDROGEN**



Hydrogen can be seen as an environmentally-friendly fuel and power alternative. Hydrogen furthermore has the great advantage that it can be used as a long-term storage solution for electric power, as a feedstock for industry, or as fuel for mobility.

ILF has first-class experience in designing H<sub>2</sub> pipeline systems and H<sub>2</sub> facilities, as well as in successfully developing and implementing feasibility studies and detailed designs, including permit application designs for hydrogen production, storage and transport facilities.

As a full-service provider, ILF offers an interdisciplinary and completely integrated approach to hydrogen projects. ILF's comprehensive solutions combine proven project execution and engineering methodologies from the oil and gas sector with the flexibility to adapt these to innovations and rapid developments in the hydrogen market.



*“With well over 100 hydrogen projects across five continents, ILF is proud to contribute its knowledge and experience in engineering hydrogen production, storage and transport facilities to help shape a sustainable future for all.”*

Michel Kneller,  
Business Area Director – Hydrogen

## PROJECT HIGHLIGHTS

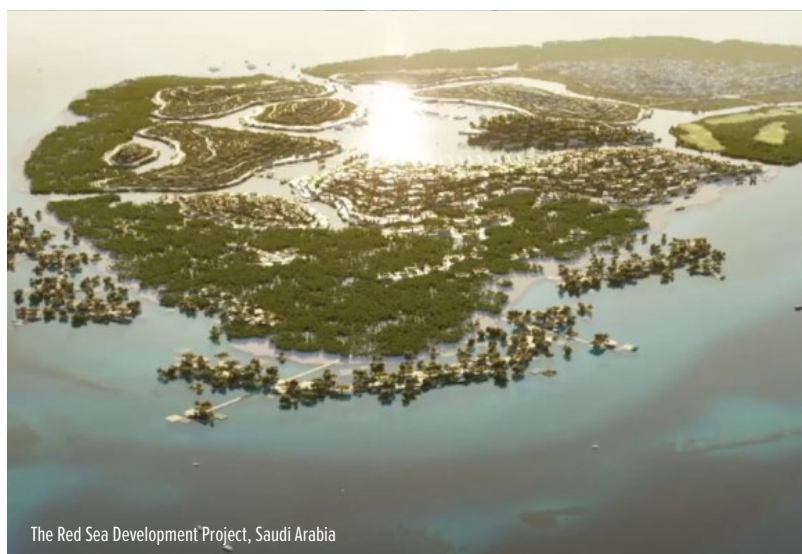
- DEMO4GRID Project – Owner’s Engineer for a 4 MW electrolyzer facility, H<sub>2</sub> storage facilities, as well as an H<sub>2</sub> refueling station, Austria
- FEED for a hydrogen pipeline system with storage functions and expansion scenarios, Finland
- Several conceptual design and FEED stage projects, incl. electrolyzers of up to 200 MW for industrial facilities, Austria
- Conceptual and pre-FEED design of giga-scale (20–30 GW) green H<sub>2</sub> production plants incl. facilities for desalination and ammonia production, Kazakhstan
- PMC services for the first Canadian green hydrogen + ammonia project with an estimated production of 1 MMTA and future scale up to 10 MMTA
- Design of an H<sub>2</sub> generation plant with an electrolyzer incl. waste heat utilization for district heating, a pressure storage tank, compressor, hydrogen refueling station and natural gas grid injection (blending) facility, Austria



Demo4Grid Hydrogen Project © MPREIS, Austria



FEED for a 100+ MW Electrolyzer, Austria



The Red Sea Development Project, Saudi Arabia



Green Ammonia Project, Canada



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