


Hydrogen Life Cycle Services

Product Sheet

A conceptual illustration for hydrogen. A glowing green particle stream flows from a white plug on the left into a transparent globe on the right. The globe contains a map of the world and the chemical formula "H₂". The scene is set against a background of lush green foliage with sunlight filtering through the leaves. The foreground is a mossy green mound.

As the hydrogen economy grows, more companies are facing challenges related to regulations, safety, economics and sustainability. At DEKRA, we provide techno-economic support across the entire hydrogen life cycle, including testing, inspection, certification and training. Leveraging our extensive experience, advanced technology, deep expertise and global network, we help you adopt hydrogen with confidence, safety, compliance and sustainability.

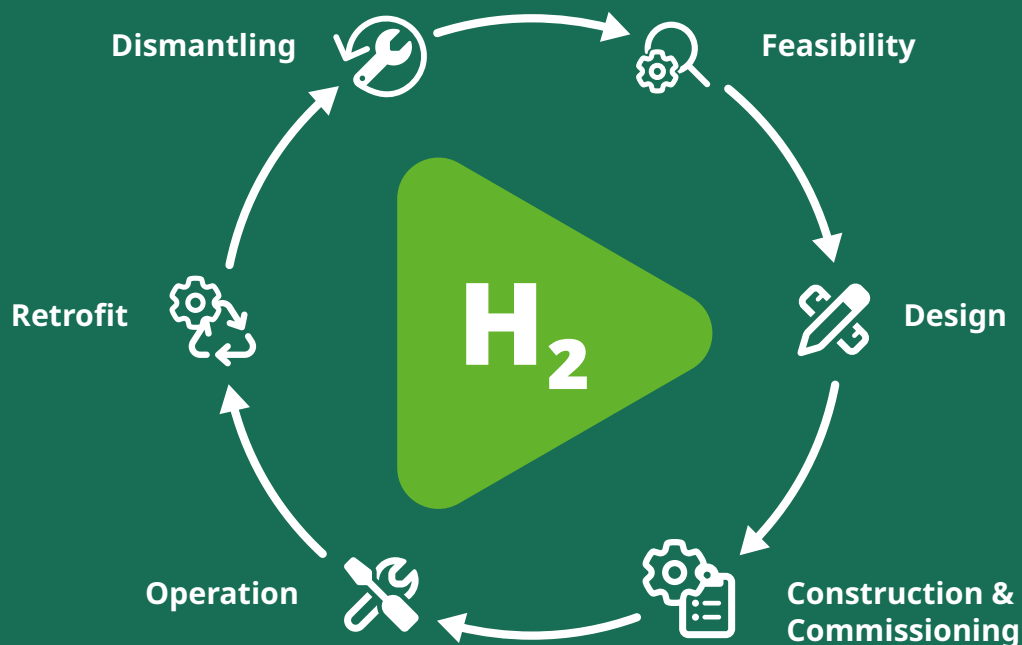
Empowering the Hydrogen Transition with Expert Support

The hydrogen industry is key to a successful energy transition, providing essential solutions for 'hard-to-abate' sectors such as steel, refineries, aviation and heavy goods vehicle traffic that cannot be directly electrified. However, companies face significant challenges in navigating complex regulations, ensuring safety, managing economic feasibility and meeting sustainability goals. From stringent compliance requirements to the safe implementation and operation of hydrogen systems, addressing these issues requires expertise and innovative solutions. At DEKRA, we provide comprehensive support across the **hydrogen life cycle**, helping businesses overcome these challenges with confidence and reliability.

Comprehensive Services for Every Stage of the Hydrogen Life Cycle

From the initial concept to the end of your asset's life cycle, our hydrogen safety services are tailored to help you manage the complexities of this dynamic industry with innovation and expertise. Rely on our specialized knowledge and life cycle support, including third-party inspections, asset integrity management and adherence to health, safety and environmental standards, to ensure your project's success.





Our services include:

- 1. Feasibility**
We evaluate the technical, economic and regulatory viability of your hydrogen projects, reducing uncertainties and building stakeholder confidence to secure investments.
- 2. Design**
Our safety reviews, compliance assessments and advisory services help you develop robust, sustainable systems that meet regulatory and safety standards.
- 3. Construction & Commissioning**
Through inspection, testing and certification services, we ensure safety and compliance, reducing risks and accelerating your project's timelines.
- 4. Operation**
We offer maintenance inspections, risk assessments and ongoing certifications to maximize operational efficiency and minimize downtime.
- 5. Retrofit**
Our testing and certification services enable the adaptation of existing infrastructure to hydrogen use, extending asset life cycles with minimal disruption.
- 6. Dismantling**
We guide you through safe dismantling, environmental compliance and proper material handling, ensuring a sustainable and regulatory-compliant process.

At DEKRA, we combine extensive expertise, cutting-edge technology and global reach to support hydrogen projects and assets throughout every phase of the life cycle. With a focus on safety, compliance, and sustainability, our solutions provide the guidance you need to confidently address the challenges of the hydrogen economy.

Ready to power the future with hydrogen? Visit our website to discover how our expert solutions can support your journey across the hydrogen life cycle.

Contact us!