

## Safety aspects for hydrogen technologies

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Hydrogen is a central component of the energy transition and the European Green Deal for a climate-neutral Europe. To be able to achieve the targets defined by 2045, the EU and the German government have drafted a framework for action and are making long-term investments in research, development and the rapid implementation of innovative hydrogen technologies.

The conditions for a successful energy transition and the economic use of green hydrogen as a clean energy carrier are Hydrogen readiness and a rapid market ramp-up, as well as the establishment of the necessary value chains in the national and European framework. Reliable quality and safety standards are the prerequisite for ensuring safety of supply and environmental compatibility and for creating trust in these technologies.

BAM has bundled its expertise in the field of hydrogen technologies into a competence center [H<sub>2</sub>Safety@BAM](#) to create confidence in the technology and to support the hydrogen strategies of the German government and the EU. The topic of hydrogen has been current at BAM for more than one hundred years and is also currently the focus of numerous research and cooperation activities. The competence centre [H<sub>2</sub>Safety@BAM](#) and its vision of "We build trust in hydrogen technologies" will be presented with its many safety-related topics, which can be found throughout the entire hydrogen value chain. Two deep dives will present the results on projects dealing with the design-to-cost issue of classical pressurized gas storage containments and the consequences of the release of liquid hydrogen, which will be roughly compared to the release of ammonia.