

Hydrogen Policy Statement

Our Position

Low-carbon hydrogen¹ will play an important role in the energy transition and in global efforts to reach the goals of the Paris Agreement. Hydrogen is uniquely positioned among energy carriers to serve a range of functions in a low-carbon economy with important applications in heating, mobility, power generation and especially as a means to reduce emissions from hard-to-abate sectors such as steel manufacturing and cement production. To realize the full potential of low-carbon hydrogen, governments must develop durable, technology-neutral policy and regulatory frameworks addressing key impediments to production, transportation, storage, and commercial use.

Policy Priorities

Incentivize low-carbon hydrogen production: Financial incentives are needed to deploy current low-carbon hydrogen production technologies and to fund further research and development. This includes boosting the implementation of pilot projects and accelerating the industrialization of specific technologies necessary to reduce the cost of low-carbon hydrogen production from thermochemical processes such as natural gas reforming with carbon capture, use and storage (CCUS) and pyrolysis; and from electrolysis using renewable power. Policies to support low-carbon hydrogen production should be technology-neutral and based on life-cycle greenhouse gas (GHG) emission savings compared to conventional, CO₂-intensive hydrogen production from methane reforming and coal gasification.

Develop hydrogen-dedicated infrastructure and leverage existing gas assets: Financial and regulatory support are needed to build out hydrogen-dedicated infrastructure such as transmission pipelines and turbines. In addition, government regulations should enable the use of existing natural gas infrastructure and facilities (e.g., blending hydrogen into the existing natural gas networks) that can be repurposed and retrofitted to accommodate hydrogen.

Enable end-use applications: Policies, regulations, and incentives should be developed to support the use of hydrogen in diverse end-use applications across multiple sectors. Policies aimed at reducing the cost of

¹ Low-carbon hydrogen refers to hydrogen produced via any production process with a life cycle GHG emission intensity below that of conventionally produced hydrogen (i.e. hydrogen from fossil fuels without carbon capture, use and storage (CCUS)). Low-carbon hydrogen includes hydrogen produced from fossil fuels coupled with CCUS, hydrogen produced via electrolysis based on electricity from renewable sources, from methane pyrolysis, and from nuclear power.



hydrogen turbines and fuel cells through research funding; demonstrating end-use applications (e.g. ammonia for marine transportation); and integrating hydrogen into electricity grid management represent specific areas of focus. Consistent reporting standards providing information on life-cycle emissions of delivered hydrogen are needed to promote consumer confidence of end-use applications.

Develop and harmonize safety codes and standards: Technically sound codes and standards will provide the basis for the safe and consistent deployment of hydrogen and related technologies. Internationally accepted safety standards will be critical for promoting cross-border projects.

Educate stakeholders, the workforce, and the general public: Governments and industry should partner to educate policymakers and the public on the value and safety of low-carbon hydrogen. Resources and programs should be dedicated to train diverse stakeholders (e.g. first responders and technicians) on operations, maintenance, and handling of hydrogen and end-use technologies.

Create integrated hydrogen strategies: Given the breadth and complexity of hydrogen resources and applications, governments must pursue integrated, holistic national and regional strategies with clear objectives, targets, and timelines for integrating hydrogen into low-carbon economies. Strategies should support multi-stakeholder initiatives, such as public-private partnerships and hydrogen hubs/valleys, covering the entire hydrogen value chain including associated supply chain. Finally, international cooperation and coordination is necessary to drive the growth of hydrogen around the world.

Our Actions

Products and Services

Baker Hughes will continue to serve the growing market for hydrogen, applying our deep expertise in gas turbines that can run on hydrogen blends and up to 100% hydrogen; advanced compression technologies; flexible pipes that can handle hydrogen content; and digital solutions to monitor hydrogen gas quality. In addition, Baker Hughes offers a range of products and services to support the CCUS project development necessary to decarbonize hydrogen production from natural gas reforming. We will continue to research and develop the new technologies that are needed to support the hydrogen economy.

Policy Engagement

We remain actively and constructively engaged with policymakers, associations, and customers to address the policy priorities necessary for developing and growing the hydrogen market, and for incentivizing the development and commercialization of the technologies needed to scale up low-carbon hydrogen production and its use in different sectors across the world.