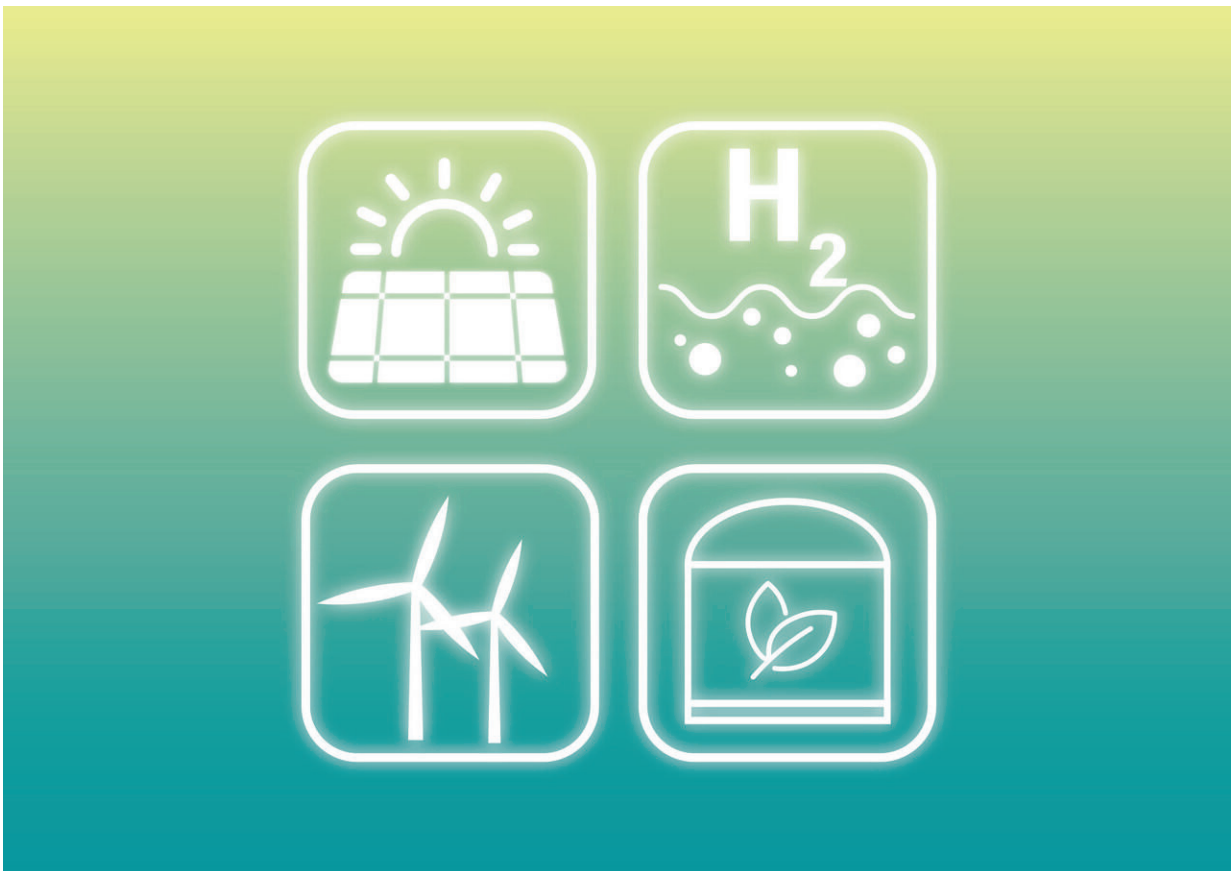


# Scientists identify key challenges facing the clean hydrogen economy

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A [new report](#) by NPL outlines the crucial needs and challenges that need addressing to boost the hydrogen economy and support the UK in

reaching its net zero goals.

The NPL [report](#), "Measurement [challenges](#) in the hydrogen sector," report identifies measurement challenges in four areas of the hydrogen economy: production, [storage](#), distribution and end-use. Solving these challenges is integral for growing the [hydrogen economy](#) and enabling the UK to reach its net zero goals.

They include:

- Reducing the production cost of electrolytic hydrogen.
- Supporting the rollout of hydrogen storage and distribution infrastructure.
- Developing new test facilities capable of advanced material research to support emerging hydrogen technologies.
- Filling gaps in regulation, technical and measurement standards across the hydrogen value chain.
- Enabling the decarbonization of different industries by supporting the progression of hydrogen end-use technologies.

Commenting on the report, Ali Al-Sikab, Scientist at NPL said, "The last few years has seen increased investment in the rapid development and rollout of hydrogen technologies in the UK. The UK government has committed to [channeling up to £500 million into green hydrogen over the parliament](#) in a bid to deliver clean power by 2030.

"As with many new technologies and innovations, metrology (the science of measurement) lies at the heart of their standardization and successful operation, which in turn leads to wider commercial uptake.

"NPL is ready to work with government, industry, and academia to solve the needs and challenges identified in the new report so that hydrogen technologies continue to gain momentum as a commercially alternative

energy source that contributes significantly to the UK's energy transition."

**More information:** Measurement challenges in the hydrogen sector:  
[www.npl.co.uk/resources/energy ... hydrogen-report-2024](http://www.npl.co.uk/resources/energy...hydrogen-report-2024)

Provided by National Physical Laboratory

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