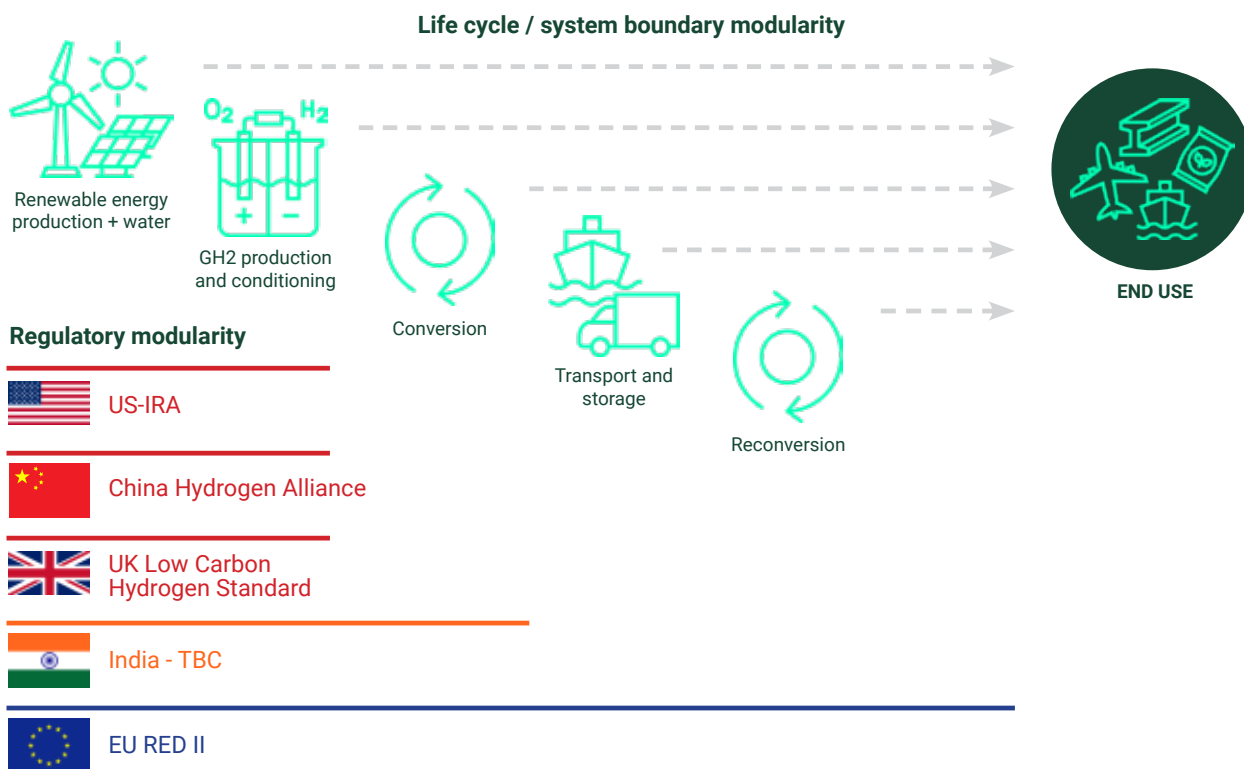


The Green Hydrogen Standard is the only globally recognised system for green hydrogen accreditation and certification. Green Hydrogen projects that meet the Green Hydrogen Standard are eligible to obtain and trade GH2 certificates of origin for green hydrogen and derivatives such as green ammonia.

Any standard for hydrogen must be aligned with the need to limit global warming to 1.5 degrees. It must be flexible enough to cover a wide range of hydrogen products and applications. The Green Hydrogen Standard™ is modular. This supports interoperability across different jurisdictions, products, and applications. It also increases transparency and accountability, which builds trust among producers, consumers, and other stakeholders.

A standard will only be meaningful if it can communicate certain minimum requirements to the consumer. Some consumers will be using green hydrogen, others for example ammonia. While there is a growing recognition of the need for uniform standards, countries are also quickly developing their own requirements, tax credits and rules, setting standards suiting their energy needs and potential. For these reasons, any standard aiming to be an international bridge for trade and recognition needs to be modular.

Green Hydrogen Standard – modular application



GH2's Green Hydrogen Standard™ takes a modular approach based on three key principles.

- 1. Any system for labelling and tiers must be clearly aligned with national and global climate commitments to limit global warming to 1.5 degrees.** The GHS includes emissions thresholds of 1kg for hydrogen and 0.3kg for ammonia.
- 2. Full life cycle analysis (LCA) of greenhouse gas emissions.** Our standard is based on “well to gate” methodology in line with the IPHE. To satisfy consumer demands to know the total emissions, it is finalising protocols for storage, conversion and delivery.
- 3. High levels of transparency and disaggregated reporting to increase confidence and promote accountability.** GH2's approach includes an option to disaggregate the data into different production stages, and to provide other data including verifying temporal matching, estimates of embodied emissions and emissions from transportation and storage.

Rapid Assessment of Green Hydrogen and Green Ammonia projects in accordance with the Green Hydrogen Standard

Given the lead times associated with green hydrogen project development, the Green Hydrogen Organisation has developed the Rapid Assessment Tool, which provides a preliminary assessment of green hydrogen and green ammonia project-alignment with the Green Hydrogen Standard. The Rapid Assessment Tool includes an assessment of whether the anticipated emissions and sustainability plans (e.g., water management) comply with national and regional regulation such as those of the European Union. The assessment prioritises issues that are crucial for getting projects to final investment decision, including:

- **Quantifying greenhouse gas emissions** in accordance with established and emerging standards on production, as well as “upstream” emissions associated with renewable electricity utilisation and “downstream” emissions associated with the storage, conversion and delivery of green hydrogen and its derivatives;
- The applicability of emerging standards relating to **additional renewable electricity**, e.g., determining whether the project will produce green hydrogen in accordance with the EU’s definition of renewable fuels of non-biological origin (RFNBOs). This includes: the requirement for **additional renewable energy**, the permissibility of **subsidies (“state aid”)**, and **temporal and geographical correlation** for grid connected projects. Similar conditions are under discussion in other markets.
- For projects with dedicated (additional) renewables, alignment with applicable sustainability **performance standards** associated with the development of generation and transmission infrastructure;
- For grid connected projects, an evaluation of the project’s utilisation of electricity (including the use and credibility of PPAs and RECs, where applicable), and the **impact of the project on the local energy market** including, e.g., network congestion and electricity prices.
- An evaluation of the project’s **utilisation of water** (including desalination) and wastewater treatment;
- Standards and good practices related to **community engagement** to project siting and **impact on the local environment**.
- Opportunities for **local economic development** associated with the project.

The Green Hydrogen Standard Committee

The Green Hydrogen Standard Committee has formed six working groups which are looking at key issues including: how to calculate emissions from **transportation, storage and distribution of green hydrogen; synthetic methane; fugitive hydrogen emissions; additionality; and water management**.

The Green Hydrogen Standard is available here: greenhydrogenstandard.org

For more information, contact Sam Bartlett sam.bartlett@gh2.org

About GH2

The Green Hydrogen Organisation (GH2) is a not profit foundation under Swiss law. In addition to its office in Geneva it is present in London, Perth, and Sydney. The mission of GH2 is to dramatically accelerate the production and utilisation of green hydrogen across a range of sectors globally. It will push to rapidly decarbonise industries like steel, cement, fertilisers, shipping and aviation that have so far made limited progress reducing their emissions.