

Green Hydrogen Standard Technical Committee

Draft Terms of Reference - 8 December 2021

1. Summary

In December 2021 the Green Hydrogen Organisation (GH2) invited stakeholders to join the Green Hydrogen Standard Technical Committee. The GH2 Board is committed to agreeing the Standard by April 2022. It is anticipated that the Technical Committee will meet virtually 5-10 times between December 2021 and April 2022 and hopefully once in person in Geneva in February (GH2 will cover the costs). The aim is that the Technical Committee makes a single recommendation to Board on the Green Hydrogen Standard.

2. Technical Committee Responsibilities

The Technical Committee will advise the GH2 Board on the following:

- a) Developing, testing and implementing a rigorous framework for accounting for greenhouse gas emissions associated with green hydrogen production, including:
 - Application (and elaboration where needed) of the IPHE [Methodology for Determining the Greenhouse Gas Emissions Associated with the Production of Hydrogen](#), taking into account stakeholder feedback on the IPHE working paper, further refinements and ongoing work, including on delivery and storage and the materiality thresholds for defining emissions sources;
 - Incorporating considerations that are out-of-scope for IPHE, in particular life cycle analysis and embodied emissions, e.g., by drawing on the work undertaken by the National Renewable Energy Laboratory ([NREL, September 2021](#)).
 - Reviewing existing and emerging certification approaches at the national and regional level to ensure “comprehensive compatibility”
 - Establishing a clear procedure for certification and accreditation, including thresholds, data standards, requirements for onsite emissions monitoring and independent / third party verification to assess compliance.
- b) A rigorous framework for addressing the ESG performance of green hydrogen production, including:
 - Incorporating sustainability assessments into investment analysis and project decision-making processes at an early stage. Key ESG issues include: Are the social and environmental impacts of new projects fully considered? Can free, prior and informed consent be verified? Are human rights respected and promoted where the

energy is produced? The GH2 Standard should address the impact on affected communities, labour and working conditions, and the prohibition of all forms of slavery, child and forced labour.

- Exploring opportunities to align GH2's treatment of ESG considerations with emerging best practice in the renewable energy sector, such as the International Hydropower Association (IHA) Hydropower Sustainability Guidelines on Good International Industry Practice, and similar efforts in the wind and solar power sector.
 - Further consideration of good governance considerations regarding the rule of law, fiscal regime and benefit sharing. This should also address transparency and accountability requirements, including contract / PPA transparency.
 - The use and management of water resources, ensuring that water is sourced responsibly from renewable sources without compromising the needs of the future.
 - Additionality requirements and geographical/temporal matching of renewable power production and consumption.
- c) A rigorous framework for addressing the development impact and SDG performance of green hydrogen production.
- d) Opportunities to test and pilot certification methods together with supporting companies.
- e) The expected costs for developers and funding considerations related to maintaining / monetising the GH2 standard.
- f) Any additional issues as agreed as requested by the GH2 Board and emerging from the Technical Committee's deliberations.

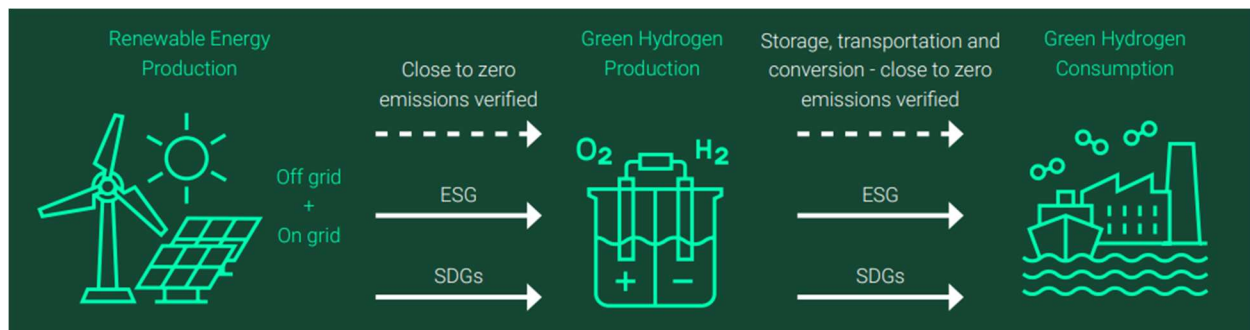
3. Background

The Green Hydrogen Organisation (GH2) was [launched](#) in September 2021. It is chaired by Malcolm Turnbull. GH2 is a Swiss non-profit foundation and receives generous support from Fortescue Future Industries whose founder Andrew Forrest serves on GH2's board. GH2's team is led by CEO Jonas Moberg.

On 4 November, GH2 [announced](#) the development of the GH2 Green Hydrogen Standard. GH2 is calling on governments, industry, the financial community, and civil society organizations to support a global effort to establish clear standards and accreditation for green hydrogen. There has been considerable success in building awareness about the role of hydrogen in meeting our energy transition and climate change goals. However, the outlook for green hydrogen based on renewable energy is fundamentally different to hydrogen based on fossil fuels, including expensive and largely unproven carbon capture and storage (CCS). The GH2 rejects the use of the term 'clean hydrogen' to conflate the outlook for green hydrogen based on renewable energy and hydrogen based on expanding the use of fossil-fuels and will establish a global standard that focuses exclusively on green hydrogen.

The GH2 Green Hydrogen Standard comprises three pillars:

1. **Rigorous accounting of greenhouse gas emissions – guaranteeing close to zero emissions.** The GH2 Standard addresses total greenhouse gas emissions, guaranteeing that green hydrogen is based on renewable sources with close to zero emissions. The GH2 Standard is rigorous, yet practical, with carbon accounting procedures and thresholds that can be applied consistently to grid and off grid production.
2. **Environmental, social and governance performance.** The GH2 Standard tracks the overall social, environmental and governance impact of GH2 certified hydrogen.
3. **The development impact.** Green hydrogen development can provide developing countries with zero-carbon energy to support energy sector development, increase energy security and create export opportunities. The GH2 Standard requires that the development impact of any GH2 Standard certified green hydrogen is assessed based on the Sustainable Development Goals (SDGs).



Further information on the GH2 Green Hydrogen Standard is available [here](#).

4. Committee Composition

The Board will decide on the composition of the Committee. It will strive to ensure that a wide group of stakeholders are represented. The members are:

- TBC
- TBC
- TBC

5. Anti-trust considerations

GH2 seeks to fully comply with all applicable laws, including antitrust and competition laws and regulations.

Technical Committee shall not discuss or share confidential proprietary or otherwise commercially sensitive information including pricing, terms and conditions of sale, production or sales levels, business relations, or other matters on which participants compete.

Discussing or sharing this information can have serious consequences for GH2 and participants including fines and reputational damage.

Technical Committee are thus asked to have due regard for antitrust and competition laws and to voice any concerns related these issues promptly

6. GH2 Contact

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