

GLOBAL CALL FOR

100 *by* 2030

At least 100 million tonnes of green hydrogen annually by 2030 – for climate and security



The **world's governments** should commit to policies delivering at least 100 million tonnes of green hydrogen annually by 2030.

The **private sector** should commit to deliver and use at least 100 million tonnes of green hydrogen annually by 2030.

100

million tonnes

of green hydrogen by 2030 can be done.
It must be done to save the planet.

100 million tonnes of green hydrogen annually by 2030 amounts to **2-3% of global energy end use.**



We cannot decarbonise the global economy without green hydrogen. The future of the planet depends on it.

We cannot achieve energy security without green hydrogen.

With the campaign “100 by 2030” we will work together to build support for green hydrogen and end our dependence on fossil fuels. We will work with partners to track government policies and ambitions. We will work with partners to track corporate plans and commitments.

We call on the G7, G20 and all countries to publicly commit to deliver at least 100 mt of green hydrogen annually by 2030.

We invite government, industry and civil society leaders to join the “100 by 2030” campaign. Decarbonising our societies will require governments, industry and civil society working together to ensure that green hydrogen production is sustainable.

At www.gh2.org/100by2030 we will track government policies and companies' capacity to deliver.

We all have a role to play. Let's do it together!



What 100 million tonnes gets us

100 million tonnes of hydrogen is enough to produce about 3300 terawatt hours (TWh) of power.

100 million tonnes could be used the following way to make a significant progress towards a decarbonised society:

- 20 million tonnes, converted into approx. 100 million tonnes of green ammonia could be used to decarbonise 10% of global **shipping**.
- 10 million tonnes could be used to replace fossil fuels in the production of ammonia for 50 % of global **fertiliser** production.
- 10 million tonnes could be used to produce **half** of the world's **steel** with reduced fossil emissions.
- 15 million tonnes could be used in **vehicles, trains and planes**.
- To illustrate: 10 million tonnes would be enough to power a large share of Europe's trucks.
- 20 million tonnes could be used for **power** flexibility and generation. To illustrate: 16 million tonnes is about the same as the power used in Brazil in a year.
- 20 million tonnes could be used in **chemical and industrial processes**, such as methanol production.
- 5 million tonnes - as a transition measure - **blending** gas in existing gas networks.

Total: 100 million tonnes.

A priority is to replace the ~90 million tonnes of hydrogen that is currently produced each year from fossil fuels, which results in ~900 mt of CO₂ emissions (around 3% of total global greenhouse emissions). Green Hydrogen has close to zero CO₂ emissions.

By 2050, Bloomberg's Green Scenario counts on 800 million tonnes of green hydrogen. We had better reach 1/8th of the way by 2030!

At the Green Hydrogen Global Assembly in Barcelona 17-18 May, we will take stock on progress. At COP 27 in Egypt in November 2022, we will report on progress.

Everyone is welcome to express support for this appeal. A steering group with governments, industry and civil society is created for the campaign.

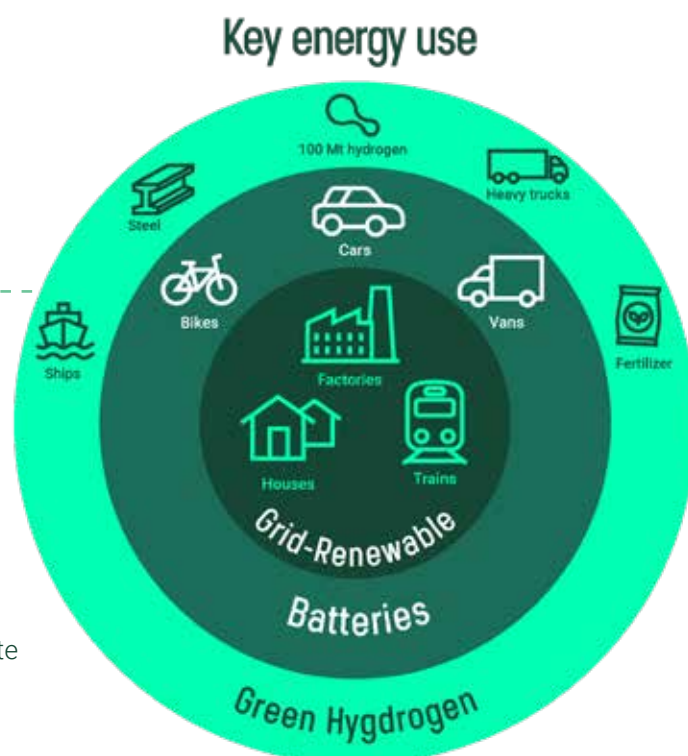
Civil society organisations are playing a crucial role in safeguarding that the green hydrogen industry meets the highest environmental, social and governance standards, and that projects in developing and emerging economies contribute to good development outcomes.

What governments must do

100 million tonnes of green hydrogen will require some 1200 GW of renewable electricity. Globally we added 290 GW of new renewable electricity in 2021. If this pace is maintained, we will have added close to 3000 GW by 2030. Most of that is needed for direct electrification. If we accelerate this trend, it will be possible to use 1200 GW to produce 100 mt of green hydrogen.

To make it happen, we need to:

- **Price carbon emissions** and stop subsidising fossil fuels.
- **Set targets** for using green hydrogen to decarbonise heavy industries, transportation, shipping and fertilisers.
- Use **contract for difference**, infrastructure and production tax credits and other incentives.
- Provide concessionary **funding**, fixed term fiscal incentives and risk alleviation.
- **Invest in infrastructure** for renewable energy and transportation.
- **Procure** only renewable energy and green products.
- Apply globally recognised **standards, certification** schemes that promote **fairness and sustainability**.
- Ensure a rapid expansion of renewable energy capacity, with progressive **planning** approaches and incentives to the renewable energy sector.



(c) Green Hydrogen Organisation

This is the Green Hydrogen Organisation's scenario. We have consulted leading experts in the various sectors to develop these projections. As we are increasingly able to substantiate how green hydrogen will be used, we will make information available at www.gh2.org. We expect that a large proportion of the ~ 90 million tonnes of hydrogen produced today based on fossil fuels will be replaced with green hydrogen. Some fossil fuel-based hydrogen will still be used not least in integrated industrial processes where carbon emissions are used, such as in the production of urea.