
Towards a cleaner future
GH2 Green Hydrogen Organisation
YOUTH SESSION AT IGHC
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WWW.GH2.ORG.IN
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Climate Change

.. long-term shifts in temperature, precipitation, wind patterns, and other aspects of the Earth's climate system. These changes are largely driven by **human activities,** particularly the **burning of fossil fuels like coal, oil, and natural gas, as well as deforestation.**

When fossil fuels are burned, they release g**reenhouse gases (GHGs) such as carbon dioxide (CO_2) and methane (CH_4)**. These gases trap heat in the Earth's atmosphere, leading to global warming.

As a result, we are witnessing rising global temperatures, melting polar ice, and more frequent extreme weather events, all of which are key indicators of climate change.

Fight against Climate Change

Promote Reforestation and Conservation

Adopt Sustainable Agriculture

Shift to Sustainable Transportation

Support Green Hydrogen and Clean Technologies

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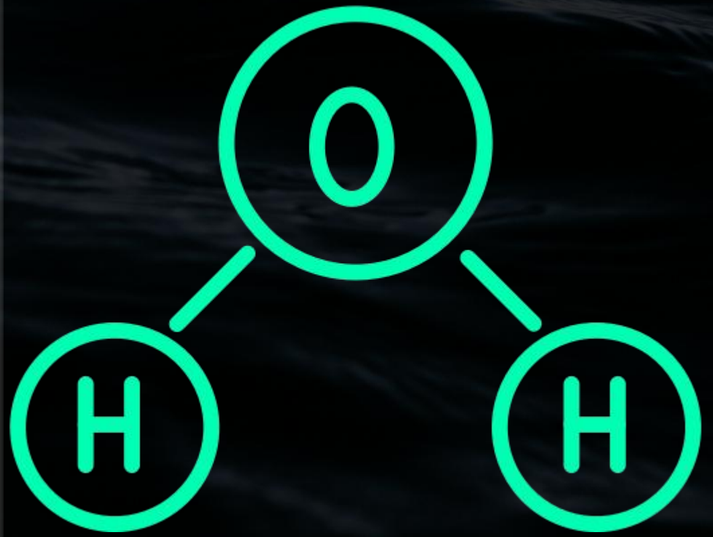
WHAT IS HYDROGEN

90% of atoms in the universe are made of Hydrogen and 75% of Normal matter is Hydrogen.

It is colorless, odorless, non-toxic, and highly combustible

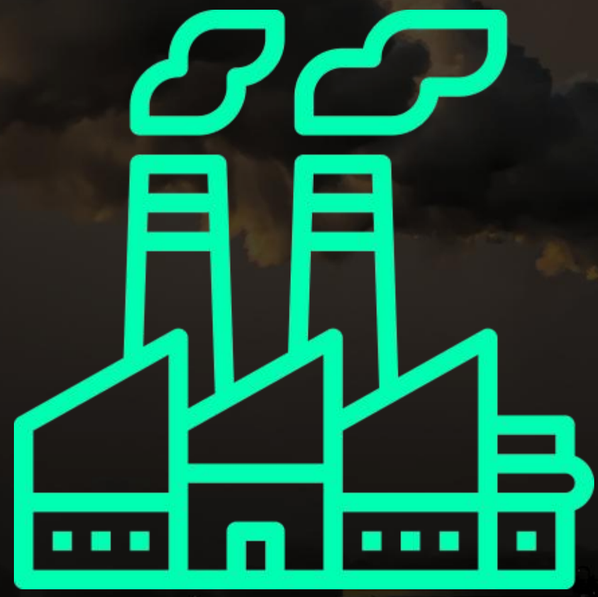
Rarely esxists in a pure form.



WHERE DO WE USE HYDROGEN

Industry

- Refining
- Chemical production
- Steel manufacturing
- Energy Storage
- Power Generation
- Aviation and Shipping
- Grid Balancing and Backup Power



CURRENT PRACTICES PRODUCE 12-13 KG CO2-EQ/KG H2

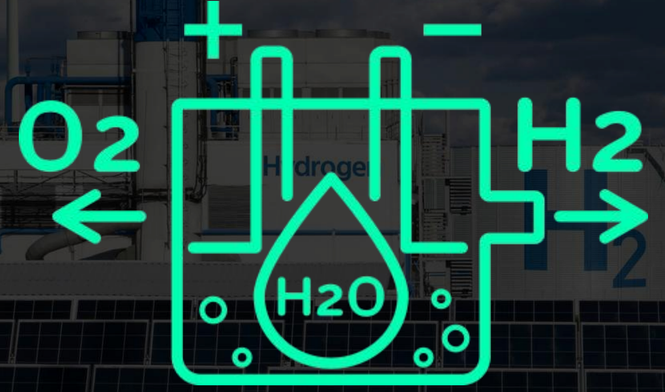
WHERE DO WE USE HYDROGEN

Transportation
Energy Storage
Aviation and Shipping
Power Generation
Grid Balancing and Backup Power

WHAT IS GREEN HYDROGEN

Green hydrogen is hydrogen that is produced through the process of electrolysis, using renewable energy sources like solar, wind, or hydropower.

Green hydrogen could also be hydrogen that is produced using bio-mass and agriculture waste



WHY DO WE NEED GREEN HYDROGEN

- Zero Emissions:
- Versatile Energy Carrier:
- Potential to Replace Fossil Fuels:
- Key Role in Energy Transition

To tackle climate change and its negative impacts, world leaders at the UN Climate Change Conference (COP21) in Paris reached a breakthrough on 12 December 2015; The Paris Agreement.

HOW CAN WE ADPOT GREEN HYDROGEN

- Renewable Energy Infrastructure
- Scaling of Electrolysers and development of Electrolyser Technology
- Government Policy and Incentives
- Infrastructure Development for transportation and storage.


Let’s work towards a cleaner world for our future generations.
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