

Context



India secured long-term export agreements for **green ammonia and green methanol** with Japanese companies, marking a milestone in its **National Green Hydrogen Mission (NGHM)**.



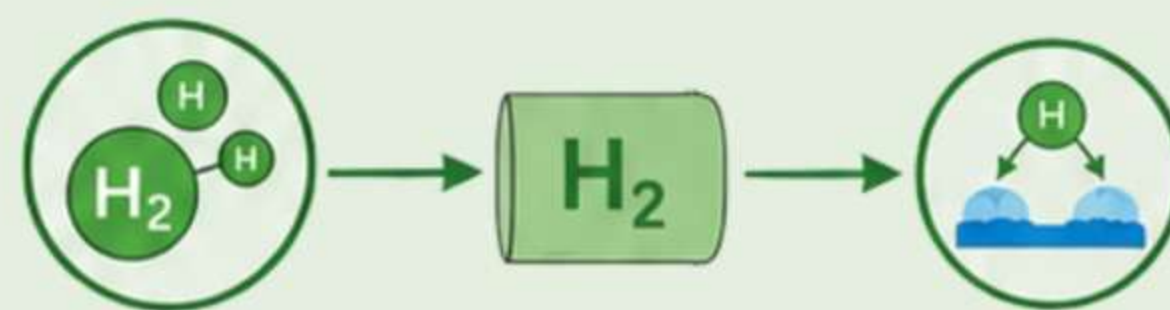
Green Ammonia

Green Methanol

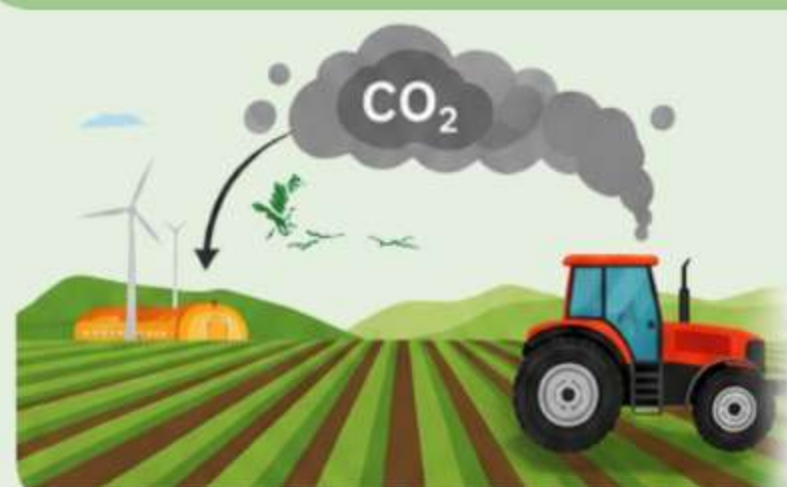


Green ammonia

- It is **produced using green hydrogen**, and is emerging as a **leading clean fuel for fertilizers, energy, and marine applications**.



Benefits of Green Ammonia

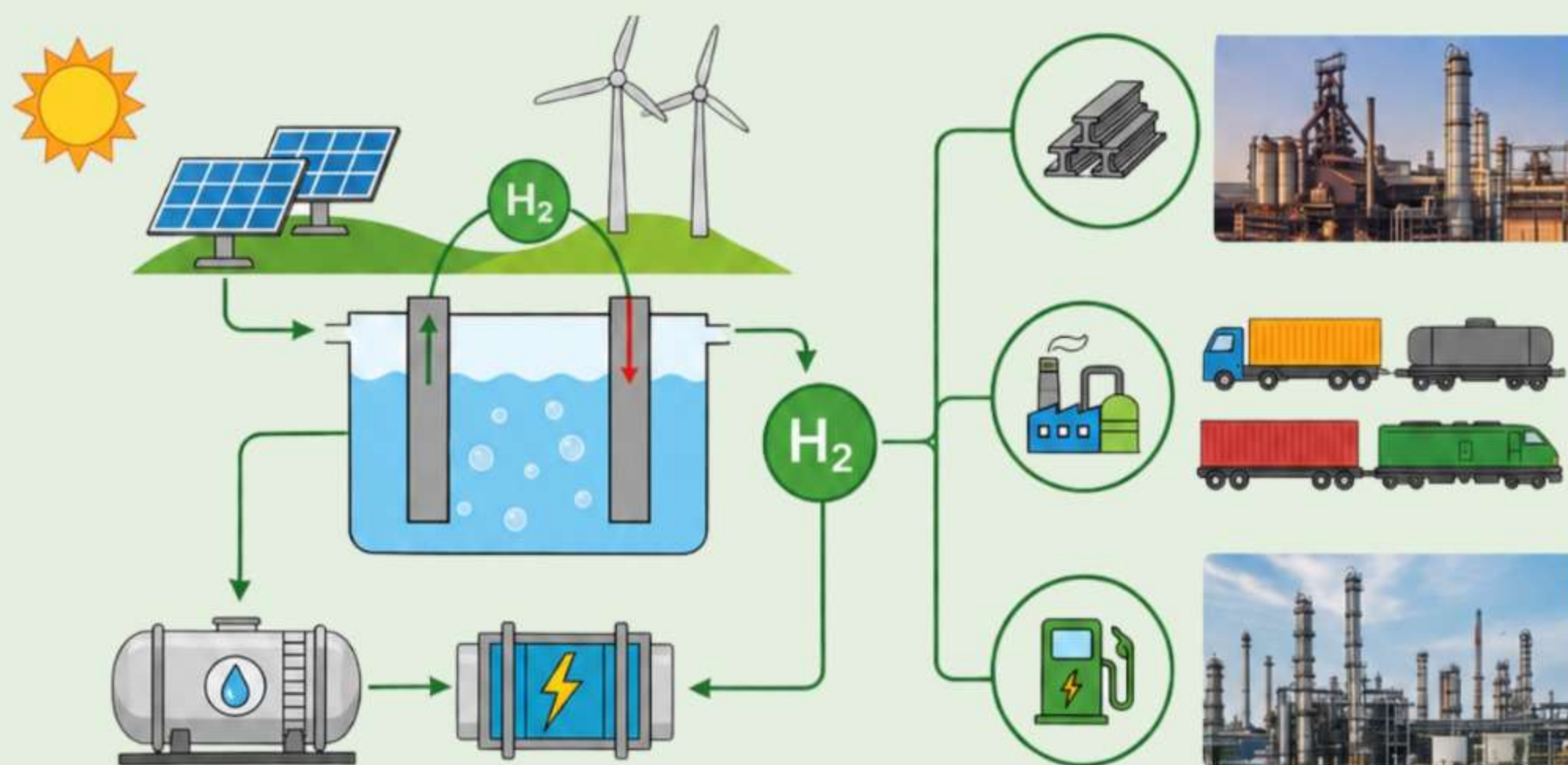


- Decarbonization of Fertilizers:** India's fertilizer sector, heavily dependent on imported ammonia, can significantly cut emissions by adopting green ammonia.



About Green Hydrogen

- Green Hydrogen:** It is produced using electrolysis of water with electricity generated by renewable energy.
- Benefit:** It is a clean burning element that can decarbonise a range of sectors including iron and steel, chemicals, and transportation.
- Hydrogen can be stored for long periods of time which can be used to produce electricity using fuel cells.



National Green Hydrogen Mission



- Aim:** To make India a global hub for the production of green hydrogen.
- Implementing Ministry:** Ministry of New and Renewable Energy (MNRE)

Hydrogen

- Symbol and Atomic number** - Hydrogen is the chemical element with the symbol H and **atomic number 1**.
- Hydrogen is the **lightest element and the most abundant chemical substance in the universe**, constituting roughly 75% of all normal matter.
- It is **colorless, odorless, tasteless, non-toxic, and highly combustible gas**.

