

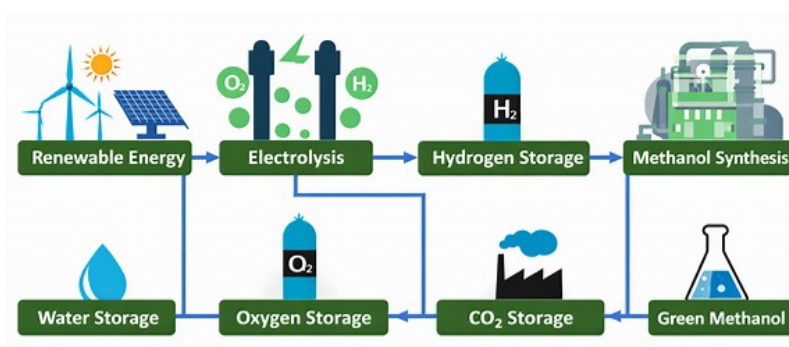
## Green Methanol

*Prelims: Current events of national and international importance | Energy*

### Why in News?

Recently, India's ACME Green Molecules Business signed a long-term supply agreement with Japan's Mitsubishi Gas Chemical (MGC) for 100,000 tonnes of green methanol annually.

- **Green Methanol** - A sustainable, net-zero carbon liquid fuel and chemical feedstock produced from renewable sources such as biomass (bio-methanol) or green hydrogen and captured CO<sub>2</sub> (e-methanol).
- **Process** - Produced by reacting **green hydrogen** (from water electrolysis powered by wind/solar) with **captured carbon dioxide** under heat and pressure.
- Alternatively, it is made by cleaning and synthesizing syngas from **gasified organic biomass waste**.



- **Uses**
  - **Maritime shipping** - Decarbonized using alternative bunker fuels.
  - **Aviation** - Shift to e-SAF (sustainable aviation fuel).
  - **Chemical manufacturing** - Replace fossil fuels to produce green plastics, textiles, and adhesives.

### Quick Facts

**eSAF** - Electro Sustainable Aviation Fuel is a synthetic, drop in replacement for conventional jet fuel that is produced using captured CO<sub>2</sub>, water, and renewable electricity.

## Reference

[Economic Times | Green Methanol](#)

