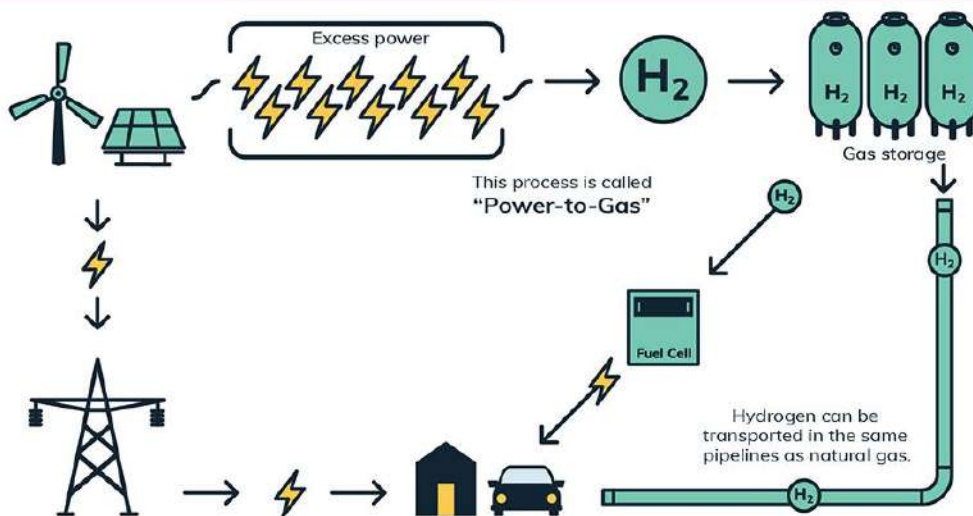


# VERSATILE APPLICATIONS

## Power-to-Gas



## Grid & Renewables Integration



Hydrogen acts as a buffer to increase grid resilience, and grid balancing (matching supply to demand.)



Large-scale renewable integration because it provides cost-effective long-term and seasonal storage. Lossless Distribution of energy across sectors and regions.

## Renewable Energy Storage



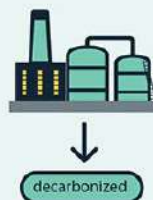
- Hydrogen mountain shelter in the Col du Palet (2,600m)
- European islands gain energy independence and security by utilizing wind and solar power to create hydrogen. Isolated from the mainland, they are empowered to create their microgrid  
Example: The Orkney islands, from the Scottish archipelago

## Backup Power



- Telecommunications industry
- Communication centers
- First response, hospitals
- Control center, traffic signals
- Disaster prone areas

## Industrial Use



**55 Million tons** of hydrogen is used in refining, fertilizer, and chemical production.

## Combined Heat and Power (CHP)

Hydrogen is a cost-effective option to decarbonize buildings' heat and power.

