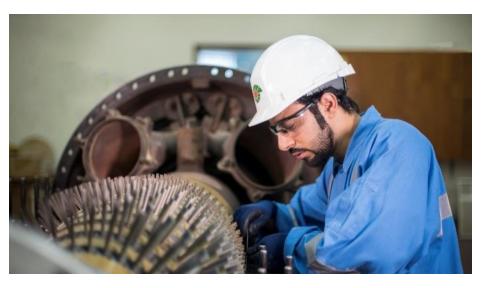
Clean Energy Technology Innovation

Dr. Khalil Al Hanashi Energy Renewal Unit- PDO







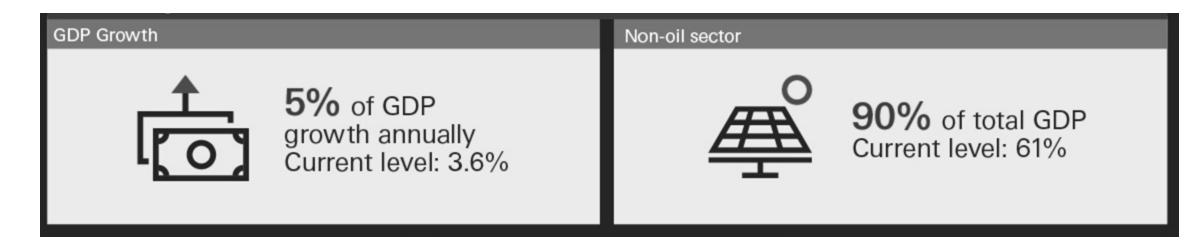


National Energy and Climate Change

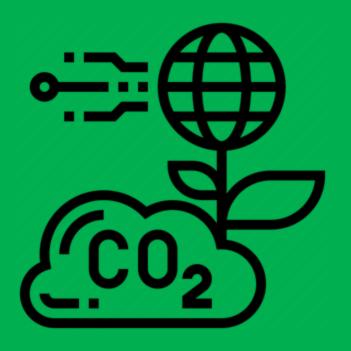


- Predominantly gas-based power generation and gas for industrial feedstock.
- Net Oil Exporter
- Growing renewables project and aspiring to 30%
 Renewable Energy share by 2030
- NDC, JULY 2021: Curtailing the GHG emission growth by 7% reduction in GHG by 2030, from business-as-usual scenario of 125.254 MTCO2e.

Oman Vision 2040



Carbon Capture and Storage



Carbon Sinks:

Innovation Domains

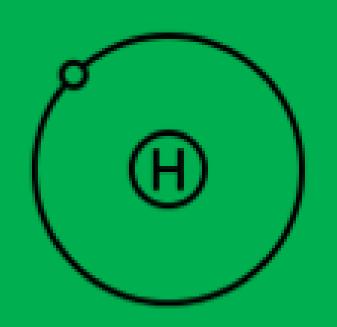
- Geological Storage (Salt domes and depleted Gas reservoir)
- CO₂ Mineralization (Peridotite Rocks)
- Seaweed







Clean Hydrogen



National Clean Hydrogen Strategy

- Ambitious plans to develop world leading clean hydrogen production.
- Blue and Green Hydrogen to support local and international demand

Innovation Domains

Reducing the Cost of Clean Hydrogen Production



Saline produced water for Hydrogen



Waste to Energy

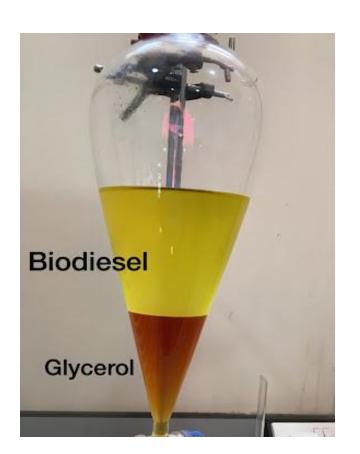


Large quantities of waste but scattered geographically.

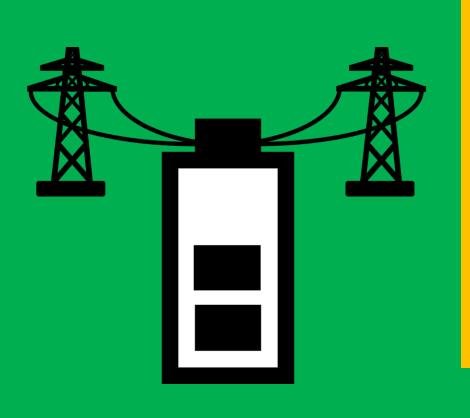
Innovation Domains

- Development and deployment of distributed and cost-effective waste to energy systems.
- Reducing the cost of Biodiesel and Bio-Methanol





Energy Storage



- 30-40% practical limit for renewables in the energy mix without storage

- High renewables resources availability (wind and solar)

Innovation Domains

Cost effective high capacity and fast responding storage innovation

Smart Grids and network stability technologies innovation

