

### Why in news?

A coalition of 22 countries have signed 'Clydebank Declaration for Green Shipping Corridors' and agreed to create zero emissions shipping trade routes between ports to speed up the decarbonisation of the global maritime industry.

### About the declaration

- The signatory countries signed the 'Clydebank Declaration for Green Shipping Corridors' (launched at the COP26 climate summit in Glasgow) and agreed to support the establishment of at least 6 green corridors by 2025.
  - A green corridor is **defined as a shipping route between two major port hubs** on which the **technological, economic and regulatory feasibility of zero-emissions ships is accelerated by public and private action.**
- India has not signed the declaration yet.
- The strategy for going carbon neutral will include using ships that run on zero-carbon fuels and updating port infrastructure.

### Challenges to green shipping in India

- Inadequate quality of intermodal infrastructure (railways, waterways connectivity with highways) which leads to more cargo handling by shipping which causes emissions.
- Difficulty in securing investment funds to replace existing ships by eco-friendly ones.
- Use of polluting fuel which contain high amounts of sulphur and release sulphur dioxide on burning.
- Seasonal reversal of winds along with frequently changing localized weather conditions in India leads to more deviation in shipping routes, more fuel consumption and hence more emissions.

Initiatives for development of Green Ports & Green Shipping in India

- India signed an agreement under IMO to cut the shipping industry's greenhouse gas emissions by 50% by 2050.
- India is a member of International Maritime Organisation (IMO) and signatory to International Convention on Prevention of Marine Pollution (MARPOL).
- India aims to increase share of renewable energy to more than 60% across major ports by 2030.
- Fuel sulphur limit has been reduced from the current 3.5% to 0.5% in India.
- National Green Tribunal (NGT) has approved the 'Beaching' method of ship recycling in Alang, Gujarat.

# 1.5.3. CARBON CAPTURE, UTILISATION AND STORAGE (CCUS)

## Why in news?

Orca is the world's largest carbon capture plant, created by Climeworks, was launched in Iceland.

### About CCUS

- It is group of technologies designed to **reduce the amount of CO**<sub>2</sub> released into the atmosphere from coal and gas power stations as well as heavy industry including cement and steel production.
- It involves-
  - **Capture** of CO<sub>2</sub> from fuel combustion or industrial processes,
  - **CO<sub>2</sub> is captured using technologies** like Chemical absorption, Physical separation, Oxy-fuel separation, Calcium lopping etc.
  - **Transport** of this CO<sub>2</sub> via ship or pipeline.



DATA BANK

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Approximately, 95% of the country's trade by

volume (70% in terms of value) is moved by