

Decarbonisation in Global Shipping & Ports Industry- The African Landscape

- Cited Research by C40 Cities indicates that shipping is powered almost entirely by fossil fuels, with the industry accounting for 2–3% of global CO2 emissions.
- Traditionally, shipping vessels engines run on convectional fuels like marine diesel or heavy fuel oils which are heavy emitters of GHG gases.
- Alternative fuels i.e. liquified natural gas (LNG), Liquid petroleum gas (LPG), methanol, green hydrogen and green ammonia are still in limited use in the shipping industry appx 1.2% in 2022.
- Availability of alternative fuels enhancing energy efficiency in vessel design provides a way to achieve IMO's shared objective of attaining net zero GHG 2050.
- In Africa early-stage development initiatives for potential bunkering hubs and continents ports authorities to catalyse demand for universal access to clean energy is critical.
- Energy transition efforts necessary for shore-based operations in African ports to promote investment in environmentally friendly, long-term operations in maritime sector.



AfDB's Innovative Approaches to stimulate Climate Resilience and Environmental Sustainability in African Ports

Climate Resilient Infrastructure

The Bank makes ports more attractive asset to invest as **Climate Resilient Infrastructure projects** by conducting Climate Risk & Adaptation component Assessment with our partner institutions followed by **blended finance with concessional Climate Facilities.**



4th Expansion of Port of Banjul, the Gambia: Climate Risk & Adaptation component Assessment with Global Center on Adaptation(GCA) followed by Bank's blended finance with a Climate Facility



Rehabilitation and Expansion of Port of Cotonou, Benin: Climate Risk & Adaptation component Assessment with GCA followed by Bank's blended finance with an Internal Climate Facility



Modernization and expansion of Moroni Port: Union of Comoros: Climate Risk & Adaptation Component assessment with GCA. To be followed by Bank's blended finance with a climate facility.



Key prerequisites for development of Green Ports in Africa

- Readiness for Low carbon transport and shipping operations in Africa
 - Need a steady agglomeration of change agents, champions and expertise to drive forward the green corridor strategic shift in select ten African countries.
 - Incentivizes the sector players to drive sufficient traction in R&D, targeted investment in green corridor infrastructure hubs, ports etc
- Regulations and Policy: International regulations (IMO GHG's Strategy and MARPOL Resolution encouraging voluntary cooperation between shipping and port sectors to contribute to reducing GHG emissions from ships and shore operations.
- National Strategies and Action Plans: Develop unique strategies for the reduction of GHG emissions and Low – Carbon fuels use across the continents Green Shipping, Ports and Regional Economic Corridor

AfDB mandate to promote rapid growth in the use of zero emission fuels and decarbonization in African ports and shipping corridors

Based on:

- 1. IMO guidelines
- 2. African Union objectives of the port sector and maritime transport
- 3. AfDB's Climate Change and Green Growth Strategy

Proposal:

- To create a baseline needs assessment for 10 African countries' ports and shipping nodes
- Feasibility study for development and implementation of IAPH Environmental Ship Index
- Guidelines for countries to implement the IMO Greenhouse Gas Emissions reductions strategy
- Capacity building around best practices for developing green ports and shipping corridors
- Develop a potential Green Ports Certification Scheme for Africa



Approach

1. Support national measures

Aim to:

- reduce port emissions
- establish green, smart African ports and shipping corridors.

Port incentive programmes to support mainstreaming of green ports Implementation; baseline studies

2. Create 10 African national green ports and shipping investment programmes



- facilitate the development of clean energy mechanisms
- decarbonise maritime transport

Investment-ready green transition programmes for ports and shipping corridors

3. Embrace and encourage mainstream use of IMO mechanisms and procedures



Aim to:

 Implement the updated ambitions of the IMO Greenhouse Gas reduction strategy

Capacity-building and potential green ports certification programme in Africa

