

KINGDOM OF MOROCCO



MOROCCO PORT SECTOR'S GREEN TRANSITION

GREEN SHIPPING CONFERENCE

Labadi Beach Hotel, ACCRA, GHANA
February, 15th and 16th 2023



MOROCCAN PORT SECTOR... TOWARDS A SUSTAINABLE HERITAGE

Forces

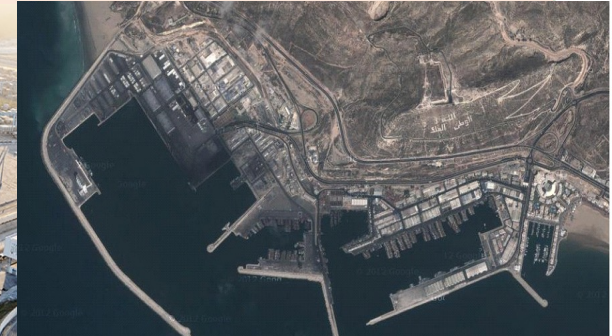
Geographical Position;
Green Natural Resources;
Renewable energies capacity;
Multi-sectorial governance body;
Expertise acquired by the Kingdom over the last 10 years;
Morocco NDC;
Green Hydrogen Roadmap;
Low Carbon Development Strategy to 2050

Opportunities

Energy exportation;
Growth demand of green energy;
Development of adapted infrastructure;
Maritime ports as energy community hub;
Cooperation and Partnership between countries and regions

Challenges

- Technologies implementation (Cost reduction, Research & innovation, Local industrial integration);
- Investment & supply (industrial cluster & infrastructure, financing);
- Markets & demand (exports, storage, domestic markets)
- Regulatory framework





United Nations
Framework Convention on
Climate Change



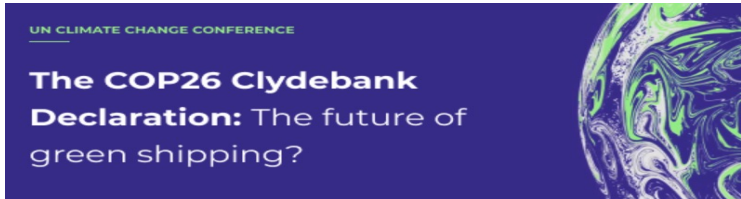
CONVENTIONS & STRATEGIES

- MARPOL Convention
- IMO Initial strategy to GHG reduction

International Level

MOROCCO COMMITMENT

Regionall level



**Déclaration
One Ocean Summit**

MOROCCO FIRST STEPS TOWARD GREEN PORTS

Port Infrastructure Adaptation

- Resilience assessment of Port infrastructure to climate change
- Strengthening the resilience of existing and future ports



Digitalisation of maritime trade

- Port community system
- Dematerialisation of documents
- Fluidification of truck flows
- Dynamic truck weighing
- Ships in time in the harbor



Reduction of electricity consumption in Port Activities

- LED lightning in Ports
- Intelligent Port Power



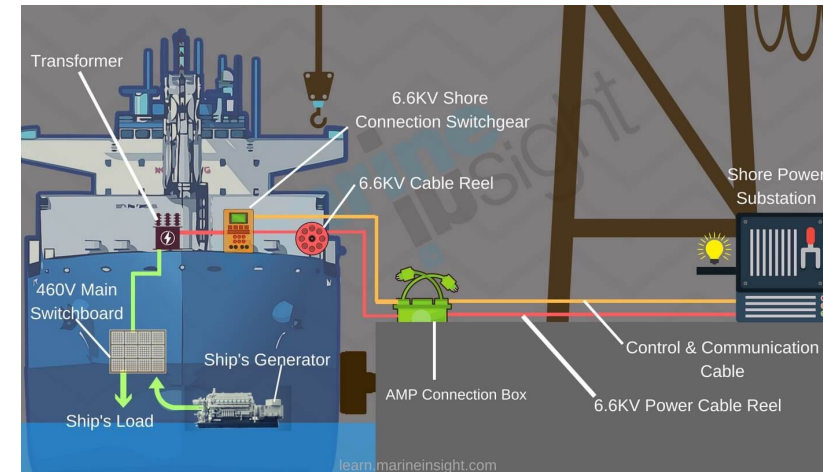
Implantation of Green Areas



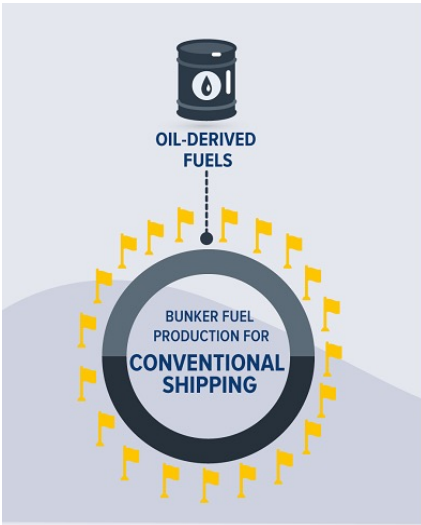
MOROCCO FIRST STEPS TOWARD GREEN PORTS

Transition, Autonomy and Energy Efficiency of Ports

- Photovoltaïque parc to supply port administratif building with energy;
- Assessment of the port's GHGs and development of a roadmap for carbon footprint mitigation and setting up and monitoring performance indicators



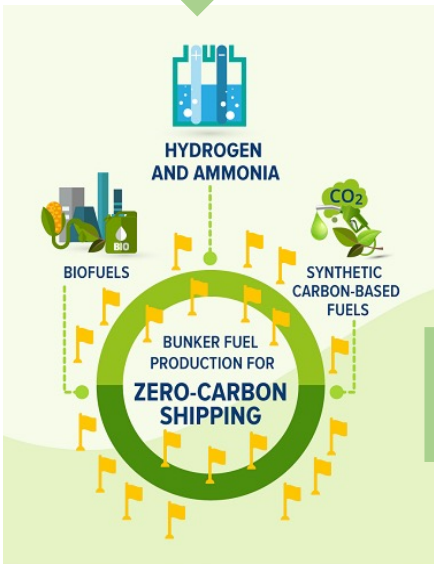
WORLD BANK GROUP CONCLUSIONS



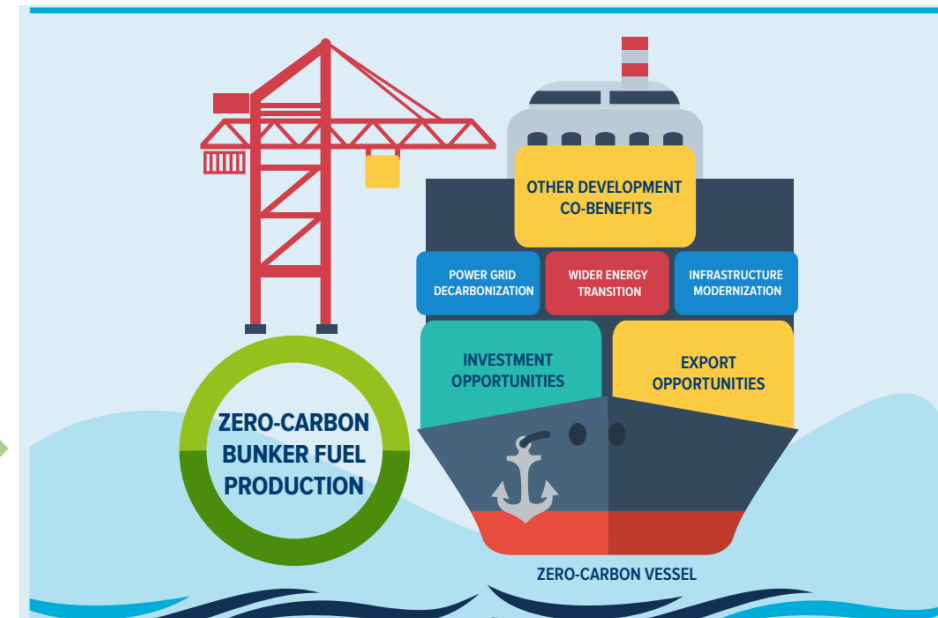
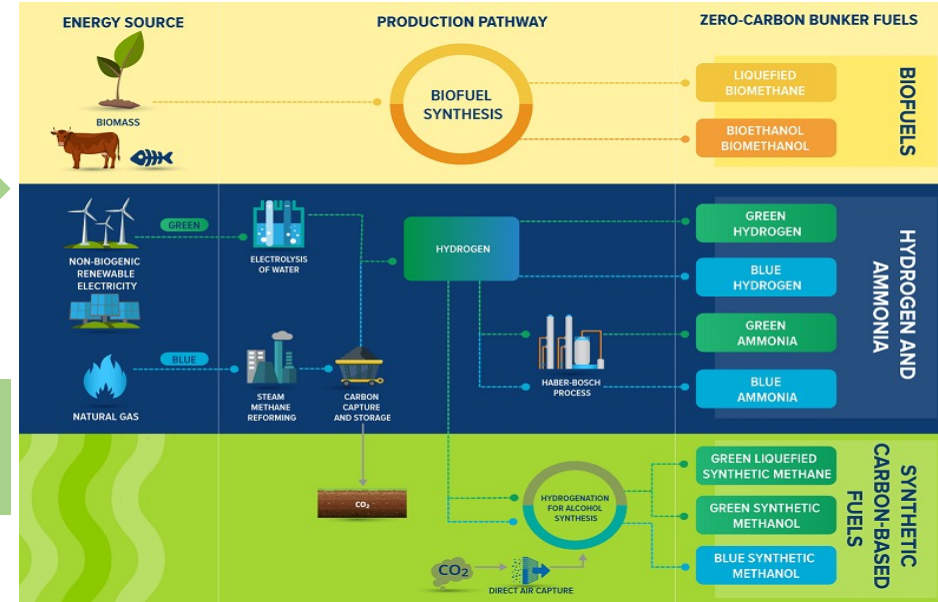
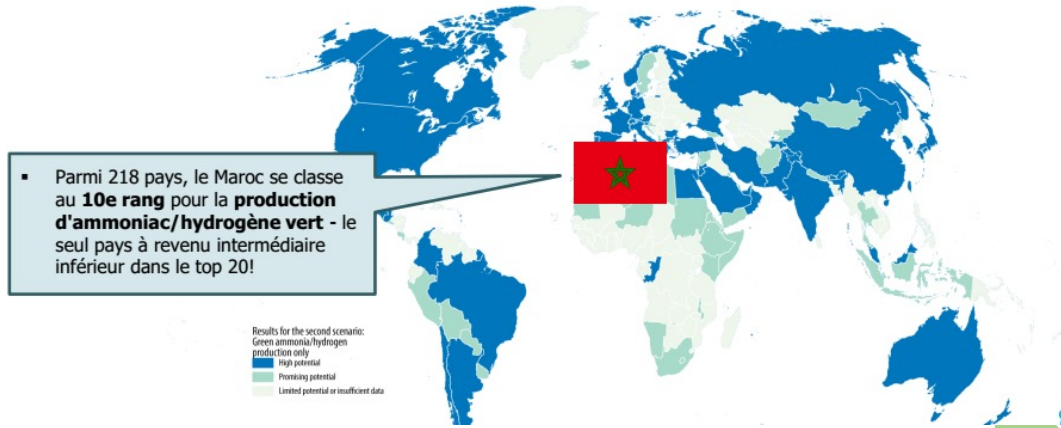
BUNKERING OPTIONS FOR ZERO-CARBON SHIPS

MOROCCO IS AMONG THE TOP 10 DEVELOPING COUNTRIES WITH HIGH POTENTIAL

REUSSIR LA TRANSITION



DEVELOPMENT OPPORTUNITIES CREATED BY THE BUNKERING OF ZERO CARBON PRODUCTION VESSELS



ONGOING PROJECTS

World Bank pre-feasibility studies on the production, storage, supply and export of zero carbon bunker fuel in Morocco

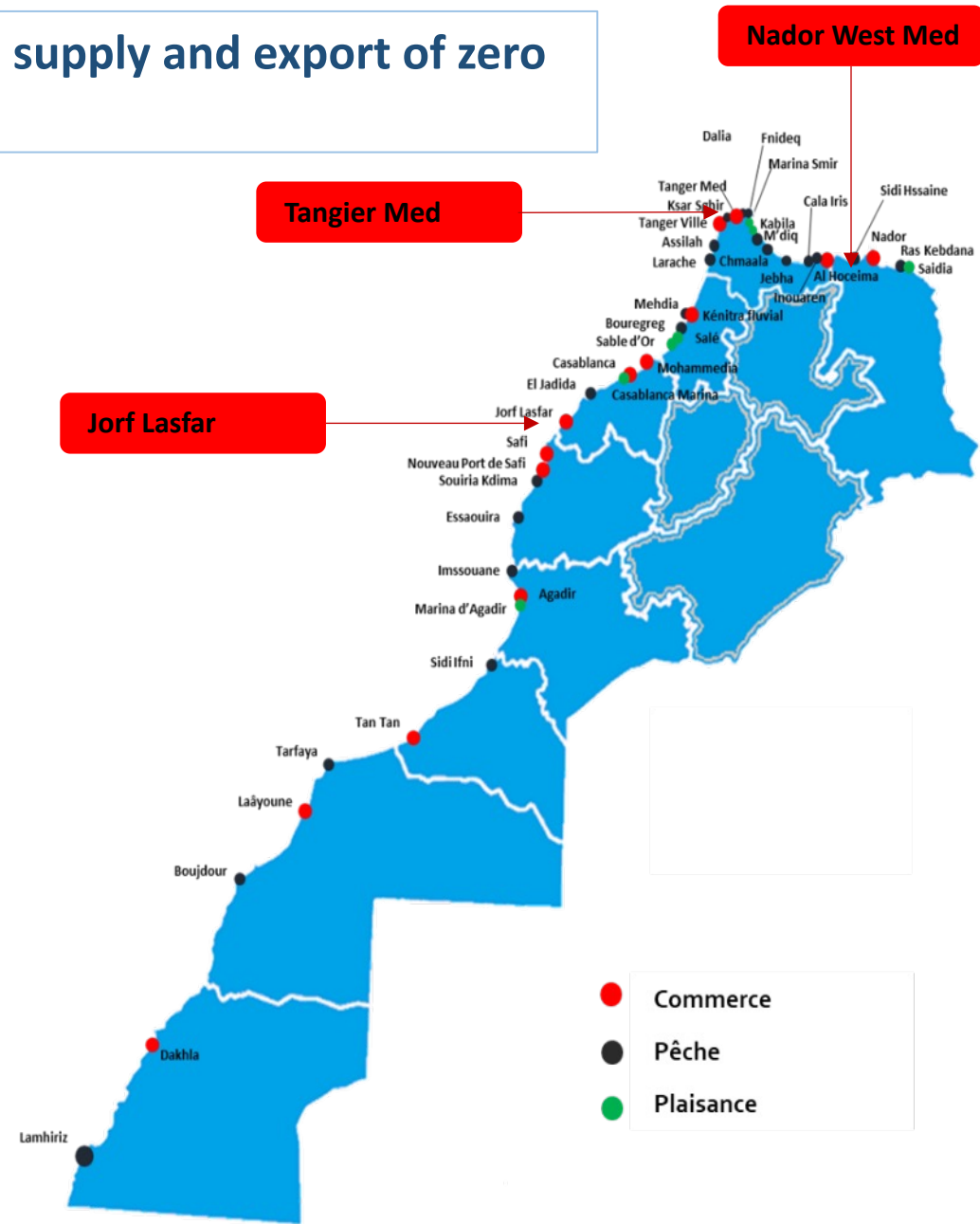
Purpose

Introduce the bunkering of ships calling at Moroccan ports with green bunker fuels

Consistency

The pre-feasibility studies will be conducted at a high analytical level and will consist of:

- A technical feasibility study
- An economic study



Feasibility Study on Electric Powered Cruise Ships at the Port of Casablanca

Motivation of the Project:

- Emission of large quantities of SO_x, NO_x and toxic particles (PM) and especially GHG (CO₂) by ships ;
- Generating noise during generator operation.
- Serious environmental pollution surrounding the port area

Objectives:

- Adaptation to European Directives 2005/33/EG
- limiting atmospheric pollution caused by ships when they are docked in Morocco.



ONGOING PROJECTS

OBSERVATORY OF GREEN TECHNOLOGIES FOR THE PORT AND MARITIME TRANSPORT SECTOR

Purpose

- Responding to international requests for maritime decarbonization
- Strengthening capacity in the field of green technology
- Promoting cooperation and synergy with WESMED partners (5+5 countries)

Consistency

- Monitoring and technological forecasting on green maritime transport in the Mediterranean,
- Sharing practices and opportunities for strategic infrastructure development;
- Establishing a network of energy communities in Mediterranean ports

WESTMED
blue economy initiative

GREEN SHIPPING Technical Group

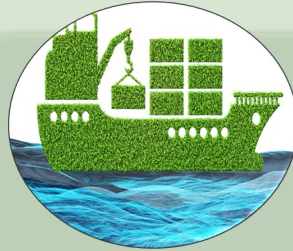
*Main achievements and
looking ahead for areas of cooperation*



Purpose

- Responding to international requests for maritime decarbonization
- Achieve by 2030 the ecological and energy transition of Moroccan ports by reconciling the development of port and maritime activities with the conservation of a healthy and sustainable marine environment

Sustainable Port Industry



Strengthen waste management, disposal and recycling measures

Sustainable navigation



Improve port capacity to fight against all kinds of pollution

Sustainable Energy



Accelerate the energy transition of ports by supplying ships with alternative fuels, including fuels with low or zero carbon content.

Resilience



Pursue the ecological transition by promoting green ports and marinas through the electrification of port infrastructures, in particular quays, thus reducing the environmental impact of calls in favor of cruises and container ships.



KINGDOM OF MOROCCO



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