



# UNCTAD Sustainable Smart Ports (SSP) for Africa project

Strengthening port capacity to leverage renewable energy and technology-driven solutions for increased resilience



# Ports are reflecting on their role in the energy transition

- Adapt to a changing competitive environment
  - Prepare for a carbon-constrained future
    - Explore new business opportunities
- Respond to social demands
  - Pollution
  - Congestion (traffic)
  - Energy

# Smart Sustainable Port (SSP):



- ✓ Ports that leverage the energy transition and technology-based solutions to:
- ✓ Improve port operational efficiency by promoting energy efficiency and
- ✓ Harness the ability to use, produce and distribute clean/renewable energy\* to support sustainable development

\* Energy production and distribution as industrial and services activities to diversify port revenues





### Project Code

2225E



### Partners

UN Country Teams and resident coordinators, UN organisations (UNECA, UNEP, IMO), and development banks (Africa Development Bank)



### Donors

United Nations Development Account (14th Tranche)



### Beneficiaries

Morocco, Ghana and Mauritius



### Duration

2022-2025



### Budget

\$ 600,000

# The «Sustainable Smart Ports (SSP) for Africa» project...

- Goal:

Strengthen capacity of selected countries in Africa, including SIDS, in building SSP that promotes sustainable energy and technology-driven solutions for a better sustainable recovery from the COVID-19 pandemic and for achievement of SDGs.

- Objectives:

1. **Raise awareness** among ports and national authorities about the strategic importance of SSP and improve their understanding of its implications for their ability to continue to operate and compete on a level playing field
2. Support ports and national authorities in their efforts to integrate sustainability principles and technology-based solutions into their **port planning and decisions**.
3. Help them assess the potential of selected ports to emerge as key players of SSP and **identify needs and gaps**
4. Formulate a **roadmap** for SSP development and implementation.

- Pilots:

- Mauritius (Port Louis), Morocco (TangerMed) and Ghana (Port of Tema)

# Needs identified



- Stock-taking/assessment:
  - Status of on-going initiatives linking port development and energy transition (national policy reforms)
  - Dashboard system to monitor reform advancements
  - Exploring regulatory obstacles linked to electric grid interconnection
  - Explore export potential
- Capacity-building:
  - Developing supply capacity (storing, bunkering and distribution)
  - Measuring the carbon footprint of port activities
  - Enhancing inter-institutional coordination for improved policy coherence between port and energy transition strategies
  - Support to assess and enhance energy efficiency
  - Support to evaluate alternative green technologies
- Experience-sharing:
  - Learning from best practices
  - Enhance cooperation with the African continent (leveraging financing, potential for regional trade in green fuels)
- Finance mobilization

## Assessing a port's SSP status (methodology)

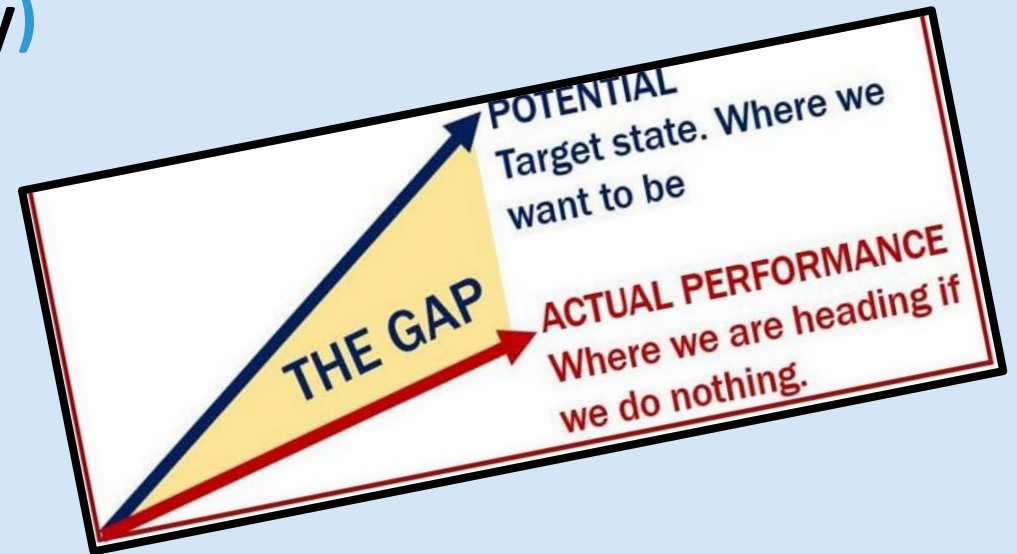
Defining port stakeholders

Assessing current energy consumption in the port

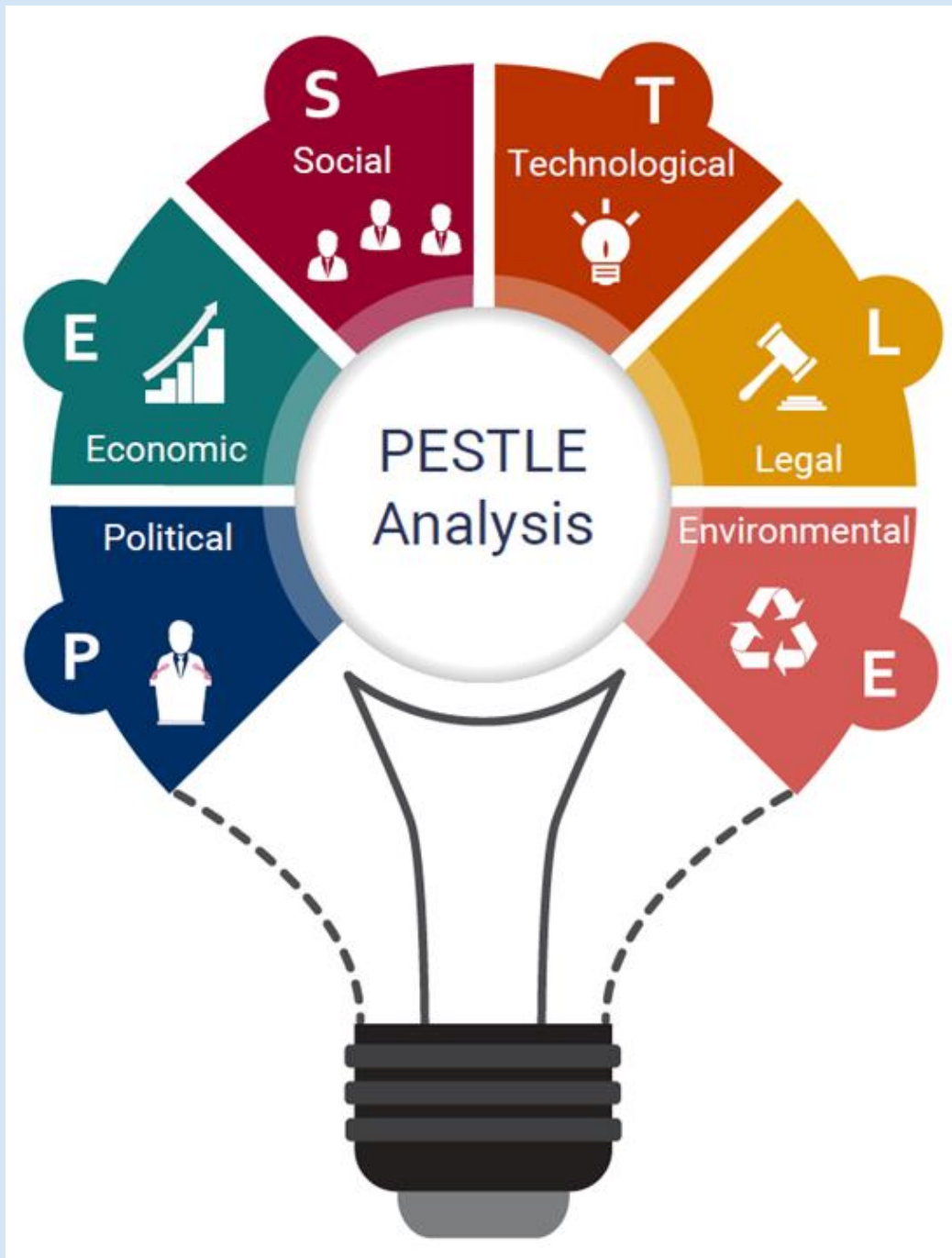
Assessing of port readiness for the energy transition

Assessing potential renewable energy generation at port

Designing an action plan to reach potential SSP development



Relevant policy  
spheres to  
develop the SSP  
status in the  
port



# For example...



Politics	Economics	Social	Technological	Environmental	Legal
Policy predictability	Available inputs for renewable energy value chain	Third-party pressure for the energy transition	Electrified equipment	Environmental impact of port (current) energy system	Weaknesses in legal framework
Policy coherence port-broader ENV	Subsidies and other incentives	Favorable opinion for energy transition reforms	Adaptable electricity network	Impact of (potential) energy generation at port	Licenses and permits
Proactive support of port authority to energy transition	Access to finance	Human resources (available skills and training programs)	Port energy system can distribute electricity	Available bunkering facilities	Supportive legislation for energy distribution
			Energy efficiency	Alternative RE sources	





THANK YOU!

