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Trade Facilitation
8th Session

**Climate Change Adaptation for Seaports
in Support of the 2030 Agenda
for Sustainable Development**

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**Energy Efficiency and Clean Energy Use
in Seaports - A Sustainability-Building
Climate Adaptation Tool**

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Energy efficiency and clean energy use in seaports

a sustainability-tool for building climate adaptation

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Energy efficiency and clean energy in ports sustainable development

- Being prominent energy users, energy consumption has risen, over recent years, as one of the top priorities for ports/terminals (environmental and economic).
- Increasingly, ports (operations and development plans) are taking into consideration energy usage and management to improve their performance.

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Building port resilience through energy efficiency, clean energy

- Port energy efficiency measures as well as clean energy use in ports are generally associated with air emission reduction including air pollutants and GHGs.
- **Relevant measures** include operational strategies, innovative technologies and energy management systems such as energy demand and supply planning.
- These measures contribute also to building ports' **climate resilience and serve as key climate adaptation tools.**

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Adapting ports to climate change impacts : energy, sustainability, and climate change nexus

- **Efficiency:** management practices and technologies that maximize operational productivity and cost-effectiveness contribute to reducing energy demand.
- **Sustainability:** integration of energy management practices, new and clean technologies, and renewable power generation improve environmental performance and reduce depletion of natural resources.
- **Availability and Reliability:** ensuring availability and access to energy sources (including clean energy) to meet present and future power demand of port operations/activities. e.g. through energy generation, transmission and distribution.
- **Resilience:** ability to sustain business continuity and operations and minimize disruptions/costs during and after a catastrophic event. thus providing economical, social and environmental/climate benefits.

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Effective climate change adaptation solutions of ports are not just about hard infrastructure, engineering projects and physical layouts, it is also about the need to transforming the current operations/management/planning practices of ports to more sustainable patterns.

- This will require improving energy efficiency including through management practices and technologies that maximize operational productivity and cost-effectiveness, as well as planning and mobilization of energy resources to ensure availability and accessibility of energy (including clean energy) and ensure both continuity of services and operations and improving environmental performance of ports.
- Promoting collaboration, exchange of information and best practices, building capacities, and scaling-up green investment is key.

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Some relevant UNCTAD work

- Emphasizing the role of port energy efficiency and the use of clean energy for greening port operations and promoting sustainable freight transportation systems has been one of the main areas of focus of recent UNCTAD work in the field of transport and trade logistics.
- This work is disseminated through various channels including **recurrent publications** such as the annual Review of Maritime Transport as well as dedicated **expert meetings** and **technical assistance** advisory instruments and capacity building tools such as the UNCTAD Sustainable Freight Transport Toolkit.

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UNCTAD Sustainable Freight Transport TOOLKIT

1) UNCTAD SFT Portal
<https://unctadsftportal.org/>



2) Training Programme



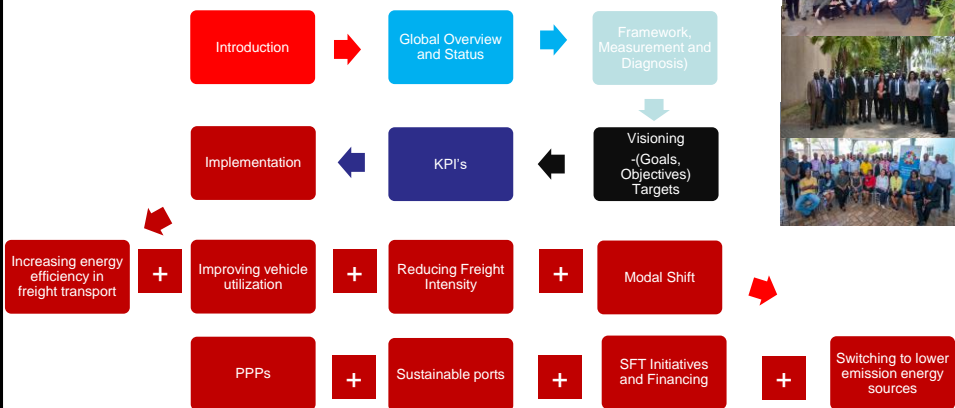
3) UNCTAD SFT Assessment and SFT Framework
<https://sft-framework.org/>



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Capacity Building - Sustainable Freight Transport Training Modules




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Tools



Self-Assessment



Key Performance Indicators



Sustainable Freight Transport Measures

- i. **A Quick Assessment (based on online Self-Assessment Questionnaire):** allows for a quick assessment of the current status and performance of freight transport sector (national/multimodal/unimodal, or subregional/corridor) along the three dimensions of sustainability (economic, environmental and social).
- ii. **A filterable Key Performance Indicators (KPIs) List:** features more than 250 indicators related to sustainable freight transport. These can be used to measure performance and progress against the objectives set in the sustainable freight transport strategy.
- iii. **A Sustainable Freight Transport Measures Catalogue:** includes more than 300 measures that can support the design and implementation of a sustainable freight transport strategy.

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Thank you for your attention

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