

Workshop on ISO 50001 energy management systems to promote sustainable practices and energy efficiency in African ports (29 and 30 Oct. 2024)

Concept Note

Audience:

Port stakeholders from Tanger Med (Morocco), Port Louis (Mauritius), and Tema (Ghana), as well as relevant ministries and ISO members in these countries. The participants are expected to be professionals involved in port operations, energy management, and policy-making.

The stakeholders identified for the training from the port could include port operators, electrical engineers, and management personnel responsible for decision-making in port operations. It was emphasized that port operators should be adept at identifying different types of cargo, cargo tonnage, and energy consumption associated with various operations within the port.

Overall objective:

To enhance the capacity of selected African ports to develop and implement energy management systems in line with ISO 50001, thereby promoting sustainable energy practices and improving energy efficiency.

Specific objectives:

- Awareness Raising: Increase stakeholders' understanding of ISO 50001 and its benefits, including energy cost reduction, greenhouse gas emissions minimization, and enhanced competitiveness.
- Capacity-Building: Provide detailed knowledge about the requirements and characteristics of ISO 50001, focusing on its applicability to port operations.
- Practical Implementation: Equip stakeholders with practical insights into developing and implementing a Port Energy Management Plan (PEMP) in accordance with ISO 50001 guidelines.
- Stakeholder Commitment: Emphasize the importance of stakeholder commitment and data-sharing requirements for successful ISO 50001 implementation.

Expected format:

- The virtual awareness-raising and capacity-building session will have a duration of six hours (2 blocks of 3 hours), facilitated by experts. The session will cover:
 - Introduction to ISO 50001 and its requirements.
 - Benefits of applying ISO 50001 in ports.
 - Practical examples and implications for port operations.
 - Key elements for successful implementation.

- Interactive Agenda and Materials: The training will include interactive elements and UNCTAD materials developed with guidance from ISO’s capacity-building unit, ensuring relevance and engagement.

Agenda:

Session 1

29 October 2024 | 9am-12pm Ghana time | 10am-1pm Morocco time | 1pm-4pm Mauritius time

Time	Details
15 mins	Welcome and introductions: <ul style="list-style-type: none"> • UNCTAD will provide a short welcome and objective of its Sustainable Smart Port initiative • Participants to highlight their roles, expectations, and experience with energy efficiency
10 mins	ISO introduction: <ul style="list-style-type: none"> • Short welcome and introduction to ISO 50001 development
25 mins	Overview of an effective ISO 50001 energy management system: <ul style="list-style-type: none"> • Emphasis on benefits, people, data, and technology together with critical success factors, non-energy benefits, decarbonisation, as well as energy performance versus certification
25 mins	The structure of ISO 50001: <ul style="list-style-type: none"> • Description of the main requirements and how they fit together
15 mins	Open discussion with participants
10-minute Break	
15 mins	National Standards Bodies (NSBs): <ul style="list-style-type: none"> • One NSB from each country (5 mins per NSB) to share about their work on ISO 50001 implementation, including examples that could serve as additional support for the ports
40 mins	People management: <ul style="list-style-type: none"> • Emphasis on change management, commitment building, behaviour change, decision-making, competence and training in the port
15 mins	Open discussion with participants
10 mins	Wrap up: <ul style="list-style-type: none"> • Summary and emphasis on the main issues and benefits

Session 2

30 October 2024 | 9am-12pm Ghana time | 10am-1pm Morocco time | 1pm-4pm Mauritius time

Time	Details
20 mins	Energy performance measurement - Challenges: <ul style="list-style-type: none"> • Emphasis on requirements of effective energy performance baselines and indicators and limitations of existing methods
45 mins	Energy performance measurement - Methodology: <ul style="list-style-type: none"> • Data collection, trends, relevant variables, regression analysis, CUSUM, monitoring, reporting, corrective action • Displaying of results and potential for effective indicators

15 mins	Open discussion with participants
15-minute Break	
55 mins	Continual improvement of energy performance: <ul style="list-style-type: none"> • Energy Savings Opportunities List and workflow, example savings measures, reporting, and energy efficient Design • Emphasise continual improvement and PDCA
15 mins	Open discussion with participants
15 mins	Wrap up <ul style="list-style-type: none"> • Summary of both sessions; issues, benefits, success factors • Emphasis on expectations versus delivery

Trainers:



Liam McLaughlin

Liam has been working in the field of energy management and energy efficiency since 1990, initially as an energy manager in the pharmaceutical industry and, since 2001, as an independent energy management consultant.

He has a passion for practical, transparent, and low-cost solutions to clients' needs and as a personal commitment to sustainability and to decarbonization. He has worked with over 500 organizations globally implementing energy management systems based on ISO 50001. He is a member of ISO Technical Committee 301, which developed ISO 50001 and its supporting standards. He is the Lead International expert in energy management with the United Nations Industrial Development Organization (UNIDO). He has also led the

development and delivery of training programmes to the energy agencies and standards bodies of more than 100 countries on ISO 50001 on behalf of ISO.



Luis Marqués

Luis has worked in the sustainability field since 2006 building on his experience as a bio-climatic architect. Luis is focused on the use of advanced data analytics, normalized indicators and related monitoring tools, in order to evaluate energy performance improvement and carbon footprint reduction.

He is a Certified Measurement & Verification Professional (CMVP) accredited by the AEE (Association of Energy Engineers) since 2016.

Since 2014, he had collaborated with UNIDO as an International Energy Performance Indicator expert, leading data analysis and performance monitoring in Energy Management System implementation projects. In this field, he is the main author and trainer in the UNIDO programme.