



PROJECT NOTIFICATION

Ref. No.: 22-CP-23-GE-WSP-A-PN2200087-001

Date of Issue	07 September 2022
Project Code	22-CP-23-GE-WSP-A
Title	Workshop on Energy Efficiency and Management through Energy Analytics
Timing and Duration	15–17 November 2022 (three days)
Hosting Country(ies)	Bangladesh
Modality	Digital Multicountry
Implementing Organization(s)	National Productivity Organisation, Bangladesh, and APO Secretariat
Participating Country(ies)	All Member Countries
Overseas Participants	38
Local Participants	12
Qualifications of Participants	Consultants and trainers, senior technical executives of enterprises, representatives of industrial associations, academicians, and government officials working on resource conservation, climate change mitigation, sustainability, data analysis, energy conservation, and energy efficiency
Nomination of Participants	All nominations must be submitted through National Productivity Organizations of member countries
Closing Date for Nominations	1 November 2022

1. Objectives

- a. Promote the adoption of energy efficiency to decouple industrial growth from environmental degradation.
- b. Examine best practices to conserve energy at the enterprise level.
- c. Introduce digital tools and software to measure equipment-level energy performance and conduct technoeconomic analysis of energy conservation opportunities.

2. Background

According to the World Meteorological Organization, the average global temperature in 2021 was about 1.11°C above the preindustrial (1850–1900) levels and it was the 7th consecutive year when the global temperature was higher than 1°C above preindustrial levels. Climate change is now obvious and calls for urgent action. The transition to cleaner energy sources and adopting energy-efficient practices and technologies are pathways to achieve net-zero carbon emissions and cleaner industrialization.

The IEA reported that energy efficiency can contribute to a cumulative reduction of 13 gigatons of carbon emissions over the next decade. This reduction potential is surpassed only by renewables, indicating a huge gap to be filled through efficient operating practices and adopting cleaner technologies. Improving the operational efficiency of equipment allows enterprises to enhance productivity, profitability, and competitiveness with less environmental impact. Recent technological advances have contributed to increasing the design efficiency of plant machinery, but operational efficiency requires continuous measurement and analysis of key performance parameters. With huge amounts of data to be measured, logged, stored, and analyzed, smart metering solutions and various energy management software guides enterprises in taking data-driven decisions to achieve energy savings, conduct cost–benefit analysis of energy conservation options, and remotely gain insights into business operations at a micro level.

Energy efficiency is a prominent tool of the Green Productivity concept developed by the APO which guides enterprises to be productive with minimal environmental impact of their operations. This workshop will enrich the knowledge base of participants on energy efficiency and management and explain applications of smart IoT-based digital tools for data measurement and storage.

3. Scope, Methodology, and Certificate of Attendance

The duration of each day's sessions will be around three hours comprising presentations by resource persons, group discussions, and other relevant learning methods. The indicative topics of the presentations are:

Day 1:

- Energy efficiency to decarbonize industrial growth
- Key operating parameters to assess and optimize performance at equipment level
- Gap analysis to identify energy efficiency improvement opportunities

Day 2:

- Data-driven analysis to identify energy conservation opportunities
- Digital tools and software to conduct technoeconomic analysis of energy conservation options
- Significance of and approaches to measuring authentic data while assessing equipment performance

Day 3:

- Smart and IoT-based data acquisition solutions and their analyses
- Optimizing resource allocation and minimizing costs through energy management software providing real-time plant performance data
- Energy modeling and simulation software for performance evaluation

The detailed program and list of resource persons will be provided one week prior to the sessions.

The participants are required to attend all sessions. This full participation is a prerequisite for receiving the APO certificate of attendance.

4. Financial Arrangements

- a. The APO will meet the assignment costs of overseas resource persons and honorarium for up to two local resource persons.
- b. The host country will meet the costs for a virtual site visit(s), either broadcast live or recorded as applicable.

5. Implementation Procedures

Please refer to the implementation procedures for APO digital multicountry projects circulated with this document.

A handwritten signature in black ink, appearing to read 'Dr. AKP Mochtan', with a long, sweeping flourish extending upwards and to the right.

Dr. AKP Mochtan
Secretary-General