



PROJECT NOTIFICATION

Ref. No.: 22-CP-41-GE-TRC-A-PN2200079-001

Date of Issue	15 August 2022
Project Code	22-CP-41-GE-TRC-A
Title	Training Course on Energy Efficiency in SMEs with Special Focus on Electric Motors
Timing and Duration	11–14 October 2022 (four days)
Hosting Country(ies)	Turkiye
Modality	Digital Multicountry
Implementing Organization(s)	Ministry of Industry and Technology of Turkiye and APO Secretariat
Participating Country(ies)	All Member Countries
Overseas Participants	38
Local Participants	12
Qualifications of Participants	Professionals of National Productivity Organizations, associated trainers and consultants, enterprise managers, representatives of industry associations, and technocrats from relevant government ministries working on energy audits, conservation, efficiency and management, resource optimization, and developing regulatory frameworks for the energy sector
Nomination of Participants	All nominations must be submitted through National Productivity Organizations of member countries
Closing Date for Nominations	26 September 2022

1. Objectives

- a. Disseminate knowledge on energy efficiency and management.
- b. Provide an overview of the significance of improving the operating efficiency of electric motors in industry and emerging technological trends to help achieve this.
- c. Examine opportunities, best operating practices, and policy frameworks on the energy efficiency of electric motors.

2. Background

Electric motors are used in almost all sectors of industry along with the commercial, residential, transport, and agriculture sectors. With urbanization and industrialization increasing globally, the number of motors is also increasing, contributing to CO₂ emissions and climate change. Minimizing the power losses in electric motors while they convert electrical to mechanical energy can contribute to sustainable development.

The power consumed by motors accounts to more than 90% of the total product life cycle cost. The Super-efficient Equipment and Appliance Deployment (SEAD) Initiative states that doubling the efficiency of new industrial electric motor systems worldwide from 2022 could reduce CO₂ emissions by about a gigatonne by 2030. However, an upswing in economic activities, inadequate policy interventions, lack of know-how on best operating and maintenance practices, and financial limitations undermine applications of technological advances in the operating efficiency of motors. Although several countries are now shifting to higher efficiency standards as regulatory measures, they are primarily applicable to new motors. To reach climate targets set out in the Paris Agreement, there is a need to focus on energy efficiency and its critical role in the energy transition.

This training course is in line with the Green Productivity concept developed by the APO on guiding enterprises to enhance productivity and profitability with the least environmental impact. With relevant know-how on approaches to conserve energy in motors acquired during the course, participants can implement them in industry and disseminate them to create multiplier effects.

3. Scope, Methodology, and Certificate of Attendance

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

Day 1:

- Significance of energy efficiency at international, national, and enterprise levels
- Enterprise energy optimization through ISO 50001 energy management systems
- Understanding motor types and characteristics

Day 2:

- Losses and assessment of electric motor performance
- Energy and motor system audits
- Case study: A project on promoting energy-efficient motors in SMEs in Turkiye

Day 3:

- Technical considerations in selecting motors
- Best operating and maintenance practices to optimize power input to motors
- Group work

Day 4:

- Evaluating and reporting results of audits including aspects of life-cycle costs, payback, and investment potential.
- Policy and regulatory frameworks on energy efficiency in electric motors
- Group work

The detailed program and list of speakers will be provided two weeks prior to the sessions with announcement of the names of the selected participants.

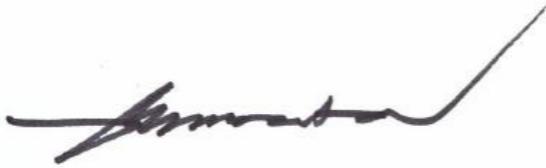
The participants are required to attend all sessions. This full participation is a prerequisite for receiving the APO certificate of attendance.

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 'Mochtan', with a long, sweeping flourish extending upwards and to the right.

Dr. AKP Mochtan
Secretary-General