PROJECT NOTIFICATION

Ref. No.: 22-CP-35-GE-DLN-A-PN2200095-001

Date of Issue	21 September 2022
Project Code	22-CP-35-GE-DLN-A
Title	APO e-Course on Generating Energy Sustainably
Launch Date	26 December 2022
Hosting Country(ies)	APO Secretariat
Modality	Digital Learning
Implementing Organization(s)	APO Secretariat
Participating Country(ies)	Open
Overseas Participants	Not Applicable
Local Participants	Not Applicable
Qualifications of Participants	Open
Nomination of Participants	Not Applicable
Closing Date for Nominations	Not Applicable

1. Objectives

a. Familiarize participants with various renewable energy sources, the latest technologies, and their role in mitigating carbon emissions for sustainable development.

b. Learn about the basics, global definitions and classifications, and applications of fossil fuel-free, clean, sustainable renewable energy sources.

c. Evaluate the pros and cons of renewable energy and global life cycle analysis (LCA) tools such as the Renewable Energy Technology Screen (RETScreen).

2. Background

Due to economic growth in the Asia-Pacific region, energy consumption is rising dramatically, and renewable energy is becoming a significant industry. Given the public health and environmental impacts of fossil fuels and fast-growing energy demand, renewable energy has a crucial role in reducing greenhouse gas (GHG) emissions in the global energy mix and future clean energy trends such as energy-sector coupling issues.

Significant technological advances have occurred in the renewable energy sector in terms of efficiency and integration into the grid. This facilitates the adoption of renewable energy to meet industry demand, which not only provides a competitive edge to business but also reduces carbon emissions. A method combining system integration/optimization and LCA tools is needed to evaluate clean/green renewable energy technology and justify the high initial costs of sustainable energy adoption.

This course will introduce the definition, classifications and applications, key concepts, and pros and cons of various energy sources and future trends in energy technologies including zero-energy, carbon-neutral buildings and energy-plus buildings in a future energy-sector coupling society.

3. Modality of Implementation

a. The course is offered through the APO e-learning platform: https://www.apo-elearning.org

b. Participants should register on this portal and create their own accounts.

c. Certificates of completion will be provided for those who satisfactorily complete all the modules of the course, including quizzes and a final examination.

4. Scope and Methodology

The course will comprise five modules:

Introduction

Module 1:
Clean, renewable thermal energy

Module 2:
Solar energy

Module 3:
Geothermal energy

Module 4:
Photovoltaic energy

Module 5:
Solar–geothermal hybrid energy

Self-assessment quizzes and a final examination

Methodology
Module study, additional study material for participants, quizzes for self-assessment, and a final examination.

5. Requirements

a. Have necessary devices and software comprising a computer/smartphone, updated browser, microphone, and speaker or headphones.

b. Access to internet connections.

c. Completion of all the modules, quizzes, and final examination.

d. The APO e-certificate will be given to participants who score a minimum of 70% on the final examination.

6. Financial Arrangements

The APO will meet the assignment costs for resource persons to develop the course modules including quizzes and a final examination.

7. Actions by APO Members

a. Promote the course nationwide.

b. Provide the link to the APO e-learning platform on NPOs' websites and social network services.

8. Actions by the APO Secretariat

a. Identify and assign the resource person(s) to develop the course.

b. Announce course commencement on the APO website and social network services.

Dr. Indra Pradana Singawinata
Secretary-General