NATIONAL PRODUCTIVITY COUNCIL
Dr. Ambedkar Institute of Productivity, Chennai.

ITEC TRAINING PROGRAMME ON EXPLOITATION OF RENEWABLE ENERGY TECHNOLOGIES FOR INDUSTRIAL APPLICATIONS

COURSE CONTENT

S.No	Module	Subtopics	Duration
1	**Introduction to Renewable Energy**	❖ Energy Scenario ❖ Energy Mix ❖ Conversion Technologies ❖ Conventional Power Plants ❖ Renewable Energy Sources ❖ Availability of Renewable Energy Sources ❖ Overview of RE technologies ❖ Policies Schemes and Legal Frameworks	**1 week**
2	**Wind & Solar Energy Technologies and Applications**	❖ Wind Resource Assessment ❖ Wind Turbine Technology ❖ Solar Energy ❖ Solar Resource Assessment ❖ Solar Thermal Applications ❖ Solar PV Technology ❖ Hybrid Systems	**1 week**
3	**Other Renewable Energy Technologies & Field Visit**	❖ Biomass ❖ Bio Energy Technologies ❖ Hydro Technologies ❖ Geothermal Energy ❖ Tidal, Wave & OTEC ❖ Energy Storage ❖ Study tour	**1 week**

DETAILED COURSE SCHEDULE

Proposed Day-wise Program Schedule							
Day	**9:30-11:00**	**11:00 – 11:15**	**11:15 – 13:00**	**13:00 – 14:00**	**14:00 – 15:30**	**15:30 - 15:45**	**15:45-17:00**
1	Registration & Welcome session	Tea Break	Introduction to course	Lunch Break	Energy Scenario, Energy demand	Tea Break	Introduction to sources of Renewable energy-Solar
2	Introduction to sources of Renewable energy-Wind		Introduction to sources of Renewable energy-Bio & others		Technical aspects of Solar PV		Technical aspects of Solar PV
3	Assessment of Renewable Energy potential-Solar		Assessment of Renewable Energy potential-Wind		Technical aspects of Solar Thermal System		Technical aspects of Solar Thermal System
4	Project costing, feasibility and detailed report preparation		Project costing, feasibility and detailed report preparation		Project costing, feasibility and detailed report preparation		Project costing, feasibility and detailed report preparation
5	Grid Operation-Challenges to manage variability in Grid		Grid Operation-Challenges to manage variability in Grid		Training needs Gap assessment and Capacity building programmes for all the stakeholders		Barriers to RE: Labour, technology transfer, R&D
6	Holiday		Holiday		Holiday		Holiday
7							
8	Storage Technologies		Case Study		Future prospects of RE		Case Study
9	Financing for RE Technologies		Funding Mechanisms		Financial Analysis		Financial Analysis
10	Risk evaluation and mitigation		Need & assessment of incentives-case study		Need & assessment of incentives-case exercise		Measurement & Verification protocols – case study

Proposed Day-wise Program Schedule							
Day	**9:30-11:00**	**11:00 – 11:15**	**11:15 – 13:00**	**13:00 – 14:00**	**14:00 – 15:30**	**15:30 - 15:45**	**15:45-17:00**
11	Multi-lateral agreements to meet NDC targets		Policy framework for RE		Overview of various Government schemes in Renewable Energy		RESCO mechanism, and case study
12	Carbon Trading		Success stories of RE schemes implemented		Scaling RE plants, start-up and down-time		Feedback from participants & Valedictory Function.

Apart from the above-mentioned schedule, there would be a visit to renewable energy facility for a day and study/cultural tour for two days.

APPROVAL FROM COMPETENT AUTHORITY

National Productivity Council

File No. AIP-11013/2/2023-AIP_CHN_NPC (Computer No. 2262)

The proposed budget of the following three proposals on Energy Efficiency and Renewable Energy theme were reviewed by the committee

The pre-approval committee reviewed the proposal and found it in order as appended below.

COMMITTEE RECOMMENDATIONS:

Committee reviewed following Three (2 residential+ 1 Online) training programme submitted by AIP Chennai's on:

1) Exploitation of Renewable Energy Technologies for Industrial Applications (Residential)
2) Energy Efficiency Practitioners Course in Industrial Utilities (Residential)
3) Exploitation of Renewable Energy Technologies for Industrial Applications (Online)

The committee, therefore, recommends consideration of the proposals for kind approval.

Submitted for kind consideration and approval of the competent authority.

10/01/2023 12:20 PM

AMITAVA RAY
(GH (ADMIN))

Note No. #6

यथा प्रस्तावित।

10/01/2023 2:20 PM

SUNDEEP KUMAR NAYAK
(DG)

Note No. #7

10/01/2023 6:24 PM

AMITAVA RAY
(GH (ADMIN))