Ministry of External Affairs
DPA II Division
ITEC COURSE PROPOSAL SUMMARY
(duly filled form to be scanned and sent as scanned pdf by email)

1. Administrative details

Course Title	**Renewable Energy Resources for Energy Autonomy and Mitigation of Climate Change**			
Stream	Energy, Environment and Climate Change			
ITEC Coordinator/ Course Director	Dr. J. Rajeswar , Training Coordinator, EPTRI			
Course Duration:	From 05th to 18th November, 2024 ; 2 weeks			
No. of days of training	14 days =	90 learning hrs (approximate)		
Accommodation	Type: Hostel	Distance from Campus	within campus	
	Name of Hostel: EPTRI Executive Hostel			
Airport (nearest)	Location:	Hyderabad	Distance from campus/ accommodation	33 kms
Batch Size	Minimum participation = 30		Maximum participation = 35	
Study tour	Type of visit	Places to visit (with location)		No. of days
	Educational	1. Solar Panel Manufacturing Unit 2. Community Level Biogas Digester Unit		2
	Cultural/ Heritage	Salarjung Museum, Charminar, Chowmallah Palace, Seven Tombs, Hussain Sagar		2

2. Financial proposal

S. No.	Fee component	Unit	Per participant cost	Total Cost for all participants
1	Course Fee	per week per participant	6000	420000
2	Study tour charges	per participant	8500	297500
3	Other charges (for Project, lab analysis etc.)	per participant	35000	1225000
4	Accommodation charges (inclusive of taxes) – Hostel	per day/night per participant	1500	735000
5	Airport pick-up and drop charges (inclusive of taxes) – for both ways	per participant	3000	105000
6	Living allowance	per day per participant	1500	735000
7	Book allowance	per participant	5000	175000
8	Valedictory/ inaugural allowance	per participant	300	10500
Course Duration (in weeks)		**2 weeks**	**Total estimated expenditure**	**3703000**
Participants (maximum)		**35**		

 # Rate of Living Allowance if fixed under guidelines (@ Rs. 1,500/- per day for up to 12-week long course and @ Rs. 1,200/- per day for courses of longer duration). Ceiling on Book Allowance and Valedictory/ inaugural allowance is also fixed @ Rs. 5,000/- per participant and @ Rs. 300/- per participant respectively.

'Lump-sum' fees for online component if any, along with number of learning hours	N/A

3. Training Schedule: A simple thematic/ day-wise schedule (topics covered) may be attached.
Schedule will be prepared subsequently

Submitted by:
(sign and stamp of appropriate authority of the Institution)

COURSE DETAILS

A. Name of the Institute	**Environment Protection Training and Research Institute (EPTRI), Hyderabad, Telangana**
B. Name/title of the Course	**Renewable Energy Resources for Energy Autonomy and Mitigation of Climate Change**
C. Proposed Dates and Duration of the Course in weeks / months	From 05th to 18th November, 2024 In weeks: Two (2) Weeks
D. Eligibility Criteria for Participants 1. Educational Qualification 2. Work Experience 3. Age Limit 4. Target group	**Applicants for this course must** • Graduates from across the spectrum of disciplines, Teachers / Trainers and / or Administrators in Technical and Vocational Education • Have a minimum of 2-year experience in teaching / training / administration; proficiency in spoken and written English • 25-45 years • Junior to Senior level Government officials, Academicians, NGO's, undergraduate, graduate & research scholars working on Climate Change & Sustainable Development issues.
E. Aims & Objectives of the Course	**Aim:** To enable developing countries in general, and local communities in particular, attain Energy-Autonomy, with multiple co-benefits in terms of reduced dependency on fossil-fuel imports, mitigation of greenhouse gas (GHG) emissions, improved livelihoods and enhanced lifestyle by switching and transforming to clean/green energy options like Solar, Wind Biomass etc. **Objectives:** ➢ To evaluate the current status of renewable energy technologies in solar, wind and biomass sectors and their scalability for widespread adoption. ➢ To assess the economic feasibility and policy ecosystem necessary to promote the integration of renewable energy into existing energy systems. ➢ To investigate the environmental benefits of transitioning to renewable energy sources, including reductions in greenhouse gas emissions and air pollutants. ➢ To identify barriers and challenges hindering the transition to renewable energy and propose viable solutions to overcome them.

	➢ To provide evidence-based insights and recommendations for policymakers, businesses, and communities to accelerate the shift towards renewable energy, thereby contributing to energy autonomy and combating climate change on a global scale.
F. Details / Content of the Course	**Contents of the Course** ❖ Technology Advancements in Renewable Energy Sector ❖ Scope and Potential of different Renewable Energy Sources – Solar, Wind, Biogas etc. ❖ Policy Ecosystem and Regulatory Framework for Renewables ❖ Economic Viability of Renewables ❖ Environmental Impacts of Renewable Energy Projects ❖ Renewables for Energy-Access and Energy-Equity ❖ RE Infrastructure and Grid Resilience ❖ Community Engagement and Empowerment ❖ Resilience and Adaptation ❖ International Cooperation ❖ Financing and Entrepreneurship Opportunities in Renewable Energy Sector
G. Mode of Evaluation of Performance of the ITEC Participant	Evaluation through Seminars, Group work and Project work
H. Name of the Department	Centre for Climate Change, EPTRI

COURSE PROFILE

The objective of harnessing renewable energy resources for achieving energy autonomy and mitigating climate change is twofold. Firstly, it aims to reduce dependence on finite and environmentally harmful fossil fuels by transitioning towards sustainable energy sources such as solar, wind, hydro, and geothermal power. This shift not only diversifies energy supply but also reduces greenhouse gas emissions, thereby mitigating the adverse effects of climate change. Secondly, the objective involves promoting energy autonomy by decentralizing energy production and distribution, empowering communities, regions, and nations to generate their own clean energy locally. This promotes resilience against supply disruptions, price fluctuations, and geopolitical tensions associated with traditional energy sources. Ultimately, the objective is to transition towards a low-carbon, decentralized, and self-sufficient energy model that promotes environmental sustainability, economic prosperity, and social equity on a global scale.

This course provides interdisciplinary training in climate change and sustainable development.

Structure of the Programme

This course is structured into three modules. Course has a proper blend of lecture, demonstration and field studies in preexisting related courses (text or lecture-note based). Course explores the subject through resources, development, impact and management.

Module 1: Science and Technology Aspects of Renewable Energy Sources

Module 2: Policy Framework, Regulatory Guidelines and Institutional Aspects of Renewable Energy Sources

Module 2: Impacts and Implications of the Transition to Renewable Energy Sources

a. Environmental Benefits

b. Socio-Economic Benefits

c. Geo-Political Implications for an Equitable World Order

d. Financing and Entrepreneurship Opportunities

Project Work: In any one of the above areas.