Proposal for International Training Programme for FY 2021-22, to be conducted under ITEC an initiative of Ministry of External Affairs

Programme Name	Energy Systems and Carbon Neutral Economy
Name of Course	International Training Programme on Calculating the Carbon Footprint of Energy Systems, Carbon Trade and Market.
Programme Coordinator(s)	Prof. Priyanka Kaushal and Prof. V. K. Vijay, Centre for Rural Development and Technology, Indian Institute of Technology Delhi, New Delhi
Programme Duration	15-11-2021 to 26-11-2021 (02 weeks)
Programme Objectives	[1] To introduce to the international community, the complex energy system of the globe, international trade and routes. [2] To establish the link between GHG emission, Carbon intensity, Climate Change and Sustainability Challenges. [3] To discuss the concept of how to quantify carbon intensity of any system with focus on power plants. [4] Carbon Capture Utilization and Storage (CCUS). [5] To identify the scopes to reduce the carbon intensity of a system [6] To discuss few of the international Best Practices in the subject domain, challenges and way forward.
Minimum Participants	25
Maximum Participants	40
Evaluation Criteria	Lectures, Practical's and Participant's Feedbacks
Eligibility	Diploma/Degree in Engineering or Science or Economics (Energy, Electrical, Engineering, Mechanical Engineering. Preference will be given to the candidate having experience in area of energy sector.
Minimum Age	No bar
Maximum Age	No bar

LECTURES TOPIC

S. No	Date	FORENOON (10 am-12pm)	AFTERNOON (2pm-4pm)
1	15-11-21	Inaugural, Opening Remark & Key note Lecture	Role of Energy and Human Development
2	16-11-21	International Energy Trade and Routes	Geopolitics of Energy
3	17-11-21	GHG Potential of Energy Production and Transportation	Case study of Natural Gas Business
4	18-11-21	Fundamentals of Power Plants and Calculation of Carbon Footprints	Hands-on Exercise: How to Calculate Carbon Footprint
5	19-11-21	Power Plants, Climate Change and Mitigation Strategies	Global Best Practices and Discussion
6	22-11-21	Carbon Capture Utilization and Storage (CCUS)	CCUS Best Practice, Challenges & Way Forwards
7	23-11-21	Quantifying Carbon Savings Options in Big Power Installations	Hands-on Exercise to understand the embodied energy of a power plant
8	24-11-21	Global Initiative to Reduce Carbon Footprint	Case Study from Corporate Business
9	25-11-21	Carbon Price, Trade and Electricity Market	Electricity Market: Case Study from India
10	26-11-21	Challenges and Way Forward Towards Carbon Neutral Economies	Concluding remark & Valedictory