Ministry of External Affairs, Government of India

Proposal for International Training Programme for FY 2023-24, to be conducted under ITEC an initiative of Ministry of External Affairs

Programme Name	Energy Systems, Security and Net Zero Emission
Name of Course	International Training Programme on understanding the complex relationship between large scale of energy system, energy security, Human Development, IPCC and its assessment reports, Carbon and other climate mitigation policies for net zero emission to achieve carbon neutrality.
Programme Coordinator(s)	Prof. Priyanka Kaushal CRDT, Indian Institute of Technology Delhi, New Delhi
Programme Duration	12-02-2024 to 23-02-2024 (02 weeks)
Programme Objectives	[1] To introduce to the international community, the complex energy system of the globe, international trade and the Geo-politics of energy. [2] To establish the link between GHG emission, Carbon intensity, Climate Change and Sustainability Challenges. [3] IPCC assessment reports & how to quantify carbon and GHG footprint of an energy service. [4] Understanding the concept of net zero emission and role of Renewables in it. [5] Carbon Capture Utilization and Storage (CCUS). [6] To discuss the international Best Practices on the subject domain, challenges and way forward.
Minimum Participants	25
Maximum Participants	35
Evaluation Criteria	Lectures, Lab visits, Renewable Energy Site visits, hands-on exercise, and Participant's feedbacks
Eligibility	Diploma/Degree in Engineering Science or Economics (Energy, Electrical, Mechanical, Chemical etc.) Preference will be given to the candidate having experience in area of energy and environmental sector.
Minimum Age	No bar
Maximum Age	No bar

Local Trip	02 Days outside Delhi; 1-3 local trips within Delhi.
Transport	Bus and Cab
Details of Programme	
Week – 1	
Day 1: Role of Energy in Development; Energy Access and Security	
Day 2: International Energy, Trade, Routes and it's geo-politics	
Day 3: Role of IPCC and UNFCCC in mitigating climate change	
Day 4: Climate Change and Mitigation Strategies	
Day 5: Fundamentals of Power Plants and Mobility: Conventional and Contemporary	
Week – 2	
Day 1 Carbon Capture, Utilization and Storage (CCUS).	
Day 2 Carbon Offset, Reduction, Avoidance and Mitigation	
Day 3: Energy Efficiencies and Global Initiative to Reduce Carbon Footprint	
Day 4: Carbon Price, Trade and Electricity Market	
Day 5: Challenges and Way Forward Towards Carbon Neutral Economies	