Course title : Energy and Carbon Markets

Course credits : 1

No. of modules : 1

Module1: Carbon markets & new trends

Detailed syllabus:

Module 1: Carbon markets & new trends

I. Introduction – Climate Change

Climate change and greenhouse gas emissions
International regime for climate stabilization
Climate change Mitigation: NDCs and Net Zero Goal
Market mechanisms under the Paris Climate Agreement
Carbon capture, utilisation and storage (CCUS)

II. Indian Context

National Action Plan on Climate Change Commitments under UNFCCC and Paris Agreement National GHG Inventory Estimation
Existing energy related market mechanisms
NDC goals for mitigation, Accounting and Reporting

III. Carbon Assessment Techniques

Gases, Sectors, and methodologies
Policies, regulations and protocols
Estimation of carbon footprint
IPCC guidelines for National GHG inventories
Case Study

IV. Carbon Markets

Carbon Economics - Price incentive or cost
Market Based Mechanisms – Cap & Trade, Carbon Trading
Voluntary and compliance Carbon Markets
Carbon Markets in India- existing mechanisms and future design
Introduction to Internal Carbon Pricing & Carbon labeling
Carbon Tax & Price Adjustments

Evaluation/Assessment scheme:

1. Quizzes – 40% (one at the end of each module)
2. End semester exam – 60% (at the end of course)

Learning outcomes:

At the end of the course the student will be able to:

- Understand carbon markets and trading instruments
- Design a Carbon Crediting Strategy for a particular case
- Comprehend working of energy and power markets
- Evaluate impact of CBAM on a particular sector