

Module No. 2: Renewable Energy Policies & Planning
No. of weeks / credits 7

Week 1-2

- **Policies for Grid-connected RE**

Part A

- Assessment of International Policy & Regulatory Regime
- Investment Subsidies
- Fiscal Measures
- Feed-in Tariffs
- Quota Obligations/Green Certificates
- Bidding Systems for Facilitating Trade in Green Certificates
- Renewables Portfolio Standard
- Production Tax Credits
- Power Sector in India
- Jawaharlal Nehru National Solar Mission
- Grid-connected RETs: Status

Part B

- **Electricity Act 2003**
 - Background
 - Objectives of the Act
 - Abridged Version Covering Salient Sections in Electricity Act 2003
- **National Electricity Policy 2005**
 - Introduction
 - Aims & Objectives
 - National Electricity Plan
 - Issues Addressed
 - Rural Electrification
 - Generation, Transmission, Distribution
 - Recovery of Cost of Services & Targeted Subsidies
 - Technology Development and R&D
 - Competition Aimed at Consumer Benefits Financing Power Sector Programmes Including Private Sector Participation, Transmission & Distribution Losses, Energy Conservation, Environmental Issues, Training and Human Resource Development, Cogeneration and Non-conventional Energy Sources, Protection of Consumer Interests and Quality Standards, Coordinated Development
- **Electricity Tariff Policy 2006**
 - Objectives

- Salient features of the policy
- **Rural Electrification Policy 2006**
 - Salient features of the Policy
 - Renewable Energy Power Policies
 - Generation Based Incentive (GBI), FDI Inflows to Non-conventional Energy- Government Initiatives, Jawaharlal Nehru National Solar Mission, New Hydro Power Policy, National Policy on Biofuels

Part C

- **Organization of the Energy Sector in India**
 - Introduction
 - Planning Commission
 - Organizations under the Administrative Control of MoC
 - Public Sector Undertakings
 - Private Sector Companies
 - Organizations under the Administrative Control of MoPNG
 - Transmission and Distribution Companies
 - Power Exchanges
 - Regulatory Organizations
 - Energy Conservation Organization
 - Renewable Energy Sources
 - Nuclear Energy Institutions
 - Financing Institution

Part D

- **Power**
 - Introduction
 - Generation
 - Transmission and Distribution
 - Consumption
 - Power and Indian Planning
 - Policies, Programmes and Regulations
 - Status of Power Sector Reforms
 - New Developments
 - Smart Grid Initiatives in India

Week 3-4

- **REC Procedures**

- ***Procedure for Registration of Renewable Energy Generation Project by Central Agency***
 - Objective
 - Applicability and Scope
 - Step-wise Description of the Procedure
 - Functions, Roles and Responsibilities of Entities Involved, Information Requirement – Application Form & Content
 - Report: Format for Registration Certificate, Timelines, Fees and Charges
 - Event of Default and Consequences Thereof, Powers to Remove Difficulties
 - **CERC Generic cost of renewable power**

Week 5

- **Solar Rooftop Report**
 - Forum of Regulators
 - Introduction
 - Rooftop Solar PV Experience in India
 - Context of Developing Net Metering Regulations in India
 - Net Metering Business Models
 - Supporting Framework
 - Net Metering Model Regulations for Rooftop Solar Projects
 - Definition of Eligible Consumer
 - Renewable Purchase Obligation
 - Applicability of Renewable Energy Certificates
 - Metering and Commercial Settlement
 - Connection Agreement
 - Annexure 1: Gross Metering and Net Metering Concept
 - Annexure 2: Net Metering – Meter Configuration Options
 - Annexure 3: Net Metering – Connection Agreement

Week 6

- **Policies and programmes for Off-Grid RE Power**
- ***Comparative Study on Rural Electrification Policies in Emerging Economies:***
 - Introduction Rural Electrification: Main Challenges and Issues
 - Technologies Commonly Used in Rural Electrification Policies
 - A Focus on Government Policies for Rural Electrification
- **Renewable Policy 2006**

Weeks 7 & 8

- **Policies and Programmes for Decentralized RE Applications**
 - Introduction
 - JNNSM
 - Biogas
 - Solar Cities
 - Energy Efficient Solar/Green Buildings
 - National Biomass Cook Stoves Programme
 - Energy from Urban
 - Industrial and Agricultural Wastes
 - Energy Conservation Building Code (ECBC)
- **Development of Solar Cities Programme**
 - Goals and Objectives
 - Assistance to Urban Local Governments
 - Financial Assistance under Solar City Programme
 - Criteria for Selection of Cities
- **Scheme For Off-Grid and Decentralized Solar Cooker Programme**
 - Background
 - Objectives, Scopes, Mode of Implementation
 - Funding Pattern, Approval Mechanism
 - Project Management Consultant / Cell (PMC)
 - Monitoring and Evaluation
 - Technical Requirements
 - Appointment of Channel Partners
 - Supporting Innovation
 - Natural Calamities and Disasters
 - Interpretation of the Guidelines

- Review, Fixing of CFA and Benchmark Cost
- Guidelines for Channel Partners
- Validity of the Scheme
- **Off-Grid and Decentralized Solar Thermal Application Scheme**
 - National Biogas and Manure Management Programme (NBMMP) during 12th Five Year Plan
 - Scheme on “Energy Efficient Solar/ Green Buildings
 - Programme on Energy from Urban, Industrial and Agricultural Wastes / Residues during 12th Plan period
 - Unnat Chulha Abhiyan (UCA) Programme during the year 2013-2014 and balance period of the 12th Plan

Week 9 & 10

- **Other Incentives and Programmes for RET**
 - Introduction
 - Type of Incentives
 - Income Tax Holiday
 - Accelerated Depreciation
 - Excise & Customs Duty Exemptions
 - Concessions in Electricity Duty
 - Green Cess/ Tax
 - Priority Sector Lending for RE Sector
 - National Clean Energy Fund (NCEF)
 - CSR Funds
 - Clean Development Mechanism (CDM)
 - Bundling of Solar Power with Coal Based Power

Study Guide: Week 6-10