

MBA782 - Renewable Energy - Economics, Policy and Regulation

‘First Course Sheet’

1. Objectives:

To understand relevance of renewable energy (RE) and its economics. To apprise various policy and regulatory measures that can be used to promote RE, and the existing framework for the same at national and state level. To identify issues affecting RE development and integration, including those to provide access to electricity.

2. Pedagogy:

Lectures

Mini Group Project

May include a field visit

3. Prerequisites:

None

4. Course Contents:

- Drivers for Renewable Energy
- RES - Wind, Solar, Biomass, SHP, Ocean, WTE etc.
- RE Development - National and International Perspective
- Economics of Renewable Energy
- Policy and Regulatory Instruments to Promote RE
- Electricity Act 2003 and other relevant legislations/policies
- Renewable Portfolio Obligation and Feed-in-Tariff
- Regulatory Approach to calculate LCOE and Feed-in-Tariff
- Market for Renewable Energy Certificates (RECs)
- NAPCC and Jawaharlal Nehru National Solar Mission
- Competitive Bidding for Renewable Energy
- Developing and Implementing a Solar Rooftop Program
- Challenges for VRE integration - Forecasting and Scheduling RE
- RE for Clean Energy Access - Issues and Solutions
- Climate Change and Green Energy Finance - Business Models
- Projects/Caselets on mutually agreed topics

5. Special Emphasis: (optional)

6. Lecture Schedule & Venue

Mon. & Thursday 10:30 am 12:00 pm

7. Office Hours: or, recommended mode of contact beyond formal contact hours
Mon. & Thursday 4:30 - 5:30 pm
8. Evaluation Components & Policies:
 - 15 % - Class attendance and Participation
 - 30 % - 1 Mini-project (max 4 students)
 - 55 % - Final Exam
9. Course Policies: Attendance, Honesty Practices, Withdrawal (within the limits of DOAA Guidelines)
Attendance: 75 % minimum
Honesty Practices: As announced in class from time to time.
10. Books & References: (more as suggested during lectures)

1. Miguel Mendonça, Feed in Tariff, Earthscan, 2007.
2. Evaluating Policies in Support of the Deployment of Renewable Power, https://www.irena.org/DocumentDownloads/Publications/Evaluating_policies_in_support_of_the_deployment_of_renewable_power.pdf
3. REN21, Renewables 2017, Global Status Report, <http://www.ren21.net/>
4. RE Policy Database, <http://www.reeep.org/policy-database> or <http://www.reegle.info/policy-and-regulatory-overviews>
5. Indian Renewable and Energy Efficiency and Policy Database <http://ireeed.gov.in/>
6. Other relevant books, journal articles, reports, laws, policy documents, regulations and tariff orders of regulatory commissions, forum of regulators, case studies, notes etc. (to be informed in the class or through email)