

Department of Economics
University of Delhi, Delhi

Minutes of Meeting

Subject : Common Prog Group GE
Semester : III/V
Course : Basic Resource and Energy Economics – ECON066
Date & Time: 14-May at 11:00 AM
Venue : Department of Economics
Chair : Surender Kumar and Swati Saini

The meeting was attended by the following teachers

S.NO.	NAME	COLLEGE
1	Apoorva Gupta	Hansraj College
2	Amrisha Bhardwaj	Lady Shri Ram College for Women
3	Anand Kumar	College of Vocational Studies
4	Dr.Basanti Nayak	Satyawati college
5	MANOJ KUMAR	Shyam Lal College Evening
6	Pankaj Yadav	Shaheed Bhagat Singh College
7	Pooja sharma	Daulat Ram college
8	Pradip Kumar Biswas	College of Vocational Studies
9	Rajan Kumar	Motilal lal Nehru college evening
10	Sujayata Choudhry	Indraprastha College for Women, University of Delhi
11	Uma	LBC
12	V. Sushmitha Naidu	Sri Venkateswara College
13	Vandita Sahay	Kamala Nehru College

Learning Objectives

This course will introduce the basics of Resource and Energy economics. The objective of this course is to provide theoretical and empirical topics on Resource economics, energy economics, energy transition, and energy security. This course introduces the conceptual and theoretical foundations of Resource Economics. In particular, the policies and potential sources are both renewable and non-renewable. The objective of this course is to provide knowledge on the principles of governing and managing natural resources.

Learning outcomes

The students will learn some issues of resource economics relating to the basics of supply, demand, and prices, income elasticities, world oil markets, and depletable resources, pathways of energy transition from conventional to renewable energy sources.

Syllabus

Unit 1: Resource Economics (Renewable and non-renewable sources)

15 lectures

Optimal extraction of non-renewable resource, Optimal management of renewable resources -Fishery and Forestry

Tom Tietenberg and Lynne Lewis, Environment and Natural Resource Economics, 9th edition, Chapter 5,6,12 and 13

Unit 2: Energy Economics

15 Lectures

Review of the Basics of Supply, Demand and Price Formation in Competitive Markets. Types of energy sources, Introduction to Basics of supply, demand, and prices, income elasticities, energy supply and economics of depletable resources, world oil markets.

Pindyck and Rubinfeld. Microeconomics, 2005, chapter 2, section 15.8.

Smil, V. "Energy in the Twentieth Century: Resources, Conversions, Costs, Uses and Consequences." *Annual Review of Energy and the Environment* 25 (2000): 21-51.

Hughes, J., C. Knittel, and D. Sperling. "Evidence of a Shift in the Short-Run Price Elasticity of Gasoline Demand." Center for the Study of Energy Markets, Working Paper 159 (2006).

Smith, J. "Inscrutable OPEC? Behavioral Tests of the Cartel Hypothesis." *The Energy Journal* 25, no. 1 (2005): 51-82.

Unit 3: Energy transition and energy security

15 Lectures

Pathways of energy transition from conventional to renewable energy sources, Policy instruments, Energy security, accessibility and 4 A definition, and Energy poverty

Fouquet, R. Historical energy transitions: speed, prices and system transformation. *Energy Res. Soc. Sci.* 22, 7–12 (2016).

Chen, B., Xiong, R., Li, H., Sun, Q., & Yang, J. (2019). Pathways for sustainable energy transition. *Journal of Cleaner Production*, 228, 1564-1571.

Cherp, A., & Jewell, J. (2014). The concept of energy security: Beyond the four As. *Energy policy*, 75, 415-421.

Carley, S., & Konisky, D. M. (2020). The justice and equity implications of the clean energy transition. *Nature Energy*, 5(8), 569-577.

Assessment:

1. **Internal Assessment (IA): 30 marks** - Evaluation will comprise two class tests, (12 marks each), and attendance (6 marks).
2. **Continuous Assessment (CA): 40 marks** – The Evaluation can consist of PPT/ Project activity (group)/ Quizzes/ Paper writing/ Book Review/ Literature Review. In addition to the above-mentioned heads, CA can be evaluated using the following heads as well - Movie Review/ Documentary Review/ Movie Screening and Report writing/ Project related to Environmental Tour/ Project related to a trip to Bio-diversity Park (35 marks) and attendance (5 marks).
3. The **End-semester exam** of **90 marks** will comprise two sections: A and B. Section A will comprise short questions (from Unit 1) of 6 marks each (5 to be attempted out of 8). Section B will comprise long questions (from Unit 2 and Unit 3) of 15 marks each (4 to be attempted out of 6).