



# ENERGY ECONOMICS AND POLICY

## PROF. SHYAMASREE DASGUPTA

Department of Humanities and Social Sciences  
IIT Mandi

**PRE-REQUISITES :** Any foundational course in Economics

**INTENDED AUDIENCE :** Primarily the graduate students working in the area of energy economics and energy policy domain. This course will also be useful for general audience

**INDUSTRIES APPLICABLE TO :** Power Sector; Energy consulting firms; Renewable Energy production units, Policy makers

### COURSE OUTLINE :

The course deals with understanding energy as a scarce resource, various aspects of energy demand and supply with a focus to policies that are in place to promote renewable energy supply and finally, a much needed discussion on interaction between energy, environment and climate change. The course aims at broadening the vision of students while making any energy related decision as a technology developer, energy manager, entrepreneur, policy maker, researcher in future or simply for personal energy use in day to day activities.

### ABOUT INSTRUCTOR :

Prof. Shyamasree Dasgupta is an Assistant Professor at the School of Humanities and Social Sciences in Indian Institute of Technology Mandi. She is an economist by training. Her teaching and research interest remains in the area of energy, environment, climate change and sustainable development. She obtained Ph.D and M.Phil in Economics from Jadavpur University, Kolkata, India with SYLFF Fellowship. She is a member of several active academic/research networks including International Association of Energy Economics, Indian Society for Ecological Economics, The Indian Econometric Society etc. She is a contributing author in the Industry Chapter of IPCC AR 5.

### COURSE PLAN :

**Week 1:** Energy as a Scarce Resource; Classification, Measurement and Accounting of energy resources

**Week 2:** Energy Demand-Part I- Analyzing past, present and future demand

**Week 3:** Energy Demand-Part II - Demand Side Management, policies and behavioural issues

**Week 4:** Energy Supply- Part I – Economics and policies of non-renewable energy supply

**Week 5:** Energy Supply- Part II – Economics of electricity supply and renewable energy and related policies

**Week 6:** Energy Market

**Week 7:** Special topics on energy, environment and climate change - Part I

**Week 8:** Special topics on energy, environment and climate change - Part II