wir906 - Resource and Energy Economics

Module label Resource and Energy Economics
Module code wir906
Credit points 6.0 KP
Workload 180 h

Used in course of study
- Master's Programme Sustainability Economics and Management > Basic and Accentuation Modules
- Master's Programme Water and Coastal Management > Socioeconomics

Contact person
Module responsibility
- Christoph Böhringer
Authorized examiners
- Die im Modul Lehrenden

Entry requirements
Skills to be acquired in this module
Understanding the (normative) problems of resource use
Rationales and instruments for policy intervention into (energy) markets
Command of analytical methods (incl. role of analytical and numerical models in policy analysis)
Ability to judge energy policy issues based on sound economic analysis (theory)
Ability to quantify the relevance of arguments (empirics).

Module contents
The course deals with the following subjects: Resource economics - Economics of sustainable resource use, methods of resource economics, non-renewable resources, renewable resources
Energy economics - Markets and regulation: competitive markets as efficiency benchmark; market failures as a rationale for regulation - Fundamentals of energy system/market analysis: definitions and concepts; energy statistics and balances; elasticities and incidence of policy interference - Market imperfections and regulatory design: environmental externalities, imperfect competition - Electricity markets: supply, demand, market interactions, market failures and regulatory responses
Methods of teaching: The course is designed as a lecture that teaches the relevant methods, concepts and models and illustrates them with reference to practical examples.

Reader’s advisory
Steven Stoft, Power System Economics : Designing Markets for Electricity, New York 2002;
IEA: World energy outlook, annual.

Links
Language of instruction English
Duration (semesters) 1 Semester
Module frequency yearly
Module capacity unlimited
Modulart ---
Lern-/Lehrform / Type of program Lectures
Vorkenntnisse / Previous knowledge

Examination Time of examination Type of examination Written exam
Final exam of module

Course type Comment SWS Frequency Workload attendance
Lecture 4.00 56 h
Seminar 0 h
Total time of attendance for the module 56 h