Module label: Advanced Topics of Sustainability Economics
Module code: wir911
Credit points: 6.0 KP
Workload: 180 h

Module contents:
- Natural science of climate change: greenhouse effect; measures, causes and impacts of climate change.
- Economics of climate change: market failures (public goods, externalities); game theory of international agreements (prisoner’s dilemma, chicken game, assurance game, repeated games, continuous choice); environmental policy instruments (especially taxes, tradable permits).
- Climate policy in practice: EU-ETS (pitfalls: market segmentation, conditional grandfathering, lobbying); emission taxes and the EU-ETS; interaction between black and green quotas; embodied carbon tariffs.

Entry requirements:
None

Skills to be acquired in this module:
This course aims at giving students an understanding of reasons, goals and instruments for climate policy, as well as implied complications due to the long term characteristics and the international dimension of climate change. Students first learn basics about the natural science of climate change and the main statements of climate research about the anthropogenic contribution to climate change. The economic interpretation of high pollution as a symptom of a market failure then leads to the treatment of policy instruments, and the understanding of economic efficiency as a prerequisite for effective climate policy. Game theoretic analysis of international negotiations and agreements provides key insights about the international dimension of the problem. By means of practical examples students then see in detail the functionality and pitfalls of selected implemented (or currently discussed) policies, e.g. the EU-ETS. With successful completion of the course, students shall be able to judge climate policy issues on an informed scientific basis (natural science and economics).

Reader's advisory:

Links:
- Languages of instruction: German, English
- Duration (semesters): 1 Semester
- Module frequency: halbjährlich
- Module capacity: unlimited
- Modulart: Pflicht
- Lern-/Lehrform / Type of program: AS (Akzentsetzung)

Examination:
- Time of examination: end of semester
- Type of examination: written exam

Course type:
- Comment: SWS
- Frequency: Workload attendance
  - Lecture: 2.00, 28 h
  - Exercises: 2.00, 28 h
  - Seminar: 0 h

Total time of attendance for the module: 56 h