



University of Cologne

Department of Economics – Chair in Economics and Energy Economics
Prof. Dr. Marc Oliver Bettzüge

Seminar in Energy, Resource and Environmental Economics

Winter Term 2019

Carbon Pricing and Emission Trading Schemes

As of today more than 20 Emission Trading Schemes (ETS) are in place worldwide (e.g. California, Québec, New Zealand, RGGI, etc.). The European Union Emission Trading System (EU ETS), is the largest one yet. While the design as well as the sectors and emissions covered by the respective ETS differ strongly among the regions, they all work as ‘cap and trade’ system: the government limits annual emissions while companies then sell or buy emission allowances on a market. In order to internalize the external effects of production (i.a. greenhouse gas emissions), the regulator limits the emissions quantity while the market determines the price for the externality. If designed correctly, this enables cost-efficient emission reduction and incentivises long-term investments into low-carbon technology.

A carbon price (also called carbon tax) also aims to internalize the costs for emissions but is a price based mechanism. Hereby, the regulator sets a price per tonne of GHG emission that has to be paid by the polluters. Thus, in contrast to an ETS, the price for the externality is fixed whereas emissions themselves may vary. Carbon taxes have also been implemented in many countries (e.g. Argentina, Chile, Mexico, etc.), but also hybrid instrument such as an ETS with price floors are currently widely discussed.

Given this background, students in this seminar will analyse ETS market designs and carbon taxes worldwide, analyse the impact of a national carbon price in Germany as well as a EU-wide carbon price floor, evaluate the recent EU ETS reform in light of national policies (e.g. a coal phase out) and discuss (future) challenges for the industry.

Schedule

09.10.2019 <u>16:00-17:30</u>	Introductory Meeting <i>S21, Seminar Building</i> - Organizational Issues - Introduction - Seminar Topics
13.10.2019	Deadline Submission of Topic Preferences Please submit your seminar topic preferences to Johanna.Bocklet@uni-koeln.de
Seminar Topics will be allocated to you by Email	
16.10.2019 <u>16:00-17:30</u>	Guest Lecture/Deep Dive, tba <i>Institute of Energy Economics, Vogelsanger Str. 321a, 50827 Cologne</i>
20.10.2019	Deadline to Register or Withdraw from the Examination
23.10.2019 <u>16:00-17:30</u>	Skills Seminar <i>Institute of Energy Economics, Vogelsanger Str. 321a, 50827 Cologne</i> Expectations on your paper and helpful tips on how to find a research question, write a research paper and give a presentation
11.12.2019	Deadline Submission of First Draft of the Paper Email first draft of your paper to your peer and to Johanna.Bocklet@uni-koeln.de so that your peer can prepare feedback Mandatory
Individual Meeting(s) with Mentor (<i>optional, but highly recommended</i>) Discussion of first ideas, paper structure, research question, analysis etc.	
18.12-19.12.2019	Seminar Presentations and Company Visit <i>RWE, Essen</i> ▪ Presentation by each seminar participant ▪ Peer Review ▪ Submission of written peer review ▪ Discussion with representatives of RWE ▪ Visit of the RWE Trading Floor Mandatory
19.01.2020	Deadline Submission of Final Seminar Paper Please submit your seminar paper to Johanna.Bocklet@uni-koeln.de . Mandatory

Application

A maximum number of applicants of 30 can be admitted to the course, priority will be given to students of the WiSo Faculty. Please register on KLIPS for the seminar as early as possible (first registration period).

After you receive a seat in the seminar, please make sure to register for the examination on KLIPS as well (use the Lehrveranstaltungsprüfung "Seminar in Energy, Resources and Environmental Economics"). Only those, who have a seat in the seminar can register for the examination! Thus, if you decide to not take the seminar, please make sure to deregister from the course so your peers are able to enroll for the remaining spots before the exam registration phase ends!

Once you have registered for the examination, the registration is binding and students who do not hand in a seminar paper or who do not present their paper will receive a failing grade. Thus, please make sure that you are able to attend the presentation days, before registering for the course.

Mode of Examination: combined examination

The final grade consists of:

- 50% Seminar Paper (max 5000 words)
- 40% Presentation at seminar meeting (15 minutes)
- 10% Oral discussion of a peer's presentation (3-5 minutes) and written peer feedback (max 500 words)

General Requirements

The seminar is designed for students to prepare for a Master thesis in Energy Economics. The seminar participants are expected to gain in-depth insights into their topic independently. Thus, we expect students to already have a solid foundation in Energy Economics (i.a. have taken other courses in the Energy specialisation) before taking the seminar.

While overall topics will be distributed, students are expected to determine the main focus of their seminar paper themselves. The emphasis within the own topic as well as the draft structure of the paper shall be discussed with the mentor at an early stage. Furthermore, students should deal critically with the contributions of other participants. Active participation in the seminar discussion is expected. We provide a guideline for the preparation of seminar papers. This includes all design requirements.

Further Information

Allocated Modules	<ul style="list-style-type: none">▪ Specialisation in Energy Economics – Seminar in Energy, Resource and Environmental Economics▪ The seminar can also be selected by IMES students.
Credits	6
Language	English
Examiner	Prof. Dr. Bettzüge
Cooperation Partners	RWE Trading
Organisation	Please contact. Johanna Bocklet in case you have any questions about the seminar (Johanna.bocklet@uni-koeln.de)