

Lehrstuhl für Umwelt-/Ressourcenökonomik und Nachhaltigkeit

Prof. Dr. Andreas Löschel

01.10.2023

Winter semester 2023/24 Master Seminar Advanced Energy and Resource Economics I

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Public support for sustainable energy in the EU: Understanding preferences, behavior, and policy support.

Organisation

In this seminar, students will learn from and with applied economic research papers. They have the option of working only with papers or also apply statistical analysis of survey data. The seminar covers topics concerning sustainable energy use and acceptance, with a focus on the European Union. Students present and discuss their work during a block seminar.

The seminar paper should be around 20 pages (+/-10%) and presentations should take around 30 minutes per topic, including 10 minutes for discussion. The seminar paper will be 75% of the final grade and the presentation 25%. For successfully completing the seminar, participants will receive 5 CP. The seminar paper has to be written in English and presentation and discussions will be in English.

Writing and presenting will be assigned to groups of 2 students each.

Writing, presenting and submission

The writing period starts immediately after the introduction session on 12.10.2023. The block session for presentation and discussion will take place on 17.01. and 18.01.2023. Seminar papers must be submitted at least one week after the block seminar electronically via e-mail to david.schulze-r2a@rub.de on 24.01.2024 latest 23:59h.

Topic assignment

Students can sign up after the introduction session and choose three ordered preferences for topics. Alternatively, they can send an e-mail directly after the introduction session to David.schulze-r2a@rub.de and choose three ordered preferences for topics. The final topic assignment will be published on 18.10.2023 on the Moodle course. **Participation is limited to the first 20 students that sign up.** After being notified of their topic, participants have until 22.10.2023 to sign up for the seminar on FlexNow to take part.

Dates and deadlines

Introduction session: **12.10.2023** 15:00-16:00h in room GD 02/156

Topic assignment: 18.10.2023
Registration in FlexNow: until 22.10.2023

Block seminar for presentations: **17.01.2024** 14:00-18:00h in room GD 03/158

18.01.2024 09:00-18:00h in room GD 02/148

Seminar paper submission deadline: 24.01.2024 until 23:59h

Topics

This seminar covers sustainable energy use and acceptance in countries of the European Union. Based on the scientific literature or survey data from 23 countries, students will investigate one of the following dimensions of support for sustainable energy that have been grouped into three blocks. The questions in this sections are only suggestions for the direction of each paper.

Block I: Individual behavior

Consumption decisions and energy use behavior have a large impact on energy use, but depend on support and effort by many people. Understanding this behavior is important to draft efficient and effective policies.

- 1. Energy efficient appliances: Much energy can be saved by updating old household appliances. Prices and income as well as environmental concerns may be possible factors.
- 2. Sustainable energy use behavior: Conserving energy requires time and effort. Education or employment could be related to this behavior.
- 3. Sustainable energy use potential: Some people feel like they already save as much energy as they can. Is this related to economic factors, or individual values?

Block II: Support for renewable energy sources

The transition to sustainable energy sources requires changes to where and how energy is produced, which can impact people's lives in many different ways. Additionally, people may have different opinions and preferences for new technologies. Factors that influence support for different sources are important for the success of the transition.

- 4. Support for energy from renewable sources (Solar): Photovoltaic energy regeneration may not be equally profitable for all regions of the EU. What drives public support?
- 5. Support for energy from renewable sources (Hydrogen): Hydrogen is a promising but not widely implemented renewable energy source. Who is more likely to support it?
- 6. Support for energy from renewable sources (Wind): Wind farms are changing landscapes all over Europe. Are there regional differences in acceptance?
- 7. Support for energy from renewable sources (Biomass): Energy generation from biological matter may be more or less preferable to individuals from regions with a closer connection to agriculture.

Block III: Support for sustainable energy policy

Politicians can choose different policy instruments such as taxes, subsidies and bans to promote efficient and sustainable energy use. Understanding support for those policies can help to better understand which policies are easier to implement, and which groups are more difficult to convince

- 8. Support for renewable energy subsidies: Subsidies may be seen as inefficient or unfair but could be popular with people working in affected industries.
- 9. Support for banning inefficient appliances: Some people dislike bans out of a preference for free decision making, others may think they are necessary. What could explain this difference?
- 10. Support for taxes on fossil fuels: Many people use fossil fuels in transportation or as a source of cheaper energy. Is energy cost, living situation or something else a more important factor?

Students will receive useful source material from the applied scientific literature as well as an optional introduction to using data and the statistical programming software "R". The literature and links to data and tutorials will be uploaded after the introduction session to Moodle.