

The Economics of Natural Resources

Institut für Volkswirtschaftslehre
Summer Semester 2025



Content

To understand the natural world we live in aids the efforts to tackle important environmental challenges such as climate change. Economic perspectives on the issue can specifically shed light on how natural resources can be more sustainably managed. This seminar covers both long standing and current topics in Natural Resources Economics. The topics focus on the socio-economic roles of natural resources with rigorous empirical papers studying different regions worldwide. The seminar extends the dialogue to the intervention frontiers where the effectiveness of environmental regulations and innovation is explored. Besides providing the subject matter knowledge, the seminar aims to encourage and train students to conduct independent, original economic research through scientific paper evaluation, own data analysis and presentation of findings.

Prerequisites

Basic knowledge of Microeconomics and Macroeconomics is required. Prior knowledge of Public Economics/Environmental Economics/Development Economics is helpful. Knowledge of Statistics/Econometrics is required to understand the empirical literature.

Requirements

The following are required from seminar participants:

- Attendance at the kick-off meeting
- At least one consultation meeting with the instructor
- Seminar presentation (20-minute presentation and 10-minute discussion)
- Active participation and contribution to other presentations
- Submission of the term paper (10-12 pages)

Each seminar topic (see below) is accompanied by a list of suggested literature. Each paper may focus on a different sub-topic. The selected literature should first be discussed in detail in student's term paper: What is the research question? What are the hypotheses? Which methods are used? What are the results?. Subsequently, an independent extension of the findings is to be made. Examples might include: comparison with recent research literature, independently extending the analyses to more recent time point, replicating the results using data from a different temporal or geographic context, or deriving and discussing economic or social policy measures.

Student's research plan should be discussed with the instructor. In the kick-off meeting, information about the seminar schedule is given and the seminar topics are distributed. In addition, helpful hints are given on how to conduct and write a research paper. The

seminar language is English. The guidelines for scientific papers at the Institute of Economics can be found **here**. The formal guidelines must be strictly adhered to. Formal aspects are part of the evaluation of the term paper.

Registration

Students can register for the seminar via Stud.IP from 10.03.2025.

Important dates

- from 10.03.2025: Registration via Stud.IP
- 11.04.2025: Kick-off meeting and topic distribution (13:00-15:00, VWL institute)
- 06.06.2025: Group consultation (9:00-12:00, VWL institute)
- 04.07.2025: Block seminar, presentation (from 9:00)
- 01.08.2025: Submission deadline for the term paper (until end of day, via E-mail)

Seminar topics and literature

Please note that each suggested paper within a topic can function as the foundation for the student's own research.

1. Climate change impact

- McGuirk, E. F., & Nunn, N. (2025). Transhumant Pastoralism, Climate Change, and Conflict in Africa. *Review of Economic Studies*, 92(1), 404-441. <https://doi.org/10.1093/restud/rdae027>
- Gilli, M., Calcaterra, M., Emmerling, J., & Granella, F. (2024). Climate Change Impacts on the Within-Country Income Distributions. *Journal of Environmental Economics and Management*, 127, 103012. <https://doi.org/10.1016/j.jeem.2024.103012>

2. Biodiversity

- Frank, E., & Sudarshan, A. (2024). The Social Costs of Keystone Species Collapse: Evidence from the Decline of Vultures in India. *American Economic Review*, 114(10), 3007-3040. <https://doi.org/10.1257/aer.20230016>

3. Infrastructure investment

- del Valle, A. (2024). Saving Lives with Indexed Disaster Funds: Evidence from Mexico. *American Economic Journal: Economic Policy*, 16(2), 442-479. <https://doi.org/10.1257/pol.20220066>
- Balboni, C. (2025). In Harm's Way? Infrastructure Investments and the Persistence of Coastal Cities. *American Economic Review*, 115(1), 77-116. <https://doi.org/10.1257/aer.20191943>

- Dorsey, J., Langer, A., & McRae, S. (2025). Fueling Alternatives: Gas Station Choice and the Implications for Electric Charging. *American Economic Journal: Economic Policy*, 17(1), 362-400. <https://doi.org/10.1257/pol.20220130>

4. Firm and innovation

- Chen, Q., Chen, Z., Liu, Z., Suárez Serrato, J. C., & Xu, D. Y. (2025). Regulating Conglomerates: Evidence from an Energy Conservation Program in China. *American Economic Review*, 115(2), 408-447. <https://doi.org/10.1257/aer.20211455>
- Meeks, R. C., Thompson, H., & Wang, Z. (2025). Decentralized Renewable Energy to Grow Manufacturing? Evidence from Microhydro Mini-Grids in Nepal. *Journal of Environmental Economics and Management*, 130, 103092. <https://doi.org/10.1016/j.jeem.2024.103092>
- Bracht, F., & Verhoeven, D. (2025). Air Pollution and Innovation. *Journal of Environmental Economics and Management*, 130, 103102. <https://doi.org/10.1016/j.jeem.2024.103102>

5. Policy effectiveness

- Hansen-Lewis, J., & Marcus, M. (2025). Uncharted Waters: Effects of Maritime Emission Regulation. *American Economic Journal: Economic Policy*, 17(1), 37-69. <https://doi.org/10.1257/pol.20220626>
- Yang, L., Lin, Y., Wang, J., & Peng, F. (2024). Achieving Air Pollution Control Targets with Technology-Aided Monitoring: Better Enforcement or Localized Efforts?. *American Economic Journal: Economic Policy*, 16(4), 280-315. <https://doi.org/10.1257/pol.20220810>
- Assunção, J., McMillan, R., Murphy, J., & Souza-Rodrigues, E. (2023). Optimal Environmental Targeting in the Amazon Rainforest. *The Review of Economic Studies*, 90(4), 1608-1641. <https://doi.org/10.1093/restud/rdac064>

Seminar Organization

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