

Environmental Microeconomics (18 hours)

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The aim of the course is to introduce the students to the microeconomic analysis of pollution policy. A base model will specifically be presented to address pollution generation and environmental policy design. Also, the consumers' side will be considered, with specific attention to the distributional impact of policies.

The general model will then be extended in several directions, including (but not limited to) eco-innovation drivers and transboundary/international pollution problems. For the covered topics, a general theoretical analysis will be developed, and then examples of current theoretical and empirical research will be provided.

Topics covered will include:

1. Recalling and modelling negative externalities
2. Basic model of environmental policy – theory of environmental policy instruments
3. Environmental Policy in the presence of pre-existing distortions: imperfect information, imperfect competition
4. International Environmental Problems: a game theory perspective and climate change as a case study
5. Modelling policy instruments in the real world: the EU Emissions Trading System.
6. A glance on the “demand side”: distributional impacts of environmental policies and political acceptability.

Main textbook: Phaneuf DJ, Requate T. A Course in Environmental Economics: Theory, Policy, and Practice. Cambridge University Press; 2016. (PR)

Basic references.

For parts 1 and 2: (PR). Chapters 1-3

For part 3: (PR). Chapters 4 and 6

For part 4: (PR). Chapter 12

For part 5: Ellerman, A. D., Marcantonini, C., & Zaklan, A. (2016). The European Union emissions trading system: ten years and counting. *Review of Environmental Economics and Policy*. 10(1), 89-241

Borghesi, S., Pahle, M., Perino, G., Quemin, S., & Willner, M. (2023). The market stability reserve in the EU emissions trading system: a critical review. *Annual Review of Resource Economics*, 15, 131-152.

For part 6: Douenne, T. and A. Fabre. 2022. Yellow Vests, Pessimistic Beliefs, and Carbon Tax Aversion. *American Economic Journal: Economic Policy*, 14 (1): 81-107.

Vona, F. (2023). Managing the distributional effects of climate policies: A narrow path to a just transition. *Ecological Economics*, 205, 107689.

Additional references (list to be completed), based on current issues in environmental policy design, will be provided during the lectures.