Roweno J.R.K. Heijmans

This version: January 2021

Office K.302 Warandelaan 2, 5037 AB Tilburg The Netherlands

E-mail: r.j.r.k.heijmans@uvt.nl Website: www.roweno.nl Mobile: +31 6 25 02 02 55

Personal Details

Name: Roweno Johannes Ryan King Heijmans

Address: Bataviastraat 48, 5014 BV, Tilburg, the Netherlands

Education

2017/21 Ph.D. Candidate, Economics, Tilburg University, the Netherlands

Expected date of graduation: Summer 2021

2017 Research Master, Economics, Tilburg University, the Netherlands

2015 **BSc, Economics**, Tilburg University, the Netherlands

Research

Job Market Paper

"THE GLOBAL CLIMATE GAME"

Abstract: The present paper studies emissions abatement in a game of technological investments. Players invest in competing technologies. One technology is cheap and dirty, the other expensive but green. Technological investments are strategic complements. While such games typically have multiple equilibria, I show how uncertainty about the green technology's true potential leads to selection of a unique equilibrium. Applied to international environmental agreements, the model yields sharp predictions on when a treaty targeting abatement technologies gets ratified. Under well-identified conditions, countries adopt the dirty technology even though that is inefficient. In a two-stage version of the game, I study the incentive to cooperate on green R&D prior to signing an international agreement. When used to inform domestic policy, the model suggests a novel policy of network subsidies. A network subsidy virtually guarantees efficient adoption of the green technology but is not, in equilibrium, paid out.

Publications in peer-reviewed journals

- "CLIMATE-CONSCIOUS CONSUMERS AND THE BUY, BANK, BURN PROGRAM", with Reyer Gerlagh. *Nature Climate Change*, 2019.

The buy, bank, burn scheme we propose in this paper is being implemented by three NGOs: ForTomorrow, Compensators, and CAP₂.

- "COVID-19 TESTS THE MARKET STABILITY RESERVE", with Reyer Gerlagh and Knut Einar Rosendahl. Environmental and Resource Economics, 2020.

Working Papers

- "AN ENDOGENOUS EMISSION CAP PRODUCES A GREEN PARADOX", with Reyer Gerlagh and Knut Einar Rosendahl. Conditionally accepted at *Economic Policy*

- "REGULATING STOCK EXTERNALITIES", with Reyer Gerlagh. Submitted.
- "Efficient epidemics: Contagion, control, and cooperation in a global game", with Ana Moura. Submitted.
- "LINKING CAP-AND-TRADE SCHEMES UNDER ASYMMETRIC UNCERTAINTY", with Rever Gerlagh

Work in Progress

- "SEQUENTIAL GLOBAL GAMES"
- "Endogenous Emission Caps Always Produce a Green Paradox", with Reyer Gerlagh and Knut Einar Rosendahl.

Book Chapters

Gerlagh, R., Heijmans, R.J.R.K., & Mayumi, K. T. (2019). 5 Can the social cost of carbon be calculated? Contemporary Climate Change Debates: A Student Primer, 65.

Policy Reports (in Dutch)

Van Damme, E.E.C., Gerlagh, R., Heijmans, R.J.R.K., & Willems, B.J. (2018). Veilen of vergelijken voor het winnen van windenergie op zee?

Policy report written on request of the Dutch Ministry of Agriculture, Nature and Food Quality regarding the question how the rights to build windmill parks on the North Sea are most efficiently allocated.

Academic talks

Conferences

SURED (Ascona, Switzerland); European Economic Association Annual Meeting (Berlin, Germany); Econometric Society World Congress (Milan, Italy); Conference of the Spanish-Portuguese Association of Resource and Environmental Economics (Lleida, Spain – moved to 2020); European Association of Environmental and Resource Economists Annual Meeting (Berlin, Germany); Koninklijke Vereniging voor Staatshuishoudkunde New Paper Session (Leiden, the Netherlands); Autumn panel meeting on the economics of climate change (Berling, Germany – organized by Economic Policy and CEPR)

European Economic Association Annual Meeting (Manchester, United Kingdom); European Association of Environmental and Resource Economists Annual Meeting (Manchester, UK); CREE Workshop (Statistics Norway, Oslo, Norway); UECE Lisbon Meetings in Game Theory and Applications (Lisbon, Portugal); International Energy Workshop (IEA, Paris, France); Energy & Climate Conference (Toulouse, France)

SURED (Ascona, Switzerland); World Meeting of Environmental and Resource Economists (Gothenburg, Sweden); European Economic Association Annual Meeting (Cologne, Germany); CREE Workshop (Statistics Norway, Osly, Norway); UECE Lisbon Meetings in Game Theory and Applications (Lisbon, Portugal); Nederlandse Economendag/Dutch Economists Day (Amsterdam, the Netherlands)

Seminars

2020	Tilburg University; Nova SBE Health Economics & Management Knowledge Center, Lisbon, Portugal; Universidad del Rosario, Bogota, Colombia
2019	Nederlandse Emissieautoriteit (Dutch emissions authority)
2017	Tilburg University; CPB Netherlands Bureau for Economic Policy Analysis

Awards & Honors

2019	Scholarship from the Spanish-Portuguese Association of Resource and Environmental Economics to present my job market paper at their conference.
2015	Tilburg University Excellence Scholarship
2016	CentER Honors Program, CentER, Tilburg University
2015	Honors Program "Discourses on Europe", Tilburg University

Teaching Experience

Teaching Assistant, Tilburg University, the Netherlands

2019/20 BSc thesis supervision, Grondslagen macro-economie (undergraduate macro, in Dutch), Micro-economics 2: Game Theory (research master).

Teaching Assistant, Tilburg University, the Netherlands

2018/19 BSc thesis supervision, Grondslagen macro-economie (BSc macro, in Dutch), Economics for Social Sciences (BSc).

Teaching Assistant, Tilburg University, the Netherlands

2017/18 MSc thesis supervision, Grondslagen macro-economie (BSc macro, in Dutch), Macroeconomics for EOR (BSc).

Employment

2014 Intern, De Nederlandsche Bank, Amsterdam

Professional Activities

Refereeing: Resource and Energy Economics, Annals of Economics and Statistics

Conferences: Reviewer for the Spring Meeting of Young Economists (24th and 25th edition) Organizational: Member of the Education Committee, Tilburg University, 2015-2017

Skills

Computer: LATEX, Matlab, Microsoft Office, State, Python

Languages: Dutch (native), English (fluent), German (intermediate), Portuguese (beginner).

References

Prof. Dr. Eric van Damme

Supervisor Tilburg University +31 13 466 30 45 Eric.vanDamme@tilburguniversity.edu

Prof. Dr. Sjak Smulders

Tilburg University +31 13 466 36 53 j.a.smulders@uvt.nl

Prof. Dr. Bård Harstad

University of Oslo +47 228 560 52 bard.harstad@econ.uio.no

Prof. Dr. Reyer Gerlagh

Supervisor Tilburg University +31 13 466 26 28 r.gerlagh@uvt.nl

Prof. Dr. Knut Einar Rosendahl

Norwegian University of Life Sciences +47 672 311 45 knut.einar.rosendahl@nmbu.no