

Curriculum Vitae, Daniel J.A. Johansson

Current Position	Post-doc at the Environmental Economics Unit, Department of Economics, School of Business, Economics and Law, Göteborg University, 2008-
Previous positions	Researcher at the Division of Physical Resource Theory, Department of Energy and Environment, Chalmers University of Technology, 2007-2008. Guest Research Scholar, International Institute of Applied Systems Analysis (IIASA), autumn 2007. PhD student at the Division of Physical Resource Theory, Department of Energy and Environment, Chalmers University of Technology, 2002-2007. Project assistant at the Division of Physical Resource Theory, Department of Energy and Environment, Chalmers University of Technology, 2001-2002. Various summer job positions at Ascom Tateco and Alingsås Energi, 1995-2000. Ascom Tateco, electronic technician, 1994-1995.
Degrees and undergraduate courses	Doctor of Philosophy in Energy and Environment with focus on Physical Resource Theory 2007, Chalmers University of Technology. Licentiate of Philosophy in Environmental Science with focus on Physical Resource Theory 2005, Chalmers University of Technology. M. Sc. in Electrical and Environmental Engineering, 1995- 2001, Chalmers University of Technology. Minors in International Studies, Human Ecology and Psychology, 1999-2001, Göteborg University.
Date of Birth	1975-02-25
Marital Status	Spouse, 2 children.
Address (home)	Svängrumgatan 29, 421 35 Västra Frölunda, Sweden.
Address (work)	Environmental Economics Unit, Department of Economics, School of Business, Economics and Law, Gothenburg University, Box 640, 405 30 Göteborg, Sweden.
Phone (home)	+46 31 22 94 47 / +46 704 953 264
Phone (work)	+46 31 786 41 75
E-mail	daniel.johansson@ceconomics.gu.se

Research interests

Integrated assessment modelling of climate change, environmental policy and economics, energy policy and economics, analysis of risk and uncertainty, energy systems modelling, Global Warming Potentials (GWP).

Scientific publications in peer reviewed journals

- Johansson, D. J. A and Azar C., 2003, Analysis of land competition between bioenergy and food production, *World Resources Review*, Vol. 15, Page 165-175
- Johansson D.J.A., Persson U.M. and Azar C., 2006, The cost of using Global Warming Potentials, *Climatic Change*, Vol. 77, No. 3-4, Page 291-309.
- Johansson, D.J.A. and Azar C., 2007, A scenario based analysis of land use competition between bioenergy and food production in the US, *Climatic Change*, Vol. 82, No. 3-4, Page 267-291.
- Persson T.A, Azar C., Johansson D.J.A. and Lindgren K., 2007, Major oil exporters may profit rather than lose in a carbon constrained world, *Energy Policy*, Vol. 35, No 12, Page 6346-6353.
- Johansson D.J.A., Persson U.M. and Azar C., 2008, Uncertainty and learning: Implications for the trade-off between short-lived and long-lived greenhouse gases, *Climatic Change*, Vol. 88, No., 3-4, Page 293-308.
- Fuss S., Johansson D.J.A., Szolgayova J., Obersteiner M., 2009, Adoption of electricity generating technologies under long-term climate policy uncertainty, *Energy Policy*, Vol. 37, No 2, Page 733-743.
- Johansson D.J.A., Azar C, Lindgren K., and Persson T.A., 2009, OPEC strategies and oil rent in climate conscious world. Accepted for publication in *The Energy Journal*.
- Hedenus F., Azar C. and Johansson D.J.A., 2009, Energy Security policies in EU 25 – the expected cost of oil supply disruptions. Accepted for publication in *Energy Policy*.

Working Papers

- Johansson D.J.A. and Azar C., 2008, *Cost-effective prices on emissions subject to uncertain estimates – The Case of CH₄ and N₂O.*
- Johansson D.J.A. 2008, *Economic vs. physical based indexes for comparing different greenhouse gases: Do they match?*

Papers in Conference Proceedings

- Johansson D.J.A and Azar C., 2003, Economic implications of emissions uncertainties: the case of biospheric methane emissions from rice cultivation, *Proceedings of the 3rd international methane and nitrous oxide mitigation conference.*
- Persson U.M., Johansson D.J.A. and Azar C., 2003, Integrated assessment of the economic trade-off between CO₂, CH₄ and N₂O abatement – efficiency losses from using static GWPs, *Proceedings of the 3rd international methane and nitrous oxide mitigation conference.*
- Johansson D.J.A., Persson U.M., and Azar C., 2004, The economic trade-off between CO₂, CH₄ and N₂O abatement - an economic assessment of using static

- GWP'S, *Proceedings of the 7th International Conference on Greenhouse Gas Control Technologies*.
- Johansson D.J.A., Persson U.M. and Azar C., 2005, Trade-off between CO₂ and CH₄ under conditions of uncertainty, learning and inertia, *Proceedings of the 4th Non-CO₂ Greenhouse Gas Conference*.
- Johansson D.J.A. and Persson U.M., 2005, Non-CO₂ Greenhouse Gases in National Climate Policies: A Reassessment of the Comprehensive Approach, *Proceedings of the 4th Non-CO₂ Greenhouse Gas Conference*.
- Johansson D.J.A. and Persson U.M., 2006, Methane in Climate Policies, *Proceedings of the First Regional Symposium on Carbon Management – Carbon Management Challenges and Opportunities for the Petroleum Industry* (In press).
- Person T.A. and Johansson D.J.A., 2006, OPEC's Oil Revenues in Carbon Constraint Scenarios – When Can Richardian Rents Occur, *Proceedings of ENERGEX 2006 – the 11th International Energy Conference & Exhibition*.
- Fuss S., Johansson D.J.A., Szolgayova J., Obersteiner M., 2008, Risikoverringering bei der klimapolitik & die auswirkungen auf die zeitliche planung von energieinvestitionen, "*Proceedings of the 10. Symposium Energieinnovation, Graz/Austria*.
- Hedenus F., Azar C. and Johansson D.J.A., 2008, Energy Security policies in EU 25 – the expected cost of oil supply disruptions, *Proceedings of EAERE 2008*.

Other scientific publications

- Johansson D. J. A. and Essandoh- Yeddu J., 2001, *Sustainable energy scenarios for Ghana's long-term development plan (Vision 2020)*, Master of Science thesis.
- Johansson D. J. A., 2005, *Modelling climate policy – Non-CO₂ greenhouse gases, uncertainty and land-use competition*, Thesis for Degree of Licentiate of Philosophy.
- Johansson D. J. A., 2007, *Modelling climate policy – Trade-Off Metrics, Resource Markets, and Uncertainty*, Thesis for Degree of Doctor of Philosophy.

Other Publications (popular scientific papers, debate articles etc)

- Azar, C. Hedenus, F. Johansson, D.J.A., Persson, M., Permit Trading is not enough (In Swedish), *Dagens Industri* 25/9 2003.
- Johansson D.J.A. and Azar C., "Emission Permit Trading", in "*From here to sustainability – Is the Lisbon/Göteborg agenda delivering?*" eds. Samuelsson B., Environmental Panel on Sustainable Development Report no. 1, 2004.
- Hedenus F. and Johansson D.J.A., Global scenarios for energy, carbon dioxide and industrial roundwood, *Report to the Swedish Environmental Advisory Council*, 2006.
- Hedenus F. and Johansson D.J.A., No future for grain ethanol (In Swedish), *Göteborgs Posten*, 03/11 2006.
- Johansson D.J.A., Hur fort behövs vilken förändring?, Eds. Birgitta Johansson, *Formas Fokuserar: Världen i ett nytt klimat*, inskickad, Stockholm, Sverige

Scientific Presentations

- Johansson, D.J.A. *Partial equilibrium analysis of land competition between food and bioenergy production*, World Renewable Energy Congress VII, Cologne 3/7, 2002
- Johansson D.J.A., *Methane emissions in Asia – Rice cultivation, emission uncertainties and socio-economic consequences* (In Swedish), Sweden's Energy Conference, Eskilstuna 11/3, 2003
- Johansson, D.J.A., *Analysis of land competition between bioenergy and food production*, The XIVth Global Warming International Conference, Cambridge-Massachusetts 27/5, 2003
- Johansson, D.J.A. & Persson, U.M., *GWP – How bad is the metric?* (In Swedish), The Swedish Energy Agency's Research Program Conference in International Climate Politics, Stockholm 1/11, 2003
- Johansson D.J.A., *Economic implications of emission uncertainties: the case of biospheric methane emissions from rice cultivation*, the 3rd International Methane and Nitrous Oxide Mitigation Conference, Beijing 19/11, 2003
- Johansson D.J.A., *The cost of using Global Warming Potentials*, International Energy Workshop (IEW), Paris 22/6, 2004
- Johansson D.J.A., *Modelling climate policy – Non-CO₂ greenhouse gases, uncertainty and land-use competition*, Licentiate Seminar, Discussant leader: Michael Obersteiner, 18/2, 2005
- Johansson D.J.A., *Trade-off between CO₂ and CH₄ under conditions of uncertainty, learning and inertia*, The 4th Non-CO₂ Greenhouse Gas Conference, Utrecht 5/7, 2005
- Johansson D.J.A., *Valuing emissions uncertainties – The case of methane, nitrous oxide and carbon dioxide emissions*, The 4th Non-CO₂ Greenhouse Gas Conference, Utrecht 5/7, 2005
- Johansson D.J.A. and Persson U.M., *An evaluation of six countries existing policy instruments to reduce non-CO₂ greenhouse gases* (In Swedish), Sweden's Energy Conference, Eskilstuna 8/3, 2006
- Johansson D.J.A., *Resource use in the future – the case of energy and industrial roundwood*, Swedish Environmental Advisory Council, Stockholm 28/4, 2006
- Johansson D.J.A., *Methane in climate policies*, The First Regional Symposium on Carbon Management – Carbon Management Challenges and Opportunities for the Petroleum Industry, 20/5, 2006, Dammam, Saudi Arabia
- Johansson D.J.A. and Hedenus F., 2006, *Global scenarios for energy, carbon dioxide and forests products*, Presentation for the Royal Swedish Academy of Engineering Sciences and the Swedish Environmental Advisory Council, 15/6, 2006, Stockholm, Sweden
- Johansson D.J.A., *A scenario based analysis of land competition between food and bioenergy production in the US*, Workshop on Climate Mitigation Measures in the Agro-Forestry Sector and Biodiversity Futures, 17/10, 2006, Trieste, Italy
- Johansson D.J.A., *Modeling Climate Policy – Trade-Off Metrics, Resource Markets and Uncertainty*, presentation and defence of doctoral thesis, 23/5, 2007
- Johansson D.J.A., *Energy and climate policies impact on land use and grain prices*, Presentation for the Swedish Oat Association, 11/6, 2007
- Johansson D.J.A., *OPEC's strategies and oil rent in climate conscious world*, International Energy Workshop (IEW), Stanford 27/6, 2007

Johansson D.J.A., *OPEC's strategies and oil rent in climate conscious world*, International Institute of Applied System Analysis (IIASA), Laxenburg 3/10, 2007

Johansson D.J.A., *Economic vs. physical based indexes for comparing different greenhouse gases: Do they match?* International Institute of Applied System Analyses (IIASA), Laxenburg 5/12, 2007

Johansson D.J.A. & Persson U.M., *Using simple climate-economy models to inform policy*, SWECLIM seminar, Institute for international economic studies, Stockholm University, 5/9, 2008

Teaching (selection)

Assistant teacher in “Science of Environmental Change” for master degree students in Industrial Ecology, 2004, 2005 and 2006

Supervision in “Sustainable Resource Utilization” for computer engineering students, 2002, 2005 and 2006

Supervision in “Sustainable Resource Utilization” for mechanical engineering students, 2006

Course leader and main teacher in “Basics of Energy Supply and Demand” for students in Problem Solving in Natural Sciences, 2003

Supervision in “Sustainable Development” for students in pedagogy, 2003

“The Basic Science of Climate Change”, lecture for students in Human Ecology, 11/10-2005 and 10/11-2006

Public Presentations (selection)

The importance of methane in climate change (In Swedish), Science Festival, Göteborg, 2004

How can the EU ETS change in the future? More gases, maybe? (In Swedish), Seminar with the local business organization, Göteborg, 19/10, 2005

Participated in scientific panel in Swedish National Radio program “Karlavagnen”, May 2007

Interviewed in “Vetandets Värld”, (science program in Swedish National Radio), May 2007

Ms. C. thesis supervision

Rootzen, J., *Land use efficiency for forest C-sequestration versus fossil fuel substitution through bioenergy: A case study from south India*, Master of Science Thesis, Chalmers University of Technology, Göteborg, 2004.

Goyanes, J., *Investment decisions in the EU power industry under uncertainty in future climate policy*, Master of Science Thesis, Chalmers University of Technology, Göteborg, 2005.

Savoyat, V., *Socio-economic consequences of soybean expansion in Brazil*, Master of Science Thesis, Chalmers University of Technology, Göteborg, 2007.

Awards

The Jan Erik Sundgren Award – For valuable contributions towards sustainable development, 2008

Boards

Member of the scientific advisory board of Ecoera, 2007-

Scholarships

Minor Field Study Scholarship (MFS), Swedish Development Agency (SIDA), 2000
The Swedish Engineering Union's Environmental Fund, 2000
The Olof Palme Memorial Fund for International Understanding and Common Security, 2000

Projects

A study of the future outlook concerning the global demand for industrial roundwood and energy and emissions of carbon dioxide, Financed by the Swedish Environmental Advisory Board, 2006

Strategies to steer the energy system in a sustainable direction under the presence of radical uncertainty – Design of targets and policy instruments, Financed by Göteborg Energi AB, 2008-2009

Review assignments for

Atmospheric Environment

Climatic Change

Ecological Economics

Energy Policy

Environmental and Resource Economics

Journal of Industrial Ecology

17th Annual Conference of the European Association of Environmental and Resource Economists

Language skills

Swedish, fluently

English, fluently

German, basics

Computer skills

MS-Office, excellent

GAMS, excellent

Matlab, intermediate

SPSS, basics

MAPLE, basics

PASCAL, basics

Visual Basic, basics

Passed Graduate Courses (A total of one year full time studies)

Bio-Economic Household Modelling

Biogeochemical Cycles

Energy, Environment & Sustainability

Energy Physics

Environmental Economics

Natural Resource Economics

Operations Research

Science of Global Change

Systems Analysis
Technology Evolution