




PERSONAL INFORMATION

Katja Schumacher



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Sex Female | Date of birth 26/11/1968 | Nationality German

WORK EXPERIENCE

October 2007 - ongoing

Senior Researcher

Öko-Institut e.V. (Institute for Applied Ecology), Schicklerstr. 5-7, 10179 Berlin, Germany

- National, European and global energy and climate policy research;
- Economic and social assessment of energy and climate policies;
- Energy-economic modelling.

Business or sector Environmental Research Institute - NGO

October 2000 – October 2007

Research Fellow

DIW Berlin (German Institute for Economic Research), Mohrenstr. 58, 10117 Berlin, Germany

- National and international energy and climate policy research;
- Energy-economic modelling;
- Climate impact assessment

Business or sector Economic Research Institute

February 1998 – September 2000

Senior Research Associate

Lawrence Berkeley National Laboratory (LBNL), MS 90/4000, 1 Cyclotron Road, Berkeley, CA 94720, USA

- Economic and technology assessment of energy efficiency and greenhouse gas emissions trends in developing countries

Business or sector Government research institute

December 1997

Consultant

Lawrence Berkeley National Laboratory (LBNL), Institute of Meteorology and Hydrology, Hanoi

- Revised and edited Vietnamese "national Report on Asia Least-Cost GHG Abatement Strategy"

Business or sector Government research institute

September 1996 – July 1997

Student Research Assistant

Lawrence Berkeley National Laboratory (LBNL)

Business or sector Government research institute

EDUCATION AND TRAINING

April 2003 – July 2007

Doctor in Economics (Dr. rer. pol.)

PhD

Humboldt University Berlin

October 1992 – November 1996 **Diplom Volkswirtin (Dipl. Economist)**

Masters in economics

Rheinische Friedrich Wilhelm University Bonn

August 1995 – June 1996 **Exchange Student**

University of California at Berkeley (UC Berkeley)

- Graduate program in economics

October 1990 – September 1992 **Vordiplom Mathematik**

University of Osnabrück

- Double major in economics and mathematics

PERSONAL SKILLS

Mother tongue(s) German

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	B1	B1	B1	B1	B1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

ANNEXES

- Journal Articles
- Reports/Discussion Papers
- Books/Book Chapters

Journal Articles

- Sands, Ron, Katja Schumacher, Hannah Förster (2014): "U.S. CO2 Mitigation Scenarios in a Global Context: Welfare, Trade and Land Use" in *The Energy Journal* Vol. 34 (1) (Special issue on U.S. Technology Transitions under Alternative Climate Policies).
- Sato, Misato; Karsten Neuhoff; Verena Graichen; Katja Schumacher; Felix Matthes (2014): Sectors Under Scrutiny: Evaluation of Indicators to Assess the Risk of Carbon Leakage in the UK and Germany. *Environmental and Resource Economics* Available at: <http://dx.doi.org/10.1007/s10640-014-9759-y>
- Sands, Ron, Hannah Förster, Carol Adaire Jones, Katja Schumacher (2013): Bio-electricity and land use in the Future Agricultural Resources Model (FARM). *Climatic Change*, pp.1–12. Available at: <http://dx.doi.org/10.1007/s10584-013-0943-9>
- De Cian, Enrica, Ilkka Keppo, Johannes Bollen, Samuel Carrara, Hannah Förster, Michael Hübler, Amit Kanudia, Sergey Paltsev, Ronald Sands, Katja Schumacher (2013): European-Led Climate Policy versus Global Mitigation Action: Implications on Trade, Technology, and Energy. *Climate Change Economics*, 04(supp01), p.1340002. Available at: <http://www.worldscientific.com/doi/abs/10.1142/S2010007813400022>
- Förster, Hannah, Katja Schumacher, Enrica De Cian, Michael Hübler Ilkka Keppo, Silvana Mima, Ronald D. Sands (2013): European Energy Efficiency and Decarbonization Strategies beyond 2030 - A Sectoral Multi-Model Decomposition. *Climate Change Economics*, 04(supp01), p.1340004. Available at: <http://www.worldscientific.com/doi/abs/10.1142/S2010007813400046>
- Knopf, Brigitte, Yen-Heng Henry Chen, Enrica De Cian, Hannah Förster, Amit Kanudia, Ioanna Karkatsouli, Ilkka Keppo, Tiina Koljonen, Katja Schumacher, Detlef P. van Vuuren (2013): - Strategies and Costs for Transforming the European Energy System. *Climate Change Economics*, 04(supp01), p.1340001. Available at: <http://dx.doi.org/10.1142/S2010007813400010>.
- Duscha, Vicki; Katja Schumacher; Joachim Schleich; Pierre Buisson (2013): „Costs of meeting international climate targets without nuclear power” *Climate Policy* - published online at <http://www.tandfonline.com/action/showAxaArticles?journalCode=tcpo20> and may be downloaded under: http://www.isi.fraunhofer.de/isi-media/docs/e-x/working-papers-sustainability-and-innovation/WP07-2013_Costs_of_meeting_international_climate_targets_VD.pdf?WSESSIONID=0bbc80e6f00d6f5c6cbcf22180004276
- Sands R., Schumacher K. (2009). „Economic Comparison of Greenhouse Gas Mitigation Options in Germany“. *Journal of Energy Efficiency* 2: 17-36.
- Praetorius, Barbara, Schumacher Katja (2009). Greenhouse gas mitigation in a carbon constrained world: The role of carbon capture and storage. *Journal of Energy Policy* Vol. 37(12):5081-5093.
- Schumacher, K., R. Sands (2007). "Where are the industrial technologies in energy-economy models? An innovative CGE approach for steel production in Germany", *Energy Economics* 29: 799-825.
- Schumacher, K., R. Sands (2006). "Innovative energy technologies and climate policy in Germany", *Journal of Energy Policy* 34 (18): 3929-3941.
- Schumacher, K., J. Roy, J. Sathaye, T. Y. Jung, and H. Lee (2006). "Productivity trends and technological change in energy intensive industries in Brazil, India and South Korea", *International Journal of Environment and Development* 3 (1): 15-34, June 2006.
- Mongia, P., K. Schumacher, and J. Sathaye (2001). "Policy Reforms and Productivity Growth in India's Energy Intensive Industries", *Journal of Energy Policy* 29 (9): 715-724.
- Roy, J., J. Sathaye, A. Sanstad, P. Mongia, and K. Schumacher (1999). "Productivity Trends in India's Energy Intensive Industries", *The Energy Journal* 20 (3): 33-61.

Reports/Discussion Papers

- Öko-Institut, Fraunhofer ISI (2014). Klimaschutzszenario 2050 – 1. Modellierungsrunde. Studie im Auftrag des Bundesministeriums für Umwelt, Naturschutz, Bau und Reaktorsicherheit. <http://www.oeko.de/oekodoc/2065/2014-638-de.pdf>
- Ecorys, Öko-Institut, Cambridge Econometrics, TNO (2013). Carbon Leakage Evidence Project - Factsheets for selected sectors. http://ec.europa.eu/clima/policies/ets/cap/leakage/docs/cl_evidence_factsheets_en.pdf
- Öko-Institut, Ecofys (2013). Support to the Commission for the determination of the list of sectors and subsectors deemed to be exposed to a significant risk of carbon leakage for the years 2015-2019 (EU Emission Trading System). Service Contract No. 07.1201/2011/605733/SER/CLIMA.B.2. http://ec.europa.eu/clima/policies/ets/cap/leakage/docs/carbon_leakage_list_en.pdf
- Schumacher, K.; Herold, A.; Koch M.; Döring, U.; Harthan, R.; Jörß, W.; Pollitt, H.; Grebot, B.; Marsden, H.; Sobey, M.; Noden, R.; Mistry, R.; Hill, J.; Harmelink, M.; Pulles, T.; Jozwicka, M.; Smokers, R.; Bolech, M.; Coenen, P.; Kuenen, J. (2012): Ex-post quantification of the effects and costs of policies and measures, Öko Institut, Cambridge Econometrics, Amec, TNO, September 2012. http://ec.europa.eu/clima/policies/g-gas/monitoring/studies_en.htm
- Schumacher, K., Repenning, J., Matthes, F. Chr. et al. (2012): Evaluierung des nationalen Teils der Klimaschutzinitiative des Bundesministeriums für Umwelt, Naturschutz und Reaktorsicherheit (BMU). Öko-Institut, Arepo Consult, Ecologic, FFU, FiFo, Dr. H.-J.- Ziesing (August 2012). Ausführliche Zusammenfassung und Kurzzusammenfassung: http://www.bmu-klimaschutzinitiative.de/de/ziele_und_bilanz

Schumacher, K.; Cludius, J.; Matthes, F.; Diekmann, J.; Zaklan, A.; Schleich, J. (2012): Price Determinants of the European Carbon Market and Interactions with Energy Markets. UBA Climate Change Nr. 11/2012, <http://www.uba.de/uba-info-medien-e/4300.html>

Healy, S. and Schumacher, K. (2011) Product classification and its implication on competitiveness and carbon leakage Aluminium Climate Strategies Report

<http://www.climatestrategies.org/research/our-reports/category/61.html>

Healy, S. and Schumacher, K. (2011) Product classification and its implication on competitiveness and carbon leakage – Pulp paper and paperboard Climate Strategies Report, <http://www.climatestrategies.org/research/our-reports/category/61.html>

Quirion P., Schumacher, K., Healy, S. (2011): Modelling the allowance allocation method of the EU ETS – An application to the cement industry. Climate Strategies Report, <http://www.climatestrategies.org/research/our-reports/category/61/344.html>

Schumacher et al. (2011): Post2012 climate regime options for global GHG emission reduction Analysis and evaluation of regime options and reduction potential for achieving the 2° degree target with respect to environmental effectiveness, costs and institutional aspects UBA Climate Change Nr. 16/2011: <http://www.umweltdaten.de/publikationen/fpdf-l/4159.pdf>

Duscha, V. et al. (2010) Post-2012 climate regime: How industrial and developing nations can help to reduce emissions – assessing emission trends, reduction potentials, incentive systems and negotiation options UBA Climate Change 02/2010. Download <http://www.umweltdaten.de/publikationen/fpdf-l/3954.pdf>

Hermann, A. et al. (2009) Analyse des öffentlichen Beschaffungswesens in Deutschland am Beispiel der Bundesebene und Maßnahmen zu seiner noch umweltfreundlicheren Ausrichtung (Endbericht UBA): http://www.umweltbundesamt.de/produkte/beschaffung/doks/endbericht_beschaffungswesen_deutschland.pdf

Graichen, Verena, Katja Schumacher; Felix Chr. Matthes; Lennart Mohr; Vicky Duscha; Joachim Schleich; Jochen Diekmann (2008). Impacts of the EU Emissions Trading Scheme on the industrial competitiveness in Germany. Climate Change No. 10/2008. <http://www.umweltbundesamt.de/umweltoekonomie/publikationen.htm>

Freischlad, Herbert, Armin Kraft, Stefan Kotzur, Felix Matthes, Julia Repenning, Katja Schumacher (2008). Vergleich von Heizkraftwerksvarianten für die Stadtwerke Kiel – Technische, wirtschaftliche und ökologische Bewertung. http://www.stadtwerke-kiel.de/pdf/unternehmen/zusammenfassung_gutachten.pdf

Schumacher, K.; R. D. Sands (2006). Where Are the Industrial Technologies in Energy-Economy Models? An Innovative CGE Approach for Steel Production in Germany. Discussion Paper 605, DIW Berlin.

Kemfert, C.; Schumacher K. (2005). Costs of Inaction and Costs of Action in Climate Protection: Assessment of Costs of Inaction or Delayed Action of Climate Protection and Climate Change; Final Report ; Project FKZ 904 41 362 for the Federal Ministry for the Environment. Berlin: DIW Berlin, 2005 (DIW Berlin: Politikberatung kompakt 13).

Kemfert, C.; Schumacher, K. (2005). Klimaschutz im deutschen Strommarkt: Chancen für Kohletechnologien durch CO₂-Abscheidung und -Speicherung? In: Wochenbericht 16, DIW Berlin, Seite 243-248/20. April 2005.

Kohlhaas, M., K. Schumacher, J. Diekmann, D. Schumacher, M. Cames (2004). Economic, Environmental and International Trade Effects of the EU Directive on Energy Tax Harmonization. Berlin: DIW, 2004 (Diskussionspapiere/Deutsches Institut für Wirtschaftsforschung 462).

Matthes, F. C., M. Cames, O. Deuber, J. Repenning, M. Koch, M. Kohlhaas, K. Schumacher, H.-J. Ziesing (2003). Auswirkungen des europäischen Emissionshandelssystems auf die deutsche Industrie: Endbericht; Projektträger Umweltstiftung WWF Deutschland: Öko-Inst. [u.a.].

Books/Book Chapters

Schumacher, Katja and Kohlhaas, Michael (2009). „Learning-by-doing in Wind Electricity Production – Who learns and Why does it Matter to Differentiate? A Case Study of Germany. In: Cottrell, J. et al. (eds.) Critical Issues in Environmental Taxation, International and Comparative Perspectives IV. Oxford University Press.

Schumacher, Katja (2007): Innovative energy technologies in energy-economy models – assessing economic, energy and environmental impacts of climate policy and technological change in Germany, Dissertation, Humboldt Universität Berlin, August 2007.

Schumacher, K.; M. Kohlhaas, K. Siraki, H.-J. Wagner, S. Vögele, V. Krey, P. Markewitz, D. Martinsen, H. Welsch (2007). „Integration von Lernkurven in Energiesystem- und CGE-Modelle“, in: Energiemodelle zu Innovation und moderner Energietechnik – Analyse exogenen und endogenen technischen Fortschritts in der Energiewirtschaft, Forum für Energiemodelle und Energiewirtschaftliche Systemanalysen in Deutschland (Hg.), LIT-Verlag, Münster, S. 215-232.

Züm, M.; C. Lutz, H. Kremers, S. Peterson, K. Schumacher (2007). „Abbildung exogenen technischen Fortschritts in Ökonomiemodellen“, in: Energiemodelle zu Innovation und moderner Energietechnik – Analyse exogenen und endogenen technischen Fortschritts in der Energiewirtschaft, Forum für Energiemodelle und Energiewirtschaftliche Systemanalysen in Deutschland (Hg.), LIT-Verlag, Münster, S. 177-196.

Pehnt, M., M. Cames, C. Fischer, B. Praetorius, L. Schneider, K. Schumacher, J. Voß (2006). Micro-cogeneration. Towards a decentralized energy system. Springer.

M. Cames, K. Schumacher, J. Voß (2006). Institutional Framework and Innovation Policy for Micro Cogeneration in Germany. In: M. Pehnt, M. Cames, C. Fischer, B. Praetorius, L. Schneider, K. Schumacher, J. Voß: Micro Cogeneration. Berlin [u.a.] Springer, 2006, S. 171-196.

Schumacher, K., Kohlhaas, M., Welsch, H. (2005). Technologischer Fortschritt in LEAN_2000. In: Ansätze zur Modellierung in Innovation in der Energiewirtschaft – Methodenworkshop des Forum für Energiemodelle und Energiewirtschaftliche Systemanalysen in Deutschland am 13.10.2004 im Bundesministerium für Wirtschaft und Arbeit (Proceedings), Ingo Ellersdorfer und Ulrich Fahl (Hg.), S. 197-206, 2005, Mensch & Buch Verlag, Berlin.