

Curriculum Vitae

Jan Christoph Steckel

PERSONAL DETAILS

Name Jan Christoph Steckel

Date of birth 14.06.1982

Nationality German

EDUCATION

- 2012** **PhD (Dr. rer. oec.) in Economics** (summa cum laude)
Title of the thesis: “Developing Countries in the Context of Climate Change Mitigation and Energy System Transformation”
Supervisors: Prof. Dr. Ottmar Edenhofer, Prof. Dr. Dirk Messner
- 2008 – 2012** **Technical University Berlin/ Potsdam-Institute for Climate Impact Research**
PhD candidate
- 2009** **Tsinghua University, Beijing**
Young researcher exchange with Tsinghua University from September - November
- 2007 – 2008** **Potsdam-Institute for Climate Impact Research**
Master thesis and student employee
- 2002 – 2008** **Flensburg University**
Studies of “*Diplom Wirtschaftsingenieurwesen mit Schwerpunkt auf Energie und Umweltmanagement*“
(Major in “*Energy and Environmental Management*” and minors in Engineering and Economics);
graduation in June 2008, *very good*

Master Thesis: “Towards a Global Carbon Market – The CDM’s current trends and future prospects”
Supervisors: Prof. Dr. Olav Hohmeyer, Prof. Dr. Ottmar Edenhofer
- 2004** **Ecole Supérieure de Commerce, Rennes, France**
Erasmus Scholarship
- 2001** **Gutenbergschule Wiesbaden**
Abitur (A-level equivalent) in Mathematics (A-), Chemistry (A),
English (B+), Politics and Economy (A-)

PROFESSIONAL EXPERIENCE - GENERAL

- Since 01/2014 Mercator Research Institute on Global Commons and Climate Change**
Group Leader Working Group “Climate and Development” (formerly Task Force “Macroeconomic Sustainability Assessment”)
- Since 02/2012 Technical University of Berlin**
Chair Economics of Climate Change, Prof. Dr. Ottmar Edenhofer
Group leader ‘Macroeconomic Sustainability Assessment’ (50%)
- 2008 – 2013 Potsdam-Institute for Climate Impact Research**
Research Domain III, Sustainable Solutions, Working Group Policy Instruments
Researcher (50%)
- 2007 – 2008 Potsdam-Institute for Climate Impact Research**
Student Employee
- 2006 Help e.V.**
Internship in Nias, Indonesia from August to December
Analysis of the possibilities for renewable energies in an earthquake and tsunami affected area
- 2005 David Suzuki Foundation / Canadian Solar Industries Association**
Internship in Ottawa, Canada from April to July
Fields of work: Canadian energy policy, renewable energy subsidies, feed-in tariffs

University thesis from July to October; Topic: “Possibilities for Solar Energy in Prince Edward Island”
- 2001 – 2002 Military service**
Drohnenlehrbatterie 300, Idar – Oberstein

PROFESSIONAL EXPERIENCE - TEACHING

- WiSe 2015/16 Climate and Development**
Seminar jointly with Gregor Schwerhoff, TU Berlin
- WiSe 2014/15 Climate and Development**
Seminar, jointly with Michael Jakob and Gregor Schwerhoff, TU Berlin
- SoSe 2014 Economics of Climate Change**
Exercise and Seminar following the lecture by Prof. Edenhofer, jointly with Gregor Schwerhoff and Nicolas Koch, TU Berlin
- SoSe 2013 Green Growth and Models of Prosperity**
Seminar, jointly with Robert Marschinski, Linus Mattauch, Jan Siegmeier, Michael Jakob, TU Berlin
- WiSe 2010/11 Low Carbon Development**
Lecture and Seminar, jointly with Michael Jakob, TU Berlin
- SoSe 2010 Economics of Climate Change**
Exercises for the Lecture “Economics of Climate Change by Prof. Edenhofer, jointly with Robert Marschinski and Steffen Brunner, TU Berlin

PROFESSIONAL EXPERIENCE – RESEARCH PROJECTS

Since 09/2013 Collaborative Research Center 1026 (“Sustainable Manufacturing”) funded by “Deutsche Forschungsgemeinschaft (DFG)”

Principal investigator in project A4 “Macroeconomic Sustainability Assessment”

2010 – 2013 Entwicklung und Dekarbonisierung (EntDekEn) (Development and Decarbonization), in cooperation with Universität Göttingen (Prof. Klasen) and GIGA Hamburg (Jun. – Prof. Lay), funded by Bundesministerium für Bildung und Forschung (BMBF), funding code 01UV1008A

Project coordination at PIK, jointly with Michael Jakob and Brigitte Knopf

LANGUAGES

German Mother Tongue

English Fluent

French Proficient

Danish Basic Knowledge

SKILLS

Computer MS – Office, Tech, Matlab, GAMS (Basic), PYTHON (Basic)

Hobbies Playing the piano and the guitar, travelling, hiking, sailing, surfing, snowboarding, badminton, volleyball

Miscellaneous German government’s lecture program in Nigeria, 2015

Amulya K.N. Reddy prize for best paper published in Energy for Sustainable Development (with Anne Zimmer and Michael Jakob), 2015

Mercator Scholarship for German-Chinese young researcher exchange, 2009

‘ASA Programm’ Scholarship, 2006

‘ERASMUS’ Scholarship, 2005

Elected member of Flensburg University student parliament, 2003/2004

Editor-in-chief of ‘Imagine’ high school magazine, 1999 to 2001

PUBLICATIONS

- Peer Reviewed** Ward, H., Burger, M., Chang, Y. J., Fürstmann, P., Neugebauer, S., Radebach, A., ... & **Steckel, JC** (in press). Assessing carbon dioxide emission reduction potentials of improved manufacturing processes using multiregional input output frameworks. *Journal of Cleaner Production*, doi:10.1016/j.jclepro.2016.02.062
- d'Amour, C. B., Wenz, L., Kalkuhl, M., **Steckel, JC**, & Creutzig, F. (2016). Teleconnected food supply shocks. *Environmental Research Letters*, 11(3), 035007.
- Steckel, JC**, O. Edenhofer, M. Jakob (2015): Drivers for the renaissance of coal. *Proceedings of the National Academy of Sciences*, 112 (29), pp. E3775-E3781
- Zimmer, A. M. Jakob, **JC Steckel** (2015): What motivates Vietnam to strive for a low-carbon economy? – An explorative case study on the drivers of climate policy in a developing country. *Energy for Sustainable Development* 24, pp. 19 - 32
- Edenhofer, O., M. Jakob., F. Creutzig, C. Flachsland, S. Fuss, M. Kowarsch, K. Lessmann, L. Mattauch, J. Siegmeier, **JC Steckel** (2015). Closing the emission price gap. *Global Environmental Change* 31, pp. 132-143.
- Jakob, M., **JC Steckel**, C. Flachsland, L. Baumstark (2015): Climate finance for developing country mitigation: blessing or curse? *Climate and Development*, 7 (1), pp. 1 - 15
- Wenz, L., S.N. Willner, A. Radebach, R. Bierkandt, **JC Steckel**, A. Levermann (2015): Regional and sectoral disaggregation of multi-regional input-output tables – a flexible algorithm. *Economic Systems Research* 27 (2), pp. 194-212
- Jakob, M., **JC Steckel**, S. Klasen, J. Lay, N. Grunewald, I. Martínez-Zarzoso, S. Renner, O. Edenhofer (2014): Feasible mitigation actions in developing countries. *Nature Climate Change* 5 (11), pp. 961 - 968
- Jakob, M., **JC Steckel**, O. Edenhofer (2014): Consumption-Versus Production-Based Emission Policies. *Annual Review of Resource Economics* 6 (1), pp. 297 - 318
- Edenhofer, O., **JC Steckel**, M. Jakob (2014): Does Environmental Sustainability Contradict Prosperity? *Global Policy* 5 (s1), pp. 15 - 20
- Jakob, M. and **JC Steckel** (2014): How climate change mitigation could harm development in poor countries. *WIREs Climate Change* 5 (2), 161 – 168
- Steckel, JC**, RJ Brecha, M. Jakob, J. Strefler, G. Luderer (2013): Development without energy? Assessing future scenarios of energy consumption in developing countries. *Ecological Economics*, 90, pp. 53 – 67
- Hübler, M. and **JC Steckel** (2012): Economic Growth, Decarbonization, and International Transfers. *Climate and Development*, 4 (2), pp. 88 – 103
- Jakob, M., Luderer, G., **Steckel, JC**, Tavoni, M., Monjon, S. (2012): Time to act now? Assessing the costs of delaying climate measures and benefits of early action. *Climatic Change*, 114 (1), pp. 79 - 99

Luderer, G., Bosetti, V., Jakob, M., Leimbach, M., **Steckel, JC**, Waisman, H. Edenhofer, O. (2012): The economics of decarbonizing the energy system: Results and insights from the RECIPE model intercomparison. *Climatic Change*, 114 (1): pp. 9 - 37

Tavoni, M., De Cian, E., Luderer, G., **Steckel, JC**, Waisman, H. (2012): The value of technology and of its evolution towards a low carbon economy. *Climatic Change*, 114 (1): pp. 39 - 57

Steckel, JC, M. Jakob, R. Marschinski and G. Luderer (2011): From carbonization to decarbonization? - Past trends and future scenarios for China's CO₂ emissions. *Energy Policy*, 39 (6), pp. 3443-3455

Steckel, JC, M. Kalkuhl and R. Marschinski (2010): Should carbon-exporting countries strive for consumption-based accounting in a global cap-and-trade regime? *Climatic Change Letters*, 100 (3), pp. 779 - 786

Book Chapters Krey V. et al. (2014): Annex II: Metrics & Methodology. In: *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Arvizu et al. (2011): Technical Summary. In: *IPCC Special Report on Renewable Energy Sources and Climate Change Mitigation* [O. Edenhofer, R. Pichs-Madruga, Y. Sokona, K. Seyboth, P. Matschoss, S. Kadner, T. Zwickel, P. Eickemeier, G. Hansen, S. Schlömer, C. von Stechow (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Sathaye, J. et al. (2011): Renewable Energy in the Context of Sustainable Development. In: *IPCC Special Report on Renewable Energy Sources and Climate Change Mitigation* [O. Edenhofer, R. Pichs-Madruga, Y. Sokona, K. Seyboth, P. Matschoss, S. Kadner, T. Zwickel, P. Eickemeier, G. Hansen, S. Schlömer, C. von Stechow (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Flachsland, C., G. Luderer, **JC Steckel**, B. Knopf, O. Edenhofer (2011): *International Emissions Trading and the Global Deal*. Contribution to the "Research and Forum on Economics of Climate Change - Towards a Low-Carbon Economy in China. Earthscan, ISBN 9781849711746

Edenhofer, O., B. Knopf, G. Luderer, **JC Steckel**, T. Bruckner (2010): *More heat than light? On the economics of decarbonization*. In: Rübbleke, D. (Ed.). Sustainable Energy. London, Routledge Publishers

Other Edenhofer, O., M. Jakob and JC Steckel (2013): Wohlstand und ökologische Nachhaltigkeit - ein Widerspruch? *ifo Schnelldienst*, 66 (15), pp. 22 - 26

Kornek, U., **JC Steckel**, K. Lessmann, O. Edenhofer: The climate rent curse:

New challenges for burden sharing. Presented at the Annual Conference of the European Association of Environmental and Resource Economists (EAERE) in Toulouse, 27.6.2013 – 29.06.2013. Available online at: <http://www.webmeets.com/EAERE/2013/Prog/viewpaper.asp?pid=757>

Edenhofer, O. and **JC Steckel** (2012): Die Renaissance der Kohle und Chancen globaler Klimapolitik. *Mining + Geo*, 3, pp. 336 – 348

Flachsland, Christian, Edenhofer, Ottmar, Jakob, Michael, **Steckel, JC** (2008). Developing the International Carbon Market. Linking Options for the EU ETS. Report to the Policy Planning Staff in the Federal Foreign Office.

Selected Talks The International Fight against Climate Change and the Role of Developing Countries. November 5, 2015, Public lecture on invitation of the German embassy in Abuja, Nigeria.

Feasible mitigation options in the context of sustainable development. July 10, 2015, Our common future conference, Paris

Klimafahrplan und Klimafinanzierung, May 12, 2015, Verband der Bayrischen Wirtschaft, München

Climate Finance for Developing countries: Blessing or Curse?. January 29, 2015. Invited talk at “AG Emissionshandel”, Berlin

What drives the renaissance of coal? June 5, 2014, International Energy Workshop, Beijing

Climate protection, development and equity: Decarbonization in developing countries and countries in transition. UC Berkeley Symposium Innovating Energy Access for Remote Areas: Discovering untapped resources, Berkeley, California, April 10 2014

Climate change mitigation, development and the role of energy. Round Lecture “Energy in Development”, TU Berlin, November 19, 2013

The Climate rent curse: New challenges for burden sharing. European Association of Environmental and Resource Economists, 20th Annual Conference, Toulouse, June 29, 2013

Climate Finance – Curse or Blessing? Indian Statistical Institute, New Delhi, February 21, 2013

Media Süddeutsche Zeitung, Frankfurter Allgemeine Zeitung, Tagesspiegel online, FOCUS online, Deutsche Welle, ABC rural, Discover Magazine, Le Scienze