

Curriculum Vitae

Jan Christoph Steckel
- May 2018 -

PERSONAL DETAILS

Date of birth	14.06.1982
Nationality	German
Languages	German (mother tongue), English (fluent), French (proficient), Danish (basic), Spanish (basic)
Education	<p>PhD (Dr. rer. oec.) in Economics 2012 (summa cum laude) Technische Universität Berlin (<i>Berlin Institute of Technology</i>) PhD Thesis: "Developing Countries in the Context of Climate Change Mitigation and Energy System Transformation" Supervisors: Prof. Dr. Ottmar Edenhofer, Prof. Dr. Dirk Messner</p> <p>Master in Industrial Engineering 2008 ("Diplom Wirtschaftsingenieur") University of Flensburg, University of Southern Denmark</p>

PROFESSIONAL EXPERIENCE

Since 2014	Working Group Lead "Climate and Development" Mercator Research Institute on Global Commons and Climate Change
Since 2012	Project Lead Chair Economics of Climate Change, Prof. Dr. Ottmar Edenhofer Technische Universität Berlin (<i>Berlin Institute of Technology</i>)
2012 – 2013	Post Doctoral Researcher Research Domain III (Sustainable Solutions) Potsdam Institute for Climate Impact Research
2009	Visiting researcher Research Center for International Environmental Policy (RCIEP) Tsinghua University, Beijing
2007 – 2012	PhD Candidate Working Group Policy Instruments, Research Domain III (Sustainable Solutions) Potsdam Institute for Climate Impact Research
2006	Trainee Fields of work: Research on off-grid energy solution and energy demand in an earthquake and tsunami affected area. Disaster Relief in Nias, Indonesia Help e.V.
2005	Research assistant Fields of work: Canadian energy policy, feed-in tariffs David Suzuki Foundation / Canadian Solar Industries Association

TEACHING AND SUPERVISION

Teaching	<p>Climate and Development - Challenges of Climate Change Mitigation and Poverty Eradication (TU Berlin, Seminar and Lecture, 2014 – 2016)</p> <p>Economics of Climate Change (TU Berlin, Seminar and Exercise, 2010 – 2014)</p> <p>Low Carbon Development (TU Berlin, Seminar and Lecture, 2010)</p>
Supervision	<p>PhD Level</p> <p>Ira Dorband (Economics, since 2016): Distributional effects of carbon pricing in developing countries</p> <p>Lorenzo Montrone (Economics, since 2018): Structural economic change, poverty eradication and distributional effects of climate change mitigation</p> <p>Nils Ohlendorf (Economics, since 2018): Political economy of climate policy</p> <p>Jose Antonio Ordóñez (Economics, since 2017): Political economy of climate policy in Indonesia</p> <p>Alexander Radebach (Economics, since 2012): Climate change mitigation in developing countries</p> <p>Hauke Ward (Economics, 2012 - 2017): The Role of Efficient Technology for Achieving Climate Change Mitigation and Development</p> <p>Leonie Wenz (co-supervision, Physics, 2012 – 2016): Climate Change Impacts in an Increasingly Connected World</p> <p>Master Level</p> <p>Fabian Hafner (Hertie School of Governance, ongoing), Lorenzo Montrone (U Roma III, 2018), Nils Ohlendorf (FU Berlin, 2018), Mariko Landström (Aalto U, 2017), Tom Schulze (TU&FU Berlin, 2016), Anne Gläser (U Copenhagen, 2016), Lisa-Marie Bischer (TU Berlin, 2016), Ira Dorband (FU Berlin, 2016), Silvia Forin (FU Berlin, 2015)</p>

RESEARCH PROJECTS

2017 – 2019	<p>Strategic Scenario Analysis (START) funded by German Federal Ministry of Education and Research (BMBF)</p> <p>Project co-lead at MCC</p>
2017 - 2019	<p>Pathways and Entry Points to limit global warming to 1.5°C (PEP1p5) funded by German Federal Ministry of Education and Research (BMBF)</p> <p>Project lead at MCC</p>
2015 - 2016	<p>Carbon Pricing for Sustainable Development (CAPRI) funded by GIZ and Federal Ministry for Economic Cooperation and Development (BMZ)</p> <p>Project lead at MCC</p>
2013 - 2016	<p>Collaborative Research Center 1026 (“Sustainable Manufacturing”) funded by “Deutsche Forschungsgemeinschaft (DFG)”</p> <p>Principal investigator “Macroeconomic Sustainability Assessment”</p>
2010 – 2013	<p>Entwicklung und Dekarbonisierung (EntDekEn) (Development and Decarbonization), in cooperation with Universität Göttingen (Stephan Klasen) and GIGA Hamburg (Jann Lay), funded by “Bundesministerium für Bildung und Forschung (BMBF)”</p> <p>Co-Project lead at PIK</p>

CONTRIBUTIONS TO INTERNATIONAL ASSESSMENTS

- UNEP EGR** UN Environment Emissions Gap Report 2017, Coordinating Lead Author for Chapter 5 “Bridging the Gap: Phasing out Coal”
- IPSP** International Panel on Social Progress 2017, Contributing Author Chapter 4 (Growth, Human Development and Planetary Welfare)
- IPCC** IPCC 5th Assessment Report 2014, Contributing Author (Annex II)
- IPCC Special Report on Renewables 2011, Lead Author (Technical Summary) and Contributing Author (Chapter 9)

PUBLICATIONS (PEER REVIEWED JOURNAL PUBLICATIONS)

- Steckel, J. C., & Jakob, M. (in press). The role of financing cost and de-risking strategies for clean energy investment. *International Economics*. doi.org/10.1016/j.inteco.2018.02.003
- Edenhofer, O., J.C. Steckel, M. Jakob, C. Bertram (2018). Reports of coal’s terminal decline may be exaggerated. *Environmental Research Letters*, 13(2), 024019.
- Forin, S., H. Ward, A. Radebach, J.C. Steckel (2018) The effect of industry delocalization on global energy use: A global sectoral perspective. *Energy Economics*, 70, 233-243
- Jakob, M., D. Kübler, J.C. Steckel, R. van Veldhuizen (2017) Clean up your own mess: An experimental study of moral responsibility and efficiency. *Journal of Public Economics*, 155, 138-146.
- Kornek, U., J.C. Steckel, K. Lessmann, O. Edenhofer (2017): The Climate Rent Curse: New Challenges for Burden Sharing. *International Environmental Agreements: Politics, Law and Economics*, 17 (6), 855–882
- Ward, H., Wenz, L., Steckel, J. C., & Minx, J. C. (2017). Truncation Error Estimates in Process Life Cycle Assessment Using Input-Output Analysis. *Journal of Industrial Ecology*. doi:10.1111/jiec.12655
- Ward, H., A. Radebach, I. Vierhaus, A. Fügenschuh, J.C. Steckel (2017). Reducing global CO2 emissions with the technologies we have. *Resource and Energy Economics*, 49, 201-217
- Steckel, J. C., Rao, N. D., & Jakob, M. (2017). Access to infrastructure services: Global trends and drivers. *Utilities Policy*, 45, 109-117
- Nemet, G. F., Jakob, M., Steckel, J. C., & Edenhofer, O. (2017). Addressing policy credibility problems for low-carbon investment. *Global Environmental Change*, 42, 47-57.
- Steckel, J.C, Jakob, M, Flachsland, C., Kornek, U., Lessmann, K., Edenhofer, O. (2017). From climate finance toward sustainable development finance. *WIREs Climate Change*, 8 (1), e437, doi: 10.1002/wcc.437
- Ward, H., Burger, M., Chang, Y. J., Fürstmann, P., Neugebauer, S., Radebach, A., ... & Steckel, J.C (2017). Assessing carbon dioxide emission reduction potentials of improved manufacturing processes using multiregional input output frameworks. *Journal of Cleaner Production*, 163, 154-165
- Hirth, L. & Steckel, J.C (2016): The role of capital costs in decarbonizing the electricity sector. *Environmental Research Letters*, 11 (11), 114010
- Jakob, M. & Steckel, J.C (2016). Implications of Climate Change Mitigation for Sustainable Development. *Environmental Research Letters*, 11 (10), 114010.

- Schueler, V., Fuss, S., Steckel, J.C., Weddige, U., & Beringer, T. (2016). Productivity ranges of sustainable biomass potentials from non-agricultural land. *Environmental Research Letters*, 11(7), 074026.
- d'Amour, C. B., L. Wenz, M. Kalkuhl, J.C. Steckel, & Creutzig, F. (2016). Teleconnected food supply shocks. *Environmental Research Letters*, 11(3), 035007.
- Steckel, J.C., 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, J.C. 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, J.C. Steckel (2015). Closing the emission price gap. *Global Environmental Change* 31, pp. 132-143.
- Jakob, M., J.C. 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, J.C. 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., J.C. 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., J.C. Steckel, O. Edenhofer (2014): Consumption-Versus Production-Based Emission Policies. *Annual Review of Resource Economics* 6 (1), pp. 297 - 318
- Edenhofer, O., J.C. Steckel, M. Jakob (2014): Does Environmental Sustainability Contradict Prosperity? *Global Policy* 5 (s1), pp. 15 - 20
- Jakob, M. and J.C. Steckel (2014): How climate change mitigation could harm development in poor countries. *WIREs Climate Change* 5 (2), 161 – 168
- Steckel, J.C., R.J. 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. & J.C. Steckel (2012): Economic Growth, Decarbonization, and International Transfers. *Climate and Development*, 4 (2), pp. 88 – 103
- Jakob, M., Luderer, G., Steckel, J.C., 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, J.C., 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, J.C., Waisman, H. (2012): The value of technology and of its evolution towards a low carbon economy. *Climatic Change*, 114 (1), pp. 39 - 57
- Steckel, J.C., 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, J.C., 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

PUBLICATIONS (OTHER)

- Steckel, J.C. & Michael Jakob (2018): Keeping the lights on – On the political economy of coal investments in Indonesia and Vietnam. Available online at: <http://blog.mcc-berlin.net/post/article/keeping-the-lights-on.html>
- Mutanga, S., R. Quitzow & J.C. Steckel (2017): The G20's role in improving quality of life through sustainable energy and urban infrastructure in Africa. T20 Policy Brief. Available online: <http://www.g20-insights.org/wp-content/uploads/2017/10/g20s-role-improving-quality-life-sustainable-energy-urban-infrastructure-africa-1508154254.pdf>
- Steckel, J.C. & Felix Creutzig (2017): Deutschland: Das gefährliche Vorbild. ZEIT online, 7.11.2017
- Steckel, J.C. & Michael Jakob (2017): Klimaschutz fehlt. Frankfurter Rundschau, 16.6.2017
- Steckel, J.C. & Lion Hirth (2017): Globale Energiewende braucht deutlich günstigere Kredite für Erneuerbare. VIK Mitteilungen 1/17: pp. 19-20
- Dorband, I. I., Jakob, M., & Steckel, J. C. (2017). Double Progressivity of Infrastructure Development through Carbon Pricing-Insights from Nigeria. Available online at SSRN 3059138
- Steckel, J.C., G. Schwerhoff, O. Edenhofer (2017): Enabling low-carbon development in poor countries. In: Stark, R. et al. (eds.): Sustainable Manufacturing. Sustainable Production, Life Cycle Engineering and Management. Heidelberg, New York: Springer.
- Steckel, J.C. (2016): Klimaschutz als Hilfe zur Armutsbekämpfung. Frankfurter Rundschau, 5.10.2016
- Radebach, A., Steckel, J.C., & Ward, H. (2016). Patterns of Sectoral Structural Change—Empirical Evidence from Similarity Networks. Available at SSRN 2771653.
- Jakob, M. & JC Steckel (2016): The Just Energy Transition. Prepared for the International Symposium “A Just Transition for Our Common Home: Energy, Labour and Poverty Eradication”. Available online at: http://awsassets.wwf.panda.org/downloads/jakobsteckel_2016_jet.pdf [Accessed September 2016]
- Edenhofer, O., J.C. Steckel, M. Jakob (2015): Climate Finance in the Context of Sustainable Development. France Stratégie
- 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.
- Edenhofer, O, M. Jakob & JC Steckel (2013): Wohlstand und ökologische Nachhaltigkeit - ein Widerspruch? ifo Schnelldienst, 66 (15), pp. 22 – 26
- Edenhofer, O. & JC Steckel (2012): Die Renaissance der Kohle und Chancen globaler Klimapolitik. Mining + Geo, 3, pp. 336 – 348
- 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.

Schlomer, 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., Carraro, C., Hourcade, JC, Neuhoff, K., Luderer, G., Flachsland, C., Jakob, M., Popp, A., Steckel, J.C., ... & Bauer, N. (2009). The Economics of Decarbonization. Report of the RECIPE project. Potsdam Institute for Climate Impact Research, Potsdam.

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

Flachsland, Christian, Edenhofer, Ottmar, Jakob, Michael, Steckel, J.C. (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

Bridging the Gap – Phasing out Coal. Presentation of Chapter 5 of the UNEP Gap Report. German Pavilion, COP23, November 7, Bonn, Germany

Carbon Pricing in Developing and Emerging Economies. Keynote talk at the Environment for Development Network, Policy Day 2017, October 26, 2017, Addis Ababa, Ethiopia

Climate Change – An economic perspective. Invited lecture at the University of Amsterdam, March 21, 2017, Amsterdam, The Netherlands

How to integrate climate change mitigation in developing countries and achieving SDGs. Energy Policy Exchange Forum. Hertie School of Governance, October 6, 2016, Berlin, Germany

Climate Policy, Coal and the Power of Relative Prices. Queen's College, Oxford University, Fossil Fuel Supply and Climate Policy: An International Conference. September 27, 2016, Oxford, UK.

Umsetzung der INDCs im Lichte der Kohlerenaissance. Bundesministerium für Wirtschaftliche Entwicklung und Zusammenarbeit. CAPRI Workshop. September 19, 2016, Bonn, Germany

Clean up your own mess. An experimental study of moral standards and efficiency. European Association of Environmental and Resource Economists Annual Conference 2016. June 23, 2016, ETH Zürich, Switzerland

On increasing wind power capacity in Vietnam - A climate economist's perspective. May 18, 2016, Vietnam-Germany Joint Research Initiative on Wind Power, GIZ Vietnam, Hanoi, Vietnam

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

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

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

TALKS AT INTERNATIONAL CONFERENCES

International Energy Workshop 2010, 2011, 2014, 2016 (Stockholm, Stanford, Beijing, Cork); 5th Atlantic Workshop on Energy and Environmental Economics 2012 (A Toxa); Annual Conference of the European Association of Environmental and Resource Economists (EAERE) 2013, 2016, 2017 (Toulouse, Zurich, Athens); Innovating Access for Remote Areas 2014 (Berkeley), Our Common Future under Climate Change 2015 (Paris), 16th Conference of the International Schumpeter Society 2016 (Montreal), Fossil Fuel Supply and Climate Policy 2016 (Oxford), Environment for Development Annual Conference 2017 (Addis Ababa)

REVIEW ACTIVITIES

Science, Science Advances, Nature, Nature Climate Change, Nature Energy, Proceedings of the National Academy of Sciences, Environmental Research Letters, Global Environmental Change, Journal of Environmental Economics and Management, Energy Economics, Ecological Economics, Utilities Policy, Energy Policy, Climate Policy, Climatic Change, Climate and Development, WIREs Climate Change, Fulbright Foundation, Routledge

MEDIA COVERAGE

die tageszeitung (print, 22.3.2018); *Le Monde* (online, 13.3.2018); *Deutschlandfunk* (radio and online, 9.2.2018), *Bayerischer Rundfunk* (radio, 9.2.2018), *Washington Post* (print, 8.2.2018); *ZEIT online* (online, 7.11.2017); *Frankfurter Rundschau* (print, 16.6.2017); *Frankfurter Allgemeine Sonntagszeitung* (print, 26.02.2017); *Frankfurter Rundschau* (print, 7.10.2016); *Discover Magazine* (online and print, 30.11.2015); *Wirtschaftswoche* (online, 27.11.2015); *Focus* (online, 23.7.2015); *Australian Broadcasting Channel* (radio and online, 13.7.2015); *Le Scienze* (online, 8.7.2015); *Vox.com* (online, 7.7.2015); *Frankfurter Allgemeine Zeitung* (print 7.7.2015); *International Business Times* (online, 7.7.2015); *Pacific Standard* (online, 7.7.2015); *Tagesspiegel* (online, 2.11.2014); *Süddeutsche Zeitung* (print, 30.10.2014)