

CHRISTOPH BERTRAM

PROFESSIONAL & RESEARCH EXPERIENCE

- Since 03/2019 Potsdam Institute for Climate Impact Research (PIK), Potsdam, Germany
Team leader International Climate Policy Analysis
- Since 04/2011 Potsdam Institute for Climate Impact Research (PIK), Potsdam, Germany
Member of the Energy Systems group
- 06/2012 – 08/2012 Participation in the Young Scientists Summer Program (YSSP) of the
International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria
- 05/2010 – 03/2011 Potsdam Institute for Climate Impact Research (PIK), Potsdam, Germany
Research analyst for Professors Rahmstorf and Schellnhuber at the German
Advisory Council on Global Change (WBGU)
- 11/2009 – 03/2010 Heinrich Böll Foundation, Washington DC, USA
Intern with the climate & energy program
- 05/2008 - 04/2009 Fraunhofer Institute for Solar Energy Systems ISE, Freiburg, Germany
Final thesis on physics of phosphorus diffusion for solar cell emitters
- 09/2007 - 04/2008 Mörike-Gymnasium, Esslingen, Germany
Intern teaching physics and political science in secondary school

PUBLICATIONS (peer-reviewed)

- Fujimori S, Hasegawa T, Krey V, Riahi K, Bertram C, et al. 2019. *A Multi-Model Assessment of Food Security Implications of Climate Change Mitigation*. Nature Sustainability 2 (5): 386–96. ([link to journal page](#), pdf available upon request)
- Oshiro K, Gi K, Fujimori S, van Soest HL, Bertram C, et al. 2019. *Mid-Century Emission Pathways in Japan Associated with the Global 2 °C Goal: National and Global Models' Assessments Based on Carbon Budgets*. Climatic Change. ([open access](#))
- Krey V, Guo F, Kolp P, Zhou W, Schaeffer R, Awasthy A, Bertram C, et al (2019) *Looking under the hood: A comparison of techno-economic assumptions across national and global integrated assessment models*. Energy Vol. 127 P. 1254-1267. ([link to journal page](#), pdf available upon request)
- Bertram C, Luderer G, Popp A, Minx JC, Lamb WF, Stevanović M, Humpenöder F, Giannousakis A, Kriegler E. (2018) *Targeted policies can compensate most of the increased sustainability risks in 1.5 °C mitigation scenarios*. Environ Res Lett 13:064038. ([open access](#)).
- Luderer G, Vrontisi Z, Bertram C, et al (2018) *Residual fossil CO₂ emissions in 1.5–2 °C pathways*. Nature Climate Change ([link to journal page](#), pdf available upon request).
- McCollum DL, Zhou W, Bertram C, et al (2018) *Energy investment needs for fulfilling the Paris Agreement and achieving the Sustainable Development Goals*. Nature Energy ([link to journal page](#), pdf available upon request).

- Kriegler E, Bertram C, Kuramochi T, et al (2018) *Short term policies to keep the door open for Paris climate goals*. Environ Res Lett. ([open access](#)).
- Jewell, J.; McCollum, D.; Emmerling, J.; Bertram, C. et al (2018) *Limited emission reductions from fuel subsidy removal except in exporting regions*. In: Nature ([link to journal page](#), pdf available upon request).
- Edenhofer, O.; Steckel, J.; Jakob, M.; Bertram, C. (2018) *Reports of coal's terminal decline may be exaggerated*. In: Environmental Research Letters, 13 ([open access](#)).
- Kriegler, E.; Bauer, N.; Popp, A. et al.. (2017) *Fossil-fueled development (SSP5): An energy and resource intensive scenario for the 21st century* In: Global Environmental Change, 42 ([open access](#))
- Edelenbosch, O. Y.; Vuuren, D. P. van; Bertram, C.; Carrara, S.; Emmerling, J.; Daly, H.; Kitous, A.; McCollum, D. L.; Saadi Failali, N. (2017) *Transport fuel demand responses to fuel price and income projections: Comparison of integrated assessment models* In: Transportation Research Part D: Transport and Environment, 55 ([Post print](#))
- McCollum D, Wilson C, Pettifor H, Ramea K, Krey V, Riahi K, Bertram C, Lin Z, Edelenbosch O, Fujisawa S. (2017) *Improving the behavioral realism of global integrated assessment models: An application to consumers' vehicle choices*. Transportation Research Part D: Transport and Environment, 55 ([Post print](#)).
- Edelenbosch O, McCollum D, van Vuuren DP, Bertram C, Carrara S, Daly H, Fujimori S, Kitous A, et al. (2017) *Decomposing passenger transport futures: Comparing results of global integrated assessment models*. Transportation Research Part D: Transport and Environment, 55 ([Post print](#))
- von Stechow, C., J.C. Minx, K. Riahi, J. Jewell, D.L. McCollum, M.W. Callaghan, C. Bertram, G. Luderer, G. B (2016): *2°C and SDGs: United they stand, divided they fall?* Environ. Res. Lett., Vol. 11, Mar. 2016 ([open access](#))
- Bertram C, Luderer G, Pietzcker R, Schmid E, Kriegler E, and Edenhofer O (2015) *"Complementing carbon prices with technology policies to keep climate targets within reach,"* Nature Climate Change, 5 (3) , <http://dx.doi.org/10.1038/NCLIMATE2514> [[Post-print](#)].
- Riahi K, Kriegler E, Johnson N, Bertram C, et al, (2015) *"Locked into Copenhagen pledges - Implications of short-term emission targets for the cost and feasibility of long-term climate goals"*, Technol. Forecast. Soc. Change, <http://dx.doi.org/10.1016/j.techfore.2013.09.016> [[open access](#)].
- Bertram C, Johnson N, Luderer G, Riahi K, Isaac M, Eom J (2015) *"Carbon lock-in through capital stock inertia associated with weak near-term climate policies"*, Technol. Forecast. Soc. Change, <http://dx.doi.org/10.1016/j.techfore.2013.10.001> [[open access](#)].
- Schwanitz J, Piontek F, Bertram C, Luderer G, (2014) *"Long-term climate policy implications of phasing out fossil fuel subsidies"*, Energy Policy, <http://dx.doi.org/10.1016/j.enpol.2013.12.015>. [[Post-print](#)]

Luderer G, Bertram C, Calvin K, Cian ED, and Kriegler E, (2013) *“Implications of weak near-term climate policies on long-term mitigation pathways,”* [Climatic Change, pp. 1–14, 2013.](#)
[Preprint available after final publication]

Luderer G, Pietzcker R, Bertram C, Kriegler E, Meinshausen M, and Edenhofer O, (2013) *“Economic mitigation challenges: how further delay closes the door for achieving climate targets,”* [Environ. Res. Lett., vol. 8, no. 3, p. 034033, Sep. 2013 \[open access\]](#) .

CONFERENCE TALKS (selected)

- 11/2018 IAMC meeting #11, Seville, Spain
Bertram, C. et al.: “The role of the financial sector in decarbonization: Using IAM scenarios for assessing transition risks across sectors and companies” (talk and panel discussion in plenary session)
- 01/2018 Chinese Energy Modeling Forum (CEMF), Beijing, China
Bertram, C. et al.: “The impact of short-term mitigation policies on long-term decarbonization and broader sustainability impacts” (invited talk)
- 12/2015 IAMC meeting #8, Potsdam, Germany
Bertram, C. et al.: “Implications of the INDCs for reaching long term climate policy objectives” (talk in introductory plenary session)
- 06/2015 Annual workshop DK Climate Change, University of Graz, Austria
Bertram, C. et al.: “Complementing carbon prices with technology policies to keep climate targets within reach” (invited talk)

EDUCATION

- 04/2011 – 01/2015 Potsdam Institute for Climate Impact Research (PIK), Potsdam, Germany and Technical University Berlin, Germany
PhD thesis: “The effect of near-term climate policies on the achievability of ambitious long-term climate targets” (“Dr. rer. oec.” 16.11.2015), supervised by O. Edenhofer, G. Luderer and E. Kriegler
- 10/2003 – 09/2009 Universität Tübingen, Germany
Advanced degree in physics (“Dipl.-Phys.”)
- 10/2004 – 10/2009 Universität Tübingen, Germany
Political science (major) and Spanish (minor)
State examination (“Staatsexamen“)
- 08/2006 - 04/2007 Universidad Nacional de Córdoba, Argentina
Study abroad program funded by scholarship by the Landesstiftung Baden-Württemberg
- 09/1994 – 07/2003 Schelztor-Gymnasium, Esslingen, Germany
University-entrance diploma (“Abitur“)

SKILLS

- Languages German (native)
English (fluent)

Spanish (fluent)

French (basic knowledge)

Computer

GAMS, R, Matlab, LaTeX, MS Office, VBA, Origin, gnuplot, Maple, Java

Latest update: 15 October, 2019