

Prof. Dr. Felix Creutzig

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PROFESSIONAL EXPERIENCE

- since 2017 **Chair of Sustainability Economics of Human Settlements**
Technical University Berlin
- since 2012 **Mercator Research Institute on Global Commons and Climate Change**
Head of Working Group: Land Use, Infrastructures and Transport
- 2012/2013 **Princeton Institute for International and Regional Studies**
Visiting Associate Research Scholar
- 2012/2013 **Dahrendorf Working Group Chair: Infrastructure and Climate Change**
- 2009-2012 **Economics of Climate Change, Technical University Berlin**
Group leader: Sustainable Human Settlements and Infrastructures
- 2008-2009 **Berkeley Institute of the Environment, University of California, Berkeley**
Postdoctoral Fellow: Climate Change Mitigation in the Transportation Sector
- 2008 **Energy Foundation China, Beijing.** Consultant

EDUCATION

- 2003-2007 **Humboldt Universität zu Berlin, Berlin, Germany**
PhD in Biophysics (Dr. rer. nat.): *Sufficient Encoding of Dynamical Systems - From the Grasshopper Auditory System to General Principles*
- 2005 **Hebrew University, Jerusalem, Israel**
Project: *Dynamical Systems and Information Theory*
- 2003-2004 **Studienkolleg zu Berlin, Berlin, Germany**
Project: *The Role of Actors and their Beliefs in the Protection of Floodplains in Croatia and Austria*
- 2002-2003 **Cambridge University, Cambridge, UK**
Advanced Mathematics and Theoretical Physics, Part III
Master of Advanced Study, with merits
- 2002 **Harvard Medical School, Boston, MA, USA**
Lab work in molecular neuroscience
- 2000-2002 **Albert-Ludwigs-Universität Freiburg, Germany**
Medical Studies, Physikum, bachelor equivalent (2.0, top 5%)
- 1999-2002 **Albert-Ludwigs-Universität Freiburg, Germany**
Physics, Vordiplom, bachelor equivalent (1.0, top 1%)
- 1992-1999 **Leibnizschule Hannover, Germany**
Abitur (1.0): Biology, Mathematics, Politics, Ancient Greek

POLICY IMPACT

- 2020 Policy Brief for the German cabinet on COVID-19 and GHG emissions
- 2020 Developing a proposal for an integrated data platform for smart mobility in Israel that will be implemented and funded with about €5million in the pilot phase
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UNIVERSITY TEACHING

- since 2017 Lecture *Urbanization and Global Environmental Change*
Technische Universität Berlin
- Seminar *Sustainability Economics of Human Settlements*
Technische Universität Berlin
- 2014 Lecture *Land Use, Infrastructures and Climate Change*
Technische Universität Berlin (together with O. Edenhofer)
- 2013 Lecture *Land Use, Infrastructures and Climate Change*
Technische Universität Berlin (together with O. Edenhofer)
- 2012 Seminar *Behavioral Economics of Mobility*
Technische Universität Berlin (together with L. Mattauch)
- 2012 Lecture *Land Use, Infrastructures and Climate Change*
Technische Universität Berlin (together with O. Edenhofer)
- 2011 Seminar *Sustainability Sciences*
Technische Universität Berlin (together with L. Mattauch)
- 2011 Lecture *The Spatial Economics of Climate Change*
Technische Universität Berlin (together with O. Edenhofer)
- 2010 Lecture *Geographical Economics and Climate Change*
Technische Universität Berlin (together with O. Edenhofer)
- 2009 Lecture *Geographical Economics and Climate Change*
Technische Universität Berlin (together with O. Edenhofer)
- 2005-2006 Seminar *Mathematics for Biologists*
Humboldt Universität zu Berlin
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SUMMER SCHOOL CONVENING

- 2013 *Sustainable and Low Carbon Urban Systems* (with Helga Weisz)
German National Merit Foundation, Leysin, Switzerland
- 2011 *Defining Sustainable Transport* (with Elizabeth Deakin)
German National Merit Foundation, Überlingen, Germany
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SUPERVISION AT TECHNISCHE UNIVERSITÄT BERLIN

- PhDs Blanca Fernandez (Making Urban Policies Sustainable, magna cum laude, 2016),
Christopher Bren d'Amour (Urbanization and food systems, magna cum laude, 2018)
Steffen Lohrey (ongoing)

	Anjali Ramakrishnan (ongoing) Nikola Milojevic-Dupont (ongoing) Zakia Soomauroo (ongoing) Eva Ayaragarnchanakul (ongoing) Jiawei Hu (ongoing)
Co-supervised	Li-jing Liu (2018-2019) Linus Mattauch (Rent and Redistribution, summa cum laude, 2015)
External referee	Ramana Gudipudi (Cities and Global Sustainability: Insights from Emission and Ecological Efficiency, magna cum laude, 2017) Paolo Avner (Effectiveness and political economy of climate change mitigation policies at the urban scale, 2020)
Committee chair	Jennifer Garard (Stakeholder Engagement at the Science-Policy Interface)
Master theses	<ul style="list-style-type: none"> • Jessica Horne (Cost-benefit analysis and quality of life of redesigning streets for people) • Carolin Liesenjohann (Impact of bicycle infrastructure improvements on modal choice) • Nikhil Ravindra (Innovations in Urban Climate Governance for Bengaluru) • Freya Hofmann (Greenhouse gas emission impact of increased grid integration of electric vehicle (EV) charging infrastructure in Germany) • David Kapfer (Restituting Location Gains: A typology of residential land and property taxes in Europe) • Georg Hubmann (Towards a more sustainable Shanghai? A sustainability evaluation of Shanghai's rapid urbanisation period with a focus on housing development) • Anissa Suatmodi (Online Motorcycle Taxi and Its Influences on Sustainable Lifestyle in Jakarta Metropolitan Area, Indonesia) • Emily Breslin /Transportation System Efficiency in High SOV, High VMT Settings: Push-Pull Policy Framework for Commuter Mobility-as-a-Service in the San Francisco Bay Area) • Mudit Chordia (Automotive gluttony: a roadblock to curbing GHG emissions and reducing resource consumption in the German automotive sector) • Alexander Gosewinckel (Co-benefits and India's National Solar Mission: A Case for Distributed Solar Implementation)
Postdocs	Aneeqe Javaid Mahendra Sethi Leila Niamir Tiziana Susca (former) Peter Agoston (former) Tim Beringer (former) Sohail Ahmad (former)

FUNDING HISTORY

2019-2022	BMBF support for IPCC chapter scientist, ca 220.000€
2018-2019	DAAD P.R.I.M.E Postdoctoral Scholarship, Christopher Bren d'Amour, ca 130.000€

2017-2020	MobiliSta: Mobility Space apart from the Car-Friendly City. Modelling of sustainable infrastructure measures. FONA City of the Future, 290.000€
2014-2018	Postdoctoral Scholarship of the Humboldt Foundation, Sohail Ahmad, ca. 225.000€
2013-2015	PhD Scholarship of the Böll Foundation, Blanca Fernandez, ca. 45.000€
2014-2016	PhD Scholarship of the Stiftung der Deutschen Wirtschaft, Christopher Bren d'Amour, ca. 45.000€
2010-2011	One Planet Mobility, 95.000€ (PI: F. Creutzig)
2009-2010	CITIES (Car Industry, Road Transport and an International Emission Trading Scheme - Policy Options), 107.000€ (PIs: F. Creutzig, O. Edenhofer)

SCIENTIFIC COMMITTEES AND SERVICE

2018-2021	Coordinating Lead Author of the IPCC 6th Assessment Report, Working Group III, Chapter 5: Demand, services and social aspects of mitigation
2019	Vice-Chair appointment committee of the chair in Urban- and Regional Economics at ISR, TU Berlin
2017	Program Committee Cities and Climate Conference 2017 (Potsdam, 19-21 Sep 2017)
2016-2017	Member of Green Growth Knowledge Platform Sustainable Infrastructure Research Committee
2016	Lead Author of the 2nd State of the Carbon Cycle Report (SOCCR-2) for the US government
since 2015	Member of the Scientific Advisory Board of Klimafakten
2014	Lead Author of the 2nd UCCRN Assessment Report on Climate Change and Cities (Chapter 4 - <i>Equity and Environmental Justice</i>)
2010-2014	Lead Author for the IPCC 5th Assessment Report, Working Group III (Chapter 8 on Transport, Technical Summary, Summary for Policy Maker) Contributing Author to Chapter 12 on Human Settlements, Infrastructures and Spatial Planning and to Chapter 11 on Agriculture, Forestry and Land Use, for which leading the Crosscut on Bioenergy , coordinating 22 authors
2012/2013	Member of the Dahrendorf Academic Board
2010	Lead Analyst to the Knowledge Module 9: Energy Efficient End-use: Transport
2010	Contributing Author to the IPCC Special Report on Renewable Energy Sources and Climate Change Mitigation for Chapter 9 and Chapter 11
2009-2011	Chair of Netzwerk Europa (Alumni Organization of the Studienkolleg zu Berlin)
2005-2009	Founder of Berliner Luft - Sustainable Transport for Berlin. NGO promoting public transportation, cycling and walking modes in Berlin.
since 2004	German Physical Society - DPG

JOURNAL SERVICE

Editorial Board: Global Sustainability (2017-), PLOS ONE (2018-), Mitigation and Adaptation Strategies for Global Change (2020-), Environmental Data Science (2021-)

Advisory Board: Environmental Research Letters (2012-)

Guest Academic Editor: PLOS ONE (2017)

Special Issue Editor:

- *Systematizing and Upscaling Urban Solutions for Climate Change Mitigation* in Environmental Research Letters, completed in 2020. See also references 67, 68 and 93.
- *Near-Term Mitigation Pathways: Technologies and Policies for Energy Efficiency and Low Carbon Energy* in Applied Energy, completed in 2019. See also reference 70.
- *Demand-Side Solutions for Transitioning to Low-Carbon Societies* in Environmental Research Letters, to be completed in 2020
- *Evidence Synthesis for Climate Solutions* in Environmental Research Letters, to be completed in 2020

Award: Publons Peer Review Award 2018 (Among top 1% of reviewers in Environment)

Reviewer: Science, Nature, Nature Climate Change, Nature Sustainability, Proceedings of the National Academy of Sciences, Environmental Research Letters, Journal of Industrial Ecology, Global Environmental Change, Current Opinion in Environmental Sustainability, Regional Environmental Change, Transport Policy, Energy Policy, Climatic Change, Ecological Economics, Energies, Global Change Biology Bioenergy, Biomass and Bioenergy, Environment and Planning B, International Journal of Sustainable Transportation, Transport Research D, Landscape and Urban Planning, Science of the Total Environment, Environment Development and Sustainability, Renewable and Sustainable Energy Reviews, Sustainable Cities and Society, Umweltpolitik und Umweltrecht, Annals of the American Association of Geographers, Forest, European Research Council, Asian Development Bank, African Academy of Sciences, Climate Policy, PLOS ONE, Research Council of Norway, Oxford Martin School.

AWARDS AND SCHOLARSHIPS

2019	Fellow of the Israel Public Policy Institute on <i>The Governance of Digital Commons</i>
2017	Piers Sellers Prize , recognizing exceptional climate change research
2008–2009	European Recovery Program Scholarship
2006	Stipend for <i>Methods in Computational Neuroscience</i> , MBL, Woods Hole, MA
2004–2006	Boehringer Ingelheim Fonds Scholarship
2003–2004	Studienkolleg zu Berlin, Hertie Foundation, Award and Scholarship
2002–2003	Cambridge European Trust Scholarship
1999–2007	German National Merit Foundation, Award and Scholarship

WORKSHOP AND CONFERENCE CONVENING AND ORGANIZATION

2018	Organizing and Convening conference on <i>Systematizing and Upscaling Urban Solutions for Climate Change Mitigation</i> , together with Future Earth and the Global Carbon Project (Sep 13-14, 2018)
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- 2018 Organizing and Convening workshop on *Climate policy and Challenges for the Road Transport Sector*, together with the German automobile industry (Jan 25, 2018)
- 2013 Organizing workshop on *Transport-sector inclusion into EU ETS: Contrasting the Engineering and the Economics perspective*
- 2013 Organizing and Chairing Lord-Dahrendorf-Workshops on *Low-Carbon Infrastructures, Co-Benefits and Land Taxation in European Cities* and *A European Energiewende as a European Common Good?*
- 2013 Organizing workshop with Thomas Pogge and Ottmar Edenhofer dedicated to *Global Public Good Provision*
- 2012 Organizing and Chairing Workshop at Technical University Berlin on *Land Rents, Infrastructures and Climate Change*
- 2009 Chairing a side event at COP15, Copenhagen, on *Driving home solutions: transport emissions trading and regional adaptation information*
- 2009-2011 Chairman of *Netzwerk Europa* - Alumni-Organization of the Studienkolleg zu Berlin, convening seminars, projects and alumni-meetings.
- As chair of *Netzwerk Europa*, the alumni society of the Studienkolleg zu Berlin, I was engaged in building up a community of more than 300 European students and scholars by organizing regular workshops and alumni meetings from 2009-2011.
- 2010 Co-Chairing *Ambivalence in Providing Humanitarian Aid*, Chorin
- Jul 2009 Co-Chair, *The Future of European Cities in Times of Climate Change*, for *Netzwerk Europa*; funded by the Hertie Foundation; in Berlin.
- Oct 2006 Co-Chairing and Organizing *Power & Rationality: The Future of Energy Supply*, funded by the German National Merit Foundation and the Böll Foundation; in Tübingen.
- May 2001 Co-Chairing and Organizing, Alumni Meeting of Members of the Schülerakademie - 300 people; 28 courses; in Kirchheim.

LANGUAGES

Native	German
Fluent	English, French
Basic	Hebrew, Italian, Spanish
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PEER-REVIEWED PUBLICATIONS (H-INDEX GOOGLE SCHOLAR: 51)

**read abstract or upload PDFs by click on title*

100. *Reviewing the scope and thematic focus of 100,000 publications on energy consumption, services and social aspects of climate change: A big data approach to demand-side mitigation*
F. Creutzig, M. W. Callaghan, A. Ramakrishnan, A. Javaid, L. Niamir, F. Müller-Hansen, J. C. Minx, B. K. Sovacool, Z. Afroz, M. Andor, M. Antal, N. Das, J. Díaz-José, F. C. Doebbe, M. Figueroa, A. Gouldson, H. Haberl, A. Hook, D. Ivanova, W. F. Lamb, N. Maizi, É. Mata, K. Steensen Nielsen, C. D. Onyige, L. A. Reisch, J. Roy, P. F. D. Scheelbeek, M. Sethi, S. Some, S. Sorrell, M. Tessier, T. P. Urmee, D. Virág, C. Wang, D. Wiedenhofer, C. Wilson (2020) *Environmental Research Letters* (2020)

99. *Lifestyle, psychological, socioeconomic and environmental factors and their impact on hypertension during the coronavirus disease 2019 pandemic.*
R. Kreutz, P. Dobrowolski, A. Prejbisz, EAE Algharably, G. Bilo, **F. Creutzig**, G. Grassi, V. Kotsis, D. Lovic, E. Lurbe, P. A. Modesti, M. Pappaccogli, G. Parati, A. Persu, J. Polonia, M. Rajzer, P. de Timary, T. Weber, B. Weisser, K. Tsioufis, G. Mancia, A. Januszewicz (2020) *Journal of hypertension* (2020) DOI: 10.1097/hjh.0000000000002770
98. *Learning from urban form to predict building heights*
N. Milojevic-Dupont, N. Hans, L. H. Kaack, M. Zumwald, F. Andrieux, D. de Barros Soares, S. Lohrey, P.-P. Pichler, **F. Creutzig** (2020) *PLOS ONE* 15 (2020): e0242010.
97. *Limits to Liberalism: Considerations for the Anthropocene*
F. Creutzig (2020) *Ecological Economics* 177 (2020): 106763.
96. *Engage, don't preach: Active learning triggers climate action*
F. Creutzig, F. Kapmeier (2020) *Energy Research & Social Science* 70: 101779.
95. *Keeping up with the Patels: Conspicuous consumption drives the adoption of cars and appliances in India*
A. Ramakrishnan, M. Kalkuhl, S. Ahmad, **F. Creutzig** (2020) *Energy Research & Social Science* 70: 101742.
94. *Discourses of climate delay*
W. Lamb, G. Mattioli, S. Levi, J. T. Roberts, S. Capstick, **F. Creutzig**, J. C. Minx, F. Müller-Hansen, T. Culhane, J. K. Steinberger (2020) *Global Sustainability* 3
93. *Systematizing and upscaling urban climate change mitigation*
F. Creutzig, X. Bai, R. Khosla, V. Viguie, Y. Yamagata (2020) *Environmental Research Letters* [Editorial for focus issue - see also ref 67 & 68](#)
92. *Machine learning for geographically differentiated climate change mitigation in urban areas*
N. Milojevic-Dupont, **F. Creutzig** (2020) *Sustainable Cities and Society*, 102526.
91. *Urbanization, processed foods, and eating out in India*
C. Bren d'Amour, B. Pandey, M. Reba, S. Ahmad, **F. Creutzig**, K. C. Seto (2020) *Global Food Security* 25: 100361.
90. *Adjust urban and rural road pricing for fair mobility*
F. Creutzig, A. Javaid, N. Koch, B. Knopf, G. Mattioli, O. Edenhofer (2020) *Nature Climate Change*
89. *Fair street space allocation: ethical principles and empirical insights*
F. Creutzig, A. Javaid, Z. Soomauroo, S. Lohrey, N. Milojevic-Dupont, A. Ramakrishnan, and others (2020) *Transport Reviews*
[Media: Berliner Morgenpost](#)

Systematic Reviews

88. *Determinants of low-carbon transport mode adoption: systematic review of reviews*
A. Javaid, **F. Creutzig**, S. Bamberg (2020) *Environmental Research Letters* 15, no. 10 (2020): 103002.
87. *Climate change mitigation in cities: a systematic scoping of case studies*
M. Sethi, W. F. Lamb, J. C. Minx, **F. Creutzig** (2020) *Environmental Research Letters*
86. *Systematic map of the literature on carbon lock-in induced by long-lived capital*
V. Fisch-Romito, Vivien, C. Guivarch, **F. Creutzig**, J. C. Minx, M. W. Callaghan **F. Creutzig** (2020) *Environmental Research Letters*

85. *Saving resources and the climate? A systematic review of the circular economy and its mitigation potential*
J. Cantzler, **F. Creutzig**, E. Ayargarnchanakul, A. Javaid, L. Wong, and W. Haas (2020) Environmental Research Letters
84. *A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part I: bibliometric and conceptual mapping*
D. Wiedenhofer, D. Virag, G. Kalt, ..., **F. Creutzig**, H. Haberl (2020) Environmental Research Letters
83. *A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part II: synthesizing the insights*
H. Haberl, D. Wiedenhofer, D. Virag, G. Kalt, ..., **F. Creutzig** (2020) Environmental Research Letters
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82. *Temporary reduction in daily global CO₂ emissions during the COVID-19 forced confinement*
C. Le Quéré, R. B. Jackson, M. W. Jones, A. J. P. Smith, S. Abernethy, R. M. Andrew, A. J. De-Gol, D. R. Willis, Y. Shan, J. G. Canadell, P. Friedlingstein, **F. Creutzig**, G. P. Peters (2020) Nature Climate Change 1-7
Media: Spiegel - CNN - Washington Post
81. *Quantifying the potential for climate change mitigation of consumption options*
D. Ivanova, J. Barrett, D. Wiedenhofer, B. Macura, M. Callaghan, F. Creutzig **F. Creutzig** (2020) Environmental Research Letters
Media: Spiegel
80. *Unique Opportunities of Island States to Transition to a Low-Carbon Mobility System*
Z. Soomauroo, Philipp Blechinger, **F. Creutzig** (2020) Sustainability, 12(4), 1435
79. *Sweet spots are food based: Structural adjustments to co-control regional pollutants and national GHG emissions in China*
L. J. Liu, Q.M. Liang, **F. Creutzig**, H. Ward, K. Zhang (2020) Ecological Economics, 171, 106590
78. *Environmental and economic impacts of trade barriers: The example of China -US trade friction*
L. J. Liu, **F. Creutzig**, Y. F. Yao, Y.M. Wei, Q.M. Liang (2020) Resource and Energy Economics, 59, 101144
77. *A comparison of the health and environmental impacts of increasing urban density against increasing propensity to walk and cycle in Nashville, USA*
S. Ahmad, A. Goodman, **F. Creutzig**, J. Woodcock, M. Tainio (2020) Cities & Health 1-11
76. *Research for city practice*
M- Grant, L. McCunn, S. Ahmad, A. Goodman, **F. Creutzig**, J. Woodcock, M. Tainio, T. Holmes, D. Eisenman, L. Warwick-Booth, S. Coan (2020) Cities & Health 4(1):2-12
75. *The Mitigation Trinity: Coordinating Policies to Escalate Climate Mitigation*
F. Creutzig (2019) One Earth 1.1:76-85
74. *Leveraging digitalization for sustainability in urban transport*
F. Creutzig, M. Franzen, R. Moeckel, D. Heinrichs, K. Nagel, S. Nieland, H. Weis (2019) Global Sustainability 2
Media: Informationsdienst Wissenschaft
73. *Direct Air Capture of CO₂: A Key Technology for Ambitious Climate Change Mitigation*
C. Breyer, M. Fasihi, C. Bajamundi, **F. Creutzig** (2019) Joule 3(9): 2053-2057
72. *Tackling Climate Change with Machine Learning*
D. Rolnick, P. L. Donti, L. H. Kaack, K. Kochanski, A. Lacoste, K. Sankaran, A. Slavin Ross, N. Milojevic-Dupont, N. Jaques, A. Waldman-Brown, A. Luccioni, T. Maharaj, E. D. Sherwin, S.K.

- Mukkavilli, K. P. Kording, C. Gomes, A. Y. Ng, D. Hassabis, J. C. Platt **F. Creutzig**, J. Chayes, Y. Bengio (2019) arXiv:1906.05433
 Media: [unite.ai](#) – [Horizon](#)
71. *The concerns of the young protesters are justified: A statement by Scientists for Future concerning the protests for more climate protection.*
 G. Hagedorn, T. Loew, S. Seneviratne, W. Lucht, M.-K. Beck, J. Hesse, R. Knutti, V. Quaschnig, ... **F. Creutzig**, ... E. v. Hirschauen, S. Winter, M. Wittau, J. Zorn (2019) GAIA-Ecological Perspectives for Science and Society 28.2: 79-87.
 70. *The role of electric vehicles in near-term mitigation pathways and achieving the UK's carbon budget*
 G. Hill, O. Heidrich, **F. Creutzig**, P. Blythe (2019) Applied Energy 251, 113111
 Media: [Deutschlandfunk Clean Energy Wire](#)
 69. *On-demand motorcycle taxis improve mobility, not sustainability*
 A. Y. Suatmadi, **F. Creutzig**, I. Otto (2019) Case Studies on Transport Policy
 68. *Star-shaped cities alleviate trade-off between climate change mitigation and adaptation*
 C. Pierer, **F. Creutzig** (2019) Environmental Research Letters
 Media: [Clean Energy Wire](#) [Wissenschaft.de](#) [rbb](#)
[Research Highlight in Nature Climate Change](#)
 67. *Spatially contextualized analysis of energy use for commuting in India*
 S. Ahmad, **F. Creutzig** (2019) Environmental Research Letters 14 045007
 Media: [Op-Ed in the Hindu: The Wheels to a Low-Carbon Transport System](#)
[Coverage in the Hindu](#)
 66. *Learning about urban climate solutions from case studies*
 W. Lamb, **F. Creutzig**, M. W. Callaghan, J. Minx (2019) Nature Climate Change 9:279-287
 65. *The mutual dependence of negative emission technologies and energy systems*
F. Creutzig, C. Breyer, J. Hilaire, J. Minx, G. Peters, R. Socolow (2019) Energy & Environmental Science
 Media: [Edison Handelsblatt](#) – [energate messenge](#)
 64. *Assessing human and environmental pressures of global land-use change 2000-2010*
F. Creutzig, C. Bren d'Amour, U. Weddige, S. Fuss, T. Beringer, A. Gläser, M. Kalkuhl, J. C. Steckel, A. Radebach, O. Edenhofer. (2019) Global Sustainability 2, doi.org/10.1017/sus.2018.15
 Media: [Forschung & Lehre - Energiezukunft](#)
 63. *Upscaling urban data science for global climate solutions*
F. Creutzig, S. Lohrey, X. Bai, A. Baklanov, R. Dawson, S. Dhakal, W. F. Lamb, T. McPhearson, J. Minx, E. Munoz, B. Walsh (2019) Global Sustainability 2, doi.org/10.1017/sus.2018.16
 Media: [Interview with NDR Info](#)
 62. *A global dataset of CO2 emissions and ancillary data related to emissions for 343 cities*
 C. Nangini, A. Peregon, P. Ciais, U. Weddige, F. Vogel, J. Wang, F.-M. Breon, S. Bachra, Y. Wang, K. Gurney, Y. Yamagata, K. Appleby, S. Telahoun, J. Canadell, A. Grubler, S. Dhakal, **F. Creutzig** (2019) Scientific data, 6, 180280.
 61. *Can land taxes foster sustainable development? An assessment of fiscal, distributional and implementation issues*
 M. Kalkuhl, B. Fernandez Milan, G. Schwerhoff, M. Jakob, M. Hahnen, **F. Creutzig** (2018) Land Use Policy Volume 78, November 2018, Pages 338-352
 60. *Towards demand-side solutions for mitigating climate change*
F. Creutzig, J. Roy, W. F. Lamb, I. M. L. Azevedo, W. Bruine de Bruin, H. Dalkmann, O. Y. Edelenbosch, F. W. Geels, A. Grubler, C. Hepburn, E. Hertwich, R. Khosla, L. Mattauch, J. C. Minx, A. Ramakrishnan, N. D. Rao, J. Steinberger, M. Tavoni, D. Urge-Vorsatz, E. U. Weber (2018) Nature Climate Change 8(4), 268

59. *Negative emissions: Part 1 - Research landscape and synthesis*
J. C. Minx, W. F Lamb, M. W Callaghan, S. Fuss, J. Hilaire, **F. Creutzig**, T. Amann, T. Beringer, W. de Oliveira Garcia, J. Hartmann, T. Khanna, G. Luderer, G. F Nemet, J. Rogelj, P. Smith, J. L. Vicente, J. Wilcox, M. del Mar Zamora (2018) Environmental Research Letters
58. *Negative emissions: Part 2 - Costs, potentials and side effects]*
S. Fuss, W. F Lamb, M. W Callaghan, J. Hilaire, **F. Creutzig**, T. Amann, T. Beringer, W. de Oliveira Garcia, J. Hartmann, T. Khanna, D. Lenzi, G. Luderer, G. F Nemet, J. Rogelj, P. Smith, J. L. Vicente, J. Wilcox, M. del Mar Zamora, J. C. Minx (2018) Environmental Research Letters
57. *Negative emissions: Part 3 - Innovation and upscaling*
G. F Nemet, M. W Callaghan, **F. Creutzig**, S. Fuss, J. Hartmann, J. Hilaire, W. F Lamb, J. C. Minx, S. Rogers, P. Smith (2018) Environmental Research Letters
56. *The literature landscape on 1.5C climate change and cities*
W. Lamb, M. Callaghan, **F. Creutzig**, R. Khosla, J. Minx (2018) Current Opinion in Environmental Sustainability 30: 26-34
55. *Govern land as a global commons*
F. Creutzig (2017) Nature 546.7656: 28-29
54. *The underestimated potential of solar energy to mitigate climate change*
F. Creutzig, P. Agoston, J. C. Goldschmidt, G. Luderer, G. Nemet, R. Pietzcker (2017) Nature Energy 2:17140
[Media: Washington Post - Spiegel Online - Sueddeutsche - Carbon Brief - scinexx - Solarserver - 3sat vox](#)
53. *Synergies and trade-offs between energy-efficient urbanization and health*
S. Ahmad, S. Pachauri, **F. Creutzig** (2017) Environmental Research Letters 12:114017
52. *Lifting peripheral fortunes:
Upgrading transit improves spatial, income and gender equity in Medellin*
B. Fernandez Milan, **F. Creutzig** (2017) Cities 70:122-134
51. *Urban infrastructure choices structure climate solutions*
F. Creutzig, P. Agoston, J. Minx, J. Canadell, R. Andrew, C. Le Quere, G. Peters, A. Sharifi, Y. Yamagata, S. Dhakal (2016) Nature Climate Change 6:1054-1056
[Media: Oekonews - The Conversation](#)
50. *Future urban land expansion and implications for global croplands*
C. Bren d'Amour, F. Reitsma, G. Baiocchi, S. Barthel, B. Güneralp, K. Erb, H. Haberl, **F. Creutzig** (corresponding author), K. Seto (2016) PNAS, doi: 10.1073/pnas.1606036114
[Media: The Guardian - Deutschlandfunk - Gizmodo - Der Standard - innovations report - La Razon - Forskning - Slate - ANSA - Taiwan Environmental Information Center - scinexx - das Wissensmagazin - dailygreen](#)
49. *Financing Public Capital through Land Rent Taxation: A Macroeconomic Henry George Theorem*
L. Mattauch, J. Siegmeier, O. Edenhofer, **F. Creutzig**, CESIFO WORKING PAPER NO. 4280
48. *Beyond technology: Demand-Side Solutions to Climate Change Mitigation*
F. Creutzig, B. Fernandez, H. Haberl, R. Khosla, Y. Mulugetta, K. Seto. (2016) Annual Review of Environment and Resources
47. *From targets to action: rolling up our sleeves after Paris*
B. Knopf, S. Fuss, G. Hansen, **F. Creutzig**, J. Minx, O. Edenhofer (2017) Global Challenges 1.2
46. *Climate Change, Equity and Sustainable Development Goals: An Urban Perspective*
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| 2018 | web.de: <i>Muss der Sprit teurer werden?</i> |
| 2017 | Carbon Brief: <i>Why solar keeps being underestimated</i> |
| 2017 | The Guardian: <i>EU must not burn the world's forests for 'renewable' energy</i> |
| 2017 | Zeit online: <i>Deutschland, das gefährliche Vorbild</i> , zusammen mit Jan Steckel |
| 2017 | web.de: <i>Wohnraumangel in Großstädten: Wird die Entwicklung noch zunehmen?</i> |
| 2013 | Cicero: <i>Energiewende - Die Große Chance in der Eurokrise</i> |
| 2013 | Kultura Liberalna: <i>Cities: Pragmatic Action to Deal with Climate Change</i> |
| since 2009 | Environmental Research Web: Blogs, <u>a selection of them is listed on this website</u> |
| 2011 | Europe & Me: <i>On the European debt crisis</i> |
| 2009 | Chinadialogue: <i>Fixing Beijing's transport nightmare</i> |
| 2008 | Tagesblick: <i>Zeit Voranzuschreiten</i> |
| 2007 | TIP Berlin: <i>Autofrei ist sexy</i> |

INVITED TALKS

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|------|---|
| 2020 | Sciences Notes , Heidelberg, Title: <i>Städtische Lösungen für das Anthropozän</i> |
| 2020 | Keynote at Applied Machine Learning Days , Lausanne, Title: <i>Urban Solutions for the Anthropocene</i> |
| 2019 | Keynote at NeurIPS , Vancouver, Canada, Presentation Title: <i>Leveraging digitalization for urban solutions in the Anthropocene</i> |
| 2019 | COP25, Madrid Presentation Title: <i>The role of digitalization in desirable pathways of the Anthropocene</i> |
| 2019 | Ringvorlesung Technical University Berlin, Title: <i>Urbanisation and Global Environmental Change</i> |
| 2019 | IEA Workshop on Bioenergy, Berlin Title: <i>The (non-)rationale of bioenergy for climate change mitigation</i> |
| 2019 | Zukunftsbrücke, Title: <i>Prosperity for all: Individual Wellbeing and Planetary Stability</i> |

- 2019 Oberbürgermeister Potsdam, Potsdam, Title: *Infrastrukturinvestitionen, Verhaltensänderung und soziale Normen: koordinierte Massnahmen für die Förderungen der umweltfreundlichen Verkehrsmittel*
- 2019 Heibrids, Berlin Title: *Machine learning for low-carbon urban planning*
- 2019 Nachhaltig Lecture Series, Halle, Title: *Nachfrage, Konsum und Klimaschutz*
- 2018 **Keynote at European Congress of Conservation Biology, Jyväskylä, Finland**, Presentation Title: *The Paris agreement promises? How to stay below 1.5 - 2 C warming, and what does it mean in the context of sinks and sources/Global bioenergy potential.*
- 2018 IPCC Cities conference in Edmonton, Presentation Title: *Upscaling urban data science for global climate solutions*
- 2018 IPCC Cities conference in Edmonton, Presentation Title: *Geometric design of cities balances trade-off between climate mitigation and urban heat island*
- 2018 MBA Sustainable Mobility Management, Presentation Title: *Sustainability Transformations in Urban Transport*
- 2017 Summer School Energy and the Environment, Presentation Title: *Making Urban Transport Solutions Effective for Global Climate Mitigation*
- 2017 Leading the way to a new European bioeconomy strategy, European Forest Institute and German Ministry for Agriculture - Berlin, Presentation Title: *The Urban Contribution to a Nascent Bioeconomy*
- 2017 **Piers Sellers Price Lecture** - Leeds, Presentation Title: *Urban climate change solutions at global scale*
- 2017 FONA Agendakonferenz: Wege zur Mobilitätswende. Forschung und Innovation für eine nachhaltige urbane Mobilität - Berlin, Presentation Title: *Mobility and Climate Change Mitigation - A Global Perspective*
- 2016 Class on Climate Change Governance, University of Wisconsin - Madison, Presentation Title: *Demand vs Supply Side: Design and Rationale of IPCC Reports*
- 2016 Weston Round Table, University of Wisconsin - Madison, Presentation Title: *Urbanization and Global Environmental Change*
- 2016 University of Wisconsin Law School, University of Wisconsin - Madison, Presentation Title: *The rationality of climate change legislation in EU law*
- 2016 Summer School Energy and the Environment, Presentation Title: *Global Challenges and Trends for Urban Transportation*
- 2014 Chair for Traffic Engineering (Kai Nagel), Technical University Berlin, Presentation Title: *Sustainable urban form: global observations and analytical modeling*
- 2014 Forschungsstelle Nachhaltige Umweltentwicklung (Hermann Held), Hamburg, Presentation Title: *Ambiguity and optimal learning in climate mitigation scenarios*
- 2014 Climate Change and Transport, Karlsruhe, Key Note: *Divergent Views on Low-Carbon Transportation*
- 2014 Yale School of Forestry & and Environmental Studies, Presentation Title: *Industrial Sustainability at the Nexus between Land Use and Energy*
- 2014 Climate Foundation Donor Deep Dive, Lisbon, Presentation Title: *Urban transport as a hotspot for climate mitigation*

- 2014 ITB (Internationale Tourismus-Börse), Berlin, Presentation Title: *Mitigation GHG emissions in tourism and aviation*
- 2014 European Climate Foundation, Berlin, Presentation Title: *Key insights on mitigating climate change in the transport sector*
- 2013 Deutscher Geographentag, Passau, Presentation Title: *ASIF: Updating Decomposition Options of Low-Carbon Futures in Land Transport*
- 2013 Summer School of the German National Merit Foundation, Leysin, Key note: *Man City Earth*
- 2013 Princeton Institute for International and Regional Studies, Presentation Title: *An ecological rationality approach towards climate change mitigation*
- 2013 University of Louisville, Kentucky, Presentation Title: *Narratives of Low-Carbon Futures in Land Transport*
- 2012 Potsdam Institute on Climate Impact Research, Presentation Title: *Cities, transport costs and resulting GHG emissions*
- 2012 Princeton Institute for International and Regional Studies, Presentation Title: *Hitting the roof of analytical framework - Epistemological Uncertainty in Bioenergy Assessments*
- 2012 World Bank, Transport - Turning the Right Corner, Presentation Title: *Narratives of low-carbon futures in land transport*
- 2012 VDA (German Association of the Automotive Industry), Presentation Title: *Climate policies in transport revisited*
- 2012 Harvard Project for Asian and International Relations, Briefing of the European Delegation, Presentation Title: *Mobility and Sustainability: An Asian-European Comparison*
- 2012 Global Sustainability Summer School, Potsdam Institute for Advanced Sustainability Studies and Potsdam Institute on Climate Impacts, Presentation Title: *Fishbanks: Seeking to manage the global commons*
- 2012 Potsdam Institute for Advanced Sustainability Studies, What population decline means for public service provision in rural regions, Presentation Title: *A Climate Economic Perspective: Rural Mobility and GHG Emissions*
- 2012 National Research Council, Needs and Research Requirements for Land-Change Modeling, Chapel Hill, Presentation Title: *Bioenergy and Land Use*
- 2012 Leopoldina - German National Academy of Sciences, Briefing Meeting on Bioenergy, Presentation Title: *Comparing Assessments on Bioenergy*
- 2012 Bundesumweltministerium, Presentation Title: *Policies for Decarbonizing the Transport Sector*
- 2012 Yale School of Forestry & and Environmental Studies, Presentation Title: *Evaluating bioenergy futures*
- 2012 GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit), Presentation Title: *Low-carbon transport scenarios for European cities*
- 2011 North American Regional Science Council, 58th Annual North American Meeting, Miami, Presentation Title: *Fuel prices, urban form and optimal public transit*
- 2011 Carlo Schmid Programm, Annual Alumni Meeting, Presentation Title: *Governing the Global and Local Commons*

- 2011 attac Oldenburg, Presentation Title: *The Economics of Car-Free Cities*
- 2011 Summer School of the German National Merit Foundation, Salem, Key note: *Bioenergy and Sustainability: The Limits of Disciplinary Research*
- 2010 Deutsche Bahn, Presentation Title: *Integrating the Transport Sector into the EU Emission Trading Scheme*
- 2010 California State Capitol, Sacramento, Presentation Title: *CITIES: Car Industry, Road Transport and an International Emission trading Scheme - policy options*
- 2010 innoz, Presentation Title: *Evaluating the Climate Mitigation Benefits of a German Road Charging Policy*
- 2010 Umweltbundesamt, Presentation Title: *A Review: Options for Decarbonizing the Transport Sector*
- 2009 COP15, Copenhagen, on *Bridging the gap Pathways for transport in the post 2012 process*
- 2009 Potsdam Institute of Climate Impact Research, Presentation title: *Synergies in Urban Transport Policies*
- 2009 Energy and Resources Group, Berkeley, Presentation title: *Co-Benefits of Transport Demand Management Measures: A Beijing Case Study*
- 2008 Max Planck Institute for Biological Cybernetics, Bethge-Lab, Tübingen, Presentation title: *Predictive Coding Principles*
- 2006 Freie Universität Berlin, Theoretical Neuroscience, Grün-Lab, Presentation title: *Optimality and Sufficiency in the Decoding of Auditory Signals*
- 2006 Cold Spring Harbor Laboratory, Zador-Lab, Presentation title: *Sufficient Encoding in the Auditory System: Lessons from Grasshopper Mating Songs*
- 2005 Hebrew University, Interdisciplinary Center for Neural Computation, Presentation title: *The Past-Future Information Bottleneck*

CONFERENCE AND WORKSHOP CONTRIBUTIONS

(presented by F. Creutzig if not indicated otherwise)

- 2019 IIASA-Rite Symposium on Demand-side climate solutions, Laxenburg Title: *Current state of IPCC assessment on demand-side solutions*
- 2019 Conference Ethics and Value in Assessment, MCC Berlin, Title: *Intersection points of values and scenario modelling in the IPCC*
- 2019 IPep1.5 Symposium, Potsdam Title: *Session moderator*
- 2019 International Society Industrial Ecology Title: *Scaling up Urban Solutions for Global Climate Mitigation*
- 2017 Third Annual International Transport Energy Modelling (iTEM3) Workshop, Paris Presentation Title: *Carbon pricing renders high-speed railways efficient for climate mitigation*
- 2016 Symposium ‘Cities as Complex systems’, Hannover Presentation Title: *Urban typologies to bridge the gap between idiosyncratic cities and global environmental change*
- 2014 Second International UGEC (Urbanization and Global Environmental Change) conference, Presentation Title: *Urban Heat Risks, Health and Equity*

- 2014 Second International UGEC (Urbanization and Global Environmental Change) conference, Presentation Title: *Urban Form and the Environment*
- 2014 Second International UGEC (Urbanization and Global Environmental Change) conference, Presentation Title: *A Global Typology of Urban Energy Use and Implications for Climate Change Mitigations*
- 2013 Linking Local Consumption to Global Impacts, SESYNC (National Socio-Environmental Synthesis Center), Annapolis, Presentation Title: *Insights from Urban Economics for Linking Local Consumption to Global Impacts*
- 2013 Climate change and its implications on ecosystem services and society. Italian Society for Climate Sciences - SISC. Lecce, Italy. Presentation Title: *Albedo Modifications as Global Mitigation and Local Adaptation Strategy in European Cities: A Geographically Explicit Investigation*, presented by Tiziana Susca
- 2013 Reconceiving Forest Governance: The Example of the German Forest, Mercator Research Institute on Global Commons and Climate Change, Presentation Title: *Forest and Modernity - an Anthropological View*
- 2013 Princeton Institute for International and Regional Studies, Commentator of *Climate Change Response Policies: Dealing with Risk and Uncertainty* by Howard Kunreuther and Elke Weber
- 2013 Princeton Institute for International and Regional Studies, Commentator of *Climate Change Uncertainty in Development Projects* by Stephane Hallegatte
- 2013 Impact World, Potsdam, Presentation Title: *Typology of Uncertainty in the Communication of Climate Change*
- 2013 Micro-Energy Systems, Technical University Berlin, Presentation Title: *Bioenergy and Livelihoods*
- 2013 The Radical Emission Reduction Conference, Tyndall Center, Poster Title: *The Behavioral Economics of Mobility*, presented by Linus Mattauch
- 2012 Applied Urban Modelling, CRASSH, University of Cambridge, Presentation Title: *Low-Carbon Transport Scenarios for European Cities*
- 2012 Better Air Quality, Hong Kong, Poster title: *A Congestion Charge for Beijing?*, presented by Maximilian Thess
- 2012 Planet under Pressure, London, Presentation Title: *Reconciling top-down and bottom-up modeling on future bioenergy deployment, and implications for a risk-based paradigm shift in climate change policy*
- 2012 Planet under Pressure, London, Presentation Title: *Low-carbon transport scenarios for European cities*
- 2011 SUME (Sustainable Urban Metabolism for Europe), Vienna, Presentation Title: *Sustainable Transport Scenarios for Europe*
- 2011 Working Group Transport of the DGfG (German Geographical Society), Presentation Title: *Evaluating E-Mobility as a Climate Mitigation Strategy for Europe*
- 2011 Strategies for Sustainable Mobilities, mobil.TUM, Technical University Munich, Presentation Title: *Operationalizing Sustainable Transport for Scenario Analysis*
- 2010 The Futures of the City: Towards Sustainable Urban Environment and Mobility, COST (European Cooperation in Science and Technology) Presentation Title: *Co-Benefits and Path Dependence in Sustainable Urban Transport*

- 2010 Transport Research Board, Washington, D.C., Poster title: *Hot Deal or Hot Air - Life-cycle Analysis of Pneumatic Cars*
- 2009 International Council for Science, Paris, Presentation Title: *Key Tenets of Sustainable Land Use Economics*
- 2009 Opening the Gates: A Critical Appraisal of China's Urban Development Practices, UC Berkeley, Presentation Title: *Motorization in Beijing*
- 2008 3rd Regional EST Forum, Singapore, Presentation Title: *External costs and congestion charging: a Beijing case study*
- 2007 7th Meeting of the German Neuroscience Society, 2007, Poster Title: *Time-Warp Invariant Pattern Recognition: How do Grasshoppers Solve the Problem?*
- 2006 NIPS 2006, Vancouver, Presentation Title: *Projecting the Past into the Future: the State Space of Dynamical Systems as an Information Bottleneck*
- 2006 **Featured talk**, CNS, Edinburgh, Presentation Title: *Time-Warp Invariant Stimulus Decoding in an Insect Auditory System?*
- 2006 Berlin Neuroscience Forum, Poster Title: *From Burst Encoding to Time-Warp Invariance*
- 2005 6th Meeting of the German Neuroscience Society, Göttingen 2005, Poster Title: *Burst Encoding in the Metathoracic Ganglion of Grasshoppers*