

Prof. Dr. Elmar Kriegler – Curriculum Vitae

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Born on 01.01.1971 in Düren, Germany



Prof. Dr. Elmar Kriegler is an internationally recognized researcher on integrated assessment of climate change and the use of scenarios in climate change research. He works on integrated assessment modeling, decision analysis, scenario analysis and economics of climate change. He is Head of the research department "Transformation Pathways" at the Potsdam Institute for Climate Impact Research, Lead Author of the Intergovernmental Panel on Climate Change (IPCC) and Professor for Integrated Assessment of Climate Change at the University of Potsdam. Elmar Kriegler has been named highly cited researcher in 2018, 2019 and 2020.

Work experience

Since 01 / 2021

Professor for Integrated Assessment of Climate Change

Faculty of Economics and Social Sciences, University of Potsdam

Since 01 / 2019

(Acting) Head Research Department III "Transformation Pathways"

Potsdam Institute for Climate Impact Research, Telegraphenberg A31, 14473 Potsdam

06 / 2010 – 12/2018

Deputy Chair Research Domain III "Sustainable Solutions"

Potsdam Institute for Climate Impact Research, Telegraphenberg A31, 14473 Potsdam

06 / 2009 - 05 / 2010

Senior Scientist

Potsdam Institute for Climate Impact Research, Telegraphenberg A31, 14473 Potsdam

06 / 2008 - 05 / 2009

Marie Curie Visiting Fellow

Potsdam Institute for Climate Impact Research, Telegraphenberg A31, 14473 Potsdam

06 / 2006 - 05 / 2008

Marie Curie Visiting Fellow

Department of Engineering and Public Policy, Carnegie Mellon University, Pittsburgh

08 / 2005 – 05 / 2006

Postdoctoral researcher

Potsdam Institute for Climate Impact Research, Telegraphenberg A31, 14473 Potsdam

Education

02 / 2000 – 07 / 2005

Doctoral Studies in Theoretical Physics

Department of Physics, University of Potsdam

Degree: Dr. rer. nat. (summa cum laude / with distinction)

Thesis title: Imprecise Probability Analysis for Integrated Assessment of Climate Change

Principal Advisor: Prof. Dr. H.J. Schellnhuber

09 / 1991 – 08 / 1995 and 07 / 1996 – 07 / 1998

Studies in Physics

Department of Physics, University of Freiburg

Degree: Diplom in Physics (M.Sc. equivalent)

09 / 1995 – 06 / 1996

Exchange Student in Physics

Department of Physics, University of Washington, Seattle

IPCC Authorship

2018-2022

Lead Author of the 6th Assessment Report of IPCC Working Group III

Chapter 3 "Mitigation pathways compatible with long-term goals"

2017-2018

Lead author of the IPCC Special Report on 1.5°C Warming

Chapter 2 "Mitigation Pathways compatible with 1.5°C in the context of sustainable development" and Summary for Policymakers

2010-2014

Lead author of the 5th Assessment Report of IPCC Working Group III

Chapter 6 "Assessing Transformation Pathways" and Annex II "Metrics and Methodology", Contributing Author to the Summary for Policy Makers and the Technical Summary

Board Memberships

Since 2010: Scientific Steering Committee of the Integrated Assessment Modeling Consortium (IAMC)

2010: Scientific Steering Committee Member of the IPCC Workshop on Socio-economic Scenarios (Berlin, Nov 2010)

Since 2012: Steering group of the International Committee on New Integrated Climate Change Assessment Scenarios (ICONICS)

Since 2013: Executive Committee Member / Co-Chair of the IAMC Scientific Working Group on Model Evaluation and Diagnostics

2014: Member of the Advisory Group for the Climate Engineering Conference 2014 (Berlin, August 2014)

2014-2015: Scientific Steering Committee Member of the IPCC Expert Meeting on Scenarios (Laxenburg, May 2015)

Since 2016: Scientific Steering Committee of the "The World in 2050" Initiative

Since 2016: Executive Board of the DFG Scientific Priority Programme on Climate Engineering

2018-2019: Scientific Steering Committee of the Scenarios Forum 2019 - Forum on scenarios and societal futures

Since 2019: Co-Chair of the IAMC Scientific Working Group on Scenarios for Climate-Related Financial Analysis

Since 2019: Executive Board of the Dialogue on the Economics of Climate Change, accompanying and supporting the BMBF funding measure Economics of Climate Change II

Awards

2020: Web of Science Highly Cited Researcher 2020 in the category Social Sciences by Clarivate Analytics

2019: Web of Science Highly Cited Researcher 2019 in the category Social Sciences by Clarivate Analytics

2018: Web of Science Highly Cited Researcher 2018 in the category Cross-Field by Clarivate Analytics

2014: EAERE Award for Outstanding Publication in Environmental and Resource Economics (ERE) for: M. G. W. Schmidt, H. Held, E. Kriegler, A. Lorenz (2013) Climate Policy Under Uncertain and Heterogeneous Climate Damages, Environmental and Resource Economics, Jan 2013, Vol 54, Issue 1, pp 79-99

2013: IAMC Award 2012 for outstanding achievements in the field of integrated assessment (Integrated Assessment Modeling Consortium)

06 / 2006 - 05 / 2009: Marie Curie Outgoing International Fellowship, European Union

02 / 2000 - 01 / 2003: Ph. D. scholarship, Deutsche Bundesstiftung Umwelt (German Federal Foundation of the Environment)

1995 / 96: Foreign exchange student travel grant, J. William Fulbright Foreign Scholarship Board

Guest Editorships

CD-LINKS Special Issue on Global and National Low Carbon Development Pathways, *Climatic Change*, 162, 1779–1785 Oct. 2020

RoSE Special Issue 'The Impact of Economic Growth and Fossil Fuel Availability on Climate Protection', *Climatic Change*, Vol. 136, Issue 1, May 2016

AMPERE Special Issue 'The AMPERE intermodel comparison on the economics of climate stabilization', *Technological Forecasting and Social Change*, Vol. 90, Part A, Jan 2015

EMF Special Issue 'The EMF27 Study on Global Technology and Climate Policy Strategies', *Climatic Change*, Vol. 123, Issue 3-4, Apr 2014

LIMITS Special Issue on 'Implementing Climate Policies in the Major Economies: An Assessment of Durban Platform Architectures - Results from the LIMITS Project', *Climate Change Economics*, Vol. 04/Issue 04, Nov 2013

Reviewer

Climatic Change, *Energy Economics*, *Energy Policy*, *Environmental Research Letters*, *Nature Climate Change*, *Nature Energy*, *Nature Communications*, *Proceedings of the National Academy of Sciences*, *Review of Environmental Economics and Policy*, *Science*

Publications

ORCID: 0000-0002-3307-2647

Web of Science ResearcherID[®] I-3048-2016

Publication Statistics based on Web of Science Core Collection (Status 19 Nov 2019)

Based on 90 journal articles and four chapters of the IPCC 5th Assessment Report out of 127 papers, reports and book chapters listed below; 7335 citations; Highest cited article: Lenton et al., 2008, PNAS – 1294 citations; 13 articles and 2 IPCC chapters with more than 100 citations; 31 articles and 3 IPCC chapters with more than 50 citations; **h-index: 39**

Publication Statistics based on Google Scholar (Status 19 Nov 2019)

<https://scholar.google.de/citations?user=jblphpMAAAAJ>

Based on 120 of 127 papers, reports, and book chapters listed below; 13710 citations; Highest cited article: Lenton et al., 2008, PNAS – 2701 citations; 32 items with more than 100 citations; 55 items with more than 50 citations; **h-index: 52**

Highly cited articles and chapters with 50 or more citations based on Web of Science Core Collection are highlighted below.

Journal Articles (peer reviewed)

2021

- A. Giannousakis, J. Hilaire, G.F. Nemet, G. Luderer, R.C. Pietzcker, R. Dias Bleasby Rodrigues, L. Baumstark & **E. Kriegler** (2021) How uncertainty in technology costs and carbon dioxide removal availability affect climate mitigation pathways. *Energy*, 216: 119253. doi:10.1016/j.energy.2020.119253.

2020 (9)

- N. Bauer, D. Klein, F. Humpenöder, **E. Kriegler**, G. Luderer, A. Popp & J. Strefler (2020) Bio-energy and CO₂ emission reductions: an integrated land-use and energy sector perspective. *Climatic Change*, 163(3), 1675-1693. doi:10.1007/s10584-020-02895-z.
- N. Bauer, C. Bertram, A. Schultes, D. Klein, G. Luderer, **E. Kriegler**, A. Popp & O. Edenhofer (2020) Quantification of an efficiency–sovereignty trade-off in climate policy. *Nature*, 588(7837), 261-266. doi:10.1038/s41586-020-2982-5.
- B.C. O'Neill, T.R. Carter, K. Ebi, P.A. Harrison, E. Kemp-Benedict, K. Kok, **E. Kriegler**, B.L. Preston, K. Riahi, J. Sillmann, B.J. van Ruijven, D.P. van Vuuren, D. Carlisle, C. Conde, J.S. Fuglestedt, C. Green, T. Hasegawa, J. Leininger, S. Monteith & R. Pichs-Madruga (2020) Achievements and needs for the climate change scenario framework. *Nature Climate Change*, 10(12), 1074-1084. doi:10.1038/s41558-020-00952-0.
- Z.R.J. Nicholls, M. Meinshausen, J. Lewis, R. Gieseke, D. Dommenges, K. Dorheim, C.-S. Fan, J.S. Fuglestedt, T. Gasser, U. Golüke, P. Goodwin, C. Hartin, A.P. Hope, **E. Kriegler**, N.J. Leach, D. Marchegiani, L.A. McBride, Y. Quilcaille, J. Rogelj R.J. Salawitch, B.H. Samset, M. Sandstad, A.N. Shiklomanov, R.B. Skeie, C.J. Smith, S. Smith, K. Tanaka, J. Tsutsui & Z. Xie (2020) Reduced Complexity Model Intercomparison Project Phase 1: introduction and evaluation of global-mean temperature response. *Geoscientific Model Development*, 13(11), 5175-5190. doi:10.5194/gmd-13-5175-2020.
- R. Schaeffer, A. Köberle, H.L. van Soest, C. Bertram, G. Luderer, K. Riahi, V. Krey, D.P. van Vuuren, **E. Kriegler**, S. Fujimori, W. Chen, C. He, Z. Vrontisi, S. Vishwanathan, A. Garg, R. Mathur, S. Shekhar, K. Oshiro, F. Ueckerdt, G. Safonov, G. Iyer, K. Gi & V. Potashnikov (2020) Comparing transformation pathways across major economies. *Climatic Change*, 162(4), 1787-1803. doi:10.1007/s10584-020-02837-9.
- A. Giannousakis, L. Baumstark & **E. Kriegler** (2020) En route to China's mid-century climate goal: comparison of emissions intensity versus absolute targets. *Climate Policy*, 20(10), 1274-1289. doi:10.1080/14693062.2020.1798734.
- A. Malik, C. Bertram, J. Després, J. Emmerling, S. Fujimori, A. Garg, **E. Kriegler**, G. Luderer, R. Mathur, M. Roelfsema, S. Shekhar, S. Vishwanathan & Z. Vrontisi (2020) Reducing stranded assets through early action in the Indian power sector. *Environmental Research Letters*, 15(9): 094091. doi:10.1088/1748-9326/ab8033.
- H. Wang, W. Chen, C. Bertram, A. Malik, **E. Kriegler**, G. Luderer, J. Després, K. Jiang & V. Krey (2020) Early transformation of the Chinese power sector to avoid additional coal lock-in. *Environmental Research Letters*, 15(2): 024007. doi:10.1088/1748-9326/ab5d99.

M. Roelfsema, H.L. van Soest, M. Harmsen, D.P. van Vuuren, C. Bertram, M. den Elzen, N. Höhne, G. Iacobuta, V. Krey, **E. Kriegler**, G. Luderer, K. Riahi, F. Ueckerdt, J. Després, L. Drouet, J. Emmerling, S. Frank, O. Fricko, M. Gidden, F. Humpenöder, D. Huppmann, S. Fujimori, K. Fragkiadakis, K. Gi, K. Keramidas, A.C. Köberle, L. Aleluia Reis, P. Rochedo, R. Schaeffer, K. Oshiro, Z. Vrontisi, W. Chen, G.C. Iyer, J. Edmonds, M. Kannavou, K. Jiang, R. Mathur, G. Safonov & S.S. Vishwanathan (2020) Taking stock of national climate policies to evaluate implementation of the Paris Agreement. *Nature Communications*, 11: 2096. doi:10.1038/s41467-020-15414-6.

2019 (5)

M. Hofmann, S. Mathesius, **E. Kriegler**, D.P. van Vuuren, H.J. Schellnhuber (2019) Strong time dependence of ocean acidification mitigation by atmospheric carbon dioxide removal. *Nature Communications*, in press. doi: 10.1038/s41467-019-13586-4

J. Rogelj, P.M. Forster, **E. Kriegler**, C.J. Smith, R. Sférian, (2019) Estimating and tracking the remaining carbon budget for stringent climate targets. *Nature*, 571, 7765, 335-342 p. doi: 10.1038/s41586-019-1368-z

M. J. Gidden, K. Riahi, S. Smith, S. Fujimori, G. Luderer, **E. Kriegler**, D.P. van Vuuren, M. van den Berg, L. Feng, D. Klein, D.K. Calvin, J.C. Doelman, S. Frank, O. Fricko, M. Harmsen, T. Hasegawa, P. Havlik, J. Hilaire, R. Hoesly, J. Horing, A. Popp, E. Stehfest, K. Takahashi (2019) Global emissions pathways under different socioeconomic scenarios for use in CMIP6: a dataset of harmonized emissions trajectories through the end of the century. *Geoscientific Model Development*, 12(4): 1443-1475. doi: 10.5194/gmd-12-1443-2019

V. Krey, F. Guo, P. Kolp, W. Zhou, R. Schaeffer, A. Awasthy, C. Bertram, H. Sytze de Boer, P. Fragkos, S. Fujimori, C. He, G. Iyer, K. Keramidas, A.C. Köberle, K. Oshiro, L.A. Reis, B. Shoai-Tehrani, S. Vishwanathan, P. Capros, L. Drouet, J. E. Edmonds, A. Garg, D.E.H.J. Gernaat, K. Jiang, M. Kannavou, A. Kitous, **E. Kriegler**, G. Luderer, R. Mathur, M. Muratori, F. Sano, D.P. van Vuuren (2019) Looking under the hood: A comparison of techno-economic assumptions across national and global integrated assessment models. *Energy* 172: 1254-1267. doi: 10.1016/j.energy.2018.12.131

F. Piontek, M. Kalkuhl, **E. Kriegler**, A. Schultes, M. Leimbach, O. Edenhofer, N. Bauer (2019), Economic growth effects of alternative climate change impact channels in economic modelling. *Environmental and Resource Economics* 73(4). doi: 10.1007/s10640-018-00306-7

2018 (13)

J. Rogelj, A. Popp, K. V. Calvin, G. Luderer, J. Emmerling, D. Gernaat, S. Fujimori, J. Strefler, T. Hasegawa, G. Marangoni, V. Krey, **E. Kriegler**, K. Riahi, D. P. van Vuuren, J. Doelman, L. Drouet, J. Edmonds, O. Fricko, M. Harmsen, P. Havlik, F. Humpenöder, E. Stehfest and M. Tavoni (2018) Scenarios towards limiting global mean temperature increase below 1.5 °C. *Nature Climate Change* 8: 325–332. doi: 10.1038/s41558-018-0091-3. [highly cited: 87 citations in WoS]

D. Huppmann, J. Rogelj, **E. Kriegler**, V. Krey, K. Riahi (2018) A new scenario resource for integrated 1.5 °C research. *Nature Climate Change* 8: 1027-1030. doi: 10.1038/s41558-018-0317-4

J. Strefler, N. Bauer, **E. Kriegler**, A. Popp, A. Giannousakis, O. Edenhofer (2018) Between Scylla and Charybdis: Delayed mitigation narrows the passage between large-scale CDR and high costs. *Environmental Research Letters* 13: 044015. doi: 10.1088/1748-9326/aab2ba

D.L. McCollum, W. Zhou, C. Bertram, H.-S. de Boer, V. Bosetti, S. Busch, J. Deprés, L. Drouet, J. Emmerling, M. Fay, O. Fricko, S. Fujimori, M. Gidden, M. Harmsen, D. Huppmann, G. Iyer, V. Krey, **E. Kriegler**, C. Nicolas, S. Pachauri, S. Parkinson, M. Poblete-Cazenave, P. Rafaj, N. Rao, J. Rozenberg, A. Schmitz, W. Schoepp, D.P. van Vuuren, K. Riahi (OA February 2019) Energy investment needs for fulfilling the Paris Agreement and achieving the Sustainable Development Goals. *Nature Energy* 3, 7: 589-599. doi: 10.1038/s41560-018-0179-z

Z. Vrontisi, G. Luderer, B. Saveyn, K. Keramidas, A. Reis Lara, L. Baumstark, C. Bertram, H. Sytze de Boer, L. Drouet, K. Fragkiadakis, O. Fricko, S. Fujimori, C. Guivarch, A. Kitous, V. Krey, **E. Kriegler**, E. Ó Broin, L. Paroussos, D. P. van Vuuren (2018) Enhancing global climate policy ambition towards a 1.5 °C stabilization: a short-term multi-model assessment. *Environmental Research Letters* 13: 044039. doi: 10.1088/1748-9326/aab53e

J. Fuglestedt, J. Rogelj, R. J. Millar, M. Allen, O. Boucher, M. Cain, P.M. Forster, **E. Kriegler**, D. Shindell (2018) Implications of possible interpretations of 'greenhouse gas balance' in the Paris Agreement. *Philosophical Transactions of the Royal Society A - Mathematical, Physical and Engineering Sciences*: 376. doi: 10.1098/rsta.2016.0445

C. Weber, D.L. McCollum, J. Edmonds, P. Faria, A. Pyanet, J. Rogelj, M. Tavoni, J. Thoma, **E. Kriegler** (2018) Mitigation scenarios must cater to new users [Comment]. *Nature Climate Change* 8, 10: 845-848. doi: 10.1038/s41558-018-0293-8

- A. Schultes, M. Leimbach, G. Luderer, R.C. Pietzker, L. Baumstark, N. Bauer, **E. Kriegler**, O. Edenhofer (OA Januar 2019) Optimal international technology cooperation for the low-carbon transformation. *Climate Policy* 18, 9: 1165-1176. doi: 10.1080/14693062.2017.1409190
- E. Kriegler**, G. Luderer, N. Bauer, L. Baumstark, S. Fujimori, A. Popp, J. Rogelj, J. Strefler, D.P. van Vuuren (2018) Pathways limiting warming to 1.5°C: a tale of turning around in no time? *Philosophical Transactions of the Royal Society A - Mathematical, Physical and Engineering Sciences*: 376. doi: 10.1098/rsta.2016.0457
- J. Strefler, T. Amann, N. Bauer, **E. Kriegler**, J. Hartmann (2018) Potential and costs of carbon dioxide removal by enhanced weathering of rocks. *Environmental Research Letters* 13: 034010. doi: 10.1088/1748-9326/aaa9c4
- G. Luderer, Z. Vrontisi, C. Bertram, O.Y. Edelenbosch, R. C. Pietzcker, J. Rogelj, H. Sytze De Boer, L. Drouet, J. Emmerling, O. Fricko, S. Fujimori, P. Havlik, G. Iyer, K. Keramidas, A. Kitous, M. Pehl, V. Krey, K. Riahi, B. Saveyn, M. Tavoni, D.P. van Vuuren, **E. Kriegler** (2018) Residual fossil CO₂ emissions in 1.5-2 °C pathways. *Nature Climate Change* 8, 7: 626-633. doi: 10.1038/s41558-018-0198-6
- E. Kriegler**, C. Bertram, T. Kuramochi, M. Jakob, M. Pehl, M. Stevanovic, N. Höhne, G. Luderer, J.C. Minx, H. Fekete, J. Hilaire, L. Luna, A. Popp, J.C. Steckel, S. Sterl, A. Yalaw, J.P. Dietrich, O. Edenhofer (2018) Short term policies to keep the door open for Paris climate goals. *Environmental Research Letters* 13: 074022. doi: 10.1088/1748-9326/aac4f1
- C. Bertram, G. Luderer, A. Popp, J.C. Minx, W.F. Lamb, M. Stevanovic, F. Humpenöder, A. Giannousakis, **E. Kriegler** (2018) Targeted policies can compensate most of the increased sustainability risks in 1.5 °C mitigation scenarios. *Environmental Research Letters* 13: 064038. doi: 10.1088/1748-9326/aac3ec

2017 (7)

- D.P. van Vuuren, K. Riahi, K. Calvin, R. Dellink, J. Emmerling, S. Fujimori, S. KC, **E. Kriegler**, B. O'Neill (2017) The Shared Socio-economic Pathways: Trajectories for human development and global environmental change. *Global Environmental Change* 42: 148-152. doi: 10.1016/j.gloenvcha.2016.10.009
- K. Riahi, D.P. van Vuuren, **E. Kriegler**, J. Edmonds, B. O'Neill, S. Fujimori, N. Bauer, K. Calvin, R. Dellink, O. Fricko, W. Lutz, A. Popp, J. Crespo Cuaresma, S. KC, M. Leimbach, L. Jiang, T. Kram, S. Rao, J. Emmerling, K. Ebi, T. Hasegawa, P. Havlik, F. Humpenöder, L. Aleluia Da Silva, S. Smith, E. Stehfest, V. Bosetti, J. Eom, D. Gernaat, T. Masui, J. Rogelj, J. Strefler, L. Drouet, V. Krey, G. Luderer, M. Harmsen, K. Takahashi, L. Baumstark, J. Doelman, M. Kainuma, Z. Klimont, G. Marangoni, H. Lotze-Campen, M. Obersteiner, A. Tabeau, M. Tavoni (2017) The Shared Socioeconomic Pathways and their Energy, Land Use, and Greenhouse Gas Emissions Implications: An Overview. *Global Environmental Change* 42: 153-168. doi: 10.1016/j.gloenvcha.2016.05.009. [highly cited; 321 citations in WoS]
- E. Kriegler**, N. Bauer, A. Popp, F. Humpenöder, M. Leimbach, J. Strefler, L. Baumstark, B. Bodirsky, J. Hilaire, D. Klein, I. Mouratiadou, I. Weindl, C. Bertram, J.-P. Dietrich, G. Luderer, M. Pehl, R. Pietzcker, F. Piontek, H. Lotze-Campen, A. Biewald, M. Bonsch, A. Giannousakis, U. Kreidenweis, C. Müller, S. Rolinski, A. Schultes, J. Schwanitz, M. Stevanovic, K. Calvin, J. Emmerling, S. Fujimori, O. Edenhofer (2017) Fossil-fueled development (SSP5): an energy and resource intensive scenario for the 21st century. *Global Environmental Change* 42: 297-315. doi: 10.1016/j.gloenvcha.2016.05.015. [highly cited; 72 citations in WoS]
- N. Bauer, K. Calvin, J. Emmerling, O. Fricko, S. Fujimori, J. Hilaire, J. Eom, V. Krey, **E. Kriegler**, I. Mouratiadou, H.S. de Boer, M. van den Berg, S. Carrara, V. Daigolou, L. Drouet, J. Edmonds, D. Gernaat, P. Havlik, N. Johnson, D. Klein, P. Kyle, G. Marangoni, T. Masui, R.C. Pietzcker, M. Strubegger, M. Wise, K. Riahi, D.P. van Vuuren (2017) Shared socio-economic pathways of the energy sector - quantifying the narratives. *Global Environmental Change* 42: 316-330. doi: 10.1016/j.gloenvcha.2016.07.006. [highly cited; 51 citations in WoS]
- A. Popp, K. Calvin, S. Fujimori, P. Havlik, F. Humpenöder, E. Stehfest, B.L. Bodirsky, J.P. Dietrich, J.C. Doelmann, M. Gusti, T. Hasegawa, P. Kyle, M. Obersteiner, A. Tabeau, K. Takahashi, H. Valin, S. Waldhoff, I. Weindl, M. Wise, **E. Kriegler**, H. Lotze-Campen, O. Fricko, K. Riahi, D.P. van Vuuren (2017) Land-use futures in the shared socio-economic pathways. *Global Environmental Change* 42: 331-345. doi: 10.1016/j.gloenvcha.2016.10.002. [highly cited; 130 citations in WoS]
- B.C. O'Neill, **E. Kriegler**, K.L. Ebi, E. Kemp-Benedict, K. Riahi, D.S. Rothman, B.J. van Ruijven, D.P. van Vuuren, J. Birkmann, K. Kok, M. Levy, W. Solecki (2017) The roads ahead: Narratives for shared socioeconomic pathways describing world futures in the 21st century. *Global Environmental Change* 42: 169-180. doi: 10.1016/j.gloenvcha.2015.01.004. [highly cited; 138 citations in WoS]
- M. Leimbach, **E. Kriegler**, N. Roming, J. Schwanitz (2017) Future growth patterns of world regions – A GDP scenario approach. *Global Environmental Change* 42: 215-225. doi: 10.1016/j.gloenvcha.2015.02.005

2016 (12)

- E. Kriegler**, I. Mouratiadou, G. Luderer, J. Edmonds, O. Edenhofer (2016) Introduction to the RoSE special issue on the impact of economic growth and fossil fuel availability on climate protection. *Climatic Change* 136: 1–6. doi: 10.1007/s10584-016-1667-4
- E. Kriegler**, I. Mouratiadou, G. Luderer, N. Bauer, R.J. Brecha, K. Calvin, E.D. Cian, J. Edmonds, K. Jiang, M. Tavoni, O. Edenhofer (2016) Will economic growth and fossil fuel scarcity help or hinder climate stabilization? *Climatic Change* 136: 7–22. doi: 10.1007/s10584-016-1668-3
- I. Mouratiadou, G. Luderer, N. Bauer, **E. Kriegler** (2016) Emissions and their drivers: sensitivity to economic growth and fossil fuel availability across world regions. *Climatic Change* 136: 23–37. doi: 10.1007/s10584-015-1368-4
- N. Bauer, I. Mouratiadou, G. Luderer, L. Baumstark, R.J. Brecha, O. Edenhofer, **E. Kriegler** (2016) Global fossil energy markets and climate change mitigation – an analysis with REMIND. *Climatic Change* 136: 69–82. doi: 10.1007/s10584-013-0901-6
- G. Luderer, C. Bertram, K. Calvin, E.D. Cian, **E. Kriegler** (2016) Implications of weak near-term climate policies on long-term mitigation pathways. *Climatic Change* 136: 127–140. doi: 10.1007/s10584-013-0899-9
- N. Bauer, J. Hilaire, R.J. Brecha, J. Edmonds, K. Jiang, **E. Kriegler**, H-H. Rogner, F. Sferra (2016) Assessing global fossil fuel availability in a scenario framework. *Energy* 111: 580-592. doi: 10.1016/j.energy.2016.05.088
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