

PUBLICATIONS

RESEARCH INTERESTS AND ACADEMIC IMPACT

Energy economics and policy, climate change economics, international environmental agreements, behavioural economics, computable general equilibrium modelling

Google Scholar: 9825 citations, h-Index = 50 (4.10.2023)

Scopus: 4123 citations, h-Index = 34, 115 papers (4.10.2023)

More than 90 articles in (Social) Sciences Citation Index Journals, e.g., *Canadian Journal of Economics*, *Ecological Economics*, *Economica*, *Economics Letters*, *Energy Research and Social Sciences*, *Energy Economics*, *Environmental and Resource Economics*, *Environmental Research Letters*, *European Economic Review*, *Journal of Environmental Economics and Management*, *Journal of Economic Dynamics and Control*, *Journal of Public Economics*, *Land Economics*, *Nature Climate Change*, *Nature Energy*, *Nature Geoscience* or *Proceedings of the National Academy of Sciences (PNAS)*

EDITORSHIPS OF JOURNALS

since 2019 Member of the Editorial Board "**Energy and Climate Change**"

since 2019 Member of the Editorial Board "**Perspektiven der Wirtschaftspolitik**" (Perspectives in Economic Policy) published by the association of German economists

since 2018 Associate Editor of the Journal "**Resource and Energy Economics**"

since 2017 Member of the Editorial Board of the Journal "**The Energy Journal**"

since 2016 Member of the Editorial Board of the Journal "**Climate Policy**"

Editor of Special Issues of the Journals **Applied Energy** (2021), **Resources, Conservation & Recycling** (2021), **Energy and Buildings** (2021), **Applied Energy** (2020), **China Economic Review** (2020), **Resource and Energy Economics** (2019), **Energy Economics** (2019), **Economics of Energy & Environmental Policy** (2019), **Energy Economics** (2017), **Energy Economics** (2015), **Energy Policy** (2014), **Economica** (2014), **Energy Policy** (2010)

TEN REPRESENTATIVE JOURNAL ARTICLES

Can self-set goals encourage resource conservation? Field experimental evidence from a smartphone app (with M. Rodemeier and M. Werthschulte), **European Economic Review**, conditionally accepted.

A multi-country meta-analysis on the role of behavioral change in reducing energy consumption and CO₂ emissions in residential buildings (with T. Khanna, G. Baiocchi, M. Callaghan, F. Creutzig, H. Guias, N. Haddaway, L. Hirth, A. Javaid, N. Koch, S. Laukemper, M. Del Mar Zamora and J. Minx), **Nature Energy**, 6, 925–932, 2021.

On the role of present bias and biased price beliefs in household energy consumption (with M. Werthschulte), **Journal of Environmental Economics and Management (JEEM)**, 109, 102500, 2021.

The Impacts of the EU ETS on Efficiency - An Empirical Analyses for German Manufacturing Firms (with B. Lutz and S. Managi), **Resource and Energy Economics**, 56, 71-95, 2019.

On the Effects of Unilateral Environmental Policy on Offshoring in Multi-Stage Production Processes (with O. Schenker and S. Koesler), **Canadian Journal of Economics**, 51(4), 2018.

The long-term impact of matching and rebate subsidies when public goods are impure: Field experimental evidence from the carbon offsetting market (with M. Kesternich & D. Römer), **Journal of Public Economics**, 137, 70-78, 2016.

The Demand for Climate Protection - Empirical Evidence from Germany (with B. Sturm and C. Vogt), **Economics Letters**, 118(3), 415–418, 2013.

Inequality, communication, and the avoidance of disastrous climate change in a public goods game (with A. Tavoni, A. Dannenberg and G. Kallis), **Proceedings of the National Academy of Sciences (PNAS)**, 108(29), 11825-11829, 2011.

On the Self-interested Use of Equity in International Climate Negotiations (with A. Lange, C. Vogt and A. Ziegler), **European Economic Review**, 54(3), 359-375, 2010.

Decomposing Integrated Assessment of Climate Change: Methodology and Sample Application (with C. Böhringer and T. F. Rutherford), **Journal of Economic Dynamics and Control**, 31(2), 683-702, 2007.

1. Can self-set goals encourage resource conservation? Field experimental evidence from a smartphone app (with M. Rodemeier and M. Werthschulte), **European Economic Review**, conditionally accepted.
2. Municipal building codes and the adoption of solar photovoltaics (with S. Carattini, B. Figge and Z. Gordon), **Journal of Environmental Economics and Management (JEEM)**, conditionally accepted.
3. Oil price crises, gas price crises, climate crises, Editorial, **Gaia**, forthcoming.
4. Digital technology and energy sustainability: Recent advances, challenges, and opportunities (with C. Wei, C.-Z. Li, S. Managi and T. Lundgren), **Resources, Conservation and Recycling** 190, 106803, 2023.
5. Can a Catholic Institution Promote Sustainable Behavior? Field Experimental Evidence on Donations for Climate Protection (with M. Gleue and C. Feldhaus), **Journal of Behavioral and Experimental Economics**, 98, 101855, 2022.
6. Encouraging consumer activity through automatic switching of the electricity contract - A field experiment (with C. Feldhaus, J. Lingens, G. Zunker), **Energy Policy**, 164, 112855, 2022.
7. Patterns and determinants of carbon emission flows along the Belt and Road from 2005 to 2030 (with Y. Yang, H. Wang und P Zhou), **Ecological Economics**, 192, 107260, 2022.
8. What motivates smart meter adoption? Evidence from an experimental advertising campaign in Germany (with S. Berger, F. Ehering, C. Feldhaus and A. Wyss), **Energy Research & Social Science**, 85, 102357, 2022.
9. Recent advances in energy demand for residential space heating (with C. Wei and Y. Huang), **Energy and Buildings**, 261, 111965, 2022.
10. On the role of present bias and biased price beliefs in household energy consumption (with M. Werthschulte), **Journal of Environmental Economics and Management (JEEM)**, 109, 102500, 2021.
11. A multi-country meta-analysis on the role of behavioral change in reducing energy consumption and CO2 emissions in residential buildings (with T. Khanna, G. Baiocchi, M. Callaghan, F. Creutzig, H. Guias, N. Haddaway, L. Hirth, A. Javaid, N. Koch, S. Laukemper, M. Del Mar Zamora and J. Minx), **Nature Energy**, 6, 925–932, 2021.
12. The demand for global and local environmental protection – experimental evidence from climate change mitigation in Beijing (with B. Sturm, J. Pei, W. Ran, W. Buchholz and Z. Zhao), **Land Economics**, 97, 137-154, 2021.
13. Does demand-side flexibility reduce emissions? Exploring the social acceptability of demand management in Germany and Great Britain (with P. Grunewald, M. Gleue and J. Unterberg), **Energy Research & Social Science**, 82, 102290, 2021.
14. The changing role of global value chains in decoupling economic growth from CO2 emissions in 2000-2014 (with D. Zhang, H. Wang and P. Zhou), **Energy Economics**, 93, 105053, 2021.
15. Coal Transitions-Part 1: A systematic map and review of case study learnings from regional, national, and local coal phase-out experiences (with F. Diluiso, P. Walk, N. Manych, N. Cerutti V. Chipiga, A. Workman, C. Ayas, R. Cui, D. Cui, K. Song, L. Banisch, N. Moretti, M. Callaghan, L. Clarke, F. Creutzig, J. Hilaire, F. Jotzo, M. Kalkuhl, W. Lamb, F. Müller-Hansen, G. Nemet, P.-Y. Oei, B. Sovacool, J. Steckel, S. Thomas, J. Wiseman, J. Minx), **Environmental Research Letters**, 16 (11), 1003003, 2021.
16. Managing momentum in climate negotiations (with S Carattini), **Environmental Research Letters**, 16 (5), 051001, 2021.
17. Negotiating Weights for Burden Sharing Rules in International Climate Negotiations: An Empirical Analysis (with M. Kesternich and A. Ziegler), **Environmental Economics and Policy Studies**, 23(4), 309-331, 2021.
18. The future of coal in a carbon-constrained climate (with M. Jakob, C. Steckel, F. Jotzo, B. Sovacool, L. Cornelsen, R. Chandra, O. Edenhofer, C. Holden, T. Nace, N. Robins, J. Suedekum and J. Urpelainen), **Nature Climate Change**, 10, 704–707, 2020.
19. The rebound effect representation in climate and energy models (with G. Colmenares and R. Madlener), **Environmental Research Letters**, 15, 123010, 2020.
20. Emissions trading systems for global low carbon energy and economic transformation – Editorial (with X. Zhang, J. Lewis, D. Zhang and J. Yang), **Applied Energy**, DOI 10.1016/j.apenergy.2020.115858, 2020.
21. Recent advances in energy demand research in China (with C. Wei and S. Managi), **China Economic Review**, 63, 1-6, 2020.
22. Low-carbon Transitions: Economics and Policy– Editorial (with C. de Miguel, M. Filippini, X. Labandeira and J. Labeaga), **Energy Economics**, 84 (Suppl. 1), 1-3 (2019)
23. Conditional cooperation in the case of a global public good - experimental evidence from climate change mitigation in Beijing (with W. Ran, J. Pei, B. Sturm and Z. Zhao), **China Economic Review**, 56, 101308 (2019).
24. Do voluntary environmental programs reduce emissions? EMAS in the German manufacturing sector (with R. Kube, K.v. Graevenitz and P. Massier), **Energy Economics**, 84, 1-12 (2019).
25. Interdisciplinary synthesis report on the coal phaseout. The Kopernikus project ENavi informs the German coal commission (with M. Pahle et al.), **GAIA**, 28(1), 61-62, 2019.
26. Facing the Energy Transition - An Introduction (with M.T. Costa-Campi and E. Trujillo-Baute), **Economics of Energy & Environmental Policy**, 8(2), 1-6, 2019.

27. The European Union energy transition: key priorities for the next five years (with S. Tagliapietra, G. Zachmann, O. Edenhofer, J.M. Glachant and P. Linares), **Energy Policy**, 132, 950-954, 2019.
28. The Impacts of the EU ETS on Efficiency - An Empirical Analyses for German Manufacturing Firms (with B. Lutz and S. Managi), **Resource and Energy Economics**, 56, 71-95, 2019.
29. Recent Advances in Energy Demand Analysis – Insights for Industry and Households (with S. Managi), **Resource and Energy Economics**, 56, 1-5, 2019.
30. Processing trade, foreign outsourcing and carbon emissions in China (with J. Pei, J. Xue, G. Peters, Z. Zhao and Q. Chen), **Structural Change and Economic Dynamics**, 49, 1-12, 2019.
31. The Impact of a Feed-In Tariff on Wind Power Development in Germany (with C. Hitaj), **Resource and Energy Economics**, 57, 18-35, 2019.
32. Research trends in environmental and resource economics: Insights from four decades of JEEM (with R. Kube, H. Mertens and T. Requate), **Journal of Environmental Economics and Management**, 92, 433-464, 2018.
33. Reducing CO2 from Cars in the European Union (with S. Paltsev, Y.-H. Chen, V. Karplus, P. Kishimoto, J. Reilly, K. von Graevenitz and S. Koesler), **Transportation**, 45(2), 573-595, 2018.
34. China's emissions trading takes steps toward big ambitions (with F. Jotzo, V. Karplus, M. Grubb, K. Neuhoff, L. Wu, F. Teng), **Nature Climate Change**, 8(4), 265-267, 2018.
35. On the Effects of Unilateral Environmental Policy on Offshoring in Multi-Stage Production Processes (with O. Schenker and S. Koesler), **Canadian Journal of Economics**, 51(4), 2018.
36. Establishing an expert advisory commission to assist the G20's energy transformation processes (with P. Großkurth et al.), **Economics E-Journal**, 12, 1–12, 2018.
37. Define limits for temperature overshoot targets (with O. Geden), **Nature Geoscience**, 10, 881-882, 2017.
38. The Effect of Globalisation on Energy Footprints: Disentangling the Links of Global Value Chains (with O. Kaltenecker and F. Pothen), **Energy Economics**, 68(S1), 148-168, 2017.
39. Informing the Transitions towards Low-carbon Societies – Editorial, **Energy Economics** (with C. de Miguel, M. Filippini and X. Labandeira), 68 (Suppl. 1), 1-3, 2017.
40. Casting Light on Energy Efficiency — Evidence on Consumer Inattention and Imperfect Information (mit M. Rodemeier and R. Kube), **Applied Economics Letters**, 24(21), 1575–1587, 2017.
41. Improving Voluntary Public Good Provision through a Non-Governmental, Endogenous Matching Mechanism: Experimental Evidence" (with C. Reif and D. Rübbelke), **Environmental and Resource Economics**, 67, 559–589, 2017.
42. Revealed preferences for voluntary climate change mitigation when the purely individual perspective is relaxed – evidence from a framed field experiment (with B. Sturm and R. Uehleke), **Journal of Behavioral and Experimental Economics**, 67, 149-160, 2017.
43. Energy Costs in Germany and Europe: An Assessment Based on a (Total Real Unit) Energy Cost Accounting Framework (with O. Kaltenecker, M. Baikowski and J. Lingens), **Energy Policy**, 104, 419-430, 2017.
44. The long-term impact of matching and rebate subsidies when public goods are impure: Field experimental evidence from carbon offsetting market (with M. Kesternich and D. Römer), **Journal of Public Economics**, 137, 70-78, 2016.
45. Pro-Environmental Households and Energy Efficiency in Spain (with A. Ramos and X. Labandeira), **Environmental and Resource Economics**, 63, 367–393, 2016.
46. Peeling the onion: Analyzing aggregate, national and sectoral energy intensity in the European Union (with F. Pothen and M. Schymura), **Energy Economics** 52 (Suppl. 1), S63-S75, 2015.
47. Frontiers in the economics of energy efficiency (with C. de Miguel and X. Labandeira), **Energy Economics** 52 (Suppl. 1), S1-S4, 2015.
48. Do Chinese individuals believe in climate change and why? An econometric analysis (with J. Dai, M. Kesternich and A. Ziegler), **Ecological Economics** 116, 310-321, 2015.
49. Invention in Energy Technologies: Comparing Energy Efficiency and Renewable Energy Inventions at the Firm Level, (with S. Rexhäuser), **Energy Policy** 83, 206-217, 2015.
50. On the Provision of Public Goods with Probabilistic and Ambiguous Thresholds (with A. Dannenberg, G. Paolacci, C. Reif and A. Tavoni), **Environmental and Resource Economics**, 61(3), 365-383, 2015.
51. Energy-saving and emission-abatement potential of Chinese coal-fired power enterprise: a non-parametric analysis (with C. Wei and B. Liu), **Energy Economics**, **Energy Economics** 49, 33–43, 2015
52. Emissions trading in China: emerging experiences & international lessons (with F. Jotzo), **Energy Policy**, 2014.
53. Designing an EU Energy and Climate Policy Portfolio for 2030: Implications of Overlapping Regulation under Different Levels of Electricity Demand (with F. Flues, B. Lutz and O. Schenker), **Energy Policy** 75, 91-99, 2014
54. Designing an Emissions Trading Scheme for China - An Up-to-date Climate Policy Assessment (with M. Hübler and S. Voigt), **Energy Policy** 75, 57-72, 2014.
55. The voluntary provision of international public goods – an overview (with D. Rübbelke), **Economica**, 81(322), 195-204, 2014.

56. The New IPCC Scenarios: What Does the Two-Degree Target Cost? - Die neuen Szenarien des IPCC: Was kostet das Zwei-Grad-Ziel?, **GAIA** 23/2, 73, 2014.
57. Incidence and Extent of Co-Authorship in Environmental and Resource Economics: Evidence from the Journal of Environmental Economics and Management (with M. Schymura), **Scientometrics**, 99, 631-661, 2014.
58. Did Fukushima Matter? Empirical Evidence of the Demand for Climate Protection in Germany (with C. Gallier and B. Sturm), **Applied Economics Letters**, 21(12), 846-851, 2014.
59. An empirical analysis of the CO₂ shadow price in Chinese thermal power enterprises (with C. Wei and B. Liu), **Energy Economics**, 40, 22-31, 2013.
60. The Demand for Climate Protection - Empirical Evidence from Germany (with B. Sturm and C. Vogt), **Economics Letters**, 415-418, 2013.
61. The EU decarbonisation roadmap 2050: What way to walk? (with M. Hübler), **Energy Policy**, 55, 190-207, 2013.
62. A new robustness analysis for climate policy evaluations: A CGE Application for the EU 2020 Targets (with C. Hermeling and T. Mennel), **Energy Policy**, 55, 27-35, 2013.
63. The Value-Added of Sectoral Disaggregation: Implications on Competitive Consequences of Climate Change Policies (with V. Alexeeva, C. Böhringer and Sebastian Voigt), **Energy Economics**, S127-S142, 2012.
64. Inequality, Communication and the Avoidance of Disastrous Climate Change (with A. Tavoni, A. Dannenberg and G. Kallis), **Proceedings of the National Academy of Sciences (PNAS)**, 108(29), 11825-11829, 2011.
65. On the Self-interested Use of Equity in International Climate Negotiations (with Andreas Lange, Carsten Vogt and Andreas Ziegler), **European Economic Review**, 54(3), 359-375, 2010
66. Auctioning of CO₂ Emission Allowances in Phase 3 of the EU Emissions Trading Scheme (with E. Benz and B. Sturm), **Climate Policy**, 10 (2010), 705-718.
67. Paying the Piper and Calling the Tune? A Meta-Regression Analysis of the Double-Dividend Hypothesis (with N. Anger and C. Böhringer), **Ecological Economics**, 69(7), 1495-1502, 2010.
68. Indicators of Energy Security in Industrialised Countries (with U. Moslener and D. Rübhelke), **Energy Policy**, 38(4), 1665-1671, 2010.
69. Energy security—concepts and indicators - Editorial (with U. Moslener and D. Rübhelke), **Energy Policy**, 38(4), 1607-1608, 2010.
70. EU Climate Policy Up to 2020: An Economic Impact Assessment (with C. Böhringer, U. Moslener and T. F. Rutherford), **Energy Economics**, 31(S2), 295-305, 2009.
71. Oil and Unemployment in Germany (with U. Oberndorfer), **Jahrbücher für Nationalökonomie und Statistik**, 229(2+3), 146-162, 2009.
72. Technological Uncertainty and Cost-Effectiveness of CO₂ Emission Reduction (with V. Otto), **Energy Economics**, SUPPL 1, 4-17, 2009.
73. A Symmetric Input-Output Table for EU 27: Latest Progress (with J. Rueda-Cantuche, J. Beutel, F. Neuwahl and I. Mongelli), **Economic Systems Research**, 21(1), 59-79, 2009.
74. Environmental Taxation and Induced Structural Change in an Open Economy: The Role of Market Structure (with C. Böhringer and H. Welsch), **German Economic Review**, 9(1), 17-40, 2008.
75. Employment impacts of EU biofuels policy: combining BU technology information and sectoral market simulations in an IO framework (with F. Neuwahl, I. Mongelli, L. Delgado), **Ecological Economics**, 447-460, 2008.
76. Directed technical change and differentiation of climate policy (with V.M. Otto and J. Reilly), **Energy Economics**, 30 (6), 2855-2878, 2008.
77. Extending Working Hours: Why not work 42 Hours rather than 38? – A CGE Analysis for Germany (with K. Conrad and H. Koschel), **Empirica**, 35, 255-266, 2008.
78. Climate Policy Induced Investments in Developing Countries: The Implications of Investment Risks (with C. Böhringer), **The World Economy**, 31(3), 367-392, 2008.
79. Energy Biased Technical Change - A CGE Analysis (with V. Otto and R. Dellink), **Resource and Energy Economics**, 29(2), 137-158, 2007.
80. Decomposing Integrated Assessment of Climate Change: Methodology and Sample Application (with C. Böhringer and T. F. Rutherford), **Journal of Economic Dynamics and Control**, 31(2), 683-702, 2007.
81. Promoting Renewable Energy in Europe – A Hybrid CGE Approach (with C. Böhringer), **The Energy Journal**, Hybrid Modelling of Energy-Environment Policies: Reconciling Bottom-up and Top-down, 123 – 138, 2006.
82. Computable General Equilibrium Models for Sustainability Impact Assessment: Status Quo and Prospects (with C. Böhringer), **Ecological Economics**, 60(1), 49-64, 2006.
83. Efficiency Gains from “What”-Flexibility in Climate Policy - An Integrated CGE Assessment (with C. Böhringer and T. F. Rutherford), **The Energy Journal**, Multi-Greenhouse Gas Mitigation and Climate Policy, 405-424, 2006.
84. Recycling of Eco-Taxes, Labor Market Effects and the True Cost of Labor- A CGE Analysis (with K. Conrad), **Journal of Applied Economics**, 8(2), 259-278, 2005.
85. Climate Policy Beyond Kyoto: Quo Vadis? A Computable General Equilibrium Analysis based on Expert Judgements (with C. Böhringer), **Kyklos**, 58(4), 467-493, 2005.

86. Assessing Emission Allocation in Europe: An Interactive Simulation Approach (with C. Böhringer, T. Hoffmann, A. Lange and U. Moslener), **The Energy Journal**, 26(4), 1-22, 2005.
87. Market Power and Hot Air in International Emission Trading: The Impacts of U.S. Withdrawal from the Kyoto Protocol (with C. Böhringer), **Applied Economics**, 35(6), 651-664, 2003.
88. Carbon Taxes and Joint Implementation - An Applied General Equilibrium Analysis for Germany and India (with C. Böhringer and K. Conrad), **Environmental and Resource Economics**, 24(1), 49-76, 2003.
89. Assessing the Costs of Compliance: The Kyoto Protocol (with C. Böhringer), in: European Environment (now: **Environmental Policy and Governance**), 12(1), 1-16, 2002.
90. Technological Change in Economic Models of Environmental Policy: A Survey, **Ecological Economics**, 43(2-3), 105-126, 2002.
91. The Economic and Environmental Implications of the US Repudiation of the Kyoto Protocol and the Subsequent Deals in Bonn and Marrakech (with Z.X. Zhang), **Review of World Economics**, 138(4), 711-746, 2002.

Schwetzingen, October 2023