

Curriculum Vitae

Prof. Dr. Klaus Eisenack

Employment

since 2016	Full professor for “Resource Economics”, Humboldt-Universität zu Berlin
2014 – 2016	Associate professor for “Economics, in particular environment and development economics”, Carl von Ossietzky University Oldenburg, Germany
2008 – 2014	Head of Chameleon Research Group (funded by the German Ministry for Education and Research, Program for Social-Ecological Research)
2008 – 2014	Assistant professor “Environment and Development Economics”, Carl von Ossietzky University Oldenburg
2001 – 2008	Scientist at the Potsdam Institute for Climate Impact Research
1996 – 2001	Student assistant at Carl von Ossietzky University Oldenburg

Academic Grades

2006	Dissertation in Mathematics, Free University Berlin (<i>summa cum laude</i>), Dissertation: “Model Ensembles for Natural Resource Management”, Disputation: “Differential Games of Environmental Agreements”
2001	Diploma in Mathematics (<i>sehr gut</i>), Carl von Ossietzky University Oldenburg, Diploma thesis: „Modellierung unter Unsicherheit: Qualitative Differentialgleichungen in der Bioökonomik“
1999	Examination in Philosophy and Economics (<i>sehr gut</i>), Carl von Ossietzky University Oldenburg

Peer Reviewed Papers

Roggero, M., J. Fjornes and K. Eisenack (2023) Ambitious climate targets and emission reductions in cities: A configurational analysis, Climate Policy, DOI:10.1080/14693062.2023.2282488

Roggero, M., A. Gotgelf and K. Eisenack (2023) Co-benefits as a rationale and co-benefits as a factor for Urban Climate Action: linking air quality and emission reductions in Moscow, Paris, and Montreal, Climatic Change 176, 179.

von Dulong, A., A. Hagen, R. Mendelevitch and K. Eisenack (2023) Buy coal and gas? Interfuel carbon leakage on deposit markets with market power, Energy Economics, 106434.

Harmáčková, Z. V., Y. Yoshida, N. Sitas, L. Mannetti, A. Martin, R. Kumar, M. Berbés-Blázquez, R. Collins, K. Eisenack, E. Guimaraes, M. Heras, V. Nelson, A. Niamir, F. Raverà, I. Ruiz Mallen, P. O’Farrell (2023) The role of values in future scenarios: What types of values underpin (un)sustainable and (un)just futures? Current Opinion in Environmental Sustainability 64, 101343.

- Eisenack, K., and M. Paschen (2022) Adapting long-lived investments under climate change uncertainty, *Journal of Environmental Economics and Management* 116, 102743.
- Eisenack, K., and M. Roggero (2022) Many roads to Paris: Explaining urban climate action in 885 European cities, *Global Environmental Change* 72, 102439.
- Eisenack, K., A. Hagen, R. Mendelevitch, and A. Vogt (2021) Politics, profits and climate policies: How much is at stake for fossil fuel producers?, *Energy Research & Social Science* 77, 102092.
- Eisenack, K., C. Oberlack and D. Sietz (2021) Avenues of archetype analysis: Roots, achievements and next steps in sustainability research, *Ecology and Society* 26(2), 31.
- Gotgelf, A., M. Roggero and K. Eisenack (2020) Archetypical opportunities for water governance adaptation to climate change, *Ecology and Society* 25(5): 6.
- Steinhäuser, M. and K. Eisenack (2020) How market design shapes the spatial distribution of power plant curtailment costs, *Energy Policy* 144, 111591.
- Hamborg, S., J. N. Meya, K. Eisenack and T. Raabe (2020) Rethinking resilience: a cross-epistemic resilience framework for interdisciplinary energy research. *Energy Research & Social Science* 59, 101285.
- Eisenack, K. and M. Mier (2019) Peak-load pricing with different types of dispatchability. *Journal of Regulatory Economics* 56, 105-124.
- Hagen, A. and K. Eisenack (2019) Climate clubs vs. single coalitions: the ambition of international environmental agreements. *Climate Change Economics* 10(3), 1950011.
- Eisenack, K., S. Villamayor-Tomas, G. Epstein, C. Kimmich, N. Magliocca, D. Manuel-Navarrete, C. Oberlack, M. Roggero and D. Sietz (2019) Design and quality criteria for archetype analysis. *Ecology and Society* 24(3), 6.
- Oberlack, C., D. Sietz, E. Bürgi-Bonanomi, A. de Bremond, J. Dell'Angelo, K. Eisenack, E. Ellis, G. Epstein, M. Giger, A. Heinimann, C. Kimmich, M. T. J. Kok, D. Manuel-Navarrete, P. Messerli, P. Meyfroidt, T. Václavík and S. Villamayor-Tomás (2019) Archetype analysis in sustainability research: meanings, motivations, and evidence-based policy making. *Ecology and Society* 24(2), 26.
- Wang, R., K. Eisenack and R. Tan (2019) Sustainable rural renewal in China: archetypical patterns. *Ecology and Society*, 24(3), 32.
- Neetzow, P., A. Pechan, and K. Eisenack (2018) Electricity storage and transmission: Complements or substitutes? *Energy Economics* 76, 367-77.
- Meya, J. and K. Eisenack (2018) Effectiveness of gaming for communicating and teaching climate change, *Climatic Change* 149(3), 319-333.
- Oberlack, C. and K. Eisenack (2018) Archetypical barriers to adapting water governance in river basins to climate change, *Journal of Institutional Economics* 14, 527-555.
- Roggero, M., S. Villamayor-Tomas, C. Oberlack, K. Eisenack, A. Bisaro, J. Hinkel and A. Thiel (2018) Introduction to the special issue on adapting institutions to climate change, *Journal of Institutional Economics* 14, 409-422.

- Schmid, E., A. Pechan, M. Mehnert, K. Eisenack (2017) Imagine all these futures: On heterogeneous preferences and mental models in the German energy transition, *Energy Research & Social Science* 27, 45-56.
- Eisenack, K. (2016) Institutional adaptation to cooling water scarcity in the electricity sector under global warming, *Ecological Economics* 124, 153-163.
- Eisenack, K. and L. Kähler (2016) Adaptation to climate change can support unilateral emission reductions, *Oxford Economic Papers* 68 (1), 258-278.
- Eisenack, K., S. Moser, E. Hoffmann, R. Klein, C. Oberlack, A. Pechan, M. Rotter, and C. Termeer (2015) Reply to: Opening up the black box of adaptation decision making, *Nature Climate Change* 5, 494-495.
- Ruppert-Winkel, C., R. Arlinghaus, S. Deppisch, K. Eisenack, D. Gottschlich, B. Hirschl, B. Matzdorf, T. Moelders, M. Padmanabhan, T. Plieninger, K. Selbmann and R. Ziegler (2015) Characteristics, emerging needs and challenges of transdisciplinary sustainability science: Experiences from the German Social-Ecological Research Program, *Ecology & Society* 20 (3), 13.
- Eisenack, K., S. Moser, E. Hoffmann, R. Klein, C. Oberlack, A. Pechan, M. Rotter, and C. Termeer (2014) Explaining and overcoming barriers to climate change adaptation, *Nature Climate Change* 4, 867-872.
- Pechan, A. and K. Eisenack (2014) The impact of heat waves on electricity spot markets, *Energy Economics* 43, 63-71.
- Eisenack, K. (2014) The inefficiency of private adaptation to pollution in the presence of endogenous market structure, *Environmental and Resource Economics* 57 (1), 81-99.
- Oberlack, C. und K. Eisenack (2014) Alleviating barriers to urban climate change adaptation through international cooperation, *Global Environmental Change* 24, 349-362.
- Reckien, D. and K. Eisenack (2013) Climate change gaming on board and screen: a review, *Simulation & Gaming* 44 (2-3), 249-267.
- Eisenack, K. (2013) Interdisciplinary communication and education with a board game on climate change, *Simulation & Gaming* 44 (2-3), 324-344.
- Eisenack, K., O. Edenhofer and M. Kalkuhl (2012) Resource rents: the effects of energy taxes and quantity instruments for climate protection, *Energy Policy* 48, 159-166.
- Eisenack, K. (2012) Adaptation financing in a global agreement: is the adaptation levy appropriate?, *Climate Policy* 12, 491-504.
- Stecker, R., T. Mohns and K. Eisenack (2012) Anpassung an den Klimawandel – Agenda Setting und Politikintegration in Deutschland, *Zeitschrift für Umweltpolitik und Umweltrecht* (ZfU), 2/2012, 179-208.
- Eisenack, K. and R. Stecker (2012) A framework for analyzing climate change adaptations as actions, *Mitigation and Adaptation Strategies for Global Change* 17 (3), 243-260.
- Eisenack, K., R. Stecker, D. Reckien and E. Hoffmann (2012) Adaptation to climate change in the transport sector: a review of actions and actors, *Mitigation and Adaptation Strategies for Global Change* 17 (5), 451-469.

- Schlüter, M., R. R. J. McAllister, R. Arlinghaus, N. Bunnefeld, K. Eisenack, F. Höller, E.J. Milner-Gulland, B. Müller, E. Nicholson, M. Quaas, M. Stöven (2012) New horizons for managing the environment: a review of coupled social-ecological systems modeling, *Natural Resource Modeling* 25 (1), 219-272.
- Reckien, D., K. Eisenack and M. Lüdeke (2011) Land consumption by urban sprawl - a new approach to deduce urban development scenarios from actors' preferences, *Environmental Modeling and Assessment* 16:465-477.
- Reckien, D. and K. Eisenack (2010) Urban sprawl: using a game to sensitize stakeholders to the interdependencies among actors' preferences, *Simulation & Gaming* 41 (2), 260-277.
- Leimbach, M. and K. Eisenack (2009) A trade algorithm for multi-region models subject to spillover externalities, *Computational Economics* 33 (2), 107-130.
- von Bloh, W., C. Bounama, K. Eisenack, B. Knopf and O. Walkenhorst (2008) Estimating the biogenic enhancement factor of weathering using an inverse viability method, *Ecological Modelling* 216, 245-251.
- Eisenack, K., V. Tekken and J. Kropp (2007) Stakeholder perceptions of climate change in the Baltic Sea region, *Coastline Reports* 8, 245-255.
- Eisenack, K. (2007) A common framework for qualitative and quantitative modelling, *Working Papers of the 21st Annual Workshop on Qualitative Reasoning*, Aberystwyth.
- Eisenack, K., J. Kropp and H. Welsch (2006) A qualitative dynamical modelling approach to capital accumulation in unregulated fisheries, *Journal of Economic Dynamics and Control* 30, 2613-2636.
- Eisenack, K., J. Scheffran and J. Kropp (2006) Viability analysis of management frameworks for fisheries, *Environmental Modelling and Assessment* 11, 69-79.
- Eisenack, K. (2003) Qualitative viability analysis of a bio-socio-economic system, in P. Salles and B. Bredeweg (Ed.): *Working Papers of 17th Workshop on Qualitative Reasoning*, Brasilia, 63-70.
- Welsch, H. and K. Eisenack (2002) Energy costs, endogenous innovation and long-run growth, *Jahrbücher für Nationalökonomie und Statistik* 222 (4), 490-499.
- Eisenack, K. and G. Petschel-Held (2002) Graph theoretical analysis of qualitative models in sustainability science, in N. Agell and J. A. Ortega (Ed.): *Working Papers of 16th Workshop on Qualitative Reasoning*, Sitges, Spanien, Edicion Digital@tres, Sevilla, 53-60.
- Eisenack, K. and J. Kropp (2001) Qualitative modeling and simulation of a coupled bioeconomic system, in G. Biswas (Ed.): *Working Papers of 15th Workshop on Qualitative Reasoning*, San Antonio, Texas, 182-187.
- Eisenack, K. and J. Kropp (2001) Assessment of management options in marine fisheries by qualitative modelling techniques, *Marine Pollution Bulletin* 43 (7-12), 215-224.

Editorships

Oberlack, C., D. Sietz and K. Eisenack (2020) Archetype Analysis in Sustainability Research, special issue in *Ecology and Society*.

Eisenack, K. and S. Villamayor-Tomas (2018) Institutional Economics of Climate Adaptation, special issue in Journal of Institutional Economics.

Siebenhüner, B., M. Arnold, K. Eisenack and K. Jacob (2013) Long-Term Governance of Social-Ecological Change, Routledge.

Eisenack, K. and D. Reckien (2013) Games and Climate Change, special issue in Simulation & Gaming.

Book chapters and Monographs

Eisenack, K., J. K. Fjornes and M. Roggero (2021) Können lokale Regierungen das Klima retten?, In: J. Sommer, R. Loske, A. Brunnengräber, H. Leitschuh, P. Ibisch (Eds.) Jahrbuch Ökologie 2022, Das Zeitalter der Städte, Hirzel.

Eisenack, K., and A. Wirsing (2019) Spielend in die Utopie, In: L. Hochmann, S. Graupe, T. Korbun, S. Panther and U. Schneidewind (Eds.) Möglichkeitswissenschaften - Ökonomie mit Möglichkeitssinn, Metropolis, 619-639.

Hagen, A., L. Kähler and K. Eisenack (2017) Transnational Environmental Agreements with Heterogeneous Actors, In S. Çağatay (Ed.) Economics of International Environmental Agreements: a Critical Approach, Routledge, 79-96.

Vetter, A., E. Chrischillis, K. Eisenack, C. Kind, P. Mahrenholz and A. Pechan (2017) Anpassung an den Klimawandel als neues Politikfeld, In: G. Brasseur, D. Jacob und S. Schuck-Zöller (Eds.) Klimawandel in Deutschland: Entwicklung, Folgen, Risiken und Perspektiven, Springer, 325-334.

and (2023) in: Brasseur, G., D. Jacob, S. Schuck-Zöller (Eds., 2023) Klimawandel in Deutschland, 2nd edition, Springer/Spektrum Heidelberg (in press).

Siebenhüner, B., M. Arnold, K. Eisenack and K. Jacob (2013) Long-Term Policies: Setting the Scene, in: B. Siebenhüner, M. Arnold, K. Eisenack and K. Jacob (Eds.) Long-Term Governance of Social-Ecological Change, Routledge, 1-25.

Eisenack, K. (2012) Archetypes of adaptation to climate change, in M. Glaser, G. Krause, B. Ratter und M. Welp (Ed.): Human/Nature Interactions in the Anthropocene: Potentials of Social-Ecological Systems Analysis, Routledge, 107-122.

Pechan, A., M. Rotter and K. Eisenack (2011) Anpassung in der Versorgungswirtschaft. Empirische Befunde und Einflussfaktoren, in A. Karczmarzyk und R. Pfriem (Ed.): Klimaanpassungsstrategien von Unternehmen, Metropolis, 313-336.

Eisenack, K. (2010) Die ökonomische Rahmung der Adaptation an den Klimawandel, in M. Voss (Ed.): Der Klimawandel – Sozialwissenschaftliche Perspektiven, VS-Verlag für Sozialwissenschaften, 155-170.

Eisenack, K., M. Lüdeke, G. Petschel-Held, J. Scheffran and J. Kropp (2007) Qualitative modelling techniques to assess patterns of global change, in J. Kropp and J. Scheffran (Ed.): Advanced Methods for Decision Making and Risk Management in Sustainability Science, NOVA Science Publishers, New York, 83-127.

Eisenack, K. (2006) Model Ensembles for Natural Resource Management: Extensions of Qualitative Differential Equations Using Graph Theory and Viability Theory, PhD thesis, Darwin, FU Berlin, <http://www.diss.fu-berlin.de/2006/326/>

Kropp, J., K. Eisenack and J. Scheffran (2006) Marine overexploitation: a syndrome of global change, in S. Sonak (Ed.): Multiple Dimensions of Global Change, TERI Press, New Delhi, 257-284.

Eisenack, K., O. Moldenhauer and F. Reusswig (2002) Möglichkeiten und Grenzen qualitativer und semiqualitativer Modellierung von Natur-Gesellschafts-Interaktionen, in I. Balzer and M. Wächter (Ed.): Sozial-Ökologische Forschung, ökom Verlag, München, 377-389.

Kropp, J., K. Zickfeld and K. Eisenack (2002) Assessment and management of critical events: the breakdown of marine fisheries and the North Atlantic thermohaline circulation, in A. Bunde, J. Kropp und H.-J. Schellnhuber (Ed.): The Science of Disasters, Springer Verlag, Berlin, 192-216.

Discussions Papers and other Publications

Some discussion papers are currently under peer review.

Eisenack, K. (2023) Why local governments set climate targets: Effects of city size and political costs, Berlin School of Economics Discussion Paper #0029.

Eisenack, K., A. Hagen, F. Holz, K. Pittel, A. Vogt und M.-T. von Schickfus (2022) Klimapolitik und Stranded Assets in der fossilen Wirtschaft, Ökologisches Wirtschaften 2/2022, 30-35.

Korintenberg, M., A. Gotgelf, E. Baibagyshov, R. Judis, U. Kasymov, J. Walter, S. Lange, P. Neetzow, K. Eisenack, J. Zeitz (2021) Method for organic carbon stock assessment and improvement of Land Degradation Neutrality and climate change reporting on agricultural ecosystems in Kyrgyz Republic, Soil Science and Resource Economics Group, Humboldt-Universität zu Berlin, Germany.

Bateman, I. J., P. Neetzow, K. Eisenack, G. Meran (2020) Editorial: EAERE, ERE and the Research Challenges of the Coronavirus Pandemic, Environmental and Resource Economics, DOI: <https://doi.org/10.1007/s10640-020-00427-y>.

Eisenack, K. (2019) Anpassung an die Folgen des Klimawandels. Möglichkeiten und Herausforderungen im Umgang mit unvermeidbaren Klimaveränderungen. Geographische Rundschau 12-2019.

Eisenack, K., R. Mendelevitch (2019) Standpunkt: Kohleausstieg ohne unsichtbare Hand. Tagesspiegel Background, Berlin.

Eisenack, K., A. Gotgelf, U. Kasymov, P. Lutz, P. Perez, C. Oberlack and D. Sietz (2018) Second Research Workshop on Archetype Analysis in Sustainability Research, Workshop Report, Humboldt Universität zu Berlin, Germany.

Oberlack, C., A. Winiger, P. Kupferschmied, D. Sietz and K. Eisenack (2017) Research Workshop Archetype Analysis in Sustainability Research, Workshop Report, University of Bern, Switzerland.

Schneidewind, U., R. Pfriem, J. Barth, T. Beschorner, M. Binswanger, H. Diefenbacher, K.

Eisenack, et al. (2016) Transformative Wirtschaftswissenschaft im Kontext nachhaltiger

Entwicklung : für einen neuen Vertrag zwischen Wirtschaftswissenschaft und Gesellschaft, Ökologisches Wirtschaften, 2/2016, 30–34.

Kähler, L. and K. Eisenack (2016) Strategic complements in international environmental agreements: a new island of stability, Oldenburg Discussion Papers in Economics, V-393-16.

Máñez Costa, M., D. Rechid, L. Bieritz, C. Lutz, A. Nieters, B. Stöver, M. Jahn, M.-C. Rische, S. Schulze, E. Yadegar, J. Hirschfeld, A. Schröder, G. Hirte, S. Langer, S. Tscharaktschiew, K. Eisenack, J.-M- Steinhäuser (2016): Synthesis of existing regional and sectoral economic modelling and its possible integration with regional earth system models in the context of climate modelling. Report 27. Climate Service Center Germany, Hamburg

Eisenack, K. (ed., 2015) Contributions to the institutional economics of the energy transition, Oldenburg Discussion Papers in Economics, V-385-15.

Hagen, A. and K. Eisenack (2015) International environmental agreements with asymmetric countries: climate clubs vs. global cooperation, Nota di Lavoro 58.2015, Fondazione Eni Enrico Mattei, Milan, Italy.

Spijker, E., C. Jepma, E. Hofman, G. Joosten, L. Hoenders, K. Eisenack, L. Neubauer, S. Hönsch, G. Brunekreeft, M. Palovic (2015) A level playing field for the European biogas and biomethane markets - Case of the Netherlands and Germany: policy environment, key differences and harmonisation issues. Report, Joint Implementation Network, www.jiqweb.org.

Chameleon Research Group (2014) Selected Findings. Berlin/Oldenburg. Available at: www.climate-chameleon.de.

Eisenack, K. and D. Reckien (2013) Climate change and simulation/gaming, Guest editorial for the special issue Simulation & Gaming 44 (2-3), 241-248.

Eisenack, K., E. Hoffmann, A. Pechan and M. Rotter (eds., 2012) Workshop on Barriers to Adaptation to Climate Change - Documentation of the working groups and of the discussion of their results. Berlin, 18th-21st September, www.climate-chameleon.de.

Antes, R., K. Eisenack and K. Fichter (2012) Wirtschaftswissenschaftliche Ansätze zur Gestaltung von Transformationen zur Nachhaltigkeit, Ökologisches Wirtschaften 3/2012.

Eisenack, K. and R. Stecker (2011) An action theory of adaptation to climate change, Earth System Governance Working Paper 13.

Eisenack, K., R. Stecker, D. Reckien and E. Hoffmann (2011) Adaptation to climate change in the transport sector: a review, PIK Report 122, Potsdam Institute for Climate Impact Research.

Stecker, R., and K. Eisenack (2011) Internationale Adaptationspolitik - vom bottom-up in der Theorie zum top-down in der Praxis, Ökologisches Wirtschaften 2/2011.

Stecker, R., Pechan, A., Steinhäuser, M., Rotter, M., Scholl, G., Eisenack, K., (2011) Why are utilities reluctant to adapt to climate change?, Report, www.climate-chameleon.de

Eisenack, K., O. Edenhofer and M. Kalkuhl (2010) Energy taxes, resource taxes and quantity rationing for climate protection, PIK Report 120, Potsdam Institute for Climate Impact Research.

Eisenack, K. (2010) Auswertung der Testspiele von Keep Cool Online mit Studierenden, Report to Schulen ans Netz e.V.

Eisenack, K., E. Hoffmann and G. Scholl (2010) Wie passt sich die Versorgungswirtschaft an den Klimawandel an?, Ökologisches Wirtschaften 4/2010.

Grants and Awards

Climate and Water under Change: Emerging challenges and strategies for coordinated action in the model region Berlin-Brandenburg (CliWaC) (head of work package, 220,000€) Einstein Research Unit, 2022-2024.

Mentoring of Achim Hagen / junior research group: “The political economy of climate policy and finance (PECan)” (social-ecological research program, German Federal Ministry for Education and Research, 2022–2027, 2,417,000€).

Award for supervised master theses of Lukas Berger: “Climate Policy, Health Policy and Age – A multidimensional political economy analysis” and Annelie Gütte: “The Role of Relational and Cognitive Social Capital in Environmental Collective Action” (2022, Thaer-Institute, Humboldt-Universität zu Berlin).

AnthropoScenes. Making Sustainable Futures Public (head of work package) Berlin University Alliance (BUA), July 2021 - June 2024.

Klimakonferenzen mit online-Rollenspiel Keep Cool (40,000€), German Federal Foreign Office, 2021.

Anticipating and Transforming Coastal Futures, Working Group at Deutsches Komitee für Nachhaltigkeitsforschung in Future Earth (DKN).

European award for Best Doctoral Dissertation in Environmental and Resource Economics for supervised PhD thesis of Paul Neetzow (2020).

Fossil Resource Markets and Climate Policy: Stranded Assets, Expectations and the Political Economy of Climate Change (FoReSee) (head of work package, 337,000€) German Federal Ministry for Education and Research, October 2018 – September 2022.

Governing climate change: an investigation of adaptation opportunities, PhD grant for Anastasiia Gotgelf, Elsa Neumann Foundation, July 2018 – June 2021.

Methodenentwicklung zur Bewertung der Kohlenstoffspeicher und zur Verbesserung der Klimaberichterstattung von landwirtschaftlich genutzten Ökosystemen Zentralasiens (CarbAsia) (head of work package, 81,000€, GIZ, November 2018 – September 2020).

KEEP COOL east (head, 178,000€), German Federal Environmental Foundation, January 2018 – December 2020.

Revitalizing Civil Society for Robust Social-Ecological-Technical Systems (CRISSI) (head, 80,000€), German Federal Ministry for Education and Research, December 2018 – August 2020.

Award for supervised master thesis of Lea Fink: “What drives firms to successfully cooperate on climate change? - an institutional analysis of the Science Based Targets initiative” (2019, IRI THESys).

The economics of power system infrastructure: Techno-economic interdependencies of storage and grid, PhD grant for Paul Neetzow, Reiner Lemoine Foundation (21,000 €), Jan 2018 – June 2019.

SmartCaDEF (head, 60,000€), German Federal Ministry for Education and Research, August 2018 – January 2019.

Vom Mainstreaming zur transformativen Anpassung an den Klimawandel (head of work package, 214,000€), German Environmental Protection Agency, February 2018 – December 2020.

Polycentric Climate Governance (head, 25,000€), Humboldt-Universität zu Berlin, July 2017 – January 2018.

Award for supervised master thesis of Jasper Meya (Deutscher Planspielpreis 2017).

Nomination for award for supervised master thesis of Jonathan Barth: „Exploring the dynamics of quality regulation in the light of path dependencies“ (2017, Gesellschaft für Energiewissenschaft und Energiepolitik).

Polycentric adaptation through spatially heterogeneous urban green (PolyGreen) (head, 49,960€), German Federal Ministry for Education and Research, September 2016 - March 2017.

Crafting Usable Knowledge to Reach Sustainable Development Goals in Rural/Urban Food Systems (head, 25,000€), Humboldt-Universität zu Berlin, May – August 2016.

Adaptation to Climate Change through Sustainable Forest Management (InForMa) (head, 44,239€), GIZ, June 2016 – May 2017.

Nomination for award for supervised master thesis of Paul Neetzow: „Market failure in electricity storage investment“ (2016, Gesellschaft für Energiewissenschaft und Energiepolitik).

Resilience of socio-technical systems exemplified at the electricity transport and actor system (head of a work package, 682.000 €), VW Foundation, 2015-2018.

Keep Cool mobil: Das Planspiel zum Klimawandel für mobile Endgeräte (head, 340.000 €), Deutsche Bundesstiftung Umwelt, German Federal Environmental Foundation, February 2015 – January 2017.

Award for supervised master thesis of Christina Roolfs: „Modeling electric network capacity under different institutional settings“ (2012, Student Award of the Swiss Association for Energy Economics).

Projekt de.zentral (head, 770,000 €) Institutional and technological consistent energy strategies for a centralized or decentralized energy transition in Germany, German Federal Ministry for Education and Research, August 2013 – March 2017.

Sectoral economic modeling for the integration of regional earth system modeling (head of a work package, 280,000 €), Helmholtz-Zentrum Geestacht, 2014.

Award for good teaching, Carl von Ossietzky University Oldenburg (for winter term 2012/13).

Environmental Award of the Sparda-Bank (November 2013).

PhD Program Systemintegration Erneuerbarer Energien, Lower Saxony Ministry for Research and Culture, 2013 – 2017.

Groen Gas – Grünes Gas (head of a work package, 7,003,000 €), Subproject “A level playing field for green gas in the European market”, co-financed by the Interreg IV A Programm (EU), 2012-2014.

Chameleon (head, 1,961,000€) Adapting utilities to climate change – analysis and development of options for business and policy, Junior research group in the social-ecological research program, German Federal Ministry for Education and Research, 2009–2014.

Chameleon (head, 60,000€) Prephase, German Federal Ministry for Education and Research, 2008–2009.

Keep Cool Online I and II (head, 7,000€): Entwicklung einer netzfähigen Variante des Klimabrettspiels Keep Cool, German Federal Environmental Ministry, 2008-2010.

BaltCICA (contributions) Climate Change: Impacts, Costs and Adaptation in the Baltic Sea Region, co-financed by the Baltic Sea Region Programme (EU), 2008-2013.

Analyzing Patterns of Vulnerability (contributions), funded by the Netherlands Environmental Assessment Agency, 2007 – 2009.

ADAM (contributions) Adaptation and Mitigation Strategies: Supporting European Climate Policy, EU Integrated Research Project, 2006-2009.

ASTRA (head of a work package) Developing Policies and Adaptation Strategies to Climate Change in the Baltic Sea Region, co-financed by the Interreg III B Programm (EU), 2005-2007.

Viabilität unter Unsicherheit (head), German Science Foundation (DFG), 2005-2007.

Evolution Equations for Deterministic and Stochastic Systems (contributions), EU Research Training Network, 2002-2006.

Typical Cause-Effect Patterns of Land Use Change in Selected Developing and Newly Industrialized Countries (contributions), DFG, 2002-2004.

DIWA Datenintegration und Qualitative Dynamik des Wattenmeers (contributions), BMBF, 1998-2001.

Organization of Scientific Conferences and Events

Sixth Research Workshop on Archetype Analysis in Sustainability Research, Lund, June 2023.

Workshop on Climate Governance in Cities, Berlin, November 2022.

Workshop on Stranded Assets in the Fossil Resource Sector, Berlin, May 2022.

Co-chair of 26th Annual Conference of the European Association of Environmental and Resource Economists (EAERE 2021), Berlin/Online, June 2021.

Co-chair of 25th Annual Conference of the European Association of Environmental and Resource Economists (EAERE 2020), Berlin/Online, June 2020.

Co-chair of Navigating the Sustainability Transformation in the 21st Century, KOSMOS Conference the occasion of the 250th birthday of Alexander von Humboldt, Berlin, August 2019.

Second Research Workshop on Archetype Analysis in Sustainability Research, Berlin, March 2018.

Research Workshop Archetype Analysis in Sustainability Research, Bern, Switzerland, May 2017.

Das Klima aufs Spiel setzen, Workshop on Keep Cool mobil and Serious Games for Teaching and Research, Berlin, September 2016.

Special Session „Beyond Truisms: Exploring the Contributions of Institutional Analysis to the Study of Climate Change Adaptation“, Workshop on the Ostrom Workshop 5, Bloomington, June 2014.

Special Session „Barriers to Adaptation – Taking Stock and Looking Ahead“, European Climate Change Adaptation Conference, Hamburg, March 2013.

International Research Workshop on the Barriers to Adaptation to Climate Change, Berlin, September 2012, www.climate-chameleon.de/htm_engl/workshop_engl.html.

Wie lässt sich sozial-ökologischer Wandel gestalten?, Seminar of social-ecological research groups, Berlin, April 2012.

Special Session „Adapting Infrastructure to Climate Change - Socioeconomic, Biophysical and Theoretical Perspectives“, 11th Biennial International Society for Ecological Economics Conference, August 2010.

Co-chair of 11th Biennial International Society for Ecological Economics Conference, Oldenburg, August 2010.

3rd German Workshop on Adaptation Research in the Social Sciences, Bonn, April 2010.

Scientific Presentations, *Keynotes* and Conference Papers

- 2023 *FAERE Workshop on Cities and the Environment, Paris*. Conference on Earth System Governance (ESG), Nijmegen. 6th International Workshop on Archetype Analysis in Sustainability Research, Lund. 28th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Limassol.
- 2022 27th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Rimini. International Conference on Fossil Fuel Supply and Climate Policy, Oxford. *New Institutional Economics: Navigating Turbulent Times of Transition Workshop, Potsdam*. Workshop on the multifaceted nature of energy politics, Jerusalem. *6th International GamiFIN Conference, Tampere. Closing the Climate Adaptation Gap and Unlocking Transformative Change Conference, Online*. Conference on Earth System Governance (ESG), Toronto.
- 2021 26th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Online. Jahrestagung des Vereins für Socialpolitik, Online. *Workshop on Social Science, Potsdam-Institute for Climate Impact Research, Online*. XVIII Biannual International Association for the Study of the Commons (IASC) Conference, Online. Conference on Earth System Governance (ESG), Online.
- 2020 25th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Online. Playing Climate Workshop: Weather as backdrop and actor in games, Online.
- 2019 Workshop on the Ostrom Workshop 6, Bloomington, Indiana. 24th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Manchester. KOSMOS Conference at the occasion of the 250th birthday of Alexander von Humboldt, Berlin.

- 2018 Conference on Earth System Governance, Utrecht. European Consortium for Political Research (ECPR) General Conference, Hamburg. 6th World Congress of Environmental and Resource Economists (WCERE), Gothenburg.
- 2017 23rd Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Athens. *3rd Workshop on the Chinese Workshop on the Institutional Analysis of Social-Ecological-Technical Systems (CWINS), Zhejiang University, Hangzhou*. XVI Biannual International Association for the Study of the Commons (IASC) Conference, Utrecht.
- 2016 Adaptation Futures 2016, Rotterdam. International Association for the Study of the Commons (IASC) European Conference, Bern. 22nd Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Zurich.
- 2015 2nd European Climate Change Adaptation Conference (ECCA), Copenhagen. 15th IAEE European Energy Conference, Antalya. 21st Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Helsinki.
- 2014 Workshop on the Ostrom Workshop 5, Bloomington, Indiana. 14th IAEE European Energy Conference, Rome.
- 2013 20th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Toulouse. European Society for Ecological Economics Conference, Lille. European Climate Change Adaptation Conference, Hamburg.
- 2012 Jahrestagung des Vereins für Socialpolitik, Göttingen. 19th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Prague. Adaptation Futures 2012 International Conference on Climate Adaptation, Tucson. 5th German Workshop on Adaptation Research in the Social Sciences, Kassel.
- 2011 18th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Rome. 9th International Conference of the European Society for Ecological Economics, Istanbul. Resilience 2011, Tempe, Arizona.
- 2010 11th Biennial International Society for Ecological Economics Conference, Oldenburg. 3rd German Workshop on Adaptation Research in the Social Sciences, Bonn. Berlin Conference on the Human Dimensions of Global Environmental Change. NCCARF Climate Adaptation Futures Conference, Gold Coast, Australia.
- 2009 17th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Amsterdam. Climate Change: Global Risks, Challenges and Decisions, Copenhagen. Conference on the International Dimensions of Climate Policies, Bern.
- 2008 10th Biennial International Society for Ecological Economics Conference, Nairobi. Conference of the International Society for Dynamic Games, Wroclaw. *Symposium der Deutschen Gesellschaft für Humanökologie, Sommerhausen*. Berlin Conference on the Human Dimensions of Global Environmental Change.
- 2007 7th International Conference of the European Society for Ecological Economics, Leipzig. German-Polish Coastal Dialogues in the Baltic Framework II on Conditions and Perspectives for Development of ICZM, Międzyzdroje. 3rd International ASTRA

conference on Climate Change Adaptation, Riga. 21st Annual Workshop on Qualitative Reasoning, Aberystwyth, Wales. UN-Dekade „Bildung für nachhaltige Entwicklung“ – Der Beitrag Europas, Berlin.

- 2006 Institutional Dimensions of Global Environmental Change Synthesis Conference, Bali. Berlin Conference on the Human Dimension of Global Environmental Change. 2nd International ASTRA Conference on Climate Change Adaptation, Gdansk.
- 2005 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Bonn.
- 2004 First Biennial Meeting of the International Environmental Modelling and Software Society, Osnabrück.
- 2003 Jahrestagung der Deutschen Physikalischen Gesellschaft, Dresden. International Workshop on Euro Diffusion, Cercedilla. 17th Workshop on Qualitative Reasoning, Brasilia.
- 2002 16th Workshop on Qualitative Reasoning, Sitges.
- 2001 15th Workshop on Qualitative Reasoning, San Antonio.

Guest scientist

- Sep. 2011 – Dec. 2011, Indiana University in Bloomington, USA, Ostrom Workshop in Political Theory and Policy Analysis (collaboration with Prof. Elinor Ostrom, Prof. McGinnis, Prof. Cox)
- Dec. 2003 – Jan. 2004 CREA, École Polytechnique, Paris: Analyzing Influence Diagrams by Linking Qualitative Dynamics and Viability Theory (collaboration with Prof. Dr. Aubin, Prof. Dr. Saint-Pierre)
- Sep. – Dez. 1995 University of Stirling, Scotland: courses in mathematics, philosophy und environmental science

Activities in Editorial Boards, Commissions, as Reviewer or Consultant

- Since 2021 Co-speaker of the Berlin University Alliance (BUA) at Deutsches Klima Konsortium (DKK)
- Since 2018 Strategic Group, Integrative Research Institute on Transformations of Human-Environment System (IRI THESys), Humboldt-Universität zu Berlin
- 2012 – 2016 Speaker, Oldenburg Center for Sustainability Economics and Management (CENTOS), Carl von Ossietzky University Oldenburg
- 2006 – 2015 Advisory Board, Leitstelle Gender und Nachhaltigkeit (genanet), Berlin

Journals & Publishers (alphabetical): AI Communications, B.E. Journal of Economic Analysis and Policy, Climate and Development, Climate Policy, Climatic Change, Computational Management Science, Earth System Governance, Ecological Economics, Ecological Informatics, Ecology and Society, Energy Economics, Environmental Research Letters, Environmental and Resource Economics, Environmental Policy and Governance, Environmental Science and Technology, Environmental Science and Policy, European Economic Review, European Journal on Artificial Intelligence, GAIA, Global Environmental Change, Global Environmental Politics, Journal of

Cleaner Production, International Journal of Climate Change Strategies and Management, Journal of Economic Dynamics and Control, Journal of Environmental Economics and Management, Journal of Institutional Economics, Landtechnik, Nature Climate Change, Nature Communications, NOVA Science Publishers, ökom Verlag, Resource and Energy Economics, Simulation & Gaming, Springer Verlag, Urban Climate, WIREs Climate Change, Zeitschrift für Umweltpolitik und Umweltrecht.

Organizations: European Research Council (ERC), Deutsche Forschungsgemeinschaft (DFG), German Academic Scholarship Foundation, Intergovernmental Panel on Climate Change (IPCC), EU Commission, German Ministry for the Economy, German Ministry for Education and Research (BMBF), German Environmental Protection Agency (UBA), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Lower Saxony Governmental Commission for Climate Protection, Lower Saxony Association of Cities and Municipalities (NSGB), Research Council of Norway, German Association of Energy and Water Industries (BDEW), Association of German Transport Companies (VDV), RWE AG, Deutsche Bahn AG, Fraport AG, HSE AG, Evangelisches Studienwerk Villigst e.V., Regionale Innovationsstrategie Weser-Ems, Schulen ans Netz e.V., Deutsche Bundesstiftung Umwelt (DBU, German Environmental Foundation).

Memberships: European Association of Environmental and Resource Economics; International Association for the Study of the Commons; Ausschuss für Umwelt- und Ressourcenökonomie (AURÖ) des Vereins für Socialpolitik; International Society for Ecological Economics.

CEO of Keep Cool GbR, Development and use of simulation games, Berlin.

Supervision of Dissertations

von Dulong, A. (Humboldt-Universität zu Berlin, 2019-2023) "Modeling and empirically assessing climate policies and asset stranding: Patterns of policy-induced losses in the fossil fuel extraction, power, and financial sector"

Montes de Oca, M. (International Monetary Fund, with Franziska Holz, DIW, 2019-2023) "Political economy, stranded assets and carbon pricing in resource-rich countries"

Gotgelf, A. (Humboldt-Universität zu Berlin, 2017-2022) "Explaining collective action for sustainable development: Information governance and co-benefits in water, land, climate and urban areas"

Neetzow, P. (Humboldt-Universität zu Berlin, 2015-2019) "The economics of power system transitions: modeling pathways and policies for storage, grids and renewables"

Landholm, D. (Potsdam-Institute for Climate Impact Research, PIK, with Jürgen Kropp, 2018-2021) "Cross-scale drivers of greenhouse gas emissions and local solutions for climate change mitigation"

Ansari, D. (German Institute for Economic Research, DIW, with Franziska Holz, 2018-2019) "Fossil fuels in the 21st century: Insights from applied energy modelling and policy analysis"

Meya, J. (Humboldt-Universität zu Berlin, 2015-2018) "Essays in the economics of nature conservation: inequality, valuation and policy instruments"

Hagen, A. (Humboldt-Universität zu Berlin, 2014-2018) "Global climate policy beyond nation-state actors: an economic analysis of environmental cooperation"

- Paschen, M. (Universität Oldenburg, with Carsten Helm, 2013-2017) "Economic aspects of renewable energies - an empirical and theoretical analysis of effects on electricity prices and investments in transmission grids"
- Kähler, L. (University Oldenburg, 2012 - 2017) "Environmental Agreements: Strategic Complements and Transnational Cooperation"
- Oberlack, C. (University Freiburg, with Bernhard Neumärker, 2013-2015) "Institutional economics of climate adaptation in a polycentric order"
- Pechan, A. (University Oldenburg, 2010-2015) "Utilities in a Changing Environment"
- Osberghaus, D. (Centre for European Economic Research, ZEW, 2010-2015) "The economics of adaptation to climate change – the case of private households in Germany"
- Bierl, K. (Humboldt-Universität zu Berlin, since 2022)
- Finzel, L. (Humboldt-Universität zu Berlin, since 2023)
- Sorge, S. (HNE Eberswalde, with Carsten Mann, since 2021) "Understanding the Emergence and Development of Governance Innovations for Forest Ecosystem Service Provision"

Development and Facilitation of Simulation Games, Public Understanding of Science

KEEP COOL: Open Humboldt Festival 2021; Berliner Lange Nacht der Wissenschaften 2004, 2005, 2007, 2016, 2019; Deutscher Evangelischer Kirchentag 2017; Haus der Wissenschaft Bremen 2014, 2015; Schlaues Haus Oldenburg 2013, 2014; Klimahaus Bremerhaven 2013; Oldenburger Lange Nacht der Wissenschaften 2009-12; Schülerakademie Nachhaltigkeit 2009.

Eisenack, K., N. Marscheider, E. Meyer, L. Bethlehem (2017): KEEP COOL mobil – Das Planspiel zum Klimawandel für mobile Endgeräte. Deutsche Bundesstiftung Umwelt.

Eisenack, K. and G. Petschel-Held (2013, 2004): KEEP COOL – gambling with the climate, board game on climate change. Spieltrieb, Wiesbaden. Published in cooperation with the Leibniz Gemeinschaft, the German Ministry for the Environment, and others, www.climate-game.net.

Praxis Emissionshandel: Universität Oldenburg 2008-14, Potsdam-Institut für Klimafolgenforschung 2008, Rosa-Luxemburg Stiftung 2007.

Eisenack, K. and U. Rotter (2009): KEEP COOL online. Schulen ans Netz e.V.

Eisenack, K. and L. Baumstark (2007): Praxis Emissionshandel: Simulation for 20-60 participants.

Keep Cool mit Klimakonferenz, Climate Day with 120 pupils: John-Lennon-Gymnasium, Berlin 2006, Lenné-Schule, Potsdam 2006.

QUAG: Sommer school of the Integrated Assessment Society (TIAS) on Stakeholder Participation and Model-Building in Sustainable Resource Management, Osnabrück 2005.

Reckien, D. and K. Eisenack (2004): QUAG - game on urban sprawl.

Fischereispiel: Potsdamer Lange Nacht der Wissenschaften 2003, Brandenburger Zukunftstag für Mädchen und Jungen 2003.

Further Training

Training program: Leading, managing and designing interdisciplinary research projects, University Bern and Freiburg, October 2008 - March 2013.

Training: Facilitation and presentation skills, May 2005, University Potsdam.

Summer school of the Integrated Assessment Society (TIAS) on Stakeholder Participation and Model-Building in Sustainable Resource Management, Osnabrück 2005.

Summer school of the MONET Network of Excellence on Qualitative Reasoning, Mai 2000, Bertinoro, Italy.