

Publication List

Peer-reviewed publications

- Steinberger, JK; Krausmann, F (2011) Material and energy productivity. *Environmental Science and Technology*: [dx.doi.org/10.1021/es1028537](https://doi.org/10.1021/es1028537).
- Gingrich, S; Kuskova, P; Steinberger, JK (2011) Long-term changes in CO₂-emissions in Austria and Czechoslovakia - identifying the drivers of environmental pressures *Energy Policy* 39(2): 535-543.
- Sahakian, M; Steinberger, JK (2011) Energy Reduction Through a Deeper Understanding of Household Consumption: Staying Cool in Metro Manila. *Journal of Industrial Ecology*: forthcoming.
- Steinberger, JK; Roberts, JT (2010): From constraint to sufficiency: the decoupling of energy and carbon from human needs, 1975-2005. *Ecological Economics* .
[http://dx.doi.org/10.1016/j.ecolecon.2010.09.014](https://doi.org/10.1016/j.ecolecon.2010.09.014)
- Steinberger, JK; Krausmann, F; Eisenmenger, N (2010): Global patterns of material use: a socioeconomic and geophysical analysis. *Ecological Economics* 69(5), pp. 1148-1158.
[http://dx.doi.org/10.1016/j.ecolecon.2009.12.009](https://doi.org/10.1016/j.ecolecon.2009.12.009)
- Weisz, H; Steinberger, JK (2010): Reducing energy and materials flows in cities. *Current Opinion in Environmental Sustainability* 2(3), pp. 185-192.
[http://dx.doi.org/10.1016/j.cosust.2010.05.010](https://doi.org/10.1016/j.cosust.2010.05.010)
- Kennedy, C; Steinberger, JK; Gasson, B; Hansen, Y; Hillman, T; Havranek, M; Pataki, DE; Phdungsilp, A; Ramaswami, A; Villalba Mendez, G (2010): Methodology for inventorying greenhouse gas emissions from global cities. *Energy Policy* 38(9), pp. 4828-4837.
[http://dx.doi.org/10.1016/j.enpol.2009.08.050](https://doi.org/10.1016/j.enpol.2009.08.050)
- Binder, CR; Feola, G; Steinberger, JK (2010): Considering the normative, systemic and procedural dimensions in indicator-based sustainability assessments in agriculture. *Environmental Impact Assessment Review* 30(2), pp. 71-81. [http://dx.doi.org/10.1016/j.eiar.2009.06.002](https://doi.org/10.1016/j.eiar.2009.06.002)
- Sahakian, M; Steinberger, JK (2010): Energy Reduction Through a Deeper Understanding of Household Consumption: Staying Cool in Metro Manila. *Journal of Industrial Ecology* - forthcoming
- Gingrich, S; Kuskova, P; Steinberger, JK (2010): Long-term changes in CO₂-emissions in Austria and Czechoslovakia - identifying the drivers of environmental pressures. *Energy Policy* - forthcoming
- Steinberger, JK; Friot, D; Joliet, O; Erkman, S (2009): A spatially explicit life cycle inventory of the global textile chain. *International Journal of Life Cycle Assessment* 14(5), pp. 443-455.
[http://dx.doi.org/10.1007/s11367-009-0078-4](https://doi.org/10.1007/s11367-009-0078-4)
- Steinberger, JK; van Niel, J; Bourg, D (2009): Profiting from negawatts: reducing absolute consumption and emissions through a performance-based energy economy. *Energy Policy* 37(1), pp. 361-370. [http://dx.doi.org/10.1016/j.enpol.2008.08.030](https://doi.org/10.1016/j.enpol.2008.08.030)
- Kennedy, C; Steinberger, JK; Gasson, B; Hansen, Y; Hillman, T; Havranek, M; Pataki, DE; Phdungsilp, A; Ramaswami, A; Villalba Mendez, G (2009): Greenhouse gas emissions from global cities. *Environmental Science and Technology* 43(19), pp. 7297-7302.
[http://dx.doi.org/10.1021/es900213p](https://doi.org/10.1021/es900213p)
- Steinberger, JK (2008): Book review of Sustainable Energy: Choosing Among Options by J. W. Tester, E. M. Drake, M. W. Golay, M. J. Driscoll, and W. A. Peters and Energy at the Crossroads: Global Perspectives and Uncertainties by V. Smil. *Journal of Industrial Ecology* 12(2), pp. 248-249
- Steinberger, JK (2008): Book review of Sustainability Indicators - A Scientific Assessment edited by Tomas Hak, Bedrich Moldan and Arther Lyon Dahl, SCOPE Volume 67. *Journal of Industrial Ecology* 12(5/6), pp. 802-804
- Landhuis, D; Matos, L; Moss, SC; Steinberger, JK; Willmann, KVL; Greytak, TJ; Kleppner, D (2003): Inelastic Collision Rates of Trapped Metastable Hydrogen. *Physical Review A* 67, pp. 022718
- Kaspi, VM; Chakrabarty, D; Steinberger, JK (1999): Precision timing of two anomalous X-ray

- pulsars. *Astrophysical Journal* **525**(1), pp. L33-L36
- Keating, B; Timbie, P; Polnarev, A; Steinberger, JK (1998): Large angular scale polarization of the cosmic microwave background radiation and the feasibility of its detection. *Astrophysical Journal* **495**(2), pp. 580-596

Book chapters, conference proceedings, reports, PhD thesis

- Wiedenhofer, D; Lenzen, M; Steinberger, JK (2011) Spatial and Socio-Economic Drivers of Direct and Indirect Household Energy Consumption in Australia. in Landscapes of Urban Consumption. Ed: P. W. Newton.
- Erb, K-H; Mayer, A; Krausmann, F; Lauk, C; Plutzar, Steinberger, JK; Haberl H (2011). The interrelations of future global bioenergy potentials, food demand and agricultural technology. Socioeconomic and environmental impacts of biofuels: Evidence from developing nations. Eds: A. Gasparatos and P. Stromberg. Cambridge, Cambridge University Press: forthcoming.
- Steinberger, JK; Krausmann, F (2010): What do economic resource productivities measure?, in: Proceedings of the International Society for Ecological Economics conference: Advancing sustainability in a time of crisis, 22-25 August 2010, Oldenburg - Bremen, Germany. 1-22.
- Fischer-Kowalski, M; Krausmann, F; Steinberger, JK; Ayres, RU (2010): Towards a low carbon society: Setting targets for a reduction of global resource use., in: Vienna: IFF Social Ecology, Social Ecology Working Paper , 1-37. http://www.uni-klu.ac.at/socec/downloads/WP115_web.pdf
- Erb, K-H; Haberl, H; Krausmann, F; Lauk, C; Plutzar, C; Steinberger, JK; Müller, C; Bondeau, A; Waha, K; Pollack, G (2009): Eating the planet: Feeding and fuelling the world sustainably, fairly and humanely - a scoping study. Report commissioned by Compassion in World Farming and Friends of the Earth, UK, in: Vienna, Potsdam: Institute of Social Ecology and PIK Potsdam, Social Ecology Working Paper , 1-132. http://www.uni-klu.ac.at/socec/downloads/WP116_WEB.pdf
- Blanc, I., Friot, D., Cabon, J., Mäenpää, I., Steinberger, J., Krausmann, F., Erb, K.-H., Tukker, A., Vercalsteren, A., and Van Hoof, V. (2009): *Evaluation of Environmental Accounting Methodologies for the assessment of global environmental impacts of traded goods and services. Report to SKEP*.
- Steinberger, JK; van Niel, J; Bourg, D (2008): Vers une économie fondée sur la performance énergétique. *La Revue Durable* (31), pp. 46-50
- Steinberger, JK; Friot, D; Jolliet, O; Erkman, S (2007): Location-specific global product LCI : a textile case study, in: Paper presented at the 3rd International Conference on Life Cycle Management, University of Zurich, 27-29 August 2007. Zürich:
- Steinberger, JK; Lassueur, T; Seal, T (2006): Evaluation des programmes d'action du Plan Directeur Cantonal de l'Energie 2001-2005. Report to the Canton of Geneva, IPTEH, University of Lausanne
- Currión, P and Steinberger, JK (2006): The Role of ICT in Crisis Management. In: *Faster and More United? - the debate about Europe's crisis response capacity*. European Commission, pp. 372-379.
- Stauffacher, D., Currión, P., Drake, W., and Steinberger, J.K. (2005): *Information and Communication Technology for Peace: the role of ICT in preventing, responding to and recovering from conflict*. New York: United Nations ICT Task Force.
- Steinberger, JK (2004): Progress towards high precision measurements on ultracold metastable hydrogen and trapping deuterium, Massachusetts Institute of Technology, Physics Department.

Conferences & Workshops

- November 2010: Presentations "Modelling infrastructure-driven energy demand" with Markus Heinz and "Understanding energy and material productivity" with Fridolin Krausmann, Conaccount-ISIE Asia-Pacific meeting, 7-9 Nov, Tokyo, Japan.
- August 2010: Presentation "What do resource productivities measure?" with Fridolin Krausmann, International Society for Ecological Economics, 22-25 August 2010, Oldenburg - Bremen, Germany.

- June 2009: Presentation "Global patterns of material use: the impact of economic development, population and technology on cross country differences of material consumption." with Fridolin Krausmann and Nina Eisenmenger. International Society of Industrial Ecology, Lisbon, Portugal, 21-24 June 2009.
- February 2009: Presentation "Measuring low carbon cities" (with Helga Weisz) at the workshop "Towards low carbon cities: understanding and analyzing urban energy and carbon" in Nagoya, Japan
- September 2008: Presentations at Conaccount, Charles University, Prague "The Evolving Energy requirements of human society: global trends in the human development-Energy relationship, 1975-2005" (with J. Timmons Roberts).
- August 2008: Posters "The Evolving Energy requirements of human society: global trends in the human development-Energy relationship, 1975-2005" (with J. Timmons Roberts) and "The evolution of material and energy flows of the EU-15, 1970-2004" (with Helga Weisz, Fridolin Krausmann and Nina Eisenmenger), Gordon Research Conference on Industrial Ecology, Colby-Sawyer College, New Hampshire
- June 2008: Presentation: "The changing relation of energy consumption and human development: a global study 1975-2005" at Advances in Energy Studies 2008, TU Graz
- October 2007: Presentation: "Discussing system boundaries of urban metabolism by considering direct and indirect resource use" jointly with Helga Weisz, Workshop Analysing Stocks and Flows of the Urban Built Environment, Trondheim, Norway
- August 2007: Presentation: "LCA for globalized trade: data requirements and challenges from a textile case study", LCM 2007, Zürich
- June 2007 : Presentation: "Kyoto targets for growing urban regions: using the case study of Geneva, Switzerland to understand the potential and limits of regional approaches to climate and energy policy implementation", ISIE 2007, Toronto
- April 2007: Invited speaker for round-table "Quel avenir énergétique pour les pays du Sud?", EPFL, organized by Ingénieurs du Monde.
- August 2006: Poster "Assessment of Geneva's Energy Action Programs", Gordon Research Conference, Oxford