

Curriculum vitae – Dominik WIEDENHOFER

Academic career, positions held to date

Name	Mag.rer.nat. WIEDENHOFER Dominik, Bakk.techn.
HIGHER EDUCATION	
2012/02 - 2017/05	Doctoral thesis (to be defended in 2017/05): “Opening up the Black Box of Social Metabolism: Modeling the Biophysical Dynamics of Consumption and Stock-Flow Interactions”. (supervision: Prof. Fridolin Krausmann).
2010/10 - 2011/07	Master thesis: ‘Spatial and Socio-economic Drivers of Direct and Indirect Household Energy Consumption in Australia’ (supervision: Julia Steinberger, PhD and Prof. Manfred Lenzen)
2008/11 - 2009/03	Master program <i>Human- and Social Ecology</i> at the Alpen-Adria University Klagenfurt, Vienna, Graz; Graduation (MSc) with honors
2008/02 - 2008/08	Stipend from EU/Australia Exchange for Sustainable Development; Flinders University, Adelaide, Australia.
2004/10 - 2008/08	Bachelor program <i>Environmental and Bio-Resource Management</i> at the University of Natural Resources and Applied Life Sciences Vienna; Graduation (BSc)
APPOINTMENTS / POSITIONS HELD TO DATE	
Since 2011/09	Researcher and Lecturer at the Institute of Social Ecology, Alpen-Adria University Klagenfurt, Vienna, Graz, Austria.
2013/06 – 2013/08	Visiting Scientist at the Nagoya University, Japan , Department of Civil Engineering, Research Lab for Environmental Systems Analysis and Planning. (with Prof. Hiroki Tanikawa)
2012/02 – 2012/02	Visiting Scientist at the University of Leeds, United Kingdom , Earth and Science Department, Sustainability Research Institute (SRI). (with Julia Steinberger, PhD)
2010/03 – 2010/05	Visiting Scientist at University of Sydney, Australia , Department of Physics, Integrated Sustainability Analysis (ISA). (with Prof. Manfred Lenzen)
2009 – 2011	Researcher at EcoPolicy Lab, Neue Energien 2020, FFG Project 822065
2006 & 2007	Internships at Austrian Alpine Association, Taricaya Research and Conservation Peru
2006 - 2009	Teaching assistant at the University of Natural Resources and Life Sciences (BOKU), Austria , Dept. of Socio-Economics (5 courses and lectures)

Projects (selected)

2015 – ongoing	“Material Inputs, Stocks and Outputs (MISO): a model of the global socio-metabolic transition” (FWF P27590-G11, PI Prof. Fridolin Krausmann, funding sum 283.749 €)
2011 – 2016	“UTE - Urban Time and Energy - A socioecological model for assessing time-use and energy metabolism” (FWF-TRP 214-G17, PI Prof. Marina Fischer-Kowalski, funding sum 256.396 €)
2011 – 2014	“NeuJOBS: Employment 2025 - How will multiple transitions affect the European labour market” (FP7-SSH-2010-1 266833, PI Prof. Marina Fischer-Kowalski, funding sum 358.981 €).
2012 – 2015	“wwwForEurope – Wealth, Work and Welfare for Europe” (FP7-SSH-2011-1 290647; PI Prof. Marina Fischer-Kowalski, funding sum: 290,601€)
2013 – 2017	“Austrian Raw Material Equivalents in the Material Flow Accounting Framework – Indicator Development and Policy Consultancy” (PI Ass.Prof. Nina Eisenmenger)

Peer review and organizing activities, and/or memberships in academic organisations

2016	Chair of the Gordon Research Seminar on Industrial Ecology , Vermont, USA.
2016	Reviewer for the Joint conference of the International Society for Industrial Ecology (ISIE), 12th Socio-Economic Metabolism section conference and 5th Asia Pacific conference, Nagoya University, Japan
2015	Reviewer for the Conference of the European Society for Ecological Economics (ESEE) at the University of Leeds, United Kingdom
2012 – ongoing	Member of the International Society for Industrial Ecology (ISIE) and the International Input Output Association (IIOA)
Reviewing activities:	Journal of Industrial Ecology; Environmental Modelling & Software; Environmental Science & Technology; Resources, Conservation and Recycling; Ecological Economics; Regional Environmental Change; Sustainability; Environmental Pollution; Resources; publons.com/author/938894/dominik-wiedenhofer

PUBLICATION LIST

Full infos: www.orcid.org/0000-0001-7418-3477 or www.researchgate.net/profile/Dominik_Wiedenhofer

FIRST AUTHORED PUBLICATIONS IN PEER-REVIEWED JOURNALS

- Wiedenhofer, Dominik, Dabo Guan, Zhu Liu, Jing Meng, Ning Zhang, and Yi-Ming Wei. "Unequal Household Carbon Footprints in China." *Nature Climate Change*, December 19, 2016. doi:10.1038/nclimate3165.
- Wiedenhofer, Dominik, Julia K. Steinberger, Nina Eisenmenger, and Willi Haas. "Maintenance and Expansion: Modeling Material Stocks and Flows for Residential Buildings and Transportation Networks in the EU25: Stocks and Flows in the EU25." *Journal of Industrial Ecology* 19, no. 4 (August 2015): 538–51. doi:10.1111/jiec.12216.
- Wiedenhofer, Dominik, Manfred Lenzen, and Julia K. Steinberger. "Energy Requirements of Consumption: Urban Form, Climatic and Socio-Economic Factors, Rebounds and Their Policy Implications." *Energy Policy* 63 (December 2013): 696–707. doi:10.1016/j.enpol.2013.07.035.

CO-AUTHORED PUBLICATIONS IN PEER-REVIEWED JOURNALS

- Krausmann, Fridolin, Dominik Wiedenhofer, Christian Lauk, Willi Haas, Hiroki Tanikawa, Tomer Fishman, Alessio Miatto, Heinz Schandl, and Helmut Haberl. "Global Socioeconomic Material Stocks Rise 23-Fold over the 20th Century and Require Half of Annual Resource Use." *Proceedings of the National Academy of Sciences*, in press 2017.
- Mayer, Andreas, Willi Haas, and Dominik Wiedenhofer. "How Countries' Resource Use History Matters for Human Well-Being – An Investigation of Global Patterns in Cumulative Material Flows from 1950 to 2010." *Ecological Economics* 134 (April 2017): 1–10. doi:10.1016/j.ecolecon.2016.11.017.
- Eisenmenger, Nina, Dominik Wiedenhofer, Anke Schaffartzik, Stefan Giljum, Martin Bruckner, Heinz Schandl, Thomas O. Wiedmann, Manfred Lenzen, Arnold Tukker, and Arjan Koning. "Consumption-Based Material Flow Indicators — Comparing Six Ways of Calculating the Austrian Raw Material Consumption Providing Six Results." *Ecological Economics* 128 (August 2016): 177–86. doi:10.1016/j.ecolecon.2016.03.010.
- Schaffartzik, Anke, Dominik Wiedenhofer, and Marina Fischer-Kowalski. "More Productive, Less Sustainable? On the Need to Consider Material Resource Flows." *Intereconomics* 51, no. 4 (July 2016): 200–204. doi:10.1007/s10272-016-0602-2.
- Haas, Willi, Fridolin Krausmann, Dominik Wiedenhofer, and Markus Heinz. "How Circular Is the Global Economy?: An Assessment of Material Flows, Waste Production, and Recycling in the European Union and the World in 2005." *Journal of Industrial Ecology* 19, no. 5 (October 2015): 765–77. doi:10.1111/jiec.12244.
- Schaffartzik, Anke, Helmut Haberl, Thomas Kastner, Dominik Wiedenhofer, Nina Eisenmenger, and Karl-Heinz Erb. "Trading Land: A Review of Approaches to Accounting for Upstream Land Requirements of Traded Products: A Review of Upstream Land Accounts." *Journal of Industrial Ecology* 19, no. 5 (October 2015): 703–14. doi:10.1111/jiec.12258.
- Schaffartzik, Anke, Dominik Wiedenhofer, and Nina Eisenmenger. "Raw Material Equivalents: The Challenges of Accounting for Sustainability in a Globalized World." *Sustainability* 7, no. 5 (April 30, 2015): 5345–70. doi:10.3390/su7055345.

CONFERENCES, BOOK CHAPTERS & CONFERENCE PROCEEDINGS (selected):

More than 40 oral contributions at national/international scientific conferences as first author or co-author and 9 book chapters.

Invited lecture at the Young Researchers Section of the Gordon Research Conference on Industrial Ecology 2014, Tuscany, Italy. "Modelling global economy-wide material stocks in the course of the socio-metabolic transition, 1900 - 2009." Dominik Wiedenhofer, Christian Lauk, Willi Haas, Hiroki Tanikawa, Tomer Fishman, Fridolin Krausmann.

Schaffartzik, Anke and Dominik Wiedenhofer. „Linking Society and Nature: material flows and the resource nexus.“ In: Routledge Handbook of the Resource Nexus, edited by Raimund Bleischwitz, Holger Hoff, Catalina Spataru, Ester van der Voet und Stacy VanDeveer (*under review*).

Wiedenhofer, Dominik, Willi Haas, Michael Neundlinger, and Nina Eisenmenger. "Material Stocks and Sustainable Development." In *Social Ecology. Society-Nature Relations across Time and Space*, edited by Helmut Haberl, Marina Fischer-Kowalski, Fridolin Krausmann, and Verena Winiwarter, 5:277–91. Cham: Springer International Publishing, 2016.

Wiedenhofer, Dominik, Rovenskaya Elena, Haas Willi, Krausmann Fridolin, Pallua Irene, and Fischer-Kowalski Marina. "Is There a 1970s Syndrome? Analyzing Structural Breaks in the Metabolism of Industrial Economies." *Energy Procedia* 40 (2013): 182–91. doi:10.1016/j.egypro.2013.08.022.

Wiedenhofer, Dominik, Manfred Lenzen, and Julia K Steinberger. "Spatial and Socioeconomic Drivers of Direct and Indirect Household Energy Consumption in Australia." In *Urban Consumption*. Collingwood, Vic: CSIRO Publishing, 2011.