JAN WEINZETTEL

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Key areas of expertise

Environmental sustainability, carbon footprint, supply chain impacts, life cycle assessment, input-output analysis, industrial ecology, environmental footprints

EDUCATION

2008	**PhD**
	Faculty of Electrical Engineering, Department of Electro-technology, Czech Technical University in Prague, Czech Republic, **Thesis:** Life Cycle Assessment and Input-Output Analysis: Interconnections for unavailable data acquisition
2004	**Ing** (equivalent to MSc)
	Faculty of Electrical Engineering, Department of Electrotechnology, Czech Technical University in Prague, Czech Republic, **Thesis:** Quality Management of a Manufacturing Company

CURRENT POSITIONS

2012 –	**Researcher, Head of Environmental Footprint Lab (since 2018)**
	Environment Centre, Charles University, Czech Republic
	Environmental sustainability and indicators (further development and calculation of carbon, land, material and water footprints), environmentally extended input-output analysis (single-, multi-regional and hybrid framework), environmental life cycle assessment (LCA), **project management, communication and co-operation across multiple institutions and countries**
	PI in Czech Science Foundation **EXPRO** project **Pathways towards environmental sustainability** (2023-2027, **2 million EUR**)
	Team leader and coordinator of activities of the Environment Centre within EU funded project *N2K Revisited* (2019-2026, **directly responsible for a budget of over 1 million EUR**)
	Leader of work-package on Eco-design and consumer behavior within Czech Technological Agency-funded project *Centre of environmental research: Waste management, circular economy and environmental security* (2021-2026, **work-package budget approx. 1 million EUR, 5 institutions involved**)
	Principal Investigator in several other research projects funded by Czech Science Foundation and the European Commission focused on **environmental footprints** of households, nations and international trade, total budget about 700 000 EUR.
2016 –	**Associate Professor** (docent)**,** part time
	Faculty of Electrical Engineering, Czech Technical University in Prague, Czech Republic
	Lectures in Industrial Ecology, focused on life cycle assessment, **environmental management systems and eco-design**
2013 –	**LCA expert** in EPD verification process
	Building Research Institute – Certification Company, Ltd.
	Critical review of life cycle assessment studies, which serve as a basis for Environmental Product Declaration, **on-site visits of the manufacturing sites**

PREVIOUS POSITIONS

2010 – 2012	**Researcher**
	Industrial Ecology Programme (IndEcol), **Norwegian University of Science and Technology**, Trondheim, Norway
	Leader of work package 2 and 3 of the *OPEN:EU* project (7 indirect reports from

3 other institutions, budget approximately 20 % from the total 1.5 million EUR); responsible for **development of environmental extensions for a multiregional input-output model to calculate** land, water, and carbon footprints; calculation of national **environmental footprints** and their analysis; data manipulations and analysis using Matlab.

2007 – 2010 Researcher
Environment Center, Charles University, Czech Republic
Development of a method for the calculation of material requirements of national consumption using hybrid life cycle assessment-environmentally extended input-output analysis; analysis of the drivers of changes in material requirements.

PERSONAL SKILLS

PC	MS Office, Matlab, SimaPro
Languages	Czech (mother tong), English (proficient user)
Communic.	Work performed in international teams
Organization	Project leader, team leader, chief leader of a summer camp for children
Driving lic.	B (personal car), held since 1999

SELECTED PUBLICATIONS

Weinzettel, J., Vačkář, D., Medková, H., 2018. Human Footprint in Biodiversity Hotspots. *Frontiers in Ecology and the Environment* 16, (8), 447-452, [doi:10.1002/fee.1825](doi:10.1002/fee.1825) (WoS **IF: 11.1, AIS: 4.2**, cited: 22×)

Weinzettel, J., Hertwich, E.G., Peters, G.P., Steen-Olsen, K., Galli, A., 2013. Affluence drives the global displacement of land use. *Global Environmental Change* 23, 433-438, doi:10.1016/j.gloenvcha.2012.12.010 (WoS **IF: 9.5, AIS: 3.8, cited: 365×, highly cited paper**)

Weinzettel, J., Pfister, S., 2019. International trade of global scarce water use in agriculture: Modeling on watershed level with monthly resolution. *Ecological Economics* 159, 301-311, doi:10.1016/j.ecolecon.2019.01.032 (WoS IF: 5.4, AIS: 1.5, cited: 15×)

Weinzettel, J., Vačkářů, D., Medková, H., 2019. Potential net primary production footprint of agriculture: A global trade analysis. *Journal of Industrial Ecology* 23, 1133-1142, doi:10.1111/jiec.12850 (WoS **IF: 6.9**, AIS: 1.4, cited: 14×)

Weinzettel, J., Wood, R. (2018) Environmental Footprints of Agriculture Embodied in International Trade: Sensitivity of Harvested Area Footprint of Chinese Exports. *Ecological Economics* 145, 323-330, doi:10.1016/j.ecolecon.2017.11.013 (WoS IF: 5.4, AIS: 1.5, cited: 15×)

Weinzettel J., Steen-Olsen K., Hertwich E.G., Borucke M., Galli A., 2014.: Ecological footprint of nations: Comparison of process analysis, and standard and hybrid multiregional input-output analysis. *Ecological Economics* 101,115-126, doi:10.1016/j.ecolecon.2014.02.020 (WoS IF: 5.4, AIS: 1.5, **cited: 86×**)

SUMMARY

During the last fifteen years I have built a successful research career with 28 papers (12 as the first author, 2 marked as "Highly Cited in Field"), h-index 20 and over 2000 citations according to the Web of Science. I have received national as well as EU funding to focus on **environmental sustainability considering supply chain impacts**. I have collaborated with researchers across Europe and established the Environmental footprint lab within the Charles University Environment Centre. Throughout my research career I have been critical of my own work and I have always questioned how to move further towards more reliable and meaningful results. I am highly self-motivated and results-oriented. I have a technical background and experience from **on-site visits of manufacturing sites**. I am open to learning new methods and always look for new ways to solve problems.

-       The approach I developed to calculate the material footprint indicator of the Czech Republic was adopted to estimate the material footprint of the EU officially published on the Eurostat website.

-       I led the first construction of environmental extension of the MRIO model to calculate national water and land footprints and displacements through international trade, keeping a high level of detail of all agricultural crops as reported by FAOSTAT for international trade.

-       I led the first calculation of the potential net primary footprint, by connecting MRIO to spatially specific land-use.