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He has an engineering degree from the [HTL Braunau](#), a Bachelor in physics from [Princeton University](#), and MSc and PhD in [energy & resources from the University of California, Berkeley](#). He has been a professor at NTNU since 2003, except for 2015-2019, when he taught at [Yale University](#). Since 2007, he has served as a member of the UN International Resource Panel, where he led the development of three assessment reports, including [Resource Efficiency and Climate Change](#) (2020). He currently serves as one of 15 [climate science advisors](#) to the EU.

Hertwich is most well-known for providing the first quantification of carbon footprints of global consumption (2009) and is co-owner of [XIO-SA](#), which updates and licenses data used for this purpose. He has pioneered the life cycle assessment of energy scenarios (2014) and the climate impact assessment of the circular economy (2020). He recently turned his research focus to the material stocks of industrial equipment and the improved management of the valuable materials contained in this equipment. Further, he has an interest in the role of science advice bodies, theories of change, and narratives of sustainable development.