

Co-authors' biographies



Markus Antonietti was born in Mainz, Germany, in 1960. He began his studies in chemistry at the University of Mainz, where he also obtained his PhD in 1985. He was appointed Professor of Physical Chemistry at the University of Marburg in 1991, and became Director of the Colloid Department at the Max Planck Institute of Colloids and Interfaces in Potsdam in 1993. His research focuses on the synthesis and properties of functional polymers, and the techniques for characterizing them. In recent years, he has launched a major programme on 'sustainable chemistry'.

Tariq Banuri began his career in the Civil Service of Pakistan, went on to receive a PhD in economics from Harvard University, joined the United Nations as a Research Fellow at the World Institute for Development Economics Research, and was the founding Executive Director of the Sustainable Development Policy Institute in Pakistan. He worked as Senior Fellow and Director of the Future Sustainability Program at the Stockholm Environment Institute, and recently joined the United Nations as the Director of the Division for Sustainable Development. He has served on national as well as international forums for policy, advocacy, and research, including as a Coordinating Lead Author on the Nobel prize-winning Intergovernmental Panel on Climate Change.



Nico Bauer completed his PhD thesis at the Potsdam Institute for Climate Impact Research (PIK) under the supervision of Professor Ottmar Edenhofer in 2005. He returned to PIK in May 2007 after working at Fondazione ENI Enrico Mattei in Italy, and the Paul Scherrer Institute in Switzerland. He is currently involved in the development of modelling tools for PIK's Research Domain III, and is Co-Chair of the research groups on energy system and macroeconomic modelling. He is also involved in several other scientific projects, contributes to policy relevant reports, and supervises PhD students.

Markus Haller, born in 1975, studied energy and process engineering at the Technical University of Berlin. In 2007, he joined the Potsdam Institute for Climate Impact Research as a PhD student. He works on the representation of the power sector of developing countries in integrated assessment models, with a focus on the integration of renewable energy sources into rapidly growing electricity systems.





Hermann Held is Co-Chair of the research domain ‘Sustainable Solutions’ at the Potsdam Institute for Climate Impact Research (PIK). To advance mitigation strategies, he develops and applies methodologies that aim at an optimal mix of options under conditions of risk and uncertainty. He completed his PhD in physics with a fellowship from the Max Planck Society, followed by an Alexander von Humboldt fellowship at the University of California at Berkeley. In 1999 he joined PIK in order to merge his system science and environmental management interests. He lectures on climate science, economics and statistics.

Matthias Kalkuhl studied applied system science at the University of Osnabrück, and mathematics at the University of Granada. Since 2008 he has worked as doctoral student at the Potsdam Institute for Climate Impact Research. His research interests are dynamic game theory, policy instruments modeling, and the economics of exhaustible resources.



Gerhard Knies has worked in elementary particle physics research at DESY, CERN, SLAC, and the University of California. In 2003 he founded the Trans-Mediterranean Renewable Energy Cooperation and later initiated the DESERTEC Industrial Initiative, which aims at using clean power from deserts to provide energy, water, and climate security worldwide.

Elmar Kriegler works in the PIK research domain ‘Sustainable Solutions’. His research focuses on assessing the technological and climatic risks of climate change mitigation policies. He also works on the coupling of climate, energy and economy models under conditions of uncertainty. Kriegler studied physics at the University of Freiburg, obtained his PhD in physics at the University of Potsdam, and was a Marie Curie fellow at Carnegie Mellon University in Pittsburgh.



Anders Levermann trained as a physicist in Marburg, Berlin and Kiel, Germany. He completed his PhD in theoretical physics at the Weizmann Institute of Sciences, Israel. Since 2003 he has worked at the Potsdam Institute for Climate Impact Research, and in 2007 he also became Professor of Dynamics of the Climate System at Potsdam University. His research focuses on tipping elements of the climate system. He is head of the flagship activity, Tumble, which investigates the risk of tipping for Greenland, Antarctica, the Atlantic overturning, and monsoon circulations.



Johan Lilliestam holds a MSc degree in environmental science and physics from Göteborg University, and a MA in environmental management from Freie Universität Berlin. He is currently working on his doctoral thesis at the Potsdam Institute for Climate Impact Research in the research domain 'Transdisciplinary Concepts and Methods'. His research focuses on electricity costs and security of supply in a SuperGrid Europe.

Hermann Lotze-Campen studied agricultural science and agricultural economics at Kiel (Germany), Reading (UK) and Minnesota (USA) Universities. He holds a PhD in agricultural economics from Humboldt University, Berlin. He previously worked for a European aerospace company and as a policy consultant. At the Potsdam Institute for Climate Impact Research Lotze-Campen leads a research group that works on the interactions between climate change, agriculture and food production, land and water use, and adaptation options through biomass energy production and technological change.



Michael Lüken, born in 1979, studied physics in Jena, Austin (USA) and Heidelberg. Since 2006, he has been a PhD student at the Potsdam Institute for Climate Impact Research. He is currently working on model-based assessment of mitigation strategies within a long-term and multi-regional perspective. His PhD thesis will focus on the implications of climate policy for welfare distribution among different regions of the world.

Jennifer Morgan joined the World Resources Institute as its Director for Climate and Energy in September 2009. Previously, she was the Global Climate Change Director of the environmental NGO 'E3G'. In 2007, she worked with the German Chancellor's chief advisor Hans Joachim Schellnhuber, and in 2008 advised former Prime Minister Tony Blair. Prior to joining E3G in 2006, Jennifer Morgan led the Global Climate Change Programme of WWF. She holds a BA in political science and Germanic studies from Indiana University, and an MA in international affairs from the American University, Washington, DC.



Dieter Murach, born in 1953, studied forestry in Göttingen, receiving his PhD in 1983. Since 2001 he has been Professor of the Ecology and Economics of Forestry at the Eberswalde University of Applied Sciences. He is also Dean of Silviculture at the State Forestry Office. His research focuses on dendromass production, the ecology of forests, and biocoal applications.



Robert Pietzcker joined the PIK research domain ‘Sustainable Solutions’ as a doctoral student after working briefly as a consultant with McKinsey & Company. In his doctoral thesis he will analyze the representation of capital inertia in hybrid energy-economic models, focusing on the example of decarbonizing the transport sector. Previously, Pietzcker studied physics at the University of Freiburg and at McGill University in Montreal before graduating from the University of Jena.

Karsten Sach, born in 1959, is Deputy Director-General at the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety, with responsibility for international cooperation. Prior to assuming that office in 2004, he led the department for International Cooperation, Global Conventions and Climate Change. Since 1999 he has been the chief German negotiator at the Conferences of the Parties of the United Nations Framework Convention on Climate Change. Since September 2008 he has been Chairman of the Management Board of the European Environment Agency and since January 2009 additionally Chairman of the International Renewable Energy Agency (IRENA). Sach studied law and obtained his PhD at the Albert-Ludwigs-Universität in Freiburg in 1993.



Katrin Vohland is an expert in biodiversity research, mainly studying the inter-relationships between biodiversity, climate change, and ecosystem services. She has worked in the Amazon on speciation of arthropods and on sustainable pathways to protect forests, and in Africa on the contribution of rainwater harvesting to landscape functions. At PIK she investigated the impact of climate change on protected areas. Vohland recently moved to the Museum for Natural History in Berlin to strengthen biodiversity research in Germany and connect it more closely to international programmes and research requirements.

Ernst Ulrich von Weizsäcker, born in 1939, was Professor of Biology from 1972–75 at the University of Duisburg-Essen, and President of the Wuppertal Institute for Climate, Environment and Energy from 1991–2000. He served as a Member of Parliament and Chair of the German parliament’s Environment Committee from 1998–2005. From 2006–08 he was Dean of the Bren School of Environmental Science and Management at UC Santa Barbara, California. Since 2007 Weizsäcker has been Co-Chair of the International Panel on Sustainable Resource Use. His main publications include ‘Factor Four’ (with A. and H. Lovins, 1997) and ‘Factor Five’ (with C. Hargroves and M. Smith, 2009).

