



NETHERLANDS ENVIRONMENTAL ASSESSMENT AGENCY (PBL) AND
INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS (IIASA) WORKSHOP ON

ENHANCING THE STATE OF TRANSPORT MODELING IN IAMs

AN EXPERT MEETING CARRIED OUT WITHIN THE FRAMEWORK
OF THE EUROPEAN COMMISSION FP7 ADVANCE PROJECT
(WODAK ROOM, IIASA, LAXENBURG, AUSTRIA – 19 NOVEMBER 2013)

Biosketches of Speakers and Chairpersons

Keywan Riahi leads the Energy Program at the International Institute for Applied Systems Analysis (IIASA, Austria). In addition, he holds a part-time position as Visiting Professor in the field of energy systems analysis at the Graz University of Technology, Austria. Professor Riahi is a member of the Scientific Steering Committee of the Integrated Assessment Modeling Consortium (IAMC) and a number of other international and European scenario activities. His work within international modeling comparison projects, such as the Stanford-based Energy Modeling Forum (EMF), focuses on the spatial and temporal characteristics of technology diffusion and the path-dependent development of the energy system under alternative policy configurations.

David McCollum is a Research Scholar with IIASA's Energy Program, having joined the group in February 2011. He received his doctorate in transportation technology & policy from the University of California, Davis (USA), Institute of Transportation Studies in 2011. Dr. McCollum's main fields of scientific interest include techno-economic analysis of advanced energy and transport technologies and the development and application of energy-economic and integrated assessment models. Dr. McCollum is an author of the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (Working Group III) and was previously a lead analyst on the Global Energy Assessment. He has co-organized policy workshops with the Global Environment Facility and United Nations in multiple countries.

Detlef van Vuuren is professor in Integrated Assessment of Global Environmental Change at the Faculty of Geosciences, Utrecht University and senior researcher at PBL Netherlands Environmental Assessment Agency. He is also member of the board of the Integrated Assessment Modelling Consortium (IAMC) and member of the Working Group on Coupled Models of the World Climate Research Programme (WCRP). Prof. van Vuuren serves on the editorial boards of the journals

Climatic Change and *Earth System Dynamics*. He played a coordinating role in the development of the Representative Concentration Pathways (RCPs), now used heavily in the IPCC's assessments. Prof. van Vuuren has participated as (Coordinating) Lead Author in various assessments such the Millennium Ecosystem Assessment, UNEP's Global Environmental Outlook, the International Assessment on Agricultural Science and Technology Development, and the OECD Environmental Outlook.

Bastien Girod works as senior researcher at Prof. Hoffman's Chair for Sustainability and Technology (SusTec) at the Department of Management, Technology, and Economics of ETH Zurich. His research centers on the socio-techno-economic changes required to reduce environmental impacts especially greenhouse gas emissions. Past research includes contributions in the field of long-term climate change scenarios, environmental assessment of household consumption, Life-Cycle-Assessment, rebound effects and global energy modelling in the field of transportation. At SusTec he currently investigates the framework conditions enabling firms in the power sector to invest towards low carbon technologies, in particular energy efficiency. Bastien developed the detailed transport sector module in the IMAGE/TIMER model and authored one of the few papers to date summarizing the results of a model inter-comparison focusing on transport.

Thomas Longden started at FEEM in April 2010 and is currently working as a modeller for the Sustainable Development Programme and within the ICARUS research group on alternative energy innovation. Whilst at the University of New South Wales (located in Sydney, Australia), Longden worked as a Lecturer of Environmental Economics and as a Research Officer at the Social Policy Research Centre. After leaving UNSW in 2009, he worked as an Economic Development Officer at the Vietnamese Institute of Fisheries Economics and Planning in Hanoi, Vietnam.

Oreane Edelenbosch is a junior researcher at the PBL Netherlands Environmental Assessment Agency. She is working for the ADVANCE project, where her main topic of scientific interest is the representation of energy demand in IAM models. Currently she is developing a service sector module, focusing on different end uses, into the IMAGE/TIMER framework. Edelenbosch completed her MSc in 2012, with a thesis on luminescent solar concentrators at the Experimental Physics department of the Imperial College London and a thesis on the interaction between Climate- and Air quality Policy at the University of Utrecht.

Lewis Fulton has worked internationally in the field of transport/energy/environment analysis and policy development for over 20 years. He is Co-Director of the NextSTEPS Program within the Institute of Transportation Studies at the University of California, Davis. There he helps lead a range of research activities around new vehicle technologies and advanced fuels, and how these can gain rapid acceptance in the market. From 2007-2012 he was a Senior Transport Specialist with the International Energy Agency, Paris, as well as Division Head for Energy Technology Policy during 2011-2012. He returned to the IEA in 2007 after working there originally from 1999-2005. During 2006-2007 he worked in Kenya with the UN Environment Program, developing and implementing GEF-funded sustainable transport projects around the world. During the 1990s he also worked at the US Department of Energy for 4 years, and taught at the Independent University of Bangladesh and the University of Maryland.

Jari Kauppila

Biosketch forthcoming

Charlie Wilson is a Research Scholar in IIASA's Transitions to New Technologies (TNT) Program, working with Arnulf Grübler on energy technology innovation and scaling dynamics, research that fed into the Global Energy Assessment. Dr. Wilson is currently a Lecturer in Energy & Climate Change in the Tyndall Centre at the University of East Anglia (UK). His research interests lie at the intersection of technology, policy, behavior and decision making. After completing his PhD at the University of British Columbia (Canada) on the social and behavioral determinants of energy use, Dr. Wilson has held teaching and/or research positions at the London School of Economics (UK), Chalmers University (Sweden), and IIASA. Prior to his academic career, Dr. Wilson worked for a number of years in the private sector on renewable energy finance and climate change policy.

Mark Jaccard has been a professor since 1986 in the School of Resource and Environmental Management at Vancouver's Simon Fraser University. His PhD is from the Energy Economics and Policy Institute at the University of Grenoble. He has published over 100 academic papers, most of these related to his principal research focus: the design and application of energy-economy models that assess the effectiveness of sustainable energy and climate policies. For this career research, he was named a Fellow of the Royal Society of Canada in 2009 and British Columbia's Academic of the Year in 2008. He has contributed to several major processes and assessments, including the Intergovernmental Panel on Climate Change (93-96 and 2010-2012), the China Council for International Cooperation on Environment and Development (1995-2001 and 2007-2009), Canada's National Roundtable on the Environment and the Economy (2006-2009), British Columbia's Climate Action Team (2007-2009), and the Global Energy Assessment (2008-2012). In 2006, his book, *Sustainable Fossil Fuels*, won the Donner Prize for top policy book in Canada

Jillian Anable is Senior Lecturer at the Centre for Transport Research at the University of Aberdeen. Dr Anable's work focuses on transport and climate change with particular emphasis on the application of behavioural and psychological theory to the understanding of travel choice. She is Co-Transport Topic Leader at UKERC carrying out, among other things, a scenario analysis of the travel sector to 2050 incorporating lifestyle and policy changes. Prof. Anable has advised the UK Government advisory body - the Commission for Integrated Transport - on climate change and has carried out work for the Department for Transport and the Scottish Government on carbon abatement, public attitudes to climate change and 'smarter choices'. Her PhD, completed in 2002, applied market segmentation and psychometrics to divide the population into different traveller types to identify the characteristics and motivations of those most likely to respond to both hard and soft transport policies.

Robert Pietzcker is a PhD candidate at the Potsdam Institute for Climate Impact Research (PIK). In his thesis he uses hybrid energy-economy models to analyze two paramount building blocks of mitigation scenarios, namely the decarbonization of the transport sector and the integration of variable renewable energy into the power system on the example of Photovoltaics and Concentrating Solar Power (CSP). Further research interests include the representation of capital inertia in hybrid energy-economic models, the modeling of load management and storage, learning curves in energy models, and the effect of differing economic damage valuation on climate protection policies. Pietzcker joined the PIK Research Domain "Sustainable Solutions" as PhD student

after working as a short-term consultant with McKinsey & Company. Previously, he studied physics at University of Freiburg as well as McGill University in Montreal, Canada, before graduating with a Diploma from the University of Jena.

David Greene is an author of more than 200 publications on transportation and energy issues. His current work focuses on the potential to mitigate greenhouse gas emissions from transportation, technological and economic potential for fuel economy improvement, impacts of fuel economy policies, modeling energy transitions for transportation, developing scenarios for alternative fuel infrastructure build-out, and estimating the costs of oil dependence. He is an emeritus member of both the Energy and Alternative Fuels Committees of the Transportation Research Board and a lifetime National Associate of the National Academies. He received the Society of Automotive Engineers' Barry D. McNutt Award for Excellence in Automotive Policy Analysis, the Department of Energy's 2007 Hydrogen R&D Award and 2011 Vehicle Technologies R&D Award, and was recognized by the Intergovernmental Panel on Climate Change for contributions to the IPCC's receipt of the 2007 Nobel Peace Prize.

Hannah Daly is a Research Associate in Energy Systems at the University College London Energy Institute. She joined the Energy Institute in October 2012 upon completing her PhD at University College Cork. Dr. Daly's research interests are in developing transport and energy models and using these tools to inform policy-making. Her PhD research involved creating a model of the Irish car stock, which was used to examine the impact of policy measures on meeting climate targets in the future. She has also worked on developing the representation of travel behaviour in energy systems models. Hannah graduated in 2009 with a BSc in Mathematical Sciences from University College Cork.

Alex Körner joined the IEA Energy Technology Policy Division in January 2011, where he is working as an energy analyst in the transport sector. The main focus of his work is to develop modelling tools and to assess strategies towards sustainable transport, including technological as well as behavioural aspects. Körner is the co-author of the IEA Technology Roadmap on Fuel Economy of Road Vehicles and one of the authors of the 2012 IEA Energy Technology Perspectives publication. He studied at Technische Universität Berlin and holds a Master's Degree in Power and Process Engineering. Before joining the IEA, he worked on integrated assessment modelling to investigate the transition of the global energy system at Potsdam Institute for Climate Impact Research (PIK).