

Workshop Programme

International BE₄ Workshop

Including Behaviour in Energy/Engineering/Economy/Environment models

Court Room, Senate House, Malet Street, London WC1E 7HU

Day 1, Monday April 20th

12:15 – 12:45 Registration and lunch, *Jessell Room*

12:45 – 13:00 Welcome and introduction:

Neil Strachan, UCL Energy Institute and WholeSEM

Brian Ó Gallachóir, UCC and ETSAP

Hannah Daly, UCL Energy Institute

13:00 – 14:00 Keynote address:

Energy-economy modeling and behavioral realism: How much is enough

Mark Jaccard, Simon Fraser University

14:00 – 15:00 Keynote address:

Energy use and greenhouse gas emissions from transportation: implications for energy models

Andreas Schäfer, UCL Energy Institute

15:00 – 15:30 Break

15:30 – 16:45 Energy systems models' treatment of behaviour

Global sensitivity analysis of an energy-economy model of the residential building sector

Louis-Gaëtan Giraudet, Frédéric Branger, Céline Guivarch, Philippe Quirion

CIREN, France

The feasibility of alternative transition pathways under restricted technological availability

Mariësse van Sluisveld, Harmen-Sytze de Boer, Andries Hof, Detlef van Vuuren
PBL Netherlands Environmental Assessment Agency
Copernicus Institute of Sustainable Development, The Netherlands

How we treat behaviour in energy system optimisation models [short presentation]

Hannah Daly
UCL Energy Institute, UK

Discussion

15:45 – 18:00 Energy demand and the transport sector

The transportation sector as a lever for reducing long-term mitigation costs in China

Meriem Hamdi-Cherif, Henri Waisman
CIRED, France

Incorporating behavior change through modal-shifts in the MARKAL-Georgia transport sector

Anna Sikharulidze, Gary Goldstein
Sustainable Development Centre Remissia, Georgia

A model for the analysis of future scenarios of energy demand in the transport sector in South Africa

Bruno Merven, Adrian Stone, Alison Hughes
University of Cape Town, South Africa

Discussion

18:00 – 19:00 Food and drinks reception at Senate House

Day 2, Tuesday April 21st

09:00 – 10:45 Consumer heterogeneity and vehicle choice

COCHIN-TIMES: Integration of Vehicle Consumer Choice in TIMES Model and its Implications for Climate Policy Analysis

Kalai Ramea, David Bunch, Chris Yang, Sonia Yeh, Joan Ogden
University of California Davis, USA

Incorporating social influence effects into global energy-economy models

Hazel Pettifor, Charlie Wilson
University of East Anglia, UK

Breaking down non-cost barriers to technology adoption is critical for the transport-energy transformation

David McCollum, Keywan Riahi, Volker Krey, Kalai Ramea
IIASA, Austria

Representation of heterogeneity and consumer behavior in IAM models transport sector: stylized or explicit? [short presentation]

O.Y. Edelenbosch, D. McCollum

PBL Netherlands Environmental Assessment Agency

Exploring the timing and scale of uptake of plug-in vehicles in the car market in the UK: a disaggregated consumer segmentation approach

Christian Brand, Jillian Anable, Celine Cluzel

Environmental Change Institute, University of Oxford

Discussion

10:45 – 11:15 Break

11:15 – 12:50 Beyond cost-optimisation: The role of energy poverty and information

Spatial socioeconomic indicators of suboptimal space heating choices

James Glynn, John Curtis, Brian Ó Gallachóir

University College Cork, Ireland

Assessing the impact of energy poverty in the energy system through the application of a regional TIMES model: Lessons from a case study in Gauteng, South Africa

Audrey Dobbins, Ulrich Fahl, Kai Hufendiek

IER, Germany

Assessing demand-side behaviour in long-term energy modelling: The case of Romanian Social MARKAL

Roman Kanala, Metin Caliskan, Adriana Dardala, Marian Dardala, Emmanuel

Fragnière, Titus Felix Furtuna, Francesco Moresino, Ion Smeureanu, Emilia Titan

University of Geneva, Switzerland

To Buy or Lease Solar PV: A Selection Bias Problem

Jacquelyn Pless, Harrison Fell, Ben Sigrin

National Renewable Energy Laboratory, USA

Discussion

12:50 – 13:40 Lunch

13:40 – 15:15 (How) can the social sciences inform E4 analysis?

Challenges and opportunities of modelling behaviour in E4 models

Gesche Huebner, Mike Fell, Megan McMichael, Stephanie Gauthier, Moira

Nicolson, David Shipworth

UCL Energy Institute, UK

Integration of social sciences with E4 modelling

Clare Watson, Ger Mullally, Paul Deane, and Brian Ó Gallachóir

University College Cork, Ireland

TWO-gether: Modelling co-evolving energy consuming social practices in the household sector

Kavin Preethi Narasimhan, Thomas Roberts, Maria Xenitidou and Nigel Gilbert
CRESS, University of Surrey, UK

Interdisciplinary experiments in energy modelling: co-producing social science and engineering insights on energy demand

Tom Hargreaves, Jason Chilvers, Noel Longhurst, Sarah Higginson, Eoghan McKenna, John Barton, Murray Thomson, Matthew Leach, Damiete Emmanuel-Yusuf
School of Environmental Sciences, University of East Anglia, UK

Discussion

15:15 – 15:40 Break

15:40 – 17:00 Panel discussion

Dr Henri Waisman, Institute for Sustainable Development and International Relations (IDDRI), France

Dr Charlie Wilson, University of East Anglia, UK

Dr David Shipworth, UCL Energy Institute, UK

Prof. Michael Grubb, UCL Institute for Sustainable Resources, UK