

# SCCER Mobility Seminars



Prof. Dr. Andreas W. Schäfer, University College London

## Need for and Patterns of the Adoption of Disruptive Transportation Technologies

Tuesday, 17 November 2015, 2.15 pm at ETH Zürich  
LEE E 308 (LEE-building, E-floor, room 308)

### Abstract

This seminar consists of three parts. It starts with an update of the most recent trends in global passenger travel and projects future US mobility levels through 2100 for different scenarios of consumer behavior, technology change, and transport policy. In the absence of radical consumer change, this part concludes a continuous growth in travel demand, especially in air travel. In a next step, the opportunities for and costs of reducing CO<sub>2</sub> emissions from passenger aircraft, the fastest growing transport mode, are discussed. Although significant cost-effective fuel burn and CO<sub>2</sub> emission reduction potentials are identified, they likely continue to be outpaced by future demand growth. A number of potentially disruptive transportation technologies already exist or may become available in the near future. To better understand the conditions under which they could be adopted on a large scale, the final part of this seminar presents initial results from a study examining the adoption characteristics of past disruptive transportation technologies.

### Biography

Andreas W. Schäfer is a Professor of Energy and Transport at the UCL Energy Institute, University College London, and a Visiting Professor at the Precourt Energy Efficiency Center at Stanford University. His publications cover the demand for and supply characteristics of energy and transportation systems. In addition to peer review journals, his work was published in popular science magazines, such as Scientific American. He is lead-author of "Transportation in a Climate-Constrained World", MIT Press (June 2009). Prior to joining the UCL Energy Institute, he held appointments at the International Institute for Applied Systems Analysis (IIASA), the Massachusetts Institute of Technology, the University of Cambridge, and Stanford University. He holds a MSc in Aerospace Engineering and a PhD in Energy Economics, both from the University of Stuttgart, Germany.

The seminar is organized by the Swiss Competence Center for Energy Research (SCCER) for Efficient Technologies and Systems for Mobility. We'd appreciate your registration until **13 November 2015** using the [doodle link](#) or contact [fiorella.meyer@sccer.ethz.ch](mailto:fiorella.meyer@sccer.ethz.ch).

