



Workshop: The Energy Transition in Land Transportation

Organizers: Anna Creti (University Paris Dauphine and Ecole Polytechnique)
and Jean-Pierre Ponsard (CNRS and Ecole Polytechnique)

Tuesday November 22 2016

Location: Maison de la chimie, 28 Rue Saint-Dominique, 75007 Paris

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Free access with registration: <https://www.inscription-facile.com/form/nEDy8M0o3QMIsadZktnY>

Scope of the workshop

Land transportation for passengers and merchandises is one of the major sources of CO2 emissions worldwide. Emissions are barely declining in OCDE countries and bound to grow in emerging countries due to the increase in standards of living. This situation creates an important challenge for the mitigation of climate change: new technologies have been launched, a set of complementary policies has been designed, and consuming habits are changing. This workshop seeks to promote exchanges between research scientists with public and private decision makers interested by the following two major issues:

- Where do we stand in 2016 in terms of deployment: how to explain the differences within European countries and between Europe and Japan, California or China; which evaluation can be made of current policies (carbon tax, subsidies, technical norms...), of changing consumer habits.
- Model building of low carbon scenarios at the 2050 horizon: how to introduce technological assumptions along with policy assumptions and change in behavioral habits; how to model the evolution of modal usages (individual and collective) due in particular to the development of collaborative transportation modes; how to model the value added chain from energy sources and material building; what are the learning by doing potentials and networking effects at these various stages and their impacts in terms of private financing and public support policies.

Presentations are expected on each set of issues. These presentations will be followed by a round table that will give the opportunity for public and private decision makers to define the most promising areas for future research in view of the current state of the energy transition in their own sector of activities.

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Program of the workshop

8.30 - 9.00 Welcome & Introduction by Jean-Pierre Ponsard

Session 1 9.00 - 13.00 chair Yannick Perez, Assistant Professor, CentraleSupélec & Univ Paris Sud (RTIM) Paris-Saclay, Research Scientist at the chair Armand Peugeot

9.00 - 9.40 "Comparison of leading electric vehicle policy and deployment in Europe". **Uwe Tietge**, Research Scientist, the International Council for Clean Transportation Europe team, Berlin.

9.40 – 10.20 "Heterogeneous Users, Endogenous Congestion and the Cost of Pollution". **Marc Ivaldi** Professor, Toulouse School of Economics (TSE) and Ecole des Hautes Etudes en Sciences Sociales

10.20– 10.35 Coffee break

10.35– 11.15 "Corrective Policy and Goodhart's Law: The case of carbon emissions from Automobiles", **Mathias Reynaert** Assistant Professor of Economics, Toulouse School of Economics, joint work with James Sallee.

11.15– 12.00 "Overlapping Strategies for Reducing Carbon Emissions from the Personal Transportation Sector", **Carolyn Fischer**, Senior Research Fellow, Resources For the Future, Washington DC, joint work with Soren Anderson and Alex Egorenkov

12.00 – 12.40 « From weak signals to mobility scenarios: A prospective study of France in 2050 ». **Vincent Kaufmann**, Professor, Ecole polytechnique fédérale de Lausanne, Director of LaSUR, joint work with Emmanuel Ravalet.

Lunch 12.40-13.30

Session 2 13.30 – 18.30 chair Dominique Bureau, Délégué Général du Conseil économique pour le Développement Durable (CEDD), Président du Comité pour l'économie verte au Ministère de l'écologie, du développement durable et de l'énergie

13.30 – 14.10 "The Carbon Footprint of Suburbanization: Evidence from French Household Data", **Miren Lafourcade** Professor, University Paris Sud (RITM) Paris Saclay & Paris School of Economics, joint work with Camille Blandin de Thé

14.10– 14.50. "Mobility Choices and Climate Change: Assessing the Effects of Social Norms and Economic Incentives through Discrete Choice Experiments". **Charles Raux**, Professor, Université de Lyon, Director of Laboratoire Aménagement Economie Transports.

14.50-15.30 "Application of E3ME to assess the economic effects of low-carbon transport in France". **Sophie Billington**, Project manager, Cambridge Econometrics (UK)

15.30-16.10 "Defining the abatement cost in presence of learning-by-doing: application to the fuel cell electric vehicle" **Guy Meunier** (INRA and Ecole Polytechnique), joint work with Anna Creti, Alena Kotelnikova and Jean-Pierre Ponsard

16.10 – 16.30 Coffee break

Round table 16.30 – 18.00 chair Anna Creti

"How does the energy transition materialize in your sector of activities: main challenges and potential breakthroughs?"

with

Sylvain Herberg, Directeur du Pôle Prospective EDF-Direction Prospective et Relations Internationales
Grégoire Marlot, SNCF / Direction Stratégie Finance

Erwin Performis, Air Liquide, VP Hydrogen Energy Market

Yann Tréméac, Chef de service adjoint, Service Transports et Mobilité, ADEME, Paris