





Conference

"The Economics of Energy and Climate Change"

Toulouse, September 8-9, 2015

CONFERENCE VENUE

MERCURE ATRIA TOULOUSE

Boulevard Lascrosses 8, Esplanade Compans-Caffarelli 31000 Toulouse – <u>www.mercure.com</u> - <u>www.accorhotels.com</u>

ORGANIZING COMMITTEE

Stefan Ambec Claude Crampes Thomas-Olivier Léautier Jean Tirole

CONFERENCE SECRETARIAT

Christelle Fauchié, IDEI-TSE Manufacture des Tabacs Aile Jean-Jacques Laffont 21 allée de Brienne

31000 Toulouse – France email: <u>elecconf@tse-fr.eu</u>

Tuesday, September 8

8:15-8:45 Registration

8:45-8:50 Welcoming address: J. Tirole (TSE) Room: Amphithéâtre Gavarnie

8:50-10:30 **Keynote Lectures (40'+10')**

L. Bretschger (ETH Zurich)

"Efficient and Equitable Climate Policy in a Dynamic World"

• **F. Wolak** (Stanford University)

"Role of Financial Market Participants in Improving Wholesale Electricity Markets Performance"

10:30-11:00 Coffee break

11:00-12:20 Parallel sessions

International agreements 1 Chair: S. Chabé-Ferret Room: Amphithéâtre Gavarnie

C. Almer (University of Bath) and R. Winkler (University of Bern)

"Analysing the Effectiveness of International Environmental Policies: The Case of the Kyoto Protocol"

Discussant: S. Chabé-Ferret (TSE)

O. T. Acikgoz (Yeshiva University) and **H. Benchekroun** (McGill University)

"Anticipated International Environmental Agreements"

Discussant: J.P. Amigues (TSE)

Market mechanisms 1 Chair: E. Cantillon Room: Pic du Midi/Lourdes

P. Holmberg (Research Institute of Industrial Economics, Stockholm)

"Pro-Competitive Rationing in Multi-Unit Auctions"

Discussant: P. Cramton (University of Maryland and European University Institute)

R. Li (University of Berkeley, Berkeley), A.J. Svoboda (Pacific Gas and Electric Company) and S. S. Oren (University of California, Berkeley)

"Efficiency Impact of Convergence Bidding in the California Electricity Market"

Discussant: E. Cantillon (ECARES, ULB)

Storage Chair: G. Lafforgue Room: Cordes

 I. Lazkano (University of Wisconsin-Milwaukee), L. Nostbakken (Norwegian School of Economics) and M. Pelli (Université de Sherbrooke)

"From Fossil Fuels to Renewables: The Role of Electricity Storage"

Discussant: G. Lafforgue (TBS)

T. Durmaz (Norwegian School of Economics)

"Precautionary Energy Storage"

Discussant: M. Liski (Economics Department of the Aalto University)

12:20-14:00 Lunch

14:00-16:00 Parallel Sessions

Renewables Chair: S. Ambec Room: Amphithéâtre Gavarnie

- **S. Ambec** (TSE, INRA-LERNA-IDEI) and C. Crampes (TSE, Gremaq and IDEI) "Environmental Policy with Intermittent Sources of Energy"
- Discussant: L. Bretschger (ETH Zurich)
- M. Lopez-Botet Zulueta, M. Perrot, P. Fourment, T. Hinchliffe and V. Silva (EDF R&D)
 "Economic and Technical Analysis of the European System with a High RES Scenario"
 Discussant: T. Durmaz (Norwegian School of Economics)
- M. Liski (Economics Department of the Aalto University) and I. Vehviläinen (Gaia Group and Aalto University)

"Gone with the Wind? An Empirical Analysis of the Renewable Energy Rent Transfer" Discussant: M. Reynaert (TSE)

Adaptation Chair: N. Treich Room: Pic du Midi/Lourdes

C. Raux , A. Chevalier, E. Bougna (Laboratory of Transport Economics, CNRS, University of Lyon) and Denis Hilton (University of Toulouse)
 "Mobility Choices and Climate Change: Assessing the Effects of Social Norms and Economic Incentives through Discrete Choice Experiments"
 Discussant: H. Andersson (TSE)

 F. Cohen (London Shool of Economics and Political Science, London), M. Glachant and M. Soderberg (MINES ParisTech, Paris)

"Adaptation of American Homes to Climate Change"

Discussant: C. Nauges (TSE)

 Y. Tsur (The Hebrew University of Jerusalem) and A. Zemel (Ben Gurion University of the Negev)

"Policy Tradeoffs under Risk of Abrupt Climate Change

Discussant: **N. Treich** (TSE)

Carbon value Chair: F. Ricci Room: Cordes

V. Bosetti (Università Commerciale "L. Bocconi", IGIER and FEEM) and M. Maffezzoli (Università Commerciale "L. Bocconi" and IGIER)
 "Taxing Carbon under Market Incompleteness"

Discussant: **F. Ricci** (University of Montpellier 1)

- P. Krüger (University of Geneva and Swiss Finance Institute)
 "Climate Change and Firm Valuation: Evidence from a Quasi-Natural Experiment"
 Discussant: S. Pouget (TSE)
- I. Ahamada, M. Fodha (Paris School of Economics and University Paris 1), D. Kirat (University of Orléans, CNRS, LEO, UMR 7322,)

"Carbon Tax, Spatial Heterogeneity and Distribution: Evidences from the French Energy Consumption"

Discussant: N. Ladoux (TSE)

16:00-16:40 Coffee break

16:40-18:00 Parallel Sessions

International agreements 2 Chair: F. Salanié Room: Pic du Midi/Lourdes

E. Billette de Villemeur (LEM UMR 9221, Université de Lille) and J. Leroux (HEC Montréal, CIRANO & CRÉ)

"Track-and-Trade: A Liability Approach to Climate Policy"

Discussant: V. Zaporozhets (TSE)

 B. Harstad (University of Oslo), F. Lancia (University of Vienna) and A. Russo (University of Oslo)

"Compliance Technology and Self-Enforcing Agreements"

Discussant: F. Salanié (TSE)

Market mechanisms 2 Chair: T.O. Léautier Room: Amphithéâtre Gavarnie

P. Cramton (University of Maryland and European University Institute)
 "Pay-for-Performance: The Essential Ingredient in Capacity Markets"
 Discussant: T.O. Léautier (TSE)

N. Wölfing (ZEW Mannheim & ETH Zürich)
 "Forward Trading and Collusion in Supply Functions"
 Discussant: D. Salant (TSE)

20:00-22:00 Conference dinner

Wednesday, September 9

8:40-10:00 Parallel Sessions

Dynamic resource management Chair: L. Rougé Room: Cordes

- J.P. Amigues (Toulouse School of Economics(INRA, IDEI and LERNA)) and M.
 Moreaux (Toulouse School of Economics (IDEI, IUF and LERNA))
 "From Primary Resources to Useful Energy: The Pollution Ceiling Efficiency Paradox"
 Discussant: L. Nostbakken (Norwegian School of Economics)
- O. Lecuyer (Department of Economics and Oeschger Centre for Climate Change Research, University of Bern)and A.Vogt-Schilb (The World Bank)
 "Optimal Transition from Coal to Gas and Renewable Energy under Capacity Constraints and Adjustment Costs"
 Discussant: L. Rougé (TBS)

International trade

A. Dechezleprêtre (London School of Economics), **D. Dussaux** (CERNA Mines ParisTech), D. Hemous (INSEAD) and Mi. Muûls (Imperial College London) "International Outsourcing and Innovation in Clean Technologies"
 Discussant: Y. Lefouili (TSE)

Chair: S. Caprice

C. Fischer (Resources for the Future, Gothenburg University, FEEM, and CESifo Research Network)
 "Strategic Subsidies for Green Goods"
 Discussant: S. Caprice (TSE)

Transport

Chair: C. Crampes Room: Pic du Midi/Lourdes

Room: Amphithéâtre Gavarnie

- A. Creti (Ecole Polytechnique, Université Paris Dauphine), A. Kotelnikovaa (Ecole Polytechnique), G. Meunier (Ecole Polytechnique, INRA-UR1303 ALISS), J.P. Ponssard (Ecole Polytechnique, CNRS)
 - "Defining the Abatement Cost in Presence of Learning-by-doing: Application to the Fuel Cell Electric Vehicle"

Discussant: **F. Prieur** (INRA, Université de Montpellier)

- M. Reynaert (Toulouse School of Economics)
 - "Abatement Strategies and the Cost of Environmental Regulation: Emission Standards on the European Car Market."

Discussant: M. Glachant (MINES ParisTech, Paris)

10:00-10:30 Coffee break

10:30-12:30 Parallel Sessions

Energy efficiency

Chair: P. Bontems Room: Pic du Midi/Lourdes

- L. G. Giraudet (CIRED, Ecole des Ponts ParisTech) and S. Houde (Department of Agricultural and Resource Economics, University of Maryland)
 - "Double Moral Hazard and the Energy Efficiency Gap"

Discussant: P. Bontems (TSE)

- D. Lemoine (Department of Economics, University of Arizona)
 "General Equilibrium Rebound from Energy Efficiency Policies"
 Discussant: S. Ambec (TSE)
- A. Karimu and R. Brännlund (Centre for Environmental and Resource Economics Umeå School of Business and Economics Umeå University)
 "Energy efficient R&D investment and Aggregate Energy Demand: Evidence from OECD Countries"

Discussant: J. Laurent-Lucchetti (University of Geneva)

Environmental tools Chair: C. Crampes Room: Amphithéâtre Gavarnie

S. Andrade de Sá (ETH Zurich) and J. Daubanes (ETH Zurich)
 "Limit Pricing and the (In)Effectiveness of the Carbon Tax"
 Discussant: P. Rey (TSE)

J. Coria (Department of Economics. School of Business, Economics and Law, University of Gothenburg. Gothenburg, Sweden) and J. Jaraitė (Centre for Environmental and Resource Economics, School of Business and Economics, Umeå University, Umeå, Sweden)

"Transaction Costs of Emissions Trading vs. Carbon Taxes"

Discussant: M. Sarr (University of Cape Town)

12:30-14:00 Lunch

14:00-15:20 Parallel Sessions

Gas industry Chair: A. Creti Room: Cordes

- R. Ritz (Energy Policy Research Group (EPRG) Judge Business School & Faculty of Economics University of Cambridge)
 "Strategic Investment and International Spillovers in Natural Gas Markets"
 Discussant: A. Creti (Ecole Polytechnique, Université Paris Dauphine)
- F. Henriet and K. Schubert (Paris School of Economics, University Paris 1)
 "Should We Extract More Shale Gas? The Effect of Climate and Financial Constraints"
 Discussant: M. H. Nguyen (TSE)

Electricity retail Chair: P. Dubois Room: Pic du Midi/Lourdes

- M. Filippini (Institute of Economics (IdEP), Università della Svizzera italiana (USI); Swiss Federal Institute of Technology (ETH), Switzerland), B. Hirl (Institute of Economics (IdEP), Università della Svizzera italiana (USI)) and G. Masiero (Department of Management, Information and Production Engineering (DIGIP), University of Bergamo, Italy; Institute of Economics (IdEP), Università della Svizzera italiana (USI), Switzerland) "Rational Habits in Residential Electricity Demand"
 Discussant: P. Dubois (TSE)
- N. Astier (Toulouse School of Economics) and T.O. Léautier (Toulouse School of Economics)

"Smart Market Designs for Smart Consumers"
Discussant: F. Wolak (Stanford University)

Developing countries Chair: A. Estache Room: Amphithéâtre Gavarnie

 Y. Jin (Institute of Environment and Economy, College of Environmental Sciences and Engineering, Peking University), H. Andersson (Toulouse School of Economics) and S. Zhang (Institute of Environment and Economy, College of Environmental Sciences and Engineering, Peking University)

"Benefit-Cost Analysis of Phasing Out Coal in Power Plants and for Household Usage: An Empirical Analysis of the Chinese Action Plan Applied in Beijing"

Discussant: A. Estache (ULB)

S. Di Falco, J. Laurent-Lucchetti (University of Geneva) and M. Veronesi (University of Verona)

"Property Rights and Conflicts: Theory and Evidence from the Highland of Ethiopia" Discussant: **P. Scott** (TSE)

15:20-15:45 Coffee break

15:45-17:25 Plenary session Chair: T.O. Léautier Room: Amphithéâtre Gavarnie

• **P. Joskow** (MIT)

"Achieving Greenhouse Gas Mitigation Goals: Failing on Almost All Fronts"

J. Tirole (TSE)

"Negotiating a Climate Agreement"

17:25-18:00 Farewell cocktail