

# 13th Conference on the Economics of Energy and Climate

Toulouse, June 15-16, 2022



Energy  
& Climate  
Center

Toulouse  
School of  
Economics

## CONFERENCE VENUE

Toulouse School of Economics (TSE)  
1, Esplanade de l' Université - Auditoriums 3, 4, 6  
31080 Toulouse Cedex 06

## ORGANIZING COMMITTEE:

Stefan Ambec (TSE)  
Christian Gollier (TSE)  
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**GEOCEP**

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# Wednesday, June 15, 2022

**8:30 – 9:00**      **Registration and Welcome**      **Room: A3**

**09:00 – 10:00**      **KEYNOTE LECTURE 1:**  
**Moderator: Stefan AMBEC (TSE)**      **Room: A3**

**Natalia FABRA** (Universidad Carlos III de Madrid)  
*Efficiency and distributional implications of Real Time Pricing for Electricity*

**10:00 – 10:30**      **Break**

**10:30 – 12:30**      **PARALLEL SESSION 1**

**1A: Organization of the Energy Market**      **Chair : Gilles LAFFORGUE**  
**Room: A3**

**Claude CRAMPES** (TSE) and Jérôme Renault (TSE)  
*Flexibility and Risk Transfer in Electricity Markets*  
Discussant: **Matti LISKI** (Aalto University and Helsinki Graduate School of Economics)

**Christoph GRAF** (Stanford University), Federico Quaglia (Terna S.p.A.) and Frank Wolak (Stanford University)  
*Simplified Market Mechanisms for Non-Convex Markets: Evidence from Italian Electricity Market*  
Discussant: **Natalia FABRA** (Universidad Carlos III de Madrid)

**Charles MASON** (University of Wyoming)  
*Why do Firms Hold Oil Stockpiles?*  
Discussant: **Gilles LAFFORGUE** (Toulouse Business School)

**1B: Climate Policy and Finance**      **Chair: Frédéric CHERBONNIER**  
**Room: A4**

Pier Basaglia (University of Hamburg), **Stefano CARATTINI** (Georgia State University, CESifo, and London School of Economics), Antoine Dechezleprêtre and Tobias Kruse (Organisation for Economic Co-operation and Development)  
*Climate Policy Uncertainty and Firms' and Investors' Behavior*  
Discussant: **Ulrich HEGE** (TSE)

Frédéric Cherbonnier (TSE, Sciences-Po Toulouse) and **Ulrich HEGE** (TSE)  
*Should There Be a Green Supporting Factor? Carbon Policies and Climate Financial Regulation*  
Discussant: **Julien SAUVAGNAT** (Bocconi University)

**Frédéric CHERBONNIER** (TSE, Sciences-Po Toulouse), Christian Gollier (TSE) and Aude Pommeret (IREGE, University Savoie Mont Blanc)  
*Stress discounting*

**12:30 – 14:00**      **Lunch**

**Parallel sessions:** 25 minutes for speakers, 10 minutes for discussants and 5 minutes for questions

**2A: Renewables and Network Reliability****Chair: Stefan AMBEC****Room: A3**

**Jonathan ELLIOTT** (Johns Hopkins University)  
*Investment, Emissions, and Reliability in Electricity Markets*  
 Discussant: **Mathias REYNAERT** (TSE)

Catherine BOBTCHEFF (Paris School of Economics and CNRS), Philippe De Donder and **François SALANIE** (TSE)  
*When Electricity Provision Becomes Unreliable*  
 Discussant: **Nicolas ASTIER** (Paris School of Economics)

**Nicolas ASTIER** (Paris School of Economics), Ram Rajagopal and Frank Wolak (Stanford University)  
*Can Distributed Intermittent Renewable Generation Reduce Future Grid Investments? Evidence from France*  
 Discussant: **Stefan AMBEC** (TSE)

**2B: Subsidies in Energy Markets****Chair: Ludovica GAZZE****Room: A4**

**Bettina CHLOND**, Timo Goeschl (Alfred Weber Institute for Economics, Heidelberg University, Leibniz Institute for European Economic Research (ZEW)) and Martin Kesternich (Leibniz Institute for European Economic Research (ZEW), University of Kassel)  
*Accelerating Consumer Durable Replacement In Low-income Households: Pecuniary and Behavioral Instruments*  
 Discussant: **Stefano CARATTINI** (Georgia State University)

Raphael Calel (Georgetown University), Jonathan Colmer (University of Virginia), Antoine Dechezleprêtre (London School of Economics and OECD) and **Matthieu GLACHANT** (MINES ParisTech)  
*Do Carbon Offsets Offset Carbon?*  
 Discussant: **Sylvain CHABE-FERRET** (TSE)

**Matthias RODEMEIER** (Bocconi University) and Andreas Loschel (University of Bochum, CESifo, & RWI)  
*Information Nudges, Subsidies, and Welfare: Evidence from a Natural Field Experiment*  
 Discussant: **Ludovica GAZZE** (University of Warwick)

16:00 – 16:30

**Break**

**3A: Electricity Prices****Chair: Sébastien HOUDE****Room: A3**

**Matti LISKI** and Iivo Vehviläinen (Aalto University and Helsinki Graduate School of Economics)  
*The (smart) Technology Effect: Consumers, Not Producers, Benefit from More Efficient Trade in Electricity Markets*

Discussant: **Christoph GRAF** (Stanford University)

Christoph Graf and **Frank WOLAK** (Stanford University)

*Measuring the Ability to Exercise Market Power in Locational-Pricing Markets: An Application to the Italian Electricity Market*

Discussant: **Sébastien HOUDE** (Grenoble Ecole de Management)

**3B: Land Use****Chair: Anouch MISSIRIAN****Room: A4**

Rafael Araujo (FGV EPGE and Climate Policy Initiative), Francisco Costa (University of Delaware) and **Marcelo SANT'ANNA** (FGV EPGE)

*Efficient Forestation in the Brazilian Amazon: Evidence from a Dynamic Model*

Discussant: **Alipio FERREIRA** (TSE)

**Valentin GUYE** (Université Paris-Saclay, INRAE, AgroParisTech)

*Balancing Indirect Land Use Change Mechanisms: Empirical Evidence from Biofuel Mandates and Pan-tropical Deforestation*

Discussant: **Anouch MISSIRIAN** (TSE)

**20:00*****Conference Dinner (invitation only)***

# Thursday, June 16, 2022

8:30 – 10:30

PARALLEL SESSION 4

## 4A: Auctions

Chair: Bert WILLEMS

Room: A3

Bert Willems (Tilburg University and Toulouse School of Economics) and **Yueting YU** (Tilburg University)

*Bidding and Investment in Wholesale Electricity Markets: Pay-as-Bid versus Uniform-Price Auctions*

Discussant: **Patrick REY** (TSE)

**Stefan LAMP** (Universidad Carlos III Madrid), Mario Samano (HEC Montreal) and

Silvana Tiedemann (Hertie School)

*Bidders' Experience and Prices in Renewable Energy Auctions*

Discussant: **Olivier DE GROOTE** (TSE)

**Olga CHIAPPINELLI** (DIW Berlin) and Gyula Seres (National University of Singapore, Global Asia Institute, and Tilburg Law & Economics Center)

*Optimal Discounts in Green Public Procurement*

Discussant: **Bert WILLEMS** (Tilburg University)

## 4B: Climate Risk and Firms

Chair: Nicolas TREICH

Room: A4

**Julien DAUBANES** (Université de Genève), Shema Mitali (EPFL) and Jean-Charles Rochet (TSE, Université de Genève)

*Why Do Firms Issue Green Bonds?*

Discussant: **Sébastien POUGET** (TSE)

Luigi Iovino, Thorsten Martin and **Julien SAUVAGNAT** (Bocconi University),

*Corporate Taxation and Carbon Emissions*

Discussant: **Eugenia GONZALEZ-AGUADO** (TSE)

Wesley Howden (The University of Arizona) and **Remy LEVIN** (University of Connecticut)

*The Impacts of Climate Change on Risk Preferences*

Discussant: **Nicolas TREICH** (TSE)

10:30 – 10:50

*Break*

**5A: Systemic Changes****Chair: Francesco RICCI****Room: A6**

Jim Skea, Alaa AlKhourdajie, Raphael Slade, Iain Staffell (Imperial College London) and

**Richard GREEN** (Imperial College London)

*Why do Mitigation Pathways Differ? The Role of Scenario Assumptions and Model Features*

Discussant: **Claude CRAMPES** (TSE)

**Alexis LEBEAU** (EDF R&D, Industrial Engineering Research Department, CentraleSupélec),

Marie Petitet (EDF R&D, Chaire European Electricity Markets, University Paris-Dauphine),

Marcelo Saguan (EDF R&D), Simon Quemin (EDF R&D, Climate Economics Chair, University Paris-

Dauphine, Potsdam Institute for Climate Impact Research)

*Long-Term Issues with The Energy-Only Market Design in the Context of Electricity Decarbonization: Insights from a System Dynamics Simulation Model*

Discussant: **Francesco RICCI** (CEE-M, Univ de Montpellier, CNRS, INRAE, Institut Agro Montpellier)

**5B: Technology Breakthrough****Chair: Stefan LAMP****Room: A3**

**Sai BRAVO MEGAREJO** and Carole Haritchabalet (Université de Pau et des Pays de l'Adour)

*Certification of Low-carbon Hydrogen in the Transport Market*

Discussant: **Thomas TANGERAS (IFN)**

**Sugandha SRIVASTAV** (Smith School of Enterprise & the Environment, University of Oxford)

*Bringing Breakthrough Technologies to Market Evidence from Renewable Energy Projects*

Discussant: **Stefan LAMP** (Universidad Carlos III de Madrid)

**5C: The Political Economy of Solar****Chair: Matthieu GLACHANT****Room: A4**

**Olivier DE GROOTE** (TSE), Axel Gautier (HEC Liege, University of Liege) and Frank Verboven (KU Leuven)

*The political economy of financing climate policy – Evidence from the solar PV subsidy programs*

Discussant: **Matthias RODEMEIER** (Bocconi University)

**Sébastien HOUDE** (Grenoble Ecole de Management) and Wenjun Wang (Agricultural Bank of China)

*The Incidence of the U.S.-China Solar Trade War*

Discussant: **Matthieu GLACHANT** (Mines ParisTech)

**12:10 – 13:30****Lunch**

**6A: Air Pollution****Chair: Marcelo SANT'ANNA****Room: A6**

**Marion LEROUTIER** (Misum, Stockholm School of Economics) and **Hélène Ollivier** (Paris School of Economics, CNRS)

*The Cost of Air Pollution for Workers and Firms: Evidence from Sickness Leave Episodes*

Discussant: **Tatyana DERYUGINA** (University of Illinois)

Isis Durrmeyer and **Nicolás MARTINEZ** (TSE),

*The Welfare Costs of Urban Traffic Regulations*

Discussant: **Marcelo SANT'ANNA** (FGV EPGE)

**6B: Carbon Pricing****Chair: Luc ROUGE****Room: A3**

**Thomas-Olivier LEAUTIER** (Toulouse School of Economics and TotalEnergies) and **Elise Viadère** (Université Paris-Dauphine)

*Give to the Poor or the Needy: Optimal Carbon Dividend Distribution*

Discussant: **Richard GREEN** (Imperial College London Imperial)

**Aude Pommeret** (Université de Savoie Mont-Blanc (IREGE)), **Francesco RICCI** (CEE-M, Univ de Montpellier, CNRS, INRAE, Institut Agro Montpellier) and **Katheline Schubert** (Paris School of Economics, University Paris 1 Panthéon Sorbonne)

*Confronting the Carbon Pricing Gap: Second Best Climate Policy*

Discussant: **Luc ROUGE** (Toulouse Business School)

**6C: Regulation and Compliance****Chair: Sai BRAVO MEGAREJO****Room: A4**

**Oliver R. Browne** (Brattle), **Ludovica GAZZE** (University of Warwick), **Michael Greenstone** and **Olga Rostapshova** (University of Chicago)

*Enforcement and Deterrence with Certain Detection: An Experiment in Water Conservation Policy*

Discussant: **Céline NAUGES** (TSE)

**Bing Guo** (Universidad Carlos III de Madrid), **Sarah PARLANE** and

**Lisa Ryan** (University College Dublin)

*Regulatory Compliance in the Automobile Industry*

Discussant: **Sai BRAVO MEGAREJO** (Université de Pau et des Pays de l'Adour)

**15:00 – 16:00 KEYNOTE LECTURE 2:****Room: A3**

**Moderator: Mathias REYNAERT** (TSE)

**Tatyana DERYUGINA** (University of Illinois)

*How Many Lives Are Saved by Reductions in Fossil Fuel Use?*