



@FSR Energy #FSREnergyInnovation

SEMINAR

1st Energy Innovation Academy

Scientific Organiser:

Miguel Vazquez | Florence School of Regulation / RSCAS / EUI

Event Coordinator:

Chiara Canestrini | Florence School of Regulation / RSCAS / EUI

Cappella

Villa Schifanoia, Via Boccaccio 121 - Florence

28 - 30 NOVEMBER 2018

INTRODUCTION

The FSR Energy Innovation Area and the Young Scholars Initiative (YSI) of the Institute for New Economic Thinking (INET) have the pleasure to invite you to participate in the 1st Energy Innovation Academy.

Energy transitions imply disruptive innovations and that is what drives the Academy's topics. We aim to discuss industries as complex and evolving systems. We are interested in their dynamics, networks, interactions, and heterogeneity. Our strategy is to bring together scholars from within and outside energy industries to cross-fertilise discussions on energy transition and complex adaptive systems.

During mornings, the event will provide presentations on the state of the art of the discipline on a specific topic. At the end of each morning, the workshops will elaborate on specific research questions or methodologies, in the format of a roundtable followed by open Q&A.

In the afternoons, the academy seminars will take place. They are designed to give participants the opportunity to present and discuss their own research with experienced mentors and the rest of the participants of the academy.

The Energy Innovation Academy is organised under the scientific supervision of Miguel Vazquez (FSR Energy Innovation), with the support of Vanessa Avanci and Danilo Spinola from the YSI Complexity Economics Working Group.



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| 28 NOVEMBER | DAY 1 |
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| | Workshop Session |
| 09.00 - 10.00 | Digitalisation and energy |
| | Jean-Michel Glachant Florence School of Regulation / RSCAS / EUI |
| 10.00 - 10.30 | Coffee Break |
| 10.30 - 11.30 | Financing and innovation in energy transitions |
| | Bjarne Steffen ETH Zurich |
| 11.30 - 12.30 | Workshop I – Public policies in a dynamic context |
| 12.30 - 14.00 | Break |
| | Seminar Session |
| 14.00 - 14.35 | Nothing new under the sun? Mapping learning pathways for wind, solar PV and biomass in relation to local and national promotion policies in selected countries |
| | Gustavo Onofre Andreao University of Campinas |
| 14.35 - 15.10 | The evolution of European TSO business model |
| | Andrea Biancardi Bocconi University |
| 15.10 - 15.45 | Energy efficiency and emissions in maritime shipping: blockchain technology applications in regulatory processes |
| | Thomas Brewer MIT & ICTSD |
| 15.45 - 16.25 | An ecological stock flow consistent approach to macroeconomic stability, entropy and chaos |
| | John Smith University of Hertfordshire |
| 16.25 - 16.45 | Coffee Break |
| 16.45 - 17.25 | Areva, EDF, and the economic viability of the closed fuel cycle |
| | Ryan T. Brown United Nations ECE |
| 17.25 - 18.00 | Innovation in the electricity industry due to the the expansion of renewable energy |
| | Grace Quiceno Jorge Tadeo Lozano University |
| 18.00 - 18.35 | A Dystopian Keynes meeting Schumpeter (DSK) model to represent a relationship between the energy sector and heterogeneous financial actors |
| | Mariana Maria University of Campinas |
| 29 NOVEMBER | DAY 2 |
| | Workshop Session |
| 09.00 - 10.00 | New ecosystems in electricity retailing |

Pilar Vazquez | Iberdrola

| 10.00 - 10.30 | Coffee Break |
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| 10.30 - 11.30 | Behavioral economics in energy industries |
| | Michelle Hallack Fluminense Federal University |
| 11.30 - 12.30 | Workshop II - Smart specialisation experience in the EU and LAC |
| 12.30 - 13.30 | Break |
| | Seminar Session |
| 13.30 - 14.05 | The dynamics of low carbon investment risks: a comparative assessment of solar PV and wind onshore investments in Germany, Italy and the UK |
| | Florian Egli ETH Zurich |
| 14.05 - 14.40 | The relation between wind and solar power on electricity price level and volatility |
| | Iulia Falcan United Nations University – Maastricht |
| 14.40 - 15.15 | Disruptive innovation in the EU's natural gas sector that maintains the <i>status quo</i> |
| | John Szabo CEU |
| 15.15 - 15.50 | Overcoming barriers to green technology diffusion: an agent-based approach on directed technological change and learning |
| | Kerstin Hotte University of Bielefeld |
| 15.50 - 16.10 | Coffee Break |
| 16.10 - 16.45 | Material requirements for global renewable energy storage |
| | Piero Carlo dos Reis ETH Zurich |
| 16.45 - 17.20 | Fueling the engines of liberation with cleaner cooking fuel: evidence from Indonesia |
| | Jeonghwan Yun USC |
| 17.20 - 17.55 | The regime building of low-carbon energy transition: concepts from the evolutionary theory |
| | Felipe Botelho Tavares UFRJ |
| 17.55 - 18.30 | Complex networks approach in evolution of the bioenergy technological frontier |
| | Carolina da Silveira Bueno University of Campinas |
| 30 November | DAY 3 |
| | Workshop Session |
| 09.00 - 10.00 | The role of regulation in energy transitions |
| | Miguel Vazquez Florence School of Regulation / RSCAS / EUI |
| 10.00 - 10.30 | Coffee Break |
| 10.30 - 11.30 | Regional cooperation in the EU |

| | Javier Gómez European Commission |
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| 11.30 - 12.30 | Workshop III - "Nudges" and demand-side management |
| 12.30 - 14.00 | Break |
| | Seminar Session |
| 14.00 - 14.35 | Complex adaptive systems thinking in EU energy law |
| | Gijs Kreeft University of Groningen |
| 14.35 - 15.10 | A changing future for natural gas in the Netherlands – energy, the public, and institutional re-design |
| | Toyah Rodhouse Delft University of Technology |
| 15.10 - 15.45 | Regulating innovation and technology in the pursuit of EU's energy goals for 2030 |
| | Gokce Mete Centre for Energy, Petroleum and Mineral Law and Policy |
| 15.45 - 16.25 | Solar energy via distributed Generation: proposals for a new legal framework for the Brazilian electricity sector |
| | Felipe Cunha UFBA |
| 16.25 - 16.45 | Coffee Break |
| 16.45 - 17.25 | Incentive regulation of electricity distribution networks – lessons from UK's experience |
| | Madoka Sawabe CRIEPI |
| 17.25 - 18.00 | Quantification of economy-wide rebound effects |
| | Anne Berner University of Göttingen |
| 18.00 - 18.35 | Regulation of energy prosumers in New Zealand |
| | Daniela Aguilar Abaunza University of Waikato |

SPEAKERS

| Jean-Michel Glachant | Director of Florence School of Regulation and Holder of the Loyola de Palacio Chair, Florence School of Regulation/RSCAS/EUI, Italy |
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| Javier Gómez | Scientific Policy Officer, European Commission, Belgium |
| Michelle Hallack | Adjunct professor, Fluminense Federal University, Brazil |
| Bjarne Steffen | Lecturer, ETH Zurich - Swiss Federal Institute of Technology, Switzerland |
| Miguel Vazquez | Advisor, Florence School of Regulation/RSCAS/EUI, Italy |
| Pilar Vazquez | Global Energy Management, Iberdrola, Spain |

PARTICIPANTS

| Daniela Aguilar Abaunza | PhD student, University of Waikato, New Zealand |
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| Gustavo Onofre Andreao | PhD Student, University of Campinas, Brazil |
| Vanessa Avanci | PhD student, Fluminense Federal University, Brazil |
| Anne Berner | PhD Student, Centre of Statistics, University of Göttingen, Germany |
| Andrea Biancardi | Research Fellow, Bocconi University, Italy |
| Felipe Botelho Tavares | PhD Candidate, Federal University of Rio de Janeiro, Brazil |
| Thomas Brewer | Senior Fellow, MIT & ICTSD, USA |
| Ryan T. Brown | Energy Economist, United Nations Economic Commission for Europe, Sustainable Energy Division and The University of Texas at Austin, Switzerland, USA |
| Chiara Canestrini | Project Associate, Florence School of Regulation/RSCAS/EUI, Italy |
| Felipe Cunha | Researcher, Federal University of Bahia, Brazil |
| Carolina da Silveira Bueno | PhD candidate, Researcher, University of Campinas, Brazil |
| Tiago de Barros Correia | Visiting Fellow, Florence School of Regulation/RSCAS/EUI, Italy |
| Piero Carlo Dos Reis | MSc Student, ETH Zurich, Switzerland |
| Florian Egli | PhD Candidate, ETH Zurich, Switzerland |
| Iulia Falcan | PhD Candidate, United Nations University - Maastricht, the Netherlands |
| Kerstin Hotte | PhD student, University of Bielefeld, Germany |
| Samson Yemane Hadush | Research Fellow, Florence School of Regulation/RSCAS/EUI, Italy |
| Anne Marie Kehoe | Project Associate, Florence School of Regulation/RSCAS/EUI, Italy |
| Gijs Kreeft | PhD Researcher, University of Groningen, the Netherlands |
| Mariana Maria | PhD Student, University of Campinas, Brazil |
| Gokce Mete | Post-doctoral Research Fellow, Centre for Energy, Petroleum and Mineral Law And Policy, United Kingdom |
| Athir Nouicer | Research Associate, Florence School of Regulation/RSCAS/EUI, Italy |
| Grace Quiceno | Relations Manager, Jorge Tadeo Lozano University, Colombia |

| Toyah Rodhouse Nicolò Rossetto | PhD Candidate, Delft University of Technology, the Netherlands Research Associate, Florence School of Regulation/RSCAS/EUI, |
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| | Italy |
| Madoka Sawabe | Research Economist, Central Research Institute of Electric Power Industry, Japan |
| Tim Schittekatte | Research Associate, Florence School of Regulation/RSCAS/EUI, Italy |
| John Smith | Postgraduate Researcher, University of Hertfordshire, United Kingdom |
| John Szabo | PhD Student, Central European University, Hungary |
| Jeonghwan Yun | PhD Student, University of Southern California, USA |