



@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.



Co-funded by the Erasmus+ Programme of the European Union



<b>28 NOVEMBER</b>	DAY 1
	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
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
<b>30 November</b>	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
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
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
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,
	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