

Workshop

Digital Energy Marketplaces: The role of smart contracts in the definition and coordination of investments, architectures and governance

 #DigitalEnergyMarket @FSR_Energy

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Refettorio - Badia Fiesolana, Via dei Roccettini 9 - San Domenico di Fiesole (Fiesole, Florence)

Scientific Organisers:

Miguel Vazquez | Florence School of Regulation / RSCAS / EUI

Nicolò Rossetto | Florence School of Regulation / RSCAS / EUI

Introduction

Technological innovation has the potential to increase the efficiency of an industry, significantly transform it, or even entirely disrupt it. To transform or to disrupt, innovation needs to change the industry players and the way they interact. For example, industry change may be driven by consumers pushing the path from smart technologies, which any utility may implement itself to manage its assets, to smart transactions, where smart technologies create new coordination tools within the industry.

By gathering practitioners from the industry, academics and representatives of the institutions, this workshop develops further the debate started at the [Open Marketplaces & Enabling Technologies workshop](#) that took place last March in Brussels. The various sessions of the workshop will explore how distributed ledger technologies like the blockchain can effectively transform the energy industry and enable new forms of interaction among the actors of the supply chain. The possible emergence and the organisation of new platforms and contractual arrangements will be investigated. Finally, the workshop will address the governance and regulatory issues that the adoption of these new technologies raises.

Programme

09.00 - 09.15 Welcome and introductory remarks

Miguel Vazquez | Florence School of Regulation

09.15 - 09.30 Introductory remarks

Mark van Stiphout | European Commission, DG Energy

09.30 - 09.45 Presentation of the draft stakeholder paper on digital energy marketplaces

Natalie Samovich | AIOTI

Session 1: Smart contracts and short-term energy markets

09.45 - 10.45 What type of contracts will shape the energy market of the future? (e.g. energy or flexibility contracts; centralised or decentralised contracts). How will contracts produce short-term signals (signals for all type of uses of the power system, e.g. flexible consumer devices and decentralised production)?

Moderator: **Cristobal Irazoqui** | European Commission, DG Energy

Giuseppe Amoroso | Enel

Jerome Michel | EDF

10.45 - 11.00 *Coffee Break*

Session 2: Smart contracts and investment

11.00 - 12.00 How will investment in new assets for the energy transition (i.e. renewable generation and grid capacity) be coordinated? What are the challenges for IoT, big data, blockchain and decentralised energy markets to allow significantly larger participation of end consumers in the investment decision-making process?

Moderator: **Miguel Vazquez** | Florence School of Regulation

Kenneth Wallace-Mueller | DLA Piper

Francisco Hernanz | Iberdrola

12.00 - 13.00 *Lunch*

13.00 - 13.15 **Keynote speech**

New business models in the electricity sector

Jean-Michel Glachant | Florence School of Regulation

Session 3: Platforms' architecture

13.15 - 14.15 On what kind of markets and platforms will these contracts be traded? Will they be decentralised or centralised? Will these markets be organised by system operators, exchanges or other third commercial parties? How can we embrace emerging trends in consumer platforms (e.g. in the area of home, electrical vehicles, heating and cooling, electric appliances)?

Moderator: **Rolf Riemenschneider** | European Commission, DG Connect

Howard Wright | EPEX SPOT

Stefan Niessen | Siemens

Fabio Genoese | Terna

Session 4: Platforms' governance

14.15 - 15.15 Following the above questions, can we agree on a common definition of platform? How can we agree on common governance principles for such platforms? If and how these markets should be regulated?

Moderator: **Nicolò Rossetto** | Florence School of Regulation

Michael Jesberger | ENTSO-E

Ewald Hesse | Energy Web Foundation

15.15 - 15.45 *Coffee Break*

Session 5: Roundtable - Regulatory adaptation

15.45 - 16.45 Do market design principles need to change to accommodate the above considerations? The role of sandboxes.

Moderator: **Mark van Stiphout** | European Commission, DG Energy

Alexandra Schneiders |UCL

16.45 - 17.30 Wrap-up

Mark van Stiphout | European Commission, DG Energy

Miguel Vazquez | Florence School of Regulation

