



#### **CEER-FSR JOINT TRAINING COURSE**

## **INTRODUCTION TO FUNDAMENTALS OF ENERGY REGULATION**

Course Directors:	<b>Ilaria Conti</b>   Head of FSR Gas Area, Florence School of Regulation/RSCAS/EUI <b>Koen Locquet</b>   CREG Acting President, CREG/CEER
Training Coordinators:	Mara Radulescu   Florence School of Regulation/RSCAS/EUI Anh Tran   CEER
Course Advisors:	<b>Jean-Michel Glachant</b>   Director, Florence School of Regulation/RSCAS/EUI <b>Margot Loudon</b>   Member of CEER Training Academy Advisory Board
Course Location:	CEER – Securex building 30a, Cours Saint-Michel – 1040 Brussels
Course Date:	Monday 1 - Friday 5 April 2019

• Module 1: "EU Energy Regulatory Framework and Policy", 2 days, from Monday 1st to Tuesday 2nd April 2019.

• Module 2: "European Electricity and Gas Market Regulation", 3 days, from Wednesday 3rd to Friday 5th April 2019.

## INTRODUCTION

The Council of European Energy Regulators (CEER) and the Florence School of Regulation (FSR) are delighted to announce a unique joint course called "Introduction to Fundamentals of Energy Regulation", to be held in the CEER's office in Brussels on 1-5 April 2019. This CEER-FSR course is focused on explaining the fundamentals of EU energy policy and regulation, building on similar successful courses held in previous years. The course is ideally suited for newer staff members within National Regulatory Authorities (NRAs), European Institutions and other public authorities.

The CEER-FSR course will comprehensively explain the key aspects of EU electricity and gas regulation, both theory and practice, across the energy cost chain from wholesale markets through to networks and retail issues. Attendees will be provided with a clear understanding of the economic and legal frameworks that have developed in European energy regulation, including an explanation of the main institutions and participants involved.

The course brings together the FSR's rigorous academic understanding of regulatory principles along with senior regulatory practical knowledge and expertise. By combining academic groundings and practical on-the-job regulatory experience, the course seeks to build the





operational understanding, capacity and tools for newer NRA staff members, which they can then apply in their work.

The course is co-directed by Koen Locquet, Acting President of CREG and Ilaria Conti, Head of FSR Gas Area. Furthermore, Jean-Michel Glachant, FSR Director and Advisor for this course, will attend to and open Module 1. The course comprises of two standalone - but related – modules, as follows:

- Module 1: "EU Energy Regulatory Framework and Policy", 2 days, from Monday 1st to Tuesday 2nd April; and,
- Module 2: "European Electricity and Gas Market Regulation", 3 days, from Wednesday 3rd to Friday 5<sup>th</sup> April inclusive.

Attendance at both modules is recommended, though they are designed such that participants can gain value by attending just one module if they wish.

The detailed training programme for both modules of the course is shown next. As can be seen, each day will be composed of two sessions of circa three hours each. Each session will involve two speakers: the first speaker will cover the main principles and the second will focus on practices. Each speaker will deliver a presentation, followed by a Q&A session, aiding interaction and understanding among course attendees. In addition, the first day of Module 2 includes a field trip, providing participants the opportunity to learn of the need for pan-European TSO operational coordination and infrastructure (including IT systems) to perform operational coordination activities.





# PROGRAMME

# MODULE 1 (2 DAYS, 1-2 APRIL 2019): EU ENERGY REGULATORY FRAMEWORK AND POLICY

# Monday, 1 April - *EU energy regulation and energy policy: the landscape*

- 10:30 11:00Introduction of the course.<br/>Tour de table introduction of participants and their course expectations.<br/>Koen Locquet | CEER/CREG
- 11:00 12:15 Principles

Overview of electricity and gas markets:

• A brief introduction to the physics of energy (How does energy work?) and to markets and regulation (What is an energy market?)

• Why do we need markets in regulated utilities

(gas/electricity/finance/healthcare/ education)? Why do we need European wide markets (gas/electricity/bakery /TV/cars)? What are TSOs/DSOs and why do we regulate them?

• Are energy markets (gas and electricity) the same in the main "Market-Based Economies"?

• Should gas and electricity industries use the same market design? **Jean-Michel Glachant** | FSR/RSCAS/EUI

Q&A / Group work

- 12:15 13:15 **Lunch break**
- 13:15 14:30 Practices

Energy regulation explained:

- What is an energy regulator and why do we have them?
- General objectives of the regulatory authorities (Regulation).
- Core duties and powers of regulators.
- On the basis of the homework, participants are asked to present and participate in discussions to share experiences. **Koen Locquet** | CEER/CREG

Q&A / Group work

# EU energy regulation and energy policy: the institutions, actors and forms of cooperation

14:30 – 16:00 Principles

European energy policy:

• What are the key objectives of EU energy policy?





- Which political issues globally impact the energy sector?
- Who defines EU energy policy Member States or European Institutions? How is EU legislation developed?
- Why were European bodies like the ENTSO and ACER created? Who are they?
- How does the Commission interact with all these actors? **Jacques de Jong** | Clingendael International Energy Programme (CIEP)

Q&A / Group work

16:00 – 16:15 Соffee break

#### 16:15 – 17:45 Practices

European cooperation:

- Introduction to CEER and ACER, their composition, roles/activities and Processes.
- Introduction of some basic concepts and terms (Framework Guidelines, Network Codes, 3rd Package).
- Introduction to ENTSOs their role and functioning. Andrew Ebrill | CEER

Group work based on a quiz.

- 17:45 –18:00 Wrap-up of 1st day. Jean-Michel Glachant | FSR/RSCAS/EUI
- 18:00 19:00 WELCOME DRINK AT THE END OF THE DAY CEER OFFICE

### **Tuesday, 2 April - Introduction to the European legal framework for** *energy: logic and dynamics*

- 09:00 09:20 Group activity
- 09:20 10:50 Principles

The EU regulatory framework for energy: from the origins until today

- The "pillars" of EU energy regulation
- The way towards a decarbonised energy sector
- The Regulatory Packages
- Ilaria Conti | FSR/RSCAS/EUI

Q&A / Group work

- 10:50 11:10 Соffee break
- 11:10 12:40 Practices

Impact of the evolution of the regulatory framework:Implementation of the 3rd Energy Package in Greece: What has been achieved? Where is the Greek energy market today?





#### Evangelia Gazi | RAE

Q&A / Group work

- 12:40 13:40 **Lunch break**
- 13:40 15:10 Principles

Regulation of renewable energy and energy efficiency:
Key EU legislative acts (renewable energy and energy efficiency directive, the Clean Energy Package).
The impact of intermittent renewable electricity generation on grid safety and security of supply.
Philipp Wichter | Florence School of Regulation Advisor

Q&A / Group work

- 15:10 15:30 Собрее вреак
- 15:30 17:00 Practices

Renewable support schemes: state of play and the role of regulators. **Yvonne Finger** | BNetzA

Q&A / Group work

- 17:00 17:15 Wrap up, conclusions of Module 1 and deliverance of certificates to participants of Module 1. Anh Tran | CEER Ilaria Conti | FSR/RSCAS/EUI
- **19:00 21:00 Group Dinner**





# MODULE 2 (3 DAYS, 3-5 APRIL 2019): EUROPEAN ELECTRICITY AND GAS MARKET REGULATION

### Wednesday, 3 April - Retail markets and customer protection and visit to a TSO regional operational coordination centre in Brussels

- 09:00 09:20 Tour de table introduction of participants of Module 2 and their course expectations. Ilaria Conti | FSR/RSCAS/EUI
- 09:20 10:50 Principles and practices

Retail markets

What should competitive markets mean for energy consumers (e.g. choice, reliability, flexibility)? How can consumers participate?
What role for regulators in retail markets?
Vasant Bhoendie | ACM

Q&A / Group work

- 10:50 11:10 Соffee break
- 11:10 12:40 Principles and practices

Customer policy

- Is there a need for a "regulation" of energy consumer issues?
- What are the provisions in the still relevant 3rd Package on consumer
- issues and what is the new Electricity Directive about?
- What is energy poverty? What can be done by NRAs?
- What role for regulators in consumer protection?

Florian Pichler | E-Control

Q&A / Group work

- 12:40 13:40 Lunch break
- 14:00 16:30 *Visit to a TSO regional operational coordination centre in Brussels.*

Participants will have a chance to learn of the need for pan-European TSO operational coordination and infrastructure (including IT systems) in place to perform operational coordination activities.





## Thursday, 4 April - Electricity and Gas Markets

- 09:00 09:20 Group activity
- 09:20 10:50 Principles

Electricity markets:

• The energy supply chain from production to distribution. Do we really buy/sell electricity into the grid or in an electricity market? What is the relationship between network capacity and electricity markets? What is the importance of balancing and imbalance?

- Why do we have several electricity markets like day-ahead, intraday and balancing markets? Why do we couple or split our wholesale markets?
- Are electricity markets really European or only national?

Tim Schittekatte | FSR/RSCAS/EUI

Q&A / Group work

- 10:50 11:10 Собрее вреак
- 11:10 12:40 Practices

How is Europe's electricity wholesale market designed?

- What is Europe's electricity target model?
- Why pursue an integrated, interconnected electricity network?

• How are regulators contributing to shaping and delivering the internal energy market (and what do the network codes do)? **Salvatore Lanza** | ARERA

Q&A / Group work

- 12:40 13:40 **Lunch break**
- 13:40 15:10 Principles

The gas market picture:

• The landscape of today's gas market globally: main actors, structural dynamics, regulatory challenges.

- How is gas traded, transported and supplied in Europe? Progress achieved, scale of investments.
- LNG, storage and other market "flexibility tools".

**Aad Correljé** | Clingendael International Energy Programme (CIEP) and TU Delft

Q&A / Group work

- 15:10 15:30 **Со***г***ре вреак**
- 15:30 17:00 Practices





- How is Europe's gas wholesale market designed?
- What is the gas target model?
- What is the regulators' role in shaping and delivering the internal energy market (network codes, etc.)?
- What role for gas in the future?
- Rocio Prieto | CNMC

Q&A / Group work

17:00 –17:15 Wrap-up of 2nd day of Module 2. Ilaria Conti | FSR/RSCAS/EUI

### Friday, 5 April- Electricity grids and gas grids

- 09:00 09:10 Group activity
- 09:10 10:40 Principles

Electricity grids including renewables:

• Overview of electricity grids. Why regulate electricity grids in a competitive market?

• Are the EU electricity grids really European or only national? Nicolò Rossetto | FSR/RSCAS/EUI

Q&A / Group work

- 10:40 11:00 Собрее вреак
- 11:00 12:30 Principles

Gas grids:

- Overview of gas grids. What are the differences with electricity grids?
- Why regulate gas grids in a competitive market?
- Are the EU gas grids really European or only national? **Nico Keyaerts** | Formerly FSR/ACER

Q&A / Group work

- 12:30 13:15 Lunch break
- 13:15 15:00 Practices

Regulating natural electricity and gas monopolies:

- How do regulators design electricity and gas grid access tariffs?
- How do they approve an investment plan? How do incentives work?
- How are renewables and technology changing the way grids work and are regulated?

Group work exercise based on a tariffs case study. Group work presentation.

Johan Allonsius | CREG





15:00 –15:15 Wrap up and deliverance of certificates to participants of Module 2. Ilaria Conti | FSR/RSCAS/EUI Anh Tran | CEER