



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

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

Course Directors: **Ilaria Conti** | Energy Policy Coordinator, Florence School of Regulation/RSCAS/European University Institute  
**Koen Locquet** | Director of Administrative Affairs, CREG/CEER

Training Coordinators: **Mara Radulescu** | Florence School of Regulation/RSCAS/EUI  
**Anh Tran** | CEER

Course Location: CEER – SECUREX BUILDING  
30A, COURS SAINT-MICHEL – 1040 BRUSSELS

Course Date: **MONDAY 6 - FRIDAY 10 MARCH 2017**

- **Module 1: “EU Energy Regulatory Framework and Policy”, 3 days, from Monday 6th to Wednesday 8th March 2017**
- **Module 2: “European Electricity and Gas Market Regulation”, 2 days, from Thursday 9th to Friday 10th March 2017**

#### **■ 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 in March 2017. 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).

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, Director of CREG Administrative Affairs and Ilaria Conti, FSR Policy Coordinator. Furthermore, Jean-Michel Glachant, FSR Director and scientific

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”, 3 days, from Monday 6<sup>th</sup> to Wednesday 8<sup>th</sup> March; and,
- Module 2: “European Electricity and Gas Market Regulation”, 2 days, from Thursday 9<sup>th</sup> to Friday 10<sup>th</sup> March 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 last day of Module 1 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 – Module 2 participants may attend this field trip also.



## ▪ PROGRAMME

### MODULE 1 (3 DAYS, 6-8 MARCH): EU ENERGY REGULATORY FRAMEWORK AND POLICY

#### Monday, 6 - *EU energy regulation and energy policy: the landscape*

10:15 – 10:45 Introduction of the course  
Tour de table introduction of participants and their course expectations  
**Koen Locquet** | CEER/CREG

10:45 – 12:00 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?
- Does a gas market industry already exist somewhere in the world and can we copy it? Does one also already exist for electricity?
- Why should the gas and electricity industries use the same market design?

**Jean-Michel Glachant** | FSR/RSCAS/EUI

Q&A / Group work

12:00 – 12:15 **COFFEE BREAK**

12:15 – 13:30 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

13:30 – 14:30 **LUNCH BREAK**

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

14:30 – 16:00 Principles

## The gas market picture

- The landscape of today's gas market globally: main actors, structural dynamics, regulatory challenges
- How is gas traded in Europe? Progress achieved, scale of investments
- LNG, storage and other "flexibility tools": how to regulate the "new" gas supply chains in Europe?

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

Q&A / Group work

16:00 – 16:15

**COFFEE 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, 7- 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

- Why regulate energy at EU level?
- What is the 3rd Energy Package?
- Purpose and process for framework guidelines and network codes

**Ilaria Conti** | FSR/RSCAS/EUI

Q&A / Group work

10:50 – 11:10

**COFFEE BREAK**

11:10 – 12:40

Practices

Impact of the evolution of the regulatory framework

- Transition in the application of the 2nd to the 3rd Energy Package in Greece: Was it necessary? What was not working well and what has since improved?

**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)
- Impact of European renewable policy on security of supply (capacity mechanisms)

**Nicole Ahner** | TenneT

Q&A / Group work

15:10 – 15:30

**COFFEE BREAK**

15:30 – 17:00

Practices

Interactions between competition, markets and renewable support schemes

- The relationship between competition law and energy regulation. How to reconcile competition aims with climate change objectives and policies, including support schemes? What role for the regulator?

**Denis Cagney** | Former CER Director

Q&A / Group work

17:00 – 17:15

Wrap-up of 2<sup>nd</sup> day  
**Koen Locquet** | CREG

19:00 – 21:00

**GROUP DINNER**

### **Wednesday, 8 - Retail markets and customer protection and visit to a TSO regional operational coordination centre in Brussels**

09:00 – 09:10

Group activity

09:10 – 10:40

Principles and practices

Retail markets

- What should competitive markets mean for energy consumers (e.g. choice, reliability, flexibility)? How can consumers participate?
- How are prices determined?
- What role for regulators in retail markets?

**Matthias Noorlander** | ACM

	Q&A / Group work
10:40 – 11:00	<b>COFFEE BREAK</b>
11:00 – 12:30	Principles and practices  Customer policy <ul style="list-style-type: none"> <li>• Is there a need for a “regulation” of energy consumer issues?</li> <li>• What are the relevant provisions in the 3rd Package on consumer issues? How have NRAs implemented them?</li> <li>• What is energy poverty? What can be done by NRAs?</li> <li>• What role for regulators in consumer protection?</li> </ul> <b>Florian Pichler</b>   E-Control
	Q&A / Group work
12:30 – 12:50	Wrap up and conclusions of Module 1 <b>Ilaria Conti</b>   FSR/RSCAS/EUI <b>Andrew Ebrill</b>   CEER
12:50 – 13:00	Deliverance of certificates to participants of Module 1 <b>Ilaria Conti</b>   FSR/RSCAS/EUI <b>Andrew Ebrill</b>   CEER
13:00 – 14:00	<b>LUNCH BREAK</b>
<b>14.00 – 16:30</b>	<b><i>Visit to a TSO regional operational coordination centre in Brussels</i></b>  <i>Both participants of Module 1 and Module 2 can participate in this field trip. 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.</i>

## MODULE 2 (2 DAYS, 9-10 MARCH): EUROPEAN ELECTRICITY AND GAS MARKET REGULATION

### Thursday, 9 - *Electricity and Gas Markets*

09:00 – 09:20	<p>Tour de table introduction of participants of Module 2 and their course expectations <b>Ilaria Conti</b>   FSR/RSCAS/EUI</p>
09:20 – 10:50	<p>Principles</p> <p>Electricity markets</p> <ul style="list-style-type: none"> <li>• 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?</li> <li>• Why do we have several electricity markets like day-ahead, intraday and balancing markets? Why do we couple or split our wholesale markets?</li> <li>• Are electricity markets really European or only national?</li> </ul> <p><b>Marcelo Saguan</b>   EDF/FSR Advisor</p> <p>Q&amp;A / Group work</p>
10:50 – 11:10	<b>COFFEE BREAK</b>
11:10 – 12:40	<p>Practices</p> <p>How is Europe's electricity wholesale market designed?</p> <ul style="list-style-type: none"> <li>• What is Europe's electricity target model?</li> <li>• Why pursue an integrated, interconnected electricity network?</li> <li>• How are regulators contributing to shaping and delivering the internal energy market (and what do the network codes do)?</li> </ul> <p><b>Ryan McLaughlin</b>   Ofgem</p> <p>Q&amp;A / Group work</p>
12:40 – 13:40	<b>LUNCH BREAK</b>
13:40 – 15:10	<p>Principles</p> <p>Gas market regulation beyond the 3<sup>rd</sup> Package</p> <ul style="list-style-type: none"> <li>• What are the future objectives of EU energy policy?</li> <li>• Will the “key actors” remain the same? Which role for European bodies like the ENTSOs and ACER?</li> <li>• Gas to power, power to gas? The challenge of decarbonisation</li> </ul> <p><b>Jacques de Jong</b>   CIEP</p> <p>Q&amp;A / Group work</p>
15:10 – 15:30	<b>COFFEE BREAK</b>

15:30 – 17:00	<p>Practices</p> <p>How is Europe's gas wholesale market designed?</p> <ul style="list-style-type: none"> <li>• What is the gas target model?</li> <li>• What is the regulators' role in shaping and delivering the internal energy market (network codes, etc.)?</li> <li>• What role for gas in the future?</li> </ul> <p><b>Michael Thomadakis</b>   Grant Thornton Greece/ Former Board Member of RAE</p> <p>Q&amp;A / Group work</p>
17:00 – 17:15	<p>Wrap-up of 1st day of Module 2</p> <p><b>Ilaria Conti</b>   FSR/RSCAS/EUI</p>

### **Friday, 10- Electricity grids and gas grids**

09:00 – 09:10	Group activity
09:10 – 10:40	<p>Principles</p> <p>Electricity grids including renewables</p> <ul style="list-style-type: none"> <li>• Overview of electricity grids. Why regulate electricity grids in a competitive market?</li> <li>• Are the EU electricity grids really European or only national?</li> </ul> <p><b>Leonardo Meeus</b>   FSR/RSCAS/EUI and Vlerick Business School</p> <p>Q&amp;A / Group work</p>
10:40 – 11:00	<b>COFFEE BREAK</b>
11:00 – 12:30	<p>Principles</p> <p>Gas grids</p> <ul style="list-style-type: none"> <li>• Overview of gas grids. What are the differences with electricity grids?</li> <li>• Why regulate gas grids in a competitive market?</li> <li>• Are the EU gas grids really European or only national?</li> </ul> <p><b>Nico Keyaerts</b>   FSR/RSCAS/EUI</p> <p>Q&amp;A / Group work</p>
12:30 – 13:30	<b>LUNCH BREAK</b>
13:30 – 15:00	<p>Practices</p> <p>Regulating natural electricity and gas monopolies</p> <ul style="list-style-type: none"> <li>• How do regulators build electricity and gas grid access tariffs?</li> <li>• How do they approve an investment plan? How do incentives work?</li> <li>• How are renewables and technology changing the way grids work and are regulated?</li> </ul> <p><b>Lecturer tbc</b>   CREG</p>





## Q&A

15:00 – 16:00

Practices

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

**Lecturer tbc** | CREG

16:00 –16:20

Wrap up and deliverance of certificates to participants of Module 2

**Ilaria Conti** | FSR/RSCAS/EUI

**Andrew Ebrill** | CEER