COURSE PROGRAMME

The priority for Europe's energy sector is to decarbonise while maintaining security of supply, affordability for consumers and competitiveness for businesses. The European Green Deal sets ambitious targets that require significant developments in energy infrastructures, not only in terms of new investments but, also, in relation to the way such networks are operated and managed. Energy businesses face a strong push towards increased integration, both from a horizontal perspective - with regards to other sectors - and from a vertical point of view - in relation to other segments of the value chain.

In this context, regulators are facing several challenges. While the current regulatory framework was designed to maximise the efficiency of the electricity and gas sectors and to promote market integration in relatively stable circumstances, regulation will now have to be applied to an industry undergoing profound changes. Also, according to the Commission's proposal on EU legislation on gas market, regulatory authorities will also be tasked to regulate the hydrogen sector.

With the aim of supporting the energy transition, regulators have to make a broad range of choices. Renewable and low-carbon gases, including hydrogen when blended into the existing gas grid, need to have access to the wholesale market; at the same time, gas quality in the grid should be preserved, in particular with regards to cross-border flows. Where a decrease in gas demand is expected, regulators face decisions on existing gas networks over the best choice between repurposing, decommissioning, reinvestment and asset lifetime extensions. There are significant changes happening at distribution level in both gas and electricity in Europe, with DSOs having an increasingly active role; also, DSOs are looking to enter into new activity areas and regulators will need to understand those areas and consider where regulation might be necessary. Regulators have a role in ensuring that DSO-TSO cooperation evolves in a beneficial way for energy markets and ultimately for consumers. Governance of how DSOs and TSOs interact and engage in network planning, as well as arrangements to facilitate effective coordination for system operation, including for flexibility, are the key regulatory concerns in this area. In general terms, a more integrated approach to investment planning is needed to ensure system adequacy while delivering the most cost-efficient solutions. The regulation of the hydrogen sector will need to enable a sufficient level of flexibility and subsidiarity, to allow innovation to take place and to consider the heterogeneity of the current energy mixes across Europe.

This tailor-made 3-day CEER training programme will help deliver energy regulators this expertise. The programme will cover the fundamental principles and future direction of the regulation of energy infrastructures with a particular view on the regulatory decisions to support the energy transition. This will include specific relevant examples from countries across Europe. The programme will also focus on the provisions on hydrogen infrastructure regulation included in the revised EU legislation affecting the gas market.

COURSE STRUCTURE

Week 1: *18 - 25 April 2022*
Individual preparation to the course: Literature review, reading materials, preparation of course work

Week 2:

- *Class 1: Tuesday 26 April 2022 | 14:00-17:00 CET*
  Decarbonisation and regulation of energy infrastructures: main challenges.
  Industry and consumers view on infrastructures and energy transition
- *Class 2: Wednesday 27 April 2022 | 10:00-16:00 CET*
  Practical issues in regulating energy infrastructures to support the energy transition.
  Challenges for the electricity and gas sectors, both at TSO and DSO level, including case studies.
- *Class 3: Thursday 28 April 2022 | 10:00-13:00 CET*
  Integrated infrastructure planning
  Infrastructure regulation in the new Decarbonisation package, with a focus on hydrogen networks.

Tuesday, 26 April 2022
14:00-17:00 (CET)

14:00-14:15 Opening and welcome | Introduction of the programme, format and participants

Marco La Cognata | Course Director

SESSION 1 Main challenges in decarbonisation and regulation of energy infrastructures

14:15-14:45 **Main challenges in decarbonisation and regulation of energy infrastructures**

Pippo Ranci | FSR

14:45-15:15 **Main challenges in decarbonisation and regulation of energy infrastructures**

Tom Maes | CREG/CEER

15:15-15:30 **Break**

SESSION 2 Industry and consumers view on infrastructures and energy transition

15:30-16:00 **Energy transition and infrastructure regulation: the industry perspective**

Michael Schmöltzer | GIE

16:00-16:30 **Energy transition and infrastructure regulation: the consumers perspective**

Lisa Fischer | E3G

16:30-17:00 Roundtable discussion and wrap up

All participants

Wednesday, 27 April 2022
10:00-16:00 (CET)

10:00-10:15 Wrap up of day 1 and introduction of day 2

Marco La Cognata | Course Director

SESSION 1 Challenges for the electricity sector

10:15-10:45 **Challenges for electricity DSOs**

Tomás Gomez | Universidad Pontificia Comillas

10:45-11:15 **Digitalization of the electricity sector**

Valerie Reif | FSR

11:15-11:30 **Break**

SESSION 2 Challenges for the gas sector

11:30-12:00 **Challenges for gas transmission: decommissioning and repurposing**

Miguel Martinez | ACER

12:00-12:30 **Challenges and stakes of the development of biomethane and its access to the gas networks and markets: the case of France**

Edouard Le Bret | CRE

12:30-13:30 **Lunch**

13:30-14:00 **Challenges from the energy transition for the regulation of networks: the case of Dutch DSOs**

Noa Wesselink | ACM

14:00-14:30 Group work

14:30-14:45 **Coffee break**

SESSION 3 Focus on DSO-TSO relationship

14:45-15:15 **Key aspects and challenges of the DSO-TSO relationship in the context of energy transition**

Tomás Gomez | Universidad Pontificia Comillas

15:15-16:00 Roundtable discussion and wrap up

All participants

Thursday, 28 April 2022
10:00-13:00 (CET)

10:00-10:15 Wrap up of day 2 and introduction of day 3

Marco La Cognata | Course Director

10:15-10:45 **Adopting a more integrated approach to infrastructure planning**

Riccardo Vailati | ARERA

10:45-11:15 **The revised TEN-E Regulation**

Karoline Narodoslawsky| E-Control

11:15-11:30 **Break**

11:30-12:00 **Regulation of infrastructure in the Decarbonisation package, with a focus on regulation of hydrogen networks**

Claudio Marcantonini | ARERA

12:00-12:45 Roundtable discussion

All participants

12:45-13:00 Course wrap-up and closing

Marco La Cognata | Course Director