



#### **ONLINE TRAINING COURSE**

# DECARBONISATION, GASES AND LNG

# FOR ENERGY EXPERTS FROM EAST ASIA

10 - 14 January, 2022

#### **Course Director**

Sergio Ascari | Florence School of Regulation, Robert Schuman Centre for Advanced Studies, European University Institute

## **Course Co-Director**

Ilaria Conti | Florence School of Regulation, Robert Schuman Centre for Advanced Studies, European University Institute

### **Training Coordinator**

Marina Cascella | Florence School of Regulation, Robert Schuman Centre for Advanced Studies, European University Institute

# **Overview**

The Training Course will deal with *Decarbonisation, gases and LNG*- and will be addressed to energy experts from the East Asia region, including the following countries and territories: P.R. China, South Korea, Japan, Taiwan, Myanmar, Thailand, Vietnam, Malaysia, Singapore, Indonesia, Brunei, Philippines.

Focus of this Training Course is on the decarbonisation issues of natural gas. It will outline and compare key technical options and opportunities throughout the natural gas value chain, and present and discuss policies undertaken by the EU and other countries on these topics.





#### Structure

The course will last five days and consist of 3 hours / day, including lectures and presentation of case studies.

The Course will be given in English.

## **Draft Programme**

Day 1: Policy framework and technical options.

Date/Time: January 10<sup>th</sup>, 2022; 8:30-11:30 CET (14:30-17,30 ICT, 16:30-19:30 JST)

Day 1 will outline policies undertaken for an active contribution of the natural gas industry to decarbonisation, also in its interaction with power systems. An overview of technical options and their current status is offered.

## **Presentations**

- The evolving role of natural gas in a decarbonising world and in the European Green Deal. Sector Coupling and Energy System Integration (Ilaria Conti, Florence School of Regulation)
- New gas technologies: pyrolysis, power-to gas, carbon capture and storage, renewable and decarbonised gases: potential and role in the energy transition (Ilaria Conti, Florence School of Regulation)

Day 2: Case studies of methane reducing technologies

Date/Time: January 11<sup>th</sup>, 2022; 8:30-11:30 CET (14:30-17,30 ICT, 16:30-19:30 JST)

Presentation of case studies from the EU and East Asia will illustrate the integration between gas and power systems.

#### **Presentations**

Case study: Hydrogen in East Asia (Speaker from DNV-GL)





- Case study: Boosting renewable gases and curbing methane emissions: the Gas
  Distributor's perspective (Speaker from Thüga)
- New uses of LNG in water and land transportation and other sectors (Arno Büx, Gas Infrastructure Europe)

Day 3: Natural gas emission reduction policies

Date/Time: January 12<sup>th</sup>, 2022; 8:30-11:30 CET (14:30-17,30 ICT, 16:30-19:30 JST)

Day 3 will be devoted to GHG emissions from the natural gas industry, including both methane and CO<sub>2</sub>, and to policies undertaken in the EU to tackle them.

For midstream emission containments, proposals and positions of the European Gas Industry will be presented, including in relation to problems posed by the mixing of new gases like hydrogen and bio-methane.

### **Presentations**

- Methane emissions in the LNG supply chain: state of the art and policy issues (Maria Olczak, Florence School of Regulation)
- Case Study: Methane emission reduction policy in selected countries (Maria Olczak, Florence School of Regulation)

Day 4: Natural gas related GHG emissions and their reduction

Date/Time: January 13<sup>th</sup>, 2022; 8:30-11:30 CET (14:30-17,30 ICT, 16:30-19:30 JST)

GHG emissions from the gas industry include upstream issues, as GHG emissions from gas flaring and venting at production sites are remarkable for their size, but also offer a most promising area of abatement by gas collection and use, also by replacing heavier emission energy sources. For this topic, a contribution from the World Bank is proposed, which has long established a specific Task Force providing the best globally known monitoring effort.

A contribution from ENTSO-G, the EU official coordination body of Gas Transmission System Operators, will deal with the financial aspects of emission reduction.



# **Presentations**

- The problem of gas flaring and venting: State of the art and policies (Instructor from International Energy Agency)
- Financing sustainable gas infrastructure: challenges and possible solutions (Instructor from ENTSO-G)

Day 5: Regulatory issues of a sustainable natural gas industry

Date/Time: January 14<sup>th</sup>, 2022; 8:30-11:30 CET (14:30-17,30 ICT, 16:30-19:30 JST)

Turning gas systems into sustainability tools may require significant changes in the current regulatory framework of the gas industry. New EU policy proposals for sustainable energy systems and their impact on natural gas regulation will be presented and discussed.

### **Presentations**

- Regulatory issues of a decarbonised gas system (Erik Rakhou, Baringa LLC)
- The new EU Gas Package and the Hydrogen Strategy (Erik Rakhou, Baringa LLC)

#### **Fees and Certificates**

The course will be held online by means of the FSR Training Platform and is free of charge for selected participants.

Experts taking part in the whole Course will receive a Certificate of Attendance.