

# Clean Molecules for the Energy Transition – 3rd edition



@FSR\_Energy

**12-30 June 2023**

Online Training

Course Directors:

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## Introduction

Within the EU Green Deal vision, renewable, low-carbon, and even emission-negative gases such as renewable hydrogen and biogas have a central role to play in decarbonising the EU economy. This vision has since been elaborated in subsequent strategies pertaining to key areas, for example, the Energy System Integration Strategy and the EU Hydrogen Strategy. Moreover, the energy crisis in Europe over the past 12 months or so has also brought an added impetus to accelerate the growth of these sectors to ensure the long-term affordability and security of energy in the EU.

The ‘Clean Molecules for the Energy Transition’ course from the Florence School of Regulation covers the key issues in this fast-evolving area. The three-week programme (2 weeks of offline preparation & 1 week of live classes) offers first-hand insights into the EU and global context of clean molecules, with relevant case studies, topical discussions and panel debates delivered by leading professionals.

## Course structure

**Week 1 & 2 (12-25 June 2023)** | Offline preparation to the course**Week 3 (26-30 June 2023)** | Online live classesCo-funded by the  
Erasmus+ Programme  
of the European Union

## Draft Programme

### **12 June**      **Preparatory weeks on the course platform**

12:00- 13:00      Welcome Live Class

12 - 25 June      *Read/watch/listen to the material and take the relevant activities on the course platform.*

19 June            2 – 3 PM CEST  
Live Office Hour

**Ronnie Belmans** | KU Leuven

### **26 June**      **Day 1: Clean molecules in the EU**

9:00 - 9:15        Welcome to the course

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

9:15 - 10:15      Lecture “The EU context”

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

10:15 - 11:15      Lecture “Mapping the system: products, processes, and taxonomies”

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

11:15 - 11:30      *Coffee break*

11:30 - 12:00      Case study “Biogas and biomethane”

**Eva Hennig** | Thuga

**Zoltan Elek** | Landwärme

12:00-12:30      Case study “Scenario planning and policy framework for the end-uses of clean molecules in the EU”

**Carla Benauges** | European Commission

**Piero Carlo Dos Reis** | European Commission

12:30 - 13:30      *Lunch break*

13:30 - 14:30      Debate “Transportation of clean molecules”

*Moderator*

**Christopher Jones** | Florence School of Regulation, RSCAS, EUI

*Panellists*

**Sara Piskor** | ENTSOE

**Roxana Caliminte** | GIE

**Simone Viganò** | Italgas

**Maxime Peeters** | Port of Antwerp-Bruges

14:30 - 14:35      Closing

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

**27 June**      **Day 2: Hydrogen deep dive**

9:00 - 9:15      Welcome and reflections on previous day

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

9:15 - 10:15      Lecture “Producing green hydrogen and synthetic fuels with Power-to-X technology “

**David Parra** | Iberian Energy Storage Research Centre, CIIAE

10:15 - 11:15      Case study “Market uptake of hydrogen”

**Timo Bollerhey** | H2Global

**Andrea Triki** | DENA

11:15 - 11:30      *Coffee break*

11:30 - 12:00      Mini lecture “EU Hydrogen Bank and market-based support instruments for Hydrogen scale up“

**Johanna Schiele** | European Commission

12:00 - 12:30      Interactive session “Hydrogen cost-effectiveness in the EU”

**James Kneebone** | Florence School of Regulation, RSCAS, EUI

12:30 - 13:30      *Lunch break*

13:30 - 14:30      Debate “National strategies for a hydrogen economy”

*Moderator*

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

*Panellists*

**Erik Rakhou** | BCG

**Harry van Til** | Dutch Ministry of Economic Affairs and Climate

**Roberto Cianella** | Ministero dell’Ambiente e della Sicurezza Energetica

**Fiona Simon** | Australian Hydrogen Council

14:30 - 14:35      Closing

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

**28 June**      **Day 3: Regulation and markets**

9:00 - 9:15      Welcome and reflections on previous day

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

9:15 - 10:15      Lecture “The Hydrogen and Decarbonised Gas Market Package”

**Christopher Jones** | Florence School of Regulation, RSCAS, EUI

10:15 - 11:15      Lecture “The future of network regulation”

**Oliver Koch** | European Commission

11:15 - 11:30 *Coffee break*

11:30 - 12:00 Mini lecture “CBAM and international trade”

**Michael Mehling** | MIT, University Strathclyde Law School

12:00 - 12:30 Interactive session “Certification of clean molecules”

**James Kneebone** | Florence School of Regulation, RSCAS, EUI

12:30 - 13:30 *Lunch break*

13:30 - 14:30 Debate “Hydrogen and industrial competitiveness: EU, US, China”

*Moderator*

**Christopher Jones** | Florence School of Regulation, RSCAS, EUI

*Panellists*

**Laima Eicke** | IASS, Harvard

**Wilson Ricks** | Princeton University

**Joseph Dellatte** | Institut Montaigne, Kyoto University

14:30 - 14:35 Closing

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

## **29 June** **Day 4: Externalities of a clean molecule economy**

9:00 - 9:15 Welcome and reflections on previous day

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

9:15 - 10:15 Lecture “Security of supply for renewable energy supply chains”

**Elizabeth Press** | IRENA

10:15 - 11:15 Lecture “Consumer engagement and the risk of greenwashing”

**Meghna Tewari** | OFGEM

11:15 - 11:30 *Coffee break*

11:30 - 12:00 Mini lecture “Emissions from clean molecules”

**Maria Olczak** | EDF

12:00 - 12:30 Interactive session “The role of clean molecules in energy security”

**James Kneebone** | Florence School of Regulation, RSCAS, EUI

12:30 - 13:30 *Lunch break*

13:30 - 14:30 Debate "Empowering consumers to support decarbonisation of the gas sector"

*Moderator*

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

*Panellists*

**Meghna Tewari** | OFGEM

**Katrien Verwimp** | AIB

**Marine Cornelis** | Next Energy Consumer

14:30 - 14:35 Closing

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

**1 July** **Day 5: Participants' projects discussion**

9:00 - 09:15 Welcome and reflections on previous day

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

09:15 - 9:50 Lecture "The regulators perspective: networks and markets"

**Riccardo Galletta** | ACER

9:50 - 11:45 Mastery challenge "Final presentations & course closure"

**Ilaria Conti** | Florence School of Regulation, RSCAS, EUI

**Andris Piebalgs** | Florence School of Regulation, RSCAS, EUI

**James Kneebone** | Florence School of Regulation, RSCAS, EUI

**Nicolò Rossetto** | Florence School of Regulation, RSCAS, EUI