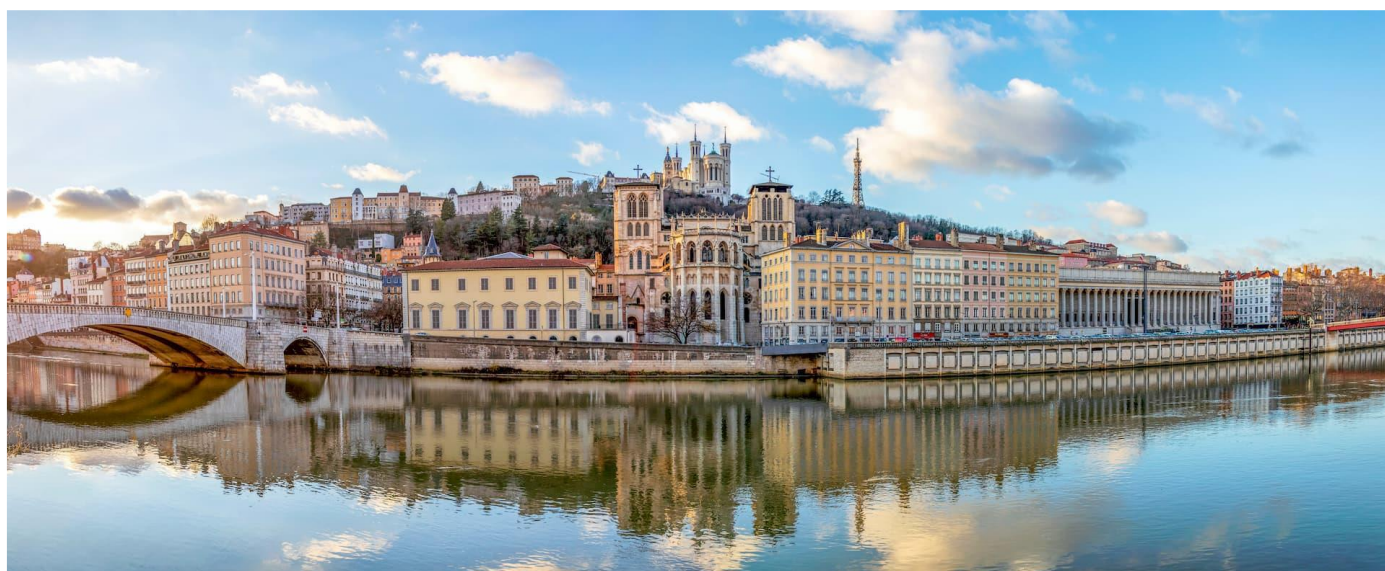




## Workshop

# Bioenergy in a Net Zero Future

Lyon (France), Thursday 19 October 2023



Workshop organized by IEA Bioenergy in collaboration with ADEME, the French Agency for Ecological Transition

## INTRODUCTION

Reaching net-zero emissions globally by 2050 requires an unprecedented transformation in how energy is produced, transported and used. In the IEA Net Zero by 2050 scenario, modern bioenergy use rises to 100 EJ in 2050, meeting almost 20% of total energy supply. In an energy mix dominated by wind and solar, sustainable bioenergy features prominently in flexible energy generation, industry and transport, and is increasingly used in connection with carbon capture and utilisation or sequestration (CCUS). The captured biogenic CO<sub>2</sub> can either be stored to achieve a net extraction of CO<sub>2</sub> from the atmosphere (reaching so-called 'negative emissions') or it can be combined with green hydrogen to produce carbon-containing e-fuels and e-products.

This workshop, organised by IEA Bioenergy in collaboration with ADEME, aims to discuss the role of bioenergy in the transition to a carbon neutral energy system. In the morning sessions, the focus will be on policies and strategies to support the role of bioenergy in the energy transition. The afternoon sessions will consider the flexibility of bioenergy in the energy system, the use of biogenic CO<sub>2</sub> and promising developments in bioenergy concepts.

## PROGRAMME

*Status 12 July 2023*

8.45 Registration

### 9.00 The role of bioenergy in energy transition strategies

- Welcome and short introduction by IEA Bioenergy and ADEME representatives
- IEA representative: bioenergy in IEA's Net Zero by 2050 roadmap – *to be confirmed*
- Representative of the French Ministry: French perspective
- Marlon Arraes, Ministry of Mines and Energy, Brazil: Brazilian perspective – *to be confirmed*
- Oshada Mendis, Natural Resources Canada: Canadian perspective

10.30 Tea/Coffee

### 11.00 Panel debate on drivers and barriers & effective policies and strategies to support the role of bioenergy

With the speakers of session 1 and representatives of the European Commission, the USA, ... and regional French authorities.

12.15 Lunch break

### 13.30 Flexible bioenergy and the use of biogenic CO<sub>2</sub> in future energy systems

- Markus Millinger, Chalmers Univ. (Sweden): Considerations on the priority of biomass use in future energy systems
- Elina Mäki, VTT (Finland): How flexible bioenergy and other system services from sustainable bioenergy can support the transition to a renewable energy system
- Christiane Hennig, DBFZ (Germany): Managing biogenic CO<sub>2</sub> in Bio-CCUS concepts
- Representative of IEA Bioenergy Task 45: Carbon accounting in Bio-CCUS value chains – to be confirmed
- Aïcha El Khamlichi, ADEME (France): Will there enough biogenic CO<sub>2</sub> for projected e-fuel demand in France?

## 15.00 Tea/Coffee

### 15.30 Promising developments in bioenergy concepts

- Marion Maheut, ENGIE (France): Diversification of applications downstream of pyrogasification
- Joakim Lundgren, Luleå University of Technology (Sweden): Carbon-negative production of hydrogen through biomass gasification
- ... (France): synergy projects between anaerobic digestion and gasification in France
- ..., Ramboll (Denmark): Status of CO<sub>2</sub> capture and utilization from biogas plants in Denmark – to be confirmed
- Stefan Ellenbroek, Energie360 (Switzerland): Wood-based CHP with biochar production for negative emissions – to be confirmed

## 17.00 Summary and conclusions

### 17.15 Closing drinks

## PRACTICAL INFORMATION

### Date:

Thursday 19 October 2023, 8.45-17.15 CEST

### Meeting location:

The event will take place at Hôtel Mercure - Lyon Centre Charpennes.

Address: 7 place Charles Hernu, 69100 Villeurbanne - Lyon, France

*5 minutes by metro (stop Charpennes Charles Hernu) and 10 minutes by foot from the Lyon Part Dieu train station (stop of international trains)*

The workshop will be hybrid, so online participation will also be possible.

### Participation:

Participation to the workshop is free of charge, but pre-registration is required.

Registration link: **A registration link will be available by the end of August.**

Please indicate if you will participate on-site in Lyon, or if you would like to connect online and follow the live stream. There is room for around 100 participants in Lyon.

### Hotel suggestions:

- Mercure Lyon Centre Charpennes Hotel: <https://all.accor.com>
- Lyon Marriott Hotel Cité Internationale: <https://www.marriott.fr>
- Novotel Lyon Gerland Musée des Confluences: <https://all.accor.com>
- Radisson Blu Hotel Lyon. <https://www.radissonhotels.com>
- InterContinental Lyon - Hotel Dieu: <https://www.ihg.com/intercontinental>
- Sofitel Lyon Bellecour: <https://all.accor.com>

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