



DIPARTIMENTO DI ENERGIA

Thursday, April 11th, 2024

h 9.00 – 13.00

Location: Politecnico di Milano,
Campus Bovisa La Masa,
Via Giuseppe La Masa 1,
Building B23 DMEC, Sala Consiglio, 1st floor
For information: veronica.piazza@polimi.it

Registration form

<https://forms.office.com/e/zc55PdA96z>

The role of biomass to fuels in the energy transition

The valorisation of biomass offers a great potential for the current energy transition and circular economy, but technological development and market deployment face challenges related to economic, regulatory as well as fundamental issues (feedstock, chemistry, reactors).

This seminar aims to overview the research frontiers, the technological status, the market and political drivers. Distinguished researchers and industrial experts will bring their vision, tackling key questions .

Which role for biogenic C within a future carbon-free energy market?
Bio-syngas, bio-liquids, bio-char, bio-CCS?

Which scientific, technological and regulatory obstacles must be overcome to enhance energy and carbon efficiency and improve the economic competitiveness?

Program:

Session 1: from research to technology

- 9.00 Introductory contributions from Polimi
A. Beretta, T. Faravelli, M.C. Romano (Politecnico di Milano)
- 9.30 Production of H₂ from biomass through a two-step process of
pyrolysis and reforming
M. Olazar (Universidad del País Vasco, Bilbao)
- 9.50 Advancements in Biomass Pyrolysis: From Model Compounds
to Pilot Plant Catalytic Upgrading
D. Chen (NTNU, Trondheim)
- 10.10 Biogas exploitation in Italy: status and RSE research activities
A. Rossetti (RSE)
- 10.30 ☕ Coffee Break

Session 2: from technology to market

- 11.00 Biofuels and biorefining in the EU: challenges and opportunities
in policies and technologies
D. Chiaramonti (Politecnico di Torino)
- 11.20 The role of biofuels in the decarbonization of the mobility sector
P. Pollesel (Eni)
- 11.40 An end-user perspective: the quest for Sustainable Aviation Fuel
M. Arra (Leonardo)
- 12.00 Status of industrial gasification and pyrolysis of biomass for
fuels/chemicals
C. Hindsgaul (Ramboll)
- 12.20 Round table discussion
- 13.00 Closure

Organized by
Alessandra Beretta
Matteo Carmelo Romano
Veronica Piazza
Dipartimento di Energia, Politecnico di Milano

