



TITLE: Youth for Renewable Energy Communities

Organized by: K.EY with Kyoto Club

Rimini, 29 February 2024 11:00-13:00

Background

Renewable Energy Communities (RECs) play a pivotal role in accelerating the energy transition, fostering local generation and consumption of renewable energy. An REC operates as a localized, participatory, and integrated system, primarily focusing on renewable energy generation, distribution, and consumption, while underscoring community benefits and involvement. The concept of a "Energy Community" is central to this approach, aiming to optimize local energy systems through improved efficiency, flexibility, and local generation from renewable sources. REC development hinges on the collaboration of various key stakeholders, including public administrations, utilities, energy producers, and users, encompassing both consumers and prosumers.

Workshop Overview

The platform '**Youth for Renewable Energy Communities**' will present the following topics at KEY 2024. Since September 2023, at Politecnico Torino, 60 Master Students in Sustainable Architecture from diverse countries, including Afghanistan, China, Colombia, Egypt, Ethiopia, Finland, Georgia, Germany, India, Iran, Italy, Lebanon, Mexico, Nigeria, Sri Lanka, Turkey, have engaged in a comprehensive workshop on "Energy Transition and Low Carbon Architecture". This initiative aimed at creating Renewable Energy Communities across Europe, focusing on 8 selected sites for design, analysis, and portrayal. The 4-month workshop underscored the significance of promoting sustainable development models to enhance quality of life and investing in local economies. It adopted a holistic, interdisciplinary approach to addressing urban and rural development issues.

Format

The 'Youth for Renewable Energy Communities' series is structured into four sets of duets, each representing different community types:

- Urban Communities: 2 in The Netherlands
- Sub-urban Communities: 2 in Northern Italy
- Countryside Communities: 1 in Central Italy and 1 in Hungary
- Island and Remote Communities: 1 in Southern Italy and 1 in the UK

Tutors and international experts will discuss the workshop's outcomes, presenting their insights in the final session.

Key Features

The workshop's key outcomes include:

- Exploration of renewable energy potentials: solar, biomass, biogas, wind.
- Analysis of end-use balance and Reference Energy System across sectors: housing, tertiary, transportation, industrial, agriculture.
- Innovative solutions in green hydrogen generation using PV, wind, and geothermal energy.

Agenda: **Youth for Renewable Energy Communities**

11:00 **Workshop Introduction**

Empowering the Future: Youth for Renewable Energy Communities | Roberto Pagani (IT)

Energy Performance of Buildings: what next? | Enrico Fabrizio (IT)

Concepts for Renewable Energy Communities in Europe | Chiel Boonstra (NL)

11:30 **Youth for Renewable Energy Communities**

8 Renewable Energy Communities in Europe: Italy, The Netherlands, Hungary, UK
Slide Show by University Master Students

12:00 **Reflections and Considerations** | Gianni Silvestrini (IT)

12:15 **Poster Session: 1.Process | 2.Plan | 3.Project | 4.Performance |**

8 Renewable Energy Communities in Europe: Italy, The Netherlands, Hungary, UK
Posters explained by University Master Students at the Poster Session

Wrap up: what experts think?

Chiel Boonstra (NL), Simona Costa (BE) tbc, Corrado Carbonaro (IT), Loredana Torsello (IT) tbc.

13:00 **Closing**

Speakers list (ordered as in the Agenda)

Roberto Pagani, Politecnico di Torino (IT)

Enrico Fabrizio, Politecnico di Torino (IT)

Chiel Boonstra, Trecodome (NL)

Gianni Silvestrini, KEY | Kyoto Club (IT)

Simona Costa, Tour4EU (BE) tbc

Corrado Carbonaro, Politecnico di Torino (IT)

Loredana Torsello, COSVIG (IT) tbc