

LOMBARDY ENERGY CLEANTECH CLUSTER



GENERAL INFORMATION

REFERENCE ECOSYSTEM

Sustainability

TECHNOLOGY AREAS

Water Energy Nexus - water management and purification, Smart Energy Systems - energy production and distribution, Green Building, Sustainable Manufacturing, Clean Air, Circular Economy

EUROPEAN PROJECTS AND INTERNATIONAL NETWORKS

ESECA (COSME), iDesignRES (Horizon Europe), RISE (I3), SYSCHEMIQ (Horizon Europe), EDIH Lombardia (MIMIT), SMaRT PCBs (MASE), Tech4lib (Fondazione Cariplo), Vanguard Initiative, ICEI Alliance (ICEI-A), European Cluster Collaboration Platform (ECCP), S3 Partnerships of European Regions (ESPC), Digital Innovation Hub (DIH), Enterprise Europe Network (EEN), Cluster Tecnologico Nazionale Energia (CTNE)

HEADQUARTERS

Via Pantano, 9 - 20122 Milano

WEBSITE

energycluster.it/en



NUMBER OF MEMBERS



SUCCESS STORIES

In 2022, LE2C activated the working table on **Renewable Energy Communities (RECs)**. From this initiative the strategic supply chain "Transition to the RECs ecosystem" was born, promoted by the Cluster and officially recognized by the Lombardy Region. The partners' goal was to develop an inclusive bottom-up approach, different from the traditional turnkey model. The supply chain, led by TerrAria srl, involves 11 LE2C member entities, representing companies and consortia operating in the provinces of Bergamo, Brescia and Milan.

In 2023, the supply chain partners submitted a project proposal under the Lombardy Region's Call "**Filiere & ecosistemi 2023**" obtaining funding for the project "**Transition to the RECs ecosystem**." The project objective was to promote the deployment of RECs and to raise awareness of the importance of renewable sources for environmental and economic sustainability.

In addition to the creation of software aimed at supporting the start-up phase (technical and economic definition of the RECs) and the post-establishment phase (management of RECs), the project investigated **two pilot cases** related to an industrial group in Lombardy:

- 1. individual remote self-consumption:** New photovoltaic plant in Cuggiono serving individual self-consumption with virtual connection between two separate company sites, but under the same primary cabin.
- 2. renewable energy community:** Expansion of PV plant in Legnano to serve a corporate REC (between company and employees residing under the same primary cabin or local associations/foundations).

ONGOING PROJECTS 2024

SYSCHEMIQ



SYSCHEMIQ (2022-2026) is a project funded by the Horizon Europe Program that aims to **accelerate the transition to a circular plastics economy**.

The main objective is to **promote the reuse of waste from plastic packaging**, as well as to **foster the adoption of innovative technologies for plastic collection and treatment** and to **facilitate the exchange of knowledge and sustainable practices** at the European level. The project involves **21 European partners** that represent the fields of industry, scientific institutions, education, public administration, cities and European networks.

To address the challenges related to plastic waste, SYSCHEMIQ aims to promote systemic change by adopting **efficient redesign, reuse and recycling strategies**. In addition, project partners are working on the **design of sustainable and innovative plastic products**, with the aim of facilitating recycling, reducing costs and minimizing environmental impacts.

LE2C is committed to **promoting the replicability of SYSCHEMIQ's systemic model in the Lombardy Region**. This commitment translates into the organization of workshops and webinars aimed at disseminating and sharing the digital tools and activities developed in the context of the project. By involving experts in the field, LE2C facilitates the exchange of knowledge and best practices to foster an effective transition to a circular plastics economy.

VANGUARD INITIATIVE

LE2C, representing the **Lombardy Region**, is actively involved in two working groups within the Vanguard Initiative: **ADMA** and **Hydrogen**.

ADMA Energy - Aims to make the EU a world reference in the **production of high-efficiency components for marine renewable and offshore energy**, promoting **collaboration** between SMEs, research centers and other actors to develop a **competitive, interregional value chain**.

Hydrogen (H2) - **LE2C is co-coordinator of the Hydrogen Table**, which aims to **foster European cooperation in the hydrogen sector**, focusing on the goal of **creating a knowledge and innovation community**, engaging SMEs and achieving the EU's green hydrogen goals.



In the context of hydrogen, LE2C, together with Assolombarda and H2IT, has promoted the creation of **HERE Network**, a networking platform that **facilitates dialogue between research and industry**, promoting the meeting between companies interested in investing in hydrogen and institutions with expertise and infrastructure for technological development.



In addition, within the LE2C cluster working tables, the strategic supply chain "**DeHSK - Development Hydrogen Skills**" was born, involving 22 actors spread over 7 provinces in Lombardy, aiming to **develop skills to promote a sustainable economy, support the innovation of hydrogen** as an energy carrier for **decarbonization**, and foster local economic growth in the clean hydrogen sector.

SYNERGIES with other regional or national strategies

SMART SPECIALISATION STRATEGY S3

Sustainability Ecosystem

PNRR

Mission 2

Green revolution and ecological transition

Component 1

Circular economy and sustainable agriculture

SMART SPECIALISATION STRATEGY S3

Sustainability Ecosystem

PNRR

Mission 2

Green revolution and ecological transition

Component 2

Renewable energy, hydrogen, network and sustainable mobility

Component 3

Energy efficiency and building rehabilitation

Mission 4

Education and research

Component 2

From research to enterprise