







### **Press Release**

# ECOLE: Pioneering Circular Economy in Alpine Industrial Parks

The ECOLE (Eco Industrial Park Network for the Alpine Regions Leveraging Smart and Circular Economy) project is committed to **transforming industrial parks in the Alpine region into sustainable, resilient, and eco-friendly hubs,** better prepared to face climate and economic crises. Co-funded by the European Union through the Interreg Alpine Space programme, ECOLE was launched on the 1rst of November 2022.

In the three years of cooperation, ECOLE aims to integrate circular economy principles into industrial operations by adopting a systemic thinking community model, thereby enhancing **resource efficiency and reducing environmental impact**. This initiative brings together industries, public authorities, and universities to co-design and implement action plans for a greener future.

Under the coordination of **Consorzio ZAI Interpota Quadrante Europa**, the project gathers **12 partners** from **5 different countries** from the Alpine Space Regions around a common ambition: accelerating the transition to a **circular and resource-efficient industry in the Alps**.

For more information, visit <a href="https://www.alpine-space.eu/project/ecole/">https://www.alpine-space.eu/project/ecole/</a>



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### **Recent developments**

The project's partners gathered on the 16<sup>th</sup> and 17<sup>th</sup> of May 2024 in **Ruhstorf an der Rott**, Germany, for the **4**<sup>th</sup> **Steering Group of ECOLE**. On this occasion, a public stakeholder's event was hold on the topic of "Multi Criteria Analysis and Cost Benefit Analysis as toolkit for the development of a governance model supporting funding resources for the implementation of Eco Industrial Parks (EIP)" on the 16<sup>th</sup> of May.





The event was followed by the organisation of the **Steering Group meeting** on the 16<sup>th</sup> of May in the afternoon as well as a systemic thinking community model working session to discuss on the progress of the project and the actions pans to implement tools in the EIP pilot sites. Partners then joined in an insightful **study-visit of Siemens Technoparks** in Ruhstorf that offers to future-oriented companies a unique environment for development.





### Discover the project partners and their Industrial Parks

The main ambition of ECOLE is to solve problems Industrial Parks (IPs) face to become integrated circular Eco- Industrial Parks (EIP). Explore below the **nine innovative pilot projects** developed by ECOLE's partners in industrial parks, designed to accelerate the transition towards circular and resource-efficient industries in the Alpine region through integrated community-driven approaches and systemic change.

### 1. ZAI and Marangona industrial park (Italy)

The Consorzio ZAI, Verona's Development Agency, is planning to conduct a feasibility study within its industrial park located in Verona to assess the potential for establishing an energy community in the area. As the industrial park is expected to welcome numerous logistics companies in the coming years, understanding the projected energy consumption and exploring efficient energy management solutions is crucial for the development of the region.

#### 2. COSELAG and Trieste Industrial Park (Italy)

Based in Trieste, COSELAG is an economic development agency that aims to foster economic growth through innovation. Their industrial park, **Parco Industriale di Trieste**, will pilot sustainable industrial practices, focusing on energy efficiency and circular production methods. COSELAG is on a mission to become an Eco-Friendly Industrial Park by developing an IT platform that allows enterprises to share energy demand and waste production data. This platform will assess the feasibility of renewable energy production and industrial symbiosis. In April 2023, a contract was awarded to develop this web platform, focusing on the collection and analysis of environmental, production, energy, and resource use data. By January 2024, COSELAG signed a contract to implement the pilot action, with testing to follow before the full launch.

### 3. Energy and Innovation Centre of Weiz and CRAISS Logistic Centre (Austria)

This center in Weiz specializes in energy efficiency and innovation. Their involvement in CRAISS logistic Centre Consorzio ZAI is the Verona Developement Agency. They plan to conduct within their industrial park based in Verona a feasibility study to understand the possibility to implement an energetic community in the IP. In our industrial park in the next few years there will be a lot of logistics companies. For that reason for us is important to understand the possible energy consumption in the area, and how we can figure out the energy organization of the area. Park, based in Weiz, focus on developing best practices for sustainable industrial development, including energy-saving technologies and green building standards. Energy initiatives were implemented at CRAISS's Industrial Park zone to significantly reduce CO2 emissions, including PV panel installations, electrical storage systems, and refueling stations. Additional projects like a green noise barrier and an insect hotel were also completed by November 2023. CO2 emission reductions are now monitored using tools such as the KNX metering system to track energy use and production efficiency. Collaboration between the Weiz and St. Ruprecht communities proved crucial, highlighting the importance of joint efforts in achieving success. The initiative aims to attract companies to the economic area based on ideal locations, with local tax sharing set at a 70:30 ratio for jointly settled businesses.

### 4. Wirtschaftsagentur Burgenland GmbH and Intercommunal Business Park s7-Node Rudersdorf (Austria)

Based in Eisenstadt, Wirtschaftsagentur Burgenland GmbH is an economic development agency. They support the Intercommunal Business Park s7-Node in Rudersdorf. This business park is a greenfield site for now, so there is no available source of renewable energy like biomass, district heating or biogas, but all solid components such as ceilings, walls and foundations can basically be used as sensible heat storage elements by increasing their temperature, this process is called thermal activation. In combination with solar-thermal or solar-electric systems, a high level of solar coverage of the building's energy needs can be achieved, enabling a far-reaching supply with renewable energy. An additional consulting service is strictly technologically specific for the usage of plastic heat exchanger tubes as well as the Smart Grid interface of a heat pump installation respectively the Smart Meter of the network operator which makes the communication in the system possible.

### 5. Grenoble-Alps Metropole and HYtech Valley (France):

Located in Grenoble, this metropolitan authority promotes sustainable urban and industrial development. **HYtech Valley** will implement circular economy models, focusing on sustainable energy solutions and industrial symbiosis. The project aims to develop more cooperation and circular economy projects between the park tenants and nearby companies. The main focus is on the exchange of waste and sharing of equipment, knowledge, or other resources through site visits, workshops, and the use of the online web-based platform ACTIF. Other projects are also under development with the new park organization that was created in September 2023 and still needs strengthening through projects. One of the projects is on shared transport for employees.

#### 6. POLYMERIS and Le Veyziat Industrial Park, Bellignat (France)

Based in Bellignat, in the Haut-Bugey Agglomeration and its Plastics Valley, Polymeris is the competitiveness cluster for plastics, rubbers and composites. The industrial park supported by Polymeris, **Le Veyziat**, is also based in the Haut-Bugey Agglomeration and will be closely followed by the Agglomeration council. It will incorporate sustainable practices into its operations, encouraging recycling, resource efficiency and the development of environmentally friendly materials. The plan begins with the implementation of a plastic waste stream mapping exercise to identify the sources and types of waste that are not currently being recycled, in collaboration with a technical center and local stakeholders. Following the results, a business case on plastics waste recycling and energy recovery will be developed to present a model of industrial symbiosis and circularity in the plastics sector. These actions will also be developed to improve the governance of the Haut-Bugey conurbation, where the industrial park is located.

## 7. ITALCAM Italian-German Chamber of Commerce and Cleantech Innovation Park (Germany)

Situated in Munich, the Italian-German Chamber of Commerce facilitates cross-border trade and cooperation. The **Munich Industrial Park** will support the dissemination of circular economy practices across industries in Germany and Italy, promoting sustainable business models and resource efficiency. The industrial park is launching a circular economy initiative to boost sustainability and resource efficiency. Plans include creating infrastructure for material exchange, adopting waste-to-resource technologies, and ensuring regulatory compliance over the next few years. Collaboration with stakeholders such as park businesses, environmental agencies, and circular economy experts is integral. Despite logistical hurdles, the initiative promises significant benefits like enhanced sustainability and a more resilient industrial ecosystem. This effort positions the industrial park as a leader in environmental responsibility and sets a precedent for future sustainability practices.

### 8. Landshut University of Applied Sciences and Siemens Technopark (Germany)

Based in Ruhstorf an der Rott, the Research centre of Landshut University of Applied Sciences (TZ Energie) is a competence centre for energy storage. The centre supports **Siemens Technopark**, a brownfield industrial park, in its development. The main goal of this Industrial Park in implementing new green technologies is currently limited due to the constraints on structural changes. However, the park is focusing on energy conservation within one of its tenant companies. Additionally, TZ Energie is exploring with Siemens Technopark the possibility of installing photovoltaic (PV) technology in locations where it would be both cost-effective and energy efficient.

## 9. Development Agency Sora Ltd. with 4 Industrial Parks: Trata, Todraž, Žiri and Economic business zone Alples (Slovenia)

Located in Škofja Loka, the agency RA SORA supports regional industrial innovation in the **industrial parks of Trata, Todraž, Žiri and Železniki**. The pilot project aims to explore the utilization of waste heat within a company or through synergies with other companies for their production processes. This involves one company potentially supplying hot air or hot water to another. Additionally, the project intends to assess the feasibility of inviting companies to Industrial Parks (IPs) that can effectively utilize available waste heat resources.

#### 10. Regional Development agency of the Ljubljana and Industrial Park Zalog (Slovenia)

The Regional Development Agency of the Ljubljana Urban Region, based in Ljubljana, has launched an ambitious pilot project aimed at enhancing circular economy practices in the **Industrial Park Zalog**. The initiative focuses on the collection of edible waste edible oils from local residents and their conversion into a valuable resource for biogas production, addressing significant environmental and waste management challenges. Key partners in this project include VO-KA, the public waste management company responsible for collecting public waste, and KOTO, a company that made a successful transition from a heavy odor industry to a fully circular waste management company, also involved in biogas production. This strategic

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collaboration not only fosters circular practices within the industrial park but also improves traditionally challenging relationships with the local community. The project is critical in addressing the improper disposal of waste edible oils, which often leads to blockages in sewage systems and reduces the efficiency of wastewater treatment. By collecting these oils, the project aims to turn a problematic waste product into a sustainable energy source.

For more information concerning the project and its partners, please visit the website : <u>https://www.alpine-space.eu/project/ecole/</u>