

Bologna, December 16, 2024 – On December 12, the Open Innovation Day of the Bologna Living Lab took place, showcasing the sustainable and collaborative logistics solution developed within the URBANE project.

The event, which took place at the microhub in Via Calori, 17, was opened by Valentina Orioli, the Mobility Assessor of the Municipality of Bologna, and moderated by Paola Cossu, CEO of FIT Consulting, Innovation Manager of URBANE, and a member of the ALICE Board of Directors. In the first part of the event, the project and its contribution to European decarbonization policies were presented. Following this, each actor involved in the pilot project explained their role and shared their experiences. In the second part, logistics operators demonstrated the operation of the lockers and the process of depositing and collecting packages at the hub. Finally, participants were given the opportunity to contribute their insights and perspectives on the solution being tested. The interest shown by transporters made the event also an opportunity to start a dialogue on potential future collaborations.

The initiative highlighted how the Bologna Living Lab represents an innovative solution for improving last-mile logistics, making it more collaborative, efficient, and sustainable. Finally, the microhubs can help stimulate demand for the regeneration of commercial areas, encouraging citizen interest.

URBANE, funded by the Horizon Europe program, experiments with technological solutions that are replicable and scalable, aiming to reduce CO2 emissions by 20% and the number of delivery vans in cities by 30%, focusing on a collaborative approach inspired by the Physical Internet and innovative last-mile delivery methods.

The Lighthouse Living Lab of Bologna aims to redesign urban logistics through an innovative system based on automated, agnostic microhubs (used by multiple operators) for goods distribution. Currently, three lockers are installed at strategic locations near the boulevards surrounding the historic center: Via Calori, Porta San Mamolo, and Via Berlinguer. These lockers enable the transfer of goods from traditional vans to electric tricycles, which make deliveries within the city's ZTL (limited traffic zone). With this pilot activity, the Municipality of Bologna is implementing measures from the Sustainable Urban Logistics Plan and setting up Proximity Logistics Spaces, promoting the sharing of public space through innovative collaborative logistics actions aimed at urban regeneration.

The pilot involves ITL Foundation, coordinator of the Living Lab, the Municipality of Bologna, responsible for the planning, design, and implementation of urban mobility and logistics services, GEL Proximity, the logistics orchestrator offering omnichannel technology for locker management, and the transporters Due Torri S.p.A. and TYP. Other suppliers include Salerno Trasporti S.p.A., a company specialized in last-mile logistics, Ricoh and WIB, which provided the infrastructure and software for the lockers, respectively.

The pilot is being carried out in close collaboration with other European cities involved in the URBANE project (Helsinki, Thessaloniki, and Valladolid), and is also supported by the Metropolitan City of Bologna through the MOVE21 project. Barcelona (Spain) and Karlsruhe (Germany) participate as Twinning Living Labs, replicating and adapting the solutions from the Lighthouse Living Lab to their own contexts. Aarhus (Denmark), Antwerp (Belgium), La Rochelle (France), Mechelen

(Belgium), Prague (Czech Republic), and Ravenna (Italy) are the Follower Cities, which will carry out feasibility studies based on the results and lessons learned from the other cities.

The Living Lab is contributing to transforming the logistics system in Bologna, in line with the goals of the 2030 Agenda and the European Mission "Zero-Climate-Impact Smart Cities by 2030." As highlighted during the event, by optimizing delivery operations and reducing their environmental impact, URBANE brings various benefits for both logistics operators and citizens.

First, the use of electric vehicles helps eliminate emissions from last-mile deliveries, currently the most environmentally harmful segment. The microhubs also reduce urban congestion, as first-mile delivery vehicles can deposit packages in the lockers without time restrictions, avoiding peak traffic hours. Second, by splitting the first and last-mile deliveries between multiple operators and vehicles, the workload on drivers is reduced, and the timing is optimized. Consolidation in proximity areas increases the efficiency of integrated deliveries between multiple transporters, and the use of advanced technologies like blockchain enables the transparent and secure sharing of data, reducing conflicts between operators. Finally, the tricycles can move more easily through the narrow streets of the historic center and park more easily than vans, making the historic center more livable for residents.

For more details on the URBANE project and upcoming events, contact Alice Benini, Project Manager at ITL.