



UP - SCALE

Urban Pioneers - Systemic Change Amid Livable Environments

SLOVENIA: KRANJ, LJUBLJANA & VELENJE

Emissions domains addressed by the Pilot Activity



Consumption of non-electricity energy for thermal uses in buildings & facilities



Industrial process emissions



All vehicles & transport (mobile energy)

Key Focus Areas

Thermal energy | Mobility | Smart governance | Sector integration | One-stop-shop | Data-driven planning | Fourth-generation heating

Levers of Change

Democracy and participation | Governance and policy | Learning and capabilities | Technology/infrastructure

Description of the Pilot Activity

Three Slovenian cities piloted different approaches to systemic change through data-driven solutions and citizen participation. Kranj focused on sustainable mobility, optimising transport flows and deploying Slovenia's first Mobility-as-a-Service application. Ljubljana integrated excess heat into its district heating system while building an innovation hub for energy retrofit awareness. Velenje tackled data fragmentation through community-driven data collection and new governance models. Together, they demonstrated how digital tools, innovation ecosystems, and citizen participation can be woven into broader climate strategies.

Impact & Results

Kranj became the first Slovenian city to design a Mobility-as-a-Service application and establish a one-stop shop for transport and energy information. The Smart Kranj platform reached 1,145 registered users by May 2025, with 856 joining in Year 2 alone—75% growth. The city underwent a cultural shift: the municipality moved from decades of infrastructure-only thinking to actively considering how to make public transport more efficient and data-driven.

Ljubljana advanced systemic energy transition by linking excess heat sources with the district heating operator, preparing ground for fourth-generation heating systems. Automated data collection for emission accounting is now embedded into the existing city platform. An Innovation Hub launched to raise awareness on home retrofits, supported by an "It's time to innovate" campaign targeting decision-makers.

Velenje tackled data fragmentation through its Energy-Climate Office, where community-driven data was collected and fed into municipal processes. Siloed institutional datasets were aligned into new governance models, producing transferable methodologies for other cities.

Innovation Highlights

These include Kranj's MaaS app development, Ljubljana's high-impact Innovation Hub, and Velenje's Energy and Climate Office with the EVA digital assistant, supported by IJS (mobility analytics) and Envirodual (GHG tracking and waste heat tools). Despite challenges, partners established scalable solutions—embedding long-term impact through new governance models, open tools, and continued replication efforts.

Data proved essential as more than a technical tool—it acted as a mirror exposing underused routes, inefficient connections, and opening space for new solutions. Even while data infrastructure was still evolving, it catalysed better questions, shaped narratives, and improved decisions.

Twinning with Eilat (Israel)

Meetings in Kranj and Ljubljana covered topics of smart solutions, mobility, and public engagement. A virtual session addressed Kranj's MaaS application and Eilat's Climate Champions Programme. The final visit in Kranj and Velenje included sustainable mobility activities, MaaS updates, and the UP-SCALE conference.

