

01

LJUTOMER LIVING LAB

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Ljutomer

Location

Northeastern Slovenia (Pomurje region)

Total area

107 km²

Population

11.720

Contact person, organisation

Štefan Žohar, LEAP



<https://2isecap.eu/living-labs/ljutomer-slovenia/>

Ljutomer Living Lab

Hosting organization

Municipality of Ljutomer

Supporting role

LEAP

Year of establishment

2022

Current status

Ljutomer LL is recognized in the region for fostering innovation and addressing complex societal challenges, particularly concerning energy and climate transition (SECAPs, SUMP). It aims to extend beyond its locality, involving neighboring municipalities and local communities.



Starting Point and Goal

- creating a real-world environment for collaborative energy planning
- inspired by the concept of Local Energy Concepts (LECs)
- aimed at developing the first Sustainable Energy and Climate Action Plan (SECAP) in the Pomurje region



Achievements

- the initial goals of establishing Ljutomer LL were achieved
- the SECAP reached its final preparation stages
- the LL accelerated broad stakeholders' engagement, leading to a collaborative approach to SECAP creation at different stages



Key Factors for Success

- multi-sectoral collaboration involving residents, businesses, and local authorities
- ensuring the inclusion of diverse perspectives in the SECAP's development
- transferability of the approach and methods used



Main Barriers

- low support due to the lack of established cooperation across different sectors and actors at the local level
- the local community was initially unaccustomed to working with public and private stakeholders on such an extensive project

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Living Lab's Mission

The engagement of users and other stakeholders to co-design solutions that address real needs and challenges within the local community of Ljutomer.

“A living lab can be an effective tool for preparing energy action plans by providing a real-world environment where stakeholders can collaborate, test ideas, and gather data.”

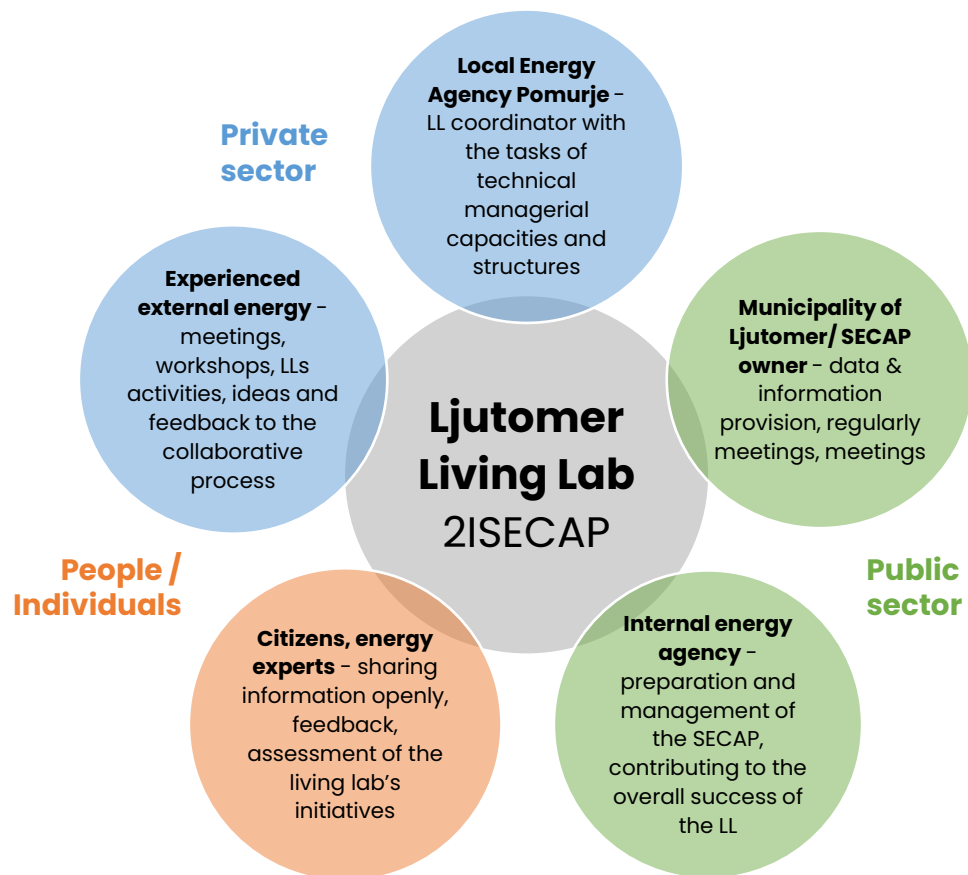
The most important impact was the encouragement and collaboration across different sectors.”

Štefan Žohar, LEAP



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Key roles within the Living Lab

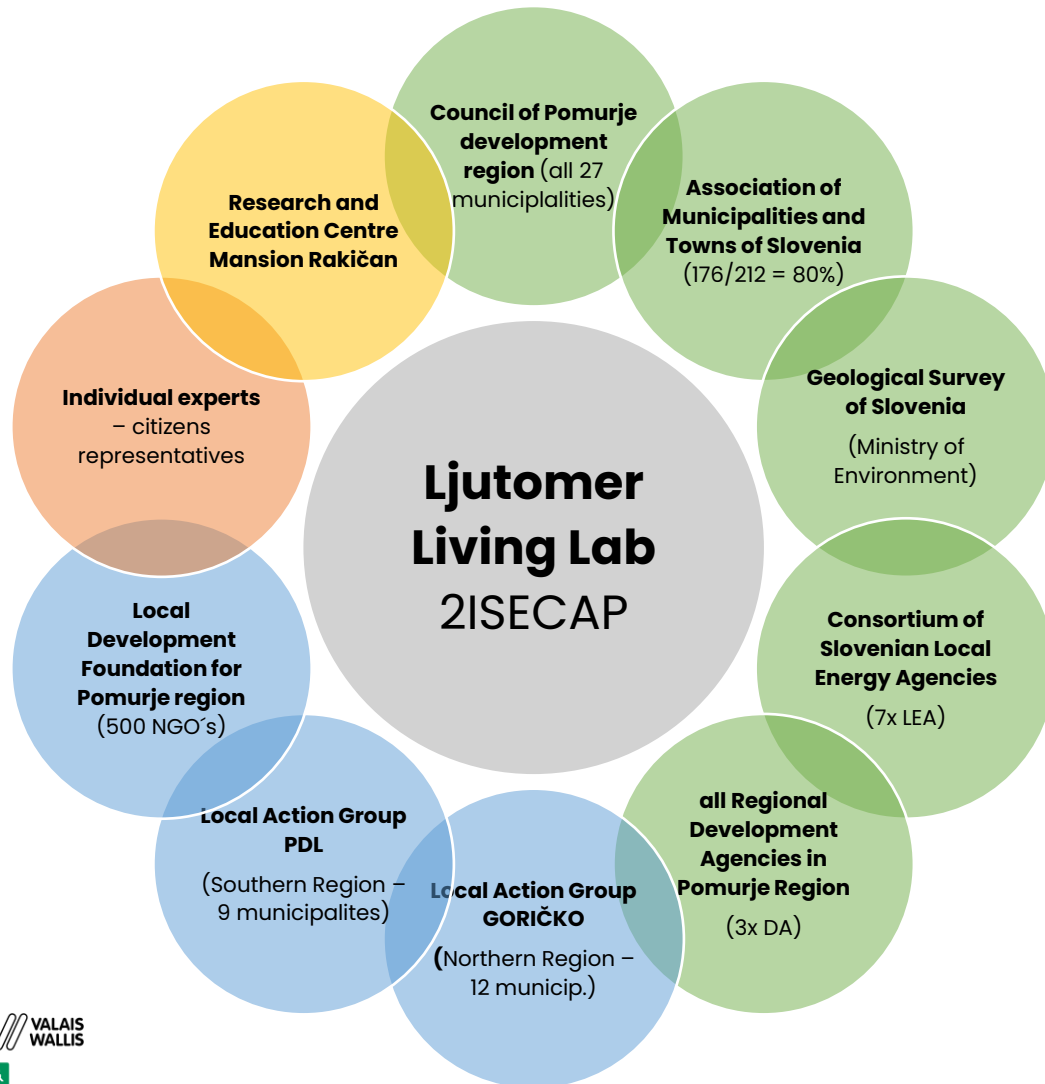


Groups according to the Quadruple-Helix model

- - Public administration
- - Private organisations
- - Research organisations
- - Citizens and local associations

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Key stakeholders' map



Groups of stakeholders according to the Quadruple-Helix model

- - Public administration
- - Private organisations
- - Research organisations
- - Citizens and local associations

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Tools and Methods Used

- PESTEL, SWOT, TWOS analysis
- Brainstorming sessions
- Presentations, free discussions, roundtables, interviews
- Maps analysis
- Strategic documents analysis, for instance, municipal documents, such as spatial plans and Sustainable Urban Mobility Plans (SUMP), to align activities with regional energy goals



Key Projects and Activities

SECAP Preparation

The primary project of Ljutomer LL is the development of the SECAP for the Municipality of Ljutomer. It involved workshops, meetings with key stakeholders, and the use of regional strategic documents as guiding frameworks.

Regional Expansion

The LL's influence expanded beyond Ljutomer, promoting SECAP development in Razkrižje municipality, showcasing the transferability of the LL model.



Major Challenges and Solutions

Engagement

Ensuring active participation from diverse stakeholders, especially those less familiar with collaborative energy planning. The LL addressed this by fostering inclusive discussions, which allowed stakeholders to share perspectives and build trust over the time.

Complexity of Tasks

Managing expectations and balancing interests among stakeholders from various sectors required clear communication and continuous collaboration to ensure successful outcomes.

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Ljutomer Living Lab as a basis for regional SECAP

Sustainable Energy and Climate Action Plan of Pomurje Region

- Second Regional Living Lab meeting; 18th of April 2023 in Murska Sobota - annual Council of Pomurje development region: *Presentation of the 2ISECAP approach and the existing regional strategic documents (Pomurje region) , which can serve as supporting material for the preparation of the regional SECAP in Pomurje in the future*
- Third Regional Living Lab meeting; 8th of September 2023 in Jeruzalem - conference of the Consortium of Slovenian Local Energy Agencies: *Presentation of the existing Sustainable Energy and Climate Action Plan of Gorenjska region by the author - Local Energy Agency of Gorenjska*
- **A defined RESULT: Development of Sustainable Energy and Climate Action Plan (SECAP) of POMURJE REGION based on the LL approach as an umbrella document for the preparation of future Local Energy Concepts (LECs) and Sustainable Energy and Climate Action Plans (SECAP's) for other municipalities in Pomurje region.**



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Ljutomer Living Lab Cross-border expansion

Sustainable Energy and Climate Action Plan of Razkrižje Municipality

Second Specific Oriented Ljutomer Living Lab Meeting; 15th of February 2023 in Razkrižje:

- The purpose of meetings was the expansion of the area of influence of the measures set up in the action plan of the planned SECAP document.
- The second purpose of the meeting was the promotion of the Living Lab approach and also the SECAP document to wider area outside of Ljutomer municipality – especially to the neighboring municipalities in Slovenia and Croatia.

Final conclusion of the meeting: Since the preparation of the Razkrižje municipality's documents contains parallels with the activities and goals of the 2ISECAP project, it presented the way the living labs (LL) work, through which the participants of the energy transition will participate and co-create.

RESULTS:

- **Strategic Approach to Torrential Waters Impact in the Municipality of Razkrižje: Overview of Funding Opportunities**
- **Strategic Approach to Torrential Waters Impact in the Municipality of Razkrižje**
- **Sustainable Energy and Climate Action Plans of Razkrižje Municipality**



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LL local and regional activities, main directions

Establishment and organization of the LL

- Creating a core team of Ljutomer Living Lab
- Securing commitments from stakeholders (signing of the Covenant of Mayors by the Mayor of Ljutomer)
- Mapping relevant stakeholders and events



Review of Strategic documents & development of SECAP

- Reviewed and discussed key municipal strategic documents (Local Energy Action Plan, Sustainable Energy Action Plan, Local Spatial Plan) to support the preparation of the SECAP for Ljutomer.
- Conducted validation and context analyses using tools like PESTEL, SWOT, and TOWS to inform decision-making.
- Defined specific measures for the SECAP action plan, taking into account existing local action plans and regional needs.

Stakeholders' engagement and Cross-sectoral collaboration

- Fostered collaboration among diverse stakeholders, including local governments, citizens, businesses, and energy experts, through workshops and follow-up meetings.
- Engaged Covenant of Mayors experts in discussions about mitigation, adaptation, and water/flood protection measures.
- Encouraged ongoing participation from stakeholders to support the development and implementation of SECAP measures, expanding the Living Lab's influence regionally.



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LL local and regional activities

Regional and Cross-border expansion

- Promoted the SECAP and Living Lab model to neighboring municipalities in Slovenia and Croatia, initiating regional SECAP efforts in Razkrižje.
- Expanded the Living Lab's impact beyond Ljutomer, engaging neighboring municipalities in Slovenia and Croatia in discussions about shared energy and climate challenges.
- Initiated cross-border collaborations, specifically addressing flood protection and the management of torrential waters through regional SECAP initiatives.
- Conducted site visits in Ljutomer and Razkrižje to assess and implement flood protection measures, identifying funding opportunities for these projects.

Continuous learning and adaptation

- Presented and exchanged knowledge from other regions, including insights from the Gorenjska and Pomurje regions' SECAPs.
- Defined synergies between different projects (INTENSSS-PA, 2ISECAP) to enhance the Living Lab's effectiveness and promote knowledge transfer across regions.
- Refined and adapted measures for the SECAP action plan based on stakeholders' feedback and expert input.

Story to share: Transferability of the local living lab

"The purpose of the second specific oriented meeting in Razkrižje was to expand the area of influence of the measures outlined in the action plan of the planned SECAP document for the Municipality of Ljutomer.

The purpose of the meeting was the promotion of the Living Lab approach and the SECAP document to a wider area outside of Ljutomer municipality – especially to the neighboring municipalities in Slovenia and Croatia.

The result was the preparation of the SECAP in Razkrižje based on the Ljutomer LL's experience."



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Recommendations for future Living Labs

Broad stakeholders' involvement

From the outset, LLs should engage a wide range of stakeholders, including community members, businesses, and local government bodies. This inclusivity fosters a sense of ownership and ensures that the lab reflects the community's specific needs.

Define clear objectives

Clear, measurable goals related to energy efficiency, carbon reduction, and community resilience should be established early to align stakeholders and guide activities.

Monitoring tools

Implementing simple tools, such as monitoring systems or checklists, could help to track progress and measure impact effectively, ensuring tangible outcomes.



Future prospects for Ljutomer LL

SUMP development

Following the completion of the SECAP, Ljutomer LL is already planning for future projects, including the development of a Sustainable Urban Mobility Plan (SUMP) and a regional SECAP for Pomurje.



Lessons learned

Active stakeholders' participation

- the active involvement of a wide range of stakeholders, including local authorities, citizens, and businesses
- building trust and ensuring open communication were critical for gaining valuable input

Collaboration and communication

- collaboration between different sectors — previously unaccustomed to work together — was a learning curve but ultimately essential for the project's success
- the importance of involving local media in the LL's activities