

OUTPUT FACT SHEET

Pilot actions (including investment, if applicable)

Version 2

Project index number and acronym	CE 89 LUMAT
Lead partner	IETU, KATOWICE
Output number and title	0.T3.1 Pilot Actions for integrated environmental management in FUAs
Investment number and title (if applicable)	Not applicable
Responsible partner (PP name and number)	PP 13 City of Kranj PP 11 Urban planning institute of the Republic of Slovenia
Project website	https://www.interreg-central.eu/Content.Node/LUMAT.html
Delivery date	07.2019
Summary description of the pilot action (including investment, if applicable) explaining its experimental nature and demonstration character	

City of Kranj with the support of the Urban Planning Institute of the Republic of Slovenia developed an Action Plan as part of the Integrated Environmental Management plan for Kranj Functional Urban Area (FUA). The aim of the plan and the pilot was to improve the quality of living in functional urban area through the identification of threats and provision of ecological services as part of the decision-making processes in order to make places more livable. The pilot project area covered the whole City of Kranj municipality.

The pilot project focused on the non-systematic management of degraded or underused urban areas (DUOs) and business zones in the Municipality of Kranj and with the main goal in mind to strengthen integral land management in functional urban area (FUO) with special emphasis on sustainable use land and the development of ecosystem services. The method to achieve this was by directing development within already urbanized areas, limiting interventions in greenfield areas, and finding spatial solutions outside the administrative borders of municipalities and regions, all due to the goal of implementing sustainable land use.

Testing the potentials of industrial symbiosis concept (IS) and the promotion of this concept was one of the main actions of the FUA Kranj Action plan. Industrial symbiosis (IS) defines the integration of traditionally separate industries into a common approach involving the physical exchange of materials, energy, water and/or by-products to achieve a competitive advantage (Chertow, 2000, s. 2007, s.). Within the LUMAT project Slovenian partners had a goal to upgrade industrial symbiosis concept with considering land as a limited source due to the future environmental policy implementation of the zero land take goal till 2050. Taking brownfield sites into consideration in establishing the industrial symbiosis concept in piloted area proved as a potential tool to make brownfield sites more attractive to investors without involving public co-funding. Also by doing this (instead of building new eco-industrial parks on greenfield sites) makes a so desired goal of circular economy even more environmental friendly since it also protects soil as a limited source.

NUTS region(s) concerned by the pilot action (relevant NUTS level)

SI04 Western Slovenia (Zahodna Slovenija) partly
SI042 Upper Carniola Statistical Region (Gorenjska statistična regija) partly

Max. 500 characters

Investment costs (EUR), if applicable

Not applicable

Expected impact and benefits of the pilot action for the concerned territory and target groups and leverage of additional funds (if applicable)

Action plan for the FUA Kranj was tackling the problem of unsystematic management of brownfield sites and underused business zones. The initial analysis showed also a lack of management in those areas at several levels. Consequently, the FUA is facing further degradation of urban environment, higher environmental risks, irrational land management, inefficient use of infrastructure, all leading to lower competitiveness and lower quality of life in the FUA Kranj and Gorenjska region.

The main objective of the Kranj FUA action plan was focused on inner urban development, preventing greenfield developments and urban sprawl and searching synergies within FUA municipalities with their public and private stakeholders.

The pilot action was focused to prepare a useful recommendations for further development of problematic zones. Beside a proposed set of actions, each step was also financially evaluated for the period of the next 8 years. This will allow municipality or regional development agency better planning of potential co-financing for such sites, but also allow potential private investors to better estimate the investment costs and mitigate potential risks.

The pilot action impacts and benefits are:

- Review of industrial symbiosis (IS) concept in Slovenia was done for better understanding the process and to find connections between IS and spatial indicators,
- List of major companies in the Municipality of Kranj in terms of the type and quantity of waste generated by business activities was done,
- Education of stakeholders about IS concept in order to achieve common economic and environmental benefits.

Sustainability of the pilot action results and transferability to other territories and stakeholders.

Action plan will be used as an expert basis for regional development program, regional spatial development strategy and other local development documents. This will ensure sustainability of results even after the end of the LUMAT project. The survey made within action plan showed that 84% of respondents didn't know the Industrial symbiosis concept. The rest 16 % mentioned, that economic benefits are not real, because work and energy needed to recycle waste is more expensive than buying new materials from 3rd countries.

However, if they were originally held up to the topic and were not so impressed, at the end almost half of respondents were willing to attend additional meeting where IS concept was presented with best cases of practice and eventually saw this as supportive environment for new business cooperation and opportunities, so the training and capacity building efforts will remain even after the project finishes.

BSC Kranj (a regional development agency) supported us to involve a wider group of stakeholders, who are a members of two working groups of the Regional development agency, the environmental and spatial development group members and economic development group. This group includes various members from owners of small to big companies, to representatives of Municipalities, NGOs and more.

Also, during the implementation of the Pilot project, we established strong co-operation with Cross-border Slovenia-Austria project called Innovative location and another project called Symbi, who is also dealing with industrial symbiosis (INTERREG Europe). The main Slovenian partner in this project was a Government Office for Development and European Cohesion Policy, who is also a main stakeholder in preparation of the partnership agreement with the EU, so the relevant topics have a good chance to be integrated into the next financial perspective.

Lessons learned and added value of transnational cooperation of the pilot action implementation (including investment, if applicable)

One of the most important results of the project was the establishment of communication. raising awareness, sharing experiences between individual stakeholders at different levels.

With the questionnaire to collect data of waste resources and demand for raw materials and energy from companies we found that companies are not willing to share data, due to professional secrecy, so it is important to educate stakeholders about all the benefits of the IS concept and strengthen the connections between stakeholders to create a safe business environment for exchanging sources. The potential of industrial symbiosis as an environmental management tool was discussed with other partners in the project and with their feedback, we got another prove, to continue our efforts in this topic. Main activities should be focused on education and creating a supportive environment for implementing it. With industrial symbiosis concept there are clear benefits for both the economy and the environment

Contribution to/ compliance with:

- relevant regulatory requirements
- sustainable development - environmental effects. In case of risk of negative effects, mitigation measures introduced
- horizontal principles such as equal opportunities and non-discrimination

Pilot project was undertaken with the proper regulatory requirements from the beginning. The Action plan of the FUA Kranj have to be understood not as formal instrument but as a steering instrument, an efficient tool used following the interest of the whole scale of stakeholders, first of all municipalities representing public interest. The results of all the actions during the LUMAT project lifetime, contributes to better land management and coherent development and spatial planning. Results of evaluation of impacts with financial estimation for each individual business zone and methodology used to decide how to step up activation and development of business zones will contribute to better use of land and economically, socially and environmentally sustainable investments in the renovation of degraded urban areas. This approach can be used as an example of good practice in other functional urban areas in Slovenia and also Europe. During the pilot project, we involved stakeholders and other actors in a non-discriminatory manner and with equal opportunities for all.

References to relevant deliverables (e.g. pilot action report, studies), investment factsheet and web-links
If applicable, additional documentation, pictures or images to be provided as annex

DELIVERABLE D.T3.7.1 PILOT ACTION KRANJ: DEVELOPMENT FRAMEWORK FOR BROWNFIELD AND GREENFIELD ZONES (IN SLOVENIA)

DELIVERABLE D.T3.7.2 PILOT ACTION KRANJ: BUSINESS PLAN UNDER INTEGRATED ENVIRONMENTAL MANAGEMENT RULES (THE POTENTIAL OF INDUSTRIAL SYMBIOSIS)

Report: Evaluation of actions to develop business zones (also on degraded areas) with financial estimation