**Interreg**
CENTRAL EUROPE
**URBAN INNO**

# URBAN INNO
Utilizing innovation potential of urban ecosystems

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**URBAN INNO**

**Utilizing innovation potential of urban ecosystems**

Transnational cooperation project funded by Interreg CE, aiming to improve sustainable linkages among actors of the innovation system for strengthening regional innovation capacity in central Europe

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## WHAT WE DO

URBAN INNO is addressing the challenge to make central Europe more innovative and competitive by maximizing the innovation potential of smaller and medium sized urban ecosystems, by a better linkage of its actors through establishment of quadruple helix clusters/networks in the partner regions and by development an implementation of new participatory methods and tools with the objective to have educated and motivated users – smart users.

## PROJECT FUNDING

Our project is funded by the Interreg CENTRAL EUROPE Programme that encourages cooperation on shared challenges in central Europe.

## PROJECT DURATION

1.6.2016. – 31.5.2019. (36 months)

## PROJECT PARTNERS

### Croatia
· City of Rijeka
· Ericsson Nikola Tesla d.d.

### Germany
· CyberForum e.V.
· inno AG

### Slovenia
· E-Institute, Institute for comprehensive development solutions
· Municipality of Maribor

### Slovakia
· Technical University of Kosice

### Poland
· Municipality of Kielce/ Kielce Technology Park

### Hungary
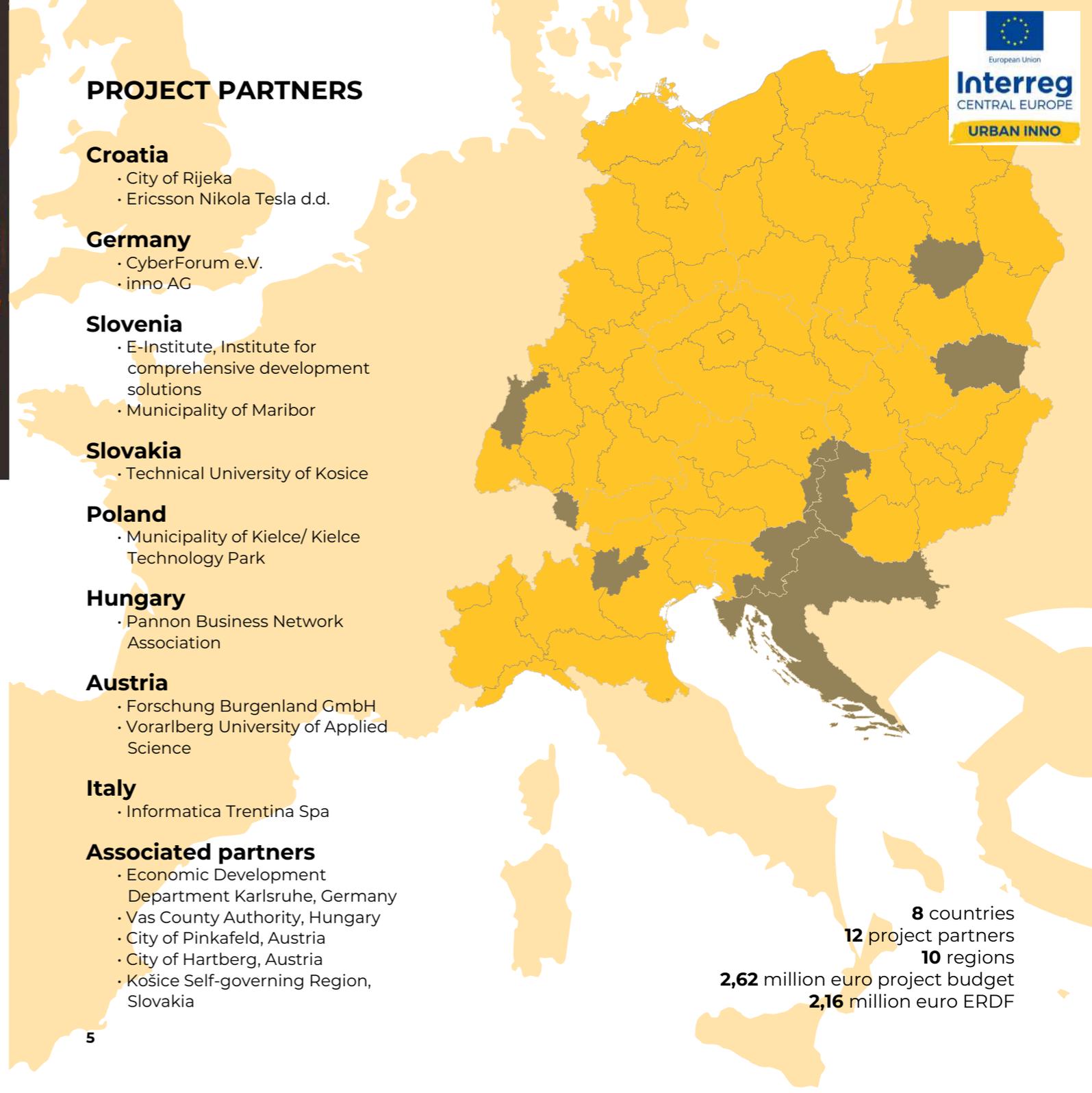· Pannon Business Network Association

### Austria
· Forschung Burgenland GmbH
· Vorarlberg University of Applied Science

### Italy
· Informatica Trentina Spa

### Associated partners
· Economic Development Department Karlsruhe, Germany
· Vas County Authority, Hungary
· City of Pinkafeld, Austria
· City of Hartberg, Austria
· Košice Self-governing Region, Slovakia

**8** countries
**12** project partners
**10** regions
**2,62** million euro project budget
**2,16** million euro ERDF

# OUTPUTS

## INNOVATION NETWORKS

In 5 target regions, a new quadruple helix cluster/network dedicated to urban innovation (UI4) shall be established, involving the most relevant stakeholders.

In order to guarantee high quality and high innovative networks/clusters, each core team in 5 target regions will receive 2 training workshops by mature/fully developed clusters. They will be organized to improve competencies and skills, supporting knowledge transfer in the area of management, communication, trust building and innovation.

The project aims to implement durable clusters/networks with a clear mandate to develop urban innovation processes.

**2 TRAINING WORKSHOPS FOR CORE TEAMS**

**5 URBAN INNOVATION CLUSTERS/ NETWORKS ESTABLISHED**

**1 TRAINING ON GOOD REGIONAL PRACTICES FOR CLUSTER AND ECOSYSTEM DEVELOPMENT**

## TOOLBOX OF SMART PARTICIPATORY METHODS

A toolbox of smart urban innovation participatory methods and tools will be developed in a form of a publication and on-line toolbox.

It will consist of: participatory methods described for different scenarios, tools available to support methods implementation and their implementation guidelines, and list of qualified facilitators who can assist the use of methods.

**1 TOOLBOX OF SMART INNOVATION PARTICIPATORY METHODS AND TOOLS**

**1 TRAINING FOR TOOL FACILITATORS**

# OUTPUTS

## PILOT ACTIONS

Implementing and evaluating smart participatory methods in urban innovation processes will be implemented through pilot projects - innovative solutions in urban environments which will be developed in close cooperation with end-users (citizens-customers- civil societies) and private sector (investors) to make them operational and commercially viable.

Participatory methods and tools will be tested in different scenarios: pilots in the field of mobility (Vorarlberg), energy (Karlsruhe, Neusiedl am See, Burgenland), smart user and innovative governance (Trento and Maribor), agriculture (Kosice), integrated infrastructure (Rijeka) and SMEs economic growth (Kielce, Vas County).

**9 PILOT PROJECTS IMPLEMENTED**

## STRATEGIES & ACTION PLANS

Urban innovation action plans (UIAPs) will be developed within 6 target regions. The 6 UIAPs will set objectives and priorities, including actions, responsibilities, timeframes, indicators, and sources of funding and budget allocations. Time horizon for the UIAPs will be 5 years, contributing to stable efforts for urban innovation in each target region.

A transnational urban innovation cooperation strategy, including financing and implementation plan, will be developed jointly and agreed upon by the partners. It will describe, in addition to common strategic goals, a number of actions to be implemented on transnational level, including roadmaps for implementation with responsibilities, budget and timeline.

**6 URBAN INNOVATION ACTION PLANS**

**1 TRANSNATIONAL URBAN INNOVATION COOPERATION STRATEGY**

# WPT1

**THEMATIC WORK PACKAGE 1**

## INNOVATION CLUSTERS/NETWORKS

### Setting-up quadruple-helix urban innovation clusters/networks in target regions

Objective of the URBAN INNO first package of activities is to establish 5 new urban innovation quadruple helix (UI4) clusters in the regions of:

· Rijeka (Croatia)
· Burgenland – Eastern Styria (Austria)
· Košice (Slovakia)
· Kielce (Poland)
· Vas County (Hungary)

Each of the newly established clusters, together with the cluster established 2015 in Maribor (Slovenia), will elaborate an Urban Innovation Action Plan, which shall define for each clusters its objectives and priorities, including actions, responsibilities, timeframes, indicators, sources of funding and budget allocations. The time horizon for the action plans will be 5 years, contributing to stable efforts for urban innovation in each target region.

## 4-helix clusters for better linkage of urban innovation actors

Cities are ecosystems with strong innovation potential because of the concentration of people and organizations, available infrastructure and urban challenges they need to solve.

The analysis of innovation development in the participating regions shows that there is still a significant gap in the field of end-users/citizens participation in innovation processes. Often, urban solutions are developed without asking the citizens (as end-users) about benefits, demand, usability, etc. If a solution is not developed to solve a real and existing problem of the citizens, they will not accept it. Thus, it is essential not only to use the innovative potential of the end-users but also to integrate them into the complete development process in a participative approach.

By promoting and supporting the setup of quadruple helix clusters, URBAN INNO is explicitly addressing the identified necessity and challenge to encourage better linkage of actors of urban innovation systems among authorities, research, industry and citizens in the target regions and Central Europe in general, in order to exploit the potential of urban environments (cities) as strong drivers for innovation.

URBAN INNO focuses hereby on smaller urban environments, which innovation potential is often underestimated.

**ACADEMIA & UNIVERSITIES**

**INDUSTRY & BUSINESS**

**GOVERNMENT & PUBLIC SECTOR**

**CIVIL SOCIETY**
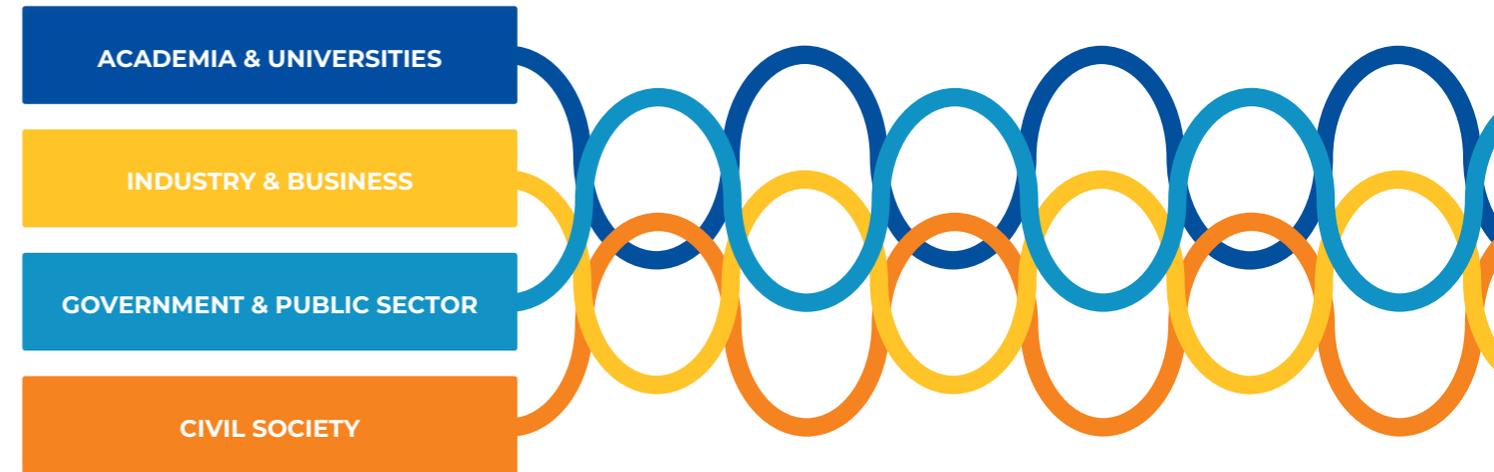
## URBAN INNO's approach to the development of quadruple-helix urban innovation clusters

The URBAN INNO approach for the set-up of quadruple-helix urban innovation clusters/networks in the target regions is designed as to be participative, consensus oriented and integrative. It is defined in the following steps for each target area:

1. Mapping of the urban innovation ecosystem and its stakeholders,

2. Establishments of a core team of stakeholders, which will be primarily in charge of the development of the cluster / network. The core teams will ensure long term engagement of stakeholders and collaborative leadership.

3. Implementation of a mentoring process of the core teams with the support of partners from more experienced regions with already existing networks. The mentoring was mainly articulated around two trainings, which topics were specifically defined to address the needs identified in each target region.

4. Formal set-up of clusters or networks, ensuring sufficient commitment of multiple stakeholders through the development and signing of a Memorandum of Understanding.

5. Development and commitment to a common strategy – the Urban Innovation Action Plan.

## Urban Innovation Action Plans and long-term commitment

The newly established quadruple helix clusters shall be established based on long-term commitment of the stakeholders, with the aim to improve durably the innovation ecosystem of the target regions.

This commitment will be made tangible through the formal establishment of the clusters and the commitment of the founding partners to Urban Innovation Action Plans, which will include:

- Development of activities/projects undertaken by cluster members, either alone or in partnership, to achieve common development strategy goals
- Identification of needed resources (e.g. partners, technology, financial resources)
- Identification of funding sources for the implementation of innovation actions (smart private investments, public funding, structural funds & financial instruments)
- Determination of a timeline for the implementation of the planned projects
- Allocation of responsibilities, resources and budget.

This process is strongly entangled with the other activities of URBAN INNO project:

- In the second set of project activities the partners will be provided with the knowledge and tools necessary to implement efficient participatory processes and ensure active participation of the citizens as end-users in the development and implementation of the clusters and their activities.
- Pilot projects offer the opportunity to test both the participatory methods and the collaboration process among the stakeholders of the quadruple helix in the framework of specific thematic pilot projects.
- In final activity - the development of a transnational strategy, involving all partners' regions, will enable the newly established clusters to embed their activities in a broader framework and generate concrete transnational benefits.

# WPT1

**UI4 CLUSTERS/NETWORKS**



## RIJEKA URBAN INNOVATION NETWORK

### Vision and mission

The vision of Urban innovation network in Rijeka (HR) is to increase research and innovation activities in the field of smart city by setting up of an innovation network as well as the integration of the members of the network. Rijeka urban innovation network will position itself as a center in the field of development and application of smart cities projects and technologies with the aim of improving citizens' quality of life and standard of living.

The mission of Rijeka innovation network is to include and support local SMEs and research organizations to use available innovation potential and create new added value for the local economy and local community.

The project of establishing the Urban innovation network in Rijeka is complementary with other initiatives such as the Initiative for open data and the project of the European Capital of Culture 2020.

## Innovation network objectives

The Urban Innovation network will address numerous objectives - on the city's, and on the citizens' level such as:

- Overcoming the fragmentation of the innovation chain of value and the gap between the scientific - research sector and the business sector
- The modernization and diversification of the economy through business sector investments in innovative smart city projects
- Upgrading the global chain of value and encouraging the internationalization of the Croatian economy
- Working in partnerships to address social challenges
- The development of smart skills - improving qualifications of existing, and new workforce for smart specialization, as well as creating smart users of services developed within the cluster.
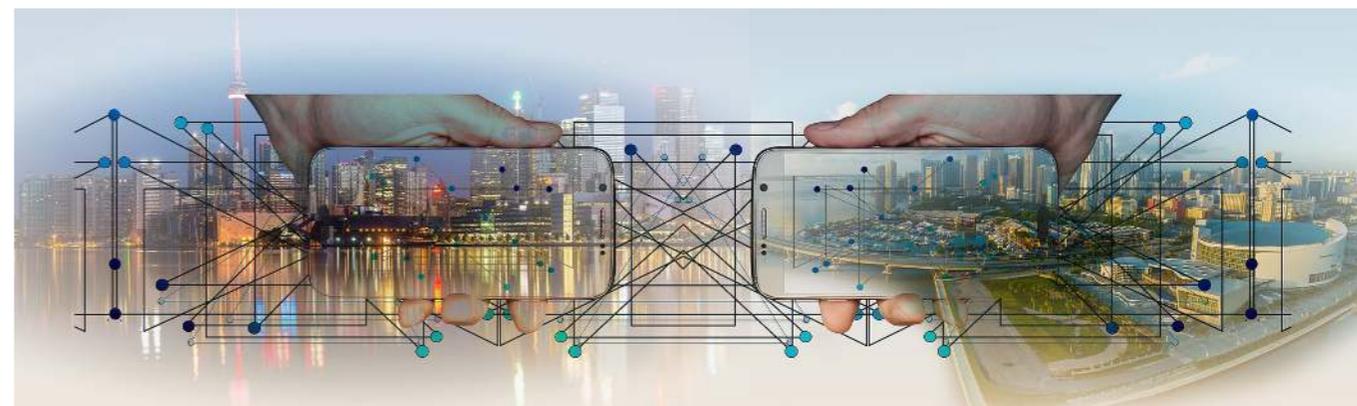


## UI4 network members

- City of Rijeka
- Ericsson Nikola Tesla d.d.
- University of Rijeka
- Association for Civil Society Development SMART
- Smart RI d.o.o.
- Exevio d.o.o.
- Multilink d.o.o.

# INNOVATION CLUSTERS/ NETWORKS

# WPT1

## UI4 CLUSTERS/NETWORKS

## URBAN INNOVATION NETWORK BURGENLAND – EASTERN STYRIA

### Purpose and target fields

The Vision of the Urban Innovation Network Burgenland - Eastern Styria (AT) is to increase the research and innovation activities in the fields of renewable energy and climate protection by set up of an innovation network and the belonging supporting services as well as the integration of the members of the network. Furthermore the innovation network will create a framework which should help to knowledge carriers in the region and should motivate other owner of know how to come to the region Burgenland and East Styria. Beyond this, also the regional economic power should be strengthened and improved.

By networking of all actors in the field of energy, energy efficiency, renewable energy, climate protection and climate change adaptation synergies will be used and the benefit of all network members should be improved.

The innovation network will contribute a significant part in reaching the aims of the research strategies of Burgenland and Styria. Furthermore the barrier to enter the market will be lowered for all stakeholders in the fields of research, development and innovation.

Furthermore, the innovation network will also contribute to improve sustainability in the region. 8 target-areas for the innovation network were identified: Networking, Research and competences, Development of a platform, Public participation, Network management, Know-how and technology transfer, Economic promotion, and Policy.



### UI4 network members

- **Forschung Burgenland GmbH** - research institute and a subsidiary company of the University of Applied Sciences of Burgenland.

- **TBH Ingenieur GmbH** - engineering office. Their field of work reaches from energy technology, electrical engineering and building services to research and development.

- **ECOsmart GmbH** - engineering and consulting office in the field of renewable energy, resources protection (sustainability) and energy efficiency.

## INNOVATION CLUSTERS/ NETWORKS

# WPT1

## UI4 CLUSTERS/NETWORKS

## KOŠICE URBAN INNOVATION NETWORK

### Purpose and key area

The aim of the Innovation Network for the Support of Local Economy in Košice Region is to support the cooperation among partners coming from research, development and innovation, education, business sector, public sector, non-profit sector and general public in creation of proper conditions for the efficient functioning of the local economy in the form of the preparation and implementation of action plans and joint innovation projects. The Innovation Network focuses its activities primarily on the area of cross-industry support for the increase of local agricultural producers´ competitiveness and stimulation of the demand for local food products within regional food networks.

### Main goals

The goals of the Innovation Network include:
· Establishment, development and maintenance of strong cooperative connections among network members,
· Preparation and implementation of action plans and joint innovative and development projects in the region,
· Capacity building through knowledge sharing in the area of sound project management, funding opportunities and latest innovation implemented in other regions.

## UI4 network members

· **Technical University of Košice** - Represented by Faculty of Economics

· **Košice Self-governing Region** - Represented by Section of Regional Development, Territorial Planning and Environment

· **European Grouping of Territorial Cooperation Via Carpatia** - Established by Košice Self-governing Region (Slovakia) and Borsod-Abaúj-Zemplén County Government (Hungary) to facilitate and support the regional and cross-border cooperation

· **Gemer Craftsmen Association** - Civil society organization supporting craftsmen and shepherds - entrepreneurs in the county of Gemer

· **Foundation 858** - Civil society organization supporting the production and marketing of the local products

· **Agency for Support of Procurement Innovations** - **ASPINNO** - Civil society organization focusing on the improvement of agribusiness environment and relevant legislation

# WPT1

## UI4 CLUSTERS/NETWORKS

## KIELCE URBAN INNOVATION NETWORK

### Economy

In order to set out, with the participation of the local community, a guiding framework for the development of Kielce as a sustainable smart city, a Kielce Smart City 2030 + Strategy was launched. Framework is related to the following areas: society, environment and spatial order, economy and innovation, security infrastructure, transport and digital Kielce.

Members of the WORKING GROUP will cooperate for the diagnosis and then for development of joint trends in the development of the smart city of Kielce, based on the process planned as part of Framework Kielce Smart City 2030+Strategy. The area of discussion and work includes economic changes, development of innovation, as a smart city and innovative city. We will use achievements of science; information and communication technologies and other methods to improve the quality of residents' life. Also to increase the efficiency of management and provision of services and to grow competitiveness focusing on the needs of current and future generations respecting highly valued economic, social and environmental values.

## Vision

· Will be developed in a collaborative manner - possibly all interested stakeholders, take into account information obtained through research, stakeholder engagement (workshops) and the use of modern technologies to enable public participation in the process (social media, Idea Kielce)

· It will encompass opportunities that open with intelligent technologies, intelligent use of urban data and intelligent collaboration

· It will, thanks to the above, integrate and support the objectives of the strategic development of the city of Kielce (in the socio-economic and environmental aspect)

## Members of ECONOMY AND INNOVATION WORKING GROUP

· Development and Revitalization Department, City Hall
· Kielce Technology Park
· Real Estate and Geodesy Department, City Hall
· Tax Department, City Hall
· Department of management systems and IT services
· SMART FACTOR – smart city leader on the Polish market

### CONTACT INFORMATION

**Anita Lagierska**
Coordinator of ECONOMY AND INNOVATION WORKING GROUP, Deputy Manager of Department for Development and City Revitalization

✉ anita.lagierska@technopark.kielce.pl

🌐 idea.kielce.eu

**Joanna Rudawska**
Coordinator of ECONOMY AND INNOVATION WORKING GROUP, Manager of Development Projects Department Kielce Technology Park

✉ joanna.rudawska@technopark.kielce.pl

✉ urbaninno@technopark.kielce.pl

# WPT1
## UI4 CLUSTERS/NETWORKS

## VAS COUNTY URBAN INNOVATION NETWORK

### Purpose and vision

The quadruple-helix cluster of Vas County (HU) led by URBAN INNO project partner Pannon Business Network Association (PBN) aims to put up the area to the Industry4.0 map of Europe with its vision to support the establishment of a community-oriented digital innovation center that is contributing to the anchoring and diffusion of the digital technologies.

The community-oriented digital innovation hub is a Multidisciplinary Science Centre, which is serving as a training and education facility for the local ecosystem, contributing to the improvement of the application of digital achievements targeting business competitiveness.

The most important aspect of its integration into the local ecosystem is that it should be implemented in a sustainable way. In this way, the centre could provide qualitative and constant chance not only for local key business actors to acquire valuable knowledge about the special areas of I4.0, like additive manufacturing and 3D printing, but to provide the chance to learn about the topic for other members of the local community.

## Priority fields

- Education of digital technology-based know-how for the local student and pupil community
- Training of digital technology-based service applications for local businesses
- Education of the local public sector and society about the implications, proposed actions due to the disruptive character of digitalization
- Demonstration of the hub for external community as a benchmark for the regional excellence
- Utilization of technology to provide service for the local business community

## UI4 cluster members

- Pannon Business Network Association (leader)
- Sárvár Municipality
- IFKA Public Benefit Non-profit Ltd. (business support organization, relevant areas: logistics, HR development, R&D, economic development)
- Institute of Advanced Studies Kőszeg (research organization)
- Eötvös Loránd University (TÁTK – Social Science Faculty)

## CONTACT INFORMATION

Pannon Business Network

✉ info@pbn.hu

📞 +36 94 505-003
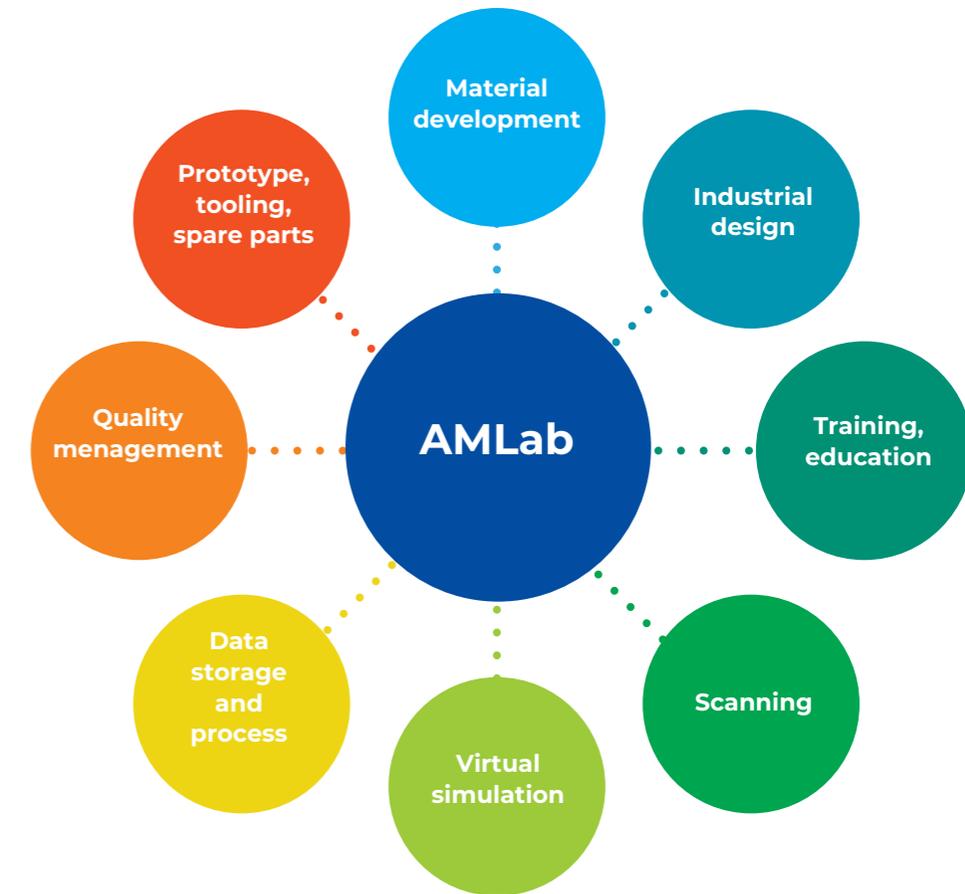
# WPT2

**THEMATIC WORK PACKAGE 2**

## TOOLBOX OF SMART PARTICIPATORY METHODS

### Development of a toolbox of smart urban innovation participatory methods and tools

### OBJECTIVE AND OUTPUTS

Objective of the second set of URBAN INNO project activities is to identify and further develop participatory methods and tools with the aim to generate SMART USERs of public and private services and technologies. Results will provide solutions for quadruple-helix clusters to engage citizens and/or customers into the innovation process in the field of urban development.

The main output of the second work package is a smart urban innovation participatory methods toolbox.

## WHAT IS THE TOOLBOX OF THE SMART PARTICIPATORY METHODS?

A toolbox of Smart urban innovation participatory methods & tools is a unique instrument that will help to engage end-users (citizens, consumers) into urban innovation process, i.e. developing urban development strategies, smart urban solutions, services or technologies.

It is designed as a manual which guides through the process of:

· Identifying target groups
· Animate them by using new communication channels and technologies (social media)
· Interaction with them in person and/or virtually at co-designing of solutions
· Maintaining relationship with them after the interactive event.

The toolbox is developed in a form of virtual on-line toolbox. It consists of:

· Participatory methods described for different scenarios
· Tools available to support methods implementation and their implementation guidelines
· List of qualified facilitators who can assist the use of methods.
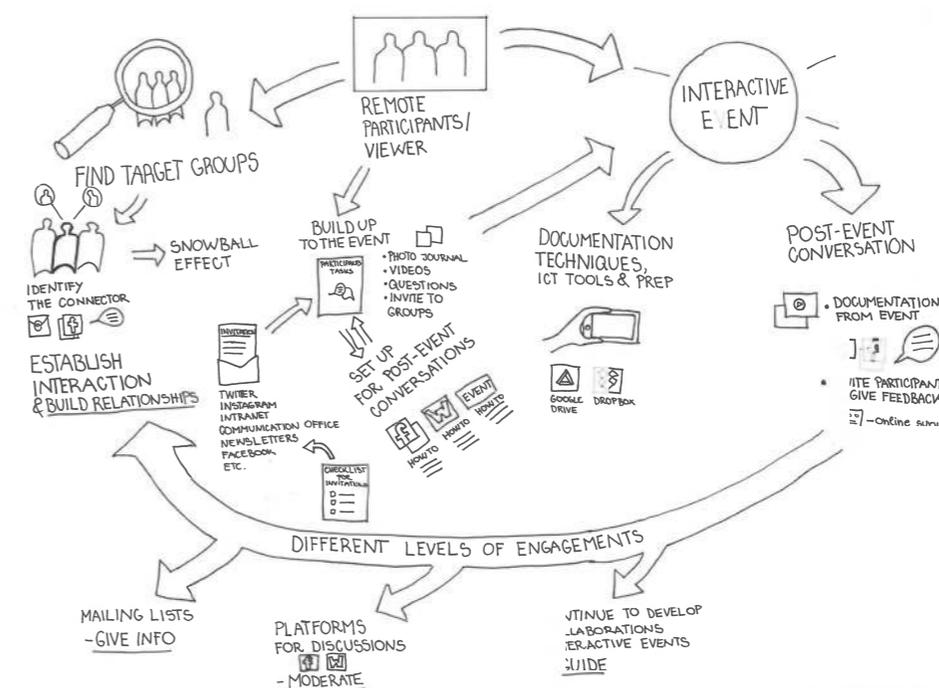
# 8 STEPS OF PARTICIPATORY PROCESS

Participatory process presented in the toolbox, guides user through eight steps:

**STEP 1: DEFINING A PROBLEM & OBJECTIVES**
Defining a challenge and objectives of the process is crucial for the success of the collaboration with end-users. You might review your definition of the problem or objectives after first interaction with target groups to make it clearer.

**STEP 2: BUILDING RELATIONSHIPS**
Building relationships is the first step, and is revisited for subsequent events in this continuous and ongoing process. It shows combinations of ICT tools and steps to be taken for reaching out and starting the first interactions with the target group.

**STEP 3: INVITATIONS**
Describing combinations of ICT tools for sharing and signing up to invitations of your interactive event.

**STEP 4: STARTING INTERACTIONS**
Engage stakeholders before the event by interacting with them, giving them opportunities to give input leading up to the event.

**STEP 5: DOCUMENTATION**
Different ways of preparing and carrying out the documentation at the event using existing technology and ICT tools.

**STEP 6: REMOTE AUDIENCE**
Steps to be taken before, during and after, to set up for a remote audience during the event.

**STEP 7: FOLLOW UP**
Tools and checklist for getting back to participants following the event.

**STEP 8: CONTINUED INTERACTIONS**
System for curating prolonged interaction of the participants from the event based on level of engagement.

## USER PARTICIPATION

**EXPLORE THE URBAN INNO PARTICIPATORY TOOLBOX**
**www.user-participation.eu**

## MORE INFO

E-institute
Institute for Comprehensive
Development Solutions
Čučkova ul. 5 / 2250 Ptuj / Slovenia
+386 2 749 32 24 (TELEFON)
+386 2 749 32 17 (fax)
info@user-participation.eu

# WPT3

## THEMATIC WORK PACKAGE 3



## Implementing and evaluating (Smart) participatory methods in urban innovation processes (pilots)

### OBJECTIVE AND OUTPUTS

The objective of the URBAN INNO pilot actions is to implement and evaluate smart and innovative participatory methods inside urban innovation processes in order to improve the citizens' engagement and the empowerment of communities, moving from smart city to a more inclusive city.

Each pilot action is aiming to collect data and outcomes required, on one side, to demonstrate the establishment and interlinkage of quadruple helix research-driven clusters/networks in partners' regions and, in the other side, by creating innovative participatory solutions developed in close cooperation with end-users, civil society and private sector. All the pilot actions are evaluated and assessed through a common set of key innovation metrics and some performance indicators.

The assessment of an individual pilot will be the result of applying the parameters defined above to assess the success of URBAN INNO in each region. The comparative analysis between pilots is conducted by crossing and aggregating the selected key performance indicators calculated over the individual pilot outcomes and results.

The comparative analysis is aiming to find cross-regional insights on the impact of URBAN INNO actions and on the participatory methodologies adopted, in order to assesses the pilot actions effectiveness at different level: in the specific region and at transnational level inside Central Europe.

## URBAN INNO pilot projects

### VORARLBERG PILOT
Innovative participative solutions in the field of e-Mobility

### KARLSRUHE PILOT
Participative methods for eBike infrastructure development in the Karlsruhe region with focus on energy issues

### TRENTO PILOT
Engaging citizens in the development of innovative government process/services in the urban area

### RIJEKA PILOT
Engaging citizens in creation of Citizen Collaboration Platform – CCP

### MARIBOR PILOT
Integrating public infrastructures and end-users through common platform (single entry point)

### KOŠICE PILOT
Innovative Urban Food System – digital market of agricultural products and the innovation of subsidiary processes

### KIELCE PILOT
Smart City tool for managing organizations networks, boosting innovation and development

### VAS COUNTY PILOT
Multidisciplinary Science Center

### BURGENLAND PILOT
Engaging all stakeholder groups in the development of a smart energy region

## Matchmaking of participatory methods and pilots

Each of 9 pilot projects will apply at least two methods from different categories. Each of the main participatory methods will be used together with the supporting methods, ICT tools and social media, in order to improve the user involvement and motivation.

| | CROWDSOURCING - PARTICIPATIVE GOVERNANCE | PLANNING THE FUTURE - VISION, STRATEGIES, PROJECTS | DEVELOPMENT OF SERVICES/ PRODUCTS | MOTIVATION & QUALIFICATION |
|---|---|---|---|---|
| 1 - Vorarlberg | ● | | | ● |
| 2 - Karlsruhe | ● | ● | | |
| 3 - Trento | ● | ● | | ● |
| 4 - Rijeka | ● | ● | | |
| 5 - Maribor | | | ● | ● |
| 6 - Košice | | ● | ● | ● |
| 7 - Kielce | ● | ● | | |
| 8 - Vas County | | ● | | ● |
| 9 - Burgenland | ● | ● | ● | ● |

## A Common Evaluation Methodology

The URBAN INNO project put in place a common evaluation methodology used to evaluate consistently the practical application of participatory methods as well as the improvement of the methods developed during the project. The aim is to measure the innovation impacts created in the CENTRAL EUROPE regional areas affected by the pilots in a consistent way with the EU regional metrics. This allow not only to compare between the 9 different pilot actions planned but also to provide required data and information to enable other cities to take advantage from URBAN INNO experience.

The evaluation is covering widely the pilots and it is involving 3 main different factors:

- Enabling Factors: what is enabling the innovation from the ground up
- Assessment Targets: what could be better to assess in order to measure results
- Outputs and impacts: possible outputs and impacts that could come from these kind of innovation methodology.
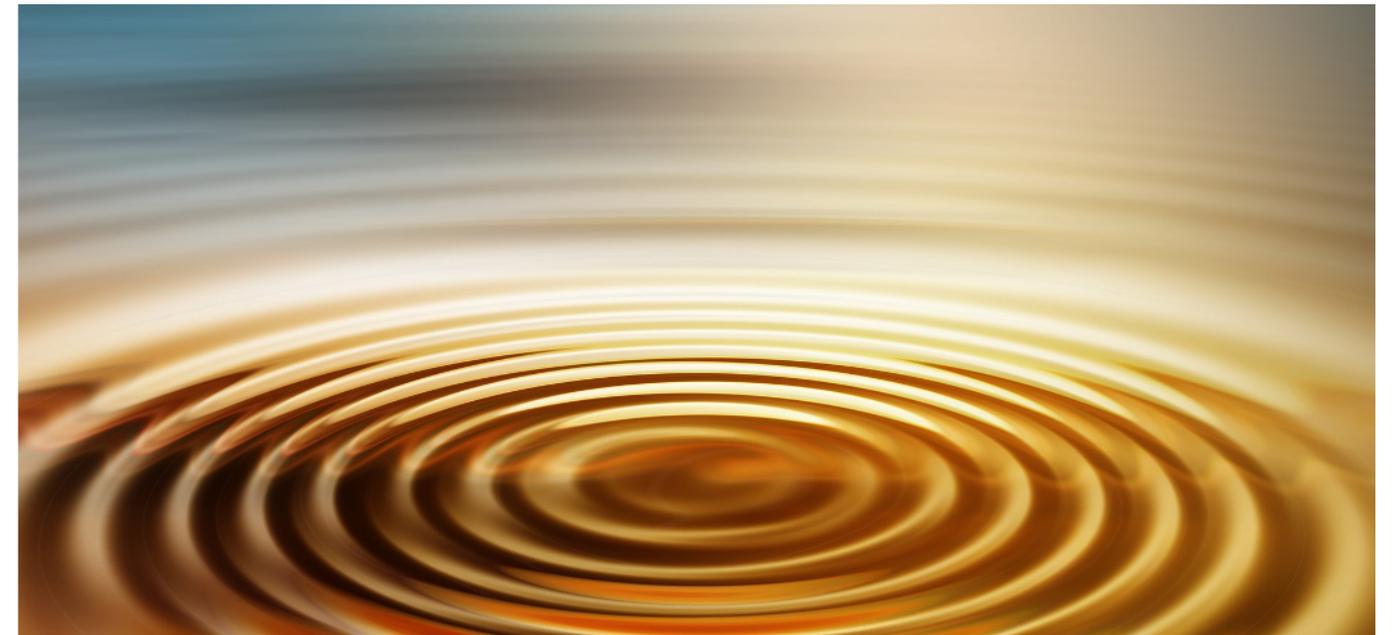
# WPT3

## PILOT PROJECTS

## VORARLBERG PILOT

### Innovative participative solutions in the field of e-Mobility

### PROJECT PARTNERS AND ASSOCIATE PARTNERS INVOLVED

- Vorarlberg University of Applied Science
- Illwerke vkw

## WHAT IT'S ALL ABOUT?

The strong automotive industry in Austria recognizes electric mobility as a major economic opportunity, as well as a mean to tackle issues high on the policy agenda on the European level – environmental issues, climate change and mobility. Given the current transport system, the main driver for a transition towards a transport system including a higher share of battery-electric and hybrid-electric vehicles is the potential to reduce negative transport impacts on the environment, particularly transport related $CO_2$-emissions and local air pollution.

To reach this potential, the pilot project applies innovation development as a key to transforming a product-based economy into an innovative service economy by integrating users as co-creators in real-life environments. User co-creation and user involvement are in the focus of the pilot, adding the social component to the conceptual design of e-mobility business models via development of the collaborative environment in line with quadruple helix principles.

By linking all the actors of the urban mobility ecosystem, FHV tests e-mobility business models and services as well as applies the diverse range of channels to test and evaluate these models. The pilot implementation entails the design of the Collaborative Business Model platform, with the objective to explore challenge and opportunities of quadruple helix collaboration in the field of electric mobility.

## WHAT WILL CHANGE?

The platform enables interaction between all the participants of the urban ecosystem as the source of innovation, delivering business models created in quadruple helix context in the field of e-Mobility. These models address changing customer needs, support IT trends in delivering innovative e-mobility solutions and encourage collaborative strategies that will define the future of e-mobility landscape. The pilot fulfils the need for improved citizen dialogue in urban and mobility planning, alongside service improvements and provides models to support the transition processes towards the creation of a participative e-Mobility environment.
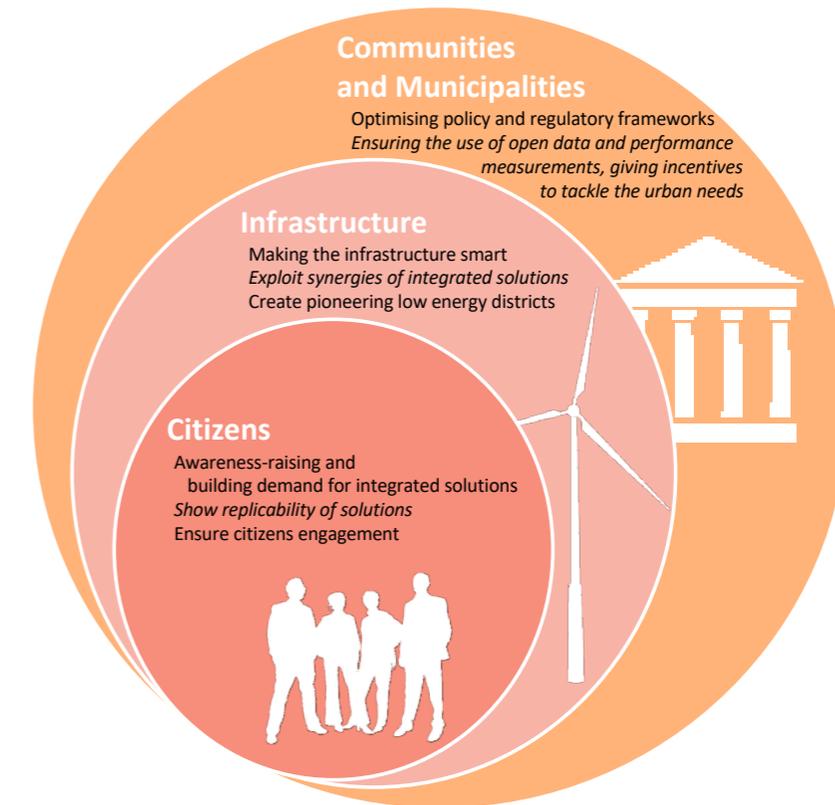
It also aims at the measurement of new, smart solutions and Smart City initiatives at policy and entrepreneurial level against the state-of- art, allowing them to be at the forefront of new findings and innovation. FHV's pilot project sets up the basis for territorial knowledge and its transferability to other European regions and creates a quadruple helix ecosystem that not only fosters a trans-disciplinary innovative approach but also connects new public customers and companies in similar fields at a local and pan-European level. Additionally, it incorporates high- quality innovation management methodologies and procedures, which document best practices, assessment foundations, and finally lead to policy frameworks and recommendations, that contribute to the ultimate change: creation of the smart, innovative and vivacious city and citizen.
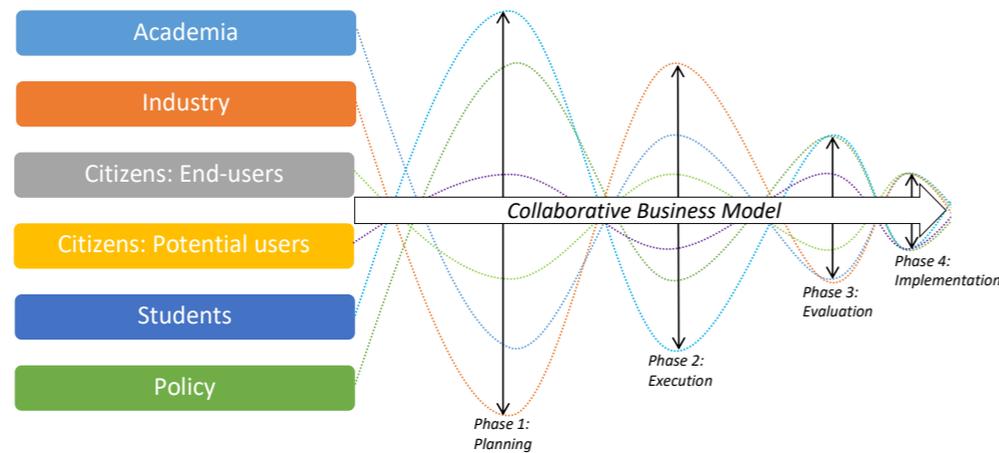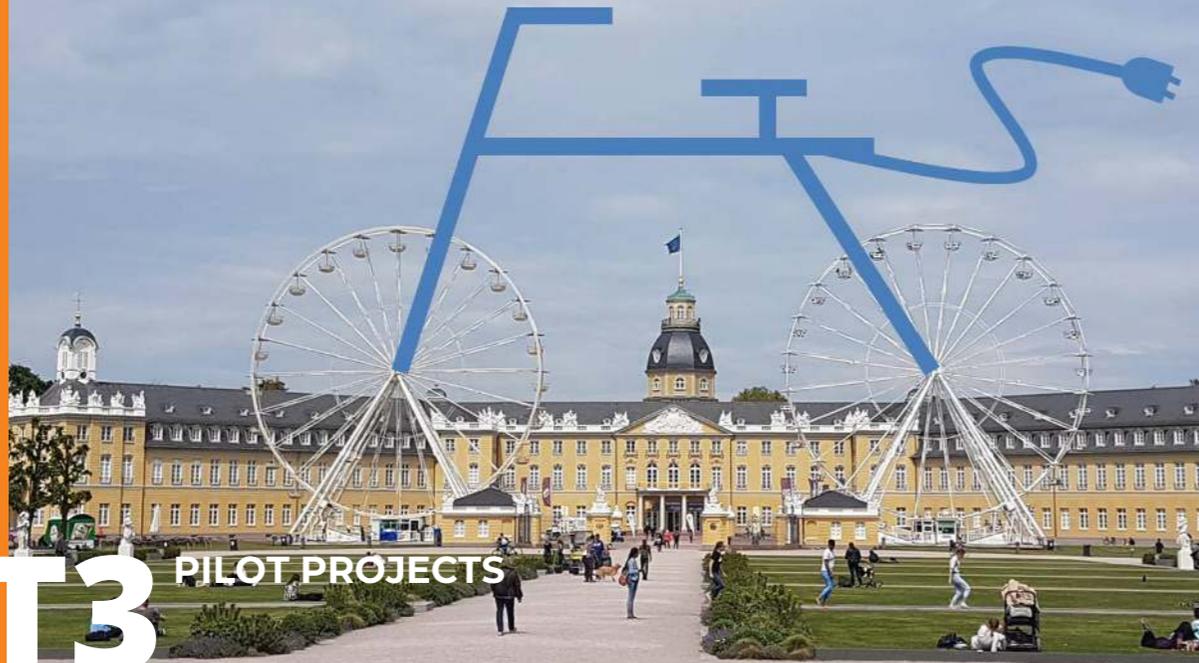
## HOW CITIZENS CAN GET INVOLVED?

The pilot project delivers the Collaborative Business Model platform, serving as a framework for the creation of a cooperative network between university, industry, public sector and citizens, aimed at boosting multidisciplinary agile innovation culture as well as encourage the involvement of civil society in the process of policy and decision-making.

The platform targets facilitation of new business opportunities and innovation in the field of e-mobility, by fostering interaction and problem solving among stakeholders in the development of new product and service concepts. It provides methodologies, tools and evaluation metrics for citizen inclusion in the process of urban planning at the initial stage. The model uncovers three layers of collaboration, each with the purpose to decrease the gap between groups involved and provide conditions for the establishment of an open innovation environment that will foster high quality problem solving and idea creation. Citizens are involved directly in the process, through workshops, public events, web channels and Smartphone application.

Academia
Industry
Citizens: End-users
Citizens: Potential users
Students
Policy

*Collaborative Business Model*

*Phase 1: Planning*
*Phase 2: Execution*
*Phase 3: Evaluation*
*Phase 4: Implementation*

**Communities and Municipalities**
Optimising policy and regulatory frameworks
*Ensuring the use of open data and performance measurements, giving incentives to tackle the urban needs*

**Infrastructure**
Making the infrastructure smart
*Exploit synergies of integrated solutions*
Create pioneering low energy districts

**Citizens**
Awareness-raising and building demand for integrated solutions
*Show replicability of solutions*
Ensure citizens engagement

# WPT3 PILOT PROJECTS

## KARLSRUHE PILOT

### eDrais 2017: Analysis of energy aspects regarding the usage of eBikes in the urban region of Karlsruhe

### PROJECT PARTNERS AND ASSOCIATE PARTNERS INVOLVED

- CyberForum e.V.
- Economic Development Department Karlsruhe
- EIFER European Institute for Energy Research (research part of the pilot)
- EnergieForum Karlsruhe (multiplier for energy sector in the region)
- Town Planning Office Karlsruhe (stakeholder)

## WHAT IT'S ALL ABOUT?

The Karlsruhe pilot project design is embedded in the wider context of the German energy transition with a special focus on the use of distributed renewable energy sources and the concept of "prosumers" (energy consumers as active parts of the energy system), the increase of energy awareness and citizen's participation.

Thereby the role of citizen's empowerment in the decision making process towards the renewable energy development, rational energy production, use and storage will be at the core of the project. An interesting example to cover this offers the development of the eBike infrastructure and use of eBikes in the urban area of Karlsruhe, combining the design of the specific charging infrastructure (and storage) with the use of renewable generated electricity. Potential users, commerce and local business should participate in the co-design process.

## WHAT WILL CHANGE?

The intention of the city is to develop together with the citizens and the local economy a holistic and broadly accepted vision for an increased usage of eBikes in the Karlsruhe region with time horizon 2025 in order to improve air quality, reduce air and noise pollution and replace car- traffic as much as possible.

The URBAN INNO Pilot will contribute to the development and realization of the vision by dealing with fundamental aspects in the vision's subfield energy. The Karlsruhe Urban Inno Pilot of CyberForum will support the municipality regarding the development of the vision "eBike Karlsruhe" by considering the energy relevant aspects of this vision from the citizens' point of view. Within the pilot, two different participatory methods are used: a crowdsourcing approach (web-based Public Participation Geo Information System – PPGIS) and a "Future Workshop".

In this way, citizens will be able to act as "co-designers" of the vision "eBike Karlsruhe" which also supports the intention of the municipality to increase citizen participation in the context of urban development.

## WHY DO WE WANT TO CHANGE IT?

The pilot will create benefits indirectly and afterwards, since it is part of a larger concept, i.e. the Pilot will support the city's intention to

• reduce car-traffic and to improve air quality in the urban areas in line with environmental strategies on the national and local level
• leverage the usage of eBikes in the city (lower inhibition threshold than for eCars regarding purchase price, range, charging stations)
• boost the local economy (bicycle dealers, mechanics repairing and maintaining eBikes, electric supply companies investing in charging stations)
• increase citizen participation in the context of urban development



## HOW CITIZENS CAN GET INVOLVED?

Within the pilot, two different participatory methods are used for citizen participation: A crowdsourcing approach (web-based Public Participation Geo Information System – PPGIS) and the event concept "Future Workshop".

PPGIS: This participatory method is based on a crowd sourcing approach supported by usage of a topic-related software. The method comprises the "customization" of an existing GIS software in order to use the functionalities for citizens participation related to energy issues of eBikes and to provide it to citizens for purposes like roadway arrangements, necessary distribution of charging stations etc. The software has been provided online to interested citizens for testing purposes for a duration of five months which has been promoted via newsletters, flyers and Facebook.

Future Workshop: The Karlsruhe Pilot Team organized the event "Future Workshop eBikes & Energy" in the Karlsruhe City Hall. Within this workshop, the participating citizens discussed the current situation, the desired vision of the future and a roadmap to reach this vision (including citizen participation). Discussions have been complemented by possibilities for the participants to mark on large maps on the walls their preferred bicycle pathways in the city area and where they would set charging stations for eBikes. The event closed with an outlook on how the results will be used by the Town Planning Office and the Economic Development Department of Karlsruhe.
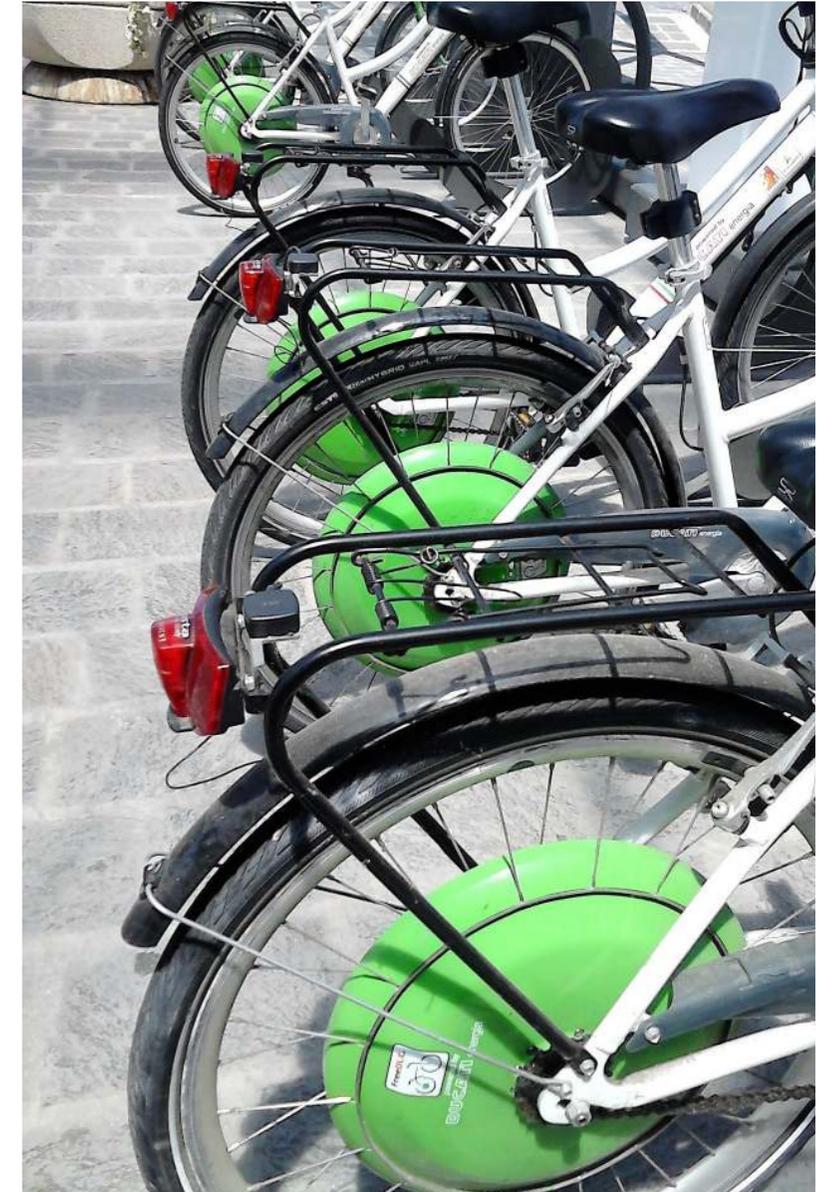
# WPT3
### PILOT PROJECTS

## TRENTO PILOT

**Development of innovation projects through participation and co-creation with citizens, public administration and local stakeholders**

### PROJECT PARTNERS AND ASSOCIATE PARTNERS INVOLVED

- Informatica Trentina Spa – (Trentino as Lab Living Lab, Tavolo Collaborazione ICT)
- Comune di Trento – Assessorato alla Cultura
- Comune di Trento - Circoscrizione 11 – S.Giuseppe-S.Chiara
- Polo Sociale S.Giuseppe-S.Chiara- Ravina-Romagnano
- Provincia autonoma di Trento – Progetto Opendata del Trentino
- Hub Innovazione Trentino
- Speck&Tech Trento, Impact Hub Trento, Contamination Lab Trento



## WHAT IT'S ALL ABOUT?

The Trento pilot action is aiming to experiment the adoption of participative methods to stimulate and build innovation inside the urban area, ensuring a direct involvement of the citizens and several types of citizen associations. So, the Trento pilot is targeting group of citizen and associations related to social and cultural area, with the objective to influence with a theideas coming from citizens the new urban development's like new Urban Center in the S.Chiara District and more in general the urban area of the District 11 of Trento, suggesting new potential ideas, defining usage of urban spaces, providing effective tools for influencing and monitoring the public administration decisions. Moreover the pilot action in Trento will push citizen participation and empowerment with specific activities aimed to improve the level of digitalization of the PA through the adoption of ICT tools and digital services provided by/for the Public Administration, involving the local open development community with the aim of extending the participatory process beyond the local area, enlarging to national level, and to the Central Europe level.

## WHAT WILL CHANGE?

The main innovation points that the Trento pilot is experimenting are:

- Providing new tools and knowledge to the PA, empowering it to having an higher citizen engagement and empowerment of communities in the definition/acceptance for further innovation projects in urban environments in the area will increase.
- Providing new tools and practices to propagate social and urban social/governmental issues from citizens and associations to the government in an innovative way ('smart') creating a combination between participative methods and specific supporting ICT tools and use social media.
- In general, improve the administrative action of the PA involving citizens in a participatory and sustainable way in an Open Government scenario, through the systematic usage of the information/data like important data, maps, statistics and historical memories for the citizens themselves, and making them available through use of data display techniques, video making and urban storytelling.

## WHY DO WE WANT TO CHANGE IT?

The above-mentioned targets show the importance of participatory methods and there positive effect to the daily lives of citizens. And this is where the selection of environmentally friendly living and finding best and the most sustainable solutions for satisfying our needs comes back to full cycle. By direct and constant involvement of all target groups, people feel needed and see the advantage for their own life in long-term.

Furthermore, it is crucial to force innovation to create a worth living region with a good infrastructure, attractive environment for firms, education level, low unemployment rate, low housing costs. Urban Systems of Innovation play a high role to fight mitigation to cities and reduce commuting. In general, we can conclude, that these examples attract young, intelligent people, which in turn attracts innovation.

## HOW CITIZENS CAN GET INVOLVED?

First method is experimenting the adoption of design thinking techniques, widely adopted for developing new services and new products in innovative companies, in the field of the public administration, involving specific target groups in the planning/ design of the urban area. This is made with workshops/laboratories with citizen associations involved in the cultural activities and businesses in the city as well as young through listen activities coordinated with local associations.

Second method is experimenting several form of citizen engagement through the use of digital technologies starting from the hacking marathon methods, the sprint ideas workshops, involving citizens, students and associations interested in software development, data and opendata experts and user experience advisers, professional and not professional.

Third method is aiming to push a sustainable model for participatory budgeting, working jointly with citizen, association and PA to create a model that could transform it in an affordable normal process for the PA and not a unique experience as often is.

Fourth method is the adoption of Social Media (Facebook/Twitter/Slack/Whatsapp) and of Open Data in order to interact directly with citizen and make all resources available for future developments.

## COULD IT BE A SUSTAINABLE MODEL FOR THE CITY?

The pilot action is aiming for a better definition of a participatory platform (several platform are available for several purposes and several target groups). Are the issues emerged from the local stakeholders and target groups similar to the other cities involved in the URBAN INNO project?

There could be a new policy to improve the empowerment of the citizens and associations in the administrative life of the city with a reasonable balance between the additional cost and the timing required to make the best decision for the future development of the city.

## WHAT IS THE TECHNOLOGY BEHIND URBAN INNO TRENTO PLATFORM?

Informatica Trentina has developed a set of services to support the decision-making processes of the Public Administrations. "IoPartecipo", a space for discussion that serves to involve citizens in decision-making processes that have an impact on the quality of their lives. "IoRacconto" represents a solution for managing participated information, a service for citizens, associations and communities that wish to contribute to civil information for a participatory construction. Beside this, other open source software tools are used like the Open Data Kit and Umap for collection of geomapped data and UMAP to visualize geomapped data over Openstreetmap tiles.

# WPT3

**PILOT PROJECTS**

## RIJEKA PILOT

### Enhancing citizen participation with CCP – Citizen Collaboration Platform

### PROJECT PARTNERS AND ASSOCIATE PARTNERS INVOLVED

- City of Rijeka
- Ericsson Nikola Tesla d.d.
- Centre of Competence for Smart Cities
- Rijeka Pensioners' Association
- Junior Chamber International Rijeka
- Association for Civil Society Development SMART

## WHAT IT'S ALL ABOUT?

The purpose of the project is to create an interactive system where citizens can participate in the decision making process regarding utilization of public infrastructure - Citizen Collaboration Platform (CCP).

The platform shall have two main components:

1. Citizen Collaboration Platform – to assure communication and interaction with citizens (collecting ideas, ranking, publishing results, etc.)

2. Facility management (GIS platform) – to identify available free real estate owned by City of Rijeka, map them, and connect them with citizen ideas and proposals.

## WHAT WILL CHANGE?

Key objective of the Project team is to conduct a variety of research in the city of Rijeka to identify public urban spaces that have the potential to respond to the needs of city residents. Available spaces will be mapped and introduced into Facility management system.

Using Citizen Collaboration Platform, we will explore the way in which residents refer to the city as well as sites that are important to them. Primary sources will be online pools and direct communication with citizens, associations, neighbourhood councils, with an objective to capture citizens' feedback on key subjects to the maximum extent possible. The results thus obtained will be analysed, selected and classified with the purpose to be the starting point for making recommendations on how to use urban spaces for City planners and management.

For the success of the project, it is crucial to establish a bidirectional link between City of Rijeka and citizens, and to promptly inform the citizens about the status of their ideas, proposals and opinions, as well as about the dynamics of their realization.
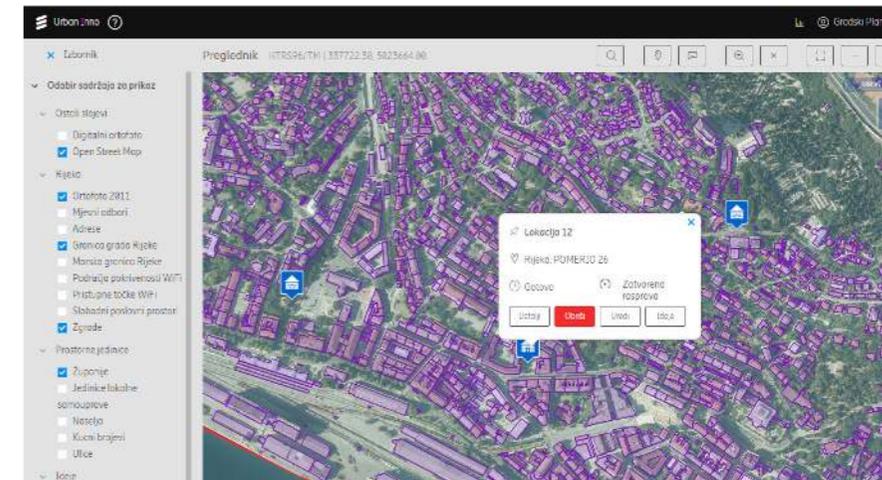
## WHY DO WE WANT TO CHANGE IT?

City of Rijeka has many unused spaces within urban area: abandoned industrial plants, as well as commercial and residential real estate. A very common problem in urban regeneration projects is the lack of communication between city planners and potential investors who do not take sufficient into account the wishes and needs of the local population. Therefore, new ideas and approach is needed for the revival of these areas, especially those in the city centre.

Establishing a clear and statistically feasible communication channel will enable better decision making and greater success of planned projects. Participation of citizens at an early stage of designing the conceptual solutions enables painless corrections and their full support. On the other hand, with the participation of citizens, developers can get a better insight into their needs, which opens the possibility for them to offer more appropriate and complete services or infrastructure.

## HOW CITIZENS CAN GET INVOLVED?

Participatory Workshops
3 main target groups (elders, young citizens and civil associations) are engaged in the processes of planning, developing and selecting CCP content in certain areas, through participatory workshops (including World café) where they are informed about the project concept and educated in the mode of participation.

e-Consultations
CCP working version will be the subject of on-line public consultations, by using existing direct democracy tool e-Consultations. It is official participatory platform of the City of Rijeka which enables direct involvement of citizens in decision-making process. Consultations with the interested public or e-Consultations are carried out in respect of those general acts, which adoption or amendments directly lead to the realisation of citizens' needs or determine other issues in the interest of the general welfare of the citizens and legal entities in the territory of the city of Rijeka.

Testing of CCP
The same participation takes place through a web-based CCP, through which citizens can comment, evaluate the proposed solutions, or propose their own ideas. In the first stage of its official use, CCP will accept 3 already existing participatory models in which citizens and local authorities collaborate together:

1. Small municipal interventions – where citizen can submit their requests for municipal work on certain areas of the city and give their proposal in online form.

2. Local partnership - through direct participation of citizens, associations and local boards it will be possible to resolve citizens needs faster and more cost effectively, by putting in order smaller public spaces (children's playgrounds, tree-lined avenues, flowerbeds, not cultivated green areas, smaller-sized illegal landfills).

3. Q&A – citizens can ask questions on a variety of topics within the competence of the City administration and related public utility companies and institutions.

The CCP will simplify the participation process and make it more transparent in comparison with the existing editions. The platform will perform the necessary search and confirm the possibility that some content could be realized at the offered location if it is in accordance with the technical or legal possibilities. The CCP with testing features will be officially launched in 2019.
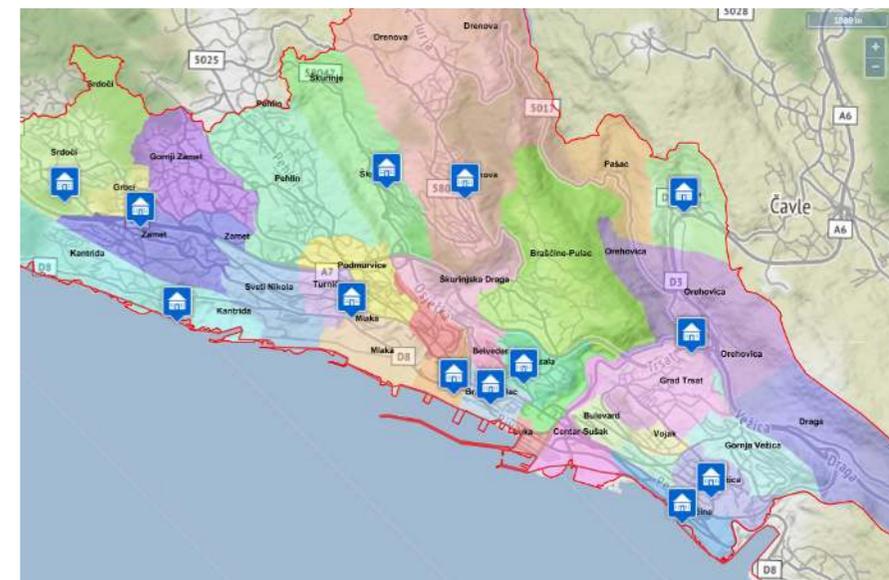


## WHAT IS THE TECHNOLOGY BEHIND URBAN INNO CCP?

CCP is based on Liferay Portal Community Edition. Liferay Portal is a free and open source enterprise portal software product. Distributed under the GNU Lesser General Public License and optional commercial license, Liferay was declared "Best Open Source Portal" by InfoWorld in 2007. It is primarily used to power corporate intranets and extranets.

Additional integrations where done with Map Server (Open Source development environment for building spatially enabled Internet applications. The software builds upon other popular Open Source or freeware systems like Shapelib, FreeType, Proj.4, libTIFF, Perl and others) to bring mapping capabilities to collaboration platform.

## WHY IS OPEN SOURCE USED FOR URBAN INNO CCP?

As CCP is basically open source it is economically efficient and easy to maintain and improve. It enables bidirectional communication with citizens thus fostering participation for key city issues. Said capabilities would probably help to position CCP as main citizen communication/participation platform allowing for phase out of existing, and mostly unidirectional communication channels.

Photo by Branko Ritonja

# WPT3 PILOT PROJECTS

## MARIBOR PILOT

### Integrating public infrastructures and end-users through a common platform (single entry point)

### PROJECT PARTNERS AND ASSOCIATE PARTNERS INVOLVED

- City of Maribor
- E-institute
- Institute for Electronic Participation (INePA)
- Companies providing public services in the urban region of Maribor (water supply, district heating, public transport, waste management, etc)
- NGOs representing citizens interests or promoting citizen participation
- Citizens of Maribor

## WHAT IT'S ALL ABOUT?

Pilot of the Municipality of Maribor will be implemented in the field of integrative service for citizens. The aim of the pilot is to engage end users (citizens) in improvement of services of public companies, which they offer to citizens.

The pilot will empower citizens to have more simplified and transparent access to public services, which are being performed by local companies owned by the municipality, but on the other hand, it will improve local municipality actions engaging citizens in creating and improving mutual relationship. Municipality of Maribor long-term goal is to improve the quality of life of citizens and their engagement in the development of the city.

## WHAT WILL CHANGE?

Public companies in Maribor already offer some smart services to citizens but at the moment the majority of citizens are either not aware of those services or are reserved to use them.

In the pilot process we wish to educate citizens on existent services and educate public companies on collaborating with citizens (to present different possible ways how to involve citizens in their activities, development of new products/service).

The final objective is to get educated users (smart users) and to engage end users (citizens/customers) in improvement of services of public companies, which they offer for citizens.

The aim is to get tailor made services for citizens which they will be willing to use (that they are educated to use) and to make public companies and local community aware of importance and benefits of citizen's involvement. The pilot project in the City of Maribor will provide the integration of public infrastructures and end-users through common platform and offer citizens improved public service.

## WHY DO WE WANT TO CHANGE IT?

Public companies in Maribor already offer some smart services but the feedback from end users is very limited. Since end-users were mostly not part of development of smart services of public companies, we wish to educate public companies how important is the involvement of end user when introducing new services and how important it is to get feedback from end user when developing new service. The aim is to develop smart technical solutions which are more user-friendly and developed in a way to make life of the citizens easier.

With these improvements citizens will benefit from better services - there will be more possibilities to get involved in innovation processes and there will be more learning opportunities about the activities of public municipal companies.

Public companies will benefit knowledge in how end user involvement is important when introducing new services and how important it is to receive feedback from end user when developing new service.

The pilot will give feed-back to public companies on how to improve and adapt their services to be even more user friendly to the needs of citizens and provide citizens with a joint platform for the better visibility and better use of public services from public companies.



Image by Municipality of Maribor

## HOW CITIZENS CAN GET INVOLVED?

Citizen will be able to participate through workshops, guided interviews, through social media channels, etc. The pilot activities are planning to involve NGOs in order to ensure strong citizen engagement.

During pilot activities, citizens will have the opportunity to be involved in participatory method called 'Living-Lab' (Innovating technologies or services with end-user involvement). Workshop will be performed in order to find out real and existing problems encountered by citizens, to be able to develop technical solution, which will be later developed and implemented as a smart service with added value and usability to the citizens.

Students will be involved in another participatory method, called 'DEMOLA challenge' Demola turns ideas and needs into a working demo, prototype or concept with highly motivated and multidisciplinary student teams. In this way, public service development process will be boosted.

In the process we will use a toolbox of Smart urban innovation participatory methods & tools which is a unique tool that will help us engage end-users (citizens, consumers) into urban innovation process.



Image by Municipality of Maribor

# WPT3 PILOT PROJECTS

## KOŠICE PILOT

### Innovative Urban Food System – Digital Marketplace of Local Agricultural Products and the Innovation of Subsidiary Processes

### PROJECT PARTNERS AND ASSOCIATE PARTNERS INVOLVED

- Technical University of Košice
- Kosice Self-Governing Region
- European Grouping of Territorial Cooperation Via Carpatia Foundation 858
- Gemer Craftsmen Association

## WHAT IT'S ALL ABOUT?

The pilot activities focus on the innovation of Urban Food Network in the City of Košice, improving the rural-urban linkages with the surrounding areas. The efforts lead to the development of a digital marketplace of agricultural products to match the local production of the rural areas with the demand mainly from urban areas. This virtual marketplace will enable citizens, restaurants, canteens and other customers in the city of Košice to buy products directly from local farmers of various sizes – from single individuals and families to large producers.

The pilot activities also cover, mainly ICT enabled, innovation of other subsidiary processes connected to this economic activity like the delivery and logistics, quality and safety controls, distributed digital payments and communication with public authorities due to legislative obligations. This electronic platform will also serve as an effective electronic tool for communication among stakeholders of urban ecosystem, including all members of quadruple helix being formed within the URBAN INNO project.

## WHAT WILL CHANGE?

The pilot project is one of the core initiatives of agricultural rebirth being implemented in the Košice region aiming to restore the productivity of rural areas, which became weak due to several historical circumstances hindering the development process. The main long term goal is to support the creation of new jobs in agricultural and other inter-connected sectors in the rural areas with positive impact on the regional income depolarization (urban vs. rural).

An increase in local agricultural production positively influences other important sectors like logistics, packaging, machinery, but also marketing and retail. Other important expected impacts include the increase of regional food sovereignty, shorter supply chains and transport distances (less $CO_2$ emissions), and more efficient food quality and safety controls realized by public authorities.

## WHY DO WE WANT TO CHANGE IT?

The Košice region has traditionally been regarded as agricultural, where production and the quality of the soil are above the Slovak Republic average. However, structural changes caused by industrialization and service oriented economy caused the draining of the labour force from rural areas and leaving them with week human and financial resources – ruining even the businesses within the agricultural sector.

The demand, mostly coming from urban areas, regarding the local agricultural products is higher than the current offer covered by regional producers – leaving the region to be very dependent on imported products. Representatives of Košice self-governing Region and other stakeholders - reflecting this unsatisfactory situation - developed new programme named 'The Agricultural Commodity Logistic Centre building program in Košice region' in order to improve the links between producers and consumers of regional food products.

The programme address different aspects of support – identification of active producers, motivation for unregistered producers to form the business, digitalization of processes, education and trainings and the marketing, including the local mark of product origin. The URBAN INNO pilot activities focuses on mentioned digitalization aspects rooted in the programme.
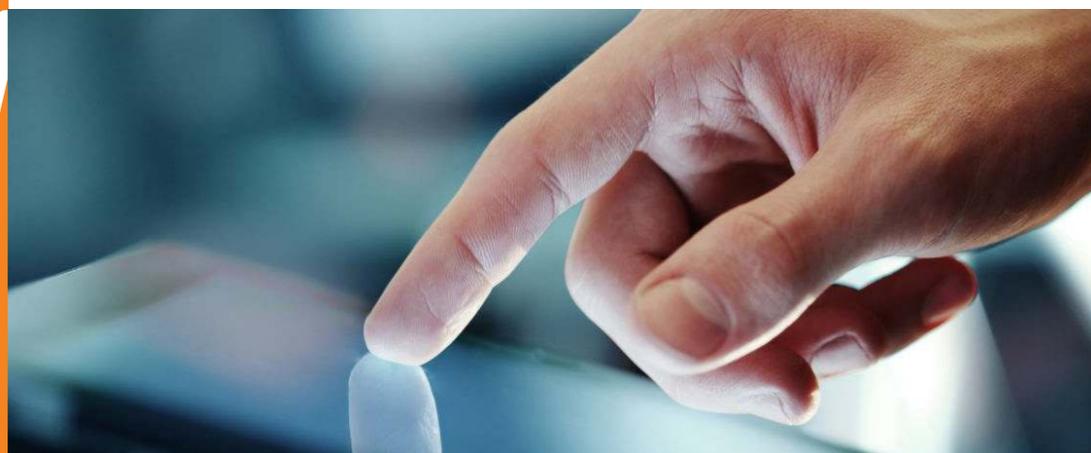
## HOW CITIZENS CAN GET INVOLVED?

Within each step of the pilot project implementation - from design, through development, implementation and testing, to real-life operation, the feedback from the citizens/end-users is very important and is facilitated via several participatory methods applied within the communication.

As the cornerstone principle when designing the digital marketplace, the Living Lab approach has been applied, enabling the end-users, but also other innovation actors like Businesses, Public Authorities and R&D, to redefine the features of the electronic platform through idea management tools. Moreover, in the planning phase, the close cooperation with the civil society organizations - Foundation 858 and Gemer Craftsmen Association - brought invaluable remarks based on real-life experience promising very good viability of the solution for the future.

# WPT3

**PILOT PROJECTS**

## KIELCE PILOT

### Virtual Community Assistant: SAM

### PROJECT PARTNERS AND ASSOCIATE PARTNERS INVOLVED

- Kielce Technology Park
- Kielce City Hall – Smart City Office
- Chamber of Commerce
- SMEs from Kielce

## WHAT IT'S ALL ABOUT?

The Kielce Pilot project will be developed as Virtual Community Assistant called Sam. It is a smart link between people and organizations which makes a positive impact on all of the participants. Sam creates a smart ecosystem on top of social media and public communication platforms. The platform uses instant messaging to provide solid information exchange, engage into participation and makes efficient business connections between people, services provided by companies, simply it will network all the people.

Virtual Community Assistant classifies users and matches them between, connecting businesses, universities, NGO's and citizens, encouraging participatory methods in their work.

Pilot will cover aspects of smart ecosystem. Activities will be surveyed by chatbots, which will help to manage discussions, information and participants, matchmaking and team building.

## WHAT WILL CHANGE?

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Virtual Community Assistant classifies users and matches them between, connecting businesses, universities, NGO's and citizens, encouraging participatory methods in their work.

Pilot will cover aspects of smart ecosystem. Activities will be surveyed by chatbots, which will help to manage discussions, information and participants, matchmaking and team building.

Purpose of Kielce Pilot is most of all, the empowerment of communication and collaboration within Kielce Technology Park and city stakeholders with the local community, companies from Kielce Technology Park and citizens. We want to strengthen the cooperation.

Chatbot will change way of communicating. SAM will use natural language as an interface, It is nowadays the most efficient way of communicating. People will use tools that they know like Facebook Messenger, Facebook. SAM removes the technological barrier between the people and organisations, helping them to participate in their local community projects.

In the communication process the chatbot will use text, images and movies. It can send maps, show image gallery from events, send other files like pdf, doc, xls.

SAM is an Artificial Intelligent, which communicates with people through natural language. Chatbot knowledge is based on data provided by different group of stakeholders, such as city entities, organisations, NGOs', worker and trade unions, clusters. Our assistant will invite people to cooperate together in future projects in easy way.

Also through the Messenger, Virtual Assistant can precisely locate its user, can help to find an event, office or particular company, guide and navigate inside/outside the building.
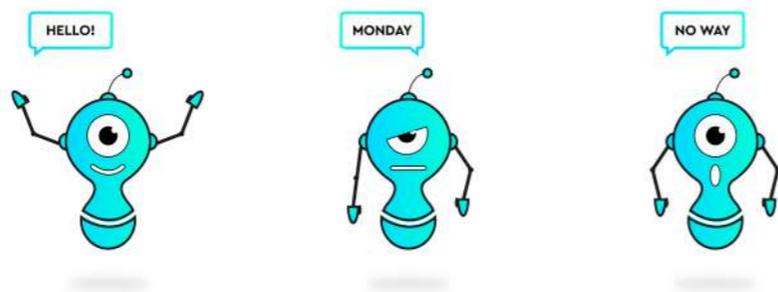


## WHY DO WE WANT TO CHANGE IT?

Because we want more accurate, free of charge reliable and direct communication method for participation in local communities.

We need new aspects in:

- Team building – instant messaging can be a good tool for team bulling in a workplace, especially where team members in different locations.
- Archiving communication - instant messaging platform offer record keeping functions, data are stored and kept save.
- Spam reduction – emails easily get cluttered with spam, quite unlike when you're using instant messaging for business.
- Activating the participants – Natali will help to schedule a meeting, rent a conference room, remind about the location, date and also can guide the way of user.
- Database of contacts, Natali will easily connect people using Facebook community.
- Surveys, questionnaires – Natali will create a surveys using Messanger.

## HOW CITIZENS CAN GET INVOLVED?

SAM use social media and public communication platforms (e.g. Facebook Messenger). It is an open platform based on the Facebook users and profiles, free of charge without a need for additional registration process, logins and passwords.

This process will enable sending comments, questions to people responsible tor entrepreneurship environment in city, like Kielce Technology Park.

Platform access will be confirmed by local public institutions, companies webpages, social media channels led by the public institutions, promoted also in press and radio. SAM QR code will be also posted on the all relevant companies, institution webpages and office doors to enable citizens fast access to all the information. Buildings will be equipped with info stands with special QR codes, which directly and instantly link the user to the bot, no typing needed.



I KNOW **SOME**THING
LET'S **SOME** TALK
I HAVE **SOME** NEWS
ZAIMEK **SOME** - CZĘŚĆ /SYGNETU KPT/
**SAM** - GENDER NAME - **SAMSON OR SAMANTHA**

## ADVANTAGES AND INNOVATIONS IN COMMUNITY ASSISTANT

- Peer to peer communication through AI chatbots using simply a smartphone, computer or any mobile device.
- Easy and fast access to the information.
- A field for open public discussion about events and situation in the city.

# WPT3 PILOT PROJECTS

## VAS COUNTY PILOT

### Establishment of a Multidisciplinary Science Centre

### PROJECT PARTNERS AND ASSOCIATE PARTNERS INVOLVED

- Pannon Business Network Association (PBN)

## WHAT IT'S ALL ABOUT?

The purpose of the pilot project of Vas County is to establish a Multidisciplinary Science Centre, which is a community-oriented digital innovation hub. It is going to be serving as a training and education facility for the local ecosystem, contributing to the improvement of the application of digital achievements targeting business competitiveness.

This HUB is functioning already as a subsidiary of PBN since 1st of November 2017. It is eager to provide not only Industry 4.0 related useful knowledge to the local community, but even to produce tangible results with 3D printing, 3D scanning, digital shape and shape design, 3D scanning and design at industrial level and also CAD design.

## WHAT WILL CHANGE?

The main objectives of the establishment of the Multidisciplinary Science Centre are:

- Translate international learning of PBN into tangible support tool for local SMEs
- Assist on application of I4.0 in the field of additive manufacturing
- Educate local business and scholar community about additive manufacturing
- To develop new technical solutions with the use of this modern technology in an environmentally friendly way
- To organize training sessions to university students and to other interested possible end- users like local citizens, representatives of companies, etc.

## HOW END-USERS CAN GET INVOLVED?

The Centre can contribute a lot via its activities to reach multiple groups of end-users and help them gathering the aforementioned I4.0-related knowledge. However, it is not the most that the Centre could do for helping its target groups and its region.

In order not to just provide trainings and study visits in the way that was once described at the beginning of the operation of the Centre, but even to raise its standards, specified questionnaires will be distributed along the different type of participants to leave their valuable feedbacks. It is even more important for the Centre to get to know what are the applied methods, which are successfully implemented by them already and what should be changed in order to support the local I4.0 development in the most suitable and sustainable way.

The target groups to be involved:

• local student and pupil community
• local business community
• local public sector and society
• external community.

It is expected that with the related knowledge learned during the trainings and other events organized by the Centre, the future participants will be able to contribute to the process of putting Vas County up to the Industry4.0 map of Europe as a relevant area.



## WHY DO WE WANT TO CHANGE IT?

Based on an analysis prepared in URBAN INNO project, PBN team detected the main weaknesses of Vas County, which are present as barriers and hindered the local Industry4.0 possible solutions to be successful. These weaknesses are:

• The local SME sector is not competitive and large enough
• The outflow of human resources into Western-Europe
• Management attitude is not supporting innovative solutions
• Low Quality of human resources
• Management sector is not enough future oriented.

As in the case of many European regions, the population of Vas County is decreasing and getting older without adequate labour force and knowledge. That is why PBN thought that a fresh-minded organization would be needed with taking the first step towards a modern technology like additive manufacturing, to get to know it better and help (mainly) the local population to learn this valuable knowledge and use it. If this technology got better and would be a more safe option with time to produce flawless products, it would spare a lot of time and human resources.

The Industry4.0 revolution is already on its way to challenge out-of- date, older and common technologies and is beating them with its fastness and cost-effectiveness. It is only a matter of time for different areas and related organizations where the I4.0 is not well-known yet to realize that acquiring the needed knowledge of it, start to use the technology and even to improve it will be the easiest and maybe the only way to achieve success in certain areas of industry.

# WPT3

### PILOT PROJECTS

## BURGENLAND PILOT

### Engaging all stakeholder groups in the development of a smart energy region

### PROJECT PARTNERS AND ASSOCIATE PARTNERS INVOLVED

- Forschung Burgenland GmbH
- Municipality Neusiedl am See
- Energie Burgenland AG (Energy provider)
- TBH Ingenieur GmbH
- ECOsmart GmbH

## WHAT IT'S ALL ABOUT?

In order to face climate change and reduce the CO 2 -emissons Burgenland pressed ahead with renewable energy in the last 10-15 years, especially wind-power. Due to the fact that new circumstances arose, just calling the end of subsidies of eco-electricity and the high number of hours in which power generation exceeds power demand based on weather conditions, demand- side behaviour and energy efficiency measures, a huge potential for Power-to- Heat technology in district heating grids in the area of northern Burgenland was evaluated.

Based on these facts and the purpose of finding an overall solution in consideration of technical, economic, legal and social aspects for the region Neusiedl the project Hybrid DH was initiated by Forschung Burgenland. Furthermore, the project aims to an overall concept for energy efficiency, renewable energies and in particular to a general energy strategy 2050 of the city Neusiedl. Additionally innovative participative solutions are needed to the primarily technical consideration. For this, we regard to the content of the project Urban Innovation.

The topic energy strategy 2050 of the project Hybrid DH is the ideal framework for the required pilot project within Urban Inno. While the aim of Hybrid DH is the primarily approach of technical and theoretical potential of solutions, the pilot project aims to the greatest possible involvement of stakeholders and end-users during the whole progress.

## WHAT WILL CHANGE?

Through higher citizen engagement and empowerment of communities the acceptance of end- users (citizens) for further innovation projects in urban environments in the area will increase. Gradually, this effect will go along with the positive experiences made by all actors within the pilot project. We will find another benefit as well in the improvement of common understanding as an increasing value of volunteering in promoting innovative projects from local population.

The pilot project, as a best practice example of innovation can help people to change their old-fashioned thinking regarding innovation and change. Fear of change stops people from action. For the pilot project involvement it is necessary to understand the reasons why people eventually resist change.

To get people willing to abandon their old motives and cope with little discomfort caused by change at the first sight one main target is to communicate in a sensitive way and deal with possible occurring resistance and showing them the positive long-term effects. As a result, better collaboration between the general public, companies (SME) and local/regional authorities policies for urban innovation emerges.

## WHY DO WE WANT TO CHANGE IT?

The above-mentioned targets show the importance of participatory methods and their positive effects to the daily life of citizens. This is where environmental friendly living and finding best and the most sustainable solutions for satisfying the needs come back to full cycle. By direct and constant involvement of all target groups, people feel needed and see the advantages.

Furthermore, it is crucial to force innovation to create a worth living region with a good infrastructure, attractive environment for firms, education level, low unemployment rate and low housing costs. Urban systems of innovation play a high role to fight mitigation to cities and reduce commuting. In general, we can conclude, that these examples attract the younger generation, people with good education and in return more innovation takes place.

## HOW CITIZENS CAN GET INVOLVED?

How do we increase interaction period and number of interactions between innovation process facilitators and end-users?

Actually, we have to use different channels to reach different age groups. Using social media channels, doing workshops at secondary and higher education schools is important to involve the younger generation.

Furthermore, parents can learn from their children in additional activities. For citizen ongoing information events and involving workshops should take place, best in collaboration with the municipality and different associations. Explaining the benefits is crucial for end-users and further contribution of citizen is relevant to the success of the power-to-heat project. People have to feel needed and huge investments have to make sense from their point of view.

## ROLE OF URBAN INNOVATION

Promoting urban innovation as well as environmental and energy issues in the area of Burgenland are quite important to the regional government. The geographic location is a big issue in this context. Neusiedl am See (North Burgenland) is located near the capital city Vienna and struggles with a significant migration and commuting rate.

When we find the highest innovation possible less young people would move to the cities. Favourable development of innovation will offer better prospects for a profitable future and hopefully commuters will find better work and stay in their hometowns. Creating awareness about the importance of urban innovation would have positive long-term effects for all stakeholders.

# WPT4 THEMATIC WORK PACKAGE 4

## Transnational urban innovation cooperation strategy

### OBJECTIVE AND OUTPUTS

Objective of final set of URBAN INNO activities is to define a transnational urban innovation cooperation strategy, relevant to the development of smart urban innovation quadruple-helix clusters and their ecosystems in the project areas.

A transnational cooperation platform will provide all interested regions the best available participatory tools and qualified facilitators and best practice will enable transfer and exchange of urban innovation models and practices throughout CE.

Following activities are planned:

1)  Monitoring of cluster and ecosystem development in each region

2) Comparative analysis/benchmarking of the quadruple helix clusters, with a focus on the identification of major shared opportunities and common priorities

3) Collection and review of European and international good practices addressing similar opportunities and priorities, and analysis of their potential for transfer in the project regions.

4) Development of transnational cooperation strategies to address the issues selected in previous activities. Development of cooperation roadmaps for the implementation and upscaling of successful pilots (WPT3) on transnational level.

This project actions are built on development of quadruple helix clusters and pilots, which are focusing on the regional level (inward oriented). It will also integrate the results of participatory methods toolbox with the aim to connect quadruple helix research-driven ecosystems in Central Europe through smart cooperation.

### KEY FIELDS OF COOPERATION

The joint transnational urban innovation strategy will define key fields of cooperation to the level of very concrete actions:

• Cluster/network cooperation system will be defined (staff exchange, study visits, best practice exchange)
• Participatory method toolbox presenting methods, developed and tested in a project will be described along with list of experts who are specialized in practicing different methods. They will be available for coaching the processes in all CE regions.
• An urban innovation transfer platform will be defined along with key players. This will enhance the transfer of different urban innovations (technologies/services) to other urban environments and provide a platform for market up-take.

The transnational strategy will encompass roadmaps for the implementation of the defined actions, with commitments to responsibilities, budgets, funding opportunities and timelines. The responsibility for the implementation lies primarily with the project partners in charge of the development of the target urban ecosystems and the respective policy makers.

The transnational character of the strategy implies a high degree of compatibility of the contents for multiple regions. The partners will consequently aim at developing joint actions enabling the further involvement of additional regions outside of the current partnership.