

#### **ABOUT URBASOFIA**

INNOVATION AND THE EUROPEAN UNION

**INNOVATION IN THE GLOBAL AGENDA** 

CASE STUDIES FROM EU FINANCED PROJECTS INVOLVING URBASOFIA

THE MEANING OF THE CRISALIDE PROJECT



# ABOUT URBASOFIA



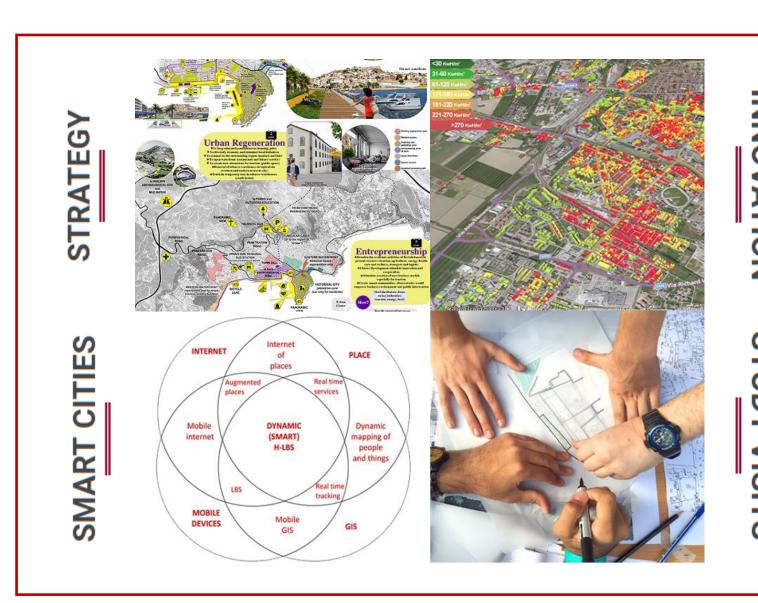
### **URBASOFIA**

when knowledge gives directions

Laboratory for urban development, policy design and territorial cohesion focused on developing more integrated, participatory and smart-oriented solutions to pressing urban problems;

Involved in development and management of EU-funded projects, especially in connection with smart cities, strategic integrated planning, urban regeneration as well as the social impact assessment of current urban issues and new ICT solutions under development.

More information: <u>www.urbasofia.eu</u>





# WHERE AND IN WHICH PROGRAMMES WE WORK (UNDERLINED = ONGOING)

- Horizon 2020 (CENTRIC, ESPRESSO, ROCK, PROGIREG, STARDUST)
- ICT/PSP EU Programme (i-SCOPE, SUNSHINE, i-LOCATE);
- SEE Programme (STATUS);
- URBACT II and III Programme (TUTUR, RE-BLOCK, <u>REFILL</u>, <u>BOOSTINO</u>, <u>SUB-URBAN</u>);
- URBAN INNOVATIVE ACTIONS (<u>Siena, Pozzuoli MAC Project</u>, Lead Expert Dr. Elisei)
- DANUBE Transnational Programme (<u>ATTRACTIVE DANUBE</u>);
- Other EU Programmes: Erasmus+, ERA NET, ADRION, etc.
- National projects in Romania and Italy using ESF and ERDF projects for social innovation, urban integrated strategies, mobility plans, energy plans, etc.)
- Integrated strategic plans for small and middle-sized cities: Alba Iulia, Baia Mare Metropolitan Area, Kavala (Greece), Pitesti, Cluj Metropolitan Area, etc.
- Cooperation for study visits and experience exchange; training for stakeholder engagement.

#### Management and design of proposals, network development

We have an extensive network of cities, research institutions, universities, private companies across Europe.



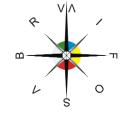


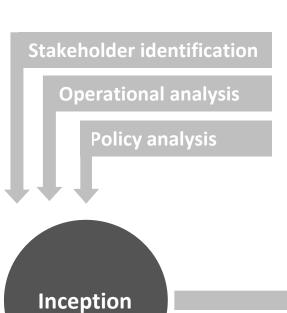
How do we embed technology and articulate cities and providers via innovative planning?

Bridging the gap between cities, integrated planning and smart technologies and tools:

- By assisting cities to transition from traditional, static and inflexible planning to integrated planning: area-based, transversal, participatory, with integration of funding;
- By developing the right tools, flagship projects and piloting actions for actual, real urban problems;
- Through research and innovation in the field(s) of smart cities (SC) pertaining to urban development and societal innovation.

### **METHODOLOGY**





#### Networking + State of the Art

CLEAR FRAMEWORK OF AVAILABLE

DATA, CURRENT PLANNING TOOLS AND

POOL OF LOCAL ACTORS

# Participatory development

- 1) Urban Problems
- 2) Possible solutions
- 3) Design of Strategy

Urban Programming



#### Planning process results:

INTEGRATED STRATEGY; POSTER PLANS, PROJECT, POTENTIAL FUNDING & PPP

**Operationalizing Governance Framework:** territorial pact or urban/metropolitan task force

**Set up of Urban Centers** 

Process Embed: Urban Centers

#### Achievements:

SUSTAINABILITY AND TOOLS FOR IMPLEMENTATION



# INNOVATION & THE EU



## **H2020 AND ESIF**



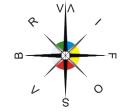
The Commission promotes commercialization and uptake of innovation through the Horizon 2020 programme and the European Structural and Investment Funds (ESIF). With the budget of EUR 80 billion, Horizon 2020 will help bring innovative ideas to life. ESIF will dedicate around EUR 110 billion to innovation activities, ICT, small and medium-sized enterprise (SME) competitiveness.

#### **EC SPECIFICALLY:**

- supports innovation development in priority areas and in SMEs, mainly through <u>Horizon 2020</u>
- fosters the broad commercialisation of innovation in the EU including <u>Public Procurement for Innovation</u>, <u>Design for Innovation</u>, <u>Demand-Side Policies for Innovation</u>, <u>Public Sector Innovation</u>, and Social Innovation
- develops sector policies to modernise the EU's industrial base and accelerate the market uptake of <u>Key Enabling Technologies</u> such as <u>Workplace Innovation</u>
- monitors innovation performance and innovation uptake in order to identify developments that require policy changes. Key methodologies include the <u>European Innovation</u> <u>Scoreboards, Innobarometers, Business Innovation Observatory</u>
- improves regulatory conditions for innovation with measures for <u>startups</u>, <u>entrepreneurship</u>, <u>access to finance</u>, <u>digital transformation</u>, <u>Single Market</u>, <u>intellectual property</u> and <u>standards</u>.
- supports the development and cooperation of <u>clusters</u> to boost SME innovation.

# INNOVATION IS A NEW MANTRA FOR EU CITIES





**Urban Innovative Actions (UIA)** is an Initiative of the European Union that provides urban areas throughout Europe with resources to test new and unproven solutions to address urban challenges. Based on article 8 of ERDF, the Initiative has a total ERDF budget of EUR 372 million for 2014-2020.

#### **Key elements:**

- Focus on products, services and products
- Looking for solutions never been tested before in Europe

#### **Typology of innovation**

#### Revolutionary

totally new approaches (never tested before in eu cities)

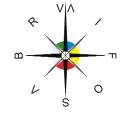
#### **Evolutionary**

- building on and combining traditional elements to create new meanings
- changing scale (changing radically the scale of application of already tested products or services)
- testing traditional approaches with new target groups

# A RELEVANT EU PROGRAMME FOR BRINGING THE INNOVATION IN CITIES







The Urban Agenda for the EU will rely on the principle of an integrated approach to sustainable urban development as the guiding principle to achieve the goals of the three policy pillars. The Urban Agenda for the EU will, in addition to the **organisations** mentioned in the **Pact of Amsterdam**, make **use** of existing **European policies**, **instruments**, **platforms and programmes** such as the opportunities offered by Cohesion Policy, including its sustainable urban development strand6 , **Urban Innovative Actions**, **URBACT**, **ESPON**, the 'Covenant of Mayors', Civitas 2020, RFSC (Reference Framework for Sustainable Cities), **EUKN**. It will make full use of the European Innovation Partnership 'Smart Cities and Communities7' as established by the Commission.

INNOVATION AS
CONCEIVED IN
THE PACT OF
AMSTERDAM
(EU URBAN
AGENDA)

# INNOVATION & THE UN



## THE GLOBAL URBAN AGENDA

# INNOVATION AS CONCEIVED IN THE HIII

The New Urban Agenda is roadmap for building cities that can serve as engines of prosperity and centres of cultural and social well-being while protecting the environment. The Agenda also provides guidance for achieving the Sustainable Development Goals and provides the underpinning for actions to address climate change.

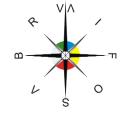
In the New Urban Agenda, leaders have committed to:

- Provide basic services for all citizens
- Ensure that all citizens have access to equal opportunities and face no discrimination
- Promote measures that support cleaner cities
- Strengthen resilience in cities to reduce the risk and the impact of disasters
  - Take action to address climate change by reducing their greenhouse gas emissions
- Fully respect the rights of refugees, migrants and internally displaced persons regardless of their migration status
- Improve connectivity and support innovative and green initiatives
- Promote safe, accessible and green public spaces

CASE STUDIES
FROM EU
FINANCED
PROJECTS
INVOLVING
URBASOFIA











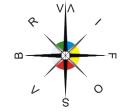
#### Smart UrbaN Services for Higher eNergy Efficiency

- ICT-PSP Project (2013-2016): Innovative digital services, interoperable with existing geographic web-service infrastructures, supporting improved energy efficiency at the urban and building level.
- Smart service platform accessible from both a web-based client and an App for smartphones and tablets.
- www.sunshineproject.eu

#### Our main role:

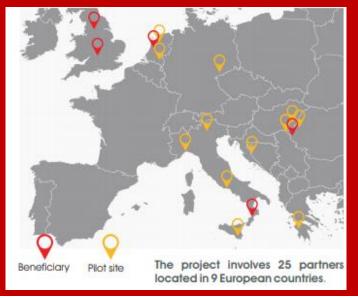
- Evaluation of socio-economic impact analysis for 8 European pilot cities
- Training
- Dissemination, communication and events preparation





Lean management models:
Sharing devices inside buildings to enable more flexible sharing mechanisms between different offices, departments etc. based on real-time location of asset.

# Pilot at Municipality of Brasov, Romania



#### Indoor/outdoor LOCation and Asset management Through open gEodata

The project integrate existing technologies transferring results of preexisting research or developed into solutions that can be turned into real products.

The main aim is to simplify the life of users by helping them "navigate" inside buildings, using their smartphone, to reach their place of destination (e.g. inside a public office, a clinic, a shopping mall, etc.). Ilocate also allows tracking objects and portable equipment within "indoor" spaces to improve their management and maintenance.

#### Fields of operation

- Public and health services
- Cultural tours
- Maintenance scenarios
- Lean management models

#### **INNOVATION AND SMART TECHNOLOGIES**

M V V

AS PLATFORMS FOR THE CONTEMPORARY CITY

In the paradigm of smart cities we can found everything,

How does the smart city trend help regeneration processes in our cities?

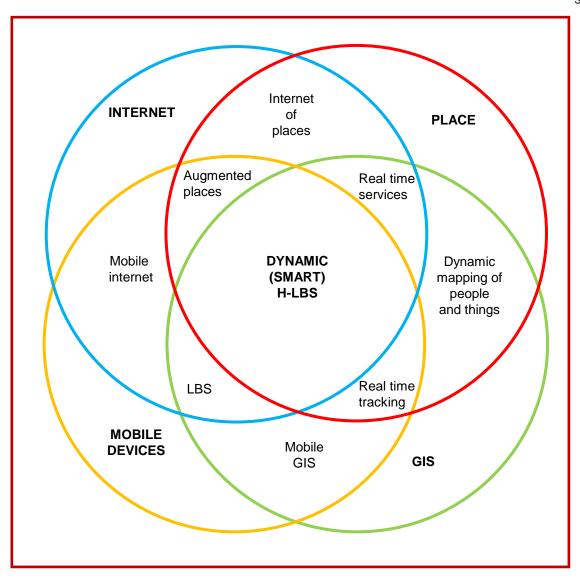
Sustainable Development ←→ Resilient Cities ←→ Smart Cities

Capability of designing good strategies and operating effective integration (smart governance)

To manage big data at urban scale and identifying new governance models (who owns the cities?)

To strengthen participatory planning process through new technologies (e-participation/geoblogs)

Public Space (Empowered by new technologies and related services) as new infrastructure of the city?





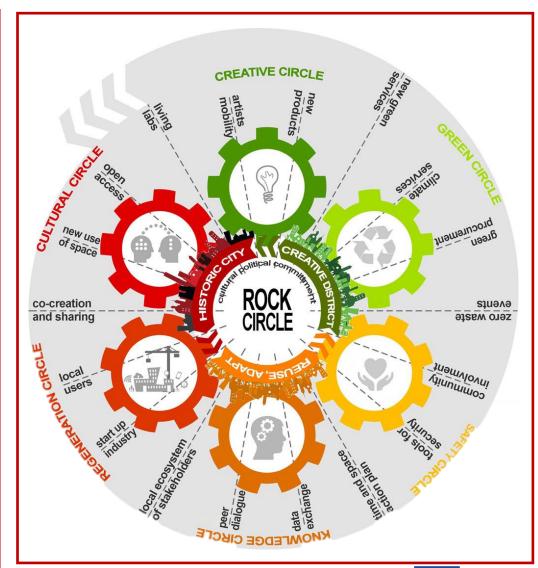


# Regeneration and Optimisation of Cultural heritage in creative and Knowledge cities

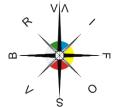
- ROCK develops an innovative, collaborative and circular systemic approach for regeneration and adaptive reuse of historic city centres. Implementing a repertoire of successful heritage-led regeneration initiatives, ROCK test the replicability of the spatial approach and of successful models addressing the specific needs of historic city centres
- Partners: 7 role model cities (Lyon, Torino, Liverpool, Vilnius, Cluj, Atena, Eindhoven) and 3 replicators (Lisabona, Skopje, Bologna).

#### Our role:

- Scientific partner supporting the transfer of Role Model initiatives, redefining access to public spaces cultural institutions and architectural monuments through LBS services;
- Expertise for three levels: creative urban environment, monitoring and management tools for results and impact assessment, heritage management.







# systEmic standardization apPRoach to Empower Smart citieS and cOmmunities

- Project financed through H2020. launched in January, 2016;
- ESPRESSO focuses on the development of a conceptual Smart Cities Information Framework, which consists of a Smart City platform (the so-called Smart City enterprise application) and a number of data provision and processing services to integrate data, workflows, and processes in applications relevant for Smart Cities within a common framework.
- http://espresso-project.eu

#### Our main role:

- Through the team members of ISOCARP, who are directly involved in the ESPRESSO project
- Leading activities of creating case studies, working directly with pilot cities and realizing indicators platform for smart cities.

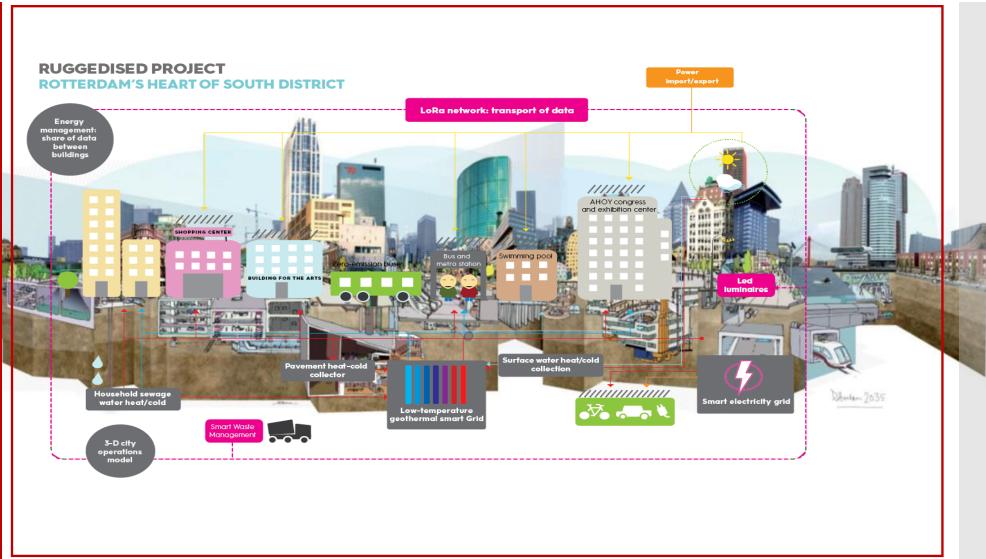


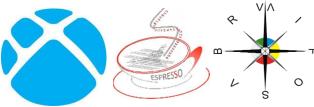




Creation of a long term learning process with companies, knowledge institutes, governments and civilians

Integrated informationand communication platform based on the 3D model of the city ('Urban Platform')



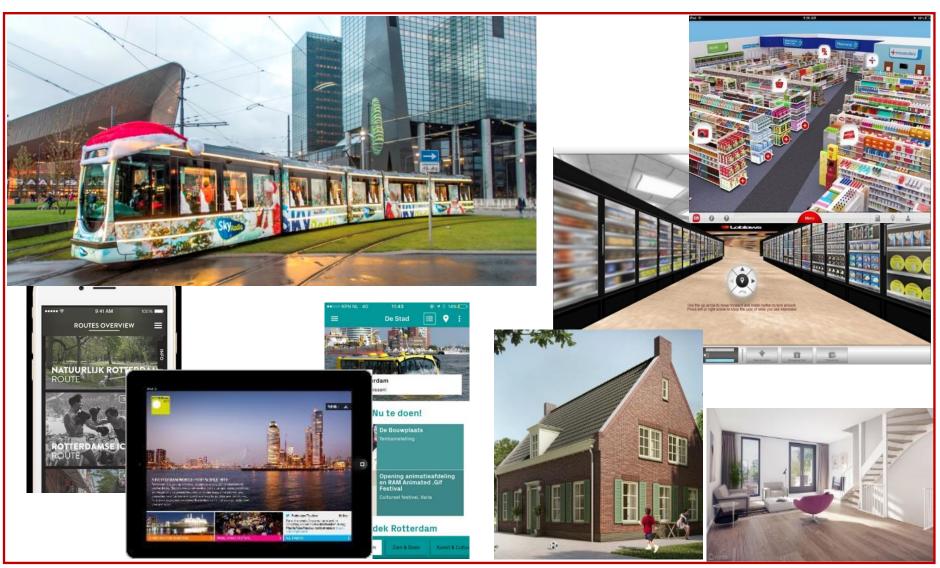


Public transport data

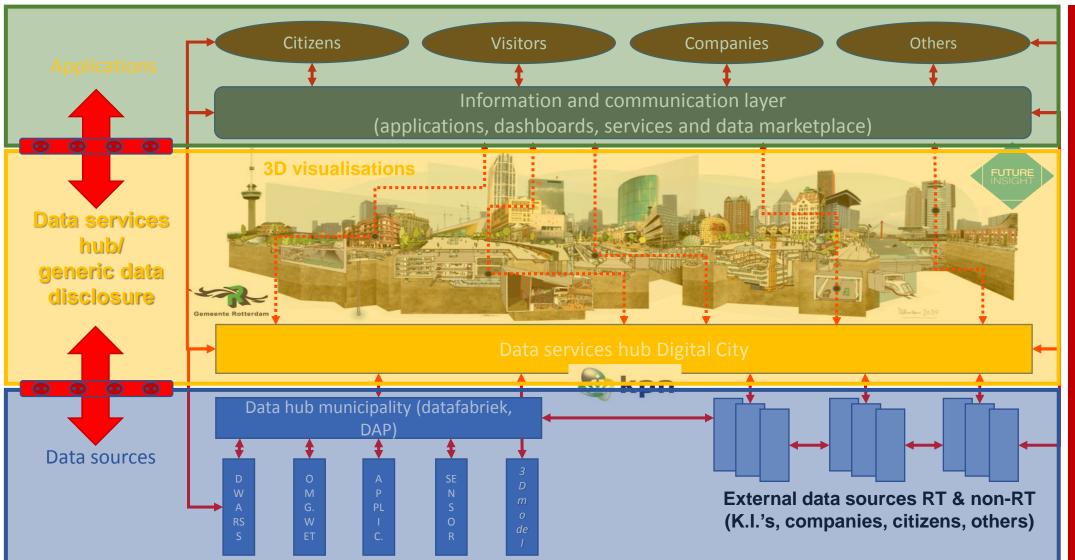
New forms of (virtual) shopping

Apps

Your own digital home, outside and inside

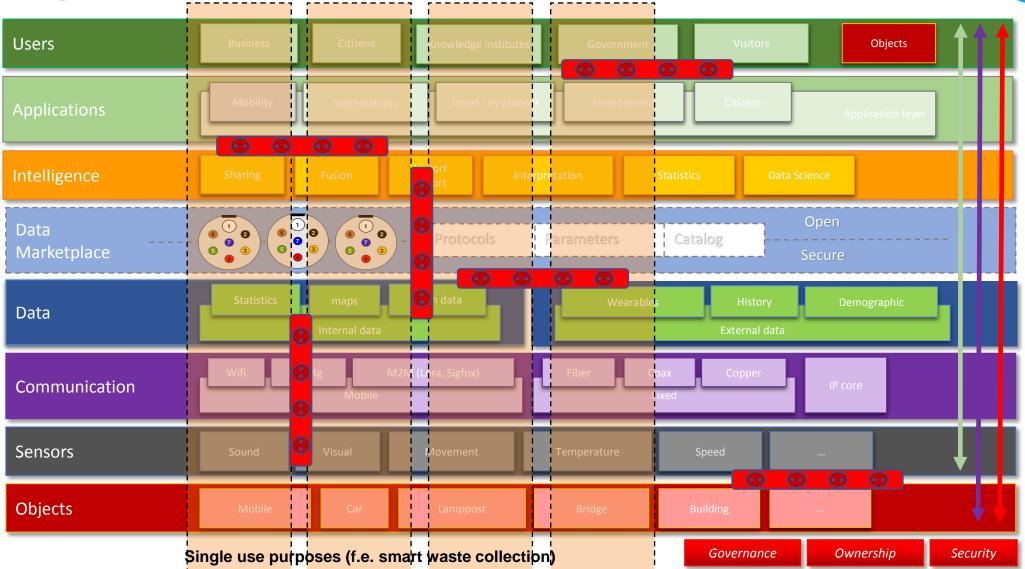






Basic design - Digital City



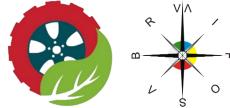


Smart City architecture: How to link "grand design" and reality: the way to integrated approach in smart cities management



# THE MEANING OF THE CRISALIDE PROJECT





CRISALIDE
City Replicable & Integrated Smart Actions Leading Innovation to Develop Urban Economies

Aim **Long-term** collaboration

Field **Research & innovation** 

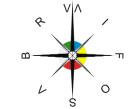
Stakeholders researchers companies (technology providers) public sector people international experts

Goal **Design&Implementation of Innovative Decision Making Tool (IDMT)** 

> Where Rostov-on Don, Russia







City Replicable & Integrated Smart Actions Leading Innovation to Develop Urban Economies

The novelty of the CRISALIDE research is in its methodology to enhance R&D and innovation through

bottom-up solutions and horizontal cooperation applied in the relation with urban space.

#### Integration of

technological, social and organizational innovations with territorial planning and urban design will allow

locating them into the space and provide cooperation of different actors through the space.

#### While innovations

in Russia currently are emerging in variety of areas of socio-economic development, innovations oriented to the urban space transformations and its use optimization are not presented.

#### However, such approach will

transform urban space into a kind of integrative platform, which will unite technological, social and organizational innovations.



#### **CRISALIDE**



City Replicable & Integrated Smart Actions Leading Innovation to Develop Urban Economies

#### **Gaps**

- top-down policy-making
- lack horizontal communications
- limits in cross-sectoral collaboration
- polarization of population around major urban areas
- peripheralization and depopulation of many areas
- underestimated local resources
- lack of consumer technologies
- reduced competitiveness and isolation
- managerial and economic dependence

CRISALIDE through the accomplishment of its objectives ensures a more bottom up collaborative approach which could give a real solution for the existing gaps.

The objectives of CRISALIDE aims to ensure through its methodology the fulfilment of the identified gaps.

The main gap in the current context is a top down approach and the lack of collaboration among foreign- local companies and the public sector and their decreased involvement in R&D investments.



City Replicable & Integrated Smart Actions Leading Innovation to Develop Urban Economies

# **Innovative Decision Making Tool (IDMT)**



Online platform (based on IGIS technology)



4 pillars innovative development schemes (specialized strategies)

- Energy, environment and climate change
  - Social innovation
- New and emerging technologies, ICT and mobility
  - Culture and tourism

- scalable networked systems of local innovation in partner cities
- co-creating community & smart communities
- replicable new business models
- promoting regeneration measures at urban scale
- promoting use of innovative technologies and smart mobility planning tools for designing projects leading towards zero carbon cities design

City Replicable & Integrated Smart Actions Leading Innovation to Develop Urban Economies



The CRISALIDE methodology to achieve its objectives is based on a simple vision:

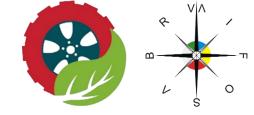
to establish a multi-stakeholder group for sustainable collaboration in the field of R&D and innovation through participatory workshops (IDS design) and the implementation of an online collaboration platform (IDMT). The methodology will implement changes in decision making at local level, allowing for a participatory approach which will include key multilevel stakeholders (institutions, enterprises, NGOs, R&D, etc.)

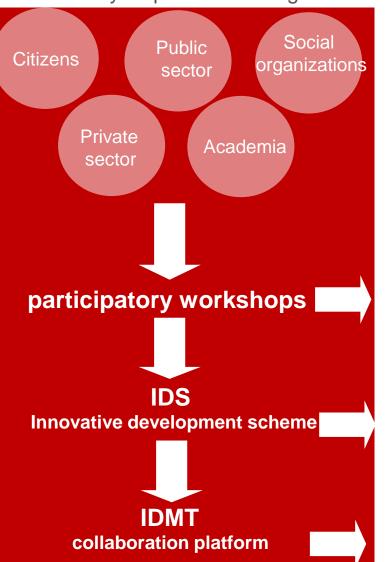
Following key factors are pillars of the methodology:

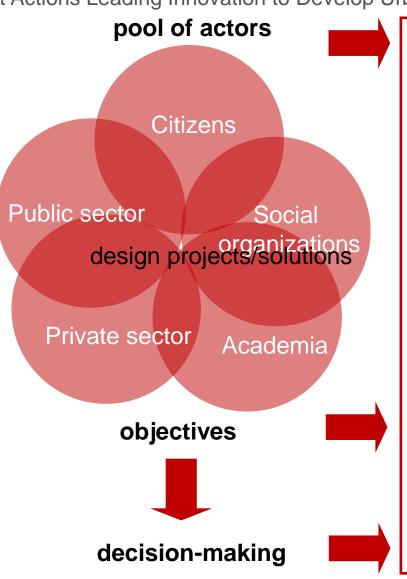
- To base the decision-making process on a pool of different actors (institutions, enterprises, NGOs and simple citizens associations) towards a pluralist perspective of the planning process leading to innovation.
- To design IDSs around credible and pragmatic objectives to be realized through a step by step thinking and acting.
- To respect and valorize natural and landscape resources in the definition of ground-breaking territorial and urban transformation.
- To be open to all innovative processes breeding up in social, economic and technological sciences.
- To promote culture and material / immaterial cultural heritage as development drivers.
- To promote and design projects/solutions based on international cooperation, with a specific focus on European Union Funds, but even of private investors/developers.

#### **CRISALIDE**









sustainable collaboration in the field of R&D and innovation

new business models
urban regeneration
innovative
technologies/procceses
smart mobility planning tools
zero carbon cities design
International cooperation's

urban transformation bottom-up policy making

#### INNOVATIVE POLICIES CONSIDER & HARMONIZE MULTIPLE PLANNING ASPECTS

#### **ECONOMIC REGENERATION**

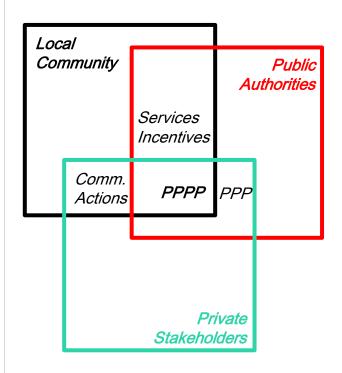
SOCIAL EXCLUSION

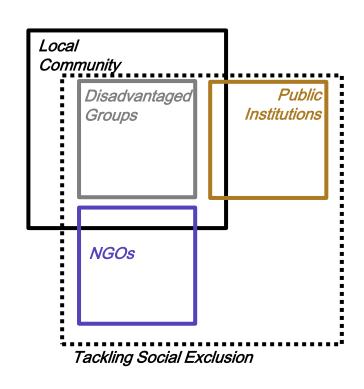
DEVELOPING AREA – BASED PERSPECTIVES/PLANNING ACTIONS

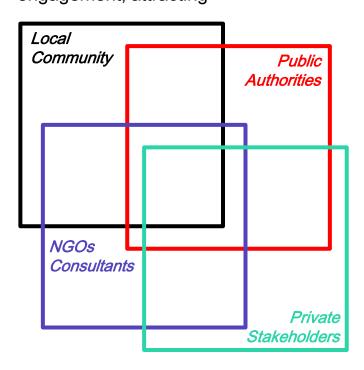
re-functionalization of different areas

decision-making process

Strengthening, institutionalization, engagement, attracting







#### CRISALIDE



City Replicable & Integrated Smart Actions Leading Innovation to Develop Urban Economies

INNOVATIVE
POLICIES
CONSIDER &
HARMONIZE
MULTIPLE
PLANNING
ASPECTS

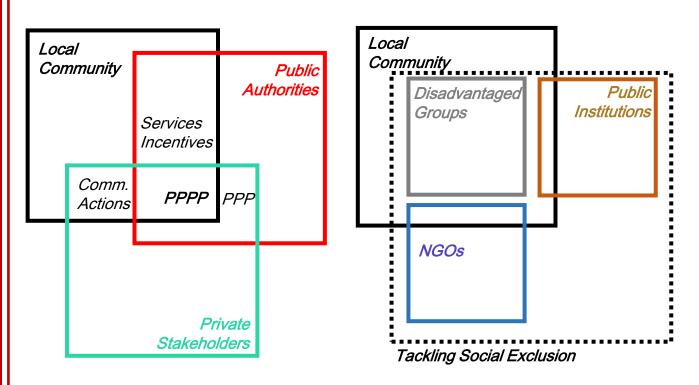
# ECONOMIC REGENERATION SOCIAL EXCLUSION

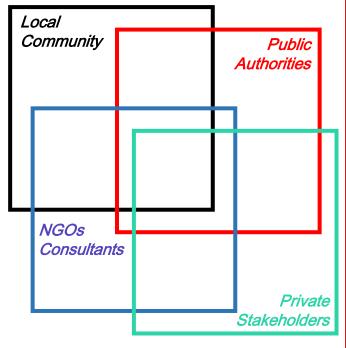
re-functionalization of different areas

decision-making process

#### DEVELOPING AREA BASED PERSPECTIVES/ PLANNING ACTIONS

Strengthening, institutionalization, engagement, attracting







City Replicable & Integrated Smart Actions Leading Innovation to Develop Urban Economies

## URBASOFIA & CRISALIDE

#### Our role

Scientific partner supporting to local actors to define and design of IDS.

Expertise for three levels: creative urban environment, integrated and sustainable urban and regional development, participatory planning processes and tools.

#### Main involvement

WP2 - Research and IDS design - a common research and co-design methodology will be set-up, URBASOFIA as leader of WP 2 will ensure the coordination of the initial phase of research (data collection – desk and field research—by all partners), and afterwards will coordinate together with Urban-Incerc the participatory co-design workshops for IDS.

#### **Activities to carry out:**

- Participatory workshop methodology
- Local context analysis
- IDS co-design workshop (methodology and facilitation)
- IDS schemes
- Design guide for IDMT
- Guidelines for IDMT replication

