



Project Results Catalogue ERA-NET Cofund

Smart Urban Futures

INTRODUCTION

Efforts are still required for cities to be more sustainable in a broad and substantial sense. There is a need for capacity building in urban administration and municipalities at large to realise urban transition pathways that implements new approaches, tools and technologies. This takes integrative procedures in how to bring about knowledge and implement solutions for transition pathways- to more sustainable urban futures. In 2017, fifteen R&I projects were approved in the ERA-NET Cofund Smart Urban Futures call (ENSUF), a collaboration between JPI Urban Europe and the European Commission, to address urgent and long-term urban challenges by co-creating ideas and projects.

Supported ENSUF projects end in 2020 and have together addressed three call topics: 1) Concepts and strategies for smart urban transformation, growth and shrinkage, 2) New dynamics of public services, and 3) Inclusive, vibrant and accessible urban communities (read more on page 11). The fifteen transnational project consortia have consisted of partners/experts from city administrations, civil society, businesses and academia from around Europe. The consortia have realised projects that co-developed solutions and strategies to tackle long-term urban challenges around the call topics.

The results of these activities, both short-term outputs and longer term outcomes, are important elements in policymaking around urban R&I, on EU level as well as in local governance.

JPI Urban Europe calls emphasize science-city cooperation and challenge-driven R&I where results help cities build capacities for urban transformation processes. Additionally, the ENSUF projects created insights, experiences and results on urban transformations that are valuable for the proposed Horizon Europe partnership Driving Urban Transitions to a Sustainable Future that will consider the learning and insights the projects harbour.

This result catalogue gives an overview of the methods, tools, knowledge(s) and conclusions that the projects have developed to approach pressing sustainability challenges (both economic, social, and environmental). It also includes information about how JPI Urban Europe manages its programme and financed projects with reference to both international policy agendas and strategic research and innovation.

Sections of this catalogue are based on result interviews that were conducted with ENSUF project coordinators and involved partners from outside academia. The interviews offer a glimpse of the people and processes behind the results, and give an increased understanding of the systems and models discussed in this catalogue. All interviews, associated materials, reports, policy briefs and videos are available via jpi-urbaneurope. eu.

This catalogue is part of the JPI Urban Europe Projects Catalogues series issued annually since 2016.

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CONTENT

Programme management		
The ERA-NETs: A European Funding Scheme	;	
ENSUF Funding Agencies and Participating Countries	;	
ERA-NET Cofund Smart Urban Futures		
Call topics	1	
Projects overview	1.	
A dilemma-driven approach	14	
The ENSUF projects	1.	
Smart Pedestrian Net	1	
LOOPER	1	
CAPA.CITY	20	
PLACED	2.	
Smart-U-Green	24	
Smart Urban Intermediaries	2	
SoHoLab	2	
Urban Education Live	30	
GLIMER	3.	
3S RECIPE	34	
BRIGHT FUTURE	3	
FLOODLABEL	3	
Cities of Making	40	
C3Places	4.	
FloodCitiSense	4	

PROGRAMME MANAGEMENT

BUILDING A COMMUNITY OF URBAN RESEARCH AND INNOVATION, IN POLICY AND PRACTICE

The Joint Programming Initiative (JPI) Urban Europe is an intergovernmental and strategic partnership of countries addressing the challenge of sustainable urban development through coordinated research and innovation. JPI Urban Europe has the ambition to establish as the European platform to create, discuss and make available knowledge and robust evidence for sustainable urban solutions and pathways. 20 European countries are engaged in the initiative and international collaboration beyond Europe has been established.

BECOMING AN FUROPEAN KNOWLEDGE HUB

Through joint calls, JPI Urban Europe continuously expands its portfolio of ongoing and completed research- and innovation projects. To achieve the maximum value from the funded projects and integrate results to strategic areas and policy developments, JPI Urban Europe has developed formats and routines for a continuous and dedicated programme management. This way, JPI Urban Europe has in the past years come to grow into a community of many hundreds of researchers and practitioners all over Europe that exchange results and insights across projects, calls and countries. Projects supported in JPI Urban Europe benefit from established strategies on results dissemination and exploitation and are active contributors to larger recurring events and arenas such as the Policy Conferences in Brussels, the AGORA Stakeholder Involvement Platform, the Urban Transitions Pathways Symposiums and popular cross-call Projects Meetings. Projects are actively featured in online channels - be it social media, web or webinar series like the Urban Lunch Talks where projects exchange impact stories with cities and relevant research and innovation stakeholders. Step by step JPI Urban Europe becomes the knowledge hub for urban transitioning.

FNABLING URBAN TRANSFORMATIONS

JPI Urban Europe builds capacities for urban development and policy implementation and stays attentive to European and global policy developments. The portfolio analysis aims to track how projects funded in the different calls relate to thematic priorities and dilemmas in JPI Urban Europe's Strategic Research and Innovation Agenda (SRIA 2.0) and other relevant policy frameworks. The program both hosts and joins various events, meetings, conferences and activities to integrate and relate call outcomes to global and European policy agendas. The Sustainable Development Goals (SDGs), The New Urban Agenda, the Urban Agenda for the EU, the EU Green Deal and the Leipzig Charter are all contexts where impactful, challenge-driven and transdisciplinary urban research and innovation is greatly needed. For the next seven year framework phase

in the EU, the proposal on the Driving Urban Transitions to a Sustainable Future¹ is intended as a central node and mechanism addressing the complex set of urban challenges with an integrated approach to offer decision makers in municipalities, industry and commercial actors, and society at large the means to act and enable the necessary urban transformations.

URBAN LIVING LABS - FOR LIVEABLE AND SUSTAINABLE URBAN NEIGHBOURHOODS

Several of these policy agendas, not least the updated Leipzig charter to be launched in November 2020, do indeed call for urban inclusivity and transitioning towards liveable and sustainable urban neighbourhoods. These are central ingredients to urban experimentation projects, sometimes labelled Urban Living Labs, which is a community in and around JPI Urban Europe that has come to grow stronger in the recent decade.

"To achieve the maximum value from the funded projects and integrate results to strategic areas and policy developments, JPI Urban Europe has developed formats and routines for a continuous and dedicated programme management."

¹ See European Commission, European Partnership – Driving urban transitions to a sustainable future (DUT), https://ec.europa.eu/info/files/european-partnership-driving-urban-transitions-sustainable-future-dut_en

THE ERA-NETs: A EUROPEAN FUNDING SCHEME

Since 2012, JPI Urban Europe is launching at least one call for research and innovation projects per year. Part of these calls are co-funded by the European Commission through their scheme of ERA-NET Cofunds. ERA-NET Cofund is an instrument of Horizon 2020 that supports and leverages cooperation of national R&I programmes and agencies across Europe. Through the ERA-NET Cofunds, the European Commission provides top-up funding and strengthens the relationship of the JPI Urban Europe programme to European strategies and priorities, e.g. the various related societal challenges of Horizon 2020. The ERA-NET Cofunds also facilitate the widening of participation of EU Member States or Associated States in such joint calls and programme activities. JPI Urban Europe launched its first ERA-NET call in 2014 and has since then launched four ERA-NETs in total, with two more in the pipeline.

The ERA-NET Cofund Smart Urban Futures (ENSUF) was published in 2015 and called for research and innovation projects that respond to a specific set of urban challenges. In ENSUF, research and innovation organisations have, together with city authorities, industry, and civil society worked with urgent and long-term challenges by co-creating projects to promote sustainable urban futures.

ENSUF FUNDING AGENCIES AND PARTICIPATING COUNTRIES

To the ENSUF call, a total amount of public funding of maximum EUR 23.8 million was provided by national and regional funding agencies from 18 European countries, including support from Horizon 2020. The JPI Urban Europe Call Secretariat consisted of FFG (Austrian Research Promotion Agency) and NCN (National Science Centre Poland). A total of 100 project partners from 17 countries participated in the funded projects with a majority from the United Kingdom, Belgium, Italy, France and the Netherlands. Figure 1 displays participating countries in the ENSUF call.



Figure 1: Country chart displaying participating countries in the ENSUF call.

Austria Belgium Cyprus Denmark Finland	AKA TEKES	Italy Latvia Lithuania Netherlands Norway Poland Portugal Romania	MIUR VIAA RCL NWO RCN NCN FCT UEFISCDI	Sweden Turkey Great Britain	FORMAS VINNOVA SWEA TÜBITAK total ESRC AHR EPSRC
France	ANR	Slovenia	ARRS (SRA)		LISING

Funding agencies from the different countries participating in ENSUF.

ERA-NET COFUND SMART URBAN FUTURES

Although integrated urban planning and development is called for since years, sector-specific priorities and strategies are still dominating and often neglecting interdependencies or synergies.

In addition, action needs to happen through dialogue: from a technocratic approach to one that recognises more diverse viewpoints and rationalities on urban futures. When the ENSUF call design process began in 2015, participating parties made sure to target these issues, and the need for integrative procedures in how to reach new knowledge and implement solutions for urban transition pathways.

The call was designed and established by JPI Urban Europe to initiate a transnational joint call for R&I proposals. The topics and application details were defined to nudge projects that aim for substantial impact in shaping smart urban futures.



Figure 2: Numbers of the ENSUF call - in short

CALL TOPICS

The projects supported in ENSUF, active between 2017 and 2020, have together addressed three call topics:

Concepts and strategies for smart urban transformation, growth and shrinkage

While patterns of transformation growth and shrinkage pose challenges to cities across Europe they also offer opportunities. The projects should create a better understanding of the interplay between cities and their surrounding rural areas in terms of landuse, transport, environment, energy, identify how transformation, growth and shrinkage dynamics can be exploited as an opportunity to revise spatial structures, decision processes and stakeholder cooperation and strengthen favourable practices towards better livelihoods and quality of life.

New dynamics of public services

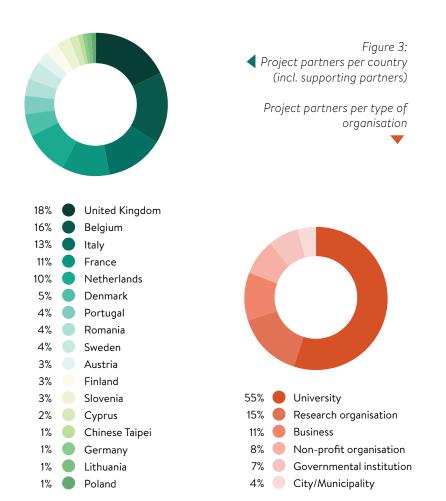
In recent decades many urban areas in Europe have seen a significant change in the structure and organisation of public service provision. Recent game-changing circumstances and dynamics stemming from economic, social and environmental trends intensify the necessity to rethink traditional models. This topic aims to develop new and innovative approaches in the realm of public services to increase the capacity of urban areas to answer local challenges.

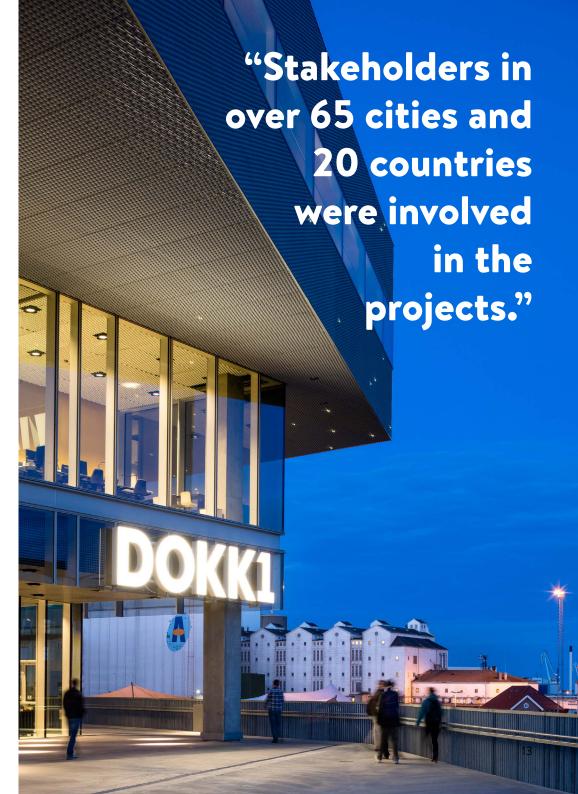
Inclusive, vibrant and accessible urban communities

This topic examines the everyday needs and challenges facing different social and cultural groups in the city, and how individual and community practices, urban governance, businesses, infrastructures and urban regeneration can support sustainable urban development and the peaceful integration of diverse communities.

PROJECTS OVERVIEW

The 15 awarded projects are all supported by consortia that include a mix of researchers from universities and research institutes, representatives from city authorities, business and NGO's. Over 10 % of formal project partners were city or government representatives; however, far more cities and municipalities were involved in the projects via urban living labs, case study areas or in co-creative processes. Stakeholders in over 65 cities in 20 countries were involved during the projects- both in formal and informal partnerships with the projects.





A DII FMMA-DRIVEN APPROACH

When ENSUF started, JPI Urban Europe was guided by its first Strategic Research and Innovation Agenda (SRIA) and its identified themes. In 2019, this SRIA was updated to version 2.0 that manifests a dilemma-driven approach to urban research and innovation. The SRIA 2.0 recognises that in practice, urban development and cities administration have to deal with multiple and sometimes counteractive goals and targets: having to make priorities amongst manifold issues and strategies . The SRIA 2.0 highlights four urban dilemmas in particular:

DILEMMA 1:

Digital transitions in urban governance



DILEMMA 2:

From urban resilience to robustness



Dilemma 3:

Sustainable land-use and urban infrastructures



Dilemma 4:

Inclusive public spaces for urban liveability



Consequently, project results in this catalogue have, in retrospect, been marked with one or more dilemmas their results contributed to. Most of the ENSUF projects are broad in scope, i.e. they both connect and interrelate with several urban dilemmas rather than fit neatly into one of them. However, these attempts to tag projects with thematic urban dilemmas, provides a first indication of where important contributions from projects can be expected- and how joint efforts and activities together with, and in between, the projects can be facilitated.

THE ENSUF PROJECTS

Though diverse in scope and research, similarities in the outcomes have been identified among the projects as they come to an end. Some common aspect are the emphasis on inclusive urban change, wide stakeholder involvement partnerships, learning as means for scaling-up results, and participatory methods. One can also spot an interest in the innovative aspects around issues of inequality and how neglected urban areas carry a key role for urban robustness. In this sense, the projects have not only targeted urban mobility as a physical attribute to cities, but as social mobility and accessibility as means for sustainability.

A majority of the projects have challenged "business as usual" in urban infrastructures and governance. They reflect on "smart urban futures" by means of how learning, narratives and place development is currently practiced in European cities and where this is taking us. Having said that, projects do not leave their results to criticism but suggest ways forward by uncovering the added value of their results, and integrated approaches at large. About half of the ENSUF projects have practised methods central to Urban Living Labs, and there are even signs of "Urban Living Labs 2.0" amongst the ENSUF projects. Urban Living Labs 2.0 is an effort in the JPI Urban Europe community to enhance not least the transformation capacities of Urban Living Labs (read more at our web).

Supported projects have created a variety of outputs: from toolboxes, methodologies, policy papers, news articles, academic publications, to videos, events and web and social media content around their impact. These are outputs that JPI Urban Europe has helped communicate during the past years via our channels and events. Together with the projects and the JPI Urban Europe community efforts have been made to increase the call's wider and long-term impact. Once this result catalogue has been launched at the ENSUF final event in September 2020, JPI Urban Europe will work on an in-depth synthesis of the call.

Please visit the project's websites to access their specific materials and outputs. The following sections contain descriptive summaries of each ENSUF project's conclusions and messages.



SMART PEDESTRIAN NET

SMART CITIES ARE WALKABLE: SPN – A MODEL TO PLAN A PEDESTRIAN NETWORK AND A PEDESTRIAN NAVIGATION SYSTEM

TOWARDS A MODEL FOR URBAN WALKABILITY AS MEANS FOR SUSTAINABILITY

Smart Pedestrian Net (SPN) set out to provide a model that helps European cities to improve walkability as one of the important dimensions of smart, sustainable and inclusive development. The project partnered with the cities of Bologna and Porto and had three main goals: 1) assess the conditions provided to pedestrians; 2) estimate the cost and benefits of promoting walkability; and 3) develop a navigation system, by combining specific criteria with pedestrian preferences.

Walking is good for business, for example, a city like Porto (a hot spot for tourism) could still reap economic gains from improved urban walkability. Yet, these days many planners may not know where to begin. Existing tools and apps around walkability and navigation in cities are either built for finding your way around- or for redesigning the urban landscape, but no existing tool connects both elements together.

A PROTOTYPE APP FOR BEHAVIOURAL CHANGE- AND A MODEL FOR EFFECT-FUL PLANNING DECISIONS

Smart Pedestrian Net created a mobile application that benefits both policy makers and citizens. The application is made to show urban residents the best way to walk

around their city but is more than yet another navigation app: the idea was to use both tech and dialogue to achieve behavioural change whilst, simultaneously, create a model that informs planners on what specific actions can incentivise people to walk in a certain area. In the app, users can plan a journey tailored specifically for their city, highlighting the best possible walking routes. At the same time, the app utilizes user feedback about what they like and what they don't like about their journey, generating a model for city planners that pinpoints the exact locations in cities that stop people from abandoning their cars and attend to walking as an alternative. The app takes into account elderaly or people with dissabilites (indicating hills etc.) and suggested routes for safer routes at night. In short: The prototype mobile application connects pedestrians and planners head-on by creating a dialogue process.

The project argues that cities need to work more to engage citizens and stakeholders in the urban planning process to recover walkability. The SPN results can make cities embrace the idea that citizens and stakeholders can articulate their ideas and concerns, and contribute to creative and innovative solutions that promote pedestrian networks in cities.

PROJECT FACTS

Duration: 2017-2020 **Involved Cities:** Porto and

Bologna

Partners: University of Minho, European University Cyprus (EUC), SYSTEMA Research Centre ASIDEES, Porto Municipality, Bologna Municipality, University of Bologna

Budget: 985.000,00 EUR

Web: jpi-urbaneurope.eu/project/

smart-pedestrian-net/

Result interview: jpi-urbaneurope. eu/smart-pedestrian-net-result-interview

E-mail: rui.ramos@civil.uminho.pt





LOOPER

LEARNING LOOPS IN THE PUBLIC REALM

TACKLE TRAFFIC CONGESTION, SAFETY AND POLLUTION WITH LEARNING LOOPS AND CITIZEN-SCIENCE

Problems such as traffic congestion, safety and pollution are difficult to tackle as the mitigation involves multiple urban stakeholders. The Urban Living Lab project LOOP-ER set out to help by creating a participatory co-creation methodology and platform that demonstrates 'learning loops': the ways of decision-making that bring together citizens, stakeholders and policy-makers to iteratively learn to handle such urban challenges. The method has three steps: 1) Problem identification, 2) Co-designing solutions, 3) Co-implementing and monitoring. In the problem identification step, you systematically categorise the desires of residents and other stakeholders. In the second step, participants (such as citizens and policy makers) co-design solutions and collectively generate and evaluates ideas (for example limited speed zones). In the final step you co-implement and monitor the solutions proposed.

When failures and conflicts are identified within a loop, these are recognised and modified in the next loop. The project's first loop took place around a street in Brussels where residents had had enough of road incidents and unsafe road environments. Through workshops, over 40 ideas were generated so the team adopted the Multi-Actor Multi-Criteria Analysis (MAMCA), a software program that identified the potential synergies and conflicts amongst the ideas. The process showed that raising traffic

safety awareness was the option that generated the least conflict and carried the most consensus. After testing and evaluation, it was concluded that more drastic measures were needed in the second loop, whereby LOOPER worked with citizen science (for instance, residents were given air quality monitors and speed monitors) and tested the concept of school streets and road signs indicating to motorists that hey are bypassing someone's home.

PARTNERSHIPS THAT MATTER- ALSO AFTER THE PROJECT FINISH LINE

One out of many lessons learned in the LOOPER project is the importance of aligning with, and including, the local government. You need buy-in from the local government if you want to persuade people that you can improve road safety with citizen-science. Projects designed in universities and municipalities do not always immediately resonate with local residents. LOOPER involved community development officers to help partner, face-to-face, with communities affected by the issue, to explain that they were part of the solution, and not just observed in a research study. For many residents, the university was geographically close but mentally distant (a place they've never been to in the city), but this changed in some aspects during the project and residents feel valued.

PROJECT FACTS

Duration: 2017-2020

Involved Cities: Manchester, Brussels, Verona

Partners: University IUAV of Venice, University of Manchester, S4B, BRAL Citizen Action Brussels, Clicks and Links Ltd., City of Verona,

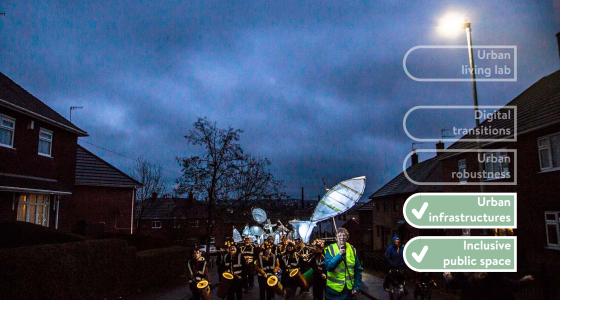
Legambiente

Budget: 1.287.000 EUR

Web: looperproject.eu/

Result interview 1: jpi-urbaneurope.eu/looperresults1 **Result interview 2:** jpi-urbaneurope.eu/looperresults2

E-mail: imre.keseru@vub.be



"The Flemish collective are even getting into conversations with large local actors (...) about bigger structural changes in their area."



CAPA.CITY

BUILDING CAPACITY TO TRANSFORM EXISTING RESIDENTIAL SUB-DIVISIONS INTO SMART AND ROBUST URBAN ECOSYSTEMS

CAPA.CITY developed a theoretical and operational framework to support collective capabilities- and create smart and robust urban ecosystems. The project operated in in five residential subdivisions located in Belgium, Denmark and France.

SUBURBANITIES-TOWARDS COLLECTIVISM OVER INDIVIDUALISM?

Many suburbs were built in a time where people held ideals based on rugged individualism and had aspirational notions of suburban affluence. Can we still articulate and express what the good suburban life looks like? CAPA.CITY has offered suburbanites tools to create collectives that co-designs solutions and strategies for connecting with institutions that have the capacity to realise change. CAPA.CITY looks at a very specific type of suburban dwelling, commonly found in Europe, classed as residential subdivisions. These are typically "detached single-family houses built from the sixties onwards." in Marseille, France; Roskilde, Denmark; and Stadsregio Turnhout, Belgium. These places represent a range of European experiences and are suitable for the project's capacity building methodology.

METHODS FOR CAPACITY BUILDING IN SUBURBANITES

CAPA.CITY successfully identified three location-based experimental learning methods which allow researchers to build trust and create a proper picture of suburban life: prototyping, telling and enacting. When in the process with residents, CAPA.CITY did

not start with big issues like the environment and the economy. Instead, they started by focusing on building a personal story around a specific area. Final results display that modern suburbanites are much more open to collective action than their predecessors (such as removal of fences, shared gardens, sharing storage space). CAPA.CITY has provided residents with a toolkit/game to create a network of useful contacts, tools needed for change, and an understanding of the processes for engagement with larger actors to last after project deadline. For instance, The Flemish collective are even getting into conversations with large local actors about bigger structural changes in their area.

PROJECT FACTS

Duration: 2017-2019

Involved Cities: Périgueux, Aix-En-Provence, Turnhout, Lanaken, Ågerup,

Nykøbing, Asnæs

Partners: Hasselt University, Intrastructures, Roskilde University, GivRum,

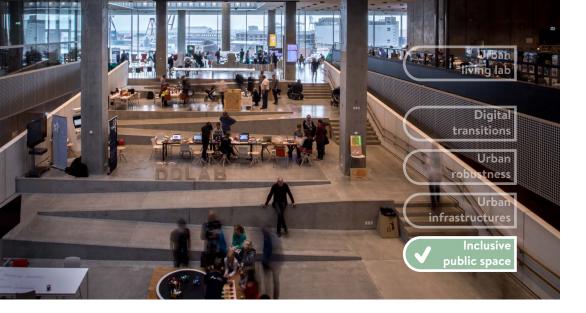
Ecole Nationale Supérieure d'Architecture de Marseille, In Vivo

Budget: 472.000 EUR

Web: www.capa-city-ensuf.eu

Result interview: jpi-urbaneurope.eu/capacityresults

E-mail: oswald.devisch@uhasselt.be



PLACED

PLACE- AND ACTIVITY-CENTRIC DYNAMIC LIBRARY SERVICES

In the twenty-first century, libraries may have a new role to play as facilitators of knowledge generation. Results from the PLACED project demonstrate that with the right digital tools, libraries can still play a very important role as spaces for knowledge generation and accessible, free- of charge indoor public space.

PUBLIC LIBRARIES ROLE IN THE FUTURE- FROM KNOWLEDGE DISTRIBUTION TO KNOWLEDGE GENERATION?

Whereas library services up until now have been to provide access to a collection of media, PLACED services support activities. Despite hosting and facilitating many workshops and lectures, libraries simply do not have the digital tools necessary to capture all of the knowledge even when events generate knowledge that is highly valuable and relevant to the needs of the local area. PLACED creates a system that captures, catalogues and connects public events that happen in the library space with its existing digital resources. One such example is art workshops for children, which have been made better accessible also online and in real time in case someone can not be there in presence.

STRATEGIC URBAN PARTNERSHIPS FOR LONG-TERM OUTPUTS

The project explicitly set up their consortium without any formal industry partners because it aims to create digital services that can be shared for free in the long-run. The PLACED team supported the time-pressured library staff in Aarhus to work on their

long-term perspective. It was in this long-term perspective that experimentation was needed, to learn and reflect as "learning from mistakes" helps you understand your organisation better and at the same time you test what the future might hold. Every success and failure helps achieve their long term vision for Aarhus Public Libraries: making the library a public space for knowledge creation. PLACED operated in three very different library systems: Aarhus (Denmark), Gothenburg (Sweden) and Lyon (France), to ensure their digital tools are widely applicable.

LOOPER services capture knowledge generated through activities, make them a part of the collection, and allow future library users to access them. In this way, PLACED helps break down the institutional walls of the library and make it an integrated part of urban life, by creating an ever-evolving collection built on urban activities and knowledge generation that can also be useful for the city.

PROJECT FACTS

Duration: 2017-2019

Involved Cities:

Aarhus, Gothenburg, Lyon

Partners:

Aarhus University, Denmark, CNRS – LIRIS, ENSSIB, Chalmers University of Technology, Dokk1 – Aarhus Public Libraries, Bibliothèque Municipale de Lyon, Library of Lundby – City of Gothenburg, Interactive Institute

Swedish ICT **Budget:** 1.278.000 EUR

Web: www.placedproject.eu **Result interview:**

jpi-urbaneurope.eu/placedresults **E-mail:** dalsgaard@cavi.au.dk





INCLUSIVE PUBLIC SPACE, MORE GREENERY AND GOVERNING CONFLICTS

In trying to find areas of consensus between different stakeholders, the project adopted an interviewing method where interviews choose from pictures of a variety of urban landscape features. Although carried out in different countries, the project revealed two universal desires with regards to urban landscapes: more public space that is "inviting, lively and offers a sense of belonging" and the principle of more greenery in the urban landscapes. SMART-U-GREEN also highlights that democratic decisions and sustainability-oriented-decisions don't always marry in urban landscape governance. Some people have lived in urban environments for such a long time that natural environments actually feel unnatural and hence unwanted to them.

And as for conflicts, coalitions (especially between government and citizens) are more motivated to persist when searching for solutions that satisfy everyone. Governments must reflect carefully on their existing political cultures if they want to genuinely generate urban landscape solutions that make their citizens happy and works in the long run.

SMART-U-GREEN

GOVERNING CONFLICTING PERSPECTIVES ON TRANSFORMATIONS IN THE URBAN RURAL CONTINUUM

Urban landscapes witness transformations that affect the quality of both the urban landscape, and the quality of life. Such transformation (including bottom-up initiatives, community gardens, and more) come with conflicts involving many actors. Together with local governments, businesses, citizen initiatives and NGOs, Smart-U-Green has analysed existing governance structures for their capacity to create sustainable and inclusive urban landscape solutions, in the Netherlands, France, Italy, Croatia, Russia, and Ukraine.

THREE MAIN GOVERNANCE OBJECTIVES THAT CREATE CONFLICTS

Results reveal three main governance objectives that tend to create conflict over urban landscape design. The first is to preserve ordinary urban landscapes; these are spaces people associate with identity and belonging. The second is to create environmentally sustainable urban landscapes. The third governance objective is to create economically viable urban landscapes. Current governance practices and routines make it difficult to generate urban landscapes design that are considered sustainable from both ecological and economic perspectives. Smart-U-Green found that existing conflicts are exacerbated by a governance bias towards projects that make building and transport infrastructure- over the ones that create new green spaces or that preserve existing spaces.



PROJECT FACTS

Duration: 2017-2020

Involved Cities: Drechtsteden, Regione Marche, Grand Reims, Zagreb, Pskov, Mahilioŭ

Partners: DRIFT, Erasmus University Rotterdam, SAAD, University of Camerino, IATEUR IRCS, Université de Reims, Regio Drechtsteden, Marche Region, Grand Reims, University of Guelph, University of Zagreb, Pskov State University, EKAPRAEKT, CIVILSCAPE Budget: 1.101.000 EUR

Web: www.smartugreen.eu/project/
Result interview:
jpi-urbaneurope.eu/
smartugreenresults
E-mail: hisschemoller@drift.eur.nl



Photo: Smart Urban Intermiediaries

SMART URBAN INTERMEDIARIES

SMART URBAN INTERMEDIARIES – TRANS-EUROPEAN RESEARCH, LEARNING & ACTION

In smart cities technology and data is considered central to improve urban systems. However, projects like Smart Urban Intermediaries (SmartUrbl) argue that you cannot have smart growth without a human touch. The project ran urban living labs (ULL) in Birmingham, Copenhagen, Glasgow and Amsterdam to advance knowledge of how intermediaries innovate and generate smart urban development and innovation, and create opportunities for dialogue and learning.

STUDYING SMART URBAN INTERMEDIARIES (SUI) ACROSS EUROPE TO ENABLE POSITIVE URBAN CHANGE

The Smart Urban Intermediaries project has investigated the different ways in which certain individuals use their skills, energy and contacts to make a difference for neighbourhoods- the so called Smart Urban Intermediaries (SUI). SUI tend to have social skills, an understanding for multiple urban issues, and knowledge of their neighbourhood. The project SmartUrbI made observation studies, rough SUI together from different areas, and conducted over one hundred interviews with forty SUI in four cities, looking for what SUI require to be a source of positive change for urban areas. In other words, the project studied not urban problems or challenges per say, but the people that try to fix them.

ALLOWING THE RISKS OF UNCERTAINTY TO SUPPORT DRIVEN COMMUNITY- AND PLACEMAKERS

Results circle around two key findings in particular: 1) SUI does community making and placemaking and 2) SUI builds networks and grow and flourish from being part of networks. SUI tend to work very resources efficient and their work is place oriented to bring about change. Their work in turns creates networks, and when SUI were invited to transnational labs to meet SUI from other countries, they reported a steep learning curve from the exchange. SUI are very driven community makers and from studying this, SmartUrbal developed recommendations to help SUI also take care of themselves in this hard and committed work

The project has put forward recommendations for how organisations and local governments, as well as R&I programs, can create the conditions that enable intermediaries to become even more effective and resilient- and how not to build structures that tend to favour tech innovation only. On this note, the project encourages trust between decision makers and SUI and to "allow the risks around uncertainty"- considering that SUI operate and bring about value and change outside more formalised initiatives.

Partners involved in the SmartUrbl project argues that intervention, prevention and investing in this piece of work will not only add value but may save money. The vision of a socially smart city creates the opportunity to develop, amplify and deepen their impact long into the future.

PROJECT FACTS

Duration: 2017-2019

Involved Cities: Amsterdam, Copenhagen, Birmingham, Glasgow

Partners: Tilburg University, Roskilde University, The University of Edinburgh,

University of Birmingham, Danish Town Planning Institute

Budget: 1.119.000 EUR

Web:

www.smart-urban-intermediaries.com/

Result interview:

jpi-urbaneurope.eu/smarturbiresults

E-mail: m.j.vanhulst@uvt.nl



SoHoLab

THE REGENERATION OF LARGE-SCALE SOCIAL HOUSING ESTATES THROUGH LIVING LABS

In many European countries, social housing estates are in dire need of renovation and investment, but the issues are generally tackled independently from one another. So-HoLab developed an integrated approach towards the renovation of public and collective spaces of such estates. The approach was tested and refined via existing projects in Paris, of an ongoing living lab experience in Milan and in new living lab projects in Brussels and Paris. How can tenants be effectively involved in renovation processes, and how such involvement can align with top-down planning processes? The three cities were choosing partly because they embodied very different approaches to social housing, so to increase chances that project results and learnings are useful to more contexts.

VALUABLE INPUT GAINED FROM USING LIVING LABS METHODOLOGY- CITIZEN ENGAGEMENT TO CREATE FOCUSED GOALS

It is often poor organisation which is primarily responsible for the exclusion of local perspectives. SoHoLab argue that living in estates in the only way to understand them. The project applied a living lab methodology to have local voices at the centre. A close working relationship with residents allowed the project's researchers to quickly dispel their own inaccurate preconceptions. Once such as preconception was that public spaces around estates would be of priority but they learned from residents that it was the quality of their housing units themselves that were of very great concern to them.

SoHoLab's results display for example that successful citizen engagement can help create focused goals. Through their discussions with residents, SohoLab's researchers narrowed their aims down to a few core objectives. The first was to become a voice for these residents. Using clear and practical examples, the researchers convinced estate managers and designers that visiting the individual apartments and talking to the residents is crucial to getting a full understanding of the condition of the building. It creates critical feedback loops between residents and decision-makers.

INCLUSION AND STORYTELLING-KEY FOR UPGRADING SOCIAL HOUSING ESTATES

The project reaffirmed that media's portrayal of social housing estates sometimes lacks nuance and depicts a narrow segment of the lived reality in these areas. Residents in social housing estates care about their homes but have a variety of ways of showing it. The SoHoLab Brussels team created a digital storytelling project, where they let resident's narrative focus go wherever the residents wanted it to go. This way, planners and policy makers can receive a revised view of the neighborhood. Adding to this, the project identified the need for a system of coordination for social housing, noticing that there were sometimes four or five different organisations working on separate programmes in the exact same estate without communicating or sharing learnings with each other.

IMPROVED QUALITY OF PUBLIC SPACE FOR KNOCK-ON EFFECTS ON THE LOCAL ECONOMY

Social housing estates are not just residential spaces. For instance, some mechanics in Paris were using the estate's car parks as workspaces. If planners were equipped with this understanding, they could see that improving the quality of playgrounds and street parking would have beneficial knock-on effects for the local economy.

PROJECT FACTS

Duration: 2017-2020

Involved Cities: Paris, Milan, Brussels

Partners: Cosmopolis – Vrije Universiteit Brussel, Société du Logement de la Région Bruxelles Capitale, Samenlevingsopbouw, Habitat et Rénovation, DAStU – Politecnico di Milano, Éupolis Lombardia, Osservatorio Regionale sulla Condizione Abitativa – Regione Lombardia, Azienda Lombarda Edilizia Residenziale, Associazione Temporiuso, AHTTEP – AUSSER – École Nationale Supérieure d'Architecture Paris La Villette, AA Feraru, Immobilière 3F

Budget: 1.067.000 EUR

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Result interview: jpi-urbaneurope.eu/soholabresults

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Photo: Urban Education Live / atu.or.ro

URBAN EDUCATION LIVE

INNOVATIVE URBAN EDUCATION IN LIVE SETTINGS – LOCAL PRESENCE AND MAPPING TECHNOLOGY AS TOOLS FOR URBAN CAPACITY BUILDING AND INNOVATION

Urban Education Live (UEL) provides alternative strategies for teaching marginalised communities outside the university environment. The project conducted research in Salo in Finland, Ljubljana in Slovenia, Bucharest in Romania, and Sheffield in the United Kingdom.

UNIVERSITIES AS CATALYSTS OF INCLUSIVE URBAN CHANGE

Urban Education Live created and tested a new model of collaboration between universities and urban communities. Here, universities act as catalysts of urban change through trans-educational urban capacity building. A local agenda and a high sensitivity to situated knowledge was put forward using social mapping, benefitting both students and local communities. The project's local hubs for learning created new networks and fostered local innovative ecologies. The flexible set of methods, technologies and theory developed by the projects makes it possible to test and implement the model on a larger scale.

EMBRACE HYBRID INSTITUTIONS AND LIVE LEARNING TO WORK WITH MARGINAL-ISED COMMUNITIES

Hybrid institutions are partnerships between a university and local actors like schools and NGOs. It was proven important that universities step outside their traditional role

of educator and researchers and, for instance, embrace the role of meditator. In those situations where the university shoulders the role of educator, it requires an awareness of that their traditional methods of pedagogy will not necessarily work with marginalised communities.

Urban Education live practised a live learning approach in their process. This meant two principles: 1) "Create new pedagogical forms" tailored for the target audience. An example is a successful game-based learning approach they tailored in Finland to appeal to a young and entrepreneurial group. 2) Embrace experimental urban space: using or creating spaces that are meaningful and familiar to marginalised communities, such as the Live Works urban room in Sheffield. The project focused on processes that allow universities to use existing spaces effectively, and temporary spaces more than creating permanent spaces. This way, they could compare and evaluate all sorts of spaces (such as a business shopping mall in Salo to an old Tobacco factory in Ljubljana) instead of trying to construct a single ideal one.

The project now wishes to develop the learnings into a network and a toolkit for universities to effectively collaborate, learn and create change together with the valuable knowledge, drive and vitality that the project identified in certain marginalised communities.

"The project's local hubs for learning created new networks and fostered local innovative ecologies."

PROJECT FACTS

Duration: 2017-2019

Involved Cities:

Ljubljana, Tampere, Sheffield,

Bucharest

Partners: Tampere University of Technology, University of Sheffield, University of Liubliana, Urban

Transition Association **Budget:** 1.600.000 EUR

Web: jpi-urbaneurope.eu/project/urban-education-live/

Result interview: https://jpi-

urbaneurope.eu/urbaneduliveresults

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GLIMER

GOVERNANCE AND THE LOCAL INTEGRATION OF MIGRANTS AND EUROPE'S REFUGEES

GLIMER set out to investigate innovative solutions that can transform the migration 'crisis' into an opportunity for European cities. The project generated theoretically informed but empirically grounded data from both urban and rural locations that have hosted refugees and asylum seekers. The results and best practices have been shared at various stakeholder roundtables organised by the consortium. Written reports and policy briefs advise policymakers and stakeholders on how find ways to integrate displaced migrants and refugees and suggest recommendations to improve this process. GLIMER studied local governance of new arrivals and integration in both small and medium sized cities in both Southern and Northern Europe (with a particular focus on Cosenza in Italy, Nicosia in Cyprus, Glasgow in Scotland and Malmö in Sweden). Are municipalities and local/regional governments better at creating sustainable refugee policies than national governments?

THEMES AND KEY ACTORS THAT BROUGHT FORWARD POLICY RECOMMENDA-TIONS

GLIMER identified four themes which were appropriate for comparing refugee policies: labour market participation, education and language training, housing, and gender dynamics. It was important to consider gender across each theme because there are specific issues that require policy consideration. The project identified key actors in

each city (NGOs, local government actors and charities) and brought these actors together on an international level to support and learn from each other's policies and processes.

CITIES BETTER EQUIPPED FOR REFUGEE POLICIES THAN STATES

GLIMER found that cities often tell more coherent policy stories than those produced at the national level. National strategies can be challenged and changed from experience and stories told by local services about the practical consequences of certain ways of administration and strategizing. National governments operate at a scale where the consequences of their decisions are not immediately to them, as opposed to on a local level. National policy revisions can be successful when local insights are reverse engineered to a national level. However, the scope for action by local governments is very different in the four contexts that were studied.

The research conducted by GLIMER highlights how, in shrinking cities, refugees can also reverse the negative consequences of depopulation and resuscitate local economies. Working on refugee policy on an international level is not just beneficial for states but cities and the project gained a lot from practising the ability to learn from each other across national borders. What they have in common, is the increasing importance of effective non-state actors in refugee policy- for instance in language studies. Often it is the third sector which creates a safety net and plugs the gaps when providing services for displaced migrants.

GLIMER created bridges between local efforts and the national government than can last beyond the end of the project. More work needs to be done on the links between the policy areas of housing and health, well-being and social cohesion. Learn more about GLIMER's policy proposals.

PROJECT FACTS

Duration: 2017-2020 **Involved Cities:** -

Partners: University of Edinburgh, University of Calabria, Malmö University,

Mediterranean Institute of Gender Studies, University of Glasgow

Budget: 1.384.000 EUR

Web: www.glimer.eu

Result interview 1: https://jpi-urbaneurope.eu/glimerresultspartner

Result interview 2: https://jpi-urbaneurope.eu/glimerresults **E-mail:** nasar.meer@ed.ac.uk , timothy.peace@qlasqow.ac.uk



3S RECIPE

SMART SHRINKAGE SOLUTIONS: FOSTERING RESILIENT CITIES IN INNER PERIPHERIES OF EUROPE

Urban shrinkage has been going on since the latter half of the 20th century, and the issue of continuous population decline has affected well over 1,500 municipalities across Europe alone. Though appearance of urban shrinkage is fairly universal (empty city centre shops, falling property values, reduced town-centre vibrancy), the causes can vary. It can be the removal of business and jobs from the city core to cheaper land on the periphery, out-migration and disinvestment of capital, an aging population, a declining tax-base and many other causes.

3S RECIPE has learned from the experience of the cities that once were on the edge of an abyss but have bounced back to life, and shared the key ingredients of their success across Europe and beyond. This way, 3S RECIPE helps shrinking cities to adapt, transform, and thrive in the face of continuously and often dramatically changing circumstances

UNDERSTANDING AND HANDLING DEPOPULATION: AN URBAN FUTURES METHOD-OLOGY

3S RECIPE operates in a total of seven different cities and seven different countries. It has identified and examined policy prescriptions for smart shrinkage solutions implemented over the past twenty years and has focused on three major 'slow burn' factors for urban shrinkage: deindustrialisation, suburbanisation, and negative population change. In each city, the local stakeholders, including the local authority, businesses, charities, urban practitioners, and citizens have identified alternative policy options for regenerating the local

economy, containing urban sprawl, and making vital liveability improvements to attract potential newcomers and retain talented university graduates.

The Urban Futures Methodology (UFM), previously developed as a civil engineering fore-sight tool, was repurposed for the project's aims. To decide on each of the seven cities' best smart shrinkage solutions the method combines several steps; firstly stakeholder work-shops are held to identify the most popular bottom-up solution from the city's own perspective; then the chosen solution are exposed to resilience tests and stress tests (testing future extreme scenarios), before being put back together again. The end result arrives at a policy consensus that are more future proof. Using this method, 3S RECIPE learned that investing in specialised higher education is in the long-run a much better way to orchestrate a turnaround in fortunes of a shrinking city, as opposed to investing in large commercial and retail real estate projects, which might not withstand or deliver value during a severe economic downturn

LOCAL STAKEHOLDERS MUST BE EMPOWERED TO BE BOLDER, MORE EXPERIMENTAL, AND TAKE RISKS

Cities need to adopt a more experimental approach, take risks, and collaborate with the creative sector at grass roots level. If humble, academics can play a mediating role between the local government and the creatives. RECIPE's results also demonstrate that every good recipe requires a local ingredient – the city's historical legacy, the local assets, 'local-ness' in general should be central to any regeneration strategy. The project concludes that towns and cities facing a structural actively seek and find capacities to help themselves and are open to input in doing so. Shrinking cities and towns should not try to ape narratives and policies of big cities, but rather policies rooted in local stories and prerequisites.

PROJECT FACTS

Duration: 2017-2020

Involved Cities: Le Havre (FRA), Maastricht (NLD), Łódź (POL), Porto (PRT),

Timișoara (ROM), Zonguldak (TUR), Stoke-on-Trent (GBR)

Partners: University of Oxford, École Normale Supérieure, University of Amsterdam, University of Lodz, West University of Timisoara, B Arts Ltd, Intercultural Institute Timisoara, University of Birmingham, University of

Porto

Budget: 1.689.000 EUR

Web: jpi-urbaneurope.eu/project/3s-recipe/

Result interview 1: https://jpi-urbaneurope.eu/3sreciperesults

Result interview 2: https://jpi-urbaneurope.eu/3sreciperesults-partner

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BRIGHT FUTURE

BRIGHT FUTURE FOR BLACK TOWNS: REINVENTING EUROPEAN INDUSTRI-AL TOWNS AND CHALLENGING DOMINANT POST-INDUSTRIAL DISCOURSES

It does not take long to find grim narratives about how post-industrial towns "fails to adapt" to the 21st century. Many of those narratives focus exclusively on economic issues. The BRIGHT FUTURE project, however, set out to translate socio-cultural qualities of small industrial towns into social innovation, with the purpose to adapt and improve both resilience and sustainability. The project examined local narratives in five industrial towns across Europe: Velenje (Slovenia), Fieni (Romania), Kajaani (Finland), Heerlen (Netherlands), and Corby (UK). The project discusses a new urban policy- and research agenda tailored to small industrial towns.

THREE TYPES OF INDUSTRIAL TOWNS AS POINT OF DEPARTURE

The distinction between "industrial" and "post-industrial" is not obvious - there are towns with an industrial heritage that still have industrial elements in them. A large part of Europeans live in these areas as opposed to larger metropolitan areas. BRIGHT FUTURE brought forward three types of industrial towns: 1) the historically industrial town, 2) the post-socialist industrial town and 3) the Nordic types.

UNDERSTAND LOCAL INDUSTRIAL NARRATIVES TO ENABLE BRIGHT FUTURE POLICIES

One part of the project's results suggest that it is important for policy- and decision makers to identify which of the types best mirror their town. One of the projects major

conclusions is that policies need to be place-specific. There is a pre-conceived idea that populism and xenophobia in European towns are a reaction to issues like shrinking economies, unemployment or the rise of the creative class. BRIGHT FUTURE argue that policymakers must understand and implement place-specific narratives and policies: industrial narratives. BRIGHT FUTURE uncovered the connection between local industrial narratives and the rise of right-wing populism. Imported stories, narratives and visions (from for instance metropolitan areas or larger cities) are not the way forward for sustainable development of industrial towns.

NARRATIVES OF THE GLORIOUS PAST, TOGETHERNESS AND FEAR OF CHANGE

BRIGHT FUTURE used narrative analysis as a methodological tool and after having collected extensive data, three main narratives became evident: "the glorious industrial past", "camaraderie in the face of industrial decay" and "the fear of change". The latter derive from stories of "being under attack" from outside forces like metropolitan policies and globalisation and how this undermines communal solidarity. Right-wing populists tend to kidnap these stories for electoral success. Neoliberal policy developments and concepts like "creative industries" and "knowledge economies" felt alien to these communities.

BRIGHT FUTURE has not only outlined what positive qualities industrial towns contain, but also shown ways for policy makers to tap into the right kind of local story and ensure more sustainable developments in a broad sense.

PROJECT FACTS

Duration: 2017-2020

Involved Cities: Velenje, Fieni, Kajaani, Corby, Heerlen

Partners: Research Centre of the Slovenian Academy of Sciences and Arts, University of Eastern Finland, University of Amsterdam, University of

Bucharest, Social Life Limited, The Young Foundation

Budget: 1.313.000 EUR

Web: jpi-urbaneurope.eu/project/bright-future/

Result interview: jpi-urbaneurope.eu/industrial-towns-can-have-bright-

futures-if-we-find-the-right-stories/ **E-mail:** david.bole@zrc-sazu.si

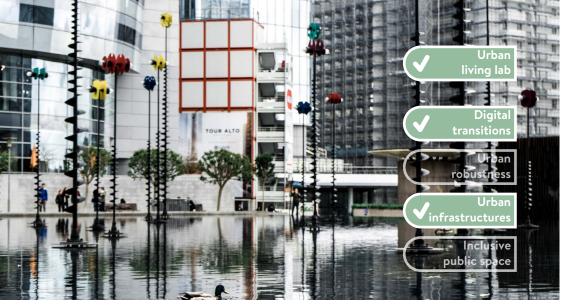


Photo: Artiom Vallat

FLOODLABEL

A SMART TOOL FOR GOVERNANCE TOWARDS FLOOD-RESILIENT CITIES.

Issues around rising sea levels and flooding is particularly stark for inhabitants of low-lying regions. There are stories from across Europe where communities argue that their local government do not take sufficient measures to the issue, whereby residents set up their own flood action groups. The FLOODLABEL project helps households protect themselves from the risks and consequences of flooding.

AN APP FOR HOUSEHOLDS, EXPERTS AND GOVERNMENTS TO FOCUS THEIR RESOURCES

Even governments who do take measure can struggle in the future as flooding can become more extreme, and governments may not be technically nor financially in a position to care for their people to the fullest extent. FLOODLABEL has created an easy to understand flood assessment tool for people to assess their flood risk exposure and understand appropriate measures. Using just a property's postcode and a short questionnaire, the app can produce a general flood risk label within minutes. Users can find sub-labels that offer a grade for each type of flooding (river flooding, heavy rainfall flooding, ground water flooding, sewage flooding) and which kind of flooding poses the most risk for their property. The app is being tested and labels need further refinement. The app's general labelling could lead experts to focus their resources on the properties that need their input the most. The project's success factors include successful stakeholder involvement: local administrations, households and regional water boards responsible water systems management.

"Both the FLOODLABEL method and system are generic enough to be scaled up and used in many places that suffer from flood risks..."

A WIDELY APPLICABLE PROTOTYPE FOR THE FUTURE: FROM AVALANCHES TO MUNICIPAL AND REGIONAL STRATEGIES

Data on for example avalanches could make the FLOODLABEL model applicable to more European contexts and climates and hence capable of producing holistic labels. If the app is rolled out and reaches mass usage, in theory, it could provide a GIS map for municipalities to evaluate which areas are most at risk from flooding and take action accordingly. The project's partners from the industry side now targets three areas where the app can develop: more high-resolution maps and data, more user input options and more sophisticated calculations. Both the FLOODLABEL method and system are generic enough to be scaled up and used in many places that suffer from flood risks, as it presents much available back-end data. The project displays a learning process between academia, local administrations and the industry side.

PROJECT FACTS

Duration: 2017-2020

Involved Cities: Graz, Beersel, Cologne, Rotterdam and the Hague **Partners:** Utrecht University, BOKU – University of Natural Resources and Life Sciences, Ghent University, Nelen & Schuurmans, German Flood

Competence Centre, Flanders Environmental Agency

Budget: 882.000 EUR

Web: www.uu.nl/floodlabel

Result interview 1: jpi-urbaneurope.eu/floodlabelresults

Result interview 2: jpi-urbaneurope.eu/floodlabelpartnerresults

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Photo: Victor Sanz

CITIES OF MAKING

RESOURCES FOR ACTIVATING NEW URBAN MANUFACTURING THROUGH TECHNOLOGY, SPATIAL DESIGN AND TRANSITION GOVERNANCE

Following years of decline and offshoring, European cities face a range of issues simultaneously: manufacturing jobs have shifted quickly to services and have created large gaps in the employment market. Now, concepts like circular economy are recognised by cities and new technology emerges, allowing industry to be quieter and more discrete. Cities of Making (CoM) explored the role of urban based manufacturing in the 21st century and developed tools to help drive a new age of urban manufacturing. The project targeted the cities of London, Rotterdam and Brussels - three cities with a distinct industrial heritage. The cities are geographically close but present different histories of manufacturing and different governance systems. The project identified what works in supporting a resilient and innovative industrial base, and tested those solutions in a real-world setting.

URBAN CENTRES TO NURTURE NEW FORMS OF GREEN URBAN MANUFACTURING

CoM studied material flows, industrial innovation, logistics, social inclusion, real estate pressures and environmental issues in both practice and literature. Project findings suggest that urban manufacturing is not in inevitable decline but rather that there is a general poor understanding of the topic and what it encompasses. When it comes to urban manufacturing, CoM argues that urban centres play an important role in nurturing new forms of urban manufacturing, based on a clean, knowledge intensive manufacturing sector.

HELPING CITIES DEAL WITH INDUSTRIAL LAND AND MANUFACTURING

CoM argues that cities need to change the way they deal with industrial land and manufacturing. This takes an appreciation of how manufacturing underpins a range of activities that cities depend on. Urban manufacturing and policy making surrounding it is a complex topic and needs to be developed together with cities. Cities of Making has published a book and produced a set of Pattern Cards as a communication tool for stakeholders to come together across sectors and have concrete discussions. The cards are already in use by in an ESPON funded project covering seven European cities - not least as facilitation support. The Cities of Making team have already experienced shorter term breakthroughs with interest from public authorities using the book and cards as facilitation tools, and from metropolitan areas opening possibilities for further research in urban manufacturing.

Cities of Making has developed typologies, practices and policies for public and private stakeholders to breathe new life into their manufacturing communities. Reach out to the project to learn what technology and resources are suitable for 21st century urban industry, where it can be (spatially) located and how to leverage such change.

"Cities of Making
has developed
typologies, practices
and policies
for public and
private stakeholders
to breathe new life into
their manufacturing
communities."

PROJECT FACTS

Duration: 2017-2019

Involved Cities: Brussels, London,

Rotterdam/The Hague

Partners: Brussels Enterprises Commerce and Industry, Latitude Platform for Urban Research and Design, Delft University of Technology, The RSA, I'Université libre de Bruxelles, University College London, Vrije Universiteit

Brussel

Budget: 959.000 EUR

Web: citiesofmaking.com
Result interview: jpi-urbaneurope.
eu/citiesofmakingresults
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C3PLACES

USING ICT FOR CO-CREATION OF INCLUSIVE PUBLIC PLACES.

C3Places gives insight into different aspects, problems and possibilities of co-creation of public open space with support of ICT. It helps to generate a practice-oriented knowledge on co-creation of public open spaces where ICT is used in placemaking to include those who are usually excluded from participatory processes in urban planning, like older people and teenagers. The project structure and partnerships of C3Places made it possible to research and experiment different phases of the co-creation process undertaken in the different case studies (Ghent, Belgium; Milan, Italy; Lisbon, Portugal; Vilnius, Lithuania).

AN ANALYSIS OF INITIATIVES THAT CREATE ENVIRONMENTAL AND SOCIAL VALUE

Different local communities worked together to co-research, co-create knowledge and co-experiment solutions for inclusive and responsive open public spaces. The experiences and empirical evidences of C3Places suggest that co-creation is more than a buzzword, it is an innovative, flexible, playful and effective way to create more inclusive and responsive urban environments. The project noticed that people are indeed smitten with digital technology - they navigate constantly through the social media networks, but they are not particularly keen to participate in another interactive activity. To reach a higher participation, more action and resources must be put in place. From the living labs it also became evident that use of ICT is very demanding from different aspects and should be well adjusted to the specific context, which is usually

not known in advance, before starting a project. Engaging people in co-creating their environment demands effort. C3Places provides an analysis of initiatives that create both environmental and social value.

BENEFITS FOR PLANNING PRACTICE, POLICYMAKING, ACADEMIA AND INVOLVED LOCAL COMMUNITIES

The exchange between researchers, planners and practitioners on the one side, and the public space users on the other side is the core of the C3Places project. The project provides a sound analysis and a reflection of the outcomes and findings as well as of the pitfalls that are relevant for policymakers and practitioners as they can benefit from experiences gained in engaging initiatives that are adequate to the local conditions. For ICT developers C3Places offers wide experiences for future development of digital tools that are closer to needs and characteristics of different placemaking and co-creation activities. The lessons learned in the Project C3Places highlight the crucial role of public open spaces for quality of life.

In spatial development processes, ICT usability must be understood from three main spatial aspects – as remote (via websites and social media), in-place, (fixed as an element and part of the space design), and as wearable tool, (that is adjusted to the user, moving together with her/him through the place). The project evidenced that ICT pervasiveness can be the starting point to help citizens to improve the urban life, to find new ways to gather in their communities, and to challenge creativity and social initiatives. ICT can also help the vulnerable groups and minorities in promoting their values and interacting with other citizen groups.

PROJECT FACTS

Duration: 2017-2019

Involved Cities: Milan, Ghent, Lisbon, Vilnius

Partners: UL/CeiED – Universidade Lusófona, Cooperacy Association, LNEC – National Laboratory of Civil Engineering, Mykolas Romeris University, Ghent University, University of Milan, Urban Planning Institute of the

Republic of Slovenia **Budget:** 874.000 EUR

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Photo: Chris Gallagher

FLOODCITISENSE

EARLY WARNING SERVICE FOR URBAN PLUVIAL FLOODS FOR AND BY CITIZENS AND CITY AUTHORITIES

Extreme and unpredictable flooding can cause important damages to cities natural and built environment. Governments, water management authorities, and researchers tries to cultivate ever more advanced flood warning systems. The project FloodCitiSense has developed a sophisticated early warning system (EWS) for flooding, to be used by inhabitants and municipal authorities across Europe. The system is now visible to municipal actors and flood mitigation experts.

CITIZENS TO PLAY AN IMPORTANT ACTIVE ROLE IN FLOODING MITIGATION

The project used citizen observatories which made citizens active research partners. Two citizen science workshops were organized in each pilot city, in the summer of 2018 and in the winter of 2019, respectively. Each workshop recruited 15-25 participants, training them to ensemble the rainfall sensors and to use the FloodCitiSense App. As a result, about 60 first-generation sensors and 50 second-generation sensors have been installed in Birmingham, Brussels, and Rotterdam. Local citizens also learned to use the self-designed app to report urban flooding by sending photos and texts. The FloodCitiSense mobile application is used to report pluvial flooding. Citizens select the rainfall and flooding types, and take a picture or a video. Reports can be viewed on a map along with rainfall from official rain gauges and FloodCitiSense rainfall sensors. The mobile app can be downloaded from the Google PlayStore or the Apple AppStore.

The results, including a push notification system (for mobiles) that can be used to warn people about imminent flooding, are very promising. The project means that the methods of co-creation and urban living labs are elements that makes the project and its results more innovative than previous similar projects. For example, testing a flooding EWS on a real flood inspires more confidence than EWS tested on a simulation. The differences between the involved cities (Brussels, Rotterdam, Birmingham) highlight the limitations of a general system and show where context specific adjustments need to be made

CREATING A FLOOD MANAGEMENT DASHBOARD FOR CITY MANAGERS

The results lay ground for creating a flood management dashboard for city managers. Currently all the project data is hosted in a central database that could be accesses by city administrators. This would allow cities to create mutually beneficial feedback loops with their citizens. Citizens could help their city governments form a big picture view of flood risks.

The FloodCitiSense product will go through phases of rigorous testing and refinement to ensure credibility, and it has an excellent basis to develop into a fully operational EWS. The fact that the project is being conducted on a European level means more widely applicable results. The project has created a way to get much more consistent information about pluvial flooding, and raised public interest in flood research.

PROJECT FACTS

Duration: 2017-2020

Involved Cities: Brussels, Rotterdam, Birmingham

Partners: Vrije Universiteit Brussel, Delft University of Technology, Imperial College London, International Institute for Applied Systems Analysis,

Etats Généraux de l'Eau à Bruxelles, Local Government Information Unit, RainPlusPlus Ltd, RPS Environmental Management Ltd, Disdrometrics, City of Brussels, City of Amsterdam, Birmingham Council, Severn Trent Water,

National Taipei University of Technology

Budget: 1.678.276 MEUR (funding by JPI Urban Europe)

Web: floodcitisense.eu

Result interview: jpi-urbaneurope.eu/FloodCitiSenseResults

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The Joint Programming Initiative (JPI) Urban Europe is an intergovernmental and strategic partnership of countries addressing the challenge of sustainable urban development through coordinated research and innovation. JPI Urban Europe has the ambition to establish as the European platform to create, discuss and make available knowledge and robust evidence for sustainable urban solutions and pathways. 20 European countries are engaged in the initiative and international collaboration beyond Europe has been established.

Since the inauguration in 2010, JPI Urban Europe has issued seven joint calls of which four have been implemented in cooperation with the European Commission. Three more calls are currently under implementation and will confirm projects in 2020/21. Over 85 projects have been funded so far, bringing together 450 project partners throughout Europe and the world. An active AGORA community was established, among other achievements.

This catalogue provides an overview of the results from the 15 projects funded in the ERA-NET Cofund Smart Urban Futures, launched in 2015.



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