# Replicate Final conference



Donostia/San Sebastián

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SAN SEBASTIÁN Ekonomia Bultzatzeko Zinegotzigoa Concejalía de Impulso Económico

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RENAISSANCE OF PLACES WITH INNOVATIVE CITIZENSHIP AND TECHNOLOGY

the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement Nº 691735



This project has received funding from

## Replication in REPLICATE

Dr Igor Calzada, University of Oxford

#### **BLOCK III: CITY TO CITY LEARNING**



Organized by:



Ekonomia Bultzatzeko Zinegotzigoa Concejalía de Impulso Económico

**donostia**sustapena fomentosansebastián WITH INNOVATIVE CITIZENSH



AND TECHNOLOGY

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#### copy-paste

Lighthouse Cities







THE GIVEN POLICY DESIGN:

UNIDIRECTIONAL

HIERARCHICAL

MECHANISTIC

SOLUTIONIST

TECHNOCRATIC



**Fellow** Cities

Lausanne (Switzerland)





#### RATIONALE

According to a policy report on Replication by the EC in 2018:

- Replication is like the quest for the Holy Grail: everyone is searching but no one seems to be able to find it (IRIS project, Gothenburg, 2019)
- The replication of smart urban energy, mobility and ICT solutions for an European urban future <u>may be difficult to achieve.</u>
- Nevertheless, replication can be FACILITATED through a network of lighthouse and fellow cities' <u>stakeholders</u> by putting them learning from each other.
- It is what we have been implementing for the whole year 2019.
- Starting from February 2016, engaging Fellow cities' representatives and stakeholders.





## 2 Results

#### Penta Helix



- (i) a unique multistakeholder composition,
- (ii) diverse preferences on business/social models,
- (iii) a regular presence of the social entrepreneurs/activists (fifth helix) as intermediaries,
- (iv) and the willingness to experiment with democratic arrangements beyond the hegemonic PPP.

#### Calzada, I. (2020).

Democratising Smart Cities? Penta-Helix Multi-Stakeholder Policy Framework. *Smart Cities* **3**(4): 1145–1172. doi: 10.3390/smartcities3040057.

#### City-to-City-Learning Programme



Replicate EU lighthouse project (#ReplicateEU) is working on its Replication main activity entitled 'City-to-City-Learning' Programme (#City/CytyLearning) led by the University of Oxford with the participation of the lighthouse (San Sebastian, Florence, and Bristol) and follower/fellow [Esen, Lausanne, and Nilüfer) cities and their related multistakeholder framework that would take place during the whole year 2019.

Within this #City2CityLearning programme a wide range of activities will be shared among stakeholders in the aforementioned cities in internal sessions via webinars. Further information: www.replicate-project.eu/city2citylearning

#### www.replicate-project.eu/city2citylearning

#### Calzada, I. (2020).

Replicating (Smart) Cities: The City-to-City Learning Programme in Replicate EC-H2020-SCC Project. *Smart Cities* **3**(3): 978–1003. doi: 10.3390/smartcities3030049.



Calzada, I. (2021) *Smart City Citizenship,* Cambridge, Massachusetts: Elsevier Science Publishing Co Inc. ISBN: 978-0-12-815300-0.

## **Final Remarks**

- 1. Multidirectionality: To <u>achieve broad social acceptance</u>
- **2. Radial:** To <u>avoid excluding</u> perspectives and interests of particular groups of stakeholders/citizens
- 3. Dynamic: To identify different typology of stakeholders
- **4. Iterative:** To <u>incorporate on data governance</u> (GDPR) and <u>pandemic</u> <u>measurements</u> (COVID19)
- 5. Democratic: To acknowledge that there is significant room for manoeuvre for local stakeholders.

## 1/3 Stakeholders:

- Role of stakeholders in your Fellow City
- Evolution
- Pandemic and stakeholders' engagements: Aftermath
- Innovative partnerships





#### Stakeholders – Nilüfer

REPLICATE can be said to have given impetus to some of the projects and incentives by the local government, particularly through the increased networking activities of the Project, bringing together city stakeholders and professional organizations to build the common future. Two important events can be highlighted:

- 1. The continuing support and stakeholder involvement in the Eco-City project of Nilufer
- 2. The physical opening of the Nilufer Social Innovation Center (though active online through 2020), the well received Social Innovation Projects Competition and operational start for the Center working in close cooperation with the local academic and professional world, funded by the Regional Development Agency.

The pandemic had strong negative impact on economic life, shifted local funds towards mitigation measures, increased local unemployment but on the positive side, perhaps also encouraged interest in socially beneficial innovations that would also help support the creation of employment and micro-enterprises increasing the attraction of the Nılufer Social Innovation Center.

#### Stakeholders – Essen

• Strong involvement of citizens via initiatives → New umbrella "Together for city change" very well organized with specific Visions, demands for Measures and Working groups in 8 topics: City council as role model, energy, mobility, ecology and environment, food, building and greening, ressources and waste, education and civil engagment, economy)

• Established collaboration with university  $\rightarrow$  Competence teams for energy, mobility, sustainability, climate change, urban development

• Major companies especially in energy  $\rightarrow$  E.On, RWE, Steag, ista After Covid-19:

- Fast establishment of online collaboration and participation
  - BewegDeinQuarter → co-creative agenda map for city district with online participation platform and hack-a-thons
  - Citizen forum on mobiilty planned with 500 citizens online for June 19th
- SECAP under preparation with online participation only Innovative Partnership:

Ruhr Academy on Smart Sustainable Metropolitan Transformation

PPAP develops, tests and implements innovative concepts for integrated, smart and sustainable neighborhoods in selected innovation areas







#### Stakeholders – Lausanne

The REPLICATE project is part of the flagship project of Lausanne Métamorphose, which consists of building a new eco-districts using 100% renewable energies.

It was essential to develop a process of people participation, to lay favorable framework conditions to the anticipated appropriation of this neighborhood by citizen.

The most important stakeholders that have been involved in the project were;

- All relevant departments of the Municipality and Utilities
- Academics from Swiss Federal Institut of Technology (EPFL), University of Lausanne, University of Applied Sciences of Valais, municipal research center
- Enterpreneurs and start-ups

It is important to highlight the importance of city projects to advance innovation. Lausanne has shown that with motivated local players, here the driller, the city has been able to achieve a technological breakthrough in the field of deep geothermal probes.

## 2/3 City-to-City-Learning:

- Learn
- Urban solutions
- Initiatives



#### City-to-City-Learning – Nilüfer

As clearly spelled-out in the Reoplication Plan for Nilufer, the Municipality has given priority to the following principles regarding smart city technical pathways:

- Strong framework based on co-creating projects with citizens
- Putting local needs at the heart of innovation
- Tech is pulled in, not pushed onto citizens

As a result, Bristol City bottom-up approaches have been seen as more amenable overall that can be summarized as:

i) democratizing the local strategy-making processes via such social innovations as Neighbourhood Committees ii) bottomup energy actions favouring cooperatives and overall urban efficiency via the realization of specific urban circular economy approaches such as gray water recycling and waste composting and iii) industrial spin-outs to regenerate the local economy.

Similar to the «Bristol is Open» concept, Nilufer will expand its e-governance reach involving more citizensensing applications on digital platforms, to drive social collaboration, knowledge, data sharing and analytics management across the digital landscape in order to deliver services to the public authorities, residents, businesses, students, and visitors.

Nilufer continues its work with the initiation of energy coops as well as doubling its efforts to increase energy consciousness among citizens

### City-to-City-Learning – Essen

• Key learnings

Thinking together Smart and Sustainable Transformation Establishing a co-creative approach with stakeholders from pentahelix

- Implementation of urban solutions under newly formed brand CONNECTED.ESSEN
- New: Open Data approach
- Smart Mobility fastly developing

Collaboration in Projects with university / companies

Testing Innovative Financing (Renewable Energy Community)





#### City-to-City-Learning – Lausanne

#### What did we learn ?

Our main energy policy objective is to develop a district heating throughout the city powered by 100% renewable energies. The choice to implement the Demand Side Platform of San Sebastian therefore seems to be natural.



How are we implementing ?

A projet call **Optimizing district heating** is launched.

- The project team is identified.
- A site visit will be organized with Fomento San Sebastian when the health situation will be improved.

## Replication in REPLICATE



- Threats and Opportunities
- Future vision

#### Future Challenges in the Post-COVID-19 – Nilüfer

Nilufer subscribes to the idea that things will <u>not be normal</u> as «before covid». The threat of climate disruption grows and the urban centers are increasingly vulnerable to upsets and crises.

The focus is on increasing urban resilience both physically and socio-ecologically. The food-energy-water nexus is under increasing pressure and city governments are heavily responsible for mitigating adverse effects.

The vision is therefore strongly in favour of strengthening the local fabric, grass-roots empowerment and organizing the future to be smart in food supply, social solidarity, circularizing the urban economy and picking those aspects of smart city developments that will support these approaches. Digitalization provides opportunities for bottom-up initiatives to thrive, just-in-time measures for crisis situtions and protecting vulnerable sections of the population.

#### Future Challenges in the Post-COVID-19 – Essen

- Essen is not expecting a back to normal
- Throughout Stakeholders raised awareness towards increasing resilience
  - ightarrow Also to climate crisis/climate emergency (decarbonisation, water management)
- Newfound resolve for Local and regional circular economy: "Stimulus by investing in sustainable infrastructure (renewables, retrofitting, cycling infrastructure, public transport), buy local schemes, sustainable food system becoming focus
- Digital infrastructure and competences: e.g. 30.000 tablets for students, academy for municipal staff
- Mobility: public transport strongly challenged (financially even before Covid-19), cycling with much stronger position (also as a result of a citizen petition), increasing numbers of car ownership and car travels in contrast to city goals
- Finances: economic constraints on municipal budget increases; opportunities from stimulus on national and european level for investments (in infrastructure)

#### Future Challenges in the Post-COVID-19 – Lausanne

#### How are we approaching smart development?

The climatic emergency was decreed by the city legislature at the beginning of 2020.

A first draft of a Climate Plan was accepted has been accepted by the City Council. It draw up a balance sheet and an inventory of current projects, in order to propose reinforced action plans.

Replication projects linked to REPLICATE will be integrated into these climate action plans.



Thank you