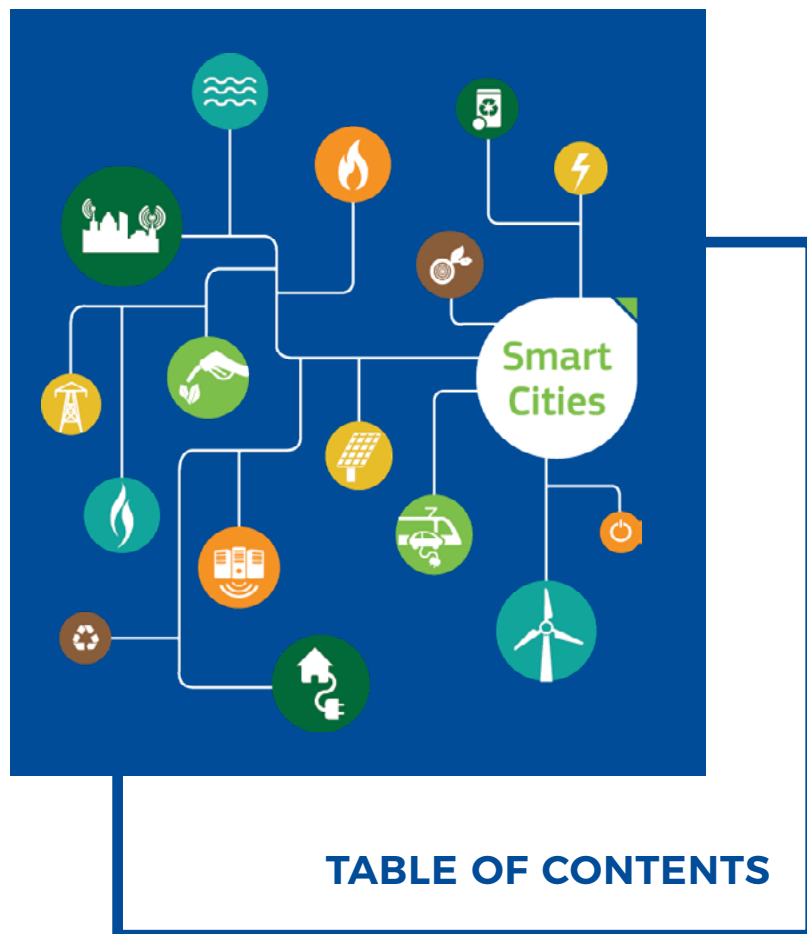




CITIZEN ENGAGEMENT SOLUTION BOOKLET

EU Smart Cities Information System



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The Smart Cities Information System (SCIS) brings together project developers, cities, institutions, industry and experts from across Europe to exchange data, experience, know-how and to collaborate on the creation of smart cities and an energy-efficient urban environment.

**WHAT IS THE
SMART CITIES
INFORMATION
SYSTEM?**

A summary of the management framework, primarily written for cities. It seeks to reduce the effort, speed up the process, strengthen quality and confidence in outputs, align across disciplines, and generally prepare a city to engage the market to acquire a solution.

**WHAT IS
A SOLUTION
BOOKLET?**





WHAT & WHY

What is citizen engagement?

Cities around the world are looking for ways to address the true needs of their citizens, with a deep level of engagement and co-agency. At the same time, citizens themselves are eager to have more impact on their living environment.

Citizen engagement, a way of actively involving citizens in the city's decision making processes, can help to address these needs. Citizen engagement exists in many different forms, ranging from merely **influencing and informing** people, to real **participation** and actual **decision making**.



The set-up of such an engagement process could be initiated by the city or its citizens, and in its most thorough form is organised by **collective effort**.



“Citizen engagement requires an active, intentional dialogue between citizens and public decision makers.”

Willem-Jan Renger,
Citizen Engagement Taskforce, IRIS project

Frequently encountered practical examples in which citizen engagement is used include:



co-design and co-creation of urban interventions in cities;



collaborative preparation of municipal legislation and action plans;



participatory budgeting in which the local community decides how to allocate part of a municipal budget;



citizens proposals, enabling citizens to submit suggestions and initiatives to municipalities.

In all of the above examples, it is important to involve as much as possible a **broad and unbiased selection of society** in the decision making processes. Understanding how this can be realised in practice, should help direct cities to achieve **inclusive engagement**.





Already in 1969, Sherry Arnstein wrote her article “**Ladder of Citizen Participation**”¹. Since then, research and experimentation in many cities has resulted in a wealth of insights around the topic. However, more efforts would be needed to systematically monitor the approaches and their impact, analyse them, and summarise them into evidence-based guidance documents.

While the result of citizen engagement **will be rewarding**, the process almost always is **challenging** and therefore requires a good understanding and well thought out approach.



! To be really effective, citizen engagement should be strongly embedded in all stages of the decision making process.

A meagre tick-box approach or postponing citizen participation only until the end of the process will have far less impact than an approach in which **deep commitment** or a **genuine co-creation interest** are considered from the outset. The latter will include a **new way of thinking** and can be quite disruptive and fruitful for all actors involved. Not least the city itself must be well aware of the **commitment, capacity and time** required to actually embed a citizen engagement mindset in its organisation as a thorough ambition.

¹ Arnstein, Sherry R., 1969. A Ladder of Citizen Participation, JAIP, Vol. 35, No. 4, pp. 216-224

Rather than a process done once within just a few projects, this involves a transition of mindset of doing business. Many municipal organisations and public servants currently are not trained to work with citizen engagement in practice, and the governance procedures of municipalities often don't fit for this purpose. Luckily solutions for **capacity building** are starting to be developed; both for individuals and for organisational transformations.

Citizen Engagement in the EU

- In the Netherlands, a new **legal framework** for spatial planning called the “**Omgevingswet**”² (Environmental Law) is coming up. **Participation and co-creation with citizens** is one of the main pillars, giving more room to citizens and **bottom-up initiatives** in local decision making around spatial planning. The law does not prescribe the specific method allowing municipalities to develop approaches that fit to their local context. As part of the Omgevingswet policy officers are building capacities to creatively involve citizens in spatial planning.
- The EU Joint Research Centre leads a Community of Practice (CoP) on Citizen Engagement with plans for a Manual and Online Resource Catalog for organisations and projects, in addition to continuing an **annual Festival of Citizen Engagement**.
- The **Citizen Focus Action Cluster at the EIP-SCC** pools together several initiatives and actions on citizen engagement and works as a **mutual learning** and matchmaking platform.

² VNG, Participatie, from <https://vng.nl/artikelen/participatie>.



Why is citizen engagement relevant?

The question of why the government should engage with citizens is often asked and answered in many different ways. This demonstrates the complexity and diversity of our understanding and needs.

Within the context of smart city projects, one answer could be that citizen engagement is relevant because smart city innovations often bridge many fields of urban life. Thus they have a far-reaching impact on people and the associated needs, benefits, and risks have never been greater.

In this context, citizen engagement helps to:

-  better understand and address the needs and concerns of citizens;
-  empower multi-level governance settings and interactions explaining what might happen, therefore increasing transparency in various decision-making processes;
-  include a diversified group of people through an accessible process which empowers those that are involved;
-  target specific vulnerable citizen groups that would not naturally participate in public hearings or town meetings;
-  engage people and strengthen collaborative actions and bottom-up innovations;
-  build community trust and consensus, create buy-in, reach a better sense of community ownership and therefore strengthen the legitimacy of actions taken and increase long-term success;
-  improve cost and resource efficiency by providing broader expertise, by increasing impact and by avoiding otherwise unforeseen problems in advance. In addition, the perspectives of citizens as non-experts can help to (re)discover more sustainable and creative solutions that could work in a specific local context.

Research based arguments for deploying citizen engagement can be found in a literature review of “**Public and Stakeholder Engagement and the Built Environment**” (Leyden et al., 2017). It identifies multiple advantages of embracing more inclusive participatory processes as they pertain to the built environment.

The authors, however, also warn that ‘more attention should be given to the nature of participation itself and its biases. This means that it is important to question who is participating and why and to determine their underlying motivation so as to ensure that others do not go unheard’.

CitizenCity has provided [a concise summary](#) of the full report.





One example where citizen engagement will make a difference is the implementation of **climate change mitigation** and adaptation measures: if those are **solely adopted and supported by local authorities without being broadly supported by society, they will not gain the impact required to meet our global targets.**



Another example where citizen and stakeholder engagement is critical is in **Positive Energy Blocks and Districts (PEB/PED)** where the social dimension is just as important as funding, technology, or resources. In the case of IRIS and +CityxChange, this means projects on the local energy transition and infrastructure linked with ambitions for urban regeneration, as well as **moving towards more energy-conscious behaviour.** Working in a setting of new and existing buildings over larger parts of neighbourhoods makes it vitally important to **build good connections** to citizens and stakeholders, to **include their ideas, concerns, and contributions**, and to **make them partners in the transition.** To improve energy-conscious inclusive citizen services it is required to take measures such as shifting their energy consumption to periods with surplus renewables or using shared e-mobility instead of private cars. This calls for extensive and innovative citizen engagement and co-creation methods, resulting in **citizens who understand, trust, use and feel ownership** of the integrated energy and mobility solutions offered in their district.





**WHAT'S IN IT
FOR CITIES?**



WHAT'S IN IT FOR CITIES?

In order to be successful in the long term, the portfolio of citizen engagement activities needs to be carefully aligned with the extent to which citizens are ready to participate in certain types of activities on the one hand and the resources and ambitions of the city on the other hand.

Collaborative and participatory cultures are significant parameters that set the baseline in different city contexts. Besides, some cities may implement **concise and affordable individual tools**, while others have the capacity to develop, implement and continually improve integrated approaches.

Up to the present, in many smart and climate-neutral city project calls, citizen engagement has typically been included as an add-on, to be used as a measure to increase absorption of the technological solutions developed by experts in the projects. In the past years, this practice has started to change, with a more prominent integration of citizen engagement and urban governance in smart city calls. **In Horizon Europe, co-creation with citizens even lies at the core of the entire Framework Programme.**



Urban planning co-creation with citizens © SCIS

“In order to make citizen engagement meaningful, it should not be a free-standing activity. Rather, it should be firmly embedded within the municipality’s ‘Bold City Vision’ and the project’s overall targets.”

Annemie Wyckmans, NTNU,
project coordinator +CityxChange

Citizen engagement is ideally part of a more extensive **Quadruple Helix open innovation model**, meaning there is intensive cooperation between stakeholders from research, industry, government, and society. In this manner, citizen engagement can deliver new forms of deliberation and operationalisation of the democratic process in the city, increasing local impact and building citizen trust. Lack of citizen engagement, on the other hand, may lead to **lack of community support for public measures or suboptimal results.**



Leuven2030 co-creation © Leuven2030

What are cities able to achieve through citizen engagement?

Co-creation

Within the **Cities-4-People project**, the **City of Trikala** in Greece (81.000 inhabitants) applied co-creation to identify solutions tackling mobility challenges, such as traffic congestion and unsatisfactory quality of public space and pedestrian infrastructure.



From the early stages of the project, the **Citizen Mobility Community** was created, engaging representatives from the citizen community and several associations, city authorities and services, and industry and entrepreneurs. Located in the central square of the city – a place of high visibility and usage – the **Citizen Mobility Lab** was hosted. At this location, brainstorming sessions, co-creation and idea sharing activities were organized. The project learned that identification and segmentation of the stakeholder groups needs to be **accurate to ensure inclusiveness**, relevance and suitable co-creation activities, while at the same time **flexibility is important**, as there may be overlaps between stakeholder groups. (For example: caregivers of disabled people face the challenges of both disabled and non-disabled people.)

The city's co-creation process involved several steps:



Identification of mobility challenges through semi-structured interviews with mobility stakeholders and an online survey targeted to local citizens. The challenges were discussed with the Citizen Mobility Community, resulting in 11 co-created concepts.



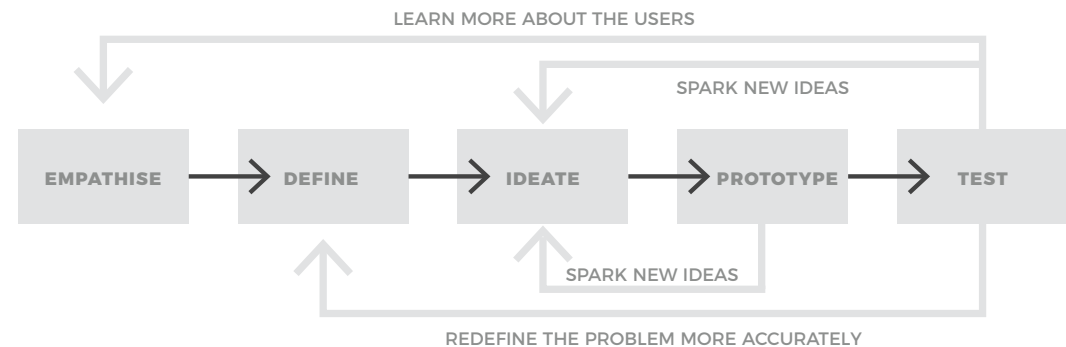
Online voting on the list of concepts.



Shortlisting of 6 concepts, of which 3 would be prototyped.



More details on the methodology and results can be found in [this article on co-creation](#)³.



Basic stages of co-creation in new service design (adapted from: Interaction Design Foundation, 2019. Design Thinking. www.interaction-design.org/literature/topics/design-thinking)


³ Margarita Angelidou et al., IOP Conf. Ser.: Earth Environ. Sci. 410 012059, 2020. Co-creating sustainable urban planning and mobility interventions in the city of Trikala

Open innovation



To secure the successful development and roll-out of Positive Energy Blocks/Districts (PEB/Ds), **the +CityxChange project** has created an **open innovation framework** (Deliverable 9.1) that can be used by cities, solutions providers, and citizens to set joint targets, assess their progress and learn from each other. **The open innovation framework combines knowledge and experience of the partners and local stakeholders in a Quadruple Helix ecosystem.**



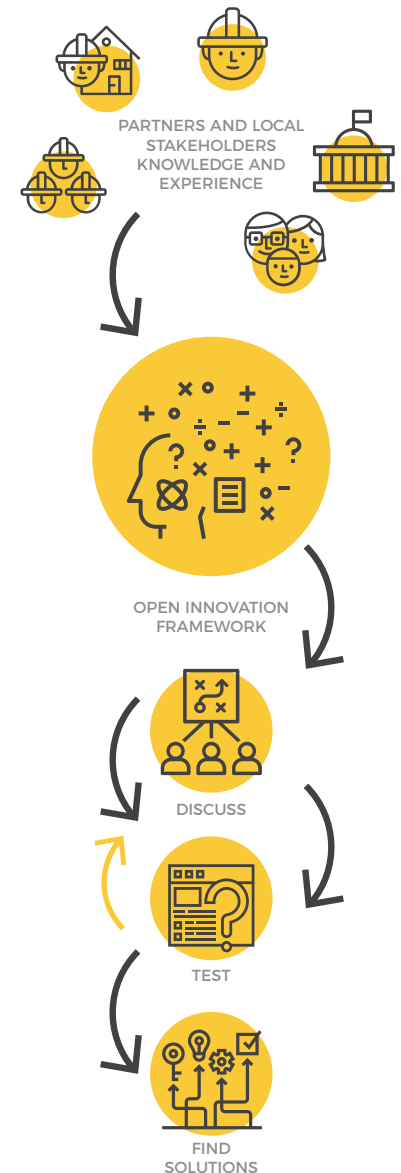
 In addition to building owners, architects, contractors, and building occupants, the complex business models required to deliver PEB/Ds involve a varying constellation of stakeholders such as public authorities, housing associations, cooperatives, utility companies, network operators, regulatory bodies, and different types of investors.

Moreover, the neighbourhood scale of such projects implies that **resident associations, local businesses, commercial associations, voluntary and community groups and local politicians, among others, must all actively be involved.** Vulnerable groups that would normally not participate in such a process, are also addressed.

These partners and local stakeholders come together to discuss, test, fail, try again and eventually find good solutions for the transformation of their local environment.



As such, the project becomes the bridge that helps the experts and citizens to liaise and innovate together.



Resource efficiency



Within the **IRIS project** the primary objective of citizen engagement activities is to sufficiently **raise awareness and learning among key stakeholders** and within the participating Lighthouse and Follower cities by introducing pragmatic and effective co-creation mechanisms to critically assess proposed solutions in a timely manner.

Choices can be made on how best to **deploy resources** in order to have the **highest impact** within the participating smart cities and communities.

Through testing and piloting of materials with local stakeholders and hosting several awareness-raising sessions, the project identified where citizen engagement would be vital, relevant and have added value. **After all, picking the right battle is extremely important.**



The project developed a **template** wherein cities described in detail their citizen engagement activities for each of the solutions to be deployed. This allowed for citizen engagement activities to become more visible and be **fully integrated** within broader deployment trajectories. In addition, a number of KPIs for citizen engagement have been formulated and integrated into wider validation frameworks.

With this iterative **open innovation approach**, the engagement and influence of citizens in the project will be both **considerable and sustainable**, with measurable outcomes within the project lifecycle.



Examples of the IRIS template describing citizen engagement activities can be found in [Annex 3 of deliverable 1.7](#).

Inclusiveness⁴



The **City of Graz** wanted to take action in a district with challenging circumstances: high proportion of migrants, various cultures and ethnicities, education levels and incomes below average. The strategy that was applied in order to **reach out to mar-**

ginalized groups such as migrants, elderly people, and children was to offer different formats of **Living Lab activities**: workshops, social safaris, online questionnaires, mental maps, etc.

Instead of waiting for people to show up, Lab organizers actively approached them on the street, literally bringing the Lab to the people. By repeatedly offering opportunities for stakeholders to participate and by actively approaching them, over a long period of time, they succeeded to also include marginalized groups in the process.



More examples from cities can be found in [deliverable D3.2](#) from the +CityXChange project.



⁴ Burón García et al., 2020. [Delivery of the citizen participation playbook. +CityXChange Deliverable 3.2](#)

Legitimacy



The city of Leuven has the ambition to be climate neutral by 2050. In 2013, **60 founding members**, including residents, enterprises, knowledge institutions and (semi-) public authorities, **jointly founded a city-wide non-profit organisation**, which since 2016 is called [Leuven 2030](#). Currently, the organisation has over 600 members. Thanks to its composition and the fact that everyone can become a member, the non-profit organisation represents all actors in the city, giving it the support and legitimacy needed for a transition with a broad societal impact.



Leuven klimaatneutraal 2030 - 3de Werfvergadering © Flickr



**BEFORE GETTING
STARTED**

BEFORE GETTING STARTED

There is no single comprehensive approach for citizen engagement which works in every situation. However, there is material available which can bring inspiration to cities and which can be adapted to the local context.

Some important contextual parameters that need to be considered during different steps of the citizen engagement methodology, are provided in this chapter.



Collaborative city planning © SCIS

Purpose

Depending on what exactly a city wants to achieve through citizen engagement, the approach applied and actions taken will have to be different. Arnstein's ladder of participation provides insight in what levels of engagement exist.

Structuring of solutions and engagement activities

The IRIS project developed a Citizen Engagement Ladder model, which consists of four steps of increasing citizen engagement levels. Each solution implemented in the participating cities is categorised in one of the four steps, quickly providing an idea of the required citizen engagement activities for each solution. The main criteria for division in various categories are the so called 'touchpoints', which are the contact points between the user and the solution and which indicate the ability of citizens to influence the outcomes of the KPIs of the IRIS project through their own behaviour.

Chapter 5 of [IRIS Deliverable 1.6](#) provides detailed information on the IRIS Citizen Engagement Ladder.



SET uses multiple types of frameworks to capture the environment around social engagement.

These are helpful to create understanding, which in turn is needed to realize a successful citizen engagement program. SET is part of the Citizen City Initiative of EIP-SCC, which aims to have discussions with cities and projects on the topic of citizen engagement.

Type	Purpose	Examples
Capture	A variety of taxonomy approaches that resonate with cities are provided to capture the theme.	Principles; scope; performance
Context	Parameters that define local realities are identified to fit the local context.	Barriers, goals, resources
Process	Reference is made to guides that support robust planning.	Processes; levels; phases



Collaborative city planning © City-zen Roadshows

Budget



Budget availability will have a major impact on the actions that can possibly be taken within the city.

When citizen engagement forms part of a municipal investment and operation, rather than being treated as an add-on, in most cases room can be made within the existing municipal budgets dedicated to these operations.

Time



The time available from the initiation of the engagement activities until the moment of implementation of a certain measures or the moment of decision making is important, since many engagement trajectories consist of multiple steps (initiation, communication and invitations, workshops,...) and as such require some minimum amount of time for maturation of the participatory effort.

Also the available time and human resources within the city administration will influence the possibilities to **manage engagement activities**. It is better to focus on selected processes with **full commitment** than to half-heartedly focus on over-ambitious initiatives.

Stakeholder type

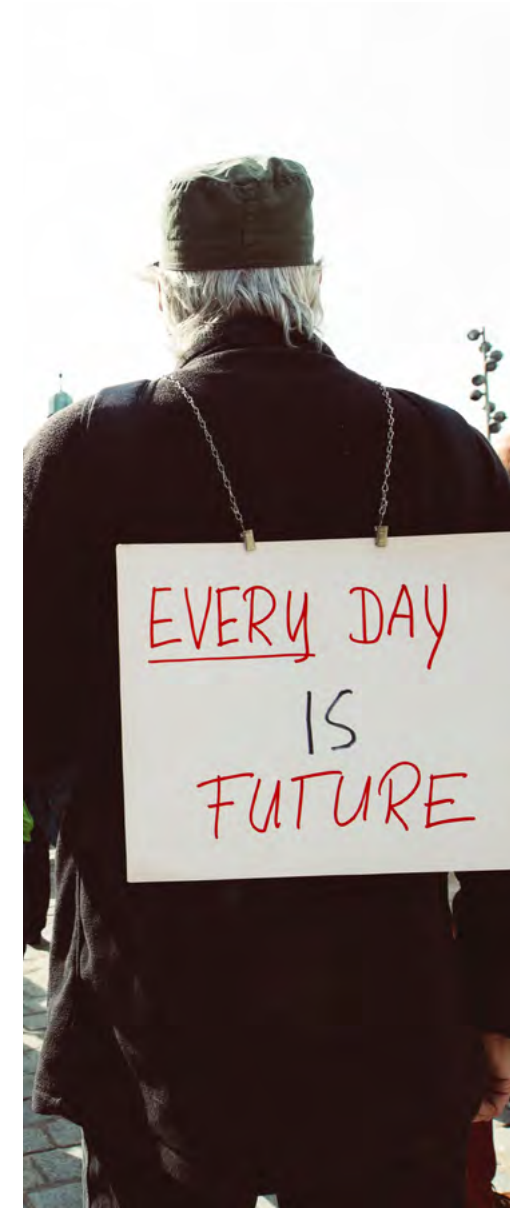


Ideally a broad and unbiased selection of stakeholders is included in the citizen engagement activities (individuals; representative organisations; networks; research institutes; industry; government; etc.), working along a Quadruple Helix approach.

In addition, as citizens are at the core of the engagement activities, their characteristics will obviously influence the process in many ways. Cities need to look at **who should be engaged** and take into account **social status, age, gender roles, migration background, disability, wealth status, willingness to pay, interest to participate in innovation, personal living environment, impact by the interventions, and many more.**

These characteristics will impact the **way of communication**, the **speed of the process**, the **actions** that are required, certain **focuses** to be placed, etc. However, it is important to take into account differences between people, this should not imply stereotypical identification of societal groups as if they are homogeneous.

Taking into account **positionality** (the social and political context creating someone's identity) is important, but should be done **along multiple characteristics**.





Influencers and champions

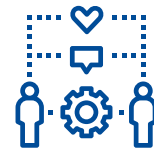
- The **IRIS project** uses influencers, who are considered individuals in a community that can exert influence on the behaviour of other individuals through peer pressure based on a social position from which they can exert that influence. An example could be to set up a project with a local school to trigger children to involve their parents in the project if the latter do not engage themselves to the level intended by the project partners. More information can be found in section 5.3.5 of [IRIS Deliverable 1.6](#) and Chapter 6 “Community building by Change agents in Utrecht” in [IRIS Deliverable 5.7](#).



- In the **+CityxChange project**, the Lighthouse City Limerick is setting up a network of Positive Energy Champions that can be first movers and influencers regarding building refurbishments, energy measures, and behaviour change. Furthermore, all of the seven cities in the project are creating dedicated activities with the “next generation”, as change agents of tomorrow as well as influencers towards their parents, families and communities. In the lighthouse city Trondheim for example, the Nordic Edge conference includes the [Next Generation programme](#).



Culture



Culture refers to the customs and beliefs, way of life and social organisation of a particular group of people. Cultures can be country, region, city or even district-specific.

They can also be mixed in areas where for example people originating from different countries or adhering to different religions live together. **As it is embedded in the way the community thinks, feels and operates in the broader sense, a culture’s features and the extent to which different cultures are mixed will impact the approach to be taken.**

The characteristics of stakeholders and cultures can have a very subtle impact on a city’s engagement process. The things to pay attention to are not always immediately visible and often **require a thorough understanding** of the person or culture in question. For example: cooking on real fire is important in certain cultures, therefore switching to electrical cooking and phasing out the use of natural gas might not be not evident.



City-zen Project presentations in Amsterdam



Cityzens discussion panel during City-zen Days 2019

Problem type and size



Problems could be simple or complex, well known or new, impact a limited number of people or have far-reaching consequences for a large community.

For example, think about the difference between engaging people in an exchange library at street level or rolling out a low-emission zone throughout an entire city. The knowledge required and resources, budget and effort to be dedicated will be completely different in both situations.

The **Cynefin framework** is one possible framework which can be used to better understand the problem at hand. Details can be found in this [Harvard Business Review](#)⁵ article, which uses the framework to help business leaders understand suitable responses for different problems in different contexts, and in this [RSA report](#)⁶, which incorporates the framework and provides a more extensive explanation on how systems thinking can be used as a basis to solve complex problems.

5 D.J. Snowden and M.E. Boone, A Leader's Framework for Decision Making. Harvard Business Review, November 2007.

6 R. Conway, J. Masters and J. Thorold, 2017. From Design Thinking to Systems Change, How to invest in innovation for social impact.

Offline versus online & the importance of place



While online activities and tools could be very useful (can be organised quickly, high degree of responsiveness, broad reach, etc.), the importance of offline and face-to-face engaging actions should not be underestimated. They remain important to establish personal connections between people. The widespread use of online platforms needs to be complemented by more small scale, neighbourhood level face-to-face meetings. Besides, even today not everyone is active online.

When working offline, proximity is an important factor to take into account: bringing the activity to an environment which is familiar to the citizens a city wants to engage with, often results in **higher attendance rates** and **increased inclusiveness** than when citizens are invited to come to a more distant place.

A **well-chosen and pleasant setting** for live meetings also helps participants to detach from their traditional roles and professional backgrounds, and open up to genuine **co-creation and creativity**.



Phase of the decision process



Whether a city starts its engagement activities at the very beginning of its solution development when all options are still open, or only when some or even most of the decisions have already been taken, will of course influence the potential impact stakeholders could still have and the type of activities the city will organize. Ideally, **citizen engagement is initiated even before the start of any other activity**. This allows citizens to be involved in the problem definition, and even the governance of the engagement activities themselves.



Also the governance structure plays an important role. For example, citizen participation in a funded project can demand different formalities and processes than citizen participation as an integral parts of a municipal planning. More insights on this topic can be found in [this paper](#)⁷ which uses the +CityxChange project in Trondheim (Norway) as an example



⁷ Gohari et al., 2020. Prevailing Approaches and Practices of Citizen Participation in Smart City Projects: Lessons from Trondheim, Norway

Experience



The city's previous experience with citizen engagement and the relevant knowledge it has within the organisation, could simplify the overall process and speed up the initiation. If a city does not have sufficient in-house knowledge or experience, it is highly recommended to call on **external expertise**.

Also citizens' experience with engagement processes – which could be positive, negative or everything in between – needs to be considered, as it will influence their initial **level of trust and openness** towards any activities.



Start with citizen engagement for better project results.



Reach out for external expertise if there is not sufficient in-house knowledge.



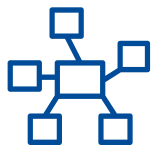
Remember that positive experience influences level of trust towards city activities.



**CITIZEN
ENGAGEMENT
IN ACTION**

CITIZEN ENGAGEMENT IN ACTION

Understanding the full context



In complex urban or community environments, there is no simple straightforward relationship between problem and (solid) solution. Neglecting certain parameters can result in undesired side effects or failure. One should look beyond the obvious and ask the right questions. What is the problem? Who is affected by this problem? Which links can be identified between the problem and other contextual parameters? Asking the right questions at the right moment can reveal critical gaps in the required knowledge and make information visible before one is faced with a *fait accompli*.

When we speak of digital transformation, both on the level of policy and research, we tend to adopt a rather narrow concept of technology-as-infrastructure. However, such a narrow focus on infrastructure does not help us comprehend the far-reaching cultural, economic, and social implications of these infrastructural developments. **A systems approach that enables understanding of the full context is necessary.**

Throughout the entire citizen engagement process, it is therefore important to be aware as much as possible of the full context. As a starting point, a city can take into account the different parameters that have been discussed before. Subtleties need to be considered carefully.

The **IRIS scoping model** consists of a number of scoping questions. These questions help to identify and describe problems, and highlight to what extent the problems are thoroughly understood.

The scoping questions can be found in section 5.3.3 of [IRIS Deliverable 1.6](#).

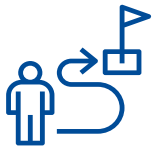
The **+CityxChange process for developing Bold City Vision (Deliverable D3.1)** helps cities to define their ambitious vision and goals, break them down into actionable steps, and implement them in cooperation with local and international stakeholders. The approach merges technical, social, spatial, economic, innovation and other perspectives, supporting cities in their quest to achieve the United Nations Sustainable Development Goals and contribute to a climate-neutral Europe by 2050.

The [report by the RSA \(UK\)](#)⁸ provides several valuable and practical pointers towards a systems thinking approach, which can help to better understand the complex dynamics at play when addressing challenges.



⁸ R. Conway, J. Masters and J. Thorold, 2017. From Design Thinking to Systems Change, How to invest in innovation for social impact.

Purpose setting



A goal oriented approach will help to shape the spending of public and other resources in the best possible manner towards the city's ambitious targets.

Clearly define the goal at the start of the process. On the one hand, think about which problems need to be solved. To do so, consult a broad public early on to identify the real problems and challenges the city would like to tackle. This is called **front-loading**.



Don't start from a specific solution because you will risk the problem it addresses after all is not so relevant.

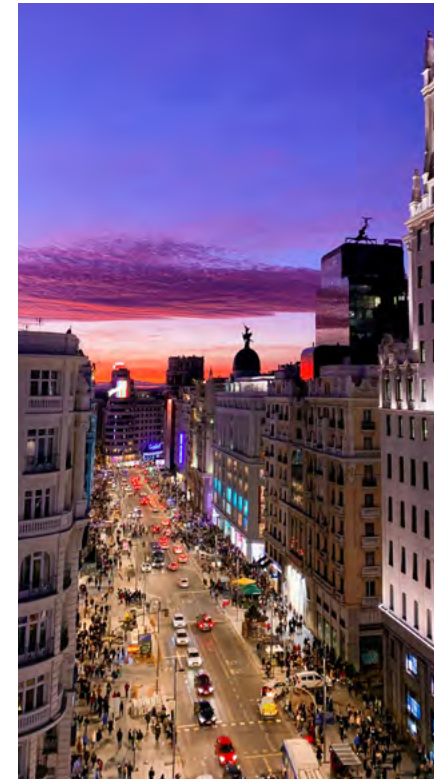
On the other hand, make sure the purpose of the city's engagement activities is clear. How will citizen participation affect the outcomes of the participatory process? How will the local council incorporate their citizens' voices into the final project? This kind of expectation management will avoid misalignment and disappointment throughout the process.



Air quality and climate change plan for the city of Madrid: an example of front-loading⁹

The city of Madrid started with 15-20 open questions as a way to start the conversation with citizens on the development of the plan. Consul's debate module was used as the online debate space inside this participation tool to compile all the conversations in which 6250 answers and comments have been accounted for.

Front-loading the process with an exploratory open debate before detailed plans were drawn up allowed early and productive community engagement, and the inclusion of high quality suggestions (weighted by votes in the online debate) in the early versions of the climate change plan.



⁹ Burón García et al., 2020. Delivery of the citizen participation playbook. +CityxChange Deliverable 3.2.

Capacity building



Once the problem to be solved and the purpose of the city's citizen engagement activities are clear, identify which people and knowledge are needed. Some of this knowledge might be readily available within the city organisation, some might require to call for external expertise.

Examples include, but are not limited to:

- professionals in communication, built heritage, education, health, crime, design thinking, transition management, etc.;
- technical experts in energy, waste, construction, water, etc.;
- interest groups and associations of residents, businesses, volunteers, etc.

To strengthen their own organisation and staff, cities can look for inspiration with other cities, for example on how their procedures, structures, routines and regulations might be of use for local implementation. However, rather than directly copying approaches or solutions, it is important to identify and translate the intentions, drivers, ecosystems and other resources behind the approach, to the local context.

By collaborating with a wide range of actors, cities can devise blended skill-sets and clusters of competences to properly assess, scope and tackle more complex and chaotic problems. At the same time, **informing and training citizens and building their capacity will result in more understanding and interest in the field where the participation is taking place.**



Applied game design

In **+CityxChange Lighthouse City Limerick** (IE) citizen participants help the municipality to develop future visions of a sustainable city by taking part in an interactive game, using a 3D model of the city block, and their imaginations. The participants work on different scenarios to collaboratively create a model for a green, efficient and people-friendly Limerick. They develop new ideas to determine the growth and adaptability of their city block. A short description of the use of the game can be found [here](#)¹⁰.



In **Trondheim** (NO), a PhD research in relation to PI-SEC (Planning Instruments for Smart Energy Communities, a project funded by The Research Council of Norway) is collaborating with +CityxChange to co-create a **game through which citizens and planning professionals can exchange knowledge and ideas** about the development towards a Positive Energy City. Players have to suggest actions that will bring the neighbourhood closer to being energy positive on a societal, technical, or bureaucratic level. More information and contact details can be found on the [PhD-page](#).



¹⁰ Limerick, Accelerate Change and Disruptive Solutions through Innovation Playgrounds.



Several platforms and organisations provide learning material and the opportunity to get in touch with peers:

- [Smart Cities Information System](#)
- [Co-VAL](#)
- [Participedia](#)
- [Civitas](#)
- [Nesta](#)

Additional learning material can be found in the **“Useful documents”** chapter at the end of this booklet.

“Ensuring internal knowledge sharing and learning on citizen engagement across the city silos, and building internal capacity of city administration staff, will avoid one-time, “token” activities on citizen engagement.”

Maria Sangiuliano,
chair of the EIP-SCC Action Cluster Citizen Focus



Including diverse stakeholder groups



Different target groups require different approaches. It is important to know how (not) to communicate with each of them to reach a certain effect. Stakeholder segmentation helps to define groups of people, allowing the city to tailor actions based on their characteristics.

When trying to engage with people, identify with their point of view: “What’s in it for them?”

The S3C Toolbox¹¹ provides several useful guidelines, tools and a step-by-step approach on segmentation:



[Using segmentation to better target user groups;](#)



[Learning about target groups;](#)



[User group segmentation tool.](#)



Example from Leuven

People in different stages of their life, require a different approach.

Leuven2030 is the not-for-profit organisation coordinating the activities related to the city’s climate action plan. One of the measures Leuven2030 planned was to initiate and support renovation of private residential buildings. The local administration targeted a neighbourhood that looked homogeneous with regard to the building typology and went on site with a team to inform and guide the process. However, on site it turned out to be all but a homogeneous setting. The mix of occupants was diverse with some people who bought their house recently and focused on saving, while elderly residents were not eager to invest, and only a few other people who were actually open to the initiative. Moreover, a lot of building owners had already invested in varying energy efficiency measures.

¹¹ The S3C project learned from experiences of other projects and developed a set of tools and guidelines focusing on engagement in smart grid projects. Those tools and guidelines have been tested and validated in demonstration projects and are now available in a finalised toolkit.

Engagement activities, tools and infrastructure



During the phases of purpose setting and capacity building with citizens, the first engagement activities have already taken place. Once the problem definition and its context are clear, the stakeholders are identified and the required capacity is in place, the next phase can start. A wealth of engagement activities exists. The chapter on **“Tools” on page 41** includes references to some useful materials where a city can find inspiration and learn about their applicability.

An important contributing factor in setting up engagement activities may be **Design Thinking**, which is useful for creating user-centred new products and services.

Students from HKU University of the Arts in Utrecht applied Design Thinking to involve Utrecht’s residents in the design of smart streetlights for their neighbourhood. More information can be found in this [article from IRIS](#) and the [pamphlet developed by the students](#).



Chapter 6 from the [IRIS Deliverable 1.6](#) provides further insights on the Design Thinking approach.



Besides, citizen engagement often benefits from the availability of infrastructure such as **living labs, an innovation centre or a central landmark building** as a meeting place. **Cities have testified that such infrastructure plays a key role in sustaining citizen engagement.**



Co-creation at Waag © Cities-4-People Consortium, 2020



Co-creation at Waag © Cities-4-People Consortium, 2020



Within the **Smarter Together project**, the city of Lyon set up several engagement activities¹².

- The house of Confluence hosts a permanent exhibition which was updated with new features about the project. The **exhibition** opens to the public 3 days a week, attracting 14000 visitors yearly.
- **Private owners and a social housing company were actively involved in the refurbishment works** of their building. Refurbishment works have a big impact on the daily life of the tenants, therefore support by the tenants is very important. Although the refurbishment works will not increase the rent, tenants who support the works will make the work of construction companies easier, as there will be less complaints and obstacles to the workers.
- **Workshops with private companies** resulted in new solutions that were not necessarily planned before.
- **A club of inhabitants and users** of the Lyon-Confluence neighbourhood has been set up, reinforcing the engagement and co-creation of new urban services in the field of smart cities.



The **+CityxChange Project** has designed **Citizen Observatories** and **Innovation Playgrounds** to invite citizens to co-create solutions for positive energy blocks in the participating cities.

An Innovation Playground, as defined in +CityxChange, is a designated area of a city bringing together different physical and virtual places and activities relating to innovation into a coherent whole to facilitate collaboration, empowering citizens, and finding new ways of addressing challenges that matter to people. More detailed information about the processes and practical solutions can be found in [Deliverable 3.3](#).



Co-creation at Waag © Cities-4-People Consortium, 2020

¹² Smarter Together, 2019. [Final report on stakeholder involvement in the Lyon Lighthouse City](#)

Open Data



Open Data policies can be applied in various forms and have many benefits:


- sharing data within the city organisation and assembling it in a single platform or federated systems will **increase the insights** that can be extracted and **enable reuse**;
- open data and open standards make it easier for a city to **access its own data** and **coordinate** with vendors and local stakeholders;
- data availability for citizens will **increase their knowledge, awareness and readiness to participate and be engaged in an informed way**; and it can help to integrate citizens and stakeholders more directly into solutions through open innovation, hackathons, citizen science, etc.;
- disseminating data in general will build trust and credibility.



PEAKapp - Personal Energy Administration Kiosk application: an ICT-ecosystem for energy savings through Behavioural Change, Flexible Tariffs and Fun.
Source: www.peakapp.eu

Some interesting examples include:

- The [Urban Data School](#) in Milton Keynes (UK) is set up to raise the standard of data literacy amongst future generations. 
- The city of Dormagen (Germany) hosts a [platform where citizens can report issues](#)¹³ related to public infrastructure. 
- [Consul](#), a free software for citizen participation originally developed by the Madrid City government, is now used in various cities around the world. 
- In +CityxChange, the ICT approach follows an open architecture¹⁴ to integrate the different components and link them through open standards and open data to municipal systems and open data platforms, including technical and participation systems.

H2020 projects are encouraged to make data openly available through the [Guidelines on FAIR Data Management in Horizon 2020](#). 

[EU-Citizen.Science](#) provides knowledge, tools, training and resources for citizen science. 

¹³ Dormagen, Mängelmelder.

¹⁴ [A Smart City Ecosystem enabling Open Innovation](#). Dirk Ahlers, Leendert Wienhofen, Sobah Abbas Petersen, Mohsen Anvaari. 19th International Conference on Innovations for Community Services (I4CS 2019). Springer, 2019.

Monitoring and evaluation



Monitoring of citizen engagement activities can be realized through a wide variety of KPIs, ranging from the **number of people** that attended a session, over a **quantification of the extent** to which the activities impacted certain aspects of people's lives, to a **qualitative appreciation**.

Monitoring and evaluation helps to:

- **showing the project progress** and its social/societal impact;
- **add feedback** from and to citizens;
- **prevent tokenist conceptions** of citizen engagement and reductionist “box ticking exercises”.



The **Cities4People project** co-created a Core-Outcome-Set of indicators together with citizens. A minimum set of outcomes that need to be achieved is defined along with the citizens: **they define the measures to evaluate the success of the interventions**. After the pilot phase, data is collected through **questionnaires and online voting** in multiple rounds (using the Delphi Method). Finally, the citizens evaluate the outcome of the interventions, comparing it to the outcome categories they had set at the beginning in the Core-Outcome-Set. This way, they participate through the entire process until they also co-evaluate the impact of the interventions.

Some recommendations can be given to improve the outcome of this step:

- **add qualitative analysis** to truly understand the impact and usefulness of engagement activities;
- **make sure different member groups of society are represented to avoid biased evaluation**;
- **share open data**, which allows others to validate results and impacts, and which helps to derive more general recommendations spanning multiple projects;
- align indicators across projects or cities to **allow for benchmarking**;
- **establish the monitoring indicators at the start of the engagement process**.

[Measuring Impact in Civic Tech](#)
(CitizenLab)

[Evaluating Digital Citizen Engagement](#)
(World Bank Group)



Monitoring of KPIs can be realized in many different ways



Let citizens define the success measures



Co-evaluate the impact of the interventions with the citizens

Privacy



Credible privacy protections are a key acceptance factor for many ICT-mediated engagement activities. Engagement with citizens and other players can ensure this is done correctly and well, concerns are taken aboard, and experiences can be reused across organisations. This section only provides an overview of some important aspects. Detailed technical and legal guidance is strongly suggested.

The European General Data Protection Regulation (GDPR) is very thorough on privacy. GDPR compliance is **mandated by law** and should be ensured together with city Data Protection Officers and solution providers.



Data sharing of privacy-related data between organisations needs to be well understood and limited in line with GDPR.

Data minimisation principles likewise should apply. Wherever possible, **little or anonymized data should be collected**. Data aggregation and anonymization should be applied as much as possible. There is also a need for **data sharing agreements**. Ideally, these can be made public to be as **transparent** as possible.

Data Privacy Impact Assessments (DPIA) should be part of municipal workflows and should ensure that personal data use is understood and protected. Apart from surveys and workshops, automated data collection, etc., a valuable way to engage with citizens and collect data can be **voluntary data provision** (for example citizen science, contributions to participation platforms, contribution to global open sources, etc.).

When working with **Citizen Participation Platforms**, these need to be set up in a privacy aware mode, **in line with GDPR/DPIAs** and with relevant technical expertise. The development principle of Privacy-by-design ensures privacy is considered early in activities; the focus should be on value for city and citizens, and the avoidance of broad surveillance.



EUROPEAN COMMISSION
Executive Agency for Small and Medium-sized Enterprises (EASME)

Data protection notice

EU Sustainable Energy Week (EUSEW) 22-26 June 2020

Your personal data are processed in accordance with Regulation (EU) 2018/1725¹ on the protection of individuals with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data.

The data controller of the processing operation is the Head of the Administration Unit of the Executive Agency for Small and Medium-sized Enterprises (EASME).

The legal basis for the processing operations comprises Article 5(1)(a) of Regulation (EU) 2018/1725 whereby processing is necessary for the performance of a task carried out in the public interest on the basis of the Treaties or other legal instruments adopted on the basis thereof², and Article 5(1)(d) of Regulation (EU) 2018/1725 based on your consent for non-compulsory personal data specified below.

The purpose of this processing operation is to organise and manage the **EU Sustainable Energy Week activities**. It covers:

- Registration of participants to events in the framework of the **EU Sustainable Energy Week**, management of their participation, provision of access to venues and inclusion in participant lists;
- Management of applications for the EUSEW Awards (evaluation, selection, announcement, promotion and feedback);
- Management of applications for hosting Policy Conference sessions (evaluation, selection, announcement, promotion and feedback);
- Management of applications for the Networking Village (evaluation, selection, announcement, promotion and feedback);
- Management of submissions of Energy Days (assessment, selection, publication, promotion and feedback);
- Management of follow-up meetings and other related follow-up actions, such as the collection of feedback, the distribution of contact lists, invitations, news, reports, other publications and information material, and sending of emails informing on future activities related to EUSEW;




¹ Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (OJEU L295/39, 21.11.2018).

² Act of Establishment: Commission Implementing Decision C(2013/771/EU) of 17 December 2013 establishing the 'Executive Agency for Small and Medium-sized Enterprises' and repealing Decisions 2004/20/EC and 2007/372/EC and Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) and repealing Decision No 1982/2006/EC (OJEU L 347/104 of 20.12.2013).

The AI Factor

Artificial Intelligence will affect citizen engagement more and more and needs to be looked at when considering privacy.

Elements of attention include:

-  **personal recognition and tracking;**
-  **media analytics and social semantics;**
-  **social nudging.**



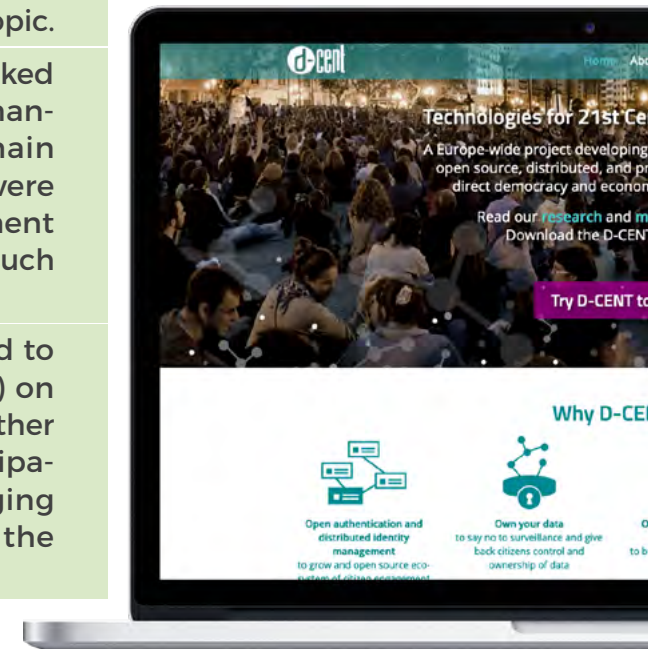
Furthermore, the **threat of biased or discriminatory use of AI or automated decision making needs to be taken seriously.**

Explainable systems with human appeal are to be preferred.



Privacy and personal data protection by platforms and IoT have always been presented as key prerequisites for citizens to trust city authorities and their smart city initiatives. Surveillance concerns and fear that personal data can be misused is high among citizens. Moreover, citizen engagement initiatives as such, pose privacy issues.

- The **DECODE Project Report** Reclaiming the Smart City (2018) recaps on risks and potential misconceptions around this topic.
- The H2020 funded [D-CENT Project](#) worked on open source distributed identity management systems based on BlockChain Technologies to address this, which were then embedded into citizen engagement and Participatory Budgeting platforms such as Decidim (Barcelona).
- Within H2020, projects are encouraged to have a Data Management Plan (DMP) on data collection and open data. They further need to consider Data Ethics of participation and informed consent for engaging with citizens. An example is given in the +CityxChange DMP, [Deliverable D11.7](#).





**GENERAL
LESSONS LEARNED**

GENERAL LESSONS LEARNED

Knowledge and capacity building

All too often a lack of capacity leads to a very limited implementation of citizen engagement activities or even none at all.

Sufficient resources need to be made available within the city administration, and the **knowledge gap** has to be overcome by sharing of and building on the wealth of materials, experiences and expertise that is available.

! Cities can learn from each other and build capacity within their own organisation. Experts can and should be included whenever needed.



New breakthrough work in collaboration methodology

! It is always important to distinguish between Communication and Co-Creation activities. Although there is a tendency to push for co-creation for every aspect of citizen engagement, this is not always the best strategy. Co-creation with citizens on subjects or measures where there is little room for contribution or where there is no future interaction between the citizen and the service can be even counterproductive. In such scenarios, communication can or may suffice. Making co-creation a prerequisite can be a risky approach.

It is also helpful to **distinguish between identity and role based stakeholderism**. Only adopting identity based stakeholderism has often led to box-ticking and compliance. It is better to **create interfaces between different actors** that can highlight differences in agency and how this is manifested. This means acknowledging a shift from identity based stakeholders to **role-based understanding of stakes**. Applied **game design and scenario-based reasoning** has much to offer here in allowing people to explore **multiple perspectives**. This is often best achieved within **open innovation environments** with a focus on **mutual learning**.



Learn from others and share your knowledge and expertise



Before deciding for co-creation check if it is the best strategy



Let citizens explore different perspectives

Collaborative governance



Collaborative governance helps to integrate the different aspects of a complex endeavour like citizen engagement. **Each city will develop its own way of describing the processes, goals and parameters of its project.**

The following elements should be considered:



principles to stick to;



alignment with and integration into strategic planning processes;



frameworks to build the project around;



building legitimacy;



guiding processes that will steer daily activities;



local context and its impact on the process.

Budget availability

Budget availability has a major impact on the actions that can possibly be taken within the city.



When citizen engagement forms part of a municipal investment and operation, rather than being treated as an add-on, in most cases **room can be made within the existing municipal budgets dedicated to these operations.**



From buzzword to reality

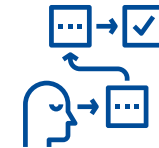
In recent years citizen engagement has become a buzzword in the smart cities debate and arena, a vehicle to overcome conceptions of merely tech driven smart cities.

As all buzzwords, it is also playing an important role in **shaping new agendas and policy priorities (Bensaude-Vincent, 2014)¹⁵ towards human/people and planet-centric smart cities**, where technology is seen as functional to reaching **Sustainable Development Goals** and solving the climate challenges.

Still, time has come for cities and all stakeholders to shift from a mere endorsement of the principles and values of citizen engagement to **actual commitment and concrete implementation**. Learning from undertakings within H2020 Lighthouse projects, designing comprehensive and sound citizen engagement plans embedded in each city's Smart City Strategy, could be a way to **overcome an add-on or box ticking approach to citizen engagement**.



Monitoring and evaluating the implementation of plans and all citizen engagement initiatives and communicating about invested resources, results and the added value, could help to this respect. Overall, such an approach would make it possible for city administrators to become accountable on citizen engagement.



¹⁵ Bensaude Vincent, 2014. The politics of buzzwords at the interface of technoscience, market and society: The case of 'public engagement in science'.

Timely engaging and frontloading

It is wise to introduce co-creation activities as early as possible in the innovation process or if not possible, remember to assess the level of impact the city can achieve against the stage in the innovation trajectory.



In this way, the city can ensure the use of the methods most appropriate to the stage of innovation development.



Trust



Cities may seek to work with **ambassadors and translators from local neighbourhoods** as they can have a huge influence on the success or otherwise of the city's engagement approaches.



A shift in paradigm from pull to visit

In current citizen engagement activities, a dominant form is to invite citizens to a central venue to listen, engage, co-create, discuss, etc. In many neighbourhoods the turn-up for this kind of activity is too limited in numbers, cultural diversity and opinion diversity.



We therefore strongly recommend a shift in effort for citizen engagement: to visit the citizens instead of always asking the citizen to come to 'us' at a central venue. In other words, we should **change the way of meeting up with citizens: try to get into their 'comfort zones' instead of inviting them to our 'comfort zone'**. This 'comfort zone' can be different from person to person and should be tailored. Especially in neighbourhoods with a lower socioeconomic status the 'central meeting approach' will most probably fail, as could be testified in the IRIS project from the Utrecht demo area case, where **visiting citizens in their own dwelling has proven much more effective**.



Starting with what is available

When starting off citizen engagement activities, cities should not forget to **map existing citizen engagement success and mobilize existing active players** (considering the Quadruple Helix).





TOOLS

TOOLS

SET Social Engagement Toolkit

SET is an ongoing collection of online and offline information that bridges existing learning on citizen engagement to cities in ways that are understandable and actionable. The purpose is to drive the success of Smart City programs by enabling cities to align efforts with citizens and stakeholders. At the same time it demonstrates replication/adoption of existing learning.

Three elements are:

Framework

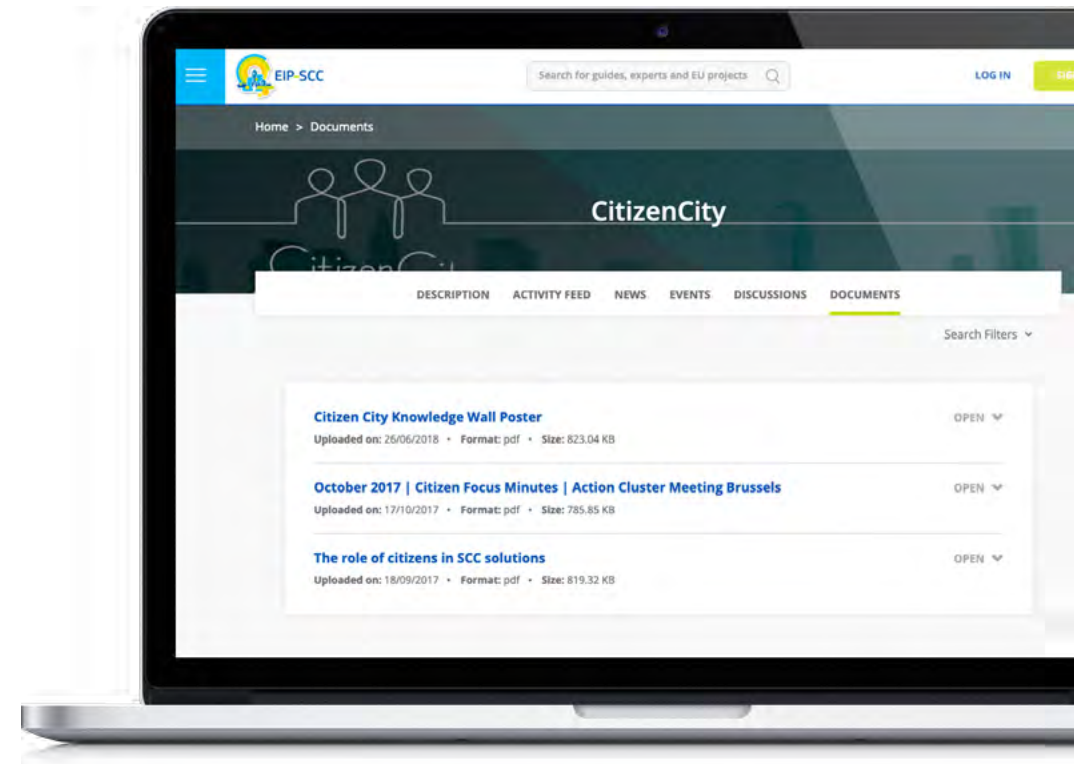
A dynamic taxonomy of citizen engagement that captures the attention of cities, defining a topic and allowing for a common understanding to connect people into a conversation.

Assessment & Goals

A range of approaches and variables that cities craft to match current context and desires. Assessing resources and defining desired outcomes refines the selection of tools.

Tools

An open growing collection of practices that are understandable and actionable by multiple levels of government employees from various backgrounds and roles. A range of tools that cities can review at different levels of decision making (scan, select, implement).



The S3C Toolkit

The S3C toolkit is developed for anyone who is involved in the development of smart grid projects, products or services in which engagement of users plays an important role. It provides approximately fifty guidelines and tools with actionable information and advice that can support a city in the planning and implementation of its smart grid project, based on extensive field research.

The information in this toolkit website is organized via three gateways which – depending on your knowledge needs and personal interests – can be used to navigate through the contents:

Learning

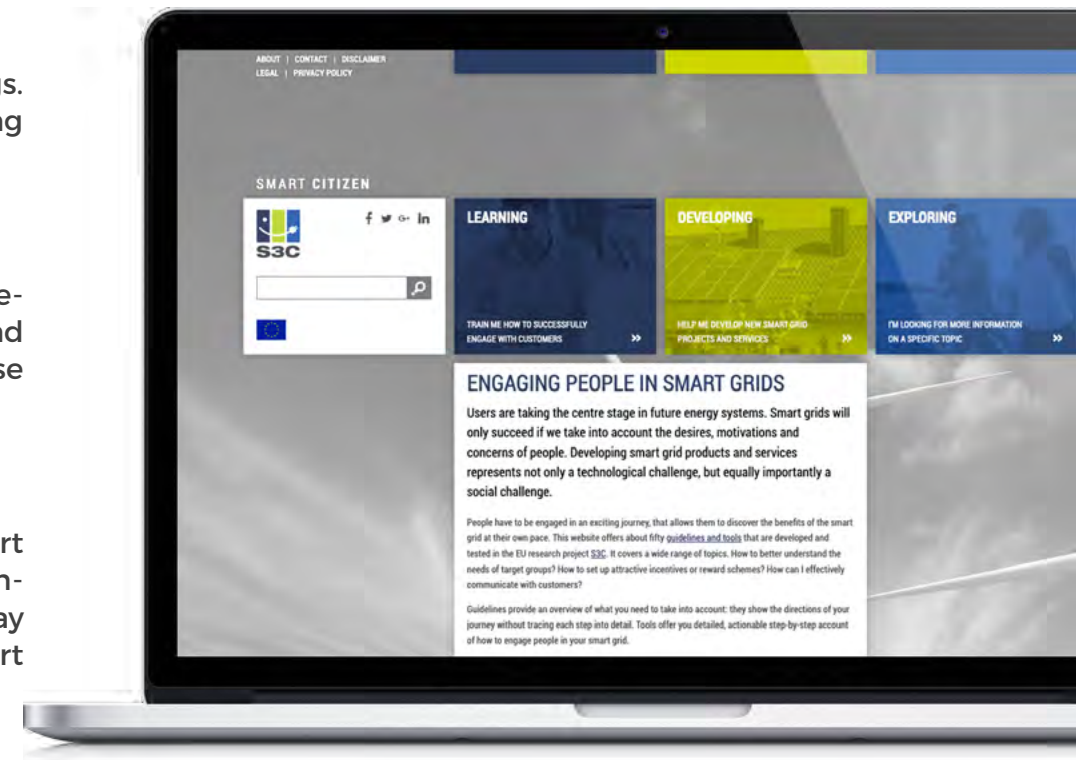
To get acquainted with the S3C approach and its research findings. One can compile his own personal information booklet by selecting preferred topics and cases.

Developing

Intended for professionals who are involved in the design or implementation of an actual smart grid project or working on concepts and ideas for smart grid products and services. Here anyone can browse through all guidelines and tools by phases in the project cycle.

Exploring

Aimed at anyone who is generally interested in the field of smart grids, and wants to learn more about customer involvement. Organized around five key topics regarding user engagement, this gateway contains all guidelines and tools on how to commit users in smart grid projects.



Cities-4-People tools and resources for replication and co-creation


The Cities-4-People (C4P) project focuses on sustainable and people-oriented transport solutions to address the many challenges linked to mobility and faced by urban and peri-urban areas.

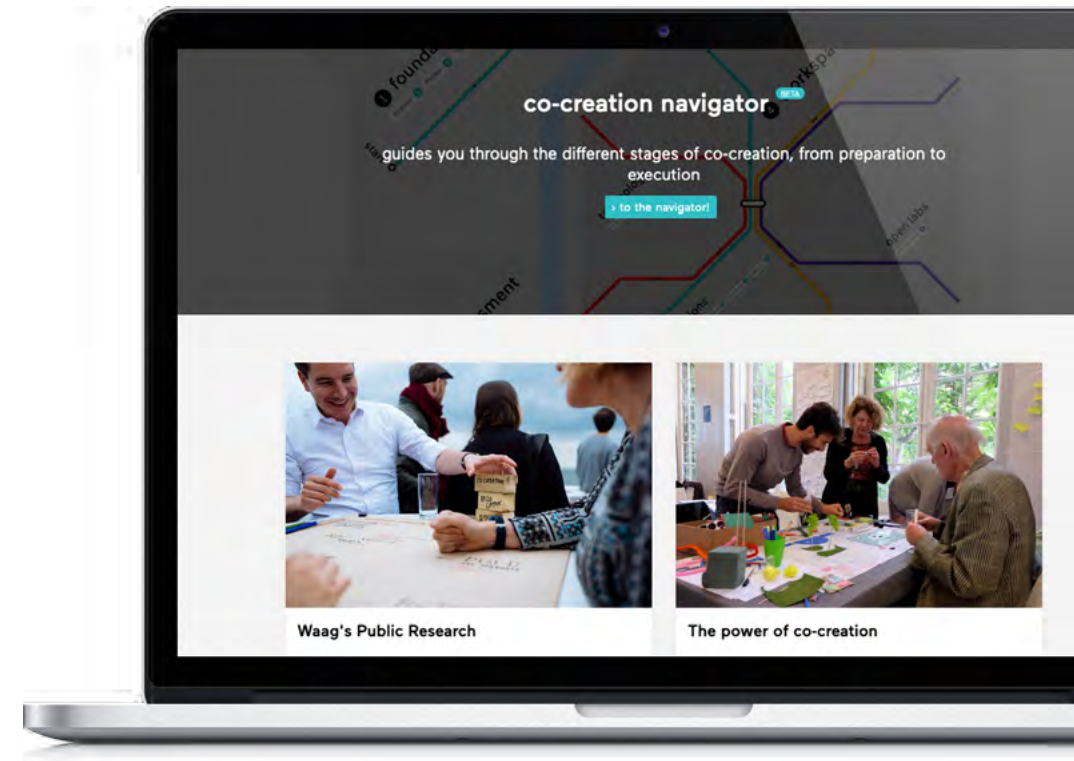
The project's pilot areas were key for testing and evaluating the proposed solutions. Starting from concrete cases, C4P develops evidence-based guidelines, summarised in a Deployment Toolkit & Replication Guide, aiming to enhance the innovation capacity and sustainability of urban mobility systems.

 The project provides a [repository of tools and resources](#) that can be used to start co-creatively tackling challenges in your own neighbourhood:

- **Communication and Voting Tools;**
- **Resources for 'People-Oriented Transport and Mobility';**
- **Educational and Inspirational Materials;**
- **Guides and Best Practices.**

The project will deliver a Citizen Mobility Kit, including all tools and methods used by the different pilot cities, together with the specific experiences in each city. As part of the Citizen Mobility Kit, a [co-creation navigator](#) has been developed, providing detailed instructions on tools that can be used while co-creating.

 As part of the Citizen Mobility Kit, a [co-creation navigator](#) has been developed, providing detailed instructions on tools that can be used while co-creating.



Catalog of Tools for Citizen Engagement and Participation

The +CityxChange H2020 Lighthouse project has created options for Participatory Platforms with seven online tools. The description of each of these tools includes a list of recommended software applications distilled from the analysis of more than 35 applications. The identified tools are listed below and can be found in **section 5.1** of [+CityxChange Deliverable 3.2](#).



1. Collaborative Text
2. Online Debate
3. Online Mapping
4. Online Voting
5. Accountability
6. Online Proposals
7. Participatory Budgeting

In addition, it provides a Catalog of Physical Tools with implementation guidelines and references to practical examples for:

1. Narrative tools
2. Co-design workshops
3. Focus working groups
4. Public Engagement Events
5. Go and find citizens
6. Mapping sessions
7. Gamification

Details about these physical tools can be found in **section 4.6** of [Deliverable D3.2](#).



GLOSSARY

This glossary provides a common understanding of the terminology used in this Solution Booklet.

Also within a city's own engagement process or during collaborating with other cities, it can be helpful to identify a common framework of understanding, as it will facilitate effective communication between the different stakeholder groups and help to collect and provide knowledge in a structured way.

CITIZENS

- » The broader stakeholder group of people that live, work, visit or move through the city.

CITIZEN ENGAGEMENT

- » The involvement of citizens in the city's decision making processes, with the objective to better address the needs of the citizens and build public support.

CO-CREATION

- » The process when all relevant stakeholders in the city are involved in the

planning of a service or solution, for example when civil society initiates the construction of a digital platform, participates in budget prioritising, or contributes in a city council discussing its maintenance and design. (Source: +CityxChange, D3.2)

CO-DESIGN

- » Happens during the definition of the problem and the development of actions to be performed in which both citizens, specialized experts and civil servants work together. (Source: +CityxChange, D3.2)

DECISION (MAKING) PROCESS

- » The process of evaluating different options and making choices to retain and implement some of them.

FRONT LOADING

- » Starting with community engagement before the actual work starts. This should be done even before the project goals are developed. Helps to build trust and eases the overall process. (Source: +CityxChange)

POSITIONALITY

- » The social and political context creating someone's identity in terms of race, class, gender, sexuality, and ability status. It also describes the way someone's identity influences, and potentially biases, his or her understanding of and outlook on the world.¹⁶

SOLUTION

- » Solutions are measures a city implements to achieve a certain objective. The roll-out of E-buses for example could be a solution to decrease carbon emissions.

QUADRUPLE HELIX APPROACH

- » The intensive cooperation between stakeholders from research, industry, government, and society.

¹⁶ www.dictionary.com

USEFUL DOCUMENTS

 Key source material for this booklet

[Delivery of the citizen participation playbook](#) (+CityxChange)

[Report on Citizen Requirements from the Transition Track #5 Solutions](#) (IRIS)

[Citizen Focus Action Cluster of EIP-SCC](#)

[Citizen City Initiative of EIP-SCC](#)

 Relevant documents and tools

[How to consult with your community](#) (Locality)

[Neighbourhood Plan Roadmap, A Step-by-step Guide](#) (Locality)

[Consul Communication Guide](#) (Consul)

[Smart City Guidance Package](#) (EIP-SCC, NTNU)

[Co-Creation of Public Services, Why and How](#) (Coval)

[Varieties of Participation in Complex Governance](#) (Archon Fung)

[Being a 'citizen' in the smart city:](#)

[Up and down the scaffold of smart citizen participation](#) (Paolo Cardullo and Rob Kitchin)

[Prevailing Approaches and Practices of Citizen Participation in Smart City Projects:](#)

[Lessons from Trondheim, Norway](#) (Savis Gohari et al.)

[Enabling social innovation in European cities](#) (SEiSMiC)

[The Hackable City, Digital Media and Collaborative City-Making in the Network Society](#)

(Michiel de Lange, Martijn de Waal)

[Make it FutureFit, Four ways to design better adult learning](#) (Nesta)



Projects & Initiatives

+CityxChange (SCC1)

[Framework for Bold City Vision, Guidelines, and Incentive Schemes](#)

[Citizen participation playbook](#)

[Framework for Innovation Playgrounds](#)

[Framework for intra-project collaboration](#)

[Data Management Plan 2](#)

IRIS (SCC1)

[Launch of T.T. #5 Activities on Citizen Engagement and motivating feedback](#)

[HKU/IRIS, Citizen Engagement in public spaces - Designing with co-creation, 2019](#)

MatchUP (SCC1)

[New citizens' engagement strategies in Antalya](#)

[New citizens' engagement strategies in Dresden](#)

[New citizens' engagement strategies in Valencia](#)

MySMARTLife (SCC1)

[Key Issues for Social Awareness and Acceptance](#)

[Methodology for citizen engagement based on system thinking](#)

Replicate (SCC1)

[Innovation Spaces](#)



Sharing Cities (SCC1)

[Methods Book of existing and next stage customer insight and engagement methods](#)

[Report on Community Engagement Hubs](#)

SmartEnCity (SCC1)

[Citizen Engagement Strategy and deployment plan](#)

Smarter Together (SCC1)

[Final report on stakeholder involvement in het Lyon Lighthouse city](#)

[Smart City Catalyst](#)

[Vienna Urban Living Lab](#)

[Vienna Co-design processes](#)

[Monitoring & evaluation manual](#)

EIP-SCC

[Inclusive smart cities: A European Manifesto on citizen engagement](#)

[Principles and Enablers of Citizen Engagement](#)

Eurocities

[Smarter cities: city-led, citizen-focused](#)



CONTRIBUTIONS:



SCIS

The Smart Cities Information System (SCIS) is a knowledge platform to exchange data, experience and know-how and to collaborate on the creation of Smart Cities, providing a high quality of life for its citizens in a clean, energy efficient and climate friendly urban environment. SCIS brings together project developers, cities, research institutions, industry, experts and citizens from across Europe.

SCIS focuses on people and their stories – bringing to life best practices and lessons learned from smart projects. Through storytelling, SCIS portrays the “human element” of changing cities. It restores qualitative depth to inspire replication and, of course, to spread the knowledge of smart ideas and technologies – not only to a scientific community, but also to the broad public!

smartcities-infosystem.eu



EIP-SCC AC Citizen Focus & CitizenCity

Citizen Focus is one of the EIP-SCC Action Clusters. It gathers city administrators, researchers, NGOs, and IT providers to promote inclusive smart cities. The aim is to support mutual learning and matchmaking on methods and tools for citizen engagement across mobility and transport, built environment and IT infrastructures. Currently, the Cluster is working on concrete ways for embedding citizen engagement into financing mechanisms for smart cities projects, and is exploring learning and capacity building needs of cities, in view of promoting a forthcoming European Citizen Engagement Academy. The Cluster hosts 2 active initiatives at present:

- European Network of City Policy Labs (innovate.city), brings together the city's quadruple helix stakeholders to co-create and co-invest on innovative solutions with a focus on regulatory frameworks.
- Citizen City Develops Tools and Platforms to make citizens central in the delivery of smart projects. It is currently developing (SET), a Societal Engagement Toolkit.

eu-smartcities.eu



+CityxChange

In the +CityxChange project, seven cities (Trondheim, Limerick, Alba Iulia, Pisek, Sestao, Smolyan and Vöru), 23 solution providers within energy, ICT, mobility and citizen engagement, and two universities have set out on a journey to co-create positive energy blocks, districts, and cities. The project, led by NTNU, is built on three main pillars:

- (1) deliver integrated planning and design by better data and better use of data,
- (2) create a local energy flexibility market through public-private partnerships and regulatory sandboxes, and
- (3) community exchange with local citizen and professional stakeholders.

In order to create solutions that are viable in the long term and advantageous for all, the project has created an Open Innovation cooperation framework, including, amongst others, a Bold City Vision, Citizen Participation Playbook, Citizen Observatories and Innovation Playgrounds.

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IRIS

In the IRIS project the cities of Utrecht (NL), Göteborg (SE) and Nice Côte d'Azur (FR), Vaasa (FI), Alexandroupolis (GR), Santa Cruz de Tenerife (ES), and Focsani (RO) are demonstrating energy and mobility services that are cheaper, better accessible, reliable, and that contribute to a more sustainable urban quality of life for their citizens.

Through the integration of solutions in energy, mobility, data science and citizen co-creation an open innovation ecosystem will be created motivating citizens to act as prosumers; enabling more effective urban planning and governance; providing exploitation of validated innovative business models; and creating more stable, secure and affordable energy and mobility services for citizens, with improved air quality.

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