# Systemic Changes in Governance

**Equipping local governments for realising climate-neutral and smart cities**

**Executive Summary**

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January 2023

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EUROPEAN COMMISSION

Publications Office
of the European Union

# EXECUTIVE SUMMARY

Making European cities climate-neutral and smart requires a huge paradigm shift and profound changes in current governance practices, to a considerable extent even systemic changes.

One of the key challenges to achieve such systemic changes is overcoming the discrepancy between the strategic vision on how the city should develop and the complex fragmentation of urban governance. In particular, a major gap exists between technological progress, in terms of solutions already available on the market, and the capacity of city administrations to adopt and mainstream these solutions.

This Governance Solution Booklet presents the far-reaching changes in governance tested by cities during their participation in Horizon 2020 Smart City Lighthouse (SCC-01) projects between 2014 and 2022. Following an in-depth analysis of the body of knowledge created by these projects, and after several direct interviews with city representatives and project partners, the booklet collects recommendations on, and solutions and good practices for governance for climate-neutral and smart cities.

The Scalable Cities Task Group on Replication defines governance as 'the framework of rules, procedures, roles and responsibilities that constitute decision-making processes and project management', both at the level of individual projects and at the level of the municipal organisation.

For years, governance changes were expected to happen as a by-product of other activities, but isolated and individual projects, disconnected from key actors and decision makers in the city, cannot effectively contribute to systemic changes in governance. Only fundamentally different approaches to governance will allow city administrators to bridge the gap between technological progress and cities' capacity to adopt innovative solutions on a larger scale to address the challenges of climate change.

The booklet describes how innovative and tested changes in governance, some of them structural and systemic, have proven their value. It presents the key findings around **five quintessential fields of change**. For each of these fields, several key recommendations are given, detailing in each case the challenge that is to be addressed, tools and actions that can promote changes, and concrete examples from SCC-01 'Lighthouse cities' and 'Follower cities'.

The first field of change concerns the need to adopt **a long-term strategic city vision, to promote long-term territorial transformation planning, and to pilot smart city solutions**. The presence of an ambitious, comprehensive, operational (and agreed upon!) city vision is an important backbone for the governance of climate-neutral and smart cities and for the transformation of the urban fabric. Normally, city visions guide the choices to be made on urban transformation, and pilots can feed this decision and policy making by providing specific information on what works and what does not work. However, it has become increasingly clear that conventional overall city visions (such as urban development plans or master plans) usually do not suffice for bringing about and accelerating the transition towards climate-neutrality. This is, among others, due to a lack of ambition, feasibility and actionability of the plan, or insufficient lack of financial means.

Road-mapping, and working towards specific, measurable, and timely objectives whilst applying frequent monitoring can help to solve these shortcomings and align better with short political cycles, as it was experienced in Sønderborg. At the same time, it is necessary to raise legitimacy with the approval from political decision makers, and to ensure that decarbonization plans co-created with local stakeholders are mainstreamed and integrated into the city's main administrative processes and legally binding plans and policies. A clear vision and roadmap also need to be accompanied by coherent piloting and experimenting. Cities have to invest time and resources for piloting solutions, and they need to be sure what to expect in terms of outputs (tangible elements) and outcomes (impacts on the citizens' lives). Moreover, it is necessary to design a plan for upscaling from the

start, to be deployed if the pilot succeeds, for instance on expanding the boundaries of the experimentation area to surrounding neighbourhoods.

The second field of change focuses on **transforming municipal organisation**. The current most common organizational scheme of municipal administrations is characterized as a hierarchical structure with "silos", which is often an important barrier to drive an ambitious climate transition. The main problem of this type of structure is often the lack of effective coordination mechanisms across the silos. Addressing this challenge also requires understanding what modalities can enable silos to work successfully with each other and under which conditions, so that administrations do not pursue a total breakup of silos, which can be politically and administratively costly.

Adopting strategies to deal with complex and cross-cutting issues, or adopting climate policies for horizontal interventions, are also approaches that foster the creation of the much-needed multidisciplinary teams for climate-neutral transitions. While some cities opt for an ambitious department reorganisation that mixes teams and shuffles competences, other administrations find it more cost-effective to set up working groups or to establish a staff office dedicated exclusively to strategic planning of such cross-cutting issues. For instance, in Florence, the creation of a working group involving different departments helped to identify a shared perspective on how to address a problem and a common approach to solve it. A dedicated public development agency with specific tasks, like the one Lyon created for the transformation of the Confluence district, can also provide effective project management and the necessary mix of competences.

**Ensuring participation, co-creation with stakeholders and citizen-driven innovation** is the third key field of change cities need to observe. While many cities already have participatory processes in place, the level of effective participation of citizens in decision-making is very different between them. Sometimes, city officials adopt a "decide-announce-defend" approach, but more advanced cities have developed a strategic co-creation approach, where co-identification, co-design, co-implementation, and co-evaluation are embedded since the inception of the whole process.

To further explore and integrate the participation of stakeholders into the policy making process, cities can appoint the figure of a facilitator, who can steer stakeholders towards consensus. Facilitating that participation and exchange happens both physically and virtually; it greatly promotes effective citizen engagement. As a result of this interaction, the narratives of projects and policies should adapt to citizen's expressed priorities and needs, by following a "multiple benefits" approach. To adopt such practices, different departments will need to be involved; new professional profiles that can effectively lead co-creation processes will be necessary among local staff.

The fourth key field of change focuses on **establishing collaborations between public and private stakeholders, securing finance, and procurement**. Regarding the uptake of climate-neutral and smart solutions, it is frequently highlighted that many solutions still lack the right business models. The challenges in this area vary greatly across sectors and technologies, depending among others on maturity of the solution and the project. In all stages, cities play an important role for the uptake of smart and climate-neutral solutions: not only as orchestrator and facilitator, but also as a launching customer. For instance, municipal governments can invest in the local innovation ecosystem to foster the development and uptake of solutions by setting up business incubators. Local administrations can also provide space for experimentation and testing and living labs, which is highly valuable for companies to demonstrate the usability of their solutions and produce references to enter the market. Financial support and the provision of go-to-market services can also be of great help for local innovative companies.

According to the experience of several SCC-01 projects, Public Private Partnerships (PPPs) are effectively supporting implementation and fostering cooperation between public and private stakeholders. Innovative financial schemes such as green bonds, climate budgets, and crowdsourcing were also successfully adopted and experimented in several SCC-01 cities. Finally, innovative public procurement can enable the uptake of innovative solutions at larger scale and

thereby contribute to the city's long-term objectives. This was the case of Rotterdam, where after the experience in the RUGGEDISED project, a new urban development project started with an early consultation process for prospective developers to hear their opinion on and suggestions for the future energy design of a specific neighbourhood preceding energy infrastructure investment and real estate development.

Finally, the fifth key field is how to create the right **learning environment** within and between cities to boost **organisational transformation and systemic change**. Recommendations build on the different elements presented across the report, such as engaging stakeholders from early stages on, adapting the project to specific contexts, building relationships with key actors of the innovation ecosystem such as universities, etc. These suggestions help to improve knowledge transfer and support replication beyond the project, through peer-to-peer learning activities, including study visits, international workshops, synthesis, and systematisation of the experiences, and clearly communicating the key lessons learnt to other cities and practitioners.