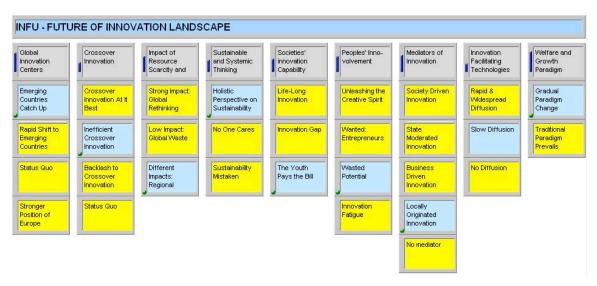


4.4 Scenario 3: Locally-Driven Innovation – Cities Go Ahead

Summary: The Scenario in a Nutshell

In 2025, Europe's innovation landscape has changed significantly. Cities, agglomerations, and regional governments have replaced European or national bodies as the most important mediators and facilitators of innovation. They made up for the lack of national and EU guidance and the entrepreneurs' growing reluctance to innovate. Thanks to local citizen initiatives, Europe's innovation capacity has returned to a high level while companies play only a moderate role for pushing innovations. In 2025, innovation is realised and organised at the local micro level and provides solutions mainly, but not only, for urban challenges.



Morphological Box: The Premises

(^{*}Premises are highlighted in blue.)

Key Aspects of the European Innovation Landscape in 2025

- The importance of cities and regions as efficient mediators of innovations is fully recognised within the Unions' innovation framework.
- Higher importance of local innovation initiatives within the European innovation policy. Only few top-level innovation guidelines.
- Role and structures of cities and regions have evolved. Open knowledge cities are the most important innovation enablers and employ the best creative heads.
- Participatory innovation: citizens and all other urban stakeholders are empowered and directly involved in innovation processes.



- Europe is characterised by a large number of new social innovations. Most social, economical and ecological challenges are addressed (locally).
- Shortened decision-making chains: businesses and entrepreneurs have easy access to innovation funding and support.
- Neighbourhoods and councils have free access to public data and co-developing places which in return makes it easier to diagnose urban challenges more accurately.
- Thanks to local initiatives, the European Union is able to compete with other regions. European cities serve as role model for a sustainable development.

Description

In the run-up to 2025, Europe's innovation landscape has fundamentally changed, and the most crucial changes have come from a rather unexpected direction: From city governments and citizens. Cities increasingly play a major role as innovation drivers. In particular, systemic sustainability innovations are best be implemented on a city level. In 2025, almost all innovation is local. It is performed right where the need for change, for new ideas and concepts is greatest - in the streets, in neighbourhoods, in local communities. People make their voices heard and shape the future in collaboration and interaction with their fellow citizens. In this process, cities, i.e. their leaders and administrative machinery, have also changed. They have re-defined their paradigm from control to enablement. Referred to as 'open knowledge cities', they bring forth new ideas of public life and participatory democracy and encourage urban social innovations in all areas of life. They have become the most important centres of innovation and change. Within these cities all urban stakeholders co-decide on urban issues, co-develop and co-operate urban services, and have an intrinsic motivation to permanently innovate services and the delivery of services. Projects of all kinds are supported by shared hard and soft infrastructures, including coproduction places such as Fab-Labs and access to public data. The city takes on the role of mediator rather than service provider and focuses on organising and enriching democratic life.

How did this come about? The answer is grassroots pressure; combined with distrust in governments and the feeling that self-support is better than waiting, triggered by the deteriorating social and economic situation in many cities. But getting there was neither easy nor straightforward.

At the beginning, no priority for locally organised innovation

For years, the European Commission put a clear focus on R&D and market innovations in its research and innovation plan. Doubtlessly, both were generally regarded both those things as pivotal to Europe's global competitiveness; nonetheless, frustration grew in town halls all over Europe. At the time, local governments at that time felt that they were getting the short end of the stick. Hadn't many innovations come from cities during the last decade? Hadn't cities achieved a lot in areas like transport, education or public services?



Should this not have been celebrated and honoured in the same way as innovations originating from the private sector?

Moreover, national governments passed ever more social, ecological, and economic responsibility to the local level. What had sounded desirable at first sight resulted in constantly increasing financial burdens for many cities which were already short of money. Mayors and town councils from Gibraltar to Cologne and Tallinn decided that they had to intervene and make their voices heard within the European Commission. Using their network "Eurocities", they requested an open dialogue and more decision-making freedom organising innovation activities. At the time, however, opinions on the right design for Europe's innovation policy varied widely. The commission remained convinced that innovations needed could only be the result of grand projects and was unwilling to give more priority to locally and citizen driven innovation projects. It took more years before things finally changed.

Spotlight 2025

Report from the Innovation in Europe Today Magazine, April 06, 2025

Local city innovations make the difference!

Today, you would have a hard time believing that in 2012, Cork in Ireland and Haarlem in the Netherlands shared the same problems. The cities' budgets were rapidly dropping towards zero, there was rampant unemployment, and the challenges of demographic change were constantly more pressing.

Thirteen years later, and the two cities could not be more different. But how could, over such a comparatively short period of time, one city manage to completely reinvent itself, change its fundamental structures and return to a path of economic and social prosperity, while the other continues to, possibly even more so, suffer from the problems mentioned above? The answer is "local city innovations".

Cork's mayors were among the first to take up the idea of empowering local communities and neighborhoods. "I clearly remember how some of my colleagues ridiculed our 'citizen innovation campaign', says Mr. Smith who headed Cork's innovation program from its start in 2018 until recently. The campaign's core, he explains, was to provide citizens with the money and tools to take matters into their own hands. Mr. Smith points to a long list of success stories: Cork's unemployment rates are the region's lowest, with more and more social start-ups providing people with solutions for care services or utilities. "I was impressed with the number of ideas people have, how motivated they are, and how their intentions benefit our social and economic situation", he reminisces. But why did the approach never really catch on in Haarlem? Mr. de Haal explains that "We also tried to activate the innovation potential of our communities. But obviously we didn't go at it the right way". Looking back, he mentions a lack of trust and too strict guidelines as main reasons. "We should have trusted people more. Our framework turned out to be just so much administrative red tape. You have to give people the freedom to handle things themselves".

Europe's innovation capacity threatened

In 2015, Europe's situation was characterised by a slow yet steady economic decline and worsening social problems. No answers were forthcoming regarding the shrinking public budgets or the increasing prices of natural resources, the pressing climate-change related issues, or increasing unemployment rates. The analysis was sobering. Europe was on the way to lose its leading position in many future growth fields. It became increasingly clear that after failing to achieve most of its Lisbon Strategy objectives, Europe would also meet



only a minority of its 2020 plan targets. The reasons were a combination of economical and political aspects. Efforts to create a coherent European R&D policy framework had not been successful, and most national high-level innovation strategies had failed.

Political struggle over the European innovation policy

By 2015, notwithstanding prolonged efforts on all levels, the policies of most member states remained essentially nationally oriented. This resulted in duplication and fragmentation and the "Innovation Union" was even more out of reach than it had been in 2011. On the EU level, designing the relevant political and administrative structures and support instruments had proved to be a complex, maybe even too complex process. The governance mechanisms introduced, such as policy warnings, turned out to be too soft to seriously impact national policies in practice. Repeatedly, quite the opposite happened. Also due to financial constraints, member states refused to implement EU targets in their national strategies, e.g. increasing investments in R&D to 3% of their GDP. In addition, innovation and R&D investment levels had less and less correlated since 2010. Also, there was a general reluctance to push through difficult and unpopular reforms which undermined the whole 'Europe 2020' strategy. Conflicts of interest prevailed. Within the EU parliament, adherents of the intergovernmental method won a broadening supremacy over those who favoured the community approach. Calls for more coordination and less bureaucracy went unheard. By 2017, most European institutions and governments had failed to sufficiently adapt their structures and policies to the new requirements resulting from a changing global innovation landscape. However, national innovation strategies also did not result in the expected, or rather hoped for, improvements and turned out to be largely inefficient. Many national high-level strategies remained political rhetoric or lacked a clear definition of responsibilities and comprehensive reforms. No European country was able to successfully face on its own the growing competition from rapidly advancing Asian countries. Furthermore, complex decision structures created bureaucratic hurdles, especially for smaller companies. Even with interdisciplinary research high on the agenda in many regions, the results of top-down prescribed cooperation only seldom justified the increased efforts and expenditures.

Industry and governments hinder each other

At the time, more and more innovation experts called for a sea change in strategy. Why focus on national agendas when the problems, partnerships and potentials are right here at the local level, they asked. Most structural social and economical problems seemed too diverse or too complex to be solved centrally.

Unfortunately, the business community failed to act. Entrepreneurs were waiting for a clear signal from the political sphere to steer investments or where they could get needed funding from. Financiers were reluctant to invest into what they called "uncertain future business perspectives". National governments on the other hand were overtaxed by the growing complexity of problems and demanded the private sector to provide solutions.



Cities feel the pressure, more focus on local enabling

The cities, on the other hand, felt the pain much more acutely. They suffered from shrinking budgets and an increasing pressure to achieve more with less. Additionally, European cities feared to fall further behind in the intensifying global competition for the creative class. Cities all over the globe had realised that their prosperity relied strongly on skilled people and invested heavily into attractive living and working conditions. Local governments were also concerned that global warming had not been successfully addressed on international and national levels. While on the international level especially the United States and China boycotted agreements, most national governments were afraid that voluntary emission reduction targets would weaken the competitiveness of their domestic economies. In an increasing number of cities worldwide, concerns about security and sustainable development began to be heard. Around 2020, Europe's cities and citizens were finally allowed to shoulder more responsibility for innovation matters, which was also a consequence of the successful addressing of corruption and the competition of specific interests across particularly affected regions in the EU. The new EU innovation policy reflected that innovation processes take radically different forms in different regional contexts and sectors. General innovation policies were replaced by local innovation strategies. Furthermore, it was acknowledged that central governments are unlikely to have the capacity to govern diversity of local conditions or local requirements.

Spotlight 2025

Extract from the Nou Barris greener living blog

I am new in Nou Barris – looking for clean neighborhood power von Corta Cordalis 13. April 2025 18:23 Uhr

Hi, my name is Corta and I just moved to lovely Nou Barrios. I have heard about your exciting community-lead clean power initiative and would like to know more. How can I join you guys? Can you guarantee my power supply and how much would it cost? Thanks and to good neighborly relations - Corta

Welcome to Nou Barris

von Samantha Lopez 13. April 2025 18:51 Uhr

Hi and welcome Corta. Great to hear you've moved here and there is nothing easier than joining us – just come along to our comunida pabellón ;-). As you might be aware, our initiative is supported by the city council and aims at providing people with clean and affordable power. All of us are very proud that we have installed more than 250 MW of solar panels in only six years and that we have been able to link them to create a local virtual power plant – completely independent from sales-driven utilities and rising coal and gas prices.

Remember how our energy minister said that there is nothing we can do against expensive electricity and growing CO_2 emissions? We proved him wrong and did what no major utility ever believed to be possible :-). Thanks to the ideas and efforts of many of us, we can guarantee reliable and affordable clean energy. All you have to do is sign a contract with us and allow us to connect your smart appliances and your e-car to our network. The more people join us, the better we can manage our power supply and demand. So, see you soon. Samantha



Municipalities as innovation facilitators and mediators

What followed was an unprecedented innovation push, driven locally by the citizens. Today, the slogan: "This idea is brought to you by your fellow citizen and supported by your local city council" has become as commonplace as were private enterprises' commercials two decades before. Cities now no longer administer a region, they manage it. They act as cluster development agencies for their regions, creating networks and bringing people together to facilitate the birth of new knowledge. To make this possible, local governments also improved their metropolitan innovation governance and invested into staff and structures. In 2025, the most talented people opt to work for cities and local governments rather than for private enterprises. To facilitate innovation within their districts, cities use a broad variety of tools and processes. They act as consumers, project partners, enablers, as well as facilitators.

Business partnerships and grassroots initiatives

Cities fostered partnerships with local business companies. The idea behind this was to directly address the most urging urban challenges where they occur. Many tasks had to be solved: managing shrinking or rapidly growing townships, handling budget cuts, providing clean and affordable energy and transport, healthcare and social services, maintaining critical infrastructures, but also promoting the creation of new employment.

Munich partnered with Siemens in the development of energy-efficient buildings, Paris with PSA Peugeot Citroen on new mobility concepts, and Madrid with T-Solar Global to shift the city's energy system to 100% renewable power. In addition to existing, long-time partnerships with larger companies, cities supported chiefly pioneering initiatives to develop locally adapted solutions. They created favourable conditions and opportunities for entrepreneurs to implement new ideas and concepts. For instance, companies would profit from access to public data, start-up financing, or would be guaranteed minimum order quantities.

However, what was most remarkable – and, possibly, the game-changer – was the empowerment of the citizens. Finally, the belief prevailed that citizens were more than consumers and that their influence should not be limited to casting ballots. Local authority changed towards more participatory governance and co-design. In 2025, citizens are directly involved in shaping the way a project, policy, or service is created and delivered. Cities provide public spaces, such as sites for *social experimentation*, where people can interact with each other, experience the value of experimental knowledge, and harness the power of collective imagination. Neighbourhood councils and informal communities are given tools and data in order to do their work much more efficiently, to go beyond discussing issues and formulating advice, to actually design and implement solutions to local problems. By 2025, Europe is characterised by more social cohesion and there is plenty of local social venture capital available. Innovation at the local level is a two way process: There is, on the one hand, the city administration who's job it is to facilitate new public and economic innovations from which their citizens profit through new jobs, reliable public services or education. On the other hand, citizens help cities diagnose problems more accurately and independently develop sustainable solutions.



2025: Europe is back on track

From a global perspective, the innovation gap between industrialised and emerging countries has been narrowed significantly. However, in 2025, there is clear evidence that Europe has returned to the right track. Following short period of economic hiccups, Europe has regained its strong position in the global innovation landscape. Worldwide, European cities and companies are recognised and by some admired for the way they develop sustainable solutions for many issues. Thanks to local actors, the talented global youth migrates to Europe.

Basic Impacts

Positive Impacts

- Local governments and local communities have more decision-making freedom and are able to design their innovation strategy based on local needs and conditions. Affected Citizens profit from effective working solutions
- Improvement of social cohesion due to high degree of collaboration between citizens
- Successful social innovation projects provide new stimuli to other cities and regions with similar problems
- Free flow of knowledge and open access to public data in urban areas
- Productive cooperation and competition between urban areas across the European Union

Negative Impacts

- Unfavourable frameworks for supporter of a centrally organised European-wide innovation strategy or common innovation landscape
- Disadvantages for larger multinational companies which might find it more difficult to get R&D funding for large-scale projects
- Increased risk of redundant innovation and waste of resources should cities fail to collaborate to a certain degree and refuse to circulate knowledge and data

Main Milestones: A Short Roadmap

- **2010** European population is shrinking and social and economic problems start to become worse; innovation capacities threaten to decline; political innovation focuses on market innovation. First attempt of Europe's cites to claim more decisionmaking freedom in innovation matters
- **2015** Conflict over right direction of Europe's innovation strategy intensifies between supporters of trans-governmental and community-based approach. Neither side is able to assert itself; social problems become even worse



- **2018** More and more cities start local innovation campaigns. Plans to foster the innovation potential of citizens prevail
- **2020** The new European innovation policy acknowledges that local innovation campaigns have a competitive advantage and shall be encouraged
- **2025** Europe is back on track. Mainly facilitated by new technologies, city and citizen driven innovation processes help to regain control of most social and economic problems

Related Innovation Visions

The following (consolidated) visions, which have been developed and discussed in the previous INFU work packages, are particular relevant and will become widely diffused and a pillar of innovation in the context of this scenario:

City-Driven Systemic Innovation

Cities are increasingly expected to play a major role as innovation drivers. Systemic sustainability innovations, in particular, may best be implemented on a city level. Cities have to develop adequate mechanisms to reap the benefits of this potential.

Social Experimentation

Social innovation is more and more recognised as highly relevant for developing innovative solutions addressing societal challenges. New modes of innovation are required to align social and technological innovation activities. Participatory experimentation will play a key role, provided that the right instruments and levels required for successful solutions exist.

Citizens' Role in Innovation

It is widely expected that citizens will play a more important role both in governing and implementing innovation activities. Civil society is involved in defining purposes of innovation and in deciding on every major investment in innovation. The whole process revolves around the citizens' panel, but also includes experts, stakeholders, and politicians.