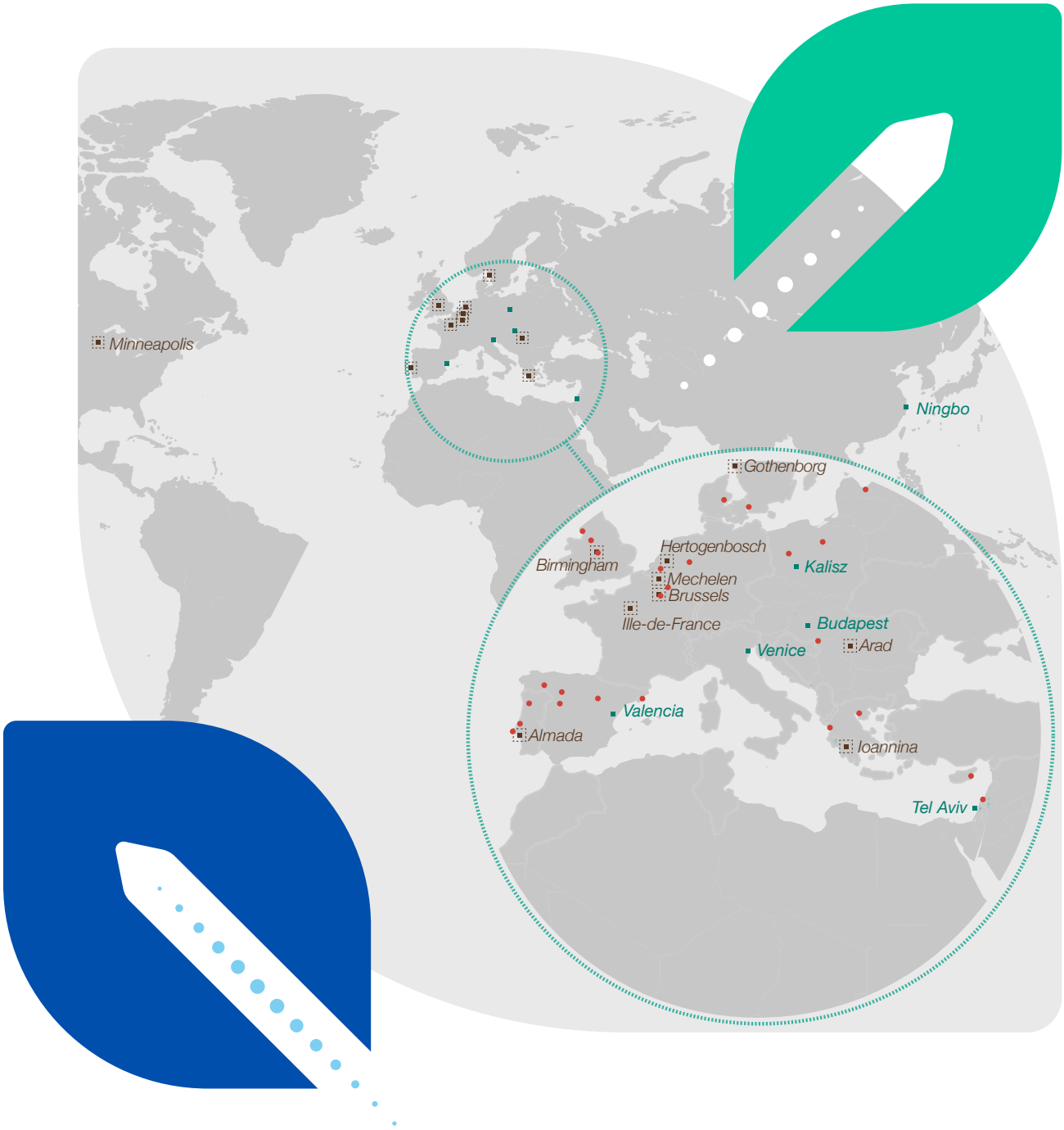
Sprout

Sustainable Policy Response to Urban Mobility Transition



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Acronyms:

FESTA (Field opErational teSt supporT Action (project)

MAMCA: Multi-Actor Multi-Criteria Analysis

OIC: Open Innovation Community

SPROUT: Sustainable Policy RespOnse to Urban mobility Transition

TIDE: Transport Innovation Deployment for Europe

Disclaimer:

Consortium

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Executive Summary

The SPROUT project has come to an end after four years of working to put cities at the centre of the urban mobility transition.

The SPROUT cities and knowledge partners have achieved the initial goals set at the beginning of the project to navigate future policy in the urban mobility transition and address the societal challenges and issues posed by emerging business models, new technologies, and disruptive innovations.

The present document, formally called the 'SPROUT results brochure', presents project results and promotes the most relevant policy planning exercises and tools developed throughout the project. The goal is to provide an overview which provides the key findings and links to more comprehensive results. The document provides resources demonstrating the process, progress and results of the project, which can be used towards future city-led innovation initiatives of cities and the sustainable urban mobility community.

The brochure begins by highlighting key elements of the urban mobility transition, drivers triggering innovations and disruptions affecting cities' current and future urban mobility environments. It then covers the SPROUT cities, the test beds where urban mobility policy planning exercises took place through a diverse range of methodologies. This leads to lessons learnt and policy packages meant to help cities beyond SPROUT navigate the urban mobility transition.

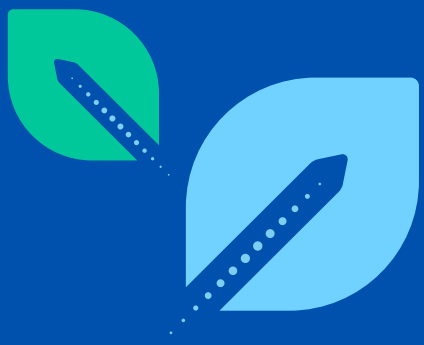
Following this, technical partners made use of the knowledge produced in the project to create the SPROUT toolbox, a website that provides step-by-step guidance for any European city to follow the SPROUT approach to test and respond to innovative mobility solutions.

Assessing the transferability of pilots' results was a key step towards building what SPROUT calls a 'city-led innovative policy response' - a response that is widely applicable in terms of its contents and structure to cities.

Finally, the lessons learnt have been compiled to produce SUMP recommendations based on SPROUT results, which focused on specific steps and activities to enrich and update the SUMP development process, including guidelines to innovate transition and digital transformation.

The project website can be found at: https://sprout-civitas.eu

Detailed references and the source material for this brochure can be found on and downloaded from the project website resources page, at: https://sprout-civitas.eu/resources



01

Project Overview: SPROUT City-Led Innovation

1 Project Overview: SPROUT City-Led Innovation

Innovative mobility solutions are currently taking place in Europe, since cities need to become smart, climate neutral, and reduce pollution for the 2030 / 2050 EU climate goals.

Industry-led innovation is speedy and when adopted might have side effects that city authorities do not expect and are not prepared to manage. Many mobility innovations therefore stay at the pilot stage. In order to balance this, cities need:

- The knowledge to prepare the right conditions to embrace innovation
- The capacity to develop policies that will stimulate & generalise innovative solutions taken up, to maximise the impact of innovation in their mobility systems.

City-led innovation, since the future urban mobility system will:

- Combine distribution of multiple innovative solutions
- Require more integrated and harmonized approaches in planning and operations
- Be more dynamic in adapting emerging needs and types of demand
- Challenge the cities regarding dedicated infrastructure development in inner cities and urban space allocation

City-led innovation aims at empowering leaders (city authorities and policymakers) to develop policies that steer the introduction of innovative solutions and gear innovation towards implementation solutions. This establishes policy in a way that is more effective and legitimate and enables more active engagement of stakeholders.

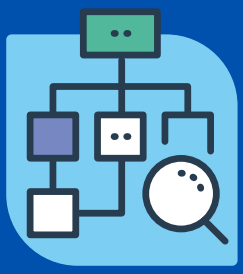
City-led Innovation

How to enhance the transformation to **digital &** to accelerate their **transition** to innovation in mobility & city logistics

Innovation Policy Response for urban mobility & Logistics

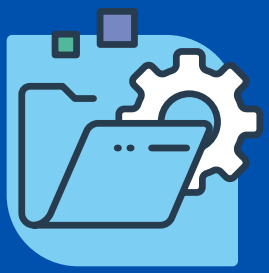
SPROUT project supported cities, with methodologies and tools to scale up pilots to long-lasting implementations integrated into the city.

Understanding the transition in urban mobility



Identify the drivers of transition and foresee the impacts

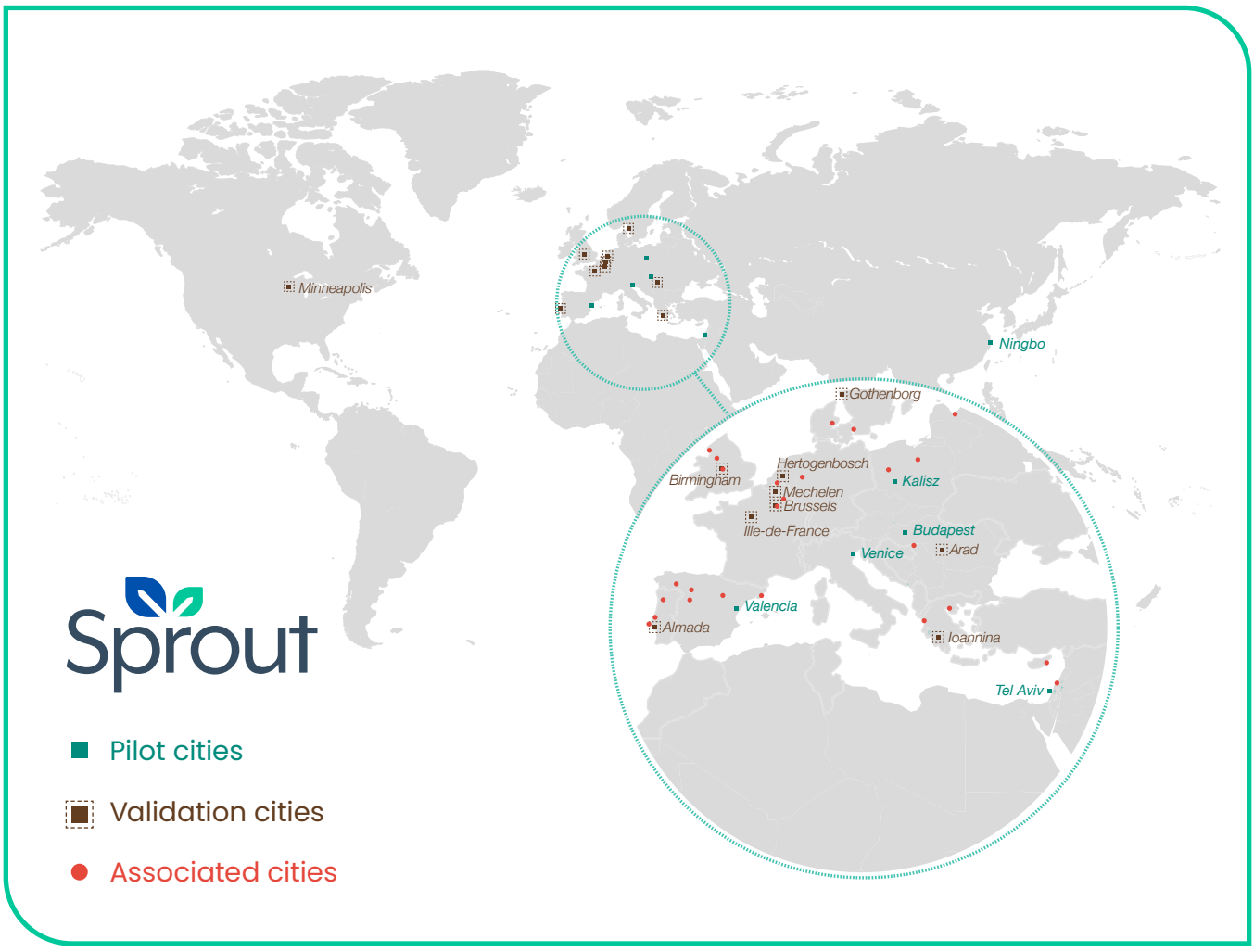
Formulate a city-led innovative policy response



Provide tools to enhance local policy-making capacity

Navigate future policy on urban mobility

The SPROUT project is committed to providing a city-led innovative policy response capable of harnessing the impacts of new mobility solutions in a way that makes them more attractive to users and more sustainable for society as a whole. To this end, SPROUT set up a community of cities organized in three layers, collaborating together towards more sustainable and innovative policy-making on urban mobility.



An important instrument to achieve the SPROUT goals has been the Open Innovation Community (OIC) on Urban Mobility Policy that was set up at the beginning and gathered new members as the project advanced. The community involved innovators from the public and private sectors of the EU, US and China. This approach facilitated the generation of debate and consensus building and validated the project results.

02

Understanding Transition in Urban Mobility

2 Understanding Transition in Urban Mobility

The first part of the SPROUT project looked at understanding the ongoing transition in urban mobility and at determining the impacts of urban mobility environments.

...a scenario building exercise was conducted to explore possible futures for urban mobility in the project's five pilot cities.

To understand the urban mobility transition, first an assessment of the current situation needed to be made. For this, an inventory was proposed of the factors used by each of the SPROUT cities, as a common framework to collect and integrate data in order to construct a comprehensive overview of their respective current and future mobility status and to understand and anticipate the urban mobility transition. These elements are categorised as key performance indicators (KPIs) and urban mobility transition drivers. In this part of the project, SPROUT also identified the relevant stakeholders to involve in the next phases of the project.

Based on this long list of drivers, a scenario building exercise was conducted to explore possible futures for urban mobility in the project's five pilot cities. This was done through mixed method approaches that combined quantitative methodology with scenario building workshops in all five cities. Further information on the scenario building process can be found in the SPROUT Toolbox.

Novel scenario building method combined with impact analyses

01 Selection of the relevant factors for urban mobility transition suitable for the city

02 Evaluation and validation of direct effects

03 Evaluation of factor impact

04 Scenario analysis

05 Policy and sustainability impact assessment

06 Development of scenario narratives

The scenarios were developed for a 2030 time-horizon, under the assumption that there would be no new policy interventions. The goal of the project was to have narrative stories as well as visuals for each scenario. This helped to convey the message that transition in urban mobility is crucial in order to harness the innovations taking place. In total, the SPROUT project developed 15 scenarios, three for each of the five pilot cities. These scenarios show possible future developments of urban mobility in the pilot cities and were updated in a later phase of the project to reflect the impact of the innovative policies chosen by the cities.

Tel Aviv Scenario 1: Alternative Tel Aviv

Tel Aviv Scenario 1: Transportation Crisis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03

Pilots' Setup, Running and Testing

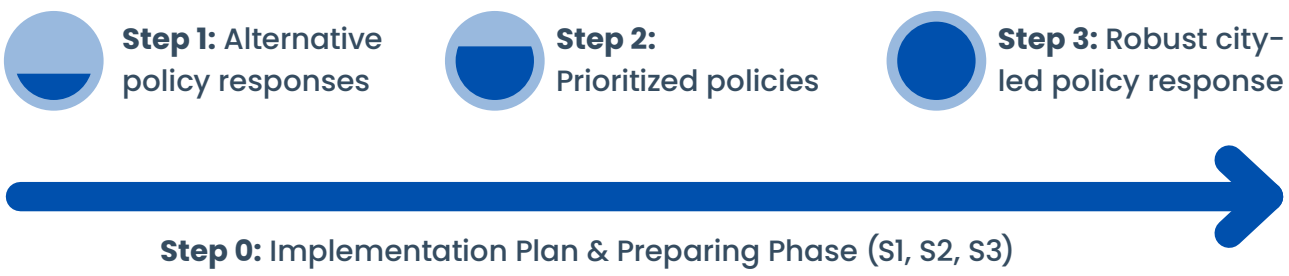
3 Pilots' Setup, Running and Testing

SPROUT tested nine innovative mobility solutions for passengers and freight in the pilot cities.

It is an essential activity to run the implementations and test activities smoothly...

The SPROUT Evaluation Framework was created to guide pilots in their setup activities and appraise the outcomes and the process. It is an essential activity to run the implementations and test activities smoothly, as well as assess the impacts and results that corroborate an initial hypothesis and support decision-making. The methodological pipeline requires a preparation stage (step 0) that crosses all steps of the process: plans the timeline, required actors, defines the objective of the tests, identifies the indicators, data collection and analysis methods, and any other factor that might guarantee the successful completion of field operation tests. Three sequential steps (steps 1, 2 and 3) conclude with the development of the city-specific policy response, facilitating the successful adoption of the new mobility solution.

SPROUT Evaluation Framework (EF): Methodological pipeline (own source)



The SPROUT Evaluation Framework is based on a combination of CIVITAS tools and relies on FESTA as the overarching methodology for assessing the impacts of field-operational tests. It provides methods to assess sustainability impacts, explains how implementing the Cost-Benefit Analysis (CBA) trade-offs, how to assess the software products and IT systems developed in the project, and finally how to assess policy response alternatives using Multi-Actor Multi-Criteria Analysis (MAMCA).

Further information can be found in D4.1, 'Pilot Evaluation Framework'.

04

SPROUT Cross-Pilot Transferability Messages

4 SPROUT Cross-Pilot Transferability Messages

Using the SPROUT Evaluation Framework, the sustainability impacts of the new mobility solutions implemented in the pilot cities were assessed and city-specific policies for harnessing their impacts were developed.

The figure shows the new mobility solutions tested and some of the actual impacts.

Tested Innovative mobility solutions	Additional actual impacts
IoT enabled smart parking for last mile deliveries: Real-time dynamic management of unloading operations including planning and booking	**Kalisz:** • Delivery time reduction (66%) • Road congestion reduction (25%) • Growth of safety (22%), proportion of cargo deliveries using the tested infrastructure (28%)
Intermodal passenger & freight transportation nodes: Parking for private bicycles into intermodal nodes. Smart parcel lockers & Micro hubs in metro stations	**Valencia:** • Reduction in CO2 emissions (2.8%) • Increase of multimodal trips linking cycling and public transport (6%)
Autonomous mobility & cargo hitching: Modular electric self-driving pod for mixed freight/passenger transport combined cargo & public transport service	**Padua:** • Reduction in traditional fuel consumption (3%) • Reduction of CO2 (4%) • Environmental quality improvement (9%)
Data analytics driven traffic & mobility management: Bluetooth detectors, data analysis of travel behaviour, mobility patterns, reallocating the public sphere- balance between capacity and liveability, prioritizing vulnerable road users at signalised intersections	**Tel Aviv:** • Reduced total crossing time of pedestrians at signalized crosswalks (8%) • Impact on conflicting vehicle movements (2.6%)
Integrated mobility & micro-mobility: Creation of micro mobility points **Public sphere reallocation:** Reallocating public space, reducing dependency on the car & increasing pedestrian and cycling zones	**Budapest:** • Increase the modal share of shared solutions (7 %)

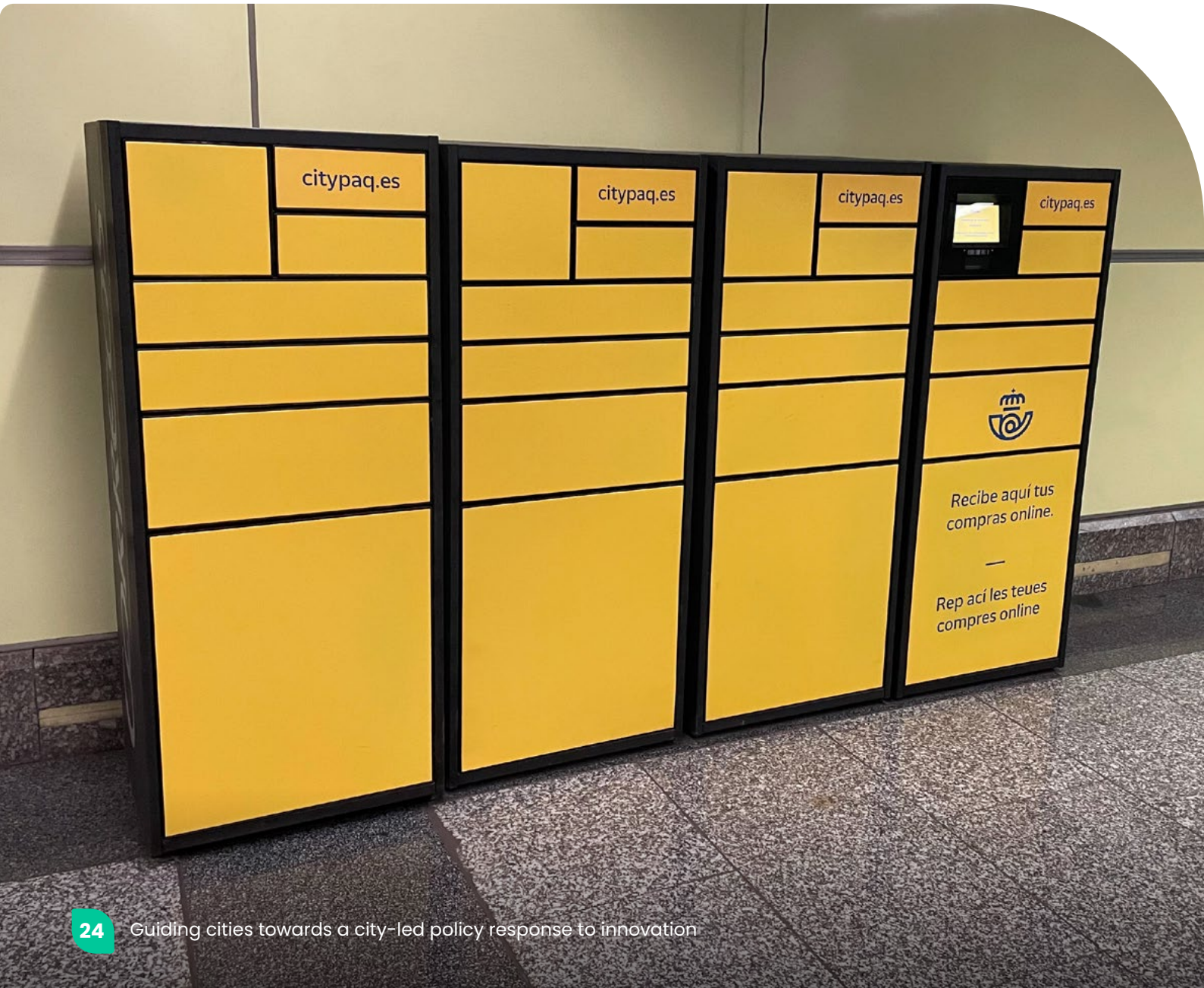
SPROUT Thematic groups - transferability messages

Thematic Group	Transferability messages
Integrated mobility points 	• Collaborative agreements and cooperative commitment among different local public entities (e.g. the municipality, district administration) are essential to promote and support the implementation. • It is also necessary to have regular exchanges between stakeholders, such as micromobility service providers, mobility managers and the municipalities – especially at the beginning of the process. The dialogue is crucial to avoid misunderstandings and helps create regulations accepted by all stakeholders. • The mobility points help avoid bad parking practices and foster the adoption and acceptance of shared micromobility vehicles for people either in favour or not. It makes parking easier – users can be sure that they park the vehicle in the right place – where it will not disturb pedestrians (especially elderly or people with disabilities) and other road users. Therefore, the overall acceptance of such services can also increase.
Public sphere reallocation 	• The introduction of traffic-calming zones and acceptance take time and require political commitment. It shows the real benefits for the whole city, enhanced with green spaces, street furniture and permissions for terraces. It is essential to keep in mind that the first steps can cause strong criticism from local residents, who need time to adapt to the new rules or environment. Using benches, trees and parklets (even temporary designs in the beginning) can help to increase the popularity of traffic calming zones, as people feel they gained benefits and not just lost previous privileges (for example car owners cannot drive through certain streets). • Co-creation practices and methodologies that consider universal design principles fostering citizens participation helps to create an enduring and universal redistribution of public urban space for users and non-users. Citizens' empowerment is a key to ensuring a successful transition towards future urban mobility.

Thematic Group	Transferability messages
IoT enabled parking for last-mile operations 	• Understanding the trade-offs between the time drivers need for planning, booking, handling of goods from bays to delivery points and just delivering are essential factors to define supportive policies to avoid bad parking practices. Consider subscription instead of parking fees. Take into account local weather conditions and possible heavy traffic when selecting the technology. Enable private cars and other mobility vehicles to park on the loading bays during off-hour deliveries to improve the use of urban space.
Intermodal passenger & freight transportation nodes 	• New services in an intermodal node often require public-private partnership agreements that demand more agile protocols and data sharing clauses to facilitate the provision, maintenance and adaptations of the new digital mobility services. Time-efficient administrative procedures and data-driven decisions are essential for future urban mobility. Different public bodies with distinct competencies should work together to understand the benefits of new mobility solutions, commit and support the implementation, fund and promote dissemination activities. These are essential to foster user acceptance and adoption.
Data analytics driven traffic & mobility management 	• Availability of real-time information from passengers and vehicles with advanced digital analytical techniques truly enhance policymakers understanding when making strategic decisions for redistributing public space or reorganizing mobility services and routes to overcome short and medium-term disruptions. Step forward towards the development of a city mobility digital twin. • Furthermore, detection of vulnerable users' needs to dynamically adapt traffic lights does not affect traffic flow efficiency and increases pedestrian safety. Although the message is based on simulation, it allows showcasing how to make cities more inclusive and mobilize public bodies in charge of changing the status quo.

Thematic Group	Transferability messages
Autonomous mobility & cargo hitching	• The modularity of the innovative self-driving pods brings proven benefits to enhance urban mobility, for passengers or freight, and improves the use of public space. Disruptive and innovative mobility solutions towards the transition to future urban mobility require dedicated public bodies to fund and create more agile bureaucratic procedures and commitment. They also need policies to ensure integration with existing public and private mobility services that reinforce the adoption and acceptance of current service providers.

More information can be found in D4.14, 'Policy implementation messages from cross-pilot results'.



05

Formulating a City-Led Innovative Policy Response

5 Formulating a City-Led Innovative Policy Response

5.1 Transferability of SPROUT pilot's measures to validation cities

This section presents the results of the validation process of the pilot's measures carried out by SPROUT's follower cities using transferability assessment templates based on the TIDE methodology[1].

Ultimately, this process identified characteristics which supported and were barriers to transferability...

The validation process required a thorough analysis of the work carried out by the pilot cities and the components and characteristics embedded in the policy measures.

During the transferability assessment process, the objective was to establish a narrative of implementation from pilot cities and highlight significant characteristics to ease the process and readiness of follower cities. Ultimately, this process identified characteristics which supported and were barriers to transferability related to the initiatives and policy measures.

The outcome of the assessment showed mixed results, and also indicated characteristics adopter cities should focus on, as recommended by pilot cities. This would involve adapting strategies, and in general some elements of their urban mobility context, to better transfer the policy measures.

Further information can be found in D5.1, 'Validation of the pilot results' wider applicability'.

[1] Shrestha, B., Hounsell, N., McDonald, M. (2013). TIDE Transferability Handbook. TIDE project.

Innovation readiness and liveability indexes of each SPROUT city were assessed to further understand the impact of the policy responses in the urban mobility ecosystem. Details on the process and the tools can be found in the next chapter.

Data gathered from cities throughout the project and assessments were consolidated into tables, which focused on and presented the weight of, barriers, and weaknesses in innovation readiness of the various characteristics, elements and sub-elements of the SPROUT cities and policy measures. Identifying the barriers and weaknesses allowed the areas for enrichment to be highlighted with an overall view of the results so far, taking into account the interrelations to these wider urban mobility environmental factors of the urban mobility ecosystem.

City-specific policy responses defined by each of the SPROUT cities and validated by the SPROUT follower cities in the transferability assessment were classified into 5 different pillars:

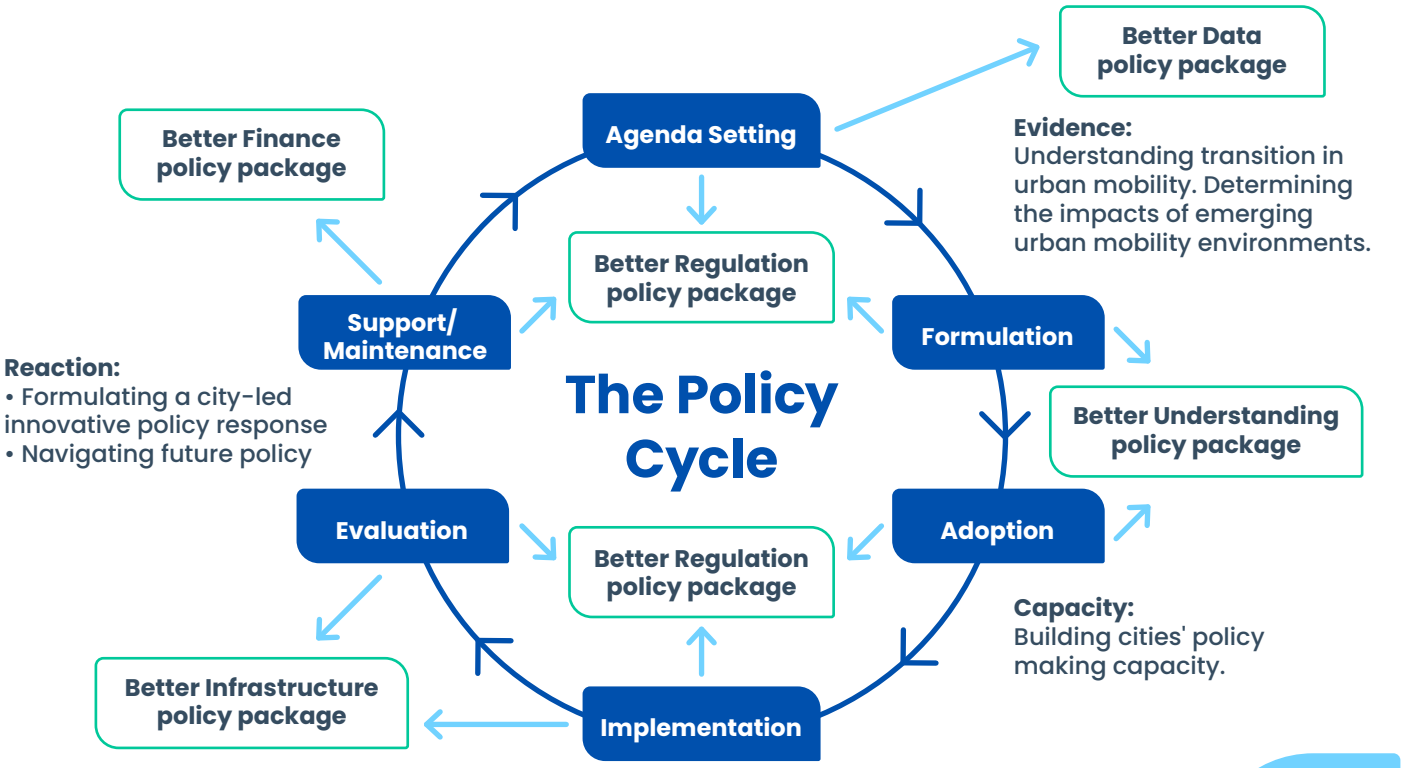
- Better Understanding
- Better Regulation
- Better Financing
- Better Data
- Better Infrastructure

The results of the 'Transferability Assessments' and 'Urban Policy System Dynamics Model' were used to identify areas to enrich the city-specific policy measures, taking into account the characteristics that presented a strong constraint for transferability and elements and sub-elements (innovation readiness elements) of the urban mobility ecosystem.

The process identified the strengths and weaknesses of the SPROUT pilot cities and follower cities based on the cities' scores on the liveability and innovation readiness index, and proposed policy elements that complement, enrich, and enhance the initial city-specific policy responses.

The policy measures were bundled based on commonalities and patterns identified to form policy packages, which were linked to specific stages of the urban policy lifecycle. By allocating the policy packages to a specific stage of the policy lifecycle, cities can identify which state of the cycle they are in and identify SPROUT city-led policy packages and policy measures to facilitate a more streamlined path to their objectives and implementation of the measures in their urban mobility context.

SPROUT policy packages in relation to the policy-making cycle



SPROUT's city-led innovative policy response aimed to harness the impacts of new mobility solutions in a way that makes them both attractive to users and sustainable for society as a whole.

Cities in the process of implementing new mobility objectives and making use of the results of SPROUT can use this information to know the type of measures they need. First, cities describe their city profile and can review the constraints for transferability encountered by cities implementing new mobility objectives using SPROUT tools. Cities should assess strengths and weaknesses of the innovation readiness elements and sub-elements though the methodology and questionnaires.

Based upon the results of these assessments and their objectives, the SPROUT results provide a reference point and the type of policy measures which can be put in place to improve awareness of potential barriers and weaknesses and improve transferability and innovation readiness in advance.

Addressing the weak points early on in the proper stage of the urban policy lifecycle by utilizing the results from the SPROUT cities aims to minimize the barriers to successful implementation. Weaknesses identified can be enriched through additional measures from the policy packages presented, which can supplement those weaknesses.

The following presents an overview of transferability assessments of the pilots:

Parking for private bicycles into intermodal nodes

Pilot city: Valencia / Follower city: Arad

Measures can be transferred given the following factors:

- High commitment from local and regional authorities to have a cycling strategy in their mobility plans
- Regulations involving the safety of bicyclists and pedestrians and to focus on the security of users
- Adequately assess and select locations of the bike parking facilities

Smart lockers into intermodal nodes

Pilot city: Valencia / Follower cities: Île de France Région, city of 's-Hertogenbosch

Measures can be transferred given the following factors:

- Competition with other e-lockers providers and location of the locker must be taken into account
- To assess opportunity costs of implementing e-lockers in a highly competitive market
- Technical integration of the e-locker platform with the postal services' platform

Self-driving pods

Pilot city: Padua / Follower cities: Gothenburg, Mechelen

Measures can be transferred given the following factors:

- Accurate planning sharing & availability of resources: stakeholders involve need technical skills and knowledge given the high-tech nature of the measure
- There is the need to have an autonomous vehicle regulatory framework in line with national and European frameworks

IoT enabled urban logistics

Pilot city: Kalisz / Follower cities: Almada, Île de France Région

Measures can be transferred given the following factors:

- Administrative commitment and capacity of local authorities enforcement: freight delivery drivers must use the loading/unloading bays determined by the local authorities
- Financial aspects: service (app for booking the bays) should be paid by delivery companies, or partially subsidised
- Technical aspects of the sensor: Durability/placement and usability of hardware/sensors' ('climate in the city', battery) and placement of the sensors (range, replacement)

Relocating public space for reducing car dependency: creation of pedestrian and cycling zones

Pilot city: Budapest / Follower cities: Ioannina, Arad

Measures can be transferred given the following factors:

- Need to collect data after implementation to understand the impact of urban reallocation measures
- Bottom-up approach by establishing a fluent dialogue with local stakeholders of the benefits of the measure (stakeholder engagement)

Creation of micromobility points

Pilot city: Budapest / Follower cities: West Midlands Combined Authority, Minneapolis, city of 's-Hertogenbosch

Measures can be transferred given the following factors:

- The need to secure enough financial resources to provide parking infrastructure and data to be able to enforce regulation
- It is essential to have coordination within a multi-level municipal system based on a clear regulatory framework for micromobility
- Establish a continuous communication with service providers on how to better integrate them into the transport network

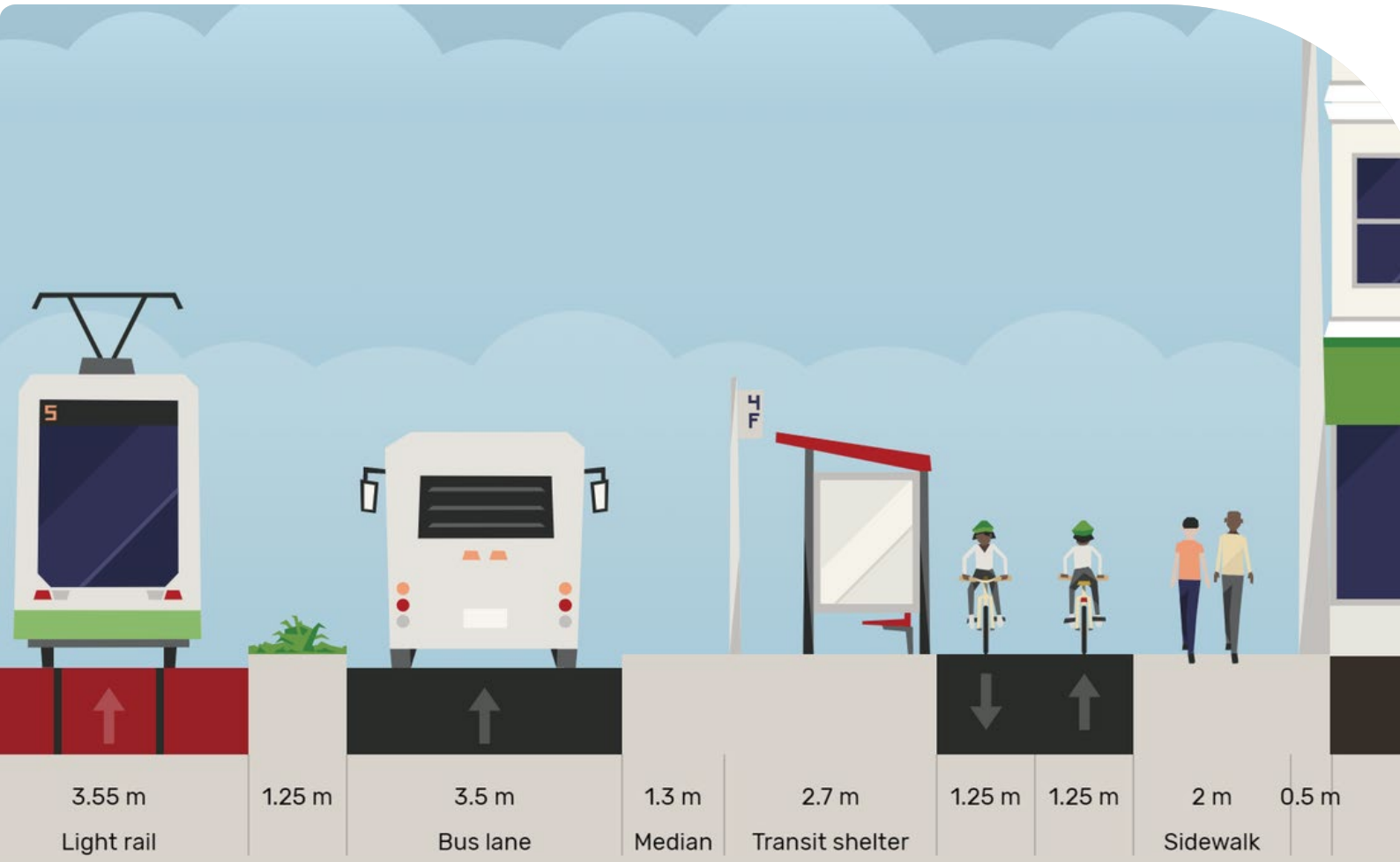
Reallocating the public sphere - balance between liveability and capacity

Pilot city: Tel Aviv / Follower city: Minneapolis

Measures can be transferred given the following factors:

- What is the key data? Demand analyses should be conducted to collect relevant data to make informed decisions on how to best reallocate public space
- To make sure current legislation allows for reallocating space, also considering financial and administrative aspects of allocating contested space
- Bottom-up approach by establishing a fluent dialogue with local stakeholders of the benefits of the measure (stakeholder engagement)

Further information can be found in D5.2, 'Urban policy system dynamics model' and D5.3, 'SPROUT City-led Innovative Policy Response'.



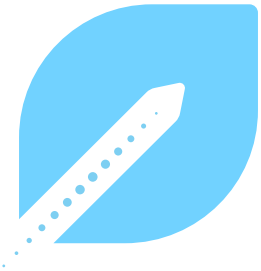
06

Building Cities' Policy Making Capacity

6 Building Cities' Policy Making Capacity

6.1 The Urban Mobility Ecosystem

The SPROUT project understands urban mobility systems as ecosystems to capture the various dimensions. An ecosystem approach provides a framework to systematically identify the main factors that drive the mobility transition and innovative policy making.

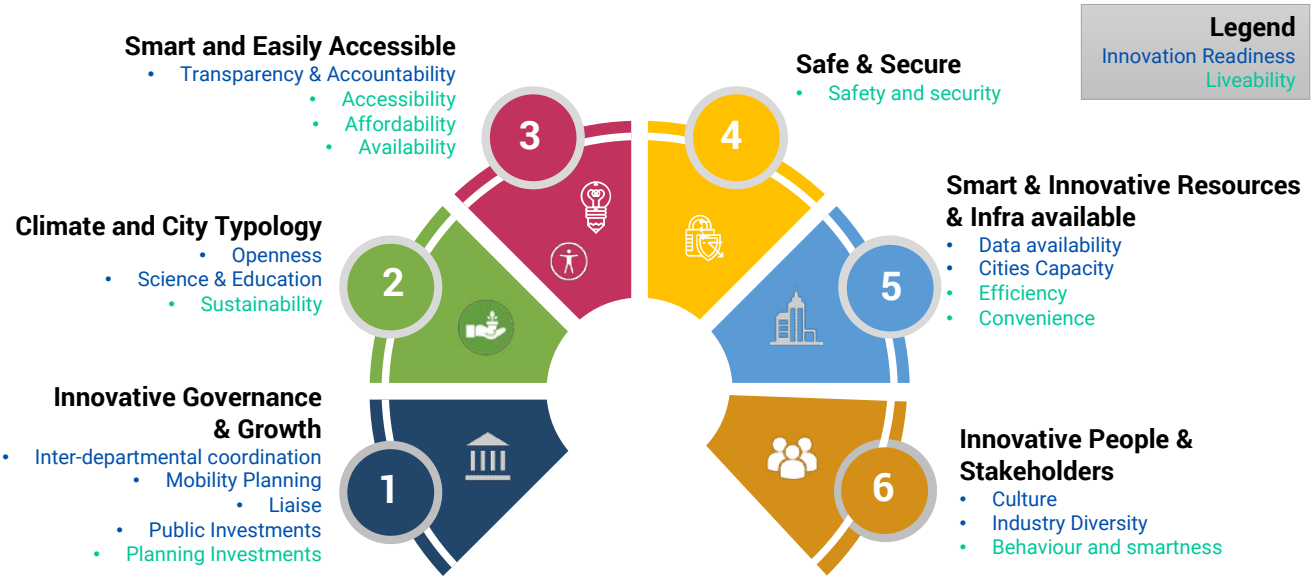


The factors may be located within the mobility system (e.g., the availability and accessibility of the transport system) or beyond (e.g., the ability of the population to use new mobility solutions).

An ecosystem can connect data, applications, relationships, and expertise.

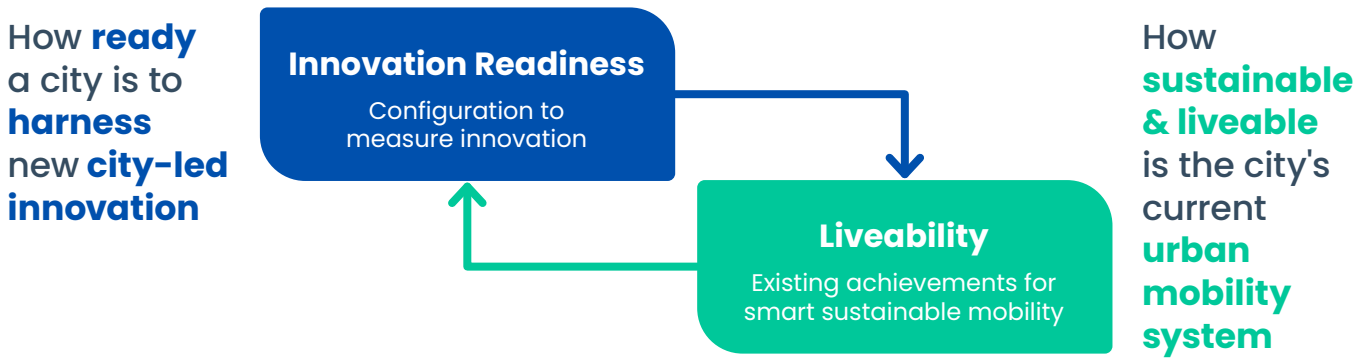
An ecosystem-based approach was followed to identify and define the main elements of an urban mobility system that affect the readiness and capability of a city to deploy innovation in mobility. An ecosystem can connect data, applications, relationships, and expertise. Thus, adopting the ecosystem approach enables the user to bridge the gap between stakeholders, processes and systems involved in every stage, to connect more easily and efficiently, with greater transparency and better management reporting.

To be more specific, the goal of this part of the process to better understand the innovative urban mobility ecosystem by identifying (1) the elements, and (2) the sub-elements that either describe the city's capability in deploying mobility innovations (Innovation Readiness) or capture the sustainability performance of a city's mobility system and (3) the interrelations of the ecosystem elements/sub-elements (Liveability).



6.1.1 The two dimensions of Innovation

Each of the aforementioned elements corresponds to a specific field that is important to driving urban mobility innovation. To better understand and further analyse these elements, it was necessary to downgrade them to a lower level, into sub-elements. These sub-elements can be categorized based on the perspective. The SPROUT urban policy model develops a holistic approach for capturing the innovative perspective from two different dimensions.



6.1.2 Innovation Readiness

SPROUT developed a self-assessment to evaluate a city's capability and readiness to enable and to deploy mobility innovations. This assessment explores the innovation readiness by looking beyond the mobility system, such as the degree of inter-departmental coordination, the procurement processes for innovative solutions, planning practices and stakeholder involvement, public investments, cooperation with academia and private actors, the collection and use of data, the level of intelligent transport services and infrastructure, and the availability of skilled personnel.

Link to the tool:
https://urbanpolicymodel.imet.gr/innovation-readiness.html

6.1.3 Liveability

The Liveability self-assessment tool identifies strengths and weaknesses that relate to a city's mobility system. It uses greenhouse gas emissions, air pollutants, trip length, costs of mobility options, availability of shared mobility offers, number of accidents, availability of infrastructure, and modal shares of public transport.

Link to the tool:
https://urbanpolicymodel.imet.gr/liveability.html

6.2 The Urban Mobility Policy Action Tracker

The SPROUT action tracker was used to assess SPROUT cities' progress towards achieving specific policy goals.

... assess the current state of an urban mobility system, by adding a forward-looking approach.

It complements indicator systems which assess the current state of an urban mobility system, by adding a forward-looking approach. Thus, it also includes targets for the future development of the mobility system and key policy measures and activities to achieve the desired state.

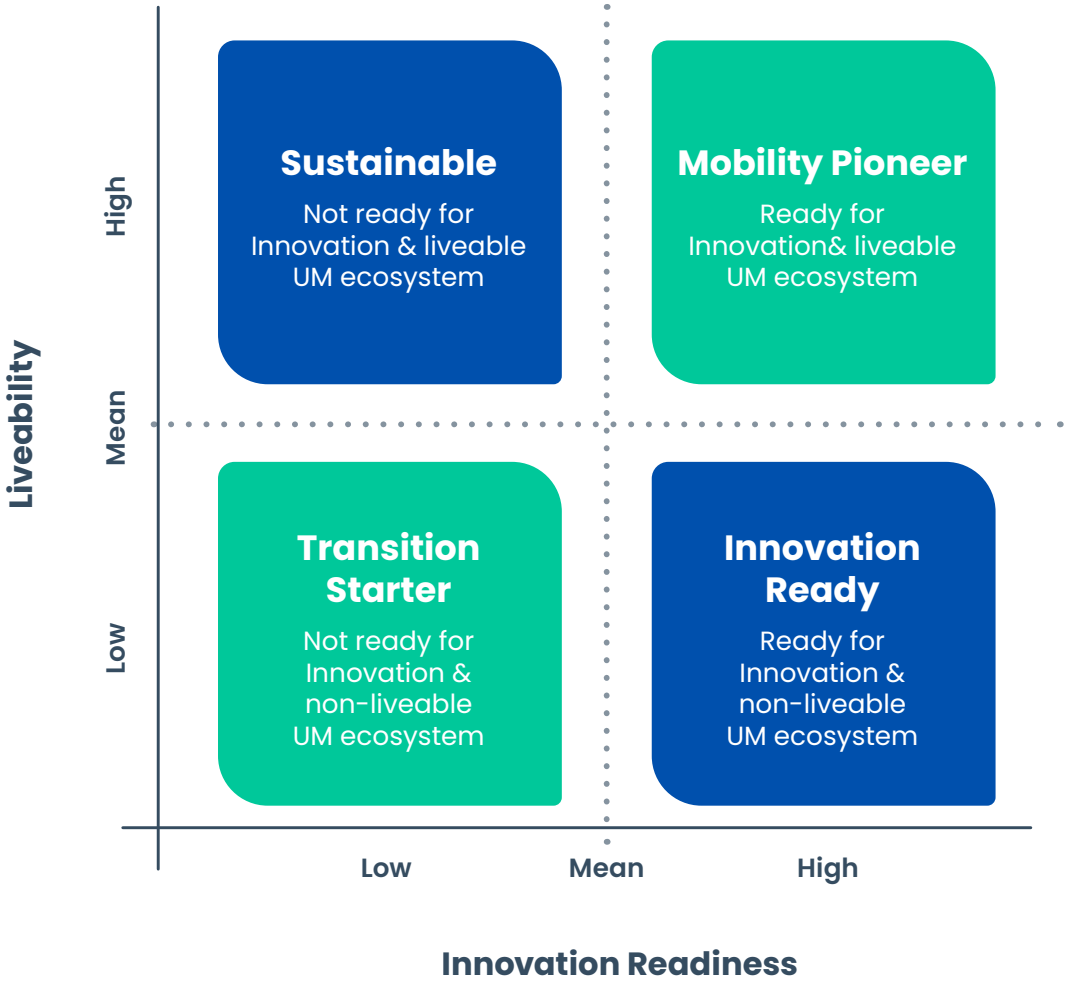
The policy action tracker reflects the three dimensions of knowledge that are crucial for coping with transitions: System knowledge on the current state of the mobility system and related impacts; Target knowledge on the desirable future state; and transition knowledge on policy measures and instruments to achieve the desired state. The tracker report on SPROUT pilot cities and follower cities is part of Deliverable D6.2.

Further information can be found in D6.2, 'Evidence-based early policy alert & action tracking'.

6.3 City Typology

Future scenario building is one of the main activities during urban mobility planning, as cities are requested to develop and discuss with residents and local stakeholders the ways the city could look in the future.

The transition to innovative mobility solutions and the digital transformation required by EU policies demands cities identify their capacities and develop their future vision. The identification of the city's current situation could be based on the score of Innovation Readiness and Liveability, two powerful tools developed in the project and introduced in previous sections. Four different types of cities regarding their current position regarding urban mobility transition were defined, following a grid approach:



Further information can be found in [D6.2, 'Evidence-based early policy alert & action tracking'](#).

6.4 The SPROUT toolbox

The SPROUT toolbox is a website that provides a step-by-step guidance for cities to follow the SPROUT approach to test and respond to innovative mobility solutions.

The toolbox provides practical guidance to city officials steering the mobility transitions that cities face.

The SPROUT toolbox provides tools, methods and data that cities can use to steer the mobility transition and harness its positive impacts. The toolbox is structured into the following sections:

- **Understand Innovation in Urban Mobility Ecosystems**, including the ecosystem framework, the innovation readiness tool, and the liveability assessment.
- **Foresee through Scenarios**, which includes step-by-step guidance for conducting scenario processes and tools that were used
- **Integrate Mobility Innovations through Pilots** which presents the pilots' evaluation framework, the sustainability assessment tool, and the cost-based assessment tool.
- **Respond through Policy Measures and Packages**, containing the policy responses from a selection of SPROUT Pilots
- The **Tool Repository** which gives direct access to the tools that have been developed and / or used during the SPROUT project as well as relevant tools from different sources, such as other projects.
- The SPROUT data space, which contains data from pilot cities and follower cities that have been collected during the project.

The SPROUT Toolbox can be found at: http://sprouttoolbox.nuacampus.org/

With the aim to support cities in their policy making capacity, SPROUT has produced three e-learning courses:

The e-courses are accessible via the resources page of the project website and the SPROUT toolbox.

eLearning course on early policy alert & action tracking

eLearning course on policy design, coalition & governance

Data-driven approach to SUMP

07

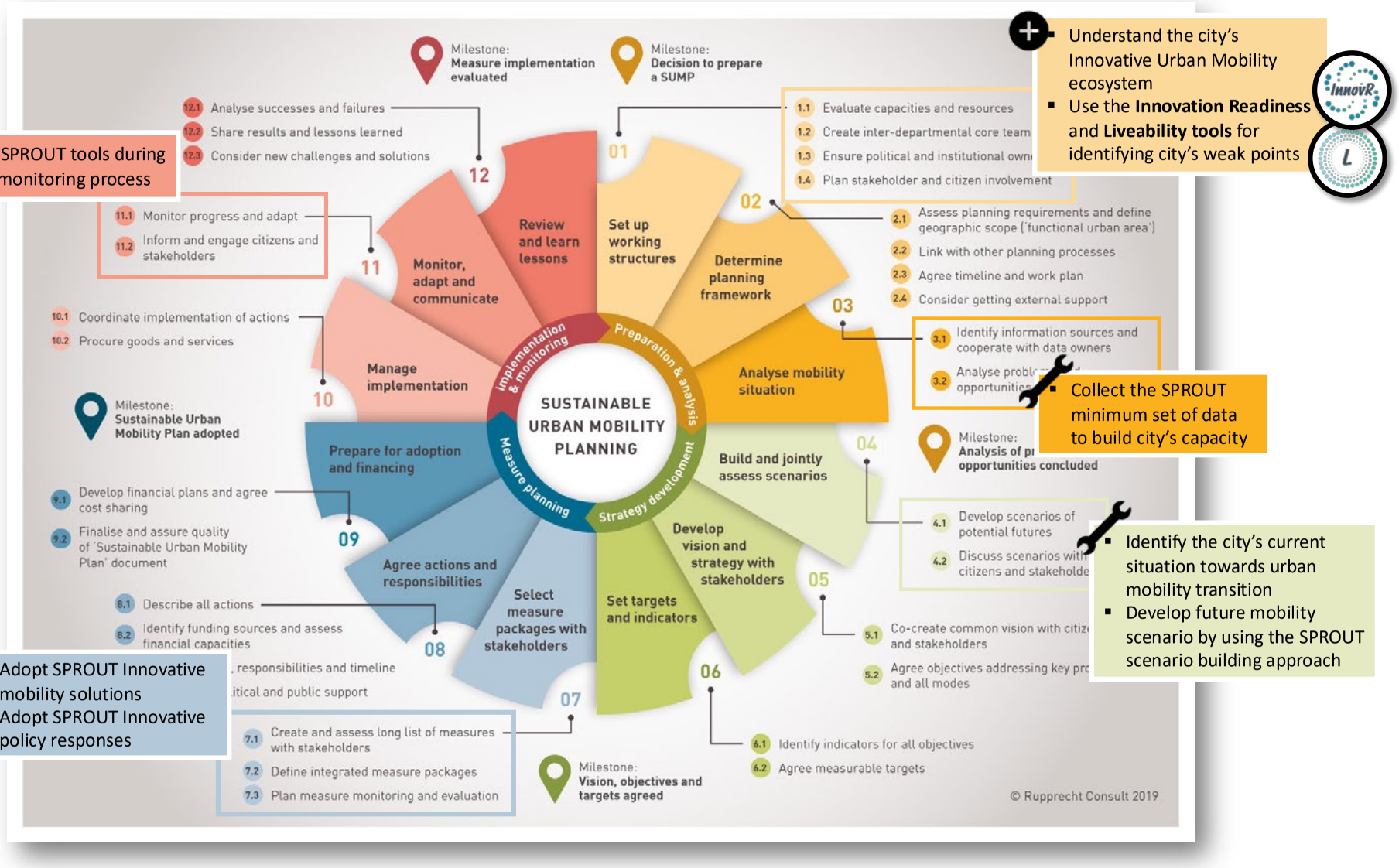
Navigating Future Policy

7 Navigating Future Policy

7.1 SUMP General Recommendations

Within SUMP guidelines development and publication, several transport and logistics related issues have emerged, and specific guidance is required by the relevant stakeholders.

As city authorities and transport planners are requested to manage city's acceleration to innovative transition, they may consider it as part of their Sustainable Urban Mobility Plan (SUMP) development process. Based on SPROUT results, some suggestions in specific steps and activities for enriching and updating the SUMP development process, including guidelines for digital transformation and innovation transition, have arisen.



- Use SPROUT tools during the monitoring process

- Understand the city's Innovative Urban Mobility ecosystem
- Use the **Innovation Readiness** and **Liveability tools** for identifying city's weak points

- Collect the SPROUT minimum set of data to build city's capacity

- Identify the city's current situation towards urban mobility transition
- Develop future mobility scenario by using the SPROUT scenario building approach

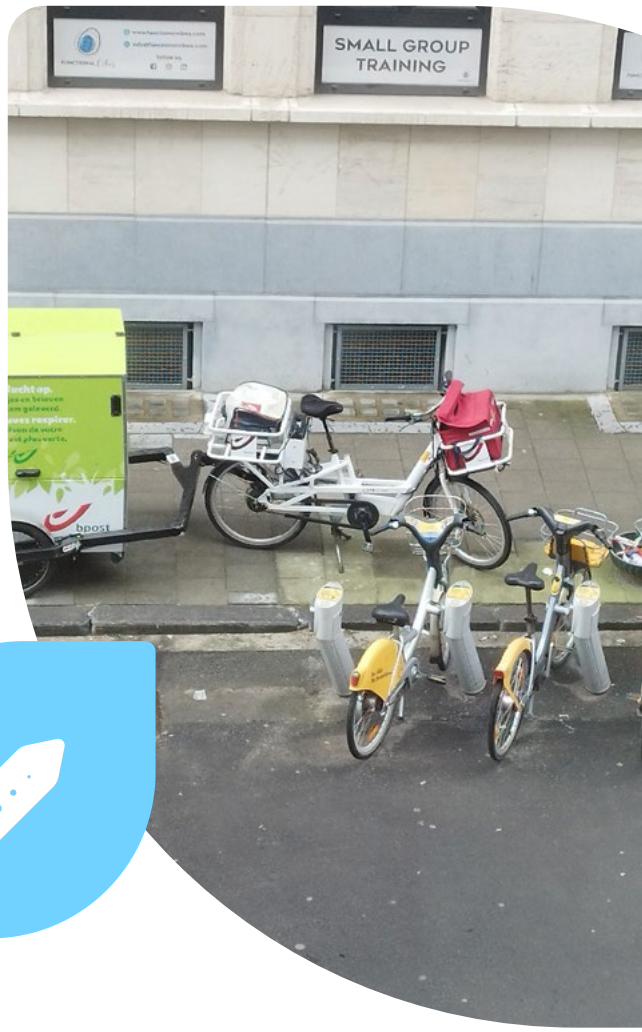
- Adopt SPROUT Innovative mobility solutions
- Adopt SPROUT Innovative policy responses

Further information can be found in [D7.1 SUMP-based policy response](#).

7.2 Urban Agenda policy briefs

Two policy briefs on recent innovations in the urban mobility field were developed:

On the integration of (shared) micro-vehicles and on autonomous vehicles. Both examples have the potential to contribute to more sustainable and future proof urban mobility systems. Still, the beneficial integration of those – most often privately operated – solutions into the mobility system requires strong guidance and regulation.



7.2.1 Urban space allocation for supporting and regulating shared mobility services for intermodality

Urban space is a scarce resource in cities worldwide. With new emerging technologies and new habits that are developing around active mobility, the re-structuring and re-allocation of this urban space is becoming more and more critical. As shared active and micro-mobility services are likely here to stay, it is crucial for cities to address them if they wish to harness their impacts. This SPROUT policy brief, therefore, explores policy options for cities to reallocate urban space and integrate active and shared mobility forms beneficially into the urban mobility system. Based on the project experience, SPROUT formulates the following recommendations:

1. Develop a coherent legal framework
2. Integrate active and shared new services within the public transport network
3. Guidance to account for benefits of new mobility solutions
4. Support the double role of cities (facilitators and regulators)

7.2.2 Required regulatory and operational facilitators for the effective integration of new mobility solutions in the transport offer of cities

During the last years, in the context of moving to sustainability, cities are interested in implementing innovative mobility solutions, such as autonomous/automated vehicles (AV's) in the context of achieving climate neutrality. However, neither cities (legislation) nor people (user acceptance) are ready to fully adopt this innovation. Knowledge from pilots with AV's, together with desktop research, highlighted specific activities which cities should do in advance to support AV implementation.

The whole analysis showed that there are four important actions:

1. **Acknowledge the autonomous/ automated vehicles** as new modes of passenger and freight transport.
2. **Review the regulatory framework** at the different levels (city, region and country) and include:
   - Regulations for autonomous/ automated vehicles
   - Regulations for combined passenger and freight transportation
3. **Create a dedicated task force** team of people to support mobility projects with new modes of transport.
4. **Strengthen people's awareness** and trust regarding AV's:
   - Involve end-users in the planning and testing processes, including vulnerable groups
   - Marketing campaigns

Further information can be found in D7.2 Urban Agenda Policy Brief.

7.3 A European strategy to navigate urban mobility policy through transition

Urbanization and the rise of on-demand city logistics have created a challenge for cities to minimize negative impacts and achieve greater sustainability.

Many European cities have adopted policies to navigate urban mobility policy through transition.

Several roadmaps have been developed to guide cities towards decarbonized, zero-emission logistics. Many European cities have adopted policies to navigate urban mobility policy through transition. In the context of SPROUT, a comparative assessment of many roadmaps focused on greening city logistics, examining the vision and objectives, timeline, methodology, areas of intervention, and identified risks. The comparison emphasises the concepts and methods used and their strengths and limitations.

Further information can be found in D7.3 A European strategy to navigate urban mobility policy through transition.

7.4 EU, US, China international cooperation agenda on urban mobility policy

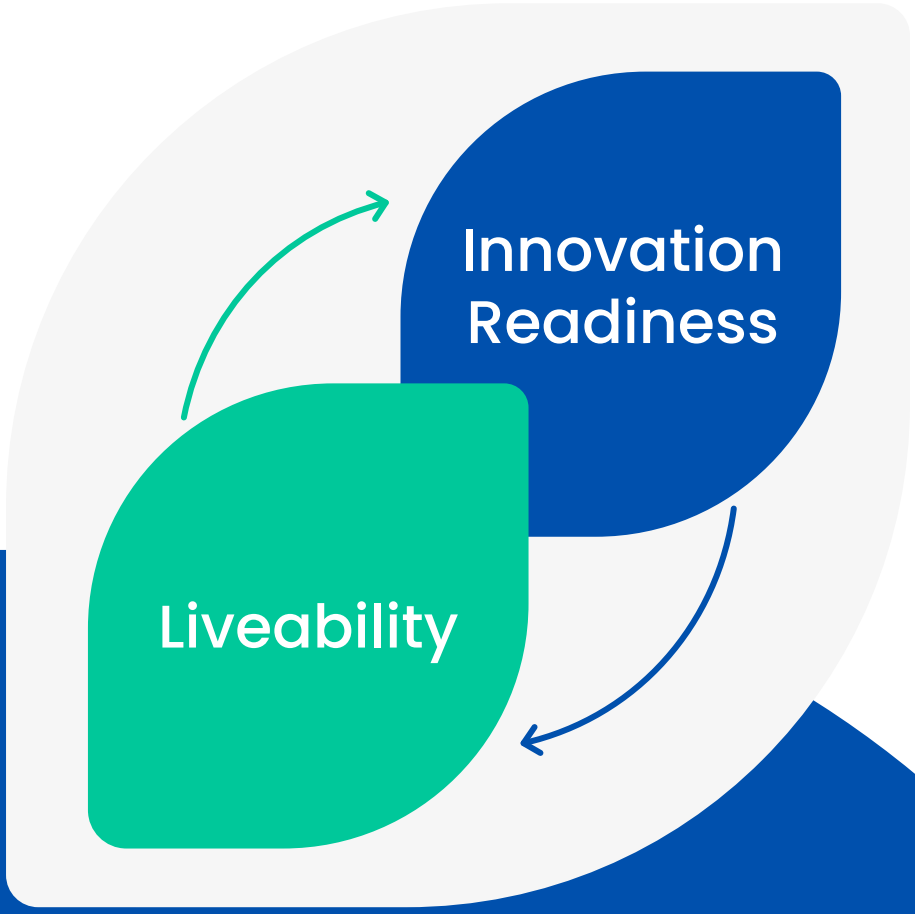
Research and innovation are increasingly interlinked internationally.

Furthermore, in the last interim evaluation of H2020, the importance of strengthening international cooperation in R&I has been stressed and endorsed by the EC. Acknowledging this reality, the project takes advantage of the international synergies with Chinese and United States organisations in order to draw a proposed international cooperation agenda on urban mobility policy.

During the preparation and implementation of SPROUT pilot cities to adopt innovative mobility solutions, different challenges were found. Cities and policy planners decided to overcome these barriers with policy measures (policies). Still, their application was not always easy because of different factors, such as non-provisional regulations, slow administrative procedures, etc.

The policy challenges found by the EU cities were also assessed in the USA and CN to find commonalities and differences.

Further information can be found in D7.4 EU, US, China international cooperation agenda on urban mobility policy.



Conclusion

Conclusion

This document, a final project publication, compiles SPROUT's main results. It is developed in the framework of the work package devoted to the project outcomes' validation, transfer and exploitation (WP8).

Results are articulated under the project's 5 objectives:

- Understand the transition in urban mobility by quantifying the current status and defining the main drivers of the transition
- Foresee and identify the impact of the drivers of urban mobility transition on cities' policies and measures for urban mobility
- Formulate a city-led innovative policy response, which can be applied widely to cities in Europe and beyond
- Provide tools to contribute to evidence-based policymaking and enhance local policy-making capacity
- Navigate future policy by channelling project results into future EU policy initiatives

Specifically, this document presents the evaluation framework developed to guide cities towards a robust city-led policy response, and SPROUT cross-pilot transferability messages, transferability of SPROUT pilot's measures to validation cities, the SPROUT urban mobility ecosystem and policy model, the project toolbox, e-learning courses and policy recommendations.

Resources can be accessed through the following links:

Project Website:
https://sprout-civitas.eu

Project Deliverables and Downloads:
https://sprout-civitas.eu/resources

SPROUT toolbox:
http://sprouttoolbox.nuacampus.org/

E-learning courses:

The e-courses are accessible via the resources page of the project website and the SPROUT toolbox.

eLearning course on early policy alert & action tracking

eLearning course on policy design, coalition & governance

Data-driven approach to SUMP

Sprout