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SMILE CITY

Sustainable Materials for Innovative, Low Emissions applications in the CIrcular ciTY

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Pilots Co-design Report (First Pilot)

Task 2.3. Pilot Design and Planning

By CEUS

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WP responsible partner: City of Lucca

Deliverable responsible partner: CEUS

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REVISION PROCESS

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Table of contents

This project has received funding from the European Union's Horizon Programme (HORIZON-CL6-2023-CIRCBIO-02) under grant agreement No 101135406,,

Executive Summary

This Deliverable includes the results of Task 2.3 - Design and plan of the first pilot using the SMILE CITY circular systemic solutions, and presents a structured roadmap framework for establishing Urban Living Labs (ULLs) as platforms for testing circular economy innovations across all participating cities and regions. Developed through a consultative process with participating cities and regions, the framework synthesizes four instructional worksheets, developed by CEUS and verified collaboratively with project partners, into a strategic methodology that supports: site selection, stakeholder engagement, co-design, and implementation planning. The ULLs will be designed as open innovation ecosystems embedded in real-life urban contexts, enabling citizen-centered prototyping of SMILE CITY systemic solutions:

A. e-charging stations for e-bikes, with concrete pre-cast elements, PV panels for roofing or flooring, and second-life EV batteries for electric power storage;
B. Cycling lanes / tracks re-paving with different mixes of recycled rubber and polymers;
C. Curbs and lane dividers in molded recycled rubber;
D. Bollards in molded recycled rubber.

The Deliverable also includes the first inputs related to the first pilot in the City of Lucca - the first site to be implemented with high demonstration and replication value.

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1. Introduction and Methodology Framework

The SMILE City project aims to accelerate the transition to circular urban systems by piloting innovative solutions in real-life settings. Task 2.3 focuses on the design and planning of ULLs, guiding cities through a step-by-step process to identify suitable pilot sites, engage stakeholders, co-design, and prepare for implementation. This Deliverable consolidates the instructional materials into a formal roadmap, providing a comprehensive overview of the methodology and progress.

Deliverable 2.3 serves as a **foundation and roadmap for the establishment of Urban Living Labs** within the SMILE City project. It provides cities and regions with **a structured framework** for mapping needs and vision, planning, co-creation (with suggested methods and tools, referring to CLEVER Cities Co-Creation Guidance), and implementing circular economy pilot interventions.

The Deliverable has been developed through a co-creation process involving four dedicated workshops with participating cities and technical partners. These workshops enabled iterative refinement of the methodology, ensuring that it reflects both practical realities and strategic ambitions. Summary and materials from the Workshops are attached as Annex 1. During the workshops, MIRO board exercises were prepared by CEUS and filled in by cities and regions, in order to test the proposed co-creation approach. The results of those exercises are attached to this report as Annex 2. Finally, the four instructional worksheets, covering stakeholder mapping, site selection, co-creation tools, and implementation preconditions for prototyping, were created by CEUS and then tested and validated by project partners during this process. These instructional worksheets are attached to this report as Annex 3. Each worksheet guides cities through structured reflection, data collection, and planning, culminating in a localized roadmap for ULL establishment and facilitation.

Importantly, **Deliverable 2.3 will not contain city-specific implementation data**, except for **the first inputs related to the first pilot in the City of Lucca**, and several illustrative inputs from other cities and regions, like Crete, Manresa, Castilla y Leon and Bursa. Instead, it will guide the process that each city will follow from November 2025 until June 2026. The results of this process, including populated roadmaps, site-specific details, and implementation plans, will be compiled in Deliverable 2.5 - Pilots Co-design Report (Further Pilots and Planning), to be submitted in June 2026.

The objective of the work under Task 2.3 is to ensure the feasibility, stakeholder alignment, and long-term sustainability of ULL pilots.

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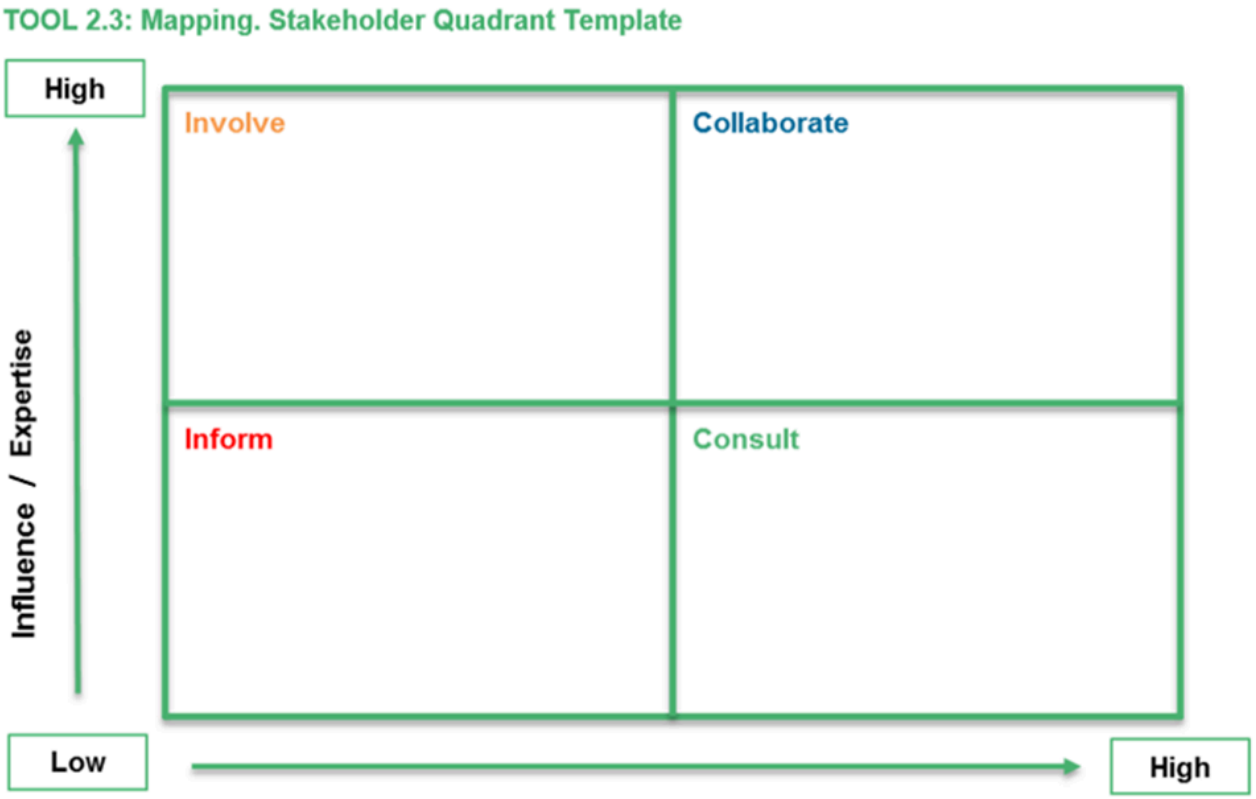
2. Stakeholder Mapping and Engagement

Cities will begin their ULL establishment by identifying and engaging a diverse set of stakeholders. This foundational step will ensure that pilots are co-created with those who will influence, implement, or be affected by the intervention.

Cities will map stakeholders across governance, technical, community, and innovation domains. They will assess stakeholder influence, interest, vulnerability, and potential impact. Engagement strategies will be designed using a four-tier model: Inform, Consult, Involve, and Collaborate. Coordination bodies (e.g., Local Green Deal Groups or ULL Task Forces) will be established or activated. Cities should ensure inclusive, gender-responsive, and culturally sensitive engagement.



Each city will produce a stakeholder matrix / map and engagement strategy tailored to its local context, laying the groundwork for participatory pilot development. Each city should also develop a vision, in collaboration with key stakeholders, using some of the proposed visioning tools.

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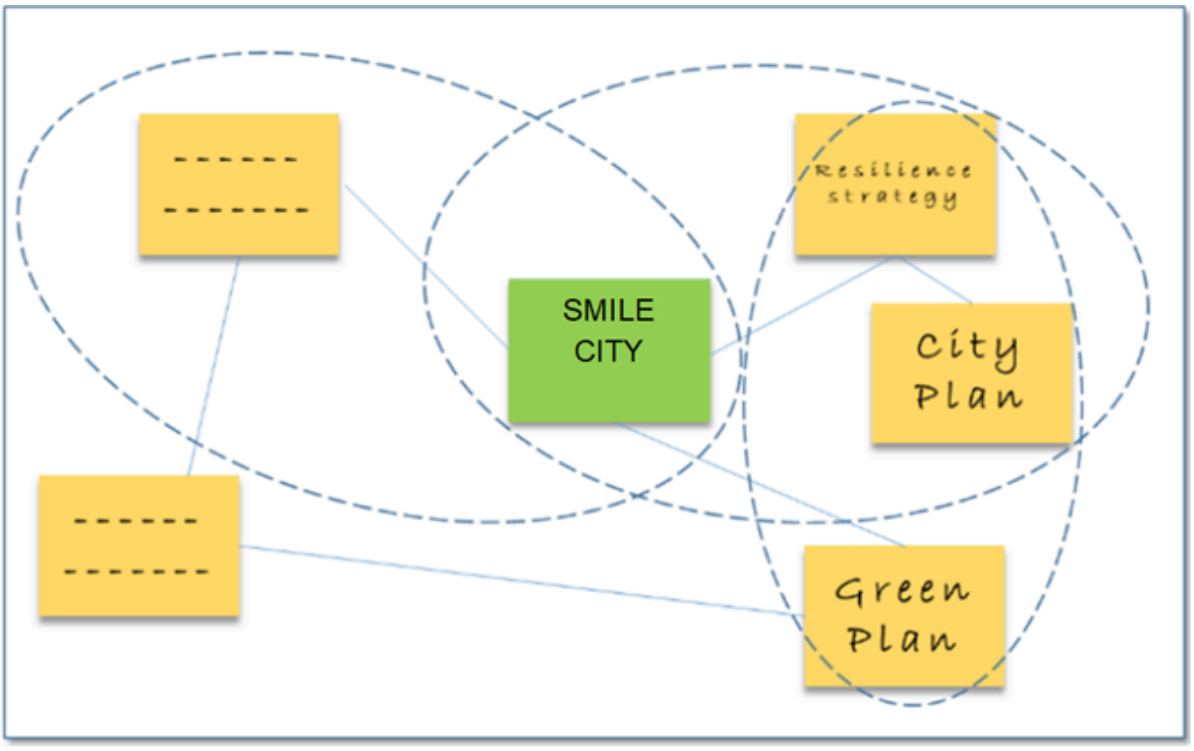
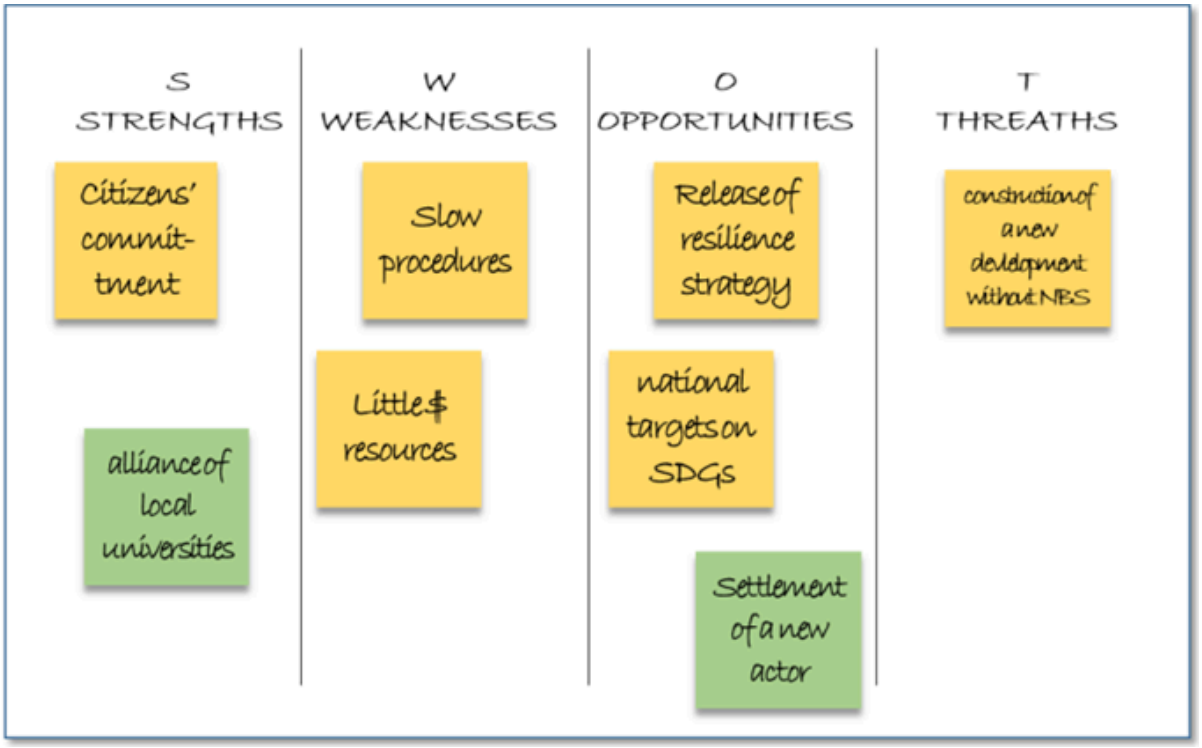
Possible tools for visioning:

Framing SMILE CITY Board



SWOT



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2.1. Stakeholder Mapping and Engagement Plan for the City of Lucca

Setting the local scene

The Mobility Office will implement project actions in accordance with existing municipal plans and programs and will coordinate internal municipal contributions to the pilots' design, installation, and oversight.

As the public administration responsible for the local territory, the City of Lucca occupies a central and enabling role in the development and execution of SMILE CITY pilots. The Mobility Office (A.2) is the lead municipal unit tasked with implementing the project's actions and ensuring consistency with municipal planning and public works procedures. At present, there is no fully established city-wide coordination body for cross-departmental guidance; such a platform is currently in development.

To manage the absence of a permanent coordination body, the Municipality is in the process of appointing an internal working group that will communicate with relevant stakeholders and municipal departments and will oversee the installation of the pilot areas from initiation through completion. This internal working group will consist of several municipal employees and will be coordinated by the A.2 department to ensure a single point of municipal responsibility and continuity across tasks.

External facilitators are regarded as a valuable asset for co-creation and participatory activities. The city recognizes the added value of collaborating with consortium partners for their project-specific expertise and with professional facilitators experienced in mediating multi-stakeholder processes. Practical constraints limit the City's capacity to engage external facilitation without additional funding: municipal staff capacity, limited English proficiency among municipal officers, the additional time required to conduct multiple stakeholder engagements, and the lack of a budget line to cover facilitation fees are all material considerations. The Municipality therefore favours a modest, pragmatic approach that balances the benefit of professional facilitation against these resource and time constraints.

Mapping challenges and needs

There is currently no adopted spatial or urban plan specific to the areas under consideration for the pilots. The City prefers to install pilots on municipal land to simplify permissions and delivery; however, the Municipality remains open to privately owned sites when conditions are favourable, including potential locations on land managed by bodies such as the National Railways, subject to further evaluation.

Technical design inputs are expected principally from project partners who will supply essential documentation such as material specifications, technical datasheets, and structural and architectural drawings for the charging stations. Once these inputs are available, a specialised municipal technician who will be a member of the internal working group will synthesise received materials and develop each pilot into a formal public works project for execution and permitting.

Decisions on who will execute construction works depend on finalised pilot locations and on the extent of pre-fabricated or turnkey deliverables supplied by partners. The Municipality will evaluate, on a case-by-case basis, the option to use an existing contractor under current framework agreements or to procure a new contractor through a public procurement process. If

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the pilot work can be integrated into existing contractual agreements, the implementation timeline and costs are expected to be more favourable; where new procurement is required, the City anticipates longer lead times, higher costs, and increased administrative complexity. The choice of contractor will also be informed by consultation with project partners to determine which works they will deliver directly and which will remain municipal responsibilities.

Regulatory questions about novel materials remain an open issue for the City. Municipal officers expressed uncertainty regarding who bears responsibility for registering End-of-Waste status for materials such as recycled rubber used in test applications. The local expectation is that producers of finished products would manage regulatory compliance related to recycled inputs, but the Municipality does not yet have clarity on specific normative steps or administrative responsibilities. Similarly, the disposal of pilot materials at the end of life must follow existing special waste procedures established by national legislation.

Testing and certification of new construction materials are considered feasible through engagement with local producers and manufacturers who could participate in laying trial materials (for example, asphalt containing recycled rubber) and then perform material analysis. To enable local testing, municipal staff require precise technical specifications and product data sheets from suppliers. At present, the Municipality does not have full clarity on which tests should be undertaken locally versus which certifications should be provided in advance by project partners; local manufacturers may request guarantees or source-level tests to determine their contractual obligations and warranties. This knowledge gap is acknowledged as arising from limited prior experience with the specific new materials proposed for testing.

Permitting the use of materials is contingent on the presence of required European or national certifications. If materials supplied by project partners carry the necessary certifications, no additional material-specific permits should be needed. Permits for works will be managed through the standard Italian public works practice of convening a "service conference", a mandatory procedure for public works that allows the Municipality to obtain the authorisations required from the competent bodies.

Financially, the Municipality has not allocated additional co-financing for the SMILE CITY systemic solution beyond the project budget. Any municipal contribution beyond the approved project resources would require political approval and is not currently planned. While external co-financing from private or public entities remains a theoretical possibility, the Municipality has not identified interested financial stakeholders and recognises that securing such funding would involve substantial technical and bureaucratic challenges.

Mapping the main stakeholders and prioritisation

Stakeholders internal to the Municipality, external institutional actors and end users have been identified with differentiated roles and levels of influence. Within municipal structures, the Public Works Department and the Traffic Department must be directly involved in pilot design to anticipate and mitigate traffic impacts and to supervise installation, ensuring that the works are executed correctly. The Maintenance Office is essential for evaluating material characteristics, lifespan, and maintenance requirements. The Superintendence of Cultural Heritage represents a critical external authority with high potential to affect project outcomes. Due to Lucca’s historical and cultural assets, the Superintendence can effectively prohibit or require substantial architectural modifications to proposed installations if they are deemed to affect protected assets or the urban landscape; the Superintendence is traditionally cautious about informal channels of

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involvement, therefore establishing early and preventive formal dialogue is considered indispensable.

Among external stakeholders, citizens and tourists are the primary end users and will directly experience the benefits and any inconveniences of the pilots. Local cycling associations and local businesses are potential partners that could be engaged after further evaluation.

The stakeholders with the greatest capacity to influence the project's success are the Public Works Department, the Traffic Department, and, above all, the Superintendence of Cultural Heritage. The Municipality currently does not identify specific vulnerable groups likely to suffer adverse impacts from the pilots, but remains attentive to inclusion principles. A foreseeable source of negative stakeholder reaction could arise if charging stations occupy public parking spaces, thereby reducing parking availability for vehicle owners who might oppose such a decision.

The Municipality has articulated an engagement framework that assigns differentiated methods and levels of interaction. Formal consultation with technical departments such as Public Works and Traffic is planned through focus groups, one-to-one meetings, and inclusion in a task force. The Superintendence is to be involved directly through targeted meetings and collaboration to secure necessary approvals and to prevent conflicts with heritage protections. Cyclist organisations will be informed via municipal communication channels, consulted through questionnaires and focus groups, and involved as appropriate. Citizens and tourists will be informed through the municipal website and engaged through questionnaires, consultation events, and workshops to capture user needs and preferences. The proposed engagement modalities rely on digital communication tools (website and newsletter), targeted questionnaires and focus groups, workshops where appropriate, one-to-one meetings for technical stakeholders, and a municipal task force for collaborative decision-making.

Visioning

The City of Lucca's immediate objective for the pilot is to advance sustainable mobility as a response to persistent traffic congestion and air quality challenges that negatively affect residents and visitors. The pilot aims to introduce construction techniques aligned with environmental sustainability and circular economy principles, install two bicycle charging stations, and implement an existing cycle path segment. Strategic placement of the charging stations near the historic centre, public parking, and transport hubs such as train and bus stations is intended to facilitate modal shift and encourage the use of non-motorised and low-emission transport modes by making charging and connectivity convenient for users.

Regarding scale-up potential, Lucca already leverages regional, national, and European funding mechanisms for sustainable mobility initiatives and maintains institutional relationships that can support dissemination and replication of pilot lessons. Existing connections with other municipalities, including twinned cities, and contacts with national bodies such as ANCI (the National Association of Italian Municipalities), the National Observatory on Sustainable Mobility, and the Tuscany Region provide communication channels and institutional platforms for integrating successful pilot procedures and technical approaches into broader guidelines and practices at the national or EU level. The Municipality expects that positive pilot outcomes, robust documentation of technical specifications and maintenance regimes, and carefully managed stakeholder processes will create an evidence base suitable for informing broader adoption by peer cities and relevant national actors.

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2.2. Stakeholder Mapping and Engagement Plan for the Region of Crete

Setting the local scene

The Region of Crete acts as the beneficiary and coordinating authority for the SMILE CITY pilot in the Region. The Region holds coordination responsibility and final authorization for piloting decisions and has identified Chania City as the pilot location in accordance with regional urban policy.

The Region of Crete positions itself as coordinator and final authorising body for the pilot, delegating on-the-ground guidance to the Technical Department of Chania City. While no permanent city-wide coordination body is reported at the regional level, an existing Smile piloting project working group provides overall supervision of the project and is expected to work in concert with the urban living lab (ULL) to be established with project support. The Region anticipates that a ULL will co-act with the established project working group to support co-creation, prototyping, construction, and testing activities.

Local partners and stakeholders already identified within the Region are considered active contributors to the piloting process. The Region explicitly expects local partners to strengthen project outcomes through participatory contribution, technical support, and stakeholder mobilisation.

Mapping challenges and needs

Planning for the pilot area is currently under development with Chania City. Chania City is the owner of the land selected for piloting, which concentrates decision-making and land use authority at the municipal level under the oversight of the Region of Crete. Technical design responsibility and approval processes are pending and remain under consideration while awaiting final guidance from Task Leaders.

Execution of works is planned through the procurement of private contractors selected via public competition, indicating formal public procurement processes will be necessary for construction and installation. The Region identifies ECOELASTICA as the national authority for registering End of Waste status for recycled technical materials in Greece, clarifying the regulatory body responsible for certifying recycled rubber or similar recycled inputs used in pilot materials.

Laboratory analysis and certification of novel construction materials are available through national research and testing institutions and accredited certification bodies. The Region cites institutions such as FORTH IESL, HELMEPA, EKETA, and other organisations as capable of analysing materials, with conformity assessments managed by certification companies registered with ELOT, the national standards authority.

Use permits and authorisations, where needed, will be provided either through national authorities within the remit of the Infrastructure Ministry or through certified private firms registered on national certification lists (CE, EPD, and equivalent). The Region confirms that, at present, there is no dedicated public co-financing in the regional budget for SMILE CITY beyond project resources, and no stakeholders have been identified to provide co-financing.

Mapping the main stakeholders and prioritisation

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Stakeholder mapping is acknowledged as a work in progress and will be developed further in coordination with Chania City and project Task Leaders. Chania City emerges as the primary stakeholder with the greatest influence on project outcomes, given its land ownership, municipal planning authority, and role in local implementation. Citizens, visitors, and NGOs are identified among those most vulnerable to potential adverse impacts and thus warrant careful inclusion and consideration in engagement plans.

The Region's preliminary stakeholder list includes private firms and research institutions that will be engaged across technical, consultative, and collaborative roles. Specific organisations named for engagement include Katheris SA for recycling inputs, the Technical Chamber — East Crete Department for engineering dissemination and technical information, FORTH IESL for materials expertise, IHELIOS for consulting, and TSIMEDOMI for material production. Engagement modalities envisaged include targeted meetings, technical consultations on recycling and materials, engineer groups with information and factsheets dissemination, workshops, and task force collaboration where appropriate. Several of these stakeholders are already flagged for deeper involvement and collaboration through regular meetings and task force membership.

The Region recognises that mapping should explicitly prioritise stakeholders by influence, interest, and vulnerability, and that this prioritisation must be translated into a staged engagement plan defining who is informed, consulted, involved, and invited to collaborate at each project phase.

Visioning

The Region's objective for the pilot is to deepen local urbanism practices and foster a Local Urban Alchemy society by promoting recyclable plastics and circular economy materials in public infrastructure and daily use. The Region highlights the need for informative workshops with public bodies, municipal actors, and citizens to raise awareness and acceptance of recyclable plastics as viable materials for urban infrastructure.

Scale-up potential is considered primarily at the national level: successful pilot development and demonstrable results are expected to encourage other Greek cities and regions to adopt green infrastructure approaches and reduce daily carbon footprints. The Region anticipates that careful documentation of pilot results, robust stakeholder engagement, and dissemination via national networks will enable broader uptake and policy influence across Greece and potentially at the EU scale.

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3. Multicriteria analysis for site selection

Together with key relevant stakeholders, cities will identify technically and strategically suitable pilot locations using a multicriteria analysis framework developed by CEUS.

Cities were instructed to:

- Review existing urban mobility strategies and spatial plans.
- Identify locations suitable for circular interventions, such as:
  - E-bike charging stations
  - Rubberized asphalt for cycling lanes
  - Recycled rubber urban furniture (bollards, lane dividers)
- Evaluate implementation feasibility through a multicriteria matrix.
- Document location-specific details, including maps, coordinates, and visual materials.

Cities and regions will evaluate potential sites for testing SMILE CITY systemic solutions by using five criteria:

- Legal: Cities will assess whether sites are covered by urban plans and whether construction is permitted.
- Technical: They will document the availability of technical documentation and permitting procedures.
- Operational: Cities will evaluate project timelines and stakeholder roles in construction.
- Financial: Budget availability, co-financing options, and maintenance pathways will be analyzed.
- Socio-political: Cities will consider potential public opposition and stakeholder sensitivities.

Each potential location will be rated using a three-tier grading scale:

✅ Clear Pathway

⚠️ Barriers Exist

❌ High Risk

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Grading preconditions for every considered pilot site, for selection

Criteria for site selection:	**Site 1**	**Site 2**	**Site 3**
Legal			
Technical			
Operational			
Financial			
Socio-political			

Grading scale for implementation preconditions:	Pathway for implementation is clear and achievable within the SMILE City timeline	Barriers exist, but there is a strategy for overcoming them	High-risk for implementation (is it a killer-risk?)

According to the grading of each criterion, cities will select pilot sites with the strongest implementation potential, strategic value, and the highest potential for replication by both private and public stakeholders, supported by detailed location descriptions and multicriteria matrices.

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3.1. Multicriteria Analysis for Site Selection in the City of Lucca

NOTE: The locations reported in the worksheets may be subject to change, based on the outcome of the ULL and/or further technical checks that will need to be conducted.

Location 1 — Cemetery Parking (Piazzale Maestri del Lavoro; 43.848877, 10.495837)

Legal analysis

An executable urban design project for the site is in progress under the municipal scheme titled "Redevelopment of the Via delle Tagliate parking lot", which positions the location favourably from a land use and permitting perspective. The pilot can be integrated into the executive project and therefore aligns with planned land use and allows construction or renovation of a cycling track and associated urban furniture. The formal legal pathway requires preparation or adaptation of an executive project compliant with Legislative Decree 36/2023, convening the Services Conference to secure required opinions and authorisations, approval by the City Council, and the launch of public procurement and execution phases. The presence of a near-completed executive project materially reduces the legal risk and simplifies the steps needed to obtain permits once SMILE CITY technical inputs are defined.

Technical analysis

A detailed Technical Economic Feasibility Project is already available for the broader regeneration of the parking area, and specific SMILE CITY technical needs can be integrated subsequently. The Municipal RUP (project manager), Engineer Francesca Guidotti, is nominated as the responsible officer for technical documentation. Required partner deliverables include material specifications, technical data sheets, and drawings for charging stations and recycled rubber elements; these must be submitted so the RUP can produce the executive variation or addendum that incorporates SMILE CITY components. Integration is feasible within the existing technical documentation route, but careful definition of construction details, interface with existing drainage, pavement layer, and electrical supply for charging points is needed prior to tendering.

Operational analysis

The executive project draft is in progress, and the Municipality confirms sufficient alignment to coordinate the SMILE CITY pilot with the ongoing regeneration intervention. Indicative procedural timing is: design completion in 30–60 days, Services Conference minimum 45–60 days, followed by procurement and implementation according to the main project schedule. The contractor will be appointed under the procedures defined by Legislative Decree 36/2023, following the General Contract Specifications. Because the site is municipally owned and covered by an advanced project, operational integration is achievable with moderate coordination effort between the SMILE CITY team, the RUP, and the contractor managing the wider redevelopment.

Financial analysis

No additional municipal budget is currently allocated for the intervention beyond project funds. Any municipal co-financing would require political approval and a precise city cost estimate to

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assess sustainability and timing. The Municipality manages the budget centrally and may consider allocating further resources if the pilot demonstrates superior material performance, environmental benefits, cost efficiency, and positive user feedback. For the Cemetery Parking site, the most prudent financial approach is to prioritise using SMILE CITY resources for pilot-specific elements and to seek contractual integration with the ongoing regeneration procurement to limit incremental municipal expenditure.

Socio-political analysis

There are no identified specific citizen objections at this stage. Anticipated community concerns would follow the common lines associated with public works: architectural or spatial impact, perceived functionality or environmental trade-offs, questions about cost effectiveness, and the post-implementation maintenance regime. Because Piazzale Maestri del Lavoro is a parking area, potential sensitivities could arise if parking capacity is reduced; early communication addressing parking management and benefits to sustainable mobility will be important. Given the site's clearer project status and municipal ownership, socio-political risk is moderate and manageable with targeted stakeholder engagement.

Conclusion and recommended next actions

This location presents the strongest readiness for immediate pilot delivery. Proceed to secure the SMILE CITY technical inputs (product data sheets, certification evidence, and electrical requirements), instruct the RUP to prepare the executive variation or annex, and schedule the Services Conference to confirm technical compatibility and authorisations. If possible, integrate SMILE CITY components into the existing procurement to minimise incremental costs and shorten the implementation timeline. Prepare communication materials explaining the benefits and maintenance plan to preempt objections about parking and long-term upkeep.

Location 2 — Railway Station / Carducci Parking (Piazzale Ricasoli 43.837423, 10.507030; Viale Carducci 43.850194, 10.466892)

Legal analysis

For the Railway Station / Carducci Parking cluster, no completed executive project currently exists; several design hypotheses have been raised, but have not materialised into a defined project. Despite the absence of a finalised plan, the sites are compatible with the intended land use and would legally permit cycling infrastructure and charging stations once a formal design and permitting track is established. The full legal procedure mirrors that for other sites: preparation or variant of the executive project in accordance with Legislative Decree 36/2023, convening the Services Conference, City Council approval, and procurement procedures. The lack of an existing executive project introduces additional legal lead time and requires resolving land-specific constraints, particularly where railway or third-party land interests may apply.

Technical analysis

Technical documentation is currently insufficient; there is no named RUP or finalised technical dossier to integrate SMILE CITY deliverables. The absence of detailed design means that charging station siting, required electrical infrastructure, pavement structural details for rubberized asphalt, and interfaces with pedestrian and transit flows remain to be defined.

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Technical feasibility, therefore, depends on the rapid development of a concept design by municipal technical staff supported by SMILE CITY partners, who must supply product specifications, structural drawings, and supply requirements. Where national rail infrastructure is involved (near Piazzale Ricasoli), coordination with third-party owners and compliance with their standards may be necessary.

Operational analysis

Operational feasibility is conditional on producing a rapid design package. Indicative timing provided is designed in approximately 30 days, then Services Conference (45–60 days) and procurement, with estimated implementation of around 60 days after contractor appointment. Because the current status is conceptual, effective operational delivery requires an accelerated municipal decision to commission technical design, identify a RUP, and confirm how SMILE CITY elements will be procured and installed. If the locations implicate railway or other external landowners, additional coordination steps and third-party approvals may extend lead times.

Financial analysis

No municipal co-financing is currently reserved, and there is no immediate budget for the wider intervention. Because the sites are not yet embedded in an extant project, the financial exposure for the Municipality could be higher if additional civil works are required to support charging stations or cycle lane modifications. The optimal financial strategy is to develop a clear cost estimate tied to the concept design, explore integrating pilot items into forthcoming maintenance or transport budgets where feasible, and prioritise procurement routes that limit municipal capital outlay by leveraging the SMILE CITY project resources and potential partner in-kind contributions.

Socio-political analysis

Socio-political reaction is uncertain and will depend on specific siting decisions, visible impacts on parking availability, and perceived disruption during construction. Installations near the railway station have high visibility and user exposure; positive reception is possible if benefits (connectivity to public transport, convenience for commuters and tourists) are clearly communicated. Negative responses could arise where interventions reduce parking or reallocate road space. Given the conceptual stage, community engagement should be designed to incorporate commuter, retailer, and resident perspectives and to use station-adjacent footfall as an opportunity to demonstrate the benefits of sustainable mobility.

Conclusion and recommended next actions

Location 2 is feasible but requires immediate investment in concept and technical design before authorisations or procurement can proceed. Commission a short technical assignment to produce a site-specific design package, identify and appoint a RUP, and engage relevant third-party landowners early, especially railway authorities. Produce an early cost estimate and a risk register addressing third-party approvals and potential parking impacts. Prepare stakeholder outreach focused on commuters and businesses to build acceptance and align design with user flows around the station.

Location 3 — New “Asse suburbano” cycle path (Via dell’acquacalda – Via Beata

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Elena Guerra; approx. 43.850388, 10.524832)

Legal analysis

A multi-phase project for the Asse suburban cycle path has been developed and approved; the first phase is under active construction, and the second phase is scheduled to commence shortly. One of the two parts of this corridor is a prime candidate for integrating SMILE CITY pilot elements, subject to timing coordination with the ongoing works. Legal procedures for integrating new materials or design variations will follow the standard route: either a project design variation authorised through the Services Conference and RUP processes or contractual agreements with the incumbent contractor if changes are minor and contractually permissible. Because the corridor already has an approved project, legal barriers are lower than for ad hoc sites, but procedural attention is required to select the section whose construction schedule aligns with the pilot delivery window.

Technical analysis

A specific, approved project is in realisation for the cycle path. The RUP for associated documentation is Engineer Francesca Guidotti, who can manage the integration of SMILE CITY materials. The SMILE CITY solutions (rubberized asphalt for cycle lanes, rubber curbs, and bollards) can be introduced either through a formal design variation or by contractual amendment with the existing contractor. The technical challenge is ensuring compatibility between the new material specifications and the current construction sequence, interface layers, sub-base requirements, and the contractor's methods. Introducing rubber-enhanced asphalt for a portion of the corridor is technically feasible and likely to require limited additional civil works if specified early; late changes during execution will be more complex and potentially costlier.

Operational analysis

Operational status is favourable: Lot 1 is under construction and Lot 2 will start soon, providing clear windows to embed SMILE CITY pilot interventions. Indicative timelines are 60 days for design/design variation, 45–60 days for Services Conference, and 30–60 days for implementation of asphalt laying if scheduled to coincide with the contractor's works. The principal operational decision is whether to pursue a contract amendment with the existing contractor or launch a specific procurement for the pilot components. Contract amendment is operationally faster when permitted by procurement rules and contract terms; it also limits site disruption by aligning pilot works with the main construction programme.

Financial analysis

No dedicated municipal funds are earmarked beyond project resources. Because the corridor is part of an existing approved project, the Municipality has greater options to negotiate pilot delivery through contractor variation rather than generating a separate capital request. This provides an opportunity to limit incremental municipal expenditure by embedding pilot elements in current works, subject to contractor agreement and verification of cost neutrality or acceptable cost sharing. The Municipality should obtain precise cost estimates for material substitution and maintenance projections to support any political decision on the use of additional funds.

Socio-political analysis

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Socio-political risk is moderate and is largely shaped by construction disruptions and perceptions of design efficacy. Because the Asse suburbano is a planned improvement to cycling infrastructure, stakeholders likely to support the intervention include cyclists and sustainable mobility advocates, while opposition may arise from residents concerned about construction impact or doubts about novel materials. Given the corridor's visibility and scale, successfully integrating circular economy materials here would have strong demonstrative value; conversely, implementation problems could amplify negative perceptions. Early engagement with local residents, cyclists, and contractors will be critical to managing expectations and showcasing pilot advantages in durability, drainage, and safety separation using rubber curbs and bollards.

Conclusion and recommended next actions

Location 3 presents a strong opportunity for demonstration value by embedding SMILE CITY elements into a live, large-scale cycle path project. Prioritise selection of the specific segment whose construction schedule best aligns with pilot timelines. Instruct the RUP to develop a design variation package specifying the rubberized asphalt mix, installation methodology, and maintenance regime; obtain firm costings and evaluate contractor willingness for contract amendment. Establish a coordination protocol to align the Services Conference and procurement or contractual amendment steps with the main works to minimise delays and additional costs. Implement a targeted stakeholder engagement plan focused on cyclists and adjacent communities to capitalise on the corridor's visibility.

Overall recommendation across locations:

- Proceed immediately with Location 1 as the principal pilot site for the first e-bike charging station because of its advanced project status and municipal ownership.
- In parallel, develop a fast-track design package for Location 2 to resolve third-party and technical unknowns, and pursue Location 3 opportunistically by negotiating integration into the Asse suburban contractor programme.
- Across all three locations, secure comprehensive technical specifications and certification evidence from SMILE CITY partners, confirm RUP responsibilities, synchronize Services Conference scheduling, prepare precise cost estimates, and implement a coordinated stakeholder communication strategy that addresses parking, maintenance, and heritage considerations where relevant.

Criteria for site selection:	Location 1	Location 2	Location 3
Legal			
Technical			
Operational			
Financial			
Socio-political			

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4. Co-Creation Methods and Tools and Planning of Co-creation Activities

Cities will develop tailored co-creation plans, aligning previously mapped stakeholders with appropriate engagement formats and scheduling activities across the pilot lifecycle, to ensure that pilots are co-designed with and for the community and all relevant stakeholders.

Co-creation methods and tools are adopted from the CLEVER Cities Co-creation Guidance, with adjustments and customization of steps and templates, to address SMILE CITY's specific needs, target groups, innovative solutions, and time plan.

Several usual engagement methods were proposed to cities, especially in the analytical and planning phase: pop-up stations, surveys, focus groups, workshops, exhibitions, panel discussions, etc.

More creative approaches were also discussed, such as Design Challenge Calls and Role Playing, Data Profiling, etc.

Specific additional tools were recommended to cities for the co-design phase of the process:

- Focus Verification
- ToC Review
- Co-design Jam: Community Walk, Immersion: Empathy Map and "How might we", Co-mapping local assets
- Co-design Scenarios Board.

Cities were instructed to think about critical stakeholders who should be involved in co-creation, to select appropriate engagement methods and tools, and think about co-creation dynamics. For this purpose, a dedicated table was prepared by CEUS, and experimentally populated by the cities.

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						Links with WP 3	Links with WP 4	Links with WP 5 (&6)
	STEP 1	**STEP 2**	**STEP 3**	STEP 4	STEP 5	**STEP 6**	**STEP 7**	**STEP 8**
CO-CREATION PATHWAY STEPS	**Identify SMILE CITY pilot area(s)**	**Map & (initially) engage stakeholders**	**LAUNCH the LL / Task Force** Kick-off meeting	Plan co-creation activities: design the LL platform	LAUNCH the **local living lab** Local kick-off meeting	**Co-design: the pilot project(s)**	**Co-Implementation: prototype construction**	**Co-monitoring: testing the prototype pilot**
	Nov '25 – Dec '25	**Dec '25 – Jan '26**	**Feb '26 – March '26**			**April '26 –Jun '26**	**Jan '26 – Jun '28**	**Jun '26 – Aug '28**
Stakeholder 1								
Stakeholder 2								
Stakeholder 3								
Stakeholder 4								
Stakeholder 5								

LEVEL OF ENGAGEMENT	**INFORM**		**CONSULT**		**INVOLVE**		**COLLABORATE**
Method of engagement	**Website / Newsle-tter**	**Pop-up stations**	**Questionn-aire / Survey**	**Focus Group**	**Workshop/ Panel Discussion / Exhibition**	**One-to-one meeting / Interview**	**Task Force Design Call / Competition / Role Play**

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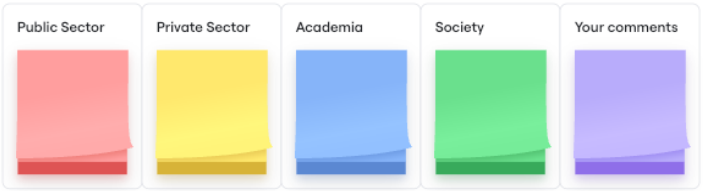
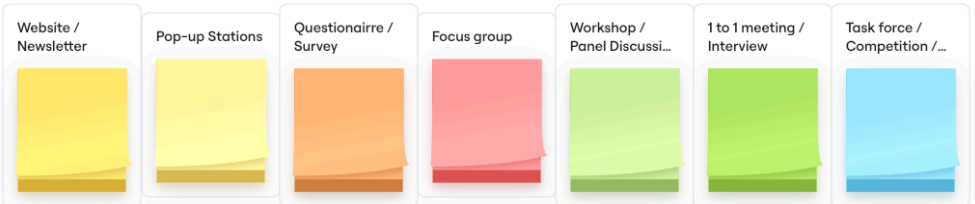
4.1 Planning of Co-creation Activities in the City of Lucca

						Links with WP 3	Links with WP 4	Links with WP 5 (&6)
	STEP 1	**STEP 2**	**STEP 3**	STEP 4	STEP 5	**STEP 6**	**STEP 7**	**STEP 8**
CO-CREATION PATHWAY STEPS	**Identify SMILE CITY pilot area(s)**	**Map & (initially) engage stakeholders**	**LAUNCH the LL / Task Force** Kick-off meeting	Plan co-creation activities: design the LL platform	LAUNCH the **local living lab** Local kick-off meeting	**Co-design: the pilot project(s)**	**Co-implemen-tation: prototype construction**	**Co-monitoring: testing the prototype pilot**
(proposal)	**Nov '25 – Dec '25**	**Dec '25 – Jan '26**	**Feb '26 – March '26**			**April '26 – June '26**	**Jan '26 – June '28**	**June '26 – Aug '28**
Sta 1 Public work department								
Stakeholder 2 Superintendence for Culturale Heritage						opportunity to previous share the project idea; binding advice on the architectural project		
Stakeholder 3 Tourists /Citizens								
Stakeholder 4 Asphalt procucers								
Stakeholder 5								

STAKEHOLDERS:



ENGAGEMENT METHODS:



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5. Implementation Preconditions for Prototyping

Cities will prepare to prototype four SMILE CITY systemic solutions:

A. E-bike charging stations (PV panels, second-life EV batteries)
B. Cycling lanes with rubberized asphalt
C. Curbs and lane dividers from molded recycled rubber
D. Bollards from molded recycled rubber

Testing and construction in pilot sites require fulfillment of legal, technical, and operational prerequisites.

Key planning areas will include:

- ➢ Location Conditions: Cities and regions will document urban plan extracts, construction parameters, and potential heritage constraints.
- ➢ Procurement Strategy: Cities and regions will outline procurement steps, blended funding options, and training requirements for local producers.
- ➢ Legal Framework: Relevant laws and permitting pathways will be analyzed.
- ➢ Technical Documentation: Requirements for engineering validation and permit issuance will be clarified.
- ➢ Material Production & Certification: Steps for local production, testing, and certification will be planned.
- ➢ Charging Station Assembly: Roles, design adjustments, and procurement needs will be defined.
- ➢ Construction & Use Permits: Cities will map procedures for initiating works and legalizing pilot infrastructure through the issuance of use permits.

5.1 Roadmap Tables with Timeline

Cities will populate a timeline linking preparatory activities to work packages and project phases. Each city will produce a detailed implementation roadmap, ensuring readiness for prototype construction and alignment with SMILE CITY objectives.

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The following tables outline the phased implementation plan prepared by city representatives. The information in the tables represents only the basic structure for now, which will be subject to change in future work and project development.

Roadmap Table of the City of Lucca:

				Links with WP 3	Links with WP 4	Links with WP 5 (&6)
MONTH	**Identify SMILE CITY pilot area(s)**	**Map & (initially) engage stakeholders**	**LAUNCH the LL / Task Force Kick-off meeting**	**Co-design: the pilot project(s)**	**Co-Implementa-tion: prototype construction**	**Co-Monitoring: testing the prototype pilot**
Nov 2025	Location conditions issue					
Dec 2025						
Jan 2026		Relevant Law provisions analysis				
Feb 2026				Technical documentation development		
March 2026						
April 2026				Technical review and Use Permit issuing		
May 2026				Technical review and Use Permit issuing Construction Permit issue		
June 2026					Public procurement planning	

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2/2 2026					Materials testing and certification Innovative materials production in local settings Construction works Pilot 1	
1/2 2027					Construction works	Technical review and Use Permit issuing
2/2 2027					Charging station montage	
1/2 2028						
2/2 2028						

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Roadmap Table of the Chania Municipality (Region of Crete):

				Links with WP 3	Links with WP 4	Links with WP 5 (&6)
MONTH	**Identify SMILE CITY pilot area(s)**	**Map & (initially) engage stakeholders**	**LAUNCH the LL / Task Force** **Kick-off meeting**	**Co-design: the pilot project(s)**	**Co-Implementa-tion: prototype construction**	**Co-** **Monitoring: testing the prototype pilot**
Nov 2025	**Location condition issue**					
Dec 2025	Law provision & prototyping	Technical documentation development				
Jan 2026	Law provision & prototyping	Technical documentation development				
Feb 2026	Law provision & prototyping	Technical documentation				
March 2026		Technical documentation		Material Production		
April 2026				Material Production		
May 2026				Material Production		
June 2026	Public Procurement	Public procurement		Material production		

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2/2 2026	Public Procurement	Public procurement		Material Testing & Certification		
1/2 2027	Public Procurement	Public procurement		Material Testing & certification	Charging station montage	
2/2 2027				Material Testing & certification	Charging station montage	
1/2 2028				Construction issue and work		
2/2 2028				Construction issue and work	Construction issue and work	

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Roadmap Table of City of Manresa:

				Links with WP 3	Links with WP 4	Links with WP 5 (&6)
MONTH	**Identify SMILE CITY pilot area(s)**	**Map & (initially) engage stakeholders**	**LAUNCH the LL / Task Force Kick-off meeting**	**Co-design: the pilot project(s)**	**Co-Implementa-tion: prototype construction**	**Co-Monitoring: testing the prototype pilot**
Nov 2025	Location conditions issue					
Dec 2025		Public Procur. Planning				
Jan 2026			Public Procur. Planning			
Feb 2026		Relevant Law provisions analysis				
March 2026			Technical documentation development	Technical documentation development		
April 2026		Technical documentation development		Local producers /contractors training	Local producers /contractors training	
May 2026			Local producers /contractors training	Materials production in local settings	Materials production in local settings	
June 2026					Materials testing and certifications	
2/2 2026					Materials testing and certifications	
1/2 2027					Construction permit issue	
2/2 2027					Charging station montage Construction works	Monitoring and technical review
1/2 2028						
2/2 2028						

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Roadmap Table of Castilla Y Leon Region (FPN):

				Links with WP 3	Links with WP 4	Links with WP 5 (&6)
MONTH	**Identify SMILE CITY pilot area(s)**	**Map & (initially) engage stakeholders**	**LAUNCH the LL / Task Force Kick-off meeting**	**Co-design: the pilot project(s)**	**Co-Implementa-tion: prototype construction**	**Co-Monitoring: testing the prototype pilot**
Nov 2025	Location conditions issue					
Dec 2025	Location conditions issue			Law provisions analysis, for prototyping		
Jan 2026				Technical documentation development		
Feb 2026				Technical documentation development		
March 2026				Public procurement planning		
April 2026				Public procurement planning		
May 2026				Public procurement planning		
June 2026				Construction Permit issue		
2/2 2026				Construction Permit issue	Local materials production Materials testing and certification	

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1/2 2027					Construction works Charging station montage	
2/2 2027					Construction works Charging station montage	
1/2 2028						Technical review and Use Permit issuing
2/2 2028						Technical review and Use Permit issuing

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6. Pilot Site Summary and Strategic Integration

At the conclusion of the ULL facilitation process in planning and co-design phase (M18), cities and regions will compile **Pilot Site Summaries**, including:

- Site name and coordinates;
- Selected systemic solutions (A–D);
- Construction timeline;
- Funding sources (SMILE CITY + local budget);
- Stakeholders involved;
- Materials and innovation elements;
- Risks and mitigation strategies.

ULL [City&Region]	**A: e-bike charging station**	**B: cycling tracks from rubberized asphalt**	**C/D: Curbs and/or Bollards from rubberized asphalt**
Pilot area / location (name of the street/park, geographic coordinates, etc.)			
Starting date of construction:			
Finishing date of construction:			
SMILE CITY funds			
Additional budget & funding source			
Stakeholders			

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involved			
Materials to be used			
Innovation **element** (if there is something specific for the Pilot, apart from what is provided by the technical partners)			
Constraints / risks			
Risk mitigation measures			

These summaries will serve as the foundation for developing Deliverable 2.5, which will be deployed in synergy with activities and tasks from WP3 (Co-Design). Both WP2 and WP3 will be a direct precondition leading to WP4 (Implementation) and informing WP5 (Monitoring and Evaluation).

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7. Recommendations for cities and regions

- ➢ Embed ULL planning within existing urban development frameworks.
- ➢ Prioritize locations with high visibility and citizen engagement potential.
- ➢ Establish cross-departmental working groups to streamline permitting and procurement.
- ➢ Use the multicriteria matrix and stakeholder mapping tools as living instruments.
- ➢ Ensure early coordination with technical partners and material certifiers.

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8. Conclusion

This roadmap provides a replicable framework for cities to establish Urban Living Labs and pilot circular economy innovations defined as SMILE CITY systemic solutions. It reflects a collaborative, context-sensitive approach that balances strategic planning with operational feasibility. It supports cities in navigating the complexity of site selection and implementation, ensuring that pilots are not only technically feasible but socially embedded and financially sustainable.

The SMILE CITY pilots will serve as demonstrators for systemic change, contributing to the broader goals of Horizon Europe and the European Green Deal.

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Annex 1: Summary and materials from consultative workshops

Workshop 1: Setting up the ULL: stakeholders' engagement

Date and time: September 26th, 2025 11:00-12:30 AM

Online platform: Microsoft Teams

Number of participants: 24

Cities or regions present (8): Lucca, Manresa, Bursa, Torino, Crete, Belgrade, Varna, Castilla y León.
The materials can be viewed in the following **folder**:

1. The **Workshop presentation**,
2. The **first results** of the Miro Exercise on Stakeholder Mapping,
3. The .doc file **Worksheet 1** – as the first template for local data generation and collection
4. The **Recording of the Workshop** – currently available for internal use, will not be publicly shared..

Workshop 2: Site(s) selection

Date and time: October 3rd, 2025; 10:00-11:30 AM

Online platform: Microsoft Teams

Number of participants: 18

Cities or regions present (4): Lucca, Manresa, Bursa, Belgrade.

The materials can be viewed in the following folder:

1. **The Workshop presentation**
2. **The first results of the Miro Exercise** on Multicriteria analysis for site selection.
3. **Worksheet 2** (.docx)
4. **Recording of the Workshop 2** – currently available for internal use, will not be publicly shared.

Workshop 3: Co-creation Pathway: Possible Methods, Tools and Dynamic Planning

Date and time: October 10th, 2025; 10:00-12:00 AM

This project has received funding from the European Union's Horizon Programme (HORIZON-CL6-2023-CIRCBIO-02) under grant agreement No 101135406,,

Online platform: Microsoft Teams

Number of participants: 21

Cities or regions present: Lucca, Manresa, Bursa, Belgrade

The materials can be viewed in the following folder:

1. Workshop 3 Presentation: Co-Creation Pathway Framework - CIE
2. Workshop 3 Presentation: Co-creation Methods, Tools and Dynamic Planning - CEUS;
3. Workshop 3 Presentation: Urban Living Labs of Task 2.3 and Task 3.6 - ETRA;
4. Workshop 3 Presentations by Partners on Co-Design of the charging stations:
   Presentation - Botta;
   Presentation - Solum;
5. The exercise on Co-creation Pathway: Possible Methods & Tools, and Dynamics Planning (docx).
6. Clever Cities folder with selected documents on the Co-Creation pathway and selected tools for Living Lab Launch and Co-Design.
7. Recording of Workshop 3 – currently available for internal use, will not be publicly shared.
   .

Workshop 4: Implementation Preconditions: Preparation for Prototyping

Date and time: October 17th, 2025; 10:00 AM-12:00 PM

Online platform: Microsoft Teams

Number of participants: 20

Cities or regions present: Lucca, Manresa, Bursa, Torino, Crete, Belgrade.

The materials can be viewed in the following **folder**:

1. **Workshop Presentation** – with the subject: Implementation Preconditions - Preparation for Prototyping.
2. The **Worksheet 4**
3. **Miro Board Exercise** – the board can be accessed for stakeholder engagement mapping and roadmap.
4. **Recording of the Workshop** – currently available for internal use, will not be publicly shared.

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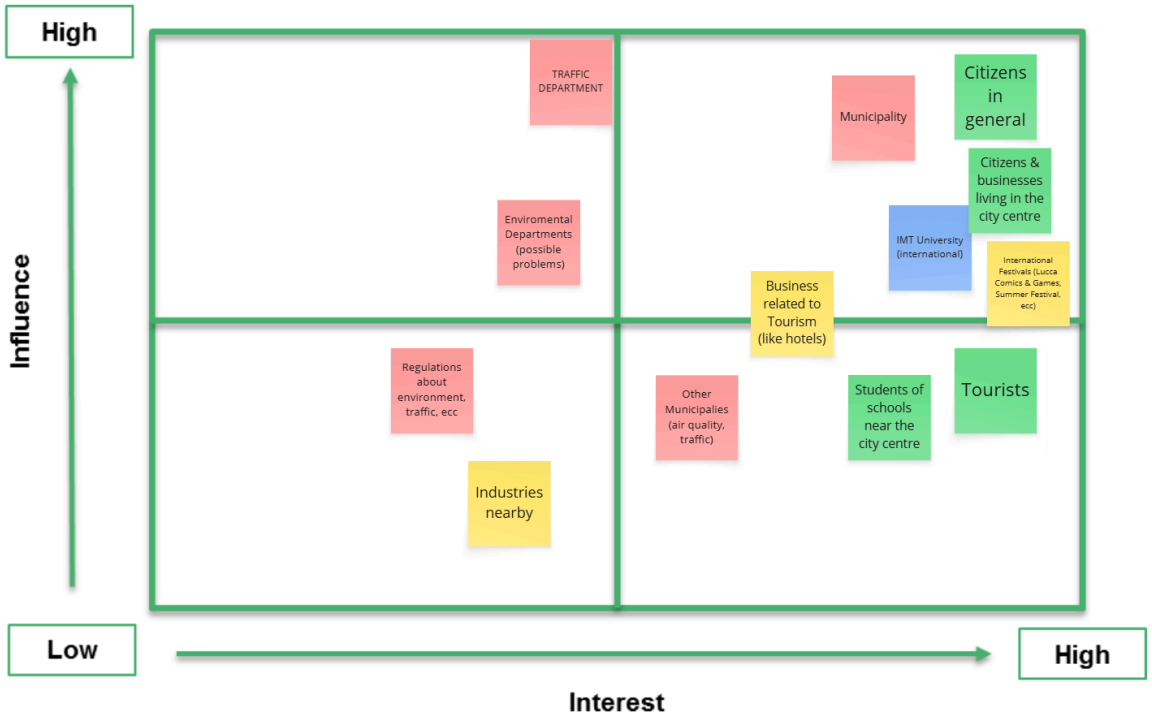
Annex 2: Exercise results from workshops

D2.3 W1 Stakeholders Mapping Exercise

LUCCA



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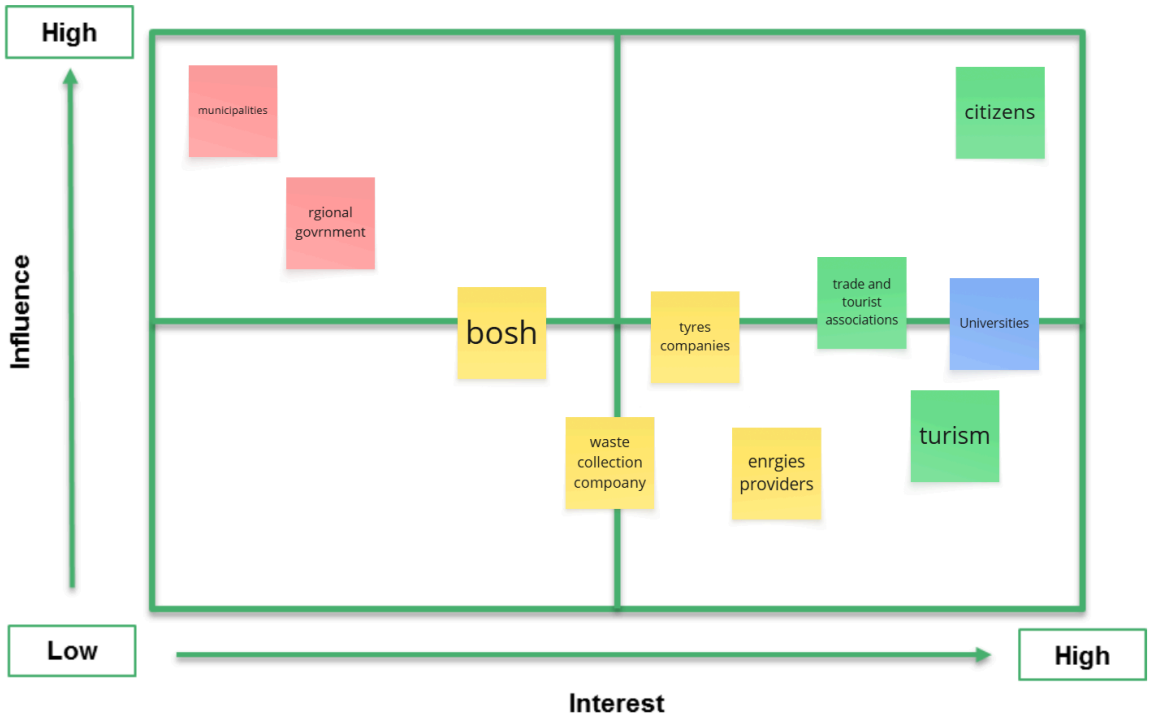
TORINO



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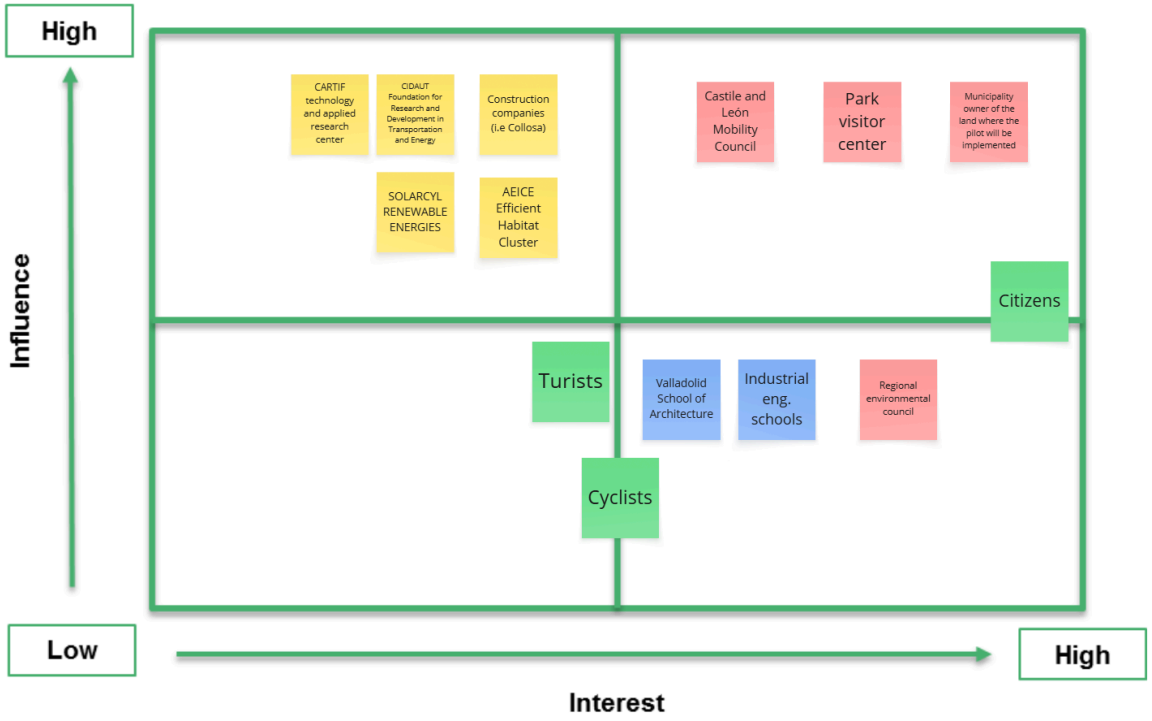
CASTILLA Y LEON



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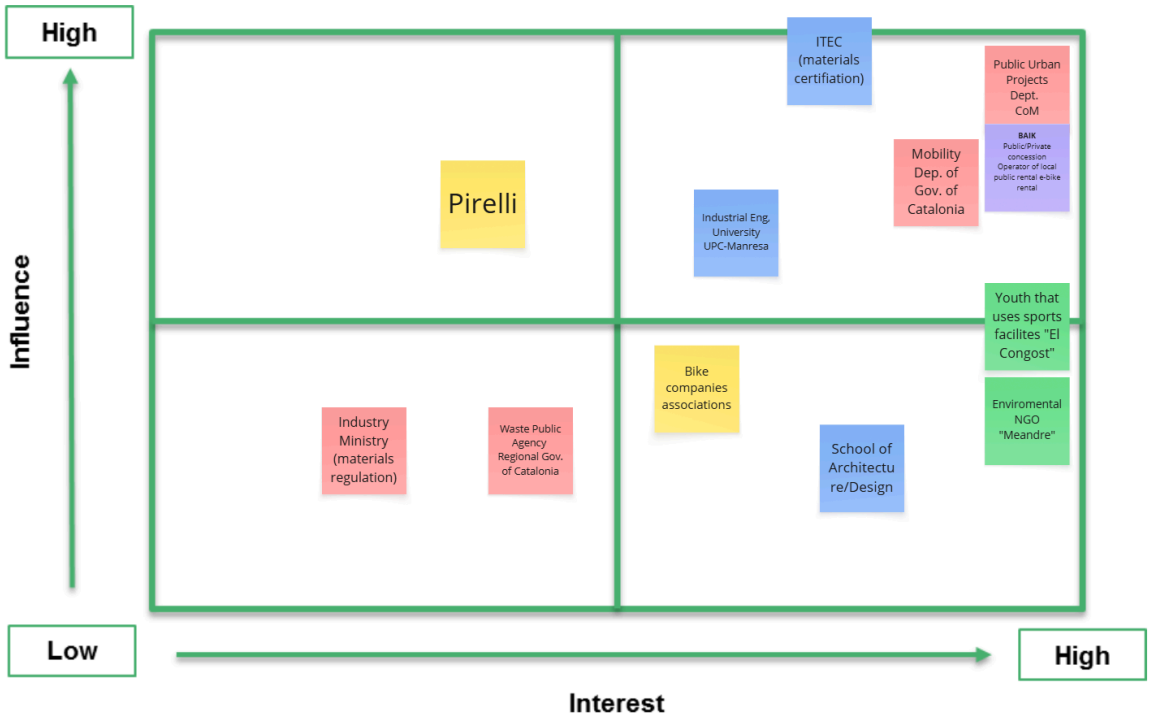
MANRESA



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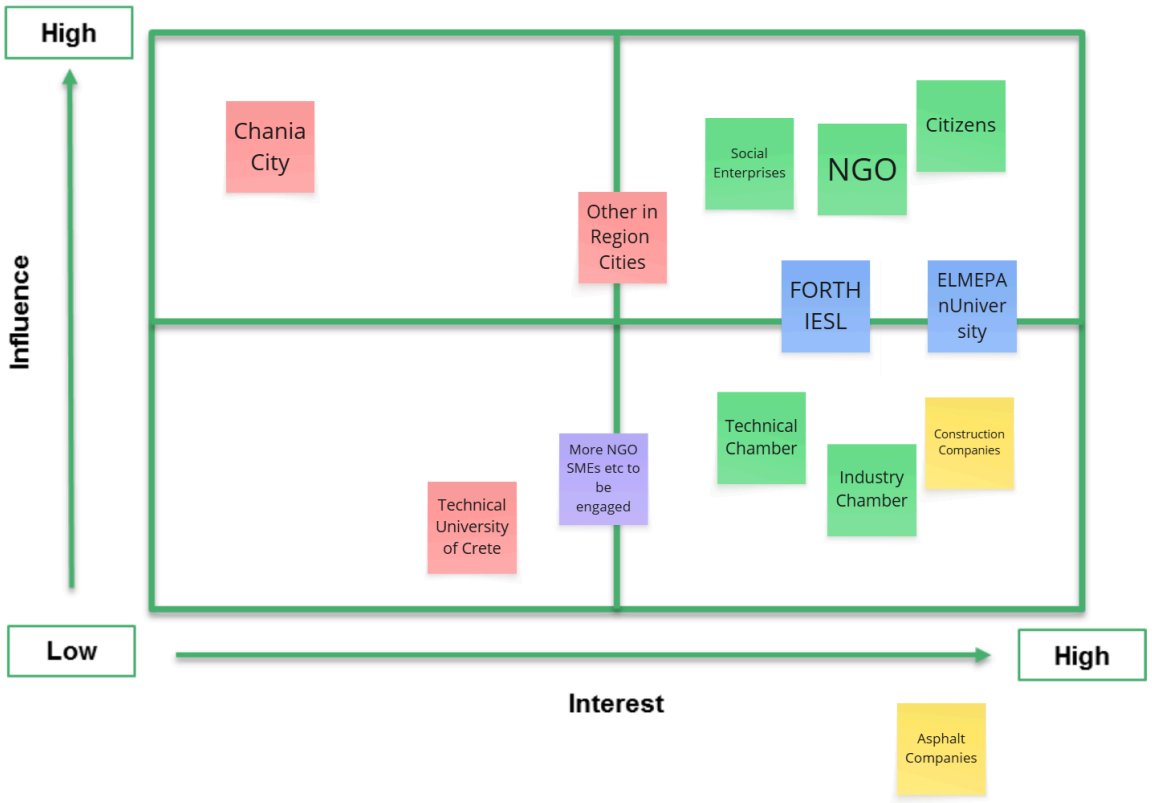
CRETE



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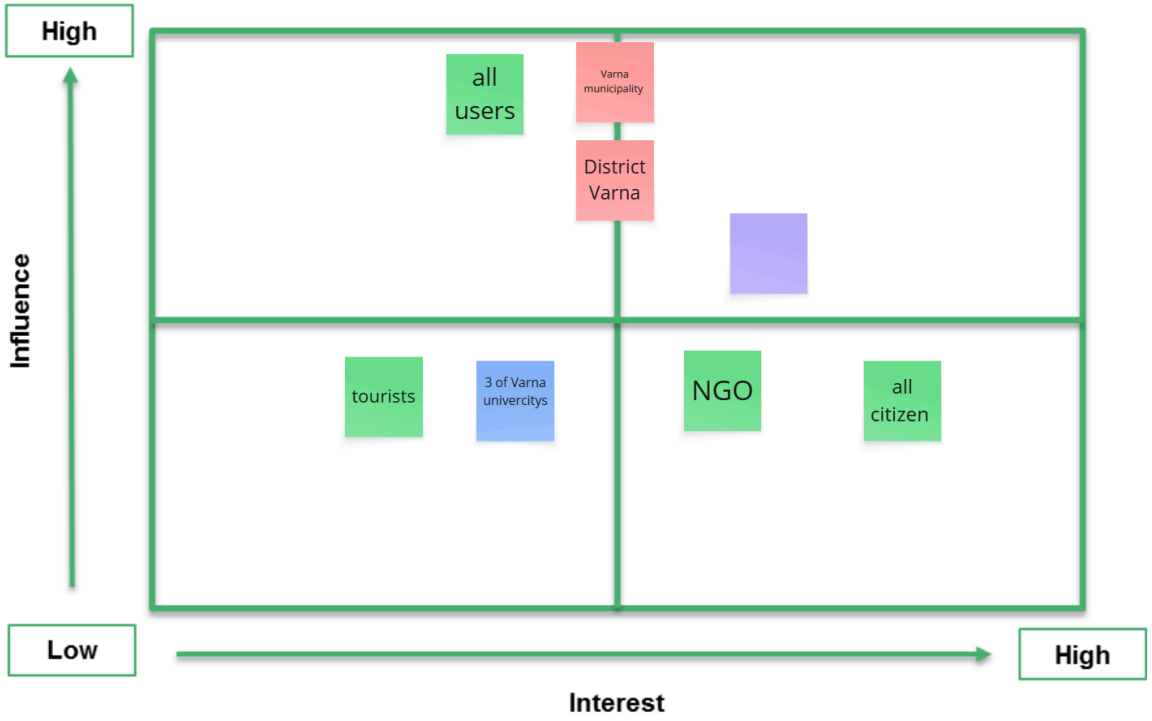
VARNA



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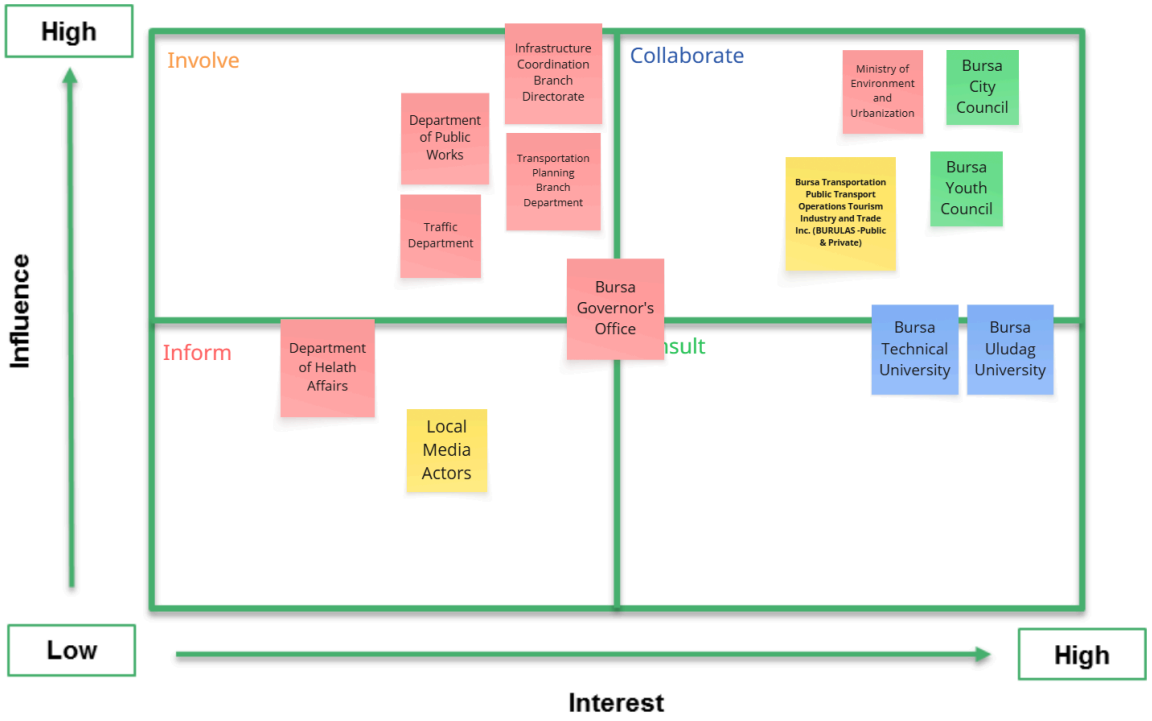
BURSA



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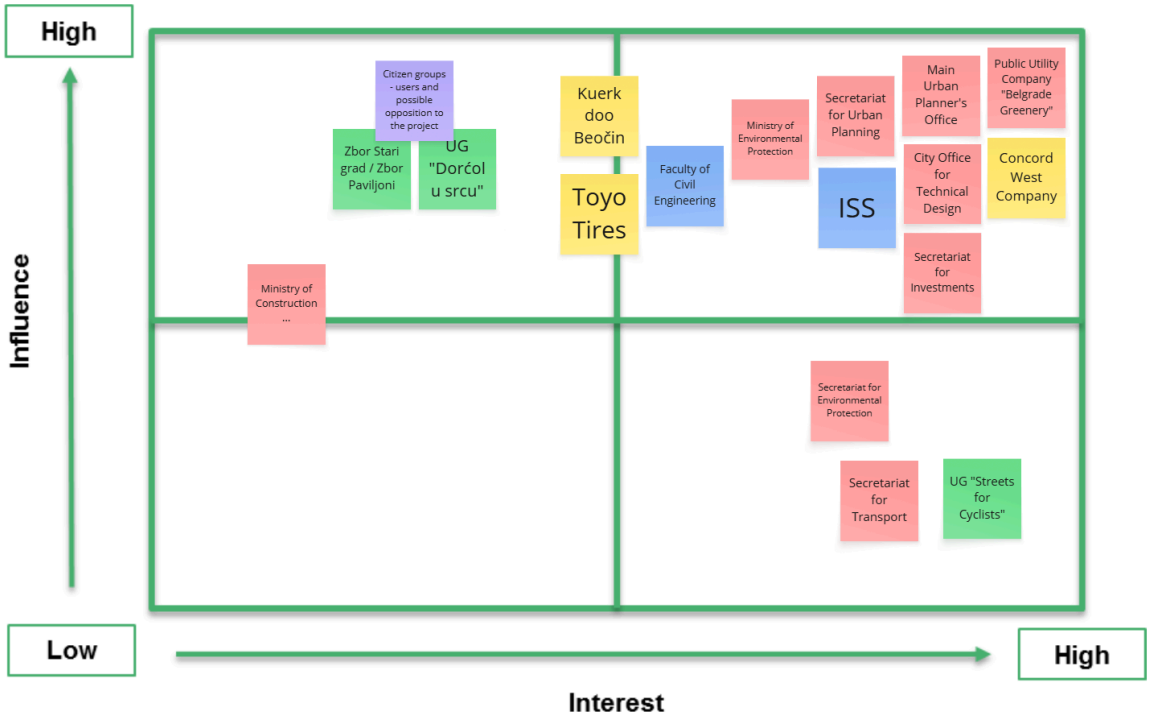
BELGRADE



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D2.3 W2 Multicriteria Analysis for Site Selection Exercise

LUCCA

Criteria for site selection:	Location 1 charging station 1 - Railway station	Location 2 charging station 2 - Tagliate parking area	Location 3 rubberized asphalt on cycling lane
Legal	possible interference of ownership with RFI (railway management company)	Municipal property of the area; no need of "high level" plan	Municipal property of the area; no need of "high level" plan
Technical	Need technical documents for structures and architectural design? Other project partners?	Need technical documents for structures and architectural design? Other project partners?	need for certifications regarding materials; how to local reuse/produce the asphalt
Operational	authorization required from the Superintendency of Cultural Heritage and the Department of Public Works; tender procedures to be done	authorization required from the Superintendency of Cultural Heritage and the Department of Public Works; tender procedures to be done	need to coordinate implementation times with ongoing projects
Financial	Uncertainty of costs for preparation, installation and construction work (e.g. electrical systems, adjustments to technical standards); need for estimates and verification against the project budget; Is it necessary to plan maintenance costs: do ICT systems require particular expertise?	Is it necessary to plan maintenance costs: do ICT systems require particular expertise?	
Socio-political	Citizen consensus is expected for the new infrastructures		guarantees regarding durability, maintenance, etc.

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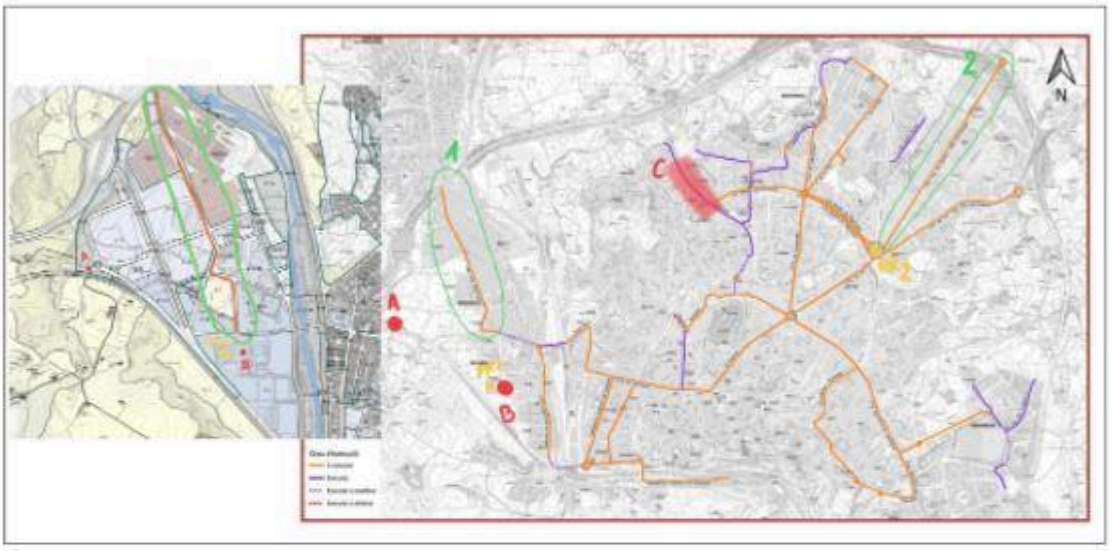
MANRESA



Criteria for site selection:	Location 1 SJV to Manresa	Location 2 Sallent Street	Location 3
Legal	Urban plan approved; City owns the land/area	Urban plan approved; City owns the land/area	
Technical	Projecte already predesigned, easy to complete; Get the innovative material certification	More challenging/time demanding project; Get the innovative material certification	
Operational	Tender & Procurement local supplier; Engage local supplier/builder	Procurement local supplier; Engage local supplier/builder	
Financial	Not enough funds to cover all the intended scope	Not enough funds to cover all the intended scope	
Socio-political	Big demand for bike lanes infrastructre +++; Location is next to old Piretl factory and refleces economy circular concept	Big demand for bike lanes infrastructre +	

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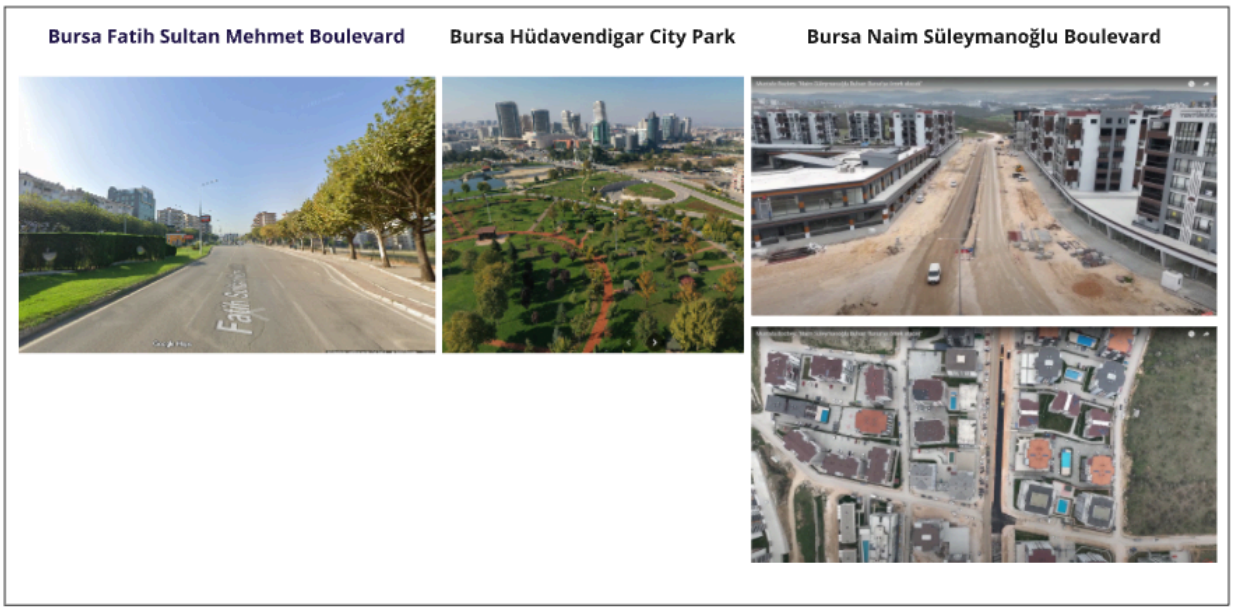
BURSA



Criteria for site selection:	Location 1	Location 2	Location 3
Legal	Main arteria, under the control of the Municipality	We might need to contact the responsible authorities to obtain permission for modifications to the bicycle road infrastructure	Main arteria, under the control of the Municipality
Technical	Municipal staff can provide technical support and carry out technical reporting.	Municipal staff can provide technical support and carry out technical reporting.	Municipal staff can provide technical support and carry out technical reporting.
Operational	The asphalt company may show resistance to the implementation of rubberized asphalt Since the current section is too short, we might need to split the area. Also, heavy traffic and the hilly, sloped terrain could cause difficulties during construction	The asphalt company may show resistance to the implementation of rubberized asphalt	The asphalt company may show resistance to the implementation of rubberized asphalt If the road plans of the construction have already been implemented, there might be some problems in implementing our pilot cycle road.
Financial	Municipality's budget...		
Socio-political	Citizens are willing to see more bicyle roads		

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smile city

BELGRADE

Criteria for site selection:	Location 1 Linear Park	Location 2 Ušće Park	Location 3
Legal	Plan of detailed regulation for the Linear Park, 2021	Plan of detailed regulation, 2019; Urban design project, 2025	
Technical	Constrction permits are obtained for Zone 4; Timeline - designs for almost all phases are completed		
Operational	Concord West Company is contracted, for design & build service; Since there are various zones, dynamics can maybe fit for construction in Zone 7		
Financial			
Socio-political		Strong civil opposition	

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Annex 3: Worksheets (City of Lucca)

Worksheet 1

Task 2.3 – Pilot Design and Planning

Pathway for ULL Establishment

1.1 Setting up the ULL and stakeholders' engagement

The first step in setting up an urban living lab for pilots' co-creation, prototyping, construction and testing is **stakeholder identification**. Stakeholders are all relevant parties who will be affected or have an interest in any aspect of your activities and initiatives.

Start by thinking broadly and freely from the individual or community level to the social/organizational/policy level. Include your colleagues and brainstorm to identify as many stakeholders as you can think of. Try to think of stakeholders with a possible negative impact on the task activities, as well as potential new and unexpected stakeholders. The broad list of stakeholders will provide you with information specific to your context.

Once you have a comprehensive list of stakeholders, the next step would be to **analyze stakeholder engagement,** in order to find your main collaborators and supporters, and distinguish them from groups that you will only consult and/or inform of your intentions and activities. For this step, you should try to put yourself in the stakeholders' shoes and foresee their interests, needs, and perspectives. Bear in mind that their roles might change during the project lifecycle.

In the following steps, you should **map stakeholders** and **prioritize stakeholder engagement**, considering their interest and influence in your ULL. The goal is to help you identify the most appropriate form of engagement for each set of stakeholders.

In the proposed mapping tool, you are free to change the parameters and criteria of the graph and to adjust them to your specific needs (e.g. axes influence/interest could become expertise/willingness). Finally, prioritization that comes as a result of mapping should help you **decide who will be engaged and in what way**. Creating a detailed system of prioritization (who will be engaged in which stage, in what way, and for which purposes) should help you identify what outcomes you want to achieve and how to measure them.

As highlighted by the UNDP (2017), stakeholder analysis should be *conducted in a gender-responsive, culturally sensitive, non-discriminatory and inclusive manner, identifying potentially affected vulnerable and marginalized groups and providing them opportunities to participate*.

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City representatives / Person(s) filling in this worksheet

Pamela Salvatore and Michela Nelli

Section 1: Setting the Local Scene

What is the role of your organization in piloting SMILE CITY systemic solution in your City/Region?

As the public administration of the local territory, the City of Lucca plays a central role in the successful development of the SMILE CITY project pilots. In particular, the Mobility Office (A.2) is in charge of implementing the project's actions, according to Plans / Program of the Municipality.

Is there a city-wide coordination body that could guide the process with all the departments (e.g. Local Green Deal Group)?

- Yes
- No
- X In development

If yes, please introduce the institution and explain its role:

If there is no coordination body, how do you plan to facilitate pilots' co-creation, prototyping, construction and testing?

This could be achieved e.g. by establishing a new Working Group / Task Force, with monthly / quarterly meetings, or by setting up a certified ULL, or in some other, creative manner.

The City of Lucca is working to appoint an internal working group to communicate with the various stakeholders and other departments involved, and above all, to oversee the installation of the SMILE CITY pilot areas from start to finish. This internal working group, consisting of a number of Municipality employees, will be coordinated by the A.2 department, which is directly involved in the SMILE CITY project.

Can external facilitators be engaged for co-creation (from consortium partners, or beyond the project, from the local innovation ecosystem)?

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Collaboration with external facilitators would be a very useful and advantageous opportunity for the project's development. We would especially appreciate the collaboration of consortium partners for their knowledge of the project and the challenges that may arise. However, we would like to highlight a potential communication issue stemming from the different language (in the Municipal Offices, there are not many people who understand and speak English).

On the other hand, according to our previous experiences in co-design and participatory processes, the role of a professional facilitator who can mediate the communication process between the various stakeholders, with the support of the Municipality, would be important. However, this would entail two adverse factors: a financial effort that the project doesn't foresee, and that LUCCA could not sustain, and much more time than then available to present the project to all stakeholders, gather input on various occasions and with different tools, and then deliver a result that must also take into account the results of the other project tasks.

Section 2: Mapping Challenges & Needs

Is there an adopted spatial or urban plan for the area(s) considered for the pilot(s)?

- Yes
- X No
- In development

List stakeholders who make decisions on these plans.

Who is the owner of the land for the area(s) considered for the pilot(s)?

For the pilots, we'd prefer areas owned by the Municipality of Lucca because it simplifies the procedure. However, if ideal conditions exist, a pilot could be installed on private property (specifically, for example, an area owned by National Railways). We are still evaluating our options.

Who can provide technical designs, and which institution approves?

List all included parties.

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Since it is very important to have as much information as possible to develop an efficient project, we expect to receive some essential documents from the various project partners, such as material specifications, technical data, and structural and architectural blueprints of the charging stations. Once the necessary information is received, a specialized technician from the Municipality of Lucca (member of the internal working group) will be in charge of putting everything together and developing it into a specific public work project for each pilot.

Who can execute the works: public utility company, private company via framework contract, or a new procurement is needed?

Since we still have to make definitive decisions on the location of both the two charging stations and the section of bike path, we will evaluate on a case-by-case basis whether to use a private company with which we already have an existing contract or to start a new contract with another economic operator. In this case, a public procurement procedure should be done. If it is possible to integrate the pilot installation project into existing agreements, the process will be much quicker and perhaps less expensive, while if we need to turn to a new company, the process will obviously be more complicated, time-consuming, and more expensive.

Another variable to consider when choosing who will carry out the work depends on what the other partners will be able to provide ready-made, and what work will remain for the Cities to manage independently. Therefore, consultation with them will be crucial.

Who can register End-of-Waste status for waste rubber or other new materials planned for testing?

Honestly, we feel we don't know the answer to this question and perhaps its normative meaning. We suppose that the companies that produce the finished products that cities/areas will use are those that threats the recycled materials. So we can guess that the task of registering End-of-Waste status for waste rubber or other new materials planned for testing will fall to the producers. But it's not clear at all to us what it is required and what has to been managed.

If, however, the question concerns the disposal of materials used for the pilots once they have completed their life cycle, as with all special waste, it is necessary to proceed through the official channels established by current legislation.

Who can analyze, and who can certify new construction materials tested?

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It is possible to have the new construction materials tested, analyzed, and certified by local producers and manufacturers involved in the pilot installations. For example, regarding asphalt made with a recycled rubber mix, it is possible to involve local companies in laying the bike path with these materials and subsequently ask them to analyze and test the material used. But to do this, local producers and manufacturers need the technical specifications and product data sheets of these new construction materials.

Furthermore, we don't know what types of tests should be conducted by the local manufacturer we'll contract, and which should be products already performed and certified by the project partners. It's possible that the local manufacturer might require certain types of guarantees and tests at the source to determine what they should guarantee and what they should already be supplied with. This is likely also due to our lack of knowledge, as we're new to these materials.

Who does provide use permit, if needed?

If the new construction materials provided by all the partners of the Smile City project already have the necessary European certifications required for their use, no further permits are required. The challenge remains: ensuring that these new building materials actually have the necessary European/National certifications and that they are made available to local producers and manufacturers for their use in the local territory.

Regarding permits for works, these will be issued by various bodies, but they can be managed by the Municipality by requesting them through the Italian procedure called "service conference", which is mandatory for all public works.

Is there co-financing for SMILE CITY systemic solution ensured in the public budget?

- Yes X No

If not, are there stakeholders who will ensure co-financing?

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At the moment, Lucca has not planned to contribute to the project's costs beyond the budget; to do so, it would need political approval to allocate more resources, and this is not currently planned. The idea is to manage everything within the project's available resources.

Since the City of Lucca is a public administration, the possibility to be co-financed by other external entities, whether private or public, is possible, but it involves numerous technical and bureaucratic difficulties. Furthermore, we have not identified any stakeholders interested in participating financially in the project's implementation.

Section 3: Mapping the Main Stakeholders - Recap

Who are the main stakeholders who need to be involved in pilot planning, design and implementation? Map stakeholders and prioritize stakeholder engagement, considering their interest and influence in your ULL.

Think of all stakeholders who have roles in pilot development, and of those who are directly impacted by the pilot (both positively and negatively, both directly and indirectly). Briefly explain each stakeholder's role, if not explained in the previous answers.

Regarding stakeholders, two distinctions must be made: those within the public administration and those outside it.

Regarding stakeholders within the Municipality of Lucca, there are certainly the Public Works Department and the Traffic Department; both of these offices must be directly involved in the pilot project design to assess the impact on traffic to prevent potential problems, and supervise the installation to certify the proper execution of the work. Also, the Maintenance Office is important because it will have to evaluate the characteristics of the materials and their durability, as well as the maintenance needs over time.

Another very important stakeholder that could truly negatively impact the project's implementation is the Superintendence of Cultural Heritage. Since Lucca is an old city with many historical monuments and places of artistic and cultural interest, it is necessary to ensure that the location of the pilot projects does not pose a problem for the Superintendence; in this case, it could prohibit the City of Lucca from proceeding with the installation and force us to change the project, especially from an architectural point of view. Usually, in our territory, this is an Entity that is also reluctant to be involved through "unofficial" channels, but we will certainly have to try to establish a preventive dialogue

Finally, among the external stakeholders, the most representative are the citizens and tourists of the City of Lucca themselves, who are the main end users of the project. Local cycling associations and/or businesses could be involved after proper evaluation.

Which stakeholders yield the most influence to affect project outcomes?

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As mentioned, the stakeholders with the greatest influence on the project's implementation are the Public Works Department and the Traffic Department and, above all, the Superintendence of Cultural Heritage.

Which stakeholders are the most vulnerable and subject to potential adverse impacts?

None in particular

List all additional stakeholders you can think of – unusual suspects are often critical.

If we decide to install the charging stations in a public parking lot, eliminating parking spaces, vehicle owners could become negative stakeholders.

Decide which stakeholders should be engaged in the process, in which stage, in what way and for which purposes.

Creating a detailed system of prioritization should help you identify what outcomes you want to achieve and how to measure them.

LEVEL OF ENGAGEMENT	**INFORM**		**CONSULT**		**INVOLVE**		**COLLABORATE**
Method of engagement	**Website**	**Newsletter**	**Questionnaire**	**Focus Groups**	**Workshops**	**One-to-one meetings**	**Task Force**
Public Works Department				X		X	X
Traffic Department						X	X

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LEVEL OF ENGAGEMENT	INFORM		CONSULT		INVOLVE		COLLABORATE
Method of engagement	**Website**	**Newsletter**	**Questionnaire**	**Focus Groups**	**Workshops**	**One-to-one meetings**	**Task Force**
Superintendence						X	X
Cyclist Organizations	X		X	X			
Citizens/Tourists	X		X		X		

Section 4: Visioning

What do you want to achieve with this pilot in the local context?

Please consider this question also in the context of stakeholders who will be affected in the local context.

The city of Lucca has been working for years to increase sustainable mobility within its territory. This is due to a significant traffic and air quality problem that negatively impacts the lives of residents and tourists visiting the city. The Smile City project could bring our construction techniques closer to the best available in terms of environmental sustainability and of the circular economy; not only, it will allow for the installation of two bicycle charging stations and the implementation of one of the existing cycle paths. The aim is also to encourage the use of sustainable means of transport, which reduce environmental impact and facilitate travel without the use of motor vehicles, by placing the charging stations in strategic locations (near the historic center, car parks, and train and bus stations).

What is the scale-up potential of the pilot, in the national or EU context?

Please consider this question also in the context of national or EU organizations that could or should be involved and/or concerned.

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As mentioned, the City of Lucca has been implementing sustainable mobility for years, often using funding sources available at regional, national, and European levels.

In this context, our institutional relationships, developed both with other municipalities (Lucca has several twinned cities, both European and otherwise), and with relevant national bodies, will be able to provide a basis for scaling up project concepts and offer useful communication channels for incorporating procedures and techniques into national guidelines. For example, relationships with ANCI (the National Association of Italian Municipalities) and with bodies involved in promoting sustainable mobility, such as the National Observatory on Sustainable Mobility, as well as with the Tuscany Region, are important.

Possible tools for visioning:

Framing SMILE CITY Board

SWOT

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Worksheet 2

Task 2.3 – Pilot Design and Planning

Pathway for ULL Establishment

1.2 Multicriteria analysis for site(s) selection

The site selection for your ULL pilot area is more than just a simple matter of picking a place. Bear in mind that it is a strategic intervention that should have socio-economic implications and must be feasible for implementation.

By definition, ULL is an open innovation ecosystem set out in a **real-life environment**, used for testing and developing new solutions, placing citizens and end-users at the center of the process through a co-creation approach. From this description, the question arises: how to choose the adequate real-life environment for the SMILE City pilot area? Or where can we prototype and test SMILE City systemic solutions?

Let's start with the areas that **formally and legally** can support the design of the infrastructure desirable for the SMILE CITY pilot testing. Think of all the **local policies** on sustainable urban mobility, as well as regulatory obligations. Have in mind the legal framework and possible barriers discussed previously (see: Worksheet 1). Brainstorm all these subjects with your colleagues from the city administration.

Another requirement is to find the **technically** most suitable environment that allows implementation of the elements intended for the pilot: e-bike charging stations, recycled rubber molded products for urban furniture (bollards, lane dividers), and rubberized asphalt for cycling lanes.

From an **operational** point of view, you need to check if the timeline for urban planning (if needed), technical design development, and project construction allows implementation of your pilot.

Considering the project's **financial** resources, take into account that additional budgeting will be needed. Think of all the possibilities for financial support, plan your financial costs in detail, and ensure implementation of the public procurement.

Finally, bear in mind that there will be **socio-political** reactions towards the pilot project, both positive and negative. As much as you co-create with all the stakeholders and include them in all the phases of the project (planning, prototyping, construction, and testing), be aware that there are constant changes in the socio-political climate, and you need to be responsive and adaptable throughout the process.

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Pamela Salvatore, Michela Nelli, Andrea Bulleri

Is there a strategic plan on sustainable urban mobility, development of cycling network, or e-bike charging stations development, that is of relevance for positioning pilot locations?

The City of Lucca has adopted a SUMP (Sustainable Urban Mobility Plan), approved in 2018 and still in force. This medium- to long-term plan develops a cycling network within the "Bicipolitana" project (a highway line for bicycles), which has been developed in a specific plan approved in 2021. It includes the redevelopment, reorganization, and creation of new cycle paths, so this project is relevant for positioning pilot locations.

Think of the locations optimal for new e-bike charging stations, but also of the locations which would benefit from rubberized asphalt, rubber curbs, or rubber bollards, to:

- **make the design more modern, dynamic, and effective (e.g., with surface change, colour, etc.);**
- **improve the durability of the surface where cycling tracks are exposed to higher stress or difficult conditions, e.g., where cycling tracks cross roads, or where they are exposed to higher wear, to increase drainage of rain, etc.**
- **improve separation of cycling track from road, using rubber curbs;**
- **increase visibility and safety, using rubber bollards.**

LOCATIONS DESCRIPTION

If you have already focused on a specific area(s), please describe location options for your pilot area. You can provide: geographic coordinates, address, neighborhood or park name, photos, maps, etc.

Location 1

Name: Cemetery Parking
Location: Lucca, Piazzale Maestri del Lavoro
Coordinates: 43.848877, 10.495837
(e-bike charging station 1)

Location 2

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Name: Railway Station Location: Lucca, Piazzale Ricasoli Coordinates: 43.837423, 10.507030	Name: Carducci Parking Location: Lucca, Viale Carducci Coordinates: 43.850194, 10.466892
(e-bike charging station 2)	

Location 3

Name: New "Asse suburbano" – cycle path (part A or part B)

Location: Lucca, Via dell'acquacalda – Via Beata Elena Guerra

Coordinate: (approx) 43.850388, 10.524832

While for Location 1 there is an almost certainty of positioning, for Locations 2 and 3 there are hypotheses that need to be better confirmed based on the project's design

FIRST PART: Multicriteria analysis

Fill in the short analysis for every considered pilot location

Section 1: Legal criteria

Is there an adopted spatial or urban plan, or urban design project, for the targeted area?
What is the name of the plan? Can you share the extract from the plan? (This question was already discussed in Worksheet 1, but from the perspective of the relevant stakeholders; now we need more specific, technical information.)

Location 1

Yes, an urban design project is underway. The executive project called "Redevelopment of the Via delle Tagliate parking lot" is almost completed.

Location 2

Not exactly, several design hypotheses have been made that have not materialized into a real project design.

Location 3

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Yes, a project has been developed in two phases; the first is currently underway; the second will begin by the end of October. Both the first and second phases of works involve the construction of a dedicated cycle path alongside the road; one section (which one is to be decided) is the first candidate for the pilot site, depending on the timing of the pilot project and of the construction site.

If not, is it in development or under the amendment phase?

Location 1

Location 2

Not yet

Location 3

No

Does the plan/design align with the planned land use, and does it allow construction or renovation of a cycling track, along with the accompanying urban furniture?

Location 1

Yes

Location 2

Yes

Location 3

Yes

Section 2: Technical criteria

Is there technical documentation for the project? Is it finalized (if so, share the extract, as an image or an attachment)? Who is responsible for issuing technical documentation and a permit? (This

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question was already discussed in Worksheet 1, but from the perspective of the relevant stakeholders; now we need more specific, technical information.)

Location 1

Yes, and it's also very detailed, as it's a Technical-Economic Feasibility Project called "Redevelopment of Via delle Tagliate Parking Lot". Documentation related to SMILE CITY's specific needs can therefore be provided at a later date.

In order to be implemented, the project needs to be approved at the executive level by the Municipal Council, after having obtained the favorable opinions of all the offices and bodies involved.
The person in charge of technical documentation is the RUP (project manager): Engineer Francesca Guidotti.

Location 2

Not exactly, several design hypotheses have been made that have not materialised into a real plan: it is therefore not possible to identify a project manager or share defined technical documentation.

Location 3

Yes, there is a specific project under realization, yet approved. The use of the materials and solutions provided in SMILE CITY must be integrated during work execution, either through a specific project design variation procedure or through agreements with the contractor (depending on the type of changes that the project will require). The person in charge of technical documentation is the RUP (project manager): Engineer Francesca Guidotti.

What is the exact legal procedure to obtain all the permits? What is the applicable law?

Relevant for all locations

1. Preparation of an **executive project** (or variant, if one already exists) in accordance with the relevant national legislation (Legislative Decree 36/2023): general descriptive report, architectural and/or structural design layouts, blueprints, estimated bill of quantities, project economic framework
2. Services Conference (procedure to obtain all permits) L. 241/90: Management of Constraints and amendment of the project to the requirements, if any
3. Approval by the City Council
4. Public procurement procedure
5. Contract and execution

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Outline the timeline for all needed procedures/permits for optional locations.

Location 1

1. Design: 30/60 days;
2. Services Conference: 45/60 days (minimum);
3. Public procurement procedure;
4. Implementation: To be defined; it depends on the main project time plan

Location 2

1. Design: 30 days;
2. Services Conference: 45/60 days (minimum);
3. Public procurement procedure;
4. Implementation: 60 days (estimated).

Location 3

1. Design/design adjustment variant: 60 days;
2. Services Conference: 45/60 days (minimum); (to be evaluated if needed)
3. Public procurement procedure or amendment of the yet existing contract
4. Implementation: 30/60 days. (only referred to asphalt laying)

These procedures and their related times are indicative; they need to be better evaluated on the basis of the most correct procedure, based on the regulatory qualification of the intervention.

Section 3: Operational criteria

At what stage is the implementation of the intervention / wider investment?

Location 1

Executive project draft for the regeneration of the main area is currently in progress

Location 2

Still to be defined / scheduled

Location 3

Lot 1 of the main road is under construction; Lot 2 works will start in a few weeks

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Is there enough time to conduct a public procurement, do the technical documentation, and carry out the investment? What is the timeline of the proposed investment?

Location 1

Yes, it is possible to do it, although it must be correlated with the ongoing intervention.

Location 2

It depends on the availability of internal projects at SMILE CITY, but we retain it is feasible.

Location 3

Yes, it is possible to do it, although it must be correlated with the ongoing intervention.

Which stakeholder will carry out the construction works, and according to which procedure / operational arrangement? (This question was already discussed in Worksheet 1, but from the perspective of the relevant stakeholders; now we need more specific, technical information.)

Location 1

The Contractor, under Legislative Decree 36/2023. The procedure to be followed and the operational arrangement are specified in the General Contract Specifications.

Location 2

See Location 1

Location 3

See Location 1

Section 4: Financial criteria

Part of the funding for the pilot area is budgeted from the project. Are there budgeted funds for the remaining intervention, into which the pilot test will fit?

Location 1

Not at the moment; The use of additional funds should remain a last chance, and its sustainability and timing should be "politically" assessed. A more precise estimate of the costs

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for the cities is required first.

Location 2

Not at the moment; The use of additional funds should remain a last chance, and its sustainability and timing should be "politically" assessed. A more precise estimate of the costs for the cities is required first.

Location 3

Not at the moment; The use of additional funds should remain a last chance, and its sustainability and timing should be "politically" assessed. A more precise estimate of the costs for the cities is required first.

Look at the local budget - which institution is in charge of implementing this intervention, and how can SMILE CITY influence the business-as-usual steps? (This question was already discussed in Worksheet 1, but from the perspective of the relevant stakeholders; now we need more specific, technical information.)

Location 1

The budget is entirely managed by the Municipality of Lucca, which allocates it to its own offices, based on objectives established by the political side. If the solutions offered by SMILE CITY will confirm expectations, in terms of improved material performances, improved environmental impact and cost efficiency, and users' positive feedback, this could lead the Municipality to allocate greater funds to virtuous choices such as those tested here.

Location 2

See Location 1	

Location 3

See Location 1	

Who maintains the site location, and can the SMILE CITY intervention be financed as an investment maintenance? (Relevant for stakeholders analysis, but also for technical procedures.)

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Location 1

The Municipality of Lucca is responsible for maintenance, managing, and scheduling the various interventions through the Maintenance Plan. Investment maintenance is not eligible for funding and normally is a cost that remains in charge of the Municipality, unfortunately.

In particular, for charging stations, the maintenance aspect is extremely important, because by using materials and techniques that are not commonly used, they must have technical characteristics and maintenance facilities that are easily available on the market and at affordable costs.

Location 2

See Location 1

Location 3

See Location 1

Section 5: Socio-political criteria

Is there any reason why the wider citizenry would oppose this project in the proposed location?

Location 1

Possible and specific reasons cannot be identified at this time.
Any objections can generally be traced back to the classic objections associated with public works, relating to:
- architectural/spatial impact;
- functionality or environmental issues;
- size and cost-effectiveness of the financed project, etc..

-good maintenance status after realization

Location 2

See Location 1

Location 3

See Location 1

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SECOND PART: Location evaluation

Grade implementation preconditions for every considered pilot location

Criteria for site selection:	Location 1	Location 2	Location 3
Legal			
Technical			
Operational			
Financial			
Socio-political			

Let's grade the implementation preconditions:	Pathway for implementation is clear and achievable within the SMILE CITY timeline	Barriers exist, but there is a strategy for overcoming them	High-risk for implementation (killer-risk)

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Worksheet 4

Task 2.3 – Pilot Design and Planning Pathway for ULL Establishment **and Operation**

1.4 Implementation preconditions: preparation for prototyping

In each city/region of the SMILE City project, the final goal within Task 2.3, after setting up an urban living lab, is to conduct **co-creation for pilots' construction and testing of the prototype**. SMILE City prototyping includes 4 **units / systemic solutions**:

A: e-charging stations for e/bikes, with concrete pre-cast elements, PV panels for roofing or flooring, and second-life EV batteries for electric power storage;

B: Cycling lanes / tracks re-paving with different mixes of recycled rubber and polymers;

C. Curbs and lane dividers in molded recycled rubber;

D. Bollards in molded recycled rubber.

That means that every Pilot will encompass one or several units / solutions, depending on the location's needs and ULL co-creation results.

In order to achieve timely and good results, we need to plan carefully. To help you plan, we have prepared a framework with key questions that should provide the necessary data for a reliable **Roadmap or Pathway**.

The Roadmap should encompass all the steps that are prerequisites to prototyping. Have in mind that this process is different for every city, since it depends on the specific local laws, permits needed for new materials, as well as construction procedures. Also, it depends on the requests that will come out of the co-creation process for each specific Pilot site.

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City representatives / Person(s) filling in this worksheet

FIRST PART: Framework Guidelines

Fill in the short analysis of the necessary preparatory works for prototyping

Section 1: Pilot Site(s)

Location conditions

Expand on the current state of the chosen location for the pilot project. Describe the location characteristics and provide the phase of urban development. Ensure the issuing of the relevant document from the line authority in charge of construction, as an extract of the urban plan, defining urban parameters, rules for construction, e.g. regulation line, installation capacities, heritage protection principles, etc.

Public procurement planning

Plan the procurement process and include all the steps necessary for procurement of the technical documentation AND/OR construction works. Can you ask the company to test several hundred meters of innovative rubberized asphalt within a bigger project? Can that be a tender requirement? So that upon contracting, training for local producers can be organized? When do you make your Public Procurement Plans? Can you blend resources from the grant and from the local budget, or other sources of funding? Consider all the steps involved in planning procurement properly...

Relevant Law provisions analysis, for prototyping

List all the relevant laws and regulations that need to be included in the procedure before prototyping, and provide relevant articles, e.g., Law on Planning and Construction (on issuing construction permits or decision of works without a permit), Law on Roads, Law on Traffic Safety, etc.

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Technical documentation development

Describe the technical documentation that is needed for the location permit. Provide, as an attachment, technical documentation if it has already been developed. Does it require a stamp from a licensed technical engineer? Can you ensure this process goes smoothly?

Section 2: SMILE CITY systemic solutions for prototyping

Innovative materials production in local settings, upon training of local producers / contractors

What are the necessary steps to manufacture the required materials for prototyping locally? Do you have a potential producer in mind, and what are the mechanisms for engaging them in the project?

Materials testing and certification

Can you use rubberized asphalt already present on the market? If yes, what is the innovation of the SMILE CITY project? If not, what documentation is required for materials application (permits, approvals, certificates)? Is there a Regulation on Construction Materials, or attesting / standardization process?

Charging station assembly

Do you understand your role in installing the charging station? Do you have contact with technical partners, and do you need to adjust the design to specific conditions of your location (e.g., requirements from cultural heritage protection)? Who will be appointed for the montage of the charging station in your city? Does your city need public procurement for this process? Which steps and official confirmations are expected in the montage process?

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Section 3: Prototype Construction

Construction Permit issue

What kind of official document is needed to initiate works in the publicly available space? What are the steps in the process for issuing a construction permit, if it is needed?

Construction works

What is the procedure and timeline of planned construction works? What are the roles of each stakeholder involved?

Technical review and Use Permit issuing, if relevant

Is there an official document that is needed for the cycling track/lane, charging station, etc., to be legally operational and used? What are the steps in the process of issuing that document, if it is needed?

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SECOND PART: Roadmap and Short ULL Report

Provide the Roadmap of the planned activities

Please, copy the listed activities, necessary as preparatory works for prototyping, in the appropriate cells, according to your planned dynamics:

- Location conditions issue
- **Public procurement planning**
- Relevant Law provisions analysis, for prototyping
- Technical documentation development
- **Innovative materials production in local settings, upon training of local producers / contractors**
- **Materials testing and certification**
- Charging station montage
- Construction Permit issue
- Construction works
- Technical review and Use Permit issuing, if relevant.

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				Links with WP 3	Links with WP 4	Links with WP 5 (&6)
MONTH	**Identify SMILE CITY pilot area(s)**	**Map & (initially) engage stakeholders**	**LAUNCH the LL / Task Force Kick-off meeting**	**Co-design: the pilot project(s)**	**Co-Implementa-tion: prototype construction**	**Co-Monitoring: testing the prototype pilot**
Nov 2025						
Dec 2025						
Jan 2026						
Feb 2026						
March 2026						
April 2026						
May 2026						
June 2026						
2/2 2026						
1/2 2027						
2/2 2027						
1/2 2028						
2/2 2028						

Map your Pilot Site(s)

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General information about your Pilot Site(s)

At the end of the co-creation and co-design process within the LL, each city/region should describe their Pilot(s) in the following manner, at the minimum, as a preparatory stage for implementation, namely prototype construction:

ULL [City&Region]	**A: e-bike charging station**	**B: cycling tracks from rubberized asphalt**	**C/D: Curbs and/or Bollards from rubberized asphalt**
Pilot area / location (name of the street/park, geographic coordinates, etc.)			
SMILE CITY systemic solutions – units, to be applied and tested			
Starting date of construction:			
Finishing date of construction:			
SMILE CITY funds			
Additional budget & funding source			
Stakeholders			

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involved			
Materials to be used			
Innovation element (if there is something specific for the Pilot, apart from what is provided by the technical partners)			
Constraints / risks			
Risk mitigation measures			

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