

The European Commission's
**INTELLIGENT CITIES
CHALLENGE**

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Venice : Intelligent City Transformation Overview

ICC Final Deliverable



Executive summary

The Intelligent Cities Initiative Challenge will give an important added value in order to reach the Action Plan for Sustainable Energy and Climate planned goals. The ICC will support the City of Venice in addressing its challenges and learning how to use smart technologies to better manage the tourism flows and involve the market players.

Green mobility, one of the Action Plan goals, is also a key challenge for the City. In fact the historical centre, the lagoon, and the islands have their main and only transport system for goods and people, both private and public, in boating.

According to the sustainability and the green mobility goals, Venice aims to carry on two main projects, together with the city's existing projects related to the Action Plan's topics:

- Reasoning on sustainable mobility by boat by identifying modes of transport that do not aggravate the already heavy load of CO2 produced by the current situation
- Providing solutions to support sustainable tourism, identifying ways of monitoring and managing flows with the possibility of highlighting a differentiated and shaped tourist offer with respect of the City

Over the next three years, the city will aim at identifying funding of all kinds (European, national, etc.) in order to implement the project and to reach the goals that the city has set, such as:

- electrification of as many water columns as possible
- support tourism and the administration in managing flows to the city
- increase awareness with respect to sustainability issues and to develop a network for the city to assess these issues

Mayor Foreword

<The city strategy foresees the use of digital tools in line with the eGovernment culture.





These policy papers will be shortly complemented by the Action Plan for Sustainable Energy and Climate, which will include a commitment to reduce CO2 emissions by 40% by 2030 and achieve neutrality by 2050 by introducing specific actions heading towards such direction.

The Intelligent Cities Initiative Challenge will give an important added value for the development and implementation of these plans for which the Administration intends to allocate adequate human and financial resources>



The city of X pursued an EU-supported transformation over four main stages, and this document details that journey by these sections

Overview to the city's journey and structure of this document

					<i>Reported as one section</i>
	1 Preparation & assessment	2 Ambition & roadmap	3 Implementation	4 Review & way forward	
	5 months: September 2020 – January 2021	3 months: February 2021 – April 2021	15 months May 2021 – July 2022	2 months August 2022 – September 2022	
Summary	Find out where a city is, where it should go and who in the ecosystem is going to mobilise make things happen	Develop a concrete plan to achieve measured improvements , collaborating with the community; push action with immediate benefits	Get “big moves” done and see results ; take action in partnership with others	Measure success, and commit to keep connections and improvements going	

Section

1

September 2020 to January
2021

Venice : Preparation and assessment

ICC transformation



Introduction – Venice & ICC

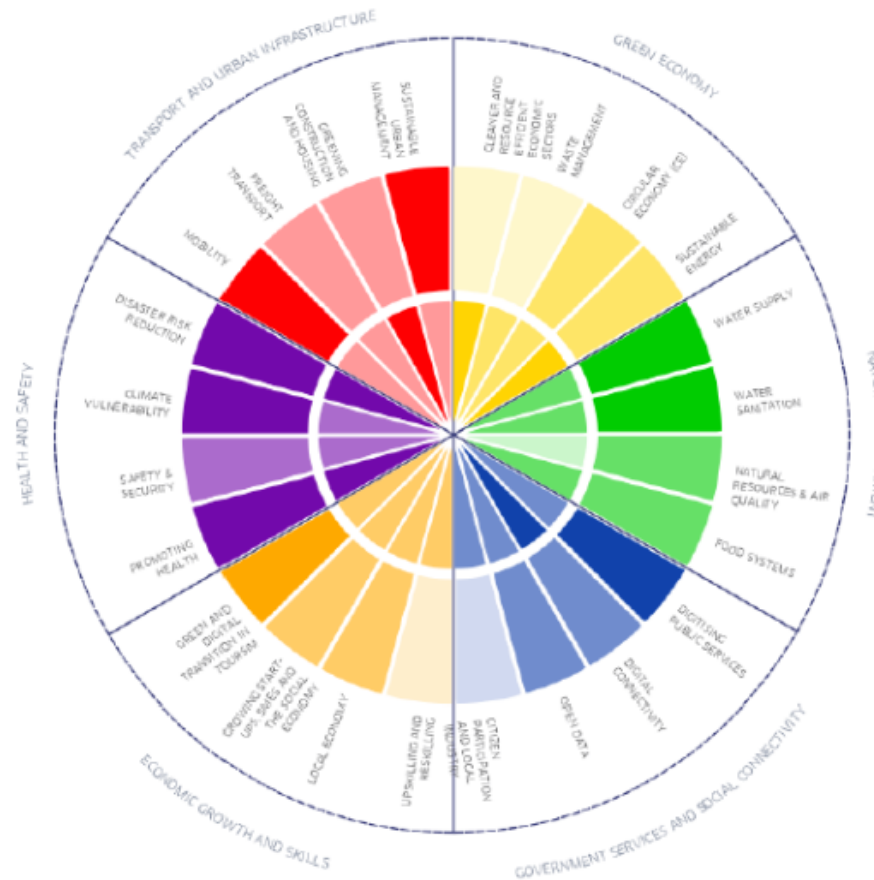
With its estimated 25 millions of visitors each year, Venice is one of the most visited cities in Europe. To avoid that Venice worldwide fame turns from a strength to a threat for its development, the city needs to move from monitoring the tourist flow to its management.

The ICC working frame is supporting the City of Venice in addressing its challenges by learning how to use smart technologies to better manage the tourism flows and involve the market players.

Green mobility is also a key challenge for the City considering that the historical centre, the lagoon, and the islands have their main and only transport system for goods and people, both private and public, in boating. The circulating water fleet (approximately 40,000 boats) impacts on water (releases of un-burnt and oily substances) and air (emissions)

ICC coordination is helping the City to identify and adopt the most performing technologies to enhance the e-mobility in the nautical sector.

City needs – The «radar»



Venice as a complex and quite unique environmental ecosystem to manage.

The Laguna is a fragile ecosystem supporting high touristic and business traffic.

At the edge of the city, Venice is converting a large industrial area from chemical towards integrated logistic, integrated with transformation and distribution.

Mobility Infrastructure is also under pressure due to the daily commuting (citizens and tourists) – above 30 mil tourist on a yearly basis. Furthermore the most relevant travel infrastructure of the region (Airport & Port of Venice) are located close to the urban area.

Security of the environment is becoming a high priority topic thus an area to further exploit.

Pollution is still a an issue in the Venice however several initiatives are underway.

City needs: State of the city overview

Significance of insight to what we want to do on the ICC

○ Of critical importance to ICC journey and we should be working to change

◐ Of importance to ICC journey, and we should act to change this along the journey as opportunity presents

◑ Contextually relevant, but not major point of attention in ICC and unlikely to be impacted on the journey

The state of Venice

Venice has established a comprehensive plan to leverage on digital technologies and solution for improving citizens and Tourist experience and to drive the green mobility agenda.

However, these solutions are involving only a portion of the required players, which need to be engaged into a larger ecosystems.

The ability to mobilise and coordinate a large ecosystem of private and public players has the highest level of attention.

Key insights from city performance analysis

Higher performance observed

1 Ability to attract and pursue funding



2 Level of interest of the city from tourist



3 Digital solution for managing the city (SCR)



4 Commitment of the city towards SDGs (Lido Green, Enabling Hydrogenous Distribution, etc.)



Lower performance observed

1 Ability to enable ecosystem and networking of involved players



2 Ability for coordinate actions towards single roadmap



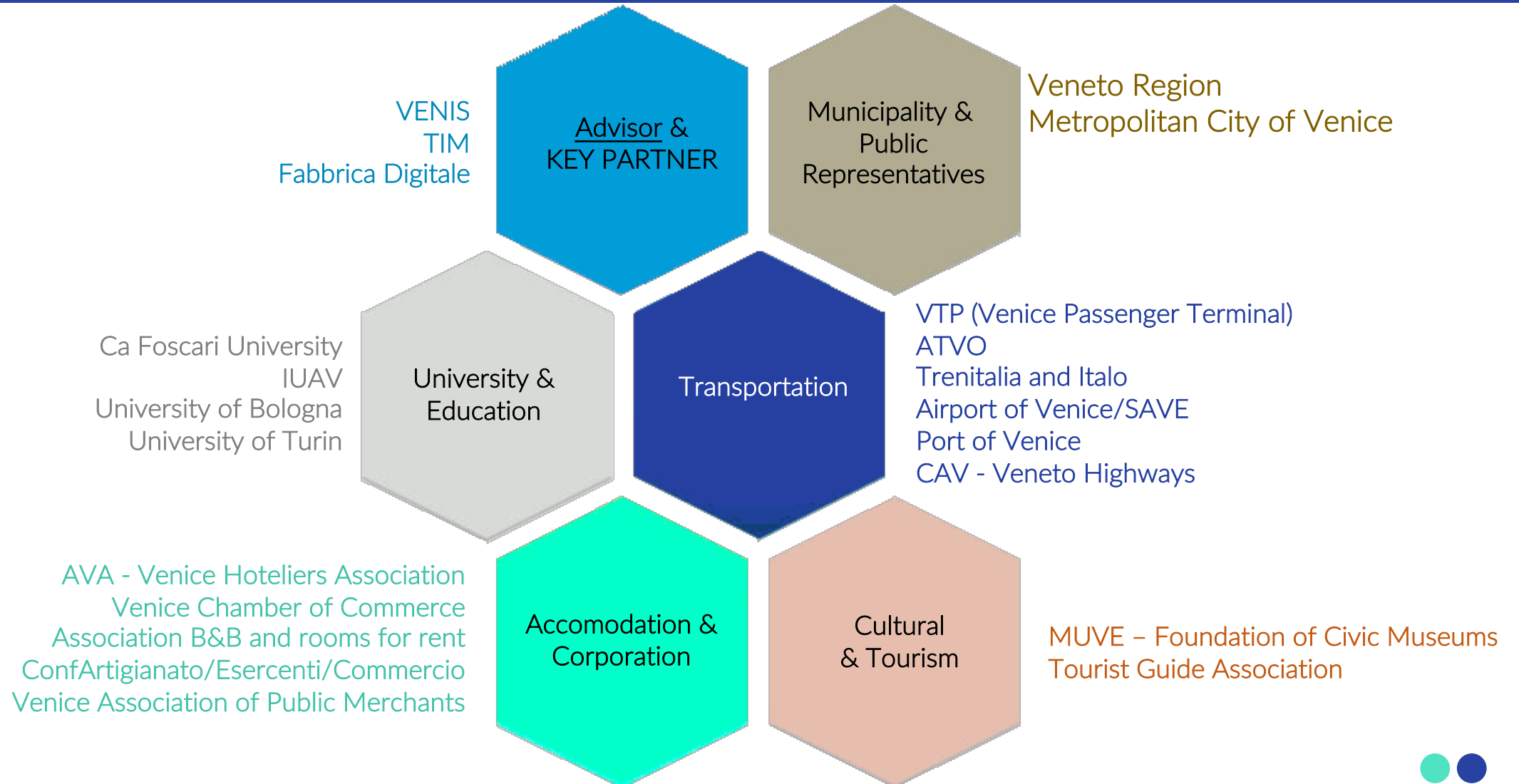
3 Fragile ecosystem which needs to further exploit new technologies



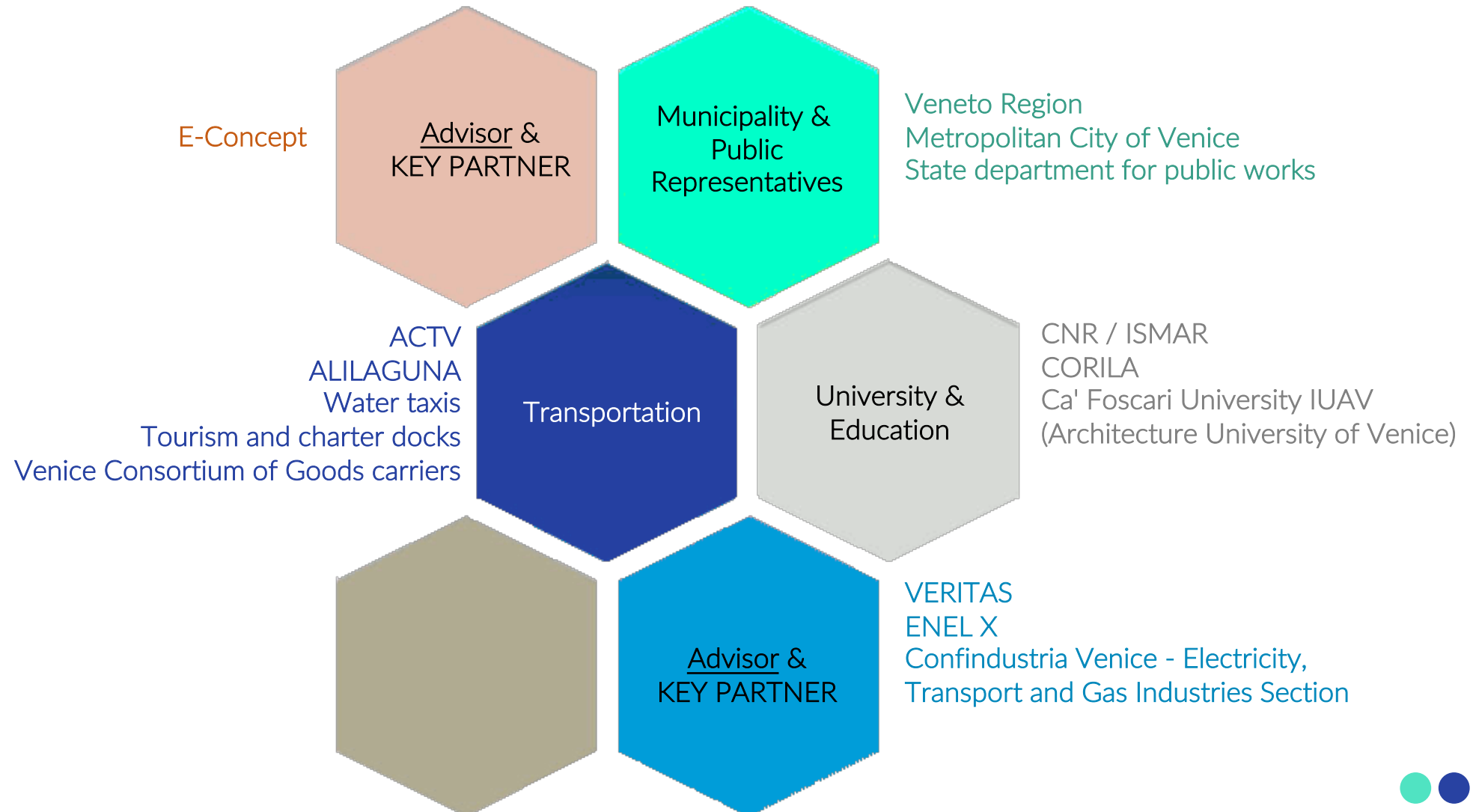
4 Ability to manage inbound touristic streams



City Ecosystem – Sustainable Tourism



City Ecosystem – Green Ecosystem



City Ecosystem

- **Shared aspirations and vision** –All the stakeholders participating in the ICC initiative have a similar vision for the city and believe that a more effective management of inbound flows (touristic and citizens), as well as the further development of the green mobility agenda is a key priority.. Hereafter a detail of the principal shared aspiration:
 - Further valorize available digital assets and tools, specifically all the capabilities and digital services provided by the Smart Control Room.
 - Ensure a proactive management and not only “passive” monitoring of city inbound and outbound flows to improve the overall citizen experience and increase the level of perceived security.
 - Need a higher level of engagement and alignment between public and private stakeholders towards common roadmap and goals
 - Develop a set of digital tools to help the life of citizens and tourists.
 - Continue to drive the green mobility agenda and migrate water transportation system towards electric solutions.

- **What we bring and how we work together** - Stakeholders are participating in the initiative with different aims and goals. Besides institutional players, a key role is played by University which can provide expertise on technology solution and data management. Private sector, in general less involved in these initiatives, is also very interested in contributing into the Digital Service creation and maximize potential returns from the initiative.

- **Urban resources for transformation** – The city has been effective in gaining financial resources and drive the developed important digital asset like the Smart Control Room. However there is now a need to better leverage on those assets and further exploit the capabilities engaging new ecosystem players.

ICC strategy: Vision and ambition statements

Develop Venice as a smart ecosystem and destination for tourists and citizen where all the players (Public, Private and Academics Institutions) share digital services, data, and practices to improve service offer, security and overall quality of living.

Ambition statement 1

Smart and Sustainable Tourism

Enable a coordinated and comprehensive approach to improve the management of inbound and outbound people streams and enable a better overall living experience of the city.

Enable the tourism market local operators to better understand the potential of the Smart Control Room, and of “VeneziaèUnica”, the multifunctional e-commerce platform and related app.

Ambition statement 2

Green Mobility

Transform water mobility of Venice towards a more sustainable overall approach leveraging on new technologies and simplifying the overall adoption process.

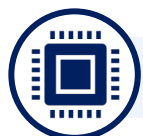
Facilitate the creation of a charging infrastructure for electric water engines in the Lagoon area

Encourage citizens and visitors to adopt greenest solutions when they move around the city.

City strategy: justification

In order to Develop Venice as a smart ecosystem and destination for tourists and citizen where all the players, two different solutions have been identified, according to the Ambition statements defined.

The City strategy has been defined by taking into account the following ideas:



The aim of improving the city from a digital and infrastructural point of view



The through a more shared management of the "smart control room" tool, the management of tourist flows could be improved



The increase in the number of recharging points, but in particular, the creation of a physical infrastructure for the distribution of energy, are elements that will contribute to the ecological transition"

In order to follow that strategy, the key factors that define success across all of the Ambition statement have been identified.



- Managing political cycles
- Stimulate the interest and involvement of the energy providers

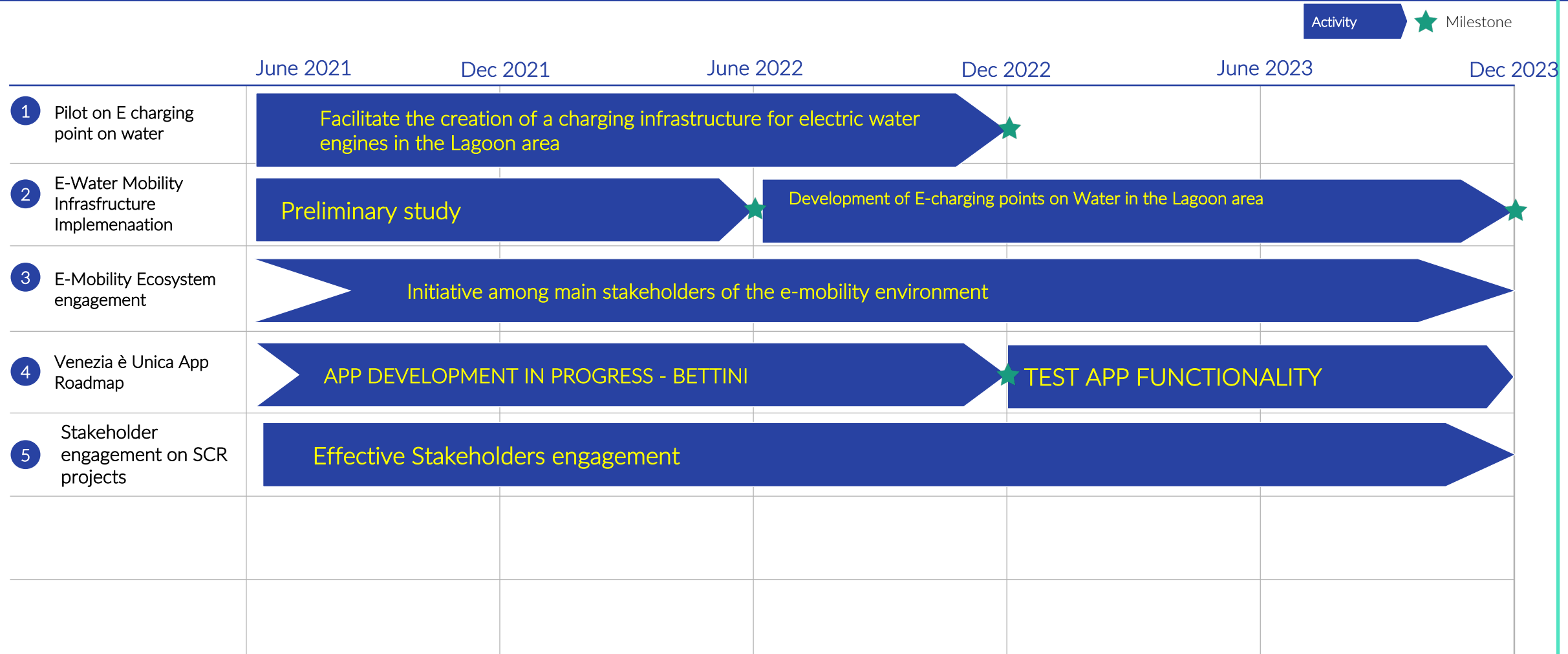
Section 2

Venice : Ambition and roadmap

ICC Transformation

February 2021 to May 2021

High level implementation roadmap for solution (“10000m plan”)



Roadmap summary

Green Mobility

Transform water mobility of Venice towards a more sustainable overall approach leveraging on new technologies and simplifying the overall adoption process.

Facilitate the creation of a charging infrastructure for electric water engines in the Lagoon area. Encourage citizens and visitors to adopt greenest solutions when they move around the city.

- pilot to E-charging point on water
- E-water mobility infrastructure Implementation
- E-Mobility ecosystem engagement

Smart and Sustainable Tourism

Enable a coordinated and comprehensive approach to improve the management of inbound and outbound people streams and enable a better overall living experience of the city.

Enable the tourism market local operators to better understand the potential of the Smart Control Room, and of “VeneziaèUnica”, the multifunctional ecommerce platform and related app.

- Stakeholder engagement on SCR projects
- VeneziaèUnica App Roadmap

Rationale to road map

Taking **vision** and **statements** as a reference point, the roadmap has defined **concrete shared strategic objectives** that are achievable within the established time frame.












For each strategic objective, the team has defined the **macro activities** necessary to achieve them, with respect to the reference period, checking the availability and timing of the interested parties.

During the Roadmap definition and the first phases of the work period, the team identified a **Critical Path** that revolved around the “**Stakeholder engagement on SCR projects**” macro activity.












The **importance of involving stakeholders** during the project has become increasingly evident, and the difficulty linked to identifying the elements that may interest them was one of the main challenge of the project.

The project did not have a lack or a limit of resources and it was possible to **move in parallel** the **macro activities** linked to the various strategic objectives.












Initiative charter E Mobility on Water - Pilot on E charging point on water

Strategy		Stakeholders involved		Inputs, outputs, outcomes and impacts	
Description 	Facilitate the creation of a charging infrastructure for electric water engines in the Lagoon area	Solution lead: 	Urban Planning Directorate of the Municipality	Source of funding and estimated cost 	European Structural Funds; Private investments
	Development of E-charging points on Water in the Lagoon area		Urban Mobility Directorate of the Municipality		
		Solution working team: 	Management Offices of Initiative Leads	Solution maturity outputs 	Infrastructure network planning
			Direction "Sviluppo del territorio e città sostenibile"		
Link to vision 	Transform water mobility of Venice towards a more sustainable overall approach leveraging on new technologies and simplifying the overall adoption process.	Contributors: 	Energy suppliers	City performance outcomes and impacts 	Air quality improvement Dissemination of knowledge of innovative ways of "electric water"
Link to ambition statement 	The ambition statement the solution links to Environment and sustainable mobility		Private and public Transport Companies		
Expected impact and timing 	Economically support certain types of enterprises working in the service sector	Risks and mitigation 	Timing to define the guidelines while projects are underway		
			Mitigation Action: plan and schedule a series of meetings with involved stakeholders and energy suppliers.		








Initiative charter E Mobility on Water - E-Water Mobility Infrastructure Implementation

Strategy		Stakeholders involved		Inputs, outputs, outcomes and impacts	
Description 	Facilitate the creation of a charging infrastructure for electric water engines in the Lagoon area	Solution lead: 	Urban Planning Directorate of the Municipality	Source of funding and estimated cost 	European Structural Funds; Private investments
	Development of E-charging points on Water in the Lagoon area		Urban Mobility Directorate of the Municipality		
Link to vision 	Transform water mobility of Venice towards a more sustainable overall approach leveraging on new technologies and simplifying the overall adoption process.	Solution working team: 	Management Offices of Initiative Leads	Solution maturity outputs 	Effective implementation of charging points
			Direction "Sviluppo del territorio e città sostenibile"		
Link to ambition statement 	The ambition statement the solution links to Environment and sustainable mobility	Contributors: 	Energy suppliers	City performance outcomes and impacts 	Air quality improvement Dissemination of knowledge of innovative ways of "electric water" Enhancement of the public infrastructure network
			Private and public Transport Companies		
			European Organisations		
Expected impact and timing 	Establish relationships with potential energy suppliers.	Risks and mitigation 	Timing to define the guidelines while projects are underway		
			Mitigation Action: plan and schedule a series of meetings with involved stakeholders and energy suppliers.		












Initiative charter E Mobility on Water - E-Mobility Ecosystem engagement

Strategy		Stakeholders involved		Inputs, outputs, outcomes and impacts	
Description 	Facilitate the creation of a charging infrastructure for electric water engines in the Lagoon area	Solution lead: 	Urban Planning Directorate of the Municipality	Source of funding and estimated cost 	European Structural Funds; Private investments
	Development of E-charging points on Water in the Lagoon area		Urban Mobility Directorate of the Municipality		
			All other entities involved in the e-mobility Ecosystem (i.e. Public transportation Organisation)	Solution maturity outputs 	Wide diffusion of the initiative among main stakeholders of the e-mobility environment
Link to vision 	Transform water mobility of Venice towards a more sustainable overall approach leveraging on new technologies and simplifying the overall adoption process.	Solution working team: 	Management Offices of Initiative Leads Direction "Sviluppo del territorio e città sostenibile"		
Link to ambition statement 	The ambition statement the solution links to Environment and sustainable mobility	Contributors: 	Energy suppliers Private and public Transport Companies European Organisations		
Expected impact and timing 	Creation of a supplier-user network in e-mobility	Risks and mitigation 	Timing to define the guidelines while projects are underway Mitigation Action: plan and schedule a series of meetings with involved stakeholders and energy suppliers.	City performance outcomes and impacts 	Air quality improvement Dissemination of knowledge of innovative ways of "electric water" Enhancement of the public infrastructure network

Initiative charter Digital Solution for sustainable Tourism - VeneziaèUnica App Roadmap

Strategy		Stakeholders involved		Inputs, outputs, outcomes and impacts	
Description 	<p>Enable the tourism market local operators to better understand the potential of the Smart Control Room</p> <p>Support the development of VeneziaèUnica", the multifunctional ecommerce platform and related app</p>	Solution lead:  <p>Tourism Management Of The Municipality</p> <p>Urban Planning Directorate</p> <p>Venis (Municipality in-house entity)</p>		Source of funding and estimated cost  <p>European Structural Funds;</p> <p>Public Fund</p>	
		Solution working team:  <p>Management Offices of Initiative Leads</p> <p>Direction "Sviluppo del territorio e città sostenibile"</p>		Solution maturity outputs  <p>Implement a beta version of the multifunctional ecommerce platform and related app</p>	
		Contributors:  <p>Tourism Management Of The Municipality</p> <p>Urban Planning Directorate</p> <p>Venis (Municipality in-house entity)</p>			
Link to vision 	<p>Enable a better overall living experience of the city</p>				
Link to ambition statement 	<p>The ambition statement the solution links to Environment and Sustainable Tourism</p>				
Expected impact and timing 	<p>Supporting third sector companies by providing a tool to tourists for smart enjoyment of the City System</p>	Risks and mitigation  <p>Timing to define the guidelines while projects are underway</p> <p>Mitigation Action: plan and schedule a series of meetings with involved stakeholders and energy suppliers.</p>		City performance outcomes and impacts  <p>Improved management of tourist flows resulting in improved quality of life for the whole city</p>	

Initiative charter Digital Solution for sustainable Tourism - Stakeholder engagement on SCR projects

Strategy		Stakeholders involved		Inputs, outputs, outcomes and impacts	
Description 	<p>Enable the tourism market local operators to better understand the potential of the Smart Control Room</p> <p>Enable the tourism market local operators to better understand the potential of the Smart Control Room</p>	Solution lead:  <p>Tourism Management Of The Municipality</p> <p>Urban Planning Directorate</p> <p>Venis (Municipality in-house entity)</p>		Source of funding and estimated cost  <p>European Structural Funds;</p> <p>Public Fund</p>	
		Solution working team:  <p>Management Offices of Initiative Leads</p> <p>Direction "Sviluppo del territorio e città sostenibile"</p>		Solution maturity outputs  <p>Effective Stakeholders engagement</p>	
	Link to vision  <p>Enable a better overall living experience of the city</p>	Contributors:  <p>Tourism related entities</p>			
Link to ambition statement  <p>The ambition statement the solution links to Environment and Sustainable Tourism</p>					
Expected impact and timing  <p>Supporting third sector companies by providing a tool to tourists for smart enjoyment of the City System</p>		Risks and mitigation  <p>Timing to define the guidelines while projects are underway</p> <p>Mitigation Action: plan and schedule a series of meetings with involved stakeholders and energy suppliers.</p>		City performance outcomes and impacts  <p>Gather and use all the data provided by Stakeholders in order to be able to improve the management of tourist flows in the city</p>	

Key Performance indicators – Activities (inputs and actions)

Solution	Activities – Inputs and actions	Solution Maturity - outputs	City performance – outcomes and impacts
E Mobility on Water	<ul style="list-style-type: none"> - Shared objectives and pilot project specification - Confirmation of Feasibility and identification of key drivers input for the implementation guidelines & Specs - Feasibility Initiative #1 	Pilot on E charging point on water	Network construction
E Mobility on Water	<ul style="list-style-type: none"> - Publication of the call for tenders - Phase 1 E-Charging point network implementation (Q4 2022) 	E-Water Mobility Infrastructure Implementation	Column placement optimization.
E Mobility on Water	<ul style="list-style-type: none"> - Workshops planning and organization 	E-Mobility Ecosystem engagement	Scheduling meetings with stakeholders
Digital Solution for sustainable Tourism	<ul style="list-style-type: none"> - Design the structure of the app - Make operational some part of the app 	VeneziaèUnica App Roadmap	Advertise / disseminate the App Venezia è Unica through marketing campaigns.
Digital Solution for sustainable Tourism	<ul style="list-style-type: none"> - Workshops planning and organization - Design a template of data sharing to input and output data from SCR 	Stakeholder engagement on SCR projects	Scheduling meetings with stakeholders

Key Performance indicators – solution maturity (outputs)

Solution	Activities – Inputs and actions	Solution Maturity - outputs	City performance – outcomes and impacts
E Mobility on Water	<ul style="list-style-type: none"> - Proof of concept to demonstrate feasibility on scalability of E Water Mobility (11/2021) - Guideline and specification for Iniziative #2 (tender, vendor selection and implementation) (Dic 20'21) 	Pilot on E charging point on water	About 80 new charging points between Water and Land mobility
E Mobility on Water	<ul style="list-style-type: none"> - Overall Project of eMobility Network (Dic 2021) - Vendor and solution selection by (Jun 2022) - Costrution of some charging points 	E-Water Mobility Infrastructure Implemenaation	About 80 new charging points between Water and Land mobility
E Mobility on Water	3 workshop every year and a major evento on Salone Nautico 2022	E-Mobility Ecosystem engagement	Involvement of all relevante stakeholder on the project
Digital Solution for sustainable Tourism	<ul style="list-style-type: none"> - HLD (Design) of VeneziaèUnica App - VeneziaèUnica App implementation Rel 1 (Jun-2022) - At leaste 2 enhancements (e.g. Social Map & the Greener way in venice) (Q42022) 	VeneziaèUnica App Roadmap	Adoption of the app Venezia è Unica on a large scale.
Digital Solution for sustainable Tourism	<ul style="list-style-type: none"> - 3 Engagement Workshops to mobilise stakeholders - Dissemination of data sharing template to input and output data from SCR. 	Stakeholder engagement on SCR projects	Involvement of all relevante stakeholder on the project

Key Performance indicators - Cross cutting indicators

Cross cutting indicatrs

Growth of Venezia Unica app users

Charging stations monitoring

Cross-detection of app users / power columns

App usage statistics.

Monitoring of tourist flows through control rooms - Venice

Study of the provenance of tourist flows - Through control rooms – Venice

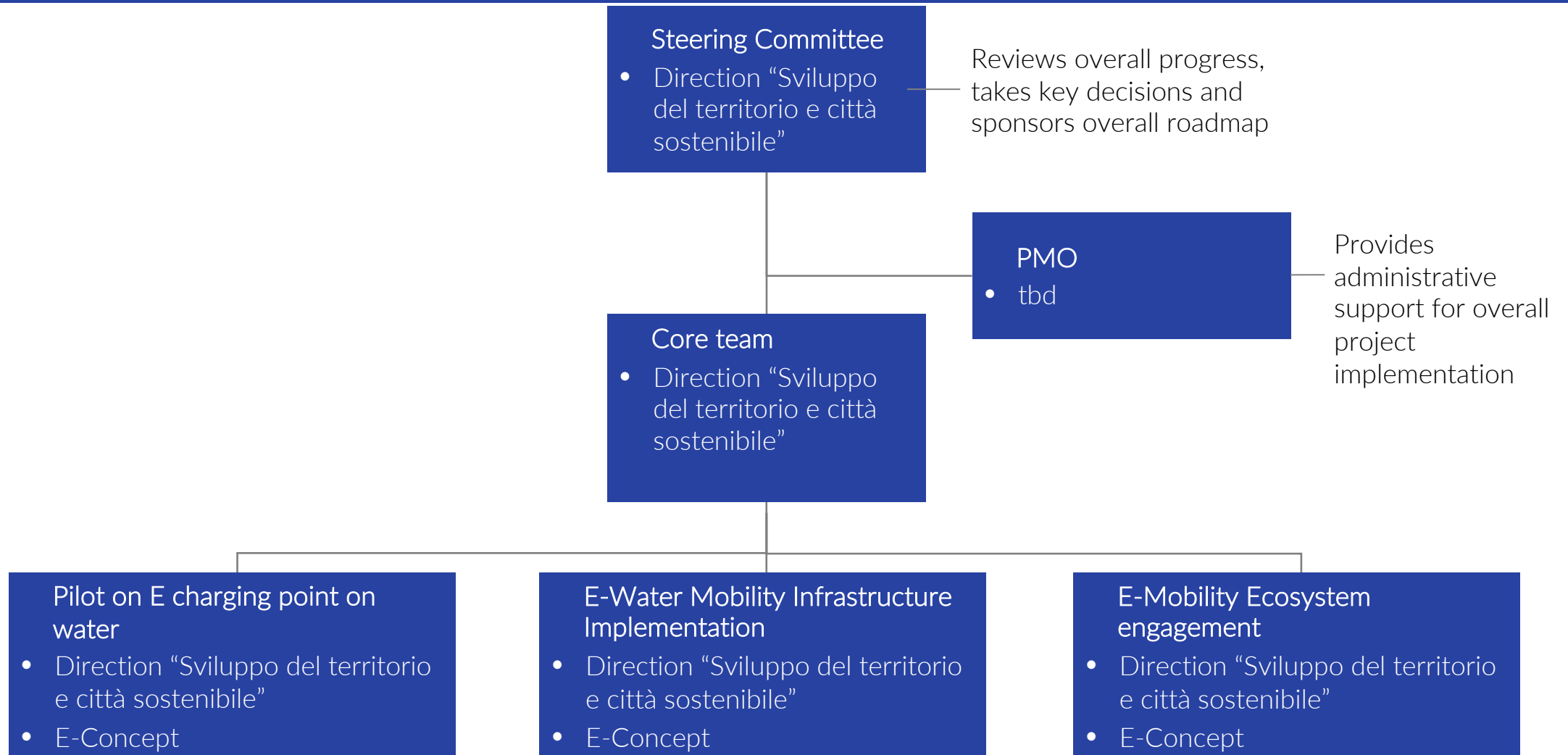
Use of big data to extrapolate specific information suitable for the creation of indexes to be used for monitoring the services offered

Rationale to KPI approach

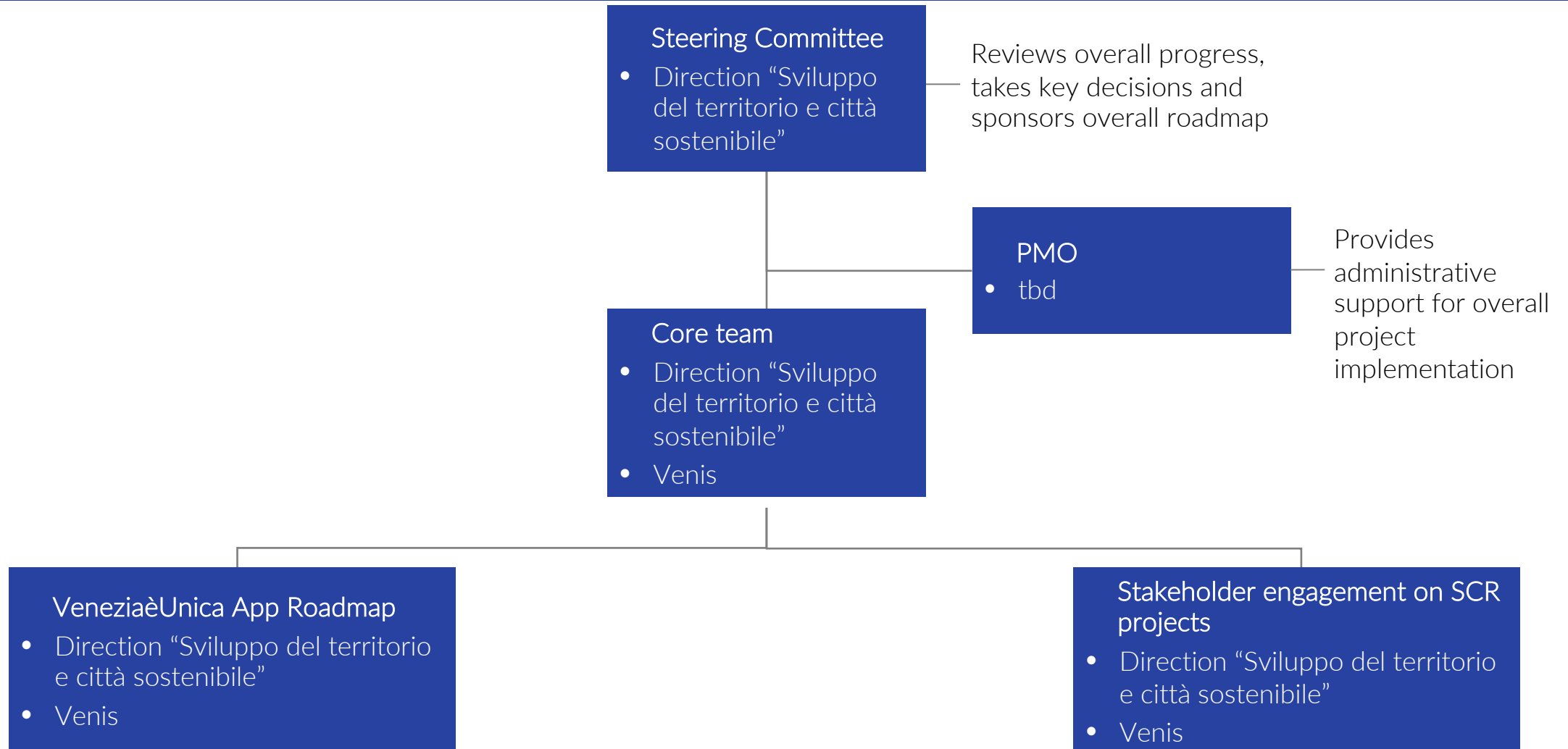
The rationale linked to the definition of the identified KPIs is shown below:

KPI	Rationale
KPI Activities (inputs and actions)	These KPIs have been identified on the basis of the strategic objectives defined in the roadmap. Each KPI defines measurable macro activities identified for each strategic objective and macro activity
KPI solution maturity (outputs)	These KPIs are indicators with the aim to quantify the identified qualitative objectives, defining specific targets to be achieved
KPI Performance	These KPIs are related to the critical path aimed at exploding in detail the potential areas of interest that could attract additional suppliers and therefore overcome the identified "criticality"
KPI Cross cutting indicators	These KPIs have the purpose of carrying out specific a monitoring on the outcome of the project and on the timely achievement of the defined objectives

Governance structure for roadmap implementation - E Mobility on Water



Governance structure for roadmap implementation - Digital Solution for sustainable Tourism



Section

3+4

February 2021 to May 2021

Venice : Impact

ICC Transformation

Impact executive summary

The main goal achieved has been to finally think about the city system as a whole and not about individual projects that may relate to the city.

The main obstacle has been to be able to involve directorates within the administration who are concerned with these issues

Other major obstacles have been:

- to raise not only of the stakeholders awareness (who are interested in the project), but also of the political and urban awareness relatively to the issues of sustainability and the administration goals.
- not having the possibility in operational terms to be able to involve other cities except through sporadic meetings that did not yield the desired results.

The project achieved its goals, despite the limitations of a project that was initially not as concrete compared to what we are used to dealing with.

Over the next three years, the city will aim at identifying funding of all kinds (European, national, etc.) in order to implement the project and to reach the goals that the city has set, such as:

- electrification of as many water columns as possible
- support tourism and the administration in managing flows to the city
- increase awareness with respect to sustainability issues and to develop a network for the city to assess these issues

We will see in the next slides The KPIs that characterized the project and the outcome that will form the basis with respect to the city's planned future activities.

There are four types of measurable concepts that come together to drive success in the ICC



Assessment of city performance - progress against KPIs

City performance		Where we started	Midway through the challenge	Final results
1	KPI 1 - Network construction.	It started from the 2021 boat show where a workshop was held in which all the stakeholders of the sector were invited	The team has identified the need to define the areas of interest to be prioritized in the construction of the energy distribution network	A first study was carried out and a first proposal relating to the areas of interest identified
2	KPI 2 - Column placement optimization	The team identified a problem related to the superintendence, initially the column placement was not identified	The working group identified the need to define how to facilitate the column installation processes	The team has decided to insert the columns in the Abaco, a list of elements shared with the superintendency that allows facilitated bureaucratic process
3	KPI 3 - Advertise / disseminate the App Venezia è Unica through marketing campaigns.	it is a primary need of the project. Initially, the application had not yet been developed	-	A beta version of the Venezia è Unica App has been developed

Assessment of city performance - discussion

City performance		Final results	Outcomes and impacts over the city performance
1	KPI 1 - Network construction.	A first study was carried out and a first proposal relating to the areas of interest identified	Allows to identify the first areas to be served and to define a prioritization of the implementation of the infrastructure of the areas that make up the perimeter, supporting the achievement of the goal of electrifying as many vessels as possible
2	KPI 2 - Column placement optimization	The team has decided to insert the columns in the Abaco, a list of elements shared with the superintendency that allows facilitated bureaucratic process	Allows to streamline Bureaucratic processes, facilitating the installation of water columns in terms of authorization procedures, eliminating waiting times and requests for opinions from other agencies, supporting the achievement of the goal of electrifying as many vessels as possible
3	KPI 3 - Advertise / disseminate the App Venezia è Unica through marketing campaigns.	A beta version of the Venezia è Unica App has been developed	Finalize the product in order to make it highly operational, enabling the achievement of the goal of supporting tourism and administration in managing flows to the city

Assessment of solution maturity - progress against KPIs

	Where we started	Midway through the challenge	Final results
E Mobility on Water			
1 Proof of concept	Need to produce a PoC identified	-	Proof of concept to demonstrate feasibility on scalability of E Water Mobility
2 Guideline and specification	Need to produce guidelines and specification such as tender, vendor selection and implementation identified	-	Guidelines and Specification Delivered
3 Charging point construction	Need to build charging points (columns) identified	Set of charging points used as a model for subsequent implementations identified	Realization of the identified "model charging points"
4 Stakeholder involvement	Need to involve stakeholders identified	-	Specific workshops with stakeholders Planned and implemented
Digital Solution for sustainable Tourism			
1 VeneziaèUnica App	Need to develop the App identified	Solution Design	Solution VeneziaèUnica App Develop
2 Stakeholder involvement	Need to involve stakeholders identified	-	Stakeholder engagement phase yet to be started
3 Template Dissemination	Need to involve stakeholders for sharing the solution template identified	-	Stakeholder engagement phase yet to be started

Assessment of solution maturity - discussion

Final results		Outcomes and impacts over the city performance
E Mobility on Water		
1 Proof of concept	Proof of concept to demonstrate feasibility on scalability of E Water Mobility	Verification of the functionality of already installed experimental elements that serve as a model with respect to future developments and subsequent installations, supporting the achievement of the goal of electrifying as many water columns as possible
2 Guideline and specification	Guidelines and Specification Delivered	Standardization of applicable models and how they are used, supporting the achievement of the goal of electrifying as many water columns as possible
3 Charging point construction	Realization of the identified “model charging points”	Implementation of applicable models and how they are used, supporting the achievement of the goal of electrifying as many water columns as possible
4 Stakeholder involvement	Specific workshops with stakeholders Planned and implemented	Involvement and outreach to relevant stakeholders, supporting the objective of increasing awareness with respect to sustainability issues and creating a network for the city to assess these issues
Digital Solution for sustainable Tourism		
1 VeneziaèUnica App	Solution VeneziaèUnica App Develop	Develop the product and allow the first tests necessary to refine it, enabling the achievement of the goal of supporting tourism and administration in the management of flows to the city
2 Stakeholder involvement	Stakeholder engagement phase yet to be started	To use as much information and data as necessary to make the solution work properly and to share its nature with relevant stakeholders, so as to facilitate and support the final adoption of the solution in order to support tourism and administration in managing flows to the city
3 Template Dissemination	Stakeholder engagement phase yet to be started	

Assessment of city ecosystem and activities - progress against KPIs

	Where we started	Midway through the challenge	Final results
Ecosystem			
1 E-Mobility Ecosystem engagement	Need to involve stakeholders Identified	-	Specific workshops with stakeholders planned and implemented
2 Stakeholder engagement on SCR projects	Need to involve stakeholders Identified	Template of data sharing to input and output data from SCR has been designed	Stakeholder engagement phase yet to be started
Activity			
1 Pilot on E charging point on water	Need to implement a Pilot identified	Shared objectives and pilot project specification Confirmation of Feasibility and identification of key drivers input for the implementation guidelines & Specs	Pilot E charging on water implemented
2 E-Water Mobility Infrastructure Implementation	Need to identify the suppliers and the tender	Meetings with potential suppliers	Tender definition phase yet to be started
3 VeneziaèUnica App Roadmap	Need to develop the App identified	Solution Design	Solution VeneziaèUnica App Develop

Assessment of city ecosystem and activities - discussion

Final results		Outcomes and impacts over the city performance
Ecosystem		
1 E-Mobility Ecosystem engagement	Specific workshops with stakeholders planned and implemented	Involvement and outreach to relevant stakeholders, supporting the objective of increasing awareness with respect to sustainability issues and creating a network for the city to assess these issues
2 Stakeholder engagement on SCR projects	Stakeholder engagement phase yet to be started	To use as much information and data as necessary to make the solution work properly and to share its nature with relevant stakeholders, so as to facilitate and support the final adoption of the solution in order to support tourism and administration in managing flows to the city
Activity		
1 Pilot on E charging point on water	Pilot E charging on water implemented	Implementation of the pilot on e-charging on water and sharing models expressing how they can be used, supporting the goal of electrifying as many water columns as possible
2 E-Water Mobility Infrastructure Implementation	Tender definition phase yet to be started	Awareness raising and information sharing with involved stakeholders supporting the objective of increasing awareness with respect to sustainability issues and creating a network for the city to assess these issues
3 VeneziaèUnica App Roadmap	Solution VeneziaèUnica App Develop	Develop the product and allow the first tests necessary to refine it, enabling the achievement of the goal of supporting tourism and administration in the management of flows to the city

5 key lessons

Lesson	Reflections
1	Bottom up proposal by stakeholders has been not at the expected level, however goals and solutions have been identified and shared and we expect a more proactive collaboration will be seen in the coming months.
2	The two ambitious statements involve different set of stakeholders. Managing a balanced agenda to cover both on a single workshop might not be effective and a parallel execution paths is needed to ensure the right stakeholder engagement on relevant solutions
3	The execution of the phase one has been severely impacted by Covid-19 since few participants have been directly touched by it.
4	The amount of effort and time required to execute the local workshops and initiatives is above the available time for large stakeholder audience. It is very difficult to commit the ecosystem of stakeholders to dedicate several days for meetings and workshops within a short time frame. A leaner approach is recommended

Commitments

Commitments to on-going resources

The municipality has allocated funds to support the two solutions.

VenziaèUnica App is under the responsibility of Venis company, which invested time and resources during the project and which plans to continue this investment.

For the e-Water and Earth Mobility, funds were raised to carry out the reconnaissance of the areas potentially reachable by the supply and energy infrastructure. We highlight the existence of a municipal project covering the next two years for the construction of some recharging points, partly on the mainland and partly in the lagoon area on public areas intended for the parking of vehicles and boats

Commitments to on-going collaboration

The application is completely managed by Venis company and the need for other collaborations has not been identified

For the e-Water and Earth Mobility, since the first part of the solution will be a public intervention, it will be the subject of public evidence necessary for the identification of the subjects who will build the structures

Commitments to on-going KPIs

Performance KPIs: the results achieved downstream of phase 4 of the project will be deepened

KPI solution maturity: the achievement of the KPI targets partially achieved at the date will be expected

KPI ecosystem and activities: stakeholder and ecosystem involvement will be envisaged in a more in-depth manner

3 Year plan - ambitions

Building on the ICC, what would will the city aim to achieve in 3 years time?

The city will aim to reach an **enhancement** of Venice as a smart ecosystem and destination for tourists and citizen by analyzing and implementing solutions that **facilitate and evolve the tools** implemented in the territory through the ICC project, such as

- having the largest number of recharging points in the lagoon area to support the electrification of vessels
- give maximum dissemination to the application, focusing on the customer experience and customer care)

What steps will you take over the next 3 years to achieve these goals?

In order to take over the next 3 years to achieve these goals, the city has identified the following steps:

Aim: *having the largest number of recharging points in the lagoon area to support the electrification of vessels*

- Identification of the energy supplier
- Design of the distribution infrastructure at the service of the areas identified in the ICC project
- Construction of the infrastructural network for the distribution of the energy necessary for the widespread supply to all the recharging points provided in the area

Aim: *give maximum dissemination to the application, focusing on the customer experience and customer care*

Involvement of the stakeholders necessary to incorporate and provide information to the application

- Expansion and evolution of the services present in the beta application
- Solution Go live
- Communication and advertising of the solution among citizens and tourists

3 Year plan - targets

KPI	Category	What commitments will the city make to this end?
1	Pilot on E charging point on water	The city is committed to reaching 80 charging points between land and sea points in the three years envisaged
2	E-Water Mobility Infrastructure Implementation	The city is committed to completing the infrastructure design in order to guarantee the service for all identified areas of interest
3	E-Mobility Ecosystem engagement	The city is committed to continuing a dialogue throughout the ecosystem to finalize the available technologies and collect and satisfy the requests of the end user
4	VeneziaèUnica App Roadmap	The city is committed to structuring a large-scale adoption of the solution, in order to support citizens and tourists
5	Stakeholder engagement on SCR projects	The city undertakes to submit to potential stakeholders and users an advanced version of the application to allow the flow of data necessary for the customer experience and customer care