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 Cleaner and better transport in cities

DESTINATIONS



D8.7

Business Model Catalogue

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Abstract

This Deliverable provides an overview about the most promising business models developed during the project. The analysis starts from the catalogue of business models emerged from the Kick-Off trainings and coaching activities performed in the 6 DESTINATIONS sites (Madeira, Limassol, Rethymno, Elba, Malta and Las Palmas).

The analysis has been carried out on the basis of the development of a methodology for the assessment of replicability and a survey conducted with the relevant stakeholders involved in the implementation of the DESTINATIONS measures.

The key result of the analysis consists in the identification of a cluster of potential business models that will be further analysed during the knowledge sharing jam exchange session in Limassol (March 2020), held during the project partners general meeting. The cluster of measures are the following:

1. Public transport information systems.
2. Integrated payments solutions for mobility
3. Public ebike-system
4. Building a sharing mobility culture

Project Partners

Organisation	Abbreviation	Country
Horários do Funchal, Transportes Públicos, SA	HF	PT
Agência Regional da Energia e Ambiente da Região Autónoma da Madeira	AREAM	PT
Câmara Municipal do Funchal	CMF	PT
Secretaria Regional da Economia Turismo e Cultura	SRETC	PT
Agência Regional para o Desenvolvimento da Investigação, Tecnologia e Inovação	ARDITI	PT
Limassol Tourism Development and Promotion Company Ltd	LTC	CY
Municipality of Limassol	LIMA	CY
Stratagem Energy Ltd	STRATA	CY
Dimos Rethimnis	RETH	EL
The Research Committee of the Technical University of Crete	TUC	EL
Comune Di Rio	Rio	IT
Comune Di Portoferraio	PF	IT
MemEx S.R.L.	MEMEX	IT
Authority for Transport in Malta	TM	MT
Valletta Kunsilli Lokali – Valletta Local Council	VLC	MT
Universita ta' Malta	UoM	MT
Ministry of Tourism	MOT	MT
Guaguas Municipales Sociedad Anonima	Guaguas	ES
CINESI S.L consultoria de transport	CINESI	ES

Ayuntamiento de Las Palmas de Gran Canaria	LPGC	ES
Ingeniería Electrónica Canaria S.L	INELCAN	ES
Sociedad Municipal de Aparcamientos de Las Palmas de Gran Canaria	SAGULPA	ES
Istituto di Studi per l'Integrazione dei Sistemi	ISINNOVA	IT
European Integrated Project	EIP	RO
Sustainable Services	GV21	ES
Vectos (South) Ltd	VECTOS	UK
Conférence des Régions Périphériques Maritimes d'Europe	CPMR	BE
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1 Executive Summary

This Deliverable provides an overview about the most promising business models developed during the project. The analysis starts from the catalogue of business models emerged from the Kick-Off trainings and coaching activities performed in the 6 DESTINATIONS sites (Madeira, Limassol, Rethymno, Elba, Malta and Las Palmas).

We consider as the “most promising business models developed during the DESTINATIONS project” those scalable within one destination (A) and replicable in another destination (B).

The scalability and replicability concepts and methods of analysis are illustrated extensively in chapter 4, and sketched in the table below:

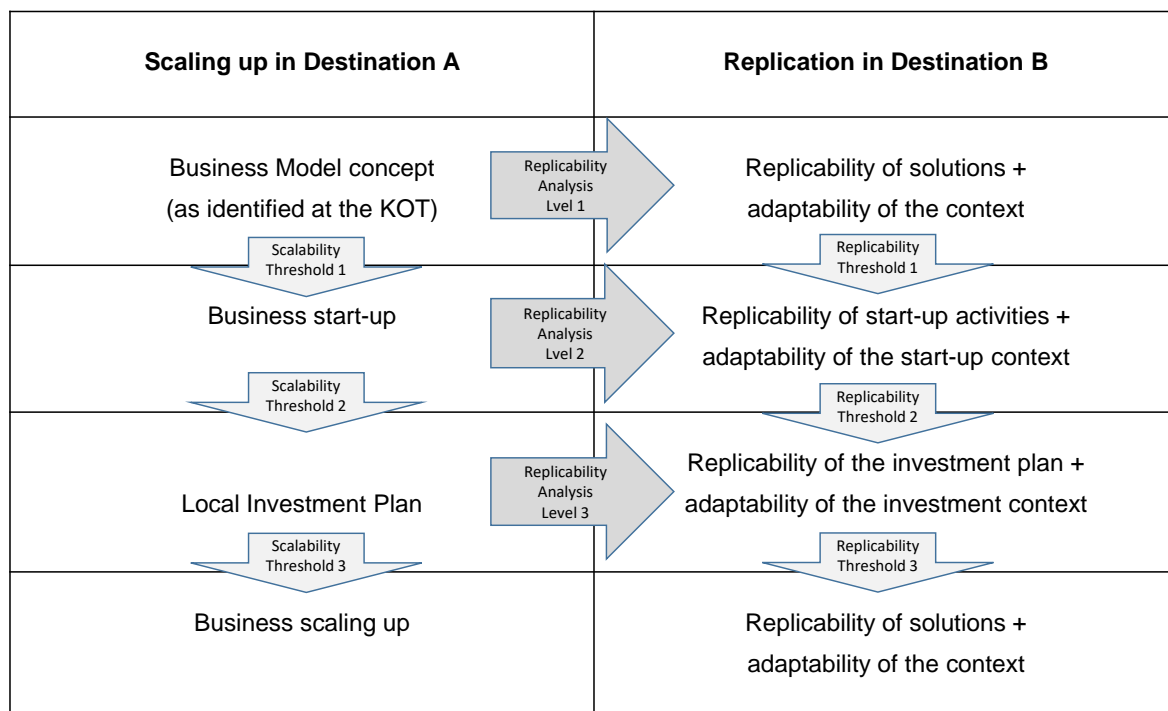


Table 1: Framework of the analysis

The scalability and replicability analyses are coordinated and framed in three main streams – of levels – of analysis:

- 1st Level: A scalability and replicability analysis is undertaken by screening the whole set of business model measures developed by the sites and selecting the measures that evolved – or are planned to evolve – into a business start-up within one destination (overpassing the scalability threshold 1) and which are replicable in another destination (overpassing the replicability threshold 1).
- 2nd Level: A second round of scalability and replicability analysis is undertaken focusing on the existing (initiated or planned) business start-up(s) in one destination and selecting the measures that are scaling up – or planned to scale up - with the implementation of a local investment plan (overpassing the scalability threshold 2) which is itself replicable in another destination (overpassing the replicability threshold 2).

- 3rd Level: this level is eventually achieved by the most promising business measures. For them guidelines and advice are given to enhance long-term sustainability in one destination (to help overpassing the scaling up threshold 3) and in another destinations where such long-term sustainability is replicable (to help overpassing the replicability threshold 3).

Concerning the Level 1 (replicability of solutions), the analysis has identified three key components, whose analysis may unlock the potential for business model replication:

1. the socio-cultural domain;
2. institutional context
3. technological factors.

The socio-cultural replicability of a solution is assumed to be dependent on the degree of interaction with citizens and communities. The more this interaction unfolds, the higher is the chance of facing risks in the replication of the solution. Besides, the social acceptance of the solution represents another important factor affecting replicability.

Institutional factors encompass heterogeneous factors as governance models, e.g. rules and regulation specific of each governmental level or organisation, number and complexity of departments and personnel appointed for the solution implementation, control and evaluation.

The technological replicability of a solution is assumed to be dependent both on solution specific factors and general context factors. On the specific factors side, two factors are used:

1. the TRL (Technology readiness levels), which allows the estimation of the technology maturity of a solution.
2. the degree of interoperability/standardisation of the solution, which is an important component indicating the potential technological replicability of a specific solution.

Concerning the Level 2 (replicability of start-ups activities), the analysis has identified potential business models, classified in cluster of measures, developing for each cluster enablers and barriers to the replicability:

1. **Limassol LIM 7.3 - PT traveller information.** High socio-cultural and institutional replicability (high acceptance of users and a general consolidated regulative and legislative framework between local transport operator and municipality) make this business model replicable. On the technological side, some difficulty may arise in the integration of information targeted to tourists with information about the mobility of public transport as in some contexts the information could be stored in different data sources and have different formats
2. **Las Palmas LPA 7.4 - Integrated payment solutions.** high acceptance among users (making easy to purchase and use the tickets) play an important role in making this business model replicable. However, a smooth replicability also needs a proper institutional and technological context, e.g. the presence of private public transport operators may represent a problem in terms of agreement on investment and regulative aspects, on the institutional side, and

the need to integrate the technical infrastructure already in place and the software modules already under operation (i.e. accounting applications and procedures, etc.) may hamper the replicability.

3. **LIM 7.4 - Mobility application and travel planner for smart phones.** Business models related to applications for travel planner available for mobile platforms seem to be replicable only in presence of site-specific conditions, as in Elba, where the framework conditions for setting up the Elba Shared Mobility Agency are under way and may facilitate the implementation of such types of applications.

On the basis of the potential replicability as emerging from the questionnaires filled-in by the DESTINATIONS stakeholders, four clusters of measures are identified:

1. Public transport information systems (Limassol)
2. Integrated payments solutions for mobility (Las Palmas)
3. Public e-bike system (Las Palmas)
4. Building a sharing mobility culture (Rethymno)

These clusters will represent the basis for organising the knowledge sharing jam to be held in Limassol (March 2020), during the Project partner meeting.

Concerning the Level 3 (Local Investment Plan, unlocking additional funding and investment) City partners have all shown many different ways of boosting the impact of the planned investment by identifying synergies with relevant programmes and projects. We have seen the unlocking of:

- grants from the European Regional Development Fund;
- loans from the European Investment Bank;
- contributions from hotels and tourist attractions;
- discounts offered by shared mobility operators; and
- greater commitments for funding from local municipalities and transport ministries.

2 The DESTINATIONS Business Model Catalogue

Business models were devised for a number of measures in the six DESTINATIONS sites, using the Lean CANVAS Methodology. The methodology has been applied in the Kick-Off Trainings (KOTs) organized in the 6 DESTINATIONS sites to analyse business scenarios for a number of measures selected in each site, summarized in the list below.

MEASURES FOR POTENTIAL BUSINESS MODELS DEVELOPMENT -- as defined at site Kick Off Training Meeting	
ELB 4.1	Shared ELBA Mobility Agency
LPA 4.1	Public e-bike system
LPA 6.1	Green credits scheme
LPA 6.2	Green Label Award and Tourist mobility card
LPA 7.4	Integrated payment card
LIM 6.2	Combined tourist and mobility products: Green Label Award and Tourist Mobility Card
LIM 7.2	Creation of an electric bus hop on hop off service
LIM 7.3	Public Transport travel information system – advertising on electric signs
LIM 7.4	Mobility application and travel planner for smart phones
MAD 6.2	Green credits: A Business Model for Mobility, Sustainability and Tourism
MAD 7.2	Attractive Public Transport
MAL 6.1	Green Mobility Hotel Award
MAL 6.3	Promoting sustainable mobility among tourists (Green Mobility App)
MAL 6.4	Smart parking management system for Valletta
RET 4.2	Building a sharing mobility culture
RET 5.1	Sustainable Freight Logistics Plan
RET 5.2	Cooperative mobility: business case on UCO to biodiesel chain

MEASURES FOR POTENTIAL BUSINESS MODELS DEVELOPMENT -- as defined at site Kick Off Training Meeting	
RET 6.1a	Sustainable mobility agency for tourists/visitors
RET 6.3	Green Mobility Card

Table 2: Measures selected for business models (KOTs)

3 Criteria to assess the scalability (within sites) and replicability (across sites) of the most promising measures

3.1 Criteria and guidelines to assess the scalability to level 1: Business Model concept

- 1) The criteria and guidelines for this level of analysis are based on the single elements/steps of the LEAN CANVAS Business Model method, summarised below (see also Annex I for a summary table) **PROBLEM** - find 3 main problems you are addressing.

Explain: **What** is the problem, for **who** is it a problem, and **why** is it a problem.

Additionally, attempt to add numbers or quantifiable indicators that will clearly highlight the scale of the problem.

Describe EXISTING ALTERNATIVES - Find out how they are solving the problem now (today's alternatives)

- 2) **CUSTOMER SEGMENT** - identify who has the problem, define target customers (do not confuse with users).

Be clear on explaining the geographic location of your customers, the industry in which they are operating in, as well as connecting them to the problem in question.

EARLY ADOPTERS - find a small niche that is having the biggest problem, the ones that suffer the most (early adopters).

These will be the first customers of your solution; Be sure to find as much information about these as possible. Explain the geographic location, connect them to the problem, explain exactly why these will be the first adopters, clarify your current connection to them etc.

- 3) **UNIQUE VALUE PROPOSITION** - Define your UVP based on the today's alternative, what makes your product more efficient for your customers, a single and compelling sentence that makes everybody understand why you are far better (your features need to be compelling to the customers' needs, otherwise are irrelevant to clients).

Ensure that you clearly define how you differentiate from alternative solutions, and why the customer will come to you; Explain the **uniqueness** of your solution.

Provide facts and data, explaining the performance of your product compared to alternative solutions (efficiency increase of 20%, decreased energy consumption of 10% or 30% less development costs for example).

- 4) **SOLUTION** – outline the main features of your solution. When your features are similar to the ones of the competitors, this is an equality. What matters are the points of difference! What you do, that the others do not do and is what matters to the clients.

Be sure to explain the format of your solution (is it a machine, an equipment, a software, a service, a process, etc.), what it does, and how it does it.

- 5) **UNFAIR ADVANTAGE** – what is it that gives you an advantage in front of the competition? Something that can't be easily copied or bought.

This could be IPR, being first movers on new technology that takes years to develop etc. Be sure to explain, *why* the listed points provide you with an advantage. It can be difficult for third-parties to understand, if they do not have a wide array of knowledge regarding your industry.

- 6) **REVENUE STREAMS** - which will be the main revenue streams when the solution is ready for the market. Explain how each of them will generate revenue and how much you expect to generate from each stream.

- 7) **CHANNELS** – How will you reach your customers?

Be sure to investigate whether the chosen channels are suitable for your choice of customers and consider whether they will be enough to establish the needed reputation on the market.

Estimate revenues for seed stage after 6 months and after 3 years. Quantify amounts and prices by detailing, for example, the expected amount of services provided and paid, amount of licenses sold at which prices etc.

- 8) **KEY METRICS** – key activities you will measure to track the success (e.g. units sold, users registered, retaining users, paying customers, number of complaints ...)
- 9) **COST STRUCTURE** – which will be the main costs when the solution is ready for the market (e.g. customer acquisition costs, distribution costs, hosting, people etc).

3.2 Criteria and guidelines to assess the replicability at level 2: Replicability of solutions and start-ups

The analysis of replicability of solutions seeks to determine the replication potential of solutions/measures in a specific context, taking into account any local factor that could influence the applicability of the solution. The method is based on the analysis of 3 specific dimensions:

- 1) **Socio-Cultural**;
- 2) **Institutional**;
- 3) **Technological**

The method considers both **specific factors proper of the solution** under assessment as well as **local factors relevant for the context** where the solution is supposed to be replicated. Data on local context are obtained through questionnaires addressed to the stakeholders from the city (policy makers and operators), while elaborations on the assessment of replicability potential are defined mostly through desk research activities (see chapter 5).

3.3 Criteria and guidelines to assess the replicability at level 3: Replicability of investment plans

The analysis of Local Investment Plan is carried out in the section 5.3. The CIVITAS DESTINATIONS sites prepared Local Investment Plans which set out objectives for securing funding and financing, the actions taken and the results.

The analysis presents selected measures which have already successfully secured external investment, the effect on measure outputs and the lessons learned which can enable valuable dissemination between partners and the whole CIVITAS network.

Guidelines have been developed in order to collect relevant information across the DESTINATIONS sites. The guidelines include the following topics:

- Identification of the potential measure;
- Identification of the source of additional funding source;
- Definition of objectives;
- Indication of the actions to be developed in order to secure the additional funding;
- The status of the actions.

4 Scalability of the most promising measures in the 6 sites

The following sections provide for each site the overview of the key challenges and issues addressed in the KOT, and the Business Models identified and analysed with the support of the LEAN CANVAS method.

4.1 MADEIRA

4.1.1 Context and challenges

In the specific case of Madeira, DESTINATIONS aims at:

- Increase the use of the urban public transport by tourists and locals;
- Increase the use of rural public transport and sustainable modes by tourists, to encourage visits to the countryside and main touristic events;
- Decrease the number of cars in critical areas;
- Decrease congestion;
- Decrease noise level and improvement of air quality;

In order to fulfil these objectives, it was relevant to design and implement new solutions that would fulfill relevant market needs. Accordingly, it was decided to focus on the following market needs:

- Access to real-time and on-line information about buses transit times and routing;
- Cheaper tickets / increased accessibility in using public transportation;
- Higher convenience in the purchasing of tickets for using public transportation.

The development of a solution that would fulfil these market needs would also permit to increase the customer base of Madeira's public transportation, through the increase of the number of trips per customer, as well as the number of new customers, mainly tourists. Two solutions were proposed: i) e.GIRO (MAD 7.4) online ticketing system which is more convenient and displays real-time information of transportation transit times, and other relevant info; ii) Green points app - reward & recognition program displaced as a mobile app that allows users to receive personalized and exclusive information, offers and promotions, geo-localized and in real time based on their profile, usage habits and location.

The early adopters of these solutions would be young people, like school students, since they use public transportation on a daily basis, and they own and use smartphones for obtaining almost everything, from information to the purchase of services and goods. Therefore, there is the expectation in this target segment of specific customer service, that convenience, a money back guarantee, the right price, will be important features of the service.. Also, when considering market trends in general, there is a growing demand for shopping apps today.

One important issue to be considered was the definition of the so called "unfair advantage" of the new solutions. This issue was extensively debated, and it was highlighted the need to develop solutions that are intermodal (possibility to be used in different modes of transportation), inter-operator (possibility to be coupled with the systems of different transport operators), and multi-service (linkage with different service providers, outside transportation scope, like parking systems). Also, security of data has to be well-thought-out since it is

necessary to comply with the new EU regulation on this matter. It was also discussed the different types of intellectual property protection, and the limitations of protecting software.

4.1.2 Business models

Two business ideas were proposed. The first one was an **online ticketing system, named e.GIRO**, which is more convenient and display real-time information of transportation transit times, and other relevant info. The second idea was a **loyalty program, named Green Points**, accessible through a mobile app that allows users to receive personalized and exclusive information, offers and promotions, geo-localized and in real time based on their profile, usage habits and location. During the discussion two lean CANVAS were built, which summarizes the main features of the two business models.

Although KOT participants had identified two different business ideas, it became clear during the discussion that those may become complementary. In this case, the e.GIRO would be the main product and it would comprise a loyalty tool - Green Points program. This strategy would enable a higher market penetration, since customers would feel rewarded through the use of e.GIRO which, in turn, would increase their use of e.GIRO solution. Also, it would enable the implementation of two different revenue streams:

- Fares;
- Fee from publicity and partners/suppliers.

From the Horário de Funchal (HF) perspective, this strategy would also enable the company to take benefit from having a detailed database of users' profile. On the one hand, it would permit a better fit between customer needs and the product/service offered, through understanding of customer consuming habits and preferences. On the other hand, it would allow to implement geo-localized and personalized marketing campaigns paid by partners/other businesses suppliers.

Besides the validation of the market, it is key to assess technology feasibility. The solution encompasses a technology platform that would connect different systems (omnichannel) with different security protocols. This represents a challenge from the technology point of view, and a detailed technology roadmap is needed.

After the validation of both the market and the technology, it is needed to develop a go-to-market strategic plan, as well as the identification of potential partners to be involved in the loyalty program.

Simultaneously, the team needs to define a pricing strategy, since that will be determinant to lock in the customer. Consequently, it would be advisable to elaborate the financial plan to assess the need for additional funds to incorporate new key personnel and marketing expenses connected to the initiate market expansion, mainly at international level. In order to accelerate and de-risk product development, moving to market readiness, the team needs to identify new sources of funding, such as entrepreneurship competitions and business angels.

The following are the CANVAS drafted by the team for the two measures mentioned above:

eGiro Card Lean Canvas (MAD 7.3)

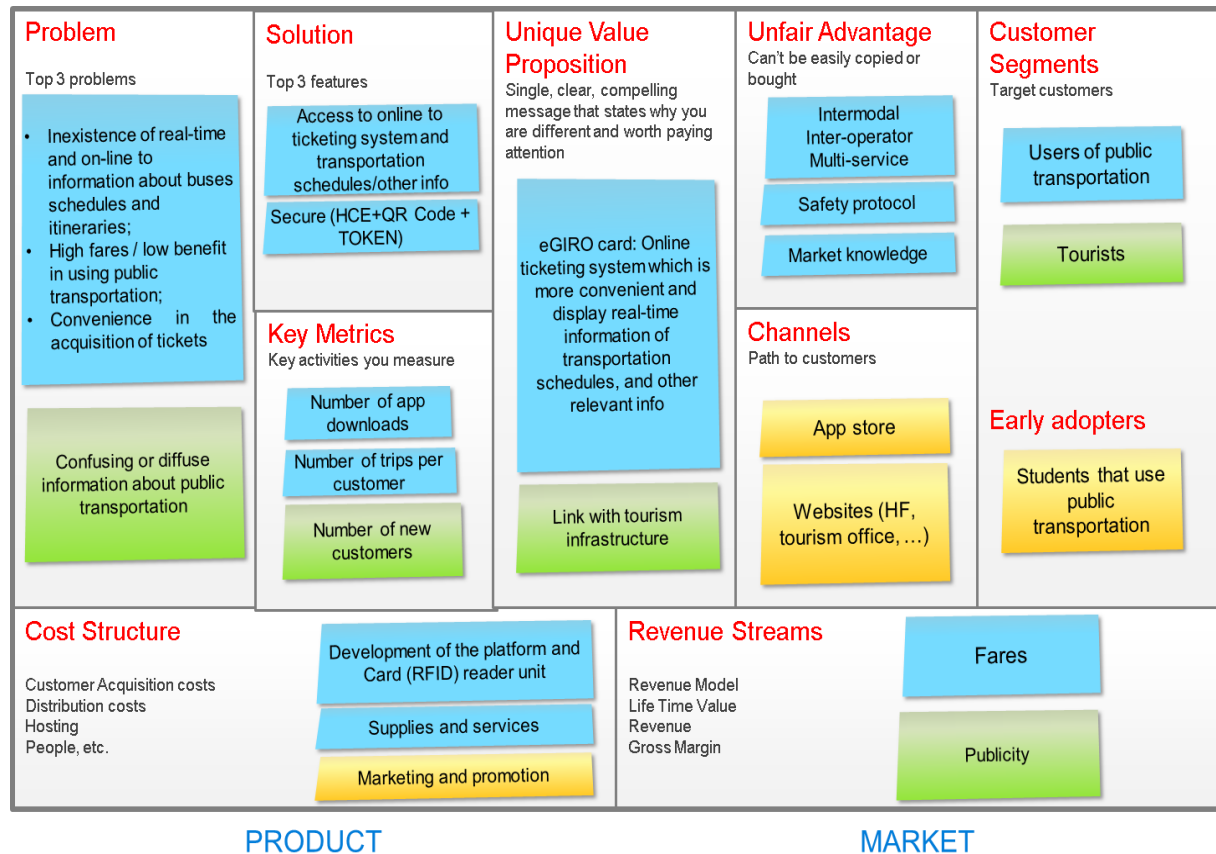


Figure 1 – MAD eGiro Card Lean Canvas

Green points app Lean Canvas (MAD 6.2)

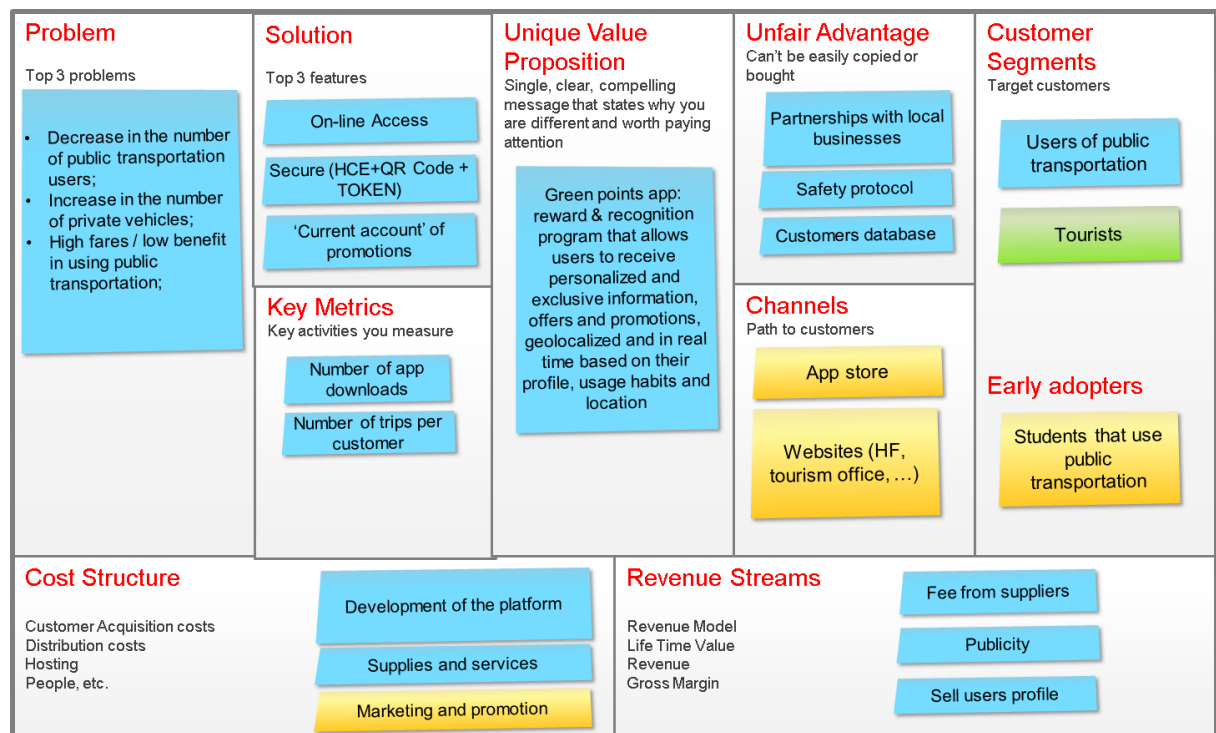


Figure 2 – MAD Green points app Lean Canvas

4.2 LIMASSOL

4.2.1 Context and challenges

A presentation was carried on business models trying to move beyond the basic approach in which a profit is the consequence of selling a product or service beyond its production or delivering costs.. Also examples were discussed on models like:

- “Triple bottom line” that gives equal weight to the social, environmental, and financial impacts of their activities;
- Sharing Economy/Peer Economy;
- Freeware/Fremium models;
- Volunteering.

The conclusions drawn from the KOT in brief address the following domains::

- Organisational: there should be interactions between all business models and all products complementing and supporting each other;
- Co-operative: all stakeholders should support each other during implementation and synergies should continue even after the end of the project;
- Managerial: a risk analysis has already being made and should be taken into account during implementation;
- Informational: press releases are useful marketing tools especially in the relevant newspapers;
- Strategical: feasibility studies for the new products would be recommended especially if they are to be allocated to private companies for exploitation and in order to assess market potential and pricing;
- Promotional: in promotion campaigns put added value benefits as one of the objectives as well as sustainability; Utilize web2 for exposure as much as possible (Website, Wiki, Youtube, Fb, Twitter, Rss feed, Blogs).

4.2.2 Business models

The participants focused on the measures selected for the business model analysis, and drafted the following CANVAS. The measures considered are the following:

- LIM 7.3 - PT traveller information system: the measure includes twenty-five ‘Smart’ bus stops will include electronic signs that advise people about the waiting time for the next bus
- LIM 7.4 - Mobility application and travel planner for smart phones to provide real time information. The app will be tailored to both residents and tourists focusing on the effective use of sustainable mobility modes by both target groups;
- LIM 6.2 - Business cases for combined tourist and mobility products. The Green Label will be awarded to hotels that commit to encourage the use of sustainable mobility modes by their guests, share links with sustainable mobility information.
- LIM 7.2 - Creation of an electric bus hop on hop off service in the old town. Two hop on hop off buses will offer the chance to visitors and residents to follow a route and visit a significant number of museums, archaeological sites and other landmarks in the town.

PT travel information System – advertising on electronic signs (LIM 7.3)

1) Problem 1. Lack of information for public transport routes and timeline. 2. Lack of information for users inside the bus.	4) Solutions Better quality electronic signs eco-friendly	3) Unique Value proposition 1. Provide tourist information to PT users and promote through advertisements various products and services 2. Tourist Information about specific landmarks 3. More time planning accuracy of the bus users.	5) Unfair Advantage LTC will be the only company that will install and operate electronic signs in cooperation with the Ministry of Communication.	2) Customer segment PT users (students, employees, citizens, tourists)
	8) Key Metrics 1. Questionnaires and data that will be collected 2. Comparing customer level before and after		7) Channels 1. A company that will undertake the advertisement 2. Various companies that want to promote their services and products	
9) Cost structure Purchasing of the electronic signs and software 1. Installation of the equipment 2. Maintenance costs			6) Revenue Streams Revenue will be created through advertisement on the electronic signs in the buses and at the bus stations	

Figure 3 – LIM PT travel information System Lean Canvas

Mobile application and travel planner for smartphones (LIM 7.4)

Problem Paper maps Static information No information	Solutions Mobile app Offline & Online Points on the map Points on categories Share / Connect / Contact	3) Unique Value proposition Updated information Travel Planning Map routes Book online Online contact	5) Unfair Advantage Online chat Online contact	2) Customer segment Travelers with smart phones
	8) Key Metrics Analyse the statistics		7) Channels Banner at the airport, port Via Wi-Fi Social media	
1) Cost structure 10.000 implementation 5.000 testing 15.000 marketing 5.000 updates / maintenance			6) Revenue Streams Ads Companies directory Sell: data, information, trends	

Figure 4 – LIM Mobile application and travel planner Lean Canvas

Green Label award and tourist mobility card (LIM 6.2)

<p>1) Problem <i>Getting tourist/hotel stakeholders to commit in green development</i> <i>Benefitting from the trend towards sustainable / green development</i> <i>Creating awareness and interest about sustainable mobility options and tourist businesses</i> Existing alternatives to address the same problems: Blue flag award, Green key</p>	<p>4) Solutions (Top 3 features) Participating stakeholders will have to satisfy a number of criteria to qualify as Green Label partners. Travellers looking for sustainable holiday options will prefer Green Label hotels and businesses, thus stakeholders will benefit from additional business. The tourist mobility card will promote mobility services at special rates plus other tourist businesses with discounts or other bonuses for users. Cross-selling will be encouraged, and the travellers will have a more enriched experience.</p>	<p>3) Unique Value proposition The Green card will provide a marketing tool to participating businesses The Tourist Mobility Card will provide discounted mobility services to travellers as well as information to enrich their holiday experience. This will also promote cross-selling.</p>	<p>5) Unfair Advantage The Limassol Tourism Board has as members a good number of hotels and tourist businesses in Limassol. Therefore the company has the network that will enable it to set these two programs up. For a competitor to do the same, it will be very cost ineffective to contact and convince all these businesses one by one. The customer will pay less for more and will also be aware of additional travel and tourist services/products that might have gone unnoticed, all contributing to an enriched holiday experience.</p>	<p>2) Customer segment <i>Users/Stakeholders: hoteliers and tourist businesses</i> <i>Customers: Visitors (mainly from UK, Russia, Germany, Scandinavia) that will be attracted by the green philosophy of a business and will benefit from discounts and offers for products and services that will enrich their holiday experience (tourist mobility card).</i> <i>Strongest customer segment: Green travellers that are especially interested in sustainable products/services.</i> Early adopters: German and Scandinavian travellers that are more interested in sustainable travel</p>
	<p>8) Key Metrics Green Label: participating companies and tourist comments online Tourist mobility card: participating companies and sales</p>		<p>7) Channels <i>The Tourist Mobility Card will be sold through hotel front desk, the Limassol Bus Company and Nextbike (bikesharing). It will also be sold electronically aiming at green travellers through social media campaigns and tourists already in Limassol through promotions at the free WiFi hotspots created by the company.</i></p>	
<p>9) Cost structure Mainly personnel cost, minor costs such as flags, trophies, plastic cards, and promotional cost. Estimate costs after seed stage 6 months and 3 years.</p>		<p>6) Revenue Streams The Green Label Award will not generate direct income. Indirect income will be generated through increased arrivals in the long run, once Limassol is established as a green destination. The Tourist Mobility Card will generate an income of i.e. €5x1000 visitors in six months, with a 30% increase per annum in sales.</p>		

Figure 5 – LIM Green label award and tourist mobility card

Hop on Hop off bus for the main touristic areas (LIM 7.2)

1) Problem - Not on schedule - Not very attractive routes - Not so recognizable	4) Solutions - <i>The ticket can be used as a discount coupon for a restaurant/bar/retails/gift shops</i> - <i>Local guide to inform and entertain the passengers</i> - <i>To have all main languages</i> - <i>Each individual can research the destinations at his/her own time on their own phone</i>	3) Unique Value proposition - <i>Incentives with the ticket</i> - <i>Tour guide</i> - <i>Multilingual</i> - <i>App guides</i> - <i>Hybrid buses/environmental friendly</i> - <i>Night route (for nightlife activities)</i>	5) Unfair Advantage - <i>Due to regulations it cannot be copied (unless in another city)</i> - <i>~20 euros ticket for customer (but with benefits)</i>	2) Customer segment - <i>Tourists</i> - <i>Locals</i> - <i>Special Interest Groups</i>
	8) Key Metrics - The tickets - Rate and comment section (reviews) on the app guide		7) Channels - Info kiosks - Hotel tour operators - Travel agencies - Internet - City newsletter	
9) Cost structure - <i>Initial cost</i> - <i>Functional cost (constant)</i>	6) Revenue Streams - From tickets - From advertisements on the bus - Sponsors - 5% to 6 months and 50% to 3 years			

Figure 6 – LIM Hop on hop off service Lean Canvas

4.3 RETHYMNO

4.3.1 Context and challenges

During the first part of the KOT, a presentation was delivered presenting the Lean Canvas approach. The facilitator introduced the participants to the concept of the service design and worked with them to identify challenges and drivers for the predefined measures.

The first challenge was to reach a common level of understanding on the main components of the CANVAS. The need of having a realistic approach for the process in relation to the target group, needs to be address, funding requirements and feasibility of the products/services to be developed. The Municipality mission is to support the design of touristic/mobility products that will affect positively the life of locals and the competitiveness and sustainability of the site as tourism destination in the long term.

Amongst the challenges discussed was the role of public entities at the business modelling process. Public entities could initiate, test and support the development of business oriented models however the business model will not finally be undertaken by the public entity. The commercial exploitation is up to the private sector depending on the profitability, economies of scale and sustainability of innovative actions. The debate was on how the mobility services / solutions will attract, inspire and motivate the uptake from local SMEs and entrepreneurs.

Further challenges were debated deriving due:

- the tourists and citizens current mobility habits and the long term plan for mindsets change (to create the critical mass in order to make financial viable new sustainable mobility services)
- the inertia of local businesses to change their way of doing business
- the continuous (year per year) increase of tourist load making essential a strategic plan to enhance the cooperation of the Transport and Tourism sectors, to support a modal shift of visitors/tourists towards more sustainable mobility options and to improve the image and attractiveness of Rethymno as a sustainable destination
- support mechanisms available for a step by step uptake of the predefined measures, considering the lack of funds for applying state-of-the-art technology, full scale infrastructures and large campaigns
- legislative limitations for the small-scale biodiesel production plan to exploit local potential at the local level (currently the supply chain –transferring to/from the mainland is not sustainable)

The KOT participants also refer to their considerations for each of the measures, for further discussion with a wider stakeholders group:

- How attractive is the measure/service/product for tourists? How could it contribute to boost tourism inflow and the vibrancy of the local economy?
- Which arguments/motivation/incentives to engage local tourism stakeholders (hoteliers, tour operators/ agencies, transport operators, others?) as multipliers/“uptakers” of the measure/service/product?
- How to engage tour operators to add sustainable mobility concepts to their “package”?

4.3.2 Business models

The participants, following the guidance of the subcontractor delivering the KOT, drafted the Lean Canvas exercise, in a brainstorming session, for the following measures considered as more pertinent and mature to bring exploitable results/“products”.

- RET 4.2 Building a sharing mobility culture: the introduction, pilot testing and expansion of shared micro mobility services (bike, e-bike, e-scooter), and of a web based sharing platform in order to create a critical mass of users (citizens, visitors, students and tourists) and to ensure sustainability.
- RET 5.2 Cooperative mobility: business case on UCO to biodiesel chain, operating a new smart UCO collection network and studying the feasibility of local supply chains and setting up a local, small scale, biodiesel production plan
- RET 6.1.a: Sustainable mobility agency for tourists/visitors by setting up and operating a new service to promote sustainable transport and tourism services to tourist, also before arrival.
- RET 6.3 Green Mobility Card, examining the feasibility of developing the business configuration for a loyalty scheme to encourage tourists and citizens to commute daily using more sustainable lifestyle patterns including the service characteristics, users’ motives, rewards by the local small businesses, potential investors and technical requirements.

Building a sharing mobility culture (RET 4.2)

<p>1) Problem Congestion on Center Pollution from transportation Effectiveness of transportation</p>	<p>4) Solutions Better quality electronic signs eco-friendly, Integrated services</p>	<p>3) Unique Value proposition 1. Provide information and promote through advertisements various products and services 2. Tourist Information about specific services 3. More time planning accuracy of the bus users.</p>	<p>5) Unfair Advantage RET will be the only that will operate the platform.</p>	<p>2) Customer segment Students, center employees, citizens, tourists) People from surrounding villages Students Employees in the center Tourists from other areas</p>
<p>9) Cost structure Purchasing of the infrastructure 1. Installation of the platform 2. Maintenance costs</p>		<p>6) Revenue Streams Revenue will be created through advertisement on the transportation means.</p>		

Figure 7 – RET Building a sharing mobility culture Lean Canvas

Sustainable mobility agency for tourist/Visitors (RET 6.1 a)

<p>Problem No designated service to coordinate mobility services and provide all necessary information for tourists Information on mobility Non existing easily Combination of information</p>	<p>Solutions A dedicated Sustainable Mobility Agency will coordinate all transport activities / stakeholders and will initiate/promote relevant services. Car pooling Include service in Existing agencies – infokiosks Web platform</p>	<p>3) Unique Value proposition Updated information Travel Planning Engagement of tour operators, hotel booking services, PT operators and other Tourism stakeholders</p>	<p>5) Unfair Advantage Transport information and plans development</p>	<p>2) Customer segment Environmentally cautious Travellers Green Tourists Milenials, Students, Elder, Mobility difficulties Sponsors</p>
<p>1) Cost structure Infrastructure Maintenance Advertisemnt</p>		<p>6) Revenue Streams Ads Companies directory Sell: data, information, trends Products – souvenirs Advertisement from Banners in web platform Touristic services Touristic card Subsidised Programs B2B</p>		

Figure 8 – RET Sustainable mobility agency Lean Canvas

Green mobility card (RET 6.3)

1) Problem <i>No such scheme available. No smart card system to allow customers to pay for the urban public transport trips and benefit from prepaid and discount tickets and other combined services.</i>	4) Solutions <i>Define a green credit scheme, promoting sustainable mode of transportation and providing benefits both to visitors/tourists and local/regional businesses</i> 8) Key Metrics <i>Green Label: participating companies and tourist comments online</i> <i>Tourist mobility card: participating companies and sales</i>	3) Unique Value proposition <i>The Green card will provide a marketing tool to participating businesses</i> <i>The Tourist Mobility Card will provide discounted mobility services to travellers as well as information to enrich their holiday experience. This will also promote cross-selling.</i>	5) Unfair Advantage <i>The customer will pay less for more and will also be aware of additional travel and tourist services/products that might have gone unnoticed, all contributing to an enriched holiday experience.</i> 7) Channels <i>The Card will be sold through hotel front desk, the Bus Company and bikesharing. It will also be sold electronically aiming at green travellers through social media campaigns and tourists through promotions at the free WiFi hotspots created by the company.</i>	2) Customer segment <i>Visitors (mainly from UK, Russia, Germany, Scandinavia) that will be attracted by the green philosophy of a business and will benefit from discounts and offers for products and services that will enrich their holiday experience (tourist mobility card).</i> <i>Strongest customer segment: Green travellers that are especially interested in sustainable products/services.</i> <i>Early adopters: German and Scandinavian travellers that are more interested in sustainable travel</i>
9) Cost structure <i>Mainly personnel cost, minor costs such as plastic cards, and promotional cost.</i> <i>Estimate costs after seed stage 6 months and 3 years.</i>		6) Revenue Streams <i>The Green card will not generate direct income. Indirect income will be generated through increased arrivals in the long run, once Rethymno is established as a green destination.</i>		

Figure 9 – RET Green mobility card Lean Canvas

A brief discussion was also held on measure RET 5.1: Sustainable Freight Logistics Plan, which was finally found not relevant for future exploitation from the market.

Cooperative mobility: business case on UCO to bio-diesel chain (RET 5.2)

1) Problem <i>Currently the collected UCO is transferred in mainland for its transformation making the full chain not viable.</i>	4) Solutions <i>Operation of the full UCO-to-biodiesel transformation chain locally</i> 8) Key Metrics <ul style="list-style-type: none"> - UCO Collected 	3) Unique Value proposition <i>UCO produced locally to be transformed and exploited locally</i>	5) Unfair Advantage <i>To the benefit of the municipality and to the benefit of the local economy and environment</i> 7) Channels <ul style="list-style-type: none"> - Local fuelling network - Info kiosk 	2) Customer segment <i>Self utilisation from municipality</i> AFTER LEGAL FRAMEWORK CHANGES <ul style="list-style-type: none"> - Tourists - Locals - Special Interest Groups
9) Cost structure <ul style="list-style-type: none"> - Initial cost - Functional cost (constant) <i>Recycling unit for 100 lt is 20.000</i> <i>Infrastructure is 100.000 (space)</i>		6) Revenue Streams <ul style="list-style-type: none"> - Self sustained 		

Figure 10 – RET Cooperative mobility Lean Canvas

4.4 ELBA

4.4.1 Context and challenges

The main challenge is developing the Elba Sharing Mobility Agency (SUMA Agency, Measure 4.1) and the services already identified and designed by MEMEX with the Municipalities of Rio and Portoferraio. The Elba Sharing Mobility Agency (SUMA Agency) is designed as the entity for planning, managing and coordinating different ride sharing services and the related user information in close relation with the conventional public transport services. Based on the contribution of MEMEX, the dedicated organization and structure for the Agency operation has been defined. The Agency operation will be supported by an innovative Information and Communication Technology (ICT) platform (web Platform and Apps - Measure 4.3).

The approach considered sustainability set-up that can use resources (staff) coming from the local institutions and the possibility to use the financial support from DESTINATIONS for the start-up stage of the Agency. To implement this approach is necessary to create a common level of understanding on the main components of the business model, and develop more than a CANVAS in relation to each of the key problems to be addressed and the target groups of the agency (residents, tourists, local municipalities).

4.4.2 Business models

The KOT allowed the refinement of the concept of SUMA Agency into a structure dedicated not only to manage the ridesharing services but also to provide infomobility service to residents and tourists and to support the Local Authorities for mobility planning and document management in relation to the higher level authorities (Livorno Province and Tuscany Region).

The first information provided by MEMEX as an input to KOT discussion defined SUMA as the structure dedicated to plan, manage and coordinate the different ride sharing services, user infomobility services and mobility planning support. Its activity is based on:

- development of an ICT platform (ELB4.3)
- backstage and services operation, networking of rental operators (ELB 4.1, ELB 4.2, and ELB 4.4).

Activities will require resources both for operating the overall services (ride sharing, infomobility, operators networking) and for keeping and maintaining the ICT platform and the backstage support conditions.

The unique value proposition of the SUMA Agency will be the offering of a unique point of access to all information on the overall mobility offer in a consistent and efficient way (information, booking, etc.) and its role as “broker” for the management and coordination of the different flexible and ridesharing services integrated with conventional public transport services.

4.5 MALTA

4.5.1 Context and challenges

A key challenge emerged during the discussion held in the KOT was how public entities that are leading and piloting innovative concepts (the measures) can and should be aiming towards the structuring of such concepts in a manner that can lead to their long-term financially

sustainable implementation and scale-up after the piloting. Such further understanding appears to be needed not just at the level of some of the partners' representatives, but even more at the decision-making level within the public/ governmental organisations that they are part of. Such long-term sustainable exploitation does not necessarily need to be undertaken by the public entities partners themselves, just because they initiated the concept (measure) and piloted it. It is exactly with such due consideration of the ultimate socio-economic and financial objectives and "reason d'être" of the organisations driving these measures, that exploitation forms/routes should be chosen and business modelling based on. The aim of ensuring long-term sustainable exploitation does not necessarily mean a focus on making money but a focus on financial sustainability and ensuring that costs are ultimately balanced by revenues. Moreover, should a systematic financial gap emerge from business modelling (hence difficult to be exploited going forward on a fully commercial basis), but the measure itself is found to be still highly beneficial and relevant to be further implemented and scaled up on the market and in the society, such a gap could possibly be filled-in from public finances. Such a model is already applied in Malta's transport sector in the case of the Public Service Obligation and related agreement with Gozo Channel (Operations) Ltd. Hence, undertaking such business model training and coaching exercise, does not run against the public nature of the local project consortium. The business modelling is not to be undertaken so that government / public entities themselves will commercially exploit such concepts (the measures) in the long term. That is clearly not the role of public entities in a market economy. However, what the business modelling needs to assess is still if such long-term financially sustainable exploitation could be undertaken, to what extent, and possibly by whom, and then to plan accordingly for such exploitation of the CIVITAS DESTINATIONS R&I project results after the project end (and funding from the EU).

4.5.2 Business models

The three measures in the focus of the business model training workshop, are outlined below.

1. MAL 6.1: **Hotel Green Mobility Award & Label** aimed at promoting sustainable mobility and travel plans. MOT and TM will introduce a new and innovative national award for the best green mobility plan proposed by hotels, entitled the Green Mobility Award. The green mobility award shall focus on the hotel industry in order for this pilot to offer a focused approach on the accommodation sector.
2. MAL 6.3: Promoting **sustainable transport** with tourists through an **app** / web portal. This is envisaged to integrate information about various forms of sustainable transportation and touristic attraction points.
3. MAL 6.4: **Smart parking management and guidance system**. The testing is envisaged in Valletta and it is envisaged to deal with the technological solutions adopted for occupancy detection, management of on-street control procedure, payment, collection, integration and provision of real-time user information systems.

The final outcome of the workshop was the decision for an Exploitation Action Plan to be developed by the consortium partners involved in the implementation of a measure. Building on the findings of a proper business modelling process (accounting for both desk-top research and direct potential customers and partner validation of own assumptions), such an exploitation action plan would need to clearly outline a recommended exploitation format, driver and roadmap for exploitation, including risks mitigation actions, milestones and

indicative budget. The findings of this activity will be discussed during the transferring jam session (see chapter 6).

4.6 LAS PALMAS

4.6.1 Context and challenges

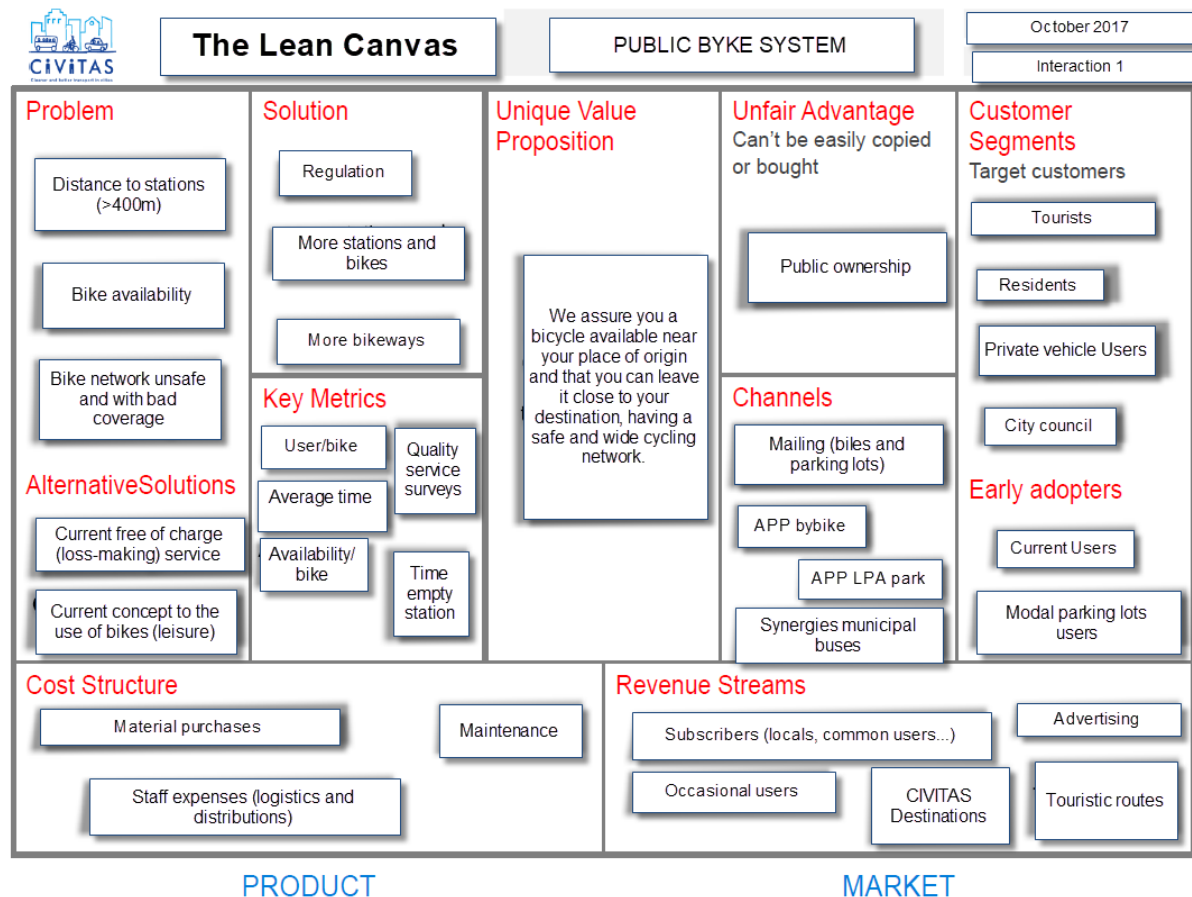
The KOTs aimed to explain the concept of service design and business modelling and the methodologies and tools to be adopted. During the KOT there was a first session where the facilitator described to participants the concept of service design, business modelling, how the lean start-up approach works, and how to approach the BMC (Lean CANVAS). The facilitator also explained the most common mistakes in designing the UVP (unique value proposition) and the business model for services. Participants worked then as a group dealing with three selected measures:

- **Measure 1. Public Bikes (LPA 4.1):** The reinforcement, upgrading, enhancement and expansion of the public bike system in order to obtain more users, (local people and tourists) and to ensure its sustainability;
- **Measure 2. Integrated Payment Card (LPA 7.4):** The creation of tourist passes for mobility, mainly to promote the use of the Municipal Public Buses by the tourist people;
- **Measure 3. Green Credit Scheme (LPA 6.1):** The configuration of a loyalty system for the use of the public transport which encourages its use for tourists, local people, and the participation in giving the rewards by the local small businesses.

4.6.2 Business models

For each measure the business model has been analysed and devised as follows:

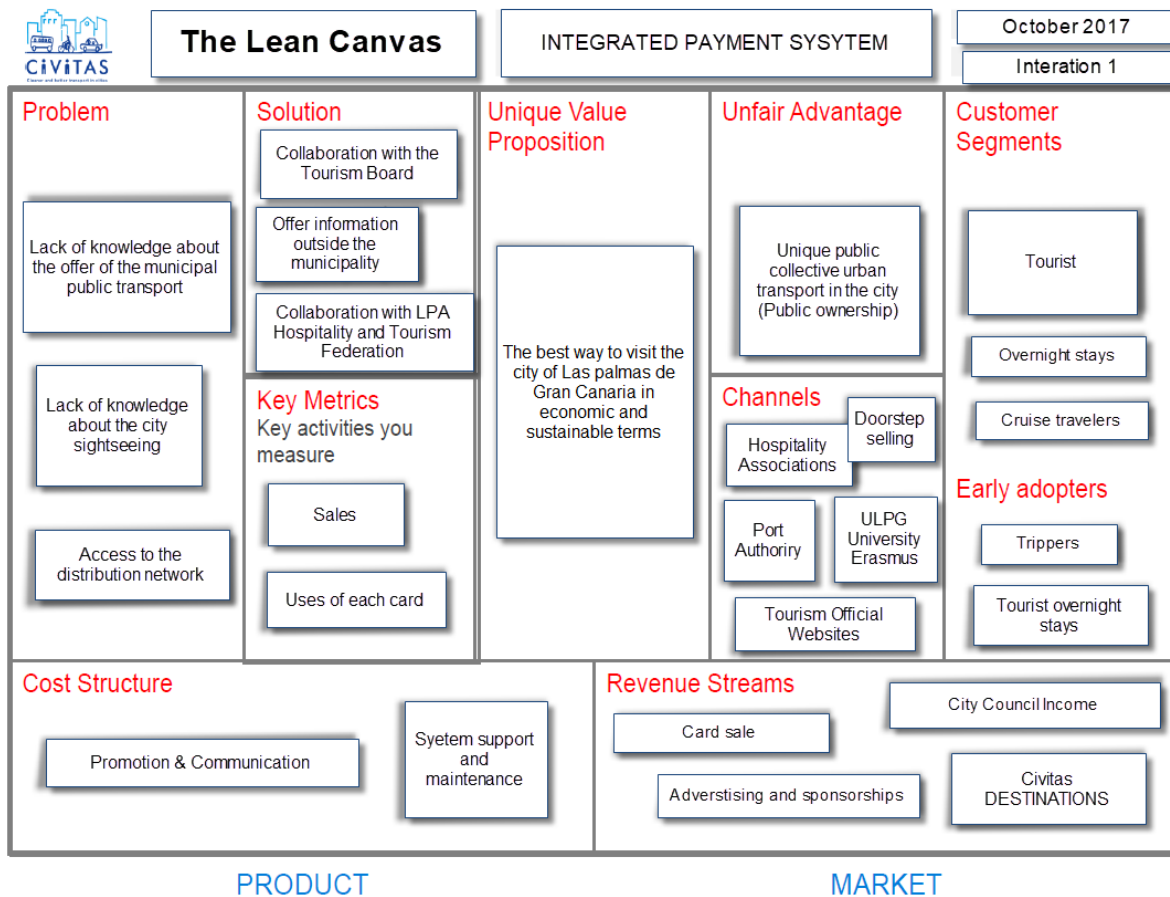
Public Bike System: This first measure consists of the improvement, enlargement and sustainability of the Public Bike System of Las Palmas (more bikes, more bike lanes, more stations, well-tuned mobility policies etc.) in order to attract more users to this cleaner and healthier mobility system. The city of Las Palmas is persuaded of the need of the introduction and use of mobility systems to improve the respect for the environment, the circulation inside the city and even the promotion of healthy lifestyles among its citizens. Therefore, Las Palmas has already a public bike system with 150 bikes distributed in 13 anchor points, but it is required the improvement of its level of use. Below the CANVAS elaborated for this measure:



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Figure 11 – LPA Public Bike System Lean Canvas

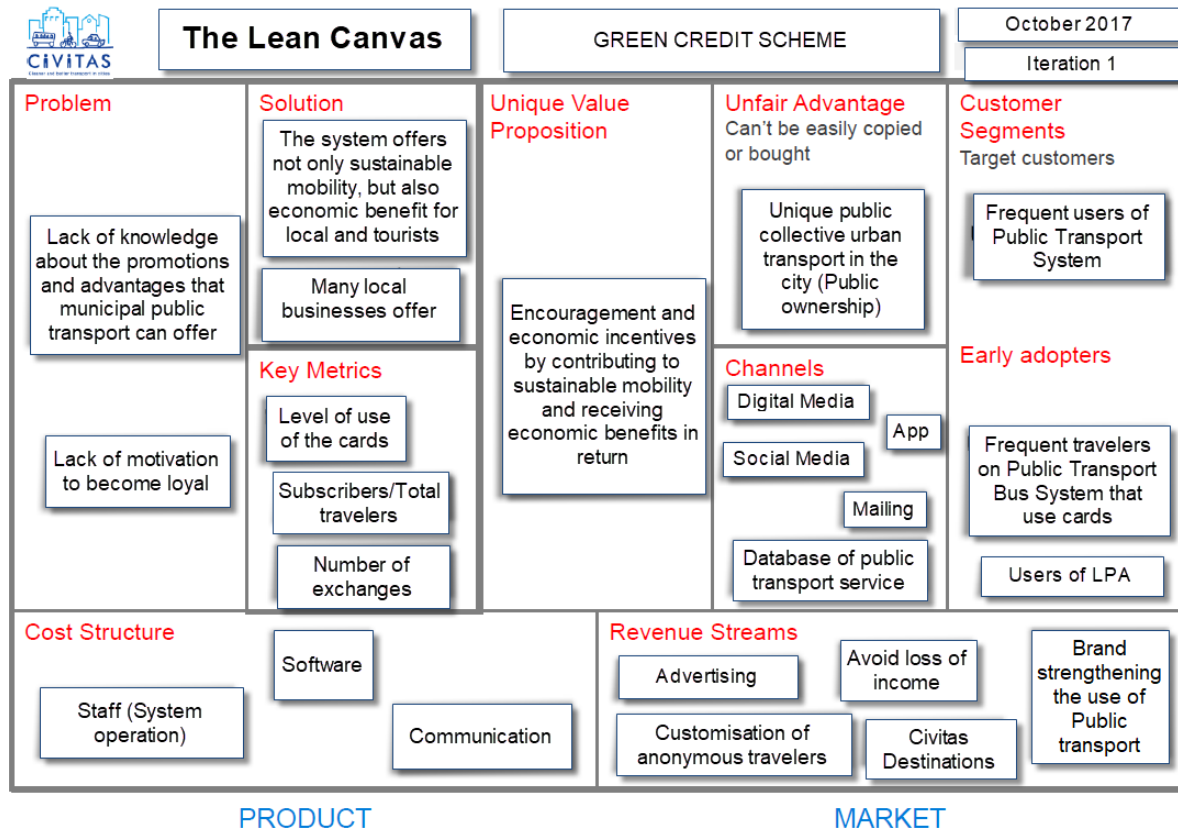
- Integrated payment card:** Guaguas Municipales (the municipal service of public buses of the City of Las Palmas) wants to implement a new payment option for tourists visiting the city of Las Palmas de Gran Canaria, offering them a transportation alternative that suits their needs. The main problem is that potential users do not know that Guaguas Municipales can offer some interesting tickets according to their needs as visitors. Moreover, Guagas Municipales has to design some specific proposals for the tourism requirements. Another problem of our potential customers is that they do not know completely about the tourist attractiveness of LPA, in other words, which places could be visited and the interest to them. It is necessary to guarantee the access to an efficient and optimal distribution network for the delivery of the tickets. Below the CANVAS elaborated for this measure:



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Figure 12 – LPA Integrated payment system Lean Canvas

- Green credit scheme:** The third measure to implement is the creation of a loyalty system for the clients of Municipal Buses. The scheme intends to reward users of public transport, benefiting them with discounts and other advantages, while promoting purchases in small and medium businesses. The main problem is the lack of knowledge about the promotions and advantages that Guaguas Municipales can offer to its customers. The users are ignorant of the benefits that could receive if they subscribe themselves to the loyalty program, and this contribute to reduce their motivation to be loyal. Indeed, if the advantages of being faithful to the transport system are unknown, it will be difficult to motivate the client to do so. Below the CANVAS elaborated for this measure:



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Figure 13 – LPA Green credit scheme Lean Canvas

5 Replicability of the most promising measures across the 6 sites

In order to design a successful replicability analysis, it is crucial to consider all the business model elements, to reflect how they change in transferring the model from one context (Destination A) to another (Destination B). The following list of questions helps to focalise the analysis from the perspective of the “receiving” Destination B:

- Who are the early adopters?
- Competitors (who are you going to threaten and their anticipated response)?
- What is the DESTINATION A is going to offer (value proposition)?
- What is the technical feasibility or maturity of the technology used?
- How are you going to deliver your value proposition?
- How the business will generate revenue?
- Right Team/Resources available (do you have them? Do you need to look for them), who are you going to partner with along the way)?
- What are the risks in your replicability plan and how are you going to mitigate them?

The Destination B team is encouraged to interview potential users and stakeholders face-to-face and test if the Destination A elements are false in Destination B, and iterate the business model based on customer interactions until all replicability hypotheses have been validated (or not).

The analysis of replicability is undertaken for selected couples of destinations and related promising business models to be replicated, and it is articulated in three levels:

- Replicability of solutions (Level 1)
- Replicability of start-up activities (Level 2)
- Replicability of investment plans (Level 3)

5.1 Level 1 analysis: Replicability of solutions

The analysis of replicability of solutions seeks to determine the replication potential of solutions/measures, taking into account local specific factors that could influence the applicability of the solution in other contexts. The method is based on the analysis of 3 specific dimensions:

- 4) **Socio-Cultural**;
- 5) **Institutional**;
- 6) **Technological**

The method considers both **specific factors proper of the solution** under assessment as well as **local factors relevant for the context** where the solution is supposed to be replicated. Data on local context are obtained through questionnaires addressed to users and stakeholders from the local municipality, while data on solutions are defined mostly through desk research activities. Examples of the questionnaires are provided in the annex 2.

ANNEX 3 provides a short description of the approach adopted for each of the above-mentioned dimensions (a more detailed example is provided for the socio-cultural replicability) and how results can be summarised in order to obtain an overall measure of the replicability of the solution.

5.2 Level 2 analysis: Replicability of start-up activities

The methodology described in the section 5.1 is now applied to the selected DESTINATIONS business models in order to evaluate the replicability potential.

Compared to the measures selected for the DESTINATIONS business models catalogue as result of the Kick-Off Trainings (KOTs) showed in Chapter 2, the list of measures considered in this section for the assessment of replicability takes into account the following changes occurred at site level:

- Malta has reached the conclusion that no measure implemented in DESTINATIONS would be amenable to develop start-ups. Therefore, no business model is considered.
- Elba has decided to include an additional measure: ELB 6.1 - Combined products for tourism and mobility: the accommodation and mobility package, not considered during the Kick-Off Trainings (KOTs);
- Limassol has cancelled the measure LIM 7.2 Creation of an electric bus hop on hop off service;
- Rethymno considered as not-relevant in the context of the business model analysis the measures RET 5.1 Sustainable Freight Logistics Plan and RET 6.1a Sustainable mobility agency for tourists/visitors. The Sulp is a targeted measure based on specific characteristics and analysis for Rethymno site. The Sustainable Mobility Agency is finally developed based on a different approach; to be incorporated into the Municipal Technical Services Department and funded by Municipal resources; therefore, is not considered as a business model.

The resulting measures eligible to be analysed in terms of replicability potential are 13, as shown in Table 3. For the sake of graphs readability and data elaboration, the full descriptions of the 13 DESTINATIONS measures have been renamed in short definitions.

MEASURES FOR BUSINESS MODELS		
	DESTINATIONS measure full description	Short description adopted for the replicability analysis
ELB 4.1	Shared ELBA Mobility Agency	S1-ELB Shared mobility
ELB 6.1	Combined products for tourism and mobility: the accommodation and mobility package	S2-ELB Accommodation
MAD 7.4	MAD 7.4 - Public Transport open and smart ticketing system	S3-MAD e.GIRO
MAD 6.2	Green credits: A Business Model for Mobility, Sustainability and Tourism	S4-MAD Green points
LPA 4.1	Public e-bike system	S5-LPA Public Bike
LPA 7.4	Integrated payment card	S6-LPA Integrated pay.

MEASURES FOR BUSINESS MODELS		
	DESTINATIONS measure full description	Short description adopted for the replicability analysis
LPA 6.1	Green credits scheme	S7-LPA Green Credit
LIM 7.3	Public Transport travel information system – advertising on electric signs	S8-LIM Public Transp.
LIM 7.4	Mobility application and travel planner for smart phones	S9-LIM Mobile Applic.
LIM 6.2	Combined tourist and mobility products: Green Label Award and Tourist Mobility Card	S10-LIM Green Label
RET 4.2	Building a sharing mobility culture	S11-RET Sharing mobility
RET 6.3	Green Mobility Card	S12-RET Green mob.
RET 5.2	Cooperative mobility: business case on UCO to biodiesel chain	S13-RET Cooperative mob.

Table 3: Measures for business models replicability

The expected results of the replicability potential assessment are twofold:

1. Ranking the DESTINATIONS business models in terms of replicability potential; from the highest, with replicability potential indexes equal or above 70%, to the lowest ones, with replicability potential indexes lower than 40%.
2. Identifying among the DESTINATIONS sites, clusters of sites declaring the highest replicability potential for specific business models. The identification of potential business models among two or more DESTINATIONS sites represents the basis to the next knowledge transferring jam activity, in which small working groups will discuss in-depth pros and cons of potential business models.

In doing that, the analysis follows a bottom-up approach:

1. At the bottom, the analysis of replicability potential focuses on the specific three components, e.g. 1) socio-cultural, 2) institutional and 3) technological;
2. Then, at a higher level of aggregation, the analysis concentrates on the global index, calculated as an average of the specific components ranking;
3. Finally, the analysis aims at the configuration of clusters of DESTINATIONS sites, on the basis of the evaluations expressed on the replicability potential of business models.

Information on the replicability potential scores and ranking at specific and global level for the DESTINATIONS sites and individual measures are shown in [Figure 20](#) (Madeira), [Figure 21](#) (Limassol), [Figure 22](#) (Rethymno), [Figure 23](#) (Elba) and [Figure 24](#) (Las Palmas), in Annex IV.

5.2.1 Replicability potential of the socio-cultural, institutional and technological components

The analysis by specific components is carried out through the identification, on the one hand, of the most promising measures, with a potential replicability equal or above 70% and, on the other, of the least promising measures, with a potential replicability below 40%.

The informational basis for ranking the measure comes from a dedicated questionnaire filled in by local stakeholders (see Annex II for details), the calculation of ranking is shown in Annex III.

5.2.2 Replicability potential of the overall components

The replicability potential of the business models is calculated as the average ranking of the specific socio-cultural, institutional and technological components. As above, a threshold equal or over 70% is considered an indicator of high replicability, while a score under 40% represents an indicator of problematic replicability.

Table 4 and Table 5 show respectively the overall score for the highest and lowest business models.

DESTINATIONS site	Measure	Rank
Rethymno	S8 -LIM Public Transp.	83,3%
Las Palmas	S8 -LIM Public Transp.	83,3%
Elba	S9 -LIM Mobile Applic.	80,0%
Elba	S8 -LIM Public Transp.	76,7%
Rethymno	S6 - LPA Integrated pay.	73,3%
Limassol	S6 - LPA Integrated pay.	70,0%

Table 4: Business models with the highest replicability

DESTINATIONS site	Measure	Rank
Elba	S13 -RET Cooperative mob.	18,3%
Madeira	S7 -LPA Green Credit	30,0%
Madeira	S1 . ELB Shared mobility	36,7%
Madeira	S2 - ELB Accommodation	36,7%
Madeira	S11 -RET Sharing mobility	36,7%

DESTINATIONS site	Measure	Rank
Madeira	S12 -RET Green Mobility	36,7%
Madeira	S13 -RET Cooperative mob.	36,7%

Table 5: Business models with the lowest replicability

Concerning the highest potential replicability, **the Limassol LIM 7.3 - PT traveller information** system is placed at the top-ranking level. The measure implies the use of ‘Smart’ bus stops, which include electronic signs that advise people about the waiting time for the next bus. The system is designed to address both tourists and residents’ needs, making their travelling with PT more efficient in terms of time and comfort. Information to tourists and residents, which could also convey commercial advertisements, are also provided on the bus, through dedicated photovoltaic displays. Technical requirements concern with devices installation and software functionalities of a central system to control and monitor information on bus positions.

High socio-cultural and institutional replicability (high acceptance of users and a general consolidated regulative and legislative framework between local transport operator and municipality) make this business model replicable. On the technological side, some difficulty may arise in the integration of information targeted to tourists with information about the mobility of public transport as in some contexts the information could be stored in different data sources and have different formats.

Business models involving integrated new payment solutions (e.g. contactless smart cards) as in **Las Palmas LPA 7.4 - Integrated payment solutions** for mobility and tourism represent another highly replicable solution (even at a lower level than public transport traveller information systems). The socio-cultural characteristics, i.e. high acceptance among users (making easy to purchase and use the tickets) play an important role in making this business model replicable. However, a smooth replicability also needs a proper institutional and technological context, e.g. the presence of private public transport operators may represent a problem in terms of agreement on investment and regulative aspects, on the institutional side, and the need to integrate the technical infrastructure already in place and the software modules already under operation (i.e. accounting applications and procedures, etc.) may hamper the replicability.

Business models related to applications for travel planner available for mobile platforms as in the **LIM 7.4 - Mobility application and travel planner for smart phones** seem to be replicable only in presence of site-specific conditions, as in Elba, where the framework conditions for setting up the Elba Shared Mobility Agency are under way and may facilitate the implementation of such types of applications.

Concerning the least replicable business models, Table 5 indicates the presence of two categories of business models: 1) green mobility or green credit business models, as in Rethymno **RET 6.3 Green mobility card** and Las Palmas **LPA 6.1 - Green credits scheme**, in which behavioural changes are at stake, encouraging citizens and businesses to adopt more sustainable lifestyle patterns by providing tangible economic rewards and 2) web-based platforms to incentivise shared mobility schemes, as in Rethymno **RET 4.2 - Building a sharing mobility culture** and Elba **ELB 4.1-4.4 – Shared mobility Agency**.

In the former group, business model replicability is made problematic by the socio-cultural and institutional complexity in establishing a network of cooperative businesses and requiring cultural and behavioural changes from citizens. In the latter, technological constraints may hamper the implementation of web-based sharing services.

Besides, site-specific business models as Rethymno **RET 5.2 - Cooperative mobility - Business case on Used Cooking Oil** to biodiesel may be difficult to replicate due to different waste management services or lack of incentive schemes to involve citizens and community at large.

5.2.3 Configuration of DESTINATIONS clusters of sites

The configuration of clusters among the DESTINATIONS sites represents a methodological tool to support cross-fertilisation and transfer of innovative solutions, with particular reference to the development of business models. Clustering the DESTINATIONS sites means to identify sites and business models whose affinity in terms of business model potential replicability may favour the in-depth understanding of pros and cons of business model take-up.

The knowledge base in clustering the DESTINATIONS sites is the potential replicability analysis carried out in sections 5.1 and 5.2, and, in particular, the insights from the overall replicability index examined in section 5.2.2. Figure 1 shows the clusters of DESTINATIONS sites on the basis both of their high replicability (an overall replicability index equal or over 50%, calculated as the average of the overall replicability for each measure) and their numerosity (at least four DESTINATIONS sites involved).

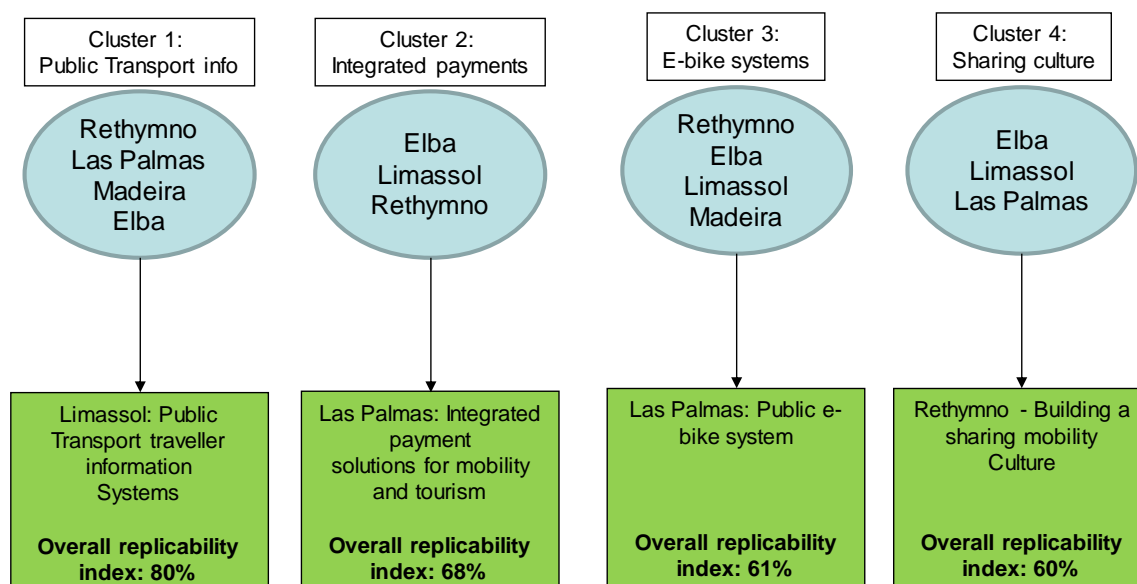


Figure 14 - Clusters of business models across the DESTINATIONS sites

On the basis of the potential replicability as emerging from the questionnaires filled-in by the DESTINATIONS stakeholders, four clusters of measures are identified:

5. Public transport information systems (Limassol)

6. Integrated payments solutions for mobility (Las Palmas)
7. Public e-bike system (Las Palmas)
8. Building a sharing mobility culture (Rethymno)

The cluster on Public Transport traveller information systems shows the higher potential replicability (80%), involving 5 DESTINATIONS sites, followed by the cluster on Integrated payments solutions (e-ticketing, etc), with a potential replicability of 68%, involving 4 DESTINATIONS sites.

The other two clusters show potential replicability respectively by 61% (public e-bike systems) and 60% (building a shared mobility). These clusters will represent the basis for organising the knowledge sharing jam, whose outline is described in section 6.

5.3 Level 3 analysis: Replicability of investment plans: unlocking additional funding and investment

5.3.1 Introduction

The earlier deliverable of D8.2, provided sites with guidance on the types of funding and financing suitable for scaling up measures and for supporting long term delivery of mobility services through greater or more diverse investment sources. This comprises public and private sector across local, national and international levels, and from the sectors of transport and tourism.

Having referred to this guidance, and through their own initiative, CIVITAS DESTINATIONS sites prepared Local Investment Plans which set out objectives for securing funding and financing, the actions taken and the results.

City partners have all shown many different ways of boosting the impact of the planned investment by identifying synergies with relevant programmes and projects. We have seen the unlocking of:

- grants from the European Regional Development Fund;
- loans from the European Investment Bank;
- contributions from hotels and tourist attractions;
- discounts offered by shared mobility operators; and
- greater commitments for funding from local municipalities and transport ministries.

5.3.2 MADEIRA – Local Investment Plan

Measure	Sources	Objective	Actions	Status
MAD 6.2	EU (ERDF)	Set up business model for long-term delivery. Based on a "licence software fee" or "% of royalty revenues"	ERDF applications are being prepared to secure approximately €100,000	Awaiting ERDF application and results of pilot

MAD 6.4	Public (Local)	Reinforce budget to integrate replacement of the traffic light system	Liaison with CMF Municipality regarding budget needed	Municipal budget for traffic light system was strengthen by €250,000
MAD 7.1	EU (ERDF)	Use the pilots and status of the DESTINATIONS project to identify and unlock ERDF funding for additional clean buses.	HF and AREAM held successful discussions with regional authorities leading to large sum of ERDF funding for additional 5 mini electric buses and 25 diesel buses	Mini EV buses already delivered. Total value of ERDF unlocked thanks to DESTINATIONS activities: €7,875,000 (50% co-funded ERDF)
MAD 7.3	EU (ERDF)	Separate and more complex specifications delivered for interoperable ticketing system for different mobility and touristic services	2019 ERDF applications submitted and approved.	Unlocked an additional €4,280,000 (50% co-funded ERDF) for the information system (MAD 7.3) and the ticket system (MAD 7.4)
MAD 7.4				

Table 6: MADEIRA Local Investment Plan

MADEIRA – LIP Detailed information

MAD 6.2 – Green credits: A Business Model for Mobility, Sustainability and Tourism

The Green Credits for Mobility system has been set up. In order to sustain its delivery on a long-term basis, ERDF applications are being prepared to secure approximately €100,000 for personnel, software, marketing and equipment costs. A key part of this funding will be for the communication of the system to build momentum and increase participants, which in return will produce revenue.

In the long term there is an aspiration to scale up to other islands in Madeira which would increase potential revenue further. This will depend on the results of the pilot where the focus still resides

Type of suitable investment includes internationalization model which is based on a "licence software fee" or " % of royalty revenues".

MAD 6.4 – Low emission zones and smart parking management

Parking management systems have been introduced.

The preliminary report showcased that the current traffic light system is not able to converge towards the strategic vision envisioned by the SUMP, nor able to give priority to buses, or adapt itself to the traffic flow in real time. Hence there was the need to reinforce the budget in order to enhance the impact of the measure while ensuring an integrated replacement of the traffic light system. The annual municipal budget allocation for traffic light system increased by €250,000.

MAD 7.1- Electrical vehicles and clean fuels for public transport urban and inter-urban fleet

Urban electric bus pilots have been undertaken. HF and AREAM have held successful discussions with regional authorities leading to a large sum of ERDF funding for an additional 5 mini electric buses and 25 diesel buses. The EV buses have already been delivered and will shortly operate in the city centre of Funchal, improving accessibility and air quality. The combined ERDF sum is €7,875,000 (50% co-funded by ERDF).

The successful ERDF proposal was the result of many months and years of meetings, lobbying and engagement of the regional authorities, with the contract signing taking place autumn 2019. The large grant is unlocked thanks to work of DESTINATIONS, since the funds were approved on the basis that they would be applied to an Innovation Project and hence benefit from related pilot, studies, and evaluation work. The specification for the buses benefitted from the learnings of the feasibility study earlier in the measure.

The regional government tender for the interregional service will be launched before the end of 2019 with a specific reference to electric fleets and to Porto Santo where all buses will be electric.

MAD 7.3 – Smart PT traveller information service &

MAD 7.4 – Public Transport Smart Multi-Task Ticketing System, in open standards

A pilot smart public transport information system has been developed. In 2019 ERDF applications were submitted and have been approved, with negotiations taking place. This has unlocked an additional €4,280,000 (co-funded 50% by ERDF) for the information system plus the ticket system (MAD 7.4). Earlier in the measure HF commenced regular discussions with the regional authorities regarding potential ERDF funding to scale up the measure from a pilot to fully operational scale. Due to the technical nature of the two measures, the authority acquired new skills to understand the measure potential if scaled up. This communicative and step by step process contributed to successfully accessing the large ERDF grant.

The tender was launched for the equipment, benefitting from a highly innovation specification, resulting from the learning from the earlier pilot.

A separate and more complex specification has been delivered for the ticketing system MAD 7.4 which enjoys the majority of the ERDF grant. It will deliver an interoperable ticketing system for different mobility and touristic services has been developed.

5.3.3 LIMASSOL – Local Investment Plan

Measure	Sources	Objective	Actions	Status
LIM 6.2	Private	Identify funding model to take forward Motion Card and	LTC has held successful meetings with many	Many discounts have been agreed with 22 attractions and mobility

		Green Label Award for participating hotels post 2020 (cost €14,000 p.a.)	stakeholders to agree discounts on Motion Card	providers making the Card an attractive proposition to hotels and tourists
LIM 7.3	(EU) ERDF	Scale up measure with additional info panels	Liaison with ERDF Project. LTC board meetings held with mayors of surrounding municipalities regarding rolling out panels of their own.	€150,000 ERDF funding has been secured and used to install 15 more displays, through the EY-KINISI project (Interreg V). Mayors signalling interest in rolling out info panels
LIM 7.4	EU (ERDF)	To enhance the app specification and functionality so that it is also fit for future upgrades in technology and to link to the national system with real time information	Discussion with EY-KINISI to scope out combining Tourist app with Transport app for enhanced overall service for user.	Secured €40,000 ERDF, through the EY-KINISI project (Interreg-V) for enhanced app and future intention to share API for long term service delivery

Table 7: LIMASSOL Local Investment Plan

LIMASSOL – LIP Detailed information

LIM 6.2 – Combined tourist and mobility products: Green Label Award and Tourist Mobility Card

Green Labels have been awarded to hotels that encourage the use of sustainable mobility modes. Tourist Mobility Cards are offered as a combined product for tourists allowing for discounted fares. By May 2019, 16 hotels were selling the cards and 22 businesses had signed up to offer discounts.

LTC purchases Motion Cards from the transport operator who issues cards to hotels, who then offer to guests to purchase. LTC has held successful meetings with many tourist attractions and mobility providers to agree discounts: For example, Cyprus Museum offers a 30% entry discount and NeXT Bike 30 mins free riding. In order to continue promotion of the Motion Card LTC intends to identify the required €14,000 to deliver the Green Label Award ceremony for hotels to encourage their participation and that of the transport operator with whom they work closely.

Possible sources of funding are private sponsors, the operator itself, the ministry and sponsorship from hotels.

To help long term implementation, additional stakeholders have been engaged to participate in the Mobility Card providing discounts including for children's eBikes, the water park,

adventure park, diving, cruises and museums (22 in total). This makes the Mobility Card more of an attractive offer to tourists and for hotels to supply them.

LIM 7.3 - PT traveller information system

DESTINATIONS has delivered 25 information panels, installed at smart bus stops along the sea front connecting the tourist area to the city and old town.

Work has been done to successfully secure additional funding for more electronic bus stop signs in the wider region to connect with the city for greater long-term impact. €150,000 ERDF funding has been secured and used to install 15 more displays, through the EY-KINISI project (Interreg V- A, Greece – Cyprus Program “2014-2020”).

A further step to scale up the measure further has seen the engagement with surrounding municipalities whose mayors are interested in rolling out panels of their own. Meetings of the LTC board of directors have taken place comprising mayors of other municipalities, hoteliers and the transport operator where the panel specification is being shared. Early interest has been received and municipal investment is expected over the coming months.

LIM 7.4 - Mobility application and travel planner for smart phones to provide real time information

Electronic scrolling signs have been installed on buses across the city providing passengers with information on the network, interchanges and ticket purchasing. A real time mobility application has already been developed. Work has been done to secure €40,000 ERDF, through the **EY-KINISI** project funding from the Interreg V- A, Greece – Cyprus Program “2014-2020”, to enhance the app specification and functionality so that it is also fit for future upgrades in technology and to link to the national system with real time information. The app then combines transport information with points of interest for tourists and accessible public spaces. LTC will continue operations of the app in future. Private sponsorship options will also be considered to generate revenue to manage the app, such as advertising.

5.3.4 RETHYMNO – Local Investment Plan

Measure	Sources	Objective	Actions	Status
RET 2.2	Public	Set up a new Smart Parking Management system to reduce car use and unnecessary traffic circling around the city centre	Market survey, system/service configuration. Call for tender. Assessment of tenders received.	Additional funding to fulfil the measure is secured from the Municipal Budget (Approx. 500.000€) Procurement process finishing. Contract signed in the following weeks.
RET 4.1	Public	Identify funding to scale up with	The first three public EV charging points have been installed on	The success has led to plans to install 3 more EVCPs in Rethymno with the support of

		additional EV charging points	the island; with the fourth one currently under procurement, using €25,000 ERDF funds	the Hellenic Electricity Distribution Network Operator. The regional government also intends to procure EVCPs at the regional level, starting from Heraklion. Other mainland Greek municipalities are following suit.
RET 4.2	Private	Engage with private mobility operators to invest in services to scale up shared mobility offering	Liaison with private operators of shared eBike and eScooter services. Work done to ensure adherence to regulations and licencing. Promotional work.	Delivery of large-scale dock less eBike and eScooter system of 300 vehicles constituting significant capital investment directly benefitting residents and tourists
RET 5.2	Public / Private	Identify sustainable funding model for scale up to other cities in Crete and continuation of measure.	Liaison with Intermunicipal Waste Management Enterprise and private licensed UCO collector. Meeting with two venture capitals to support the smart UCO collection system commercialization	Waste Management and Environment Department of Rethymno Municipality has announced call for tender procedures to assign a new licensed UCO collector. Additional funding of €16,000 has been successfully unlocked from InterregMED funds, to expand the network and enhance the supply chain. Future delivery will be funded by private UCO operators.
RET 6.1	Public	Identify sustainable funding model	Meetings with municipality to secure internal funding	Mobility Agency has been incorporated into the Municipal Technical Services Department such that the Agency's operation will be funded by the Municipality. Estimated current cost is €40,000 p.a.
RET 7.1	Public/ Private	Introduction of electromobility to the PT fleet	Agreement with the local PT transport operator (KTEL), which covered part of the procurement cost (€200.000).	The e-bus acquired a licence to operate from the competent Ministry. Currently in operation. The PT operator is currently assessing potential purchase of a 2nd vehicle. Municipality of Heraklion has announced the

				procurement of two eBuses (€748,000 investment)
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Table 8: RETHYMNO Local Investment Plan

RETHYMNO – LIP Detailed information

RET 2.2 – Smart systems for urban planners, PT operators and users

There are plans to extend the smart parking management system to all municipal on-street parking, loading and unloading bays and integrate with private parking stations by collaborating with private parking companies. Additional funding to fulfil the measure has been secured from the Municipal Budget valuing approx. €500,000.

RET 4.1 – Uptake of electric vehicles by fleet operators

The first public EV charging points have been installed on the island. The success has led to plans to install 3 more EVCPs in Rethymno with the support of the Hellenic Electricity Distribution Network Operator. The fourth fast charging station is currently under procurement, using €25,000 ERDF funds.

The Regional government in Crete also announced the intention to procure EVCPs at a regional level, starting from Heraklion. Several Greek municipalities have subsequently announced the procurement of public charging stations following the success in Crete. For example, West Athens has an open call for €650,000).

RET 4.2 – Building a sharing mobility culture

The eBike system has been successfully installed with 100% private capital funding. This saw the delivery of a dock less system with 150 e-bikes in July 2018. This was scaled up with further private funding to 300 eBikes forming greater coverage of the town for citizens and tourists. This constitutes considerable private capital investment in the town's sustainable mobility services.

The engagement of a private sharing system investor led to the attraction of other micro mobility investors. The result was an agreement with Lime to deliver the shared eScooter system also with private funding for capital costs. In anticipation of national regulation regarding speed limits, licencing and safety issues, informational and safety events have been conducted in collaboration with Lime and the Municipality.

This successful public-private cooperative approach has seen a significant investment from both sectors enhancing mobility offer for tourists and residents. Private sector has contributed capital investment whereas the municipality has used revenue funding in DESTINATIONS to help promote and integrate these two new modes into the town's mobility offering. It seems clear that private micro-mobility operators see a strong business model in investing in the tourist market.

As public bodies, RETH and TUC do not operate in the usual business-oriented models and profit is not a predetermined objective of running pilots. For measures undertaken by private operators, obviously the Municipality has limited access to operational, profit and loss data.

RET 5.2 – Use Cooking Oil waste collection truck

The pilot has been delivered at the cost of €30,000 comprising 30 sensors, a platform for monitoring of 50 collection points, a UCO production unit and auxiliary equipment. Annual operations and maintenance costs are estimated at €5,000.

The acquisition of new collection bins is a result of successful cooperation between TUC and Intermunicipal Waste Management Company, which is studying further expansion of the system to include additional collection points and other cities in Crete. Additional funding of €16,000 has been unlocked from the Interreg MED programme, to enhance support set up of the system. Shared staffing and municipal contributions could enable long term delivery.

The collection system was presented also in two venture capitals, which expressed their potential interest to commercialize them. A feasibility study for a business case for the local transformation to biodiesel has been developed and implementation has been paused pending evolution of regulatory issues.

The annual costs for future operations will be covered from sales of UCO to a private (licenced) UCO collector.

RET 6.1 - Sustainable mobility agency for tourists/visitors

The Sustainable Mobility Agency has been incorporated into the Municipal Technical Services Department such that the Agency's operation will be funded by the Municipality. This follows meetings with TUC and RETH. Public funds have already been assigned for ongoing management of the Agency (private funds prohibited under legal framework). According to the Municipality, the estimated annual running cost of the agency is €40,000 consisting mainly of staff cost (€24,000) and other goods and services (€16,000). The agency's operation is funded from DESTINATIONS until August 2020. From September 2020 the Agency will be funded by the Municipality.

RET 3.1 – Active healthy and inclusive mobility for all

Walking and cycling networks have been improved and there are subsequent plans to expand the accessibility infrastructure in the municipality to the beaches and other touristic points of interest. Ramps have already been installed and the funding for the two seatrack systems and guidance for visually impaired people has been secured through ERDF funds. The combined cost is €119,731.

RET 7.1 Introducing electric vehicle for PT

Rethymno municipality in collaboration with the Public Transport operator has introduced, nationally, the first e-vehicles into any municipal or public transport fleet. The operator covered the remaining cost for the bus procurement (approximately €200,000). Neighbouring municipalities are already developing plans based on Rethymno's actions.

The municipality of Heraklion announced the procurement of two eBuses (€748,000 investment), and Chania announced intention to add an e-bus in the city's bus routes. The Managing Director of the Athens Urban Transport Organization (OASA) communicated with TUC to get relevant information; OASA has announced the procurement of 72 ebuses for Athens.

5.3.5 ELBA - Local Investment Plan

Measure	Sources	Objective	Actions	Status
ELB 2.2	Local public & private operators	Identify revenue streams to allow for long term operations and subsidy of public investment	Meetings with Livorno Province. Interest in expanding application. Annual operation costs estimated on basis of tourist numbers and catchment area of app	Operation costs already in place until 2022. Exploring potential for private sector mobility operator investments
ELB 5.1	Private (local business)	Reducing need for visitors by boat to have to use road transport to acquire food	Plans for the local supermarket to supply food directly to tourist sailing boats in the harbour	Discussions due to take place
ELB 6.1	Private (Hotels)	Set in place mechanisms to allow for eBike hire to continue with minimal public sector investment	Hotels are being offered deals to purchase eBikes which they have been leasing in 2019. To reduce operation costs for the municipalities. Liaison with Hoteliers 'Association	€14,440.90 of investment from participating hotels for participation in second year of pilot in 2019.
ELB 7.3	Public	Invite other municipalities on Elba to purchase the Celso service to scale up across island.	The Celso service could be purchased (€350 / month) from other municipalities of Elba to extend bus location service in summer	Discussions ongoing

Table 9: ELBA Local Investment Plan

ELBA – LIP Detailed information

ELB 4.1 – 4.4 Shared Elba Mobility Agency

This measure introduced new technologies and advanced ICT solutions to realise an agency to coordinate flexible transport and mobility ride sharing services.

It is estimated that the minimum potential revenue of the agency when fully operational would be €64,000 p.a. This is calculated on the basis of 450,000 tourists, 4% registrations equalling 18,000 people, paying €3 each, totalling €54,000 per year plus annual sponsorship e of and estimated at €10,000 per year.

With the operation & maintenance cost estimated at €72,500 p.a. this shows a potential business model for continued operation of the Mobility Agency with only small short fall of funds at this very early stage of estimations. Funds for operations have been secured until 2022 which gives more time to assess revenue potential and identify partners to take forward as required.

There is also potential for private sector operators to take forward the agency especially in view of them benefitting from its centralised services. There is scope to extend the catchment area of the mobility information tool such as to Livorno Province which would increase the number of passenger registrations and hence revenue. Initial meetings with Livorno Province have already taken place who have shown interest in the app and the information service. Another perspective could be to request more sponsorship from the electric car rental operators who would increase their business since Enel is preparing to install 50 charging stations on the island.

ELB 5.1 – Island freight logistics for tourist services

The measure is demonstrating on-demand logistics services for tourists including transportation of goods to HO.RE.CA. through a specific service to improve efficiency and punctuality.

The measure is aimed to encourage the use of strategic storage points on the island and the mainland in order to promote fully loaded trips and decrease in general the number of vehicles on the road.

The municipality of Portoferraio launched a call for tender in order to find a transport operator able to guarantee the proposed service, making efforts in the full loading and optimisation of trips. The winning company will receive a contribution to demonstrate the optimization of logistics and to provide useful related data on the island.

In addition, in the same measure, another call for tender was launched in order to find supermarkets and grocery stores to supply food directly to tourists on the sailing boats moored in the harbour of Portoferraio, in order to offer a dedicated service to them. No responses were received in the 2019 tender so Portoferraio will try again in 2020 also trying to extend the service to the boats anchored in the bay.

ELB 6.1 – Combined products for tourism and mobility: the accommodation and mobility package

This has seen the delivery of an integrated package of accommodation and mobility services in close cooperation with mobility providers and hoteliers.

40 eBikes have been provided to participating hotels to offer guests during their stay. The agreement with the hotels was that the first-year leasing costs are covered by Rio and Portoferraio municipalities, but subsequent years are funded by the hoteliers who at the end can also redeem the electric bikes.

The measure has already unlocked €14,440.90 of investment from the participating hotels for their participation in the second year in 2019 such was the interest from the first year.

Hotels are soon to be interviewed as part of the evaluation process where they will also be invited to purchase in 2020 the eBikes which they have been leasing in 2019. Hotels will be offered a special offer for outright purchase and it is expected that many will take up this offer.

The measure is showing good success with hoteliers reporting that the promotion of electric bikes to their guests has been popular was of improving mobility.

ELB 7.3 – Application for user real time information

Is currently being examined the possibility of installing the Celso system on the school buses of Portoferraio municipality and also to supply the same system to the summer buses (Marebus) of the other Elba municipalities.

5.3.6 MALTA - Local Investment Plan

Measure	Sources	Objective	Actions	Status
MAL 2.2	National	Aim to maintain delivery of measure through grants from transport ministry.	Meetings held with key figures in transport ministry. Publicity used to support case to transport ministry	High level of council interest. Additional ministry funding secured: €110,000 for 2019 and €80,000 for 2020.
MAL 4.1	National & Private mobility service operators	Fund future campaigns through contributions from ministry and car/ cycle sharing companies.	Intensive promotion of shared mobility services has increased demand and number of private operators entering market (e.g. started with Car2go and Nextbike in 2018; now Blinker Whizascoot, IoScoot, Tallinja Bike, Cool joined the market). TM developed promotional video shown on TV and social media to unlock private investment. Private Operators were invited to public promotional events.	€12,800 national funding secured for ongoing cycle safety campaigns. Extra €70,000 secured for both 2019 and 2020 sustainable mobility campaigns. Private shared mobility services by private operators subsidised during EMW 2019
MAL 5.1	National & EU	Secure grants from national government to encourage purchase of EVs Link with wider EV charging network through ERDF project.	Launch of grants in parallel with eVan pilot. Engagement of tourist / souvenir shops and GRTU Union to participate in pilot. Liaison with ERDF project managers extending EV charging network.	Government grants of total €600,000 have been secured to encourage electrification of company fleets, and €7,000 discounts for individuals' Electric Vehicles). Successfully working with ERDF project.

MAL 6.3	EU & Public-private partnership	To increase scale and lifetime of planned mobile app through partnership with ERDF project	Liaison with Tourism Authority to combine specifications of ERDF tourism app with DESTINATIONS transport app for shared API.	Successful cross-sector partnership working resulting in 'all in one' app for long term mobilisation of green travel behaviour by tourists.
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Table 10: MALTA Local Investment Plan

MALTA – LIP Detailed information

MAL 2.2 Sustainable Urban Mobility Plan Award

In 2018, prizes of €30,000 and €50,000 were awarded by the Ministry of Transport to local councils - affected by the influx of tourists in peak season - for their SUMP measures to accommodate these pressures on the mobility system. This comprised an extra €30,000 secured from the Ministry than foreseen in the GA. This followed training workshops with the councils to raise awareness.

On the back of the positive publicity of the measure, a new round of training workshops was held (one in Malta and one in Gozo), and an extra €110k was successfully secured from the Ministry to repeat the award in 2019 (with three prizes of €50k, €30k and €30k). This saw an increase from 9 to 17 applications from councils illustrating the power of the financial incentives. The increase in prize funding was secured thanks to Transport Malta responding positively to direct lobbying by the councils. Workshops delivered to councils on how to deliver “mini SUMPs” also helped increase take up.

TM has just secured a further €80,000 to fund the prizes in 2020 showing the commitment to long term public investment in this measure. In order to facilitate the competition process, an intern has been assigned on such European Mobility Week activities since 2017 providing necessary resource. TM continues to promote the award to local councils at exhibitions and so future settlements are expected to continue as council interest and lobbying continues to increase.

MAL 4.1 – Promoting e-bike sharing and car sharing

Transport Malta delivered information and awareness campaigns to promote both the services of e-bike and car sharing as well as educate the public on cycle safety.

The plan to fund future campaigns is to attract car and cycle sharing companies to contribute to running costs, and to broaden the theme to include other forms of shared mobility. Thanks to intensive promotion and increasing demand for personal mobility, other service providers such as scooters and shared taxis have set up in Malta. The sum of €70,000 has being secured from national funds for the 2019 events and a further €70,000 has been awarded for 2020; the justification for which was made as part of the EMW shared mobility promotional activities.

The Cycling Safety Campaign has successfully secured national funds of €12,800 to award the cyclists with the most kilometres clocked during the challenge (biking equipment are good incentives).

These campaigns have attracted 5 new shared mobility operators since the start of project including Car2go, Nextbike, Talinya as well as eScooter and carpool companies. Ahead of European Mobility Week 2019 Transport Malta secured agreements with service providers to offer discounted alternative transport throughout the week across 10 services including ferry, shared scooters, bikes and cars, transport on demand, public bus transport and carpooling. (Subsidies included: 60 mins free for NextBike first registrations; Talinya bike free during car free day; 30 mins free for new users of car2go; and €1 discount on foot passenger ferries.) This constitutes a significant value of investment into the measure via private subsidies; and strong cross sector collaboration.

Transport Malta made a promotional video and a radio advertisement profiling the shared mobility options, to which the operators contributed costs of communications via social media, primetime TV and university fairs (as collective beneficiaries). This approach could be rolled out in other similar sites.

MAL 5.1 - Last Mile Delivery of Goods

The Sulp work focuses on the introduction of the “last mile delivery of goods” concept in Valletta.

In advance of the pilot commencing, grants were identified from national government to encourage the purchase of electric goods vehicles, in order to help scale up the measure. The launch of the grants will be paralleled with the dissemination of the results from the pilot to help encourage EV purchase overall. Government grants of €600,000 have now been secured to encourage companies to electrify their fleets; and for individuals to benefit from €7,000 discounts on EV purchases.

The measure is integrated with an ERDF project where TM is deploying an additional 108 medium-fast charging points to extend the EV National Charging Point Network, and for the first time in Malta, 22 fast charging points at strategic locations. One of the EV pillars has been located at the DESTINATIONS pilot site for mutual benefit.

TM’s eVan will be piloted and tested for feasibility of EV deliveries and to share it between 6 different companies from the tourist sector (5km away from Valetta) which have similar operations and locations. This is larger in scale than the original plan of simply TM testing. TM has worked successfully with the trade union GRTU to broker this arrangement – thanks to their involvement in the SUMP and Sulp.

This shows a joined-up approach between DESTINATIONS and national level EV grants, as well as local tourist sector to scale up the pilot.

Following this, a later step will be to liaise with airport authorities and stakeholders to ensure car hire services for tourists in particular are integrated into the EV charging infrastructure. Discussions have commenced with airport and hospitals to join up the network with private land.

MAL 6.3 Promoting sustainable mobility among tourists

The measure sees the launch of a mobile application providing useful and interesting information to encourage a change in the travel behaviour of tourists towards more green mobility options. In conjunction with this, the Malta Tourism Authority has secured funding through ERDF to deploy an application which brings together all tourist information at one single point- Visit Malta Plus.

TM, MoT and UoM are currently in discussions with the Tourism Authority so that the DESTINATIONS application can be incorporated with the Tourism Information app and thus information relevant to transport is provided through the 'DESTINATIONS branch' of the Tourism App. Through cross sector stakeholder engagement, this is combining multiple EU funding sources to deliver an enhanced app for long term delivery. This constitutes a scaling up of the scope of the measure.

Once TM's Transport app is up and running it will be handed over to the transport operators to run and update information, since it is, they who will benefit. This will allow ongoing operation with minimal or no cost to TM and no issues in terms of liability of information. TM will share API with Tourism Authority such that transport information is layered under the tourist information for an integrated and more alluring service.

5.3.7 LAS PALMAS – Local Investment Plan

Measure	Sources	Objective	Actions	Status
LPA 4.1	Private	Extend eBike network to hilly neighbourhoods. Secure private sector investment to subsidise costs of system	Meetings with business held. Business model work done.	Large supermarket chain, shopping mall and language centre have agreed to fund eBike stations to access their sites
LPA 7.2	Public	Secure municipal funding to purchase additional hybrid buses	Meetings held with municipality showing outputs of hybrid bus trials	Budget secured to procure 10 further hybrid buses by 2020 through Guaguas Municipales at cost of €3,250,000
LPA 7.3	Public & Loan Financing	Increase number of info panels and hence coverage in PT network. Make bus even more attractive to users	Information campaign and dissemination of outputs to municipality. Joined up work with BRT.	Funding for 40 extra panels secured and facilities installed (investment value. €400,000). Further €400,000 secured for 40 more along the BRT network through EIB. Long term plan for extra 10 panels per year (value of €104,000 p.a.).

Table 11: LAS PALMAS Local Investment Plan

LPA – Local Investment Plan Detailed information

LPA 4.1 Public e-bike system

A shared e-bike and smart bike system has been successfully rolled out in Las Palmas de Gran Canaria resulting in take up by residents and tourists. DESTINATIONS has funded the

whole of Sitycleta comprising 375 smart bikes, 20 eBikes, 2 reduced mobility bikes, 42 bike stations and 520 anchor points.

Sagulpa plans to scale up the bike sharing scheme with additional e-bikes that will enlarge its accessibility to the hilly neighbourhoods of the city.

As part of their business plan to increase revenue, the public bike share operator Sagulpa has commenced offering businesses sponsorship opportunities to paste their logos on the bikes and totems. This has already resulted in three organisations sponsoring 5 stations and 50 bikes including the shopping centre and the supermarket chain Hiperdino at a cost of €3,000 per station. The objective is to get each of the 40 bike stations sponsored which will return a total of €126,000 p.a. which would contribute to the current cost of operations of €675,000. Meetings with stakeholders continue and expected to increase with the option to sponsor stations located near businesses in question – or other areas with high visibility locations - to increase accessibility and hence customer numbers.

Sagulpa is working to offer companies who sponsor the bike stations a special fee for their employees that go to work by bike.

Sagulpa applied to a national funding programme called MOVES in order to enlarge the e-bike part of the sharing scheme. MOVES is based on ERDF funding, managed by Ministry of Industry and the application decision is pending (more info: <https://www.idae.es/en/node/13603>).

LPA 7.2 - Electric/ Hybrid buses in the urban bus fleet

The measure has delivered 3 hybrid buses and 1 e-bus at a cost of €1.8m

The success of these pilots has led to plans for the purchase of 10 further hybrid buses by 2020 through Guaguas Municipales resources and funding from the government to further reduce emissions from the public bus fleet overall. The pilots have been very well received by the public and there is support for low emission public transport.

Guaguas Municipales and the PT operator have recently agreed the required budget of €3,250,000 which is now available for the procurement of the 10 buses next year.

LPA 7.3 - Real time mobility and tourism information services

Real time mobility information has been improved at bus stops with 20 real time info screens powered by solar energy at a cost of €208,000.

This measure has been subsequently scaled up with the installation of 40 additional real time information panels at a cost of €400,000 taking the total to 60 across more areas of the town. This funding has been unlocked from own resources thanks to quicker installation and lower overall costs compared to previous panels. Such earlier models were cheaper, but were not solar meaning the installation, connection to the grid and electricity costs made them more expensive overall. DESTINATIONS allowed GUAGUAS to trial the new solar models, and their success has unlocked demand for more.

The BRT route is now being equipped with the same solar powered information panels. This is being funded as part of the EIB investment programme meaning the unlocking of €400,000 for 40 more kits, with 10 more panels expected to be introduced at normal bus stops each year from now until the future funded by the municipality.

6 Business cases replication: planning of the knowledge sharing jam to exchange experiences and deliver replicable business models

The analysis of potential replicability of business models has identified the following four clusters of measures:

1. Public transport information systems (Limassol)
2. Integrated payments solutions for mobility (Las Palmas)
3. Public e-bike system (Las Palmas)
4. Building a sharing mobility culture (Rethymno)

For each of these clusters, the indications provided by the DESTINATIONS stakeholders on major potentiality (as an average of socio-cultural, institutional and technological components) has led to the following associations:

1. Public transport information systems (Limassol): Rethymno, Las Palmas, Madeira and Elba
2. Integrated payments solutions for mobility (Las Palmas): Elba, Limassol and Rethymno
3. Public e-bike system (Las Palmas): Rethymno, Elba, Limassol and Madeira
4. Building a sharing mobility culture (Rethymno): Elba, Limassol and Las Palmas

The associations result from the potential replicability that each DESTINATIONS site considers more feasible according to its specific socio-cultural, technological and institutional context. It is therefore natural that the knowledge sharing jam for the whole consortium, to be organised in Limassol during the next Project meeting, will be organised on the basis of these associations.

More specifically, the knowledge sharing session will be organised in two stages:

- 1) First stage: downstream work. Each measure leader (Limassol for LIM 7.3 Public transport information systems, Las Palmas for LPA 7.4 Integrated payments solutions for mobility and LPA 4.1 Public e-bike system and Rethymno for RET 4.2 Building a sharing mobility culture) will discuss pros and cons of the measure business model with the DESTINATIONS site that have shown interest in terms of potential replicability.

In two parallel sessions of one hour each, the measure leaders will be able to provide a deep understanding of failures and success points for the measure business model, interacting with the other DESTINATIONS sites and finally drawing lessons and tips to replicate business models. In such parallel sessions the interested DESTINATIONS sites will have the opportunity to validate their assumptions, testing the feasibility of the overall replicability. In order to make the parallel sessions possible, each DESTINATIONS site needs the participation of at least two representatives.

- 2) Second stage: upstream work. To close the knowledge transferring jam each cluster will present their replicable business models to the plenum. The produced outcomes, taking each site specificities into account, will represent the knowledge basis for business model replicability.

The approach is needed to gather and share the experiences between the different measure teams of all sites and deliver guidance to replicate business models. The likely outcomes include:

- identification of possible start-ups services
- exchange of knowledge and experience
- definition of hypothesis of transferability of measures of potential interest.

Annex 1 – Lean Canvas

<p>1) Problem</p> <p>(Top 3 problems)</p> <p><i>His main problem</i></p> <p><i>Which job has to accomplish</i></p> <p><i>What, why, for who?</i></p> <p>Existing alternatives to address the same problems</p>	<p>4) Solutions</p> <p>(Top 3 features)</p> <p>Based on the UVP</p> <p>(how it delivers its UVP)</p> <p>Use MVP to test assumptions</p> <p><i>Remember: the first sentence should clarify what it does, how it does it.</i></p>	<p>3) Unique Value proposition</p> <p>Why you are different and worth buying</p> <p><i>How you help customer doing his job, accomplish his mission</i></p> <p><i>Improve his position</i></p> <p><i>.... better than others.</i></p> <p><i>Explain how you differentiate from alternative solutions and thus the uniqueness of your solution.</i></p> <p><i>Provide numbers to the performance of your solutions (see earlier explanation).</i></p>	<p>5) Unfair Advantage</p> <p>Can be easily copied or brought?</p> <p><i>What are the customer retaining costs?</i></p> <p><i>Acquisition costs</i></p> <p><i>Switching costs....</i></p>	<p>2) Customer segment</p> <p>Who is he</p> <p><i>Distinguish between users and customers (customers buy, users “use”)</i></p> <p><i>Split in vertical segments</i></p> <p><i>Pick the strongest customer segment</i></p> <p><i>Remember geographic location, Industry and connection to problem.</i></p> <p>Early adopters</p> <p><i>Remember geographic location, Industry and connection to problem.</i></p> <p><i>+ why are they early adopters? What is your relation to these etc.</i></p>
<p>9) Cost structure</p> <p>Estimate costs for each “cost-entity”</p> <p>Estimate costs after seed stage 6 months and 3 years.</p> <p><i>Examples: MVP HR costs, Eng. costs, MFG costs, marketing costs, etc.</i></p>		<p>6) Revenue Streams</p> <p>Estimation of how much each stream will generate.</p> <p>Consider the different revenue streams, How much each stream generates</p> <p>Estimation of revenue at seed stage 6 months and 3 years.</p>		

Annex 2 – Survey to assess the replicability of the measures

A. Socio Cultural Dimension:

Social Acceptance:

- 1) To which extent is the solution perceived as accepted by the population? [0-5]
Low acceptance 0 – 1 – 2 – 3 – 4 - 5 High acceptance

User Interaction:

- 2) How relevant is the involvement of the user for the solution to work? [0-5]
Active involvement of users 0 – 1 – 2 – 3 – 4 - 5 Passive Involvement of users

B. Institutional Dimension:

Responsiveness to Institutional Priorities:

- 3) What level of priority does the solution have for the current city administration (in terms of responsiveness to institutional needs and political will)? [0-5]
Not a priority 0 – 1 – 2 – 3 – 4 - 5 Top priority

Public-Private Cooperation:

- 4) To which extent the solution requires a complex institutional framework? [0-5]
Complex framework 0 – 1 – 2 – 3 – 4 - 5 Simple framework

C. Technological Dimension:

Global Context Readiness:

- 5) To which extent is the project integrable/interoperable with existing city infrastructures (software/hardware) from a technological perspective? [0-5]
Hard to fit 0 – 1 – 2 – 3 – 4 - 5 Easily embeddable
- 6) Which is the level of interest from Research/Industry/Private sector to invest in the solution? [0-5]
Not important 0 – 1 – 2 – 3 – 4 - 5 High Interest

Global Solution Readiness:

- 7) Is the technology well-established? Please, specify the TRL¹ or SRL² [1-9]

¹ https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/annexes/h2020-wp1415-annex-g-trl_en.pdf

² <https://www.canada.ca/en/department-national-defence/programs/defence-ideas/solution-readiness-level.html>

Score:

1 - TRL1 Basic Principles Observed

1,5 - TRL2 Technology Concept Formulated

2- TRL3 Experimental Proof and Concept

2,5- TRL4 Technology Validated in Lab

3 - TRL5 Technology Validated in Relevant Environment

3,5 -TRL6 Technology Demonstrated in Relevant Environment

4 - TRL7 System Prototype Demonstration in Operational Environment

4,5 - TRL8 System Complete and Qualified

5 - TRL9 Actual System Proven in Operational Environment (competitive manufacturing in the case of key enabling technologies)

Figure 15 – TRL Scores

Early stages 0 – 1 – 2 – 3 – 4 - 5 Well established

- 8) Is the technology standardized and/or interoperable with different
9) systems (hardware/software)? (standardization level) [0-5]

No standards available 0 – 1 – 2 – 3 – 4 - 5 Standardized and interoperable

Annex 3 – Methodology of the analysis of replicability

Socio-Cultural Replicability

The socio-cultural replicability of a solution is assumed to be dependent on the degree of interaction with citizens and communities. The more this interaction unfolds, the higher is the chance of facing risks in the replication of the solution. Besides, the social acceptance of the solution represents another important factor affecting replicability.

Drawing on these assumptions, we assume that the socio-cultural replicability could be represented through a Cartesian diagram whose variables are dependant both on **specific factors proper of the solution (horizontal axis)** as well as on **local factors relevant for the context (vertical axis)**.

Concerning the horizontal axis, social factors implying an active involvement of stakeholders depend on the specific characteristics of the solution under examination, which may vary considerably according to specific technical features. For example, fleet bus renewal (e.g. introduction of electric bus) implies a lower involvement of transport users than the implementation of a travel planner for smart phones, which needs an active participation of users, in terms of understanding of the tool, willingness to be on line, etc. In such a cases, the social replicability would be higher in the former case than in the latter.

The horizontal axis may be depicted as follows.

- X- axis – “**User Interaction**” [with a scale from 0 to 5]
Active involvement of users 0 - 1 - 2 - 3 - 4 - 5 Passive Involvement of users

The vertical axis may be depicted as follows.

- Y-axis – “**Social acceptance**” [with a scale from 0 to 5]:
Low Acceptance 0 - 1 - 2 - 3 - 4 - 5 High acceptance

The next graph shows resulting from the two axes, including the classification of six hypothetical solutions in three groups: solutions with low social replicability (S6), high social replicability (S2, S3, S4) and solutions at an intermediate level (S1 and S5).

As shown in the below example, the following assumptions were made:

Solution	User Interaction (X) [0-5]	Social Acceptance (Y) [0-5]
S1 -	1	3
S2 -	3	5
S3 -	4	4
S4 -	5	3

S5 -	4	1
S6 -	2	0

Table 12 – Results from “User Interaction” and “Social acceptance”

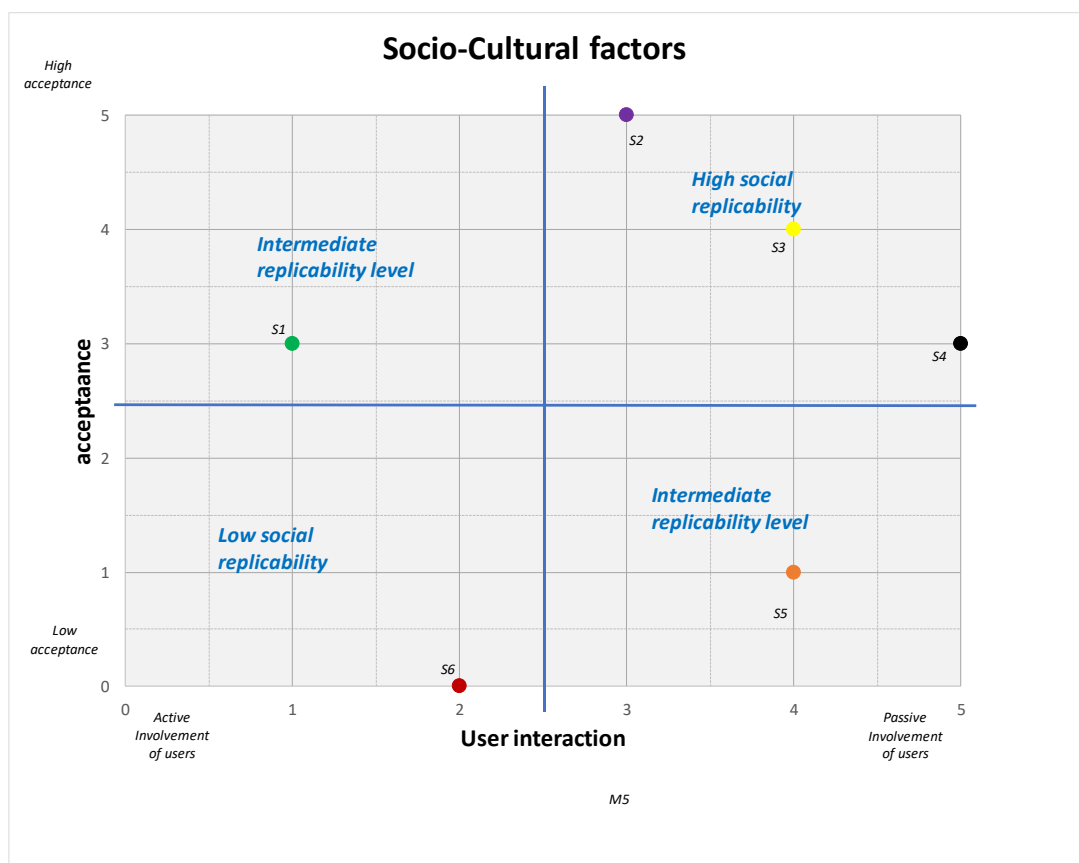


Figure 16 – Results from socio-cultural factors

In order to establish the correlation between the socio-cultural dimension and the replicability potential, a third axis has been introduced.

This axis allows to measure the Socio-cultural Replicability potential on a standardized scale 0-100%. The intersection between the solution and the *iso-replicability* lines determines the Socio-cultural Replicability level of the solution, as shown in the following table and graph.

Solution	User Interaction (X) [0-5]	Social Acceptance (Y) [0-5]	SOCIO-CULTURAL REPLICABILITY LEVEL
S1-	1	3	40%
S2 -	3	5	50%
S3 -	4	4	80%

S4 -	5	3	80%
S5 -	4	1	80%
S6 -	2	0	20%

Figure 17 – Results of socio-cultural replicability

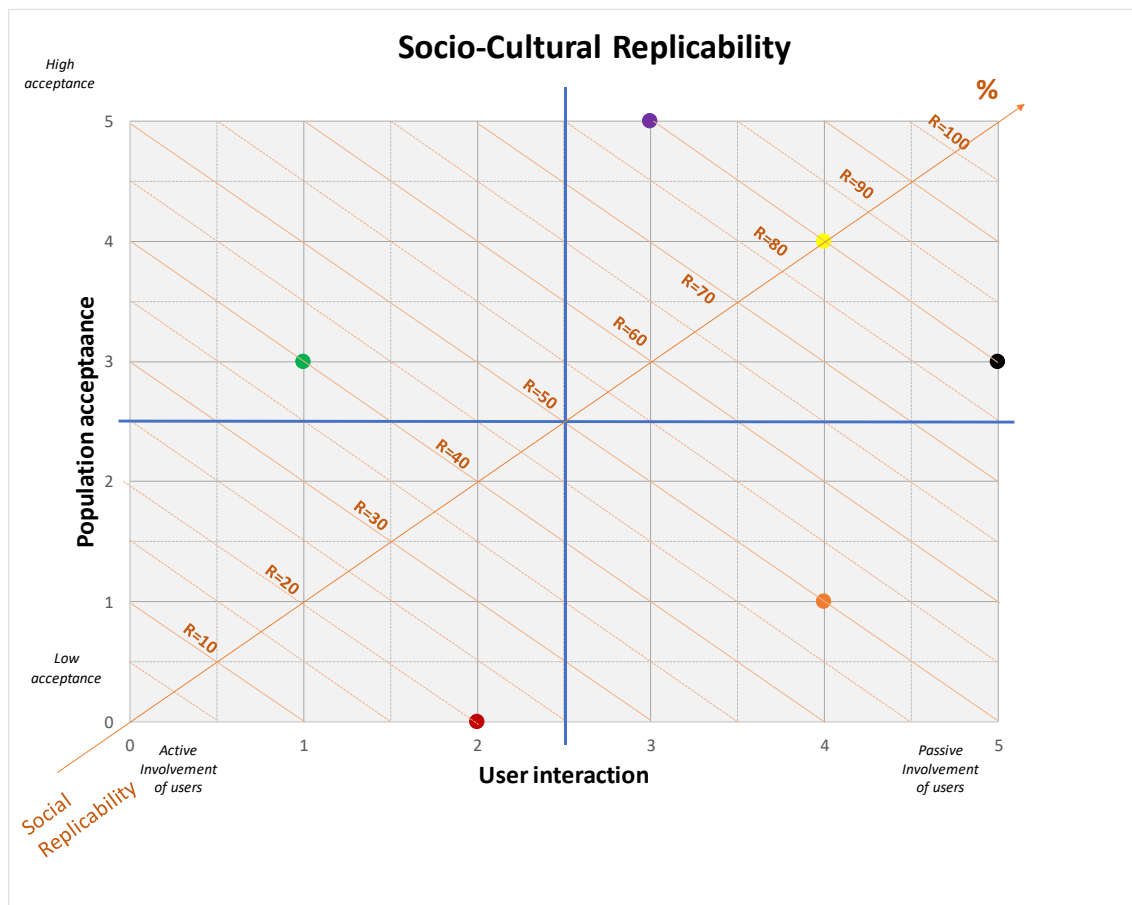


Figure 18 - Results from socio-cultural replicability

Institutional Replicability

Institutional factors encompass heterogeneous factors as governance models, e.g. rules and regulation specific of each governmental level or organisation, number and complexity of departments and personnel appointed for the solution implementation, control and evaluation, etc.

Besides, also the political willingness of policy makers and local administrators may have an influence of the institutional capability to fulfil the objectives of solutions.

The assessment of the potential institutional replicability is carried out according to the following criteria:

1. Perceived assessment of the complexity of institutional framework (departments, personnel, administrative procedures), necessary for the implementation of the solution.
2. Perceived political willingness to implement the solution, according to its importance in the local political agenda.

Drawing on these assumptions, we assume that the institutional replicability could be represented as follows:

X- horizontal axis – “**Institutional capability**” [with a scale from 0 to 5]:

- Complexity of the institutional framework [0 (min) to 5 (max)]

Complex framework 0 – 1 – 2 – 3 – 4 – 5 Simple framework

Y-axis – “**Political commitment**”: [with a scale from 0 to 5]:

- Importance of the solution in the political agenda [0 (min) to 5 (max)]

Not a priority 0 – 1 – 2 – 3 – 4 – 5 Top priority

Technological Replicability

The technological replicability of a solution is assumed to be dependent both on solution specific factors and general context factors. On the specific factors side, two factors are used:

3. the TRL (Technology readiness levels), which allows the estimation of the technology maturity of a solution.
4. the degree of interoperability/standardisation of the solution, which is an important component indicating the potential technological replicability of a specific solution.

Concerning the general context, a general context readiness to technological replicability is derived from the combination of two factors:

1. Interest from Research/Industry/Private to invest in this solution.
2. Integrability of the solution with existing urban infrastructure and technological background.

Drawing on these assumptions, we assume that the technological dimension could be represented as follows:

X- horizontal axis – “**Solution Global Readiness**” [with a scale from 0 to 5] as an average of the following:

- TRL (or SRL) adjusted [0 (min) to 5 (max)]

TRL 1-2 0

TRL 3-4 1

TRL 4-5 2

TRL 6 3

TRL 7-8 4

TRL 9 5

- Interoperability/Standardization level [0 (min) to 5 (max)]

No standards available 0 – 1 – 2 – 3 – 4 - 5 Standardized and interoperable

Y-axis – “**Context Global Readiness**”: [with a scale from 0 to 5] as an average of the following:

- Interest from Research/Industry/Private to invest in this solution [0 (min) to 5 (max)]

Not important 0 – 1 – 2 – 3 – 4 - 5 High Interest

- Integrability with existing infrastructures [0 (min) to 5 (max)]

Hard to fit 0 – 1 – 2 – 3 – 4 - 5 Easily embeddable

Synthesis of the assessment

The multi-dimensional analysis for the estimation of the Replication Potential of urban solutions is carried out through the combination of the standardised values respectively obtained for socio-cultural, institutional and technological dimensions, as described in the section 5.2.

Solution	Socio- Cultural Replicability	Institutional Replicability	Technological Replicability	Global replicability
S3	80%	85%	50%	72%
S5	80%	78%	50%	69%
S4	80%	43%	62%	62%
S6	20%	50%	60%	43%
S1	40%	35%	40%	38%
S2	50%	45%	20%	38%

Table 13 – Results from the assessment

The final standardised (0-100%) Global replicability index allows to rank the individual solutions: the higher the value, the higher the replicability potential of the solution.

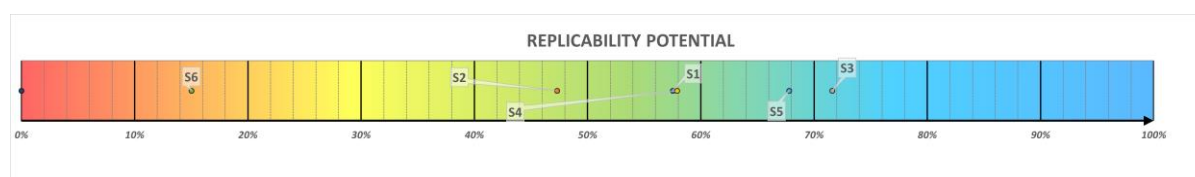


Figure 19 – Replicability scale

Annex 4: Analysis of replicability potential by key socio-cultural, institutional and technological factors

Socio-cultural component

The following table shows the ranking of the DESTINATIONS measures with reference to the socio-cultural component (higher evaluations). The table shows the following information:

- 1) the DESTINATION site making the evaluation;
- 2) the Measure under examination;
- 3) the relative result of the evaluation (replicability potential).

DESTINATIONS site	Measure	Rank
Rethymno	S8 -LIM Public Transp.	100,0%
Las Palmas	S8 -LIM Public Transp.	100,0%
Rethymno	S6 - LPA Integrated pay.	90,0%
Elba	S8 -LIM Public Transp.	90,0%
Elba	S9 -LIM Mobile Applic.	90,0%
Madeira	S8 -LIM Public Transp.	80,0%
Limassol	S11 -RET Sharing mobility	70,0%
Elba	S3 - MAD e.GIRO	70,0%
Elba	S6 - LPA Integrated pay.	70,0%
Elba	S7 -LPA Green Credit	70,0%

Table 14: Socio cultural component high ranking

From the socio-cultural perspective, The Limassol Public Transport traveller information system (S8 – LIM Public Trasp.) is considered highly replicable in Rethymno, Las Palmas (100%) and Elba (90%) basically due to an easy engagement of users, without particular barriers to a smooth interaction. Smart stops signs and electronic signs buses provide the necessary information to users and in general the social acceptance is high.

Concerning the lower ranking, some measure as the Limassol Green Label to hotels that commit to encourage the use of sustainable mobility are considered problematic from a social point of view, due to the necessary consensus that needs to be built among local businesses operators (Rethymno and Las Palmas) or, as in the Rethymno Cooperative mobility business

case on Used Cooking Oil to biodiesel, not feasible due to different organisation of waste collection services (Elba).

DESTINATIONS site	Measure	Rank
Elba	S13 -RET Cooperative mob.	0,0%
Rethymno	S10 -LIM Green Label	20,0%
Las Palmas	S10 -LIM Green Label	20,0%
Madeira	S1 - ELB Shared mobility	30,0%
Madeira	S11 -RET Sharing mobility	30,0%
Limassol	S12 -RET Green Mobility	30,0%
Rethymno	S1 - ELB Shared mobility	30,0%
Las Palmas	S2 - ELB Accommodation	30,0%
	S1 - ELB Shared mobility	30,0%
Las Palmas	S2 - ELB Accommodation	30,0%

Table 15: Socio-cultural component low ranking

Institutional component

The institutional component considers the combined implications of how much the measure plays an important role in the policy agenda and the presence of complex institutional arrangements for its implementation. Looking at the measures with higher replicability potential, the Limassol Public Transport traveller information system seems to benefit both of a simple institutional framework (due to already consolidated relationships between public transport operators and municipalities) and of a high priority in the policy agenda.

DESTINATIONS site	Measure	Rank
Madeira	S8 -LIM Public Transp.	80,0%
Limassol	S6 - LPA Integrated pay.	80,0%
Rethymno	S8 -LIM Public Transp.	80,0%
Elba	S8 -LIM Public Transp.	80,0%
Las Palmas	S8 -LIM Public Transp.	80,0%

DESTINATIONS site	Measure	Rank
Limassol	S12 -RET Green Mobility	70,0%
Rethymno	S1 - ELB Shared mobility	70,0%
Rethymno	S5 - LPA Public Bike	70,0%
Elba	S6 - LPA Integrated pay.	70,0%
Elba	S9 -LIM Mobile Applic.	70,0%
Las Palmas	S1 - ELB Shared mobility	70,0%

Table 16: Institutional component high ranking

The lower ranking from the institutional point of view are characterised by barriers in terms of institutional complexity, e.g. public-private cooperation, which needs a solid network of partners and the involvement of several businesses (museum, shops, restaurants, etc.). This is particularly relevant for those measures as the Green credits scheme in Las Palmas. Other types of institutional barriers address the complex institutional cooperation needed for setting up mobility applications aggregating data from different sources and travel planners, as in the Limassol measure LIM 7.4 - Mobility application and travel planner for smart phones to provide real time information.

DESTINATIONS site	Measure	Rank
Elba	S13 -RET Cooperative mob.	0,0%
Madeira	S7 -LPA Green Credit	20,0%
Madeira	S2 - ELB Accommodation	30,0%
Madeira	S9 -LIM Mobile Applic.	30,0%
Rethymno	S9 -LIM Mobile Applic.	30,0%
Elba	S3 -MAD e.GIRO	30,0%
Elba	S4 -MAD Green points	30,0%
Elba	S12 -RET Green Mobility	30,0%
Las Palmas	S9 -LIM Mobile Applic.	30,0%

Table 17: Institutional component low ranking

Technological component

The technological component is a mix of capability of the measure to be integrated in the existing technological infrastructure and market maturity of the solution. These two aspects explain most of the reasons behind the high ranking attributed to some measures.

On the one hand, the high potential attributed to Limassol Green Label depends on the low level of technological complexity of the measure, which could facilitate the integration in the existing infrastructure (Elba). On the other hand, market maturity is considered important for the replicability of the Las Palmas public e-bike system (Limassol and Rethymno).

DESTINATIONS site	Measure	Rank
Elba	S10 -LIM Green Label	95,0%
Limassol	S5 - LPA Public Bike	90,0%
Limassol	S6 - LPA Integrated pay.	90,0%
Limassol	S11 -RET Sharing mobility	80,0%
Elba	S9 -LIM Mobile Applic.	80,0%
Elba	S11 -RET Sharing mobility	80,0%
Rethymno	S3 - MAD e.GIRO	75,0%
Rethymno	S5 - LPA Public Bike	75,0%
Elba	S5 - LPA Public Bike	75,0%
Las Palmas	S3 - MAD e.GIRO	75,0%
Limassol	S7 -LPA Green Credit	70,0%
Limassol	S13 -RET Cooperative mob.	70,0%
Rethymno	S6 - LPA Integrated pay.	70,0%
Rethymno	S8 -LIM Public Transp.	70,0%
Las Palmas	S8 -LIM Public Transp.	70,0%

Table 18: Technological component high ranking

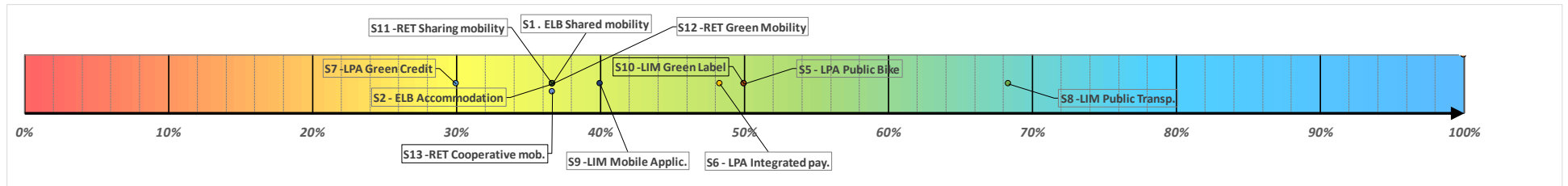
Concerning the lowest ranking, the lack of infrastructure to accommodate some measures are important factors, e.g. as the Madeira electronic ticketing e.GIRO (in Elba) or the low market maturity in others, as the Elba shared mobility services, whose technical characteristics are considered still low in Greece (Rethymno).

DESTINATIONS site	Measure	Rank
Madeira	S13 -RET Cooperative mob.	20,0%
Rethymno	S1 - ELB Shared mobility	35,0%
Elba	S3 - MAD e.GIRO	35,0%
Las Palmas	S1- ELB Shared mobility	35,0%

Table 19: Technological component low ranking

Figure 20 - MADEIRA Global and specific replicabilities

MADEIRA Global Replicability Index



MADEIRA Specific replicabilities

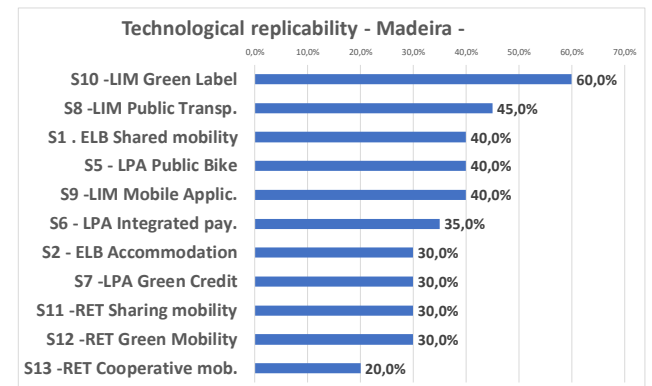
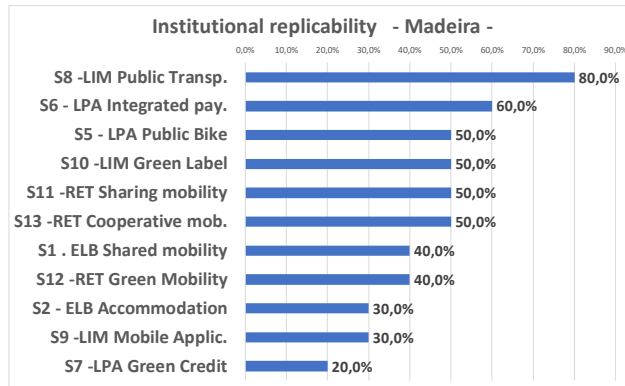
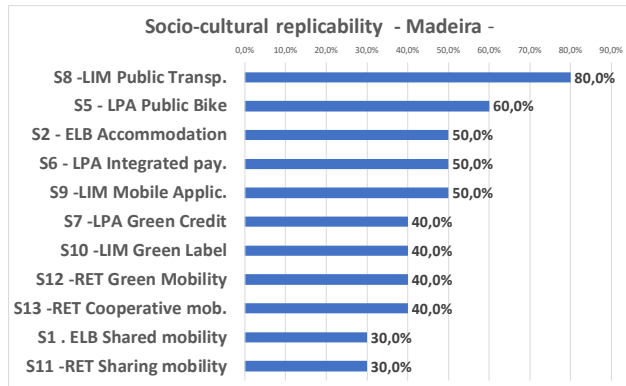
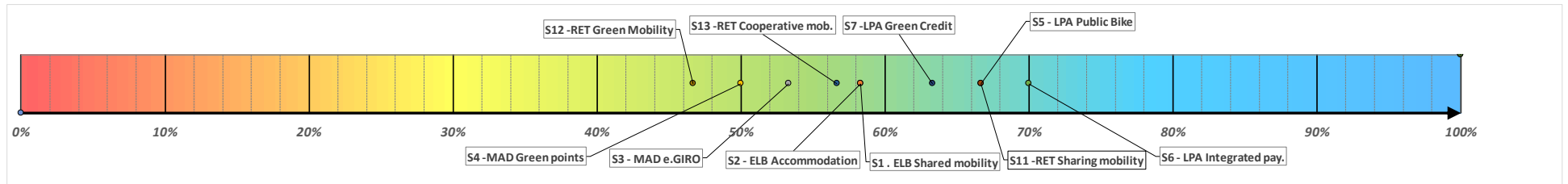


Figure 21 - LIMASSOL Global and specific replicabilities

LIMASSOL Global Replicability Index



LIMASSOL Specific replicabilities

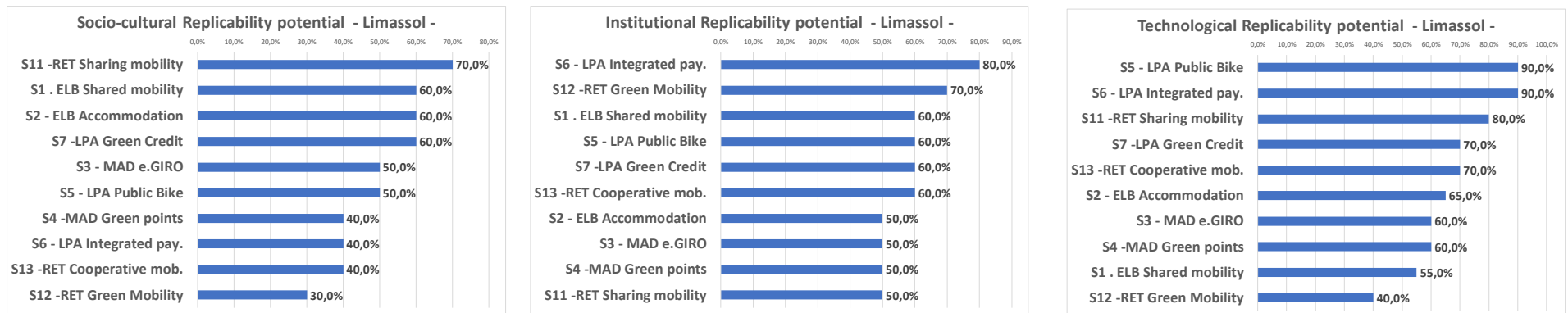
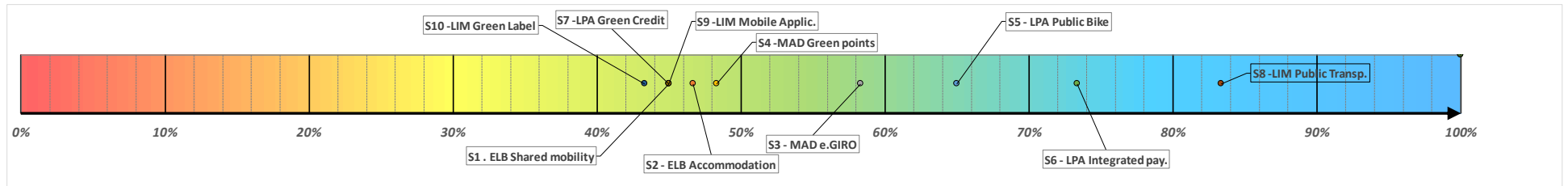


Figure 22 - RETHYMNO Global and specific replicabilities

RETHYMNO Global Replicability Index



RETHYMNO Specific replicabilities

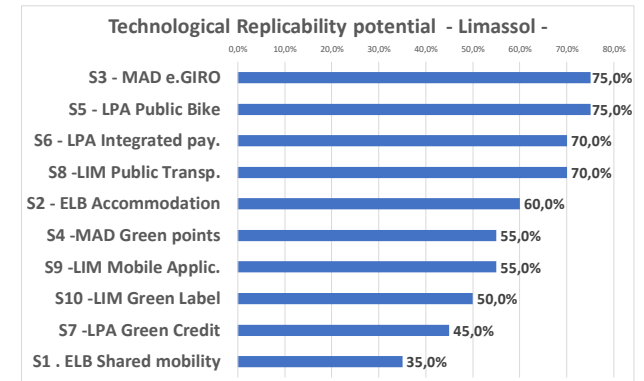
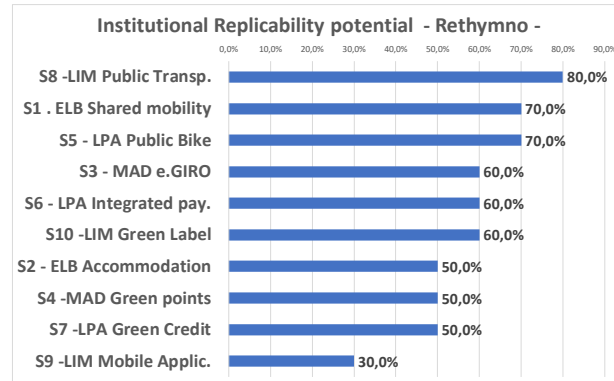
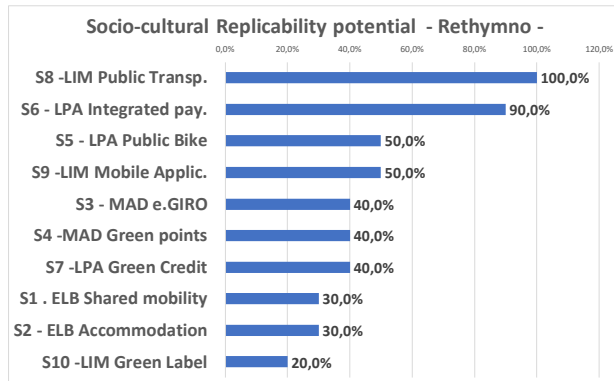
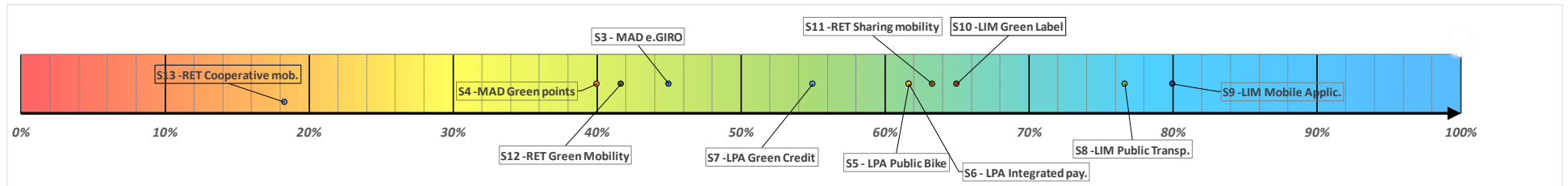


Figure 23 - ELBA Global and specific replicabilities

ELBA Global Replicability Index



ELBA Specific replicabilities

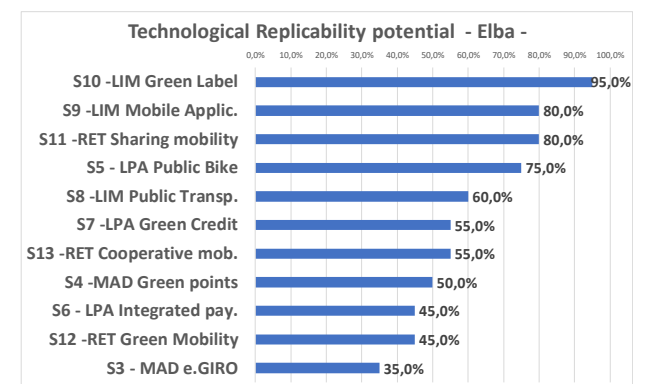
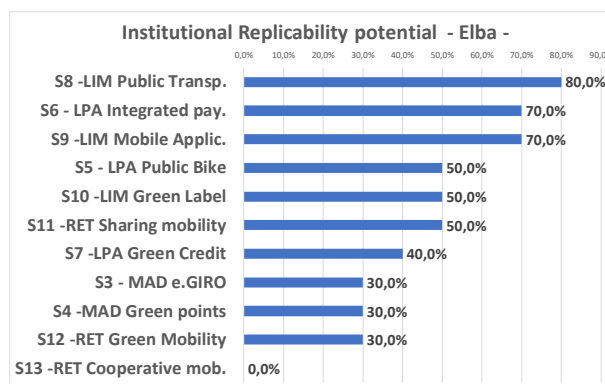
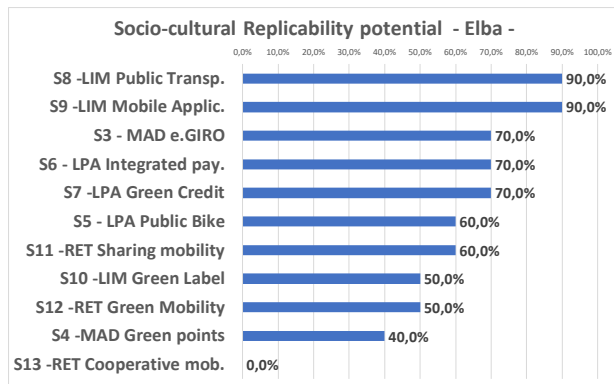
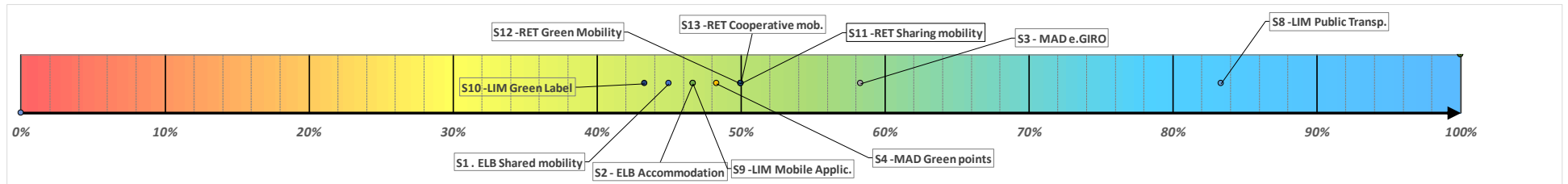


Figure 24 - LAS PALMAS Global and specific replicabilities

LAS PALMAS Global Replicability Index



LAS PALMAS Specific replicabilities

