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CiViTAS

Cleaner and better transport in cities

DESTINATIONS

Six European Islands implement Measures for better Sustainable Mobility for Citizens and Tourists alike



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CONSULTA DE BALDO BIONDIAGUJA
ADMINISTRACIÓN

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The Project

CIVITAS DESTINATIONS is a four-year Innovative Actions project co-funded by the EU's Horizon 2020 Programme. Its main aim is the integration of sustainable tourism and mobility strategies through the development of a series of innovative solutions in six European islands.

The process

Funchal in Madeira, **Limassol** in Cyprus, **Rethymno** in Crete, **the Municipalities of Portoferraio and Rio** in Elba, **the Region of Valletta** in Malta and **Las Palmas de Gran Canaria** experience significant seasonal flow of tourists each year, which puts great pressure in the transport systems of the islands. This calls for innovative solutions in order to improve mobility patterns and the quality of life for citizens and tourists alike.

The six European islands applied a set of uniform methodologies, in order to develop and implement sustainable mobility measures and actions, with the view to offering intelligent sustainable transport solutions for tourists and residents alike, through innovation and cooperation of all major stakeholders.

Twenty eight partners from 9 EU member states, with the strong support of their local politicians, have worked together for more than 4 years designing, developing, implementing and operating more than 75 measures and actions aiming at reducing the pressures on the transport systems of the 6 islands due to tourism. These actions and measures have helped develop Sustainable Urban Mobility and Logistics Plans, create attractive and accessible public spaces, promote behavioural change towards shared mobility and electromobility, manage mobility demand and awareness campaigns and promote attractive, efficient and accessible public transport.

For a complete list and description of the DESTINATIONS measures please visit

<https://civitas.eu/mobility-solutions/project/destinations>

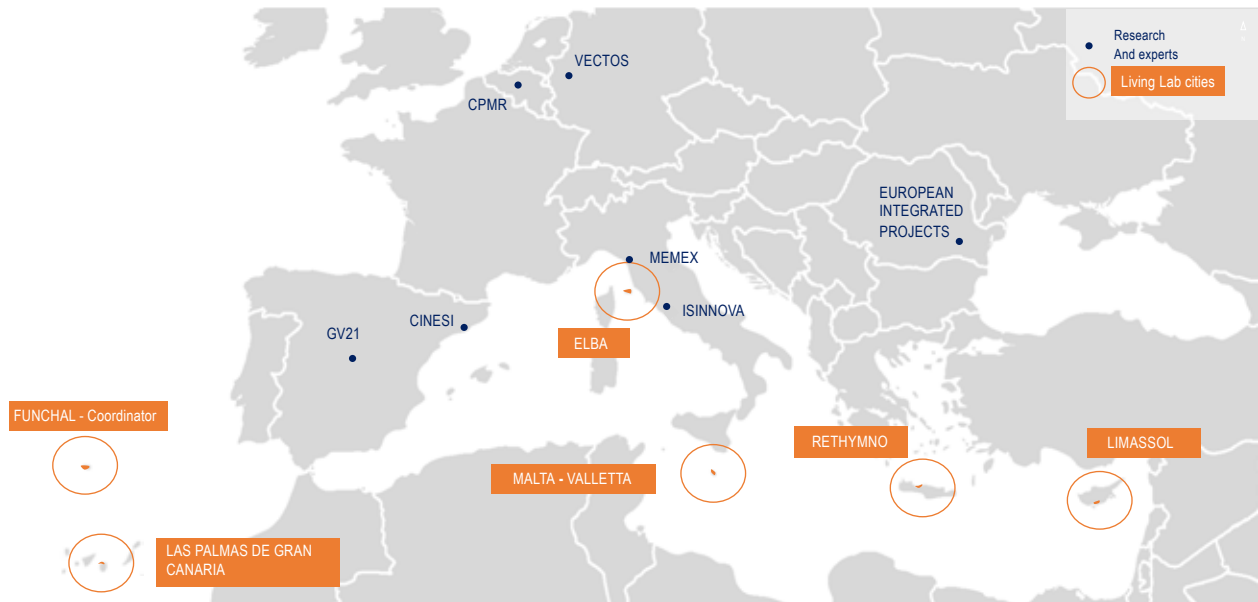
Objectives

- > Improve overall urban accessibility;
- > Reduce emissions/increase air quality;
- > Reduce energy consumption;
- > Boost local economic development;
- > Change behaviours of citizens and tourists towards more efficient and sustainable modes of transport;
- > Enhance social cohesion;
- > Improve cost effectiveness and integration of transport and mobility services.

Innovative features

- > Overarching approach to urban and regional problems;
- > Development of mobility solutions serving both residents and tourists needs;
- > Economy-sharing driven;
- > Business models to guarantee lasting impacts of the measures;
- > Working group representing over 40 EU regions following the project as observers;
- > Links to China, the most promising touristic market of the future, to strengthen international cooperation;
- > New formats for assembling and engaging stakeholders;
- > Support to island cities to cope with new touristic trends and adapt their mobility systems accordingly;
- > Information and technologies upscaling.





What did we learn?

- > Engagement of the local stakeholders is key to the successful implementation of measures
- > SUMP and SULPs should take into account the impact of tourism
- > Information campaigns are important behavioural change tools towards sustainable mobility
- > Involving the private sector early in the process is key to unlock investment from third parties
- > Information Technology tools, such as mobile Apps and gamification are powerful techniques to attract citizens and tourists towards better Public Transport
- > E-Mobility can contribute to achieving environmental objectives, improve air quality and help in the fight against climate change

Expected impact

- > **Economic:** job creation and contribution to local economic development through the engagement of local businesses, hoteliers, transport and tourism operators.
- > **Social:** improve the quality of life of the local society and reduce the risks of poverty and exclusion.
- > **Environmental:** reduce greenhouse gas emissions, increase the use of renewable energy sources and energy efficiency while protecting natural habitats and contributing in the fight against climate change



The achievements

One of the main achievements of the project is the political commitment of the island politicians towards a long-term objective to a sustainable strategy in their regions, reinforced by the continuous exchange of experiences with other touristic regions. Their pledge was manifested with the signing of the “Political Commitment” on 12 April 2019 on the island of Elba, promising to pursue seven sustainable objectives/goals to become political frontrunners for sustainable development, economic growth and an enhanced quality of life. The document was endorsed by more than 20 island regions members of the Islands Commission of CPMR and presented to the EU’s Commissioner for Transport Violeta Bulc on 7 May 2019.



Two lighthouse activities were the SUMP (Sustainable Urban Mobility Plan) and the SULP (Sustainable Urban Logistic Plan) development. The development of these plans joined several stakeholders from the tourism and the transport sectors, and drive the implementation of many of the mobility measures in the project.

The innovative solutions developed and the pilot activities implemented allowed the unlocking of significant additional funding, from the private sector or from public funds, such as the ERDF, boosting the results of the project. Such additional funding has allowed the purchase of hybrid and e-busses in Funchal, Las Palmas de Gran Canaria (LPGC) and Rethymno, more user-friendly bus stops and traffic signals in Limassol Las Palmas de Gran Canaria and Funchal, the expansion of shared bikes and e-bikes systems in LPGC and Rethymno, to name a few.



The project had a strong communication, dissemination and replication mandate. It was accomplished through an active web page, the Platform of Followers with more than 200 registered users, CIVITAS newsletters articles, a series of workshops and webinars, numerous presentations in sustainable mobility events and conferences worldwide and the organisation of sessions and events during the 2019 EU Sustainable Energy Week (EUSEW), the 2019 European Week of Regions and Cities and several European Mobility Week activities and local dissemination events by our partners.

The citizens engagement was also an accomplishment, the participatory methodologies allowed citizens to contribute to the assessment of problems, and more importantly, to be part of the solutions.



Summary of project outputs

Sites have now safer and more accessible public spaces for all, including citizens with physical disabilities.

- Elba increased safety for pedestrians and cyclists;
- Limassol installed 5 bike parking facilities;
- Madeira implemented traffic calming actions;
- Las Palmas de Gran Canaria developed traffic simulation scenarios;
- Rethymno installed 24 traffic lights with countdown timers and beach infrastructure for the disabled;
- Madeira, Rethymno, and Limassol cooperated actively with schools to promote safe routes and mobility plans for schools and university communities.

Long-lasting incentives to promote sustainable mobility were implemented.

- Madeira launched the “Public Transport Friend” discounts in some shops;
- Limassol introduced the Green Label Award and Mobility Card, and the Bicycle Challenge;
- Malta developed the Green Mobility Hotel Award and launched the App “My Malta Plan”;
- The “Elba Card” was created to sell PT tickets in the hotels;
- Rethymno created the Sustainable Mobility Agency.

Commitment to contribute to a more attractive public transport (PT) experience.

- Las Palmas GC installed 20 new autonomous panels equipped with PT smartcards readers and acquired 3 hybrid buses and an e-bus;

- Rethymno was the first city in Greece to have an e-bus in the PT fleet;
- Elba signed agreements with the PT operator for better service;
- Limassol installed 20 bike racks on buses;
- Madeira installed various systems on buses to improve the PT fleet efficiency and carried out 4 demonstration tests with electric buses;
- Malta launched a new circular bus route, linking the ferry landing site to the main bus terminal.

The use of more energy efficient vehicles and sharing services was established across all sites.

- Elba designed the Shared Urban Mobility Agency;
- Rethymno improved the bike-sharing system;
- LPGC implemented a new bike-sharing system, Sitycleta;
- These sites also installed new EV-charging stations;
- Malta promoted car-sharing;
- In Madeira, incentive schemes were put in place to support the acquisition of EVs by residents and companies.

These sustainable mobility achievements will continue operating after the end of the project, contributing to the long-term legacy of DESTINATIONS and designating the six participating islands as ideal Sustainable Tourism Destinations making important contributions in the fight against Climate Change.

Madeira and its transport system

The Autonomous Region of Madeira (ARM) is composed of two main Islands, Madeira and Porto Santo, with 254 thousand inhabitants. Madeira Island is located 973km from Lisbon, has an area of 741 km², and the capital is Funchal with an area of 76,15 km² and 105 thousand inhabitants. Madeira is a touristic destination, with a Mediterranean climate. In 2018 it received 1,6 million tourists arriving by plane and 533 thousand by cruise ship.

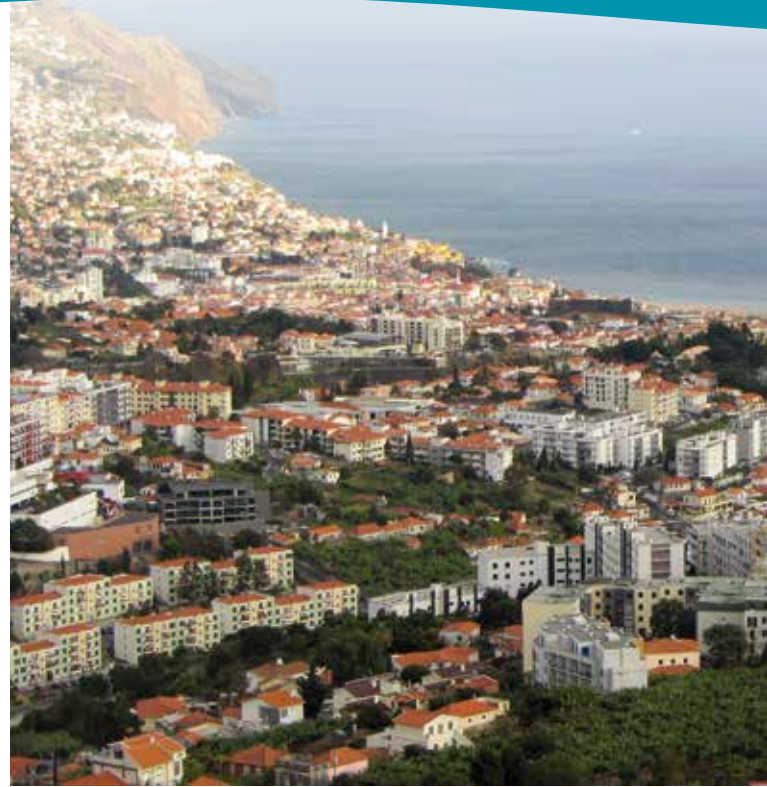
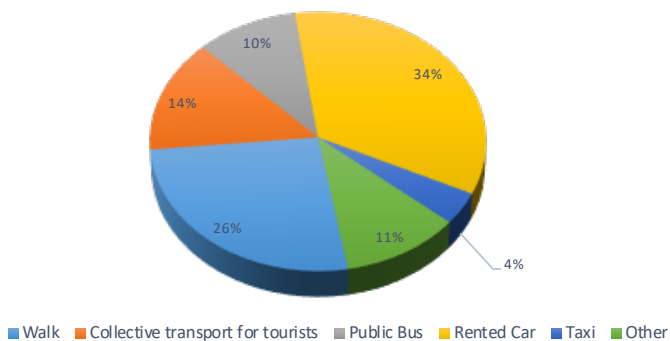
Madeira's transport system

The data collected from the 2001 and 2011 census demonstrated a big increase in the use of car, from 37% to 59%. On the other hand, the public transport use decreased from 27% to 21%. This necessitated to take actions to promote more sustainable modes of transport in Madeira. In parallel with the activities targeting residents, Madeira defined a strategy focused in the tourism segment, as it is a good target to boost the use of public transport, particularly outside peak hours.

CIVITAS DESTINATIONS in Madeira

Funchal joined the CIVITAS Initiative in October 2008 with the MIMOSA project, with the local team comprised of the public transport operator Horários do Funchal, the Municipality of Funchal and a technology agency, Madeira Tecnopólo. Madeira joined the DESTINATIONS project, as site manager and coordinator, focusing on measures to reinforce sustainable mobility for residents and tourists.

Modal share of tourists in Madeira (2019)



The involvement in CIVITAS was important at a political level. The SUMP-ARM, a Sustainable Mobility Plan (SUMP) for all municipalities in the Region of Madeira, taking into account the mobility plans of residents as well as tourists, was approved in June 2019. The development of the SUMP-ARM counted on the collaboration of more than 20 entities (from the mobility and tourism sectors), namely the executive and technical teams that were made available to participate in meetings and to supply the necessary data. The Municipality of Funchal had its SUMP approved in 2018. Other important political action was the financial support to public transport. Since April 2019, the prices of monthly transport passes have been reduced to increase affordability.

The municipalities in Madeira are starting the implementation of the SUMP-ARM. This implementation will be supported by car counting systems and the environmental monitoring station developed by DESTINATIONS partner ARDITI.

Nowadays, Madeira is moving in the right direction towards sustainable mobility. There was an increase in the use of public transport by residents and tourists, improvements in the accessibility for pedestrians, and an increase in the use of electric cars in the private and public sectors.



The politicians in Madeira are strongly engaged in implementing mobility solutions. As a result, the European Regional Development Fund has invested in the improvement of mobility in the region, financing public transport



Our mission is to guarantee the quality of life and well-being of our residents and the tourists who visit us, providing sustainable mobility and a quality transport network. We believe that improve the transport sector is essential to fulfil this objective. With CIVITAS DESTINATIONS, the Regional Government has seen significant improvements in transport. Our commitment to the future includes more incentives for the public and private electric fleet, improved information, more accessibility and the promotion of more equitable and inclusive mobility.

**Rui Barreto,
Regional Secretary
for the Economy**



fleet renovation, mobility plans and road infrastructure for better pedestrianisation and cycling. Horários do Funchal has now 5 mini electric buses connecting the city centre, the hotel area and the port of Funchal, and will receive in the following months 30 Euro VI diesel buses that can circulate in most areas of the city.

In 2019, as a result of improvements made in the public transport quality of service, Horários do Funchal was publicly awarded the Level I certification of the Quality and Service Excellence (QESM) recognition system, developed by the Regional Directorate of Economy and Transport.

Challenges of an island in the middle of the Atlantic

The distance from the mainland can be a barrier to implement efficient measures, mainly regarding technologies, such as electric buses. Besides that, narrow and very steep roads is a characteristic of most part of our volcanic island, leading to demands for extra power and manoeuvrability. In the project, this was addressed through tests of electric buses by the different public transport operators, supported by AREAM. Through these tests, it was possible to better understand, the feasibility of this technology and the type of services that can be offered with electric buses in this difficult terrain.

Limassol and its transport system

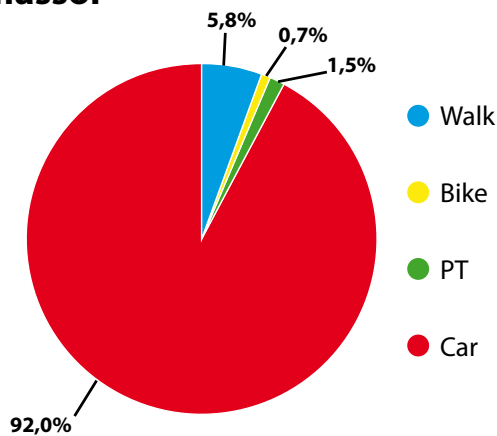
Situated in the south-eastern corner of the Mediterranean, Limassol is a fascinating and exciting destination. It is a land where the traditional and modern co-exist offering desirable contemporary facilities, yet still extending the local warm hospitality which characterises Cyprus.

Limassol is the second largest city of Cyprus with total surface 1.396 m² and a population of 240.000. Tourism is a prevailing industry with around 400.000 visitors every year.

The mobility system

At the beginning of the project it was estimated that 92,1% of transportation in the region was by car, 538.446 vehicle trips per day. Walking was the second most popular way to travel around (5,8%), followed by very low interest in public transport (1,5%) and bike (0,7%).

Limassol



Modal Split in Limassol 2016

Limassol needs to improve in the area of sustainable mobility and this view has received strong political support. Limassol mayors have signed the Covenant of Mayors, committing to a 20% decrease of pollutants by 2020. The Ministry of Transport of the Republic of Cyprus is redesigning the Public Transport System as part of the national sustainable mobility strategy. The Limassol municipalities, government authorities, local universities, the regional tourism boards and other organisations regularly participate in EU projects that promote sustainable mobility.

The fast development of Limassol evidently led to neglect sustainability considerations and practices. Today, the city stakeholders realise the significance of sustainable



The impact of CIVITAS DESTINATIONS

The Limassol Tourism Board, the Municipality of Limassol and Stratagem Energy Ltd are the local project partners that successfully implemented activities to improve cycling and walking infrastructure, increase of cycling and walking to commute but also in combination with special interest tourist activities as an integrated product,

- to improve infrastructure,
- to upgrade accessibility for people with disabilities,
- to modernise the public transport services,
- to educate the new generation,
- to encourage behavioural change,
- to create attractive and accessible public places that enable intermodal leisure trips,
- to upgrade sustainable mobility services,
- to create awareness and promote electromobility,
- to expand bike sharing,
- to engage stakeholders that can become ambassadors of the project philosophy,



"The European programme CIVITAS DESTINATIONS is extremely important for Limassol. A city that demonstrates a very high growth rate that inevitably creates traffic congestion problems, and barriers for citizens and tourists to move freely and comfortably. I truly hope that we will keep progressing in the area of sustainable mobility so that Limassol evolves to a truly sustainable city."

**Mr. Nicos
Nicolaidis
Mayor of Limassol**



development and are looking at how to best promote sustainable mobility both for tourists and citizens. The need to redesign or reinvent services, introduce new products and most importantly change attitudes is recognised. This difficult task is undertaken by local authorities, the official tourist body of Limassol, and the majority of entrepreneurs and official bodies who share the vision for turning Limassol into a more sustainable holiday destination, that offers a rich and memorable holiday experience, with a minimum environmental footprint.



- to enhance change in user behaviour and lifestyles and
- to utilise existing and new technologies to achieve the above and provide information and tools to design a sustainable journey.

Limassol plans and implements measures that are expected to contribute decisively in the enhancement of sustainable mobility modes and will promote a new, more environmentally friendly lifestyle for locals and visitors alike. The impact of the project is expected to contribute in encouraging mobility by the public transport system, increase interest in cycling and walking, as well as electromobility. Such impact is expected to reduce emissions and decrease energy consumption as well as improve the destination's attractiveness, the citizens' quality of life, the quality of the urban environment, in the medium and the long term. Finally, the project is in line with the Sustainable Urban Mobility Plan (SUMP), that has been developed by the Ministry of Transport in cooperation with the relevant stakeholders.



Tourism and Sustainable Mobility in Rethymno

Introduction to the City and its Transport system

Rethymno, a medium-size Mediterranean city, is located on the northern coast of the island of Crete, Greece. The Region has a population of 623.000 inhabitants, 13,7% of which resides in the Regional Unit of Rethymno. The Municipality of Rethymno is the third-largest on the island with 63.000 habitants.

Greece, as a popular tourist destination worldwide, attracts more than 22 million tourists a year. More than 3,3 million (15%) visit Crete through its two main airports and two ports located in the neighbouring cities, Chania and Heraklion. From 2017 onwards, there is also an increase in cruise ship visitors.

The city accommodates more than 500.000 visitors annually. Furthermore, Rethymno attracts over 1.5 million visitors on day tours and cruises due to its archeological landmarks, remarkable beaches, traditional villages, and worldwide famous gastronomy.

The mobility modal split before DESTINATIONS in Rethymno indicated the car as the main means of transport. 60% of residents used their car, 20% commute by

walking, 10% use Public Transport (PT), 5% the bicycle and 5% by taxi.

Tourism and mobility are two growing sectors which Rethymno supports by building up an integrated approach through the introduction of sustainable and affordable mobility solutions. It has been a member of the Covenant of Mayors since 2011 and sustainable mobility is one of the strategic pillars of the Municipal Sustainable Energy Action Plan (SEAP) and the most recent Sustainable Energy and Climate Action Plan (SECAP) adopted in February 2020. Rethymno is also involved in the European Reference Framework for Sustainable Cities.

CIVITAS DESTINATIONS in Rethymno

Through CIVITAS DESTINATIONS, Rethymno addresses mobility challenges in three main sectors; upgrading of the transport system, behavioural change and establishment of co-operative relations with local stakeholders. Rethymno has also secured additional funding for expanding infrastructure.

The upgrading of the transport system and services focused on addressing demand fluctuation due to tourism, aiming to provide attractive PT services to both



The city of Rethymno



Historic old town-Rethymno's Venetian Harbour

citizens and tourists, to improve links between public transport, cycling and walking networks, and to inform users about links to inter-regional and airport transportation. By doing so, Rethymno reduces traffic congestion and improves air-quality.

DESTINATIONS measures in Rethymno include electromobility, emerging technologies, policy based and soft measures and behavioural change techniques with a strong replication potential, aiming to change attitudes towards sustainable mobility and improve the city's image to citizens and tourists alike. Informational events, promotional material, experiential activities, thematic events and workshops, focus on motivating bottom-up

Rethymno is a major touristic destination with seasonal fluctuations in mobility and tourism. DESTINATIONS played a major part in the efforts of Rethymno towards Sustainable Mobility. The infrastructure and equipment installed and the innovative solutions tested, produced concrete results that have been acknowledged and awarded with honours at European level. They revealed increased potential and opportunities to help us make our city a Sustainable Tourist Destination model.

Georgis Marinakis
Mayor of Rethymno
Member of CIVITAS PAC



behavioural change of hundreds of citizens, tourists and more than 9.000 students.

Rethymno upgrades its existing Sustainable Mobility Plan (SUMP) for the city, integrating also a Sustainable Logistics Plan (SULP) for freight movement and mobility plans for 11 selected schools. Innovative solutions include smart applications and IT tools that have improved the management of the city's traffic flow and air quality.

E-mobility, a slow-growing sector in Greece, is strongly supported and continuously promoted. Rethymno leads the way by introducing e-vehicles at local level, installing the first in the region, free of charge, Electric Vehicle Charging Points (EVCPs). EVs are integrated into municipal and PT fleets; an electric mini bus and a municipal e-car are in service in the city. E-mobility is combined with sharing schemes through the introduction of shared e-scooters and e-bikes as the city's new last-mile, soft mobility solutions.

Rethymno creates attractive and accessible public spaces, promotes walking and cycling as an efficient, zero-emissions solution and improves accessibility to beaches and places of attraction for disabled people.

DESTINATIONS has strengthened the city's image as an attractive tourism destination, has improved the quality of life and has made a positive and measurable contribution to local entrepreneurship and economic growth. Rethymno is serving as a lighthouse example to other Greek cities, as best practice for sustainable mobility solutions.

Elba Island and its mobility challenges

Introduction to the Island

Elba is an Italian island located in the Tyrrhenian Sea, around 10 km from the coast of Tuscany. Despite its relatively small size (223 km²), it is a precious territory from a natural, geological and cultural point of view: it is included in the MaB (Man and Biosphere) UNESCO Reserve and in the Tuscan Archipelago National Park, boasting several species of endemic flora and fauna; its northern coast opens to the cetacean Sanctuary and its stunning diversity of minerals attracts every year a large number of people fond of geology.

Beautiful landscapes and beaches alternate with pleasant villages, which have hosted famous people such as Napoleon Bonaparte and Cosimo de Medici.



From an administrative point of view, the island is divided into seven municipalities. Portoferraio and Rio, partners of DESTINATIONS, host the main ports of the Island.

The Tourist Flows

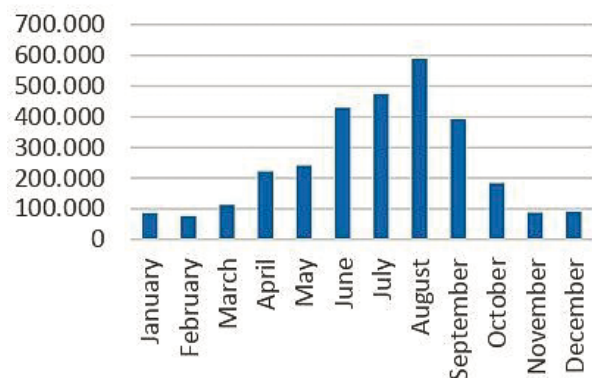
Elba has a total of 31.952 residents (2018), but a great number of tourists also populate the territory, especially in the summer season. During the peak season (June-September), the tourists registered represent about 85% of the visitors in a year. This large and concentrated tourist flow in a short period of time leads to significant mobility problems.

Data delivered by the Port Authority complete the picture of the traffic flow, both of residents and tourists. As an example, data regarding 2019 ferry passengers show a very different situation between low and high season:



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Ferry passengers 2019



The Mobility Challenges of a Small Island

According to the above data, the challenge facing Elba every year concerns the incongruity between summer and winter and shows the need to know the tourist trends to provide adequate services and infrastructures to meet the needs of visitors.

Another issue regards the use of private cars. Since the road system is mainly based on the provincial road crossing the island like a backbone and the Local Public Transport (LPT) doesn't reach many tourist locations, visitors usually use their own cars to travel, thus affecting the liveability of the island, due to traffic congestion, air pollution, parking problems, safety, etc.



Another mobility issue is the low use of the LPT (only 14%), which presents interesting challenges: improving the service by making it more accessible and efficient, providing integrated solutions with other transport modes, making ticketing and info-mobility more effective.

Elba is also an island loved by cyclists for its scenic natural routes. However, the actual cycling paths are few and, consequently, not many people use the bicycle for their daily trips.



Bikers in Elba

CIVITAS DESTINATIONS in Elba

Although only Portoferraio and Rio are project partners, many measures concern the entire island, in the belief that significant mobility improvements can only be achieved through widely implemented actions.

Drafting strategic mobility plans such as the SUMP and the Sulp is one of the many good results of the project, achieved in collaboration with partners ISINNOVA and MemEx.

But the main innovative result developed with the support of MemEx is the implementation of the Sustainable Urban Mobility Agency, a complete info-mobility and multifunction platform and App, able to address mobility problems connecting all the transport services available on the territory and providing a tool for sharing trips among people.

The general approach has been to integrate shared mobility services with local public transport, promoting walking, cycling and electric mobility solutions to the detriment of private cars.



European Mobility Week stand in Portoferraio

“DESTINATIONS has been a unique opportunity to develop pilot actions inspired by the principles of sustainable mobility and decarbonisation of public transport. The collective commitment for the future is to continue in this direction, also improving the sustainable tourism experience, which is the main driver of the local economy. The impact of the Covid-19 pandemic shows the urgency to guarantee a high level of environmental quality and liveability of our cities, by continuously promoting sustainable mobility interventions”.



Angelo Zini,
Mayor
Municipality
of Portoferraio



Marco Corsini,
Mayor
Municipality
of Rio

Malta and its transport system

Introduction of the city and mobility systems

Malta is the main island in the Maltese archipelago, which is made up of 5 islands, covering an area of approximately 316km². The Island is often considered a city-state with one principal urban agglomeration being the Northern and Southern Harbour Region. This area, which coincides with the SUMP Region and the main focus of the implementation of the DESTINATIONS Project in Malta, is the most densely populated, currently housing around 60% of the population and more than 66% of the country's total national employment provision. Furthermore, the most visited localities by tourists are also found in this Region.

The Maltase Islands are a popular destination for tourists arriving both by air and by cruise ships. The islands have seen a year-on-year increase in the number of tourists, with 2.8 million arrivals in 2019. This great influx of tourists, together with the local population of almost half a million, adds significant pressure on the existing infrastructure, including road capacity.

Malta has 112km of TEN-T roads, with congestion being common, especially around the central section of the network. The private car is predominantly the preferred mode, where the average car occupancy is also very low (1.25 passengers per car including driver). According to a study carried out in 2010, there has been a 13% decrease in modal share of public transport in all parts of the



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The capital city of Valletta

country, with the exception of the capital city of Valletta which had actually experienced a 9% growth in public transport usage as a result of the sustainable urban mobility measures introduced in this locality between 2006 and 2010. Besides, bicycle use is extremely low and rarely considered as a transport mode. In the very recent years a shift has been observed and there has been an increased interest in the uptake of sustainable and alternative transport modes both by residents and tourists. Cycle lanes have been introduced to improve the provision of cycling infrastructure while the services of car-sharing and bike-sharing have recently been launched and are proving to be a popular alternative, especially in the case of rental vehicles. Public transport remains the most popular mode of transport amongst tourists. However, owing to space limitations, buses usually have to share the road infrastructure with private vehicles, thus leading to inefficiencies.



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The Grand Harbour Marina



Delimara, Malta's Southern coastline

The Malta Tourism Authority (MTA) Market Profile has conducted surveys in 2013 on 6,739 respondents. It was noted that 22% of tourists visiting Malta rented a car whereas 76% of tourists rely on public transportation for their travel needs. The increase in the number of car-independent visitors and the decrease of tour operator-based tourism evidently affect the public transport system of Malta, resulting in a propensity toward individual and public transport usage, with an increase of self-drive cars, taxis and a decreased use of coaches.

CIVITAS DESTINATIONS in Malta

In 2016, Transport Malta prepared the National Transport Strategy 2050 (NTS) and the Transport Master Plan 2025 (TMP), which set out the vision and strategic goals, which the Government aspires to achieve in the short to medium term within the transport sector. The measures piloted as part of the DESTINATIONS Project

complement the measures being proposed in the NTS and the TMP.

In partnership with five other tourist destinations, Malta has benefitted from support, and development materialised through exchanges. Locally, extensive consultation with stakeholders, as part of the preparations for project implementation, has developed new ties and strengthened existing ones. This input has provided the background for better planning and sustainable transport solutions.

The results achieved from the pilot projects provided the basis for the Sustainable Urban Mobility Plan (SUMP) developed for the Valletta Region. This is reflected in the objective of the SUMP; "A better quality of life for residents and tourists. From a mobility perspective!". This summarises the achievements and gives a holistic way forward after the project lifetime.



"CIVITAS DESTINATIONS has provided the opportunity to test innovative initiatives with the aim of creating a shift in the modal share towards cleaner and more sustainable modes of transport. The positive impacts achieved together with the feasibility assessment has encouraged future replication and long-term implementation in other regions, in Malta."

**Mr. Joseph Bugeja,
Chairman and CEO
of Transport Malta**



Las Palmas de Grand Canaria

Las Palmas de Gran Canaria (LPGC) is the capital city of Gran Canaria, one of the eight Canary Islands, the southernmost autonomous community of Spain located in the Atlantic Ocean, in a region known as Macaronesia, 100 kilometres west of Morocco.

With 379.925 inhabitants in 2019, and around 600.000 inhabitants in the wider metropolitan area, LPGC is the largest city of the archipelago.

Tourism in Gran Canaria

In 2019, Gran Canaria hosted 3.620.371 foreign and 647.011 domestic tourists. 442.845 tourists stayed in LPGC and a further 861.566 tourists stayed elsewhere on the island but made one-day trips to the city. Furthermore, 682.735 cruise ship passengers arrived to LPGC.

The dominant age group of tourists that visit Gran Canaria is 44+ years old, followed by a group between 24-44 years old.

The Canary Islands welcome tourists throughout the year thanks to their moderate and stable weather conditions, averaging 22o Celsius and a lot of sunny days that allow visitors to enjoy outdoor activities. The tourism high season starts in October and finishes in May.

Transport infrastructure

The Gran Canaria airport (LPA) is located on the east coast of Gran Canaria, 18 km from LPGC and 25 km from the main tourist locations on the island (in the south: Maspalomas, Playa del Inglés, Mogán). It is the largest airport on the Canary Islands and fifth in Spain receiving more than 12 million passengers per year.

The port of Las Palmas is on the route of the European, African and American continents and is the first port of the Middle Atlantic, connected to 180 ports on five continents. It is the largest port in the Canary Islands, with a capacity of 850 docks.

Three major bus stations in the city serving travellers that can transfer between urban and interurban operators.

There are 1.000 kilometres of municipal roads. Motorways link LPGC with the other municipalities on the island.

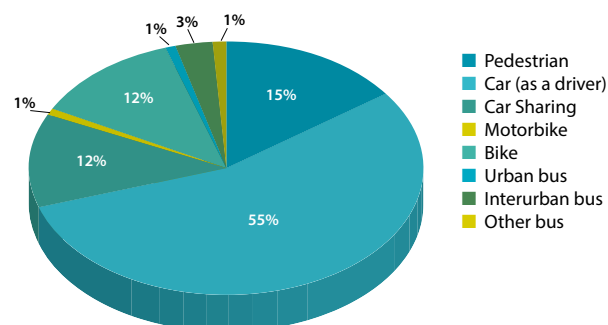


The geomorphology and the urban structure of the city define a difficult terrain for the development of cycling networks (the city is divided by several valleys and ravines and neighbourhoods are located at different altitude levels). The most favourable area for the development of the cycling infrastructure is the coastal platform. The current bike network is being extended to 52 km.

Modal Split in Las Palmas de Gran Canaria

LPGC already developed a SUMP in 2012. However, as some of the actions proposed in the SUMP have already been implemented, modal split figures are being updated by the Mobility Office under CIVITAS DESTINATIONS.

The urban public transport network was reorganised and optimised in 2013 and a Bus Rapid Transit (BRT) system is





Las Canteras beach in Las Palmas de Gran Canaria

being implemented. As a result, the urban PT company has increased the number of travellers every year (from 28.737.615 in 2012 to 38.552.670 in 2019)

CIVITAS DESTINATIONS in Las Palmas de Gran Canaria

The project has fostered the implementation of some key measures and actions in LPGC that help achieve the objectives of the 2012 SUMP. It has also supported all local partners to integrate tourists' mobility needs and requirements into their planning tools, products and services.



Sitycleta bike sharing system in Las Palmas de Gran Canaria

One of the most iconic measures of the project in LPGC is the implementation of a successful public bike sharing service, "Sitycleta", which includes 375 smart bikes, 20 e-bikes and 2 special bikes for people with disabilities. Due to its success, Sitycleta will be enlarged by adding more e-bikes and stations to connect the flat and the hilly parts of the city as well as to improve and enlarge the bicycle path network.

Furthermore, thanks to CIVITAS DESTINATIONS, the first fully electric bus has arrived to the Canary Islands. This allows the PT operator Guaguas Municipales to test this new technology in order to learn about it before the implementation of the BRT system under construction.

Other measures that were very well received by the public transport operator as well as customers, is the installation of 20 real time information panels powered by solar energy at bus stops. Due to their success, the municipality and the regional government have decided to install them all across the island using their own resources.



First articulated e-bus in Las Palmas de Gran Canaria





The Measures

Why tourism matters

According to the World Tourism Organisation, more than 600 million tourists visit Europe every year up to the end of 2019. Many of them visit the islands for their natural beauty and idyllic beaches. This is a rapidly growing market with an average annual increase of 12 million new arrivals. Despite reversals of this upward trend in 2008 due to the global economic crisis and in 2020 due to the COVID-19 pandemic, the sector is expected to recover and to continue to grow, putting pressures in the local transport systems, environment and quality of life.

The selected measures

The DESTINATIONS project develops and implements more than 75 measures dealing with the impact of tourism on transport and mobility in the six European islands. The work undertaken by the 28 project partners over a period of four years dealt with a number of important technological, environmental, societal, economic and behavioural issues.

Fifty-three of these measures were selected and are presented in this publication. They include a description of each activity in brief, their achievements, challenges faced, lessons learned, ways to sustain the measures after the end of the project and the efforts to unlock investment from third parties outside the project. The measures are presented cover six thematic areas:

- Sustainable Mobility and Logistics planning (SUMPs and SULPs),
- Attractive and accessible public spaces,
- Shared mobility services and e-infrastructure,
- Mobility demand management,
- Efficient, attractive and accessible public transport,
- e-Mobility.

The project has also established strong and useful links with China, the largest outbound tourism market in the world and a nation that has made significant progress in promoting sustainable mobility and electromobility over the past few decades. A section of this publication presents our cross-fertilisation activities with China.

The SUMP-ARM in Madeira

The activity in brief

The SUMP-ARM, the Sustainable Urban Mobility Plan for the Autonomous Region of Madeira, was officially adopted by the Regional Government on the 21st of June 2019. The subcontracting to develop the plan was financed by the European Regional Development Fund (ERDF). As part of this process, information was collected from tourism and transport sectors' stakeholders, as well as from tourists, hoteliers and transport rental services through questionnaires.



Monthly Public Transport pass promotion

Several SUMP-ARM measures have been implemented:

- Local partners implemented campaigns to use public transport to the main events in Funchal. They made available specially priced tickets and developed strong marketing activities.
- CMF launched a mobile app that provides information related to road alerts, touristic information and public transport information.
- ARDITI has implemented a smart sensor network that includes:
 - ◆ Eight environmental stations continuously monitoring environmental parameters such as CO, CO₂, SO₂, NOx, ozone, particulates and noise;

- ◆ Fifty Car-counting sensors located in tourist areas in Funchal; and
- ◆ sensors inside 20 buses counting passengers.

Achievements

In April 2019, the price of a monthly public transport pass was reduced from €45,80 to €30 in urban service, and from between €57 and €130 to €40 in interurban service. From a survey in the main ticket sales point of HF, responses show that this action was well received, with a rating of 4,3 (on a scale from 1 to 5). Of all current customers, 26% started using the pass in the last 2 years.

Lessons learned

The stakeholder meetings were the main driver to demonstrate to local politicians what actions are needed to improve sustainable mobility. This topic of discussion did not end with the meetings but continues to be discussed by the entities involved.

Challenges encountered

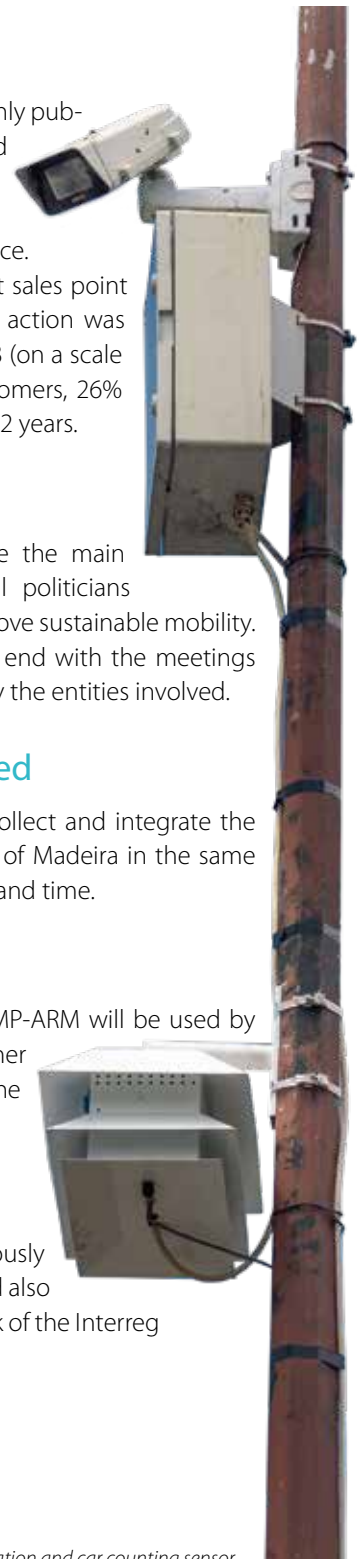
The biggest challenge was to collect and integrate the information of all municipalities of Madeira in the same plan. This required a lot of effort and time.

Unlocked investment

The actions included in the SUMP-ARM will be used by municipalities to apply for further funding, for example, from the ERDF.

Scaling up

Stakeholders are continuously involved in regional activities and also in the meetings in the framework of the Interreg Europe project DESTI-SMART.



Environmental station and car counting sensor

SULP in Funchal: Improving Freight Logistics

The activity in brief

CMF developed a Sustainable Urban Logistics Plan (SULP) that outlines the strategic actions to be undertaken over a long-term period to improve the freight operations in Funchal.

An Intelligent Transport System (ITS) to monitor and gather data regarding the use of parking spaces dedicated to freight is also being assessed.

HF already implemented a complementary activity to promote the use of public transport when shopping in the city centre. In January 2020, a dedicated box to transport luggage and goods on board was installed in 24 buses, increasing the comfort and safety inside the bus.



SULP preparation meeting

Achievements

The SULP delves deeper into the numerous issues related to freight logistics. For instance, the data collection for freight logistics was valuable in showing its impact upon the mobility system. It allowed the design and plan more detailed measures to overcome identified issues.

Lessons learned

Traffic counts showed that freight vehicles are a significant part of the motorised vehicles circulating in Funchal. In addition, it showed there is a persistent



Dedicated space on buses for small luggage

issue with illegal parking for (un)loading purposes. Improving logistics also implies a concerted and integrated approach in reinforcing the role of local authorities and using ITS as a tool to monitor and manage freight activity and collect data to support the decision-making process.

Challenges encountered

Given the technological constraints and lack of human resources to support the development of this measure, CMF is currently pursuing a simpler approach, namely the implementation of smart sensors, connected to an App, developed within the framework of Madeira's SUMP-ARM, that is able to provide freight agents with information related to parking availability for loading and unloading operations.

Scaling up

The SULP is the cornerstone for the sustainable mobility freight policies and measures in Madeira, and sets out the long-term goals alongside the integrated strategy presented in the SUMP-ARM. The majority of actions will continue to be pursued after DESTINATIONS.

Sustainable Mobility & Logistics Plan

Planning for Sustainable Mobility & Logistics for residents and visitors

The activity in brief

Rethymno - through an integrated approach - developed two related and complementary plans, the Sustainable Urban Mobility Plan (SUMP) and the Sustainable Freight Logistics Plan (SULP) to face the rising challenges of the rapidly growing sectors of mobility and tourism. During DESTINATIONS, the previous SUMP was expanded to include the wider city area, and to combine the needs of both residents and visitors. The new SUMP aims to meet tourists and citizens expectations for sustainable, affordable, secure and reliable transport services and a healthier urban environment. Following multi-level participatory and co-creation concepts the Municipality brings together local and regional stakeholders.



SUMP co-creation and consultation workshops

Our achievements

The new SUMP demonstrates mobility solutions that improve the city's accessibility and attractiveness combining emerging technologies, policy-based and soft measures with a strong replication potential, and serves as a best practice example to other Greek cities.

The most important accomplishment was the active engagement of all interested stakeholders, including the local department of the Technical Chamber of Greece, which contributed with their expertise during the design

phase and consultation events. A two-day interactive workshop brought together mobility and tourism stakeholders to design, debate and reach consensus on potential mobility solutions.

The updated SUMP has been met with strong political support and its acceptance by the City Council offers a strategic tool for attracting funding. DESTINATIONS also helped to build a common vision to enhance skills of local authorities, urban planners, transport and tourism actors, through capacity building activities.

Challenges encountered

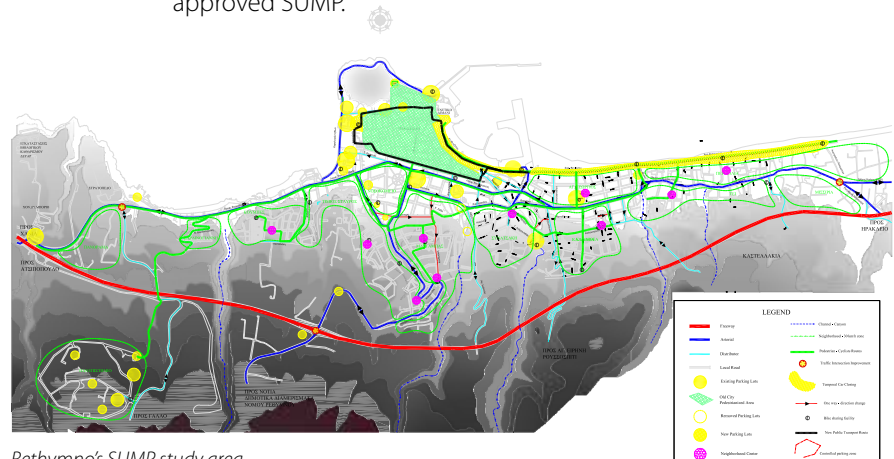
Rethymno is among the first Greek municipalities to implement a SUMP; therefore, stakeholders were not familiar with the co-design process. The local team addressed specific challenges to engage them and to build consensus on a comprehensive action plan supported by a strong communication strategy.

Unlocked investment

In the new SUMP, priority measures have triggered studies to attract funding from structural funds. Rethymno has already unlocked funding to implement large scale interventions supporting its road safety strategic plan.

How the measure will be sustained

Rethymno has established its mobility strategy, endorsed by local stakeholders and citizens, for the forthcoming years. Establishing the mobility baseline, measurable performance and impact indicators along with a monitoring framework, smart applications and ICT tools will prove essential for managing, fine-tuning and enhancing the approved SUMP.



Rethymno's SUMP study area

SULP: Making freight logistics more sustainable

The activity in brief

The first Sustainable Freight Logistics Plan was developed, envisioning to optimise logistics management and goods delivery routes to the touristic areas and the historic city centre in Rethymno. The ultimate target is to decrease the circulation of the logistics fleet, traffic congestion, noise and air pollution and to reduce environmental and social impacts.



Consulting the logistics services operators

Field surveys and interviews with logistics companies, hotel suppliers, hoteliers and retailers were carried out to analyse the logistics activity, freight movements, the impact of seasonality and to understand the problems and needs of both the supply and demand sides.

Our achievements

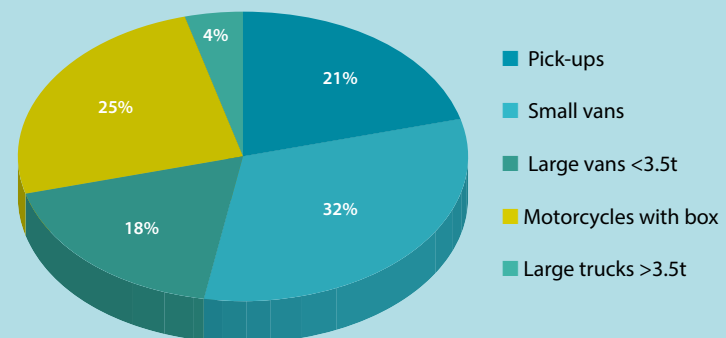
An urban Logistics Advisory Group has been established. The successful cooperation between the municipality and freight distribution companies resulted to an increased awareness of drivers and a considerable decrease of violations of access and parking regulations at the historical city centre.

To coordinate more efficiently the freight distribution activities amongst the different actors, the measure operates an on-line ITS system to manage freight delivery in the historic centre according to the goods demand and supply schedules.

What did we learn?

The interactions with freight distributors identified that a key obstacle on their daily operation was the lack of designated loading/unloading areas. This resulted in re-designing the loading bays network and studying IT solutions to manage their booking online. New regulations for accessing the historic centre were accompanied with a more efficient surveillance and fines scheme.

GOODS VEHICLES TRAFFIC COUNT SHARED BY TYPE IN HISTORICAL CENTRE JULY-AUGUST 2018



Goods delivery per type of vehicle. Historic center of Rethymno - Peak season

Unlocked investment

Within DESTINATIONS and its first SULP provisions, Rethymno unlocked funding to acquire a surveillance system to monitor all entrances to the historic centre and to enhance compliance with access regulations.

How the measure will be sustained

The Logistics Advisory Group, based within the Rethymno Municipal Council, remains active, providing continuous support for the implementation of the SULP measures within a 2025 horizon.

The objectives of the SULP are further supported by a Low Emissions Zones study developed for the city centre within the frame of DESTINATIONS.

SUMP in Elba: the activity in brief

Until recently in Elba, each municipality tackled mobility by adopting and following a different regulatory framework, mostly addressing access and parking issues within Elba's urban centres.

Thanks to the DESTINATIONS project, the Municipalities of Portoferraio and Rio held a series of meetings with citizens and stakeholders at local level in order to explore the main issues and needs related to the island's internal mobility and, with the support of ISINNOVA, it was finally possible to draft a Sustainable Urban Mobility Plan (SUMP). The SUMP's main purpose is improving the overall Elba mobility and accessibility by providing analyses



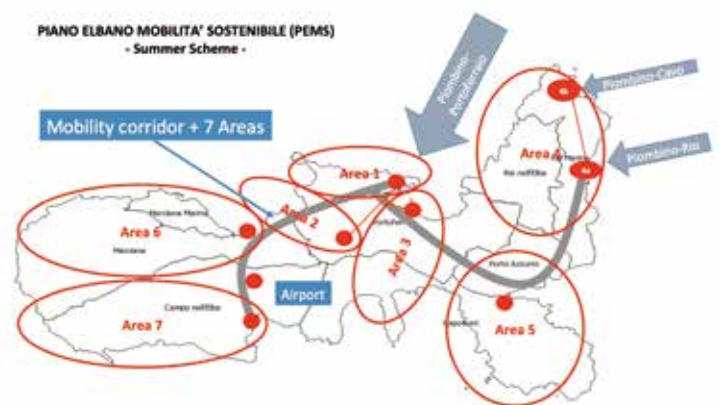
SUMP: stakeholders meeting

and guidelines to improve the efficiency of the Public Transport services (with a new proposed network system), reduce the number of private cars in circulation with the support of the new "Elba Shared Use Mobility Agency", new mobility services and infrastructures, active modes of sustainable mobility (i.e. bike and pedestrian routes), ferry and air connections and more efficient logistics.

Many issues are addressed in the SUMP, from parking to mobility flows, from travel habits to the characteristics of the territory, from intermodality to the integration of public and private services, from the use of technology in the creation of Intelligent Transport Systems (ITS) to the implementation of electric mobility, always following a transparent and participatory approach, by actively involving citizens and stakeholders from the very beginning.

Our achievements

The strategic vision of the SUMP is based on the contributions of the stakeholders and citizens. It has identified the following objectives: reduction of traffic during summer time; seasonal adjustment of the tourist offer; improvement of the maritime and air access to the island; extensive provision of info-mobility services to tourists and citizens alike; development of an integrated transport system based on shared mobility and multimodality; enhancement of electric mobility; development of bicycle mobility.



Success factors

The innovative aspect is the development of a "PolySUMP": a methodology for planning sustainable mobility in polycentric regions or areas characterised by different centres, where transportation needs are shared among several cities. Indeed, the Elba SUMP was drafted incorporating the different needs and requests of the island's seven municipalities considered as a whole.

Next steps

Since sustainable mobility is considered a key aspect for the local economy, quality of life and the environment of the whole island, the SUMP drafted within DESTINATIONS is expected to be shared and approved by all seven Elba municipalities and eventually be integrated in the Livorno Province Mobility Plan.

Sustainable Urban Logistics Plan: the activity in brief

In general, the SULP is a strategic planning document for urban mobility relative to the collection, transportation and delivery of goods within a medium to long term horizon.

Through the rationalisation and optimisation of logistic processes and infrastructures, the SULP has as final objective the reduction of the number of commercial vehicles in circulation in urban centres, in order to decrease traffic congestion, the reduction of air and noise pollution energy consumption, as well as the improvement of quality of life for residents and tourists.

The methodology developed in the H2020 “Enclose” project was adopted to draft the SULP for the Elba Island. In the initial phase, the local logistics scenario for the seven Elba municipalities was analysed and in particular, the areas mainly affected by the flows and types of goods, the main regulatory aspects in force (e.g. traffic restrictions, pedestrian areas, regulated access areas, special regulations for residents, etc.).



On the basis of this information and the needs expressed by the different stakeholders, the logistics baseline for the reference area has been defined and a feasible series of logistical measures and services have been identified and analysed.



Post office pick-up point for deliveries

Finally, for each measure or service selected, the impacts and benefits were assessed in terms of environmental benefits, reduction of energy consumption, and economic viability.

A feasibility and priority “ranking” has thus been obtained, which relates the results of the evaluation with the available economic resources, the timing of implementation and the technological support levels.

In fact, some of the identified measures are achievable in the short term and at low cost. They include the revision and harmonisation of the various municipal access regulations and road logistics infrastructures. In the medium term: the web portal for managing city entrance demand, encouraging the logistics operators to use low/zero emission vehicles, creation of “pick-up points” and others. In the long term: the reduction of commercial vehicles arriving from the mainland (optimisation through the mainland logistics base for the consolidation of goods and Portoferraio logistics base for the optimised distribution of goods on the island).

Sustainable Mobility & Logistics Plan

SUMP Award and Sustainable Urban Logistics Plan in the Valletta Region

The activity in brief

The Sustainable Urban Mobility Plan (SUMP) and Logistics Plan (SULP) provides specific, tried and tested solutions to attract residents, visitors and businesses to sustainable modes of transport and practices in the Valletta Region.



Mayor of Haż-Żebbuġ and local councillors awarded funds for the implementation of sustainable mobility measures in their locality as part of the SUMP Awards

Some of the SUMP measures were piloted in the DESTINATIONS project, for example through the SUMP Award, which encourages Local Councils to test out sustainable mobility measures in their localities, to test their feasibility in practice. The SULP included a pilot with private operators to test out the Last Mile delivery of goods using a shared electric van.

Our achievements

Data from the national statistics office and from previous studies was compiled and presented in the SUMP Baseline document. The first stakeholder meeting, with the aim to collect information and perceptions from stakeholders on the main issues related to transport and mobility was held in October 2017. Individual meetings were held with key stakeholders, such as the Local Councils Associations, the Regions that cover the Valletta area and the Chamber

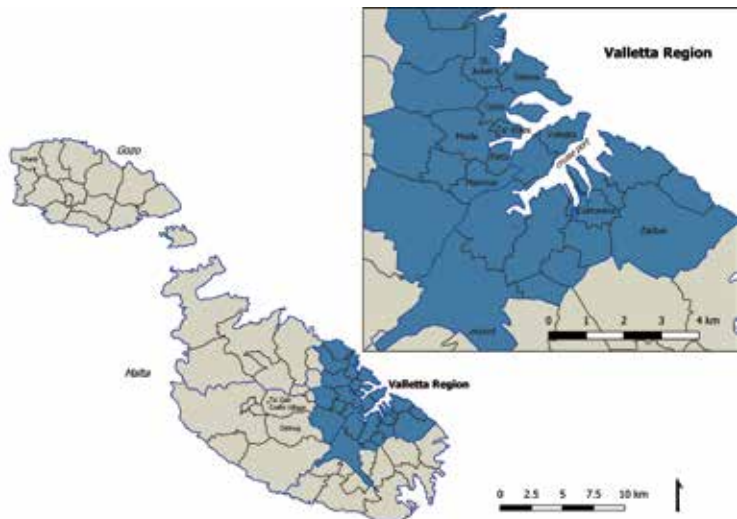
of SMEs (GRTU), leading to the development of the draft SUMP document. A specific study on the implementation of communal parking schemes is being researched in a pilot area within the region (in the localities of Gżira, Ta' Xbiex and Msida).

During the lifetime of the CIVITAS DESTINATIONS project, the SUMP Award scheme has been organised twice, in 2018 and 2019. Transport Malta (TM) has organised workshops and developed guidance material for Local Councils to incentivise their involvement and participation in the SUMP Award scheme. In both years, high quality applications were received and grants were awarded to multiple Local Councils during the European Mobility Week (EMW). In 2018, a €50,000 grant was awarded to Pietà Local Council for a free and on-demand electric van for people in town, to use for commuting purposes and running errands. Għarb Local Council (in Gozo) was awarded €30,000 to provide electric moto-scooters to 16 to 18-year-old teenagers to promote and instil sustainable mobility habits. In 2019, three Local Councils (Żabbar, Żebbuġ and Hamrun) were awarded a sustainable mobility grant for their proposed projects to create safe routes to school, to purchase an electric tricycle for waste management in narrow and historical village roads and to pedestrianise a village street to create a safer and more appealing environment for their residents and visitors.

For the SULP pilot, collaboration was formalised with the Ta' Qali crafts village, (a collection of shops selling local crafts and artisanal products, supplying souvenir shops in Valletta), to test out the use of a shared electric van to deliver their goods from their location in the centre of the island to Valletta. A charging station was installed at the premises of Ta' Qali crafts village, with funding from ERDF's SMITHS Project funding the creation of National EV (electric vehicles) Charging Infrastructure. The participating operators are collecting information about the number and lengths of trips, volumes of goods, and replaced trips, to monitor the impacts of the use of the shared electric van and determine the savings and optimisation in terms of time, space and emissions.

Lessons learned - Success factors

One of the successes of these measures is the extent of stakeholder involvement. Following the SUMP methodology and including stakeholders at different stages of



Map of the Valletta Region within the Maltese Islands

the development of the SUMP / SULP is a relatively new approach for Malta and one of the key successes brought about by these measures. Liaison by the GRTU encouraged seven operators at the Ta' Qali Crafts Village to participate in the pilot, optimising logistics operations of locally made souvenirs.

Unlocked investment How the measure will be sustained

The success of the workshops and the quality of the sustainable mobility grants applications in 2018 and 2019



Signing of the agreement for the Last Mile delivery pilot, between TM and the Ta' Qali Tenants Association, with support from the Malta Chamber of SMEs (GRTU)

has enabled TM to access national funding to continue with the same format for EMW 2020.

The implementation of the pilot allowed for the installation of an EV charging pillar on the premises of the Ta' Qali Crafts Village through ERDF funding. TM offers a number of financial incentives for the purchase of electric vehicles, such as cars and vans, electric bicycles and cargo bicycles, to encourage residents and local businesses to make the transition to EVs.



The 'Village to Valletta' shared electric van used to transport artisanal products and souvenirs from the Ta' Qali Crafts Village to shops in the Valletta Region



Electric moto-scooters for youth in Gharb

The Mobility Office and Observatory of Las Palmas de Gran Canaria

The activity in brief

In 2012 Las Palmas de Gran Canaria developed a SUMP which contained a detailed analysis of the mobility situation and a set of strategic measures for urban mobility. Since 2012, some of the actions proposed in the SUMP to improve urban mobility have been implemented while others are still being developed, some of which with the support of the DESTINATIONS project.

A Mobility Office and Observatory has been set up in Las Palmas de Gran Canaria to monitor and evaluate the implementation of the current SUMP, to update information on mobility patterns and to carry out various mobility studies.

In order to continue the implementation of the BRT (Bus Rapid Transit) project, it has been crucial to carry out several mobility analyses and studies. The BRT is one of the proposed SUMP actions and the most ambitious project that is running nowadays in the city, connecting the main attraction places and achieving a reorganisation of the public spaces wherever it goes. This means, due to the creation/expansion of more green and pedestrian areas, bike lanes, etc., the BRT is really a city project instead of just a public transport project.

The Mobility Office and Observatory has formed the basis for completing the implementation of the current SUMP life cycle and has begun the drafting of the follow-up SUMP.

Our achievements

Thanks to the Mobility Office and Observatory, periodic meetings have been set up among the representatives from different local mobility stakeholders to start discussing the present and the future of sustainable mobility in Las Palmas de Gran Canaria.

A multidisciplinary work team composed of professionals from the Municipality (Mobility and Traffic departments), Guaguas Municipales (the urban public transport company), SAGULPA (the company in charge of public



parking and the public bicycle sharing service) as well as other mobility stakeholders has been set up to discuss the mobility strategies that will be taken up by the local government.

The Mobility Office and Observatory under the CIVITAS DESTINATIONS project has served as a useful tool to connect professionals from different sectors such as Mobility (freight, logistics, passengers and soft modes) and Tourism to work together in a cooperative spirit. Before the Mobility Office was set up, Mobility and Tourism have worked to achieve their sustainability objectives as separate public entities, not together, in a coordinated manner. The office achieved in bringing together the two sectors, to establish common priorities and objectives and to make the most out of such synergies.

What did we learn?

Mobility strategies and projects in a city like Las Palmas de Gran Canaria depend on the engagement of a wide range of stakeholders. Activities need to be well coordinated to reach the expected results in a timely fashion.



Presentation of the Las Palmas de Gran Canaria Mobility Observatory

Furthermore, mobility projects in a city like Las Palmas de Gran Canaria require a multidisciplinary and experienced team from sectors such as urban planning, public transport, traffic management, logistics, law, sociology as well as other subjects.

Having a mixed team that brings together municipal civil servants, familiar with daily issues and citizens habits and needs, with experts from companies specialised in mobility management, sharing experience, aware about sustainable mobility tendencies and projects in Europe and across the world has been another success factor, crucial in achieving the set goals.

Success factors

The main success factor is the capacity and will of all mobility actors that form part of the mobility committee to work well together, act in unison. They are collectively involved in the development of present and future sustainable mobility strategies. Such cooperation among all stakeholders is a prerequisite, as all actions are interconnected and dependent upon each other.

Challenges encountered

Initially it was quite complicated to establish priorities among the actions that needed to be taken by each one of the Las Palmas partners.

How the measure will be sustained

Las Palmas de Gran Canaria is a city that traditionally has grown around the private vehicle culture where the construction of roads were prioritised on detriment of pedestrian areas or sidewalks.

It has been revealed that a Mobility Office and Observatory is a convenient tool and platform to support the wide variety of projects that the mobility field in a city such as Las Palmas de Gran Canaria can developed in order to achieve the goals of sustainable mobility according to the guidelines establish by Europe and get the change it needs to become a friendlier city for residents and visitors.

In order to continue with the integration of soft modes within the current mobility status of the city (e-scooter, bikes and other personnel mobility vehicles), to keep on with the strategy of pedestrianization of key open commercial areas and fostering public transport with the development of a high capacity transport system (BRT), beyond Civitas Destinations framework, the Municipality will keep the Mobility Office and Observatory running so it can support the development of a new SUMP as well as a way of continuous improvement in terms of mobility projects implementation.



Attractive and accessible public spaces

Energy efficiency and road safety in public spaces in Funchal

The activity in brief

To improve road safety in public spaces and promote energy efficiency, an advanced public lighting system powered by renewable energy was implemented at 5 pedestrian crossings in April 2019 in Funchal's touristic area. The public lighting is automatically activated through special road markings that detect pedestrian movement. Moreover, improvements on bus stops were also carried out to improve accessibility for public transport users.

In addition, an urban renovation plan was finalised, which includes an overview of territorial, demographic, sectorial and accessibility/mobility issues in the target area, including also an assessment in terms of public lighting efficiency and road accidents. The development of the study was also supported by the regional public-private company responsible for electricity distribution. The



Sustainable mobility starts in schools

The activity in brief

AREAM selected six primary and secondary schools in order to develop mobility studies. It started with a preliminary survey addressed to HF and schools, aiming to evaluate public transport services and identify the main problems and needs. A total of 8.811 surveys were carried out, with pupils, parents and school workers, to evaluate mobility patterns and define the baseline.

The quality and safety of the public spaces surrounding the schools were evaluated. The results were reported on a map with the identification of areas with three intervention priority levels. Accordingly, CMF already made interventions in four schools such as:

- the creation of kiss and ride areas,
- the implementation of speed bumps, raised pedestrian crosswalks and traffic calming signing.

The local team implemented communication campaigns to promote sustainable mobility concepts and the use of public transport.

A mobile application is being developed, "Pick-Up and Ride", which will help school concierges, parents and children to communicate regarding the management of faster school pick-ups. The app aims to contribute to the reduction of the traffic congestion caused by the pick-up of students after school classes.

Achievements

The promotion of public transport has enabled the slowing down of the trend of decreasing monthly pass use. In previous years the decrease was 6% per year. In 2018 and 2019 the annual reduction was only 1,3% and 1,8%.

police supported the development of a road accident database through the sharing of data, which enables the identification of accident black spots that require intervention.

Achievements

CMF has been contacted by other cities that intend to replicate the measure. The measure was praised by Interreg Europe, as a good practice with a transferability potential.

CMF and HF identified 21 bus stops where there was a need for accessibility improvements. Four new public transport shelters were installed and pedestrian accessibility to bus stops was improved through the creation of more than 550 m² of new sidewalks and the widening of existing sidewalks (82,2 m²).

A survey to HF's customers concluded that their satisfaction of safety and accessibility in bus stops had increased from 2,86 in 2010 to 3,78 in 2019 (on a scale from 1 to 5).

Lessons

The evaluation campaigns allowed CMF to perceive that the main issues within the touristic area were essentially related to accessibility problems and not to security.

Challenges encountered

The narrow and very steep roads of Funchal are the major barrier when trying to increase accessibility.
Unlocked investment

CMF received a grant from ERDF to increase bike path and pedestrian accessibility in the western part of Funchal.

Scaling up

It is expected that the activities developed could be further replicated in other areas of the city.



Participative workshops in schools

Lessons learned

The local team developed participative workshops with students, where they discussed their ideas and proposed new solutions to improve sustainable mobility in Funchal. This method was fruitful and directly linked to the students' needs.

Challenges encountered

The main actors, including the school communities, generally acknowledge the problems and the urgency of solving them. This measure involved pioneering work on this topic in Madeira and work on improving sustainable mobility around schools will continue beyond the lifetime of the project.

Scaling up

The promotion of the use of public transport will continue. It is expected that the theme of sustainable mobility will be considered for inclusion in the school curriculum.

Attractive and accessible public spaces

Increase cycling and walking in the Region of Limassol in combination with special interest tourist activities as an integrated product.



Walking route in Pissouri area of Limassol region

The activity in brief

The high importance of encouraging residents and tourists to use cycling, walking and hiking in order to explore the region, according to their special interests, leads to the expansion of walking networks, the installation of bike parking facilities, the creation or the design of new routes and the installation of map panels with general information. Information and maps are also available online.

Our achievements

Through the lifecycle of the project, the cycling and walking network in Limassol region was expanded with the design and mapping of 8 routes, the installation of 5 bicycle parking facilities and 7 map panels, and the production and dissemination of promotional material (printed and electronic). Additionally, 2 bike lanes have been created in Ypsonas Municipality. In October 2018 a new law for cycling, and the rights and responsibilities of cyclists was introduced for the first time in Cyprus. Promotional campaigns, events and seminars have been organised in order to promote and create awareness about the new law for cycling. Videos were produced and promoted on the national TV channel as well as on the social media.

What did we learn?

The activities related to this measure generated a high level of awareness regarding options for cycling and walking in

the Limassol Region. Material with specific information provides opportunities for using sustainable mobility modes in combination with special interest tourist activities.

Challenges encountered

The regulatory framework for the construction of the 2 bike lanes in the Limassol Region was a challenge for the implementation of this activity, as it was difficult to gain the appropriate construction permits and it required the removal of electricity poles that were in the way.

Unlocked investment

Ypsonas Municipality committed to construct additional bike lanes to match the CIVITAS DESTINATIONS investment.

Pissouri Community Board undertook the cost to prepare printed material for the 8 hiking routes designed in their area.

A National TV station promoted the cycling law videos free of charge for a three-month period.

Safe routes to school

The activity in brief

Workshops were organised at primary schools with the aim to educate children for road safety and the



Accessibility for disabled and the visually, hearing impaired

The activity in brief

Actions to improve accessibility to public spaces for disabled persons were successfully implemented. They gave them the opportunity to enjoy their vacations on the island with more comfort by offering more accessible beaches and better access to the city centre of Limassol.

Our achievements

The Limassol Municipality has installed one access point to the beach in the Limassol coastal front (traffic lights crossing for visually impaired people), and improve accessibility in one beach location with new infrastructure including a ramp for people with disabilities and two floating wheelchairs for disabled people to enter the sea.

What did we learn?

Upgrading infrastructure to ensure accessibility for all will keep offering the opportunity to people with disabilities to enjoy their vacations in our island safely and comfortably. People with disabilities are a very significant tourist market, always looking for destinations that provide the right product.



use of alternative sustainable mobility modes to commute to schools.

Our achievements

Limassol developed a network of 46 primary schools with more than 2.500 students and organised workshops, with

the participation of primary students, including experiential and behavioural change activities to raise awareness for the use of sustainable modes of transport and road safety. During workshops, a video was presented to promote the use of sustainable mobility modes and students had the opportunity to participate in walking and cycling road safety games.

What did we learn?

The stakeholders' engagement that resulted in the development of a constructive working team, the continuous and efficient cooperation with schools' communities, along with the elaboration of mobility plans for schools, led to a successful result.

Challenges encountered

To organise workshops in schools, pre-authorisations required from the Ministry of Education and Culture. This caused delays in the early stages.



Attractive and accessible public spaces

Active, healthy and inclusive mobility for all

The activity in brief

Rethymno's objective is to create a more attractive and accessible tourist destination. To this end, it is increasing accessibility and improving transport options for citizens and tourists by enhancing existing services and infrastructure for cycling and walking, offering state-of-the-art equipment and infrastructure for people with disabilities and improving awareness through information and publicity campaigns.

Our achievements

The message of sustainable mobility was highlighted in consultation meetings with stakeholders, promotional activities, events and a smart application - an extended



SEATRAC system supports disabled people to enter the sea

version of an App initially developed for school communities - to encourage behavioural change among citizens and visitors. Examples: increased accessibility and safety for disabled persons with the installation of 24 countdown timers at traffic lights; two ramps from parking facilities to the sea improving beach accessibility; two "SEATRAC" systems - automated railed chairs for disabled people to enter the sea; and one sea guidance system for people with vision impairment. Equipment to enhance disabled peoples' convenience, such as WC facilities, changing rooms and appropriate corridors, has also been installed.

Success factors

Close cooperation between the Municipality and the public and private sectors (the Municipal Tourism Board, the PT operator, urban planners, disabled peoples' asso-



Experiential raising awareness activities in cooperation with the Association of Disabled People

ciation) resulted in comprehensive action plans that are based on real needs of citizens and tourists. Essential tools for the implementation of this measure were «design days», face to face interviews, surveys, promotional events and consultations.

What did we learn?

Adherence to legal obligations regarding beach safety became a critical component of our work, as rules changed over time. In addition, location analysis was mandatory before the installation of the new SEATRAC system. Unexpected weather conditions or possible geomorphological changes on the beaches can cause damage to the system.

Unlocked investment

The Technical Department of the Municipality of Rethymno is presently conducting a study for a pedestrian link between the University and the city centre. Rethymno has secured 750.000€ from the Regional Development Fund of the Region of Crete to fund this study. In addition, the City will have access to 145.000€ of ERDF funding to finance the expansion of installed beach and guidance services & infrastructure for disabled people.

How the measure will be sustained

Rethymno, having established a supportive network of stakeholders and strong foundations for enhancing accessibility and car-free life is preparing a study to seek additional funding to implement small and large-scale interventions.

Shaping a road safety and sustainable mobility culture for the next generation

The activity in brief

Rethymno is combining new infrastructure and strategic plans for schools and the University, while promoting the engagement of public stakeholders and integrating behavioural change activities to increase safety and the use of sustainable transport modes within the school community.



Thematic application promoting benefits of sustainable transportation modes to adults and kids

Our achievements

The measure developed mobility plans for 11 schools of primary and secondary education in Rethymno (18 school districts), and the University. They are a key component of the upgraded Sustainable Mobility Plan for Rethymno. A two-year integrated action plan was designed and implemented that included experiential road safety and behavioural change activities for the school community with the participation of students, teachers and parents in 30 schools reaching more than 4.500 students.

Success factors - Lessons learned

The step-by-step planning together with key-stakeholders' engagement helped establish a working group that actively supported the implementation of the Action Plan. Continuous and close cooperation

with the schools' community (teachers, students and parents) resulted in mutual support and wide participation. The Directorates of Primary and Secondary Education and the Municipal Department of Education and Lifelong Learning were the two authorities that provided robust support, a key factor for the success of the measure.

Challenges encountered

A significant challenge was the need to modify the legal framework regarding necessary authorisations for educational activities in schools.

Unlocked investment

The Municipality of Rethymno has secured funding of 400.000€ of national funds for road safety interventions and mobility plans for schools in the city centre.

How the measure will be sustained

The lifelong sustainability of this measure was considered from the beginning of the design phase. The SUMP has been designed integrating a standardised package of mobility interventions around schools, both short term (0-5 years for implementation) and long term (5-15 years) replicable and easy to implement.

Experiential road safety activities involving primary education schools



Attractive and accessible public spaces

The activity in brief

Detailed designs and demonstrative interventions on pedestrian crossings and pedestrian and cycle routes have been developed in Portoferraio and Rio with the aim of increasing the level of safety and accessibility on the streets and encouraging pedestrian and cycle mobility to the detriment of the use of private cars.

In the urban area of Rio, a raised pedestrian crossing has been introduced in order to easily connect two densely populated districts of the city, separated by a very crowded road. In the city centre meticulous work has been carried out to eliminate any architectural barriers resulting from ancient stairways. The work includes the installation of different types of walkways and ramps suitable for each individual passage and a useful support for people with reduced mobility and for cyclists, who seem to appreciate it.

In Portoferraio, the Municipality has committed to the renewal of the "Porta a Terra" area, in ancient times the only access to the city by land and today one of the most characteristic tourist routes. In this area, safe road crossings were created, one of these raised and illuminated, and new sidewalks in parking areas. These interventions are linked to the ones in Via Vittorio Emanuele II, which has



Portoferraio, "Porta a Terra" new sidewalks and road crossing

been partially pedestrianised and equipped with ramps. Other infrastructure works have been built along the touristic port (Calata Mazzini), aimed at better separating pedestrian routes and vehicular traffic, and in the rear port area. In addition, renovation works have been carried out in the Cammino della Rada route, an ancient path in the extra-urban area in the nearby coast.

Our achievements

The old urban structure of the two villages of Portoferraio and Rio, characterised by narrow streets, few sidewalks and many stairways, were in need to improve accessibility and safety, for the benefit of both residents and tourists. Citizens and relevant stakeholders highlighted the importance of encouraging soft mobility in urban and extra-urban areas during stakeholder meetings held in 2017 in the framework of DESTINATIONS in order to draft the local SUMP.



Portoferraio, section of Via Vittorio Emanuele II pedestrianised

The interventions briefly described above, had the result of satisfying the need of citizens to move safely in their city and to benefit from new spaces free from cars.

Furthermore, since the two sixteenth-century cities of Portoferraio and Rio are characterised by a significant historical and architectural heritage, the interventions mentioned resulted in facilitating the visit to the historical centers: walking instead of driving, slow going, appreciating every glimpse and landscape; therefore it can be said that the new infrastructures have as an additional result to deliver a better tourist product as well.



Rio, ramps in the urban centre



Portoferraio: continuity line of the accessible and safe routes

Success and innovation factors

Some elements of the described infrastructure works may be considered as local innovations. In Portoferraio, one of the pedestrian crossings in the Porta a Terra area is raised and illuminated in order to be clearly visible by approaching drivers; another is flat but gradually descending from the sidewalk to the street level, resulting in an easily accessible and well-integrated crossing.

In Rio, it was decided to try a new material for the raised pedestrian crossing: a hard recycled rubber, very resistant to vehicular traffic and easily visible by drivers. The aim was, in fact, to adopt a sustainable solution and, at the same time, a material resistant to the frequent vehicular traffic, suitable not only on cars but also buses and trucks.

Learning points and next steps

The commitment made to improve safety and accessibility of routes and crossings has strengthened the belief about the importance of ensuring a good level of liveability of public spaces for pedestrians and promoting soft mobility. What has also been realised (in addition to working specifically on the spots identified as most in need of intervention or most in demand) is the importance to adopt a holistic vision, designing a route as a whole, giving continuity to the various pedestrian areas scattered in the city and reducing its fragmentation.

In the near future, both the municipalities of Portoferraio and Rio will continue to encourage cycling and walking, by carrying out more infrastructure projects, in order to increase accessibility and safety, and to promote this good practice in general all over the island.

Shared Mobility and e-infrastructure



The activity in brief

Limassol has implemented electro-mobility campaigns to raise awareness on this mode of transport and its benefits. The main goal is to increase the number of EV-charging stations located at strategic points in the region and to organise promotional campaigns and events in order to increase interest in electric vehicles.

Our achievements

Promotional campaigns, competitions and events have been organised aiming to raise awareness about electromobility and its positive impacts. The Limassol Tourist Company (LTC) successfully participated in European Mobility Week events in 2017, 2018 and 2019 organising annual festivals, during which, among other activities, visitors had a chance to ride e-bikes, explore an electric vehicles exhibition, see how an EV charger is used, receive information about the EV charging network and have questions answered by experts.

Promotional and communication material included brochures, advertisements in hotel and lifestyle magazines, billboards, posts in local media, radio campaigns, a dedicated Facebook page updated on an ongoing basis, a web page on electromobility - #poweruptoelectric -



Limassol European Mobility Event 2019

a promotional video etc. During competitions and events, leaflets and T-Shirts were designed, produced and distributed. All this material helped promote and convey the idea that e-vehicles use is a new sustainable way of life.





Radio campaign to promote DESTINATIONS through the European Mobility Week Event 2019

A total number of 2.500 people participated in the campaigns and events.

Two national seminars were organised in July 2017 and July 2018 with the participation of representatives from

other regional authorities of Cyprus, in order to replicate electromobility initiatives in their cities.

LTC also, participated in exhibitions, events and conferences, aiming to promote the CIVITAS DESTINATIONS project, where electromobility and sustainable mobility guides were distributed to visitors:

- Cyprus Exhibition organised by the World Trade Centre in September 2017.
- 5th Sustainable Mobility Conference in Nicosia, organised by the Ministry of Communication and Works in May 2018.
- OPAP Marathon in March 2018.

Through the implementation of the measure and the incentives of the DESTINATIONS project, the Cyprus Electricity Authority, a bike sharing company, and vehicle rental companies became increasingly interested in electromobility.

What did we learn?

Infrastructure is a prime concern and pre-condition to increase electromobility.

Challenges encountered

The lack of financial and environmental awareness regarding the benefits of electromobility as well as the lack of information on available products and services was the first challenge encountered. The promotional material has helped disseminate and highlight the most relevant information and campaigns and competitions have now increased awareness.

The major concern of tourists and locals is the existence of a sufficient number of EV charging stations and the availability of information about them.

How the measure will be sustained

Awareness efforts will be continued by LTC. At the same time the Cyprus Electricity Authority is investing in increasing the EV charging points in the future, while many private organisations such as hotels are planning to add their own in-house charging stations for guests and employees.



Changing behaviour towards shared mobility in Rethymno

The activity in brief

Rethymno is encouraging a shared mobility culture by introducing new shared e-mobility solutions through effective public-private partnerships. Dockless sharing schemes are available, as a sustainable alternative for last-mile transportation, also promoting electro-mobility to residents and visitors.

Our achievements

The first -in Greece- free-floating e-bike sharing scheme was introduced in 2018 as a private investment. In July 2019, another private operator tested the first in the region e-scooter fleet introducing 300 two-wheelers reaching 27.000 rides at the first month of operation. The Municipality purchased a further 20 e-bikes and 15 e-scooters, making them available to municipal staff and motivating a change of commuting habits. 20 scooters were procured to support traffic education and safe driving lessons in primary schools.



The Mayor of Rethymno launches the first e-scooter sharing system

Awareness campaigns, including media interviews, social media campaigns, info material at tourist kiosks and hotels, free test rides and safe driving lessons, increased public motivation to use these alternative modes of transport.

What did we learn?

The cooperation between the Municipality and system operators during the pilot testing period helped optimise the services offered. After two months of testing, the

Rethymno's Sustainable Mobility Agency

The activity in brief

Rethymno continuously enhances transport and accessibility services to tourists as part of the city's strategy. A new structure, the Sustainable Mobility Agency was set up during DESTINATIONS, to promote new mobility services and raise awareness on environmentally friendly commuting.

Improved Public Transport (PT) services and systematic analysis of users' needs contribute to increased users' satisfaction. Promotional campaigns and inspirational material encourage the use of sustainable transport modes.

Our achievements

The Agency, the first of its kind at regional level, coordinates all transport services in collaboration with local

tourism stakeholders and offers accurate and comprehensive information about alternative mobility options. An on-line platform, accessible through web and mobile devices, promotes cycling, walking and PT use. The first sustainable mobility planner application promotes car-free routes and evaluates the new services. Through DESTINATIONS, the city upgrades its PT services by re-designing the bus routes and installing "smart" bus stops offering real-time information.

Success factors

Tourists and citizens were actively involved in interactive "Learn-Share-Inspire-Change" open-air labs to discover and debate the city's transportation options, such as "voting-by-pin" and filing structured feedback forms. Surveys were carried out to analyse their actual spatiotemporal needs and define the required improvements on PT routes.

A cross-sector partnership with tourism and transport stakeholders was vital to mobilise expertise, support and



The first dockless e-bikes sharing system in Rethymno

e-bike service was withdrawn and relaunched. The new improved service incorporated lessons learned during the pilot phase to become more reliable and economically viable.

Investing in cycling infrastructure and appropriate signage increases users' safety and acceptance, key elements to reach a higher level of system utilisation. Analysis of usage data allowed the identification of higher demand areas and facilitated necessary adjustments to meet users' needs.

Challenges encountered

The absence of national/EU regulatory framework for e-scooters raised road safety concerns for pedestrians and e-scooter drivers.

Due to the COVID 19 outbreak, the e-scooters' provider suspended operation in many European countries, including Greece. The pandemic crisis however, provides new opportunities for shared mobility operators and stimulates planners and decision makers to redesign their mobility strategy including shared micromobility.

How the measure will be sustained

Fifty high-quality e-bikes will be obtained by the end of 2020. The private investment for e-scooters is estimated at 100.000€ and for the e-bikes system at 150.000€. Extra ERDF funding unlocked 70.500€ for a new municipal sharing system of 18 e-bikes and 1 e-bike for disabled people. The system, free-of-charge, will be stationed at a bio-climatically redesigned square by September 2020. Sharing schemes will continue providing tailored services to residents and visitors in Rethymno, as a reliable, convenient and eco-friendly choice for daily transportation.



Interactive open-air labs promoting sustainable mobility modes to tourists and citizens

funds. Bilateral meetings, consultation events and living labs actively engaged local authorities, urban planners, tourism associations, transport providers, NGOs and citizens associations.

Unlocked investment

Rethymno unlocked a 50.000€ fund to re-construct 15 bus stops integrating photovoltaic panels for energy saving.

How the measure will be sustained

Rethymno decided to incorporate the Agency into the Municipality's Technical Services Department, ensuring thus its viability and sustainability after the end of DESTINATIONS.

Shared Mobility and e-infrastructure

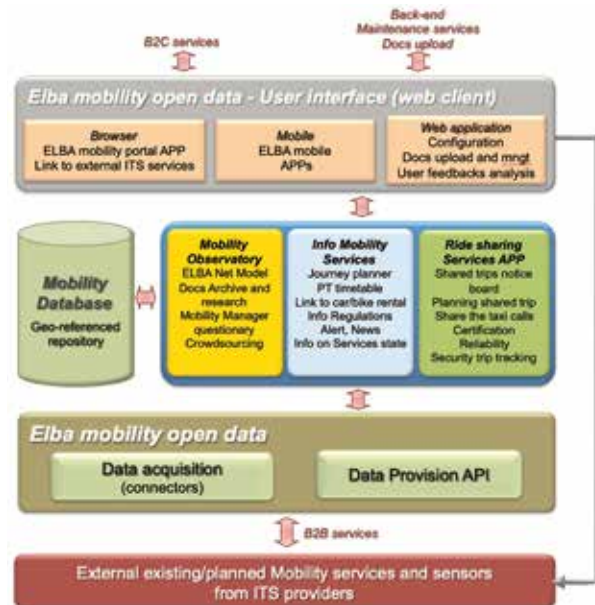
The Elba Shared Use Mobility Agency

The activity in brief

Elba is a cluster of spread out urban areas with main interconnection routes that are often narrow and steep. During the summer months, the large tourist flow and the use of own cars create significant congestion problems.

Furthermore, the presence of many scattered tourist points of interest make it difficult to offer an effective and widespread traditional public bus transport system. Mobility on the island had to be redesigned as an integrated multi-service product. Efforts to improve local PT required alternative travel modes, such as rental services and shared mobility.

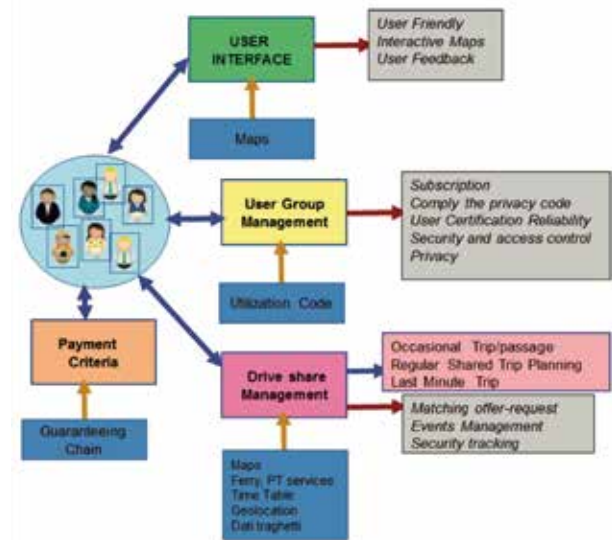
In this context, a Shared Use Mobility Agency (SUMA) was established in order to coordinate, integrate and offer different services to residents, tourists as well as mobility and transport operators so that island mobility is increased while congestion from driving own cars is reduced.



Elba Sharing Agency architecture

Our achievements

SUMA is composed of an ICT platform that aggregates data coming from different Internet of Things (IoT) sources/systems/ services to provide multimodal info mobility services (journey planner and payment), coordinates different rental operators and provides ridesharing services.

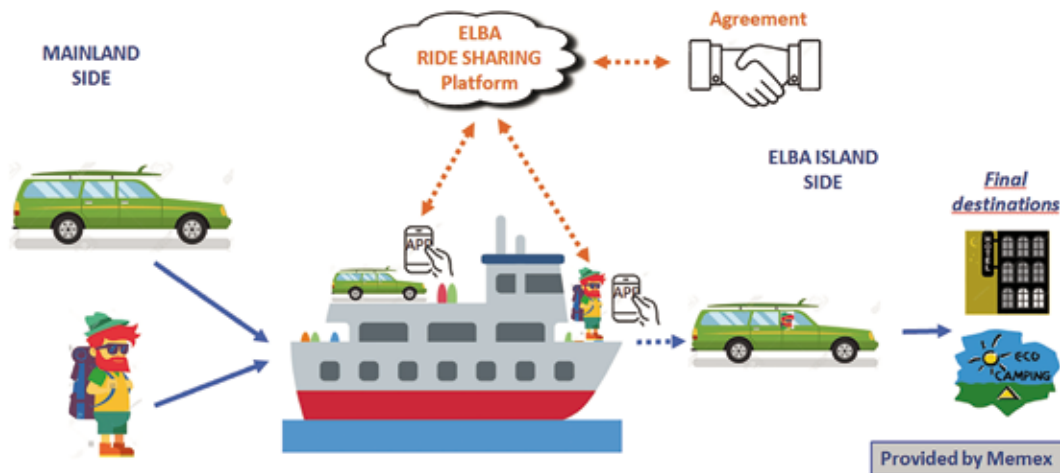


Elba Sharing Agency notice board

In particular, the ridesharing services consist (both on the platform and on the related App) of simple pages where the user can report his shared travel request or offer, for that day and time, from one location to another on the island. The system will combine the requests and offers and once the combination has been made, send notices to the interested parties so that the people offering and asking for the trip can get in contact with each other directly.

If the combination is not possible, the demand or the offer for a shared trip is shown on a notice board where all the trips requested and offered for the various locations are shown. This allows users to quickly consult it in order to find the shared trip. There is also the possibility of forming groups of people to share a taxi for the same journey. In short, it is possible to share trips from different places on the island, for example: sharing a trip from the ferry, sharing a trip from other Elba points of interest (restaurants, beaches, discos, etc.), sharing a taxi, hitchhiking, etc.

Sharing a trip to some Elba Island localities when the user is on the ferry



In the case of hitchhiking, the user can activate the safety monitoring functions - in the event that the driver makes a detour from the optimal route, an alarm signal will be triggered. In addition, the driver and passenger are able to assess the travel companion's reliability, thus creating a database guiding users to choose reliable options.

Due to its conception and its expected positive social, environmental and practical impact, the SUMA is considered as one of the most innovative measures developed in Elba within DESTINATIONS.

Success factors and innovations

SUMA responds to the mobility need in low-demand areas, effectively supporting the transport system of the island.

It is also interesting to notice that the Agency actually works on three interrelated levels (collective transport, ride sharing services and connected mobility system), with a modern approach suitable for the island.

Challenges encountered

One of the challenges faced was the formulation of both the tender to choose the company for the creation of the platform software and the subsequent supervision of the execution of the project.

For the tender, technical specifications were drafted with an accurate description of all the components of the

required platform together with the list of all possible use cases, to be considered in pre-engineering.

An important selection criterion was the capacity of the proposer to carry out such important project.

During the implementation phase, the various software releases of both the platform and the App with the various use cases were reviewed leading to requests for corrections and modifications in compliance with the approved technical specifications. This required a great commitment both in terms of time and quality of personnel.

How the measure will be sustained

A period of experimentation is included in the contract of the company that developed and supplied the Agency's software. Over time proceeds (derived from user registrations and sponsorships from the various mobility service providers and tourist points) will increase with the increasing use of the mobility services offered by SUMA leading to a self-sustained economic model.

SUMA is expected to be part of the Elba Mobility Center planned by the Province of Livorno where critical issues and related solutions concerning mobility for the island will be managed.

SUMA can also be easily adapted to a wide range of transport service schemes, territorial contexts and background conditions; it can also potentially serve a wider range of other added-value tourist services.

Promoting e-bike sharing and car sharing in Malta

The activity in brief

This measure consists of an Information and Awareness raising campaign that was launched to promote the services of bike and car sharing, provided on the islands since 2016/17 and to educate the public on cycling safety. The campaign messages highlight the virtues of using a shared car or bike when compared to the costs, both economic and environmental, of owning a car, as well as cycling safety tips targeting both drivers and cyclists. Data collection through desktop research and surveys was carried out in order to measure the success of the campaign.

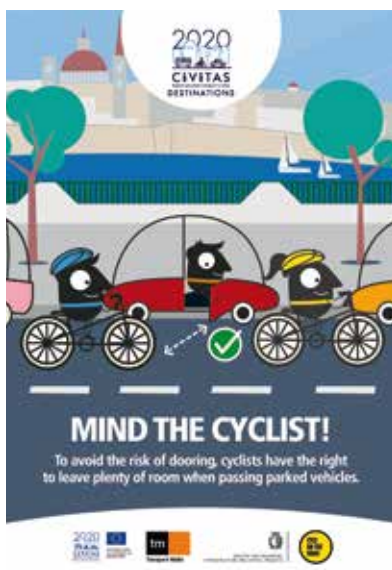
Our achievements

During the inception period of the CIVITAS DESTINATIONS project in 2016, Nextbike Malta, a private company, started operating a bicycle sharing system in the Northern Harbour area with over 50 stations and 400 bicycles. Two concession tenders were launched by the Malta Government to introduce e-bike and car sharing services on the island during the course of the project. Tallinja Bikes, operated by Malta Public Transport, introduced e-bikes in Valletta in the summer of 2018, with 3 stations and 40 electric bicycles and further extensions planned. Private company Car2Go launched their GoTo car sharing scheme in autumn 2018, with a fleet of 150 electric cars, supported by 225 charging

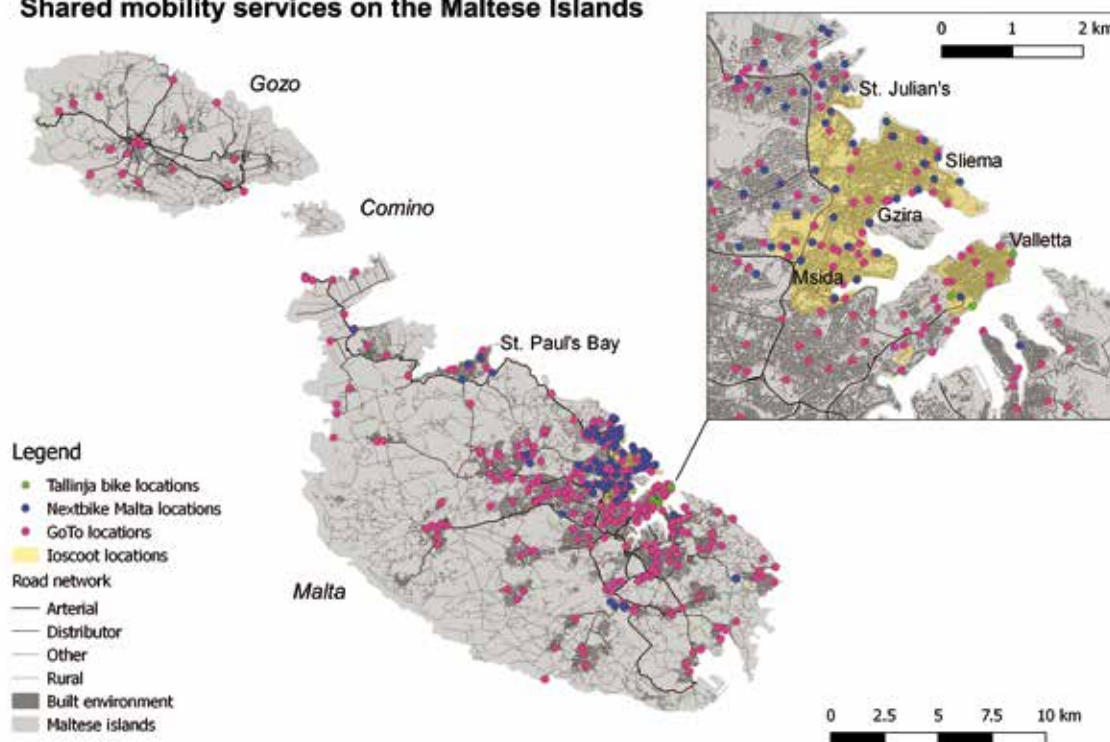
pillars and 450 reserved parking spaces across all localities. Since the launch of the car- and e-bike sharing services, other shared mobility services have started being offered, such as loScoot moto-scooter sharing, operational since 2019, as well as other scooter sharing services since, such as Whizascoot and GoTo scooters, since late 2019

The Information and Awareness Campaign was launched in November 2018, by means of infographics and informative videos on shared mobility on social media, TV, radio and printed media. The Campaign focused on encouraging the public to make use of shared transport services targeting specific audiences for two separate messages: on the one hand, the public was presented with educational material on cycling safety, whereas the second campaign message was focused directly on promoting car and (e-)bike sharing and focused on educating the public on the use of such services and highlighting their added value and advantages.

The results from the surveys with a sample representative of the Maltese population shows that in terms of awareness (being able to correctly define what is (e-)bike and car sharing), around a third of the respondents is aware of car sharing, and a quarter of bike sharing. In terms of acceptance, their willingness to use such shared mobility services, 28% of respondents replied positively in the case of car sharing and 13% with regard to bike sharing. While the reach and penetration of the information and awareness campaign may not have (yet) reached its full poten-



Shared mobility services on the Maltese Islands



The distribution of shared transport services throughout the Maltese islands.

tial - with around 15% of the sample having noticed the awareness campaign about bicycle sharing and around 30% about car sharing – around three-quarters of the respondents who have seen the campaign indicate to be well informed by the information provided and have enough information to confidently use the new shared mobility services.

Data shared by the operator of the car sharing service, GoTo Malta, shows that the number of active accounts nearly tripled between the start of the service in November 2018 and April 2019, and the use quadrupled over the same period: from 1,045 km/day in November 2018 to 4,101 km/day in April 2019.

What did we learn - Success factors

Improved road safety and safe infrastructure, investment in cycling skills and road safety education have the potential to encourage respondents to consider using bicycle sharing. More information about financial savings, and time and cost savings because of the use of reserved parking spaces and priority lanes can convince people to use car sharing.

Shared mobility is still a very new concept in the Maltese Islands and the majority of residents are not aware of such services and/or would not consider using them. However, the results from the surveys show that younger respondents have a more positive attitude towards both bicycle and car sharing, as well those with a higher education level. These findings can be utilised in a more targeted marketing campaign focused on 'early adopters' of shared mobility services.



The newly launched car sharing service

Shared Mobility and e-infrastructure

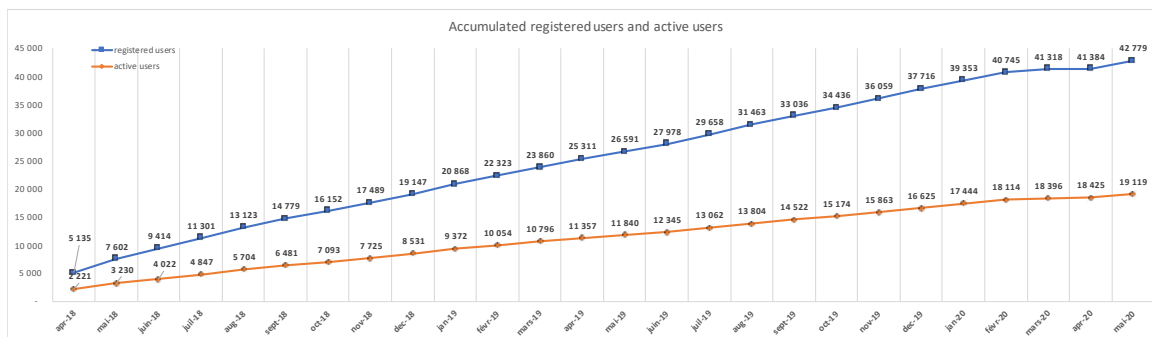
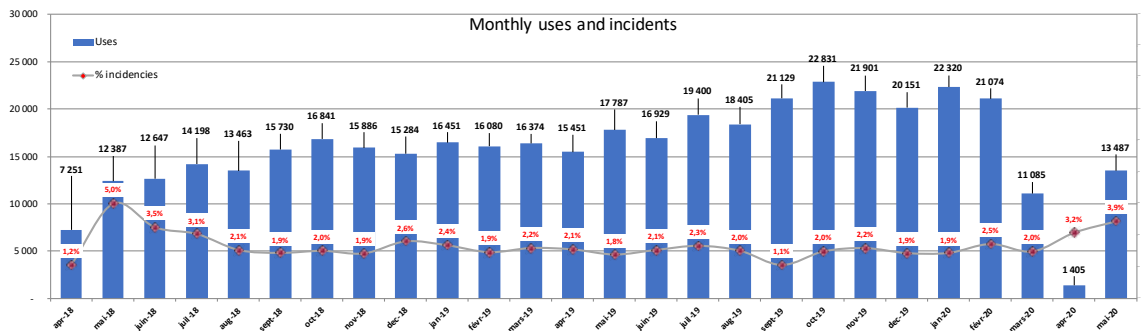
The activity in brief

The measure consisted of the launch and operation of a new and larger digital-based bicycle sharing system (Sitycleta). It is a station-based Bicycle Sharing Service (BSS) and includes 40 bike stations (10 bikes per station), 35 solar-powered smart signs, 375 smart bikes with a solar-powered on-board computer that connects with the central servers by GPRS, 20 e-bikes and 2 adapted bikes for people with a physical disability.

Our achievements

The total vehicle kilometers (vkm) travelled by these bikes since the implementation of the system (1.959.895 vkm between April 2018 and December 2019) implies savings of 184.230 litres of fuel and 329 tonnes of CO₂ (compared to the fuel consumption of an average diesel car to do the same distance).

On average, the number of daily users is 900 on working days. The average rentals per bike ratio is 3,5 on working days and 2,1 on weekends.



By the end of 2019 the Sitycleta reached over 36.000 registered users: 44% of them are active users and 31% are foreigners.



Sustainable mobility event in Las Palmas de Gran Canaria

What did we learn?

- Specific needs of the more vulnerable target groups should be considered since the beginning of the project (at the design stage).
- The interests of companies that provide sharing services usually do not match with the interests of cities. Therefore, it is quite important to work together with these providers in order to adapt some of their system features (or business model) to the city needs and requirements.
- It is crucial to engage the key local stakeholders in order to fine tune the bicycle sharing scheme.
- The bicycle sharing scheme should take into account the shape / urban structure of the city (flat areas vs. hilly areas, location of the stations, shape of public spaces, etc.)

Success factors

The weather conditions in Las Palmas de Gran Canaria are perfect for fostering the daily use of bikes. Other success factors have been the high quality of the new bicycles,

the flexibility and security of the system, and the fares adapted to each target group (like tourists). Furthermore, SAGULPA had an integrated vision combined with the existing planning tools (SUMP, Bicycle Master Plan, etc.) and implemented a methodology based on continuous data analysis always having improvement of the system in mind.

Challenges encountered

The proceedings of the City Council to obtain approval for the new service were difficult, as it required the introduction of a new tariff policy. The old service was available for free, but suffered from many shortcomings.

Unlocked investment

Up to now, three companies have joined Sítycleta as sponsors: Hiperdino (the largest supermarket chain in the Canary Islands), Centro Comercial Los Alisios (the largest shopping mall in the island) and Language Campus (a language centre that hosts international students). Sponsors pay the costs of implementing new station(s) in the vicinity of their business and cover all costs of rebranding the bicycles (€11.000/year).

How the measure will be sustained - Scaling up

Even though the allocation of funding for Sítycleta is assured in the short term – revenue earned from parking management is used to fund this new sustainable mobility service (push & pull strategy) – SAGULPA is concerned about the financial sustainability of the system in the long term. This is why SAGULPA is continuously looking for innovative revenue streams such as sponsorships. However, this goal has not been reached yet (revenues only covered 44% of the overall costs of the system in 2019).

SAGULPA plans to enlarge the bicycle sharing scheme in two ways in the coming year: by opening five new stations in the flat area in the south of the city and by expanding the number of e-stations and e-bikes at five new e-stations in the hilly neighbourhoods.

Mobility demand management

Incentives for sustainable mobility in Funchal

The activity in brief

In Madeira, several incentives have been implemented to change the travel behaviour of residents and tourists. These include gamification, discounts for public transport (PT) users, customer service improvements, more information and traffic calming measures.



ARDITI developed a mobile application, MARGE, with the objective to make the PT experience more entertaining and challenging by playing games while waiting for the bus, and also informative through surveys that were included in the app.

The “Public Transport Friend” initiative, which provides discounts to PT passengers, started in October 2019. HF used their website, social media, flyers and posters in bus stops, hotels and ticket selling points and advertisement in the local newspapers. The partners in this initiative (restaurants, shops and other businesses) promoted the use of PT through their communication channels.

Since Madeira is a touristic destination and it is common for tourists to ask PT staff for directions and information, HF offered English training to its PT staff (Drivers and front

office workers), as well as to their own staff, to be able to provide a better-quality customer service. To enable hotel staff to promote PT to tourists, HF staff visited the reception of hotels and explained in detail how to use PT, the mobile application, the use of Google Maps and similar tools.

To develop traffic calming measures, CMF conducted two studies: an assessment of the traffic light network in Funchal and an assessment of the feasibility to implement bus corridors in the city centre. These studies highlighted the various technical limitations of the current traffic light system. CMF also implemented an innovative traffic light pilot project to reinforce safety and facilitate the accessibility to the main catchment area for PT users.

Achievements

Two months after launching the “Public Transport Friend” initiative, HF surveyed its customers. Of all customers, 23% were already aware of the new initiative. This cross-sector initiative has brought 27 businesses together and is transferable to other cities.

The PT staff training achieved good results. Compared to 2017, in 2019 there was an increase of 17% on the tourists



Innovative traffic light pilot project

rating the information provided by the PT staff as “Very Good”, also, there was a 27% increase in tourists rating the politeness of the PT staff as “Very Good”.

Lessons learned

The best way to reach agreements for the “Public Transport Friend” initiative is direct personal contact with the business owner, explaining the benefits of the initiative (such as the opportunity to promote their business through PT advertisement) and negotiating the best deal for HF and the business owner.

From the stakeholders’ involvement, the local team learned some lessons:

- Hoteliers are very participative in these meetings. However, taxi drivers and others usually give strong incentives to the reception staff of hotels to promote taxis instead of PT.
- There is a general opinion regarding the need for more actions from the politicians. Technical staff need to demonstrate to politicians how the activities will benefit the residents and how they will understand that the benefits have resulted from such measures.



Customer searching in Public Transport friend website

Challenges encountered

The major challenges faced were related to technology. Initially, the “Public Transport Friend” initiative was supposed to be in direct connection with the ticketing system. However, the current ticketing system does not allow this integration and the new ticketing system will only be implemented in 2021. To resolve this problem HF decided to use a website to promote the partners of this initiative.

The current traffic light system is obsolete and very limited in terms of programming. Furthermore, a study into the feasibility of bus corridors in Funchal showed that this is currently not feasible, as conflicts at intersections would lead to an overall disruption in traffic as well as a decrease of the buses’ commercial speed. CMF is in the process of renewing the traffic light network, after which it will be possible to implement the mobility strategy according to the SUMP.

Unlocked investment

The European Regional Development Fund supported the activities by co-financing the English training to drivers and other PT staff and the implementation of some traffic calming measures.

Scaling up

The local team is focused on improving these activities in the long run. The direct contact with hotel staff, PT staff, residents and tourists will allow a better understanding of the needs and act accordingly.



Awareness on the use of sustainable mobility modes for leisure trips

The activity in brief

This measure aims to increase awareness about how to travel around for leisure trips using sustainable mobility modes of commuting. For this purpose, campaigns and competitions were designed.



Walking and cycling religious route in Limassol Region

Our achievements

A communication plan was prepared and events were organised, including campaigns and competitions. During the events, tourists and residents participated and were informed about the CIVITAS DESTINATIONS project. Hiking and cycling activities were organised and promoted as two of the main modes of commuting around Limassol. Radio spots and Live Links were used to promote the project's objectives. Dissemination activities included outdoor banners, advertising in local magazines and hotel magazines, radio spots, organising new events and participation in existing events.

A cycling/hiking route has been designed in Limassol region, promoting leisure trips covering in total 22 km.

What did we learn?

Participation in campaigns and events contributed in increasing awareness on the use of sustainable mobility modes for leisure trips. Stakeholders' engagement was a significant factor for the successful implementation of the measure. Social Media, website and radio announcements, all contributed to attracting the public and informing them about the benefits of sustainable mobility.

Smart parking guidance system

The activity in brief

The smart parking guidance system allows the Municipality of Limassol to significantly reduce unnecessary traffic congestion in the city centre and along the coastal road. Smart sensors and smart electronic devices enable drivers, through mobile applications and variable message systems, to receive information regarding parking space availability.



Smart parking Guidance System in Limassol city centre

Our achievements

The installation of the smart parking guidance system technology in 7 public parking lots in the Limassol centre provides real-time information to drivers for parking places availability.

What did we learn?

Minimising unnecessary car trips can lead to lower CO₂ emissions and improve safety and noise levels.

Challenges encountered

The main barrier faced during this implementation, was the old fashion infrastructure of the municipal parking places.

How the measure will be sustained

The measure will be sustained by the municipality. Necessary maintenance and upgrading of the system will be undertaken by the local authority.

The Tourist Mobility Card & the Green Label Award

The activity in brief

The Tourist Mobility Card enables visitors and residents to buy at the hotel a mobility card for all their public transport transfers and at the same time be allowed to have discounted entrance to museums and other places of interest as well as on bike sharing. **The Green Label certificate** is given to hotels that support and promote sustainable mobility modes, after an evaluation process.

Our achievements

This measure enhanced transport for leisure through the implementation of the Tourist Mobility Card that is also supported by Green Label partners. A network of important stakeholders was created. They became ambassadors of the project objectives. In total 16 Hotels participate have become selling points for the Tourist Mobility Card. Additionally, 22 businesses offered discounts within the Tourist Mobility Card scheme.

The Green Label was awarded, during a ceremony that took place on 12 July 2019, to hotels that promote sustainable mobility modes of commuting.



What did we learn?

Hotels are committed to encourage the use of sustainable mobility modes by their guests. Synergies are created between the mobility sector and the tourist sector. Availability of the Tourist Mobility Card at the hotel increases the interest of tourists to use the bus.

Challenges encountered

Branding efforts were necessary and the support of politicians, mayors and the Commissioner of the Environment, as well as professional associations of hotels was valuable in creating the right context to attract the interest of hoteliers to participate in the scheme and get rewarded.

How the measure will be sustained

The Green Label will be maintained by the Limassol Tourism Company in the long run, and the Ministry of Tourism and regional tourist companies are encouraged to introduce it to all regions.

The Tourist Mobility Card is a business case which significantly increases the number of bus trips, and will be maintained by the local public transport operator in cooperation with the Limassol Tourism Company.

Mobility demand management

Smart systems for urban planners, PT operators and users

The activity in brief

Rethymno is developing smart systems for urban planners, to allow real-time monitoring and analysis of traffic load, mobility and environmental data, and hence to support decision making to monitor, assess and improve the SUMP action plan.

The absence of reliable spatiotemporal traffic and environmental data was a crucial challenge for transport planning and the monitoring of the sustainable mobility plan of Rethymno. To this end, thermal cameras and environmental monitoring stations were installed in selected city locations in the Municipality of Rethymno and the Renewable and Sustainable Energy Systems Lab of the Technical University of Crete. Correlations between critical traffic and environmental indicators showcase the impact of tourism flows into the city's transportation system and the quality of the environment, and identify the points requiring interventions.

The launch of a Smart Car Parking Management System contributes to the efficient management of the city's traffic and reduce congestion, both aiming to provide improved transportation and better living conditions.

Our achievements

Eleven thermal cameras, operating in compliance to the European Data Protection Regulation (GDPR), are located in selected locations in the city centre, the city's entrances and other critical spots. They are connected to a web-based platform to collect in real-time, and to analyse numerous data sets for traffic load.

The development and operation of a two-level environmental monitoring system provides valuable data to form a comprehensive, continuously monitored overview of the city and to compare the impact of traffic to the air quality levels during rush hour and during peak/off peak seasons. The system comprises of five environmental monitoring stations carrying environmental sensors that measure traffic pollutants concentrations (particulate matters - PM, NO_x, CO, C₆H₆), GHGs (CO₂, CH₄), noise level,



Siting of thermal cameras and environmental monitoring stations

ambient air temperature, humidity levels and wind speed every 5 minutes. It also includes portable equipment to capture street level conditions.

Rethymno innovates at regional level by installing a new Smart Car Parking Management System, incorporated into an IT platform that utilises a combination of smart applications and management tools. 400 sensors installed in the city's parking places inform in real-time about available spaces through a web-based application, preventing unsuccessful attempts to find a parking place and therefore benefiting citizens and tourists by reducing congestion, fuel consumption, time loss and emissions.

Success factors - Lessons learned

State-of-the-art technologies are adapted into the integrated approach for uninterrupted, on-line based supervision of traffic and environmental conditions.

A central monitoring system provides a comprehensive mobility management and monitoring tool to urban planners, PT operators and the Rethymno Municipality. Thermal cameras and environmental monitoring stations, located at the same location in critical city areas, allow simultaneous detection and cross-correlation of traffic and environmental indicators. The analysis show-



ReSEL environmental monitoring station for real-time air-quality monitoring

cases the interrelation of transport with air quality and meteorological conditions in a medium-sized city, as well as the direct impact on carbon, nitrogen oxide and other traffic-related emissions, and on noise levels.

Challenges encountered

The development of an integrated data monitoring and management system for a city of 60.000 residents and more than 500.000 visitors during the summer period, was not an easy task. Extensive research was required for the definition of the appropriate technical characteristics capable to cover the system's capacity.

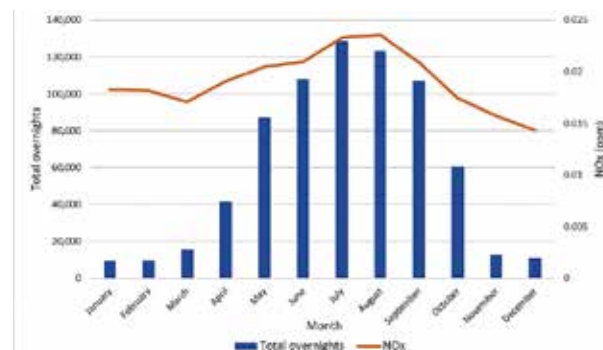
Moreover, for the development of an effective management system, the variety of alternative transportation modes should be considered; vehicles for disabled people,

cargo vehicles, residents' and visitors' vehicles, bicycles and other two-wheel vehicles. These challenges were the motivation for Rethymno Municipality to consult local stakeholders, such as the Technical Chamber of Greece.

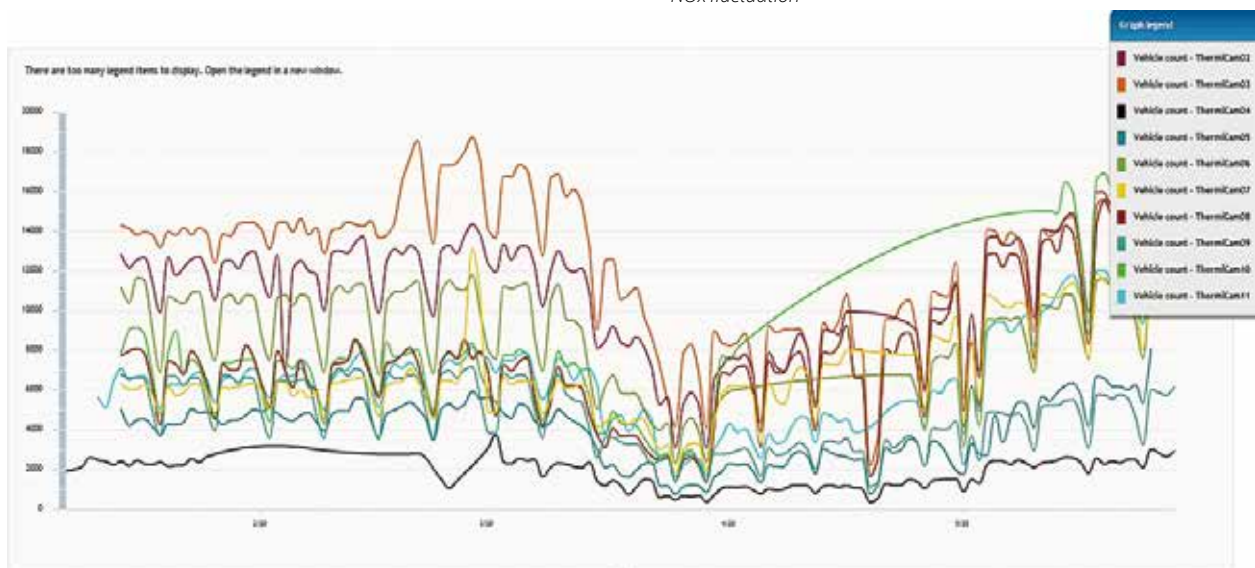
How the measure will be sustained

The environmental monitoring scheme provides an efficient, reliable, replicable, low-cost, continuous view of urban environment data, enabling urban planners to locate traffic congestion points and analyse the environmental impact of transportation. This allows them to adapt their mobility strategies and to formulate suitable sustainable mobility solutions if, when and where needed.

Rethymno shares the experience gained and lessons learned from Intelligent Transportation Systems and "smart management" services with other municipalities, enhancing the transferability and replication potential of the measure.



Impact of tourism flows in air quality – Correlation of overnight stays and NOx fluctuation



Real-time vehicle count through the use of installed thermal cameras

Mobility demand management

The activity in brief

The aim of this measure was to promote sustainable mobility among tourists, directly involving hoteliers and campsite owners in Elba, by implementing the “mobility + accommodation” package.

A preliminary survey, that involved 40 accommodation facilities’ owners throughout the island, allowed the staff of the two Municipalities of Portoferraio and Rio to better understand the problems and needs most felt in this sector, specifically regarding tourist’s travel.

There were differences between the accommodation facilities involved in the survey, (hotels, campsites, B&B, apartments), location and size. 80% of respondents considered important to provide mobility services in order to increase the number of their guests. Most mobility modes mentioned were sustainable ones, such as bikes and e-cars as well as agreements with local PT operators.

Taking into account these results and suggestions received during public SUMP consultation meetings, it was decided to involve the hoteliers in two sectors: bike mobility and local public transport.



Our achievements

Several meetings have been held in 2018 and 2019 in order to publicise the “Elba Card” to hoteliers, asking them to cooperate with the local PT operator and the municipalities. Hotel receptions were asked to provide information and sell tickets to their clients, “Elba Card” included. This scheme, that also partially addressed the problem of lack of ticket vendors on the Island, had a good success, in particular in 2019, when the purchase of tickets was established on consignment, with no risk for hoteliers.

The “Elba Card” for local public transport



Thanks to the collaboration of the local PT operator, CTT Nord, a new seasonal ticket has been introduced in order to incentivise tourists to travel by bus instead of using their own car. The “Elba Card” is available for one day or six days and allows passengers to travel all over the island at low price.

The long-term rental of e-bikes

The two Elba municipalities also supported hotels and campsites to test a long term (2 years) rental of e-bikes: two calls for tender were launched to select the rental operator and the most motivated accommodation facilities; agreements were signed between each structure, the operator and the municipalities of Portoferraio or Rio. The two municipalities managed all the administrative issues and facilitated the relationship among the parties and, most important they also provided financial support. DESTINATIONS, financed the costs for the service’s activation, first year of rental and maintenance, and transport of the e-bikes to Elba.





One rental operator and 11 accommodation facilities were selected and directly involved in the e-bike renting scheme. The bike model selected was the Benelli "Classica LX", equipped with an electric motor, continuous rated power 250W, battery with 360 W/h capacity, 3-speed Shimano (commercial value € 1.490,00). This city-bike met the needs of the identified target users, mainly tourists rather than sportive cyclists (who usually come to the island with their own bikes).

At the end of the rental period, some hoteliers declared their intention to purchase the bikes. They were mostly in

peripheral and low-demand areas, not well covered by local PT service; as such, an alternative, more sustainable and faster way of moving around has successfully been implemented.

Challenges encountered

Concerning the bike rental service, the main difficulty was to manage the administrative and financial issues. Not only the municipal staff, but also the hoteliers and the rental operator had to be very committed. Accommodation facilities have also had to present a bank guarantee, in order to avoid bad payment issues.

Success factors

The long-term rental formula is a good way to test a new solution before purchasing. Furthermore, by sharing the rental costs between the municipalities and the beneficiaries, it was possible to rent a larger number of e-bikes and, consequently, to benefit more accommodation facilities. In addition, a more advantageous price has been guaranteed thanks to the discount made by the rental operator. In conclusion, the measure allowed to put in practice a "win-win" approach, sharing the burdens and multiplying benefits for all.



Electric bike "Classica LX" model

The Green Mobility Hotel Award

The activity in brief

The Green Mobility Hotel Award and Labelling Scheme is a pilot initiative to promote good environmental practices by tourism enterprises by encouraging actions that can improve the travel experience, reduce congestion, contribute towards improved transport management and mitigate the tourism carbon footprint.

Our achievements

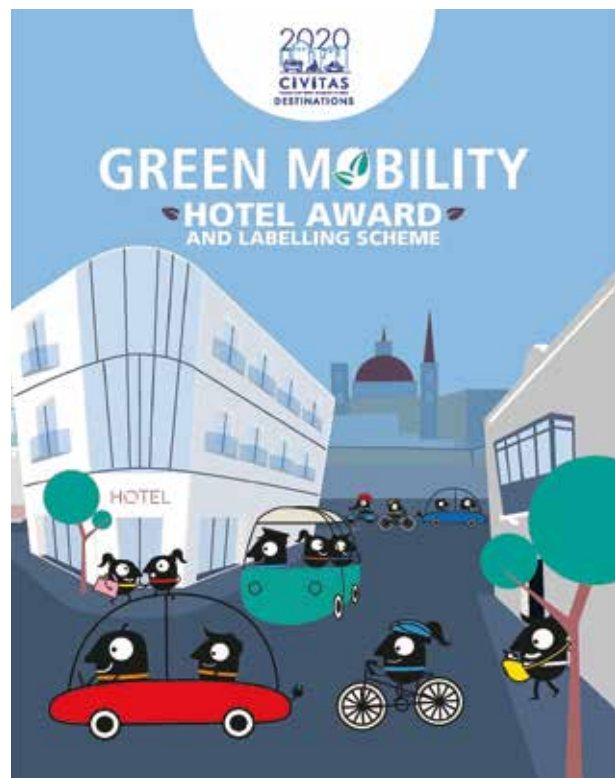
The Ministry for Tourism (MoT) met with stakeholders, including the Malta Hotels and Restaurants Association (MHRA), to explain the scope and objectives of the pilot project. The practical support provided by MHRA was vital in the promotion of the project with hoteliers.



Launch of the competition to hoteliers

Two events were organised to launch the Green Mobility Hotel Award and Label, providing guidance on the Green Mobility Plan and application forms. In addition, one to one meetings with interested hoteliers were held to further encourage participation.

Two hotels submitted their applications and were awarded the Green Mobility Label. The winning funded measures included electric passenger vans, the installation of bicycle racks and the provision of bicycles onsite for hire with helmets and lockers. Such measures are of benefit to tourists, the hotels' employees and the local community.



General information on the competition and guidance on the application process were also made available to hoteliers through a booklet

Lessons learned - Success factors

Hotels showed interest to 'think green' on the basis that it would assist sustainability and had the potential to lower costs for the business. Hotels not located in the area of this pilot initiative were also interested and if this measure were to be repeated, it is likely to be more successful should it be open nationwide. The impact from this measure is expected to be long-lasting, as it has encouraged hotels to develop and implement Green Mobility Plans, which will guide their mobility practices in the future.

Challenges encountered

Completing the application form was considered to be a potential challenge and this was mitigated through a simplified form and the provision of hands-on support. This helped to reduce the bureaucracy of the scheme and gain more interest from the hotels.

How the measure will be sustained

The Green Mobility Hotel Award and Label has potential to be turned to a recurring award on a national level or to be integrated as a 'mobility section' into the existing eco-certification scheme, using the indicators and criteria created in this pilot.

Promoting sustainable mobility among tourists

The activity in brief

MyMaltaPlan is an app developed by the University of Malta to inform tourists of the location of the main attractions on the Maltese Islands and how to get there using sustainable mobility options, such as bus, ferry, bike and car sharing and walking. The app creates a random customised trip timetable, based on the user's preferences, dates of arrival and departure, and opening hours of activities. The app also collects data about tourist mobility behaviour to assist long term tourism transport infrastructure planning.

Our achievements

MyMaltaPlan app was developed to provide useful and interesting information to tourists, in order to encourage a change in travel behaviour towards more environmentally friendly mobility options. The development and deployment of this app was supported by a series of workshops with tourist operators as well as the implementation of a marketing campaign through social media.

A series of workshops were organised prior to the launch of the app aimed at promoting the app and

explaining to operators how to contribute information about their tourism operations. Through these workshops, ties with tourism operators have been strengthened.

Lessons learned - Success factors

Collaboration and knowledge exchange was encouraged at project level through site visits and work placements. A successful example is the cross-site exchange between the University of Malta (Malta) and ARDITI (Funchal, Madeira)

New technology is a real enabling factor for new mobility behaviour. MyMaltaPlan was realised and strengthened through the shared objectives of the transport authority, tourism authority and operators.

Unlocked investment - How the measure will be sustained

Within the DESTINATIONS Project framework, a training for business plan development was organised and a business development plan was prepared for MyMaltaPlan. Through this exercise, potential sources to support the app in the future were identified but no such actions are actively pursued, as of yet.



Mark Bugeja from the University of Malta explaining the App to stakeholders

Efficient, attractive and accessible public transport

Attractive Public Transport

The activity in brief

The local project partners in Madeira believe that if public transport is to become more attractive, the use of more sustainable modes of transport have to be increased. To increase the attractiveness of PT, the public transport sales points were restyled; better information and dissemination activities were implemented; and user needs were analysed and better addressed.

To determine how to restyle the public transport sales points, the commercial department of HF consulted with the front office staff to better understand the needs of the clients as well as to create better working conditions for the staff. Improvements were made in all sales points. In the main sales office improvements were made by adding information in a bigger network map and dedicated spaces for day-to-day information or campaigns. More seating was installed, as well as a queue management system with a TV that provides information and shows public transport campaigns.

With the support of the local partners, HF developed new marketing material, such as short videos; information brochures, and campaign material for the “Bring a friend” initiative and the “Christmas gift voucher”. The material is disseminated in the sales offices and on the website, at the tourism information point and in hotel receptions. Public transport was promoted during events such as



Promotion during children's day

the European Mobility Week, through schools' visits to HF headquarters, at sports' and other events, such as activities with HF staff children, the “Drawing contest” and the “Carnival mask”. An image was added to bus stops at touristic attractions to draw tourists' attention.

From tourist surveys and stakeholder involvement, the need for a dedicated bus between the Port of Funchal and city centre and to other main touristic points with capacity for wheelchair users was identified.

A big effort was made to improve the ticketing system. A new integrated ticketing and fleet control system was



Promotion during Christmas



Winner of a Christmas contest



New bus dedicated to reduced mobility users

installed on 57 buses, making the process of ticket validation and on-board sales easier. This activity was useful to prepare the tender for a completely new ticketing system. Furthermore, a new modular support system was implemented to plan the daily public transport operation. It also provides information to customers in a more automated way and in a format easier to access.

Achievements

The activities implemented have a strong relationship with other measures of the DESTINATIONS project, especially with the SUMP and the promotion of public transport during big events. A cumulative effect of a 5% increase in public transport use has been recorded (from 2016, before the start of the project, to 2019). Another important result is the increase in customers: 13% of the customers that use a monthly pass indicated that are customers for less than 1 year and 13% between 1 and 2 years.

Regarding the improvements in the main ticket sales office, a survey indicated that 79% of the customers stated that the conditions of this office are 'good' or 'very good', and 74% stated that the improvements made were 'good' or 'excellent'. The main improvements were the queue management system and the comfort of the space.

The dedicated bus for reduced mobility was well accepted by tourists and residents. During a survey in the Port of Funchal, positive comments were received: "The HF

Reduced Mobility service bus is the best one where I've ever been." "The best dedicated bus." "Easy and safe. Perfect !!".

Lessons

HF started using social media, Facebook and Instagram, for more interaction with its customers. When analysing social media post views, it became clear that when HF publish a photo with their staff, the audience reach is higher. This reinforces the idea that the staff is the best way to reach customers.

Challenges encountered

In the implementation of technological measures to promote public transport some difficulties were faced, related to legal issues in the tender process and problems with the ownership of the ticketing software.

Unlocked investment

All the knowledge regarding the ticketing system requirements collected during the project was used to implement an integrated ticketing system - linked to a fleet control system - with the support of the ERDF.

Scaling up

The new ticketing system will be an important tool to improve the attractiveness of public transport. It will offer new possibilities to purchase tickets with mobile options, and the integration between the different public transport operators.



New management queue system in sales office

Efficient, attractive and accessible public transport

Public Transport traveller information system in Limassol

The activity in brief

The deployment of an integrated telematic system with real time information necessitated the preparation of a procurement procedure to purchase and install displays on buses and at bus stops. This is the first installation of a telematic system in Cyprus.

Our achievements

- 25 bus stop displays with photovoltaic panels were installed in the Limassol region,
- 25 on board Displays were installed for location-based information inside buses, informing the PT users about the following stops, the end of route, ticket purchasing, etc.
- A Content Management System – Back Office Tool was installed to provide information about POI (Points of Interest), nearby attractions and upcoming events in town.

The system has been designed for both tourists and residents in mind, making their travelling around using PT more efficient in terms of time and comfort.

What did we learn?

An innovative solution is the web-based Content Management System. It is a web-based application that allows the configuration of parameters on the basis of multimedia that need to be shown on the on-board display. It allows to select specific content on the on-board displays. Through the web content management system all text messages and information can be uploaded to the displays either as text messages or videos/photos and allow to monitor the status of the communication. A campaign or event may be scheduled at a particular time and duration and uploaded to the displays of the whole fleet or selected vehicles.

Challenges encountered

The telematic system had to be as per the specifications of the Ministry of Transport, so that it is compatible with the national system, when this is in place.



Improved PT services in Limassol Region

After the installation of the 25 Displays with Photovoltaic at bus stops, technical problems were faced due the heavy rain. Some of the Displays had problems but the awarded company found the solution and replacement of the damaged components with available spare parts.

Unlocked investment

An additional investment of 150.000€ from ERDF funding has been secured and used to install 30 additional displays (15 at bus stops, 15 inside buses), through the EY-KINISI project, that gave an added value to the measure (Interreg V- A, Greece – Cyprus Program 2014-2020).

How the measure will be sustained

The new system will keep working to inform all passengers for their trips in the Limassol region. The Ministry of Transport has signed an agreement to undertake maintenance and communication costs.

Mobility App & Travel Planner for Smart Phones to provide Real Time Information

The activity in brief

The Mobility application allows travellers to determine the nearest bus stations, bike rental stations, bike sharing stations and electric car charging stations. It also provides options for cycling, walking and hiking routes, with information regarding distance, level of difficulty, type of bicycle required and others. Information regarding points of access to the beach for disabled people and landmarks in the region are included in the application. Travellers can leave their comments and rate the mobility products/services on the app.



Our achievements

The application is available for i-Phone and Android free of charge and provides real time information and a feedback option. Based on our data 6.000 users have downloaded the application until April 2020.

A communication campaign and a competition has been organised during February 2019 in order to create awareness and to increase the number of users;

radio spots were broadcasted to promote the campaign and the competition to the general public; Web promo banners and articles were published to promote the Mobility Application; Google Play campaign delivered messages to increase users for mobile devices. After the campaign 4,840 users downloaded the App.

What did we learn?

The use of technology is absolutely necessary to provide information and increase interest in the use of sustainable mobility modes.

Unlocked investment

The application was upgraded with new functionalities and is now connected to the national platform established by the Ministry of Transport, Communication and Works providing real time information on bus service in Limassol. The upgrade received extra ERDF Funding of 40.000€ through the EY-KINISI project.



Improved Public Services for Tourists in Elba

The proximity to mainland and the scattered distribution of the attractions on the territory of Elba induce tourists to arrive on the island with their own car and to mostly use it during their stay, negatively affecting the environment and the quality of life. To tackle this issue, the local public transport service had to improve in efficiency and accessibility, becoming more attractive for tourists and residents alike.

One of the actions carried out within DESTINATIONS was the agreement among the two Municipalities involved in the project and the local public transport operators, enhancing the cooperation for conventional local Public Transport (PT) improvements, such as: new bus rides, new shelters and info-panels, requalification of bus stops, introduction of mobile ticketing services and a partial renewal of the bus fleet.

Moreover, several additional collective services, by sea and by land, are activated in the summer. In Rio a free bus service, called "Marebus", connects the city centre with near beaches and other smaller neighbouring areas. In 2019, Rio has doubled its efforts to offer citizens a free bus service by activating the "Go Bus", a winter shuttle service connecting the main urban areas of the municipal territory.

In the wide bay of Portoferraio, a maritime transport service was tested in the summer of 2018: the "Mini-Ferry" easily connected several coastal settlements with the city centre, contributing to the reduction of road traffic congestion. Moreover, two free bus services ("Cosmopoli by night" and "Shopping Bus") were activated with the aim of improving connections between peripheral locations, parking areas and the city centre.



The 'Mini-Ferry' service

The technical support of the project partner MemEx was very useful by introducing the CELSO System, an innovative Automatic Vehicle Management (AVM) tool designed to specifically plan and monitor transport services while giving real-time information on bus routes, position, timetables, arrivals and delays.

Our achievements

The support of CIVITAS DESTINATIONS has allowed the municipalities to achieve positive results with regard to the increase in the use of public transport by residents and tourists to the detriment of private cars.

Compared to the beginning of the project, a slight increase of local PT passengers has been registered and approximately 18.000 people travel using the additional services provided by the two municipalities.

Worth mentioning is the appreciation of people towards these additional services, which they considered very useful, especially in order to avoid traffic congestion and parking issues.



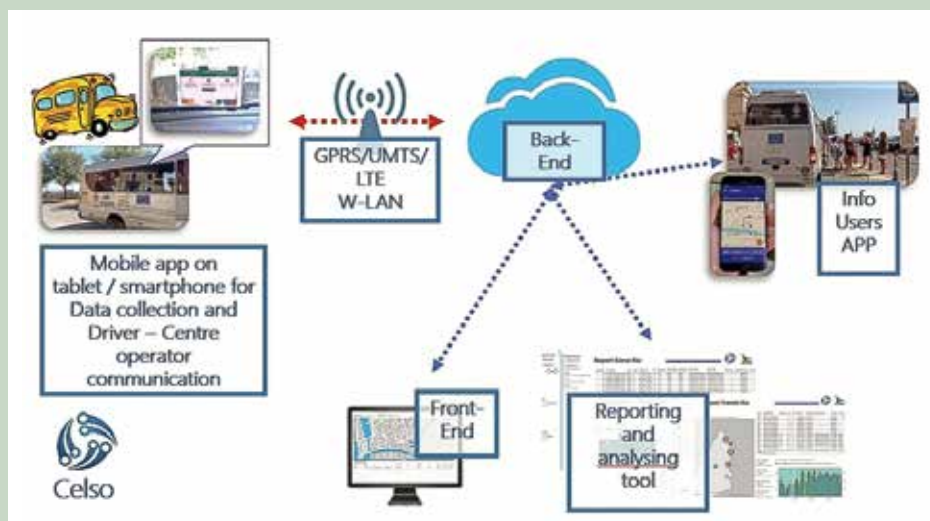
The 'Marebus' bus service

The CELSO System

The CELSO System, developed by MemEx, is widely used by transport companies to control PT fleets and provide real-time information on the service via a specific App or information panels. The system allows to plan, manage, monitor, validate and report transport services. Thanks to the mobile App, it is possible to validate the information collected during the performance of the service over time and on the basis of the driver's input.



CELSO System test- summer PT service in Rio



The Celso system

Finally, the relationship among the two municipalities and the local transport operators has improved considerably through a formal agreement but also thanks to a climate of positive and concrete cooperation. One of the results of this collaboration is, in fact, the activation of additional PT services well-integrated with the conventional ones, specifically designed to ensure comfortable connections to tourist areas.

What did we learn

One of the major learning points has been the realisation of the importance for a municipality to have a strong relationship with the local transport operators; as already mentioned, DESTINATIONS gave the opportunity to strengthen the relationship with them and with the provincial Mobility Observatory. This facilitated the inte-

By adopting it, local public administrations obtain certified data of the service's operability and constantly monitor the PT routes, with little remote technical control and low equipment costs.

On the other hand, the system, through the specific App, is user-friendly and intuitive. People can use it to have useful real-time information on the location and the stops of the bus, arrival and departure times, delays and traffic situation on the route.

grated planning of additional services with conventional local PT, both in routes and in timetable.

Testing additional services has shown that, especially in the summer, mobility is not only a need to move, but also a desire to have a travel experience. This was evident, in particular, for the Portoferraio mini-ferry, which was used, according to passengers, even just to enjoy the view of the island from the sea.

Another learning point, gained by using the Celso System, is the importance of having technological tools available to monitor fleets and support the administrator of the service for future new implementation.

Efficient, attractive and accessible public transport

Real-time mobility and tourism information services in Las Palmas

The activity in brief

Twenty real time information panels, powered by solar energy, were installed at selected bus stops by Guaguas Municipales in March 2017. The locations were selected based on the total number of customers using the different stops in the urban public transport (PT) network.

Our achievements

The real time information panels are equipped with new and innovative functionalities such as devices that allow customers to read the current balance of their contactless smart cards and electronic devices to allow the visually impaired to receive information about arrival times via a voice-operated system. This measure allowed the urban public transport company to increase the level of satisfaction among customers.

What did we learn?

Real time information system to customers makes the experience of travelling in public transport more attractive and comfortable.

Success factors

The performance of the new equipment was checked during a testing phase. As the new equipment is solar powered, the investment costs are higher than conventional grid connected equipment, but because of cost-savings



during its lifetime and low maintenance of the solar powered options, they are more attractive and feasible.

Unlocked investment from other sources

In March 2020, Guaguas Municipales had already installed 74 real-time information panels powered by solar energy (20 of them funded by DESTINATIONS and 54 with own resources).

In addition to that, the Regional Government of Gran Canaria has installed over 100 such panels (with resources beyond DESTINATIONS) all across the island for the inter-urban PT service. DESTINATIONS has catalysed the implementation of this kind of product not only in the city but also across the island.

Scaling up

There are plans to continue increasing the number of bus stops that will be provided with this kind of solar powered and battery technology.



Urban Public Transport map for tourists

Real time information system powered by solar energy

Integrated payment solutions for mobility and tourism in Las Palmas

The activity in brief

Tourism is a fundamental pillar of the Canary Islands' economy, and in the past years, Las Palmas de Gran Canaria has been established itself as a leader in the tourism industry, especially when it comes to cruises (565 cruise ships visited Las Palmas de Gran Canaria in 2017) and conference tourism.

Before CIVITAS DESTINATIONS, the urban public transport service in Las Palmas de Gran Canaria focused on citizens' and residents' trips without taking into account the specific needs of tourists in terms of urban public transport.

For that reason, Guaguas Municipales expanded its tariff options in order to include new types of tickets focused on tourism and leisure trips. As the average duration of a stay in Las Palmas de Gran Canaria is three days and many visitors stay just for one day (cruise passengers or visitors from other municipalities of the island), specific tickets for a short visit (for one and for three days) were introduced.

Our achievements

Two new Touristic Urban Public Transport Tickets (for one or for three days) are available since October 2018 and are sold together with an urban public transport map at tourist information offices, Guaguas Municipales commercial offices, as well as at some hotels and apartments.

What did we learn?

Tourism is a new market for a public transport company that has been focused on the needs of citizens and residents. Consultation with tourism business associations, local and regional tourism boards and

tourism stakeholder is necessary to understand the tourists needs and make public transport become a part of their holiday.

Success factors

The main success factor has been the consultation with professionals from the tourism industry, as they provided valuable advice about how to create an attractive alternative to tourists to move around the city and especially, how to promote public transport among people who stay in the city only for a few hours or days.

Challenges encountered

The main challenge for Guaguas Municipales was the competition with other mobility stakeholders that already had a good marketing in place to attract tourists to their services (taxis, touristic buses). A dedicated and widespread campaign was carried out to show the advantage of using public transport while being on holiday in Las Palmas de Gran Canaria.



Urban Public Transport cards for tourists

Increasing Efficiency of Public and Private Fleets in Madeira

The activity in brief

In Madeira, the local team has been working to promote the use of more energy efficient vehicles and the use of electric vehicles (EVs).

Communication and information activities, addressed to regional and local authorities, public and private companies and citizens, were designed to inform them of the importance of electric mobility and the alternative solutions that exist on the market.

5 public fast charging states were installed by the Regional Government, as well as several regular e-charging stations:

- 17 by municipalities;
- 11 by private companies for clients' use in shopping centres, restaurants, hotels, and the airport;
- 18 by public organisations.

To increase the efficiency of the public transport (PT) fleet, the following actions were implemented:

- demonstration program for electric buses in PT fleets;
- acquisition of 5 mini electric buses, co-financed by ERDF;
- eco-drive equipment installed in 20 buses;
- tire pressure equipment installed in 50 buses;
- predictive monitoring system installed in 41 buses;
- demonstration exercise of photovoltaic power system installed in 2 buses.

Achievements

Since the beginning of the project, the number of EVs in Madeira increased from 100 to 420 (320% growth). Considering the mobility patterns in Madeira, this number of EVs represent estimated annual savings of 3.600 MWh of energy and 860 tonnes of avoided CO2 emissions.

Three types of buses were tested: low floor, 12m length, 88 passengers; low entry, 8m length, 52 passengers; low entry, 5.8m length, 22 passengers. All buses performed well across the planned services, demonstrating suitable



power and torque. The main limitations were the dimension and the distance of the chassis from the ground, which prevented its circulation on some roads and consequently on some routes. The smaller vehicles with greater approach and departure angles proved to be a better choice to increase the diversity of services.

The battery capacity was another limitation. During acquisition, it will be necessary to consider increasing the battery capacity, to adopt fast charging infrastructures in



Presentation of the new mini electric buses



some terminals, or a combination of both, for the selected e-buses to operate continuously.

Although different factors influence the maintenance costs of a bus, it was found that the buses equipped with the tire pressure management system and the bus maintenance predictive analysis realised a cost reduction of 17% (from 2017 to 2019). The total fleet had a reduction of 1% in maintenance costs in this period, as a result of all activities implemented. Similarly, it was found that the Euro 2 buses equipped with the eco-drive system had a decrease in maintenance costs of 4,8%.

Lessons learned

Electric mobility is an answer for individual and collective transport, of people and goods, as it contributes to environmental, economic and public health benefits and reduced dependency on fossil fuels.

Private companies were the main drivers of change, due to their bigger investment capacity and the tax incentives created at the regional and national level. Due to ongoing

government initiatives, it is expected that the demand for EVs in Madeira will continue to grow.

Challenges encountered

The main barrier is some mistrust about the technology and maintenance costs of EVs and the higher acquisition cost when compared to combustion engine vehicles. To overcome this, the project organised awareness and demonstration actions, workshops with stakeholders and citizens, extension of the public and private charging stations' network, the creation of incentives and the organisation of training sessions for firefighters to address safety issues. In all phases of the project, efforts were made to involve EV dealers, key players in this dynamic sector.

Unlocked investment

The local government implemented incentive schemes for EV acquisition. In 2019, the initiative PRIME-RAM, supported by the Regional budget (€400.000), co-financed 42 vehicles in Porto Santo Island. This incentive was extended to Madeira island in April 2020, following the SUMP, with a Regional budget of €1.000.000.

For the PT fleet, HF received funding from the ERDF for the 5 mini electric buses, connecting the city centre, the hotel area and the port of Funchal and for 30 Euro 6 buses that can circulate in most areas of the city.

Scaling up

The promotion of EVs and the renewal of the PT fleet are activities to continue in the coming years.



Promotion of e-mobility

Introducing Electric Vehicles in public fleets in Rethymno

The activity in brief

Rethymno has introduced a new generation of CO₂-neutral e-vehicles in Crete. The first e-car and e-bus were integrated into the Municipal and Public Transport (PT) fleets. Those zero emissions, quiet and efficient vehicles circulate in the city enhancing Rethymno's eco-profile.

Our achievements

The mini e-bus, has a capacity of 23 people and is accessible to all (people with disabilities, parents with baby carriages). Its small dimensions allow access to the historic centre's narrow streets.

A new circular e-bus route, connects the city centre with the beach and the bus station, serving both citizens and tourists with 12 journeys daily. The e-bus operation is combined with tailored designed signage and informative material - also at bus stops.

The municipal e-car, currently employed by the Municipal Technical services department, with dedicated signage and messages is a moving promotion of electromobility.



The first electric bus, in regional PT fleet, circulating in the city center

Test drives, advertorials, social media posts, public events, leaflets and postcards, are further enhancing e-mobility and its benefits.

What did we learn?

Involving actively the PT operator, early during the design phase, resulted to the integration of the e-bus route to

Uptake of EVs by fleet operators - Launching EV charging infrastructure

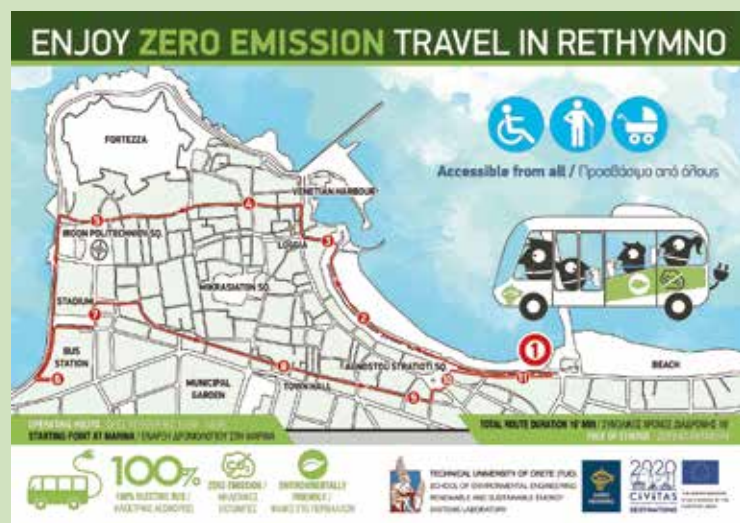
The activity in brief

Rethymno installed the first public charging points in the region, aiming to support the use of e-cars by tourists and citizens.

Our achievements

Three public EV charging stations offer free charging and parking to residents and visitors. Dedicated signage for the stations and designated parking slots aim to deliver powerful messages promoting electromobility.

Rethymno is leading the way for a regional EV charging network, as a fundamental condition for the uptake of EVs in the island.



Postcard promoting the e-bus route and schedules



the existing public transport services. The national electric vehicles (EVs) market is still at an infant stage due to higher price, public concerns about maintenance and technical support and limited awareness of the benefits of e-mobility. Showcasing the operation of publicly owned EVs, along with a targeted promotional campaign, triggered the interest of citizens and local businesses (rental car companies, hotels,

car sellers). The first e-cars have been purchased and currently circulate around the city.

Success factors

Being the first e-bus –nationally- integrated into PT has inspired replication from other follower cities. Several municipalities contacted Rethymno to learn about the procurement process and the experience from its operation. The neighbouring Municipality of Heraklion, announced a 750.000€ fund for the procurement of two e-buses.

Residents and visitors were actively involved in the design of the e-bus route, discussing and “voting” amongst alternative scenarios, during open-air interactive workshops, gaining also knowledge of e-mobility benefits. The e-bus launch was also embraced by the hoteliers and tourism operators, who promoted its route and itineraries to their customers.

How the measure will be sustained

Rethymno has ensured the e-bus operation after the project’s end as it has been finally undertaken by the PT Operator who is currently examining the possibility to upgrade its fleet with the procurement of more clean vehicles.

What did we learn?

Introducing electric vehicles as an alternative mode of transport in the region of Crete is a new challenge, since residents are not familiar with EVs and their benefits. Charging infrastructure in public spaces is rare, and only a few e-cars are circulating in the whole region. The limited awareness and interest for EVs was addressed with tailor-made campaigns highlighting the benefits of clean vehicles.

Unlocked investment - scaling up

Rethymno has unlocked 50.000€ ERDF funding for two fast chargers for the city centre and another adjacent to the national road connecting Rethymno with Chania and 85.000€ EU funding for the procurement of a PV carport, EV and microbility chargers. The Hellenic Electricity Distribution Network Operator, in collaboration with the



Municipal e-car promoting electromobility in Rethymno

Municipality is considering further expansion with 3 additional charging points, by 2022. Moreover, the regional government intends to procure EV chargers to be installed at selective locations, aiming to cover the whole island with a sufficient EV charging network.

EV legislation & charging infrastructure in Elba

The activity in brief

The municipalities of Portoferraio and Rio consider the use of electric vehicles (EVs) an opportunity for the development of green road mobility on the island.

One of the first actions undertaken on this purpose within DESTINATIONS was the Declaration of Intent for the decarbonisation of public transport, signed in 2017 by the Mayor of Rio, Renzo Galli, during the CIVITAS Forum 2017 event. Thus, the municipality opened a gradual transition from fossil fuel-powered vehicles to biomethane, hydrogen and electricity engines.

The following year, the Municipality of Portoferraio organised a conference with the support of the project partner MemEx, animating the public debate on the possible transition to electric mobility on the island. The conference, entitled

“Towards a De-carbonised Island”, gave the opportunity to meet specialised companies and stakeholders and encourage the inclusion of electric mobility in the political agenda.

These two important events contributed to preparing the local context towards the introduction of infrastructures and services for e-mobility and led the two municipalities to promptly respond to the request of the National Board for Electricity, Enel-X, for the installation of electric charging stations on their territories. An agreement was signed in order to introduce up to 15 charging stations in Portoferraio and 6 in Rio.

The two municipalities also organised meetings with the other Elban Communities in order to facilitate and promote the introduction of e-infrastructures in the whole of the island.

Finally, to complete their commitment to e-mobility, Portoferraio and Rio produced a “Vademecum for E-drivers”, an easy-to-read leaflet aimed at giving useful





information to tourists driving an electric car on the island: where to recharge, facilities for e-drivers, access to Low Traffic Zones (LTZ) for e-vehicles etc.

Achievements

About 30 locations spread all over the territories of Portoferraio and Rio were assessed in order to find the best places to install 21 electric vehicles charging stations. The design and permits, as well as mediation processes with local stakeholders, require that the implementation is carried out at different times for each station; therefore, the installation of all 21 planned stations is expected to be completed in the next few years.

The initiative attracted the interest of the private sector who requested to take into account parking areas close to their shops and shopping malls as future locations for charging stations.

Challenges encountered

The urban context of the Elba Island makes difficult to adapt to new infrastructures due to restrictions of intervention in ancient cities and to the presence of narrow spaces that limit the installation of charging stations that are quite large and include a column and an electrical cabinet nearby.

It should be noted that introducing charging infrastructures means eliminating parking stalls available for traditional cars. The charging station, in fact, cannot be considered parking area, as parking is allowed only for the recharging time. Each infrastructure design included an assessment of the impact on parking availability in the

area which at times necessitated a discussion and mediation with local stakeholders.

Success factors

One of the main success factors of the measure relates to the characteristics of Elba. The absence of railways and the lack of a good connection by sea make road transport practically the only way of moving around. In addition, regarding fuel availability, only petrol and diesel are presently available, while methane or LPG stations are absent. Finally, the relatively short distances (maximum 150 km to cross the island) and the presence of at least seven main urban centres spread over the territory, can be considered as another positive factor so as to avoid the “range anxiety” phenomenon of EVs.

Another success factor was the fruitful cooperation between the National Board for Electricity and the two municipalities.

Next steps

In the near future, it is foreseen to continue the installation of charging stations throughout the island and to encourage electric mobility in general, including e-bikes. The possibility of installing e-bike charging stations is being assessed in order to make the island more bike-friendly and ecological.

As regards to electric cars, the “Vademecum for E-drivers” will be updated, including the new charging stations and further tips to move around in the best possible way using an electric car on Elba.



Vademecum for E-drivers

Fast Charging EVs in Las Palmas

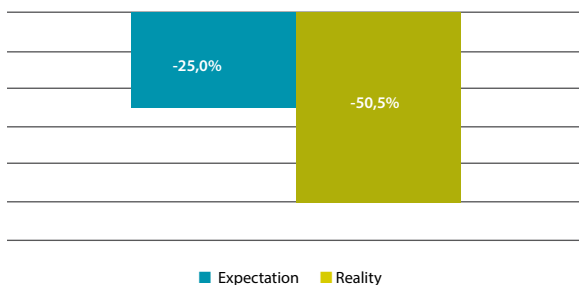
The activity in brief

This measure included two actions: the enlargement of the electric vehicle (EV) charging network of Las Palmas de Gran Canaria by implementing 6 new EV charging points inside SAGULPA's public parking facilities, as well as the purchase of three electric vans to replace the diesel fleet of SAGULPA. The EV chargers in SAGULPA's public parking are available gratis to its clients.

Our achievements

- Compared to the consumption of a gasoline-fuelled car 50.121 litres of gasoline were saved and 66,65 tonnes of CO₂ emissions were avoided thanks to the kWh's charged on SAGULPA's EV charging stations.
- By replacing three diesel-fuelled vans by three electric ones, SAGULPA saved 18.222 litres of gasoline between December 2016 and June 2019, and reduced CO₂ emissions by 50%. Moreover, maintenance costs were reduced by 71%.

Reduction of CO₂ emissions reduction due to the introduction of electric vans in Sagulpa's fleet



What did we learn?

If SAGULPA was to introduce the EV chargers now, the company would include a payment system for the EV chargers from the beginning. SAGULPA is aware that offering free charging leads to a lack of price transparency. The business model (fees, memberships, etc.) is still under discussion.

Success factors

The key success factor has been that full EVs proved to be suitable for most of SAGULPA's fleet requirements.



e-chargers for electric cars

Challenges encountered

The cost of the energy supply infrastructure was the main barrier for the implementation of the EV charging points. Their installation requires upgrades of local grids. Despite innovative solutions, such as smart charging that reduces peak loads, upgrades are still needed to prepare for the integration of EVs in the grid.

Another barrier was that some of the SAGULPA staff suffered from range anxiety. Increased exposure to EVs has addressed this issue.

Unlocked investment from other sources

The expansion of the EV charging network attracted the interest of key local stakeholders such as EV authorised dealers. This encouraged new synergies such as the "Mobility Island" space that SAGULPA implemented in 2019 in partnership with Nissan. It includes one fast EV charging point available 24 hours a day provided by Nissan and two stations within the public bike scheme, Sítycleta.

How the measure will be sustained

The goal is to provide the city with an infrastructure that could support a shift towards more sustainable mobility by encouraging the use of EVs and shared mobility services. The regional government is developing a plan to enlarge the EV charging infrastructure in the whole island.

Hybrid and e-buses in the urban bus fleet in Las Palmas

The activity in brief

Guaguas Municipales, the urban public transport (PT) company of Las Palmas de Gran Canaria, has a fleet of 241 diesel buses and just one hybrid bus with an average age of 10 years.

In order to reduce CO₂ emissions and fuel consumption, improve air quality, contribute towards the reduction of congestion and to promote sustainable mobility, Guaguas Municipales acquired three hybrid buses in operation since August 2018 and one full electric bus in operation since September 2019, to replace the oldest diesel vehicles, within the DESTINATIONS project.

Our achievements

By March 2020, the hybrid buses had run on average 50.000 km, which translates to 22% of fuel consumption savings when compared to conventional diesel buses. Drivers and maintenance staff have been trained to work with this new technology.

What did we learn?

During the bus testing phase, some issues surfaced, especially related to charging or traction, which were solved by the manufacturer. Furthermore, there were some other problems related to the performance of the e-bus because of the steep slopes present in the city, which required some software modifications to address them.

Challenges encountered

The Canary Islands are an isolated region, causing difficulties in resolving maintenance issues and finding solutions to problems. Spare parts generally need to come from the mainland and there are not yet enough trained staff in the Canary Islands specialised in this new technology causing buses to be in a non-operative state for longer.

How the measure will be sustained

The municipality of Las Palmas de Gran Canaria, as well as Guaguas Municipales, will continue investing in eco-friendly buses with their own resources to increase the availability and use of such buses.



Guaguas Municipales Hybrid buses

Cross-fertilisation activities with China

Over the 4 years duration of the DESTINATIONS project, several cross-fertilisation activities were undertaken in Europe and in China, in particular in the cities of Beijing and Shenzhen.



DESTINATIONS cities visit Foton Bus Group, in Beijing

The visits

From 22 to 29 June 2018, a delegation from the six DESTINATIONS project sites (Funchal, Las Palmas de Gran Canaria, Malta, Elba, Rethymno and Limassol) visited China, for a week rich in learning and exchange. The visit started with a workshop on Urban Mobility Management in Beijing on 22 June. Following this, the group undertook a series of technical site visits to government bureaus and prominent Chinese transport companies in Beijing and Shenzhen to witness the cutting-edge transport solutions implemented there. Visits included: the Beijing Transport Bureau, Foton Bus Group, Mobike, Didi, Shenzhen Transport Bureau, BYD, Keanda, Shenzhen Urban Transport Planning Centre, Shenzhen Enterprises Confederation, Shenzhen Bus Group, Golden Road Traffic Technology Company, and Shenzhen Metro.

After these visits, Shenzhen Bus Group expressed their interest in establishing a closer cooperation with the DESTINATIONS project, which materialised by organising visits in all six DESTINATIONS sites during 2018 and 2019.

From 4 to 8 November 2019, a delegation of eleven Chinese mobility stakeholders, from both the government and the private sector - mainly from Beijing



DESTINATIONS cities visit Shenzhen Bus Group's Intelligent Driving Centre.



Chinese Delegation visit to Las Palmas de Gran Canaria



DESTINATIONS cities visit Mobike, in Beijing



DESTINATIONS cities visit Keanda Group, in Shenzhen



Shenzhen Bus Group visit to Valletta, Malta



Shenzhen Bus Group visit to Limassol, Cyprus

and Shenzhen - visited Funchal, Las Palmas de Gran Canaria, and Lisbon (on the way to Las Palmas) for another week rich in learning and exchange. The delegation included representatives from BYD, Didi Udian, Foton, JCCC, Shenzhen Bus Group, the China Centre for Urban Development -integrated in the China National Development and Reform Commission, and Beijing University of Technology. In each of these cities the Chinese group participated in meetings with and on-site technical site visits to government bureaus and promi-

nent local transport companies and mobility stakeholders. During the meetings, the Chinese participants also presented their cutting-edge transport solutions implemented in their cities of operation.

In both occasions, all parties were clear as to the immense value of the meetings and visits and their potential to serve as a model for future EU-China knowledge exchange activities in transport.

Other Activities and Reports

Additionally, DESTINATIONS has been present with a booth in the two most relevant trade fairs in the areas of transportation -INTERTRAFFIC China (27-29 May 2019, Shanghai)- and tourism -ITB China (10-12 May 2017, Shanghai), and participated as a speaker in the SMART Mobility Conference 2019.

In these events, the interest of Chinese companies in cooperating with EU cities, and in our integrated sustainable mobility approach was reinforced and confirmed.

There were 5 focus areas of DESTINATIONS' cross-fertilisation activities with China:

1. Mobility Management and Transport Planning Measures
2. Alternative Energy Vehicles
3. Mobility Sharing
4. Mobile Apps & Integrated Mobile Payment Solutions
5. SMART Urban Transportation Management

The information produced for or during such events, as well as other relevant information related to the measures implemented in DESTINATIONS cities have been posted, in Mandarin, in the WeChat DESTINATIONS Dissemination Tool.

Finally, to help EU cities to profit from developments in sustainable mobility taking place in China, two documents have been produced:

- "Mobility Implications for European Cities of Receiving Chinese Outbound Tourists".
- "Manual for European Tourist Cities on the Application of Innovative Urban Mobility Measures used in China"

Cross-fertilisation, Replication and Dissemination Activities

Dissemination, cross-fertilisation, replication of innovative actions and uptake of best practices were key activities of DESTINATIONS. They aimed at exploiting the project's results to guarantee efficient transferability within and outside the consortium as well as to provide adequate support to develop, disseminate and replicate transferable knowledge at local regional, national and European level.

The dissemination and communication approach in DESTINATIONS aimed particularly at promoting mobility solutions, helping cities to cope with tourism volumes and trends and adapt their mobility systems by offering intelligent sustainable transport solutions for tourists and residents.

The Platform of Followers

The Platform of Followers - www.destinationsplatform.eu - established in 2017 contains a wealth of information on the activities of the project. With more than 200 registered users from more than 40 regions/cities members of the CPMR from 14 EU member states and 6 non-member states associated to the CPMR, it is the centre that ensures the transfer of our results and tools to the Follower Cities.



Cross-sites Synergies and Capacity Development

Cross-sites synergies and exchanges were key aspects in DESTINATIONS. It was a proactive process in which the cities exchanged knowledge gained during the project (or before) about the replication of policies, measures and



EU Week of Regions and Cities 2019 DESTINATIONS session

tools, or research conducted, to support measures implementation elsewhere. A large number of activities were organised to this end: 20 technical workshops and trainings, 10 work placements and 13 site visits. In addition, various activities were developed in synergy with other CIVITAS projects and communities as well as follower cities.

Seminars and Workshops

During the life of the project, DESTINATIONS conducted several seminars and workshops in order to attract new interest in the project and new registrations to the Platform of Followers with the view to enhance the potential for replication of the project's measures and actions.

The primary target of these workshops and seminars were the 150 coastal and insular regions members of the CPMR, prime candidates to take up and replicate DESTINATIONS measures. Twelve such workshops were carried out between 2018 and 2020 in five different European locations that include Bastia - Corsica, Funchal - Madeira, Corfu - Greece, Brussels - Belgium and Tulcea - Romania.

Replication Activities

As part of the transferability and cross-fertilisation activities, some of the project followers received a small fund to take-up and replicate a number of selected tools or methodologies. The Autonomous Region of Sardinia and the Municipality of Platania in Crete launched an initiative to develop a programme for safe routes to schools based



on Rethymno experience. The Municipality of Ipsonas in Cyprus will install two Environmental Monitoring Stations, as it was done in Funchal, in order to monitor air quality. Furthermore, five more organisations from the mobility and tourism sectors developed Implementation Plans for the replication of a number of the project's measures such as:

- The Shared Use Mobility Agency of Elba
- The "Mobility and Accommodation" Package of Elba
- The Rethymno programme for 'Safe Routes to School'
- The "Business Cases for Combined Tourism and Mobility Products" programme of Limassol



Rethymno technical visit to Funchal

Networking with Tourism and Transport Stakeholders

The project collaborated with NECSTouR (the Network of European Regions for Competitive and Sustainable Tourism) and its academic member NIT (research institute for tourism) to complement project results on how to improve the governance and the integration of sustainable and smart mobility measures in tourism. As a result, the project formulated ten practical guidance recommendations to support authorities willing to implement sustainable mobility solutions in touristic destinations.

Cooperation with other CIVITAS IA projects

DESTINATIONS established a close working relationship with the two sister Innovative Action projects PORTIS and ECCENTRIC. A number of common events were organised during EUSEW 2019, DG Regio's Open Days 2019 and a Final Event during the EU's Urban Mobility Days 2020 in September 2020 in Brussels.

Website and Social Media

DESTINATIONS maintains an active website www.civitas.eu/destinations full of information including description of all project measures and deliverables, news and events. Partners have produced videos, media interviews and several articles in various Mobility and Tourism Newsletters. They have also been active in all major social media channels posting news and achievements of the project. They include accounts with Facebook, Twitter and LinkedIn.



Facebook

www.facebook.com/Sustainable.Tourism.and.Mobility



Twitter

@CIVITAS_DSTNTNS



LinkedIn

CIVITAS DESTINATIONS

One of the major tasks has been the monitoring and evaluation of all measures designed and implemented during the life of the project. The focus of the evaluation work is the impact assessment of the measures implemented in each CIVITAS DESTINATIONS site. Evaluation aims to classify the impact of the implemented measures in impact categories with a qualitative assessment (Process Evaluation) and quantitative elements (Impact Evaluation) against quantifiable targets set in advance.

Evaluation in DESTINATIONS draws on the evaluation work of CIVITAS POINTER, CIVITAS WIKI and a first analysis of recent evaluation approaches defining indicators for urban mobility. The methodology adopted is the result of a cooperation between CIVITAS SATELLITE and the Project Evaluation Managers of the three Innovation Action projects (ECCENTRIC, DESTINATIONS and PORTIS).

Environment: an impact category in which many of the DESTINATIONS measures aim to improve the environment by using clean vehicles and alternative fuels and reducing the modal share of private motorized transport. Environmental evaluation in DESTINATIONS focuses on diminishing air pollution/nuisance emissions and resource consumption.

Economy: focusing on the estimation of the efficiency or benefits derived from a measure in relation to the costs associated with its development, implementation and operation. Efficiency addresses the balance between the impact a measure has and the willingness of users/providers to pay the cost of achieving this impact. This impact area also includes a measure's effectiveness in increasing the income of citizens or creating jobs.

Following the CIVITAS SATELLITE methodology, evaluation has been conducted on the basis of a "before (baseline) and after" situation using, as far as possible, a list of common indicators set to allow effective and meaningful performance comparison across cities. The measured improvement provided by the measure implementation in terms of social, transport, energy and environmental performances have been compared with the ex-ante estimations provided by the cities' staff to evaluate to what extent the measure has been able to produce the expected results.

Experience made within the CIVITAS initiative projects shows 5 impact categories relevant for assessing urban transport measures. These are: Environment, Economy, Transport, Energy and Society.

Transport: focusing on the performance of the mobility system in terms of usage and its technical characteristics. The emphasis here is on understanding how much the DESTINATIONS measures can contribute to improving the performance of the transport systems, and therefore contribute to better and cleaner urban transport, including also safety and security aspects (real and perceived).

Energy: addressing the consumption of energy. Using alternative fuels is one of a number of actions proposed in DESTINATIONS. In addition, many other measures can also contribute to the reduction of fuel consumption (e.g. increasing public transport and/or bicycle use)

Examples of the societal impact of two measures, one in Malta and one in Elba are presented below:

Society: focuses on the general acceptability of a measure and its effects on how easily people are able to travel around in a city with respect to the quality of a service, its physical and economic accessibility and also its effects on health.

In **Malta**, the measure – Promoting e-bike sharing and car sharing – used an information and awareness campaign to promote the services of (e-) bike and car sharing, provided on the Maltese islands since 2016/17 and to educate the public on cycling safety.

Impact of the measure: - In one year, thanks to the awareness campaign, the awareness level of bike sharing services increased on average by 39% among tourists and residents.

In **Elba**, the measure - Improved Public Transport services for tourists and residents - developed a package of actions including bus fleet renewal, new PT services and connections.

Impact of the measure: 67% of citizens and tourists claim to be "very satisfied" with public transport services.



Horários do Funchal (HF)

www.horariosdofunchal.pt

Horários de Funchal, Transportes Públicos, S.A. (HF) is the public transport operator in the city of Funchal and interurban operator in the east part of the Madeira Island. HF has experience in European projects to improve sustainable mobility (e.g. CIVITAS – MIMOSA and SEEMORE).



AREAM

www.aream.pt

The Agência Regional da Energia e Ambiente da Região Autónoma da Madeira (AREAM) is a private non-profit association. Its main purpose is the promotion of energy efficiency, renewable energy resources and protection of the environment, by supporting local and regional authorities, energy suppliers and end-users.



MUNICIPALITY OF FUNCHAL (CMF)

www.cm-funchal.pt

The Municipality of Funchal (CMF) is the Public Authority responsible for the city of Funchal, the capital of Madeira Autonomous Region. Funchal is characterised by narrow streets, high slopes, and the concentration of services in the city centre, which poses major challenges for planning and mobility management.



REGIONAL SECRETARIAT OF TOURISM AND CULTURE (SRETC)

www.madeira.gov.pt

The Secretaria Regional do Turismo e Cultura (SRETC) is a public authority for the tourism sector and worked together with the Directorate of Economy and Transport. They developed the regional SUMP, joining the contribution of all stakeholders from tourism, transport and services sector.



ARDITI

www.arditi.pt

The Regional Agency for Research, Technological Development and Innovation (ARDITI) has the aim to promote and support Research, Technological Development and Innovation (R&TD+i) within the Autonomous Region of Madeira



LIMASSOL TOURISM BOARD (LTC)

www.limassoltourism.com

The Limassol Tourism Company Ltd is a non-profit organisation established by the Cyprus Tourism Organisation and the Limassol Chamber of Commerce and Industry in order to assist in the implementation of the Limassol Regional Tourism Strategic Plan. LTC promotes the further development of the tourist infrastructure in the region in order to attract quality visitors throughout the year.



LIMASSOL MUNICIPALITY

www.limassolmunicipal.com.cy

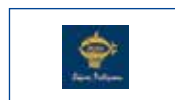
The Municipality of Limassol is a municipality in the province of Limassol in Cyprus and was founded in 1878 when Britain began ruling the country. It is one of the six municipalities of major Limassol, the metropolitan municipality and the administrative capital of the province of Limassol.



STRATEGEM ENERGY

www.strategem.com.cy

STRATEGEM Energy Ltd is an independent Research and Innovation company providing insightful and focused technical services and research on Engineering solutions. STRATEGEM's expert team of highly qualified Researchers, Engineers and Innovation Managers focuses in offering first class R&D&I services.



RETHYMNO MUNICIPALITY

www.rethymno.gr

The Municipality of Rethymno is the public authority responsible for the administration of the city of Rethymno, the third largest city in Crete and the capital of the Regional Unit of Rethymno. A member of the Covenant of Mayors since 2011, a seaside city, hosts a small port, a large well-preserved old town and numerous archaeological sites.



TECHNICAL UNIVERSITY OF CRETE

www.resel.tuc.gr

The Technical University of Crete-Renewable and Sustainable Energy Systems Lab (ReSEL)-focuses on Sustainable Energy and Mobility, with 20+ years of experience in EU-funded projects on technological and non-technological issues. As advisor of local regional and national authorities, ReSEL focuses on low carbon communities and insularity.



MUNICIPALITY OF RIO

www.comune.rio.li.it

The Municipality of Rio is located on the eastern coast of Elba. As the second port of the island, the large incoming tourist flow generates important mobility issues in the summer. Tourism is a fundamental resource for Rio; thus, the local authority is attentive to implement efficient mobility and tourism measures while guaranteeing a high level of quality of life in the territory.



MUNICIPALITY OF PORTOFERRAIO

www.comune.portoferraio.li.it

With its 12.000 inhabitants Portoferraio is the most populous city of Elba. It is located in the centre-north of the island and hosts the biggest and most active port for ferries, cruise ships, cargos and recreational crafts. Portoferraio is considered the main centre of the Island, where the hospital as well as many other administrative offices and services of the island are located.



MemEx

www.memexitaly.it

MemEx is an engineering company with more than 25 years' experience in planning, implementing and testing ITS's for PT, Sustainable Mobility, City and Port Logistics. It has expertise in EU, national and regional R&I projects and has recently developed the CELSO system (www.memex-celso.com), a low-cost AVM/AVL solution for collecting data based on a mobile app.



TRANSPORT MALTA (TM)

www.transport.gov.mt

TM (Transport Malta) is the managing authority for land, air and sea transport and falls under the authority of the Ministry for Transport, Infrastructure and Capital Projects. Transport Malta has successfully participated in a number of EU Projects promoting cleaner and sustainable transport including D-Air, STREETS and PORT-PVEV.



VALLETTA LOCAL COUNCIL

www.cityofvalletta.org

The Valletta Local Council (VLC) is the Public Authority responsible for the city of Valletta. Valletta was built by the Knights after the Great Siege of 1565. Today Valletta is a commercial and entertainment centre having experienced a recent growth in hotels and restaurants with the current infrastructure posing major challenges especially to logistics.



UNIVERSITY OF MALTA

www.um.edu.mt

The University of Malta (UoM) is the leading higher education institution in Malta. It is committed to high standards of academic research and teaching and participates actively in Regional and European Research Programmes. It is composed of fourteen faculties, and a number of interdisciplinary institutes, centres and schools.



MALTA MINISTRY OF TOURISM

www.tourism.gov.mt

The Ministry for Tourism and Consumer Protection (MTCP), responsible for the tourism sector in Malta, in close collaboration with TM and UoM has developed a set of guidelines and criteria for the hotel industry for the awarding of grants aimed at encouraging long-term sustainable mobility.



GUAGUAS MUNICIPALES

www.guaguas.com

Guaguas Municipales (Guaguas) is the urban public transport operator in Las Palmas de Gran Canaria. Guaguas is in charge of the implementation and future operation of a Bus Rapid Transit system, the most ambitious project related to urban mobility in Las Palmas de Gran Canaria.



CINESI

www.cinesi.es

CINESI is a consultancy whose mission is to assist administrations, transport operators and private clients in implementing and assessing strategies and in carrying out mobility and transport projects. Our know-how covers socioeconomic assessment, optimisation of transport networks, traffic studies, mobility surveys and implementing solutions for all transport modes.



AYUNTAMIENTO DE LAS PALMAS DE GRAN CANARIA

www.laspalmasgc.es

Municipality of Las Palmas de Gran Canaria (LPGC) is the Public Authority responsible for the city of Las Palmas de Gran Canaria. Las Palmas de Gran Canaria is the most populous city in Canary Islands and could be considered as a worldwide strategic place due to its port and airport that connect three different continents (Africa, America and Europe)



INELCAN

www.inelcan.com

INELCAN is an innovative technology-based company founded in the Canary Islands (spin-off of the University of Las Palmas de Gran Canaria), dedicated to the design and manufacture of electronic telemetry and mobile communication systems.



SAGULPA

www.sagulpa.com
www.bybikelpa.com

SAGULPA is the company in charge of the urban public parking management of Las Palmas de Gran Canaria as well as it is in charge of the public bike service known as "Sitycleta" that was set up as a measure within the CIVITAS DESTINATIONS project.



ISINNOVA

www.isinnova.org

ISINNOVA- the Institute of Studies for the Integration of Systems (www.isinnova.org), formerly known as ISIS, - is an Italian private research and consulting firm supporting public bodies for the analysis, the design, the implementation and the evaluation of sustainable policies in the fields of energy, environment, transport and mobility, urban planning, and knowledge society.



EIP

www.mobilitatedurabile.ro

European Integrated Projects (EIP) is a sustainable mobility consulting company based in Romania, with an office in Italy. The primary fields of work include stakeholder engagement, innovation management, policy research and analysis, knowledge transfer, awareness raising and communications on sustainability issues, as well as project and consortium management.



GV21

www.gv21.com

GV21 is a consulting and advisory firm fully committed and focused on helping to make the bridge between the EU and China, providing practical solutions and tailored made solutions to its clients and participating in the implementation of its recommended actions. It was set up in January 2000, has established offices in Europe (Madrid) and Continental China (Beijing), and participates in EU funded projects.



VECTOS

www.vectos.eu

Vectos GmbH is an SME leading on multi-disciplinary international mobility research and development projects. Vectos implements the latest innovations in sustainable transport, drives forward the decarbonization agenda and develop new insights into the social aspects of mobility and behaviour change.



CPMR

www.cpmr.org

The Conference of Peripheral Maritime Regions (CPMR) brings together more than 150 Regions from 24 States from the EU and beyond. It campaigns in favour of a more balanced development of the European territory. It operates both as a think tank and as a lobby for Regions focusing mainly on social, economic and territorial cohesion, maritime policies, blue growth, European governance, energy and climate change.



BEIJING UNIVERSITY OF TECHNOLOGY

www.english.bjut.edu.cn

Beijing University of Technology (北京工业大学) has established a multidisciplinary academic structure, offering a variety of programs and is involved in diversified research in the fields of Science, Engineering, Economics, Management, Liberal Arts, and Law. It is a Chinese Ministry of Education Double First Class Discipline University.

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