



Regional Action Plan for Almada City



Part I – General information

Project: RESOLVE, Sustainable mobility and the transition to a low-carbon retailing economy

Partner organisation(s) concerned: Almada City Council

Country: Portugal

NUTS2 region: Lisbon Metropolitan Area

Contact person: Pedro Gomes

email address: pedro.gomes@ageneal.pt

phone number: +351 962252536

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Part II – Policy context

- The Action Plan aims to impact:
- Investment for Growth and Jobs programme
 - European Territorial Cooperation programme
 - Other regional development policy instrument

Name of the policy instrument addressed:

POR LISBOA 2014-2020 (Lisbon Regional Operational Program) Thematic Objective 4: Supporting the transition to a low-carbon economy in all sectors. Within TO4, Investment Priority 4e: Promotion of Low Carbon Strategies for all types of territories, namely urban areas, including the promotion of sustainable urban mobility and relevant adaptation measures.

Further details on the policy context and the the way the action plan should contribute to improve the policy instrument:

As was defined in the Application Form, Lisbon Region aims to increase the energy efficiency in transport sector, through modal shift from motorized individual transport to more efficient public transportation, reversing the current excessive use of private car, and strengthening sustainable urban mobility by creating favourable conditions for a more intensive use of soft modes. Municipalities are responsible for drafting and implementing SUMP, and therefore can play a key role in carbon reduction. Although commercial related travels represent a good share of all the travels within a city, and POR Lisboa states that the development of a Metropolitan Plan for Mobility and Transport (SUMP) is mandatory for funding, the focus is the support of macro-scale regional policies and initiatives, with no support for actions targeting sustainable mobility associated to retail at local level. Also, retailers strongly believe that they will only be successful if customers have free car access to shops, distrusting pedestrianization. The RESOLVE approach aimed to enrich regional mobility policies in general and POR Investment Priority 4e by adding the perspective of commercial related travels to sustainable mobility, focusing on the transition to a low carbon retail economy, with recommendations for policy improvements.

Comment on the relevance of the policy instrument POR LISBOA 2014-2020 and its investment priorities are “closed”, and no actions towards mobility related to retail and logistics operations at local level were prioritized. The typology of actions was targeted to the implementation of macro-logistics, with no focus on local traffic generated by retailing activities. Also, most of the financing was allocated to the Central Administration instead of the Municipalities.

However, there is a consensus that the next POR 2020-2030 will have special focus on the mobility issues, with more influence from the Lisbon Metropolitan Area instead of a Regional focus. So the improvement is still relevant and realistic since the implementation of successful pilot actions related to sustainable mobility

related to retail activities and logistics will surely influence the design and implementation of the future POR Lisboa 2020-2030 whose strategic lines and measures are currently under consultation.

Background:

In line with the sustainability policies of the European Commission, the Municipality of Almada has set up relevant policies on transport and mobility in the last decade in order to face significant traffic problems due to the large number of private cars and commercial vehicles. This strategy is focused on the development of a multimodal transport system by the integration of the different mobility services, the enhancement of the overall accessibility to the public transport network, the promotion of soft (or active) mobility modes and alternative vehicles and fuels. Almada is currently developing its 2nd generation Mobility Plan, following the SUMP guidelines elaborated by the European Commission. The development of the Almada Mobility Plan has four main objectives:

1. Planning and developing a Multimodal Transport System;
2. Creating better infrastructures for Public Transport and Soft Modes;
3. Promoting the use of new and more efficient technologies/alternative fuels (including electric mobility);
4. Involving citizens in the decisions, informing and raising awareness.

The SUMP is identifying a set of proposals and recommendations of solutions which give the mobility system of Almada the most appropriate responses to local needs, safeguarding the following key principles: energy efficiency, environmental and economic equity, universal access to mobility and accessibility to the multiple functions of the territory. The SUMP will also include the results of other projects and strategic documents, which was the case of Almada's Sustainable Urban Logistics Plan (SULP), developed under the framework of the EU-funded ENCLOSE project (<http://www.enclose.eu/>). The SULP foresaw the creation of an urban consolidation centre for logistic operations, operated with EV's, among other services.

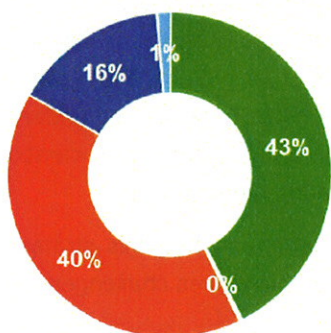
The implementation of the RESOLVE project in Almada is the continuation of this strategy, focusing on sustainable mobility related to retail in an emerging area of the city which faces challenges of environmental sustainability, quality of public space and economic development.

The RESOLVE target area in Almada is the peninsular northern part of the city and consists of two adjacent zones, Cacilhas and Almada Centre:

- Cacilhas is one of the more dynamic and more traffic congested areas of the city. Currently, Largo Alfredo Diniz, adjacent to Cândido dos Reis Street and where the intermodal terminal of Cacilhas is located, is the main access of the ferry connection between Almada and Lisbon and one of the main entrance doors in the Municipality of Almada (with around 5 millions passengers/year between Almada and Lisbon). This terminal is served by several means of public transport, namely the boat (Transtejo), road transport of passengers (Transportes Sul do Tejo) and the light rail (Metro Sul do Tejo), in addition to individual car traffic. Although Cândido dos Reis street is a pedestrianized area with a well-documented success story which is part of the Good Practices Register of RESOLVE (<https://www.interregeurope.eu/policylearning/good-practices/item/911/pedestrianisation-of-candido-dos-reis-street-in-almada/>), the logistics activities of restaurants and other commercial establishments (which have limited access to the car-free area but do not always comply with the

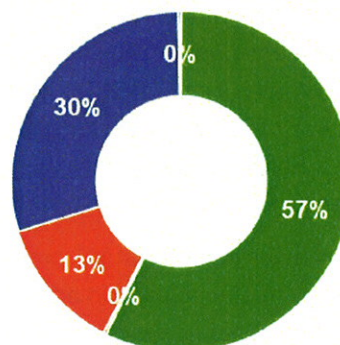
loading/unloading regulations) and the congestion associated with road traffic and uncontrolled parking in its direct surroundings, are factors that strongly influence the experience and accessibility of public space users (residents, workers and visitors).

- Almada center is the town commercial centre, with a large shared space where pedestrians, public transports, bike and cars circulate daily. The area is called an “open air commercial district”, although the economic crisis has reduced its dynamism with the closure of relevant number of shops, more recently there has been an influx of new commercial activities and some economic recovery. Unfortunately, in the last years part of the traffic calming measures was reversed, which increased the daily traffic in the area. This was partly due to public pressure by the retailers of this area. Retailer perception of the decline of the city center was mainly associated to mobility measures, and not the economic crisis that affected Portugal between 2009-2015. Also, shopkeepers are very car-oriented and assume that a large share of their customers also use their private car to shopping-related trips, which was not confirmed by the RESOLVE surveys, where it was found that around 87% of customers come by walking/cycling or public transport. This figure was similar in both 2017 and 2018 RESOLVE surveys, although it was observed that the opinion of the retailers about their customers modal share evolved favourably towards Public Transport and soft modes. During the course of the project the RESOLVE Monitoring and Evaluation tool was very useful to understand the mobility and spending patterns associated with each type of client (coming by car, PT or soft modes) – car users do not spend more money in local retail and commerce than walking customers.



How retailers think costumers come shopping:

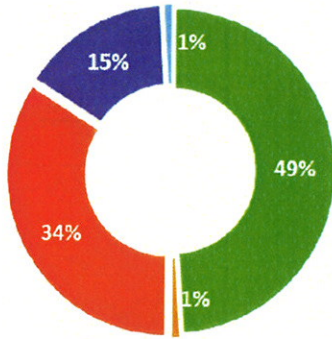
40% car | 16% PT | 1% car + TC | 43% walking + cycling



How customers actually come shopping:

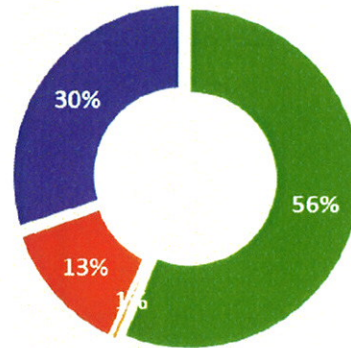
13% car | 30% PT | 0% car + TC | 57% walking + cycling

RESOLVE Survey #1, October 2017



How retailers think costumers come shopping:

34% car | 15% PT | 1% car + TC | 50% walking + cycling

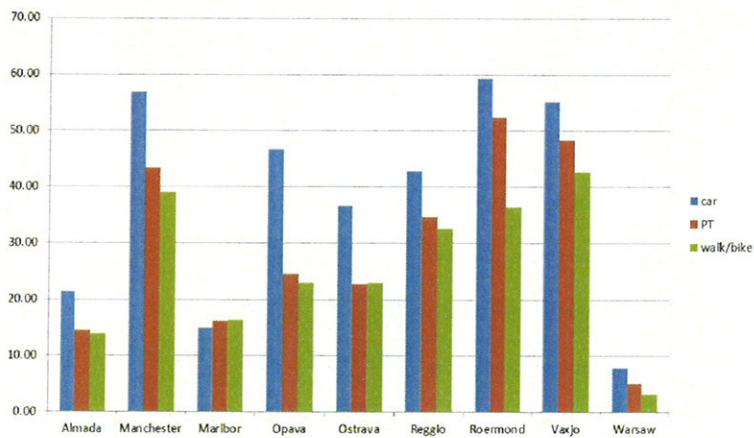


How customers actually come shopping:

13% ca | 30% PT | 56% walking + cycling

RESOLVE Survey #2, October 2018

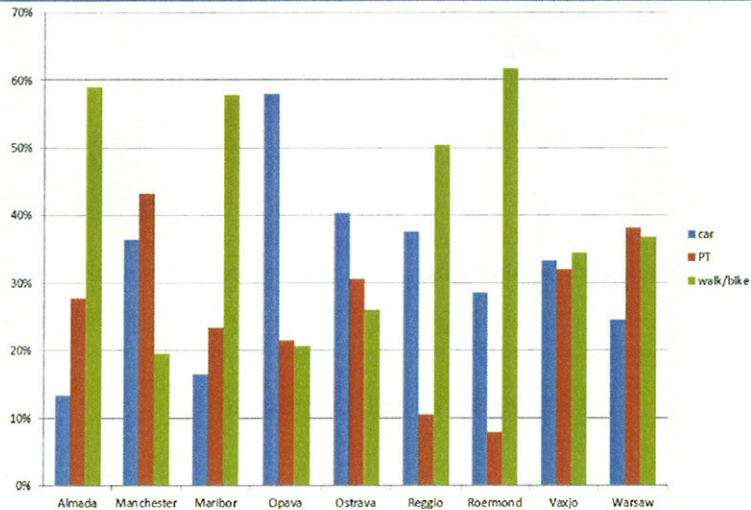
Average shopping spending per trip per city, by transport mode (€)



Source: Dr. Giuliano Mingardo, Erasmus Centre for Urban, Port and Transport Economics, Erasmus University Rotterdam

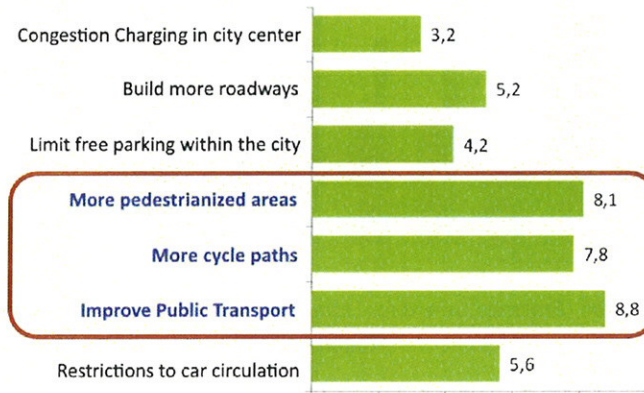
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Average shopping spending per trip multiplied by mode share multiplied by visit frequency per year



Source: Dr. Giuliano Mingardo, Erasmus Centre for Urban, Port and Transport Economics, Erasmus University Rotterdam.

Also, based on its 2015 Mobility Survey, the residents of Almada strongly support the creation of more pedestrianized areas and the improvement of the PT system, although they are also very reluctant to restrictions of traffic circulation which is somewhat contradictory.



2015 Mobility Survey, Residents opinion about traffic measures

Scale: 0 (no support) – 10 (very strong support)

Part III – Details of the actions envisaged

MAIN ACTION

Name of the action: Almada City Council decided to develop a Decarbonization Living Lab (LVpD)

1. Relevance to the project

During the Exchange of Experience Activities of the RESOLVE project, Almada City Council had the opportunity to learn about and visit other partners Good Practices. Particularly interesting for Almada City Council Regional Action Plan were the following Good Practices targeted at revitalizing the local economic activity, increasing urban quality of life and reducing the traffic related to urban retail and logistics in the city:

- Pedestrianisation of Reggio Emilia and Bologna City centers
- Pedestrianisation of Roermond City center
- City Hub of Roermond - City Hub is a medium-sized consolidation center located right next to the Designer Outlet. From its location parcels can quickly get to any destination in the city centre with a fleet of e-cargo vehicles to deliver or pick up
- Consolidation Center of Padua (CITYPORTO) - consists of an urban consolidation centre, located in the freight village Interporto Padova, an environmentally friendly fleet of hybrid and CNG vehicles, a dedicated ITS system and a set of co-ordinated local rules for urban freight transport.

All of these measures influenced the Regional Action Plan of Almada.

The opportunity to share experiences and learn about other cities good examples and success stories reinforced its sustainable mobility actions within the scope of the RESOLVE Regional Action Plan.

Furthermore, the City Council had the opportunity to learn, within RESOLVE, about new ways of engaging local stakeholders (in particular shopkeepers and residents) by the adoption of communication strategies and activities successfully tested by other Project Partners to engage of the mobility and retail sectors. As an example, Almada adopted the “World Café” format that was used previously in Roermond and learnt by Almada through the RESOLVE exchange of experience process - the Regional Stakeholders Group meeting which was held during in 20th September 2018 during the European mobility Week was organized as a “Mobility Café” during the afternoon.

In this event, 29 stakeholders including the Retailers Association, the City Council, the Public Transport Operators and Political Parties of Almada were present and were able to discuss a set of key topics in a very productive environment:

- What role for walking/cycle in Almada in 2030?
- What role for private transport in the future mobility of Almada in 2030? Will the sharing of vehicles take place?
- What role for collective transportation in Almada in the year 2030?
- What are the problems of daily mobility in Almada and its impact on quality of life, energy consumption and the environment?
- How can the mobility and transport system be financed in a city?



Mobility Café, European Mobility Week 2019, Almada

2. Nature of the action

Almada City Council decided to develop a **Decarbonization Living Lab (LVpD)** in the Cacilhas district, an innovative project that aims to recreate urban space, turning them into spaces for demonstrating activities and livelihoods that are more sustainable and less carbon intensive. The LVpD of Almada is, in practice, a delimited area where demonstrative solutions will be implemented, which can then be replicated in other locations and in other cities in the country and in the world. The LVpD was designed based on the very particular characteristics of Cacilhas and the new centrality that was generated following the requalification and pedestrianisation, introduced at Cândido dos Reis Street.



LVpD Almada implementation area in Cacilhas

The objective of Almada's LVpD is to create low carbon urban area, inclusive, resilient connected and accessible, where the community is empowered to make use of a set of innovative and disruptive set of technologies and services, which support a new approach to create, experience and manage the cities of the future. The Municipality intends to develop a model of circular economy that values local resources and fosters the process of energy transition that results in the decarbonisation necessary to reach the climate objectives defined by the city.

In the LVpD Almada, a set of innovative actions will be tested and implemented which include the creation of a small urban logistics consolidation center (with a nearly zero energy building approach) that can mitigate the problems of loading and unloading operations and mitigate the current conflicts in this highly attractive pedestrian route (also serving as a pickup point for e-shopping from residents and management center for reverse logistics), the creation of a local currency that promotes economic activity in the LVpD and surrounding areas, smart waste collection, including the use of food waste, the provision of real-time information on public transport modes which serve the area, smart metering and the reduction of energy intensity in buildings, introduction of solar pavements, and the FAROL Platform, a web-based system which aggregates all the information associated with the activities of LVpD Almada.

Almada's LVpD (Main Action) is subdivided in several Sub Actions, described in the next sections.

3. Stakeholders involved

In the LVpD Almada, a set of public and private partners will be involved. The following public entities are responsible for the overall coordination and implementation of the project:

- Almada City Council
- AGENEAL, Local Energy management Agency of Almada
- Faculty of Sciences and Technology – NOVA University

Several private companies will provide valuable support in the implementation of the sub actions:

- Larus, Construction Supplies & Equipment is responsible for the design and layout of the FAROL Center
- Lasting Values, Consultancy in Management and Environment will be responsible for the implementation of the GARUM currency and will also provide support for the management of the project
- Logistema, Logistics Consultants is responsible for the architecture and implementation of the FAROL platform
- Luísa Neto Pereira, Consulting and Management will be responsible for the stakeholder relations and management
- Mota Engil II Management, Environment, Energy and Service Concession will be responsible for the implementation of renewable energy solutions to guarantee a zero-emission logistics consolidation center

- Transporlis Association will provide integrated information regarding each public transport operator data (timetables, optimization of routes, etc.) for the Cacilhas GO panel
- UBIWHERE will be responsible for the technological solutions associated with the FAROL platform
- UNLK will be responsible for the communication and dissemination plan
- WE CONSULTANTS is responsible for the development of the collective procurement model for the shopkeepers of the implementation area.

4. Timeframe

10 months counting from the signature of the Consortium Contract and Subsidy Contract of the project (which is expected to be complete in the end of April 2019). LVpD is expected to be finalized in the first trimester of 2020.

5. Indicative costs

The LVpD Almada has an **overall budget of € 1 291 676,70**, including human resources, equipment, infrastructure and others.

The remaining budget is allocated to Management, Communication and Dissemination activities.

6. Indicative funding sources

This Action will be co-funded by Portuguese Environmental Fund (up to € 500 000,00, and City Council own resources.

Although this project is not funded by POR Lisboa 2014 - 2020, it will serve as a pilot initiative to showcase this type of initiatives to the Managing Authority of the ROP. The small scale of the Living Lab will allow Almada City council to better manage and monitor its activities and innovative actions, with the objective of dissemination and replication not only in other areas of the city, but also in other cities and regions.

SUB ACTION 1

Name of the action: FAROL Center

1. Relevance to the project

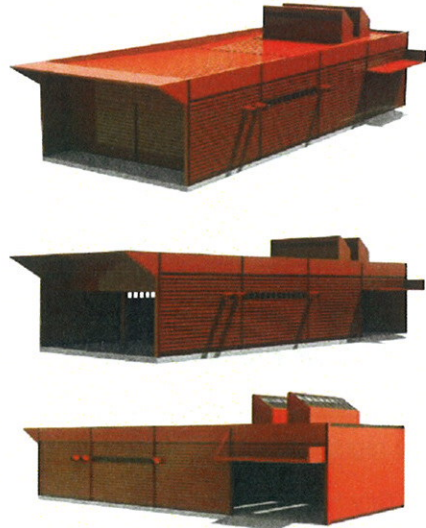
This Sub Action, being integrated in the Main Action, is inspired by two initiatives from the RESOLVE good Practice register that were of most interest to Almada:

- City Hub of Roermond

- Consolidation Center of Padua (CITYPORTO)

2. Nature of the action

FAROL Center is the backbone of the LVpD. It will be a small-scale urban consolidation center, which will be located next to Largo Alfredo Diniz, in Cacilhas. It aims to consolidate all the logistics of LVpD, designing and implementing an innovative and sustainable system, that executes all the operations of reception of goods and other goods, distribute them to the various points of the LVpD, and optimizes the reverse logistics process. The Center, as a building, was designed to respond to the logistics service model to be implemented, integrating concepts of circular economy and under the ambition of setting up a zero carbon building. The vehicles at the service of the FAROL consolidation center will be 100% electric and will ensure that the transportation of good will have zero local GHG emissions.



3. Stakeholders involved

- Almada City Council
- AGENEAL, Local Energy management Agency of Almada
- Faculty of Sciences and Technology – NOVA University
- Larus, Construction Supplies & Equipment
- Lasting Values, Consultancy in Management and Environment
- Mota Engil II Management, Environment, Energy and Service Concession

4. Timeframe

10 months counting from the signature of the Consortium Contract and Subsidy Contract of the project (which is expected to be complete in the end of April 2019). LVpD is expected to be finalized in the first trimester of 2020.

5. Indicative costs

FAROL Center has an indicative cost of 537 012, 60€, of which 186 330,00 € is human resources, 227 282,60 € is related to equipment, 90 000,00 € for infrastructures and 33 400,00 € to other expenses.

6. Indicative funding sources:

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This Sub action will be co-funded by Portuguese Environmental Fund and City Council own resources. As for the Main Action, there will be no funding from POR Lisboa 2014-2020 but since Sub Action 1 is integrated within the Main action, it will contribute to the pilot initiative to showcase this type of initiatives to the Managing Authority of the ROP.

SUB ACTION 2

Name of the action: FAROL Platform

1. Relevance to the project

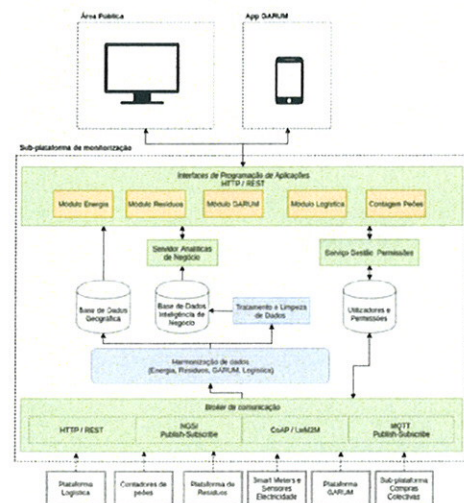
This Sub Action, being integrated in the Main Action, is inspired by two initiatives from the RESOLVE good Practice register that were of most interest to Almada:

- City Hub of Roermond
- Consolidation Center of Padua (CITYPORTO)

2. Nature of the action

FAROL Platform will constitute the central information system and aggregator of the various initiatives and subsystems. It is a fundamental (and transversal) instrument of operationalization and communication of the Living Lab of Almada, and of monitoring and dissemination of its results. The FAROL Platform integrates 3 main components:

- Monitoring: collection, processing, storage and availability of data;
- Collective purchases: an integrated and demonstrative model of shared purchasing processes and energy efficiency, operating individually for each shopkeeper (stocks, offers of purchase, building diagnosis), as well as potential supply proposals received from the market;
- Public area: A web page "business card", information and communication center, stakeholder navigation instrument, and a laboratory observatory. There will be three access profiles: shopkeeper, resident and administrator



3. Stakeholders involved

- Almada City Council

- AGENEAL, Local Energy management Agency of Almada
- Faculty of Sciences and Technology – NOVA University
- Lasting Values, Consultancy in Management and Environment
- Logistema, Logistics Consultants
- UBIWHERE
- WE CONSULTANTS is responsible for the development of the collective procurement model for the shopkeepers of the implementation area.

4. Timeframe

10 months counting from the signature of the Consortium Contract and Subsidy Contract of the project (which is expected to be complete in the end of April 2019). LVpD is expected to be finalized in the first trimester of 2020.

5. Indicative costs

FAROL Platform has an indicative cost of 186 716,00 € of which 126 526,00 € is human resources, 11 950,00 € is related to equipment, and 48 240,00 € to other expenses.

6. Indicative funding sources:

This Sub action will be co-funded by Portuguese Environmental Fund and City Council own resources. As for the Main Action, there will be no funding from POR Lisboa 2014-2020 but since Sub Action 2 is integrated within the Main action, it will contribute to the pilot initiative to showcase this type of initiatives to the Managing Authority of the ROP.

SUB ACTION 3

Name of the action: GARUM

1. Relevance to the project

This Sub Action, being integrated in the Main Action, is inspired by an initiative from the RESOLVE good Practice register, the Amsterdam Smart City which is a living lab for various 'smart city' initiatives on different themes (Infrastructure & Technology Energy, Water & Waste Mobility Circular City Governance & Education Citizens & Living). Although this initiative was not formally subject to a Study Visit by Almada City Council, the creation of a Good Practices Register within the framework of RESOLVE was a valuable tool to know more about inspirational initiatives, not only from Project Partners but also other cities and regions. Discussion

and exchange of experiences among Partners was a key point to identify suitable actions to implement and test in Almada.

2. Nature of the action

GARUM designates the virtual currency of LVpD Almada. It aims to encourage residents of Almada to separate their organic waste, thus allowing them to be properly sent for treatment and valorization. In addition, it will contribute to the economic dynamism of the LVpD area and encourage the use of public transport. It involves the residents; traders, and the Municipality of Almada. Its distribution is made as a counterpart to the waste separation action. With this currency, private individuals can purchase goods and services from local shops and/or public transportation tickets to promote sustainable mobility. Local merchants can also use the currency in the payment of municipal fees/charges. Membership of the instrument by traders and residents is voluntary.

3. Stakeholders involved

- Almada City Council
- AGENEAL, Local Energy management Agency of Almada
- Faculty of Sciences and Technology – NOVA University
- Lasting Values, Consultancy in Management and Environment
- UBIWHERE

4. Timeframe

10 months counting from the signature of the Consortium Contract and Subsidy Contract of the project (which is expected to be complete in the end of April 2019). LVpD is expected to be finalized in the first trimester of 2020.

5. Indicative costs

GARUM has an indicative cost of 230 733,80,00 € of which 112 793,80 € is human resources, 85 500,00 € is related to equipment, and 32 440,00 € to other expenses.

6. Indicative funding sources:

This Sub action will be co-funded by Portuguese Environmental Fund and City Council own resources. As for the Main Action, there will be no funding from POR Lisboa 2014-2020 but since Sub Action 3 is integrated within the Main action, it will contribute to the pilot initiative to showcase this type of initiatives to the Managing Authority of the ROP.

SUB ACTION 4

Name of the action: Cacilhas GO

1. Relevance to the project

This Sub Action, being integrated in the Main Action, is inspired by two initiatives, one from the RESOLVE good Practice register and the other from the INTERREG Europe Good Practice Register:

- Almada Bus Saúde, which is “is a new service of public transportation, flexible and inclusive, that connects the city center to Almada Hospital, Health Centers and other public services in its area of influence. “Almada Bus Saúde” has a fixed route marked on the ground with a red line, and has no stops. Passenger pick-up and drop-off is made on request throughout the entire route (just raise your hand!). “Almada Bus Saúde” circulates every day of the week, including holidays with a fleet of 4 minibuses adapted to the transport of disabled and elderly people.
- Solar powered E-paper technology screens for real time public transport information implemented in Coimbra, Portugal (<https://www.interregeurope.eu/policylearning/good-practices/item/706/solar-powered-e-paper-technology-screens-for-real-time-public-transport-information/>)

Almada Bus Saúde was partially funded by POR Lisboa 2014-2020 and uses the same type of E-paper information panels in some key points of the route, which greatly increase the overall quality and reliability of service. Although this service is targeted to mobility associated with healthcare services, a large amount of its users (currently around 17 000 per month) also use the service to other purposes, like shopping.

Currently, adjacent to the future LVpD implementation area is located the intermodal terminal of Cacilhas, the main access of the inland waterway connection and one of the main entrance doors in the Municipality of Almada. This terminal is served by various means of collective transportation, namely the ferry (Transtejo), bus (Transportes Sul do Tejo) and light rail (Metro Sul do Tejo), in addition to individual car traffic. The organization of this public space makes it difficult for residents and visitors to apprehend the public transport options they should adopt, the destinations served, the location of the appropriate bus stop and the departure/arrival times, something that is not properly provided. These difficulties are particularly concerning for bus users, given the proliferation of 25 bus stops with 25 destinations, 3 career types (Urban, Suburban and Special) and about 800 daily circulations. On the other hand, the logistics activities of restaurants and other commercial establishments in Rua Cândido dos Reis, and the congestion associated with road traffic and uncontrolled parking in its direct surroundings, are factors that strongly influence the experience and accessibility of space users public (residents, workers and visitors).

1. Nature of the action

Cacilhas GO designates a real-time information panel on the various modes of collective transportation of Almada. The Cacilhas GO information panel will be linked to a centralized database, which stores the necessary information of the service to be provided to the users. Associated to the information panel will be a smaller interactive panel, where the user/visitor will be able to carry out personalized searches according to their origin and destination of travel, as well as the mode of transport. In parallel, several actions will be

carried out to requalify the public space and alter the road circulation and parking, in order to facilitate pedestrian and cycling in the area of implementation of the LVpD Almada, as well as remove the existing obstacles to the proper functioning of the activities of logistics and waste collection will be provided by the electric vehicles operated by the FAROL Center.

2. Stakeholders involved

- Almada City Council
- AGENEAL, Local Energy management Agency of Almada
- Transporlis

3. Timeframe

10 months counting from the signature of the Consortium Contract and Subsidy Contract of the project (which is expected to be complete in the end of April 2019). LVpD is expected to be finalized in the first trimester of 2020.

4. Indicative costs

Cacilhas GO has an indicative cost of 67 650,00 € of which 16 900,00 € is human resources, 40 750,00 € is related to equipment, and 10 040,00 € to infrastructures.

5. Indicative funding sources:

This Sub action will be co-funded by Portuguese Environmental Fund and City Council own resources. As for the Main Action, there will be no funding from POR Lisboa 2014-2020 but since Sub action 1 is integrated within the Main action, it will contribute to the pilot initiative to showcase this type of initiatives to the Managing Authority of the ROP.

Date: 03/04/2019

Name of the organisation(s): Almada City Council

Signature(s) of representative of the relevant organisation(s):


Catarina Freitas, Director, Department of Innovation, Environment, Climate and Sustainability