



2020  
**CiViTAS**  
Cleaner and better transport in cities

**DESTINATIONS**



## Measure Evaluation Result

LIM 4.3 - Promote the uptake of electric vehicles, campaign on e-mobility

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## Executive Summary

Limassol Tourist Board and Stratagem Energy Ltd cooperated for the preparation of the material for the electro-mobility campaigns. These electro-mobility campaigns have been designed to provide the necessary information in the form of printed and electronic brochures. Adverts in hotels and lifestyle magazines promoted this concept as a new sustainable way of life, and billboards and electronic advertisements also supported this effort. Competitions have been organised to create awareness about the existence of e-vehicles to travel around.

The campaign also ensures publicity in local and tourist media about the DESTINATIONS project and the implemented actions across the Limassol region. Electro-mobility campaigns have been organised within this measure, with the aim to raise awareness about electric modes and their positive impacts.

Participation in campaigns and events contributed to increased awareness and interest in electro-mobility. Participants were very interested in all activities and the opportunities offered (e.g. e-bike testing). The number of private electric car owners has increased in the Limassol region, while there is also an increase in the number of e-bikes available for rental.

The electro-mobility campaign fosters an increase of the use of e-vehicles and create a trend in residents' lifestyles. It has encouraged companies to offer more e-vehicles available for rent to tourists, which can develop as a valid business case. This measure has changed the habits of locals and tourists.

A total number of 4,500 people followed/attended the events and campaigns. Additionally, 78% of tourists and residents surveyed were satisfied with the sustainable mobility and the number of EV-charging systems. The results of the surveys regarding the awareness level of people for the activities during the campaigns revealed that 79% of residents and tourists were aware of the guided tours, 31% were aware of the guided cycling tours, and 49% were aware of the guided walking tours. As for the increase in awareness regarding sustainable traveling, 41.35% of people received the promotional material related to sustainable traveling in the region and specifically the promotion of electro mobility.

Car rental companies and bike rental companies will continue to provide e-vehicles for rent after the DESTINATIONS project, as this is a business tool to attract certain market segments. Limassol Municipality will maintain the measure for free e-car parking and EV-chargers will continue to be operated either by the EAC or with the use of solar energy. The results of the measure will be important for the implementation and application of SUMP Limassol.

## A Description

Promotional campaigns have been organised within this measure with the aim to raise awareness about EV modes and their positive impacts. Limassol Tourist Company prepared the promotional material for the electro-mobility campaigns: dedicated brochures, advertisements in hotels 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, a promotional video, etc. All this material helped promote and convey the idea that e-vehicle use is a new sustainable way of life.

This measure, together with the installation of the EV charging station (LIM 4.1), helped in raising the number of private electric car owners in the Limassol Region. Moreover, an increase in the number of e-bikes available for rent in Limassol region has also been achieved through LIM 4.2.



**Figure 1:** Electro-mobility Events

The implementation of the DESTINATIONS measures gave the opportunity to Cyprus Electricity Authority and bike sharing and rental companies to increase the interest of users to prefer more sustainable modes of transport in Limassol.

### A1 Objectives and outputs

#### City policy level objectives

This measure is in line with Limassol Municipality, according to its Sustainable Urban Mobility Planning, contributing to the below objectives:

- Fewer CO<sub>2</sub> emissions/increased air quality
- Less traffic noise in the city centre/increased area attractiveness
- Less energy consumption
- Increase the total share of citizens that use sustainable mobility modes
- More attractive tourist destinations
- Changed habits of local people and tourists

- Save fuel / money
- Public health and safety

### Measure Specific objectives

- Support car rental companies in increasing the number of electric rental vehicles
- Increase awareness and interest in electro-mobility
- Encourage the usage of e-vehicles, emphasizing the relevant benefits, including free parking in Limassol Municipality
- Support bike rental companies to increase the number of electric bikes
- To create awareness, interest, and use among tourists and residents for more sustainable mobility options such as e-vehicles and e-bikes

### Outputs

- Production of leaflets and brochures for the communication campaign
- 3 e-mobility campaigns
- Free parking for electric cars to be offered by Limassol Municipality
- 2 national seminars to encourage other cities to follow

### Supporting activities:

In order to empower the impact of this measure, close cooperation with the other partners, as well as with companies that are interested in promoting electric vehicles (cars or bikes) was built. These companies included car manufacturer representatives, car/bike rental companies, and car/bike sharing companies.

## A2 Inter-relationship with other measures

The measure shares some synergies and has a strong interaction with the CIVITAS DESTINATIONS measures as follows:

- **LIM 2.1:** *Sustainable Mobility Tourist Action Plan for Limassol city center*, as this measure is also promoted through the campaigns on e-mobility for the uptake of electric vehicles developed under measure LIM 4.3.
- **LIM 4.1:** *Electric car sharing connecting Limassol-airports-ports*, and has a strong interaction with the measure, as measure LIM 4.1 is also be promoted through the e-mobility promotional campaigns planned under measure LIM 4.3.
- **LIM 4.2:** *Expansion of public bike sharing system, include e-bikes*, as this measure is enhanced by the application of the electro-mobility campaigns organized within the examined measure.

## A3 Target groups and/or affected part of the city or region

Tourists and residents moving across the region will be influenced by this measure.

## A4 Stakeholders involvement

Stakeholder name	Activities description
Chamber of Commerce	Promotion of the measure
Automotive companies	Promotion of electrical vehicles
Car rental companies' association	Promotion of electrical vehicles
Cyprus Electricity Authority	Promotion of electrical vehicles
Cyprus Solar Energy providers	Promotion of electrical vehicles

**Table 1:** Stakeholder involvement

## B Measure implementation

### B1 Situation before CIVITAS

Tourists were travelling around using rented cars and taxis, and a small percentage were using PT or other sustainable modes such as bikes. The centre of Limassol was crowded, and the air quality was suffocating due to the emissions from conventionally fuelled cars (especially during the warm periods), resulting in a degrading and unattractive place. Before the CIVITAS DESTINATIONS project, there were only a few electric cars and electric bikes in the Limassol region, mainly owned by organisations such as universities. There were no electric cars available for rental, no privately owned electric cars, and very few electric bikes. There are two major reasons for this: the fact that there were only two EV-chargers in the Limassol region, and the lack of awareness about electric modes and their benefits. By increasing the number of EV-chargers, located at strategic points in the region and the points of entry to Cyprus, as well as with relevant promotional campaigns, the interest and usage of electric vehicles has been increased.

### B2 Innovative aspects

- **New conceptual approach** - Electro-mobility campaigns, events, and seminars have been organised to raise awareness about electric modes of commuting and their positive impacts, and aim to increase the use of eco-friendly vehicles instead of conventional ones. The implementation of the DESTINATIONS measures gave the opportunity to Cyprus Electricity Authority and bike sharing and rental companies to increase the incentives for users to prefer more sustainable modes of transport in the Limassol region. Residents can be encouraged to use electric vehicles for leisure transport for everyday life. Upgraded infrastructure has been achieved and emissions have been decreased due to a reduced use of conventional vehicles.
- **Targeting specific user groups** - Tourists and residents who are not very athletic also have the option of renting electric bikes.

## B3 Technology development

No technology development for this measure.

## B4 Actual implementation of the measure

Limassol Tourism Company held meetings with Next Bike CY (22/11/2016), with Europe Car Rental Company and Cyprus Rental Association in November 2016, and with Sixth car rental company in 22/12/2016, to establish interest and intentions to invest in electric vehicles. Also, in collaboration with site partner, Limassol Municipalities, organised a free parking policy in Municipal Parking Spaces for electric vehicles. Meetings took place with different organizations in order to organize the Electro-mobility events. Specifically, meetings have been held with Cyprus Green Recycle- car company, Cyprus Historic & Classic Museum, Dacor Advertising and Media company, Limassol Police - Traffic Department, Cyprus Police - Police on bikes, Next Bike Cyprus, Limassol Cycling Club, and the Cyprus Electricity Authority.

Within European Mobility Week 2017 and World Tourism Day, Limassol Tourism Company has organised a full day event to raise awareness on sustainable mobility. Several parallel activities were organised to attract the attention of locals, foreign residents, and tourists. Activities included: guided city walks, bus sightseeing tours, a cycling arena, and a bicycle treasure hunt. Visitors also enjoyed an exhibition of electric vehicles and were informed by representatives of EAC about the EV-charging network in Cyprus and how it operates an electric car. For the purpose of the campaign and competition, leaflets, brochures, t-shirts, and the prize for competitions were designed, produced, and distributed during the event.



**Figure 2:** - European Mobility Events promoting electromobility

The main following events were organised: 1st national seminar (July 2017); e-mobility in Limassol Marathon (March 2018); 5th Sustainable mobility conference (May 2018); 2nd national seminar (July 2018); and EU mobility week (September 2018 and September 2019). In European Mobility Week 2018, LTC organised all the following activities: cycling photo exhibition, competition, live link, bicycle showcase of the event and competitions, and a walking tour. All these events were successful in demonstrating people's interest to the e-mobility issue. Another communication campaign took place in European Mobility Week 2019, including various activities such as a photo competition, e-bike testing, showcasing of sustainable mobility products, bicycle challenge, and encouraging walking with safety with students at primary schools.



**Figure 3:** Poster competition & awarding ceremony in EMW 2020

Additionally, LTC organised a poster competition with students at primary schools and a poster exhibition, "I travel by bus". In European Mobility Week 2020, a ceremony was organized, and students were awarded for their participation in the poster competition. LTC, in collaboration with NextBike CY, organized an event, a bicycle ride in the old city of Limassol, where vests with the logo of DESTINATIONS were distributed to participants to promote the project. Residents and tourists participated in the organised campaigns and events that contributed to increasing awareness and interest in electromobility. A total number of 2,500 people followed/attended the events and campaigns with a high level of interest in all activities and the opportunities offered (e.g. e-bike testing etc.).

## C Impact evaluation

### C1 Evaluation approach

#### Expected impacts and indicators

Impact category	Impact indicator	Unit of measure
Society	1 - Awareness about the activities during the campaigns	%
Society	2 - Awareness about the sustainable traveling	%
Society	3 - Number of people that followed/attended to the events/campaigns	Nº
Society	4 - Citizens satisfaction with transport system	%

**Table 2:** Expected impact and indicators

#### Method of measurement

Impact indicator	Method*	Frequency			Target Group	Domain (demonstration area/city)
		Bef.	Dur.	After		
1 - Awareness about the activities during the campaigns	S	n.a	26	41	General public	City
2 - Awareness about the sustainable traveling	S	n.a	26	41	General public	City
3 - Number of people that followed/attended to the events/campaigns	DC	11	19,21,23, 25	37	General public	City
4 - Citizens satisfaction with transport system	S	n.a.	26	41	General public	City

\*(Data collection (DC), Estimation (E), Survey (S))

**Table 3:** Method of measurement

#### Detailed description of the indicator methodologies

- **1 Awareness about the activities during the campaigns** – This indicator was estimated using data from the surveys that took place in 2018 and 2019, and aimed to understand if people were aware of the activities that took place during the events. Such activities were the guided tours by coach, the guided cycling tours, and the guided walking tours. 350 people in total answered the surveys. This indicator is a common indicator that reflects the results from the actions that took place in LIM 4.3 and LIM 6.1.

- **2 Awareness about the sustainable traveling** – The indicator aimed to understand if the promotional material reached the target audience. Therefore, in the surveys that took place in 2018 and 2019, people answered if they had received any promotional material for sustainable travel in the region and specifically for electro mobility.
- **3 Number of people that followed/attended to the events/campaigns** – To estimate this indicator, the number of participants attending each event of every year was recorded. Therefore, this indicator measured the number of people which participated in the events/campaigns.
- **4 Citizens satisfaction with transport system** – The indicator was calculated based on survey findings related to questions about the satisfaction of people regarding sustainable mobility and the EV-charging system in Limassol city centre.

## The Business-as-Usual scenario

Considering the type of indicators, mostly comprised of surveys and indicators whose information was gathered for the first time, carrying out a BAU analysis was not possible. However, it can be understood that the audience would not have had the chance to participate in electro-mobility campaigns, and therefore would not have been educated on electro-mobility had the measure not occurred.

## C2 Measure results

Impact category	Impact indicator	Unit of measure	Baseline	Ex-Ante	Ex-Post
Society	1 - Awareness about the activities during the campaigns	%	-	20%	guided tours 79%; guided cycling tours 31%; guided walking tours 49%
Society	2 - Awareness about the sustainable traveling	%	-	20%	41.35%
Society	3 - Number of people that followed/attended to the events/campaigns	Nº	-	4,000	4,500
Society	4 - Citizens satisfaction with transport system	%	-	40%	78%

**Table 4:** Measure results

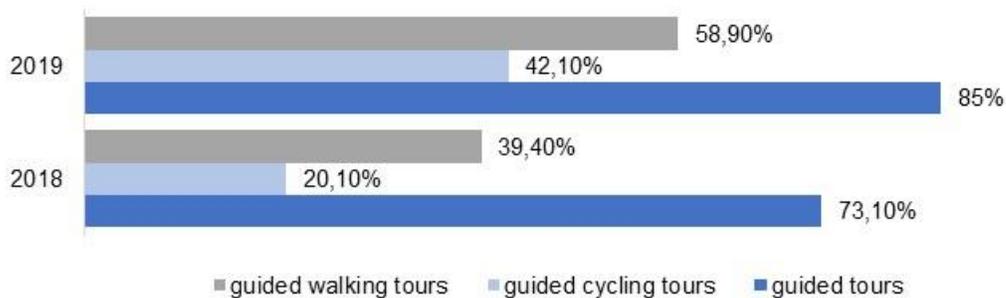
### C2.1 Society

#### 1 - Awareness about the activities during the campaigns

During the campaigns/events, specific activities were taking place and the people surveyed answered if they were aware of these activities. In 2018, 73.1% of people answered that they

were aware of the guided tours by coach, and 27.3% had participated. As for the guided cycling tours, only 20.1% were aware of this activity, with 14.4% having had participated, with 93% of these having had a very positive experience. Finally, for the guided walking tours, only 39.4% of people were aware of this activity, and 37.1% (of the 39.4%) had participated, with 95% being very satisfied with the experience.

After one year, in 2019, people seemed to be more aware about the activities of the campaigns/events. The results revealed that 85% were aware of the guided tours by coach, and 67.2% had participated. As for the guided cycling tours in 2019, 42.1% were aware of the activity, with 21.4% having had participated, with 86% of these having had a very positive experience. Finally, for the guided walking tours, 58.9% were aware of the activity, and 30.9% (of the 58.9%) had participated, with 86% being very satisfied with the experience.



**Figure 4:** Awareness level of people about the activities during the campaigns from the survey results of 2018 and 2019

Summing up, of the people who were aware of the activities which took place during the campaigns, 79% out of 350 people were aware of the guided tours, 31% were aware of the guided cycling tours, and 49% were aware of the guided walking tours.

## 2 - Awareness about the sustainable traveling

The surveyed people answered that 35.2% (in 2018) and 47.5% (in 2019) had received the promotional material related to sustainable traveling in the region and specifically for the electro mobility. Therefore, 41.35% of the surveyed population in 2018 and 2019 were aware of sustainable travelling through the received promotional materials.

## 3 - Number of people that followed/attended to the events/campaigns

The total number of people who participated in the campaigns and events for raising awareness and promoting the electro mobility in the Limassol region reached 4,500 people. This number of people followed and attended the events and campaigns, as well as participated in the different activities.

## 4 - Citizens satisfaction with transport system

The number of people who were satisfied with the sustainable mobility has increased as the number of EV-charging solutions has significantly increased throughout the implementation of other interrelated measures. Therefore, 78% of the surveyed people (65% in 2018 and 90% in

2019) were satisfied with the electro mobility with regards to EVs. It seems that the motivation of the users to prefer more sustainable modes of transport in Limassol have increased. The lack of awareness about electric modes of commuting and their benefits was one of the main two reasons as to why, before the implementation of this measure, there were no EVs available for rent, no privately owned electric cars, and very few electric bikes. The relevant promotional campaigns increased the interest and usage of electric vehicles in the Limassol region.

### C3 Quantifiable targets

No.	Target	Rating
1	Less CO <sub>2</sub> emissions: 75.16 tCO <sub>2</sub>	N/A
2	Less traffic noise in the city centre: 18 dB	N/A
3	Less energy consumption: 206.96 MWh	N/A
4	Less fuel costs: 17,199 €	N/A
5	Less fuel consumption: 13,870 L	N/A
6	Expected number of people reached by the campaign: overestimated GA target: 40,000, new target: 4,000	***
7	*Increase the satisfaction of people regarding the use of sustainable modes by 40%	***
8	*Increase the awareness level of people regarding the activities during the campaigns	***
9	*Increase the awareness level of people regarding the sustainable traveling	***
<b>N/A = Not Assessed 0 = Not Achieved * = Substantially achieved (at least 50%) ** = Achieved in full *** = Exceeded</b>		

\*New target, not in GA

**Table 5:** Assessment of quantifiable targets

Targets 1 to 5 were not assessed specifically under this measure, as it was not possible to monitor the reduction of fuel consumption and cost, CO<sub>2</sub> emissions and energy consumption, and noise pollution related to the campaigns and events organized within this measure.

However, considering the adherence to the electro-mobility campaign and events, it was understood that the measure also contributed to the common indicators related with CO<sub>2</sub> emissions, energy consumption, noise pollution, and fuel cost and consumption. Hence, the results of these indicators were achieved through the implementation of LIM 2.1, LIM 4.1, and LIM 4.2.

Target 6 was overestimated in the Grant Agreement, and the new target was 4,000 people to be reached by the campaign. This target was Exceeded, as 4.500 people attended the campaigns by September 2019.

Targets 7, 8, and 9 were not planned in the Grant Agreement, but they were considered as very interesting topics to be examined. Therefore, Target 7 was Exceeded, as 78% of the tourists and residents surveyed were satisfied with the sustainable mobility and the number of EV-charging systems.

Target 8 was Exceeded, as 79% of people answered that they were aware of the guided tours, 31% answered that they were aware of the guided cycling tours, and 49% that they were aware of the guided walking tours.

Finally, Target 9 was Exceeded, as 41.35% of people answered that they had received the promotional material related to sustainable traveling in the region and specifically for the electro mobility.

## **C4 Up-scaling of results**

Not applicable.

# **D Process Evaluation Findings**

## **D1 Drivers**

There is a strong political receptiveness for the implementation of mobility solutions and to shift modal patterns towards sustainability. There was a very good collaboration between the Ministry of Communication and Works, Police – Traffic Department, EAC, and Limassol Cycling Club, providing all the information and technology needed to implement the measure.

## **D2 Barriers**

There were no barriers for this measure and data was gathered and successfully analysed for the evaluation.

## **D3 Main Lessons Learned**

Participation in campaigns and events contributed to increasing awareness and interest in electro-mobility. Thus, the number of private electric car owners in the Limassol Region has been increased. Moreover, an increase in the number of e-bikes available for rent in the Limassol region has also been achieved. The electro-mobility campaign fosters an increase of the use of e-vehicles and creates a trend in residents' lifestyle. It has encouraged companies to offer more e-vehicles available for rent to tourists, which can develop as a valid business case. This measure has changed the habits of locals and tourists.

## E Evaluation conclusions

Research, and a visit to the area of Limassol for collecting all necessary information regarding potential improvements, has been completed. Moreover, the locations for installing up-to-date technology for informing people regarding timetables, stops, and parking, as well as cycling and walking paths, have been identified, while relevant technologies have been installed. All outputs have been completed on time and the evaluation of this measure was successfully undertaken.

## F Additional information

### F1 Appraisal of evaluation approach

All activities have been implemented on time, allowing satisfactory data to be collected for analysis. A total number of 4,500 people have participated in European Mobility Week Events and reached the articles and press release regarding the European Mobility Week. The target in the Grant Agreement was overestimated and adjusted to 4,000 people that was expected to reach the campaign and event.

Additionally, indicators related to the CO<sub>2</sub> emissions, energy consumption, noise pollution, and fuel costs and savings had been planned to be assessed, but since this measure aimed to increase the awareness regarding sustainable mobility modes and electro mobility by promotional campaigns and events, it was impossible to assess these targets (Targets 1 to 5). However, it is expected that these targets have been achieved through the interrelated measures referred to in section A2.

### F2 Future activities relating to the measure

Car rental companies and bike rental companies will continue to provide e-vehicles for rent after the CIVITAS DESTINATIONS project is completed, as this is a business tool to attract certain market segments. Limassol Municipality will maintain the measure for free e-car parking and EV-chargers will continue to be operated either by the EAC or with the use of solar energy.