

What is the LIFE Program  
LIFE is the EU financial instrument supporting environmental, nature conservation and climate action projects across the EU

This project has received funding from the LIFE program of the European Union under grant agreement N° LIFE 17 ENV/IT/000212 I-SharE LIFE



[www.i-sharelife.eu](http://www.i-sharelife.eu)

# I-SharE LIFE

Innovative sharing solutions for full electric travels in small and medium size urban areas

**CAR SHARING  
MODEL 1  
"EASY-STATION"  
BUSTO ARSIZIO**



## THE PROJECT IN BRIEF

### "I-SharE LIFE – Shared and electric transport in small and medium urban areas"

The **aim** of the project is to reduce pollutants and atmospheric loads, in particular PM10 and NO2, and to mitigate the emission of greenhouse gases produced by road transport and urban mobility.

Five models of electric car sharing service have been tested integrated with the public rail transport service to verify its transport effectiveness, environmental and economic sustainability in medium-small city contexts and in specific areas of use.

**50 electric cars** were used at the four demonstration sites in small/medium-sized cities in Lombardy and a further 8 electric cars in Osijek, a city in Croatia.

I-SharE LIFE has the ambition to evolve the electric car-sharing model, developed in large metropolitan cities, to export it to the province and to inland areas with low population density also verifying replicability and transferability in other urban areas with similar characteristics.

**Duration:** July 1, 2018 to June 30, 2021 [36 months]

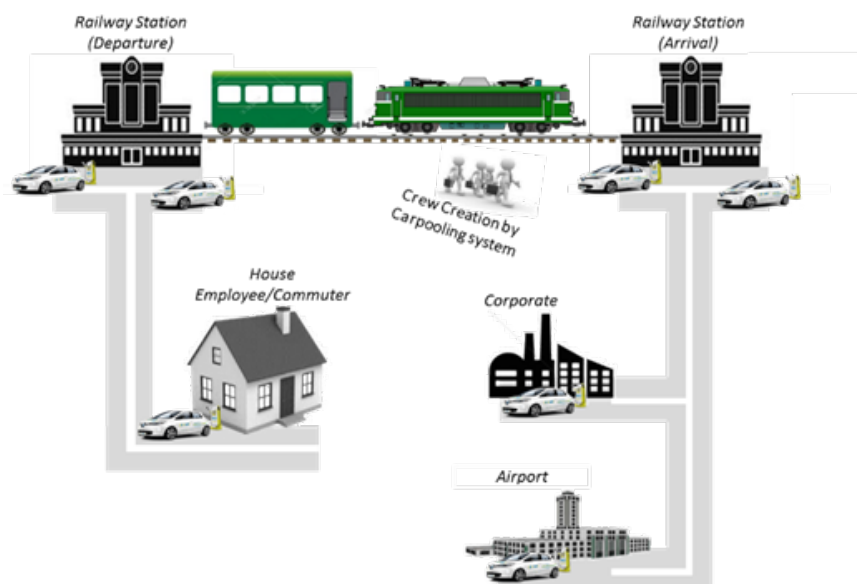
### DESCRIPTION OF MODEL 1 - Car Sharing: "Easy-station"

The aim of the model is to offer an eco-sustainable and innovative mobility service that responds not only to the needs of commuters, who use the train every day and who make the last mile to reach their workplace, but also to the needs of companies, which need to reduce the costs of their company fleet, optimizing its use and improving the number of vehicles.

Specifically, the customer journey of the service includes the following 4 macro-phases:

1. The commuter customer will have at his disposal an electric vehicle, which he will find at his home, from which he will go every morning to train station A, here he will leave the vehicle in a parking lot, reserved for him, including a charging point;
2. Employees of companies located near railway station A (e.c. 1-2 km), arriving at railway station A, may use the vehicle, left by the commuter customer, to make the last mile and thus reach their place of work;
3. Private or public companies, located near railway station A, will thus be able to use the vehicle to carry out business missions throughout their working hours, provided that they return it at the appointed time at the reserved car park of railway station A;
4. The commuter customer, upon his return to train station A, will return his vehicle to the appropriate parking lot and return to his home.

#### DIAGRAM OF THE MODEL



## TARGET AREA

The activation of this hybrid mobility service, which responds jointly to the needs of commuters and businesses, is optimal within **municipal areas where there is a strong industrial fabric**, which surrounds the urban perimeter, and where **commuting for work through the rail transport service is very frequent**.

CHARACTERISTICS OF THE TARGET AREA	
Minimum urban population	over 10.000 inhabitants
Presence of companies with operational offices near railway stations	YES
Minimum number of employees of companies near railway stations	over 50 employees

## MINIMUM REQUIREMENTS FOR ACTIVATION

The activation of the "Easy-station" model requires the presence of:

INFRASTRUCTURE REQUIRED	MINIMUM QUANTITY	COST
Electric vehicle monthly fee (Commuter)	1	€250,00/month
Electric vehicle monthly fee (Company)	1	€350,00/month
Construction cost for excavations and single charging station connection	n.a.	€15.000,00
22 KW charging station (Station)	1	€1.000,00
22 KW charging station (Company)	1	€1.000,00
Charging wall box (Commuter)	1	€500,00
Reserved parking (Station)	1	n.a.
Cost of electricity (Station)	n.a.	Included in the vehicle fee
Cost of electricity (Company)	€/KW	€0,40/KW



## DEMO MADE - BUSTO ARSIZIO (Lombardy, Italy)

**Busto Arsizio** is an industrial area, located near Malpensa International Airport, with many commuters to / from the city of Milan. The service involves the use of the electric vehicle in car sharing by commuters (for the outward journey - railway station and back) and by companies close to the station.



In this model, the costs of the service are shared between the company and the commuters. During the test phase, the municipal environmental services company (AGESP) shared 8 electric vehicles with commuters. After the co-design activities, the service was modified and improved. Electric cars are now used by company employees during office hours and some of them are also used after work and on weekends for the private trips of some employees. Both the Busto Arsizio railway station and the Castellanza railway station have been equipped with charging stations. Other charging stations are located in strategic areas of the Municipality of Busto Arsizio.

### BACKGROUND E CONTEXT

**City / Country:** Busto Arsizio, Italy

**Area [kmq]:** 30,66 kmq

**Population [inhabitants]:** 83.532 inhabitants

**Population density:** 2724,46 inhab./kmq

**Small municipality** N. inhabitants < 100.000

**Average municipality**

100.000 < N. inhabitants < 500.000

**Large municipality** N. inhabitants > 500.000

**Busto Arsizio is a small municipality**





## SIGNIFICANT ELEMENTS – TESTING PHASE AND CO-DESIGN

- **Duration:** from september to december 2019
- **Beta User Involved:** 5
- **Stakeholders:** 1
- **Project Partner:** 10
- **N° of Electric cars:** 8
- **Total Kilometers Travelled:** 44.000

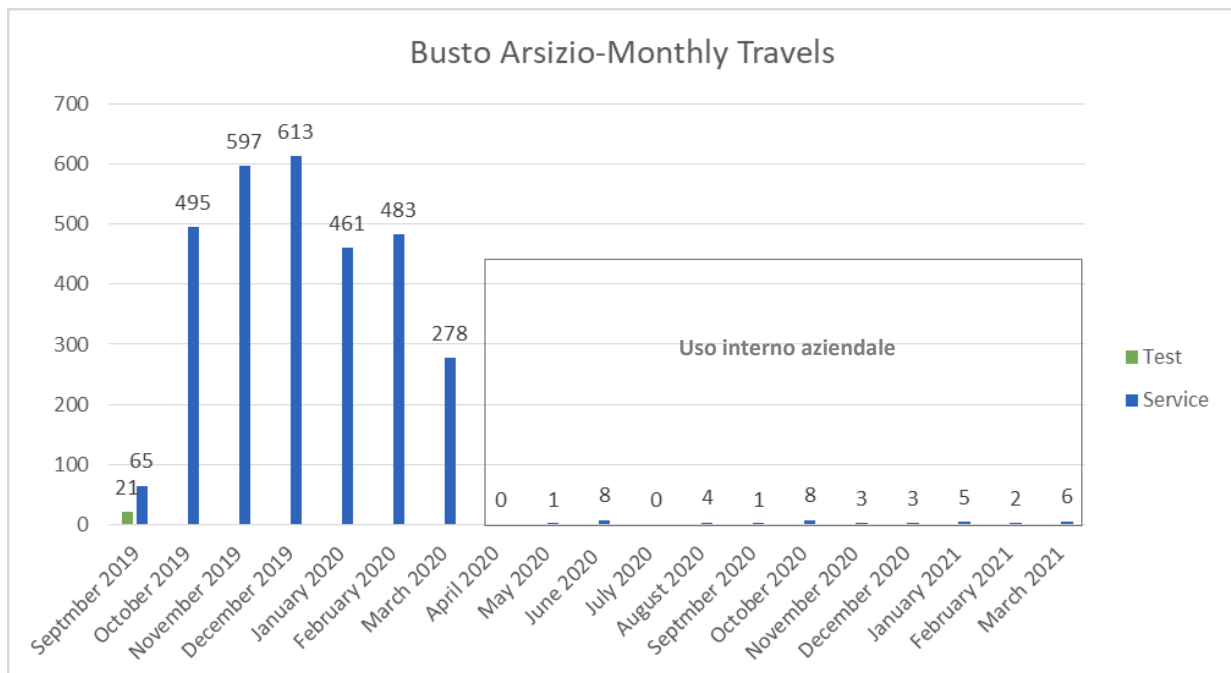


The **co-design workshop** was a moment of comparison and creation, in which had been implemented the car sharing service characteristics.

The purpose of the workshop was to identify the positive and negative aspects that emerged from the experience of the service. In Busto Arsizio were analyzed and implemented the aspects related to the general service **instructions** and also the **training session made for company employees** to use cars.

## SIGNIFICANT ELEMENTS – COMMISSIONING THE SERVICE

- **Duration:** from october 2019 to march 2021
- **Total Kilometers Travelled:** 146.848
- **N° of Electric cars:** 9



## ENVIRONMENTAL RESULTS ACHIEVED

It is estimated in terms of atmospheric emissions that the project has contributed to the savings of approximately:

BUSTO ARSIZIO			
NOx (kg)	CO (kg)	PM10 (kg)	CO2e (t)
64	65	9	25



The calculation of the estimated environmental benefit was made considering the number of trips and km that would have taken place with traditional vehicles (ICE), had the I-Share LIFE service not been implemented.

The emission coefficients of the ICE vehicles refer to the average Italian vehicle fleet.

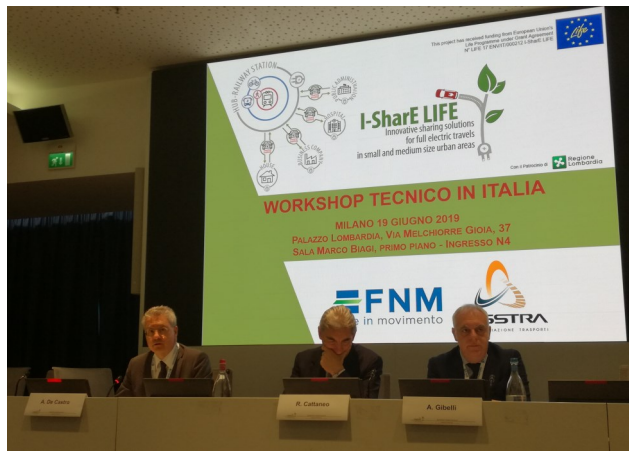
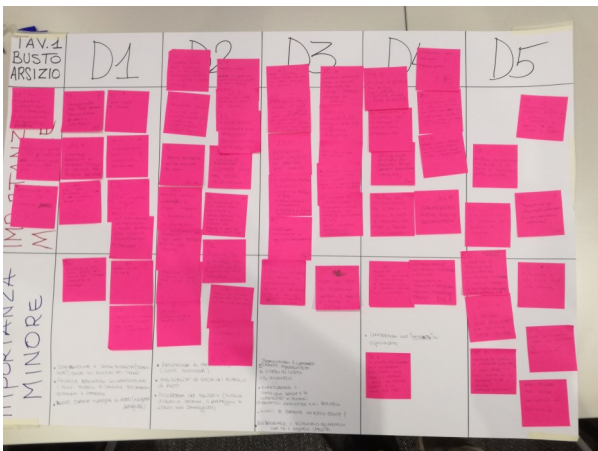
The emissions due to the production of electricity used by the I-Share LIFE cars are considered null, as all the energy purchased for the project comes from clean and renewable sources (e.g. solar, wind).



## LESSON LEARNED

### The point of view of the Stakeholders

- propensity and practical modality for the transition from private car to car sharing service for commuters and companies
- progressively monitor the trend and level of customer satisfaction
- to allow a good service, monitor and check that the car's reallocation times are respected
- be careful to the maintenance system
- public support to encourage car sharing to overcome the obstacle of mistrust towards the "new"
- promote the service to local companies also with tariff concessions for commuters and tax incentives for users
- information campaign at the railway station to intercept commuters interested in the model
- identify all the stations (rail, bus/metro) that have a high commuting and business activities nearby



## FINAL CONSIDERATIONS

The "Easy-station" business model guarantees the provision of a shared mobility service between commuters, to have a rest area near the train station, and employees, to make the last mile to the workplace and have electric vehicles to carry out their daily missions, of companies adjacent to the train station (so-called 1-2 km away).

In addition, the model guarantees the commuter the use (during weekdays, 16h hours a day, during the weekend, 24 hours a day) of a state-of-the-art electric vehicle at a cost-effective price and guarantees the optimization of the company's corporate car fleet, reducing its monthly cost.





## PROJECT COORDINATOR

---



## PARTNER

---



## SUPPORTERS

---



All rights reserved: the document is the property of the members of the I-SharE LIFE Consortium. No copying or dissemination, in any form, is permitted without the prior written agreement of the owner of the property rights. This document reflects the Consortium's point of view. The European Community is not responsible for any type of use made of the information contained therein.

