

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

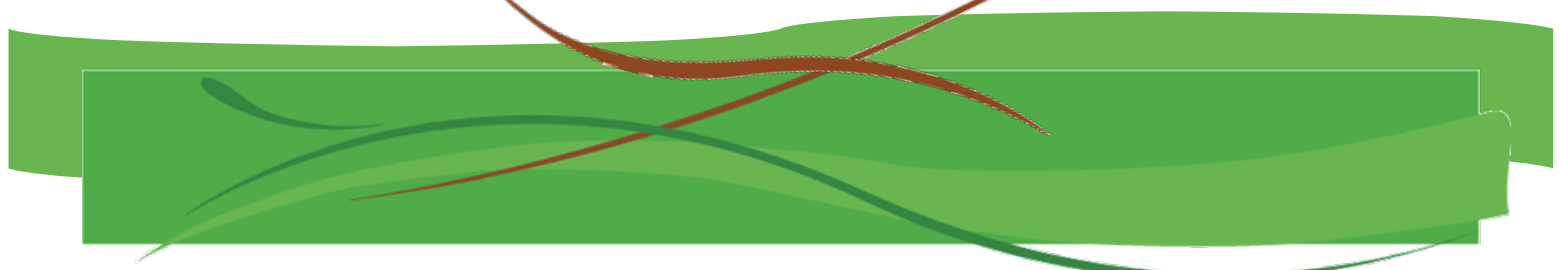
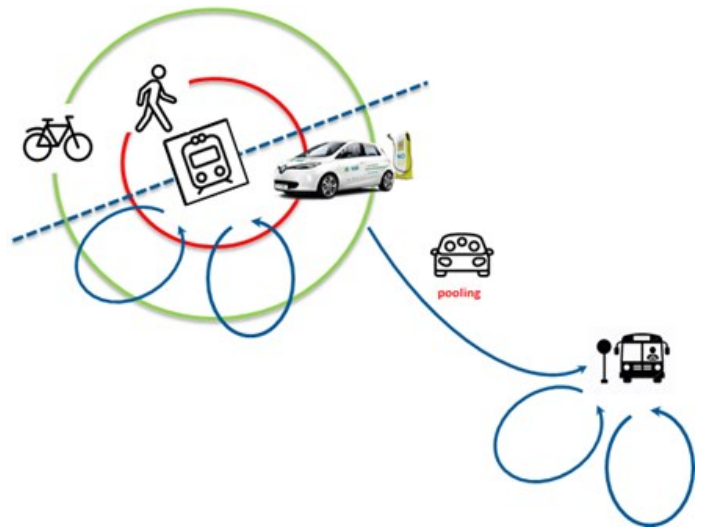


www.i-sharelife.eu

I-SharE LIFE

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

**CAR SHARING
MODEL 5
"INTERMODAL"
OSIJEK**



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 5 - Car Sharing: "Intermodal"

The objective of the "Intermodal" model is to create ad hoc workstations ("Points"), where the mobility service is provided both to business users during working hours (from 9.00 to 17.00) and to the public for the rest of the day (from 17.00 to 9.00). Specifically, the cars will be collected and released in any of the ad hoc stations ("Points"), as these car parks will be located near the train and / or other multimodal stations, in order to allow the continuation of the journey with a solution integrated and continuity alternatives. The service will be structured to provide flexible fares and integrated with local public transport services (bus, tram, etc.) for future users (business and private), allowing for both use-only tariffs and prepaid and post tariffs. -paid, both models for the ownership of third-party vehicles that are part of the car-sharing fleet.

DIAGRAM OF THE MODEL



TARGET AREA

The activation of this mobility service is optimal for **medium-sized cities**, in terms of population and density, which also represent **a nerve center for business activities** and **travel at a territorial level**.

CHARACTERISTICS OF THE TARGET AREA	
Minimum urban population	over 100.000 inhabitants
Different types of public transport services active in the cities	tram, autobus, bike-sharing

MINIMUM REQUIREMENTS FOR ACTIVATION

The activation of the "Intermodal" model requires the presence of:

INFRASTRUCTURE REQUIRED	MINIMUM QUANTITY	COST
Electric vehicle monthly fee (City)	1	€600,00/month
Construction cost for excavations and single charging station connection	n.a.	€15.000,00
Charging station 22 KW (Station)	1	€1.000,00
Charging station 22 KW (City Hall)	1	€1.000,00
Charging station 22 KW (University)	1	€1.000,00
Reserved parking (Station-City Hall-University)	1 for each site	n.a.
Cost of electricity	€/KW	n.a.

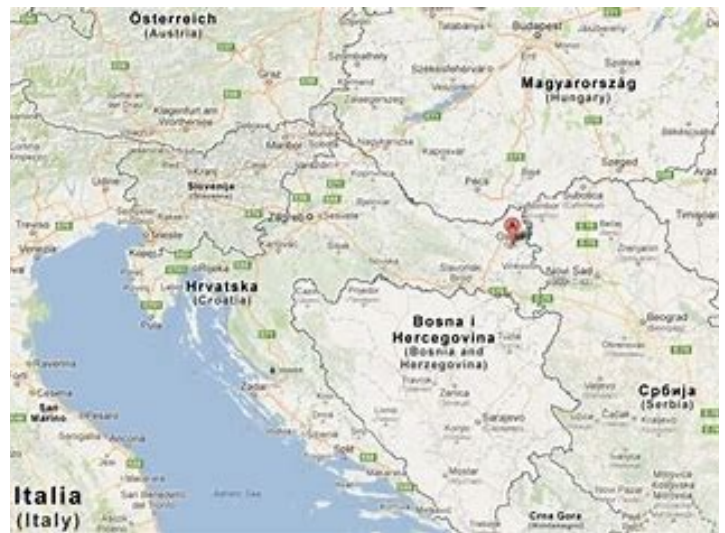
(*) The costs for model 5 (Osijek) were estimated on the basis of Italian market prices



DEMO MADE – OSIJEK (Croatia)

The model has already been tested and built in the cities of Osijek in Croatia.

Osijek is the center of Osijek-Baranja county and, being the fourth largest city in Croatia, is one of the 4 macro-regional centers.



As the largest city in the eastern Croatia region, it represents a center for the administration, employment, education and culture of the region. The Drava River that flows through it imposes the east-west spatial expansion of the city and creates a natural boundary for the city and the Baranja region to the north. Its location in a low and flat river basin, and in a relatively small area, makes the city very suitable for different modes of mobility. The service is used by occasional users (Monday-Friday afternoon + weekend) and by employees (Monday-Friday from early morning to afternoon). I-SharE e-car sharing is a completely new service provided by the local public transport operator GPP.

BACKGROUND E CONTEXT

City / Country: Osijek, Croatia

Area [kmq]: 150 kmq

Population [inhabitants]: 108.048 inhabitants

Population density: 632,34 ab./kmq

Small municipality N. inhabitants < 100.000

Average municipality

100.000 < N. inhabitants < 500.000

Large municipality N. inhabitants > 500.000

Osijek is a average municipality



SIGNIFICANT ELEMENTS – TESTING PHASE AND CO-DESIGN

- **Duration:** from June 2019 to January 2020
- **Beta User Involved:** 10
- **Stakeholders:** 16
- **Project Partner:** 2
- **N° of Electric cars:** 8
- **Total Kilometers Travelled:** 3.972



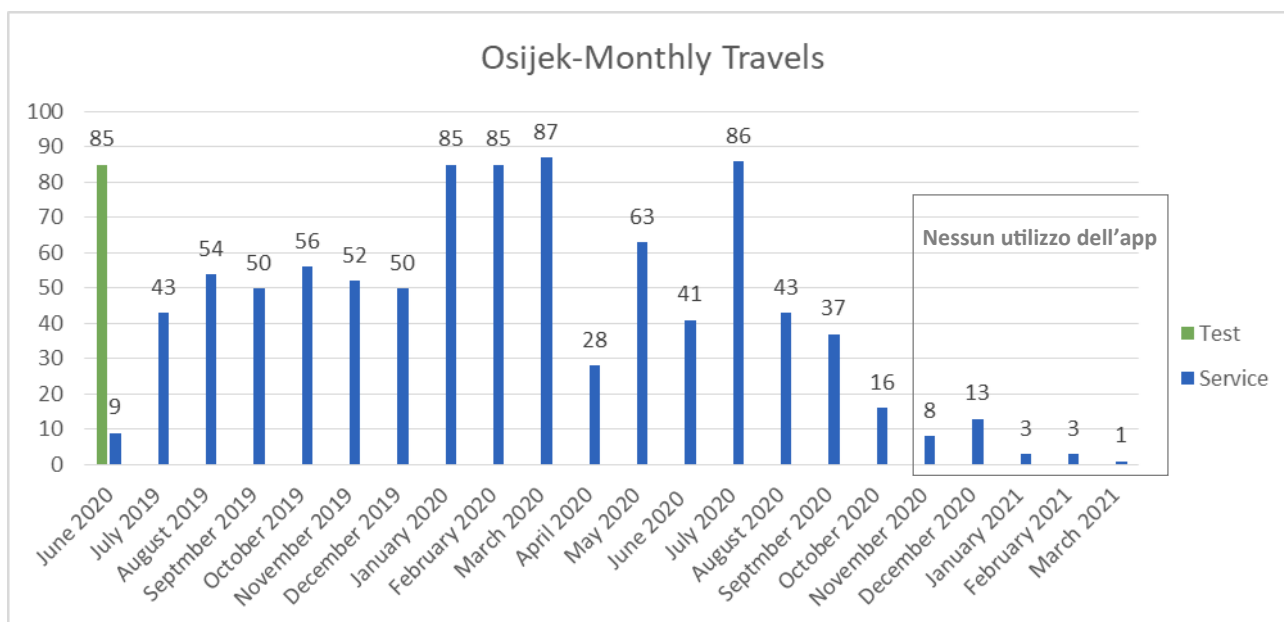
The **co-design workshop** was a moment of comparison and creation, in which had been implemented the car sharing service characteristics.

The purpose of the workshop was to identify the positive and negative aspects that emerged from the experience of the service.

In Osijek had been analyzed the users' expectations over the service, identifying their reasons of usage. The final aim was to evaluate the intermodal car-sharing service proposed according to the city context.

SIGNIFICANT ELEMENTS – COMMISSIONING THE SERVICE

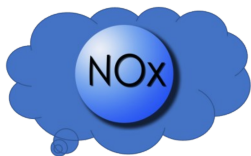
- **Duration:** from October 2019 to March 2021
- **Total Kilometers Travelled:** 122.301
- **N° of Electric cars:** 8



ENVIRONMENTAL RESULTS ACHIEVED

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

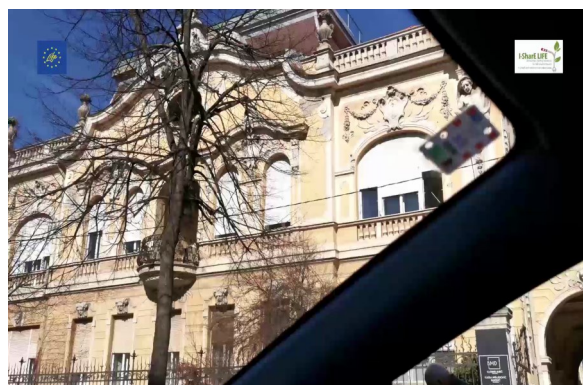
OSIJEK			
NOx (kg)	CO (kg)	PM10 (kg)	CO2e (t)
122	161	17	40



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.

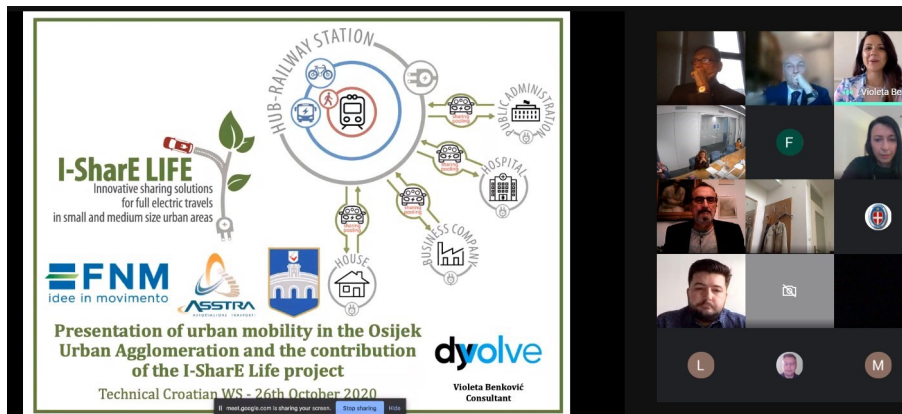
The emissions due to the production of electricity used by the I-Share LIFE cars are considered null, as all the energy purchased for the project comes from clean and renewable sources (e.g. solar, wind).



LESSON LEARNED

The point of view of the Stakeholders

- have courage and overcome resistance (at all levels) that inevitably accompany every innovation
- do not consider other operators as competitors, but as possible collaborators in order to improve the service in qualitative and economic terms
- monitor the trend and correct the shot with respect to what is requested by the customers
- carefully manage critiques on social media as everything can be exploited
- co-marketing actions with users who also offer discounts to be used in commercial establishments
- correct logistical management of withdrawals and returns to meet different needs, adding recharging points where necessary
- tariff integration with several means of transport (eg car, train, bus, tram)
- promotions and agreements with universities



PROJECT COORDINATOR



PARTNER



SUPPORTERS



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