



MULTI E

Multiple Urban and Long-distance Transport Initiatives – Electric and CNG



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A blurred background image showing a road with a white dashed line on the right side. A dark-colored car is visible in the lower-left quadrant, moving away from the viewer. The overall scene is out of focus, emphasizing the text in the foreground.

Mobility is one of the main challenges for society.

Mobility services



Business rental of vehicles
with complete management
and maintenance



Establishment and
management of charging
infrastructure



Customer service



Corporate car sharing

Establishment and management of charging infrastructure

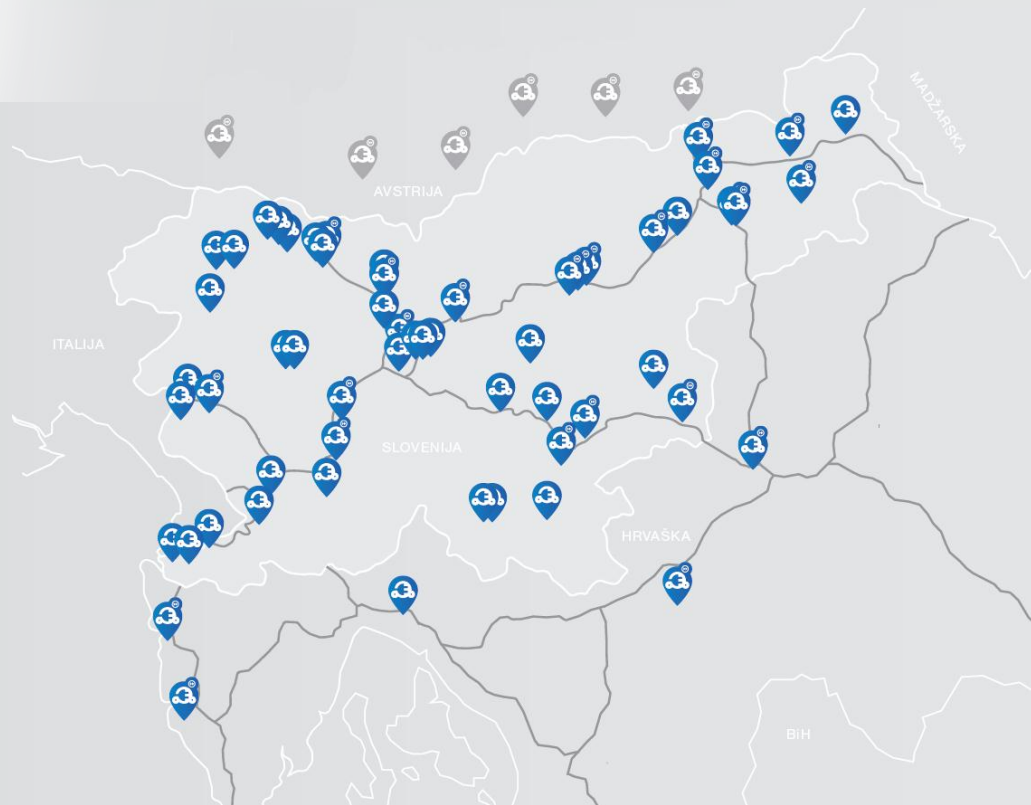


- Procurement and installment of charging stations
- Management of the infrastructure
- Maintenance

Charging infrastructure is expected to meet user and corporate requests.

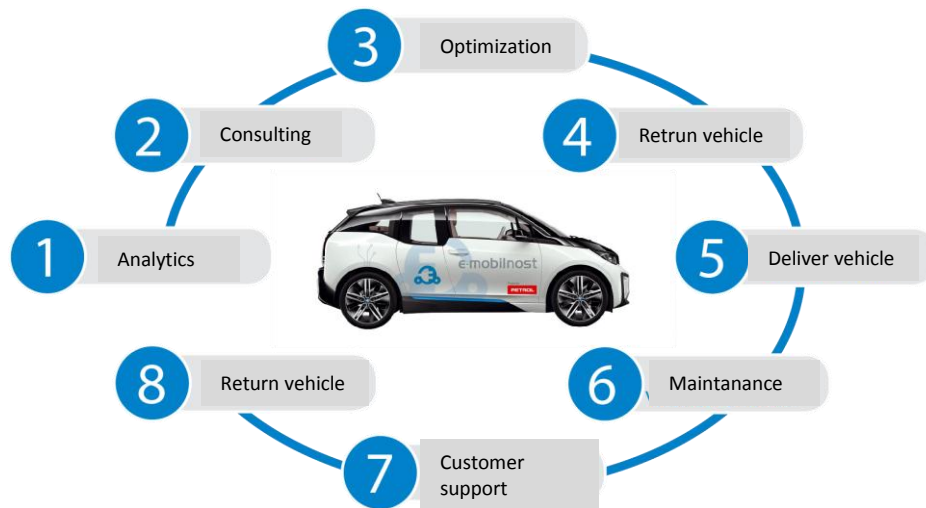
CUSTOMER SERVICE

- Usage of network, that is constantly expanding
- User identification by electromobility card and OneCharge application
- Enabling hosting/roaming in other EU countries by connecting to other providers
- Assistance to users 24/7
- 98% reliability



Vehicle as a service

In order to ease the transition to e-mobility, Petrol has developed a comprehensive service for operating an operating lease of electric vehicles.



Investments in the development of infrastructure for EV charging in the region



More than 1000 charging stations



SLO, HR, SRB, IT, HUN



Batteries and green islands

After successful implementation of CEGC as well as work progress on NEXT-E and URBAN-E, **PETROL Group** is ready for the next step:

a large scale rollout of smart e-mobility of the future!



Strong consortium with one clear goal of disrupting the mobility we know today



4 Countries

Croatia, Slovenia, Slovakia and Italy



10 Cities

Zagreb, Rijeka, Zadar, Šibenik, Split, Ljubljana, Maribor, Celje, Koper, Trst



8 Consortium partners

Petrol, d.d. Ljubljana, Petrol, d.o.o. Zagreb, ZSE, Arriva, Nomago, Celje, Koper



2018 – 2023

Project shall be implemented by the end of 2023

PROJECT OVERVIEW

EU target: decrease CO2 emission in transport sector for a total 40% relative to 1990s levels.

Q: How to reach the target in SEE and CE?

- Region has unique opportunity to shift from conventional fuels and close the gaps with the rest of Europe in clean vehicles fleet.
- Creating an ecosystem of different sustainable transport alternatives that meet full range of consumer travel needs.
- Making alternative, cross-border opportunities for clean fuel choices available for regional and long distance drivers.

Cohesion

- Improving accessibility and connectivity in CE and SEE,
- Providing transport solutions for long distance/ regional and local traffic.

Efficiency

- Removing bottlenecks and creating cross border connections,
- Introducing new and upgrade existing infrastructure,
- Creating interoperable network,
- Creating better interconnections between different modes of transport,
- Reducing demand for parking in cities and increasing vehicles utilization.

Benefits for users

- Ensure quality, efficiency and sustainability of transport services.
- Easy access to services via multimodal MaaS platform.

Sustainability

- Economically efficient and sustainable transport in the long term.
- Contributing to the objectives of low carbon greenhouse gas emissions.
- Reduce number of vehicles.

Project demonstrates significant added value by implementing technologies that were earlier developed and tested in real life trials and is now available for mass marker roll-out.

Project looks to create an integrated system along the Adriatic and expanding into the Cohesion countries, linking east to west and south to north, bridging neighboring regions and cities with close ties and economic co-dependencies, and sharing knowledge and expertise across border.

- Upgrade existing public transport services by switching to new clean fuel as a key element of **phasing out conventionally fueled vehicles** in cities by 2050.
- **Increased multi-modality** through introduction of new services that offer innovative, zero emission transport options through e-carsharing and e-ridehailing services reducing car dependency. Shifting to clean fuels by expanding the choice for consumers in alternative fuels, including cross-border continuity for both EV and CNG vehicles.
- **Integration of smart- technologies** for consumer convenience that integrates multiple clean mobility services in one platform.
- Enabling approx. **50 mio. € private investments** by connecting alternative fuels infrastructure, vehicles and MaaS into one project, thus reducing the overall risk.

OVERVIEW OF PROJECT

Duration of the project: 01/05/2018 – 31/12/2023

4 Countries: SLO, HR, IT, SK

Grant of the Action: 13 million EUR

Total eligible costs: 64 million EUR

Partners: Municipalities **Celje** and **Koper**, bus operators **Nomago** and **Arriva**, energy companies **ZSE** and **Petrol**.

Project is co-financed by CEF, INEA, **20% subsidies**

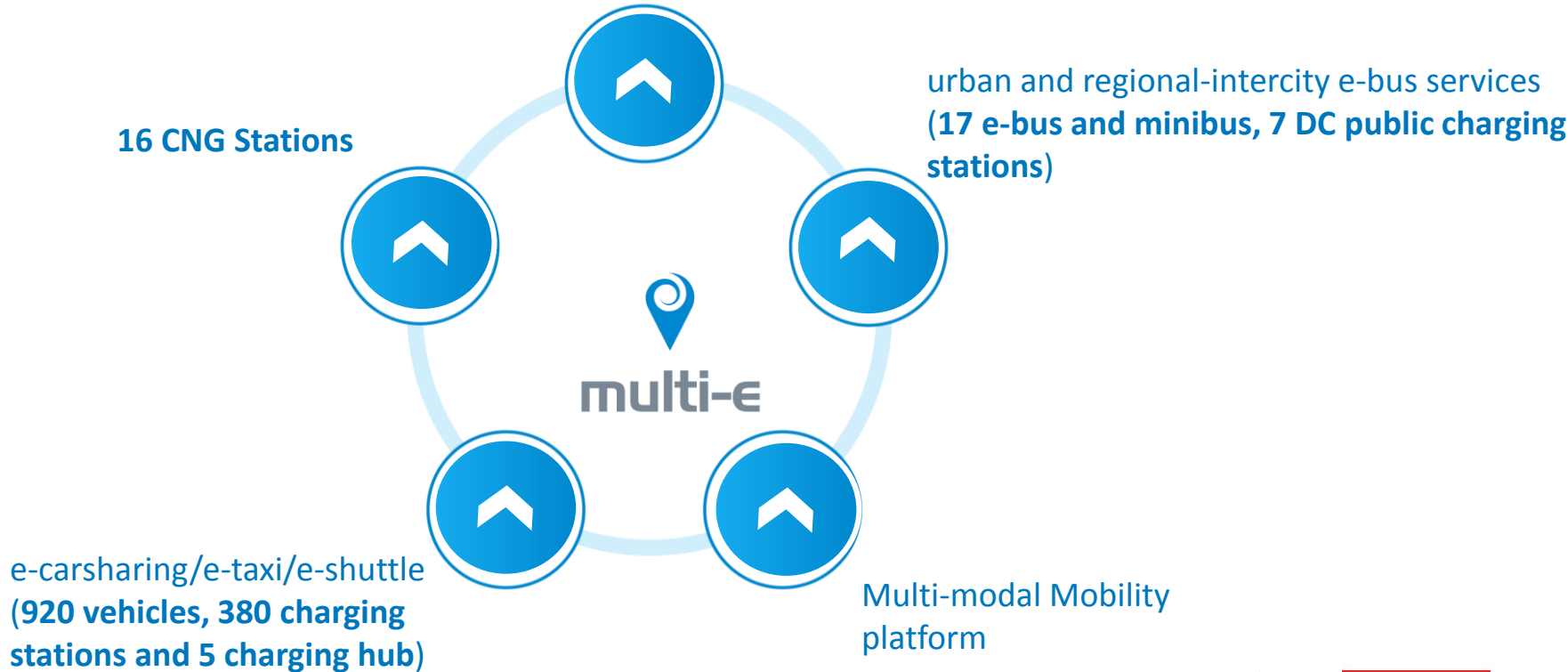
Activities:

- Establish urban and regional-intercity e-bus services
- Develop Multi-modal Mobility Service
- Develop alternative refueling infrastructure for CNG and EV
- Project management



SCOPE OF PROJECT

318 AC chargers, 13 Urban UC, 24 Core Network UC



Reduce congestion

Corner stone for sustainable
public transport

Affordable and convenient
service



Brings together municipalities,
regions and private bus
operators

Connects medium to large
cities

Platform is piloted in URBAN-E

Solutions for wide variety of travel needs

Functionalities that support car-sharing



Reduces pressures on residential parking in cities

Brings synergy of benefits in promoting sustainable transport

CNG CHARGING INFRASTRUCTURE

Close gap to Hungary and Romania



Expand the current CNG charging infrastructure network and include the region to it.

Create market for Adriatic region

EV CHARGING INFRASTRUCTURE

Project relies on EV charging infrastructure

Supports operations of e-mobility, services for buses

Expand current network of charging stations



Supports operations of carsharing and ride-hailing

Create long distance connections.

Connects 4 countries and 15 cities along the corridors

SCOPE OF PROJECT



- Install 8 UC charging stations



- Install 4 UC charging stations
- Install 26 AC charging stations
- Install 1 DC bus charging stations



- Procurement of 500 electric vehicles for mobility services
- Install 200 AC, 14 UC charging stations
- Install 2 charging hubs in Zagreb
- Install 2 CNG charging stations



- Procurement of 17 e-bus, e-minibuses and minivans for new regional, inter city and urban bus lines
- Procurement of 420 electric vehicles for mobility services
- Development of multimodal platform
- Install 180 AC, 6 DC, UC charging stations
- Install 3 charging hubs in Ljubljana and Maribor
- Install 14 CNG charging stations



ACTION SCOPE IN ZAGREB



Charging infrastructure

140 AC charging station
2 ultra (urban) charging
locations



Mobility as a Service

Established e-car sharing and
e-ride sharing



Multimodal platform 2.0

Allowing customers to choose
between various modes of
transportation



More than 21 mio EUR

Total investment to City of
Zagreb exceeds 21 mio EUR

Paving the way towards another green capital of Europe



Concept of multimodal traveling
combining e-taxi, e-car sharing and
Public Transportation Service **as**
the first of its kind in Europe!



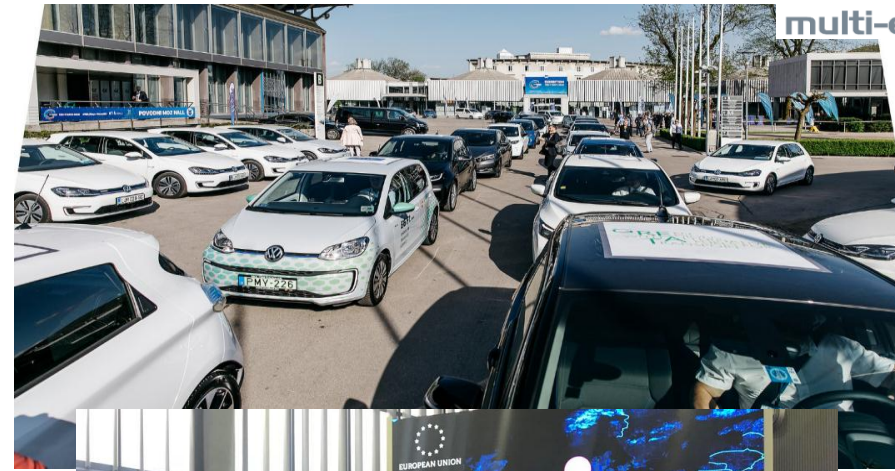
Project Rollout will strongly
influence development of
transportation in City of Zagreb



Croatian Presidency of Council
of Europe in 2020

- ✓ In November 2018 Arriva procured **1 electric minibus** that operates in Koper (16 seats, 6.8 meters long)
- ✓ Deployment of **1st CNG station** in Celje with successful launch event Jan 24th 2019 (led by MOC)
 - Municipality of Koper will launch local minivan public transport service;
 - Procurement of **electric vehicles** for e-taxi services;
 - Install **1 charging hub** in Ljubljana;
 - Install 1/3 of **CNG charging stations**;
 - Install some of the **AC and UC charging stations** in Slovenia, Italy and Croatia.

EXAMPLE COMMUNICATION MEASURES





Thank you for your attention!

Vladimir Sabo
Head of Mobility
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PETROL

Energy for life