Electromobility in Urban nodes in cohesion region

URBANe

Vladimir Sabo,
Head of mobility, Petrol d.o.o.

PETROL

Mestna občina Ljubljana

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The lighthouse project of Urban mobility

For the first time ever, an oil and gas company is the coordinator of an CEF Action aiming to reduce fossil fuels and decarbonize transport in urban nodes.

Municipalities

Mestna občina Ljubljana

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Energy companies

PETROL Energy for life

ZSE

Transport service operators

Slovenske železnice

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ABOUT THE PROJECT

Innovative approach to reduce the use of fossil fuels in Urban Nodes

Innovative Mobility Services Infrastructure

Network of 23 DC and 144 AC chargers

Intermodality Marketplace

Journey planner for an easy optimal search of green transportation services

Innovative E-taxi platform

Newly developed E-taxi platform

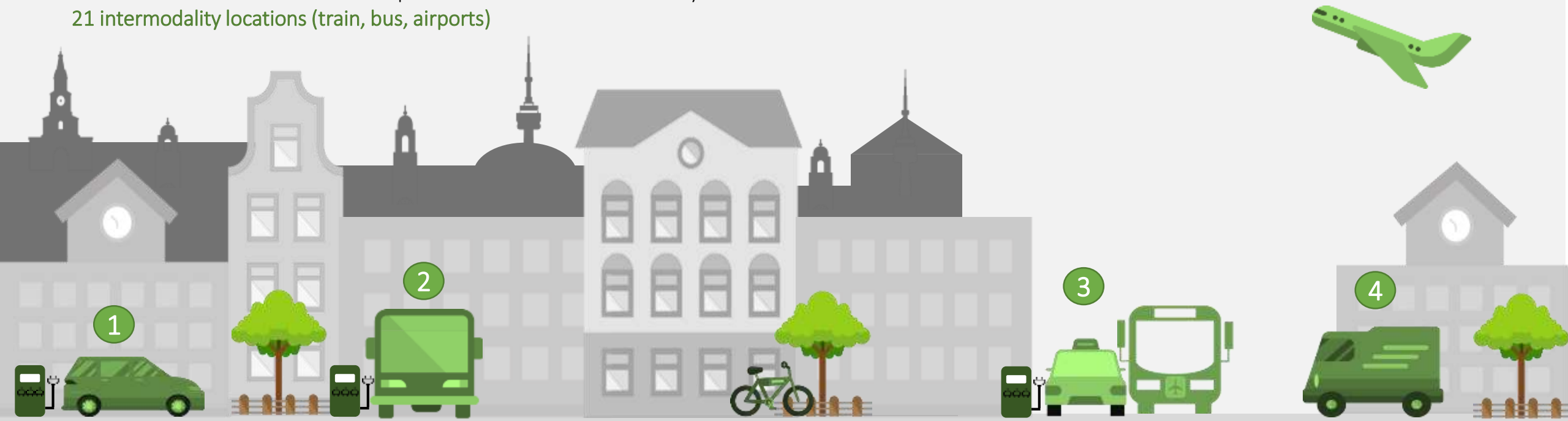
Co-financed by the Connecting Europe Facility of the European Union

URBANe

Intermodality is the core of URBAN-E

Innovative mobility services will be launched to secure initial utilization of the infrastructure. B2B and B2C EV customers can find, charge and pay without any constraints (interoperability) and switch between modes of transport in a dedicated intermodality focus.

21 intermodality locations (train, bus, airports)

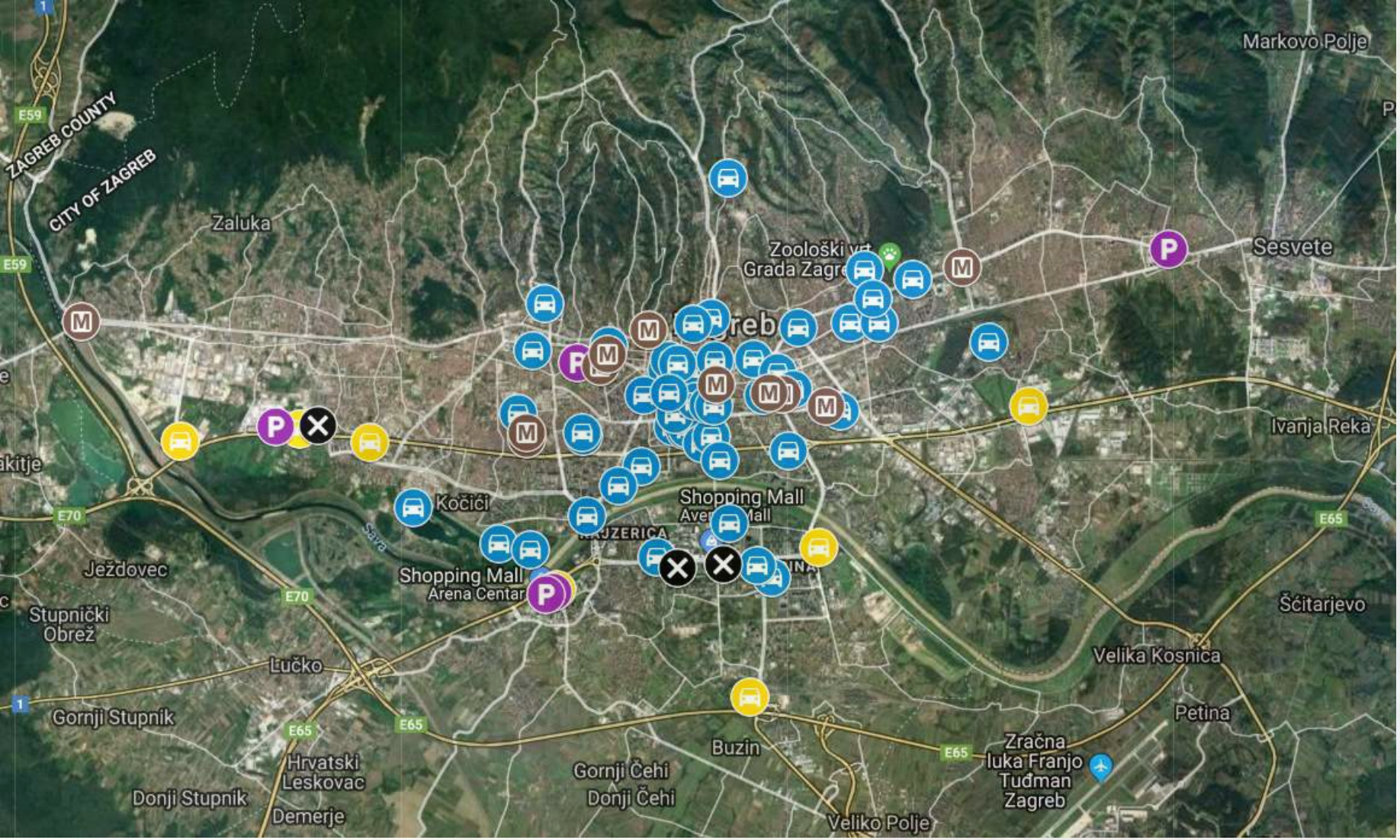


- Creation of a unique Intermodality Marketplace, enabling interconnection of data on e-taxis, e-shuttles, and public transportation modes. Green end-to-end routing enabled
- Corresponding user interfaces for various use cases (e.g. mobile and web-app for e-shuttle / e-taxi, or e-carsharing customers, portal for drivers), connected to the Intermodality Marketplace
- An innovative EV-taxi platform will be evaluated, optimizing the cost-efficiency of green car utilization and operation (e.g. routing, matching drivers and cars, etc.)

1. e-Carsharing:
2. Green e-Shuttle Service
3. Green e-Taxi
4. e-Logistics

DC Charging is crucial in urban nodes for mass market uptake - maximizing total system efficiency, consumer convenience and cost efficiency

- Consumers need 11-22 kW charging for park & ride, longer parking at home or at offices
- Businesses need 11-22 kW charging for e-logistic hubs, taxi hubs, e-carsharing , etc.
- Consumers need 50 kW charging for commuting, park & pick up, shop & charge, eat & charge, etc.
- Businesses need 50 kW charging for high utilization times (taxi, logistics, etc.)
- Drivers need UC for long distance driving (holiday, daily long business trips)



- URBAN E:

Network of 23 DC and 144 AC chargers

Charging network in The City of Zagreb

- Network of 9 DC and 47 AC chargers

Outcome of the Study: Positive impact on the environment, on regional/local development and on competition

Impact on the environment:

Large-scale decarbonisation of road transport

Reduction of noise caused by congestion and use of ICEs

An estimated total of 23.5 million tonnes of fuel savings over 2022-2026

Impact on competition:

OEMs will be able to conduct EV mass launches

A new type of player will enter the EV market: PETROL will serve as role model for oil & gas companies shifting to sustainable transport

New types of green transport operators will enter the market or expand their services, such as green taxi, e-shuttle, e-logistics and e-carsharing

Railways companies and other public transport will be able to bring to the market innovative green end-to-end travelling products

URBAN-E will seamlessly connect with other TEN-T/CEF funded projects towards the completion of the Global Project

fast E
FAST CHARGING STUDY EUROPE

(2014 -2017)

Linking countries BE, DE, SK and CZ with charging infrastructure. 307 new stations in the EU charging network.

Fast E (SK/CZ) – ZSE (E.ON SVK) coordinator

- CZ & SK (29 DC)

Fast E (BE/DE)

- Sister project fast-E (DE/BE)
- 278 fast charging stations in BE (37) and DE (241)

easte

(2016 – 2018)

EAST-E will electrify TEN-T's core corridors in CZ, SK, HR connecting to existing deployments.

- An international project by consortium of companies ZSE (SK), GO4 (SK), E.ON Czech Republic (CZ) and HEP (CRO)
- 62 charging stations along the core TEN-T corridors
- HR (27), CZ (15), SK (15 DC+ 5 AC)

ultra E
ULTRA CHARGING STUDY EUROPE

(2016 – 2018)

- 25 ultra charging stations: (4 AT, 4 BE, 12 DE, 5 NL) -> Continuous UC station network.
- Network planning for 500 UC in Europe
- Studies on market & business model, consumer attitudes, policy support
- Total budget: ~ 13 mio. €
- Project duration until 2018 e.o.p.

Other projects:

CEGC
Central European Green Corridors

CEGC: Fast Charging Infrastructure for EVs in AT, SK, SI, DE, HR (ZSE/E.ON, Nissan, Renault, BMW and Volkswagen, PETROL operates the infrastructure in Slovenia).

.GO

AVANT2GO: platform to reserve, activate and to use an electric car in Ljubljana via a smartphone app.

spin city

SpinCity: pilot for EV car-sharing in Croatia, lacking charging infrastructure.

VIBRATe

VIBRATe: enabling intercity travelling between two EU capital cities - Vienna and Bratislava.

Opportunities in Zagreb

- First TEN-T project ever awarded from „Innovation and new technologies “ field targeting Urban environment and not installation of fast charging infrastructure along the highways
- Concept of intermodality marketplace combining e-taxi, e-shuttle and Public Transportation Service as the first of its kind in Europe!
- Projects impact on urban problematic was given grade 5.0/5.0 by external evaluators and project was presented at TEN-T Days 2018!
- Project Rollout will strongly influence development of City of Zagreb as advanced and green capital of Europe.
- Strong press coverage is expected
- Croatian Presidency of Council of Europe in 2020

Thank you for your attention

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