# Projects

## TEN-T Trans-European Transport Network

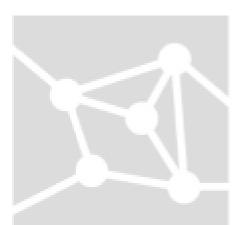
## Ele.C.Tra – Electric City Transport





### Fast Charging Cross Border Infrastructure for Electric Vehicles, Connecting Austria, Slovakia, Slovenia, Germany and Croatia TEN-T 2013 Annual Call; 2013-EU-92069-S (26040482)

Project Overview





Co-financed by the European Union

Trans-European Transport Network (TEN-T)





## Key Facts Central European Green Corridors

Project aim: to support the roll out of e-mobility, the following tasks will be implemented

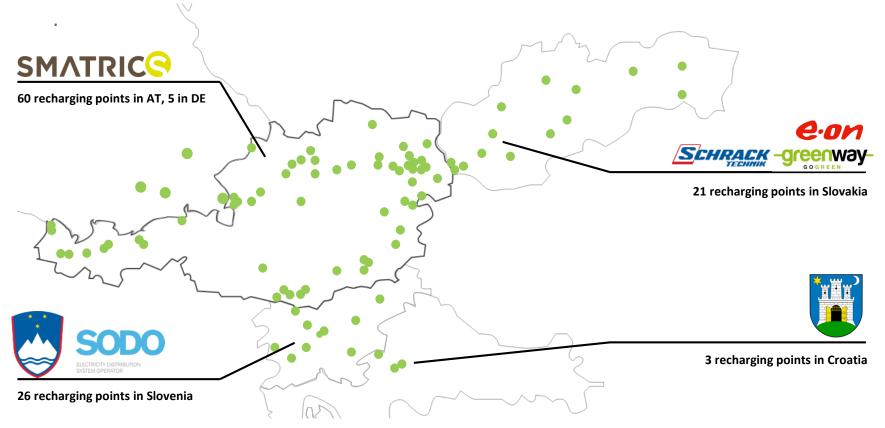
- Installation of 115 high power recharging points (CCS, CHADEMO, AC) thereof
  60 in Austria, 26 in Slovenia, 21 in the Slovak Republic, 5 in Germany, 3 in Croatia
- Integration of IT systems to provide services for customers & interconnectivity in the network
- Studies on Integration into the Energy System, Integration of Customers, Network and Services Planning
- Quality management, montoring, project management & communication
- Project Coordinator: VERBUND AG
- EU Member States: AT, DE, SI, SK, HR, FR
- Partner (Beneficiaries & Affiliated Entities): Bayern Innovativ, BMW, Government of Slovenia, GreenWay, Nissan, OMV, Renault, Schrack, Smatrics, VERBUND, Volkswagen, City of Zagreb, ZSE; Associated partners: AustriaTech; ASFINAG, SODO, et al.
- Budget: €7.124.000, thereof €3.562.000 funding by TEN-T
- Project Duration: 15<sup>th</sup> March 2014 31<sup>st</sup> December 2015





### CEGC project partners implement 115 high power recharging points in the project area

Through unified standards and aligned technical specifications CEGC aims at building up a network of multi standard high power recharging stations. Customers in the project region get access to a high quality recharging network.







## City of Zagreb charging points

- Three high power recharging points implemented on following locations:
  - Trg Stjepana Radića 1;
  - Park Stara Trešnjevka 2;
  - Avenija Dubrovnik 15.
- Technical documentation: TEB Kompleksni sustavi i rješenja d.o.o., Zagreb
- Contractor: TEB inženjering d.d., Zagreb
- Expert supervision of works: PGT Škunca d.o.o., Zagreb
- Total cost of works: 868.112,32 kn (bez PDV-a)
- Co financing TEN-T program: 434.056,16 kn (50%)
- Co financing FZOEU : 200.000,00 kn
- City of Zagreb budget: 234.056,16 kn
- Charger type: DBT Three-Standard (tri tipa priključka, 43 kW AC za IEC61851-1 type-2 priključak, 44 – 50 kW DC za CHAdeMO priključak i 44 - 50 kW DC za Combo-2 priključak)















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Defining innovative model of sustainable transport which will suit the needs of citizens (short-term sharing or renting e-scooters or e-light vehicle)

**Project** goals

Tourist offer expansion of participating cities in the project

Raising awareness on the importance of sustainable transport and encouraging a change of behavior in daily travel

Allow for model sustainability because a total of 300 electric scooters in pilot cities are not financed through project

E









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## **Project implementation**

- Testing the model in 3 pilot cities Barcelona, Genova, Firenca
- Adaptation of model for other cities and areas Murcia, Zagreb, Atena, Skopje, Suceava, Lisabon and La Valletta

#### Why e-scooters and e-light vehicles?

- high level of technological development;
- increasing the share of e-vehicles in traffic caused by rising fuel prices;
- in the pilot cities Genoa, Florence and Barcelona, the share of scooters and e-vehicles is between 15 and 20%;
- reduction of air pollution caused by traffic
- improving the quality of life
- noise reduction in urban areas









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Programme of the European Union

### Project results

- Development of project application <u>http://maps.electraproject.eu/</u>
- Pilot cities- model implementation
- Barcelona the withdrawal of the private operator Mottit from the pilot area
  - reasons small pilot area, the availability of other means of transportation, large flat areas, new operators, learning from mistakes, introduction new possibilites in business
- Genoa development of e-mobility through the support of local incentives (access to limited zones, free charging of e-vehicle, free parking) development of application for easier usage of e-vehicle (availability of e-chargers, location of the e-chargers), >100 e-vehicle available for usage
- Firenza development of e-mobility through the support of local incentives (access to limited zones, free charging of e-vehicle, free parking, a 50% reduce tax on e-vehicles); over 400 e-vehicles circulating on the streets, an internal e-vehicle sharing, sales to private and business customers
- Accesability to Ele.C.Tra KIT by other cities and areas









### City of Zagreb in project Conjuncted by the Intelligent Energy Programme of the European Un

- non-pilot city
- collection of experiences within the pilot cities
- analysis of electromobility in the city of Zagreb
- defining the model
- dissemination of electromobility signing agreements with other stakeholders (EIHP, Zagrebparking, Zagreb Tourist Board)

E









## City of Zagreb in project Conjuncted by the Intelligent Energy European Union

- implementation possibilities—agreements with suppliers Ema-skuteri, Electa
- presentations on energy week
- production of the feasibility study
- defining the operational plan







City of Zagreb in project Co-funded by the Intelligent Energy Europe Programme of the European Union

- three possible scenarios for e-light vehicle sharing:
  - building infrastructure of e-chargers
  - battery replacement
  - using during day, charging during night
- private owners of e-light vehicle and e-scooters
  - increase the share of e-light vehicle and e-scooters among private persons; Various incentives for purchasing e-vehicles (discounts, free charging, access to limited zones, free parking in the city centre,...)
- business owners of e-light vehicle and e-scooters
  - sharing system for employees within bigger companies







### City of Zagreb in project rogramme of the European Union

10 0 20 Months

Ganttchart of activities

STAKEHOLDER INCLUSION Sending interest letters Face-to-face meetings with key stakeholders Coordination of interested stakeholders AGREEMENT DEFINITION Definition and approval of agreement scheme/model Signing agreements with the operator Signing agreements with stakeholders DEFINING AND AGGREMENT UPON THE MODEL OF USE Terms of use Tariff models for users **IMPLEMENTATION OF INFRASTRUCTURE** DIGITALIZATION OF IMPLEMENTED SYSTEM Collecting and coordination of data on traffic system **Production of application** Availability on mobile devices MONITORING AND SUPERVISION **PROMOTIONAL ACTIVITIES** 

Tra.





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### Thank you for your attention!

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IEE/12/041/SI2.644730 – Ele.C.Tra. 01 July 2013 – 31 December 2015





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