Projects

TEN-T Trans-European Transport Network

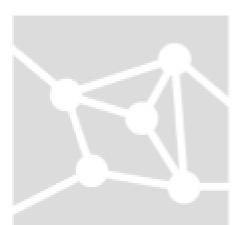
Ele.C.Tra – Electric City Transport





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

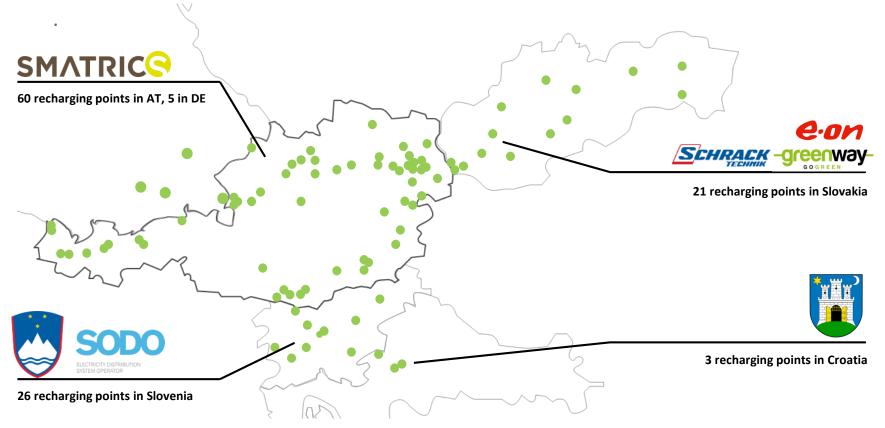
- Installation of 115 high power recharging points (CCS, CHADEMO, AC) thereof
 60 in Austria, 26 in Slovenia, 21 in the Slovak Republic, 5 in Germany, 3 in Croatia
- Integration of IT systems to provide services for customers & interconnectivity in the network
- Studies on Integration into the Energy 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: 15th March 2014 31st 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)















Co-funded by the Intelligent Energy Europe Programme of the European Union



Co-funded by the Intelligent Energy Europe Programme of the European Union





Gradski ured za energetiku, zaštitu okoliša i održivi razvoj





Co-funded by the Intelligent Energy Europe Programme of the European Union

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









Co-funded by the Intelligent Energy Europe Programme of the European Union

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









Co-funded by the Intelligent Energy Europe

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.





Gradski ured za energetiku, zaštitu okoliša i održivi razvoj



Thank you for your attention!

maja.sunjic@zagreb.hr

City office for energy, enviroment and sustainable development

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





Gradski ured za energetiku, zaštitu okoliša i održivi razvoj