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
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, monitoring, 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.

- 60 recharging points in AT, 5 in DE
- 26 recharging points in Slovenia
- 21 recharging points in Slovakia
- 3 recharging points in Croatia
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)
Defining innovative model of sustainable transport which will suit the needs of citizens (short-term sharing or renting e-scooters or e-light vehicle)

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
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
Project results

• Development of project application - http://maps.electraproject.eu/
• 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 possibilities 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
• Accessibility to Ele.C.Tra KIT by other cities and areas
City of Zagreb in project

- 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)
City of Zagreb in project

• 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

- 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

Gantt chart 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 AGREEMENT UPON THE MODEL OF USE**
  - Terms of use
  - Tariff models for users

- **IMPLEMENTATION OF INFRASTRUCTURE**
  - Collecting and coordination of data on traffic system
  - Production of application
  - Availability on mobile devices

- **MONITORING AND SUPERVISION**
  - PROMOTIONAL ACTIVITIES
Thank you for your attention!

maja.sunjic@zagreb.hr

City office for energy, enviroment and sustainable development