

Ele.C.Tra – Electric City Transport - IEE/12/041/SI2.644730

1st Croatian NSG Meeting

18th of August 2014

City Office for Energy, Environment and Sustainable development (Dukljaninova 3)

Zagreb, Croatia

The first meeting of Croatian National Support Group was held on Monday the 18th of August in the City Office for Energy, Environment and Sustainable development. Stakeholders, who attended the first meeting, are representatives of other City offices, Zagreb Tourist Board, institutes, funds, and private sector.

Introduction to the Ele.C.Tra Project

The opening speech was held by Mr. Miljenko Kovačević, Head of Section for energy analysis and energy supply in the City Office for Energy, Environment and Sustainable development, and an Ele.C.Tra project member, welcoming all of the participants. Mrs. Bruna Jakšić, Senior associate for energy management in the City Office for Energy, Environment and Sustainable development, and also an Ele.C.Tra project member presented the basic information regarding the duration, budget, partners, and goals of the Ele.C.Tra project. Also, Mrs. Jakšić informed the stakeholders about the content of, previous as well as forthcoming, work packages.

Presentation of the current situation in Zagreb – Survey Analysis (WP2)

The second presentation, held by Mrs. Jakšić, included the results of ante-operam survey, regarding the current mobility situation in the city of Zagreb. Some of the results were highlighted, mainly regarding the number of scooters, thoughts about electric mobility and different forms of ownerships.

Discussion

Mr. Matko Perovic, representative of the Energy Institute Hrvoje Požar (EIHP), presented the PRO-E-BIKE project. The project promotes clean and energy efficient vehicles, electric bicycles and electric scooters (common name “E – bikes”), for delivery of goods and passenger transport among private and public bodies such as delivery companies, public administration and citizens in European urban areas. One of the pilot cities is Zadar, located on the Adriatic coast, where the e-bikes are being used by municipal workers. The other Croatian town participating in the project is Lipik, where the e-bikes are, as well as in Zadar, being used as a transport mean when visiting retired people. The idea behind using e-bikes by the municipality is that the cities have to promote sustainable transport

and set an example for their citizens. Mr. Perovic also pointed that subsidies are very important when trying to promote electric vehicles, because of high costs of purchasing good quality electric scooters. The cost of such scooters, with a range of more than 50 kilometers and speed of 50 km/h, is around 5 to 6 thousand of dollars. Lower quality electric scooters can be purchased for around 2 thousand dollars, but according to experiences of some of the users, are not that reliable, have a smaller range and the battery cannot be charged as many times as in case of more expensive Li-Ion batteries. Mr. Perovic believes that the lack of public charging infrastructure is not as big an obstacle as it was shown in survey results. Electric bicycles, used in PRO-E-BIKE, have portable batteries, which allow their owners to recharge them at home or in the office. Public charging station, installed in front of EIHP, is not used as often as it was thought it would be, despite it is free of charge. Electric bicycles are much cheaper than the electric scooters, and their speed of approximately 25 km/h is sufficient for use in urban areas. In case of electric scooter it is necessary to register the vehicle, while in case of a bike no registration is required. He also mentioned the Free Duck – an electric light quadricycle, produced by DUCATI energia and assembled in Ludbreg, Croatia. Mr. Perovic highlighted the importance of a post-operam analysis, which should enable determining the real benefits for users of EVs, and calculating the amount of incentives required to make the system feasible and self-sustainable. When promoting sustainable urban transport it is essential to focus on the benefits of using electric vehicles - less noise, less smog, and lower fuel costs (electricity is much cheaper than fossil fuels). Also, he considers it should be pointed out that it is fun to use electric bicycles! He considers the price to be the biggest obstacle for popularization of EVs, hence believes that using electric scooters or bicycles is a more realistic option than using electric cars.

Mr. Filip Brkljača, representative of Environmental protection and energy efficiency Fund, presented subsidizing the purchase of electric and hybrid vehicles. Environmental protection and energy efficiency Fund, in collaboration with the Ministry of Environmental and Nature Protection announced two public calls for subsidizing the purchase of electric and hybrid vehicles. Fund provided up to 40% of the vehicle price. Amount of up to 70,000 HRK (9245 €) was granted when purchasing electric vehicles, up to 50,000 (6600 €) when purchasing hybrid "plug in" vehicles and for hybrid vehicles emitting 100 g CO₂ g / km, up to 30,000 HRK (3900 €) could be obtained. In case of citizens, maximum amount which could be obtained was 70 000 kn, and in case of companies and businesses, this amount was 350 000 HRK. In 2014, Fund has provided 8 million HRK for citizens and 6 million for companies and businesses. Altogether 300 citizens and 140 companies/businesses have used subsidies for the purchase of electric or hybrid vehicles, which will result with around one hundred new electric cars registered in Croatia! Mr. Brkljaca mentioned that the Fund is preparing a public call for subsidizing the purchase of electric scooters and bicycles. The Fund would also

subsidize conversion of fossil fueled vehicles to EVs, which could have a positive effect on Croatian economy. He also stated that public chargers would be necessary in case of introducing an electric scooter sharing system.

Mr. Ivo Zamberlin, representative of DOK-ING, informed the participants about the activities, regarding electromobility, which are being conducted. Currently, DOK-ING owns four electric cars – 2 LOOX's, 1 electric car bought from China and a fossil fueled car, they refurbished to an EV. DOK-ING is a 100% privately owned Croatian company, established in the late 1991 and registered for the production of robotized and special purposes systems and equipment. The only EV they have produced is LOOX – electric car, which is still too expensive for commercial production. Mr. Zamberlin stated that DOK-ING has no experience in producing electric scooters.

Mr. Krešimir Dvorski, founder of Nextbike – Public bike sharing in Croatia, informed us that Nextbike is operating since May 2013, currently has 5000 registered users, who have used the bikes more than 40 000 times and driven around 90 000 kilometers. One third of registered users are students, one third are residents and one third are tourists. Surprisingly, bikes were rented the most on the 29th of October. This is unusual because of Zagreb's climate, which is characterized by hot summers and cold winters. No surprise, less people rented bikes during the winter, especially November, December and January. Mr. Dvorski stated that the quality of vehicles in sharing systems is essential, because of frequent use. High quality electric scooters are expensive, so abundant incentives would be necessary to implement such system.

Mr. Drago Vasilj, who participated in the NSG as one of the representatives of the City Office for Energy, Environment and Sustainable development, informed all of the participants about the installation of 5 new public chargers in the City of Zagreb. Mr. Vasilj highlighted the price of the battery as the biggest obstacle for larger deployment of electric vehicles – 600 \$/kWh Li-Ion battery.

Mr. Goran Šarić, representative of the City Office for Economy, Labour and Entrepreneurship, welcomed implementation of a project within which it is possible to assess the current transport situation in the City of Zagreb. He and Mr. Dvorski were interested in a possibility to produce batteries in Croatia, but Mr. Zamberlin and Mr. Vasilj think batteries production is not likely to succeed in Europe. Mr. Šarić considers that users of EVs should be given incentives, not only when purchasing an EV, but also on an annual basis – lower taxes, cheaper registration or insurance.

Mrs. Jasenka Mandžuka, representative of Zagreb Tourist Board, considers that citizens of Zagreb should accept the e-scooter sharing system prior to tourists, to ensure sustainability,

regardless of the season. Also, due to a low percentage of citizens using scooters, she considers that kind of a system is ideal for delivering goods.

The participants agreed that range and speed of the vehicle are of great importance when introducing an electric scooter sharing system.