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**Conclusions of the 1st NSG Meeting in SUCEAVA
23rd of April 2014
Centre for Sustaining the Traditions of Bucovina,
Suceava, Romania**

Debate on electromobility was divided into 4 large components, namely:

1. Presentation of 3 main projects developed by the municipality or with the support of the municipality and that concerns electromobility:
 - a. EVUE electromobility Network of European pilot Cities
 - b. Electromobility – electric vehicles for a green municipality;
 - c. Ele.C.Tra – Electric City Transport
 2. The local action plan;
 3. Means to implement the local action plan and the above mentioned projects;
 4. Ideas on how to develop the electromobility in the framework of 2020 programming period.
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- I. Presentation of 3 main projects developed by the municipality or with the support of the municipality and that concerns electromobility
 - a. EVUE electromobility Network of European pilot Cities

Electric vehicles appear today as a way forward to reduce tailpipe carbon emissions and noise pollution, as well as a promising source for economic development. Electromobility features prominently in the Green Car Initiative (GCI) included in the European Economic Recovery Plan as well as in the European 2020 strategy aimed at making the EU a smart, green and sustainable economy by 2020.

However limited infrastructure, higher initial purchase-prices and outdated legislation concur in making Europeans still reluctant about embracing electric vehicles (EVs). More than ever, there is a need for technology, policy-makers and society to dialogue.

*Suceava, a middle-sized Romanian city at the external border of the Union, took an important leap forward in electromobility through the URBACT programme. As partner of the EVUE network, focused on developing integrated and sustainable leadership for cities to promote the use of electric vehicles. **Through URBACT, Suceava has become a pioneer in this policy area in Romania.***

b. Electromobility – electric vehicles for a green municipality

The project is proposed to be financed through the Swiss Fund.

The main goal of the project is

To stimulate the use of electric transport modes in the territory of Suceava Municipality in view of raising the awareness of the population and of private companies on the Sustainable Energy management in the municipality.

The specific objective of the project is:

To increase the number of electric vehicles in Suceava's municipal vehicle fleet in view of reducing the CO₂ emissions by 76.51 tCO₂/year and fuel consumption. To realise infrastructures for the electricity production by RES (about 50 kW) to feed the foreseen EV at the main public buildings or parking areas.

The objective will be met by means of:

- Modernizing Suceava's municipal vehicle fleet following the purchase of the 18 electric vehicles;
- Setting up a charging infrastructure in the territory of the municipality in view of reducing CO₂ emissions and fuel consumption by setting up 30 charging points by the end of project implementation;
- Producing the electricity by renewable energy, installing about 50 kW of PV at the main recharging stations
- Setting up approximately 60 specially-arranged parking spaces by the end of project implementation.

In view of using the purchased vehicles, Suceava Municipality will set up the battery charging infrastructure by installing approximately 30 charging centres (8 for standard charging and 22 for rapid charging) over the whole public territory of the municipality. In some of these recharging points the electricity will be provided by PV shelters: it's foreseen to install from 5 to 8 PV systems for a total power of about 50 kW.

The recharging points will be available also for other users (private, industrial and commercial sector): the involvement of different private clients will be promoted to achieve the economical sustainability of the service and the possibility of enlargement. The malls, widespread in Suceava, could represent an interesting promotion point for the electric mobility in private and commercial sector being traffic catalysts with a great communication and marketing potential.

c. Ele.C.Tra – Electric City Transport

The core concept of the Ele.C.Tra project is that it is possible to reduce pollution due to passenger transports and improve quality life by promoting a new urban sustainable mobility model. In this light, the project allows:

- to increase the electric scooters use in urban areas, through short sharing (e.g. for one day) or rent (e.g. for six months), Then, why the project focuses on scooters technology?
 - Because this technology has reached a high level technological development, with relevant applications in the electric mobility;
 - Because scooters modal share increases, enhanced to the growth of fuel prices;
 - Because scooters are very used in the Southern European cities involved (Genoa, Florence and Barcelona), that have a scooter modal share between 15 and 20%;
- to raise awareness of citizens and tourists by changing daily behaviours and to promote sustainable user-friendly activities by at least 100 electric scooters in every city;
- to modernize the urbane two-wheeled vehicles fleet where motorcycles and scooter are very used;
- to raise awareness of public bodies, touristic and mobility stakeholders, like local transports operators but also associations, tour operators, universities and firms, in order to develop other innovative transport means (e.g. electric buses, low impact cars);
- to promote a new mobility system suitable for tourists too. In this way, it will be possible to develop touristic flows in the areas involved.

II. The local action plan

Suceava's Local Action Plan is elaborated as a strategy to promote and implement electric vehicles and the charging infrastructure in the municipality, including campaigns for communication with citizens, in view of setting up a market for electric vehicles and enforcing favourable legislative measures, as well as mechanisms which can support overcoming financial barriers to implementing electric transport.

III. Means to implement the local action plan and the above mentioned projects

The local action plan and the above mentioned projects could be implemented in the framework of 2020 programming period.

IV. Ideas on how to develop the electromobility in the framework of 2020 programming period.

CONCLUSIONS REGARDING ELECTROMOBILITY

Common suggestion and discussion points:

Advantages vs disadvantages

1. The **most obvious advantage** of electric vehicles is that **they don't produce the pollution**. However, they still have environmental costs. The electricity used to recharge EV batteries has to come from somewhere, and right now, most electricity is generated by burning fossil fuels. Of course, this produces pollution. **The suggested solution is Vehicles in the future should use renewable energy:**
2. **Another important advantage** of battery-powered motors over gas-powered engines is **the lower cost of the fuel** - that is, electricity for EVs and gas for the internal combustion engines. Beyond the fuel-saving benefit, EVs **offer another major cost savings: maintenance**. Since an EV is fully electric, it no longer uses oil to lubricate the engine.
3. A system that combines **electric mobility (EM), sharing solutions and two-wheeled vehicles** will decisively contribute to **increase transport efficiency**:
 - a. **Electric**: decreases air pollution and noise pollution; reduces energy imports; reduces transport costs;
 - b. **Sharing**: higher usage of the vehicle, reducing number of vehicles;
 - c. **Two-wheeled vehicles**: high efficiency in space/capacity usage (both in terms of road network and parking supply);

but it also triplicates the challenges:

- a. **Electric**: autonomy limitations and problems of quick reloading;
 - b. **Sharing**: system must be practical and attractive (easy to use and with favourable costs);
 - c. **Two-wheeled vehicles**: seasonality and safety problems; not fitting to all types of users;
4. The **major disadvantage** of EV, is the **time required to recharge the batteries**. A possible solution to the recharging situation may be **battery-replacement stations**, where instead of recharging your EV you can simply swap your drained battery for a fully charged one. This system would allow batteries to be recharged outside of

vehicles and would greatly reduce the amount of time required to get an EV up and running again after its battery is fully discharged.

5. **Another major disadvantage is that EVs are considerably more expensive than comparably equipped small to midsize gas-powered vehicles. Suggestions: more incentives: discounts, no local tax, no environmental tax, eco-bonuses.**
6. **Public authorities' involvement in promotion of EV is crucial and they need to be an example for the community. They need to be involved in realizing the charging infrastructure, in promoting e-mobility and setting examples for the community. E.g. buying EV for own use and promoting e-mobility within residents, tourists, students and local distribution companies (postal office, pizza delivery), test drives and rental;**
7. **Sharing systems are an interesting opportunity for manufacturers of electric vehicles, because these systems contribute to the mainstreaming of electric mobility; therefore active support from the manufacturers should be envisaged, for the launching and subsequent development of the system. In particular, electric scooters can contribute to the diffusion of electric mobility: motorcycles are the only type of electric vehicle that has removable batteries, therefore facilitating the charging operations (the major concern of potential users of EM), even if users don't have their own parking space.**
8. **Integrating stakeholders beyond the area of mobility is important; large companies engaged in corporate social responsibility principles should be mobilised as sponsors of the system, improving their public image and contributing to reduce final costs for the end users. Advertising (in the vehicles and other communication channels) could be a good solution for these sponsors;**
9. **Learning from other sharing systems is essential.**

