

Electromobility practices in the public sector.

Dr. Andreas Vassilopoulos,
vassilopoulos@avmap.gr, electra@avmap.gr

Best practices applied in other foreign countries, in reference to the promotion and development of electromobility, has led to the conclusion that intersectoral cooperation is the key factor for success. Under this framework, many organizations from different knowledge backgrounds are currently cooperating in other countries towards electromobility. The following article presents several scenarios that the relevant municipal authority could implement in order to adopt electromobility and to contribute towards its promotion and development.

Cooperation platform

- Public bodies in local and national level
- Companies of electric vehicles/scooters trading and management
- Companies responsible for financial resources searching through funding programs
- ICT and software development companies
- Research community
- Environmental associations and NGOs
- Public

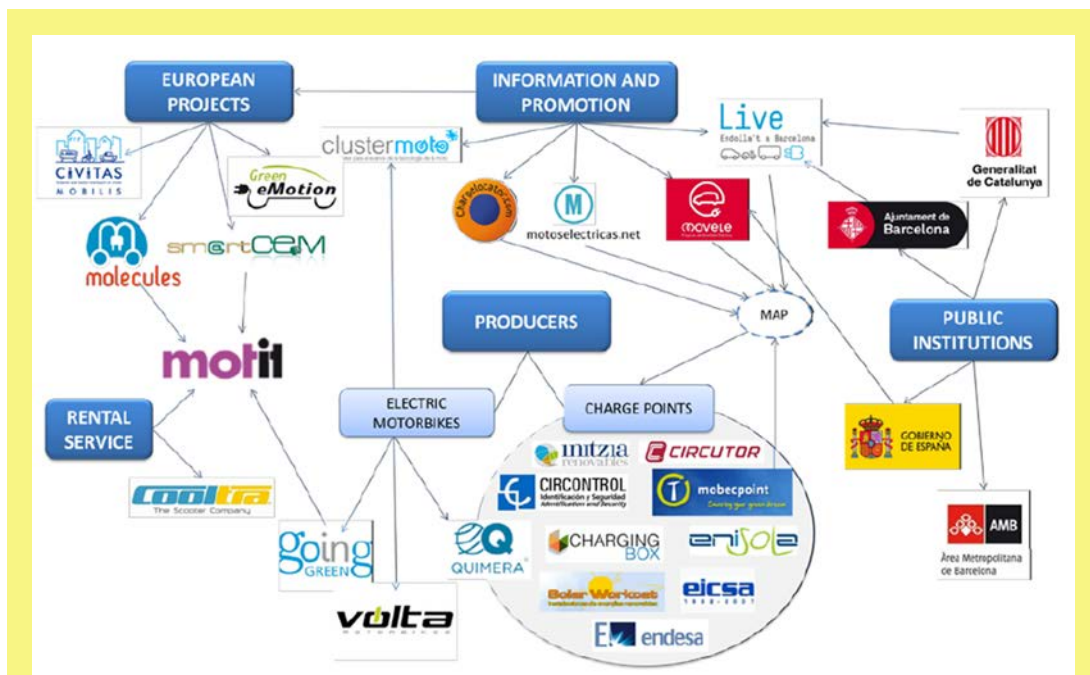


Image 1: Successful cooperation example between different organizations concerning the development and promotion of electromobility in Barcelona.

1. Electric scooters sharing system

In this scenario, the municipality will implement all the necessary actions concerning the development of the appropriate infrastructures for electromobility. Its aim is to serve and cover the needs of tourists and residents, who deal with mobility problems due to restricted or insufficient public means of transportation.

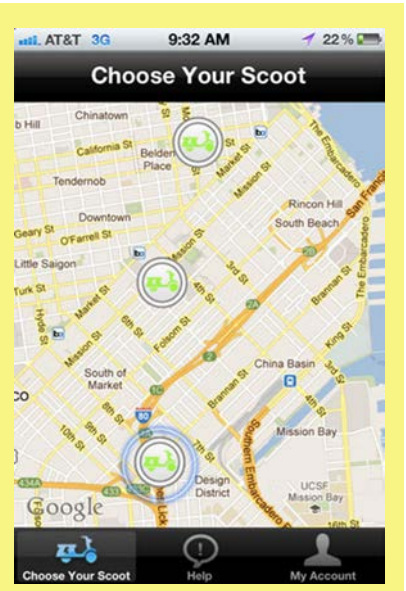
One of the initial actions is the supply of electric scooters and the development of all the necessary infrastructures for their proper functionality, including the supply of charging stations and the creation of parking areas and guard stations.

Getting a proper funding is mandatory in order the above actions to be realized. However, in order to avoid big delays until gathering financial resources, the municipality can use for scooters' charging any available socket that exists in public places and can develop suitable charging points in squares or other central places, where the rental points will also be located.

In addition, the municipality in cooperation with ICT and software development companies will proceed with the creation of software which will be suitable for monitoring all necessary processes.

More specifically, this software will contain electronic procedures for booking, payment, receipt and delivery of electric scooters, information about any damage, etc.

Tourists and residents will be able to monitor scooters' availability, choose their receipt and return station, be informed about the potential charging points, their connection with public transport, etc. The expenditure of such a system could be practically covered only by funding programmes (for example NSRF – Green Fund). Until that happens, the municipality can gradually proceed with the purchasing of electric vehicles which will be used by tourists and residents during the high season period and by the municipality's staff during the low season period, in order to cover daily municipal functional needs.



AVMap GIS S.A. (www.avmap.gr) provides a prompt solution in reference to the electronic system of use and monitoring of electric scooters and vehicles. The company develops a similar platform (maps.electraproject.eu) under the Ele.C.Tra project, which will include the area of East Attica and it will be expanded in the future in other geographic zones as well.

Consequently, the cooperation between municipal bodies and companies whose objectives are on one hand to search for financial resources through local and national funds and on the other hand to develop digital applications is particularly necessary.

Benefits:

- Urban environment improvement
- Reduced car transportation and as a result public areas release from cars.
- Traffic Upgrading
- Improvement of life quality
- Greater benefits if it will be implemented in multi-municipal level



2. Use of electric vehicles by the municipal services

In this case, the municipality implements all the necessary actions for supply and use of electric scooters / vehicles, as they were described in the previous scenario. The difference here is the fact that the electric vehicles will be used by the municipal employees in order to cover their daily needs, such as:

- In-situ measurements of water supply
- In-situ autopsies and fieldwork of urban planning services
- Use by the municipal social responsibility services
- Use by the municipal police
- Use by the municipality's volunteers (e.g. medicine delivery)
- Delivery of intra-corporate documents between the municipality's public services



The supply of vehicles and charging stations can be gradually planned from municipal resources or through leasing. Nowadays very few municipalities have their own resources for buying a fleet of electric vehicles. The municipality may initially acquire 1-2 electric scooters / vehicles and gradually increase its fleet in accordance to its needs.

Benefits:

- Reduced fuel consumption
- More efficient fleet management
- Example for residents
- Environmental benefits



3. Cost-sharing system for chargers' installation

In this scenario the municipality collaborates with local businesses and other organizations (eg port or airport), for joint procurement and maintenance of a network of charging stations.



The target audience in this case is mainly tourists, who will be able to schedule their stay in ports or airports and visit nearby places and tourist attractions.

Benefits:

- Exploitation of the tourism sector
- Strengthening of the local economy
- Example for residents
- Environmental benefits