

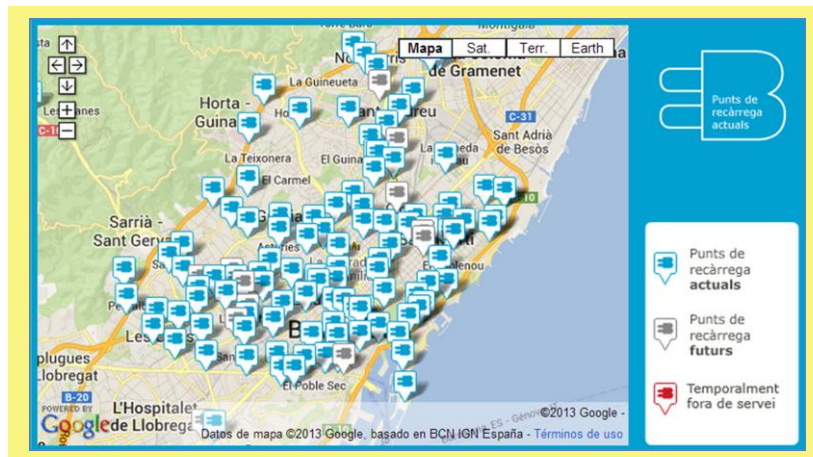
Network of charging points for electric vehicles

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The Greek government in cooperation with private sector entities is ready to adopt techniques and methods in order to develop good practices for electric sustainable mobility. However certain bureaucratic and legislative loopholes have prevented the implementation of these practices so far.

The present e-article provides a short description of the general characteristics and the results of the existing implemented good practice of the MOVELE project (2009-2010), an agreement made between the Barcelona council and the IDEA (Instituto para la Diversificación y Ahorro de Energía). The good practice refers to a **public charging points system** which ideally could be adapted to the Greek patterns too.

Particularly, the development of a plan for a pilot network of public charging stations for electric vehicles, has the objective to identify transition strategies to facilitate the progressive implementation of electric vehicle.



An energetic plan and a mobility plan of Eastern Attica would facilitate the promotion of the use of electric vehicle and the installation of several charge points for electric vehicles in public and private places accordingly.

In the case of Barcelona, since the implementation of the practice in 2009, 249 public charging points have been installed of which 134 correspond to motorbikes. Some of **the benefits and advantages** from such a practice are as follow; public network where most of the people could charge its electrical vehicle would benefit the residents who cannot afford to have a private parking. Also, the establishment of a payment system by using a common user card would allow refueling of their car for free (with a limited credit). Another benefit is that there will be available free parking in some areas of the city.

However there are limits and disadvantages on the existing practice. An essential drawback is the slow velocity of the charging points which lead to reduced charged vehicles in each point due to long time period.

On the other hand, a more quick charge point could not be compatible with all the vehicles to refuel the batteries.

Another limitation is the different type of connectors. Despite their wide deposition in the market, it is necessary to standardize them so as to be possible for all the cars to be charged.



Last but not least, another issue that should be addressed is the public space that charge points occupy leading to infrastructure problems.

In order to proceed to the implementation of the public charging points systems for e-vehicles it is important to go forward with an agreement between public and private stakeholders.

In one hand the public entities would be responsible for the organization of the network, such as the places of installation, the control of the number of points, the standardization of the connectors, the prices and the operation conditions etc.

On the other hand, private entities interested in the sector of electric vehicles, are essential for the funding of these procedures since the installation of the charge points requires a high budget of investment.

Finally, another agreement should be made with the electrical company in order to each installation be connected with an electrical grid.

As far as **the Electrical Scooters Sharing** system, its requirements for its implementation implies to the same requirements and barriers as of the public network charging point system for e-vehicles. The two systems could share the same charge point network but with some adjustments in the operation mode of the stations and specific agreements with the municipalities and promoters of the stations.

