

“ELECTROLINERAS”, AN EMERGING INDUSTRY

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The electronic car development has been a goal pursued by motor industry manufacturers, as a new opportunity of industry development, and by public authorities, because they notice a possibility of restricting emissions of poisonous gas and obeying with Kioto's conditions. Concretely, in Spain, the number of conventional vehicles was 22 millions of units in 2010 and it generates a quarter of emissions of gas. Until August 2010, only 16 electric cars were registered in Spain.

However, when the electric car is almost a fact for manufacturers, a key problem emerges regarding its practical use arose from batteries recharge. It is due to the replacement of current petrol stations by electricity supply areas, that is, “electrolineras”.

Nevertheless, there are some uncertainties on technical and economic viability of “electrolineras”. The first one is about the model of recharge that will be introduced, and where there are several possibilities: a chain of supply areas in urban network, shopping centers, public parking, or private garages. Even, there is uncertainty on type of energy that will be utilized: electric, hybrid, with hydrogen, or another liquefied gas.

Another technical problem is referred to time required for recharge of electricity, which it is directly related to the distance that will be covered by a car, and it seems to be higher than usual time for filling up in petrol stations. Moreover, it is important to pay attention to capacity of electric network needed to support an undetermined number of vehicles connected at the same time.

Furthermore, technical standard is another problem. It is necessary for homogenizing characteristics which should be fulfilled by recharge areas and vehicles. In this sense, European Commission will probably propose a standard model in the course of the year 2011 for all countries of the Union, as USA and Japan have already carried out.

Finally, it is necessary to consider the economic amount that could mean recharge of electricity versus current fuel. Apart from a spectacular increase of petroleum price that makes petrol price more expensive, the electricity cost will be higher. A possibility for reducing this difference could be night recharge when electricity prices are cheaper.

Several types of firms, as electrical companies, oil companies and construction companies are interested in the new industry which has new challenges and uncertainties. The important electric car boom is expected around the next years (in Spain, forecasts more optimistic estimate 250.000 electric cars in 2014), and firms interested in this industry will must to decide the moment more appropriate in order to start to compete in this activity.