

ONE-DAY SEMINAR FOR THE INDUSTRY: ELECTRIC MOBILITY

18th November 2010

Electric mobility: a catalyst for a new city model

The Seminar on electric mobility jointly organised by **Barcelona Activa's Capital Humà** section and the **LIVE** office (Logistics for the Implementation of the Electric Vehicle) showed the institutional impulse and the will to turn Barcelona into a hub for innovation on issues related to the electric vehicle. The participation and the complicity of a number of agents in the process was made evident by the bodies represented in the Seminar: **Leitat** and **BDigital** technological centres, and the companies **ENDESA** and **SEAT**.

The interest caused by the Seminar, attended by more than 100 people, is a reflection of the social concern for environmental sustainability and of the curiosity felt towards new employment opportunities, and of the skills that will be required in the face of a new mobility strategy – electric mobility. During the event it became clear that this mobility affects urban quality of life positively through a reduction in pollutants, while at the same time improving on aspects such as less noise pollution. But as the Head of Barcelona Activa's Strategic Sectors and of the LIVE platform, Lluís Gómez, remarked, one should not forget about the necessary productive transition; in other words, the **industrial transformation**, in addition to the **cultural and social** transformation.

The contributions to the Seminar made by Toni Pons, Head of Corporate Business at **Leitat**, and Maurici García, Manager of Mobility Business Affairs at **BDigital**, helped to get first-hand knowledge of the activity of two technological centres whose *raison d'être* is applied research. They laid down the foundations for knowledge and technology transfer between university and enterprise. These companies are outstanding in two fields respectively: the development of new components and systems for energy storage, and the development of the information and communication technologies (ICTs).

At the same time, the participation of Pedro Díaz, Head of Technology and Innovation at **ENDESA**, and of Carlos Romaní, Manager of Institutional Relations at **SEAT**, contributed their business experience from the field of energy supply and industrial development, both of which are essential to facilitate the expansion of electric vehicles in the market. The company SEAT showed its industrial capacity by covering all its automobile value chain (research and innovation, development and design, production, distribution and sales) from consumer demands, above all now focusing on aspects relating to security, consumption and emissions, and adaptation to new technologies. Nevertheless, he acknowledged that **user demand for the electric vehicle is still low**, an essential issue according to the opinion of the different actors if electric mobility is to become a daily reality.

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On the other hand, the idea from ENDESA and Bdigital is that the electric vehicle is just **one more piece in the smart cities** model, or in the model of intelligent city where technology is at the service of urban management. In this sense, access to previous information or real-time information, or the connection to social networks, the concept of ubiquity, all of them are important elements for the car industry. In this sense, electric mobility is especially relevant, as it incorporates in-car technology to provide information about the location of charging stations, employment, and so on, on the basis of the network operation of the different operators in order to guarantee an efficient mobility.

During the open debate, moderated by Ramon Pruneda, Head of Projects at Barcelona Activa's Strategic Industries section, there surfaced the main challenges and some of the queries and concerns that continue determining the real incidence and the difficulty of the change of the mobility pattern:

1. **Electric vehicle vs electric mobility**

The belief not only in the development of the car for a specific mobility, but also of public transport and other vehicles as one of the alternatives for sustainability.

2. **Autonomy of vehicles** as a conditioning factor

It is currently situated between 150 and 200 km, a fact that is perceived as a limitation. Daily urban rounds are normally shorter.

3. **Charging points for vehicles**

The need of a greater distribution of charging points and the expansion to privately-managed public parking spaces, and home charging as two important factors towards the consolidation.

4. **Energy production**

The limitations on sustainability if the right and rational implementation of the process of electric production is not carried out.

5. **Options of sustainable mobility.**

The idea of further alternatives, such as hydrogen batteries, liquefied petroleum gas (LPG), and so on.

Projects such as **VERDE**, devoted to the knowledge, manufacture and commercialization of ecological vehicles go in this direction.

6. **Institutional and legal framework.**

The progressive adaptation of the institutional and legal framework should favour a greater penetration in the market.

And from the point of view of employment and professional opportunities, special

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emphasis was placed on the possible incidence of this sphere on the labour market and on the creation of new jobs. The following are the main conclusions regarding this:

1. Given the transversality of electric mobility, **the labour market is demanding with respect to training and skills**. Specifically, one could single out technical areas such as electrical, industrial and telecommunications engineering as the more common ones, and the knowledge of English as essential in the car and science industry, knowledge of German being considered an added value.
2. In the current juncture, a **need for the reconversion of the active human teams** is clear and, simultaneously, the receptivity to and possibility of recruiting flexible and adaptable staff in the face of both change and interdisciplinary work, with a **capacity for innovation, imagination, initiative and talent**. Skills for research, development and innovation, standardization, **orientation to quality**, and so on, or a **commercial profile geared to business development or project management** are highly valued in the labour market.
3. Concerning professional opportunities, **there are specific opportunities to cover specific needs** and on the basis of new projects, through a diversity of incorporation formulas that include in-house vocational training (SEAT), or a number of trainee programmes for qualified technical staff or direct recruiting.
4. The **selection channels** are both **universities** and **specialised search portals** (22@network, Euraxess, Heurística, Talència....) or generic search portals (Infojobs, Tecnoempleo, Monster...) and, obviously, any personal **networking** or contacts through LinkedIn or Facebook, among others.

In summary, the seminar looked into the mobility of the future, in a scenario of growing demand that faces new habits of emerging countries that lead to a greater environmental pressure. The accent was laid on the main trends and progresses of the electric vehicle, showing that transversality is one of the key issues requiring the involvement and participation of all social actors.

Current trends could thus be summarized as follows:

Barcelona – towards a model of smart city

The city of Barcelona, as an active smart city, will seek to position itself favourably in the digital society and to be competitive regarding innovation in mobility, through the application of the values of excellence, internationalization and globalization, and the co-operation of all actors – public administration, industry, research and technology centres, and of citizens.

First steps in electric mobility

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In the current scenario, even if Barcelona, through the LIVE platform, is a reference point concerning charging posts, with a total of 88 points distributed across the city, the implementation is limited, as electric vehicles that are currently operating do so basically through municipal contracts, although it is true that companies such as Caprabo have signed up for the new model.

New opportunities in a global scenario

Electric mobility generates new opportunities and involves a great component of innovation that guarantees growing competitiveness in a global scenario. The quality of the product becomes the distinguishing feature, as it is nearly impossible to compete with costs in Asian economies and their capacity to produce vehicles at low cost. At the same time, companies are already partaking of a growing dynamics of internationalization, and they search for both a greater presence and openings into new businesses and markets.

Demand is key to definitive impulse

The generalization of electric mobility in an immediate future shall depend on all social agents. And not just on the support to the public industry and the administration, with state-wide projects for the promotion of the electric vehicle and recharging infrastructures in the cities such as **MOVELE**, but also on private initiative. And to a great extent, the incidence of the demand and the role of the user will give it a definitive impulse.

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www.leitat.org

www.bdigital.org

www.endesa.es

www.seat.es/es/generator/su/es/SEAT/site/main.html

<http://www.idae.es/index.php/mod.pags/mem.detalle/id.407>