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*The first charging solutions for electric city buses will be applied in the Fuencarral and Carabanchel garages*

# EMT and i-DE have signed an agreement to electrify Madrid's urban bus network

- **Based on its *Smart City* model, the distributor will advise on the electrification of the transport system and plan the charging infrastructure network**

- **The electricity grids are configured as part of the new energy model's distribution system and the smart platform necessary for the transition towards a decarbonised economy**

The Madrid Municipal Transport Company (EMT) and i-DE, Iberdrola's electrical distribution company, have agreed to work together on the electrification of the urban bus network in the city of Madrid, with the aim of consolidating sustainable mobility as an alternative to traditional transport. This initiative was finalised this morning with the signing of a collaboration agreement to develop and implement the optimal *Smart City* model for Madrid.

i-DE will advise on and facilitate the electrification of EMT's urban bus network and will collaborate in studying the options for the electricity supply to EMT facilities from which the urban buses operate, as well as in planning the charging infrastructure network for present and future electric transport. In fact, both companies have already identified optimal locations in the first EMT garages to be electrified, such as those in Fuencarral and Carabanchel.

The agreement was signed between the managing director of EMT, Alfonso Sánchez, and the i-DE director for the Madrid Region, Efigenio Golvano, in the presence of the Madrid City Council delegate for the Environment and Mobility Area, Borja Carabante, accompanied by Antonio Espinosa de los Monteros, CEO of i-DE. The agreement also establishes the creation of a joint monitoring committee to be chaired by the EMT, which will set the actions to be completed each year and monitor compliance with them.

The smart electricity grids are configured as part of the new energy model's distribution system and the smart platform necessary for the transition towards a decarbonised economy. They thus make it possible to incorporate a 'neural trace' into the grid to promote a smart city model with more efficient and sustainable services.

The EMT is becoming one of the main European actors in the promotion, development and implementation of measures to improve air quality and combat climate change in the city of Madrid. The company is a benchmark in the development of less polluting, more efficient alternative fuels and energies with much less acoustic impact for transportation and it considers the electric vehicle to be a strategic element in this.

## Five strategic areas for a smart city

The project the company is now undertaking with Madrid City Council focuses on the five strategic areas for a smart city, from the point of view of the electricity grid, namely electrification of the most polluting sectors, electric mobility, network infrastructure, energy efficiency and public awareness with the following objectives:

- **Electrification of the most polluting sectors** (such as transport and heating) to reduce polluting emissions.
- Consolidation of **electric mobility** as an alternative to traditional mobility systems. In this area, i-DE brings its knowledge of electrical grids to promote an efficient and competitive charging point deployment plan, accessible to all citizens.
- Incorporate new monitoring, automation and intelligence functionalities in the electrical distribution grid to **improve the use of the existing infrastructure.**
- Implement **energy efficiency** measures and solutions to reduce the city's energy consumption and costs.
- **Public awareness of energy**, through information technologies, providing distribution grid data related to consumption, integration of renewables and penetration of electric mobility.

i-DE has integrated Electric Mobility Control Centres into its 6 Distribution Control Centres in Spain, one of which is in Madrid, to monitor and assess the impact of electric vehicles on its distribution network.

The centres provide real-time information on charging points: locations by zones, hourly charge data for the charging points and $CO_2$ emissions avoided. Likewise, they are also able to track how use of the charging points and energy demand change over time. In the near future, the integration of data analytics tools will make it possible to make predictions about the impact electric vehicles are having.

## Smart grids and the energy transition

The transformation of grids towards a smart, more reliable and safer infrastructure will provide a response to the challenges of this transition towards the electrification of the economy, with a greater presence of renewables, sustainable mobility, smart cities, decentralised consumption (self-generation) and a consumer with greater decision-making capability and connectivity.

In recent years, i-DE has installed almost 11 million smart meters - 2.1 million of them in the community of Madrid - together with their supporting infrastructure, as well as adapting around 90,000 transformer centres, where remote management, supervision and automation capabilities have been incorporated.

### i-DE, Smart Electricity Grids

i-DE -Iberdrola's electrical distribution company- operates a distribution system with 270,000 km of power lines in Spain and has a presence in 10 autonomous communities, serving a population of 17 million. Iberdrola's distribution business is investing some €500m in Spain in projects designed to improve its procedures and customer service channels; complete the roll-out of nearly 11 million smart meters and the supervision and automation of the grid.

Iberdrola's network business is a significant driver of the Spanish economy, generating more than 10,000 jobs in total (both direct and through its suppliers). The company makes purchases to the value of €500m from 2,000 local companies.