

PRESS RELEASE

Tekniker displays its electromobility innovations at Go Mobility

- *The technology centre will use two innovative demonstrators to present its solutions for power electronics equipment and electric motors*
- *The second edition of this event will be held on March 11 & 12 at the Ficoba exhibition centre in Irún where professionals from the area of sustainable mobility will gather*

[Eibar, 9 March 2020] - Pollution and traffic jams are the two main problems in terms of quality of life and health in urban settings. Consequently, the progressive electrification of vehicles is nowadays considered to be an efficient alternative and a challenge.

Tekniker, member of the Basque Research and Technology Alliance (BRTA), will present its most recent innovations for electromobility on March 11 & 12 at the [Go Mobility](#) industrial trade fair, a reference meeting point for southern European professionals in the area of sustainable mobility and power storage.

The technology centre, with a stand in space 3-04, hall 3, will showcase its capabilities in terms of power electronic and electric motors; specifically, the centre will use two demonstrators to explain the progress made in recent years. In this regard, it must be stressed that Tekniker has focused part of its specialisation and technological development on transforming the automotive business to boost the development of electric vehicles.

The second edition of this event, to be held at the Ficoba exhibition centre (Irún), will also serve to establish closer ties with diverse actors dealing with new mobility that have to deal with the challenge of delivering alternatives that are more sustainable, accessible, safer and connected.

Customised power electronics

On the one hand, Tekniker will display a four-phase inverter equipped with SiC (silicon carbide) converters that can be used to control switched reluctance motors on electric vehicles. The aim of this initiative consists in demonstrating that the organisation has enough capacity to develop customised power electronics equipment.

These semi-conductors make it possible to reduce losses, increase switching frequency and lessen current harmonics. Consequently, system efficiency can be enhanced and both volume and weight can be reduced.

The application of these semi-conductors is not only geared towards converters used in the area of mobility (traction or charging infrastructures), but can also be applied to power storage and generation or to applications for which electric machine monitoring is required.

An efficient electric motor

In addition to Tekniker's environmental commitment, the organisation will present a transverse flow electric switched reluctance motor that is more efficient, reliable, robust, economical and sustainable that has been developed in full by the centre itself. The idea comes from the European project Weevil, which is also the name given to the prototype.

In this particular case, the system has only focused on the automotive and railway sectors. It features a compact design with its three main elements housed inside only one component: the electric machine, the gearbox and the electric converter.

This structure increases motor torque density and also simplifies vehicle transmission, meaning that permanent magnets are not required. Due to its small size, moreover, there are less components, weight is reduced and there is more space in the means of transport.

An international trade fair

The Go Mobility trade fair is an international initiative supported and promoted by the Provincial Council of Gipuzkoa in collaboration with the Basque Government and Ficoba and is aimed at manufacturers, ancillary industries, suppliers and research centres.

In this second edition, and in addition to the area where the most recent developments reported in terms of innovations related to mobility and power storage, the trade fair will also organise lectures and round table discussions. There will also be a poster section showing some twenty European projects selected in advance.

Concerning Tekniker

With nearly 40 years of experience in the field of applied research and knowledge transfer, Tekniker has achieved a high degree of specialisation in four major areas (Advanced manufacturing, surface engineering, product engineering and ICTs) and can now make available its cutting-edge technology to customers to meet their needs. The technology centre is a member of the Basque Research and Technology Alliance (BRTA).

Further information:

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