

PRESS RELEASE

Tekniker presents its technological developments at MUBIL 2024, the showcase for innovation in the area of sustainable mobility

- *The technology centre will play an outstanding role at the international exhibition to be held in Irún, Gipuzkoa, on April 17 & 18*
- *Tekniker will exhibit three demonstrators featuring the technology centre's capabilities with regard to developing electronic, mechatronic and digital products for electric vehicles to ensure safe self-driving*

[Eibar, 16 April 2024] - Over the next two days, the **Tekniker** technology centre, a member of the Basque Research and Technology Alliance (BRTA), will be one of the key players at MUBIL Mobility Expo 2024, the main showcase for developments in innovation associated with sustainable mobility in the south of Europe to be held on April 17 & 18 at the Ficoba trade fair centre in Irún (Gipuzkoa).

More specifically, and from a booth situated in hall 3 (no. 14) shared with other partners such as Masermic, Oribay Grupo and Integralia, Tekniker will display three demonstrators showcasing the organisation's technological capabilities related to sustainable mobility and self-driving.

Jose Miguel Landeta, the director of technology transfers at Tekniker, underscores that "thanks to developing electronic devices and designing state-of-the-art mechanical components and electric motors, our solutions maximise the efficiency and reliability of electric vehicles. We can also integrate advanced AI algorithms to optimise charging stations and meet their energy management requirements".

The technology centre's know-how also embraces technologies for fleet and parking space management in cities in the transition towards Smart Cities. Visitors will be able to see several examples of this kind at MUBIL 2024.

In-wheel components

During MUBIL, Tekniker will present an ad-hoc gearbox for automatically guided electric vehicles currently used, for instance, in farming and which feature the in-wheel concept meaning that the electric motor is installed on the wheel's axle.

Jose Miguel Landeta explains that “we have used advanced digital simulation and modelling tools called KissSoft and KlssSysHemos on an in-house test bench to dimension operations and eventually validate the gearbox and life cycles of all the components”.

The technology centre will also display the ADAS platform (Advanced Driver Assistance Systems), a solution that allows vehicles to scan and interpret their driving environment by identifying the elements that are present in it.

It will be possible to see a demonstrator of this system at MUBIL that can classify other nearby objects such as cars, pedestrians, cyclists, bikers, traffic signs and lights and use this information to trigger alarms that improve and guarantee safety whilst driving.

Landeta also states that “depending on the level of autonomy defined, ADAS systems can inform the driver about these alarming situations or actuate the vehicle's controls to respond in advance and avoid hazardous situations”.

Lastly, Tekniker will also showcase the control electronics used on an innovative power converter that is more efficient, lighter and smaller for hybrid electric vehicles equipped with wheel traction.

The Director of Technology Transfer explains that “it is an ECU (Electronic Control Unit) for a converter that has been designed for a very specific family of electric motors ranging up to 7.5 kilowatts that are geared towards automotive applications equipped with 330 volt batteries”.

More about Tekniker

As regards sustainable mobility, Tekniker has focused on developing electronic devices and communications, power electronics, electric motors and mechatronic systems, multi-purpose surfaces for components and batteries and charging infrastructures.

Further information:

GUK ▶ Unai Macías

unai@guk.es | Tel.+34 690 212 067