



## HORSE PARTNERS WITH MARCOPOLO TO DEVELOP NEW HYBRID MICROBUS

- Volare Attack 9 is the first hybrid ethanol microbus with a Range Extender solution, developed in a partnership between Marcopolo, HORSE and WEG
- Range Extender powertrain will be powered by bioethanol fuel to provide superior emissions profile to traditional hybrid electric vehicles

[HORSE](#), a division of HORSE Powertrain Limited and a global leader in innovative and low-emission powertrain systems, has partnered with Marcopolo, the largest bus manufacturer in South America, and WEG, the Brazilian multinational manufacturer of electronic equipment, to develop the new Volare Attack 9 hybrid microbus.

This new vehicle is the first hybrid ethanol microbus to make use of a Range Extender solution, and was presented at the Marcopolo stand at Lat.Bus 2024 Expo.

Targeted to go on sale in 2026, the Volare Attack 9 will offer a maximum range of 450km. Like most new vehicles in Brazil, the combustion engine will be fuelled by sustainable and domestically produced bioethanol, meaning that it will offer carbon neutral mobility for customers and operators.

**Patrice Haettel, Chief Executive Officer at HORSE, said:** *“This Range Extender solution in the Volare Attack 9 is the result of an incredible collaboration between HORSE, WEG, and Marcopolo. Our significant footprint in the South America region ideally placed us to be a central partner for the delivery of such an exciting project. Marcopolo is demonstrating industry leadership in introducing the technology into the microbus class. We hope this will be the start of what will be a range of sustainable solutions using this technology to debut in the region and beyond.”*

### **Building Brazilian partnerships**

As the first ethanol-powered hybrid minibus to use a Range Extender solution, the Volare Attack 9 hybrid features a low-emission powertrain specifically tailored for the model. The success of the project has led HORSE and WEG to plan to further launch a standardised Range Extender architecture for light and heavy commercial vehicles.

HORSE’s Range Extenders use WEG components for the powertrain’s electric generators, e-motors, electrical inverters, and battery packs. For the Range Extender’s combustion engine, the powertrain will use HORSE’s 85kW turbo 1.0-litre, three-cylinder ‘HR10’ unit. This engine is adapted to run on clean, carbon-neutral bioethanol.

### **HORSE’s Range Extender**

HORSE’s own market-leading Range Extender technology offers the benefits of decarbonised mobility at scale. These powertrains, like plug-in hybrid electric vehicles (PHEVs), make use of both combustion engines and batteries to provide flexible, low-emissions transport. However, unlike PHEVs, the combustion engine of HORSE’s Range Extenders never directly drives the vehicle’s wheels – instead, it only serves as an internal charging source for the vehicle’s battery.

This means that the combustion engine of a Range Extender vehicle, unlike a traditional PHEV, can constantly operate in its high-efficiency operating window and rev range. This minimises fuel consumption and emissions associated with the powertrain’s combustion engine.



Like a traditional PHEV, the Range Extender's combustion engine can be turned on or off depending on remaining battery charge and location, and the battery can be charged using any public charger or domestic power supply. Because of the efficiency of the architecture, the Range Extender's high-voltage battery is around half the size of a pure EV battery. This means both significant cost and weight savings, while also offering improved flexibility of packaging for enhanced efficiency.

### **HORSE: a leader in automotive innovation**

HORSE was created to provide highly efficient, low-emission engines, transmissions, and technologies to meet the varying power generation needs around the world. HORSE operates eight production plants across seven countries, three R&D centres and a head office based in Madrid, Spain – the company produces 3.2 million units per year for its customers around the world.

### **Ends**

#### **About HORSE**

HORSE is a global supplier of innovative powertrain solutions. It believes that there is no one-size-fits-all solution to sustainable mobility and so is investing in technologies which will support the automotive industry, and other sectors requiring power generation, in their transition to a sustainable future. With decades of industrial know-how, HORSE develops, produces and supplies highly efficient full-hybrid, plug-in hybrid and internal combustion powertrains, and cutting-edge technologies (engines, gearboxes, full-hybrid and plug-in hybrid systems, and batteries).

HORSE employs over 9,000 people in seven countries, it is headquartered in Madrid, Spain and has eight manufacturing plants and three R&D centres around the world (Argentina, in Córdoba; Brazil in Curitiba; Chile in Los Andes; Portugal in Aveiro; Romania in Bucharest, Mioveni and Titu; Spain in Seville and Valladolid, and Turkiye in Bursa in partnership with Oyak).

HORSE is a division of HORSE Powertrain Limited, a worldwide leader in hybrid and combustion powertrain solutions. Headquartered in London, UK, the company employs 19,000 people globally across 17 plants and five R&D centres. HORSE Powertrain Limited was officially created on 31 May 2024, with Renault Group and Geely each holding a 45% stake in the company, with Aramco holding a further 10%.

For more information, please contact:

- Alvaro Fernandez, Global External Communications Director; [+34 699068082](tel:+34699068082); [alvaro.fernandez@horse.tech](mailto:alvaro.fernandez@horse.tech)
- Performance Communications; [HORSE@performancecomms.com](mailto:HORSE@performancecomms.com)