

Delivering an electric transport solution

In 2010, Daimler brought its alternative drivetrain roadshow to SA which enabled us to experience its electric, hybrid and other solutions on home soil. Little has happened locally in this regard since then, with the exception of the arrival of hybrid versions of the C and S-Class.

What we did get to drive back in 2010 was the Vito ECell, a fully electric version of the Vito van. Now the company has unveiled the full production version as part of its strategy to introduce electrification across its vans range. This will start with the mid-size eVito, which will be available in Europe from the middle of 2018 with other model ranges, including the next generation Sprinter in 2019.



Image Source: Daimler

But don't rush off to your Mercedes Vans dealer just yet, because a spokesman for the company told Motor News there are currently no plans to introduce the electric models in SA.

"For the foreseeable future, we will not be bringing in the e-vans, as our infrastructure is not yet conducive to this," says Sibusiso Mkwanazi, media specialist at Mercedes-Benz SA Commercial Vehicles.

eDrive@Vans initiative

The company presented its holistic electric drive strategy at the eDrive@Vans workshop in Berlin. It says that the focus was not just on the electric van, but also on a technological ecosystem tailored specifically to customers' business needs.

"We are convinced by the necessity of electric drive in our vans, especially in city centre applications. That said, electrification of the commercial fleet is not an end in itself, but follows the same principles as a classic drive when it comes to profitability," says Volker Mornhinweg, head of Mercedes-Benz Vans. "With our eDrive@Vans initiative, we're showing that only holistic mobility solutions extending beyond the drive itself present a real alternative for commercial customers. The eVito is the starting point and will be followed by the new generation of Sprinter and Citan."

If fleet electrification is to compete on equal terms with the classic internal combustion engine, Mercedes says it will need more than the right economic parameters such as the cost of purchasing and operating the vehicles. Just as important from the perspective of total cost of ownership is the integration of a robust charging infrastructure, something that is almost non-existent in SA at present.

Electric mobility strategy is based on five main pillars

The company says its electric mobility strategy is based on five main pillars. The first is a holistic ecosystem segments vehicle development. Second, there must be a high level of industry expertise for the right product fit. Third, is a focus on profitability and low total cost ownership, while fourth is ensuring that customer co-creation is a new social point of development. The final pillar is transferring expertise and technology from within the Daimler Group.

Range will suit many city centre delivery operations

But back to the eVito and the company says that with an installed battery capacity of 41.4kWh, the range of the new eVito will be about 150km.

In unfavourable conditions such as low temperatures and with a full load, Mercedes is still claiming a range of 100km, a range that will suit many city centre delivery operations.

The battery can be fully charged in about six hours and the electric motor provides an output of 84kW and up to 300Nm. When it comes to top speed, the customer can choose between two options: a maximum speed of 80km/h fulfils all requirements in city traffic and urban areas while conserving energy and increasing range. If more speed is needed, customers can choose a top speed of up to 120km/h.

There will be a choice of two wheelbases, with the short wheelbase at 5,370mm and the long-wheelbase version offering a total vehicle length of 5,140mm. Maximum payload is 1,073 kg and a maximum load volume of 6.6m³ Installation of the battery beneath the vehicle contributes to the unrestricted usability of the entire load space. The maximum gross vehicle weight stands at 3,200kg.

Transition a response to challenges of current megatrends

Mercedes-Benz Vans is driving the transition from pure vehicle manufacturer to a provider of holistic mobility solutions with the Advance strategic future initiative launched in autumn 2016.

The strategic reorientation of Mercedes Vans is not only a part of its Advance strategy but also a response to the challenges of current megatrends - increasing urbanisation with growing traffic levels in urban areas, stricter requirements for air purity and demand for sustainable mobility.

Source: Business Day