

MAN Truck and Bus's range of eTrucks launches in 2024, with battery-electric drivelines capable of travelling up to 600-800km (373-500mi) a day. The line-up will include 4x2 tractors, 4x2 rigid trucks, 6x2 rigids and 6x2 drawbar models, with weights ranging from 20-42 tonnes. Dan Gilkes reports from the driver's seat

The coming fleet

By 2030, predicts MAN Truck and Bus, half of the vehicles it sells in Europe will have zero-emission drivelines, with a long-haul eTruck saving up to 100 tonnes of CO₂ per year, while covering 120,000km (75,000mi). The company also claims that businesses could save up to €7,000 per year in fuel costs versus a diesel truck.

The eTrucks have a modular battery design, using battery packs designed and built at MAN's Nuremberg engine plant. Using what MAN claims is a commercial vehicle-specific internal chemistry, these batteries will be capable of taking a 100% recharge in just 45 minutes, using Megawatt Charging Systems (MCS). The company is gearing up to build more than 100,000 battery packs a year from 2025 to meet the demand for eTrucks.

Tractor models will be offered with four, five or six battery packs, while longer rigid chassis can be had with three to six batteries on rigid models. Two battery packs replace the diesel truck's engine and transmission inside the chassis, with additional units outside.

With battery packs weighing 650kg, MAN claims that a 4x2 tractor with five packs will have a similar overall weight to a diesel model. That will allow customers to tailor the trucks to their operation, reducing the number of batteries to increase payload, or sacrificing payload to extend range.

CCS2 rapid DC charging systems, which will also be offered on the trucks for overnight charging, currently offer inputs of up to 350kW. The MCS system will be capable of providing up to 3.75MW of power. MAN's parent company Traton, which also includes Scania, is working with Volvo, Daimler and various charging providers to deliver suitable charging stations across Europe.

The eTruck uses a 300-350kW permanent synchron electric motor, delivering more than 3,000Nm of torque. Mounted in the middle of the chassis, with two or four gears, it

drives a conventional rear axle. A lever to the right of the steering wheel acts as a retarder, offering five steps of brake regeneration.

The parking brake releases automatically and the eTruck will crawl forwards or backwards without any pressure on the throttle. This is enough to hold the truck on an incline and makes it easy to manoeuvre. Push the pedal, however, and the eTruck moves away smoothly, with hardly any noise. Indeed, the whole driving experience is very relaxed, with ancillaries such as the air compressor operating very quietly.

Helping customers to transition to an electric future requires more than the truck, so MAN has created a 360° eMobility ecosystem, with charging infrastructure and supply, integrated route planning software with a single payment system, service and training.

The first step is a free eReady Check, which can be completed on the MAN website, with hauliers loading route distances, truck weights and other criteria to assess eTruck viability. This is followed by MAN's 360° eMobility consultation and a fleet assessment. Data-based optimisation follows. ABB, Heliox and SBRS-Schaltbau are helping to deliver charging hardware. [TE](#)

