



# THE FUTURE IS NOW

At the Innovation Day, Volkswagen Group presented the latest innovation in the field of automated driving, connectivity and alternative drive systems

Innovation. It was the main theme for the Volkswagen Group during the Innovation Day in Hamburg, Germany, on last October 11.

The aim of the Innovation Day is to present and discuss the improvements developed by the brands of the group (MAN, Scania, Volkswagen Caminhões e Ônibus, and RIO) in order to improve the transportation of goods and people.

The German group has long been committed to increasing efficiency and improving environmental performance in the world of transportation, as well as to making it safer. Research and application activities focus on three fields: automated driving, connectivity and alternative drive systems. As far as development is concerned, Volkswagen Truck & Bus is pooling the brands' resources with the aim of levera-





SCANIA ELECTRIC



MAN CNG



MAN ELECTRIC



MAN HYBRID



SCANIA HYBRID

# SUSTAINABILITY

The German Group has a wide-ranging portfolio of alternative solutions. In addition to engines powered by gas and biogas, it is developing electrical solutions for medium and heavy trucks as well as for city buses. And it will soon propose a complete range of electric vehicles for the European market. The jointly

developed electric powertrain will be the basis of any future generations of Volkswagen Truck & Bus vehicles. Both MAN and Scania will test the module on pre-series versions of a city-based battery bus in several European cities under everyday conditions. The electric buses are scheduled to

go into series production in 2020. As far as transportation of goods is concerned, the e-Delivery, a modern truck for urban logistics aimed at improving sustainability in urban delivery of goods, had its world premiere at the Innovation Day in Hamburg. The vehicle will be built at Volkswagen Caminhões e Ônibus in Brazil in 2020.

Initiatives are also under way to find solutions for electrifying heavy trucks in order to make them suitable for long-haul traffic. The e-road is the use of power lines, as in the rail sector. Test sections of road for electric vehicles are already available in Sweden. Test routes were also announced in Germany.

As far as vans is concerned, the eCrafter is an electric vehicle which is capable of up to about 200 km on a single charge. It will be delivered to selected clients by the end of 2017.

The VW I.D. Buzz Cargo is also being developed as a compact electrified van. It is under development, scheduled for launch in 2022 ●

ging synergies and incorporating the strengths of the individual brands in an optimum way. The development activities performed by each brand are coordinated by the Research and Development central function. This enables the Group to execute various major projects at the same time and with the

same level of focus. Anders Nielsen, CTO at Volkswagen Truck & Bus, pointed out «This is to avoid duplication and leverage synergies by reusing technologies across the brands. This will free up research and development resources to focus on new technologies as well as be faster to market in

a cost-efficient way.» An increasingly important role in the development of new technologies and products is played by factors such as efficiency, zero emissions and sustainability. «We chose the right time to bundle our expertise and pool our resources» said

Andreas Renschler, CEO of Volkswagen Truck & Bus, as well as Volkswagen AG Board Member responsible for commercial vehicles. «Today, we are one of the leading companies in the development of technologies and products for the future of transportation» ●

# AUTONOMOUS DRIVING

Volkswagen Truck & Bus is working closely together with Volkswagen Group Research to make automated driving on public roads a viable option, up to level 5 autonomy. The “Fellow Truck” project, for example, aims at gradually integrating modules of artificial intelligence into vehicles. Volkswagen aims at offering within a few years specific products for the autonomous transportation of goods and people on public roads. But for this to happen, we need changes to the legal framework and to the necessary infrastructures. Scania fully autonomous vehicles for use



in mines are already available and the first vehicle will be shipped soon. MAN too in cooperation with seven partners from industry, research, and administration has demonstrated with the BMWI-subsidized research project “aFAS” how far the technology of autonomous driving has evolved. For the first time in Germany, a driverless truck is driving autonomously as a safety vehicle for road maintenance works. ●

# CONNECTIVITY

Digitization is intended to radically change the world of transportation. Volkswagen Truck & Bus is actively promoting the logistics-related guide. With MAN and Scania, Volkswagen Truck & Bus is currently able to connect over 300,000 trucks. Together with the American partner, Navistar, the company will be able to expand the system in order to connect 650,000 vehicles worldwide. The vehicles will also have access to the RIO platform to request internal OEM services for their brand and those



offered by third-party suppliers. RIO is the open cloud-based platform of the Volkswagen Truck & Bus group and it interconnects all ‘players’ along the entire logistics chain. It connects services such as vehicle monitoring, driver communication, driving and efficiency analysis, digital maintenance management, and tachograph data plus other advanced logistic services that make them available on the online market. The RIO platform and the RIO applications will be available by the end of the year. ●