VOLKSWAGEN

AKTIENGESELLSCHAFT

Media information

NO. 172/2018

Green light for research project with HGVs using overhead power lines on public roads in Germany

- Research project for the electrification of HGVs supported by the German Federal Ministry for the Environment
- The aim is to reduce CO₂ emissions and relieve the burden on the environment
- Joint project by Siemens and Volkswagen Group Research
- First test drives with Scania hybrid trucks to start in early 2019

Wolfsburg, May 24, 2018 - The German Federal Ministry for the Environment today gave the green light for a subsidised pilot project to conduct research and development on the electrification of long-haul trucks. The electricity supply for the heavy goods vehicles is provided by means of a pantograph from an overhead power line. The two project partners involved – Siemens and Volkswagen Group Research – are sharing the tasks: Siemens is responsible for developing the pantograph while Volkswagen is providing the required hybrid trucks via the Group's Swedish subsidiary Scania and is carrying out the accompanying research. Trial operations will be conducted jointly as from early 2019.

During the course of this research project, one objective will be to determine how goods traffic can be organised in a more climate-friendly manner, particularly over long distances. This is because in Germany alone heavy goods traffic results in CO_2 emissions of 56 million tonnes per year. The extent to which electrification of routes for HGVs can bring about a reduction is to be determined within the scope of this project.

Both Siemens and Scania are already conducting trials on the supply of electrical energy for goods traffic. Now this technology will be gradually coming onto German public roads as part of a research project scheduled to run for three years.

It will involve two Scania trucks with varying degrees of electrification in the hybrid drivetrain taking part in test drives on three different trial routes in Germany. From the beginning of 2019, the first vehicle will be travelling periodically in traffic on public roads on sections of the A5 motorway to the south of Frankfurt, then later also on sections of the A1 motorway near Lübeck and on the B442 federal highway near Gaggenau, as soon as the overhead power line infrastructure there is complete. This research project represents the preliminary stage for a real field trial planned on a larger scale.

VOLKSWAGEN

AKTIENGESELLSCHAFT

Dr Axel Heinrich, Head of Group Research at Volkswagen AG commented as follows: "We are expecting the project to produce some useful findings on the potential for saving CO₂ emissions through electrification and on the required energy demand of the trucks. These findings will then form input for the development of future generations of electric drives and the associated energy management."

"The eHighway system is an economical and sustainable option for decarbonizing road transport. The field trials in Germany are an important step on the way toward realizing these systems," said Roland Edel, Chief Technology Officer of the Mobility Division at Siemens. "Along with the electrical drive components, the smart pantograph is the key part of the system: It connects the truck to the infrastructure along the highway. An efficiency of more than 80 percent is made possible by the efficient conductive energy transmission to the truck."

"For long-haulage transportation, Scania sees electric highways as one promising technology for a sustainable transport future. Vehicle electrification is developing quickly and with its environmental, social and cost benefits, it will play an important role in the shift to a fossil-free transport system", says Claes Erixon, Executive Vice President Research and Development, at Scania.



Volkswagen AG Global Group Communications | Spokesperson Digitalization and Innovation Contact Jens Bobsien Phone +49-5361-9- 325 29 E-mail jens.bobsien@volkswagen.de | www.volkswagen-media-services.com

🔰 YouTube 🗵 🧿

Siemens AG | Media Relations Contact Stefan Wagner Phone +49 89 63621561 E-mail sw.wagner@siemens.com