



EREV

ELECTRIC TRUCK WITH FUEL POWERED RANGE EXTENDER



EREV: DHL AND SCANIA'S ELECTRIC TRUCK SOLUTION

DHL Group and heavy vehicle manufacturer Scania have collaboratively developed an electric truck equipped with a fuel-powered generator that generates electricity to recharge the batteries. This innovative vehicle, known as the EREV, enables a transition to battery-electric road transport without the need to wait for a comprehensive charging network.

ADVANCING SUSTAINABILITY DESPITE CHALLENGES

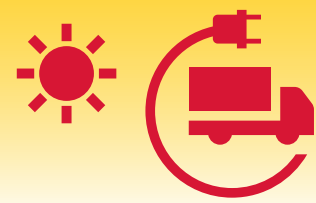
Full reliance on battery-electric trucks is still some time away due to the need for robust renewable electricity, grid, and charging infrastructure. Instead of waiting, DHL and Scania are collaborating to enhance sustainability in logistics and significantly reduce CO₂ emissions, thereby contributing to climate-friendly transport in the short term.

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KEY FEATURES OF THE EREV*



Specification

Vehicle Type

Powertrain

Battery Capacity

Tank Capacity

Range (Battery + Generator)

Fuel-Powered Generator

Maximum Weight

Cargo Capacity

Top Speed

Length

Charging/Fueling Options

Detail

Extended Range Electric Vehicle (EREV)

230 kW electric motor (295 kW peak)

416 kWh lithium-ion

200 l

650–800 km

120 kW
Tank capacity 200l

40 metric tons

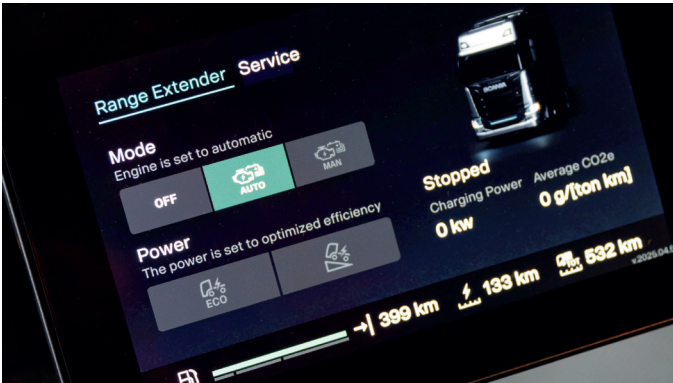
Approx. 1,000 parcels (swap body), trailer capable

89 km/h

10.5 meters

Rechargeable at depots; generator uses petrol/diesel

*First edition of EREV operates with petrol-fueled Range Extender (REX)
**The vehicle can be equipped with software that limits the use of the REX, thereby ensuring a defined CO₂ savings.



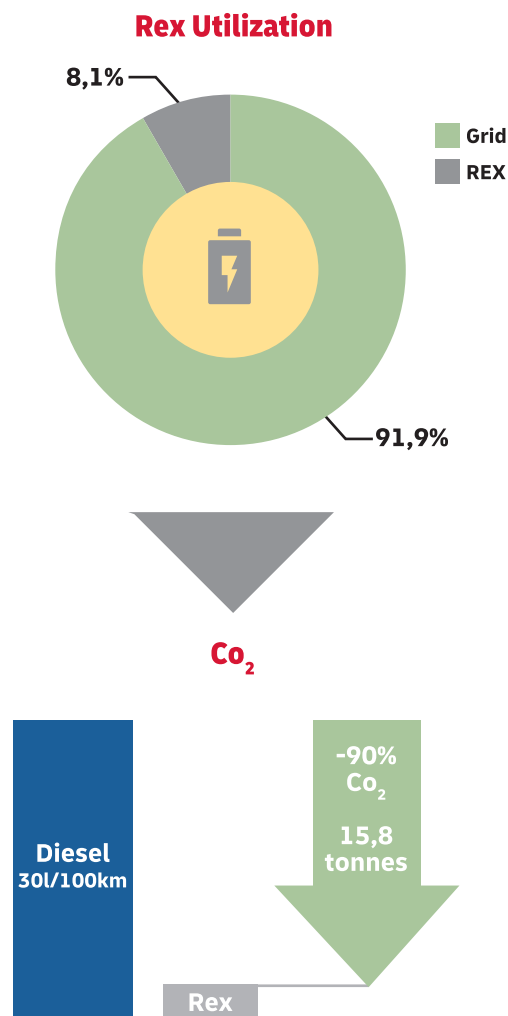
TEST RESULTED IN 90% LESS CO₂ EMISSIONS

The EREV has been tested by Post & Parcel Germany division for transport between the parcel centers near Berlin and Hamburg. During this time, the truck has covered around 22,000 kilometers and typically traveled the approximately 250-kilometer route on electric power charged from the grid. On colder days or when facing unpredictable charging difficulties (such as charging stations being occupied or malfunctioning) that require an additional range, the range extender is turned on, serving as a backup offering additional flexibility. This is a significant advantage over fully electric trucks, especially as this facilitates reliable route planning – something that is indispensable in logistics. The generator itself cannot directly drive the vehicle's drive axle. In that sense the EREV is different from conventional hybrid vehicles and a novel concept. A concept with great potential to support the transition to electrified transport, both for the transport operator and the transport system as a whole.

In the first phase of the test operation, the EREV operated over 91,9% of the time using grid charged energy, with only 8.1% of the energy supplied by the built-in range extender. Compared to a conventional truck, the EREV has so far saved more than 90% of CO₂ emissions, resulting in nearly 16 tons less CO₂ during the testing period than a comparable diesel truck.



CO₂ REDUKTION

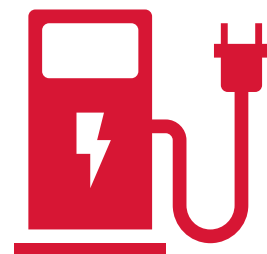


8,1 % Rex utilization has led to approximately 90% (15,8 tonnes) CO₂ reduction compared to diesel

A CALL FOR REGULATORY FRAMEWORK

To enable the rapid integration of transition technologies like the EREV into the transformation process and to quickly leverage their CO₂ savings potential, appropriate regulatory frameworks are essential. For the European Union and its Member States, this includes:

- Recognizing EREVs as a valid, climate-relevant technology and implementing targeted incentives that promote the acceptance of these technologies, paving the way for more sustainable mobility.
- Rewarding EREVs (and other transition technologies) through toll pricing that acknowledges certified CO₂e reductions.





DHL AND SCANIA TO TEST ELECTRIC TRUCK WITH FUEL-POWERED RANGE EXTENDER

DHL GROUP

DHL Group is the world's leading logistic company. The Group connects people and markets and is an enabler of global trade.

It aspires to be the first choice for customers, employees, investors and green logistics worldwide.

To this end, DHL Group is focusing on accelerating sustainable growth in its profitable core logistics businesses and Group growth initiatives.

By the year 2050, DHL Group aims to achieve net-zero emissions logistics.

DHL Group is home to two strong brands: DHL offers a comprehensive range of parcel, express, freight transport, and supply chain management services as well as e-commerce logistics solutions. Deutsche Post is the largest postal service provider in Europe and the market leader in the German mail market. DHL Group employs approximately 594,000 people in over 220 countries and territories worldwide. The Group generated revenues of approximately 81.8 billion Euros in 2023.

SCANIA

Scania is a world-leading provider of transport solutions. Together with our partners and customers, we are driving the shift towards a sustainable transport system.

In 2024, we delivered 96,443 trucks, 5,626 buses as well as 11,170 industrial and marine power systems to our customers. Net sales totalled over SEK 216 billion, of which about 20 percent were services related. Founded in 1891, Scania now operates in more than 100 countries and employs some 59,000 people. Research and development is carried out globally with our main site in Södertälje, Sweden.

Production takes place in Europe and Latin America with regional product centres in Africa and Asia.

Scania is part of TRATON GROUP. For more information visit: www.scania.com

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