

Dachser Climate Protection

Alternative Antriebe – Herausforderungen in der Umstellung des Fuhrparks

Kassel | 13. November 2024 | Andre Kranke | Head of Corporate Research & Development



Sustainable Development Goals SDGs



DACHSER Intelligent Logistics

Air pollution and entry bans



Current regulations for cars and trucks

Dan Lert: The City of Paris aims to phase out diesel by 2024, and thermal cars by 2030

By Frédéric Simon | EURACTIV | translated by Anne-Sophie Gayet 🛗 20. Juni 2022 (updated: 🎬 24. Juni 2022)



"Our long-term vision is not to elimina



München will dreckige Diesel-Fahrzeuge aussperren





Dichter Verkehr schiebt sich im abendlichen Berufsverkehr über den Mittleren Ring. (Foto: Sven Hoppe/dpa)

Die Stadt möchte von Februar 2023 an ein stufenweises Fahrverbot umsetzen, das auch auf dem Mittleren Ring geiten soll. Damit soll die jahrelange Überschreitung von Abgas-Grenzwerten gestoppt werden.

29 Apr 22

100 EU cities commit to total climate neutrality by 2030

Jun 7, 2023 - 11:38 am

THERLANDS TAX

Amsterdam brings forwa

2025 | AMSTERDAM | BEV | ELECTRIC SCOOTERS | EI



EU: 238,000 early deaths due to air pollution in 2020

The European Union's environment watchdog has reported 238,000 premature deaths in the bloc in 2020 due to air pollution.



11.04.2022



The city's air quality will further deteriorate with AQI escalating to 359 in the very poor category on Wednesday

IANS, New Delhi, NOV 29 2022, 12:40 IST | UPDATED: NOV 29 2022, 12:41 IST



por category air quality may lead to respiratory illness, doctors say. Credit: AFP Photo



Global Warming & Greenhouse Gas

Current Key Figures



Source: World Meteorological Organization & European Commission (EDGAR) | *) thereof 71.6% CO2 emission from fossil fuels (oil, coal, gas)



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At DACHSER, we are convinced that in the long run, only the companies that put themselves on a sustainable footing will have a future.

DACHSER Climate Protection focuses on efficiency, innovation, and inclusive responsibility to help achieve the global community's long-term goal of net-zero emissions.

Burkhard Eling, CEO of DACHSER

Areas of action

Process efficiency

Avoidance of greenhouse gas emissions through intelligent logistics processes



Energy efficiency

Reduction in greenhouse gas emissions through the use of energy-saving stateof-the-art technologies



Research & innovation

Support for the development of new technologies and concepts for emission-free logistics

> CLEAN ENERGY CLEAN FUTURE

> > ·H

Corporate Citizen+

Social and community activities beyond the company's business interests



Transformation to zero emission



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Key zero emission technologies

Emission- free	ZEV Zero-emission Vehicle	Zero-emission vehicle: no direct emissions of air pollutants (nitrogen oxides, etc.) and greenhouse gases (CO ₂ , methane, etc.). For trucks regulated in EU 2019/1242
	BEV Battery Electric Vehicle	Battery-electric vehicle (car, truck and bus): Electric motor/e-axle powered by 100% electricity via a traction battery. Counts as ZEV class
	FCEV Fuel Cell Electric Vehicle	Hydrogen fuel cell electric vehicle: Electric motor/e-axle is powered by an H_2 fuel cell and a traction battery. Counts as ZEV class.
	RE Renewable Energy	Renewable Energy (RE): according to EU Renewable Energy Directive (RED II) electricity and power and fuels based on wind, solar, hydropower and advanced biomass.
	Green Power Grünstrom/Ökostrom	Electricity: generated on the basis of renewable energies. It can be self-produced (onside) or purchased via guarantees of origin (GO/REC).





Intelligent Logistics

GHG Emissions Well-to-Wheel

■ Max GHG savings ■ Min GHG savings

L Our way to zero-emission





25 photovoltaic systems installed in Europe

18 more to follow

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More than 688 charging stations in over 88 branches



Over **90** zero-emission vehicles deployed across Europe

Research and testing of electromobility at **3** e-mobility sites





100% green electricity in all DACHSER branches



The European Union's **Corporate Sustainability Reporting** Directive (CSRD) is the basis for a standardized assessment of climate protection and sustainability measures



Assessment of the sustainability of corporate performance in the areas of environment, social affairs and corporate governance.

DACHSER score 2023: 52%



Assessment and disclosure of environmental data from companies, cities and countries.

DACHSER score 2023: B on a scale from A - D

DACHSER E-Mobility Sites





BEV Cars & Trucks and Charging

Operation and charging of a fleet of batteryelectric private cars, company cars and trucks



PV Plants and Green Power

Production and use of renewable electricity mainly through photovoltaic plants



Smart Grid & Load Management

Intelligent management of power sources and power consumption



FCEV Trucks and H₂ Infrastructure

Operation and refueling of hydrogen fuel cell electric trucks

Zero-emission vehicles for city distribution





Cargobikes

Payload: 300 - 500 kg

Range: 60 - 70 km

Pallet spaces: 1 - 3

Examples of vehicle types: Cenntro Antric One Cargobike BicyLift Trailer Nanuk Megaliner Cargo Cycle



Vehicle < 3.5 t

Payload: **700 - 1,000 kg** Range: **120 km** Pallet spaces: **2 - 3**

MAN eTGE Cenntro Tropos ABLE XT Renault Master



Vehicle 7.5 - 8.25 t Payload: 2.5 - 3.8 t Range: 120 - 200 km Pallet spaces: 15

Fuso eCanter Next Gen



Vehicle > 12 t Payload: 5 - 8 t Range: 250 - 350 km Pallet spaces: 17 - 18

Mercedes Benz eActros DAF LF / XB Volvo FL Renault D16ZE

State-of-the-art BEV Semi & Swap-body Truck (Volvo FH) Range about 300 km | Battery 540 kWh | In operation in Hamburg, Malsch, Freiburg, Dortmund etc.

國制廠

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ELECTRI

DACHSE

ELCERE.

10.000

First BEV Food Trucks & Trailer



105

FRC-FRC 01-2029 DACHSE **Food Logis** ST13137 etrailer.

BEV Food Truck (Volvo FL) Range about 250 km in operation in Neuss

BEV Food Trailer (Krone) Autonomy 4-6 h | Battery 23 kWh in Hamburg, Erlensee, & Langenau

First H₂ FCEV Truck (Hyundai Xcient F-Cell 6x2) Range about 400 km | 31 kg H₂ tank | 72 kWh battery For the first time at Dachser: Magdeburg branch, Germany

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MD . H 2208

BEV Company Cars



Ladevorgangs

150 kW

80 Bg

Clear roadmap to zero emission Dachser Company Cars "BEV only" in Germany since October 2024

BEV Challenges

Lack of focus on fast & reliable...

- adaptation of outdated technical regulations and rules
- expansion of electricity grids and grid connections in commercial areas
- expansion of public truck charging parks
- reduction of electricity costs at public fast charging stations
- strengthening demand to increase vehicle supply & reduce vehicle costs
- definition of legal frameworks
- creation of investment certainty



Working on challenges every day Our contribution on the way to net zero emissions

DACHSE

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