

DAIMLER



Electric Drive. The Age of Electric
Mobility Begins.

We invented the car and the truck and are passionate about their future.

Vehicle electrification is a crucial development for the sustainable and individual mobility of the future. Electric drive systems are an innovative solution for meeting the challenges of urban traffic in particular. In urban conurbations, which according to studies will contain up to two thirds of global traffic in the future, electric vehicles can make an important contribution to locally emissions-free, quiet and efficient mobility.

This sentence sums up the two concepts at the heart of Daimler's philosophy: tradition and innovation. Both concepts are closely related since, as the inventor of the automobile, we are also providing groundbreaking solutions for its future. Reinventing the car is the ambitious goal that underlies our entire business and its associated activities. We are dedicated to continuing our tradition as an automotive pioneer and will play an important role in designing the mobility of the future with our innovative strength.

With the "e-mobility Berlin" project, we are marking the beginning of a new age of mobility with electric vehicles. The goal of this joint project for locally emissions-free electric cars is an integrated mobility concept that is completely suitable and convenient for everyday use. As part of the project, Daimler will be supplying more than 100 electric Mercedes-Benz cars and will also take care of their maintenance. RWE will be responsible for the development, establishment and operation of the charging infrastructure, with about 500 power charging points, as well as the power supply and central system control.

Sustainability is what drives us. The way towards emissions-free mobility.

Innovative drive technologies form a crucial part of our vision of future mobility. At Daimler, we therefore meet in equal measure our customers' individual requirements and society's need for clean, efficient and sustainably produced automobiles.

When we consider the mobility requirements of the future, there are a number of different solutions, depending on whether individual mobility is required for long-distance transport, regional traffic or urban situations. In particular, the electrification of vehicles is becoming increasingly important for urban transport.

For this reason, we are working on the basis of a drive mix which encompasses three basic approaches: the optimisation of vehicles with state-of-the-art internal combustion engines, further enhanced efficiency through needs-based hybridisation, and locally emissions-free driving with fuel cell and battery-powered vehicles. These drive technologies form an integral part of our road map for sustainable mobility.

Daimler's road map for sustainable mobility

Efficient vehicles with optimised internal combustion engines

Further enhanced efficiency through hybridisation

Emissions-free driving with fuel cell and battery-powered vehicles

Energies for the Future of Mobility

Clean fuels for internal combustion engines

Forms of energy for emissions-free driving

The electrification of vehicles. Locally emissions-free for the future.

The electrification of vehicles is a crucial element of our road map for the future of mobility.

Here, we make a distinction between hybrid vehicles and those powered primarily with electric drives, such as exclusively battery-powered vehicles and those with fuel cell drives.

Exclusively electric driving with fuel cell and battery-powered vehicles offers significant advantages especially in urban areas, since they are quiet, highly efficient and locally emissions-free.

Fuel cell drive vehicles, however, have a significantly greater range than purely battery-powered vehicles, which means that they can also be used over greater distances. Fuel cells also enable the design of emissions-free drive systems for larger and heavier vehicles, including commercial vehicles.

We are working intensively to launch both drive options on the market as soon and as comprehensively as possible. With more than four million kilometres driven, Daimler is the manufacturer of the largest and most “experienced” fuel cell vehicle fleet in the world. There are more than 60 Mercedes-Benz A-Class F-CELL vehicles and over 36 Mercedes-Benz Citaro F-CELL buses currently in operation worldwide.

With the smart fortwo electric drive, we already launched the pilot operation for a purely electrically driven vehicle in 2007. In London, 100 smart fortwo electric drive vehicles are being tested by customers.

In late 2008, Daimler, together with RWE, has embarked on a joint project in Berlin with more than 100 smart and Mercedes-Benz electric vehicles.

The ideal town vehicle – the smart fortwo ed in London.





Berlin's motorists will fuel up with electricity in the future. "e-mobility Berlin" is the world's largest joint project for locally emissions-free transport with electric vehicles.

“e-mobility Berlin”. An innovative and customer-friendly mobility concept.

With “e-mobility Berlin”, Daimler and RWE have launched the world’s largest joint project for electric cars in Berlin.

The initiative covers all components for the efficient use of battery-powered vehicles – from state-of-the-art innovative drive technologies to a customer-friendly infrastructure. The broad-based use of electric cars will be made as convenient and accommodating to motorists’ everyday needs as possible.

“e-mobility Berlin”:
Innovative drive
technology
and infrastructure.

As part of the project, Daimler will supply more than 100 electric Mercedes-Benz cars and will also take care of their maintenance. RWE will be responsible for the development, establishment and operation of the charging infrastructure, with about 500 power charging points, as well as the power supply and central system control.

Simply refuel the
smart fortwo ed at
one of 500 power
charging stations.



“e-mobility Berlin”. Politics, energy suppliers and the automotive industry are going mobile.

A unique form of cooperation across industries, “e-mobility Berlin” brings together the specific expertise and considerable experience of two key industries with the aim of creating sustainable and eco-friendly mobility in urban areas. For this reason, “e-mobility Berlin” is also being supported by the German Federal Government.

The “e-mobility Berlin” joint initiative is a good example of what can be achieved in the area of environmental and climate protection when politics, energy suppliers and the automotive industry join forces.

“Our mobility concept is based on an integrated solution combining cars that are totally accommodating with regard to motorists’ everyday needs, with a purpose-built charging infrastructure. With this concept, we will make a significant contribution to improving the customer-friendliness and everyday suitability of electric cars.”

Dr. Dieter Zetsche, Chairman of the Board of Management of Daimler AG and Head of Mercedes-Benz Cars

Launch of “e-mobility Berlin” (left to right):
 Dr. Dieter Zetsche, Chairman of the Board of Management of Daimler AG, Federal Chancellor
 Dr. Angela Merkel, Jürgen Grossmann, CEO of RWE,
 Matthias Wissmann, President of the VDA.



Trendsetting. Electrically mobile with the lithium-ion battery.

The key technology behind the electrification of vehicles is the lithium-ion battery. Specially developed for use in automobiles, the lithium-ion battery offers significant advantages over conventional technologies.

Lithium-ion battery technology will go into series production for the first time in 2009 in the Mercedes-Benz S 400 BlueHYBRID.

Compact dimensions and therefore less weight, a markedly improved performance for greater distances, shorter charging times, and a long life and high reliability – these are the advantages of the lithium-ion battery which will go into series production for the first time in 2009, in the Mercedes-Benz S 400 BlueHYBRID.



Pilot project in London. Expertise for the electric mobility of tomorrow.

Since the end of 2007, a test fleet consisting of 100 first-generation smart fortwo electric drive vehicles has been in daily operation in London, with the vehicles being used by public authorities such as the police, amongst others.

As a locally emissions-free car, the smart fortwo ed is associated with tax advantages in the UK, and is also exempt from the toll charges that apply to London's inner city.

With its competitive performance values, the smart fortwo ed is the ideal vehicle for city traffic: agile, economical and climate-friendly.

Technical data for the smart fortwo ed (London, 2007)	
Rated output	30kW/41 HP
0-60 km/h	6.5 s
Maximum speed	Approx. 100 km/h
Range	Approx. 115 km in accordance with NEDC
NEDC consumption	12 kWh/100 km
CO ₂ emissions	0 g/km
Weight	Approx. 854 kg
Rated voltage	230 V
Charging cycle	> 1,000

In daily operation since 2007: the smart fortwo ed is used by police and authorities in London.



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and are passionate about their future.



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