# Sustainability.

## **Sustainability at Daimler**

**Our sustainability strategy.** We want to enhance the value of our company over the long term. And we can do that only if we define value creation holistically and measure the success of our business operations not only with the use of financial figures. In order to do that, we have firmly established sustainability as one of our goals and as a basic principle of our corporate strategy. The principle of sustainability determines our entrepreneurial activity: in the areas of economics, corporate governance, environmental protection and safety, as well as in our relations with employees, customers and society as a whole. **()** see page 26

The ideas that are of fundamental importance to us include the ten principles of the Global Compact, to which we are committed as a founding member of the compact and a member of the LEAD team since 2011. Our environmental and energy principles define the framework of our environmental protection activities and objectives. We also comply with the labor standards established by the International Labour Organization (ILO) and with the OECD guidelines for multinational companies.

Effective and coordinated strategies and initiatives ensure that the concept of sustainability is firmly embedded in our business operations. In our Group-wide sustainability management system, these strategies are supported by specific measures and measurable targets. Our "Sustainability Program 2020" is an important step in this direction; it defines our main areas of activity in the years ahead. We aim to steadily continue reducing pollutants and emissions, further enhance the safety of our vehicles, expand our dialogue with our suppliers and dealers, and further strengthen our social involvement.

**Comprehensive reporting on sustainability.** In 2013, Daimler published its ninth Group-wide sustainability report. It provides a detailed and comprehensive sustainability balance sheet for the previous financial year and is supplemented by an interactive online sustainability report that contains more detailed and extensive information.

The new sustainability report covers financial year 2013. It will be presented at Daimler's Annual Shareholders' Meeting in early April 2014. The report was already drawn up in line with the Global Reporting Initiative (GRI) guidelines 4.0. In this context, Daimler specifically highlighted all of the company's key sustainability-related issues. This applies in particular to focal topics such as the reduction of the  $CO_2$ emissions generated by our products and production activities, the use of senior experts, our activities in China, and the company's mobility concepts. In addition, we report on specific issues such as the handling of contracts for work and services and Daimler's position regarding the issue of refrigerants. **()** see page 112

### **Research and development**

**Research and development as key success factors.** Research and development have always played a key role at Daimler. Our researcher engineers anticipate trends, customer wishes and the requirements of the mobility of the future, and our developer engineers systematically implement these ideas in products that are ready for series production. Our goal is to offer our customers fascinating products and customized solutions for need-oriented, safe and sustainable mobility. Our technology portfolio and our key areas of expertise are oriented toward this objective.

The expertise, creativity and drive of our employees in research and development are key factors behind our vehicles' market success. At the end of 2013, Daimler employed 21,300 men and women at its research and development units (2012: 21,100). A total of 13,600 employees (2012: 13,400) worked at Group Research & Mercedes-Benz Cars Development, 5,600 (2012: 5,600) at Daimler Trucks, 1,000 (2012: 1,000) at Mercedes-Benz Vans, and 1,100 (2012: 1,100) at Daimler Buses. Our international research and development network. During the year under review, we expanded our research and development network in a targeted manner, expanding it to 22 locations in ten countries. Our biggest facilities are in Sindelfingen and Stuttgart-Untertürkheim in Germany. In Sunnyvale, California, the new headquarters of our research facilities in North America, approximately 100 people are employed at present and this number is scheduled to be doubled. In Asia, we have an important center in Bangalore, India, and the Global Hybrid Center in Kawasaki, Japan, as well as a research and development center in Beijing, which began operations in 2012. We opened a new research center in Bangalore in January 2013. With its approximately 1,300 employees, the new facility is Daimler's largest research and development center outside Germany. In March 2013, our van joint venture in China, Fujian Benz Automotive Corporation, opened Mercedes-Benz Vans' first product development center outside Germany, in Fuzhou. We also work together with numerous renowned research institutions worldwide and participate in international exchange programs for young scientists.



# **C.39**

Research and development expenditure by division

	2012	2012	12/12
	2013	2012	13/12
In millions of euros			% change
Daimler Group	5,385	5,644	-5
thereof capitalized	1,284	1,465	-12
Mercedes-Benz Cars	3,751	3,863	-3
thereof capitalized	1,063	1,125	-6
Daimler Trucks	1,140	1,197	-5
thereof capitalized	79	180	-56
Mercedes-Benz Vans	321	371	-13
thereof capitalized	139	137	+1
Daimler Buses	181	222	-18
thereof capitalized	3	23	-87

**Targeted involvement of the supplier industry.** In order to reach our ambitious goals, we are also cooperating very closely with research and development units from the supplier industry. Daimler must be closely interconnected with supplier companies in order to deal with the rapid pace of technological change in the automotive industry and the need to quickly bring new technologies to market. As part of our joint research and development work, we ensure that our company retains the key technological expertise it needs in order to keep our brands distinct and to safeguard the future of the automobile in general.

Intellectual property rights secure our leadership in technology and innovation. 128 years after the automobile was invented, our researchers and developers continue to regularly apply for patents to protect their new ideas. At the end of 2013, the patent portfolio of Daimler AG and its subsidiaries comprised more than 21,800 patents and patent applications (2012: 21,800). The new S-Class alone involves more than 800 of these intellectual property rights. They not only secure our scope to apply innovative technologies, they also ensure the exclusivity of innovations such as the high-comfort chassis system MAGIC BODY CONTROL. In addition to owning the intellectual property rights to our technology, we have more than 6,100 protected product designs. Our portfolio of intellectual property rights is completed with around 32,500 legally protected trademarks worldwide. They include the Mercedes-Benz brand, which, according to the internationally wellknown brand consultant Interbrand, is the most valuable premium automotive brand in the world. Our portfolio of intellectual property rights is also becoming increasingly important with regard to future alliances and partnerships. The intellectual property rights supplement our researchers and development engineers' expertise and make Daimler a sought-after partner for technology and product partnerships.

€5.4 billion for research and development. We want to continue shaping technological transformation in the automotive sector through our pioneering innovations. As we had already announced in the Annual Report 2012, we once again invested a very large amount of money in research and development work in 2013. Of the total investment of €5.4 billion (2012: €5.6 billion), €1.3 billion (2012: €1.5 billion) was capitalized as development costs, which amounts to a capitalization rate of 24% (2012: 26%). The amortization of capitalized research and development expenditure totaled €1.1 billion during the year under review (2012: 1.0 billion). With a rate of 4.6% (2012: 4.9%), the research and development expenditure also stayed at a high level in comparison with revenue. The focus was on new vehicle models, extremely fuel-efficient and environmentally friendly drive systems and new safety technologies. We made improvements in all of the main areas that further increased our vehicles' efficiency - ranging from energy management and aerodynamics to lightweight engineering.

The most important projects at Mercedes-Benz Cars were the successors of the C-, E- and S-Class, the new compact cars and the new smart models. In addition, we are constantly working to develop new engine generations, alternative drive systems and innovative safety technologies. Mercedes-Benz Cars spent a total of €3.8 billion on research and development in 2013 (2012: €3.9 billion). Daimler Trucks invested €1.1 billion in research and development projects (2012: €1.2 billion). That division's main projects were the continuous further development of engines with a focus on optimizing fuel consumption and complying with new emission standards, working on alternative drive systems and the successor generations of existing products. R&D expenditure at Mercedes-Benz Vans concentrated on the successor models of the Vito and the Viano. The Daimler Buses division primarily focused its development activities on new products, compliance with new emissions standards, and alternative drive systems. **7** C.38 **7** C.39

#### **Innovation and safety**

A tradition of innovation. Innovations have played a key role at our company ever since Carl Benz and Gottlieb Daimler invented the automobile. Today, they are more important than ever before, because the accelerated pace of technological development and the challenges posed by climate change and environmental protection policies face us with the task of reinventing the automobile. Our customers expect safe, comfortable and powerful vehicles that are simultaneously becoming ever more fuel-efficient and environmentally friendly. In order to meet these requirements, we are forging ahead with our work in the research and development units.

**On the road to emission-free mobility.** Finite oil reserves, rising energy prices, population growth – especially in urban centers – and the unabated demand for mobility require new solutions for all aspects of transport. Our aim is to offer an intelligent mix of drive systems for every need. We intend to significantly reduce the fuel consumption and pollutant emissions of our vehicles today and to eliminate them entirely in the long term. We are implementing this intelligent mix of drive systems for our cars and commercial vehicles as part of our "Road to Emission-free Driving" strategy. We have defined the following focal areas for this approach:

- We continue to enhance our vehicles with state-of-the-art internal-combustion engines that we are optimizing to achieve significantly lower fuel consumption and emissions.
- 2. We are achieving further perceptible increases in efficiency through customized hybridization, i.e. the combination of combustion engines and electric motors.
- 3. Our electric vehicles, powered by batteries or fuel cells, are making locally emission-free driving possible. **7** C.40

During the year under review, new products and technologies enabled us to make continued rapid progress on the "Road to Emission-free Driving." The following examples show how this is happening.

Efficient cars and commercial vehicles with internalcombustion engines. Much of our research and development work continues to focus on making our cars and commercial vehicles with internal combustion engines even more efficient. The especially economical BlueEFFICIENCY models are reducing the fuel consumption and CO<sub>2</sub> emissions of our Mercedes-Benz cars and vans compared with the predecessor vehicles by up to 30% for certain models. This reduction is made possible by engines with small displacements and turbochargers, as well as by lightweight engineering, aerodynamic improvements, tires with low roll resistance, demand-appropriate energy management and an automatic start-stop function. A good example of this is the A 180 CDI BlueEFFICIENCY Edition<sup>1</sup>, which we began to deliver to customers in March 2013. The car consumes only 3.6 liters of diesel per 100 kilometers and emits only 92 grams of CO<sub>2</sub> per kilometer. The new S-Class also features numerous coordinated modifications of the body, the engines and the ancillary components that substantially reduce fuel consumption. The new C-Class, which will be delivered to customers beginning in the spring of 2014, boasts impressive fuel efficiency. Thanks to intelligent lightweight engineering, the overall vehicle weighs about 100 kilograms less than its predecessor. The weight reduction significantly reduces fuel consumption to levels that are the best in this segment.

1 A 180 CDI BlueEFFICIENCY Edition: fuel consumption in I/100 km urban 4,2 / extra-urban 3,2 / combined 3,6; CO<sub>2</sub> emissions in g/km combined 92.

## **C.40**

Road to emission-free mobility

