SUSTAINABILITY FACTBOOK
10 GOALS - 100 FACTS
At the end of 2017, the BMW Group marked the sale of more than 100,000 electrified vehicles with a highly symbolic light installation – announcing the start of its successful realignment with the message “The future is electric” (cover photo).
The BMW Group recognised this shift years ago – and has firmly established responsible practices throughout its entire value chain.

Vehicles with Efficient Dynamics technology, plug-in hybrid drive trains and electric motors, combined with innovative mobility services, already form the basis of our commercial success. In production, we pay close attention to the efficient use of resources – which benefits the environment and, at the same time, lowers our costs. Our wide range of community, social and cultural projects worldwide also make an important contribution and help preserve our company’s reputation over the long term.

We aim to be the most successful, most sustainable premium provider for individual mobility. To achieve this, we will continue to drive the transformation process in our value chain, so that we can offer people individual solutions in a world of connected mobility and improve quality of life in cities.

People all over the world have developed a growing awareness of sustainability. More and more consumers are questioning the products they buy and the supply chain behind them.
One of our tasks is to redesign urban mobility. For this reason, our BMW Group sustainability experts once again reached out to stakeholders in big cities all over the world in 2017 to discuss concrete challenges and solutions with them.

The outcomes of this dialogue are channelled into the BMW Group’s strategy process and therefore have a decisive influence on the company.

In times of fundamental change, discussion with stakeholders, students and customers is more important than ever. This ongoing dialogue helps us identify trends, meet expectations and build partnerships.
THE BMW GROUP AT A GLANCE

1916-2018: The BMW Group has been in existence for over 100 years.

The BMW Group currently operates 31 manufacturing and assembly plants in 14 countries, with a total of 129,932 employees worldwide.

The BMW Group has around 6,000 dealerships and sells its products in more than 150 countries.

The BMW Group works with more than 12,000 suppliers in 70 countries.

The BMW Group has three automotive brands – BMW, MINI, Rolls Royce – and one motorcycle brand.

The Company sold a total of 2,463 million automobiles and 164,000 motorcycles worldwide in 2017.

By 2017, more than 23 million customers were already using the BMW Group’s mobility services.
The BMW Group has set itself ten strategic sustainability targets, which the company has been consistently pursuing since 2001 and will be implemented by 2020. The BMW Group concentrates on three key areas:

- products and services
- production and value creation
- employees and society
PRODUCTS AND SERVICES

1

Products and services

CO₂- and pollutant emissions
Electromobility
Mobility patterns
CO$_2$-AND POLLUTANT EMISSIONS

By 2020, the BMW Group will reduce CO$_2$ emissions in the European new vehicle fleet (EU-28) by at least 50% compared to the base year 1995.
FACT 001

The BMW Group has reduced the average fuel consumption of its European new vehicle fleet by 42% since 1995.

FACT 002

Average fleet CO₂ emissions per kilometre worldwide decreased by around two per cent in 2017 to 141g CO₂/km. In Europe, average emissions were 122g CO₂/km; the figures for China were 154g CO₂/km and for the US 168g CO₂/km. Regional variations in fleet use are a result of differing consumer behaviour and different test cycles.

FACT 003

The BMW Group’s Euro 5 and Euro 6 diesel models on German roads today are already around 40 per cent below the average NOₓ levels published by the German Federal Environmental Agency in 2017.
To drive down fleet emissions, the BMW Group is introducing further vehicles with an electrified drive train to its model line-up. In addition to the BMW i3 launched in 2013 and the BMW i8, which followed in 2014, iPerformance models of the 2 Series, 3 Series, 5 Series, 7 Series and X5 with plug-in hybrid drive train have also been available to customers since 2015.

Since 2007, the BMW Group has gradually equipped its vehicle fleet with Efficient Dynamics technologies as standard, modified to the specific demands of individual models, engines and markets.

More than 15,000 BMW Group employees take company buses to and from work, clocking up 70,000 kilometres every day. This reduces the number of cars on the roads and avoids up to 32,000 tonnes of CO₂.
FACT 007

The “ECO PRO Mode” driving experience control has been standard in all BMW models since 2011. Depending on individual driving behaviour, it can reduce fuel consumption by up to 25 per cent and thereby guarantees maximum efficiency.

FACT 008

In 1929, the BMW 3/15 PS had an air resistance cw value of roughly 0.70. This figure has been significantly reduced in recent years to lower fuel consumption at higher speeds. Today, the new BMW i8 and the BMW 5 Series Sedan set the benchmark, with air resistance of 0.26 and 0.22 cw, respectively.

FACT 009

The environmental footprint of the new BMW 7 Series models is 25 per cent smaller than that of their predecessors. The new models are up to 130 kilograms lighter and use up to 1.3 litres less petrol per 100 km.

FACT 010

For the BMW Group, compliance with legal requirements – including local test specifications – has top priority. The BMW Group has appropriate compliance management systems in place to ensure that the legal requirements are met.
ELECTROMOBILITY

The BMW Group leads the way with its holistic approach to premium electromobility.
The BMW i charging service ChargeNow provides access to the world’s largest charging network with more than 137,000 charging points in 29 countries.

Electric vehicles in Munich, Oxford and Hong Kong can already be charged at BMW i Light & Charge streetlamps. The principle is simple: Park close to the energy-efficient LED streetlamp and charge your car’s battery cash-free in around three hours.

Interior surfaces in BMW i3 passengers’ field of vision are made of more than 80 per cent renewable natural and recycled materials. Examples include naturally-tanned leather, a dashboard made of certified eucalyptus wood and door trim from kenaf fibre, as well as seat covers made from sheep’s wool and PET bottles spun into yarn.
FACT 014

In 1972, the BMW Group’s first electric car accompanied marathon runners at the Olympic Games. Since it did not produce any emissions, it was allowed to drive ahead of the runners as a camera car.

FACT 015

The BMW i3 is the world’s first series-production vehicle in which the entire passenger compartment is made of ultralight carbon-fibre reinforced plastic (CFRP). Carbon fibre is flexible and malleable, and just as rigid as steel, but weighs less than half as much. As a result, the BMW i3 weighs up to 300 kilograms less than a conventional electric car.

FACT 016

The BMW Group sold more than 100,000 electrified vehicles in 2017. Since the launch of the BMW i3 in 2013, the total number of BMW Group vehicles with electric and plug-in hybrid drive trains on the roads has climbed to 200,000.
FACT 017

The BMW i3 is even making a name for itself as an emergency vehicle. The zippy little electric car from Munich is not only being used by the Bavarian and Rome Police, but also the Los Angeles Police Department and the London Fire Brigade.

FACT 018

The BMW i3 was the top-selling BMW in Norway in 2017.

FACT 019

To encourage more sustainable commuter traffic in city centres, the BMW Group has developed the 48-horsepower electric C evolution maxi scooter. The pure electric scooter has a range of around 160 km.

FACT 020

The BMW Group maintained its position as the clear market leader in electrified vehicles in Germany and Europe in 2017, with 21 per cent of new registrations. Globally, the company shares first place with an American supplier, which also holds 10 per cent of the market.
MOBILITY PATTERNS

The BMW Group will permanently change mobility patterns in selected metropolitan regions by 2020 through the introduction of integrated mobility services. One of the main ways we measure this goal is through the number of DriveNow and ReachNow customers.
A privately-owned vehicle is used for an average of just 1 hour a day. The remaining 23 hours it takes up parking space.

60 per cent of the world’s population is projected to live in cities by 2030. To develop resource and climate-friendly mobility concepts for more and more densely populated metropolises, the BMW Group is actively engaged in a large number of dialogue and scaling projects.

Of the more than 6,000 car-sharing vehicles the BMW Group provides to customers in Europe, more than 900 are pure electric. The world’s largest all-electric DriveNow fleet of 400 BMW i3s is based in Copenhagen. All vehicles are linked to public transport networks.
FACT 024

In Europe, more than one million DriveNow customers made use of the BMW Group’s car-sharing services in 2017. The BMW Group has been offering a similar service in the US under the name ReachNow since 2016. In 2017, more than 82,000 customers (2016: 38,000) took advantage of this service.

FACT 025

The BMW i3 was the first vehicle to come with full connectivity as standard that is able to suggest the most efficient route to a destination. Depending on traffic, the navigation system may recommend switching to public transport; it can also display timetables and parking spaces and indicate cycle rentals.

FACT 026

Vehicles looking for parking can account for up to 30 per cent of city traffic. The BMW Group is therefore developing mobility services, such as the app and web-based parking finder ParkNow, which makes available spaces easier to find and thereby reduces traffic.

FACT 027

In its 2017 stakeholder dialogues, the BMW Group once again discussed challenges and solutions for urban mobility with more than 200 experts and university students worldwide. Their findings contribute to the continued development of the BMW Group’s sustainability strategy.
In 2015, to drive the paradigm shift from car-centric to people-centric cities, the BMW Group established the Centre of Competence Urban Mobility, with a team of experts working with cities and local interest groups to develop sustainable mobility concepts for better urban quality of life.

In Munich, the BMW Group joined forces with various consortium partners to launch the research project “City2Share”. The initiative works with local residents to develop different mobility solutions – from sharing services to new delivery concepts.

In qualitative surveys of residents participating in the “firstmover.hamburg” and “Neue Mobilität Berlin” projects, the Centre of Competence Urban Mobility found that a third of those surveyed are not dependent on their own car and only use it occasionally. In the next step, the BMW Group convinced some of these residents to give up their cars and switch to alternative mobility options. In this way, the BMW Group is working to create more space for attractive new mobility solutions.
2

→ Production and value creation

Consumption of resources
Renewable energies
Sustainable, resource-efficient supply chain

PRODUCTION AND VALUE CREATION
CONSUMPTION OF RESOURCES

The BMW Group will reduce resource consumption (energy, water, waste, solvents) per vehicle produced by 45% by 2020 (base year 2006).
Since 2006, the BMW Group has reduced its energy consumption per vehicle produced by around 37 per cent.

In 2017, the BMW Group commissioned a new high-tech paint shop at its Munich plant, which applies two layers of paint directly one after the other without drying. This reduces CO₂ emissions from the paint application process by around 50 per cent and lowers power consumption by 27 per cent.

More than half of new BMW Group vehicles manufactured worldwide leave production plants by rail. As a result, the BMW Group was able to avoid roughly 80,000 truck journeys in 2017 in Germany alone.
FACT 034

The BMW Group’s investments in corporate environmental protection have led to a steady reduction in resource consumption since 2006 and saved the company more than 161 million euros in costs.

FACT 035

Since 2015, all end-of-life vehicles in the European Union and South Korea must be 95 per cent recyclable. The BMW Group already fulfils these legal requirements for all vehicles registered since 2008.

FACT 036

The BMW Group has reduced the amount of waste per vehicle produced by around 80 per cent since 2006.

FACT 037

The BMW Group computer centre at the Munich Research and Innovation Centre requires cooling. A process has been developed for this that uses the naturally cold temperature of groundwater. Unlike conventional cooling methods, this process generates no CO₂ emissions, supports climate protection and consumes up to 90 per cent less electrical energy.

FACT 038

The BMW Group uses closed water cycles and wastewater-free processes worldwide – reducing water consumption by around 32 per cent since 2006. Manufacturing at the engine plant in Steyr, Austria, has been 100 per cent wastewater-free since 2009.
BMW Group customers also have the option of returning their vehicle to the Munich Recycling and Dismantling Centre (RDZ). By far the longest trip to the Centre was made by three friends from South Africa, who drove their more-than-20-year-old BMW 318i all the way from Cape Town to Munich – some 17,000 km. However, old “Percy’s” journey did not end as planned at the Recycling Centre – but in the BMW Museum.

To increase energy efficiency, the BMW Group is expanding its heat and power cogeneration systems at seven locations. New gas engines will increase the percentage of captive energy at all these plants by up to 50 per cent.
RENEWABLE ENERGY

The BMW Group is a leader in the use of renewable energy in production and value creation.
By 2020, the BMW Group will obtain all its power exclusively from renewable energies – as announced by Markus Duesmann, member of the Board of Management of BMW AG, responsible for Purchasing and Supplier Network, in 2017, for the first time, at the UN Climate Conference in Bonn. Globally, the BMW Group obtains 81 per cent of its electricity from renewable energies; in Europe, that figure has already reached 100 per cent.

In Leipzig, four wind turbines ensure that the BMW i3 is produced using electricity that is 100 per cent CO₂-free.

Instead of lead-acid batteries, the roughly 500 forklift trucks at the BMW plant in Spartanburg in the US are powered by hydrogen. As a result, the entire fleet that drives around the 350,000-square-metre production facility produces zero emissions.

The largest solar installation in the UK is located on the roof of the MINI plant in Oxford. The 11,500 solar modules generate a total output of more than three megawatts of renewable electricity. The photovoltaic systems currently under construction at the BMW Group plant in Shenyang, China, will produce no less than 7.3 megawatts of electricity.
In the South African province of Gauteng, around 30,000 cattle supply dung for a biogas plant. The electricity it produces provides around 33% of the power needed by the BMW Group plant in Rosslyn.
Renewable energies also play an important role at the BMW Group’s suppliers: The joint venture between the SGL Group and the BMW Group uses 100 per cent hydropower from the Columbia River to supply energy-intensive production of carbon fibres for BMW i models.

At its Spartanburg location in the US, the BMW Group operates a methane gas plant. Methane from a neighbouring landfill is converted into electricity and process heat - avoiding 46,000 tonnes of CO₂ per year.

At the BMW Group plant in Leipzig, a storage farm with up to 700 BMW i3 batteries proves that used electric-car batteries can have a useful second life. By providing buffer storage for renewable energies, they help integrate wind power from the plant’s own wind turbines into the power grid and lower production energy costs.

In Dingolfing, the BMW Group and the Technical University of Munich have tested a so-called high-temperature aquifer storage unit, which allows unneeded, surplus heat to be stored at a depth of up to 700 metres and retrieved in the winter.
The BMW Group will significantly increase supply chain transparency and resource efficiency by 2020.
In 2013, in the interior of the BMW i3, the BMW Group became the first automobile manufacturer to use eucalyptus wood from 100 per cent certified responsible forestry management in accordance with the Forest Stewardship Council (FSC).

Kenaf, a plant belonging to the mallow family and obtained from Bangladesh, was used visibly for the first time in the BMW i3 for interior door trims and dashboard. The BMW Group, working with its supplier and the development agency “Deutsche Gesellschaft für internationale Zusammenarbeit”, has trained almost 1,000 local kenaf farmers to ensure sustainable cultivation of this natural material.
The BMW Group has participated in the Supply Chain Programme of the Carbon Disclosure Project (CDP) since 2014. The CDP is a non-governmental organisation aimed at reducing energy and resource consumption. Of the 189 BMW suppliers who report to the CDP, 47 already meet the BMW Group’s CO₂ requirements.

The BMW Group’s supplier network accounts for more than 80 per cent of the company’s value added.

BMW Group canteens in Germany serve around 47,000 meals per day, with 2.6 million servings of salad and 59.5 tonnes of coffee per year. The same sustainability standards apply to these suppliers as to those who supply vehicle parts, as well as to all other service providers, such as PR and travel agencies and IT specialists.

The BMW Group Supply Chain Response Team immediately investigates any cases of non-compliance. Business relations may be terminated if suspicions are confirmed.
In 2017, to increase transparency in the cobalt supply chain, the BMW Group became the first automobile manufacturer worldwide to make information on smelters and countries of origin for the raw material cobalt available to the public.

In the summer of 2015, the BMW Group deployed its first electric truck on Munich roads. By 2017, the company was using three fully-electric vehicles to supply the plant in Munich with vehicle parts, thereby avoiding around 82 tonnes of CO₂ emissions per year. Four more electric vehicles are also used by the BMW Group at the Landshut and Leipzig locations.

BMW Group Purchasing only commissions supplier locations that meet sustainability requirements defined in Munich. In 2017, the BMW Group evaluated around 6,000 supplier locations worldwide with regard to their sustainability criteria. As a result, corrective measures were agreed with around 2,440 supplier locations, more than 410 failed to meet the requirements and were not awarded a contract.

The BMW Group has set itself the goal of excluding so-called “conflict minerals”, such as tin, tungsten, tantalum and gold, from its supply chain by 2020 and increasing the percentage of minerals from certified smelters.
3

EMPLOYEES AND SOCIETY

- Employees and society
- Health and performance
- Long-term employee development
- Diversity
- Intercultural understanding
The BMW Group encourages personal responsibility in a working environment that is designed to maintain the long-term health and performance of its employees.
The Munich location has 21 bicycle stands with 118 bikes that BMW Group employees can ride free of charge. In 2017, employees used the bikes more than 54,000 times.

In 2017, once again, as part of the BMW Group’s health initiative, the BMW Company health insurance fund (BKK) awarded prizes to departments with creative ideas on how to keep everyone fit – for example, through a health programme for test drivers and frequent drivers.

In 2017, more than 1,500 BMW Group employees at the Munich location alone competed in the company race, B2RUN, which is held every year in 17 cities across Germany.
In 2017, the BMW Group’s accident frequency rate of 3.6 accidents per million hours worked was reduced by 10 per cent compared with the previous year.

A total of 154 doctors and medical assistants currently work for the BMW Group health service in Germany. In 2017, they treated around 1,280 employees with health emergencies and were also involved in prevention, travel medicine and health counselling.

BMW Group employees have access to eight company fitness centres at six locations in Germany.

Traffic-light labelling for all food served to BMW Group employees in company restaurants provides orientation for a balanced and healthy diet – with measurable success: Since the traffic-light system was introduced, 45 per cent of employees in Germany have improved their eating habits and are choosing healthier meals.

In 2017, more than 20,600 employees took part in the “Treffpunkt Gesundheit” (Meeting point: health) interactive roadshow, designed to raise awareness of health and performance issues.
The BMW Group created its “Today for tomorrow” programme in 2004 to address the issue of demographic change. The aim is to create workplaces where employees can stay healthy as they grow older – for example, through ergonomic improvements or modified work processes. More than 50,000 employees worldwide have already benefitted from these measures.

Since 2014, more than 24,000 employees have undergone check-ups offered through the BMW Group health initiative.
The BMW Group ensures long-term employee development by nurturing employees’ abilities, making the most of their talents, developing potential and enhancing employability.
In the context of Strategy NUMBER ONE > NEXT, the BMW Group spent several weeks training almost 13,000 international and line managers, focusing on the company’s strategic alignment, technical innovations and the culture change ahead.

In 2017, the number of BMW Group employees worldwide increased by 4.2 per cent to 129,932.

There are currently more than 4,750 (2016: 4,600) young people participating in vocational and young talent programmes.

The longest-serving BMW Group employee has worked for the company for 46 years. Average service with the BMW Group is around 17 years.
The number of employees taking advantage of mobile working increased from 28,100 in 2016 to more than 31,800 in 2017.

More than 2,400 employees took advantage of the opportunity to broaden their professional horizons with the BMW Group abroad in 2017.

In 2017, the number of training days per employee was 3.4.
The BMW Group’s idea management initiative enables employees worldwide to initiate change through their ideas. In 2017, around 2,800 ideas were implemented, leading to savings of 18.2 million euros.

The BMW Group is one of the most attractive employers worldwide, as confirmed by studies conducted by international research institutes, such as trendence and Universum. The BMW Group once again earned top ratings in 2017.

In addition to the classic sabbatical, the BMW Group also offers its employees the opportunity to take up to 20 additional days’ leave a year, with a corresponding reduction in salary. Roughly 4,690 BMW AG employees took advantage of this in 2017.
DIVERSITY

The BMW Group’s diverse workforce makes the Company more competitive and more innovative.
The BMW Group is active in more than 150 countries around the globe. In Germany, employees from 118 different countries successfully work together.

At the new plant in Mexico, which is scheduled to start production in 2019, the BMW Group is deliberately hiring a mixed-age workforce from the start to avoid retirement peaks later.

At the end of December 2017, women accounted for 44 per cent of participants in the BMW Group’s Global Leader Development Programme for young talents.
In 2010, the BMW Group adopted a concept to strengthen diversity in the workforce, with regard to gender, cultural background and age across the company.

Of the 9.8 per cent of BMW AG employees who do not have German nationality, most come from Turkey; followed by Austria, Greece, Poland and Italy.

To promote diversity in German corporate culture, the BMW Group became a member of the Diversity Charter in 2012. The Charter, under the patronage of German Chancellor Angela Merkel, has so far been signed by more than 2,500 companies and public bodies.
Since 2007, the average age of BMW AG employees in Germany has increased by 1.8 years to 43.3 years of age. By 2025, the percentage of employees over 50 will increase by about a third.

In 2017, women occupied 16 per cent of management positions at the BMW Group worldwide.

The SpeakUP Line is one of the measures the BMW Group uses to prevent discrimination on the grounds of gender, sexual orientation, religion, disability, age or origin. It provides all employees worldwide with a channel to report possible breaches of this principle anonymously and confidentially.
The BMW Group is a leader in intercultural understanding.
In 2011, in collaboration with the United Nations Alliance of Civilisations (UNAOC), the BMW Group inaugurated the Intercultural Innovation Award to promote intercultural dialogue around the world. A total of 41 organisations and more than two million people from 105 different countries have already benefitted from the Award. In 2017, first prize went to the Pakistan Youth Alliance for its “Peace Rickshaws” project.

Starting in 2017, future executives participating in the BMW Group’s ReadyGo programme spend twelve months as advisors to social entrepreneur or intrapreneur projects.

Since 2011, in conjunction with the Doppelfeld Foundation, the BMW Group has recognised 25 BMW Group employees worldwide for their volunteer work. Their efforts have involved helping refugees, community capacity building in developing countries and support projects for disabled and disadvantaged young people.
The “Tech4Kids” project provides young schoolchildren with an insight into the industrial production of vehicles and alternative drives at BMW Group plants in Regensburg, Landshut and Munich. In 2017, a school from Kaliningrad also participated in the project for the first time.

In 2017, an international delegation of BMW Group employees attended the “One Young World Summit” in Bogota, where they spent four days discussing ways to make the world a better place to live with politicians, Nobel Prize winners and managers.

In 2015, BMW Financial Services employees founded the “Care4water” initiative with the organisation “Waves for Water”. Together, by the end of 2017, by handing out water filters in the communities neighbouring BMW Group plants in Thailand, India, South Africa, Mexico and Brazil, they had provided more than 500,000 needy people with access to clean drinking water.

The BMW Group has provided various educational institutions with vehicles free of charge for many years. At the end of 2017, more than 1,600 vehicles worldwide were being used for educational purposes.
The BMW Group has set itself the goal of funding the vocational education of one million young people by 2025, especially in technical fields, focusing on the US, India, Brazil, South Africa, China, Mexico and Thailand.

BMW China’s “BMW Next Mobility Youth Camp 2017” in Hangzhou encouraged university students, young city planners and designers to help develop sustainable urban mobility through their own ideas and projects.

The “BMW Group Junior Campus” allows children in Germany, Russia, South Korea and the UK to discover mobility and sustainability with all their senses. More than 50,000 children attended the Junior Campus in 2017.
RESOURCE CONSERVATION

The paper used for the Sustainability Factbook was produced in accordance with the FSC® international standard: The pulp originates from responsibly managed forests.

The CO₂ emissions generated in printing and producing this report were neutralised. The corresponding quantity of emissions was compensated for through additional environmental and climate protection measures as part of reforestation and forest protection projects in cooperation with Bergwald e.V.. Certificate number: DE-141-300295.

Agency: ABT-DESIGN.DE