

## **CEO PREFACE**



Dr. Johann Wieland

President and CEO
BMW Brilliance Automotive Ltd.

At BMW Brilliance, sustainability is inherited in the company's DNA and is one of the cornerstones of our corporate strategy. It underpins our values and shapes our commitment to innovation and continued excellence as a provider of premium vehicles and mobility services.

2017 has been a remarkable year for China and BMW Brilliance. The 19th Congress reinforced China's ambitions and recognised that the nation has entered into a new era where economic, political, cultural, social, and ecological development will be pursued holistically. The economy has also continued to shift from one focused on high-speed growth to one more vested in high-quality development. China's 13th Five-Year plan calls for intensified implementation of the Made in China 2025 strategy. This includes promoting the development of intelligent, green services to further increase the competitive advantage of Chinese manufacturing industries.

In response, BMW Brilliance has refined its sustainability strategy to streamline our efforts for a sustainable automotive value chain and to ensure our leadership in the transformation of China's automotive industry. The strategy displays our ongoing support for China's National Plan for a Beautiful China. It also reflects our commitment as a participant of the United Nations Global Compact and to the realisation of the 2030 Agenda for Sustainable Development.

We have also deepened our commitments to invest in China and contribute to the shared success we enjoy with our partners. This has included intensifying local research and development efforts to enhance our engineering competencies in China. In 2017, we completed the northern extension of our Dadong

# "At BMW Brilliance, sustainability is inherited in the company's DNA and is one of the cornerstones of our corporate strategy."

plant, expanded our Research and Development Centre, and launched our High Voltage Battery Centre. These facilities have adopted Industry 4.0 technologies and eco-efficient systems that enhance our capability and flexibility to respond to China's growing needs for sustainability over the whole automotive ecosystem. This year we received the National Green Plant Award and our Tiexi plant was designated as a National AAAA Tourist Attraction, as recognition of our commitment to sustainable development, innovation, and local economic growth.

The electrification of vehicles continued as a global trend while China maintained its position as the world's leader in new energy vehicle sales. BMW Brilliance has contributed to this market by expanding its new energy vehicle fleet as well as our charging infrastructure and electromobility services for our customers.

These accomplishments would not have been possible without the hard work and dedication of our employees, our business partners, and the support from communities where we work and live. In 2017, we were honoured to win China's Best Employer Award. We worked with our suppliers to drive sustainability throughout our value chain, and to identify win-win solutions that help achieve our sustainability goals. We also worked with BMW China to shift our Corporate Social Responsibility (CSR) efforts from charitable donations to strategic CSR. This will guide the future implementation of our community activities and create shared value for the society and our business.

2018 will mark BMW Brilliance's 15<sup>th</sup> anniversary as a joint venture and provide an occasion to celebrate the 40<sup>th</sup> anniversary of China's ongoing reform and opening-up policy. The support we have enjoyed from central and local governments, as well as our shareholders – BMW Group and Brilliance Group, will ensure the success of our ongoing contributions to local development and the Made in China 2025 strategy. And for this we are extremely grateful. It will be an exciting year and one that we at BMW Brilliance look forward to sharing with you.

Dr. Johann Wieland

President and CEO
BMW Brilliance Automotive Ltd.

## **MESSAGE FROM** THE MAYOR OF SHENYANG



## **Jiang Youwei**

The Mayor of Shenyang

As a world-leading premium automotive brand, BMW Brilliance has achieved significant success over the last fifteen years. Through excellent collaboration with the city of Shenyang, BMW Brilliance has realised several milestones, having built the first Research and Development Centre outside of Germany for BMW Group, developed one of the largest automotive production bases in the world, and reached an annual output valued at over RMB 100 billion. During this successful journey, BMW Brilliance has become a driving force in the transformation of Shenyang's development, innovation, and automotive competitiveness. These achievements are the best examples to illustrate the connection between Made in China 2025 and Germany's Industry 4.0.

Looking forward, I hope that BMW Brilliance will actively seize the opportunities that exist with our city's current revitalisation and take this opportunity to deepen their localisation strategy to reach greater success. The Shenyang Municipal Government will continue to support BMW Brilliance to strengthen the supply of all factors in production, provide industry support, optimise direct services, and ease business operation challenges and obstacles. We will create a harmonious environment to boost economic growth with shared interests and long-term value.

"BMW Brilliance has become a driving force in the transformation of Shenyang's development, innovation, and automotive competitiveness."



► Mayor Jiang visits Dadong plant.



► Mayor Jiang's on-site meeting with Dr. Wieland.

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Our point of view | INTRODUCTION

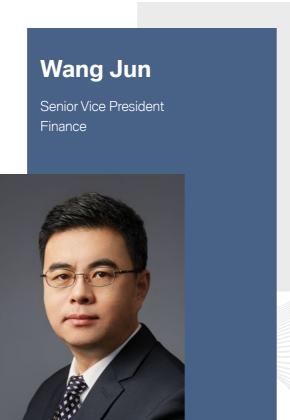


**Daniel Schaefer** 

Senior Vice President
Technology and Manufacturing

2017 has brought a set of significant advancements at BMW Brilliance in the application of Industry 4.0 and our production localisation efforts. The extension of Dadong plant, a facility filled with advanced technology, has set a new benchmark as a forerunner for the Chinese automotive industry in terms of state-of-the-art manufacturing quality and efficiency, having reduced overall energy consumption by 30%. Our R&D Centre expanded our engineering and technology capabilities to intensify our innovation potential and localisation strategy. Through these advancements, BMW Brilliance has reached the Top 10 for China Intelligent Manufacturing Scientific Progress.

Our sustainability efforts contribute to our financial performance through effective risk management and improvements in manufacturing and resource efficiency. We contribute to the economy as the largest taxpayer in Shenyang by having paid over RMB 24 billion in taxes in 2017 to the local and central government and increased investments in our supplier and dealership networks. In the long-term, we are committed to realising the financial potential of creating a digital environment, to leverage innovative technologies that promote internal connectivity, optimise production quality, and increase efficiency.





**Sean Green** 

Senior Vice President Sales and Marketing

Sustainability is a key element of our brand. We consider and incorporate sustainability into everything we do, from product design to production, and from customer relationship management to aftersales services. We then communicate this through our dealer network, who provide an interface with our customers and reiterate our commitments to providing premium and sustainable products and services, tailored for the Chinese market. To provide convenience to our growing customer base of new energy vehicle owners, we are building a complete sustainable mobility ecosystem, with over 65,000 charging pillars to date.

## **David Shangguan**

Senior Vice President Human Resources



Our employees are the most important success factor for our business and are essential to our sustainability achievements. Guided by our Human Resources Strategy, we are pleased to have retained our position as one of China's top employers, receiving multiple awards this year for our achievements as an Excellent Employer and Extraordinary Employer. Through our focus on local employee development, we also saw an increase in the percentage of local Chinese employees in management positions grow to 85%. These outcomes are a result of our career planning initiatives and our emphasis on providing equal opportunities for all our employees so that they may grow personally and professionally at BMW Brilliance.

## HIGHLIGHTS 2017

### **January**

- All-new BMW 1 Series Sedan rolled off the production line
- Management team of the BMW Group global production system visited Shenyang

## March

- One millionth car rolled off the production line at Dadong plant
- National launch of ZINORO 60H
- One millionth N20 engine produced

## May

- BMW Brilliance Tiexi plant recognised as National AAAA **Tourist Attraction**
- BMW Brilliance opened new Dadong plant northern extension











## **February**

- Cross-functional research and development teams of BMW entities in China jointly visited China Automotive Technology and Research Centre
- Celebration of new record of daily volume at Tiexi plant

## **April**

- ZINORO Shenyang showroom opened
- World premiere of the all-new BMW 5 Series Li at the 2017 Shanghai International Auto Show
- BMW Brilliance won the 2017 National May 1st Labour Award

### June

- All-new BMW 5 Series Li was officially launched
- BMW JOY Home launched "Joyful Sports"

## July

- New Research and Development Centre opened
- Xi'an Decentralised Distribution Area opened
- 2017 BMW China Culture Journey kicked off

## **September**

- · Received inaugural National Green Plant Award
- Shanghai-Shenyang freight train launch to support inbound transportation
- BMW Brilliance awarded by the China Automobile Customer Satisfaction Index
- BMW China and BMW Brilliance held NEXT Experience event to introduce the Strategy NUMBER ONE > NEXT and group's new core values

## **November**

- BMW Sustainability and CSR Forum held
- Framework Agreement on Construction and Lease of BMW Brilliance Training Centre was signed for a centralised training centre
- BMW Group management circle for purchasing and supplier network visited Shenyang
- Recognised for Excellence 5 Star awarded by Chinese Association for Quality and European Foundation for Quality Management









## August

• Tiexi logistics first Automatic Guided Vehicle in operation

### October

- Human Resources Shared Services Centre launched
- High Voltage Battery Centre in Shenyang opened
- BMW Brilliance "DIGITAL.me" concept presented at BMW IT Fair in Munich

## **December**

- Electro Magnetic Compatibility Laboratory opened
- Received multiple awards as best employer, with special recognition from Zhaopin.com as the "No. 1 Best Employer in China"
- Listed in China's 10 Advancements in Intelligent Manufacturing Science and Technology

BMW Brilliance was founded in 2003 as a joint venture between the BMW Group and Brilliance China Automotive Holdings Ltd.

Our business operations include production, research and development, sales, aftersales services, and purchasing of BMW and ZINORO automobiles in China. BMW Brilliance has a state-of-the-art production base in Shenyang, Liaoning Province - an industrial heartland of China.

We are inspired by the potential of doing business in a sustainable manner and guided by our aspiration to be the leading sustainable provider of premium individual mobility across the entire value chain of China's automotive industry.

#### Our Operations: As of December 31st, 2017

Complete vehicle plants in Dadong and Tiexi

Powertrain plant in Tiexi

598

Authorised dealer outlets nationwide

5

BMW parts distribution centres

BMW training centres

15

Training bases

Training spots



## **OUR PRODUCTS**



BMW 1 Series I Sedan



BMW 2 Series I Tourer



BMW 3 Series I Long Wheelbase and Standard Wheelbase



BMW 5 Series I Long Wheelbase \*Including plug-in hybrid model



BMW X1 I Long Wheelbase \*Including plug-in hybrid model



BMW X3 I (Start of production 2018)



**ZINORO 60H** \*Plug-in hybrid model



**BMW 3-Cylinder Engine** 



**BMW 4-Cylinder Engine** 



396,888 2016

2017

305,845



2017 🗷



**EMPLOYEES** 

**AVERAGE FLEET** CO<sub>2</sub> EMISSIONS

2017 146.9 g/km

2016

159.2 g/km



**CORPORATE AVERAGE FUEL CONSUMPTION** 

2017

2016



6.17 I/100 km

6.69 I/100 km







An overview of BMW Brilliance | INTRODUCTION | 17

## KEY PERFORMANCE INDICATORS \_\_\_\_\_

ı	2013	2014	2015	2016	2017	Change from previous year %
BMW Brilliance activities						
Automobiles produced (units)	214,978	287,780	288,055	305,845	396,888	29.8%
Automobiles delivered (units)	206,729	278,637	287,448	310,041	386,566	24.7%
Number of authorised dealer outlets nationwide	420	460	515	558	598	7.2%
Number of dealers with 5S certification	30	35	39	42	42	0%
Product Responsibility						
Average fleet CO <sub>2</sub> emissions (in g/km)	174	168.0	165.4	159.2	146.9	-7.7%
Corporate average fuel consumption (in I/100 km)	7.30	7.06	6.95	6.69	6.17	-7.8%
<b>Environmental Protection</b>						
Energy consumption per unit produced (in MWh)	2.06	1.67	1.66	2.05	1.83	-10.7%
CO <sub>2</sub> emissions per unit produced (in t)	1.10	0.97	0.88	1.13	0.70	-38.0%
Water consumption per unit produced (in m³)	2.72	2.18	2.18	2.58	2.68	3.9%
Process wastewater per unit produced (in m³)	0.50	0.47	0.46	0.46	0.39	-15.2%
Waste for disposal per unit produced (in kg)	4.41	5.67	9.17	6.42	7.43	15.7%
Volatile organic compounds (VOC) per unit produced (in kg)	3.52	0.48	0.45	0.40	0.54	35.0%

I	2013	2014	2015	2016	2017	Change from previous year %
Suppliers						
Purchasing volume in China (in billion CNY)	17.9	23.9	23.5	23.9	26.7	11.7%
Employees						
Workforce at year-end	13,024	15,257	16,573	16,286	16,686	2.5%
Attrition rate (% of workforce)	6.8%	6.8%	3.8%	3.3%	4.5%	37.0%
Percentage of women in total workforce (in %)	11.9%	12.3%	11.8%	12.9%	12.8%	-0.8%
Average days of further training per employee	3.2	3.4	2.2	1.7	2.1	23.5%
Accident frequency rate	0.92	0.82	1.06	0.54	0.43	-20.4%
Corporate Social Responsibi	lity					
Number of employees and customers who participated in "Warm-Heart" activities*	50,000	65,000	80,000	84,700	86,700	2.4%
Number of people benefiting from "Warm-Heart" activities*	70,000	91,000	100,400	136,600	157,600	15.4%

<sup>\*</sup> Warm Heart initiatives include activities organised by BMW entities in China under the Warm Heart banner as well as activities carried out separately by BMW Warm Heart Customer Clubs. These figures are cumulative. Beneficiaries are calculated as number of times people have benefitted from activities.

## **OUR VALUE CHAIN**























**DISPOSAL** 

AND RECYCLING

## **RESEARCH** AND DEVELOPMENT

#### **SUPPLY CHAIN**

### **PRODUCTION**

#### of products and services

#### **MAIN ACTIVITIES**

Development of innovative. fascinating cars and services:

- Local concept
- Series development
- Production planning

Cooperation with suppliers to create:

- Modules/systems
- Components
- Parts
- Raw materials

Manufacturing of cars by a highly qualified and diverse workforce:

- Engine construction
- Bodywork
- Paintwork
- Assembly
- Quality control

## **AREAS OF ACTION** (INTEGRATION OF SUSTAINABILITY)

- Environmentally friendly product design
- Development of more efficient and alternative drivetrains
- Planning and development of new mobility services
- · Connected Drive, digital networking
- Life cycle engineering

- Implementation of environmental and social standards in the supply chain
- Promotion of transparency and resource efficiency in the supply chain
- Purchase of raw materials from environmentally and socially friendly sources
- · Purchase of renewable raw materials and materials with sustainable characteristics (e.g. secondary aluminum)

Improving resource efficiency (energy, water, waste):

- Reduction in environmentally damaging wastewater and emissions
- Use of recycling materials
- Promotion of lifelong learning and the development of key skills among employees
- Creation of a working environment that fosters long-term health and high performance

## **LOGISTICS AND TRANSPORT**

## SALES AND UTILISATION

#### of vehicles and services

Securing customer-oriented transport logistics in the network

- Suppliers
- Plants
- Dealerships through the seamless combination of various modes of transport
- Optimisation of capacity utilisation of transport modes

emissions

Offering a range of premium products and services for individual mobility through:

- · Coordination of a nationwide dealership/repair shop network
- Implementation of a coordinated and target-grouporiented marketing mix
- Provision of financial services

Recovery and dismantling of vehicles for:

- Reuse
- · Recycling and disposal of vehicle components and materials

- · Increase in the share of Promotion of sustainable modes of transport with low mobility behaviour patterns based on:
  - Connected Drive
  - Mobility services in the area of electromobility
  - Car-sharing products
  - Mobility assistance services
  - Dealers with 5S certification

- Expansion and management of a network for vehicle recovery and recycling
- Research on recycling and second life use of components (e.g. batteries)







Our sustainability drivers | SUSTAINABILITY MANAGEMENT | Our sustainability drivers | SUSTAINABILITY MANAGEMENT | 23

## **OUR SUSTAINABILITY DRIVERS**



## Dr. Stefan Kasperowski

Plant Director, Powertrain Plant

What are the advantages of localising powertrain production, and how does it boost intelligent manufacturing and innovation?

Since the opening of the Powertrain plant in Shenyang in 2012, we have witnessed the development and growth of our engine production in China. The last six years have been a success for localising our sophisticated engine technology, with continuous knowledge transfer and build-up of competence within BMW Brilliance Automotive. Our ambition to lead in quality and performance and to stay at the forefront of innovation means that we utilise the latest state-ofthe-art technology and intelligent production systems to manufacture our premium application engines. In line with our commitment to continue expanding our business in China, the successful innovation and adoption of new technologies for powertrain production reflects our approach of working "in China, for China". This achievement has been made possible through the great commitment of our shareholders and the relentless contribution of our employees.

"Enhanced in-house competence of both product and production means that we can provide the best possible new energy vehicle solutions for our customers with regards to performance, quality, reliability, and sustainability."

With the opening of the High Voltage Battery Centre in Shenyang in 2017, what opportunities does this bring for BMW Brilliance as the first premium automotive joint venture to establish high voltage battery production?

The opening of the High Voltage Battery Centre supports our position in leading the development and production of new energy vehicle technology in China and utilises our engineering competence as an integral part of the product value stream. Combining research and development, production, and testing in one comprehensive battery centre (the first for the BMW Group outside of Germany) allows us to integrate the newest technological developments and respond quickly to market demands. Localised battery production ensures that BMW Brilliance can continue to lead the development of technologies to meet the requirements of the China market and enables us to accelerate our new energy vehicle business in China with more locally produced products.

# How will the High Voltage Battery Centre enable better new energy vehicle performance and boost sustainability?

As a leader of developing China's premium segment for new energy vehicles and speeding up the industry transformation towards electrification, the High Voltage Battery Centre is an essential part of our strategy. Enhanced in-house competence of both product and production means that we can provide the best possible new energy vehicle solutions for our customers with regards to performance, quality, reliability, and sustainability. With the local production of batteries, we can adapt quickly and stay ahead of the competition. We are well prepared with our increasing competence in battery technology and the integration of electrification in our cars, and we will build batteries with more capacity to push the market further and satisfy future customer demands.



► High Voltage Battery (HVB) Centre.

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## 1.1 STRATEGY AND MANAGEMENT

Our goal to be the No.1 in the premium automobile segment in China requires staying ahead of trends that influence, disrupt, and empower the industry. In China, one of the most influential trends has been the adoption of Industry 4.0 and digitalisation. The convergence of these trends are revolutionizing business, society, and industry - disrupting business models and creating new ones. This transformation, outlined in the Made in China 2025 action plan, is inspiring Chinese automakers to embrace automation, increase capacity, resource optimisation, and create agile manufacturing platforms.

At BMW Brilliance, we believe that sustainability is essential for our ability to maintain our competitive positioning, and our economic success.

A holistic approach towards sustainability requires future-oriented thinking and understanding the value of sustainability. In the past, our sustainability approach was guided by a collection of robust processes, initiatives, and targets, developed to meet the needs of our business for a sustainable automotive manufacturer. In 2017, we embarked on a journey to elevate our vision to a new level, and to align our focus by developing cross-departmental goals and strategies, guided by a new aspiration and set of sustainability targets.



▶ 2017 BMW Brilliance sustainability strategy workshop.

## OUR SUSTAINABILITY STRATEGY

In 2017, the development of our new sustainability strategy ushers us into a new era of our sustainable development journey – one that raises our level of ambition, ensures clarity, and improved coordination, both within BMW Brilliance, and across our entire value chain.

Our sustainability strategy is comprised of three core elements:

- Aspiration, Goals & Approach Our north stars
- Principles The values and beliefs to underpin and lead our actions, defined in alignment with key national and international frameworks
- Framework Priority focus areas where we will set targets, take action and monitor results, supported by a set of enablers

Our aspiration is to be the leading sustainable provider of premium individual mobility across the Chinese automotive industry's value chain. We emphasise our desire to enhance the quality of life for our Chinese customers and stakeholders through sustainable mobility solutions, to align our business to help address the world's most important social and environmental issues, and to spur innovation through the utilisation of e.g. Industry 4.0 technologies > Figure 01.

### Our sustainability aspiration





### Aspiration

To be the leading sustainable provider of premium individual mobility across the entire value chain of China's automotive industry.



#### Goals

To achieve our aspiration, BMW Brilliance will develop and provide innovative and sustainable mobility solutions to address the evolving needs of our customers. We strive to improve the quality of life of all our stakeholders, both through our products and services, and through the way we work.



#### Approach

We will do this by:

- · Leveraging the strength of BMW Group.
- Continuously focusing on smart, green technological innovation.
- Engaging and collaborating with business partners, industry associations, academia, government, and civil society.
- Prioritising the sustainability issues that are most material to our business in the long run.

This aspiration is a reflection of our inherent corporate values, developed in alignment with the principles of BMW Group, and the statements made from the 13th Five-Year plan of China. Previously a tacit philosophy, the codification of an aspiration statement serves as a north star that will motivate and harmonise our stakeholders and outline our principles for the promotion of economic development, environmental conservation and the protection of people and society.

Our principles incorporate our current and desired contribution to society. Aligned with internationally recognised frameworks such as with the Sustainable Development Goals, China's National Plan on Implementation of the 2030 Agenda for Sustainable Development, and China's 13th Five-Year plan, our 3 Principles (3Ps) are People, Planet and Prosperity and they connect our business with the challenges of today > Figure 02.

#### Our sustainability principles







- · We develop innovative products and services that meet the evolving needs of our customers and society as a whole.
- We care for and enable our customers, partners, and employees to become respected and thriving members of the BMW Brilliance ecosystem.

## **Environmental stewardship is key to long-term**

- We embrace innovation in the pursuit of minimising the environmental impacts of our business processes, products, and services.
- We commit to making a substantial contribution to a smarter and greener automotive industry in China.

#### Value derived from sustainable mobility

- We pursue strong and long-term business growth through activities that are scalable and deliver significant value.
- · We seek to achieve mutual benefit for ourselves and our stakeholders as we work towards a more sustainable future.



Leveraging our aspiration and our 3Ps, and in reference to the issues identified as most relevant to our stakeholders > Chapter 1.2 and international and Chinese policies. We invited thought leaders from across our divisions at BMW Brilliance and BMW Group to develop a framework to guide our actions and investments for the future.

As a result, three main pillars were established which

span the breadth of our value chain: Product & Services, Production & Value Creation, Employees & Society. Below these three pillars, we developed eight focus areas to guide our decision making and day-to-day actions, determined by their ability to attribute to growth and create positive impact. Moreover, we took into careful consideration the 'enablers' that empower our sustainable business operations and contribute to the achievement of our sustainability targets > Figure 03.

Strategy and management | SUSTAINABILITY MANAGEMENT | 27

## **Our Aspiration:**

"To be the leading sustainable provider of premium individual mobility across the entire value chain of China's automotive industry."

1 Target picture

**3** Pillars

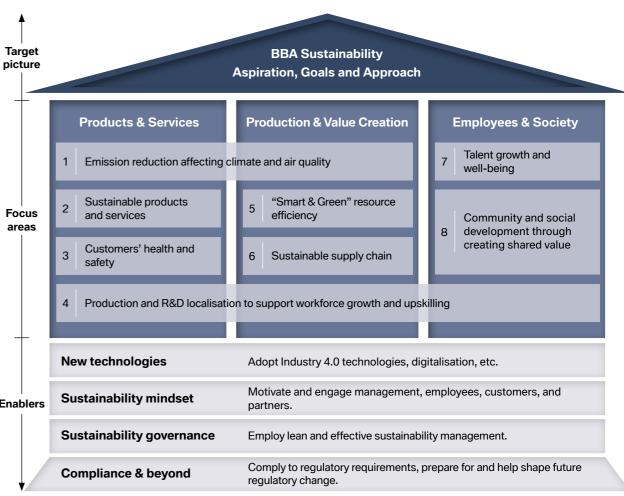
8 Focus areas

4 Enablers

#### Strategy framework







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This sustainability framework will be used to guide our management, enrich our initiatives, and align our efforts for greater traceability, scalability, and long-term performance. In 2018, we will revisit our sustainability

framework to incorporate the results of a materiality analysis. This year, we illustrate how our existing efforts map to our defined focus areas.



#### Emission reduction affecting climate and air quality

Improve our corporate average fuel efficiency, support the development of new energy vehicles, and focus on green manufacturing.



#### Sustainable products and services

Enhance the portfolio of new energy vehicles within a new energy vehicle ecosystem.



#### **Customers' health and safety**

Build products with safe materials and safety systems, and provide services such as driver training.



#### Production and R&D localisation to support workforce growth and upskilling

Expand production capacity, enhance local research and development capabilities.



#### "Smart & Green" resource efficiency

Integrate systems to utilise renewable energies, improve energy and water efficiency in production. Enhance material reuse and recycling.



#### Sustainable supply chain

Expand the Supplier Risk Management (SRM) programme to safeguard a sustainable supply chain.



#### Talent growth and well-being

Focus on employee development and health, through our Competency Model for career development and our Health Management 2020 programme.



#### Community and social development through creating shared value

Support our communities through the BMW Warm Heart Fund, BMW JOY Homes programme, BMW China Culture Journey, and the BMW Children's Traffic Safety Education (CTSE) programme.

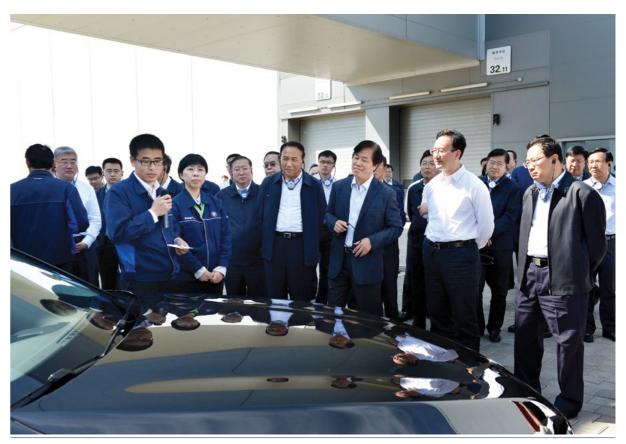
The progression and development of our sustainability strategy relies on frequent engagement with our

stakeholders > Chapter 1.2, and our commitment to a culture of compliance > Chapter 1.3.

## 1.2 STAKEHOLDER ENGAGEMENT

Ensuring sustainable performance as a leading automotive company requires constant engagement with different stakeholders to establish mutual trust, contribute to understanding and awareness about sustainability issues, and receive feedback about our own actions. We therefore engage in ongoing dialogues with a variety of stakeholders, allowing us to identify trends, build communication and trust, and deepen partnerships.

We align our stakeholder engagement efforts with our business strategy, generating value for both our key stakeholders and for BMW Brilliance. Our main stakeholder groups are our shareholders, customers, employees, suppliers, and dealers, as well as policymakers and authorities, academic institutions, students, and local communities. We engage with the relevant stakeholders along our value chain in the most appropriate format, including dialogue, presentations, surveys, and training initiatives. The topics and engagement format are customised for specific stakeholder groups and we do our best to address any concerns and questions in a timely and transparent way.



▶ Chairman Qi Yumin, Brilliance Group, accompanies a government delegation at Dadong plant.

### **Academic Institutions**

Fostering research in the Chinese automotive industry and collaborating with academic institutions is integral to the long-term sustainability of BMW Brilliance's business. In 2017, we focused on reinforcing our partnerships with local universities by "Developing Future Talent". Our programmes, ProMotion China Ph.D. and our Campus Ambassador Summer Camp, provide doctoral and undergraduate students with the opportunity to receive training, career guidance, and career planning, and to learn from our employees about BMW's culture of innovation and future development > Chapter 5.4.

SUSTAINABILITY MANAGEMENT | Stakeholder engagement

!!!!!!!!

#### **Future Talent**

As part of the BMW Group's global strategy to develop young people and attract the talent of tomorrow,

BMW Brilliance has developed a series of specialised and localised programmes, traineeships, and vocational education opportunities to build the skill sets needed for the future. Through these activities, such as the New Vocational Education Programme (NVEP), we build up the technical competencies of the next generation of the automotive workforce - 99% of NVEP graduates have gone on to join BMW Brilliance > Chapter 5.4.

## **Regulatory Authorities**

We work with local authorities to stay informed and remain current in an

evolving regulatory environment. This year, we reached a new milestone of professional cooperation with the Shenyang State Tax Bureau who visited Tiexi plant to discuss tax services and provide an on-site tax policy introduction to employees. We also worked on building a harmonious relationship with the Shenyang Traffic Police Bureau, who conducted traffic safety training to promote on-road safety awareness for our employees.

## **Policy Decision-Makers**

Regular and open communication with policymakers provides us with the opportunity to contribute to government initiatives and advocate for industry sustainability. Important topics of discussion include emission standards, the advancement of new energy vehicles and supporting infrastructure, and the promotion of innovation. This continuous dialogue has allowed us to establish relationships of mutual trust between the BMW Group and Brilliance Group, and the Chinese government.

## **BMW BRILLIANCE STAKEHOLDERS**

## **Communist Party of** China

This year, we were honoured to hold the BMW Brilliance CPC Conference together with Chinese and German management and Party member representatives. More than 200 people attended and engaged in the dialogue on the importance of the partnership between CPC and BMW Brilliance. Speakers encouraged Party members to act as role models in their daily work and contribute to BMW Brilliance's sustainable development.

## **Employees**

Our employees are our greatest asset. Our goal is to maximise individual potential and reinforce

the company's culture through open communication, creating a work environment that positively contributes to self-growth and career progression. In 2017, we held Associate Meetings at Dadong, Tiexi, and Powertrain plants to reflect on our collective achievements. Employees also contribute their feedback through an employee survey every other year, as well as through our Associate Representative Congress and Union Representatives Congress, held annually > Chapter 5.



Our dealers bring our brand, our message, and our world-class products to the automotive market in China. That is

why we work closely with our dealers to better understand their needs and the needs of our customers. To support, we provide on-site coaching through our BMW China Training Academy, which is available for all new and existing dealerships. Dealer trainings are designed to build competencies and to introduce new technologies, to enhance customer interactions and to ensure the highest quality customer experience > Chapter 2.4.



#### **Shareholders**

Close collaboration with shareholders enables seamlessly integrate sustainability

into our corporate strategy, activities, and operations. Representatives of our shareholders - the BMW Group and Brilliance Group - form our Board of Directors and are in regular contact with our Board of Management. Through close collaboration that is based on mutual trust and win-win approaches, shareholders have empowered our investment projects to succeed, making BMW Brilliance a benchmark of the Chinese automotive industry.



#### **Local Communities**

We invest in our local communities as part of our long-term commitment

to Corporate Social Responsibility and in building a prosperous China. This is achieved by providing both direct and indirect contributions to the local community and economy, creating a more cohesive

and strong society > Chapter 6.



#### **Suppliers**

We are in continuous dialogue with our suppliers. In addition to projectbased communication, we host a series

of BMW Brilliance Supplier Events that provide a platform to build upon relationships that contribute to economic development, growth, and sustainable innovation along the supply chain. In 2017, we held a quality training for the all-new BMW 5 Series parts suppliers at Dadong plant, and a G08 supplier workshop in Shenyang > Chapter 4.2.



We are building connections between our brand and customers to guide our efforts towards a

sustainable future for the Chinese automotive

industry. We use channels such as our Customer Interaction Centre to gather feedback, to explore new opportunities, and meet the needs of our customers. In 2017, our Tiexi plant was approved as a National AAAA tourist attraction, providing guests with the opportunity to learn about our manufacturing processes, as well as the sustainability features integrated within our production > Chapter 2.4.

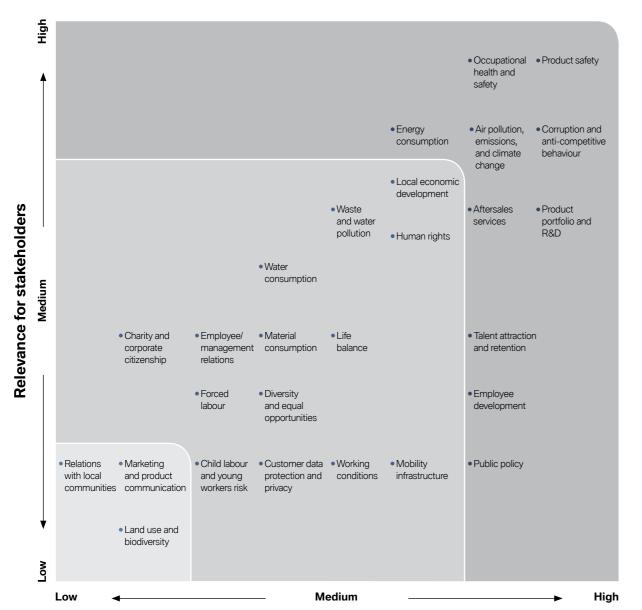
## **UNDERSTANDING OUR MATERIAL ISSUES**

BMW Brilliance's sustainability strategy and management approach have been built on an understanding of the key sustainability issues that are material to our business and our stakeholders. We engaged internal and external stakeholders in a comprehensive materiality analysis in 2015 and used the results as a basis for defining and prioritising focus areas for our Sustainability Report > Figure 04.

#### BMW Brilliance matrix of relevant sustainability issues







**Relevance for BMW Brilliance** 

Our materiality analysis identified ten priority sustainability issues that are highly relevant to BMW Brilliance and our stakeholders > Figure 05. This Sustainability Report shares information about how we manage each of these priority issues, as they relate to our own operations, our business relationships and our growth. For example, addressing energy consumption, occupational health and safety, and corruption is

important not only for our own activities, but also for the activities of our suppliers and dealers. Our localisation and supplier risk management strategies help us to improve the sustainability impacts in our supply chain, while our talent attraction and retention and employee development activities articulate the value that we see in our workforce.

#### Highly relevant sustainability issues identified













**Product safety** 

**Occupational** health and safety

**Corruption and** anti-competitive behaviour

Air pollution, emissions, and climate change

Energy consumption



**Product portfolio** and research and development



**Aftersales** services



**Talent attraction** and retention



**Employee** development



**Public policy** 

In 2018, we will conduct a refresh of our materiality analysis to sharpen our sustainability strategy. We will share our updated materiality matrix in the BMW Brilliance 2018 Sustainability Report with any corresponding adjustments to our focus areas, while updating any changes to our strategic approach and investments.







## 1.3 A CULTURE OF COMPLIANCE

At BMW Brilliance, we uphold a strong culture of compliance that acts as the foundation for putting our values into practice. We prioritise ethical behaviour at the highest level and protect the human rights of all individuals involved in our operations. Our compliance efforts are wide-ranging, with a focus on meeting requirements on fair competition and anti-monopoly regulations and preventing corruption and fraud.

To assure compliance, we have developed policies and mechanisms based on all applicable laws and regulations that are reinforced by a comprehensive compliance management system and management structure. We implement and monitor initiatives systematically, providing the necessary measures, training, and remediation efforts to ensure that compliance issues are understood, and policies are enforced across BMW Brilliance.

#### MANAGING COMPLIANCE

Through our compliance management system, we actively address anti-monopoly and fair competition requirements, implement anti-corruption and antifraud policies, and take measures to prevent bribery, data theft, and any anti-competitive practices in our company.

Our system is reinforced by our compliance management structure, chaired by our CEO who monitors the overall effectiveness of the compliance management system. The BMW Brilliance Compliance Committee consists of representatives from Legal Affairs and Compliance, Controlling and

Risk Management, Corporate Audit, and Human Resources, supported by the Compliance Committee Office which is responsible for managing daily compliance matters across the organisation, with local compliance teams in Shenyang and Beijing. The office's work is strengthened by the Compliance Operations Network, which includes all department heads, plant directors, and heads of the regional sales office > Figure 06.



### **BMW Brilliance compliance management system**







- The BMW Brilliance Compliance Committee reports to the Board of Management and the Audit and Compliance Committee/the Board of Directors based on the Articles of Association of BMW Brilliance and the BMW Brilliance Compliance Committee Working Procedures.
- The "Compliance Operations Network" consists of the Compliance Responsibles, who are defined by fixed criteria. The criteria include: reporting level I, regional setting, separate legal entity or specific compliance risk.

### **COMPLIANCE TRAINING AND COMMUNICATIONS**

All employees at BMW Brilliance are required to follow the Legal Compliance Code on employee behaviour pertaining to anti-monopoly law, anti-fraud, and anticorruption. To fortify the Code, we conduct compliance risk assessments, initiate mitigation processes. implement comprehensive training programs, and provide a whistle-blowing mechanism to alert the BMW Brilliance management in any instances of noncompliant behaviour.

To maintain a high level of compliance, we believe in awareness-building, open communication, and a clear signal from management. Our Compliance Committee and General Counsel regularly send letters on important policies and announcements and provide information on how to conduct compliance risk assessments and actively mitigate specific compliance scenarios.

We require mandatory online training modules for all non-production employees. These trainings cover the Legal Compliance Code and focus on anti-corruption policies as well as information security and data privacy. Specialised training is given to managers who are newly promoted into a leadership function, while additional departments are provided with training based on their exposure to potential non-compliance risks.



Internal training on anti-corruption compliance

For all our employees, we are proud to have redesigned the compliance intranet webpage and our e-learning platform to be more user-friendly and interactive. This includes new features that help track the completion of online training.

At Tiexi, Dadong and Powertrain plants, the Plant Directors emphasise the importance of compliance, communication and the accessibility of grievance mechanisms at BMW Brilliance during the regular "Associate Days", where all employees gather twice a year. Animated films are shown on the plants' common area LED screens that cover compliance issues such as confidentiality, data privacy, anti-bribery, anti-fraud, and conflict of interest scenarios. On the plants' E-pillars, short articles on major compliance areas are displayed with corresponding visual stories to emphasise the correct behaviour.



▶ Interactive compliance communication via E-pillars.

Our sales divisions in Beijing and regional offices receive regular legal and compliance team training on anti-monopoly legal requirements specific to the automotive industry. In 2017, our Sales management also attended an internal half-day compliance conference on how to actively counter corruption risks. Externally, we are implementing measures for our business relations with external partners that cover compliance clauses in purchase orders and event invitation letters. As an automotive manufacturer, we often employ standard vehicle provision forms with compliance clauses, which we use when we provide our products to external parties, conferences, and events.

#### **RESPONDING TO INQUIRIES**

We have mechanisms in place to address compliance inquiries. Employees, suppliers and business partners can raise concerns through line managers, project leads, or Human Resources personnel. Processes for the community to raise concerns are available at the plant level. Concerns can also be raised through our confidential compliance advisory and notification hotline, SpeakUP. The SpeakUP Line

is managed by the Compliance team within BMW Brilliance and concerns can be raised anonymously. We acknowledge, investigate as appropriate, and document all concerns. Where concerns are investigated and substantiated, we take appropriate remedial actions, advise the reporter promptly, and document the outcomes. BMW Brilliance does not tolerate any form of retaliation against anyone who raises a concern or participates in an investigation.

## Data Privacy and PRC Cyber Security Law

Data privacy has become a significant concern across all industries as the emergence of technical innovations and digitalisation create new risks for companies and for customers. At BMW Brilliance, we are making significant investments in protecting customer, partner, and employee data. In 2017, we developed initiatives to raise awareness and to strengthen our privacy data protection systems and culture. This includes optimising process controls in projects and assessing privacy risks of the legacy informational technology (IT) system. We held a workshop initiated by our Compliance Committee Office and Data Privacy Protection Officer network (DPPOs) to strengthen communication and cooperation between DPPOs and Legal and Compliance functions at BMW Brilliance and across BMW Group entities in China.

Along with data privacy, cybersecurity measures have also been taken at BMW Brilliance. With the announcement of the PRC Cyber Security Law, we tasked a dedicated project team to review and assess the status of BMW Brilliance under the newly released law. This included the review and assessment of all IT infrastructure, security policies, and IT systems.

To prepare for the future, mitigation procedures were developed in collaboration with the IT department and an external party, which will support the implementation and training of all related departments.



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## **RESPECTING HUMAN RIGHTS**

We are committed to respecting the human rights of all individuals impacted by our operations. The BMW Brilliance Joint Venture Equity Contract includes a requirement to establish policies and procedures at BMW Brilliance to avoid human rights infringements and to address adverse human rights impacts that might involve our company. We expect all employees and business partners to respect human rights in their daily actions.

#### **HUMAN RIGHTS GOVERNANCE**

Human rights issues are managed by the relevant business functions of BMW Brilliance. The Human Resources Department is responsible for assuring human rights within our operations. The Purchasing and Supplier Quality Management Department takes the necessary steps to ensure the suppliers respect human rights.

We base our respect for human rights on internationally agreed principles, including the principles set out in the International Bill of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. The following important governance documents and policies embed human rights into our business practices:



#### **BMW Brilliance Joint Venture Contract**

**Objective:** This is a founding document of BMW Brilliance as a joint venture between BMW and Brilliance Automotive, setting out the key principles of business conduct.

**Issues addressed:** Our commitment to the United Nations Global Compact and the respect of the International Labour Organization's labour law is explicitly stated therein.



#### **Associate Handbook**

**Objective:** The objective of the Associate Handbook, which includes our Ethics and Code of Conduct as well as our Business Principles, is to detail and communicate to all employees their rights and responsibilities, as well as our corporate values.

**Issues addressed:** All human rights issues relevant to human resources, such as non-discrimination, remuneration, working hours, and other terms of employment are reviewed in the Handbook.



#### **Legal Compliance Code**

**Objective:** The Legal Compliance Code explains the central importance of lawful conduct to BMW Brilliance and provides an overview of the legal areas relevant to our business.

**Issues addressed:** Issues covered which are relevant to human rights include data protection, health and safety, and non-discrimination.



General Terms and Conditions for the Purchase of Goods and Services and the BMW Group's International Terms and Conditions for the Purchase of Production Materials and Automotive Components

**Objective:** Our terms and conditions of procurement govern the right and obligations of the parties involved.

**Issues addressed:** Environmental criteria as well as recognised human rights and labour standards are included.

#### **HUMAN RIGHTS VIOLATIONS**

Employees can submit information about possible human rights violations within the company via the BMW Brilliance SpeakUP Line, anonymously and confidentially. As part of our efforts to prevent human rights violations, we provide employee information and training, particularly on the SpeakUP programme. We also conduct risk analyses and human rights impact assessments, and we maintain internal monitoring and reporting structures. Our cooperation with business partners and our dialogue with stakeholders also allow us to identify and address risks quickly.



#### **HUMAN RIGHTS IN THE VALUE CHAIN**

Risks for human rights infringements are particularly high in complex supply chains with extensive division of labour, as is the case in the automotive industry. We require our direct suppliers to meet the same social and environmental standards that are applied at BMW Brilliance. Compliance with internationally recognised human rights standards, as well as with labour and social standards, is part of our General Terms and Conditions for all purchases and is included in all supplier contracts.

We continuously review our corporate policies and initiatives regarding their effectiveness in avoiding human rights infringements in our supply chain. Additionally, the supplier risk management process that is applied throughout the BMW Group network enables us to identify and analyse potential sustainability and human rights risks throughout our supply chain. In our regular supplier review, we consider issues such as occupational health and safety, child labour risks, and environmental impacts > Chapter 4.

## **SUSTAINABILITY MANAGEMENT: FORECAST 2018**

In 2018, we will unveil our renewed materiality analysis that will align our approach with Global Reporting Initiative Standards. The results will help us to refine our strategy and action plans and will guide our way for our initiatives.

We will continue developing and implementing our new strategic framework, including the definition of specific targets, key performance indicators, and action plans associated with the focus areas and enablers that we have prioritised. We have planned activities to further integrate sustainability into our business, e.g. Artemis project - supply chain Environment, Health and Safety (EHS) risk mapping and transparency; strengthening green logistics and multimodal transportation; NEV high voltage battery life-cycle blueprint, etc.

Our compliance system is always responding to emerging issues. With regards to data privacy, our priority is the execution of the newly released government policy and regulations. To enhance cybersecurity, we will work to ensure compliance with the Cyber Security Law.

We will continue our training efforts to ensure our employees are fully aware of our compliance requirements. Our mandatory online training modules on the Legal Compliance Code, focusing on anti-corruption policies, information security, and data privacy will be reintroduced in 2018 for all non-production employees.

We will also continue to implement our department classroom training programme on anti-monopoly law and anti-bribery policies. Our communication campaigns will include interactive formats, and a compliance video competition is planned.

Communication of compliance messages to third parties including dealers and suppliers will be increased. To enhance due diligence procedures before onboarding new suppliers and to improve ongoing performance monitoring, the Compliance function has joined the Purchasing teams in redefining and optimising process and approval flows. A comprehensive dialogue started in 2017 will continue in 2018, incorporating both teams' expertise into an IT system designed to support purchasing and business departments in identifying compliance risks and initiating appropriate mitigation measures.



► Aerial of new Dadong plant.







A culture of compliance | SUSTAINABILITY MANAGEMENT = 41

Aerial of Powertrain plant.



## **OUR SUSTAINABILITY DRIVERS**



## **Patrick Mueller**

Vice President, Research and Development

### **How does the Research and Development** (R&D) Centre support BMW Brilliance's localised development strategy?

As the new head of the Research and Development Centre, one of my major tasks is to further expand the R&D work which is performed in Shenyang for BMW Brilliance. In the past years, we have maintained sustainable growth in our workforce, facilities, and total area, further fulfilling our commitment to localised development in Shenyang.

In 2018, we will continue to invest in highly skilled engineers to help us meet the challenges of a growing Chinese market. In the future we will not only develop and build for our Chinese customers but will also extend our activities in cooperation with our partners in Munich, Beijing, and Shanghai to include vehicles for export to our worldwide markets.

With BMW Brilliance's rapid rate of growth, we have more vehicles in our portfolio, putting more demands on our R&D function. There are also new regulatory requirements that we need to adopt, and we must continue to develop life cycle measures that keep our vehicles competitive.

An even bigger challenge is the increasing amount of work which BMW Brilliance R&D is performing in the early stages of our vehicle projects. We will cover all aspects of development for China-specific vehicles. With our new testing facilities and our highly skilled, motivated, and thorough workforce, we have the resources in place to take on these challenges.

"China is the most aggressively developing market for high-tech battery supply, and we are an active participant."

How is the R&D Centre enabling BMW Brilliance to offer innovative products and mobility services, particularly as customers and the automotive industry are focusing on self-driving technology and digitalisation?

BMW Brilliance R&D is an increasingly important hub when it comes to development of electric drivetrains, for both hybrid and battery vehicles. These new energy vehicles are key elements enabling sustainable and green individual mobility now and in the future. China is the most aggressively developing market for hightech battery supply, and we are an active participant.

We are also enhancing our testing facilities to bring electric drivetrains to market. BMW Brilliance is using the BMW drivetrain technology, which is available, affordable, and leading-edge in functional aspects, and we have the engineers to maximise the benefits of this technology. Highly autonomous driving technology and further digitalisation of our vehicles is driven by our BMW Group partners in Beijing and Shenyang. If we can set up a 5G environment around Tiexi, BMW Brilliance R&D could become a major testing centre of autonomous driving technology.



► Electro Magnetic Compatibility (EMC) laboratory.

What are the opportunities in the sustainable development of new energy vehicles for BMW Brilliance - from production and recycling of high voltage batteries to the construction of a new energy vehicle ecosystem?

Developing new energy vehicles for BMW Brilliance is not just an opportunity – it is a necessity. BMW Group and BMW Brilliance are motivated by ever-increasing requirements to reduce CO2 and to deliver zeroemission or near-zero-emission vehicles. We have been outstanding in achieving these targets through our Efficient Dynamics Strategy.

In the future, BMW Brilliance will play an increasingly important role for the BMW Group, as a substantial portion of the zero-emission vehicle credits are generated through BMW Brilliance products.

Recycling of batteries has always been at the core of development for the BMW Group and BMW Brilliance, as the batteries are too valuable to simply dispose of. We have taken a leading role in the "second life" aspect of battery usage, and we are also working heavily on recycling valuable raw materials. Rather than building large, heavy batteries, we are working on lightweight, highly efficient and safe batteries with outstanding energy density - the smaller the batteries, the less we must recycle.

Meanwhile, the new energy vehicle ecosystem is developing, and the number of charging stations is rising constantly. The support of the Chinese government for new energy vehicles will speed up the availability of a convenient and reliable charging network.

## 2.1 STRATEGY AND MANAGEMENT



► New Dadong plant.

The automotive industry is dramatically changing, triggered by a fundamental shift in individual mobility behaviour and an acceleration of new technologies from electrified powertrains and end-to-end digitalisation, all within a rapidly changing regulatory environment.

In China, the market is young, sophisticated and dynamic. For BMW Brilliance, a localised joint venture striving to meet the needs of Chinese consumers, we must strike a perfect balance of cuttingedge technology, customer-centric services, and outstanding product performance.

At BMW Brilliance, we respond to market demands by offering a wide range of models from traditional internal combustion engines to new energy vehicles. In 2017, we further extended our product line-up and brought new vehicle models to the Chinese market, designed to meet our customers' increasingly individualised and diversified needs. Our engineers work closely with the BMW Group's R&D team to develop products and components specifically for the needs of Chinese

customers and in line with Chinese regulations, which is essential for our long-term business strategy.

In production, BMW Brilliance is guided by the European Foundation for Quality Management (EFQM) "Excellence Model", regarded as a holistic and structured quality management framework to achieve sustainable success and excellence in manufacturing. The EFQM model provides a unique opportunity to sustain high levels of performance and exceed the expectations of all stakeholders. BMW Brilliance uses the EFQM "Excellence Model" to align our management approach, to set competency and performance targets, and to ensure business decisions incorporate the needs of all stakeholders.

With the expansion of the new energy vehicle market, we have continued to increase our contribution to electromobility by providing premium new energy vehicles with the newest generation of electric vehicle charging infrastructure and complementary services to create a customer-oriented new energy ecosystem in China.

For all our models, we conduct rigorous material and product safety checks, and utilise advanced safety features. We invest in upgrading customer interactions, provide training for customers on vehicle use, and continue to develop innovations in our aftersales services based on customer feedback. For our dealer network, we are fostering the growth of sustainable initiatives which result in competitive advantages and cost reductions, we provide the latest digital technology to enhance the customer experience and provide on-site training to stimulate demand of new energy vehicles.

## **EXPANDING OUR BUSINESS IN CHINA**

Since BMW Brilliance's inception in 2003, our expansion has been rapid as we established local research and development, procurement, and production. We are committed to introducing the latest products and technologies into the Chinese market.

In 2017, we officially launched the all-new BMW 1 Series Sedan, marking a shift from introducing products to China to also developing products for China, with a model built with best-in-class technology. We also launched the all-new BMW 5 Series Li, which underwent a global testing process and an upgrade of premium technological equipment specifically for the Chinese market. Our launch of the ZINORO 60H, the second model of the ZINORO brand, represents BMW Brilliance's commitment to our localisation strategy and our determination to lead the new energy vehicle market. As a symbol of the future, this year we held the world debut of the all-new BMW 530Le iPerformance, one of the most intelligent and advanced premium new energy vehicles ever produced in China. Sales as a result of our expanding, locally-produced vehicle models accounted for 68.7% of the total sales of the BMW brand in mainland China.

At production, our localisation efforts are reaching fruition. In 2017, we increased our production capabilities with an extension of Dadong plant which is now BMW's most modern, innovative, and sustainable car factory. We expanded our

Research and Development Centre at Tiexi plant to further optimise our manufacturing processes and our vehicles, while creating an innovation hub. The R&D Centre's key areas of innovation include new energy vehicle powertrains, module and component development, China-specific body and trim solutions, and electronic and digital connectivity, as well as testing and analysis.

As market demand grows for new energy vehicles, we are invested in technologies and infrastructure that will meet the needs of our customers. With our High Voltage Battery Centre (HVB) at Powertrain plant, we produce more powerful and longer-lasting electric batteries with greater durability and maximum driving range to suit the diverse lifestyles of our customers. The HVB Centre makes BMW Brilliance the first Chinese premium automobile manufacturer to launch its own battery assembly line. The all-new BMW 530Le iPerformance plug-in electric hybrid is the first vehicle in our product fleet to incorporate this new battery technology, marking a new era for our new energy vehicles.



▶ Battery pack assembly production.

In 2017, we began preparing for the BMW 1 Series Sedan export project. Having gained strong support and approval from the government, we initiated a cross-departmental working group to complete the process and IT system that lays the foundation for our official launch. The accomplishment of this project will connect our world class vehicles to international markets - bridging BMW Brilliance to the world.

## **BUILDING FOR GREEN PRODUCTION**

The Tiexi plant is a role model for sustainable automobile manufacturing. The plant's construction maximises natural ventilation and utilises underground water for temperature adjustments to conserve energy, and the building has an intelligent management system with extensive monitoring to automatically analyse and adjust energy use.

At both Dadong and Tiexi plants, we have developed production lines that are highly flexible and capable of producing traditional combustion engine vehicles and new energy vehicles on the same assembly line. This avoids redundant investment in plants and production equipment and makes our production system extremely flexible, so that BMW Brilliance can react quickly and appropriately to customer demand.

## **DIGITALISATION AT BMW BRILLIANCE**

With the current trend of digitalisation and the transformation of the automotive industry, innovation is essential. At BMW Brilliance, we create an environment for innovation, where digitalisation in production, the use of smart data analytics, smart logistics, and innovative automation are enhancing the flexibility and quality of production processes. We use digital technology to provide more convenient and efficient services for our employees in their day-to-day work, increasing the efficiency of employee interaction and building a friendly, proactive, and innovative corporate culture.

At our new HVB Centre, innovative production processes and state-of-the-art robotics are applied to our double-module battery production. The application of advanced and Industry 4.0 technologies means the HVB Centre sets new standards to produce high voltage batteries in China. We use an

Integrated Process Management (IPM) system for quality management that leverages big data to trace the progress of battery cells and processes, including information as detailed as tightening torque. Automatic laser welding gives high accuracy and stable weld quality, adding strength and reliability, which enhances battery function and safety.



Laser welding the battery cell system.

Furthermore, we are collaborating with local network providers and the local government to explore 5G technologies. The emergence of a 5G network creates new opportunities for BMW Brilliance to utilise real-time connections and big data analysis. This can be translated into smarter buildings to optimise energy, emissions, and material use; to enhance the accessibility and reach of our mobility services; to enable machine-to-machine communication; to connect our employees; and to improve our logistics monitoring and traceability.

Meanwhile, we are transforming our company culture to increase open-mindedness towards digitalisation and Industry 4.0 technologies. We invested in building the technical competence of our employees by raising awareness through interactive events and programmes.



#### **Tech Day**

Our first Tech Day was held in 2017 to raise employee awareness of how technology is integrated into production and linked to sustainable development. We used information booths, speeches, and workshops to share about strategy and technical details.

## **DIGITAL.me**, Innovation and **Digitalisation event**

DIGITAL.me was developed to share the digital culture at BMW Brilliance and present the latest innovation cases to the BMW world. In the event, eight prototypes developed by Tiexi plant's Innovation Management Council were highlighted.



## Mobility Strategy - Empower Yourself

In 2017, we launched four digital programmes that connect and empower our employees. Designed by the IT Innovation Lab, we unveiled the "BBA Mini Programme" - an app for employees to read BBA intranet news and search production reports, the "Personal Cloud" – an exclusive library of information for employees, the "Joy Event App" - an app to create and participate in events with ease, and "Xiao Bao", BMW Brilliance's new digital assistant.

We spur the imaginations of everyone at BMW Brilliance by encouraging our employees to submit their ideas on our innovation platform, and the most promising suggestions are selected and developed in our IT Innovation Lab. At BMW Brilliance, our employees are the key element in our digitalisation strategy, and we leverage the opportunities of digital programmes to empower, enable, and connect our employees for the future.

More detailed information about our focus areas can be found in the following subchapters:

- ► Efficient mobility > Chapter 2.2
- ► Product safety > Chapter 2.3
- Customer satisfaction > Chapter 2.4

Climate change and the effects of air quality in our communities and our cities present an ongoing challenge for the automotive industry. To address these challenges, we are continuously reducing the CO<sub>2</sub> emissions from our vehicle fleet and aim to be the leader in taking a holistic approach to premium electromobility.

We focus on taking approaches that reduce our impacts on the environment and are committed through the innovation and development of our product portfolio to increase the efficiency of our traditional combustion engines and expand our range of new energy vehicles, to further reduce corporate average fuel consumption and emissions across our product portfolio.

#### REDUCING FUEL CONSUMPTION

Fuel efficiency and environmental impacts are important factors that we consider from the design stage. We closely analyse and test the materials, production technologies, and drivetrain types on performance, efficiency, and reuse.

We reduce the energy requirements of our vehicles by utilising the BMW Group's Efficient Dynamics Strategy and by including innovations such as lightweight design, efficient engines and gearboxes, and optimised aerodynamics. We are increasing the new energy vehicles offerings in our product portfolio to contribute to our fulfilment of China's corporate average fuel consumption target for passenger vehicles, set at 5.0 litres per 100 kilometres by 2020, and to meet the requirements set by China's new dual-credit scheme, the "Management Regulations for Corporate Average Fuel Consumption (CAFC) and New Energy Vehicle (NEV) Credits" which will be enforced from April 2018. These regulations are a positive step forward in reducing fuel consumption in the Chinese automotive market and will motivate vehicle manufacturers to accelerate deployment in the new energy vehicle market, extend driving ranges, increase battery density, and reduce costs.

Having reached 6.17 (6.69 in 2016) litres per 100 kilometres in 2017, 7.8% less than in 2016, we remain the top-ranked joint venture in China for our corporate average fuel consumption achievement rate and we expect to continue making significant strides in contributing to China's commitments on fuel efficiency and emissions targets.



**₹** 7.8%

Reduction in corporate average fuel consumption compared to 2016.

## LOWERING CO<sub>2</sub> EMISSIONS

Indirect CO<sub>2</sub> emissions (Scope 3) are caused by the use and disposal of our products, in our supply chain, in transport logistics, and by employees commuting to and from work. In 2017, our total indirect CO<sub>2</sub> emissions increased by 21.4% compared to 2016, primarily due to the growth of our sales volume. Despite the fact that we have made considerable progress in improving average fuel economy across our fleet with CO2 emissions decreasing to 146.9 grams per kilometre from 159.2 in 2016, our emissions generated at the utilisation phase increased by 19.8% > Figure 07. This was a disproportional increase when compared to a 29.8% growth in production and displays our significant fuel economy improvements.



Assembly shop at Tiexi plant.

#### Indirect CO<sub>2</sub> emissions (Scope 3) of BMW Brilliance automobiles (in t)



	2013	2014	2015	2016	2017	Change from previous year %
Total emissions	-	9,392,718	9,285,353	9,558,817	11,606,790	21.4%
Upstream chain <sup>1</sup>	-	1,989,978	1,989,117	2,099,198	2,675,910	27.5%
Utilisation phase <sup>2</sup>	-	7,244,557	7,138,095	7,292,407	8,735,582	19.8%
Disposal <sup>3</sup>	-	158,183	158,141	167,212	195,298	16.8%

<sup>1</sup> Emissions from the upstream chain are calculated based on the carbon footprint of representative vehicles from the product lines.

In order to decrease the indirect CO<sub>2</sub> emissions of our vehicles in the future, we will reinforce our efforts to promote new energy vehicles, further increase the efficiency of fuel consumption and of our transport logistics > Chapter 3.2 and continue to collaborate with our suppliers to reduce CO<sub>2</sub> emissions along the value chain > Chapter 4.

## THE GROWTH OF **ELECTROMOBILITY**

Electromobility is an essential element and strategic pillar of the Strategy NUMBER ONE > NEXT. As part of the BMW Group's global production, BMW Brilliance will contribute to the commitment set by the BMW Group, to offer 25 electrified models to our customers by 2025.

At the end of 2017, China's overall new energy vehicle production and sales volume had maintained its global lead for three consecutive years, with over 1.8 million new energy vehicles accumulatively sold, representing more than 50% of the global market share of new energy vehicles.

As a pioneer in shaping electromobility in China, our ZINORO brand, designed and produced in China for the Chinese market, launched the second model the all-new ZINORO 60H, a plug-in hybrid model that combines zero-emission driving in the city with a longer range for distance travel. Customers driving the ZINORO 60H can easily complete their daily

commutes and city driving in all-electric mode, with a 60-kilometre electric range.

We also announced the world debut of the all-new BMW 530Le iPerformance, showcasing BMW Brilliance as a pioneer in the field of new energy vehicles and as an innovator of sustainable mobility.

### OFFERING SUSTAINABLE MOBILITY **SERVICES**

By the end of 2017, BMW's public charging network had expanded to 92 cities in China, with over 65,000 charging pillars available. For our customers, the ChargeNow™ card provides access to the charging pillars, and BMW Connected Drive gives drivers updated information about charging stations in their immediate vicinity. We also maintain a ChargeNow™ WeChat account as another platform for our customers to receive real-time information about charging pillar locations, charging services, and related events.



► National launch of the ZINORO 60H.

<sup>2</sup> The fleet emissions are extrapolated from the average fleet emissions of BMW Brilliance products sold in a given year. The calculation was based on an average mileage of 150.000 kilometres

<sup>3</sup> Emissions from disposal processes are calculated based on the carbon footprint of representative vehicles from the product lines.

To reinforce our public charging network, our ChargeNow™ programme includes strategic partnerships with local providers to extend public access to charging pillars and intelligent charging systems. All public ChargeNow™ charging pillars can be used by customers of other brands with vehicles conforming to the China GB standard by purchasing a charging card from our local partners.



Our customers with private parking spaces can also receive private charging wall boxes, including installation services. Our certified installers provide free standard installation in 100 cities across the country. For customers who do not have their own

parking space in Beijing, Shanghai, Guangzhou, Shenzhen, Hangzhou or Chengdu, a special charging card package provides access to semi-public charging stations in their residential compounds. We also contribute to the Sino-German electric vehicle charging project, which brings together government officials, automotive companies, and scientific institutes to conduct research on topics related to the charging of new energy vehicles.

As one of the key aspects of BMW Group's vision for future mobility and part of the ACES approach (Automated, Connected, Electrified and Shared), ReachNow launched its car sharing service in Chengdu in partnership with leading car sharing provider EVCARD. The business launched with 100 fully electric BMW i3 available to pick up and drop off at over 1,000 stations across the city. The debut of car sharing in Asia, also marks the launch of BMW Group's official mobility brand ReachNow into the Chinese market, aiming to offer new and innovative individual mobility solutions to Chinese customers.







## 2.3 PRODUCT SAFETY

Our approach on product safety follows that of the BMW Group. We protect our customers and other road users from injury by creating networks of active and passive vehicle safety systems.

Road safety and the use of hazard-free materials are crucial from both social and environmental perspectives. BMW Brilliance has adopted an integrated approach to product safety in line with the global safety standards of the BMW Group. This includes advanced safety systems, the avoidance of potentially harmful materials and emissions inside our vehicles, adequate product information, and safety training for drivers. Keeping our customers and other road users safe is an integral part of our product responsibility.

For example, during the product development phase, we are exploring the most advanced safety features, materials and technologies that guarantee product safety. At production, we use optical checking enabled by 3D cameras that detect abnormal trends in welding and foil application, verify and optimise welding quality, and flag potential quality defects during production. During utilisation, we inform our customers about any potential risks and hazards related to our products, as well as the environmental performance and proper use of our products and services. We report on the fuel consumption of our vehicles in accordance with



➤ 3D camera optical check of laser welding.

China's vehicle fuel consumption regulations. The fuel consumption for all our vehicle models can be referenced on the Ministry of Industry and Information Technology website.

We monitor customer feedback on our products and pay close attention to any feedback on the topic of safety. If necessary, the responsible authorities are informed without delay and measures to secure customer safety are initiated. We have established implementation processes and organisations for this

## **SAFETY SYSTEMS AND TRAINING**

Our vehicles are designed to keep passengers and other road users safe. They include active safety systems that help prevent accidents as well as passive safety systems which seek to mitigate the consequences should an accident occur. Active safety includes perfect chassis tuning, optimal traction, and effective brakes. Electronic chassis control systems as well as a range of driver assistance systems also contribute towards accident prevention.

Should an accident occur, all BMW Group vehicles and ZINORO models have energy-absorbing crumple zones, safe passenger cells, restraint systems, airbags, and many other passive safety features that protect the lives and health of drivers. Moreover, the vehicle front has various devices installed to protect pedestrians.

For example, the BMW X1, the first premium SAV designed for the Chinese market, is equipped with a number of active safety features, such as seatbelt alert for front passengers, electronic stability control, and adaptive headlights. These features put the BMW X1 at the top of the compact SUV category, having been awarded a five-star rating for the crash test and the 2016 Safety Car Award from China Automotive Technology and Research Centre (CATARC).

PRODUCT RESPONSIBILITY | Product safety

Beyond our vehicle safety features, we provide BMW customers with complete road safety training, designed for a range of different skill levels and driving abilities. Led by our expert team of 31 instructors, who are certified in Germany and BMW-qualified, more than 7,600 participants took part in our training courses and events across eight cities in 2017. These localised and tailored training courses test drivers under a variety of conditions and offer a safe, superior and complete BMW driving experience.



#### **USING SAFE MATERIALS**

In the early development phase, we evaluate the potential materials to be used in a product in order to determine the risk potential and eliminate any problematic materials from the outset. This ensures that all policies and regulations in terms of product safety and protection of human health and the environment are met in each phase of the vehicle life cycle (from development to utilisation, through to recycling and disposal). As part of our production process, we fully document all chemical substances used. These substances first undergo a safety inspection and are then approved for a specific application through our central recording system, which provides detailed specifications and tips on handling these products as well as on storage, transport, and first aid.



Non-hazardous material analysis.

#### MANAGING HAZARDOUS MATERIALS

To ensure a comprehensive and consistent approach towards prohibited and restricted substances and materials, BMW Brilliance and the BMW Group work closely to define clear business procedures that secure the safe control of hazardous substances.

We are aligned with the BMW Group in monitoring vehicles and components to ensure compliance with EU end-of-life vehicles (ELV) directives and we include this in international purchase contracts to ensure supply chain cooperation. We comply with the Management Requirements for Automotive Hazardous Substances and Recyclability and Recoverability Rate issued by MIIT (2015-38), which recommends limits for recyclability and recoverability of parts. This has come into effect since January 2016 for new models, and will be compulsory from January 2018 for existing models. We require compliance with the same guidelines throughout our supply chain.

With customer demand for new energy vehicles growing in China and globally, further research will identify any effects of hazardous materials associated with the parts that comprise high voltage batteries. Our current efforts are to provide optimal battery usage and explore opportunities to increase the recyclability of used batteries by working with the government to support the policymaking process and working with our suppliers to identify where continuous improvements can be made.

#### PROTECTING INTERIOR AIR QUALITY

We identify potential health effects caused by substances found in our external environment. In response to the growing challenge of air pollution in urban areas, all BMW vehicles are equipped with a passenger compartment filter as standard. This highly efficient air filter almost completely removes particles such as dust, pollen, and pollutants from incoming air.

## **ACHIEVING PRODUCT AND** MANAGEMENT SYSTEM **CERTIFICATION**

In 2017, external auditors from China Quality Certification Centre (CQC) conducted an ISO 9001:2008 audit at Dadong plant, Tiexi plant and Powertrain plant on our operations, quality, purchasing, and research and development. With our advanced quality management system, we successfully achieved the certification, demonstrating that the BMW Brilliance quality management system is working effectively.

In the same year, we also passed the 2017 China Compulsory Certification (CCC) external audit with zero findings. The audit includes an inspection of production processes, materials, and equipment, as well as a conformity check of all series products. Generally, BMW Brilliance's product standard requirements are higher than China's mandatory requirements for product emissions, fuel consumption, the use of environmentally sound materials, and recyclability and reusability throughout a product's life cycle.

At our High Voltage Battery Centre, we obtained ISO/ TS16949 Letter of Conformance (LOC) issued by the IATF (International Automobile Task Force). This certification provides confidence in the application of new high voltage battery technology and recognises our management process and approach, quality management system knowledge, working environment, and target setting. In the future, BMW Brilliance plans to expand the audit to cover the entire Powertrain plant and has already started preparation.



▶ HVB Centre obtains the ISO/TS16949 Letter of Conformance.

PRODUCT RESPONSIBILITY | Customer satisfaction

#### Customer satisfaction | PRODUCT RESPONSIBILITY = 57

## 2.4 CUSTOMER SATISFACTION

Customer demand is constantly evolving and in this technological age, customers can see, interact with, and experience products and brands in new ways. We aim to maintain high customer satisfaction with high-performance vehicles, sustainable designs, and premium customer services.

We strengthen our customer engagement through open communication, collecting feedback, protecting customer data, and through investing in our aftersales teams to deliver the best possible services that are reflective of BMW Brilliance's core values.



To optimise our customer interaction and support, we integrate our multiple communication channels to provide increasingly individualised information to our customers and offer benefits through our local commercial partnerships.

The BMW Customer Interaction Centre is at the core of our communication with customers. Our agents call current and prospective customers to gather information about their satisfaction with our dealers' sales and aftersales services. We also receive over 59,000 inbound calls per month, which are mostly customer inquiries. A self-service function allows customers to receive information efficiently and provides the option to receive information as a text message.

Our Direct Communication Circle defines which content and campaigns are of interest to each customer group. The relevant information is then included in individualised online newsletters that are sent to eight million customers, users, and prospects each month.



We use a 360-degree customer view tool to make proactive, needs-based suggestions to our customers and to harmonise customer communication across different departments and communication channels. The tool analyses customer data and informs our dealers regularly about the current situation and needs of each customer. In response, we send each of our customers the information they require, such as a service reminder, information about insurance renewal or end of warranty, sales promotions, or a birthday greeting. We also use the 360-degree customer view tool in our Customer Interaction Centre, increasing the efficiency of our communication and resulting in higher customer satisfaction. In 2017, we launched the BMW Online Chat on our official website and further personalised customer communication in our online newsletters.



BMW chat service.

#### **COLLECTING CUSTOMER FEEDBACK**

We solicit customer feedback via text message after each interaction with one of our dealers, so we can proactively respond to any negative feedback with a call to the customer to get more detailed information. Customer inquiries, suggestions, and comments are then sent to the relevant departments or dealers for follow-up. We assess customer feedback and resolution rates on a monthly basis, to be able to act on common issues and improve response and resolution times. To date, 185 BMW dealers are involved in this new process and the results show a positive impact on customer satisfaction.

In 2017, over 83,000 aftersales customers participated in interviews conducted by our Customer Interaction Centre. Overall, satisfaction was high, with a customer recommendation rate of 93.7%, increasing from 86.7% in 2016.



Customer data security is a top priority, and our Data Privacy Protection Office provides technical security to protect customer data and its usage. BMW Brilliance implemented a standardised process which adheres to the customer data privacy protection process of the BMW Group. Our dealers apply the same processes to ensure our customers' personal information is kept safe. We continuously improve our systems and processes in line with developments in customer data protection requirements, and we offer various channels for customers to change their opt-in status based on their preferences.

## SUPPORTING DEALER **IMPROVEMENT**

We monitor our dealers' performance in sales and aftersales services with our Joy Index. We conduct surveys to collect information about customer satisfaction and feedback, which we analyse monthly and then share with our dealers. The information serves as a basis to better align services with customer needs and expectations and allows us to jointly track improvements over time. To help our dealers offer premium customer service, we encourage ongoing exchanges among dealers, and the best dealer action plans or service tips are shared on an online dealer platform.

We prepare our dealers to better serve their customers with an on-site coaching programme, with the aim of creating a consistent premium experience for all customers and prospects who visit our dealerships. The goal is to make the customer experience more personal, emotional, and inspiring. We provide onsite training for all our new dealerships and carry out individualised coaching for dealerships with low customer feedback scores. Dealers identified for improvement will receive training from the BMW China Training Academy.

To better serve our customers, we conduct a customer survey to collect feedback on dealership experiences. In 2017, the survey concluded that customers prefer more interactive experiences or more convenient and digital options. In response, our aftersales team now encourages our sales consultants to customise their approach and deliver information based on individual needs. We also extended our dealership network to provide more customer touch points, including the expansion of digital services to further increase customer convenience. In the future we will provide upgraded interactive technology devices in more showrooms, to harness digitalisation as a tool for connecting with customers.

Customer satisfaction | PRODUCT RESPONSIBILITY | 59 PRODUCT RESPONSIBILITY | Customer satisfaction

## "Expanded our new energy vehicle dealership network to 234 locations in 75 cities."

For the electrification of our product fleet, we have expanded our new energy vehicle dealership network to 234 locations in 75 cities. To ensure these dealers can provide the best possible service to customers and prospects, we conduct on-site training. We also train sales advisors, area managers, and call centre agents to complement the service at our dealerships. To stimulate demand and further expand the share of new energy vehicles in our fleet, we are implementing a strong marketing and public relations campaign. Through experiential events, potential customers get the opportunity to experience first-hand the outstanding performance and driving dynamics of our new energy vehicles.



### **FOSTERING SUSTAINABILITY IN OUR DEALERSHIPS**

We apply the 5S dealer certification programme of the BMW Group to promote sustainability among our dealers. The 5S programme incorporates the concept of sustainability along with the traditional 4S (sales, services, survey, and spare parts) concept and requires dealers to reach a relevant sustainability standard which includes their contributions to the local economy and employment, their commitment to community welfare, and the validity of their measures for resource use and carbon emission reduction at their operations. As of 2017, we had 42 5S dealerships in the BMW China network. Moreover, 16 dealers were successfully recertified according to the 5S certification model, which requires renewal every two years.



► Energy saving architecture, utilising natural light.

## PRODUCT RESPONSIBILITY: **FORECAST 2018**

In 2018, we will celebrate the roll-off of our our two millionth locally produced vehicle, three short years after reaching 1 million in 2015. We will also launch the BMW 530Le iPerformance, reflecting our investment and success in the premium new energy vehicle segment and the all-new BMW X3, becoming the sixth BMW model to be locally produced, which will redefine the premium mid-size SUV market.

In line with the BMW Group's strategy and as a global leader in innovative mobility, BMW plans to expand our mobility service offerings in China, growing the car sharing offering and investigating other business models to provide customers with more choices to meet their mobility needs. With our growth in new energy vehicle production, we will set-up over 80,000 ChargeNow™ charging pillars covering over 100 cities to better support customer access and to reinforce the new energy vehicle ecosystem in China.

We will export the BMW 1 Series Sedan in 2018, marking a further milestone at BMW Brilliance, as we bring our locally produced high-quality vehicles to the world.

Our production capabilities will continue to expand. BMW Brilliance will lay the foundation for Phase II of our High Voltage Battery (HVB) Centre, fostering greater research and development capabilities in battery and new energy vehicle production technologies.

We will work closely with the local government and local service providers to foster the development and application of a 5G network at our plants, to expand smart manufacturing processes, to explore new technologies that optimise production and non-production operations and to enable machine-to-machine communication.

Product safety will remain our priority. We will work to improve our active and passive safety features, expand our range of driver assistance systems and continue driver safety training. In 2018, we are extending our training to include more locations, so that our tailor-made courses can be more readily available to both current and prospective BMW customers and improve overall road safety across China.

Our relationship with customers will be intensified with the introduction of our new global Customer Board under the BMW Group that will support aftersales services. Dealership showrooms will also be upgraded with interactive technology devices, expanding on current digitalisation pilots.







## **OUR SUSTAINABILITY DRIVERS**



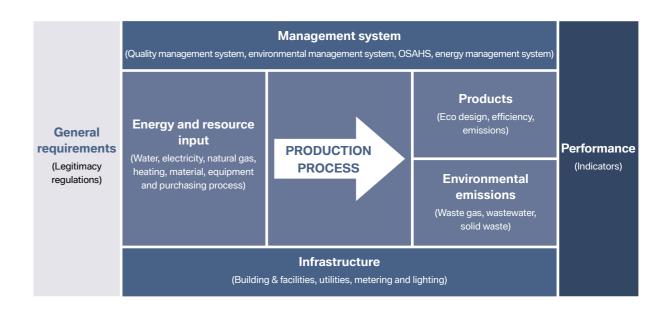
**Green Plant Project Core Team** 

Why was BMW Brilliance selected to receive the Green Plant Award from the Ministry of Industry and Information Technology?

At BMW Brilliance, we have put great efforts into our green manufacturing implementation which has received significant recognition. The National Green Plant Award is a new initiative by the Ministry of Industry and Information Technology that includes an assessment of seven areas - general requirements, infrastructure, management system, energy and resources, product, environmental emissions, and comprehensive performance. We set a target to be in the first group of National Green Plants in China and were honoured to be selected in September 2017.

Our commitment to green manufacturing includes projects to improve our energy efficiency, increase the amount of renewable energy that we use, and promote the implementation of our energy management system based on ISO 50001 and our greenhouse gas emission reporting in line with ISO 14064. We utilise a Heat Recovery Centre to recover waste heat from our foundry and we are installing solar panels that will provide renewable energy for our plants.

"Being recognised as a Green Plant reflects the progress of our overall green manufacturing strategy, which is embedded in our management system."



### How does this national recognition reflect BMW Brilliance's manufacturing strategy?

Green Manufacturing System is an important pillar of the government's Made in China 2025 strategy, and BMW Brilliance winning the National Green Plant Award is a strong endorsement from the Chinese government that we are putting into action its green manufacturing strategies.

Being recognised as a Green Plant reflects the progress of our overall green manufacturing strategy, which is embedded in our management system. Operating as a National Green Plant is a long-term approach that supports BMW Brilliance's strategy of furthering green manufacturing in China.

### What other plans does BMW Brilliance have to promote green manufacturing in China?

BMW Brilliance has been invited to join the national Green Factory Promotion Alliance of China as a council member. We will also be involved in the development and optimisation of assessment standards for Green Plants in the automotive industry and will support the drive for green manufacturing in China.

## 3.1 STRATEGY AND MANAGEMENT

BMW Brilliance aims to be the most resource-efficient premium mobility provider in China. We are working to increase the energy and resource efficiency of our production processes and reduce our emissions. Through these measures, we minimise our impacts on the environment, contribute to China's ambitious environmental goals, and reduce our costs, while incorporating industry best practices.

We are committed to reducing our environmental impacts to a minimum. We set targets at the earliest phase of product development and define concrete measures for their achievement. Using life-cycle engineering to achieve specific environmental targets, we develop products to be environmentally friendly over their total life span, and work to reduce environmental impacts during both the production and utilisation phases of our vehicles.

The BMW Group target for 2020 is to reduce Groupwide resource consumption per vehicle produced by 45% compared to 2006, and BMW Brilliance makes a significant contribution to these goals by reducing our energy consumption and water consumption. Our new plant in Dadong utilises advanced production technologies along with wall insulation and intelligent lights to achieve 30% lower energy consumption, and the paint shop uses 60% less energy and water than 10 years ago.

BMW Brilliance's environmental management system is based on BMW Group systems, international standards, and relevant environmental legislation in China.

## **ENVIRONMENTAL PROTECTION** AND MANAGEMENT

Our Board of Management appoints a representative to ensure the effective implementation of our overall environmental management system. At the plant level, each plant director is responsible for environmental management of our operations. In addition, the Environmental Sustainability Circle has the mandate to continuously improve the environmental performance

of BMW Brilliance, and meets quarterly to review performance on environmental targets.

Through the BMW Group's international environmental protection network, our experts exchange ideas with environmental specialists from other BMW Group plants. The aim is to build the competence of local teams and employees and share best practices globally. We conduct annual internal and external audits of our environmental management system and always strive for improvement. All our operating plant locations are certified in accordance with ISO 14001. In 2017, BMW Brilliance was certified to the new ISO 14001:2015 standard.

As government inspections of the industry have increased, we are taking a proactive approach to ensure compliance by continuing to stay in close communication with relevant authorities to better understand and align with their expectations. Inputs from interactions with government officials at the plant level are brought to top management at the BMW Group and BMW Brilliance, and used to enhance current management systems and mechanisms.

#### **OUR CORPORATE CULTURE**

We aim to incorporate environmental protection into our organisational culture. One way that we raise awareness and motivate employees to help reduce our environmental impacts is by including environmental topics in information exchanges and competence building for the workforce. We also conduct annual environmental campaigns on specific topics - for 2017, the campaign topic was energy savings, with information on how to reduce energy consumption at the office and at home, and an Environment Protection Star Award was awarded to one team in each plant for their achievements.

We focus on reducing the environmental impact of our activities in three key areas:

- ► Energy consumption and emissions > Chapter 3.2
- ▶ Waste management > Chapter 3.3
- ► Reducing water consumption > Chapter 3.4

## 3.2 ENERGY CONSUMPTION AND EMISSIONS

Our total energy consumption increased by 17.8% in 2017 compared with 2016, due to the addition of new production technologies > Figure 08. Finding ways to improve our energy efficiency with these technologies in place is a top priority.

Since the introduction of new foundry technology in our Powertrain plant, our energy efficiency is beginning to improve due to use of a Heat Recovery Centre, which enables our foundry to recover waste heat for use in heating water and buildings. From 2017, this creates 1,716 MWh/a of energy savings.

Energy consumption and emissions | ENVIRONMENTAL PROTECTION | 65

#### **Energy consumption at all plant locations (in MWh)**



	2013	2014	2015	2016	2017*	Change from previous year %
Total fuel consumption from non-renewable resources	115,447	109,895	132,325	183,422	184,408	0.5%
Total electricity consumption	165,396	216,674	202,558	295,867	393,565	33.0%
Total heating consumption	162,627	153,660	143,539	144,130	156,295	8.4%
Total energy consumption	443,500	480,229	478,424	623,419	734,268	17.8%

<sup>\*</sup> Includes energy consumption of new facilities and new production technologies.

In 2017, we increased our use of power from renewable energy sources. Wind power purchased from the grid accounted for 25% of our total electricity consumption in 2017. We are also installing 17.1 MW capacity of solar panels - Phase I will be in operation in July 2018, and Phase II will be complete by the end of 2018. The power generated will be used by BMW Brilliance, with any surplus channelled into the city's energy grid.

Our energy consumption and carbon footprint for production decreased in 2017, to 0.70 tonnes of CO<sub>2</sub> per unit > Figure 09. In the coming years, we plan to reduce this further by expanding our energy efficiency measures and using cleaner energy sources.



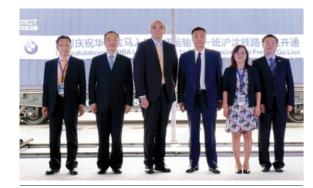
Solar panels installed at Gate 2, Tiexi plant.

	2013	2014	2015	2016	2017	Change from previous year %
CO <sub>2</sub> emissions per unit produced	1.10	0.97	0.88	1.13	0.70	-38.0%

## **INCREASING TRANSPORT EFFICIENCY**

Our logistics operations facilitate the safe and efficient transport of components from our suppliers to our manufacturing plants and of finished vehicles from our plants to our dealerships. We rely on partnerships with our suppliers to reflect best practice and enhance efficiency and transparency.

In 2017, our focus was on increasing the share of lowcarbon modes of transport to reduce overall costs and minimise our environmental impact. Our vision is to green our logistics and move beyond regulatory requirements. Our proactive measures to reduce CO<sub>2</sub> emissions for freight transportation both pre- and post-production has put us in an advantageous position for the future. With the recent promulgation of GB1589-2016 by the authorities, we are introducing standard-dimension trucks into our fleet, and also taking this as an opportunity to boost rail freight and sea shipments while exploring new technologies that will optimise and automate our inbound and outbound processes.



► Ceremony of the 1st Shanghai to Shenyang special train freight.

For inbound logistics, we utilise and promote carbonefficient means of transport as much as possible. With our suppliers we encourage clean energy fuels,

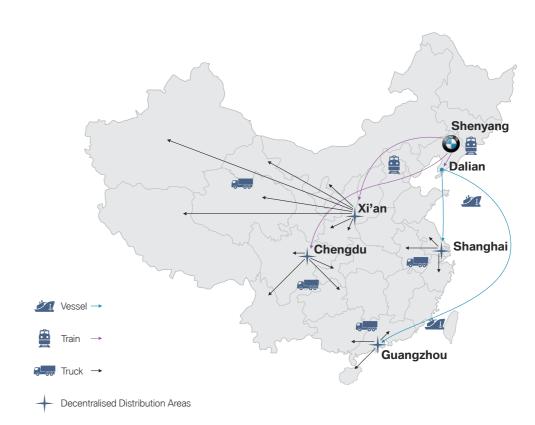


**26%** 

We have shifted 40 of our inbound suppliers from road freight to rail, including a special train from Shanghai to Shenyang launched in 2017 with 26% lower CO<sub>2</sub> emissions than road transport.

e-trucks, and rail freight. We have shifted 40 of our inbound suppliers from road freight to rail, including a special train from Shanghai to Shenyang launched in 2017 with 26% lower CO2 emissions than road transport. During assembly, we are optimising the handling steps at the warehouse while also finding ways to reuse equipment and materials through flexible production lines. For the all-new BMW 5 Series Li we changed to recyclable packaging instead of disposable, resulting in a 30% waste reduction in packaging and cost savings. Within our plants we have integrated forklift software to increase efficiency by using the shortest possible routes. This has drastically cut down delivery time of materials.

For outbound logistics, we are increasing the use of rail and sea shipments to reduce road transport emissions, lowering our CO<sub>2</sub> emissions from long-distance transport by 6% in 2017. We use vessels from the port of Dalian to deliver finished vehicles to Shanghai and Guangzhou. We are also utilising trains for transportation to Chengdu and Xi'an and launched a new dispatch area in Xi'an which utilises rail for pre-haul. We optimised new vehicle unloading and parking in Dadong and Tiexi so that cars are immediately loaded according to the direction of travel, reducing unnecessary moves and lowering our costs and emissions > Figure 10.



We have held several information sessions with logistics providers and suppliers to discuss BMW Brilliance's logistics strategy and strengthen cooperation throughout the value chain. We also provide training to suppliers on CO<sub>2</sub> emissions monitoring and waste disposal regulations. We include "Environmental Protection and Zero Waste" as one of the fundamental principles for suppliers, motivating suppliers to make their own environmentally friendly decisions. In 2017, we introduced end-to-end transparency with our logistics providers to show customers the origin and destination of parts.

Over 16,000 of our employees use BMW Brilliance's shuttle buses to travel to and from work each day, reducing the number of private vehicles on the roads and the amount of CO2 emissions generated by employee commutes.

### **REDUCING VOC EMISSIONS**

Energy consumption and emissions | ENVIRONMENTAL PROTECTION | 67

We are committed to reducing the VOCs (volatile organic compounds) from our production processes to mitigate any risks and impacts on society. Our VOC emissions increased from 0.40 kg of VOCs produced per unit in 2016 to 0.54 kg of VOCs per unit in 2017, due to the start-up of production at Dadong plant, which required an optimisation period. With a relatively lower volume of vehicles produced in the ramp-up phase, our per-unit VOC emissions were higher.



► Paint shop at new Dadong plant.

## 3.3 WASTE MANAGEMENT

Managing waste is a priority at BMW Brilliance, and we address this through waste management procedures designed to appropriately handle waste generation from production to transport. Our objective is to minimise our overall waste footprint and make lasting contributions to the BMW Group's 2020 goal of reducing waste by 45% per vehicle, compared to 2006 levels.

We use an adapted version of the BMW Group's waste information system to record the waste we produce. The system allows us to optimise the handling of waste especially in terms of reuse and recycling and to assure compliance with Chinese legislation. We document individual waste flows and categorise waste as hazardous or non-hazardous, in accordance with the Waste Pollution Prevention and Control Law and the Hazardous Waste Catalogue of China.



Plastic waste sorting.

In our production processes, we use recycled packaging to reduce waste and minimise our impact on the environment. The use of returnable packaging for local parts whenever possible has drastically reduced our packaging waste.



Cardboard waste sorting.

## **ENSURING RESPONSIBLE WASTE MANAGEMENT**

We select our waste management service providers carefully, to ensure that our waste is processed correctly and that legal requirements are satisfied. All service providers are audited regularly in accordance with the BMW Group's waste management procedures. Only suppliers that satisfy the audit criteria are permitted to perform waste management activities. Service providers who handle hazardous waste are audited

on-site every two years. For non-hazardous waste, we conduct a document check every second year and onsite audits every four years for all service providers with physical operations.

Waste management | ENVIRONMENTAL PROTECTION ≡ 69

In 2017, we carried out eight waste audits covering six waste management service suppliers. As a result of our increased production volume and implementation of new projects, our waste for disposal increased by 51.8% while our waste for disposal per unit produced increased by 15.7% > Figure 11, > Figure 12.

#### Total hazardous and non-hazardous waste at all plant locations (in t)



	2013	2014	2015	2016	2017	Change from previous year %
Hazardous waste for recycling	1,940	4,060	3,999	5,024	6,799	35.3%
Hazardous waste for disposal	384	1,034	2,000	723	1,365	88.8%
Total hazardous waste	2,324	5,094	5,999	5,747	8,164	42.1%
Non-hazardous waste for recycling	13,113	22,312	26,659	39,067	62,230	59.3%
Non-hazardous waste for disposal	563	597	641	1,219	1,582	29.8%
Total non-hazardous waste	13,676	22,909	27,300	40,286	63,812	58.4%
Total waste for disposal	947	1,631	2,641	1,942	2,947	51.8%
Total waste for recycling	15,052	26,374	30,658	44,091	69,029	56.6%
Total waste	15,999	28,005	33,299	46,033	71,976	56.4%

#### Waste for disposal per unit produced at all plant locations (in kg/unit)



	2013	2014	2015	2016	2017	Change from previous year %
Waste for disposal per unit produced	4.41	5.67	9.17	6.42	7.43	15.7%

### 3.4 REDUCING WATER CONSUMPTION

Most of our water use is for production processes, cooling, and water consumed by our employees. We work to continuously improve our water efficiency in all three areas. To reduce water consumption in our production processes, we have increased the reuse of water at our plants.



► Recycled water station at new Dadong plant.

Our location in Shenyang, which faces water scarcity challenges, makes responsible water use fundamentally important for BMW Brilliance. In 2017, we continued to implement water-saving initiatives for our production plants and offices. We are investigating whether the treated water from our wastewater recycling system can be used for cooling in the paint shop, to complement the water in the cooling tower. The BMW Group is developing a Water Roadmap 2020 to guide water consumption reduction efforts for all its plants, including those under BMW Brilliance.

Activities to increase our water savings include optimisation of cooling water in our machining workshop for engine production, which is expected to reduce water demand by 38%. At our Dadong plant, we implemented a wastewater reclamation system that saves 85,000 m³ of wastewater annually. At Tiexi and Powertrain plants, we recycled 15,813 m<sup>3</sup> of safe wastewater for use at our paint shop and 115,791 m<sup>3</sup> for irrigation of our properties in 2017.



► Treated wastewater for irrigation.

A management system monitors water consumption levels and targets at each of our plants. Despite our continued efforts to limit our consumption, the expansion of our facilities resulted in a 3.9% increase in water consumed per unit in 2017 compared to the previous year > Figure 13. However, we reduced the amount of process wastewater produced per unit to  $0.39 \text{ m}^3 > \text{Figure } 14.$ 

#### Water consumption per unit produced at all plant locations (in m<sup>3</sup>/unit)





	2013	2014	2015	2016	2017	Change from previous year %
Water consumption per unit produced	2.72	2.18	2.18	2.58	2.68	3.9%

### Process wastewater per unit produced at all plant locations (in m³/unit)



Reducing water consumption | ENVIRONMENTAL PROTECTION | 71

	2013	2014	2015	2016	2017	Change from previous year %
Process wastewater per unit produced	0.50	0.47	0.46	0.46	0.39	-15.2%

### **ENVIRONMENTAL PROTECTION: FORECAST 2018**

In 2018, our solar power project will become operational at Tiexi and Powertrain plants. Within the effective sun lighting period, it will contribute about 15 MW of our plants' energy consumption. Surplus power will be channelled into Shenyang's local energy grid.

Our environmental protection campaign for 2018 will focus on waste management. In addition, we will continue the audits of our waste management service providers to ensure correct handling. We also plan to find more potential suppliers for recycling services and increase the proportion of waste that is recycled.

In 2018, we will expand the shift from road freight to rail, and we will use digital tools to improve transport routes. We will adopt new electric vehicle shuttle buses in the Guangzhou Decentralised Dispatch Area and a hybrid plug-in shuttle bus in the Shenyang Plant Dispatch Area, and we will launch new Decentralised Dispatch Areas in Ningbo and Zhengzhou.

We will continue to use and trial new methods that increase reuse and recyclability of materials while optimising our systems and performance. We are doing this by phasing out lead-acid batteries for lithium-ion batteries for our forklifts used in inbound logistics. We are investing in vehicle packaging that moves away from cardboard and we are leveraging emerging opportunities to digitalise and optimise the transportation of inbound

## 采购及零部件质量管理部2017年员工大会 2017 ASSOCIATE FORUM OF PURCHASING AND QMT.





### **OUR SUSTAINABILITY DRIVERS**



### At Boysen, what are the biggest sustainability issues and opportunities you see?

As a specialist in exhaust technology, our most important sustainability issues are air pollution and climate change. We develop and produce highperformance systems and components that reduce pollutants and noise emissions. Our sustainable systems reduce emissions of NOx, carbon monoxide, and hydrocarbons, and provide soundproofing. We also have high-performance systems in exhaust gas purification, vibration control, and CO<sub>2</sub> optimisation.

In our operations, we also rigorously manage waste and effluents. Our principle is to avoid waste wherever possible and for what cannot be avoided, to recycle. We have reusable metal bin systems for our part suppliers and have eliminated washing from the production process. We maximise energy efficiency at our facility with state-of-the-art heat exchanger systems and closed heating and cooling circuits.

### How does Boysen approach sustainability?

The compatibility of individual mobility and environmental protection is the core business of the Boysen Group. Therefore, all sustainability issues have a considerable influence on our daily work.

We have a sustainable business model, as a foundation company which has no shareholders with short-term profit interests. The protection of the environment and the preservation of jobs are firmly anchored in our principles and our management culture, as well as in the entire organisation. Our commitment to sustainable corporate governance is also reflected in our use of state-of-the-art energy concepts at all production sites worldwide.

Through the Boysen Foundation, we promote research and science in the field of environmental technology at various excellent universities in Germany.

### How is BMW Brilliance working with Boysen on sustainability challenges and emerging issues like China's Stage 6 emissions standard?

BMW Brilliance is proactively addressing these challenges by working closely with Boysen's local project organisations and teams. A strong partnership and regular, open communication are the key factors for success. Only through early and timely communication are both companies able to deploy and implement the right development and industrialisation tasks to ensure that all product and quality targets are met in compliance with Chinese regulations.

Once the first project sample parts are produced and assembled on the vehicles, BMW Brilliance feedback to us on product performance is critical to fine-tune our processes ensuring that parts are up to the highest quality standards, as required by the premium segment market. Through our strong relationship that we have built over the last decade with BMW Brilliance, we are able to achieve complex projects such as meeting China's Stage 6 emission standard in a relatively short and demanding time frame.



▶ Boysen Exhaust Systems Shenyang plant.



Boysen production line.

### How has sustainable development in parts design resulted in enhanced performance and competitiveness at Boysen?

Our work on developing parts with more sustainable performance has created decisive competitive advantages for Boysen and our customers from the combination of weight reduction, backpressure reduction, and profitability due to improved process technology. This means our systems are not only resource-saving in production but also in operation, consuming less fuel and producing less CO<sub>2</sub> emissions.

"Our work on developing parts with more sustainable performance has created decisive competitive advantages for Boysen."

### 4.1 STRATEGY AND MANAGEMENT

BMW Brilliance's supply chain network is both global and local and continues to grow at a significant pace. Our engagement with our suppliers is a major source of value creation and innovation for us. However, our supply chain also presents challenges from a sustainability perspective, as it includes a vast network of suppliers and sub-suppliers. We recognise the complexity of maintaining sustainability standards throughout our supplier network and the challenges that our suppliers experience. In response, our teams use processes and communication channels to effectively and transparently collect data and supplier information to improve our risk management and compliance outcomes. In 2017, we made considerable progress in streamlining our supplier network management.

We also see opportunities to leverage our own expertise to help suppliers improve their sustainability performance. We are convinced that working closely with suppliers on sustainability will be the key to achieving our own long-term goals, underscoring our position as a responsible mobility provider.

Sustainable supply chain management is embedded in our overall approach to supplier relationships. We prioritise close long-term partnerships with shared objectives and targets to continuously improve product and production quality, ensure security of supply, and enable innovation. Integrating sustainability management into our supply chain helps to minimise risks, maximise opportunities, and achieve our overall sustainability goals. In our engagement with suppliers, we discuss the challenges and opportunities we face, and develop in-depth analyses and solutions in a collaborative manner.

Our overall approach to Supplier Risk Management (SRM) incorporates sustainability. In addition to finance, maintenance, and delivery, we have defined three specific sustainability areas > Figure 15.

**SRM** sustainability areas







At BMW Brilliance, our China-based Supplier Risk Management process includes on-site assessments by our own staff, who can terminate the relationship or impose a corrective action plan if necessary. New projects to extend assessment to high-risk subsuppliers have shown positive results and will be used to inform and improve our existing supplier risk management processes.

Many of our suppliers see the Supplier Risk Management process as not just a compliance mechanism, but also as a way to become more competitive in a marketplace where sustainability is increasingly synonymous with quality. We encourage them in this process by strengthening our relationships further and helping them to improve. We have various supplier initiatives that help us to build supplier capacity, including a programme where BMW Brilliance and Tier I suppliers conduct joint visits of sub-suppliers.



On-site visit to a supplier.

Aligning our sourcing closely with the BMW Group's global strategy has meant an increasing shift of value creation toward China, which today constitutes the Group's main sales market > Figure 16. Local sourcing provides numerous benefits for our business and for society, including lowered currency risks, the ability to support the communities and regions in which we operate, and a smaller transport footprint resulting in lower greenhouse gas emissions.

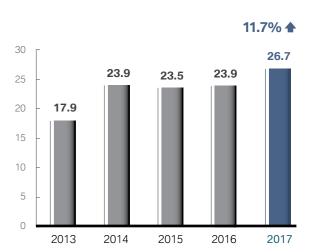
BMW Brilliance has an ongoing initiative to move suppliers to Shenyang, which will reduce costs and CO<sub>2</sub> emissions from transportation and logistics.

However, it is important to our business that the transition to localise suppliers is cost-effective and provides benefits for the environment and our communities. We are committed to identifying the best possible methods to alleviate any challenges and potential community impacts.

The following subchapter describes the implementation of our management approach > Chapter 4.2.

### **Purchasing volume in China** (in billion CNY)





### Developing our local network of suppliers



By year-end 2017, we worked with 359 suppliers based in mainland China, an increase of 4% from 2016.



Our suppliers are located across 17 Chinese provinces. The number of suppliers located in Liaoning Province, where our plants are also located, has steadily increased in recent years, up from 79 in 2016 to 84 in 2017.



The volume of parts purchased from local suppliers has stabilised at a high level since 2014. Our supplier selection process for China is shaped by several criteria and considerations.

We aim to source all major large automotive parts from within China, to significantly reduce international shipping costs and related emissions. In most cases, we seek direct engagement with the manufacturers rather than involving contractors, brokers, wholesalers, or agents.

### 4.2 IMPLEMENTING OUR APPROACH

BMW Brilliance has a cross-functional team responsible for integrating sustainability into our supply chain. The three major departments involved - Parts Purchasing, Supplier Quality Management, and Logistics Quality Management - make up a "clover-leaf" team that continuously reviews our suppliers' sustainability performance and channels support to suppliers when needed.

### **OUR SUPPLIER PRINCIPLES AND STANDARDS**

We have guidelines, procedures, and policies designed to ensure that our employees are aware of local environmental, health and safety, and labour laws, as well as legal requirements and international sustainability principles. With this knowledge, our employees can support our supply chain sustainability goals. An example of this is the integration of sustainability criteria into the BMW Brilliance Environment, Health, and Safety Purchasing Management Procedure.

The BMW Group Supplier Sustainability Policy summarises the BMW Group's core principles and standards for our suppliers in accordance with globally recognised principles. It includes a commitment to environmental and social responsibility, as well as to compliance with all internationally recognised human rights standards, and local labour and environmental laws.

### **OUR SUPPLIER** SUSTAINABILITY CLAUSES

BMW Brilliance's supplier network connects to the BMW Group's supplier network. Harmonisation of the contracts in the BMW Group and BMW Brilliance supplier networks, and the introduction of the same high-quality BMW Group processes for all of our local suppliers, were carried out in 2015.

We adhere to the BMW Group's International Terms and Conditions for the Purchase of Production Materials and Automotive Components, the UN Global Compact, and the International Labour Organization standards, with their specific provisions regarding environmental protection, social responsibility, and the protection of human rights, including a ban on child labour and forced labour.



Supplier information day

### **OUR APPROACH TO** MINIMISING SUPPLIER RISK

To promote greater corporate responsibility among our suppliers, we developed a dedicated BMW Brilliance Supplier Risk Management process. The framework is in accordance with the ISO 14001 Environment Management System and the ISO 45001 Occupational Health and Safety Management Standards.



### Sustainability risk filter

The BMW Group's proprietary sustainability risk filter evaluates the environmental, social, and governance risk potential of all new and existing suppliers. The filter takes into account locationspecific and product-specific risks. In countries where certain social risks are particularly prevalent, such as child labour or forced labour, a dedicated assessment of these risks is carried out. Environmental risks such as potentially harmful emissions or process materials containing substances that can be hazardous to health are also considered.



### Supplier self-assessment questionnaire

BMW Brilliance uses the supplier self-assessment questionnaire method developed by Drive Sustainability (formerly the European Automotive Working Group on Supply Chain). We have also introduced modular online assessments for additional requirements. Before we engage with new suppliers, we require that they make a clear commitment to specific social standards, such as compliance with international human rights guidelines. The procurement process also requires information about sustainable use of materials and environmental management systems, which is then evaluated as part of the purchasing decision.



### **Supplier on-site assessments**

The last step of the Supplier Risk Management process is on-site assessment > Figure 17, > Figure 18. In 2017, all our suppliers underwent the BMW Group screening process, and 66 suppliers underwent our annual site assessments, extending our coverage rate from 88% in 2016 to 97% in 2017. We reassessed all critical suppliers who were identified as high-risk during the 2016 audit to ensure compliance with our sustainability standards.

At the end of 2017, we rolled out an intensive engagement initiative called the Artemis project, which has been used to select and assess 24 sub-suppliers identified as having potential environment, health, and safety risks. In addition, we conducted on-site assessments on environment, health, and safety issues at 35 suppliers in 2017, emphasising our expectations that our supplier networks must adhere to our highest standards.

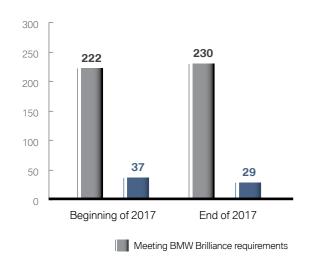
SUPPLIER MANAGEMENT | Implementing our approach | SUPPLIER MANAGEMENT | 81

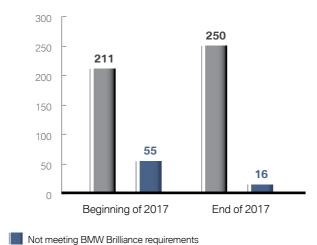
### On-site assessment results: Impacts on labour



### On-site assessment results: Impacts on the environment







### Strengthening dialogue with our suppliers

Every year, we hold a series of BMW Brilliance supplier events covering projects, change control, quality, and logistics that brings together suppliers and management for an open discussion. This form of engagement has been successful in building and deepening our relationships with suppliers and business partners and in improving our common approach to key issues including sustainability.

We also hold supplier training, such as the quality training event for the all-new BMW 5 Series parts suppliers held in Dadong in March 2017, and a G08 supplier workshop in November 2017 in Shenyang.



# **FORECAST 2018**

We will continue to roll out our Supplier Risk Management process to more suppliers so that we can identify supplier sustainability risks and evaluate supplier performance, implement countermeasures, and enable continuous improvement. We will expand the Artemis project to include more sub-suppliers and collect additional data that will better inform our process. We will also enhance our communication with our suppliers through an online survey to enable earlier identification of needs and risks.

We will also improve supplier transparency on environment, health, and safety risks by sending consultants to do on-site checks, enhancing the technical aspect of our Supplier Risk Management. In the future, our focus will be on the maturity of our supplier strategy as it relates to relationship-building with suppliers, compliance, and risk management. We want to strengthen our due diligence but also move beyond compliance to be more proactive towards emerging risks within the industry. This will require more detailed risk mapping and the use of the Artemis project to effectively identify risks with Tier I suppliers and sub-suppliers. We will create more robust due diligence processes and management mechanisms, so that we are able to expand our scope and maintain transparency.



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### **OUR SUSTAINABILITY DRIVERS**



**Human Resources Shared Services Centre** 

### How will BMW Brilliance's new **Human Resources Shared Services Centre** (HR SSC) benefit your employees?

Our new HR SSC serves more than 17,000 employees located in eight cities and adopts innovative digitalisation to improve how our human resources management systems operate, and how our employees can access information and services. They can now use a hotline, email, and a front desk in five on-site service centres. In the first three months, around 13,500 cases were processed in total via all channels.

On a day-to-day basis, the HR SSC benefits employees by providing more convenient and efficient human resources services, including 57 processes such as onboarding, exit, staff data management, personnel file management, payroll and benefits, time management, and labour contract management.

### How does the HR SSC fit into BMW Brilliance's overall human resources management approach?

Delivering high-quality one-stop services to our employees is important. The better service that Human Resources provides, the better our employees will be engaged, setting the foundation for sustainable growth, employee support, and operational efficiency. To maintain our position as an attractive employer, we will combine operational excellence and fresh thinking to offer our best service to employees - they are essential to our success.

In the future, we will enable the HR SSC with data analysis and additional mobile solutions to support employees, particularly in production.

### What other digitalisation initiatives are in place that benefit employees?

Many of our training and awareness initiatives are now online or shared on our facilities' E-pillars, and we are creating apps and digital assistants that help streamline administrative tasks.

### **HR SSC outlook**



### 5.1 STRATEGY AND MANAGEMENT

With the new BMW Group Strategy NUMBER ONE > NEXT, the success of our human resources management and our ability to improve the operational efficiency of our company will become increasingly important. Sound investments in talent planning and digitalisation of our career planning programmes will help us to fulfil our vision of having the best employer brand in the industry and support our long-term contribution to BMW Group development. We aim to unlock the potential of human resources management to add business value. We will boost and sustain business growth by means of a competitive advantage built on a corporate culture of high efficiency, teamwork, innovation, social responsibility, and sustainable development. We are establishing a lifelong learning environment with systematic and innovative development programmes and upgrading our human resources expertise, practices, systems, and service quality.



NEXT Experience event.

It is our goal to promote responsible behaviour and a work environment that fosters the long-term health and performance of our employees. As a responsible employer, occupational health and safety is of key importance to BMW Brilliance. We want to protect our employees from any potential negative health and safety impacts related to their work environment. We therefore implement an integrated health and safety

management system to address potential risks and contribute to the long-term health and performance of our workforce.

To contribute to our employee's well-being, we also implement various programmes and initiatives following the motto "Stay active - We support you". Activities include health and safety training, improving workplace safety and ergonomics, thematic health and safety initiatives, and our Health Management 2020 programme.

### **HUMAN RESOURCES MANAGEMENT**

Human resources management at BMW Brilliance is overseen by our executive team. Our Senior Vice President of Human Resources, who is also a member of the Board of Management and reports directly to the CEO, is responsible for the formulation and implementation of BMW Brilliance's Human Resources Strategy and regularly reports on our progress towards strategic goals.

Operationally, the Associate Handbook is one of the cornerstones of managing the employer-employee relationship. It communicates our employees' rights and responsibilities, including the BMW Brilliance Legal Compliance Code, and is binding for all members of staff.

To ensure our future viability and to retain the best talent, we emphasise the three main pillars of human

- ▶ Being an attractive employer > Chapter 5.2
- Occupational health and safety > Chapter 5.3
- Training and development > Chapter 5.4

### 5.2 BEING AN ATTRACTIVE EMPLOYER

The global economy is dramatically changing, triggered by developments in emerging markets and the accelerated rise of modern technologies enabling digitalisation, automation, shared mobility, and connectivity. At BMW Brilliance, these trends are transforming the composition of our workforce and shifting our human resources landscape. For this reason, we are focused on providing the right combination of attractive benefits, remuneration, and training so that we attract and develop the right skills, experience, and high level of flexibility to remain agile in an ever-evolving industry.

In 2017, based on BMW Group's Employer Value Proposition (EVP) we developed the theme of "Passion for Innovation" to drive our employer brand and to lead our employees and their work into the future. This vision with our combined ambition gives us a new impetus to achieve our most aspired goals, to strive towards being the most attractive employer in the Chinese automotive industry.

With guidance from BMW Group's Human Resources strategy, we made significant progress in 2017 having been selected as the: No. 1 Best Employer (Zhaopin.com), No. 1 Most Admired company in the Chinese auto industry (Universum), Excellent Employer of China (51job.com), Annual Extraordinary Employer (Liepin.com), and Best Employer at the China Employer Brand Festival (58.com).









Our advancement to date stems from our competitive benefits and remuneration packages, commitments to providing open and clear management-to-employee communication, and in the opportunities for crosscultural experiences that cultivate a diverse set of skills. Through these means we are able to differentiate BMW Brilliance from other employers and attract a high calibre of talented professionals.

### MONITORING WORKFORCE **GROWTH**

To evaluate whether we are reaching our goal of being an attractive employer, we monitor key performance indicators related to our position in the employer market and to our internal employee figures.

We recognise and appreciate the diversity of our workforce and place great value in new and varying perspectives from our employees with different professional and personal backgrounds. We show this through our Global Leadership Development Programme and international vocational training that are designed to promote employee exchange, international experience, and an intercultural and diverse workforce.

At the end of 2017, our total workforce reached 16,686 (excluding employees who have contracts with a thirdparty labour dispatch service provider).

Women make up

13%

of our total workforce and

30%

of our management team.

Women make up 13% of our total workforce and 30% of our management team. The total share of female employees remained constant compared to 2016, while women in management positions increased by 6%. This includes our first female plant director. We hold a female leadership seminar every year to share experiences and encourage female employees to develop as leaders. Our continuous efforts to develop local talent have contributed to a steady increase of Chinese employees in management, who now account for 85% of our management group. All employees are employed in full-time contracts > Figure 19.

#### ATTRITION RATES

In line with our business growth, the rate of new hires increased to 8% in 2017 from 2.2% in 2016. We initiate employee transfers among our different production plants to ensure that each plant has the right workforce balance and skill sets on the ground. These transfers help us attain higher levels of efficiency across our facilities. BMW Brilliance continues to succeed in retaining talent and creating high loyalty within our workforce. To track this, we closely monitor our monthly employee attrition rate. BMW Brilliance's voluntary attrition rate was 3.2% in 2017, a slight increase from 2.6% in 2016. The overall attrition rate (voluntary and non-voluntary) increased from 3.3% in 2016 to 4.5% in 2017. Despite this increase, BMW Brilliance remains well below average attrition rates within the market.



### PERFORMANCE INDICATORS



		2013 ,	2014	2015	2016	2017	Change from previous year %
Workforce	e composition						
Total workford	ce at year-end	13,024	15,257	16,573	16,286	16,686	2.5%
Share of fema	ale employees	11.9%	12.3%	11.8%	12.9%	12.8%	-0.8%
Share of male	employees	88.1%	87.7%	88.2%	87.1%	87.2%	0.1%
Share of fema	ale employees in positions	-	26.7%	27.0%	28.4%	30.2%	6.3%
Share of emp	loyees in management	6.0%	5.9%	6.0%	6.7%	6.9%	3.0%
Share of Chin the managem	ese employees within nent group	-	76.3%	78.1%	82.0%	85.0%	3.7%
Share of non-	production employees	25.0%	27.3%	29.0%	29.1%	28.3%	-2.7%
Share of prod	uction employees	75.0%	72.7%	71.0%	70.9%	71.7%	1.1%
Employee	es by employment c	ontract					
Open-end contracts	Overall share	-	13.4%	14.4%	19.0%	37.7%	98.6%
	Female employees	-	1,692	392	489	766	56.6%
	Male employees	-	334	1,992	2,609	5,529	111.9%
	Employees in Shenyang	-	1,931	2,258	2,954	6,086	106.0%
	Employees in Beijing	-	95	126	153	209	36.6%

	ı	2013	2014	2015	2016	2017	Change from previous year %
	·		,				
Fixed-term contracts	Female employees	-	1,550	1,725	1,605	1,362	-15.1%
	Male employees	-	11,681	12,464	11,583	9,027	-22.1%
	Employees in Shenyang	-	12,700	13,641	12,656	9,908	-21.7%
	Employees in Beijing	-	531	548	532	481	-9.6%
Employee	es by employment ty	/pe					
Employee	es by employment ty	/pe					
Employee Full-time	Overall share	/pe -	100.0%	100.0%	100.0%	100.0%	0%
			1,883	100.0% 2,117	100.0%	100.0%	0% 1.3%
	Overall share	-					1.3%
	Overall share Female employees	-	1,883	2,117	2,101	2,129	1.3% 2.6%
Full-time	Overall share  Female employees  Male employees	-	1,883	2,117	2,101	2,129	
Full-time	Overall share  Female employees  Male employees  Female employees  Male employees	-	1,883 13,373 1	2,117 14,456 0	2,101 14,185 0	2,129 14,557 0	1.3% 2.6% 0%

	2013	2014	2015	2016	2017	Change from previous year %
By region						
New employees in Shenyang	1,371	2,920	1,801	270	1,205	346.3%
New employees in Shenyang (percentage)	11.0%	19.1%	10.9%	1.7%	7.2%	324.8%
New employees in Beijing	113	186	128	93	125	34.4%
New employees in Beijing (percentage)	1.0%	1.2%	0.8%	0.6%	0.8%	24.9%
By age						
New employee hires, age <30	-	2,425	1,384	212	1,037	389.2%
New employee hires, age <30 (percentage)	-	15.9%	8.4%	1.3%	6.2%	378.1%
New employee hires, age 30-50	-	655	523	141	280	98.6%
New employee hires, age 30-50 (percentage)	-	4.3%	3.2%	0.9%	1.7%	86.5%
New employee hires, age >50	-	26	22	10	13	30.0%
New employee hires, age >50 (percentage)	-	0.2%	0.1%	0.1%	0.08%	-22.1%





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	2013	2014	2015	2016	2017	Change from previous year %
By gender						
Female new employee hires	-	407	329	113	182	61.1%
Female new employee hires (percentage)	-	2.7%	2.0%	0.7%	1.1%	55.8%
Male new employee hires	-	2,699	1,600	250	1,148	359.2%
Male new employee hires (percentage)	-	17.7%	9.7%	1.5%	6.9%	358.7%
Training and development						
Training days organised by the Human Resources department	-	46,967	35,205	27,851	34,314	23.2%
Training attendee satisfaction rate	-	93.0%	96.0%	97.0%	97.0%	0%
Average training days*						
Employees in production	-	1.3	1.1	1.1	1.3	15.2%
Employees in non-production	-	9.7	4.7	3.2	4.4	36.6%
Employees in management positions	-	6.7	3.1	3.2	3.4	7.0%
Employees in non-management positions	-	3.4	2.1	1.6	2.1	28.2%

<sup>\*</sup> One training day corresponds to seven hours.

### **REMUNERATION**

We reward our employees with total remuneration that is above average and aligned with the upper third of the respective labour market in China. We conduct an annual benchmark within the automotive industry to ensure our competitiveness as an attractive employer. In addition to a fixed base salary and overtime payments, our employees receive allowances and a variable bonus that links total remuneration to performance.

Within our attractive remuneration packages, we provide employees with a highly competitive benefits programme featuring a full range of insurance options, comprehensive medical coverage, and a pension savings plan that can be customised to best suit employees' individual needs. We provide flexible work time models to meet the needs of our employees and demand in the labour market, with three core options:

**MODEL** 

### Standard work time for non-production employees

These contracts entitle the employee to a 40-hour workweek, which complies with China's labour laws. This work time model applies to approximately 5% of our employees.

**MODEL** 

### Work time accounts for production employees

Using work time accounts enables us to adapt to our annual production volume fluctuations, while guaranteeing stable payment for our production employees. This work time model applies to approximately 73% of our employees.

**MODEL** 

### Flexible work time for non-production employees

Employees from a certain pay-grade level are entitled to flexible work time. For some specific roles such as drivers, flexible work time is assigned according to job and functional requirements. The flexible work time model applies to approximately 23% of our employees.

To foster a good work-life balance, we provide statutory annual leave as legally required and extensive vacation leave in addition to national statutory holidays. Personal leave such as maternity and paternity leave, sick leave, and compassionate leave are also available to meet our employees' needs.

For all local employees at BMW Brilliance, we have an Associate Car Programme that grants certain discounts and periodic special rates for particular BMW Brilliance models. For convenient and economical transportation for our employee's daily commute, we provide a shuttle bus service between our plants and public transport centres across Shenyang.

### **EMPLOYEE PARTICIPATION** AND FEEDBACK

To ensure employee growth, BMW Brilliance relies on everyone within our employee community. We provide communication platforms for our entire workforce to contribute. Our collective voice is what drives our corporate culture and our diversity is what enables the company to innovate and recognise areas for workflow improvement and integration of innovative ideas and concepts.

We use platforms at a company level such as our "Executive Dialogue" and at the division level such as our "BBT Forum" to create opportunities that build rapport between management and our employees. Through these events, all of our employees at BMW Brilliance have the chance to inquire and speak directly with management to understand the company's strategic direction and objectives.

Another way we engage our employees is by regularly collecting their feedback. Every other year, BMW Brilliance carries out an employee survey. The 2017 survey showed:

89% of employees are satisfied with their jobs, and

91% of employees are satisfied working at BMW Brilliance.



► Employee survey 2017.

We also collected employee feedback in 2017 through several smaller surveys on topics such as the move to the new Powertrain plant and how well employees identify with the company strategy. More opportunities to give feedback are provided during Associate Conferences, when all employees of specific departments or plants come together for a day of dialogue with management. Managers and non-production staff are also encouraged to express their needs and concerns during open-door meetings. We use weekly one-on-one meetings between line managers and their employees to ensure sufficient communication in reporting lines, and there are business groups that hold weekly meetings to promote communication. Finally, we launched the Human Resources Shared Services Centre hotline in 2017 for employees to ask questions and get feedback.

At BMW Brilliance, a Labour Union was established in 2007 as a mechanism for social dialogue. Today, the Labour Union represents all local employees, and its aim is to protect employees' rights and interests through mediation. The Labour Union and the Board of Management meet annually and decide together which topics to address in areas such as health and safety or compensation, and the results are presented to employees at the annual Employee Representatives Congress and Union Representatives Congress.



▶ Dr. Wieland and Mr. Han sign Collective Contract on Labour Remuneration

### 5.3 OCCUPATIONAL HEALTH AND SAFETY

We establish accountability for health and safety performance through business planning, policies, and management systems. BMW Brilliance complies with Chinese labour law, applicable health and safety laws, and relevant regulations that prohibit forced, compulsory, and child labour. We are committed to the observance of fair working conditions and human rights, as they are set out in the ten principles of the United Nations Global Compact and the Declaration on Fundamental Principles and Rights at Work by the International Labour Organization. Any violation of the Legal Compliance Code is filed with the Human Resources Department and the Compliance Committee. Both our internal and shareholder audit teams conduct annual audits to ensure full compliance with internal and external rules and regulations.

Our integrated safety management system was designed in accordance with international standards such as OHSAS 18001 and ISO 14001 and bestpractice guidelines of the BMW Group, as well as relevant Chinese legislation. Our safety management systems, which include policies, procedures, and work instructions, are certified as good practice. The system is implemented by the Health, Safety, Security, Mobility and Food Service Department of BMW Brilliance.

In 2017, we reduced the accident frequency rate from 0.54 to 0.43 through continous improvements of our work environment and safety conditions > Figure 20.

### **IMPROVING WORKPLACE** SAFETY AND ERGONOMICS

Training is the key to preventing work-related accidents and illness. We provide health and safety training to all new employees, refresher training to longstanding employees, and special safety training to high-risk groups.



25,102

The total number of man-times provided of health and safety training.

### Occupational health and safety



	2013	2014	2015	2016	2017	Change from previous year %
Accident frequency rate*	0.92	0.82	1.06	0.54	0.43	-20.4%
Absentee rate	0.97%	0.98%	0.93%	0.99%	0.99%	0%
Total number of injuries with lost time (excluding minor first-aid level injuries)	0	17	29	17	15	-11.8%

<sup>\*</sup> The accident frequency rate is calculated as the number of accidents with one day lost time or more, multiplied by one million hours worked, divided by total working hours of the time period statistics (e.g., one month).

We regularly implement and continuously improve health and safety measures at our plants. Occupational health and safety management has been integrated into Value-added Production System initiatives, ensuring that when we implement production improvements, we take health and safety concerns into account. BMW Brilliance employees are also encouraged to raise ideas and suggestions to promote safe working conditions and ergonomic improvements.



A worker wearing an exoskeleton on the assembly line.

### Safety at Tiexi plant

Safety is of the utmost importance in the manufacturing industry. As a forerunner in the application of Industry 4.0 and Made in China 2025 technologies, we rely on the Tiexi plant to be a leading example for innovation, efficiency, digitalisation, and safety.

In 2017, safety engineers at Tiexi plant launched a series of safety education workshops, introducing new activities and highlighting safety achievements. Following the workshops, we held a Safety Knowledge Competition, where teams from the logistics shop, paint shop, assembly shop, and press shop won Excellent Team Awards. The team from the body shop won the Champion Team Award. We expect the Tiexi plant to establish a new benchmark for safe manufacturing.



### **IMPLEMENTING HEALTH AND SAFETY INITIATIVES**

In addition to making our working environment safer for our employees, we are also implementing various initiatives to contribute to the overall health and well-being of employees in both production and non-production roles. These include pilot projects and rehabilitation courses to reduce the potential for musculoskeletal disorders amongst employees including flexibility checks and body and back examinations for early identification and prevention.

To build safety awareness and improve injury-prevention skills, we started a campaign on "Slipping, Tripping and Falling". This included five rounds of body balance skill training, workplace inspections, and shared knowledge on personal protective equipment usage.



► Safety campaign poster at Dadong plant.

We provided training year-round covering specific safety measures and their application to an evolving manufacturing industry. We also developed six training videos on environment, health, and safety topics, increasing training flexibility and convenience.

In recognition of the importance of workplace mental health, BMW Brilliance initiated mental resilience programmes for employees, such as psychological counselling at each of our plants, to provide our employees with the opportunity to have face-to-face meetings with counsellors. To raise awareness of the issue, a series of workshops were provided where more than 1,000 employees participated in training on topics including happy family relationships, love and

marriage, child psychology, emotional management, and work-life balance.

#### **HEALTH MANAGEMENT 2020**

Health Management 2020 is an initiative which supports BMW Brilliance employees in making informed decisions about managing their health. A key component of the initiative is the annual health check programme. In 2017, we had 14,668 employees participate in the annual health check programme, which provides a comprehensive health screening. We added physical flexibility tests, a 10-year risk assessment of cardiac disease, and work ability assessment questionnaires, and provided detailed recommendations for medical treatment and guidance for diet and exercise. To improve efficiency, we added online booking methods for medical appointments.

Seasonal flu vaccines were provided to 3,280 employees, and 923 employees received the Hepatitis B vaccine.



Seasonal flu vaccination

We also extended the gym hours at our Physical Assessment and Rehabilitation Centres to 15 hours per day to provide more flexibility for our employees' schedules.

Two of the designated hospitals for work-related injury or illness are now providing a convenient payment service for BMW Brilliance employees; another hospital will add the payment service in 2018.

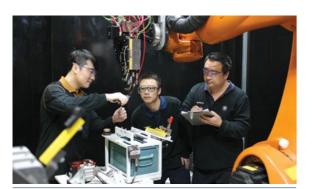
BMW Brilliance has approximately 500 expatriate employees and family members and we ensure they have high-quality health services, including 24-hour access to medical care, home visits, and direct channels to visit different hospitals and clinics. A monthly health newsletter is distributed via the public WeChat account, and is updated on a regular basis to allow expatriates and their families to easily access health information.

98 EMPLOYEES | Training and development | EMPLOYEES 99

### 5.4 TRAINING AND DEVELOPMENT

Through leadership and training, we enable our employees to realise their potential. The training and development of our employees is fundamental to the sustainable growth of the company. We focus on strengthening our leadership culture and developing the skills of our future talent. As part of our talent management, we regularly review the performance of our employees based on our business performance targets. We also organise awards such as "Best YOU" and "Best in My Eyes" to recognise exceptional employee behaviour.

In 2014, the Academy of BMW Group China was launched as a joint structure to bring together all the training departments of BMW Group entities in China. Through the Academy we create innovative training programmes that cater to the passions of our employees, that advance their career opportunities, and contribute to the sustainable growth of the company.



► Peer-to-peer technical training.

### INTERNAL TRAINER DEVELOPMENT PROGRAMMES

The Internal Trainer Development Programme focuses on the development of BMW Brilliance employees in becoming "BMW certified trainers". In 2017, 45 BMW certified trainers delivered 17 different courses on both technical and non-technical themes.

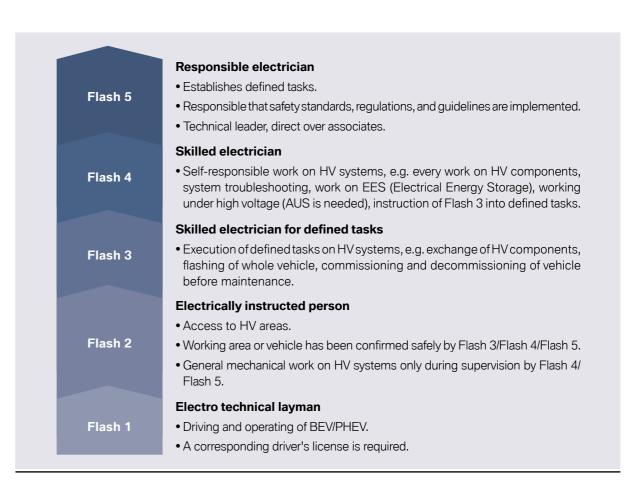
A central element of the programme is the delivery of our Train the Trainer curriculum which builds internal capacity and contributes to long-term knowledge retention. This year, we had five of our certified trainers qualify 26 trainees to be "BMW certified trainers", accumulating an average satisfaction rate of 4.96 out of 5.



Internal trainer development.

### **High Voltage Qualification Flash Training**

With the advancement of high-voltage battery technology, safety procedures and technical competence are important for all our employees working with new energy vehicles. Since 2012, we have offered High Voltage Qualification Flash Training to provide knowledge sharing on the potential hazards related to handling high voltage battery systems. In 2017, we held 52 sessions for 974 BMW employees in China, providing five tiers of training courses.



## AREA MANAGER DEVELOPMENT PROGRAMME

The Area Manager Development Programme is a BMW Group qualification programme for area managers in sales. The Academy provided 10 sessions under the Area Manager Development Programme in 2017, with 26 new area managers joining the programme and 23 completing certification.

### **LANGUAGE COURSES**

In an intercultural working environment, one competency requirement at BMW Brilliance is good language skills. We offer English, German, and Chinese language courses for local employees and expatriates, with both online and offline training modules. In 2017, 942 BMW Brilliance employees attended language courses for a total of 4,612 training days.

### **COMPETENCY MODEL**

In 2017, we rolled out our Competency Model to advance the professional development of our employees, with a structured framework of employee competencies and clear appraisal criteria. It helps managers objectively identify and develop both individual and team potential. For employees, the model helps them understand their own competencies, receive clear feedback, and find their individual development path. Overall, using the Competency Model establishes a common corporate language regarding the competencies required to support our business development.

Job satisfaction is also closely linked to the design of an interesting and gratifying career path. Through the Competency Model, we encourage our employees to develop themselves and find a career path that is suitable and motivating for them. We try to provide challenging and meaningful training and assignments, and promote the rotation of employees between departments, enabling them to experience different work environments.

100 EMPLOYEES | Training and development

Training and development | EMPLOYEES = 101

### **DEVELOPING FUTURE TALENT**

As part of the BMW Group's global strategy to develop young people and attract the talent of tomorrow, BMW Brilliance has developed a series of specialised and localised programmes, traineeships, and vocational education opportunities to build the skill sets needed

for the future. Through the following programmes, we are training and cultivating the next generation for the benefit of the BMW Brilliance brand, the growth of our business, and the development of the automotive industry in China.

Programme	<b>About</b>	Participants
The Global Leader Development Programme (GLDP)	An international graduate initiative offering recent talented graduates an opportunity to jumpstart their careers at BMW Brilliance. Through four rotations, these professionals will work in multiple departments with two international assignments, one of which is at BMW Group Headquarters in Munich.	To date, six Global Leader Development Programme employees have participated.
ProMotion China Ph.D. Programme	Attracts high-potential Ph.D. students interested in research and development, production planning, and process optimisation with many of these students showing an interest in Industry 4.0 technologies.	Since 2014, we have had 14 students participating in this four-year programme, with three new doctoral students joining in 2017.
Fastlane China Programme	Provides career growth and rapid promotion opportunities for outstanding master's degree graduates. Fastlane trainees are provided skills training and a designated "buddy" who provides project guidance and inspiration so that trainees reach the fullest of their potential.	In 2017, there were 16 graduates from the programme.
SpeedUp China in Production Programme	Recruits bachelor's degree students and develops young professionals into high-quality production technicians.	In 2017, there were 18 trainees that graduated from the programme.
The New Vocational Education Programme	Programme adapted from the dual education system in Germany, modified to suit the Chinese context.  Designed to build the technical skills of our production employees and to support high school students to build the capacities they need to secure well-paid jobs in the future.	99% of graduates joined BMW Brilliance Automotive. 178 apprentices have graduated from the New Vocational Education Programme, with 54 completing the programme in 2017.

### STRENGTHENING OUR LEADERSHIP CULTURE

We recognise that leadership development is a critical factor in our ongoing success. The leadership style we want to nurture is based on the Core Values of the BMW Brilliance culture: Responsibility, Appreciation, Transparency, Trust, and Openness. Through targeted training, workshops, discussion panels, and communication campaigns, we are developing leaders who can carry this culture forward based on their individual strengths.

An important cornerstone of leadership at our production units is the Standard Work Programme of the Academy, which enhances problem solving and leadership through a culture of coaching and continuous

improvement. Applying coaching techniques and BMW Brilliance's Leadership Core Values, our managers seek to improve the individual performances of their team members and encourage continuous improvement throughout the organisation.

Leadership Magic Cube was launched in 2017 as a team-based learning programme that enhances team performance through collective work on innovation, strategy, decision-making, and collaboration. Leadership Think Tank was also relaunched as a training platform and venue for leadership reflection and team development.



### MONITORING OUR PERFORMANCE

We focus on continuous improvement by measuring and evaluating our training and development performance each year. In 2017, we maintained a very high employee training satisfaction rate of 97%.

training days organised by Human Resources increased from **27,851** in 2016 to **34,314** in 2017.

The number of employee

### **EMPLOYEES: FORECAST 2018**

We are driven to retain our standing as the most attractive employer in the Chinese automotive industry. As greater digitalisation and Industry 4.0 promise to transform our industry, we remain committed to our set of Core Values and in taking a "people first" attitude. For the future, we will emphasise internal communication and expand opportunities for employee engagement through manager-employee weekly meetings and our annual Associates Conference. We recognise that leadership development is a critical factor in our ongoing success. The leadership style we want to nurture is based on the Core Values of the BMW Brilliance culture: Responsibility, Appreciation, Transparency, Trust, and Openness. Through targeted training, workshops, discussion panels, and communication campaigns, we are developing leaders who can carry this culture forward based on their individual strengths.

To reinforce how we communicate with our employees, we issue a "HR AND ME" monthly newsletter to share important human resources information, policies, and programmes with all our employees. In 2018, we will extend the conversation by holding "HR AND ME LIVE" session on key topics such as compensation and benefits for better communication.

In 2018, we will extend the health and safety initiatives and campaigns which provide clear employee benefits, and new campaigns will be carried out to improve safety behaviour and safety awareness. A series of safety initiatives will cover topics such as fire safety, traffic safety, chemical safety, confined space

safety, and electrical safety. We will also roll out initiatives addressing healthy diet and healthy activities. A new streamlined risk assessment system will be applied to make our health and safety risk management more effective and efficient. With this system, risks associated with particular tasks will be assessed, and all risks will be grouped and prioritised according to recognised standards. For high-priority risks, further actions will be suggested and tracked to reduce the risks to an acceptable level.

For our entire workforce, we are pleased to have received the support of the Shenyang Municipal Government in customer-built BMW Brilliance Automotive Training Centre. This project will begin in mid-2018 and will be fully operational in 2020. After completion, the BMW Brilliance Automotive Training Centre will be a state-ofthe-art comprehensive training base capable of accommodating a maximum of 500 people for training and various kinds of activities. It will also be able to meet the demands of our growing vocational education trainings at BMW Brilliance.

With the expansion of our product line-up and facilities such as our new Research and Development Centre, our focus remains on attracting top talent that enable the BMW Group and BMW Brilliance to reach our full potential together. In 2018, we will conduct a Research and Development Recruiting Tour in Germany to identify the next generation of world-class engineers, technicians, and technologists to drive our global innovation.

















106 CORPORATE SOCIAL RESPONSIBILITY | Our sustainability drivers

### Our Sustainability Drivers \_\_\_\_\_



Nanjing Ningbao Automotive Service Co., Ltd.

### **How is strategic Corporate Social** Responsibility creating shared value at Nanjing Ningbao?

BMW has always advocated for corporate social responsibility, and at Nanjing Ningbao, it is a prerequisite for our development. We believe that strategic corporate social responsibility goes beyond charitable contributions and includes creating shared value for our environment, our society, and our business.

That is why we became the first 4S dealership in Jiangsu Province, and made the investment to upgrade to a BMW 5S dealership in 2012. We understand that within this highly competitive industry, strategic corporate social responsibility gives us an edge in building brand equity and in addressing the needs of our community. To achieve this, we focus on two approaches, our software and our hardware. Our software represents our high-end services and community programmes. Programmes such as the

BMW Children's Traffic Safety Training Camp, BMW China Cultural Tour, and BMW JOY Home which are institutionalised within our employee and customer activities. We use these programmes to engage our employees, clients, and local volunteers and contribute to meaningful causes that build on the social fabric of our community such as planting trees, preserving the old city walls of Nanjing, visiting nursing homes and orphanages, and assisting left-behind children. In addition, we firmly believe that happy employees lead to happy customers.

Our hardware represents our "green" facilities. The exhibition halls of our store, we have installed solar roofing systems, saving 50,000 kWh annually; our ground source heat pumps keep indoor temperatures consistent throughout the year, saving 40%-50% on air-conditioning costs. We installed LED lighting to reduce electricity consumption by 60%, saving 320,00 kWh, introduced wastewater recycling, and an automated car wash system that saves 50% more on water over traditional systems.

All of these investments are what contribute to our objectives regarding customer satisfaction and brand reputation, as well as environmental protection and sustainable development. These also contributed to our recognition in 2017 with the Excellence in Sales -Best Retailer in Sustainability awarded by BMW Group in Munich, which we are proud to have won.

### **How has Corporate Social Responsibility** at Nanjing Ningbao evolved over time?

We were established in 2002 and over the past fifteen years we have grown through an ever-evolving automotive industry.

Our focus on corporate social responsibility despite the industry's new and pressing challenges remain constant, we are committed to sustainable growth with BMW's support and inspiration.

We were the first distributor of new energy vehicles for BMW in China and provide our customers with driving pleasure, safety performance, and an all-round customer experience.

We guide our employees and customers to care for sustainability, and our corporate social responsibility programmes were introduced to make them truly happy. We have developed invaluable partnerships within our community such as with the Shanghai Pudong Development Bank, to increase investment in community programmes. Through these programmes, our employees and customers can donate and volunteer.

Being a leading service provider in this industry requires innovative business models and having incorporated strategic corporate social responsibility, we have realised significant value over time for our business and in the positive outcomes we see in our community.

### What is Nanjing Ningbao's goal for **Corporate Social Responsibility in the** future?

BMW is committed to "Less emissions. More driving pleasure". Our goal is to work with BMW to deliver on this promise.

Our future will be to continue fulfilling our goals towards corporate social responsibility, to always innovate and to deliver premium products and services to the public. We will also focus on two main areas - social mobility, safe and sustainable mobility, to create shared value for the society and our business.

We will continue to advance and invest in our "hardware" for a more efficient and digitalised facility. We will focus on expanding our "software" by increasing the scalability and implementation of our core CSR programmes, around JOY Home, intangible cultural heritage, and our efforts in education ranging from internships and training.



### 6.1 STRATEGY AND MANAGEMENT

We believe there are significant opportunities for BMW Brilliance in cooperation with BMW China to contribute to Chinese society in a meaningful and lasting way that creates shared value for our business, our environment, and our communities. We are aligned with the BMW Group's new Strategy NUMBER ONE > NEXT and the BMW Group's Corporate Social Responsibility strategy, and have upgraded our approach from charitable donations to strategic CSR.

We take stock of the significant progress and impact that our CSR programmes have made to date and in particular with how our new approach to CSR refines how we create social and environmental value. In 2017, we applied our upgraded BMW China CSR Strategy to promote social mobility through tailor-made programmes that target the needs of disadvantaged groups in Chinese society and leverage our core competencies to contribute to the safe and sustainable mobility of our local communities.

Our management approach is described in > Chapter 6.1. A detailed description of our CSR initiatives is available in > Chapter 6.2.

### **OUR APPROACH**

Our mission is to "think and act in a visionary manner as a responsible corporate citizen of Chinese society". This is reflected in our CSR philosophy, as well as in our actions and initiatives to contribute to social mobility and safe and sustainable mobility.

BMW's strategic CSR approach focuses on creating shared value and in the development of innovative solutions that empower and enable over the long-term. At BMW Brilliance, creating shared value means creating benefits for the company and also achieving social goals.

We take actions as an advocate and practitioner of strategic CSR to leverage our resources and core competencies to support Chinese society and stay true to our three principles:

- Long-term commitment
- Addressing social issues
- All-inclusive stakeholder engagement

Through clear positioning, innovation, and a sustainable operational model, BMW Brilliance effectively promotes various stakeholders' long-term and active participation to address environmental and social issues.

At BMW Brilliance and BMW China, our flagship CSR programmes have existed for over a decade, providing a sense of pride for our employees and displaying our capabilities as a company to address and reinvent our CSR initiatives. In an effort to continue this evolution, our teams regularly revisit, rethink, and refine our approach.



### ▶ 2017 BMW Sustainability and CSR Forum.

### "Our mission is to think and act in a visionary manner as a responsible corporate citizen of Chinese society."

### **BMW Children's Traffic Safety** Education

BMW's expert CSR programme expanded to adult drivers in 2017, with the launch of the new "BMW Good Driver" initiative that engaged BMW dealers, employees, and customers to promote better driving and road safety awareness.

### The BMW China **Culture Journey**

BMW's iconic programme that demonstrates BMW's strategic approach to CSR, creates shared value, and spurs innovation through empowerment. This goal is achieved in two ways: by communicating the importance of preserving our "Intangible Cultural Heritage" (ICH) and in the promotion and inspiration of ICH works. This project acts as a bridge between traditional and modern life in China and articulates BMW's commitment to society and local culture.

#### **BMW JOY Home**

BMW's exclusive stakeholder engagement programme that showcases our evolution from donating to "enabling". In 2017, the programme was extended to include a new element called "Joyful Football". This is an innovative model that aims to support leftbehind children's physical and mental health through sports and educational activities.

In 2017, we evolved our most-recognised CSR programmes to adapt to a changing society and address our local, national, and global commitments.

All our CSR programmes are designed to address current and emerging social challenges in Chinese society by leveraging our resources and capabilities to achieve tangible results. To ensure our progress, we conduct regular reviews of programme effectiveness and create strategies and action plans to adjust.

We use our China Charity Federation BMW Warm Heart Fund as a comprehensive volunteering platform to enhance how we engage with community stakeholders from across the country.

### THE CHINA CHARITY **FEDERATION (CCF)-BMW WARM HEART FUND**

The CCF-BMW Warm Heart Fund was jointly established between BMW Brilliance, BMW China, and the China Charity Federation (CCF) in 2008. Through the Warm Heart Fund, we are able to streamline how

157,600

BMW Warm Heart Fund has benefitted individuals 157,600 times through these initiatives.

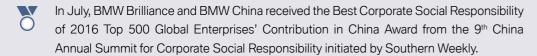
we invest and engage with our employees, dealers, and customer representatives and use it as a dedicated channel through which we contribute our CSR efforts.

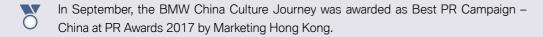
By the end of 2017, more than 250 BMW dealers and 86,700 customers and employees participated in a variety of public campaigns to help address social issues in Chinese communities. It is estimated that the BMW Warm Heart Fund has benefitted individuals 157,600 times through these initiatives.

A dedicated and professional team was set up to take full responsibility of BMW Brilliance and BMW China CSR projects, covering tasks from internal and external communications to stakeholder engagement.

### **AWARDS AND HONOURS IN 2017**







In November, the 2017 BMW Children's Traffic Safety Education programme was awarded the Public Welfare Marketing Golden Award at the 4th Sugin Awards.

In November, BMW China Automotive Trading Ltd. and BMW Brilliance Automotive Ltd. received the 2017 Responsible Corporate Award from China Newsweek.

In November, the BMW China Culture Journey was awarded the 2017 Golden Flag CSR Golden Award and the 2017 Golden Flag Grand Award.

In December, BMW Brilliance Automotive Ltd. was honoured as a 2017 Excellent Corporate Citizen by the 2017 China 13th Annual Outstanding Corporate Summit.

In December, the 2017 BMW Children's Traffic Safety Education programme was honoured as 2017 Excellent Corporate Citizen Project by the 2017 China 13th Annual Outstanding Corporate Summit.

In December, the BMW JOY Home won the Annual Public Welfare Award at the 1st Chinese Auto Industry Public Welfare Gala by China Automotive News.

In December, the BMW JOY Home was selected as a CSR Model Programme for the China Automotive Industry in 2017 by Beijing Morning Post.

In December, the 2017 BMW Children's Traffic Safety Education programme was honoured as 2017 Beijing Corporate Volunteering Programme Top 10.

In December, the 2017 BMW China Culture Journey was honoured as the Best Public Welfare Practice of Culture and Art in China Auto Industry of 2017 Yixuan Award initiated by Auto Business Review.

In December, BMW JOY Home won the Public Welfare Education Zhumeng Award at the 1st Zhumeng China Automotive Industry on Teenager Development Public Welfare Gala.

### **6.2 OUR INITIATIVES**

We seek to promote progress on key social issues in China through targeted, well-monitored, and innovative CSR programmes revolving around caring for disadvantaged youth, ensuring equal development opportunities, introducing dual-education approaches, preserving traditional Chinese culture, and increasing road safety.

### **BMW CHILDREN'S TRAFFIC SAFETY EDUCATION (CTSE)**

Aimed at improving children's road safety education, in 2005 we launched the nationwide BMW Children's Traffic Safety Education (CTSE) programme, which is the first and longest-running children's safety education programme by the Chinese automotive industry. At its inception, the focus was on generating public awareness of children's traffic safety through roadshows. In 2017, the programme continued to expand, with a footprint that includes Beijing, Hangzhou, Guiyang, Shenyang, Changsha, and Shanghai, attracting nearly 5,000 parents and children.



Over the last twelve years, we have brought the CTSE programme to a total of 66 cities, benefitting more than 410,000 people, while our Train the Trainers programme has qualified over 9,000 people in our classrooms.

To continue the success of the CTSE programme, we are constantly looking for new opportunities to bring digitalisation into what we do and increase our outreach and impact. By emphasising the use of technology and interactive scenario-based teaching methods, our Magic Lab lets children embark on a

magical road safety journey through a children's traffic safety book series, "BMW Children's Traffic Safety Education - The Magic Castle of Safety Education", and 4D augmented reality teaching tools, which have been jointly produced by China Children's Press & Publication Group and BMW.



This year, we extended the CTSE programme to include adult drivers through a new project called "BMW Good Driver" and in alignment with the government's "China Good Driver Initiative". The BMW Good Driver project was developed to improve overall road safety for children. Over 11 million people engaged in a series of online activities called "BMW Good Driver", to advocate for good traffic behaviour. At the end of 2017, we unveiled the BMW Children Traffic Safety Education Ambassador programme to engage BMW dealers, car owners, employees, and media personnel to volunteer. In less than a year, we have had 400 BMW stakeholders register with close to half being qualified through online and offline training.



### **BMW CHINA CULTURE JOURNEY**

At BMW, we believe that a successful brand communicates its value beyond products and services, and that true value is calculated through contributions to society and culture and in resolving social issues. A brand uses its own heritage and its people to build bridges with society.

This belief is represented through our iconic CSR programme, the BMW China Culture Journey. The programme explores innovative means to preserve local cultural and societal values on which our communities and business operations are built. BMW China Culture Journey has advanced BMW's strategic CSR in a more sustainable manner, evolving from site visits to building a sustainable public platform that concentrates social resources and integrates Intangible Cultural Heritage into modern life.



The evolution of the programme is an illustration of our commitment to the shared development of Chinese society, as well as to the Chinese conventional wisdom of "teaching people how to fish instead of giving them a fish". Through this approach, the BMW China Culture Journey is exploring new and innovative models to safeguard Intangible Cultural Heritage.

To achieve this, we apply powerful designing, marketing, and communication to inspire, spur curiosity, and promote the consumption of intangible cultural heritage products. For instance, BMW China Culture Journey, in collaboration with the travel website Mafengwo, launched the "BMW China Culture Journey Intangible Cultural Heritage Tour Guide in Sichuan" and "BMW China Culture Journey Intangible Cultural Heritage Tour Guide in Hunan" for two consecutive years to attract young people. After being uploaded on the Mafengwo website, the tours have been viewed and downloaded two million times.





For more than a decade, the BMW China Culture Journey has invested in the conservation of Chinese Intangible Cultural Heritage and has evolved from a donation-based charity to a programme that focuses on enabling Intangible Cultural Heritage "inheritors". For example, the BMW China Culture Journey has invited inheritors to hold interactive workshops at BMW Experience Shanghai. To date, nine sessions have been held, which have attracted over 200 members of the public.

In the future, our goal is to continue along our journey (more than 24,000 kilometres in 22 provinces) and continue increasing our reach (more than 90 different heritage sites). We have donated a total of RMB 16.3 million to date through a range of events that include collaborative opportunities, such as working with the Tsinghua University's Academy of Arts and Design to establish the Tsinghua BMW Innovation Centre for ICH Safeguarding. Our investments are applied to create catalysts and develop innovative models of safeguarding and promotion of ICH.

### 2017 BMW China Culture Journey Explores Intangible **Cultural Heritage Crossover Initiatives**

BMW China Culture Journey launched the "Intangible Cultural Heritage Crossover Incubation Programme" in 2017 supporting innovation and collaboration between ten inheritors from the Tsinghua BMW Innovation Centre for ICH Safeguarding and the ICH Crossover Creative Ambassadors in the fields of music, fashion, gourmet food, and handicrafts.

The ICH journey included a 10-day cross-country trip spanning over 2,300 km and 47 ICH events. The vision of the BMW China Culture Journey is to preserve culture and history through the arts.



### **ICH Music**

Participation of pop music singer Jike Junyi, together with inheritors of ICH items in traditional music, to produce the first-ever nonprofit ICH music.

#### **ICH Fashion**

Participation of designer Sara Yun, together with inheritors of traditional art items and traditional craftsmanship items, to produce a collection of Chinese cultural elements and trendy ICHinspired apparel.



### **ICH Gourmet**

Participation of culinary expert Heimai to integrate traditional food into modern dishes, creating "a bite of Intangible Cultural Heritage".



#### **ICH Handicrafts**

Participation of designer Gao Yigiang and volunteer BMW car owners, together with around ten inheritors of traditional craftsmanship items, to design and produce creative and practical ICH handicrafts which feature desirable Chinese cultural elements.



### **BMW JOY HOME**

In China, the project "JOY Home" was established in 2011, developed to provide disadvantaged children in rural areas with greater opportunities to learn and play. Through the programme, rural children receive help with their homework, take part in educational activities, and as of 2017, participate in organised sports. The programme is supported and sponsored

by BMW dealers and customers, many of whom participate as volunteers.

This year was remarkable for the BMW JOY Home programme with the JOY Home Launch Ceremony and with Joyful Sports training and events being held in Shenyang, Chengdu, and Beijing.



In Shenyang nearly 100 BMW employees, car owners, and dealers participated.

In Chengdu, we involved more than 60 principals and physical education teachers from 32 JOY Homes.





In Beijing, 45 BMW employees, car owners, and media joined in activities to play games with children and migrant workers throughout the year.

In other parts of the country, we promoted Joyful Sports curriculum in 6 JOY Homes and in-depth Joyful Football training in 5 JOY Homes.



### 2017 BMW JOY Home Launches "Joyful Sports"

In 2017, in response to the call from the government and realising the urgent need in the communities in which we live and operate, BMW JOY Home launched the programme "Joyful Football". In partnership with world-renowned non-governmental organisation "Right to Play", BMW has developed and designed events and activities that improve children's development as well as provide training for local teachers in physical education. For schools that are unable to provide the equipment for football, BMW will provide participating BMW car owners, dealers, and employees with "Action Packages" that include the equipment for volunteers to organise and facilitate sporting activities with children. In the future, this emphasis on children's development through sports and education will expand to other communities and grow "Joyful Sports" at BMW JOY Homes.



### **BMW EDUCATION OF SERVICE TECHNOLOGY (BEST)**

The BEST programme was developed by the BMW China Training Academy in response to the national call for the development of vocational training. It incorporates dual-education vocational training, an approach that was credited with reinforcing and sustaining the rapid development of Germany's economy. The BEST programme runs primary and secondary education accreditation programmes for students, in cooperation with local vocational schools.

BEST focuses on the joint application of theoretical and practical knowledge and has attracted many talented high-level participants, with product knowledge and professional skills, to China's automotive industry. BEST also cultivates teachers with professional training capacity, international training ideas, and the most advanced automotive technologies. To date, we have set up 15 training bases across 13 provinces in cooperation with over 300 dealers nationwide. Of the 7,000 graduates, 65% have now joined BMW dealerships as a reliable force for high-quality aftersales services. Creating multi-win outcomes for schools, enterprises, students, dealers, and society, BEST has become a model for vocational education in China.

Our initiatives | CORPORATE SOCIAL RESPONSIBILITY | Our initiatives | CORPORATE SOCIAL RESPONSIBILITY | 117

### STAKEHOLDER ENGAGEMENT

In addition to CSR initiatives we implement ourselves, we also engage stakeholders under the umbrella of the BMW Warm Heart Customer Clubs and the Associate Social Responsibility project.

#### **BMW WARM HEART CUSTOMER CLUBS**

BMW Warm Heart Customer Clubs are member-driven groups through which customers volunteer their time and resources to contribute to their local communities. The BMW Warm Heart Customer Club represents the largest stakeholder network of its kind with 17 clubs across China involving BMW dealers, customers, and other charity organisations that maximise community benefits and impact. Since its formation as the first stakeholder volunteering platform in China's automotive industry in 2008, there have been over 400 public welfare events held.



BMW Good Driver promotion by Quanzhou BMW Warm Heart Customer Club.

### ASSOCIATE SOCIAL RESPONSIBILITY PROJECT

Developed for our employee volunteers, the Associate Social Responsibility project is guided by the mindset to "devote love and care for others", with a slogan of "helping each other with one RMB per person every month". The project provides financial support and spiritual care to elders, orphans, sick children, and the disabled as well as to employees in difficult circumstances.

By the end of 2017, volunteers had helped 250 homeless and disadvantaged elders in social welfare homes, 50 disabled orphans in the Happy Dream Orphanage, twins with cerebral palsy, and over 30 physically disabled children and primary students. Since 2008 we have helped 105 poverty-stricken patients with eye diseases to receive eye surgery, and in 2017, we held the "Walking for Bright" activity co-organised with Delos Foundation to provide students in financial need with free eye examinations and eyeglasses. Over 80 BMW Brilliance employees participated in this activity, helping over 100 students.

Our Associate Social Responsibility project shows the value of social inclusion and the importance of providing support to those in our communities that need it most.



▶ Public charity hiking activity – Walking for Bright.

# CORPORATE SOCIAL RESPONSIBILITY: FORECAST 2018

Building on the momentum of 2017, we will continue our exploration and innovation of creative projects with long-term objectives, transition from donations to focus on enablement, and create shared value that benefits our communities, our environment, and our local economy.

We will utilise a professional and comprehensive CSR project evaluation system of IOOI (Input, Output, Outcome, and Impact) Model to improve the quantitative and qualitative measurement of our projects' social impacts.

In addition, we are developing a volunteer management system for 2018. We are focusing our efforts in our approach to volunteer management by developing a network to engage all stakeholders both internally and externally, in order to mobilise their contributions as volunteers.





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GRI content index Ⅰ APPENDIX 

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### 7.1 ABOUT THIS REPORT

The BMW Brilliance 2017 Sustainability Report provides stakeholders with comprehensive information about the company's sustainability ambitions and progress. The topics included here have been selected and weighted in accordance with the findings of a systematic materiality process. The content of the report was prepared in compliance with the GRI Standards of the Global Reporting Initiative, applying the "Core" option. Using the Global Reporting Initiative Content Index helps to show how we are implementing the requirements of the UN Global Compact.

### **REPORTING PERIOD**

This is BMW Brilliance's fifth Sustainability Report, covering the calendar year from 1st January to 31st December 2017. The last BMW Brilliance Sustainability Report, covering our 2016 performance and activities, was released in November 2017. The next Sustainability Report will be published in mid-2019. BMW Brilliance reports on an annual basis.

### REPORTING SCOPE

The sustainability performance data in the report include the following production and operation sites of BMW Brilliance: our plants in Shenyang, as well as our branch company in Beijing and our five regional offices. During the reporting period, the northern extension of Dadong plant, the new Research and Development Centre, and the High Voltage Battery Centre were opened.

The content and data of the report relate primarily to BMW Brilliance. We have made no changes in the methods used to collect and measure the data on our sustainability performance. There were no significant changes to the list of material topics and topic boundaries of the report during the reporting period.

The targets set within the report build on the indicators presented in previous years. Additional targets apply to all entities operating in China under BMW Group. Joint initiatives with BMW China Automotive Trading Ltd. or the BMW Group are included in the areas of customer relationship management, employee training and development, and corporate social responsibility.

### THIRD-PARTY VERIFICATION

External auditors and experts audited indicators from the areas of environmental protection, product responsibility, and occupational health and safety in accordance with ISO 14001, ISO 9001, and OHSAS 18001.

### 7.2 GRI CONTENT INDEX

The following table lists the GRI Standards Disclosures and their location in the BMW Brilliance's Sustainability Report. This report was prepared in accordance with the GRI Standards: Core option. The compliance with the GRI Standards has not been externally assured.

General Disclo	osures			
GRI Standard	Disclosure	Page number	Comments or omissions	UN Global Compact
GRI 102: General	Organisational profile			
Disclosures 2017	102-1 Name of the organisation	pp. 2, 3, 129		
	102-2 Activities, brands, products, and services	pp. 12-19		
	102-3 Location of headquarters	pp. 13, 129		
	102-4 Location of operations	p. 13		
	102-5 Ownership and legal form	pp. 12-13		
	102-6 Markets served	pp. 12-13		
	102-7 Scale of the organisation	pp. 12-13, 15-17		
	102-8 Information on employees and other workers	pp. 89-92	d: Not included in the total number of employees are interns. They perform administrative work and support in the departments, but not to a significant effect. There are no self-employed workers.	Principle 6
			e: There are no significant variations (such as seasonal variations) in the employment numbers of BMW Brilliance.	
			f: The small number of employees in other regional locations next to Shenyang and Beijing are integrated into the Beijing figures, as those locations legally belong to the Beijing offices.	
	102-9 Supply chain	pp. 76-81		

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GRI Standard	Disclosure	Page number	Comments or omissions	UN Global Compact					
GRI 102:	Organisational profile (continued)								
General Disclosures 2017 (continued)	102-10 Significant changes to the organisation and its supply chain	p. 120							
	102-11 Precautionary Principle or approach	pp. 24-28		Principle 7					
	102-12 External initiatives	pp. 24-28							
	102-13 Membership of associations	-	CAAM (China Association of Automobile Manufacturers) CAEFI (China Association of Enterprises with						
			Foreign Investment)						
			IAC (The Investment Association of China)						
			LNAEFI (Liaoning Association of Enterprises with Foreign Investment)						
			SYAEFI (Shenyang Association of Enterprises with Foreign Investment)						
			BAEFI (Beijing Association of Enterprises with Foreign Investment)						
			ABNEA (Association of Beijing New Energy Automotive)						
			AHK (German Chamber of Commerce in China)						
			EFQM (European Foundation for Quality Management)						
			Road Vehicle Committee of China Intelligent Transportation Systems Association (ITS China)						
	Strategy								
	102-14 Statement from senior decision-maker	pp. 2-3							
	Ethics and integrity								
	102-16 Values, principles, standards, and norms of behaviour		The 12 Basic Principles are: Customer Orientation, Peak Performance, Responsibility, Effectiveness, Adaptability, Dissent (Frankness), Respect and Trust and Fairness, Associates, Leading by example, Sustainability, Society, and Independence.	Principles 6, 1					
			Core Values: Responsibility, Appreciation, Transparency, Trust, and Openness.						
			Norms of Behaviour:  - Associate Handbook including a Compliance and Ethics Code of Conduct section  - Legal Compliance Code  - Corruption Prevention Guideline  - Corporate Hospitality and Gifts Instruction  - Anti-Fraud and Fraud Response Guideline						

GRI Standard	Disclosure	Page number	Comments or omissions	UN Global Compact
GRI 102: General	Governance			1
Disclosures 2017 (continued)	102-18 Governance structure	p. 24	According to the Articles of Association of BMW Brilliance, the highest authority of BMW Brilliance is the Board of Directors (BoD). The BoD has the power to make decisions on all major and important matters of BMW Brilliance as provided in the Articles of Association. A management organisation, the Board of Management (BoM), is established under the BoD, and is responsible for and in charge of the day-to-day operation and management of BMW Brilliance.	
	Stakeholder engagement			
	102-40 List of stakeholder groups	pp. 30-31		
	102-41 Collective bargaining agreements	p. 94	100% of local employees are members of the Labour Union, and all Union members are covered by the Collective Contract on Labour Remuneration. This excludes expatriates, who are not eligible for the Labour Union	Principle 3
	102-42 Identifying and selecting stakeholders	p. 29		
	102-43 Approach to stakeholder engagement	pp. 29-31		
	102-44 Key topics and concerns raised	pp. 32-33		
	Reporting practice			
	102-45 Entities included in the consolidated financial statements	p. 120		
	102-46 Defining report content and topic boundaries	pp. 32-33		
	102-47 List of material topics	pp. 32-33		Principles 7, 8, 9, 10
	102-48 Restatements of information	-	Where necessary and possible, restatements are explained in footnotes to the respective graphs.	
	102-49 Changes in reporting	p. 120		

GRI Standard	Disclosure	Page number	Comments or omissions	UN Global Compact				
GRI 102: General	Reporting practice (continued)							
Disclosures 2017 (continued)	102-50 Reporting period	p. 120						
	102-51 Date of most recent report	p. 120						
	102-52 Reporting cycle	p. 120						
	102-53 Contact point for questions regarding the report	p. 129						
	102-54 Claims of reporting in accordance with the GRI Standards	p. 120						
	102-55 GRI content index	pp. 121-128						
	102-56 External assurance	p. 120						
Specific Disc	losures for Material Topics							
GRI Standard	Disclosure	Page number	Comments or omissions	UN Global Compact				
Corruption an	d anti-competitive behaviou	r						
	a anti-competitive behaviou	1						
GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 33-34		Principle 10				
	103-2 The management approach and its components	pp. 34-40						
	103-3 Evaluation of the management approach	pp. 34-35		_				
GRI 205: Anti-corruption 2017	205-2 Communication and training about anti-corruption policies and procedures	pp. 34-37	We define governance bodies as those committees which receive active regular reports by the compliance function. All committee members are informed about BMW Brilliance's anti-corruption policies and procedures. All committee members who are BMW Brilliance.					

committee members who are BMW Brilliance employees have also received training on anticorruption. Committee members representing our shareholders are not covered by the training programme of BMW Brilliance, but are covered by the compliance programmes of BMW Group

and Brilliance Group respectively.

GRI Standard	Disclosure	Page number	Comments or omissions	UN Global Compact

### Corruption and anti-competitive behaviour (continued)

GRI 205: Anti-corruption 2017 (continued)	205-2 Communication and training about anti-corruption policies and procedures (continued)	pp. 34-37	Our compliance training includes mandatory online training for all non-production employees, additional classroom training for new employees and managers, and special workshops and training for specific target groups (e.g. Sales, Purchasing, and Finance).  c: Information unavailable: The number of business partners that policies and procedures have been communicated to is not reported.	
GRI 206: Anti-competitive Behaviour 2017	206-1 Legal actions for anti- competitive behaviour, anti-trust, and monopoly practices	-	In 2017, there were no legal actions regarding anti-competitive behaviour or violations of anti-trust and monopoly legislation.	
GRI 414: Supplier Social Assessment 2017	414-2 Negative social impacts in the supply chain and actions taken	pp. 76, 78-80		Principles 1, 2, 3, 4, 5, 6, 10

### **Product safety**

GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 33, 46, 53
	103-2 The management approach and its components	pp. 53-55
	103-3 Evaluation of the management approach	pp. 53-55
GRI 416: Customer Health and Safety 2017	416-1 Assessment of the health and safety impacts of product and services	pp. 54-55

GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 33, 64, 65		Principles 7, 8, 9
	103-2 The management approach and its components	pp. 65-67		
	103-3 Evaluation of the management approach	pp. 65-66		
GRI 302: Energy 2017	302-1 Energy consumption within the organisation	p. 65	Conversion factors: steam consumption measured in GJ*0.277 = MWh, gas consumption in cubic meters*10.82/1000 = MWh.	

GRI Standard	Disclosure	Page number	Comments or omissions	UN Global Compact
Energy consur	nption (continued)			
GRI 308: Supplier Environmental Assessment 2017	308-2 Negative environmental impacts in the supply chain and actions taken	pp. 76, 78-80		Principles 7,8
Air pollution, e	missions, and climate chan	ge		
GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 33, 46, 50, 64-65		Principles 7, 8, 9
	103-2 The management approach and its components	pp. 16-17, 50-52, 54-55, 65-67		
	103-3 Evaluation of the management approach	pp. 16-17, 50-52, 65-67		_
GRI 305: Emissions 2017	305-3 Other indirect (Scope 3) GHG emissions	рр. 50-51		_
	305-4 GHG emissions intensity	pp. 16, 65-66	Efficiency indicator = CO <sub>2</sub> emissions (from vehicle production) from Scope 1 (CO <sub>2</sub> ) and Scope 2 (CO <sub>2</sub> ) divided by the total number of BMW Brilliance vehicles produced.	
	305-5 Reduction of GHG emissions	pp. 16, 65-66		_
GRI 308: Supplier Environmental Assessment 2017	308-2 Negative environmental impacts in the supply chain and actions taken	pp. 76, 78-80		Principles 7, 8
Talent attraction	on and retention			
GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 33, 86-87		Principle 6
, pp. 666.1	103-2 The management approach and its components	pp. 86-94		
	103-3 Evaluation of the management approach	pp. 88-94		_
GRI 401: Employment 2017	401-1 New employee hires and employee turnover	pp. 88-92	a: Total number of new employees hires: 1,330. b: Confidentiality constraints: The total number of amployee turnover as well as the breakdown.	_
			employee turnover, as well as the breakdown by age group, gender and region (total numbers and rates) are not reported.	

GRI Standard	Disclosure	Page number	Comments or omissions	UN Global Compact
Employee deve	elopment			
GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 33, 86, 98		
	103-2 The management approach and its components	pp. 98-101		
	103-3 Evaluation of the management approach	p. 101		
GRI 404: Training and Education 2017	404-1 Average hours of training per year per employee	p. 92	a: Information unavailable: Average training days by gender are not reported.	
Occupational I	nealth and safety			
GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 33, 86, 95		Principles 1, 2
	103-2 The management approach and its components	pp. 95-97		
	103-3 Evaluation of the management approach	pp. 95-97		_
GRI 403: Occupational Health and Safety 2017	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	p. 95	a: Information unavailable: Data is not reported by gender. There are no occupational disease cases in the company. We monitor the accident frequency rate instead of the lost day rate.	
			b: Information unavailable: No data on types of injury, injury rate and work-related fatalities are reported for contracted workers, as it is currently impossible to get solid data on this from contractors.	
			c: The scope of this health and safety data only covers the production plants of BMW Brilliance. As they are all in the same region, no regional breakdown is necessary. Minor (first-aid level) injuries are excluded from the number of work-related injuries and from the accident frequency rate. The accident frequency rate is calculated by the number of accidents with one day lost time or more, multiplied by one million hours worked, divided by the total working hours of the month.	
			* The absentee rate only includes sickness leave.	
GRI 414: Supplier Social Assessment 2017	414-2 Negative social impacts in the supply chain and actions taken	pp. 76, 78-80		Principles 1, 2, 3, 4, 5, 6, 10

GRI Standard	Disclosure	Page number	Comments or omissions	UN Globa Compact
		-		
Public policy				
GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 29-31, 33		
	103-2 The management approach and its components	pp. 29-31, 50		
	103-3 Evaluation of the management approach	pp. 30-31		
GRI 415: Public Policy 2017	415-1 Political contributions	-	BMW Brilliance operates within the commercial and legal framework and pays taxes accordingly. BMW Brilliance does not support political parties, their representatives, or candidates for office with financial or in-kind political contributions.	
Aftersales ser	vices			
GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 33, 47, 56		
	103-2 The management approach and its components	pp. 56-58, 115		
	103-3 Evaluation of the management approach	pp. 56-58		
Product portfo	olio and research and devel	opment		
GRI 103: Management Approach 2017	103-1 Explanation of the material topic and its boundary	pp. 33, 46- 48		Principles 7, 8, 9
	103-2 The management approach and its components	pp. 44-48		_
	103-3 Evaluation of the	pp. 44-48		

management approach

305-5 Reduction of GHG

emissions

GRI 305:

Emissions 2017

pp. 16, 50-51

### WE LOOK FORWARD TO HEARING FROM YOU

### FURTHER INFORMATION AND PUBLICATIONS ARE AVAILABLE AT:

http://www.bmw-brilliance.cn/cn/en/csr/download.html

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