

SUSTAINABILITY REPORT 2021



ABOUT THIS REPORT

At BMW Brilliance, we firmly believe that there is no accountability without transparency, and we release the Annual Sustainability Reports to disclose our economic, social and environmental impacts on the most critical aspects. We strive to provide a clear, balanced and quantitative report that shows our thinking and actions as a leader in China's automotive industry. The content of the report was prepared in compliance with the GRI Standards of the Global Reporting Initiative, and to demonstrate our implementation of the communication requirements of the United Nations Global Compact.



This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

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CEO'S MESSAGE

LEADING THE MOVEMENT FORWARD

2021 was a stark reminder of the urgent need for us all to move towards a more sustainable way of living. COVID-19 and its effects remained pervasive and we felt the increasingly devastating impact of climate change, which threatens biodiversity, ecosystems, natural balance, resources and livelihoods around the world. The businesses worldwide were also tested by numerous challenges, including the cost of raw materials, logistics disruption and the supply shortage of semiconductors. All of these point to the precipice upon which we now stand, and it is time to decide: Do we continue as before, allowing our environment to succumb to the damage we are inflicting upon it, or do we take decisive actions now, to ensure that there will still be a habitable home for our future generations? For BMW Brilliance, the answer is clear.

No Premium Without Sustainability

As societies work towards a more sustainable economy, businesses also need to keep up with the sustainable development. The sustainability targets of BMW Brilliance are aligned with BMW Group, and we fully support the Group's strategic objective to be the most sustainable manufacturer for individual premium mobility. For us, there is "no premium without sustainability". As well as fostering a sustainability mindset among our employees and embedding sustainable practices throughout our organisation, we are driving industry-wide changes by working together with our partners to build an end-to-end sustainable value chain. A sustainable future is only possible when we are all pulling in the same direction.



Catalysing Climate Change Actions

Taking actions against climate change is one of our top business priorities, and we are change agents to drive green transformation across our entire value chain, from production to supply chain, logistics and dealer management.

We are proud to say that operating on renewable electricity has become a business norm within BMW Brilliance. We successfully transitioned to 100% renewable electricity not only for our production base in Shenyang (since 2019), but also for all our non-production sites across China in 2021. Together with the state-of-the-art low-carbon technologies in our production, we were able to reduce CO₂ emissions per vehicle produced year after year. To accelerate sustainable transformation of our supply chain, we launched the Supply Chain Match Plan China, and one of the underlying ambitions are to enable our suppliers in Liaoning Province to transition to 100% renewable electricity by 2030. Likewise in our logistics operation, carbon reduction is a core mission under our new "2025+ Aftersales Strategy", which has set ambitious targets to curb CO₂ emissions from aftersales logistics.

On the customer end, we are striving to create a low-carbon ecosystem along the customer journey. One landmark programme is the Network Transformation Green Star Programme, which we are developing to enhance sustainable dealerships and services through four aspects: green environment, green power, green operations, and green engagement. Over the course of this past year, we have continued to develop our charging infrastructure, making more renewable electricity available for our customers throughout the country.

Accelerating Circularity

Truly sustainable manufacturing cannot be achieved without circularity. At BMW Brilliance, we intensify circularity with our "Secondary First" approach, which is finding ways to reduce, reuse and recycle parts and materials used in our products and processes. In 2021, battery recycling and its subsequent secondary use was a major focus for us. And so, we have greatly enhanced the volume of high-voltage batteries (HVBs) recycled and identified secondary uses for HVB's for pallet trucks and as energy storage solutions in our plants, thereby extending their lifecycle.

While circular processes are not new for us, we have made great strides in recent years by increasing the volume of materials we recycle, in particular with our closed-loop system for steel and aluminium ingots. Another component in our push for sustainability is an expanded scope of parts-returns and remanufacturing, and further upgraded core tracing features for reverse logistics systems and improved overall parts-manufacturing capability. Our efforts have resulted in more efficient manufacturing, requiring fewer primary materials, and reducing our overall environmental impact.

Extending Care to Biodiversity

Biodiversity is the foundation of life on our planet, whom we treat as a critical stakeholder. Biodiversity conservation is vital to building an ecological civilisation, thus fulfilling the Corporate Social Responsibility (CSR) in this area is more important than ever. In 2021, we launched our "BMW Beautiful Homeland Initiative"—a new and long-term BMW CSR programme that focuses on biodiversity conservation and public education with full engagement of stakeholders. We are proud to be the first premium OEM to embrace and contribute to biodiversity conservation in China. We are also ingraining this philosophy in our facilities by establishing ecological gardens, sponge city concepts and implementing nature-based solutions to foster a better environment for our people and our planet.

Priorities in 2022

At BMW Brilliance, we believe the spirit of sustainability and cooperation is the only way forward to resolve the global challenges today. This year we are scaling up for our next phase of growth by expanding our production footprint, deepening our local supplier network, and launching the new future-orientated models. By manufacturing more of our products in China, our biggest single market, we are adding more constructive values for the local economy and for our Chinese customers. Furthermore, our new production plants adhere to the BMW iFACTORY principles of "Lean, Green and Digital", reflecting our determination to move forward together with China. In 2022, we are not only excited to accelerate our own sustainable transformation, but also ready to lead the sustainable and high-quality development of China's automotive industry.



Today we must regard carbon as the new currency and remain industry leader in promoting a sustainable and green economy, by engaging and collaborating with our partners across value chain."



Dr. Franz Decker

President and CEO
BMW Brilliance Automotive Ltd.

AN OVERVIEW OF BMW BRILLIANCE

BMW Brilliance was founded in 2003 as a joint venture of the parent companies Bayerische Motoren Werke Aktiengesellschaft (BMW) and Brilliance China Automotive Holdings Limited.

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

Guided by our aspiration to be the leading sustainable provider of premium individual mobility, we are steadfast in accelerating the sustainable transformation across our entire value chain in China.

2021 AT A GLANCE

700,787

Vehicles produced

22,829

Total workforce at year-end

436

Local content suppliers in China

652,000

Automobiles wholesaled

683

Authorised dealer outlets nationwide

71.39

Billion RMB of purchasing volume in China



LEGEND

Headquarter & Production Base



Branch Office (including LingYue)



Sales Regional Office



Finished Vehicles Dispatch Area



Finished Vehicles Export Warehouse



Spare Parts Distribution Centre



Training Centre



OUR LOCATION

① Shenyang



② Beijing



③ Tianjin



④ Dalian



⑤ Zhengzhou



⑥ Xi'an



⑦ Hefei



⑧ Nanjing



⑨ Shanghai



⑩ Hangzhou



⑪ Ningbo



⑫ Chengdu



⑬ Guangzhou



⑭ Foshan



OUR FACILITIES

3 Complete Vehicle Production Plants¹

1 Powertrain Plant

4 Branch Offices

5 Sales Regional Offices

9 Finished Vehicles Dispatch Areas

2 Finished Vehicles Export Warehouse

6 Spare Parts Distribution Centres

5 Training Centres²

17 Training Bases³

1. Include Plant Tiexi, Plant Dadong and Plant Lydia. Plant Lydia will start production in 2022.

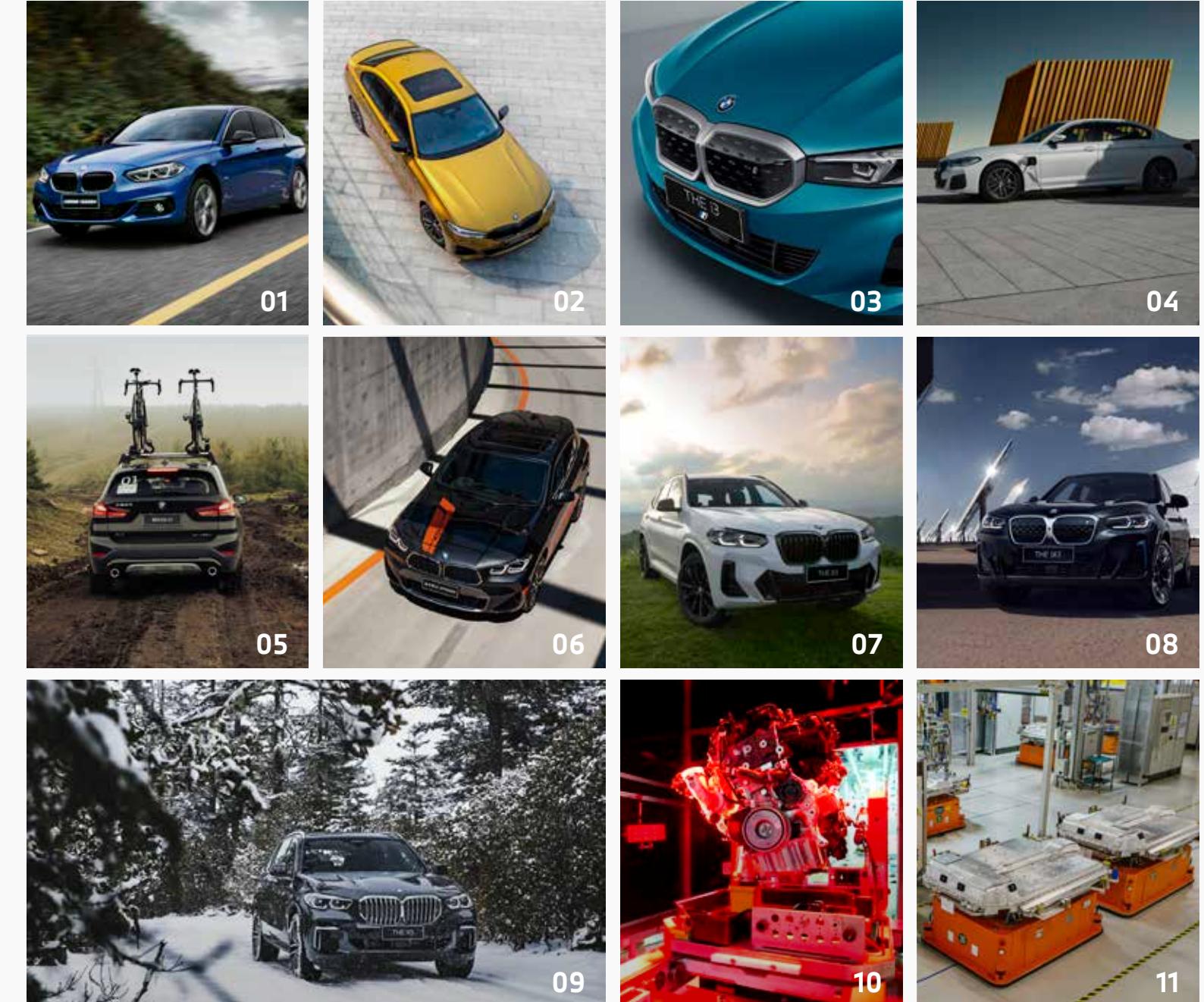
2. Managed by BMW to deliver trainings for employees and dealer partners.

3. Cooperate with vocational schools to offer training and certification for training base students, and are open to dealers for training.



- 01 **BMW 1 Series** - Sedan
- 02 **BMW 3 Series** - Long Wheelbase and Standard Version
- 03 **BMW i3 Series** - Fully Electric Sedan (launch in 2022)
- 04 **BMW 5 Series** - Long Wheelbase (incl. plug-in hybrid model)
- 05 **BMW X1** - SUV (incl. plug-in hybrid model)
- 06 **BMW X2** - SUV
- 07 **BMW X3** - SUV
- 08 **BMW iX3** - Fully Electric SUV
- 09 **BMW X5** - SUV (launch in 2022)
- 10 **BMW Engine** - 3 Cylinder and 4 Cylinder
- 11 **BMW High-voltage Battery** - PHEV and BEV

OUR PRODUCT PORTFOLIO





HIGHLIGHTS IN 2021

JANUARY

- The 3 millionth engine rolled off the production line at BMW Brilliance Powertrain Plant.



FEBRUARY

- Dr. Franz Decker met with Mr. Wang Xinwei, previous incumbent Mayor of Shenyang Municipal Government.
- BMW Brilliance was granted with "A-Category Enterprise" by China Quality Certification Centre.



MARCH

- BMW Brilliance Technology and Manufacturing was awarded 7 Stars and Outstanding Achievement for Sustainability at the EFQM Global Award 2021.
- LingYue Nanjing Branch was established.
- "Lights off" at BMW Brilliance Plants for Earth Hour 2021.

JULY

- BMW China and BMW Brilliance donated RMB 11 million for Henan Flood relief.
- Kick-off of the 2021 BMW China Culture Journey Yunnan tour.
- Official opening of the BMW Spare Parts Distribution Centre in Hefei.
- Successful roll-off of the 100,000th high-voltage battery of BMW Brilliance.



APRIL

- The first-ever "BMW Group Brand Night" in China was held.
- The new BMW X2 Dark/Light Edition hit the market.

AUGUST

- BMW deepened cooperation with the State Grid EV Service.
- The BMW Group brought an extensive line-up at the 2021 Chengdu Motor Show.



MAY

- BMW Brilliance ranked in Top Ten of LinkedIn's Top Companies 2021.
- 2021 BMW Children Traffic Safety Education kicked-off.
- BMW Brilliance plants launched biodiversity event on the International Biodiversity Day.



JUNE

- The first BMW Group China Sustainability Summit 2021 was held.
- Release of the BMW Brilliance Sustainability Report 2020.
- The 6th BMW Brilliance Associates' Congress and the 4th BMW Brilliance Union Members' Congress were held.

SEPTEMBER

- National launch of the new BMW iX3.
- BMW iX3 achieved record-breaking Super 5 Star Rating at C-NCAP.
- BMW Brilliance completed a green power trade and ranked first nationwide in the Green Power Purchase.
- Roll-off of the 4 millionth BMW Brilliance car from production line.



NOVEMBER

- Successful launch of the "BMW Beautiful Homeland Initiative".
- The BMW Brilliance Art Season kicked off.
- The 2021 BMW Brilliance Technology and Manufacturing Management Forum was held.



DECEMBER

- BMW Brilliance topped the Automotive Industry Green Development Index for three consecutive years.
- "Sustainability@BMW Shenyang Plants" event was held at BMW Brilliance Plant Dadong.
- BMW Brilliance Shenyang Training Centre started operations.
- Launch of the new 2022 BMW X1.



BMW BRILLIANCE
AUTOMOTIVE

OUR SUSTAINABILITY PROGRESS

KEY PERFORMANCE HIGHLIGHTS

C-NCAP
★★★★★

The BMW iX3 gained a Super 5-Star rating in C-NCAP with a total score of 95.7%. Ranked 1st out of 82 tested models.

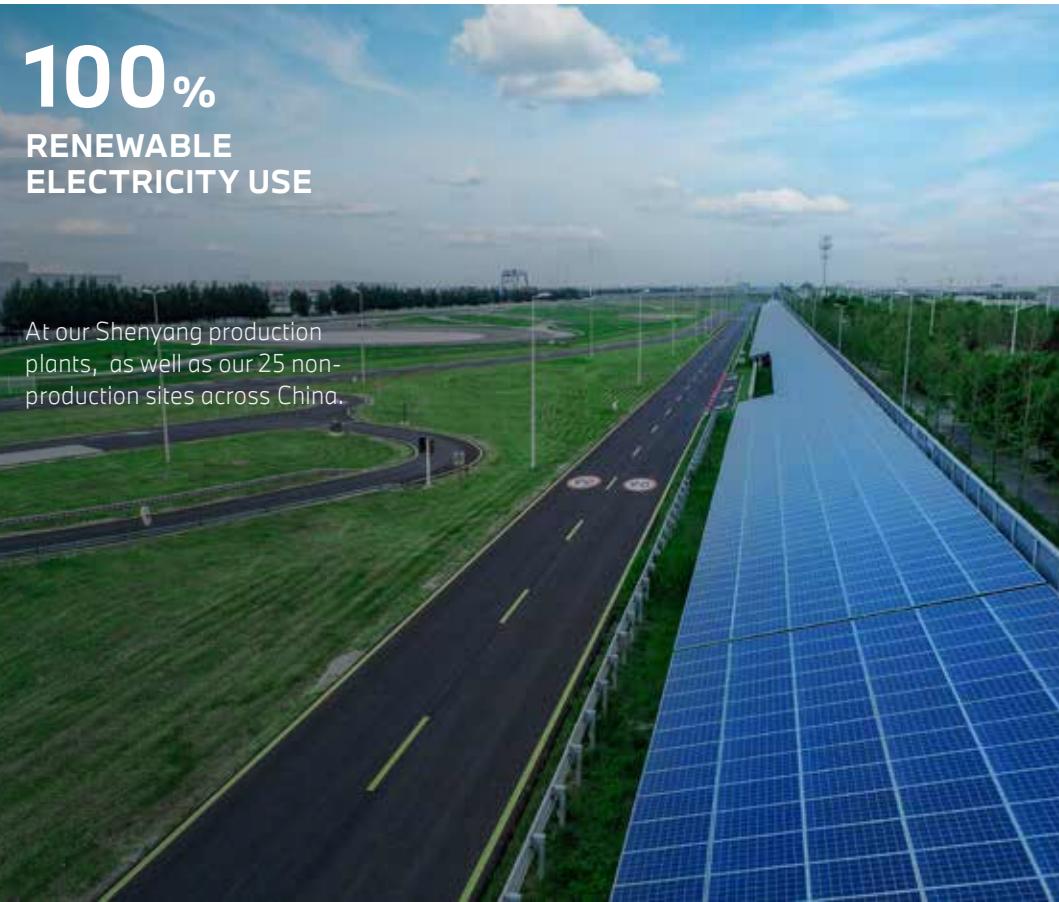
47,322

NEV wholesale volume in 2021.

↗ 71.1% vs 2020

100%
RENEWABLE
ELECTRICITY USE

At our Shenyang production plants, as well as our 25 non-production sites across China.



1st
PREMIUM OEM

To use the Sino-European railway and the Chengdu comprehensive bonded zone for vehicle imports.



1,914
Volunteering Hours

Of staff volunteers service for BMW Corporate Volunteer Association activities.

↗ 107.4% vs 2020

11,459,458

Total Beneficiaries

Of BMW CSR activities organised by the BMW CSR team, BMW Brilliance Trade Union and BMW Brilliance Shenyang Associate Social Responsibility Programme.

517

BMW i Dealer outlets at 2021 year-end.

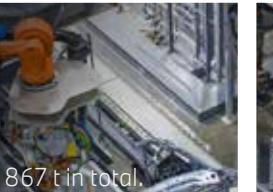
↗ 163.8% vs 2020



278,000+

Pieces of spare parts

Recycled, weighing over 867 t in total.



71,000 t

Scrap steel recycled

From production process.

365,713

Public charging pillars



-7.8%

CO₂ emissions per vehicle produced vs 2020.

-76.0%

VOC emissions per vehicle produced vs 2020.

Provided to BMW NEV customers in China, with charging by green energy being enabled through collaboration with State Grid EV Service.

↗ 19.2% vs 2020

-7.3%

Energy consumption per vehicle produced vs 2020.

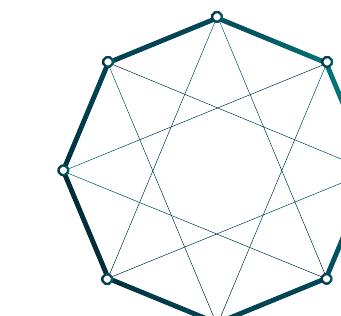
-16.4%

Waste for disposal per vehicle produced vs 2020.

BMW GREEN POWER ALLIANCE



SUPPLY CHAIN SUSTAINABILITY PLAN CHINA



Developed in 2021 with clear governance and eight working packages, to accelerate sustainable development for our 436 local suppliers in China.

BMW BEAUTIFUL HOMELAND INITIATIVE



The New BMW CSR programme initiated in 2021 to commit to **biodiversity conservation** and **ecological civilisation construction**.



OUR SUSTAINABILITY PROGRESS

KEY PERFORMANCE INDICATORS

Note:

1. This figure is publicised on the Corporate Average Fuel Consumption and New Energy Vehicle Credits of Passenger Vehicle Enterprises in 2021 by Ministry of Industry and Information Technology (MIIT) on April 8th 2022.

2. Indirect CO₂ emissions generated in the upstream supply chain, the logistics (including inbound, finished vehicles and aftersales logistics), the utilisation phase, and the disposal of automobiles produced by BMW Brilliance for sales in mainland China market of the year, and those generated from employee commuting and business trips of BMW Brilliance within the year. The increase in this figure was mainly due to the increase in production volume and reporting scope expansion for logistics. Leveraged on improved data traceability, we managed to track and report CO₂ emissions from international inbound logistics (US-China route) in 2021.

3. In addition to BMW Brilliance's Shenyang production base, as of 2021, BMW Brilliance ensured 100% renewable electricity use at its non-production sites.

4. The year-on-year reduction of volatile organic compounds (VOC) emissions was mainly due to the utilisation of new VOC treatment facilities and the optimisation of our paint shops' operation.

→ See **Basis of Reporting** for definition of each performance indicator.

	2017	2018	2019	2020	2021	% Change
BUSINESS ACTIVITIES						
Revenues from operations (in RMB million)						
	113,197	141,918	172,692	189,006	214,787	13.6
Tax (in RMB billion)	25	31	35	38	43	13.2
Vehicles produced (in unit)	396,888	491,888	536,537	602,936	700,787	16.2
Automobiles wholesaled (in unit)	386,556	465,192	544,549	605,050	652,000	7.8
Authorised dealer outlets nationwide (number)	598	625	647	666	683	2.6
PRODUCTS AND SERVICES						
Average fleet CO ₂ emissions (in g/km)	146.90	139.00	137.80	142.09	152.80	7.5
Corporate average fuel consumption (in l/100 km) ¹	6.17	5.84	5.79	5.97	6.42	7.5
New Energy Vehicles dealer outlets in China (number)	234	336	450	495	554	11.9
Public charging pillars provided in China (number)	65,708	81,585	130,405	306,891	365,713	19.2
Spare parts recycled (number)	56,362	217,500	124,600	108,070	278,000	157.2
High-voltage Batteries recycled (in pieces)	--	--	3,262	4,347	6,173	42.0
PRODUCTION, OPERATION AND SUPPLIER NETWORK						
Total Greenhouse gas emissions (in t)	11,884,985	14,190,033	15,417,955	17,741,047	21,392,395	20.6
Scope 1 Greenhouse gas emissions (in t)	37,448	35,733	42,141	43,614	50,937	16.8
Scope 2 Greenhouse gas emissions (in t)	240,747	281,753	68,602	71,275	71,604	0.5
Scope 3 Greenhouse gas emissions (in t) ²	11,606,790	13,872,546	15,307,212	17,626,158	21,269,854	20.7
CO ₂ emissions per vehicle produced (in t/vehicle)	0.70	0.63	0.20	0.18	0.17	-7.8
Share of renewable electricity (in %) ³	25	43	100	100	100	--
Total energy consumption (in MWh)	734,268	841,518	974,642	1,026,890	1,106,295	7.7
Energy consumption per vehicle produced (in MWh/vehicle)	1.83	1.65	1.63	1.51	1.40	-7.3
Volatile organic compounds (VOC) per vehicle produced (in kg/vehicle) ⁴	0.54	0.56	0.52	0.50	0.12	-76.0
Total water consumption (in m ³)	1,173,531	1,214,892	1,332,876	1,188,228	1,275,998	7.4



OUR SUSTAINABILITY PROGRESS

KEY PERFORMANCE INDICATORS

Note:

1. Due to the improved data basis, the 2021 reporting scope of employees has been expanded to BMW Brilliance and its wholly-owned subsidiary—LingYue Digital Information Technology Co., Ltd, including dispatched employees. While the scope of employees in 2020 is the permanent employees of BMW Brilliance.

2. This figure is a newly added indicator to reflect the local directly hired employees in management positions.

→ See **Basis of Reporting** for definition of each performance indicator.

	2017	2018	2019	2020	2021	% Change
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PRODUCTION, OPERATION AND SUPPLIER NETWORK (CONT'D)

Water consumption per vehicle produced (in m ³ /vehicle)	2.68	2.47	2.40	1.97	1.82	-7.6
Process wastewater per vehicle produced (in m ³ /vehicle)	0.39	0.42	0.44	0.44	0.47	6.8
Waste for disposal per vehicle produced (in kg/vehicle)	7.43	8.05	7.47	2.99	2.50	-16.4
Total waste (in t)	71,976	85,237	87,013	181,791	210,691	15.9
Total hazardous waste (in t)	8,164	11,164	10,199	9,442	10,408	10.2
Total non-hazardous waste (in t)	63,812	74,073	76,814	172,349	200,283	16.2
Local content suppliers in China (number)	359	378	394	400	436	9.0
Purchasing volume in China (in RMB billion)	26.70	43.10	49.68	54.89	71.39	30.1

EMPLOYEE AND SOCIETY

Total workforce at year-end (number) ¹	16,686	18,925	19,824	20,739	22,829	10.1
Total new employee hires (in %) ¹	8.0	17.3	8.9	8.6	16.2	88.1
Female employees in total workforce (in %) ¹	12.8	12.0	12.1	11.9	11.9	0.3
Employees in management positions (in %) ¹	6.9	6.6	6.9	7.0	7.5	6.9
Female employees in management positions (in %) ¹	30.2	30.0	30.6	30.2	31.4	4.0
Local employees in management positions (in %) ^{1,2}	--	--	--	--	90.0	--
Attrition rate (in %) ¹	4.5	4.8	3.6	3.7	7.4	97.8
Accident frequency rate (per one million hours worked)	0.43	0.28	0.17	0.09	0.13	44.4
Training days of training organised by the Human Resources Department (in day) ¹	34,314	33,804	24,311	15,491	19,524	26.0
Average days of further training per employee (in day/person) ¹	2.10	1.79	1.23	0.75	0.86	14.5
Training attendee satisfaction rate (in %) ¹	97.0	97.0	98.2	98.4	99.0	0.6
Beneficiaries of BMW CSR activities (number)	21,000	80,292	2,628,710	11,568,364	11,459,458	-0.9
Expenditure on social commitment activities (in RMB)	17,064,616	15,575,085	16,513,831	36,619,722	23,439,759	-36.0
Total employee participants of CSR activities (number)	--	--	212	85	300	252.9
Total hours of volunteer service (in hour)	--	--	1,915	923	1,914	107.4

-
- 1.1 Sustainability Management
 - 1.2 Stakeholder Engagement
 - 1.3 Compliance Management
 - 1.4 Data Privacy and Information Security

CHAPTER 1

FUNDAMENTALS

1.1

SUSTAINABILITY MANAGEMENT

Adhering to the BMW Group's vision to be the most sustainable manufacturer for individual premium mobility, BMW Brilliance firmly believes that there is no premium without sustainability.

We have weaved this philosophy into the fabric of our sustainability management. Everything from our governance structure, risk management, to our compliance and information security management, aligns with our goals to be more sustainable in business. We are not in this alone. It is thanks to the support of our partners that we can create premium and sustainable products and services. To this end, we strive to build a transparent and collaborative relationship with all stakeholders that motivate us to exceed their expectations.

BEST ENTERPRISE PRACTICE AWARD

For achieving Sustainable Development Goals by Global Compact Network China for 3 consecutive years.

1st Rank

In 2021 China's Automotive Industry Green Development Index for 3 consecutive years.



SUSTAINABILITY MEGATRENDS

A company's success depends to a large extent on its ability to recognise changes in its business environment early on and make plans accordingly, so as to prevent damages from potential risks and seize opportunities. In 2021, we conducted various studies with qualitative and quantitative methodologies to analyse the sustainability megatrends around us, including the green power policy, biodiversity, climate risk and others. Based on the analysis, we refined our sustainability focus to take proactive and future-proof actions.

THE CALL FOR CONCRETE ACTIONS

In 2021, the world around us underwent drastic changes. BMW Brilliance is aware of the changes taking place in the environment and is reflecting upon the impact that our business has on it. We recognise the social responsibility that we take on as a leading player in China's automotive industry, and as such we are optimising our business to enhance sustainability, identifying potential opportunities, and exploring new ideas and directions for further growth with sustainability in mind. The objective is for us to not only achieve growth in this industry but also create a prosperous planet for the generations to come.

We experienced worsening impacts of climate change, as we witnessed the floods caused by torrential rain in Henan in 2021. Not only have these events caused adverse

effects on our business, it has also inflicted pain on many lives and further slowing down the economy. Concurrently, COVID-19 continues to afflict populations around the world and is impacting economic recovery, creating uncertainty for the future. Given the growing importance of biodiversity, more and more governments and corporations are being called to take action.

In these trying circumstances, the world is coming together to combat these challenges. A progressive road map has been introduced in China as the country formally commits to carbon neutrality by 2060, with a series of policies on energy transition, carbon market and circular economy coming up. Following the fruitful conclusion of COP15 to the UN Convention on Biological Diversity in Kunming, biodiversity was also put at the top of the agenda for decision-makers worldwide, including China.

As a leader in sustainability in the Chinese automotive industry, BMW Brilliance is in a constant endeavour to improve our operations and adapt to external changes while responding to national strategies. We believe sustainable growth is the only path forward to guide us out of the challenges outlined above, and it is a path that holds great potential for growth. As part of our efforts to achieve sustainability, we are expanding our E-mobility initiative, revolutionising traditional travel with low-carbon alternative methods. We are also making notable progress in transitioning our manufacturing and logistics processes to become low carbon, and advancing circularity across our entire value chain. What is more, we are actively utilising new technology such as 5G, IoT, and AI in our push to fully digitalise our work and service. In doing so we are creating more possibilities to enhance our sustainability performance.



**The purpose is to achieve
not only growth in this
industry, but also create a
prosperous planet for the
generations to come.**

SUSTAINABILITY STRATEGIC DIRECTIONS

In 2020, to achieve our goals set by the BMW Group as well as to better comply with national policies in China, we have redefined our three sustainability directions. Building on the foundations laid down in the previous year, in 2021, we looked to further enhance our responses towards internal and external changes.

“

With a converging focus, we are accelerating our step towards a more low-carbon and circular development.”



Carsten Mueller-Deiters

Head of Business Development and Corporate Sustainability

1

CLIMATE CHANGE ACTIONS

We firmly support the Paris Climate Agreement and are dedicated to achieving carbon reduction across our whole value chain. In 2021, with the launch of the new BMW iX3 and scaling up of charging facilities, we boosted new energy vehicle (NEV) sales and facilitated convenient long-distance low-carbon travel. Through our efforts, we have not only reached a milestone in using 100% renewable electricity in our production and non-production sites, but also paved the pathway for our dealers and business partners towards renewable electricity adoption through the BMW Green Power Alliance project. In utilising innovative methods to promote green logistics through the pilot use of E-Trucks, LNG Trucks and the wider adoption of railway transportation, we have further accelerated low-carbon transformation.

2

ACCOUNTABLE, CIRCULAR & RESILIENT VALUE CHAIN

Every stakeholder is a valued partner in realising our goals. Sided with stakeholders, in 2021, we worked on the most critical sustainability issues while maintaining our Quality-First mindset to guide our quality management. We joined hands with our suppliers to explore and innovate on the use of secondary materials. One of our key accomplishments was to push on a more sustainable dealer network through the Network Transformation Green Star Programme. We have also made significant progress in forging a closed-loop system and the secondary use of HVBS, which has driven us closer towards circularity.

3

RESPONSIBLE CORPORATE CITIZENSHIP

We are continuing to support our employees and aid their development, as well as care for the environment in which we inhabit. Within our operations we are actively facilitating a more inclusive and diverse working environment that empowers employees of all genders. Apart from the competitive benefits programme and comprehensive training that we offer, we also have initiated education programmes to enhance the sustainability awareness and mindset across all our staff. In addition, we have launched a new CSR programme, the “Beautiful Homeland Initiative”, which focuses on protecting biodiversity and provides relevant education.

ALIGNMENT WITH UNSDGs

Strategic Directions	Goals	Actions and Initiatives	Page Index	Supporting UNSDGs
CLIMATE CHANGE ACTIONS Take actions to reduce absolute and intensity of CO ₂ emissions across value chain.	Supply chain Achieve key suppliers CO ₂ disclosure transparency and use of renewable electricity.	<ul style="list-style-type: none"> Supply Chain Match Plan China Renewable electricity adoption by suppliers BMW Green Power Alliance 	56 56 18	  
	Production Reduce the emissions from producing our products in line with the BMW Group sustainability goals and China's carbon-neutral commitment.	<ul style="list-style-type: none"> Renewable electricity purchase to ensure 100% renewable electricity till 2025. Combined heating and power system STEAM energy-saving initiative 	44 47 45	  
	Non-production Minimise the overall environmental impact of CO ₂ , waste, and the use of natural resources from BMW Brilliance's real estates.	<ul style="list-style-type: none"> Green building benchmark Office waste audit and assessment 100% renewable electricity adoption 	60 60 60	
	Logistics Increase the efficiency of our logistics flows through multi-modal transport and innovative new low-carbon shipping technologies.	<ul style="list-style-type: none"> Multi-modal logistics optimisation Pilot use of E-Trucks and LNG Trucks Logistics planning enhancement Green warehouse management 	50-51 50-51 50-54 54	
	Utilisation Accelerate the electrification of China's automotive industry with NEVs and nationwide charging capabilities.	<ul style="list-style-type: none"> NEV product portfolio and competency optimisation Charging service using renewable electricity Dealership Network Transformation Green Star Programme 	31 33 34-35	
	ACCOUNTABLE, CIRCULAR & RESILIENT VALUE CHAIN Optimise our operations for top quality, circularity, minimal EHS impact, and responsible, resilient value chain.	Product and service quality Adopt the latest technologies to create the highest-quality products and offer premium service quality.	<ul style="list-style-type: none"> Quality-first mindset fostering Application of industry 4.0+5G+AI Dealership Network Transformation Green Star Programme Customer Board Platform, Joy Index, Premium Customer Experience Ambassador Selection 	27 27-28 34-35 29, 77
	Circularity Implement innovative approaches and technologies to reuse, recycle, and repurpose raw materials, HVBs and end-of-life products.	<ul style="list-style-type: none"> Material recycling of steel and aluminium Recycling and secondary use of HVBs Parts remanufacturing, ReLife Point and reverse logistics system enhancement New materials investigation for reusable packaging 	39 38 37 40	  

ALIGNMENT WITH UNSDGs

Strategic Directions	Goals	Actions and Initiatives	Page Index	Supporting UNSDGs
ACCOUNTABLE, CIRCULAR & RESILIENT VALUE CHAIN (CONT'D)	Environment, health and safety Minimise the impacts of our operations, our suppliers and dealers' operations on the environment, employees, and communities.	<ul style="list-style-type: none"> Continuous measures to enhance VOC reduction, waste management and water efficiency Health and Safety Protection Activity programme Dealer EHS Manual & self-check list update 	46, 91-92 70-71, 91-92 35	
	Ethical sourcing Advance the highest standards of responsibility in sourcing raw materials, data protection, and our partners' business practices.	<ul style="list-style-type: none"> Supplier Social Responsibility Code of Conduct training Ethical raw material procurement 	58 58	
RESPONSIBLE CORPORATE CITIZENSHIP Lead our industry by modelling an inclusive, diverse culture that supports our workforce and our communities.	Diversity and inclusion Create a work culture that recognises and values the diversity of all associates.	<ul style="list-style-type: none"> 2021 Special Collective Contract for the Protection of Female Associates' Rights and Interest BMW Global Diversity Week BMW Digital Inclusion Initiative 	63 64 63	
	Human capital development Train our workforce for current and future skills while enabling them to achieve their personal and professional goals, and optimising our pipeline for new talent.	<ul style="list-style-type: none"> The Academy of BMW Group China online learning platform for employees BMW Brilliance Technology & Manufacturing Management Development Programme Future Talent Programmes The BMW Brilliance Training Centre started operation The Training Academy with BEST Programme, Dealer Elite Talent Development and Retention Programme, New Staff Enlightening Journey Programme, BMW Business School Programme 	74 75 75 75 76 - 77	
	Corporate social responsibility Create shared value for members of society to help address social issues and improve social welfare.	<ul style="list-style-type: none"> BMW CSR flagship programmes The new "BMW Beautiful Homeland Initiative" The "Self-Strengthening Movement" under BMW JOY Home BMW Corporate Volunteer Association 	79 - 83 80 83 84	

SUSTAINABILITY GOVERNANCE AND RISK MANAGEMENT

SUSTAINABILITY GOVERNANCE

The BMW Brilliance Board of Management is at the core of our leadership. Under their guidance, we have integrated sustainability into key business decisions that direct our company forward. Sustainability is an integral component in our annual target-setting process, which defines the targets each business function is required to meet. This allows us to follow directives laid by the Board of Management in a systematic way that holds all business functions accountable. The Board of Management also oversees our compliance with all provisions of the law and internal regulations, as well as implementing risk management and conducting risk control measures.

Since its establishment in 2020, the BMW Brilliance Corporate Sustainability Execution Committee has been fulfilling its responsibility of ensuring transparency and facilitating common understanding on overall sustainability progress and target status across our value chain. Through monthly meetings and continuous engagement, the committee steered the cross-function communication and resource synergy, and promoted the sharing of insights, trends, and best practices to drive sustainability innovation and projects.

Corporate Sustainability Governance at BMW Brilliance

Sustainability is an integral component in our annual target-setting process, through which business functions are required to reach targets that were set.



ASSESSING AND MANAGING CLIMATE RISKS

Faced with the severe impact of climate-related disasters in 2021, we conducted a deep-dive climate-related risk analysis based on Task Force on Climate-Related Financial Disclosures (TCFD). Our aim is to minimise the adverse effects of climate change through risk management and become a more resilient mobility service provider.

According to the TCFD, climate-related risks can be divided into two major categories. The first category is transition risks, which are related to the transition to a lower-carbon economy with extensive policy, legal, technology, reputation and market changes to address mitigation and adaptation requirements related to climate change. The second category is physical risks, which are related to the physical impacts of climate change and can be event-driven (acute, like hurricanes and floods) or longer-term shifts (chronic, the rise of sea levels) in climate patterns.

By conducting megatrend analysis, literature review and peer benchmarking, we have identified 3 tiers of key transition and physical climate change risks, including the increased severity of extreme weather events, shifts in consumer preferences and increased costs of GHG emissions. As a result, all risks were listed on the heatmap and integrated into the corporate risk report for further evaluation. Our next step is to conduct a quantitative analysis of climate-related risks to provide a more concrete financial reference for the strategy design and decision making.



Birdview of BMW Plant Powertrain.

“

By assessing various emerging risks, including climate change's impact on our business, we are better prepared for the future by enhancing our resilience to potential extreme events.”



Jun Wang

Senior Vice President
Finance

1.2

STAKEHOLDER ENGAGEMENT



For BMW Brilliance, nurturing a transparent and collaborative relationship with all stakeholders in a transformative context has become a key priority for us. Despite the negative impact of the pandemic, we have continued our inclusive stakeholder engagement efforts with a view to gather all stakeholders' feedback. Our ultimate aim is to establish an ongoing, transparent dialogue that serves to bolster mutual trust to help guide BMW Brilliance's decision-making processes in the best possible way.

STAKEHOLDER ENGAGEMENT AND COLLABORATION

Sustainability has always been a central theme when engaging with different stakeholders. By approaching and interacting with each stakeholder group in a tailor-made fashion, we can understand their concerns and respond to their needs and expectations more efficiently.

Our communications with stakeholders provide us with a host of viewpoints concerning sustainability, which, in turn, inspires us to optimise our management approach and methods.

DIALOGUE & ENGAGEMENT

We maintain a close dialogue with local government, and regularly exchange opinions on critical economic, social and environmental issues. In February 2021, the previous incumbent mayor of Shenyang Municipal People's Government, Mr. Wang Xinwei visited Plant Tiexi, and widely acknowledged BMW Brilliance's contributions to the local economy. In December 2021, at the Sustainability@BMW Shenyang Plants event, our up-to-date sustainability achievements and management approaches were presented to Shan Yi, Vice Mayor of Shenyang, Li Gang, Secretary of Dadong District CPC Committee, participating journalists and suppliers.

We have long treated our suppliers as indispensable partners who enable us to realise a sustainable and circular value chain. We regularly engage suppliers via joint conversations, exploring potential opportunities for both business-related issues as well as for greater sustainability in our operations. In June 2021, our key suppliers were invited to the German Association of the Automotive Industry Quality Management Centre (VDA QMC) Regional Conference, where we shared insights on achieving sustainable and high-quality development in today's digital age. In addition, green transformation and sustainability were also highlighted during the BMW Brilliance Supplier Media Visit, where we presented the best sustainable practices to realise a sustainable supply chain.

We also engage with other business leaders to enhance collaboration on sustainability issues. In June 2021, the BMW Brilliance–BASF Tech Day was successfully held, with more than 1,000 senior managers and industrial experts taking part. As a result, a further consensus on the continuing cooperation has been established in order to ensure long-term sustainable development for both sides. In the same month, the first Open World Event ended successfully with the guests attendances from Alibaba Group. This event allowed us to expand our horizons with the latest technological developments to better promote our digital transformation.



Our Stakeholder Groups and Engagement Approach

CUSTOMERS

Approach

Surveys, social media, trade fairs, auto shows, mass media.

Focus Topics

- Product quality and safety
- Customer support and satisfaction
- Information security and privacy protection
- Health and safety
- Employee development and well-being
- Product quality and safety
- Diversity, inclusion, and equality

EMPLOYEES

Approach

BMW Brilliance Trade Union, BMW Brilliance Congress, employee surveys, dialogues with managers, internal communications.

CIVIL SOCIETY

Approach

Regular communication with local authorities on focus topics through meetings with senior government officials, visits and management forums.

GOVERNMENT

Approach

Roundtables, lectures and discussions with experts, scholars and students; specialised and localised programmes, traineeships, and vocational education opportunities.

BUSINESS PARTNERS

Approach

Regular interaction with suppliers and dealers, business conferences; industry initiatives, joint events, training courses, supplier risk assessments, supplier forums and supplier media visits.

SHAREHOLDERS

Approach

Communication between our Board of Management and Board of Directors and shareholder representatives (BMW Group and Brilliance Group).

MASS MEDIA

Surveys, social media, trade fairs, auto shows, press release.

- Product quality and safety
- Customer support and satisfaction
- Energy consumption and renewable energy

STAKEHOLDER COMMUNICATION

BMW Brilliance strives to establish smooth communications among all our employees while leveraging different communication channels to cultivate a sustainability mind-set. In March 2021, we held a series of events in support of the Earth Hour 2021 initiated by the World Wildlife Fund (WWF). Our employees got a better understanding of how to put the concept of sustainability into actual practice by turning off the electric devices, saving toiletries and driving in BMW models' ECO PRO mode. In July 2021, the BMW Region China Joint Strategy Forum was successfully held, kicking off a series of communication programmes to ensure that all employees fully understand the company's strategy in China towards 2025 and beyond.



STAKEHOLDER COLLABORATION

BMW Brilliance always strives to expand our sustainability networks through widespread collaborations with partners from industry, supply chain, civil society and other areas. In this way, we are better able to leverage strengths from both sides to enhance overall sustainable development and ultimately create shared value.

BMW Brilliance maintains a close relationship with the China Automotive Technology and Research Centre (CATARC), one of the Chinese automotive industry's leading associations. We actively participate in various events organised by CATARC to promote industrial technological innovation, which directly drives the development of the automotive industry. In 2021, our excellent performance earned us CATARC recognition. BMW Brilliance was awarded the "China-New Car Assessment Programme (C-NCAP) Safety Contribution" Award by CATARC, and we have been continually ranked No. 1 on the Automotive Industry Green Development Index.

In terms of our collaboration with civil society, based on our strong partnership with the China Education Development Foundation and China Green Foundation, we are exploring new areas while also addressing other emerging issues. In 2021, we launched the "BMW Beautiful Homeland Initiative" to expand our care and efforts towards biodiversity protection. We also upgraded the BMW JOY Home programme via a new Self-Strengthening Movement which focuses on the revitalisation of rural education.



#Collaboration Initiative

THE BMW GREEN POWER ALLIANCE

We initiated the BMW Green Power Alliance in 2021 to accelerate renewable electricity adoption across our entire value chain, including at our production, supply chain, dealerships and non-production sites. We have accomplished a feasibility study of different renewable electricity adoption solutions, such as the Power Purchase Agreement (PPA), distributed solar, and the International Renewable Energy Certificates (I-RECs). Furthermore, multiple workshops were held to help motivate and empower our business partners to transition to renewable electricity. In the fall of 2021, the workshop for dealer partners attracted over 150 participants from 104 dealer groups; whereas the workshop for non-production sites drew over 50 participants from real estate landlords, relevant business departments and facility operators. Following the workshop and training, pilot dealers and non-production sites were selected as the first group to adopt renewable electricity. In the future, we will develop practice manuals to provide professional guidance and technical support to our dealers and real estate partners on renewable electricity adoption.

1.3

COMPLIANCE MANAGEMENT

At BMW Brilliance, we maintain a strong commitment and fundamental belief in regulatory compliance at all times while having "Zero Tolerance" for any non-compliance. We believe that a company can only be sustainably successful over the long term when it fully complies with laws and regulations and behaves honourably in business. Our commitment to integrity and corporate responsibility guides everything we do at BMW Brilliance.



6 Social Credit System Honour List

Top rankings on all public ratings related to the automotive industry with no blacklist record

Advanced AEO¹	General Administration of Customs
A Level Tax Payer	State Taxation Administration
Level A Entity	State Administration of Foreign Exchange
Enterprise Quality Level A	China Quality Certification Centre
Labour Protection Level A	Ministry of Human Resources and Social Security
Honest Entity	Ministry of Ecology and Environment

1. Authorised Economic Operator

COMPLIANCE GOVERNANCE AND MANAGEMENT

Given the uncertainties resulting from the COVID-19 pandemic and ever stricter regulatory requirements around the globe, placing integrity at the heart of our business strategy is not only a best practice, but also vital for our company's long-term survival.

Since 2020, several compliance topics such as antitrust, cybersecurity and data security have been put at centre stage. The topic list may continue to grow and remain highly active in the foreseeable future. Meanwhile, a series of law enforcement moves in China has sent a powerful signal from top regulators about their determination to see tightened regulations are closely adhered to. At BMW Brilliance, a well-functioning and dynamic compliance management system has become increasingly important for the company's sustainable future success.

A ROBUST GOVERNANCE STRUCTURE

BMW Brilliance has established a robust organisational framework to ensure a proper compliance accountability structure. The Board of Directors (BoD) of BMW Brilliance assumes the ultimate responsibility for administering a compliance management system at the shareholder level. The Audit and Compliance Committee (AC) under the BoD sets compliance objectives, allocates resources and monitors practices to ensure complete compliance with all regulatory and ethical requirements. Authorised by the BoD, BMW Brilliance's Board of Management (BoM) and Corporate Governance & Compliance Committee, serving as its sub-committee, takes the primary over-sight role. And a dedicated department of "Corporate Governance and Compliance" was established to manage overall compliance programmes. → [See Chapter 5.2 Compliance Governance for more description of our compliance governance process.](#)

TAKING A RISK-BASED APPROACH

BMW Brilliance has developed a hybrid methodology that combines both top-down and bottom-up approaches to identify, assess, and mitigate any key compliance risks the company may face. Each year, the Corporate Governance and Compliance department summarises and assesses the overall status and reports it to management. The 2021 Compliance Risk Assessment heat map shows increasing risk levels for the most compliance subjects, which is in line with today's stricter external regulatory environment. In response to this, a variety of mitigation measures were developed and implemented.

Compliance Governance at BMW Brilliance

As an integral part of an effective compliance management system, the robust organisational framework of BMW Brilliance has ensured that a proper compliance accountability structure is put in place.

**BOARD OF DIRECTORS /
AUDIT AND COMPLIANCE COMMITTEE**

**BOARD OF MANAGEMENT /
CORPORATE GOVERNANCE & COMPLIANCE
COMMITTEE**

**CORPORATE GOVERNANCE &
COMPLIANCE DEPARTMENT**

COMPLIANCE OPERATIONS NETWORK



2021 BMW Brilliance Compliance Interface / Ambassador Workshop.

GENERAL MEASURES - PREVENTION, DETECTION AND REMEDIATION

BMW Brilliance regularly implements a wide range of prevention, detection, and remediation measures to manage its compliance risks. Furthermore, we regularly update our compliance management system to cope with the continually changing risk profiles of the company's businesses, environment, customers, laws, and standards.

To prevent the initial emergence of any compliance issue, BMW Brilliance instils and promotes a culture of ethics and integrity throughout the company. To this end, nine compliance speeches were delivered by BoM members during a variety of activities in 2021. This helped establish an ethical climate of corporate governance. A culture of compliance was also nurtured through compliance target, legal monitoring, policies, training, communication, and pre-approval processes via the E-compliance systems.

BMW Brilliance uncovers potential compliance issues in several ways, including case investigations, special reviews, routine audits, and other methods. When problems are identified, we initiate disciplinary measures in a strict and consistent manner against those employees or business partners who have violated external regulations or internal policies. We strive to locate the root causes and work diligently to optimise the necessary controls and processes to minimise any risk of recurrence.

One of the key components of compliance is to ensure the process of reporting compliance concerns is as easy as possible. To this end, there are a variety of ways to report compliance concerns at BMW Brilliance. In 2021, the company further officially promoted the BMW Group SpeakUP line to business partners.

BMW Brilliance is fully committed to lawful and responsible business conduct, and we also demand high ethical standards from our business partners. That is why BMW Brilliance has taken and will continue to take necessary proactive and practical steps to foster our business partners' active engagement in compliance management. By creating a culture of compliance across our entire supply chain, we will reinforce trust between BMW Brilliance and our business partners and maintain business relationships in a stronger and more sustainable manner.

Moreover, we will actively encourage business departments to take more proactive measures related to anti-fraud, including job rotation, and conflict of interest self-declarations. At the same time, we will initiate prudent measures to enhance the overall capacity and capabilities of forensic technology in investigation.

While we have made steady progress on various issues, we must be fully aware that some compliance areas are still prone to misconduct and fraud. For this reason, the fight against non-compliance will remain a focal point for us in the foreseeable future. That is why we must practise constant vigilance and redouble our efforts to ensure thorough, effective and timely implementation of all compliance programmes and processes.

2022 FORECAST

Today's increasingly volatile, uncertain, and dynamic environment demands a robust compliance management system. Faced with a host of challenges, BMW Brilliance is actively taking systematic measures in a variety of compliance areas, with special attention to high-risk sectors.

In terms of antitrust, we will continue to review and reinforce our antitrust management system as well as all pertinent penalty mechanisms. The specific antitrust targets will be included as part of the overall 2022 compliance targets for all managers and antitrust compliance requirements will be included in the job descriptions for relevant staff members. We explicitly prohibit certain misconducts related to transaction prices as well as gross profits on specific individual sales.

1.4

DATA PRIVACY AND INFORMATION SECURITY

At BMW Brilliance, we recognise the importance of data privacy and information security, and we have expended determined effort in building a strong infrastructure to safeguard us from threats. Thanks to our robust compliance culture, we are able to rapidly respond to regulation changes to ensure that we are fully complied with cybersecurity and data-protection regulations and standards in China and beyond.



ISO/IEC 27001 27701

Certification obtained on information security management system and privacy information management system.

100% Training Rate

For non-production employees on data privacy, cybersecurity law and information protection.

DATA PRIVACY AND INFORMATION SECURITY MANAGEMENT

GOVERNANCE AND MANAGEMENT APPROACH

BMW Brilliance has a refined governance organisation that closely follows China's changing regulatory landscape. We strictly comply with the recent changes in laws and regulations, including the Data Security Law of the People's Republic of China, the Personal Information Protection Law of the People's Republic of China (PIPL), and Several Provisions on the Management of Automobile Data Security (for Trial Implementation).

To ensure that we have fulfilled the requirement of recent laws and regulations, we established a cross-functional PIPL Taskforce to analyse the laws' requirements, check our current status and risks, and formulate responding measures. In the long term, we will set up a PIPL Programme to focus on the PIPL and important vehicle data cross border. The programme will bring changes to our governance structure, where we have introduced 4 dedicated roles: Cybersecurity Officer (CSO), Data Security Officer (DSO), Data Privacy Officer (DPO), and Automotive Data Security Officer (ADSO). Their responsibility is to manage personnel, processes, and automotive data by utilising a series of features that we have developed.

Along with our perpetual pursuit of digitalisation, information security is a fundamental component in our designs and is closely managed throughout the entire process. At all corporate-level digitisation programmes, such as cloud transformation, 5G IoT as well as digital plant, our core focus is to ensure cybersecurity. Among all the digitalisation programmes initiated by different business units, we have designated a dedicated position, the Security Matter Expert, with a set of standard instructions to ensure information security across the entire digitisation process.

INFORMATION SECURITY

As information security is of the utmost importance to BMW Brilliance, we have ceaselessly strived to improve the security measures. This year we have been able to expand the scope of information security governance framework by incorporating individual applications from our business into our own governance framework. We have expanded the device network access control process and tools, and set up the production security process, which enhances the role and responsibilities of IT/OT/IoT security in the production process. We have passed ISO/IEC 27001 certification.

#Action

Four-year achievement of Cybersecurity Law of China (CSL) Programme

In 2017, we established the Cybersecurity Law of China (CSL) Programme to facilitate its implementation across all of BMW Brilliance. Over the past four years, this programme has been effective in its goals, culminating in its conclusion this year. Notable achievements include:



DATA PRIVACY

BMW Brilliance values the privacy and security of customer data, and is fully dedicated to defending it and preventing any illegal cross-border data transfers. We continue to follow the seven guiding privacy principles and privacy management process, integrating the Data Privacy Impact Assessment (PIA) into our Data Privacy Management standard of operations. We have also updated the BMW Brilliance Associate Handbook and dealer contracts to include clear and comprehensive requirements regarding privacy management. Our implemented data security measures have fully complied with international data protection regulations and standards and have passed ISO/IEC 27701.

AWARENESS PROMOTION AND COMMUNICATION

Internal communication is critical to ensure that we have complied with our privacy principles. As such, we have educated our employees to increase their information security and data privacy awareness through E-learning on BMW Brilliance's online training platform. We trained 100% of non-production employees on three main topics: Data Privacy Protection, Fundamentals of Cybersecurity Law, and information protection. We have also initiated Cybersecurity Month at Plant Dadong in 2021 to further raise security awareness, which will roll out to all plants in 2022.

We have also been in active contact with our community as well as regulators. As such, we have participated in discussions held by the National Information Security Standardization Technical Committee and provided insights and suggestions for standardisation from our corporate perspective.

2022 FORECAST

Building on our achievements in 2021, we will continue to improve our information security and data use governance. We will work to enhance our cloud security in the coming year, and take more measures to safeguard the security of our production network.

We are also looking to take the overall awareness from employees on the protection of information security and data privacy to a new level. We recognise there is still much work to be done, so promoting the visualisation and automation of cybersecurity will be a major focus for us. Our aim is to create transparency related to subject data consent and customer inquiries, as well as to enforce additional conditions for cross-border access. Ultimately, we want to restructure the role and responsibilities of data security and cyber security in response to shifts in the regulatory landscape.



2021 BMW Brilliance Cybersecurity Awareness Month at Plant Dadong.

“ The protection of privacy and information is woven into every facet of our business. It is the bond of trust shared between partners, customers and us.”



Alexander Angerbrandt
Vice President
Information Technology



CHAPTER 2

PRODUCTS AND SERVICES

BMW Brilliance believes that true premium products and services not only create value for customers, but also contribute to environmental and social responsibility.

As a leading provider of sustainable premium mobility experiences, we are tirelessly enhancing quality and safety while minimising the environmental footprint of our products and services. Our products are designed and manufactured to our highest standards with a Quality-first mentality, and we take pride in the steps we have taken to ensure customer safety.

As our NEV product portfolio continues to expand, we are working with our partners and dealers to provide the infrastructures and services that enable a premium and convenient E-mobility lifestyle for our customers. In addition, we have introduced changes and innovations across the whole value chain to reach circularity and ensure our long-term sustainable growth.

-
- 2.1 Total Quality Management
 - 2.2 Climate-friendly Products and Services
 - 2.3 Circular Product Lifecycle

2.1

TOTAL QUALITY MANAGEMENT

- QUALITY-FIRST CULTURE
- PRODUCT QUALITY AND SAFETY
- SERVICE QUALITY



Here at BMW Brilliance, we believe that committing to the highest product standards and unparalleled services are the first step in our pursuit of excellence, which are essential components for us to achieve sustainability as well. In 2021, we continued to practise a quality-first mindset while making an all-out effort to ensure customers' health and safety. We strive to create the best experience for every customer; thus we have worked closely with our network of dealers by supplying guidance and perfecting operating procedures and systems.

★★★ C-NCAP

Super 5-Star rating gained by the BMW iX3 with a total score of 95.7%. Ranked 1st out of 82 tested models.

EFQM 7 Stars

Outstanding Achievement in Sustainability awarded to BMW Brilliance Technology and Manufacturing from EFQM.



QUALITY-FIRST CULTURE

Quality is one of the most prominent considerations customers have when they make their decision to purchase a car. At BMW Brilliance, it is our mission to deliver best-in-class products and services, which are echoed by the positive results of the customer satisfaction surveys.

“

Taking the initiative to ensure end-to-end premium quality with a sharp focus on customers' expectations is the cornerstone of our success as a premium brand.”



Hong Yang-Schwindt
Head of Corporate Quality



We believe that **Quality Number ONE** and **Sustainability Number ONE** are beneficial to both BMW Brilliance and our consumers on our way towards premium quality. It is this conviction that continuously attracts our attention to the quality assurance system and channels our efforts to achieve quality improvement.

TOTAL QUALITY MANAGEMENT

Our Total Quality Management strategy puts customers at the heart of every move we make. This is reflected not only in our pursuit of most premium customer experience but also all links in the supply chain and production process. Our continuous improvement philosophy is driven by the quality targets we set to evaluate our overall performance. These targets encompass four stages reflecting the complete customer journey: desire, purchase, use, and customer care.

BMW Brilliance has a wholesome governance structure that guides overall quality management and ensures our conformity to world-class quality management standards. Throughout 2021, we have continuously maintained and improved our overall quality management system in adherence to the ISO 9001, IATF 16949 and other BMW internal requirements released by the Quality Circle for Quality Management System (QC QMS). The QC QMS is comprised of leaders from different quality functions and holds regular meetings to evaluate the progress of quality management.

On June 17, 2021, BMW Brilliance successfully held the 6th Quality Circle QMS with our CEO and Senior Vice President, who reiterated the importance of high-qual-



AI-powered defect detection in our production process.

ity products for our premium brand and the high regard paid by the company to quality management. We are pleased to announce that we have strictly followed VDA, EFQM standard and passed the annual audit of ISO 9001 in 2021.

CULTIVATING THE QUALITY-FIRST CULTURE

Building an organisation-wide, quality-first mindset is central to BMW Brilliance's corporate values. The Quality No. 1 Conception is evidenced throughout the whole value chain and reinforced from top to bottom. A strategy was laid out by BMW Brilliance's top management to guide long-term development. In tune with the strategy, different function teams design concrete and feasible measures to turn the strategy into field practices by each

and every associate. As a result, the gene of quality has been successfully ingrained at functions from R&D, Purchasing and Production, to Sales and After-sales.

This year, the quality mindset was fostered via various channels. For our employees, we held Q-online education courses with an objective to promote among associates the quality principle. VDA QMC also provided a Product Integrity Training to demonstrate the national and VDA standards as well as BMW's quality requirements through different case studies. Besides, our emphasis on quality also extends to our suppliers, who have profoundly realised our strict quality requirements during our routine and ad-hoc communications.

PRODUCT QUALITY AND SAFETY

Topped the China Automobile Customer Satisfaction Index (CACSI)

Once again, five of our models defended their titles in their own segments of the China Automobile Customer Satisfaction Index in 2021.



BMW 3 Series
Top B-class Luxury Sedan



BMW 5 Series
(Long-ranged and PHEV)
Top C-class Luxury Sedan
Top PHEV Sedan



BMW X1
Top A-class Luxury SUV



BMW X3
Top B-class Luxury SUV

Premium product quality requires exceptional product conformity and corporate responsibility for product safety. BMW Brilliance's plants maintain the highest level of production among BMW's plant network, which ensures our delivery of premium quality products.

QUALITY GOAL: ZERO DEFECT

BMW Brilliance adheres to a Zero-Defect goal across our entire manufacturing process, from order to delivery with BMW Purchasing and QMT teams driving that process. To achieve zero defects in all new products throughout the entire supply chain, BMW Brilliance applies Industry 4.0 technologies during the pressing, welding, painting, and assembly processes to enhance our data analytics, which is key to further improving process stability and product quality. We also rely on artificial intelligence (AI) and 5G technologies to enhance our process execution to ensure product quality.

HAZARDOUS MATERIALS MANAGEMENT

BMW Brilliance strictly follows EU regulations under Directive 2000/53/EC and REACH, China's GB/T 30512 Requirements for Prohibited Substances in Automobiles and other relevant international and national standards. We also currently observe the proposed changes to GB/T 30512, which expands the number of prohibited substances to include asbestos and polycyclic aromatic hydrocarbons (PAHs). We carefully control all hazardous

materials limits covering all of our parts and components, the data of which have also been submitted in accordance with the new CQC MDS (China Quality Certification Centre Material Database System) requirement.

ENSURING CUSTOMER HEALTH

All BMW Brilliance vehicles comply with GB/T 27630 interior air quality requirements and strictly comply with any changes in the relevant legislation. We continue to work towards exceeding these regulations as well as satisfying customer expectations. For instance, we make use of an aldehyde scavenger to decrease formaldehyde and acetaldehyde emissions and carry out yearly random odour checks on all vehicles and run a key component emission contribution analysis on BMW X1.

We also take a series of measures to minimise interior noise. For the all new BMW 3 Series Battery Electric Vehicles (BEV), we co-designed with acoustics experts an upgraded standard tyres with improved noise insulation performance. In addition, better electric motor acoustics have also been achieved through improved overall sound packaging and vibration isolation. Road noise levels and road-induced booming noise have been minimised through an effective underbody sealing concept. We've also enhanced BMW's iconic electric sound design for a more engaging BEV driving experience.

PROMOTING DRIVING SAFETY

The BMW Driving Experience China programme offers safety-focused training courses that teach participants how to respond to a wide range of road emergencies. In 2021, 20,405 participants took part in our training courses and events.



#Award

BMW iX3: Record-breaking result in safety test

BMW iX3 was awarded a C-NCAP Super 5-star rating with a total score of 95.7%, ranking 1st out of 82 tested models, breaking the overall rating record under the current protocol.

#Certification

A-Category Enterprise

China Compulsory Certification (CCC)

BMW Brilliance was granted China Compulsory Certification (CCC) A-Category Enterprise. This is the authority approval for BMW Brilliance which has achieved "0 findings" results during the CCC annual plant audit over the past two years while passing all authorised random inspections.

SERVICE QUALITY

In a year fraught with challenges amid the ongoing COVID-19 pandemic, BMW Brilliance endeavours to become a beacon of stability and has consistently strived to reaffirm customers' belief in a better tomorrow through our industry-leading service quality. We are making strides in our customer-centric approach to maintain and constantly improve the services we offer.

DELIVERING PREMIUM CUSTOMER EXPERIENCE

In 2021, we focused on improving customer service through customer-centric approaches, such as digitalisation and process efficiency optimisation. Our aim is to always deliver a premium, seamless, personalised and delightful customer experience. To achieve this, we analysed customer comments from different departments and functions, including Dealer Development, LingYue, Sales and Customer Support. We also measured our service performance via different channels such as Joy Index, Aftersales Process Audit, and Appointment Scheduling Mystery Shopping. We successfully conducted multi-level communication activities among central, region and dealers to bolster joint efforts for customer service.

CUSTOMER SATISFACTION AND SERVICE EVALUATION

We have developed a variety of channels to engage dealerships and measure customer satisfaction to enhance and optimise customer experience. One method we adopted to measure customer satisfaction is to mon-

itor the quality of sales and aftersales services provided by dealers through Joy Index to track improvements and better align services with customer needs and expectations. In 2021, we received 90.7% positive customer comments for aftersales Joy Index result.

We collected real, direct customer feedback through an innovative approach - BMW/MINI Service Experience Ambassador Programme. It has received 300,629 customer comments relating to aftersales issues in 2021. Furthermore, we have optimised the aftersales survey questionnaire for customers' better understanding.

Another tool we used to improve customer satisfaction was Customer Board Platform. This tool provided regular dealer performance reports on service quality and shared best practices for daily operations. In 2021, 360 dealers adopted Customer Board Platform in their management process and implemented 1,538 action plans on aftersales, covering diverse aspects of customer experience, such as attitude and behaviour, quality of service, and other issues.

2020 Peak-End Customer Experience Award

Every year, we identify top BMW/MINI dealerships and recognise their contributions to providing premium services to our customers nationwide. In 2021, 301 dealers were evaluated for the 2020 Peak-End Customer Experience Award. After fierce competition, 10 dealers were awarded as Customer Experience Best Dealers.



2022 FORECAST

In the coming year, we will continue to heighten our performance standards to ensure a delightful experience for customers and maximum customer satisfaction.

We are now actively exploring digital solutions that will empower our overall quality management to be more customer-oriented and efficient. To achieve this, we plan to integrate all quality-related information into one platform and make use of big data and AI to significantly improve our overall level of quality management. This approach will be directly applied to sustainability issues, which are ultimately all about quality. Key performance indicators for sustainability will also be incorporated into the overall quality management system, including vehicle emissions (in line with all regulatory changes), plus analysis and interpretation.

Moving forward, delivering a sublime customer experience while expanding Bimmer groups (brand promoters) is our main focus. Strengthening the collection of customer experience factors such as employee attitude and behaviour, retail engagement and hospitality comprise large part of our aftersales strategy. All of these will consistently be improved through specific actions, including issuing food and beverage guidance to dealers, as well as conducting joint dealer promotions with marketing via multiple channels.

2.2

CLIMATE-FRIENDLY PRODUCTS AND SERVICES

- CLIMATE-FRIENDLY PRODUCTS
- LOW-CARBON SERVICES
- SUSTAINABLE DEALER MANAGEMENT

Among the myriad of challenges that we are collectively facing in the world, climate change is one that has wide-reaching effects that permeate multiple facets of life. As a member of society, BMW Brilliance takes its responsibility to stand alongside industry leaders and combat the climate crisis. Changing the world starts with changing ourselves, and we have done so by upgrading our products, business practices, and services in keeping with our goals to mitigate and reverse climate change impacts to achieve sustainability.

**47,322**

NEV wholesale volume in 2021.

↗ 71.1% vs 2020

517BMW i Dealer outlets in China at 2021 year-end.
↗ 163.8% vs 2020**365,713**Number of public charging pillars provided to BMW customers in China.
↗ 19.2% vs 2020



CLIMATE-FRIENDLY PRODUCTS

BMW Brilliance is using creative approaches to NEV development while closely adhering to the 2030 targets set by the BMW Group and relevant goals cited in China's NEV Industry Development Plan (2021-2035).

The BMW Group's Target on NEV offerings in China:

12 BEVs

will be launched across the BMW brands in China by 2023.

25%

of total domestic sales will come from BEVs by 2025.

Key Sustainable Features of the BMW iX3



Driving Assistance System as Standard

Including Steering and Lane Control Assistant, Active Cruise Control, Automatic Speed Limit Assist and Route Monitoring etc.



Aerodynamic Wheels

Weigh 15% less than its predecessors and reduce its drag coefficient by around 5%, contributing to improved handling and greater overall efficiency.



BMW 5th Generation eDrive Technology

The rare earth materials-free 210 kW e-motor can achieve 93% electrical efficiency, an e-range of 530~550 km with 15.1~15.6 kWh of energy consumption per 100km.



Batteries Produced by Renewable Electricity

Manufacturing of the BMW iX3 batteries are powered by 100% renewable electricity at our Shenyang HVB Centre.

We have implemented Lifecycle Assessments (LCA) on our models to identify as many areas for carbon reduction as possible. We're also pioneering the use of low-carbon services, including green energy charging, 3-in-1 charging stations, and other measures.

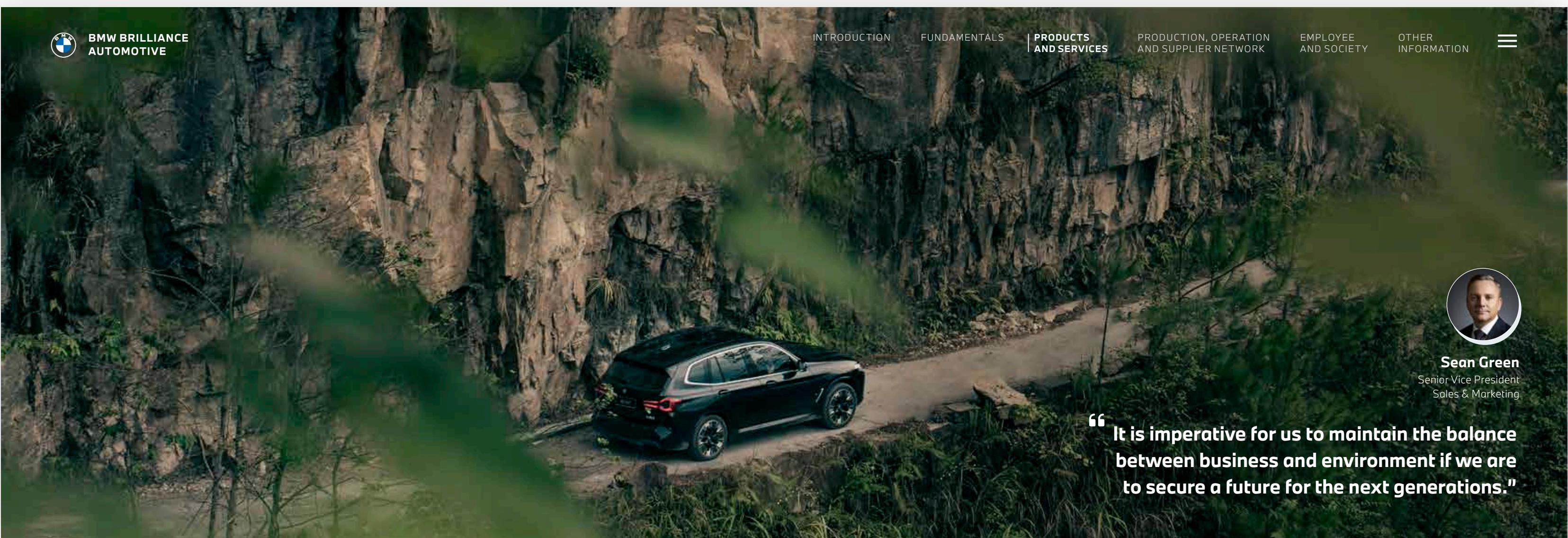
LEADING THE FUTURE OF E-MOBILITY

The BMW Group continues to accelerate the transition to NEVs and is working on expanding its comprehensive selection of electronic products. In particular, the Group

is poised to launch 12 Battery Energy Vehicles (BEVs) in China by 2023, with the percentage of BEVs to reach 25% of total domestic sales by 2025. With the exciting new BMW iX3 being launched nationwide in September 2021, we sold 47,322 NEVs across China at year-end, a significant increase of 71.1% compared to 2020.

The BMW iX3 is the industry leader in E-mobility, designed with luxurious aesthetics, superb driving ease and reliable eDrive technology. This design masterpiece shares the BMW heritage of sheer driving pleasure with

a unique electric drive train, offering high efficiency, long e-range operation, and convenient charging by a safe and reliable battery. The BMW iX3's rare earth-free design of electric motor eliminates the need for rare metal resources. Moreover, the highly integrated, lightweight, scalable and modular design achieves 93% electrical efficiency and an e-range of 530~550km with 15.1~15.6 kWh of energy consumption per 100km. All of these reflect BMW's outstanding achievements in advanced automotive electrification and dedication to sustainability.



Sean Green
Senior Vice President
Sales & Marketing

“ It is imperative for us to maintain the balance between business and environment if we are to secure a future for the next generations.”

ENHANCING THE BATTERY MANUFACTURE CAPACITY

On July 30 2021, BMW Brilliance successfully unveiled its 100,000th HVB off the HVB Centre production line, a true testament to the continued expansion of HVB's production capabilities as well as BMW Brilliance's commitment to sustainability. In line with the company's acceleration of the electrification process, BMW Brilliance opened the HVB Centre II in 2020, which marked the first facility worldwide to produce fifth-generation BMW HVB.

EXPANDING i-DEALER OUTLETS

We are continuing with efforts to add more BMW i dealer outlets to provide our customers with BMW i products. Backed by rigorous technical training, all authorised dealers can perform in-store repairs of the fifth-generation high-voltage electric systems. This provides customers with a trusted and convenient aftersales experience. 517 BMW i dealer outlets have been opened by the end of 2021, up from 196 in 2020.

REDUCING CARBON AND RESOURCE FOOTPRINTS THROUGH LCA

BMW Brilliance conducted detailed LCA calculation of our models to help identify more carbon reduction possibilities. Following the completion of the BMW 5 Series pilot LCA. In the meantime, we will continue to calculate and monitor the carbon emissions of other models to better contribute to the sustainable development of our products.

FUEL CONSUMPTION MANAGEMENT

BMW Brilliance is continuing its efforts with fuel consumption management in order to improve fuel efficiency and reduce CO₂ emissions. Corporate Average Fuel Consumption (CAFC) 2021 rose to 6.42 from 5.97 l/100km. This was primarily due to calculation flexibility adjustments as defined by the Ministry of Industry and Information Technology (MIIT).

LOW-CARBON SERVICES

Sustainability is embedded in the DNA of BMW Brilliance's charging services. This gives our customers and partners truly accessible solutions to realise the goal of green mobility. We have re-defined premium services by charging with green energy.

“Our premium services enable a worry-free E-journey with accessible charging facilities and green energy.”



Karl-Heinz Gassner
Head of E-Mobility



GREEN ENERGY CHARGING

In 2021, we continued to promote the rapid development of charging infrastructure. By the end of last year, we have integrated 365,713 public charging pillars across a unified network, spanning 318 cities across the country.

We are bringing the dream of convenient green energy charging to our customers. To this end, we have been working more closely than ever with the State Grid EV Service to promote programmes such as:

- The use of green power for NEVs;
- Research and innovation of charging technologies;
- Cooperation in sales and marketing of charging.

As a result, green energy has been made available for BMW customers in public charging stations. One highlight of the green energy charging service is that blockchain technology is utilised for green energy source tracing, and BMW customers will be issued with Green Energy Certificates after using the green energy charging service.



3-IN-1 DEALER CHARGING STATIONS

3-in-1 dealer charging stations are coming online to engage more dealers. These advanced 3-in-1 dealer charging stations bring solar power generation, energy storage, and NEV charging all together in one place. We aim to introduce 100 of these charging stations over the next three years at BMW dealerships and have already reached agreements with more than 10 dealers in this regard of green transformation. A digital platform will also be in place to manage green energy generation and utilisation.



DIGITALISATION OF CHARGING SERVICES

Public expectations for green energy charging services are rising, and BMW Brilliance is leading the industry by creating a single hub that will supply all charging related services. This is supported by a series of incentives that are designed to encourage more users to take advantage of our charging service. These include digital rewards such as achievement medals awarded to users in the My BMW App, as well as Joy Credits which are part of the BMW Membership programme. As of 2021, a series of digital charging services have been available to customers to facilitate better customer experience and achieve better satisfaction. These services include Easy Charge, BMW charging station recommendations, as well as a function to collect customer feedback.

#Innovation

Compound charging improves E-mobility accessibility

To further enhance the customer charging experience at compounds, BMW Brilliance cooperated with Charging Point Operators (CPO) in 2021 and successfully rolled out 11 compound charging pilot stations in 6 cities, including residential communities and workplaces. BMW compound charging pilot station is to provide NEV customers with shared and convenient charging service as well as to integrate the vehicle into customer's life through the smart charging platform.

SUSTAINABLE DEALER MANAGEMENT

BMW Brilliance continually encourages dealers to serve as our sustainability ambassadors to inspire and empower them to provide a green customer experience. Our ultimate aim is to promote a win-win partnership, creating long-term value for both the BMW brand and dealers.

“Dealerships are the valuable lynchpins that play a significant role in the sustainable development of BMW Brilliance and our shared green future.”


Amy Huang

 Vice President
Sales Channel Development

PERFORMING WHILE TRANSFORMING: NETWORK TRANSFORMATION GREEN STAR

In line with the national strategy of carbon reduction and a circular economy, BMW Brilliance is extending our sustainable services to dealerships through a new programme: Network Transformation Green Star, which will be rolled out in 2022.

Two benchmarks have been developed to measure dealers' progress to this end: **Network Transformation Green Star** as the basic standard and **Network Transformation Green Star Lighthouse** for outstanding dealership performance. Our goal is to have all dealerships qualify for Network Transformation Green Star status by 2025 and encourage outstanding dealerships to reach the Lighthouse level. The evaluation system contains three parts, including obligatory items, scoring items and guidance items. And the result will be audited by a third party, which is a key reference to grant the title.

BMW Network Transformation Green Star Comprises Four Aspects



GREEN ENVIRONMENT

We encourage dealers to focus on four areas of green environment, including energy saving, customer's comfortable experience, circularity as well as culture and biodiversity. By taking measures such as deploying facilities with high energy efficiency, green furniture materials and customised design, we inspire dealers create a whole new customer experience that is environmental friendly, safe and comfortable.



GREEN POWER

We encourage and guide dealers to adopt green power through procuring Power Purchase Agreements, installing distributed solar power or I-RECs. We also require 80% green power use for Network Transformation Green Star and 100% for Network Transformation Green Star Lighthouse status, of which at least 10% comes from distributed solar power.



GREEN OPERATION

We guide dealers to take sustainable actions in daily operational process, from sales, aftersales to office work. With the multiple tools developed by BMW (BMO & SPARK), dealers could realise e-reception and digital working, and are encouraged to purchase operational consumables with less ecological footprint. We also encourage dealers to adopt other measures to reduce waste in operation, such as using reusable servicing kits for aftersales, and the oil filling systems.

#Management Target

**All dealerships
to realise green
transformation by 2025.**



GREEN ENGAGEMENT

We also encourage and mobilise dealers to provide diversified green engagement activities to customers and employees. Through engagement in topics like green campaign, CSR activities, green communication, sustainable training and green lifestyles, dealers can be the change agents to encourage more people to participate in sustainable actions and expand the impact of our sustainable services.

Empowering Green Transformation through the BMW Green Power Alliance Dealer Training Workshops

In 2021, we initiated a variety of dealer training workshops through the Green Power Alliance programme, with a total of 100 participants from 104 dealer groups. We have built solid foundation for our Network Transformation Green Star by accentuating and implementing topics such as different renewable energy adoption approaches (PPA, I-RECs, Distributed Solar Panel), renewable energy using recommendations, and experience sharing sessions. In 2022, we will continue to carry out five regional dealer training workshops, screen out pilot areas and groups and support them for the renewable energy adoption implementation to fully empower their green transformation process.



NETWORK TRANSFORMATION ACCELERATION

Despite challenges posed by the pandemic in this past year, we have continued to accelerate network transformation projects. For this reason, we made a comprehensive effort to revitalise every BMW Brilliance dealership, inside and out, with new designs, product presentations, and interactive experiences. We aim to finish all transformation upgrades by 2025. 221 dealers have already finished their transformation by the end of 2021. We further enhanced customer experience through customised design, cross-industry cooperation, (i.e. Starbucks), and enriching our guest area with restaurant, children's area and tea room.

DEALER EHS MANAGEMENT

Dealers are valuable partners to us. That is why we want to empower and equip them with the capabilities and awareness to identify and prevent any EHS risks. In 2021, we closely monitored all EHS-related regulation updates and integrated EHS self-assessments into our Retail Standards with 92.1% of audited dealers completing their EHS self-assessments. We also made EHS videos focusing on sustainability topics to give guidance to dealers on how to implement energy saving, CO₂ emission reduction, etc, which will release in the second quarter of 2022.

#Innovation

BMW i-Space: Creating a sustainable space for NEVs in the future

New showrooms for the BMW i series will incorporate our sustainability concepts in order to nurture a brand-new sales process. The showrooms will incorporate terrazzo flooring materials recycled from waste glass. All construction and furniture materials come from recyclable materials and are environmentally friendly. In the meantime, we also deliver the sustainable brand concept through the green construction method of prefabrication and installation. There are more showrooms coming up with one in Shenzhen already opened in 2021.

2022 FORECAST

BMW Brilliance is working diligently to enhance our climate-friendly products and services. To this end, we will continue to expand the scope of NEV models and carry out carbon footprint LCA. We anticipate earning a process certification for 530Li XDrive in 2022.

What is more, the green energy charging service scope will extend to a 3-in-1 dealer charging ecosystem so that BMW customers could have one more source of certified green power for charging and one more way to enjoy a green lifestyle. The 3-in-1 solution will not only expand its coverage in dealer outlets, but also try to be applied in various scenarios such as park & charge, private charging, and compound charging. In the future, green energy charging services and the 3-in-1 solution will continue to contribute to BMW's sustainability strategy and targets during car sales and use phase.

Our Network Transformation Green Star Programme for dealerships will be rolled out in full scale in 2022, with the aim to have 50 dealerships to achieve the Green Star Status by year-end. Aside from this, our new i-corner upgrade design will also be finalised in early 2022. Renovations will display more sustainable elements about NEV models. In it, we emphasise the use of lightweight and easy-to-assemble materials to make the space more flexible and sustainable.

All of these measures will testify to our determination to offer green, climate-friendly products and services for everyone.

2.3

CIRCULAR PRODUCT LIFECYCLE

- PARTS REMANUFACTURING
- BATTERY RECYCLING
- CIRCULAR USE OF MATERIALS
- GREEN PACKAGING

BMW Brilliance has been furthering its efforts to reduce environmental impact and create a circular lifecycle. We developed systems to enhance the efficiency and efficacy of our parts remanufacturing processes while repurposing components that can function within acceptable parameters.

We have also expanded our closed-loop system for materials, and increased the scope of secondary materials use while developing more sustainable packaging. Through these actions, we are one step closer to reaching our aim of true circularity.



PARTS REMANUFACTURING

BMW Brilliance is fully committed to recycling as well as remanufacturing parts, and we are cementing our leading position in the China market with faster expansion of scope and overall parts-remanufacturing capabilities.

In 2021, establishing a green and circular economy became a critical national strategy, with a series of laws and policies related to remanufacturing went into effect in order to standardise and encourage the sound development of this emerging industry. One of the most important of these laws is the Interim Measures for the Management of Standards for Remanufacturing of Auto Parts released by the National Development and Reform Commission (NDRC) in April, which clearly defines remanufactured products, production requirements, quality guarantees, markings, and core traceability. We have ensured the compliance with these regulations while enhancing our own efforts to achieve a circular production process.

This year, we expanded the scope of our parts return process while further upgrading the core tracing features for reverse logistics systems and improved our overall parts-remanufacturing capabilities. Through these efforts, we gained a deeper understanding of consumer habits and are now in a better position to play a leading

role in the market. BMW Brilliance is fully committed to recycling as well as remanufacturing parts, and we have achieved significant progress toward this end.

EXPANDING THE SCOPE OF PARTS REMANUFACTURING AND RECYCLING

To serve the Chinese market more efficiently while adhering to local guidelines, we have made use of additional locally remanufactured parts. More 8-speed remanufactured automatic transmissions and mechatronics were released to fit new BMW Brilliance car models. We have also developed remanufactured transfer cases that will be available on the market in early 2022. Furthermore, we have begun the extension of AC compressor and electronic steering gear remanufacturing solutions, which will achieve Standard Operating Procedure (SOP) status during the first half of 2022. To ensure supply chain security during the current global chip shortage period, we have prioritised remanufacturing as a special solution for urgent cases such as electronic steering gears.

In total, we have recycled over 278,000 spare part pieces, weighing more than 867 t during the course of 2021. Of these spare parts, more than 1,800 transmissions, 3,800 steering gears, 12,500 air conditioning compressors, 1,500 head units, and 1,000 mechatronic items were put into the remanufacturing process. At the same time, we have expanded the scope of parts-return in order to prepare our core readiness for further remanufactured parts development, especially for NEVs.



RELIFE POINT AND REVERSE LOGISTICS SYSTEM

In 2021, the Encory China Dealer Front-end (ECDF), a parts tracking system, was fully utilised to improve the transparency of the overall reverse logistics process, providing parts information, logistics status, and other key data. To date, we have received continuous support and regular updates to enhance its efficacy and capacity. Along with BMW Brilliance's returns system, our transportation tracking system also went online to assist in monitoring parts returns while more than 1,000 m² of extra space was cleared for reverse logistics and core sorting. In the meantime, we realised 100% renewable energy use at our Relife Point through I-RECs.

In 2021, we recycled a total of 389 t of metal (80% steel and iron, 20% aluminium), 140 t of plastic, and 43 t of paper during our remanufacturing processes.

#Action
Number of various spare parts being put into the BMW remanufacturing process in 2021

01/
Transmissions



1,800+
pieces remanufactured

02/
Steering Gears



3,800+
pieces remanufactured

03/
AC Compressors



12,500+
pieces remanufactured

04/
Head Units



1,500+
pieces remanufactured

05/
Mechatronic Items



1,000+
pieces remanufactured

BATTERY RECYCLING

Battery, an essential source of power in our life, also causes unnegelectable damages to the environment. As a corporate citizen of the planet, BMW Brilliance is an active leader in addressing the environmental problems caused by the battery.

We have fully complied with all regulatory requirements related to HVB lifecycle management. All batteries are 100% traceable, collected and recycled by BMW. What's more, we are currently pioneering various strategies for the secondary use of HVBs to expand their operational lifetimes to help contribute to the national agenda of establishing a circular economy.

EXTENDING HVB LIFECYCLES

Adhering to regulatory standards and requirements is of the utmost importance to BMW Brilliance. To ensure full compliance, we have appointed a dedicated team to manage the entire lifecycle of HVBs. In 2021, we recycled 6,173 pieces of HVBs, a 42% increase from 2020. This was achieved through optimising our collection and recycling processes. To this end, we conducted training exercises with dealers to ensure that they maintain our standards when handling HVBs. We have also enhanced the recycling interface within JoyChat to improve our dealer's user experience. BMW Brilliance's professional HVB Recycling Service outlet in Shanghai is currently enjoying successful operations, earning widespread praise and recognition from the local government.

Developing our battery recycling capabilities is at the forefront of our efforts to preserve the environment.

We have also established a sustainability strategy for HVB disposal—the closed-loop concept, which involves the disposal of test batteries and aftersales batteries. The goal is to effectively extract and put them into new battery production from 2022 onward. Key materials in HVBs—nickel, cobalt, and lithium—are then recycled into manufacturing new batteries. This process will ultimately help replace mined resources. We are currently working closely with our recycling partners and HVB suppliers to achieve the closed-loop system for our HVBs in the future. By the end of 2021, 554 BMW dealers have established the recycling procedure for HVBs across China.

PIONEERING SECONDARY USE OF HVBS

We have been focusing our efforts on pioneering R&D on secondary use scenarios for HVBs. Starting at our production plants, our first breakthrough was the pilot use of secondary HVBs to power our pallet trucks. In 2021, we used end-of-life HVBs to power forklifts and pallet trucks at our Plant Tiexi and Plant Powertrain. After six months into the pilot scheme, these HVBs demonstrated outstanding power resilience and safety performance.



Our second breakthrough was the pilot use of secondary HVB for energy storage at Plant Tiexi. Starting in 2021, we used retired HVBs to store and supply photovoltaic power to 3 direct-current charging pillars in a pilot power storage station we created. The success of these pilot schemes was supported by adhering to a strict operational process that ensured the safety and optimal performance of the HVBs. Further tests are ongoing to validate these programmes with the goal of scaling up for wider application.



#Collaboration

Furthering HVB Research Through Cooperation with Tsinghua University

Over a two-year period, we have partnered with Tsinghua University on HVB market research, battery lifecycle carbon emission calculations, and reusable battery development. Based on a carbon emission LCA of BMW Brilliance's HVBs carried out in tandem with our partner, we were able to identify certain processes in the lifecycle where carbon emissions could be reduced. Ultimately, we will develop an application that analyses the overall health of an HVB based on its usage data, allowing us to utilise it in a variety of scenarios.

CIRCULAR USE OF MATERIALS

For us at the BMW Group, the twin ideas of "**Secondary First**" and "**RE: THINK, RE: DUCE, RE: USE, RE: CYCLE**" have comprised our main approach towards the promotion of a circular economy.

THE BMW i VISION CIRCULAR

The fully electric vision vehicle BMW i Vision Circular displayed at the IAA MOBILITY 2021 is a concrete example of how the use of primary raw materials can be drastically reduced in the cars of the future.



Our circular practice is aligned with the initiatives of the BMW Group, focusing on increasing the use of secondary materials in our products through innovation and close collaboration with our partners.

CLOSED-LOOP SYSTEM FOR MATERIALS

We had great success with steel in our closed-loop system in 2021. By working closely with our steel manufacturing partners to incorporate scrap steel back into their manufacturing processes, we achieved an accumulative recycling volume of 71,000 t within the loop. We are also in the process of testing a closed-loop project for aluminium ingots used at our foundry plant, and by the end of 2021 we achieved 12% in total. Ultimately, we returned 10,402 t of scrap aluminium to our suppliers in 2021.

Amount of scrap steel and aluminium recycled from production process (in t)

Scrap steel	
2020	– 45,000
2021	– 71,000
Scrap aluminium	
2020	– 0
2021	– 10,402



Scrap steel and aluminium recycling system at our Plant Dadong.

EXPANDING THE SCOPE OF SECONDARY MATERIALS

Plastics are another secondary material with which we have made significant progress. We are currently exploring the feasibility of using secondary plastics for our automobile interiors and exteriors with our suppliers. The performance of these plastic parts will be further evaluated before we go ahead with mass production.

SECONDARY AS A REQUIREMENT TO SUPPLIERS

As part of our push for increased circularity, BMW Brilliance has incorporated a sustainability target, which includes the use of secondary materials by our suppliers as a requirement during the nomination process. We encourage the Platinum Group Metal (PGM) suppliers to use secondary rhodium and palladium, which not only reduces their mining cost but also contributes to carbon

reduction and circularity. Among our new supplier nominations in 2021, we have achieved over 70% secondary PGM use, reducing roughly 480,000 t CO₂ emissions in the coming three years.

“

By reducing the use of primary raw materials and expanding their lifecycle, we are accelerating our steps to achieve circular production.”



Lorry Lu

Head of Indirect Purchasing

GREEN PACKAGING

Green packaging remained a core focus of our circularity efforts in 2021. We have been initiating different programmes to enhance the efficiency and usability of our current bins while also exploring the possibility of recycling and remanufacturing bins to achieve material circularity in our supply chain.



STEEL BIN AND NON-STEEL BIN PROGRAMME

We carried out an investigation into steel bins reuse for BMW X1 with an aim to reduce costs, materials, and CO₂ emissions. Our programme was initiated in March 2021 and completed by the end of 2021. A total of 1,350 pieces of steel bin can be reused in the next project.

We also conducted a feasibility study on the use of non-steel bins to evaluate the use of expanded polypropylene (EPP) renewable material (from EOP bins and daily scrap material). This study led us to a conclusion that a ratio of 75% new material to 25% recycled material used in producing new bins will meet our required EPP bin functions. As a result, we are now in negotiations with our EPP supplier to conclude a recycling and transportation contract.

MAXIMISING BIN USABILITY

In addition to recycling and reuse of packaging materials, we have improved upon BMW Brilliance's bin concept construction guidelines by incorporating a light bin design standard, which has greatly increased efficiency. 98.2% of all local parts are now transported via returnable packaging. Our bin-sharing and rental programme has achieved excellent results, with our top five parts suppliers making use of rental bins 35,545 times in 2021. The current scope of applications covers existing projects and will eventually be extended to new vehicle projects.

In June 2021, we started a project to optimise packaging density that was completed at the end of 2021. The result is that Plant Tiexi has already achieved nearly 0.101 m³ per car saving in packaging while Plant Dadong has saved approximately 0.166 m³ per car. We have also published a CO₂ emissions matrix on different package materials and provided guidance on the best material choices for the bin design.

98.2%

Local parts are transported via returnable packaging.

35,545x

Use of rental bins among our top five parts suppliers in 2021.

2022 FORECAST

In adherence to the requirements of the National Development and Reform Commission's "14th Five-Year" Circular Economy Development Plan, BMW will develop and release more remanufactured parts categories applicable to the demand in the China market. This plan includes fulfilling a remanufactured product line of electronic steering gear while achieving SOP for the remanufacturing extension of AC compressors.

The plan also covers releasing remanufactured mechatronics to fit on hybrid cars, and the beginning of using remanufactured engine components, alternators, and head unit extensions. This plan will also improve the systematic solutions of core classifications and sorting standards.

The results of the secondary utilisation pilot programmes will be evaluated for a possible mass rollout. In 2022, with new requirements in place for recycling suppliers, we will form a closed-loop of HVB recycling, which involves all recycled raw materials being reused by our own suppliers.

We will continue to work on capacity building for separating aluminium coils to enable a closed-loop of raw materials. We will also conduct more tests to evaluate the performance of plastic parts and hopefully achieve the start of mass production next year.



At BMW Brilliance, we are fully committed to sustainability, and it is reflected in our manufacturing, transportation, operations as well as in our ties with our supply chain partners. As a National Green Plant, sustainable production is at the core of our production and is fully integrated into our strategic goals. To deliver on our commitment, we devote every effort to reducing our carbon footprint and our reliance on resources to tackle global challenges such as climate change and resource scarcity.

Through increased use of low-carbon and multi-modal transportation and innovations in green warehousing practice, we tirelessly strive to make improvements in green logistics to reduce our environmental footprint. For our supply chain, we launched the Supply Chain Match Plan China to leverage different ways to reduce carbon emissions and adopt renewable electricity while enhancing EHS management to minimise the environmental and social risks across the supply chain. This year, another focal point for us is to transform our non-production sites and construct a low-carbon and healthy workplace.

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- 3.1 Resource Consumption and Efficiency
 - 3.2 Green Logistics
 - 3.3 Purchasing and Supplier Network
 - 3.4 Real Estate Management

CHAPTER 3

PRODUCTION, OPERATION AND SUPPLIER NETWORK

3.1

RESOURCE CONSUMPTION AND EFFICIENCY

- CARBON FOOTPRINT AND RENEWABLE ENERGY
- RESOURCE MANAGEMENT
- GREEN PRACTICES AT PLANT LYDIA

BMW Brilliance has placed green and sustainable production as a long-term core mission to accomplish. We are constantly exploring innovative ways to improve energy efficiency across our entire value chain while increasing the ratio of renewable electricity used in our operations. Another focused area for us is resource management. Here, we have taken meaningful steps to minimise our impact on the environment. By implementing all of our best-in-class green practices in our new production plants, we have led the entire automotive industry in sustainable production.

**100%**

Use of renewable electricity for all our Shenyang production plants.

-7.8%

CO₂ emissions per vehicle produced vs 2020.

-7.3%

Energy consumption per vehicle produced vs 2020.

-7.6%

Water consumption per vehicle produced vs 2020.

-16.4%

Waste for disposal per vehicle produced vs 2020.

-76.0%

VOC emissions per vehicle produced vs 2020.

BMW BRILLIANCE'S CARBON FOOTPRINT

At BMW Brilliance, we track our emissions at every stage of our value chain, from our own operations as well as our suppliers' emissions and the emissions generated by our customers.

In 2021, the BMW Group announced an upgrade of its 2030 climate commitments with more strenuous CO₂ emission reduction targets set across its value chain, including an 80% reduction in production CO₂ emissions per vehicle versus the 2019 level. We are committed to making major contributions to support the Group's climate pledge and fulfilling our commitments to "In China, For China and the World" by pioneering green transformation of our production, and sharing our expertise and experience with our peers around the globe.

We aim to set the standard for achieving "zero-carbon emission" production by applying three main approaches:

- Using renewable electricity
- Improving energy efficiency
- Reducing reliance on fossil-based energy

In 2021, our total CO₂ footprint increased as our production volume climbed 16.2% as compared to 2020. Leveraged on improved data traceability, we managed to track and report CO₂ emissions from international inbound logistics (US-China route) in 2021, thus expanding our reporting scope for Scope 3 emissions.

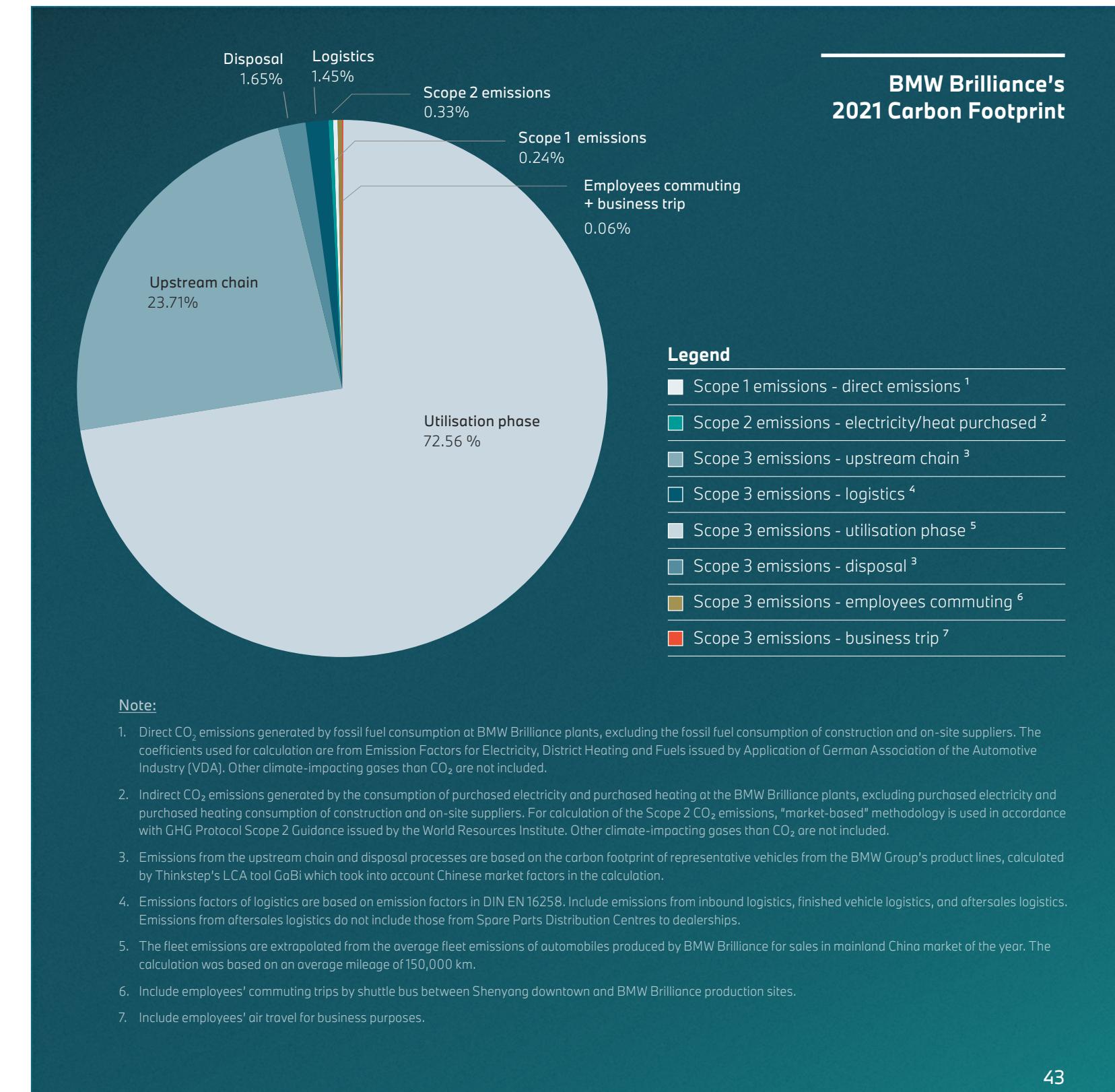
We are striving to reduce carbon emissions across the whole value chain through innovation, collaboration and investment. Our actions are described in various chapters of this report.

BMW Brilliance's Greenhouse Gas Emissions

(in t)

	2021	2020
TOTAL EMISSIONS	21,392,395	17,741,047
Scope 1 ¹	50,937	43,614
Scope 2 ²	71,604	71,275
Scope 3 ^{3,4,5,6,7}	21,269,854	17,626,158

→ See [Chapter 5.2 Key Performance Indicators](#) for the breakdown of Scope 1, Scope 2 and Scope 3 Greenhouse Gas emissions.



100% RENEWABLE ELECTRICITY USE

Since 2019, we have converted to 100% renewable electricity at our Shenyang production base. Our next goal is to achieve carbon-neutral production as part of the BMW Group's overall commitment to sustainability.

We are making landmark progress in maintaining our use of 100% renewable electricity. In 2021, we achieved an increase from 15.1 to 31.1 MWp on-site Solar PV power-on. And we participated in the "National Green Power Transaction" pilot scheme and completed a renewable electricity trading volume of 2.78 billion kWh, which ranked first nationwide.

These measures will fulfil nearly all of the renewable electricity needs at our Shenyang production base until the end of 2025. We're working hard as well to find other ways of using renewable electricity. In 2021, electricity made up 53% of our plant's energy consumption, 100% of which was sourced from renewable resources: 70% by outsourced wind and solar power, 3% from on-site solar power, and 27% from I-RECs.



ENERGY EFFICIENCY AND TRANSFORMATION

IMPROVING ENERGY EFFICIENCY

One major focus for BMW Brilliance is our continuing pursuit of energy efficiency. As a result, our energy consumption per vehicle produced has decreased for four consecutive years since 2016. But there is more to be done. In 2021, following the ISO 50001-certified Energy Management System, our process teams further standardised energy metering management in order to maximise energy efficiency.

To help foster greater awareness of energy efficiency, we hosted regular training programmes and workshops to share the latest updates in energy-related practices and standards. These actions brought down our energy consumption per vehicle produced to 1.40 MWh/vehicle, a 7.3% decrease compared to 2020. In 2021, our CO₂ emissions per vehicle produced was 0.17 t/vehicle, a 7.8% decrease compared to 2020.

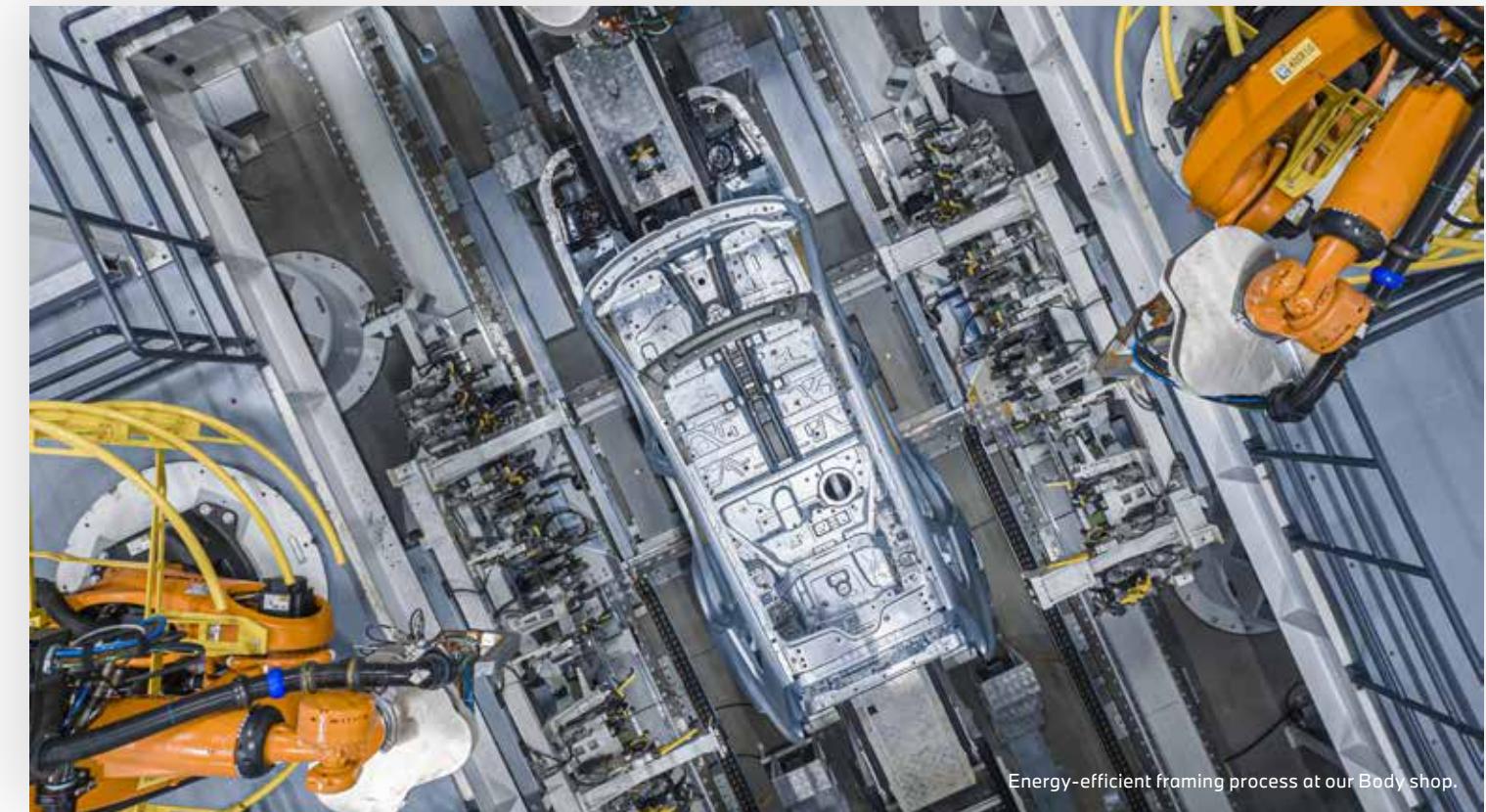
REDUCING RELIANCE ON FOSSIL-BASED ENERGY

BMW Brilliance never stops our actions to explore alternative energy sources in innovative ways. In 2021, we investigated the viability of hydrogen and biogas to replace fossil energy. After close examination and technical feasibility study of several solutions, we will further evaluate the performance and efficacy of each solution in more comprehensive terms.

CO₂ emissions per vehicle produced (in t/vehicle)



Energy consumption per vehicle produced (in MWh/vehicle)



Energy-efficient framing process at our Body shop.

#Green measures

STEAM PLATFORM: Inspiring energy management innovation

In 2021, the Standard Tool for Efficiency Applications and Measures (STEAM) platform, a key energy-saving initiative, played an important role in facilitating energy management innovation. We introduced this platform to provide employees with a way to submit their innovative ideas for energy efficiency improvements during production processes. In 2021, our staff members submitted 42 measures to the platform, which will ultimately result in a combined savings of over 5,000 MWh of energy use per year.

#Collaboration

Joint collaboration to boost carbon emissions research

In 2021, BMW Brilliance initiated a cooperative intention with State Grid and Northeastern University on the development of a Carbon Footprint Management Platform. In the near future, with this platform in place, we will be able to achieve more precise carbon footprint management.

RESOURCE MANAGEMENT

BMW Brilliance is determined to lead the revolution for green operations by actively promoting sustainable production methods in green plants, where technology and innovation is the driving force.



Left: Scrap steel and aluminium recycling system at Plant Dadong.



Up: Reclaimed water treatment system at Plant Dadong Paint Shop.

Down: Paint recycling system at HVB Centre II.

One notable component in our value chain with significant environmental impact is our manufacturing process. As we have set clear goals to reduce our overall environmental footprint, we are incorporating enhancements throughout our operation to bolster our progress. Efficiency is crucial to BMW Brilliance and thus we are optimising our resource usage by enhancing our water reclamation capabilities. We have also brought innovations to classify and dispose waste materials while cutting down on emissions. Furthermore, we have integrated a comprehensive set of improvements to our facilities that offer a variety of benefits for both the environment and the ecosystem.

WATER REUSE AND RECYCLING

We channel our efforts to reduce water consumption and promote effective management of reclaiming water. The Paint Shop of Plant Dadong Extension Projects has been steadily expanding its water reclamation facility's capacity, saving 80,000 m³ of water. We also conduct

ongoing improvements to enhance water efficiency in vehicle production. In 2021, we achieved 1.82 m³ of water consumption per vehicle produced, an improvement of 1.97 m³ from 2020 level.

WASTE CLASSIFICATION AND DISPOSAL

Minimising waste across all operations is one of our top priorities. In this regard, we have repurposed end-of-life materials in new ways by developing innovative approaches. About 170 t of iron sludge waste from Plant Powertrain is no longer landfilled, 99.5% of which was recycled. By separating the amount of concentrated grease oil generated in the pre-treatment process of painting, the grease oil wastewater output is reduced by 71%, and 120 t of harmful wastewater could be recycled this year. Thanks to the optimised sludge treatment facilities and processes at Shenyang Plants, the waste per vehicle produced we sent off for disposal in 2021 decreased from 2.99 to 2.50 kg.

VOC EMISSIONS REDUCTION

Since 2021, Plant Tiexi and Plant Dadong Extension Projects have completed the installation of state-of-the-art volatile organic compounds (VOC) treatment facilities, which have made significant contributions towards VOC reduction. By the end of 2021, we have cut VOC emissions per vehicle produced by 76%.

LAND USE AND BIODIVERSITY

Sustainability is closely intertwined with ecology and environmental protection. As a front runner in BMW's global production network, the BMW Brilliance Shenyang plant has pioneered the concept of sponge plant and nature-based solutions during the planning and implementation of the new project, actively adopted soil and water conservation measures, and selected a landscape design with more functions to protect the biodiversity of the plant.

Water consumption per vehicle produced (in m³/vehicle)



Waste for disposal per vehicle produced (in kg/vehicle)



VOC emissions per vehicle produced (in kg/vehicle)



GREEN PRACTICES AT PLANT LYDIA

BMW Brilliance is ceaselessly pursuing a more sustainable production process. The new Plant Lydia, which commenced production officially in May 2022, reflects our green ambitions in this first-of-its-kind, state-of-the-art auto manufacturing facility.



BMW Brilliance Plant Lydia.

"We believe green production is the key to solving the sustainability puzzle."



Jochen Esmann

Head of Tiexi New Plant (Lydia) Project

POWERED BY LOW-CARBON ENERGY

We are receptive to emerging clean energy technologies and actively adopt what we deem beneficial to our goals. In 2021, our first Combined Heating and Power (CHP) in Liaoning has already began operation at Plant Lydia. This system enables energy transformation from coal to natural gas, which is expected to reduce CO₂ emissions by 50% through energy replacement. The CHP will provide supplies of electricity, heating and serve as a convenient transfer method from natural gas to biogas. In the future, the CHP could provide electricity and heating via a dedicated pipeline. Other measures include optimising the use of solar energy through solar photovoltaic

panels already installed in all parking lots at Plant Lydia. More panel installations are planned in both the production facilities and reserve area as well. The estimated capacity of solar photovoltaics is currently 23 MW, and we are actively exploring the potential to expand this share of on-site renewable electricity generation.

Furthermore, we seek to explore innovative ways to improve energy efficiency. An electricity consumption target has already been set for Plant Lydia, which has also become a requirement for our equipment suppliers. We have also adopted the Building Information Modeling (BIM) system to improve energy efficiency by monitoring

and adjusting the temperature and light changes in the office areas. In addition, we have adopted the pilot use of an E-oven, which is powered by renewable electricity to reduce CO₂ emissions by replacing natural gas usage.

RESOURCE UTILISATION IMPROVEMENT

Comprehensive water efficiency measurements were taken at Plant Lydia. Consequently, a total water consumption target has been set to measure the progress and outcome of our resource-saving actions. We have enhanced water recycling as well through a number of measures, including building a rainwater collection sys-



tem for irrigation, collecting used water from production for secondary use such as car washing, and installing wastewater treatment facilities, all of which can save 40,000 m³ of water per year.

We have also rolled out a series of measures at Plant Lydia to improve energy efficiency. In our Press Shop, we developed a main drive control cabinet on the second floor, which can reduce approximately 5% of power through improved energy efficiency and being totally free from the chiller water. In the Body Shop, the electrical welding gun and new control standard help contribute to lowering energy consumption as well. In the Paint Shop, we focus on recirculation of building air between the processes through heat recapture and filtration. In addition, the e-coating reverse osmosis filtration system also allows for reduced fresh water consumption while lowering hazardous waste.

PROMOTING CIRCULARITY

In terms of our furniture selection, our principle for Plant Lydia is to reuse secondary office furniture from other plants as much as possible. As for the production process, we have built the capacity to separate iron and aluminium from mixed metal waste to provide better circulation.

ECOLOGICAL CONSERVATION

An ecological conservation garden will be built at Plant Lydia near the southwest assembly area for employees to visit during lunch breaks and leisure time. Native species will be cultivated to preserve local biodiversity, and a small artificial lake will be included, supplied by rainwater or grey water. Water conservation measures will also be taken, including putting a clay layer in the soil to better hold water for healthy tree growth.

2022 FORECAST

In 2022, a series of steps to enhance green production are under planning. In terms of carbon footprint and renewable energy, the standards of National Green Plant and ISO 50001 will be extended to cover Plant Lydia.

To further our share of on-site renewable energy, targets for solar photovoltaics capacity have been detailed on our 2022 agenda. In addition, we will continue to explore the possibility of energy replacement, with heat pumps and biogas, for instance. In the future, cooperation with research institutions will be strengthened to better leverage digital technologies for CO₂ reduction.

Especially at our new plants, more definitive sustainability actions will be taken. To this end, the Plant Dadong Extension Projects will carry out phase III water reclamation capacity expansion, which will save nearly 130,000 m³ of water per year upon commencement.

As for Plant Lydia, NEV will be used for inner plant logistics. And at both Plant Lydia and Plant Dadong, a new paint material with lower VOCs and higher solid content will be applied.

From 2024 to 2025, Plant Lydia will be connected with the local metro line, which will lower down carbon emissions from employee commuting.



3.2

GREEN LOGISTICS

- INBOUND LOGISTICS
- FINISHED VEHICLE LOGISTICS
- AFTERSALES LOGISTICS



BMW Brilliance strives to create the greenest and most innovative products in the industry and bring them to our customers with the utmost speed and efficiency. In doing so, this part of our value chain is also one of the largest components contributing to our global environmental footprint. We are fully committed to achieving the clear sustainability goals that the BMW Group has set for 2030. We have continued exploring new ways to minimise our carbon emissions and optimised our business throughout our three operational stages: inbound logistics, finished vehicle logistics and after-sales logistics.

We scrutinised every link in our logistics chain and have devised tailored optimisations for each step in the process. Our goal is to improve resiliency while simultaneously providing steady supplies to our plants, dealers, and customers. We have piloted the use of the first E-Trucks for our inbound logistics, implemented railway-to-railway transportation as well as upgraded our resilient logistics management for finished vehicles. Above all, we developed a new aftersales strategy along with improved green warehouse management for aftersales logistics.

1st

Premium OEM to use the Sino-European railway and the Chengdu comprehensive bonded zone for vehicle imports.

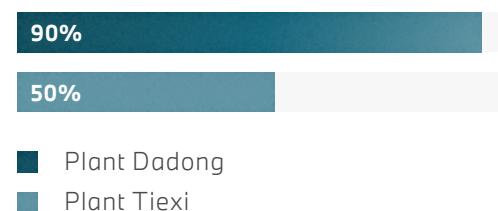
1/3 reduction

In carbon emissions from aftersales logistics operation by 2026.

INBOUND LOGISTICS

Sustainability has long been one of the basic tenets of BMW Brilliance's inbound logistics planning and operations. Through promoting low-carbon modes of transportation, deploying new transportation vehicles and making progress in digitalisation, we have established a more low-carbon, resilient, and efficient inbound logistics system.

Shipments of cargo from Dalian Port to Shenyang Plants by train (in %)



PRIORITISING LOW-CARBON TRANSPORTATION MODES

To introduce more low-carbon transportation, BMW Brilliance is reducing CO₂ emissions by scaling up low-carbon and multi-modal transportation. In 2021, we have made efforts to increase the share of transportation modes with lower carbon emissions, such as railway and sea transportation. Shipments of cargo from Dalian Port to our Shenyang plant are currently conducted through railway, with Plant Tiexi receiving 50% of their shipments and Plant Dadong receiving 90% of their shipments by train.

Concurrently, we are continuing to grow the proportion of sea transportation—at this moment we are only ferrying roughly 1% of inbound logistics through sea freight. Alongside our efforts to increase the share of rail and sea transportation that we utilise, we are also optimising our road transportation by maximising the payload mass to reduce transport frequency and integrating low-carbon criteria into our supplier selection process. Potential suppliers are encouraged to adopt low-carbon transportation modes and utilise the full-truckload method.

BUILDING RESILIENT LOGISTICS THROUGH RISK MANAGEMENT

BMW Brilliance highly values stability in our inbound logistics, and as such we are proactively monitoring potential risks, including climate-related risks, and providing preventive solutions to build resilient logistics. Front-desk meetings are conducted to identify potential risks and cross-functional meetings are held every week to assess potential risks across the entire logistics



Pilot use of the first heavy E-Truck powered by Li-on battery for our inner-plant and inter-plant logistics.

process. In the event of a potential risk being discovered, preventive measures will be taken to mitigate possible negative impacts, such as increasing the capacity of storage based on traffic condition forecasts.

IMPROVING LOGISTICS EFFICIENCY THROUGH DIGITAL PLANNING

We are utilising digital planning to enhance the efficiency of shipment loading, which has resulted in a reduction of carbon emissions from our vehicles. The Plant Traffic Steering System (PTSS) has been utilised to monitor real-time intersection traffic. Our planning system actively analyses traffic conditions and optimises truck dispatches to avoid congestions to enhance efficiency. This has led to a reduction in our carbon emissions while our trucks are en route.

#Initiative

EXPLORING ALTERNATIVE FUEL ADOPTION FOR HEAVY VEHICLE TRANSPORTATION

We are ceaselessly searching for cleaner and more efficient fuel in our logistics operations, as it is a vital factor in the future of sustainable transportation. In 2021, we initiated a pilot of an E-Truck, which was the first heavy E-Truck (20 t) used in Shenyang. The battery of the E-Truck is powered by 100% renewable electricity, which could transport 56 White Car Bodies of the BMW iX3 per day, and is estimated to reduce 2.2 t of CO₂ per year and produce zero hazardous pollutants as compared to traditional fossil fuel. This programme is under evaluation and is set to be rolled out for use in inner-plant and inter-plant logistics in 2022.

FINISHED VEHICLE LOGISTICS

With the goal of maximising efficiency and minimising carbon emissions in our mind, we have merged the logistics segments for local produced finished vehicle and imported finished vehicle. As a streamlined organisation, the new team is striving to hasten synergies and efficiency, speed up innovation and digitalisation to realise future sustainable business models.

78%

of locally produced finished vehicles are transported wholly or partially by rail.

1st

premium OEM to use the Sino-European railway and the Chengdu comprehensive bonded zone for vehicle imports.

Once the production is completed, finished vehicle logistics takes over the vehicles and responsible for delivering our dealers all over China for our customer purchases. In the past years, We have been continuously optimising process in order to be the most efficient and sustainable logistics network.

PURSUING A LOW-CARBON TRANSPORTATION MODE

In our transportation of finished vehicles, we continue to practise railway-to-railway transportation to improve efficiency while reducing CO₂ emissions. Having maintained a robust railway transportation network, we are transporting 78% of locally produced finished vehicles wholly or partially by rail, a shift from the traditional road to rail mode.

The incident in 2021 which obstructed the Suez Canal effectively handicapped global sea transportation. During that period, railway proved to be a reliable and stable mode of transportation. After undergoing a thorough evaluation process and finally initiated in December 2020, the "Silk Road" project in which a route for BMW/ MINI imports was implemented by the international railway to western China.

In 2021, BMW became the first premium OEM to utilise the Sino-European railway and the Chengdu comprehensive bonded zone for vehicle imports. Chengdu became the first railway import port for finished vehicles within the logistics network in China, which is an effective complement when the sea freight capacity is insufficient. We are also working to extend main haul railway

transportation and eliminate the need for trucks, to further lower CO₂ emissions while improving the stability, security, and efficiency of our logistics operations.

EXPLORING NEW TRANSPORTATION VEHICLES

As the world of transportation and logistics shifts towards clean energy vehicles, BMW Brilliance is exploring alternative forms of clean transportation with our suppliers. E-Trucks have emerged as a strong candidate. Upon evaluation of the truck's battery efficiency, charging station availability, and speed and route, we have identified 2 technical challenges. One is the instability of the battery's life utilised, and another is the lack of perfect hydraulic functions. Our solution is to cooperate with E-Truck suppliers to develop new products that meet our requirements and optimise charging facilities along the routes.

OUR APPROACH TO USING ALTERNATIVE FUEL IN FINISHED VEHICLE LOGISTICS

Action	Challenge	Solution
E-Truck	— Battery instability	<ul style="list-style-type: none"> — Collaboration with E-Truck suppliers to develop new products — Optimise charging and supporting facilities along logistic routes
LNG-Truck	<ul style="list-style-type: none"> — High maintenance cost — Limited LNG support facilities — Lower payload capacity 	<ul style="list-style-type: none"> — Establish strategic cooperation between logistics suppliers and LNG Truck OEMs — Further construction of LNG supporting facilities along logistics routes — Expand LNG pilot programme to Shenyang-Beijing
Hydrogen Fuel	<ul style="list-style-type: none"> — Technological barrier 	<ul style="list-style-type: none"> — Continue exploration of hydrogen application opportunity in transportation vehicles

In addition to E-Trucks, we have been exploring the use of Liquified Natural Gas (LNG) Trucks in Decentralised Dispatch Area (DDA) cities. While LNG fuel has potential to lower our carbon footprint, we have identified a number of challenges, including high maintenance costs, limited LNG support facilities along routes, and a decrease in payload capacity.

BMW Brilliance has facilitated a strategic cooperation between our logistics suppliers and LNG Truck OEMs to develop new trucks that can load eight units of finished vehicles. We plan to expand the scope of our pilot programme to Shenyang-Beijing in 2022. Furthermore, we keep exploring the opportunity of using hydrogen energy in transportation vehicles.

About Finished Vehicle Logistics

RIGHT VEHICLE RIGHT PLACE ON TIME - EVERY TIME

LEAN & CONTINUOUS FLOW
GREEN AND DIGITAL
SPEED AND PRECISION
ARTIFICIAL INTELLIGENCE MAXIMISED
VALUE
MINIMUM ENERGY
ZERO WASTE
TEAM WORK

“

We are determined to lead from the forefront in low-carbon logistics driven by technology and innovation .”



Robert Kuessel

Senior Vice President
Technology and Manufacturing



1st BMW China Finished Vehicle Logistics Strategy Conference.

INNOVATING THROUGH DIGITAL MANAGEMENT OF LOGISTICS

In 2021, our Vehicle distribution Management (VDM) system went live, empowering the digital and smart management of finished vehicle logistics. The VDM system is a comprehensive platform that allows for real-time vehicle location tracking, paperless operation, and management dashboard to create the overall transparency of the business status. This system is also a vital step to contribute to the digitalisation and innovation. The data which is collected via every single handling step in the logistics chain from VDM will be saved in Cloud Data Hub (CDH) for the analysis to generate the direction for our further carbon reductions. Data-driven logistics is the base of never-ending sustainable improvements.

MORE RESILIENT LOGISTICS MANAGEMENT

In 2021, faced with unprecedented effects of extreme weather, the ongoing pandemic, as well as other emergencies, BMW Brilliance has optimised its logistics management to remain resilient against such challenges. During site selection processes we have considered evaluations for the risk of natural disasters. We have also implemented preventive measures into our operations, such as daily monitoring of weather conditions, installing solar panels at the outdoor parking of Plant Lydia and Plant Dadong Extension Projects, and building sheds to prevent hail in the Chengdu DDA. Alongside our preventive measures, we are preparing a contingency plan by developing alternative routes and readying secondary modes of transportation to ensure stable logistics during emergencies such as pandemics, typhoons, or floods.



#Collaboration Initiative

Rainwater harvesting and water circulation system in Tianjin VDC

As part of our push to make our operations greener and carbon-efficient, we have been experimenting with a natural water circulation system in our Tianjin Vehicle Distribution Centre (VDC). Natural rainwater is collected through this system and is later utilised for car washing – which not only conserves water expenditure but also independent utilities network and is thus more resilient against extreme weather conditions. Depending on varying weather conditions, roughly 80-100 m³/year of water can be saved, which is on average 1.6-2 l/car. As we have seen favourable results from this programme, we intend to extend it to other Finished Vehicles Dispatch Areas in future.

AFTERSALES LOGISTICS

Aftersales service is a vital component for BMW Brilliance's sustainable value chain. For which we have developed the 2025+ Aftersales Strategy, that sets sustainability as one of our cornerstones. We are constantly seeking solutions to promote green logistics and enhance performance in reducing our overall impact to the climate and environment. As part of our new strategy, we have set an ambitious carbon reduction target in 2026 to further reduce our carbon emissions by 1/3.

10,000 t

of CO₂ avoided by replacing urgent airfreight replenishments of spare parts by rail in 2021.



AFTERSALES LOGISTICS

2026 CARBON REDUCTION TARGETS

REDUCE

1/3

carbon emissions from aftersales logistics operation

REPLACE

50%

urgent airfreight replenishment by greener transportation

UTILISE

50%

E-Trucks in DMDC delivery routes

ESTABLISH



Digital carbon emission baseline and management system

GREEN TRANSPORTATION

To forge a low-carbon logistics system, we have reviewed our operations in its entirety and have made optimisations to our aftersales logistics with carbon efficiency as our primary focus. For international spare parts, we are working to minimise airfreight replenishment as it generates a substantial amount of CO₂ and gradually substitute it with railway transportation, the greener option. In 2021, 20% of our urgent airfreight replenishments were replaced by rail, thus reducing CO₂ emissions by 10,000 t. Our target is to replace 50% of urgent airfreight replenishments with greener transportation modes by 2026.

Apart from more efficient and greener modes of transportation, we have optimised our inventory management system to adjust the usage of railway transportation based on market predictions, and we are seeking out local sourcing solutions for spare parts to avoid unnecessary international transportation.

For domestic logistics, our aim is to lower our impact on the environment by increasing share of electric vehicles used. We have steadily deployed battery-powered E-Trucks to deliver parts from Spare Parts Distribution Centre to our dealers. In 2021, two E-Trucks were deployed in the Spare Parts Distribution Centre in Foshan, and one E-Truck was deployed in the Spare Parts Distribution Centre in Hefei, both showing positive results. Our target is to reach 50% utilisation of E-Trucks in Dealer Metro Distribution Centre (DMDC) delivery routes in 2026.

Aside from taking direct and concrete actions, we believe that thorough and complete data is the foundation for an effective measurement of our progress in achieving our carbon reduction targets. We started to establish a digital carbon emission management system to trace the CO₂ from aftersales logistics. Our interim target is to establish a CO₂ baseline condition and identify preliminary decarbonisation approaches for aftersales logistics.

“

To remain a leading member of the automotive industry, BMW Brilliance is dedicated to sustainable growth. And our aftersales service is a critical component of achieving a sustainable value chain.”



Dr. Kang Bo

Vice President
Customer Support



GREEN WAREHOUSE MANAGEMENT

At BMW Brilliance, logistics performance is measured with sustainability factors, and in terms of warehouse management, the green warehouse is now our operational standard. On the forefront of renewable electricity adoption, we were able to realise 100% renewable electricity for our six Spare Parts Distribution Centres across China in 2021 through I-RECs. In particular, our Spare Parts Distribution Centre in Hefei has become the first "green warehouse" to be certified by Leadership in Energy and Environmental Design (LEED) Green Building Standard, which is the most widely used and well recognised green building rating system in the world.

As we move forward, sustainability will become a new norm, as all the new Spare Parts Distribution Centres shall receive the LEED certification. In addition, all the new Spare Parts Distribution Centres will take part in the BMW Green Power Alliance project to adopt 100% renewable electricity with priority on power. Sustainability is now a KPI that we take into consideration during our warehouse supplier selection process. One detail we would like to see from our suppliers is for at least 50% of the packaging used to be returnable.

As part of our push to make our warehouses greener, BMW Brilliance is planning to limit and reduce paper consumption. This is to be accomplished through adjust-

ing logistics operations and transitioning to alternative packaging materials for products. One example is to employ returnable packaging for Spare Parts Distribution Centre to dealer deliveries. We will also utilise electronic devices for business operations, such as using scanners during stocktakes to completely replace paper records. At the dealership level, we have implemented e-reception, e-workshops, and e-payments to minimise paper use in our service process.

#Initiative

Leading Warehouse Project: Optimise aftersales logistics planning strategy

To enhance our logistics planning process, we have implemented the Leading Warehouse Project. Through maintaining a certain stock of new or slow-moving parts at the Spare Parts Distribution Centre in Shanghai, we could avoid urgent international airfreight and thus contribute to carbon reduction.

2022 FORECAST

Looking to the new year, we will continue improving our green operations on all sectors of our logistics flow.

For inbound logistics, we are conducting further LNG Truck pilots to resolve its challenges and optimise its functions. As LNG is more carbon-efficient, we hope to increase its scope in the future. E-Trucks will be rolled out for inner-plant and inter-plant transportations.

Our finished vehicle logistics work will focus on exploring the possibility of using the Sino-Europe railway to export products such as the BMW iX3. We are also planning to add Tianjin Port as an export port in 2022 to meet the needs of the growing business. This will not only reduce the number of ship changes contributing to CO₂ reduction, but also maximise resource utilisation by integrating with imported vehicle transportation routes and improving efficiency.

Finally, in terms of aftersales logistics, we will continuously promote our green logistic initiatives while exploring new possibilities of other clean energy solutions for transportation, including LNG and hydrogen.



3.3

PURCHASING AND SUPPLIER NETWORK

- SUPPLY CHAIN CARBON REDUCTION
- SUPPLIER ENVIRONMENT, HEALTH & SAFETY MANAGEMENT
- SOCIAL RESPONSIBILITY AND ETHICAL SOURCING

At BMW Brilliance, we have built a comprehensive series of sustainability measures and standards into every aspect of our purchasing and supply network that guide both of our company and business partners. By means of the Supply Chain Match Plan China, we can leverage different ways to reduce carbon emissions throughout the entire supply chain.

We are also focusing our attention on adopting renewable electricity sources for ourselves and our suppliers. BMW Brilliance also has in place an effective EHS management methodology that helps identify a wide range of risks that threaten sustainable operations. These measures, along with serious concerns about ethical sourcing of materials, reflect our sincere dedication to ensuring that all of our business practices are sustainable and contribute to a healthy global environment.

**436**

Local content suppliers in China.
↗ 9.0% vs 2020

71.39 billion RMB

Purchasing volume in China.
↗ 30.1% vs 2020

SUPPLY CHAIN CARBON REDUCTION

“

We are driving the green development across the value chain by fulfilling carbon reductions goals together with our suppliers.”



Martin Schlicker

Vice President
Purchasing & QMP

In order to meet the BMW Group's ambitious 2030 goal of cutting supply chain CO₂ emissions per vehicle produced by more than 20%, as compared to 2019 level, while also meeting the Chinese government's "dual carbon" goals, BMW Brilliance has implemented a determined approach comprising a series of concrete actions in the Supply Chain Match Plan China.

MANAGEMENT APPROACH

Sustainability has been comprehensively integrated into BMW Brilliance's supply chain management strategy. Through the use of role-modelling and enabling, we are helping to drive a low-carbon transition along the entire supply chain to achieve our ambitious commitments for carbon reduction. To this end, low carbon output has become a key criterion in our purchasing strategy, and we give priority to those suppliers who achieve lower carbon footprints.

We regularly speak with our raw material suppliers about their carbon-reduction strategies and goals to ensure that an appropriate and action-oriented synergy exists between BMW Brilliance and them. We also strongly encourage suppliers to accelerate the pace of their carbon-reduction targets and roadmap towards greater sustainability. Moreover, we make it a point to connect our suppliers to the China Development Research Foundation (CDRF) platform where a great deal of useful carbon-reduction information and other resources on government policies and industry peers' actions can be found.

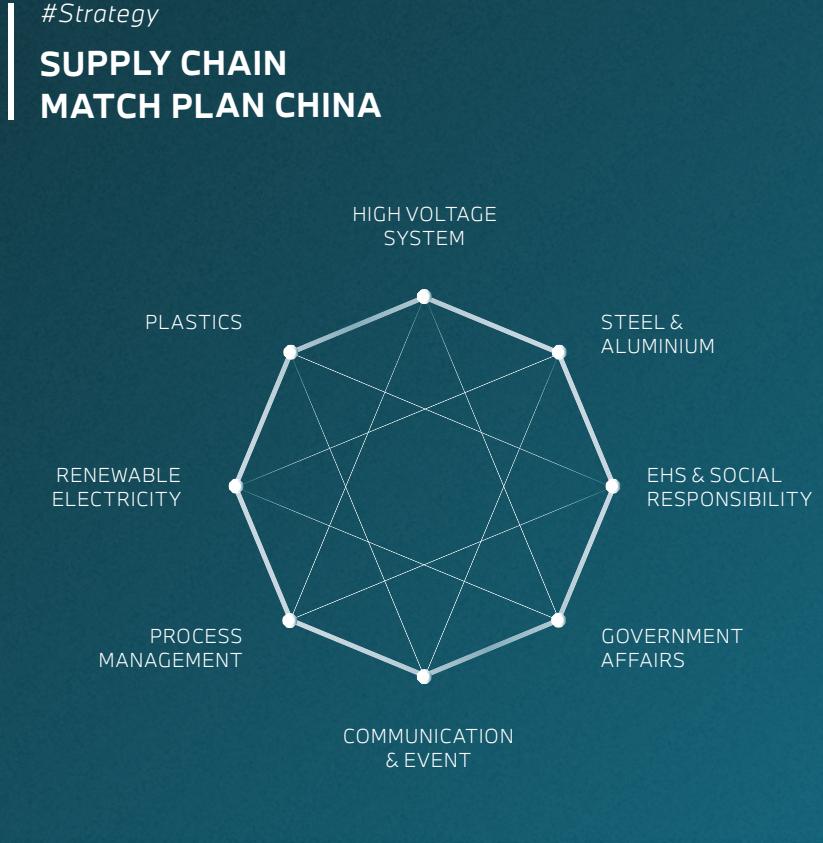
SUPPLY CHAIN MATCH PLAN CHINA

In 2021, the Supply Chain Match Plan China programme was a major milestone for BMW Brilliance to develop an integrated and customised plan for sustainable supply chain management across China. A dedicated team was also established for the Match Plan to develop a comprehensive management system in order to better coordinate a working synergy and cooperative mindset among different departments.

Based on a thorough analysis of the carbon emissions across the entire supply chain, eight working packages were developed with specific individual targets set. These were not only targeted at raw materials and parts with high carbon emissions, such as steel, aluminium, High Voltage System (HVS), and plastics, but also incorporated other key sustainability factors like renewable electricity, EHS, social responsibility, process management and government affairs in order to comprehensively promote sustainable development for suppliers.

ADOPTING RENEWABLE ELECTRICITY ACROSS THE SUPPLY CHAIN

Renewable electricity is a crucial point of focus for BMW Brilliance to mobilise and encourage suppliers to make use of carbon-free power sources. To this end, we have conducted electricity mapping at our suppliers together with training to help them with renewable electricity purchases, and share our know-how and lessons learned from our journey of transitioning to 100% renewable electricity in production. Our HVB Tier 1 supplier, CATL, from whom we purchased HVBs of 4.14 GWh in 2021, achieved 100% renewable electricity in 2021. Our



aluminium ingot suppliers, from whom we purchased a total of 20,000 t aluminium ingot, also achieved 100% renewable electricity in 2021.

Our carbon reduction philosophy also influences suppliers to actively consider sustainability issues during the construction and operation of their facilities. For example, greater numbers of suppliers are now considering the installation of solar photovoltaic panels during the site selection stage of their construction planning.

SUPPLIER ENVIRONMENTAL, HEALTH & SAFETY MANAGEMENT

We have pioneered a concrete and holistic supplier EHS risk management system through our Environment, Health and Safety Protection Activity (EPA) programme that has set a benchmark for EHS within our industry.



SUPPLIER EHS MANAGEMENT APPROACH

The EPA is a thorough risk assessment process that identifies, analyses, and rectifies potential EHS risks throughout the supply chain from Tier-1 to N-Tier. It also covers 10 processes, including risk identification, policy trends, process optimisation, database information management, training, auditing, early warning, and fast response.

Our approach provides all suppliers with corrective actions and continuous capacity-building activities. We also use a digital Environmental Risk Management System (ERMS), which enables us and our suppliers to respond more efficiently to potential EHS risks. For high-risk suppliers, on-site assessments are conducted via an independent third party. For low-risk suppliers, we have a self-assessment checklist and a special "Challenge Round". We also require additional evidence supporting our suppliers' self-assessment results.



OPTIMISATION OF EHS MANAGEMENT

We have optimised our EPA programme by getting more suppliers involved while also enriching the contents of the digital management system. In 2021, the scope of the "Challenge Round" was expanded. Previously, it was for internal staff members, but this year we have included Tier-1 suppliers who are responsible for N-Tiers.

BMW Brilliance guided the process to help Tier-1 suppliers become responsible for their own supply chain performance results. For the ERMS, we have added a news module, which publishes EHS-relevant news to suppliers. It is also equipped with an external risk event-tracking module to provide suppliers with a rapid feedback function for external events, placing greater focus on suppliers' EHS risks within the manufacturing sector.



SUPPLIER EHS MANAGEMENT ACHIEVEMENTS

In 2021, we audited 51 companies from our supply chain, comprising 20 nominated suppliers and 31 N-Tier suppliers. The initial audit result for 2021 was 14 red / 8 yellow / 29 green. By the end of 2021, we successfully improved the average audit score from an initial 88% to 95%. We also finished 107 "Challenge Rounds" for those suppliers responsible for N-Tiers, initially resulting in 4 red / 2 yellow / 101 green. In addition, several risk management activities were carried out on environmental and social matters, including risk management for heavy pollution output during winter weather. We designed a contingency plan for B/C/D rated suppliers in Liaoning and helped them improve over the long term. We also drew up risk management contingency plans for possible production restrictions due to the Olympic Winter Games.

SOCIAL RESPONSIBILITY AND ETHICAL SOURCING



SUPPLY CHAIN SOCIAL RESPONSIBILITY INITIATIVES

Ensuring that our suppliers adhere to BMW Brilliance's standards and expectations for social responsibility is a core aspect of our supply chain management framework. Since 2020, we have had in place the BMW Brilliance Supplier Social Responsibility Code of Conduct while continuing to promote and integrate social responsibility measures across our entire supply chain. In 2021, we made key progress in our Supply Chain Social Responsibility Initiatives.

In 2021, we enhanced our supplier social responsibility management, which included publishing a supplier checklist and engaging four suppliers in pilot schemes. Moreover, we completed four internal training sessions and designed a video training course for suppliers, which went live with training sessions in December 2021.

ETHICAL AND TRANSPARENT SOURCING OF HVB RAW MATERIALS

Material-specific sourcing strategies were initiated by BMW Brilliance to guarantee maximum transparency while fostering responsible business practices across our entire supply chain. Two critical raw materials contained in HVBs—cobalt and lithium—help power our NEV fleet. We recognised the importance of responsible procurement of raw materials when sourcing from regions experiencing political and social conflicts, which

may include minerals such as cobalt and lithium from the Democratic Republic of the Congo (DRC). Since 2020, we have begun sourcing cobalt for the Gen5 HVB cells directly from mines outside of the DRC, in Australia and Morocco, and made it available to our HVB manufacturer. By providing full knowledge and transparency about the origins of cobalt, we are able to minimise the risk of child labour and human rights violations from the sourcing of this material.

2022 FORECAST

Looking ahead in 2022, as the development of our Supply Chain Match Plan China progresses, additional specific indicators and targets will be set to better measure and manage our performance. In addition, we are exploring the application of other renewable electricity solutions.

In terms of supplier EHS management, we have combined the EHS scheme and social responsibility programme, allowing us to integrate internal standards into the entire supply chain. As a result, we will provide social responsibility training to suppliers while conducting ongoing EPA audits.

3.4

REAL ESTATE MANAGEMENT

BMW Brilliance is taking firm actions to transform our non-production sites into low-carbon, green and healthy working environments. We are rethinking our approach to the entire lifecycle of our various non-production sites with enhanced sustainability in mind. This encompasses everything from site selection and building design, to construction and facility management.

Our aim is to minimise the overall environmental impact in terms of carbon footprint, waste and consumption of natural resources at our facilities. At the same time, we are striving to foster a thriving, supportive, and healthy working environment for our employees.

100%

Use of renewable electricity
at our 25 non-production
sites through I-RECs.

INTEGRATING "SUSTAINABILITY" INTO REAL ESTATE TRANSACTION PROCESS

BMW Brilliance ceaselessly works to integrate more sustainable factors into its selection criteria for non-production sites, which forges solid, sustainable foundations for greener operations. This is evident in our selection of office buildings and other key facilities. To this end, we will give a stronger focus on sustainability when choosing proprietors, especially those holding sustainable building certifications or being equipped with renewable electricity supply. In addition, environmental impact assessments will be carried out to improve each building's overall sustainability performance. Sustainability will also be an essential factor for new facilities when we are evaluating partnerships with potential qualified suppliers and contractors.

TRANSFORMING INTO GREENER BUILDINGS

BMW Brilliance strives to create a working environment that is both healthy for our personnel and friendly to the planet. In 2021, we benchmarked with the world's leading green building standards—LEED and WELL. We are singularly determined to identify those elements that will effectively transform our working environment to benefit our employees' health while also contributing positively to the environment. Based on our gap analysis, we plan to make improvements by upgrading our air filtration systems to improve indoor air quality. Moreover, we will proactively carry out air and water quality testing, and install direct drinking water facilities across office area to ensure optimum water quality. We also plan to embark on a company-wide training and communication programme to keep employees abreast of the latest necessary environmental measures.

In terms of overall energy consumption, BMW Brilliance ensures 100% renewable electricity through I-RECs at its 25 non-production sites, including 9 offices, 2 research and development centres, 6 spare parts distribution centres, 5 training centres, 1 consolidation centre, and 2 brand experience centres. We are also actively exploring other ways of utilising renewable electricity, such as installing rooftop solar panels and purchasing green electricity, through the BMW Green Power Alliance project.

PROMOTING PRUDENT ENVIRONMENTAL MANAGEMENT

BMW Brilliance stays in regular communication with employees concerning green operations and promptly responds to sustainability issues. To this end, we publish Partner Satisfaction Index on regular basis to various internal customers and shareholders on selected real estate management topics of major importance. In 2021, we received positive feedback about office waste management, and we subsequently initiated a waste audit project to further examine this issue more closely.

Moreover, an employee survey was also conducted on the office waste management topic to gain a better understanding of employees' overall awareness, as well as to consider the optimal way to implement their suggestions on a scheme for waste classification at the office. As a result, based on the analysis of our current performance, we collectively came up with several creative proposals on how to improve office waste management. The next step will involve taking further action to facilitate better office waste management through enhancing our waste classification system and increasing employee awareness on this matter.



Digitalised management of building operation and environmental performance.

Furthermore, we have also leveraged digital solutions to strengthen our environmental management. In our future efforts to optimise the management of the 25 non-production sites across China, including the new ones under construction, we will actively seek to digitalise our work-related tasks to become greener and more sustainable. To aid in this task, we are developing a unified environmental management platform and will go live in April 2022 to collect data at all non-production sites regarding water and energy consumption, air quality indexes, and waste statistics. This platform can effectively integrate a variety of functions, including data maintenance, performance reporting, regulation tracking, training, as well as audit support, to help improve overall facility management. It also enables real-time facility management data monitoring, to provide reference for further improvements.

2022 FORECAST

We are currently developing our own sustainable building standards for all non-production sites, incorporating key sustainability aspects from site selection, through building design to construction, and until facility management. Our digitised facility management approach is enabling us to measure and monitor more indicators, which will help us set clear environmental targets in the near future and develop concrete reduction actions.

CHAPTER 4

EMPLOYEE AND SOCIETY

The bond between that of a corporation and society has never been so tightened. It is a thriving relationship that is built not only through trust, but also on responsibility to our employees as well as to the greater society. To those who are part of BMW Brilliance family, both employees and partners, we look to instill our core values and empower them to excel

further within our organisation. We value diversity and inclusivity and are actively seeking to broaden our scope of recruitment to reach more talented individuals. As a corporate member of society, we take our social responsibility and have made efforts to tackle the most pressing challenges with all stakeholders.

-
- 4.1 Human Resources Management
 - 4.2 Employee Engagement
 - 4.3 Caring for People
 - 4.4 Empowering People
 - 4.5 Corporate Social Responsibility



4.1

HUMAN RESOURCES MANAGEMENT

- CORE VALUE AND CULTURE
- DIVERSITY AND INCLUSION
- TALENT RECRUITMENT



Here at BMW Brilliance, our people are the most valuable resources, and we nurture sustainable growth internally for our employees who are committed to building our vision of a better tomorrow. We have fully integrated our core values into our operations, and we have faith they will guide us to further growth at every level of our company. BMW Brilliance places a strong emphasis on working with a diverse range of people, and we have invested in creating a work environment that is welcoming and nurturing to all. In 2021, we actively expanded our outreach programmes to discover and engage more prospective talents across the country, providing channels for them to understand our company and working opportunities.

22,829

Total workforce at 2021 year-end.
↗ 10.1% vs 2020

3,692

Total new hires in 2021.
↗ 107.1% vs 2020

31.4%

Female employees in
management positions.
↗ 4.0% vs 2020

CORE VALUE AND CULTURE

“We celebrate the differences among people, as they are where diversity and innovation come from. Mutual understanding and mutual appreciation bring us closer as a family.”



David Shangguan

Senior Vice President
Human Resources

Our core values of Responsibility, Appreciation, Transparency, Trust, and Openness are firmly integrated into the way our organisation operates. This year, we continuously held corporate culture discussions and department-specific workshops in our core value space. Moreover, the linkage to leadership principles and the BMW Brilliance culture has been strengthened by several cross-divisional events with senior management.

We have upgraded the core value appreciation initiatives, which are employee awards for outstanding core value practitioners. In 2021, we launched the new concept BestYOU programme, which provides more timely and flexible recognition to exceptional employees. The new concept can support a wide range of recognition with different requirements. In 2021, nearly 6,600 associates were recognised by their partners for outstanding work, and around 1,600 individuals or teams received instant recognition from their departments.

DIVERSITY AND INCLUSION

EMBRACING DIVERSITY

BMW Brilliance firmly supports diversity and inclusivity in the workplace, and we have embedded these values into all aspects of our operations. We have actively responded to the female rights protection policies of China and Liaoning Province, and updated the Special Collective Contract for the Protection of Female Associates' Rights and Interests, which was deliberated and approved by the BMW Brilliance Associates' Congress.

DIGITAL INCLUSION

Under the impact of the digital age, our lives are inseparable from digital technology. Digital inclusion, which allows digital technology to benefit everyone, is one of the significant moves of BMW's sustainable vision. We are working on the BMW Digital Inclusion Initiative to arouse our employees' awareness of the digital gaps of disadvantaged groups and build an ecosystem that is digitally friendly to everyone.

BMW BRILLIANCE EMPLOYEE ACCORDING TO AGE GROUP

(in %)¹

Year	<30 years old	30-50 years old	>50 years old
2017	46.8	52.6	0.7
2018	43.7	55.6	0.7
2019	37.8	61.5	0.7
2020	33.2	65.9	0.8
2021	31.1	68.0	0.9

1. Due to the improved data basis, the 2021 reporting scope of employees has been expanded to BMW Brilliance and its wholly-owned subsidiary—LingYue Digital Information Technology Co., Ltd, including dispatched employees. While the scope of employees in 2020 is the permanent employees of BMW Brilliance.

FEMALE EMPLOYEES IN MANAGEMENT POSITIONS
(in %)¹



FEMALE EMPLOYEES IN TOTAL WORKFORCE
(in %)¹



FEMALE EMPLOYEES IN TOTAL NEW EMPLOYEE HIRES
(in %)¹



#Activity

The BMW Global Diversity Week

In May 2021, the BMW Global Diversity Week took place in its plants of all global locations. At BMW Brilliance, we participated by initiating a series of activities and communication, emphasising the importance of diversity and inclusion.



Lunch Roulette

An O2O (Online to Offline) event where employees can experience diversity by randomly matching with another colleague through our platform to have lunch together. It provides an opportunity for diverse background colleagues to share and learn from each other, granting participants deeper insights into diversity through spirited communication.



Online & Offline Publicity

We utilised online screensavers, pop-ups, e-posters, and videos to promote diversity and inclusivity. Our associates can view the videos in public areas throughout offices and plants, and we have updated all PC screensavers to reflect our message as well. Offline, we deployed promotional materials such as posters and stickers throughout our facilities. We used recyclable paper stickers and boxes as part of our sustainable operations.



Yummy Diversity

An on-site event to introduce iconic traditional dishes from various countries to allow our associates to experience the culinary world right here in the office. Over 800 associates in our Beijing associated offices took part in this activity.

TALENT RECRUITMENT

As a premier automaker leading the industry in innovation and digitalisation, BMW Brilliance firmly holds the belief that talent acquisition is the key to a corporation's long-term development.

To this end, we are promoting our employer brand by utilising diverse methods, including digital campaigns, increasing our presence in job fairs, as well as enlisting the assistance of our current employees as brand ambassadors. This will allow us to engage prospective talent and give them a chance to experience BMW Brilliance's culture, and to better understand our strengths as an employer.

ENGAGING YOUNG TALENT

BMW Brilliance believes that talent acquisition is an integral component of our core competency, which allows us to stay innovative and thus contribute to our digitalisation and sustainability agenda. To more effectively communicate BMW's corporate culture and facilitate an understanding between BMW Brilliance and the younger generation, we have designed the following events:



BMW Explore Journey

During the one-day "BMW Explore Journey" student activity, we invited young digital talents from a variety of schools to the Shanghai BMW Brand Experience Centre for a variety of activities, including vehicle test drives, and meanwhile joined the Shanghai Autoshow to experience more BMW products.

BMW Brilliance Open Talk

We conducted a series of BMW Brilliance Open Talk activities regarding the ongoing pandemic, attracting over 300 students from schools in China and abroad. To better prepare students for the job application, we held tutorials on resume composition, interview techniques, and conducted mock interviews all over live streams with our Human Resources Department.

2021 Hackathon @ BMW Shenyang Plants

In July 2021, we kicked off the first Hackathon at BMW's Shenyang Plants, attracting hundreds of students from over a dozen domestic and international schools. This event allowed BMW to work with young digital talents in exploring new technology and ideas for digitalising the industry.

ATTRACTING LOCAL TALENTS

We continue to work closely with competent departments of the provincial and municipal government to drive forward local talent acquisition and retention. With the consistent implementation of "Shenyang Talent Favourable Policy New Package 3.0" and other talent favourable policies, policy resources are more closely aligned with talent and corporation needs, and government-led talent assessment systems have become more robust and multifaceted.

In 2021, we secured numerous favourable subsidies and resources for entitled talents who are either newly acquired or internally developed as high-end, critical, freshly graduated, and essential production talents. More inspiringly, our senior technicians with proven skills have been, for the first time, recognised by governmental evaluation authority. With all these positive changes, we are able to better fit in and take on a more active role in realising local talent development strategy, creating more possibilities for the sustainable development of individual talent, BMW Brilliance, and local communities.

As our efforts of local talent acquisition for the newly formed LingYue Nanjing Branch Company, we recruited over 200 new employees in 2021, laying a solid foundation for their continued growth.

CANDIDATE-CENTRIC JOB EVENTS

The candidate experience is an essential part of BMW Brilliance's recruitment process. In the ongoing pandemic era that has been fraught with uncertainty,

BMW Brilliance reached out to candidates across multiple channels and provided the full experience through a blend of online and offline engagement.

BMW Brilliance in conjunction with the Shenyang government jointly hosted the job fair in April. As the premier member of the Shenyang Auto Industrial Chain Alliance, BMW Brilliance attended the event while working closely with several suppliers to offer numerous high-quality positions and stimulate growth in Shenyang's production industry. Over 2,649 potential candidates attended the event. We engaged with potential candidates over many mediums including live streaming, face-to-face interviews, auto shows, and Employer Branding Game zones, that garnered much attention and recognition from candidates and greatly enhanced their experience.

We go where promising talent is located, thus in October we organised job fairs in Shanghai, Ningbo, and Changchun, to get closer to our candidates and help them understand our company and working opportunities.

EVERYONE IS AN EMPLOYER BRANDING AMBASSADOR

Here at BMW Brilliance, we firmly believe that the best advocates for our employer brand are the people that are currently employed with us. They share what they have experienced in working with us and refer us to their friends and family. In 2021, BMW Brilliance ranked in the top 10 companies on LinkedIn and first among automotive companies. Its methodology is built on research around what it means to build a successful career, matched to exclusive LinkedIn data. As this was

#Award

EMPLOYER AWARD WON BY BMW CHINA AND BMW BRILLIANCE



LinkedIn Top Company Top 10
Top 1 in Auto Industry

LinkedIn.com



Extraordinary Employer Award
Top 50

Liepin.com



Employer Excellence China Top 100
Excellence in Corporate Social Responsibility
Graduate Employer China 2021

51job.com



China Best Employers with
Extraordinary Achievement Top 2
China Best Employers for Female Employees Top 1
2021 Best Employer Award for Campus Recruitment

Zhaopin.com



Best Employer in
Social Responsibility

Lagou.com



2021 Excellent Company
in Automotive Industry

Maimai.com



Power Global
Recruiting Employer

Lockin China



King's Ark—Best Employer for
Talent Acquisition

Zhipin.com

the first time BMW Brilliance has received this honour, a LinkedIn Top Company Award Roadshow was held to show our appreciation for our employees and celebrate together. Over 600 employees took part in the event, sharing the good news with their friends on the social media to promote the understanding of BMW Brilliance to more people. In addition, we leveraged innovative ways to promote the internal recommendation, such as sharing honours and art galleries, which has attracted over 1,000 associates to share how they feel and work in BMW Brilliance and the positions.

2022 FORECAST

With the organisational changes in the coming year, we must ensure all employees get ready on the first day of 2022 in terms of organisation and culture. More culture initiatives will be conducted to foster the core value into daily business operations. In terms of talent acquisition, we will continue to hold candidate centric events, leveraging deep and diversified hiring channels to fulfil talent needs for 2022 and onwards, and support sustainable business growth in the long term.



4.2

EMPLOYEE ENGAGEMENT

- EMPLOYEE COMMUNICATION
- SUSTAINABILITY MINDSET

**99%**Employee participation rate
in 2021 Employee Survey.**93/100**High-Performance Organisation
Index rated by employees.



EMPLOYEE COMMUNICATION

At BMW Brilliance, we consider the voices of employees as an important source that inspire us to enhance our operations and management. To this end, we have constructed comprehensive platforms and channels to collect their opinions, share our most up-to-date news and facilitate direct and convenient communication with our people.

DIVERSE COMMUNICATION CHANNELS

BMW Brilliance always keeps an open ear to employees' opinions and suggestions via a number of communication channels.

- **WeChat official account:** Here, we post employee best practices stories, festival greetings, Union activity registration notices and briefings, attracting nearly 35,000 followers. In 2021, we published 98 articles with an average click count of 3,129.
- **Internal webpage:** The site for sharing Union organisation and business information.
- **JoyChat information:** Online share space for internal notices and Union policies.
- **Union Express U-journal:** A bi-monthly newsletter launched in May 2021 for internal communication.
- **Management sessions:** Regular "catch up" sessions with BMW Brilliance management to improve associates' working conditions and also to inspire and encourage people to support the development of the company.

As in the past, we worked closely in 2021 with the BMW Brilliance Trade Union, which served as an important bridge in our employee engagement. On June 22, 2021, both the 6th BMW Brilliance Associates' Congress and the 4th BMW Brilliance Union Members' Congress were held. At these meetings, the attendees reviewed and approved the 2021 Supplementary Agreement Collective Contract, among many other proposals.

EMPLOYEE SURVEY

One major highlight this year is the completion of a comprehensive survey for employees to better engage with them and raise the overall level of satisfaction. The survey had a high participation rate of 99%, and resulted in an impressive High-performance Organisation Index of 93 out of 100. This year, we also incorporated questions related to compliance and sustainability, the results of which reveal that 95% of employees believe BMW Brilliance performs excellently in both areas.

95% of our employees believe that BMW Brilliance performs excellently in both compliance and sustainability.

SUSTAINABILITY MINDSET

In 2021, sustainability was deeply embedded in a host of employee engagement activities. Our aim was to effectively nurture a sustainability mindset and culture inside BMW Brilliance while also raising employees' awareness about sustainability issues and advocating behavioural change.



ENGAGING EMPLOYEES FOR SUSTAINABILITY BEHAVIOUR AND ACTIONS

In 2021, the BMW Trade Union Elite Team Challenge was themed with sustainable development, especially during the second Challenge, where 10 plogging activities were organised with more than 300 participants. The employee participants not only learnt about sustainable knowledge, but also integrated environmental protection awareness with actions, contributing to the sustainable development through plogging.

In addition, the concept of "circularity" was also highlighted in a flea market activity we organised. Via the online JoyChat platform, four special groups were formed and given information about second-hand goods to publish and share that would encourage all employees to practise a greener recycling lifestyle. And at an offline event on March 8, 2021, 360 participants took part in buying and selling over 300 second-hand items, all of which sold out within two hours.

We also integrated sustainable topics into different employee engagement activities. For example, on Children's Day, we arranged four garbage-sorting sessions for over 300 children of the employees. Moreover, we sponsored a five-day Sustainability Knowledge Quiz with all the questions related to carbon reduction, with 663 participants joining in. During our mountain climbing activity, we made it a point to incorporate care for the disabled, so nearly 500 participants were blindfolded in order to experience what it is like for the blind to walk in everyday life. Attendees also received marvelous gifts crafted by disabled individuals.



Planting and biodiversity event at BMW Shenyang plants.

#Activity:

Planting New Greenery and Enjoying Biodiversity BMW Shenyang Plant Biodiversity Event

Biodiversity is an important element in the sustainable development of BMW Brilliance. On May 22, 2021, International Biodiversity Day, the "Planting New Greenery and Enjoying Biodiversity" Event was launched on the My BMW App and at various locations at the Shenyang plants. During the one-week event, more than 60,000 App users and company employees learned about biodiversity while over 3,000 participants expressed an understanding and expectations about biodiversity.

2022 FORECAST

Based on the results of employee survey, we have identified a host of opportunities for further improvement. Through department discussion and workshops, a number of focus areas have been defined. The follow-up actions are also under planning and will be closely monitored in the future. At the same time, we will initiate even more activities to foster and inculcate a sustainability mindset with the aim of forming a cross-functional collaboration that engages a greater number of employees and other key stakeholders.



4.3

CARING FOR PEOPLE

- TAKING CARE OF HEALTH AND SAFETY
- BENEFITS AND WELL-BEING

The well-being of our employees fully determines the past and the future success of BMW Brilliance. That's why we do our best to safeguard the health and safety of our employees and provide them with the first-class benefit packages. We believe our efforts to create a comfortable working environment will give our employees a strong sense of belonging and motivate them to achieve their personal goals.

0.13

Accident frequency rate
(per one million hours worked)

>87%

Average COVID-19 vaccination rate
across our workplaces by end of 2021.



TAKING CARE OF HEALTH AND SAFETY

OCCUPATIONAL HEALTH AND SAFETY

At BMW Brilliance, we believe that ensuring a safe workplace for employees is a fundamental corporate responsibility. Our Occupational Health and Safety (OHS) Management System was developed based on several policies or standards, including the BMW Group H&S policy, UNGC, the ISO 45001:2018 standard, ILO's Declaration on Fundamental Principles and Rights at Work, as well as all applicable regulations in China. In 2021, we updated the OHS Management Liability Letter according to the Work Safety Law (2021 Amendment), with employees signed on.

Accident frequency rate (per one million hours worked*)

Year	
2017	0.43
2018	0.28
2019	0.17
2020	0.09
2021	0.13

* The scope only covers directly contracted employees at the production plants. It is calculated by the number of accidents with one day lost time or more, divided by the total working hours (in millions) of the year.

In 2021, BMW Brilliance maintained the ISO 45001:2018 accreditation standard from the International Organisation for Standardisation, fulfilling the requirements of OHS management systems. We have also maintained the Work Safety Standardisation Level 2 Certification from the Emergency Management Department of Liaoning Province. The effectiveness of this was proven by our 2021 accident frequency rate of just 0.13 per one million hours worked.

OHS HAZARDS AND RISK MANAGEMENT

To better manage OHS hazards and risks, BMW Brilliance has designed and posted a safety risk distribution map based on hazard identification, risk assessment and risk control planning. Safety risk bulletin boards and safety risk notification cards are posted in the workshop throughout key areas of the premises respectively.

We launched the project **Today for Tomorrow > NEXT** with the pilot in the Plant Tiexi Assembly Shop in the fourth quarter of 2020, and successfully completed in June 2021. Since then, we have proceeded with logistics at Plant Dadong. Our project focuses on ergonomic conditions, behavioural patterns as well as job rotations. In this way, we can prevent employees from musculoskeletal disorders. From results gleaned from our evalua-



An associate in our assembly workshop.

tion of the Safety and Ergonomics Risk Assessment (SERA) as well as on-site ergonomic behaviour observations of 454 workplaces at Plant Tiexi and 192 workplaces in logistics at Plant Dadong, our health department developed a series of exercises tailored for each workplace. These are designed so that associates can use their off time to do specific exercises which can relieve physical stress caused by their working postures.

In addition, several optimised working postures were also taught to operators to mitigate possible health hazards. 2,310 employees attended the training sessions to learn about ergonomic behaviour and exercises designed to ensure their well-being. Work-

ing conditions in 15 job sites were improved and we initiated job rotations in 26 workplaces.

OHS TRAINING AND COMMUNICATION

Along with a comprehensive OHS management system, we are also working on employee safety skills and awareness enhancement through OHS training. In addition to the Three-level Safety Training for new employees, we also provide safety training for employees on specific topics such as LOTO (Lock-out-Tagout), chemicals, work in confined spaces, PPE (Personal Protective Equipment), and Hot Work.

HEALTH INITIATIVES

Based on the results of the annual health check in 2020, we optimised and enhanced our Health Management 2025 programme, which serves as a template for guiding healthier behaviour. These include programmes such as Mental Care, Stop Smoking, Burn What You Eat, Hearing Protection, Healthy Sleep as well as Flu Vaccination.



Annual Health Check

As always, we provided annual health check in 2021, with 97% of employees participating in Shenyang and 80% in Beijing.



Flu Vaccination

In terms of the flu vaccination, 2,124 employees received vaccinations in Shenyang and 76 employees were vaccinated in Beijing.



Mental Care

As BMW Brilliance highly values the health and well-being of employees, mental care is also of the utmost importance. In 2021, 354 associates participated in consultations, 692 associates took part in different training programmes, 415 associates took self-evaluation surveys on depression and anxiety as well as personality tests. 229 associates listened to recordings guiding meditation, relaxation, as well as career planning and brain charging activities.

During the pandemic outbreak in Nanjing, all associates and business travellers attended online training to support them during the lockdown and improve their psychological mindset. 763 associates participated in on-site training, with an average score of 4.8 out of 5 achieved on the satisfaction survey.



Healthy Sleep

We did the Pittsburgh Sleep Quality Index (PSQI) assessment during the 2021 annual health check to identify any difficulties in developing healthy sleep patterns. Only 4% of associates who did the test had poor sleep quality. Our next step will be an analysis of the sleep via Apnoea sleeping monitor on volunteers and refer them to a sleeping specialist and/or mental care consultations as needed.



Stop Smoking Initiative

Over this past year, we have asked the 3,204 employees who have a habit of smoking if they are willing to quit smoking during the annual health check. We provided ways to help them cut back on the amount they smoke and eventually stop smoking.



Burn What You Eat

In 2021, we did an evaluation with 1,046 associates and among whom 171 associates successfully lost a targeted amount of weight through exercise and healthy diet, and were awarded by the Trade Union.



Hearing Protection

Under the hearing-protection campaign, we trained 1,055 employees, following the transfer of two employees as a result of excessive noise concerns. This number was, however, a significant improvement over the 14 transferees in 2020.



#COVID-19 Management

HEALTH MANAGEMENT AGAINST THE PANDEMIC

Faced with ongoing challenges posed by COVID-19, we established a Crisis Management Team in 2020 to enhance pandemic management and introduce prevention measures on a daily basis. The health management team shared daily updates to the management, as well as the best ways to manage risks while providing other holistic advice. We also updated our corporate guidelines - the HR Communication & Prevention Instructions (version 21.0). In 2021, our efforts to encourage COVID-19 inoculations were very successful, resulting in an 89% COVID-19 vaccination rate at the Plant Dadong, 85% at the Plant Tiexi, 88% the Plant Powertrain, 89% in Beijing and 86% in other regions. Booster vaccinations started in November 2021.

In 2021, BMW Brilliance's holistic and pioneering health management efforts were widely recognised, resulting in our winning the AON Best Employee Health Employer, Comprehensive Health Award, edging out nearly 200 top enterprises.

BENEFITS AND WELL-BEING

COMPETITIVE BENEFITS

Employee well-being is the cornerstone of BMW Brilliance's long-term sustainable development. We recognise our employees' dedicated service and contributions to the company and continue to care for their health and well-being even after retirement. For this purpose, in 2021, we offered additional specific preferential benefits to retirees. We will continue to follow all government regulation changes closely and update our retirement policy accordingly.

We also provide competitive holiday leave policies, which aims to ensure a safe and healthy work-life balance for employees, who will in turn contribute to improved business results. We will also continue to tailor our benefit packages to employees' requirements to better meet their individual needs.

Below: BMW Brilliance Beijing Trade Union event to promote employee health.



WELL-ROUNDED SUPPORT

In 2021, Associate Charity Funds supported 1,041 associates. This includes precise assistance to 281 associates with financial difficulties, gifts and benefits for 400 new-born babies and 200 newly married associates. We have also extended care to 12 associates who suffered major illnesses, shown support for 70 associates who had family members passing away, visited 71 associates in hospital, cared for 2 associates whose family property suffered a fire accident, rewarded 1 associate for righteousness and bravery and celebrated 4 associates' retirements.

To create a better life and working environment for employees, we launched the New Era Associate Home Project at Plant Dadong, which will open in June 2022. It encompasses a service centre providing Union service, reimbursement service and IT service, a mini cinema, a reading corner, as well as some activity facilities and a Platform Production. The Trade Union also organises cultural and sports events to promote a healthy lifestyle and encourage work-life balance, with over 15,000 participations. As for the public rental housing project, 650 associates successfully applied with the support of Union in 2021.

Furthermore, we are enacting and enhancing more functions of Digital Union, including "joining the Union", "welfare e-Signature", "e-Library", "group purchasing" platform, "new-born gift application" and "newly married gift application", to bring care and more convenience to our associates. The number of views for our online content has reached 114,370 times.

“

By providing all-round supports and organising diverse activities for employees, we strive to build a healthy and dynamic relationship between the company and our people.”



Wang Wenning

Chairman
BMW Brilliance Trade Union

2022 FORECAST

In 2022, we will further strengthen the OHS management of our dual-prevention mechanisms, which covers classified risk prevention and control, as well as risk assessment and mitigation. At the same time, we will strengthen our OHS management oversight of suppliers to ensure a safe workforce. To enhance our range of benefits and better ensure employee well-being, we are also reviewing our leave benefit policies to actively respond to China's national policy mandates in 2022.

4.4

EMPOWERING PEOPLE

- EMPOWERING EMPLOYEES
- EMPOWERING DEALER PARTNERS

Our employees and the partners we work with form the driving force that powers the sustainable growth of BMW Brilliance. By giving our partners and employees the tools to succeed, we win as a team. For this reason, we have designed and nurtured a sustainable training and talent development ecosystem that helps everyone associated with BMW Brilliance embrace their full potential while contributing to our operational goals.

19,524 days

Of training organised by
Human Resources Department.
↗ 26.0% vs 2020

>10,700

Talents in dealers embarked
their Enlightening Journey since
programme was launched in 2020.



EMPOWERING EMPLOYEES

BMW Brilliance makes use of the latest advances in technology to better connect, engage and equip our current and prospective talents. Our aim is to lead them towards a sustainable future within the automotive industry. To this end, we are fully embracing digitalisation for both training and as a workable daily business solution under the impact of the pandemic.

0.86

Average days of further training per employee.

↗ 14.5% vs 2020

99%

Training attendee satisfaction rate.

↗ 0.6% vs 2020

LEADERSHIP DEVELOPMENT

Leadership is the key when it comes to the implementation of values and culture. BMW Brilliance places a strong emphasis on leadership training and development. In 2021, besides systematic leadership programmes, a series of leadership development programmes and activities were developed and launched, aiming to cultivate a learning culture for leaders to learn, exchange and practise together.

GOING DIGITAL

We view our digitalisation strategy not only as an efficient channel to maximise training participation, but also as a resilient solution to the pandemic. In 2021, based on our e-learning platform and App, the number of online courses increased from 240 to 320, along with a significant rise in the number of participants.

We have also transferred some of the BMW Group's courses, formerly conducted by German trainers, into online courses. This has saved airfreight transportation costs while also contributing to carbon reduction. In order to empower BMW Brilliance employees with comprehensive knowledge and abilities in digitalisation, we launched a total of 16 online training courses and two classroom training sessions in Digitalisation @ Maintenance and Planning Area.

LEARNING BY TEACHING

In 2021, we continued to implement our internal trainer programme to help bolster the personal growth of BMW Brilliance associates through a process of "learning by teaching" and to share best practices across various



Best practice sharing session conducted by issue specialist.

business functions. We also recruited 18 new internal trainers and conducted six production technology theme training sessions. The total training hours reached an equivalent of 2,200 training man-days and received a satisfaction rating of 98%.

TRAINING FOR THE FUTURE

In 2021, we continued to provide more training with the latest cutting-edge technologies to empower employees with both critical thinking and technical skills. To support BMW's Electrification Strategy and qualify associates working in high voltage environments, especially in the battery area, we designed and delivered High Voltage Qualification Training for Batteries, and Battery Theory Basic Training in 2021. 30 participants took part and successfully completed the courses.

In addition, BMW Brilliance began implementing a virtual reality (VR) training platform in 2021, allowing associates to receive three VR training courses that simulate working conditions on the shop floor under a high voltage environment. This digital method creates a new ecosystem paradigm in training and has sparked great interest in the trainees who are now able to effectively learn important skills with greater safety.

To help prepare our associates for work at Plant Lydia and Plant Dadong Extension Projects, we continue to develop updated training courses based on New Processes, New Standards, and New Equipment. By the end of 2021, we successfully completed over 2,700 man-days of training. In addition, we also designed a new process to better meet line builder training requirements while continuing to support line construction at Plant Lydia and Plant Dadong Extension Projects.

NURTURING FUTURE TALENT

BMW Brilliance attaches great importance to developing talents for the future of the automotive industry. To this end, we developed the Future Talent Programme (FTP), dedicated to training technical proficiency and developing soft skills for young talents. FTP aims to attract tomorrow's most suitable talent for the company as a sustainable talent pipeline. In 2021, 11 patents were applied for under the name of BMW Brilliance. Ph.D. trainees are becoming the new rising force behind cutting-edge technology development at BMW Brilliance.

Adapted from the dual education system in Germany and modified to suit the Chinese context, our New Vocational Education Programme (NVEP) 2021 nurtured 71 apprentices to support production operations. The

first group of 25 apprentices focusing on Electronics for Automation Technology started on-the-job training and received positive feedback from the shop floors. We continued to utilise our E-learning platform as well as the Teams' interactive platforms to enhance learning effectiveness. We also piloted a strength orientation workshop to encourage and inspire apprentices to achieve personnel development based on their own unique strengths. Our programme for bachelor's degree students was updated to cope with new internal and external circumstances, allowing us to recruit and develop more bachelor's degree students to serve as future section leaders in technology. Meanwhile, 35 master's degree students joined BMW Brilliance after 3-6 months' on-the-job training during the programme period.

#Collaboration

Cooperation with State Grid Liaoning Electric Power and Northeastern University

On November 16, 2021, BMW Brilliance launched a joint laboratory project in partnership with State Grid Liaoning Electric Power, Ltd. (SGLEP) and Northeastern University (NEU). This marks a new chapter in technology and knowledge transfer as part of a key initiative in line with the University Cooperation Programme.

Under this mutually beneficial school-enterprise cooperative venture, BMW Brilliance seeks to expand university collaboration in the area of technology and knowledge transfer. As the new form of technology and knowledge transfer, this joint innovation lab is positioned to improve integrated innovation capabilities through data sharing, joint experiments, subject research, provincial and ministerial projects, and achievement announcements. Ultimately it will become the carrier of substantive Industry-University-Research Alliance, which will enhance the core competitiveness of the industry through deep-level integrated innovation and swift achievement transformation and application.



The new BMW Brilliance Shenyang Training Centre.

CONTRIBUTING TO LOCAL TRAINING

With policy changes and a host of updates in mind, BMW Brilliance made contributions towards developing local talent. We partnered with universities and vocational schools to provide up-to-date training courses and models, and to ensure students in the programme meet educational targets. In addition, we provided campus students with opportunities to learn and acquire hands-on experience, including the Campus Ambassador Event, summer camps, and on-the-job internships. All of these helped propel students' professional growth as well as enhanced job competition abilities.

BMW BRILLIANCE SHENYANG TRAINING CENTRE

By May 2021, the BMW Brilliance Shenyang Training Centre had completed all interior decoration upgrading work. Afterwards, the Centre began normal operations, welcoming guests in seven different occasions from various governmental departments, including the State Council, Ministry of Education, Ministry of Finance, Liaoning Provincial Department of Finance and Department of Education, as well as members of the media from

Xinhua News Agency and others. This is a reflection of the high regard the government and society in general have for the BMW Brilliance Shenyang Training Centre.

#Initiative

Launch of the BMW Brilliance Technology & Manufacturing (BBT) Management Development Programme (MDP)

The BBT Management Development Programme (MDP) is a BMW Brilliance programme in collaboration with the School of Economics and Management at the Dalian University of Technology. The primary aim of this venture is to equip young BBT technical leaders with the knowledge and mindset that will prepare them for challenges over the next five to ten years in the fields of future supply chain and smart manufacturing management. On July 9, 2021, the first cohort of BBT MDPs officially started classes. To further strengthen our cooperative efforts and provide support for BBT MDPs, the School of Management as well as the management of the Dalian University of Technology appointed Dr. Franz Decker, CEO of BMW Brilliance, and Mr. David Shangguan, senior vice president of Human Resources of BMW Brilliance, as the visiting professors.



EMPOWERING DEALER PARTNERS

“Dealers are important partners of BMW Brilliance where our sustainable concepts and policies are put into their daily practices.”

For BMW China Training Academy, our mission is to cultivate and empower high-quality dealer talent, to realise business strategic goals, to ensure sustainable development, and to enhance brand loyalty and elite employee retention.”

**Laura Wang**

Vice President
BMW China Training Academy



A COMPREHENSIVE RETAIL TALENT DEVELOPMENT MECHANISM TO ENHANCE BUSINESS TRANSFORMATION AND SUSTAINABLE DEVELOPMENT

To realise sustainable growth of BMW Brilliance and dealer partners, BMW China Training Academy has developed a comprehensive and sustainable retail talent development mechanism, which includes BMW Education of Sales and Service Talent (BEST) Programme, New Staff Enlightening Journey Programme, professional training and certification system, and BMW Dealer Elite Development & Retention Programme. The BEST Programme provides students with BMW standard training and certification, while the New Staff Enlightening Journey Programme empowers new employees with competencies and shapes premium brand behaviour. The comprehensive training and certification system effectively promotes professional competence of dealers. BMW Dealer Elite Development & Retention Programme motivates dealer partners, grants official professional qualification, provides promotion and development opportunities, thus enhances the retention of elite talents. All of these will power our sustainable business transformation.

In addition, the annual National Elite Competition promotes continuous learning, and enhances the selection and motivation of elite talents. The 2021 Aftersales National Competition focused on the needs of new energy business, strengthened application ability of core professional knowledge and skills to enhance the NEV aftersales customer experience. The selection of professional talents of aftersales functions in the competition provided dealers with opportunities to realise their personal value. It also set a service benchmark for the industry, leveraging the power of exemplar to motivate more dealer partners.

ADVANCING WITH TIME, ACCELERATING TRANSFORMATION AND DEVELOPMENT OF DEALER MANAGERS

To cope with the complex and dynamic market environment, it is crucial to cultivate comprehensive and innovative dealer managers to drive business transformation. For this reason, we cooperated with Peking University in the development of a new programme called the BMW Business School. It offers dealer partners two separate programmes, “BMW Entrepreneur” EMBA Programme and “BMW Elite Managers” MBA Programme.

The courses are designed for investors, brand directors and elite managers, and are delivered by top national think tanks, industry pioneers and veteran scholars. Combined with the development trend of automotive industry and BMW China's strategy, the curriculum selects classic EMBA and MBA courses of Beijing International MBA at Peking University. This programme effectively enhances dealer managers' core operational management capabilities, strategic leadership and innovation capabilities to promote their long-term growth.

TALENT DEVELOPMENT MECHANISM AT BMW DEALERSHIPS



BEST Programme

Combined with students' on-campus learning

- BMW standard training and certification
- Internship at dealers



New Staff Enlightening Journey Programme

3 - 6 Months

- Improve new employees' competencies and help integrate into dealerships
- Shape premium brand behaviour



“Junior Staff” Level 1 Certification

12 - 15 Months

- Improve employees' professionalism and grant certification



“Senior Talent” Level 2 Certification

24 / 36 / 48 Months

- Offer career development & promotion opportunities
- Improve retention of elite talents



“Elite Talent” Level 3 Certification

36 / 48 Months

- Award brand qualification
- Improve retention of elite talents



Left: Sean Green, Senior Vice President of Sales & Marketing, is wearing the school badge for the students at BMW Business School.
Right: BMW Business School group photo at the opening ceremony.



DRIVING THE CULTURE TRANFORMATION OF CUSTOMER-CENTRIC BMW PREMIUM CUSTOMER EXPERIENCE

To help dealers achieve sustainable development, we promote the "customer-centric" culture transformation of dealer partners and help them establish the premium team to realise premium customer experience. We encourage dealers for positive changes through Premium Customer Experience Ambassador Selection and the promotion of Premium Customer Experience Officer. Leading as an example, the managements demonstrate premium customer service, and make every effort to build a premium customer service team. Meanwhile, front-line staff accomplish their daily work with excellent skills and listen to the voices from customers with a sincere attitude. They implement the 10 Promises, so that the BMW brand can be truly rooted into the hearts of customers.

After 3 consecutive years of Premium Customer Experience Ambassador Selection, we awarded a total of 90 dealer partners with the title of "Premium Customer Experience Ambassador". Among them, 30 ambassadors across the country were awarded in 2021. They actively adhered to the premium customer experience philosophy and witnessed the culture transformation of the dealers, making contributions to sustainable development.



Above: The use of Mixed Reality in BMW iX's product launch training.

Left: A technician experiencing interactive VR training course.



Right: Diverse modules and content in the E-training platform.



EXPLORING DIGITALISATION AND EMPOWERING FUTURE RETAIL TALENT

BMW Brilliance continues to explore digital platforms as a resilient and more efficient way to provide dealers with high-quality online training resources. Digitalisation also contributes to carbon emissions reduction by avoiding physical training materials as well as dealers' commute.

With the talent empowerment by digital tools, we can provide learners an immersive experience while improving the quality and efficiency of training. To date, we have developed 20 VR courses, covering aftersales topics such as HVB disassemble and repair, body repair, warehouse management, and NEV safety production. AI technology was also applied in 2021 Aftersales National Competition, with four aftersales topics published, including spark plugs, brake pads, air-conditioner filter, and engine oil. Moreover, we are actively exploring the use of Mixed Reality in preparatory training for the BMW iX's product launch and will further attempt to exploit this new technology in real sales scenarios.

Through "Live Streaming", "Thematic Space", "Joy Sharing" and other learning and interactive modules in the E-learning system of BMW Joylearning, we strive to create an open, efficient and agile co-creation and sharing platform for dealer partners, attracting them to achieve continuous learning and participate in interactive activities and sharing. With learning materials now being published in a variety of formats through such a highly integrated training system, E-training has emerged as an important way to expand learning coverage while also boosting learning efficiency and convenience. The number of training man-days under the E-learning format has reached 916,351, an increase of 18.3% compared to 2020. The number of average daily active users has reached 12,399, growing 21.9% from the previous year.

916,351

Number of training man-days
under the E-learning format.

↗ 18.3% vs 2020

12,399

Number of daily active users
of BMW Joylearning App.

↗ 21.9% vs 2020

2022 FORECAST

In 2022, BMW Brilliance will continue to deepen the talent development with digitalisation, and improve the quality of talents through diversified empowerment approaches to better contribute to the business development.

In terms of empowering employees, our goal is to integrate and combine a myriad of external online training resources with our internal offline training courses. Our ultimate aim is to develop a sustainable and highly effective blended training course while enhancing our overall online training efficiency. We will also closely cooperate with the BMW Group Academy to localise a greater number of Digitalisation @ Maintenance and Planning Area courses in order to further enrich BMW Brilliance's resource training pool while enhancing our employees' competency, which contributes significantly to greater business growth.

For dealer partners, we will continue to create efficient and high-quality learning methods through digital innovation, provide flexible empowerment solutions, and improve the learning experience for dealer partners. Meanwhile, we will deepen our cooperation with vocational colleges to create more professional sales, aftersales technical and non-technical talents for the future retail market. We will also promote continuous learning and growth to meet business changes and accelerate the sustainable development of our business.

4.5

CORPORATE SOCIAL RESPONSIBILITY

- BMW CSR PROGRAMMES
- LOCAL COMMUNITY ENGAGEMENT

In 2021, China made huge strides in combating social and economic issues. With the success of eradicating extreme poverty from all corners of the country, the wide-sweeping efforts to tackle climate change and protect biodiversity, the needs of the society as a whole are shifting, and so is our focus on social responsibility. BMW Brilliance is committed to growing together with China and providing ceaseless support to the long-term development of the Chinese people and environment.

11,459,458Total beneficiaries of
BMW CSR activities.**1,914** hoursof staff volunteers service for
BMW Corporate Volunteer
Association activities.

↗ 107.4% vs 2020



BMW BEAUTIFUL HOMELAND INITIATIVE

New BMW China CSR programme committed to biodiversity conservation.

BMW CSR PROGRAMMES

“
A truly responsible and sustainable business must have a higher purpose than simply achieving profit and offering employment – it must work to improve the world.”



Dr. Franz Decker

President and CEO
BMW Brilliance

As our society is still impacted by the pandemic, we recognised that corporate social responsibility is more important than ever. We need to reconsider how to maintain a harmonious coexistence between human, planet and society.

BMW sees “contributing to a better Chinese society” as its mission and has engaged a wide range of stakeholders through its CSR programmes to resolve real social problems and make long-term contributions to building a better society. We are a premier company and leading the Chinese automotive industry by action, responsibility and partnership to set social agendas, and invent new paradigms to tackle challenges through CSR programmes, thereby maximising our positive impact on the society.

AN ALL-NEW, ALL-ROUND CSR APPROACH

At BMW Brilliance, we are constantly rethinking the way we interact with society. Our latest endeavour is to apply the concept of social innovation in the upgrades to all of our CSR programmes. Upon a thorough analysis of the societal issues we currently face, we are integrating a wider array of elements that refine the way we approach different challenges, and maximise our positive social footprint through these programmes.

In 2021, we included “environmental protection” to the current CSR pillars of—“culture protection” and “social development” in response to the global challenges of climate change and biodiversity. Concurrently, we are working towards the ecological

civilisation goals that the Chinese government has set. In the new pillar, we are extending our care not only to the society, but also to the biodiversity and ecosystem of our homeland in China.

We are continuously stimulating stakeholder engagement and deepening collaborations with society, which includes a range of organisations from NGOs, academia, and local communities to corporations, and across the value chain with our

dealers, customers, and employees. In 2021, for the first time, BMW called for an extensive dealer-level engagement in CSR activities with BMW, to inspire and encourage all BMW authorised dealers to pursue excellence not only in commercial operations, but also in becoming an outstanding corporate citizen that undertakes CSR actions for the development of the community. In 2021, a total of 357 dealers nationwide implemented 631 CSR activities in dealership.

BMW CSR FOCUS AND FLAGSHIP PROGRAMMES

1.

Continue to boost drivers' awareness of traffic safety to oneself, others, and to the society to improve Chinese children's traffic safety awareness and skills.

BMW CHILDREN'S TRAFFIC SAFETY EDUCATION

2.

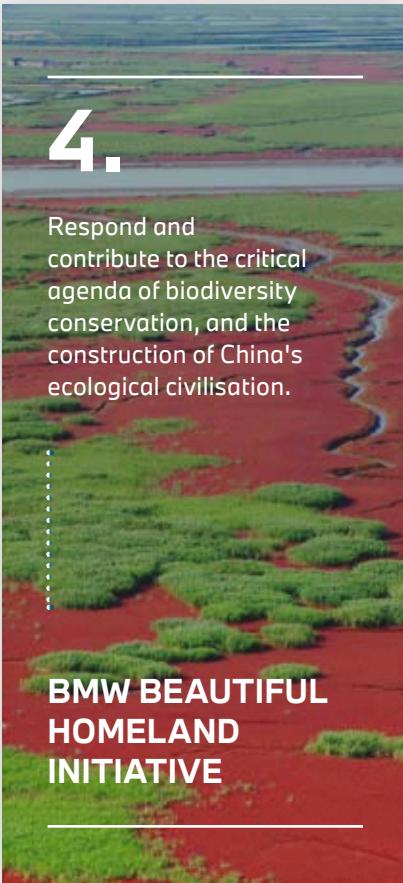
Conserve Chinese traditional culture and develop Chinese intangible cultural heritage.

BMW CHINA CULTURE JOURNEY

3.

Focus on and subsidise specific disadvantaged groups in the society, such as migrant children and left-behind children in China's underdeveloped areas.

BMW JOY HOME



4.

Respond and contribute to the critical agenda of biodiversity conservation, and the construction of China's ecological civilisation.

BMW BEAUTIFUL HOMELAND INITIATIVE



Habitat of Red-crowned Crane at the Liaohekou Nature Reserve, the largest Reedswamp in Asia and "red beach" in the world.
(Photo provided by Liaoning Panjin city wetland protection authority)

BMW BEAUTIFUL HOMELAND INITIATIVE

Following COP15 to the UN Convention on Biological Diversity and the Chinese government's focus on biodiversity, BMW Brilliance assumed a leading role in launching the "BMW Beautiful Homeland Initiative". A programme which is committed to biodiversity conservation and national parks construction in China, while also contributing to China's ecological civilisation construction. With this new pillar added to our CSR strategy, we are proud to be the first premium OEM to respond and contribute to the critical agenda of biodiversity conservation.

In 2021, BMW China, BMW Brilliance joined hands with China Green Foundation and China Education Development Foundation-BMW Warm Heart Fund to officially launch the "BMW Beautiful Homeland Initiative". The first phase of which is to establish a biodiversity conservation public education base in the Liaoning Liaohekou National Nature Reserve. BMW will donate monitoring, inspection, and bird rescue equipment to the reserve to protect and restore important habitats there, and directly contribute to local biodiversity conservation. Moreover, BMW will leverage its core competencies to launch a series of online and offline publicity and education activities, to engage dealers, car owners, suppliers, media, government, and the public in biodiversity conservation and to further raise their awareness.

We will not get tired to become more and more sustainable because we at BMW do understand that a responsible corporation needs to support nature.

BMW CHILDREN'S TRAFFIC SAFETY EDUCATION



The Children's Traffic Safety Education (CTSE) is BMW's first CSR programme in China that lasts for 17 years. In 2021, this programme was given the theme "**Propriety**", which has been integrated into current traffic safety education. It is "transforming traditional culture for innovative development" in a ground-breaking way.

TRAVEL WITH PROPRIETY TRAVEL SAFELY WITH CHILDREN

This year's CTSE was a proactive response to the call of the Traffic Management Bureau of the Ministry of Public Security to improve traffic safety awareness and education. Under the topic of "Travel with Propriety, Travel Safely with Children", 2021 BMW Children's Traffic Safety Education integrated "propriety culture", the traditional Chinese culture , and the "civilised awareness" to traffic safety. Additionally, the BMW Children's Traffic Safety Education will include the concepts of "Safety", "Propriety", "Regulations" and "Legal" to bring a different traffic safety course to both adults and children.

BMW Brilliance has also explored innovative ways to visualise knowledge for more effective communication. In 2021, we worked in tandem with China Children's Press and Publication Group to launch the "Travel with Propriety" traffic safety propriety package with the core content of "the propriety of walking", "the propriety of riding in a car" and "the propriety of driving" based on the specific scenes. The content was also reinvented into cartoon videos called "AnAn tell you the traffic propriety".

ENABLING MORE WITH TRAFFIC SAFETY EDUCATION TOOLBOXES

By the end of 2021, BMW donated 1,230 traffic safety education toolboxes and traffic safety propriety packages to the schools and organisations to provide resource support of traffic safety to schools for quality education, including yellow magic box 80 sets, green box 500 sets and propriety box 650 sets.



CTSE VOLUNTEERING TRAINING

In terms of CTSE routine volunteering training, we established 45 dealer training bases by 2021. By the end of this year, there were 22 CTSE ambassador training and 751 people trained as ambassador volunteers, and 74 CTSE experience courses conducted in schools and communities, benefiting 35,144 people.

751
individuals

Trained as CTSE ambassador volunteers through 22 CTSE ambassador training in 2021.

35,144
people

Benefited from 74 CTSE experience training courses in 2021.

BMW CHINA CULTURE JOURNEY

2021 marks the 15th anniversary of the BMW China Culture Journey, which has been dedicated to protecting China's intangible cultural heritages as part of our "In China, for China" commitment to the Chinese society.

In retrospect to the 15 years' of programme contribution, we have reorganised visits to 410 intangible cultural heritage across 24 provinces and municipalities, donated over 25 million RMB to 90 intangible cultural heritage items and research projects, and funded and enabled over 500 intangible culture heritage inheritors. The programme has reached and engaged nearly 15 million people.

BMW China Culture Journey has created a sustainable and reproducible model for "integrating intangible cultural heritage into modern life" and "promoting the creative transformation and innovative development of traditional Chinese culture".

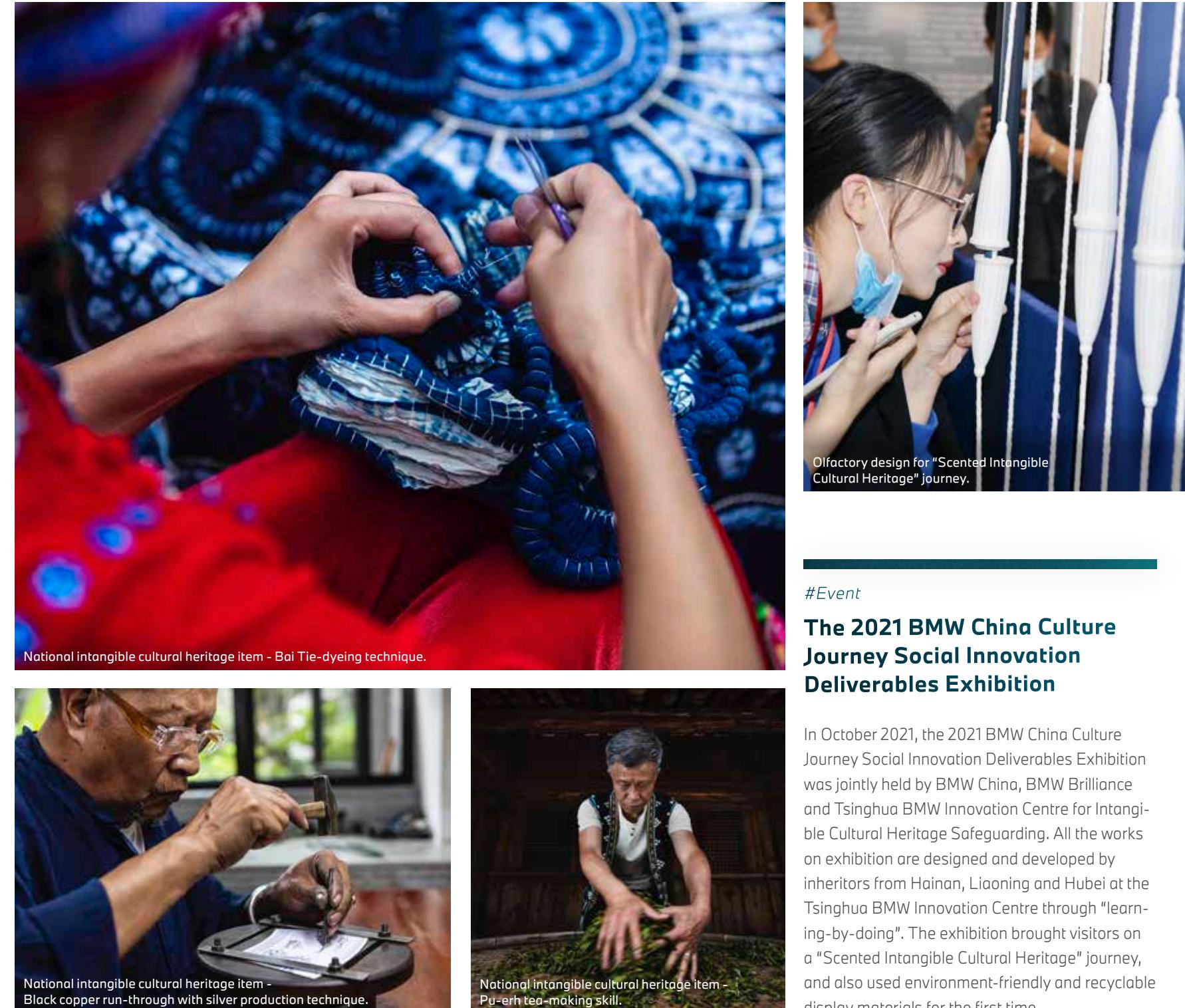
YUNNAN: A SPIRITUAL HOMELAND OF HARMONY AND DIVERSITY

Guided by the theme of "Exploring Yunnan's History and Legacy, A Spiritual Homeland of Harmony and Diversity", the tour led scholars, media and other guests to explore nearly 20 tangible and intangible cultural heritage in Yunnan. The programme live-streamed six themed cultural workshops, attracting nearly 5.5 million viewers. We selected 5 intangible cultural heritage inheritors to study with professors from Tsinghua University's Academy of Arts and Design. The inheritors designed and developed marketable creative

products. By collaborating with a travel website Mafengwo, we launched the "BMW China Culture Journey Intangible Cultural Heritage Tour Guide of Yunnan" to promote Yunnan's culture and tourism industry with further upgrading and innovation.

Meanwhile, five representative intangible cultural heritage (ICH) items selected from the 2021 BMW China Culture Journey of Yunnan have been successfully admitted to the Tsinghua BMW Innovation Centre for further study. These ICH items consist of black copper run-through with silver production, Heqing silverware, Jianshui purple pottery, Bai tie-dyeing and Yi embroidery. A project team composed of Tsinghua University expert tutors and ICH inheritors is established, focusing on improving the artistic aesthetics and cultivation, and jointly exploring the innovative approach to inherit, safeguard, and develop ICH, and work together to create ICH merchandise.

BMW China Culture Journey has been widely recognised by governments, the media, partners and the public: the project has twice been featured as a case study in textbooks, such as Zhejiang Province's 13th FYP higher education Public Relations textbook and "Public Relations in Daily Life" published by Zhejiang University.



BMW JOY HOME

2021 marks the 10th anniversary of the BMW JOY Home programme. As the earliest BMW CSR programme to extensively engage BMW dealers and customers, the BMW JOY Home programme has seen 95 BMW JOY Home schools established in 29 provinces and autonomous regions across China.

BMW JOY Home in 10 years

>400

Activities hosted.

>130,000

Left-behind and migrant children benefited.

>10,000

BMW associates, dealers and customers participated in volunteer activities.

"SELF-STRENGTHENING MOVEMENT"

With China's success in poverty alleviation, social issues such as rural left-behind children and urban migrant children have been markedly resolved. The new focuses are shifting to rural revitalisation and beautiful countryside construction. Meanwhile, in response to the Opinions on Comprehensively Strengthening and Improving School Physical Education in the New Era released by the Ministry of Education, BMW JOY Home launched the future-oriented "Self-Strengthening Movement".

From 2021 to 2023, BMW JOY Home will support 52 schools in China's last 52 counties that achieved poverty alleviation in 2020, and forge them into 52 model sports schools. We will achieve this by providing professional training for physical education

teachers, which will benefit more than 100,000 students. Concurrently we are exploring a sports model that is suitable for rural schools to promote the rural education revitalisation.

In 2021, BMW JOY Home supported 16 BMW JOY Home schools in Yunnan and Sichuan provinces and organised training for physical education teachers in these newly included schools. Through its social influence and an innovative enabling approach, the programme continuously engages stakeholders, and is caring for members of society. We partnered with NGOs to help advance BMW JOY Home as a constantly growing sustainable enabling platform.



Left and Above:
2021 BMW JOY Home organised training for physical education teachers in Sichuan and Yunnan provinces.

EMPLOYEE VOLUNTEERING AND PHILANTHROPIC ACTIONS

At BMW Brilliance, we firmly hold the belief that giving back to society and contributing to sustainable communities is not an option but an obligation. Our commitment to corporate social responsibility is manifested not only in our social donations for emergency relief, but also in the volunteering actions of BMW associates.

VOLUNTEER ACTIVITIES

As an integral part of BMW's corporate social responsibility, our corporate volunteer activities bring associates on a volunteering journey that helps improve children's traffic safety awareness, shows supports to left-behind and migrant children with special attention to their physical and mental health, and advocates environmental protection actions.

To foster eco-conscious habits for children, BMW Corporate Volunteer Association organised environmental protection classes for young students of BMW JOY Home, which helped them imbibe the belief that "there is no such thing as waste, only resources in wrong places". In addition to indoor classes, volunteers also took the children on outings for sports games to inspire them with the joy and excitement brought by sports.

This year, environmental protection became a highlight of the BMW corporate volunteer activities. BMW Corporate Volunteer Association organised three plogging activities, which attracted a total of 114 associate volunteers to pick up trash while jogging. Through volunteering, we contributed to environmental protection and sustainable development of the city.

In 2021, a total of 7 volunteer activities were organised, with a total of 300 participants, and 1,914 hours of volunteer service. In September, the BMW Corporate Volunteer Management Platform, which managed BMW corporate volunteer activities and volunteers' service

data, officially came online. This will further optimise our volunteer management and match our resources to social needs.

SOCIAL DONATIONS

In order to provide emergency assistance to those affected by natural disasters in Henan in 2021, BMW quickly activated the social emergency disaster relief mechanism, and donated RMB 10 million of disaster relief funds through the China Education Development Foundation-BMW Warm Heart Fund. In addition, a charity donation platform was set up for BMW employees, dealers, car owners and the general public to support the post-disaster reconstruction of Henan rural schools. BMW matched donations at a ratio of 1:1, capped at RMB 1 million. A total of more than RMB 1.396 million was gathered from BMW stakeholders and the public, making full use of the BMW Warm Heart Fund platform to drive the extensive participation of stakeholders.



Above: Volunteers in 2021 BMW corporate volunteer plogging activities picked up trash while jogging in the countryside of Beijing and Shenyang.

#Award OUR CSR AWARDS AND HONOURS



#Award

Annual Public Welfare Award

The 7th JinXuan Awards

BMW China and BMW Brilliance

2021 Responsible Corporate

China Newsweek, 17th Corporate Social Responsibility Forum

BMW China and BMW Brilliance

"Silver Award" in Social Innovation

The 8th SuQin Awards Ceremony

BMW Children's Traffic Safety Education

CSR Gold Award

2021 Golden Flag Award

BMW Children's Traffic Safety Education

CSR Gold Award

2021 Golden Flag Award

BMW China Culture Journey

China Automotive CSR Golden Key Award

Auto-First

BMW Beautiful Homeland Initiative

China Automotive CSR Golden Key Award

Auto-First

BMW China Culture Journey

"Charity of the Year" Award

2021 Trends Home Annual Awards

BMW China Culture Journey

2021 Automobile Marketing Innovation Case

36Kr

BMW China Culture Journey

"2020-2021 Sustainable Development of China's Automobile Industry" Report

BMW China and BMW Brilliance, Honourable mentions

LOCAL COMMUNITY ENGAGEMENT



#Event:

2021 BMW Brilliance Art Season

On November 20, the 2021 BMW Brilliance Art Season Kick-off Ceremony took place at Shenyang Kerry Parkside, jointly organised by BMW Brilliance and the Shenyang Municipal Bureau of Culture, Tourism, Radio and Television. The BMW Brilliance art season introduced the new theme of "circular" with the aim of promoting the concept of sustainable development and a circular economy. This was also the first time that the BMW Brilliance Art Season has gone outside the production plant to explore the aesthetic inspiration between industrial culture and art space.

BMW Brilliance has always valued our close ties with stakeholders and communities. In Shenyang, home of BMW in China, a host of events and activities have taken place to contribute to local cultural, environmental, and intellectual development.

MAKING SHENYANG A CHARMING CITY

Since 2020, we have developed and delivered the Enjoy Shenyang Newsletter to encourage more associates to get to know and love the city. This quarterly newsletter shares expat life circles and uncovers expat experiences in Shenyang. These include lighthouse and themed events, arts and culture, leisure activities, education, and health which facilitate update-to-date information sharing within the community.

Another development that helped further promote Sino-German cultural and educational exchange was the collaboration between BMW Brilliance and the HuZ-German School Shenyang, which has been officially recognised by the German Foreign Ministry as a German School Abroad. Through this cooperative effort, BMW Brilliance will continue to support Shenyang's reputation as a diversified international city.

ENHANCING COMMUNICATION WITH LOCAL STAKEHOLDERS

As a responsible corporate citizen, BMW Brilliance has always been committed to closely linking its brand and corporate culture to the local society, actively promoting the advancement of local culture and arts to create shared values. For example, we have maintained a cooperative relationship with the Lu Xun Academy of Fine Arts (LAFA) for 10 years. In June 2021, the New Plant Art Project at Plant Lydia and Plant Dadong Extension Projects was unveiled. As a result, 13 talented students were selected and took art tutorials to experience BMW Brilliance's brand culture and will provide art designs and creations that integrate both art and local culture into BMW's brand, production processes and employees' working environment.

We also actively share our sustainability progress and achievements with our local partners. On December 1, 2021, the "Sustainability@BMW Shenyang Plants" event was held at BMW Brilliance Plant Dadong. This event also marked the official start of the Dadong Plant Solar PV system - a renewable energy booster for BMW Brilliance. On hand at this event were Shan Yi, Vice Mayor of Shenyang, Li Gang, Party secretary of Dadong CPC, media personnel, and our suppliers who have always been staunch supporters of BMW Brilliance's sustainability efforts. They were all present to witness our fruitful progress and our plan to empower the future of sustainable development.

2022 FORECAST

In the coming year, we will continue to promote CSR programmes under the new CSR strategy, and we look to build on our work in 2022 in the following ways:

Through promoting the Network Transformation project of BMW's dealers, all the dealerships will be outfitted with a dedicated area for children imbedded with CTSE content. In 2022, traffic safety education and traffic safety property packages will enter local communities with a series of activities.

The China Culture Journey programme will bring forth transformations to explore more possibilities beyond traditional handicrafts, and more social deliverables that feature sustainable design are expected to be released.

Concurrently, more stakeholders and resources will be integrated into the JOY Home platform. We are striving to develop more innovative ways to engage stakeholders in the "BMW Beautiful Homeland Initiative" programme.

In 2022, we will continue to contribute to society through donations and volunteering services. Meanwhile, we are looking to expand our BMW Brilliance Art Season to boost local cultural cooperation, innovation, and development.

CHAPTER 5

OTHER INFORMATION

-
- 5.1 About this Report
 - 5.2 Further GRI Information
 - 5.3 GRI Content Index
 - 5.4 Limited Assurance Report
 - 5.5 Basis of Reporting

ABOUT THIS REPORT 5.1

REPORTING PERIOD

The BMW Brilliance 2021 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 communication requirements of the United Nations Global Compact.

This is BMW Brilliance's ninth Sustainability Report, covering the calendar year from January 1, 2021 to December 31, 2021. The last BMW Brilliance Sustainability Report, covering our 2020 performance and activities, was released in June 2021. The next Sustainability Report will be published in mid-2023. BMW Brilliance reports sustainability progress 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, our Finished Vehicle Dispatch Centres and Export Warehouse, Spare Parts Distribution Centres, Consolidation Centre, Research and Development Centres, Training Centres, Brand Experience Centres, as well as our branch offices and five sales regional offices across China.

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. The targets set within the Report build on the indicators presented in previous years. In addition, BMW Brilliance expanded the scope of Greenhouse Gas Emissions during the reporting period to more comprehensively reflect the emissions of the logistics transportation. 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.

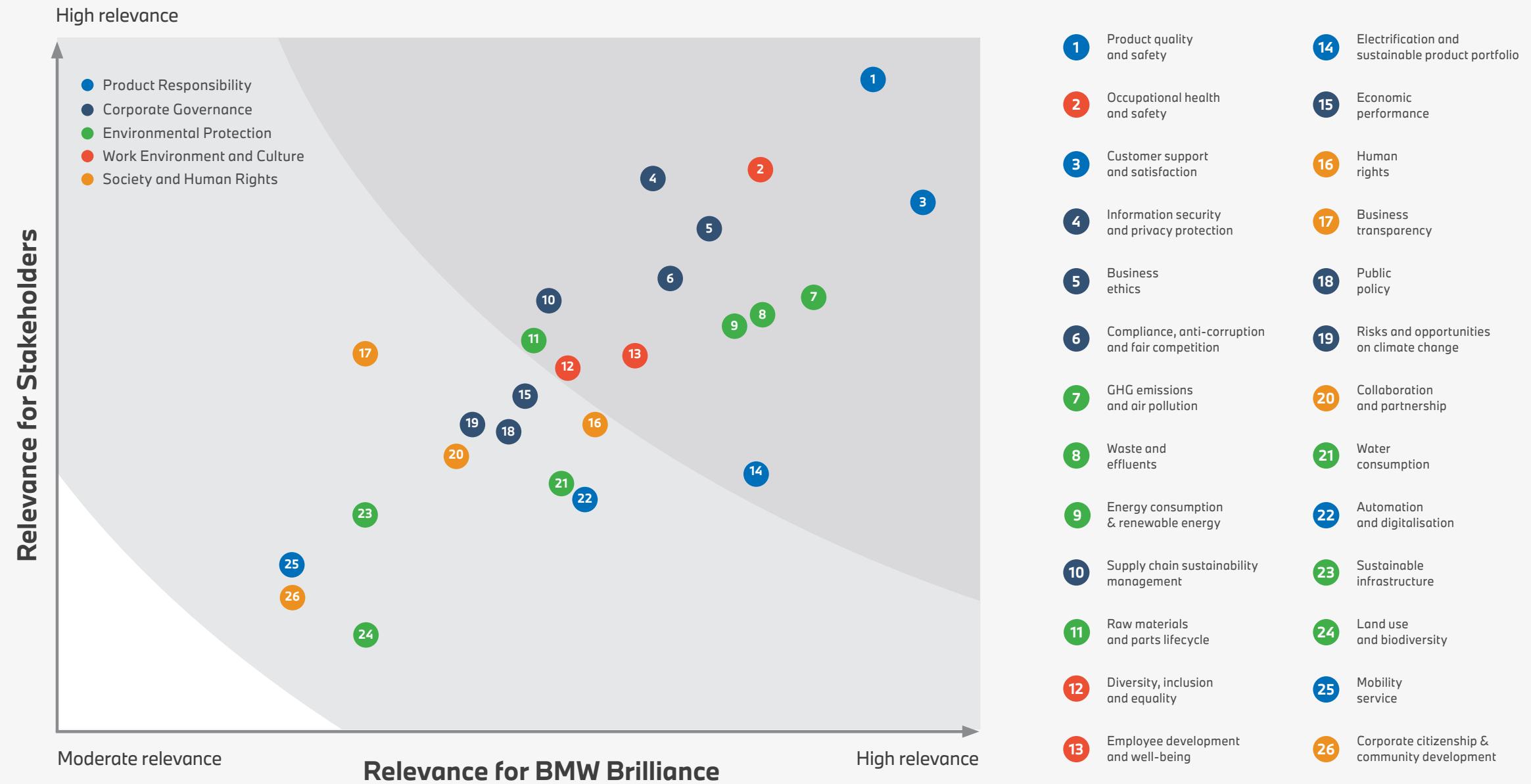
THIRD-PARTY ASSURANCE

PricewaterhouseCoopers Zhong Tian LLP has provided limited assurance on selected key data in this Report.

FURTHER GRI INFORMATION 5.2

MATERIALITY MATRIX

In 2020, we conducted a refreshed materiality assessment to determine up-to-date sustainability priority issues that matter the most to our business and stakeholders, and shape our strategic directions for the crucial years to come.



IDENTIFIED MATERIAL TOPICS AND THEIR BOUNDARIES

As a leader in the automotive industry, we carefully evaluate the impact of the material issues on our supply chain, production, sales and utilisation, recycling and disposal and on our employees and society. We act in joint efforts with our partners across the whole value chain to tackle these issues and expand our positive impact on our stakeholders.

IDENTIFIED MATERIAL TOPICS	Supply chain	Production	Sales and utilisation, recycling and disposal	Employee and society
Product quality and safety	+	+	++	+
Occupational health and safety	+	+	+	++
Customer support and satisfaction			++	
Information security and privacy protection	+	++	++	+
Business ethics	++		+	++
Compliance, anti-corruption and fair competition	+	+	+	++
Greenhouse gas emissions and air pollution	++	++	++	+
Waste and effluents	+	++		
Energy consumption and renewable energy	+	++	+	
Supply chain sustainability management	++			+
Raw materials and parts lifecycle	++	+	++	
Diversity, inclusion and equality	+			++
Employee development and well-being			+	++
Electrification and sustainable product portfolio	+	++	++	

++ High impact + Moderate impact

COMPLIANCE GOVERNANCE

COMPLIANCE MANAGEMENT AND GOVERNANCE STRUCTURE

As an integral part of an effective compliance management system, the robust organisational framework BMW Brilliance has ensured that a proper compliance accountability structure is put in place. The Board of Directors (BoD) of BMW Brilliance assumes the ultimate responsibility for administering the compliance management system at the shareholder level. The Audit and Compliance Committee (AC) under the BoD sets compliance objectives, allocates resources and monitors practices to ensure complete compliance with all regulatory and ethical requirements.

Authorised by the BoD, BMW Brilliance's Board of Management and Corporate Governance & Compliance Committee, serving as its sub-committee, takes the primary oversight role. To cope with today's ever changing regulatory environment and business needs, the committee continues to expand its scope of responsibility to include a greater focus on anti-money laundering measures, export controls, product monitoring, and internal control systems of retail, starting from 2021.

A dedicated department of "Corporate Governance and Compliance" was established to manage overall compliance programmes. Its department head then reports directly to the

Chief Executive Officer of the company. Moreover, the broader compliance steering departments also collaborate to enable business departments to implement compliance programmes in their daily operations, and to help mitigate compliance risks more effectively.

As the Compliance Responsible of each department, the department heads have the duty to make sure they and their teams act in full compliance. Moreover, the role of Compliance Interface, which serves as a bridge between business operations and the central compliance function, was created and nominated by all departments. Customised education and communication channels are provided across the broader compliance network, and consultant services are always available to support their daily operations.

COMPLIANCE TRAINING

In 2021, 22 one-on-one sessions were arranged with the newly onboard Compliance Responsible and Compliance Interface. Two workshops were held to reinforce compliance requirements while facilitating the discussion over a host of challenges and hot topics, and the best practices were shared among the participants. Around 120 Compliance Interface managers attended various events.

Topics overseen by the Board of Management and Corporate Governance & Compliance Committee

General Compliance

- Anti-trust compliance
- Corruption prevention
- Fraud prevention
- Social credit system
- Human rights
- Export control
- Anti-money laundering

Technical Compliance

- Homologation
- Non-homologation
- Product monitoring

Joint Management System

- Corporate sustainability
- Environmental protection
- Occupational safety
- Corporate security (incl. information security)
- Food safety
- Quality management system

IT / Data Governance

- Corporate IT governance
- Data governance (incl. Data privacy protection)

Internal Control System / Risk Management

ENVIRONMENTAL MANAGEMENT

MANAGEMENT SYSTEMS

BMW Brilliance attaches great importance to its leadership role in society, making social responsibility a major focus of our production. We strive to minimise our impact on the environment in all of our manufacturing processes. In 2021, all our production plants successfully passed the ISO 14001:2015 Environmental Management System certificate renewal audit. In order to better meet the stringent environmental protection requirements that our diverse stakeholders established, we have proactively updated and optimised many environmental procedures that are now already in effect.

ENVIRONMENTAL GOVERNANCE AND STEERING

BMW Brilliance has established the Green Plant Circle and held regular meetings to discuss sustainability topics. We are committed to exploring additional enablers as well as opportunities to help us improve overall green performance and reduce our impact on the environment, including energy-saving measures and zero waste policies.

RISK IDENTIFICATION AND MANAGEMENT

To avoid foreseeable risks and integrate eco-friendly concepts as early as possible, we have an environmental management department that goes into action during the project design phase to analyse and assess all possible environmental impacts. During the construction phase, we monitor environmental risks and ensure compliance with the project team. For small-scale project modifications, the project team consults with the environmental management team to evaluate any possible environmental impacts and recommends eco-friendly thinking in the early production stages by completing a change management checklist.

The environmental management team also works in tandem with the compliance team to stay up to date on all regulatory changes. A total of 46 items were identified as a result of environmental laws and regulations updates, and the evaluation results were published on the company's Legislation Express. We are confident in mapping out strategies to fulfil the latest stakeholder requirements and expectations.

RESOURCE CONSUMPTION AND EFFICIENCY MEASURES

BMW Brilliance takes great pride in placing environmental concerns at the core of its entire operations. We work hard every day to minimise any negative impacts that could occur during the automotive production process. In 2021, we continued to take a series of effective measures to reduce pollutants and wastes while also enhancing our natural resource utilisation management.

VOC EMISSIONS REDUCTION

In 2021, our Plant Tiexi and Plant Dadong Extension Projects completed the installation of state-of-the-art volatile organic compounds (VOC) treatment facilities, which will make a significant contribution towards VOC emissions reduction. By the end of 2021, we cut per-vehicle VOC emissions by 76% from 0.50 to 0.12 kg per vehicle. From 2022, Plant Lydia and Plant Dadong will begin the use of BC1, which is a new type of paint ingredient containing 66% fewer VOCs and higher solid content. We will also continue to expand the use of water-based solvents, and focus on exploring ways to lower VOC materials.

COMPREHENSIVE WASTE MANAGEMENT

Today we have greater capabilities than ever before to reduce and sustainably manage the waste generated by our operations. This has been made possible through upgrades in our waste-flow tracking and overall improvements in the traceability of hazardous pollutants. In 2021, a new BMW Brilliance IT-pioneered weighing system was unveiled. This new system is much more reliable and will help significantly improve our on-site waste management efforts by enhancing the traceability requirement process.

We have also optimised waste recycling methods at our production plants. For example, since January 2021, nearly 150 t/year of wet iron sludge waste was sent for incineration, generating 375,000 kWh. Furthermore, around 20 t/year of dry iron sludge waste was diverted from landfill and recycled to produce 20 t/year of auxiliary raw materials. At Plant Dadong, our sludge dehydration programme was initiated in 2021, which significantly decreased the water content of sludge by 40%, eventually lowering overall sludge generation by nearly one kg per vehicle produced.

RESOURCE CONSUMPTION AND EFFICIENCY MEASURES

(CONT'D)

Adhering to our 4R principle (Reduction, Reuse, Recycling, Regeneration), BMW Brilliance actively seeks cooperation with our suppliers to enact compliant waste disposal measures and explore other ways to reduce resource waste. To this end, all of our potential waste handling suppliers must undergo an extensive evaluation process in order to be qualified and selected. For existing suppliers, we audit their documentation and continuously perform on-site inspections to ensure valid and proper disposal of all waste. In 2021, as a result of changes in waste classifications and improvements in various treatment processes, the waste-per-vehicle we sent off for disposal decreased from 2.99 to 2.50 kg per vehicle produced.

WATER AND WASTEWATER MANAGEMENT

We use reclaimed water generated from a wastewater treatment station for irrigation and cooling purposes. Moreover, the Paint Shop at Plant Dadong Extension Projects has gradually expanded its water reclamation facility capacity since June 2021, resulting in a water-saving of 80,000 m³. The capacity expansion work at Phase III also continues apace. The Paint Shop at Plant Tiexi has introduced new oily wastewater reduction technology to separate the oil component from the wastewater. This has resulted in the concentration volume of oily wastewater decreasing by 71%, allowing us to save nearly 10 t/month in water usage. Furthermore, BMW Brilliance is continually exploring new resources for use at Plant Lydia, including rainwater collection as well as a reuse project that will begin construction in 2022.

BMW Brilliance has also initiated a host of strict routine water-conserving measures, including the use of water-efficient fixtures and posting water-saving signage throughout the production and office areas. To better monitor and control water consumption, one of our tasks in 2022 is to establish additional process water target for our production, and we have already initiated the target-setting process this year. We also regularly introduce improvements towards reducing the water intensity for vehicle production. In 2021, we achieved 1.82 m³ of water used per vehicle, an improvement compared to 1.97 m³ in 2020.

SOIL AND WATER CONSERVATION AND BIODIVERSITY

In our ongoing efforts to integrate ecological protection into our production environment, BMW Brilliance's Shenyang production facilities have adapted sponge plants and nature-based solution concepts to revive the overall environment in our plants. Moreover, we have introduced grass planting bricks, clay water retainer layers and other ecological measures to ensure better soil and water conservation. We have designed 1.65 million m² of landscaping area in our new plants, comprising over 11,000 tree stems, and the landscaping corridors and biodiversity area are currently under construction. We also make use of spoil backfill and soil thatch to recycle 2.73 million m² of earthwork. In addition, more than 30 plant species will be introduced into our production facility via layered landscaping. This will not only contribute to greater biodiversity, but also create a more harmonious work environment for our employees and our neighbours.

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

BMW Brilliance's senior leadership takes overall responsibility and accountability for preventing work-related injuries and ensuring safe and healthy workplaces for all employees. Our leadership team has developed OHS policies and objects to align with our strategic goals and ensures the effective operation and continual improvement of the system. The CEO appoints the Head of Security, Occupational Safety and Services Department, as the Occupational Health and Safety Management Representative to organise and further the operation

of the OHS management system and advance a culture of safety throughout the company. The Designated OHS Management Coordinator, a senior manager from the Safety Management Department, serves as the second-in-command of this operation, supporting the OHS Management Representative in sustaining this important safety work.



KEY SUSTAINABILITY PERFORMANCE INDICATORS

- BMW Brilliance Business Activities
- Products and Services

Note:

1. This figure is publicised on the Corporate Average Fuel Consumption and New Energy Vehicle Credits of Passenger Vehicle Enterprises in 2021 by MIIT on April 8th 2022.

	2017	2018	2019	2020	2021	% Change
BUSINESS ACTIVITIES						
Revenues from operations (in RMB million)						
	113,197	141,918	172,692	189,006	214,787	13.6
Tax (in RMB billion)	25	31	35	38	43	13.2
Vehicles produced (in unit)	396,888	491,888	536,537	602,936	700,787	16.2
Automobiles wholesaled (in unit)	386,556	465,192	544,549	605,050	652,000	7.8
Engines produced (number)	393,110	491,488	478,588	598,316	656,956	9.8
Authorised dealer outlets nationwide (number)	598	625	647	666	683	2.6
PRODUCTS AND SERVICES						
Average fleet CO ₂ emissions (in g/km)	146.90	139.00	137.80	142.09	152.80	7.5
Corporate average fuel consumption (in l/100 km) ¹	6.17	5.84	5.79	5.97	6.42	7.5
New Energy Vehicles wholesaled (in unit)	1,983	21,438	32,246	27,664	47,322	71.1
New Energy Vehicles dealer outlets in China (number)	234	336	450	495	554	11.9
BMW i dealer outlets in China (number)	--	--	91	196	517	163.8
Public charging pillars provided in China (number)	65,708	81,585	130,405	306,891	365,713	19.2
Spare parts recycled (number)	56,362	217,500	124,600	108,070	278,000	157.2
Spare parts recycled (in t)	826	800	563	669	867	29.6
High-voltage batteries recycled (in pieces)	--	--	3,262	4,347	6,173	42.0
High-voltage batteries recycled (in kg)	--	--	78,875	98,261	123,111	25.3



KEY SUSTAINABILITY PERFORMANCE INDICATORS

• Production, operation and supplier network

Note:

1. Emissions from the upstream chain and disposal processes are based on the carbon footprint of representative vehicles from the BMW Group's product lines, calculated by Thinkstep's LCA tool GaBi which took into account Chinese market factors in the calculation.
2. The increase in this figure is mainly due to the reporting scope expansion. Leveraged on improved data traceability, we managed to track and report CO₂ emissions from international inbound logistics (US-China route) in 2021.
3. The fleet emissions are extrapolated from the average fleet emissions of automobiles produced by BMW Brilliance for sales in mainland China market of the year. The calculation was based on an average mileage of 150,000 km.
4. The increase in business trip and the employees' commuting in 2021 was mainly due to the recovery of business operation and employees' commuting from COVID-19's impact, as compared to 2020.
5. In addition to BMW Brilliance's Shenyang production base, as of 2021, BMW Brilliance ensured 100% renewable electricity use at its non-production sites.
6. The year-on-year reduction of volatile organic compounds (VOC) emissions was mainly due to the utilisation of new VOC treatment facilities and the optimisation of our paint shops' operation.

	2017	2018	2019	2020	2021	% Change
PRODUCTION, OPERATION AND SUPPLIER NETWORK						
Total Greenhouse gas emissions (in t)						
Total Greenhouse gas emissions (in t)	11,884,985	14,190,033	15,417,955	17,741,047	21,392,395	20.6
Scope 1 Greenhouse gas emissions (in t)	37,448	35,733	42,141	43,614	50,937	16.8
Natural gas	37,448	35,733	42,141	43,614	50,937	16.8
Scope 2 Greenhouse gas emissions (in t)	240,747	281,753	68,602	71,275	71,604	0.5
Electricity/heat purchased by BMW Brilliance	240,747	281,753	68,602	71,275	71,604	0.5
Scope 3 Greenhouse gas emissions (in t)	11,606,790	13,872,546	15,307,212	17,626,158	21,269,854	20.7
Upstream chain ¹	2,675,910	3,408,077	3,981,487	4,339,177	5,071,706	16.9
Logistics ²	--	--	173,102	175,113	310,772	77.5
Utilisation phase ³	8,735,582	10,219,060	11,058,404	12,799,547	15,521,957	21.3
Disposal ¹	195,298	245,409	267,321	300,866	352,059	17.0
Business trips ⁴	--	--	8,815	2,105	2,606	23.8
Employees commuting ⁴	--	--	9,065	9,351	10,754	15.0
CO ₂ emissions per vehicle produced (in t/vehicle)	0.70	0.63	0.20	0.18	0.17	-7.8
Share of renewable electricity (in %) ⁵	25	43	100	100	100	--
Total energy consumption (in MWh)	734,268	841,518	974,642	1,026,890	1,106,295	7.7
Total fuel consumption from non-renewable resources(in MWh)	184,408	196,553	233,127	238,834	295,209	23.6
Total electricity consumption (in MWh)	393,565	475,702	557,572	590,214	590,662	0.1
Total heating consumption (in MWh)	156,295	169,263	183,943	197,842	220,424	11.4
Energy consumption per vehicle produced (in MWh/vehicle)	1.83	1.65	1.63	1.51	1.40	-7.3
Volatile organic compounds (VOC) per vehicle produced (in kg/vehicle) ⁶	0.54	0.56	0.52	0.50	0.12	-76.0
Total water consumption (in m ³)	1,173,531	1,214,892	1,332,876	1,188,228	1,275,998	7.4
Water consumption per vehicle produced (in m ³ /vehicle)	2.68	2.47	2.40	1.97	1.82	-7.6
Process wastewater per vehicle produced (in m ³ /vehicle)	0.39	0.42	0.44	0.44	0.47	6.8



KEY SUSTAINABILITY PERFORMANCE INDICATORS

- Production, operation and supplier network
- Employee and society

Note:

1. Total non-hazardous waste consists of non-hazardous waste for recycling and non-hazardous waste for disposal. We improved the data calculation process in 2020, and there was an increase in total non-hazardous waste for recycling over the previous year.

2. Due to the improved data basis, the 2021 reporting scope of employees has been expanded to BMW Brilliance and its wholly-owned subsidiary—LingYue Digital Information Technology Co., Ltd, including dispatched employees. While the scope of employees in 2020 is the permanent employees of BMW Brilliance.

	2017	2018	2019	2020	2021	% Change
PRODUCTION, OPERATION AND SUPPLIER NETWORK (CON'T)						
Total waste (in t)	71,976	85,237	87,013	181,791	210,691	15.9
Total waste for recycling (in t)	69,029	81,276	83,004	179,987	208,940	16.1
Total waste for disposal (in t)	2,947	3,961	4,009	1,804	1,751	-3.0
Waste for disposal per vehicle produced (in kg/vehicle)	7.43	8.05	7.47	2.99	2.50	-16.4
Total non-hazardous waste (in t)	63,812	74,073	76,814	172,349	200,283	16.2
Total non-hazardous waste for recycling (in t) ¹	62,230	72,152	74,891	172,007	200,068	16.3
Total non-hazardous waste for disposal (in t)	1,582	1,921	1,923	342	215	-37.2
Total hazardous waste (in t)	8,164	11,164	10,199	9,442	10,408	10.2
Total hazardous waste for recycling (in t)	6,799	9,124	8,113	7,980	8,872	11.2
Total hazardous waste for disposal (in t)	1,365	2,040	2,086	1,462	1,536	5.0
Scrap steel recycled from production process (in t)	--	--	--	45,000	71,000	57.8
Scrap aluminium recycled from production process (in t)	--	--	--	--	10,402	--
Local content suppliers in China (number)	359	378	394	400	436	9.0
Purchasing volume in China (in RMB billion)	26.70	43.10	49.68	54.89	71.39	30.1
EMPLOYEE AND SOCIETY						
Total workforce at year-end (number) ²	16,686	18,925	19,824	20,739	22,829	10.1
Female employees in total workforce (number) ²	2,129	2,268	2,389	2,465	2,725	10.5
Female employees in total workforce (in %) ²	12.8	12.0	12.1	11.9	11.9	0.3
Male employees in total workforce (number) ²	14,557	16,657	17,435	18,274	20,104	10.0
Male employees in total workforce (in %) ²	87.2	88.0	87.9	88.1	88.1	-0.04
Employees, age <30 (number) ²	7,805	8,276	7,486	6,893	7,099	3.0
Employees, age <30 (in %) ²	46.8	43.7	37.8	33.2	31.1	-6.3



KEY SUSTAINABILITY PERFORMANCE INDICATORS

• Employee and society

Note:

1. Due to the improved data basis, the 2021 reporting scope of employees has been expanded to BMW Brilliance and its wholly-owned subsidiary—LingYue Digital Information Technology Co., Ltd, including dispatched employees. While the scope of employees in 2020 is the permanent employees of BMW Brilliance.
2. This figure is a newly added indicator to reflect the local directly hired employees in management positions.

	2017	2018	2019	2020	2021	% Change
EMPLOYEE AND SOCIETY (CON'T)						
Employee and society						
Employees, age 30-50 (number) ¹	8,771	10,526	12,192	13,675	15,515	13.5
Employees, age 30-50 (in %) ¹	52.6	55.6	61.5	65.9	68.0	3.1
Employees, age >50 (number) ¹	110	123	146	171	215	25.7
Employees, age >50 (in %) ¹	0.7	0.7	0.7	0.8	0.9	14.2
Production employees (number) ¹	11,971	13,844	14,311	15,029	16,312	8.5
Production employees (in %) ¹	71.7	73.2	72.2	72.5	71.5	-1.4
Non-production employees (number) ¹	4,715	5,081	5,513	5,710	6,517	14.1
Non-production employees (in %) ¹	28.3	26.9	27.8	27.5	28.5	3.8
Employees in Shenyang (number) ¹	15,994	18,175	19,068	19,963	21,563	8.0
Employees in Shenyang (in %) ¹	95.9	96.0	96.2	96.3	94.5	-1.9
Employees in Beijing (number) ¹	692	750	756	776	1,266	63.1
Employees in Beijing (in %) ¹	4.2	4.0	3.8	3.7	5.5	49.9
Employees in management positions (number) ¹	1,146	1,256	1,367	1,448	1,704	17.7
Employees in management positions (in %) ¹	6.9	6.6	6.9	7.0	7.5	6.9
Employees in non-management positions (number) ¹	15,540	17,669	18,457	19,291	21,125	9.5
Employees in non-management positions (in %) ¹	93.1	93.4	93.1	93.0	92.5	-0.5
Female employees in management positions (number) ¹	346	377	418	437	535	22.4
Female employees in management positions (in %) ¹	30.2	30.0	30.6	30.2	31.4	4.0
Local employees in management positions (number) ^{1,2}	--	--	--	--	1,534	--
Local employees in management positions (in %) ^{1,2}	--	--	--	--	90.0	--
Share of employees with fixed-term contract (in %) ¹	60.0	49.7	48.1	41.0	41.4	1.0
Total new employee hires (number) ¹	1,330	3,266	1,756	1,783	3,692	107.1
Total new employee hires (in %) ¹	8.0	17.3	8.9	8.6	16.2	88.1



KEY SUSTAINABILITY PERFORMANCE INDICATORS

• Employee and society

Note:

1. Due to the improved data basis, the 2021 reporting scope of employees has been expanded to BMW Brilliance and its wholly-owned subsidiary—LingYue Digital Information Technology Co., Ltd, including dispatched employees. While the scope of employees in 2020 is the permanent employees of BMW Brilliance.

	2017	2018	2019	2020	2021	% Change
EMPLOYEE AND SOCIETY (CON'T)						
Employee and society						
Female new employees (number) ¹	182	310	261	172	431	150.6
Female new employees (in %) ¹	1.1	1.6	1.3	0.8	1.9	127.6
Male new employees (number) ¹	1,148	2,956	1,495	1,611	3,261	102.4
Male new employees (in %) ¹	6.9	15.6	7.5	7.8	14.3	83.9
New employees in Shenyang (number) ¹	1,205	3,096	1,629	1,682	3,141	86.7
New employees in Shenyang (in %) ¹	7.2	16.4	8.2	8.1	13.8	69.6
New employees in Beijing (number) ¹	125	170	127	101	551	445.5
New employees in Beijing (in %) ¹	0.8	0.9	0.6	0.5	2.4	395.6
New employees, age <30 (number) ¹	1,037	2,534	1,222	1,339	2,221	65.9
New employees, age <30 (in %) ¹	6.2	13.4	6.2	6.5	9.7	50.7
New employees, age 30-50 (number) ¹	280	722	518	438	1,460	233.3
New employees, age 30-50 (in %) ¹	1.7	3.8	2.6	2.1	6.4	202.8
New employees, age >50 (number) ¹	13	10	16	6	11	83.3
New employees, age >50 (in %) ¹	0.08	0.05	0.08	0.03	0.05	66.5
Attrition rate (in %) ¹	4.5	4.8	3.6	3.7	7.4	97.8
Voluntary attrition rate (in %) ¹	3.1	3.7	2.6	2.9	6.5	125.8
Involuntary attrition rate (in %) ¹	1.4	1.2	1.1	0.8	0.9	2.3
Accident frequency rate (per one million hours worked)	0.43	0.28	0.17	0.09	0.13	44.4
Training days of training organised by the Human Resources Department (in day) ¹	34,314	33,804	24,311	15,491	19,524	26.0
Average days of further training per employee (in day/person) ¹	2.10	1.79	1.23	0.75	0.86	14.5
Average training days for employees in production (in day/person) ¹	1.30	1.00	0.77	0.48	0.62	29.2
Average training days for employees in non-production (in day/person) ¹	4.40	4.00	2.39	1.36	1.45	6.6
Average training days for employees in management positions (in day/person) ¹	3.40	3.70	1.14	0.92	1.87	103.3
Average training days for employees in non-management positions (in day/person) ¹	2.05	1.70	1.87	0.71	0.77	8.5



KEY SUSTAINABILITY PERFORMANCE INDICATORS

• Employee and society

	2017	2018	2019	2020	2021	% Change
EMPLOYEE AND SOCIETY (CON'T)						
Employee and society						
Training attendee satisfaction rate (in %) ¹	97.0	97.0	98.2	98.4	99.0	0.6
Accumulated graduates of BEST Programme (number)	6,377	7,473	8,381	8,953	9,023	0.8
Beneficiaries of BMW CSR activities (number)	21,000	80,292	2,628,710	11,568,364	11,459,458	-0.9
Accumulative beneficiaries of BMW CSR activities (number)	157,600	237,892	2,866,602	14,434,966	25,894,424	79.4
Expenditure on social commitment activities (in RMB)	17,064,616	15,575,085	16,513,831	36,619,722	23,439,759	-36.0
Total employee participants of CSR activities (number)	--	--	212	85	300	252.9
Total hours of volunteer service (in hour)	--	--	1,915	923	1,914	107.4

Note:

1. Due to the improved data basis, the 2021 reporting scope of employees has been expanded to BMW Brilliance and its wholly-owned subsidiary—LingYue Digital Information Technology Co., Ltd, including dispatched employees. While the scope of employees in 2020 is the permanent employees of BMW Brilliance.

GRI CONTENT INDEX 5.3

This report has been prepared in accordance with the 2016 GRI Standards: Core option, and the updated 2018 GRI Standards on Occupational Health and Safety.

GRI 101: FOUNDATION

GRI 102: GENERAL DISCLOSURES

GRI Standard	Page index	Further Information	UNGC
GRI 102-1: Name of the organisation	03	--	--
GRI 102-2: Activities, brands, products, and services	03-04, 06	--	--
GRI 102-3: Location of headquarters	03	--	--
GRI 102-4: Location of operations	03	--	--
GRI 102-5: Ownership and legal form	03	--	--
GRI 102-6: Markets served	03	--	--
GRI 102-7: Scale of the organisation	03	--	--
GRI 102-8: Information on employees and other workers	08, 63-65, 95-98	<p>a Do not include the total number of employees or interns. They assist in administrative tasks. There are no self-employed workers.</p> <p>b 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.</p>	6
GRI 102-9: Supply chain	55-56	--	--
GRI 102-10: Significant changes to the organisation and its supply chain	56	--	--
GRI 102-11: Precautionary Principle or approach	15	--	7
GRI 102-12: External initiatives	17-18, 33, 37-40, 56-58, 64-65, 72, 79-84	--	--

GRI 102: GENERAL DISCLOSURES

(CONT'D)

GRI Standard	Page index	Further Information	UNGC
GRI 102-13: Memberships of associations	--	<ul style="list-style-type: none"> 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) CBCSD (China Business Council for Sustainable Development) Global Compact Network China 	--
GRI 102-14: Statement from senior decision-maker	01-02	--	--
GRI 102-15: Key impacts, risks, and opportunities	15	--	--
GRI 102-16: Values, principles, standards, and norms of behaviour	20-21, 23-24, 58, 63-64, 67	<p>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. Core Values: Responsibility, Appreciation, Transparency, Trust, and Openness.</p> <p>Norms of Behaviour:</p> <ul style="list-style-type: none"> Associate Handbook including an Ethics and Code of Conduct section Legal Compliance Code- Corruption and Prevention Guideline Corporate Hospitality and Gift Instruction Anti-Fraud Policy and Fraud Response Guideline 	10
GRI 102-17: Mechanisms for advice and concerns about ethics	20-21, 23-24, 58	--	10

GRI 102: GENERAL DISCLOSURES

(CONT'D)

GRI Standard	Page index	Further Information	UNGC
GRI 102-18: Governance structure	15, 20, 91	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.	--
GRI 102-40: List of stakeholder groups	17	--	--
GRI 102-41: Collective bargaining agreements	67	100% of local employees are members of the BMW Brilliance Trade Union, and all Union members are covered by the Collective Contract on Labour Remuneration. This excludes expatriates, who are not eligible for the Trade Union.	3
GRI 102-42: Identifying and selecting stakeholders	17-18, 88	--	--
GRI 102-43: Approach to stakeholder engagement	17-18	--	--
GRI 102-44: Key topics and concerns raised	17-18, 88	--	--
GRI 102-45: Entities included in the consolidated financial statements	87	--	--
GRI 102-46: Defining report content and topic boundaries	17-18, 87-88	--	--
GRI 102-47: List of material topics	17, 88	--	--
GRI 102-48: Restatements of information	--	Where necessary and possible, restatements are explained in footnotes to the respective groups.	--
GRI 102-49: Changes in reporting	87	--	--
GRI 102-50: Reporting period	87	--	--
GRI 102-51: Date of most recent report	87	--	--

GRI 102: GENERAL DISCLOSURES

(CONT'D)

GRI Standard	Page index	Further Information	UNGC
GRI-102-52: Reporting cycle	87	--	--
GRI-102-53: Contact point for questions regarding the report	End of report	--	--
GRI-102-54: Claims for reporting in accordance with the GRI Standards	87, 99	--	--
GRI-102-55: GRI Content Index	99-110	--	--
GRI-102-56: External assurance	111-113	--	--

SPECIFIC DISCLOSURES FOR MATERIAL TOPICS

We report all relevant information on our material topics in accordance with our management approaches. For reasons of confidentiality, we do not disclose on the personnel and financial resources that are used for the management of these topics.

Product Quality and Safety

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	27	--	--
GRI 416: Customer Health and Safety			
GRI 416-1: Assessment of the health and safety impacts of product and service categories	27-28	--	--
GRI 416-2: Incidents of non-compliance concerning the health and safety impacts of products and services	--	BMW Brilliance did not have significant non-compliance with laws / regulations in 2021 that resulted in a financially material impact.	--

Occupational Health and Safety

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	70, 92	--	--
GRI 403: Occupational Health and Safety 2018			
GRI 403-1: Occupational health and safety management system	70, 92	--	--
GRI 403-2: Hazard identification, risk assessment and incident investigation	70	BMW Brilliance did not have significant non-compliance with laws / regulations in 2021 that resulted in a financially material impact.	--
GRI 403-3: Occupational health services	70-71	--	--

Occupational Health and Safety

(CONT'D)

GRI Standard	Page index	Further Information	UNGC
GRI 403-4: Worker participation, consultation and communication on occupational health and safety	70	--	--
GRI 403-5: Worker training on occupational health and safety	70	--	--
GRI 403-6: Promotion of worker health	70-71	--	--
GRI 403-7: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	70-71	--	--
GRI 403-8: Workers covered by an occupational health and safety management system	70-71	--	--
GRI 403-9: Work-related injuries	08. 97	--	--
GRI 403-10: Work-related ill health	--	--	--

Customer Support and Satisfaction

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	29	--	--

Information Security and Privacy Protection

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	23-24	--	--
GRI 418: Customer Privacy 2016			
GRI 418-1: Substained complaints concerning breaches of customer privacy and losses of customer data	--	BMW Brilliance did not encounter substantiated complaints in 2021 concerning breaches of customer privacy and losses of customer data.	--

Business Ethics

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	20-21, 23-24, 58	--	1,2,3,4,5,6
GRI 419: Socioeconomic Compliance 2016			
GRI 419-1: Non-compliance with laws and regulations in the social and economic area	--	BMW Brilliance did not have significant non-compliance with relevant laws and regulations in 2021 that resulted in a financially material impact.	--

Compliance, Anti-corruption, and Fair Competition

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	20-21, 57-58, 90	--	10

Compliance, Anti-corruption, and Fair Competition

(CONT'D)

GRI Standard	Page index	Further Information	UNGC
GRI 205: Anti-corruption 2016			
GRI 205-2: Communication and training about anti-corruption policies and procedures	20-21	<p>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 employees have also received training on anti-corruption. 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.</p> <p>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).</p> <p>Information unavailable: The number of business partners that policies and procedures have been communicated to is not reported.</p>	--
GRI 206: Anti-competitive behaviour 2016			
GRI 206-1: Legal actions for anti-competitive behaviour, anti-trust, and monopoly actions taken	--	In 2021, there were no legal actions regarding anti-competitive behaviour or violations of anti-trust and monopoly legislation.	--

Greenhouse Gas Emissions and Air Pollution

GRI Standard	Page index	Further Information	UNGC
GRI 103: Management approach 2016			
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	43-45	--	7, 8, 9
GRI 305: Emissions 2016			
GRI 305-1: Direct (Scope 1) GHG emissions	07, 43, 94	--	--
GRI 305-2: Energy Indirect (Scope 2) GHG emissions	07, 43, 94	--	--

Greenhouse Gas Emissions and Air Pollution

(CONT'D)

GRI Standard	Page index	Further Information	UNGC
GRI 305-3: Other Indirect (Scope 3) GHG emissions	07, 43, 94	--	--
GRI 305-4: GHG emission intensity	07, 94	--	--
GRI 305-5: Reduction of GHG emissions	43-54	--	--

Waste and Effluents

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	46, 91-92	--	7, 8, 9
GRI 306: Effluents and Waste 2016			
GRI 306-1: Water discharge by quality and destination	08, 46, 94-95	--	--
GRI 306-2: Waste by type and disposal method	08, 94-95	--	--

Energy Consumption and Renewable Energy

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	44-45	--	7, 8, 9
GRI 302: Energy 2016			
GRI 302-1: Energy consumption within the organisation	07, 94	--	--
GRI 302-2: Energy consumption outside of the organisation	07, 94	--	--
GRI 302-4: Reduction of energy consumption	07, 94	--	--

Supply Chain Sustainability Management

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	56-58	--	1-10
GRI 308: Supplier Environmental Assessment 2016			
GRI 308-1: New suppliers that were screened using environmental data	--	Due to the complexity and in some cases the lack of transparency across entire supply chains, it is not possible to give a percentage of the new suppliers screened.	--
GRI 308-2: Negative environmental impacts in the supply chain and actions taken	56	--	--
GRI 414: Supplier Social Assessment 2016			
GRI 414-1: New suppliers that were screened using social criteria	--	Due to the complexity and in some cases the lack of transparency across entire supply chains, it is not possible to give a percentage of the new suppliers screened.	--
GRI 414-2: Negative social impacts in the supply chain and actions taken	56, 58	--	--

Raw Materials and Parts Lifecycle

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	39	--	7, 8, 9
GRI 301: Materials 2016			
GRI 301-1: Materials used by weight or volume	39	--	--
GRI 301-2: Recycle input materials used	39	--	--
GRI 301-3: Reclaimed products and their packaging materials	39	--	--

Diversity, Inclusion and Equality

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	63-64	--	6
GRI 405: Diversity and Equal Opportunity 2016			
GRI 405-1: Diversity of governance bodies and employees	08, 63-64, 95-98	--	--
GRI 405-2: Ratio of basic salary and remuneration of women to men	--	This information is subject to internal confidentiality regulations and is not reported.	--
GRI 406: Non-discrimination 2016			
GRI 406-1: Incidents of discrimination and corrective actions taken	--	This information is subject to internal confidentiality regulations and is not reported.	--

Employee Development and Well-being

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	64-65, 74-75	--	6
GRI 404: Training and Education 2016			
GRI 404-1: Average hours of training per year per employee	08, 95-98	--	--
GRI 404-2: Programmes for upgrading employee skills and transition assistance programmes	64-65, 74-75	--	--
GRI 404-3: Percentage of employees receiving regular performance and career development reviews	--	BMW Brilliance carries out a companywide portfolio process on an annual basis to assess associates' performance and career development. The percentage information is not currently available due to the complexity of the portfolio process and variations among different job functions.	--



Electrification and Sustainable Product Portfolio

GRI Standard	Page index	Further Information	UNGC
GRI 103-1: Management approach (inclusive 103-1, 103-2, 103-3)	31-40	--	7, 8, 9

LIMITED ASSURANCE REPORT 5.4

INDEPENDENT PRACTITIONER'S ASSURANCE REPORT

To Board of Management of BMW Brilliance Automotive Ltd.



We have been engaged to perform a limited assurance engagement on the selected 2021 key data as defined below in the 2021 Sustainability Report of BMW Brilliance Automotive Ltd. (the "Company").

SELECTED KEY DATA

The selected key data in the Company's 2021 Sustainability Report that is covered by this report is as follows:

- Vehicles produced (in unit)
- Automobiles wholesaled (in unit)
- Authorised dealer outlets nationwide (number)
- Average fleet CO₂ emissions (in g/km)
- Corporate average fuel consumption (in l/100km)
- Scope 1 Greenhouse gas emissions (in t)
- Scope 2 Greenhouse gas emissions (in t)
- Scope 3 Greenhouse gas emissions (in t)
- Share of renewable electricity (in %)
- CO₂ emissions per vehicle produced (in t/vehicle)
- Total energy consumption (in MWh)
- Energy consumption per vehicle produced (in MWh/vehicle)
- Volatile organic compounds (VOC) per vehicle produced (in kg/vehicle)
- Total water consumption (in m³)
- Water consumption per vehicle produced (in m³/vehicle)
- Process wastewater per vehicle produced (in m³/vehicle)
- Total waste (in t)
- Waste for disposal per vehicle produced (in kg/vehicle)
- Total non-hazardous waste (in t)
- Total hazardous waste (in t)
- Local content suppliers in China (number)
- Purchasing volume in China (in RMB billion)
- Total workforce at year-end (number)
- Female employees in total workforce (in %)
- Employees in management positions (in %)
- Female employees in management positions (in %)
- Local employees in management positions (in %)
- Total new employee hires (in %)
- Attrition rate (in %)
- Training days of training organised by the Human Resources Department (in day)
- Average days of further training per employee (in day/person)
- Training attendee satisfaction rate (in %)
- Accident frequency rate (per one million hours worked)
- Beneficiaries of BMW CSR activities (number)
- Expenditure on social commitment activities (in RMB)
- Total employee participants of CSR activities (number)
- Total hours of volunteer service (in hour)

Our assurance was with respect to the year ended 31 December 2021 information only and we have not performed any procedures with respect to earlier periods or any other elements included in the 2021 Sustainability Report.

CRITERIA

The criteria used by the Company to prepare the selected key data in the 2021 Sustainability Report is set out in the definitions of the key data in Chapter 5.5 of the 2021 Sustainability Report (the "basis of reporting").

THE BOARD OF MANAGEMENT'S RESPONSIBILITIES

The Board of Management of the Company is responsible for the preparation of the selected key data in the 2021 Sustainability Report in accordance with the basis of reporting. This responsibility includes designing, implementing and maintaining internal control relevant to the preparation of the selected key data in the 2021 Sustainability Report that is free from material misstatement, whether due to fraud or error.

OUR INDEPENDENCE AND QUALITY CONTROL

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

PRACTITIONER'S RESPONSIBILITIES

It is our responsibility to express a conclusion on the selected key data in the 2021 Sustainability Report based on our work.

We conducted our work in accordance with the International Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information". This standard requires that we plan and perform our work to form the conclusion.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Accordingly, we do not express a reasonable assurance opinion about whether the Company's 2021 selected key data in the 2021 Sustainability Report has been prepared, in all material respects, in accordance with the basis of reporting. Our work involves assessing the risks of material misstatement of the selected key data in the 2021 Sustainability Report whether due to fraud or error, and responding to the assessed risks. The extent of procedures selected depends on our judgment and assessment of the engagement risk. Within the scope of our work, we have performed the following procedures in Beijing Office, Tiexi Plant, Dadong Plant and Powertrain Plant of the Company:

1. Interviews with relevant departments of the Company involved in providing information for the selected key data within the Sustainability Report; and
2. Analytical procedures;
3. Examination, on a test basis, of documentary evidence relating to the selected key data on which we report;
4. Recalculation; and
5. Other procedures deemed necessary.



INHERENT LIMITATION

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities.

CONCLUSION

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the 2021 selected key data in the 2021 Sustainability Report is not prepared, in all material respects, in accordance with the basis of reporting.

RESTRICTION ON USE

Our report has been prepared for and only for the board of management of the Company and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the content of this report.



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BASIS OF REPORTING 5.5

Vehicles produced (in unit)

BMW vehicles produced by BMW Brilliance of the year.

Automobiles wholesaled (in unit)

BMW Brilliance wholesale volume of BMW Brand in mainland China of the year.

Authorised dealer outlets nationwide (number)

Number of authorised dealer outlets in operation in mainland China at year-end, excluding MINI and BMW Motorrad dealer outlets.

Average fleet CO₂ emissions (in g/km)

Average CO₂ emissions of automobiles produced by BMW Brilliance for sales in mainland China market of the year.

Corporate average fuel consumption (in l/100 km)

Average fuel consumption of automobiles produced by BMW Brilliance for sales in mainland China market of the year. The calculation is based on the GB 27999-2019 Fuel Consumption Evaluation Methods and Targets for Passenger Cars of the People's Republic of China. The data is publicised on the website of the Ministry of Industry and Information Technology of the People's Republic of China on April 8th 2022.

Scope 1 Greenhouse gas emissions (in t)

Direct CO₂ emissions generated by fossil fuel consumption at BMW Brilliance plants, excluding the fossil fuel consumption of construction and on-site suppliers. The coefficients used for calculation are from Emission Factors for Electricity, District Heating and Fuels issued by Application of German Association of the Automotive Industry (VDA).

Scope 2 Greenhouse gas emissions (in t)

Indirect CO₂ emissions generated by the consumption of purchased electricity and purchased heating at the BMW Brilliance plants, excluding the purchased electricity and purchased heating consumption of construction and on-site suppliers. For calculation of the scope 2 CO₂ emissions calculation, the "market-based" methodology is used in accordance with GHG Protocol Scope 2 Guidance issued by the World Resources Institute.

Scope 3 Greenhouse gas emissions (in t)

Indirect CO₂ emissions generated in the upstream supply chain, the logistics, the utilisation phase, and the disposal of automobiles produced by BMW Brilliance for sales in mainland China market of the year, and those generated from employee commuting and business trips of BMW Brilliance within the year. Emission factors of the supply chain and the disposal are based on the carbon footprints of representative vehicles from the product lines, calculated by Thinkstep's LCA tool GaBi. Emissions factors of logistics are based on emission factors in DIN EN 16258. Emissions from the utilisation phase are calculated based on the average fleet emissions of automobiles produced by BMW Brilliance and an average mileage of 150,000 km per vehicle.

Share of renewable electricity (in %)

The ratio of renewable electricity consumed to the total electricity consumption of BMW Brilliance Shenyang Production Region and BMW Brilliance non-production sites, including office buildings, R&D centres, training centres, consolidation centre, BMW experience centres, and other non-production sites. Renewable electricity includes the generation of solar power electricity, the purchase of wind power electricity, and the International Renewable Energy Certificates (I-RECs).

CO₂ emissions per vehicle produced (in t/vehicle)

Production-relevant CO₂ emissions per vehicle produced in BMW Brilliance plants, excluding CO₂ emissions from energy consumption of R&D, Vehicle Dispatch Centre (VDC), construction, on-site third-party suppliers and other non-production relevant energy consumption of the plants.

Total energy consumption (in MWh)

Total energy consumption of the year in BMW Brilliance plants, including purchased electricity, purchased heating, and natural gas.

Energy consumption per vehicle produced (in MWh/vehicle)

Production-relevant energy consumption per vehicle produced in BMW Brilliance plants, excluding the energy consumption of R&D, VDC, construction, on-site third-party suppliers, and other non-production relevant energy consumption of the plants.

Volatile organic compounds (VOC) per vehicle produced (in kg/vehicle)

Production-relevant VOC per vehicle produced in BMW Brilliance plants.

Total water consumption (in m³)

Total fresh water consumption of the year in BMW Brilliance plants.

Water consumption per vehicle produced (in m³/vehicle)

Production-relevant water consumption per vehicle produced in BMW Brilliance plants, excluding the water consumption of R&D, VDC, construction, on-site third-party suppliers and other non-production relevant water consumption of the plants.

Process wastewater per vehicle produced (in m³/vehicle)

Production-relevant process wastewater per vehicle produced in BMW Brilliance plants.

Total waste (in t)

Production-relevant non-hazardous and hazardous waste for recycling and disposal of the year in BMW Brilliance plants.

Waste for disposal per vehicle produced (in kg/vehicle)

Production-relevant waste for disposal per vehicle produced in BMW Brilliance plants.

Total non-hazardous waste (in t)

Production-relevant non-hazardous waste for recycling and for disposal of the year in BMW Brilliance plants.

Total hazardous waste (in t)

Production-relevant hazardous waste for recycling and for disposal of the year in BMW Brilliance plants.

Local content suppliers in China (number)

Total number of parts suppliers and raw material suppliers of the year including the run-out suppliers of the year.

Purchasing volume in China (in RMB billion)

The amount of purchasing volume, including tax, paid by BMW Brilliance to parts suppliers and raw material suppliers in mainland China of the year.

Total workforce at year-end (number)

The number of employees includes BMW Brilliance and its wholly-owned subsidiary LingYue Digital Information Technology Co., Ltd at year-end. The figure does not include interns while it includes dispatched employees.

Female employees in total workforce (in %)

The ratio of female employees at year-end to the total workforce at year-end.

Employees in management positions (in %)

The ratio of employees in management positions at year-end to the total workforce at year-end. Management positions refer to employees with function levels from I to V.

Female employees in management positions (in %)

The ratio of female employees in management positions at year-end to total employees in management positions at year-end.

Local employees in management positions (in %)

The ratio of local directly hired employees in management positions at year-end to total employees in management positions at year-end.

Total new employee hires (in %)

The ratio of newly hired employees of the year to the total workforce at year-end.

Attrition rate (in %)

The number of voluntary and involuntary turnover divided by the number of monthly average employees of the year.

Training days of training organised by the Human Resources Department (in day)

Total training days of LRG (Learning Resources Guide) training and department training organised by the Human Resources Department of the year.

Average days of further training per employee (in day/person)

Average training days for employees participating in the training organised by the Human Resources Department.

Training attendee satisfaction rate (in %)

Average training satisfaction evaluated by employees who have attended training organised by the Human Resources Department.

Accident frequency rate (per one million hours worked)

The scope only covers directly contracted employees in BMW Brilliance plants. It is calculated by the number of accidents with one day lost time or more divided by the total working hours (in million) of the year.

Beneficiaries of BMW CSR activities (number)

Number of times people benefited from CSR activities organised by the BMW CSR team, BMW Brilliance Trade Union in mainland China and BMW Brilliance Shenyang Associate Social Responsibility Programme.

Expenditure on social commitment activities (in RMB)

Expenditure on the social commitment by BMW Brilliance, China Charity Federation-BMW Warm Heart Fund, and China Education Development Foundation-BMW Warm Heart Fund.

Total employee participants of CSR activities (number)

Total number of times employees attended voluntary activities held by BMW Corporate Volunteer Association in mainland China.

Total hours of volunteer service (in hour)

Total hours that employee volunteers spend on voluntary activities held by BMW Corporate Volunteer Association in mainland China, including direct service hours and indirect service hours. Direct service hours refer to activity hours, and indirect service hours refer to the hours that volunteers spend on transportation, on-site preparation and lunch hours during the activities.



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