

BMW GROUP SUSTAINABILITY.

UNIVERSITÄT PASSAU



Kai Zöbelein – Kommunikation Nachhaltigkeit
29. Januar 2019.

**BMW
GROUP**

THE NEXT
100 YEARS



Rolls-Royce
Motor Cars Limited

BMW GROUP.



Rolls-Royce
Motor Cars Limited



Sheer driving pleasure

The world's most exciting
premium small car brand

The pinnacle of
automobile luxury

Make life a ride



30 PRODUCTION SITES IN 14 COUNTRIES.





THE NEXT 100 YEARS

**BMW
GROUP**



Rolls-Royce
Motor Cars Limited

CHALLENGES: THE BUSINESS ENVIRONMENT IN THE AUTOMOTIVE INDUSTRY IS CHANGING AT A RAPID PACE.



Environment

Climate change and consequences



Urbanisation

2030 over 60% of world population in cities



Politics and Regulation

CO2 emission regulations, import restriction

Global Developments

Competition

New competitors with new business models



Culture

Sustainable, urban lifestyle

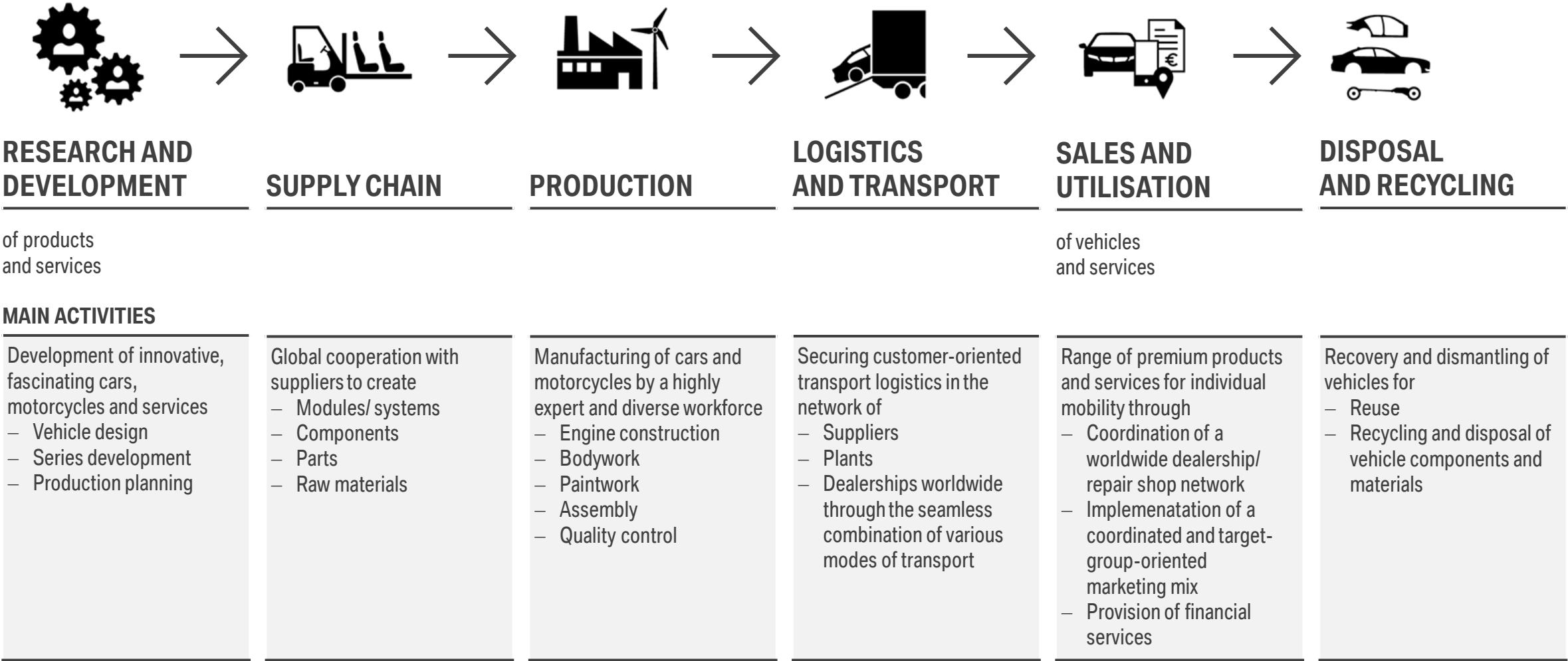


Digitalisation

Autonomous Driving and Connectivity



THE BMW GROUP TRADITIONAL VALUE CHAIN.



THE TRANSFORMATION OF THE BUSINESS MODEL.



OEM TRADITIONAL

**SMART CAR &
DIGITAL SERVICES**

CAR AS A SERVICE

MOBILITY AS A SERVICE



” For us, sustainability means future viability – for the BMW Group and for society. We know the challenges and are rising to meet them. We develop innovative mobility solutions that create additional value for customers, the company and society. ”

Harald Krüger

Chairman of the Board of Management of BMW AG

UN GLOBAL COMPACT: 10 PRINCIPLES.



United Nations
Global Compact

Human Rights

- 1 Businesses should support and respect the protection of internationally proclaimed human rights; and
- 2 make sure that they are not complicit in human rights abuses.

Labour

- 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- 4 the elimination of all forms of forced and compulsory labour;
- 5 the effective abolition of child labour; and
- 6 the elimination of discrimination in respect of employment and occupation.

Environment

- 7 Businesses should support a precautionary approach to environmental challenges;
- 8 undertake initiatives to promote greater environmental responsibility; and
- 9 encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

- 10 Businesses should work against corruption in all its forms, including extortion and bribery.

SUSTAINABILITY MUST BE AN INTEGRAL PART OF THE ORGANIZATIONAL STRUCTURE.

Sustainability Board



Sustainability Circle



Specialist divisions

- Comprises the entire Board of Management
- Chairman: Chairman of the Board of Management
- Responsible for strategic alignment

- Comprises department heads from all divisions
- Chairman: BMW Group Sustainability and Environmental Representative
- Responsible for preliminary work to support decision-making

- Implement sustainability measures and processes needed for the BMW Group to achieve its goals

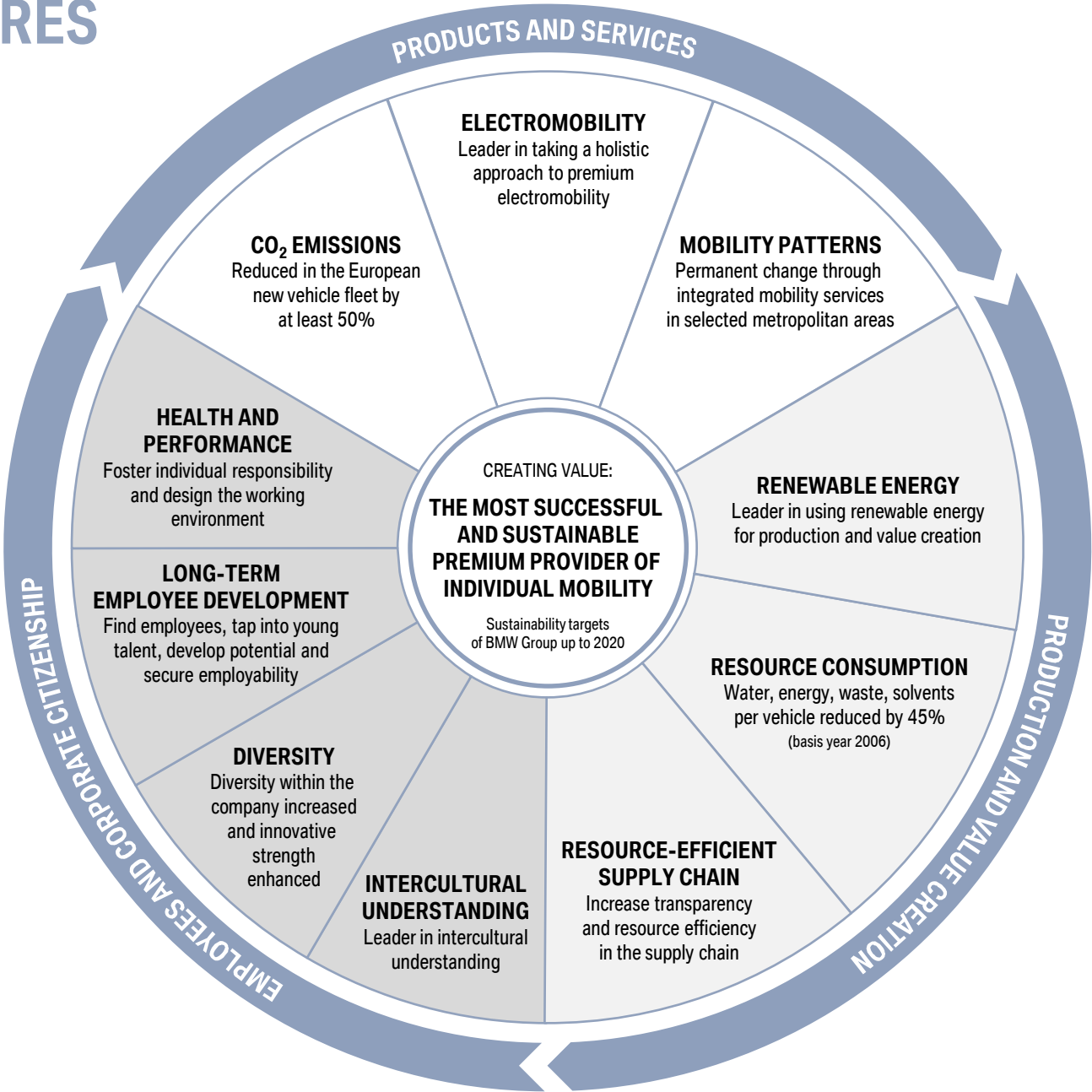
How “sustainability” is integrated in an organisation is an indication of the integrity with which it is practised.

SUSTAINABLE MANAGEMENT REQUIRES A HOLISTIC APPROACH.

Sustainable management is more than just product orientation (fleet fuel consumption, CO₂).

Sustainable management requires a holistic viewpoint across the entire value chain.

Sustainable management is a corporate goal of the BMW Group and is part of the Balanced Scorecard for the Group.



THE BMW GROUP CONTRIBUTES TO THE FOLLOWING UN SUSTAINABLE DEVELOPMENT GOALS.



SUSTAINABILITY SUCCESS STORY 2017.

CORPORATE ENVIRONMENTAL PROTECTION

Investments in corporate environmental protection saved the company more than 161 million euros in costs.

EDUCATION AND TRAINING PROGRAMMES

By the end of 2017, our international education and training programmes had already reached 150,000 young people.

SUPPLY CHAIN TRANSPARENCY

In 2017, the BMW Group became the first automobile manufacturer worldwide to make information on smelters and countries of origin for the raw material cobalt available to the public.

RENEWABLE ENERGY

By 2020, the BMW Group will obtain all its power exclusively from renewable energies.

E-MOBILITY

In 2017, we sold 103,080 electrified vehicles in total.

PRODUCT RESPONSIBILITY.

EMISSIONS OF CO₂ AND POLLUTANTS

By 2020, the BMW Group will have reduced CO₂ emissions in the European new vehicle fleet (EU-28) by at least 50% compared to the base year 1995.



The BMW Group reduced CO₂ emissions in newly-sold vehicles in Europe by around 42% between 1995 and 2017.

In Europe, emissions of NO_x and PM in the new vehicle fleet were lowered by over 90 % between 1992 and 2017.

Fully electric: BMW i3 (since 2013);
Plug-In-Hybrids: BMW i8 (since 2014),
2 Series, 3 Series, 5 Series, 7 Series,
BMW X5 and MINI Countryman. Plug-in
hybrid models save up to 50 % fuel.

By 2025, we plan to offer 25 electrified models, of which twelve will be purely electric.

PRODUCT RESPONSIBILITY.

ELECTROMOBILITY

The BMW Group is a leader in taking a holistic approach to premium electromobility.



Electromobility is one of the central topics of the future when it comes to making urban living and traffic sustainable.

Sustainability is BMW i's guiding principle. The entire life cycle of the BMW i3 has been designed according to the principle of maximum resource conservation and sustainability.

In the BMW plant in Leipzig, the BMW i3 is manufactured 100% with wind energy.

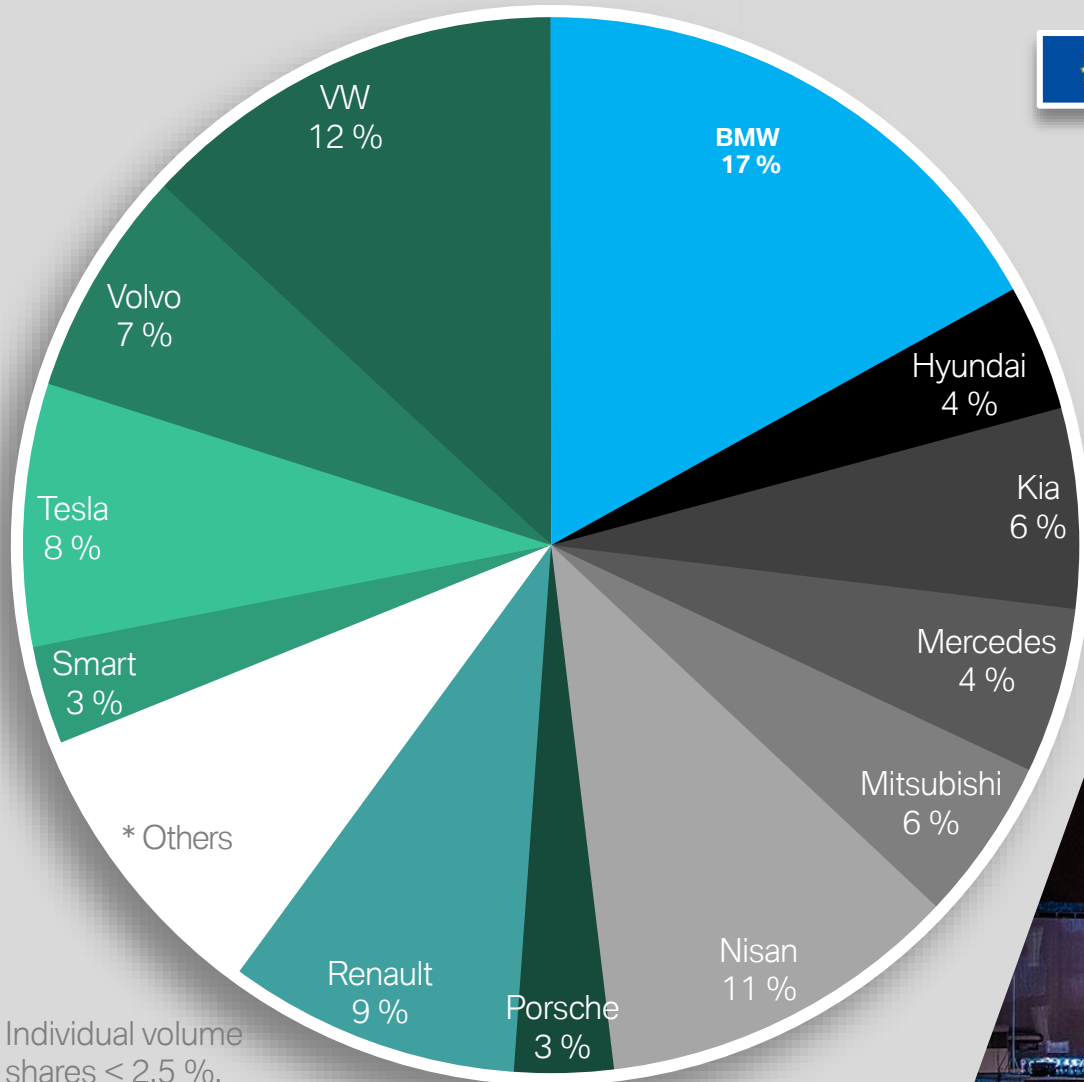
The BMW i3 is 95% recyclable. The battery modules can be reused as solar energy storage.

THE EUROPEAN EV MARKET. (BEV + PHEV COMBINED REGISTRATIONS).



➤ Leading by far,
even beyond
volume brands.

Source:
IHS-Markit global new vehicle registrations
CYTD, 04.01.19 report.



* Individual volume
shares < 2.5 %.

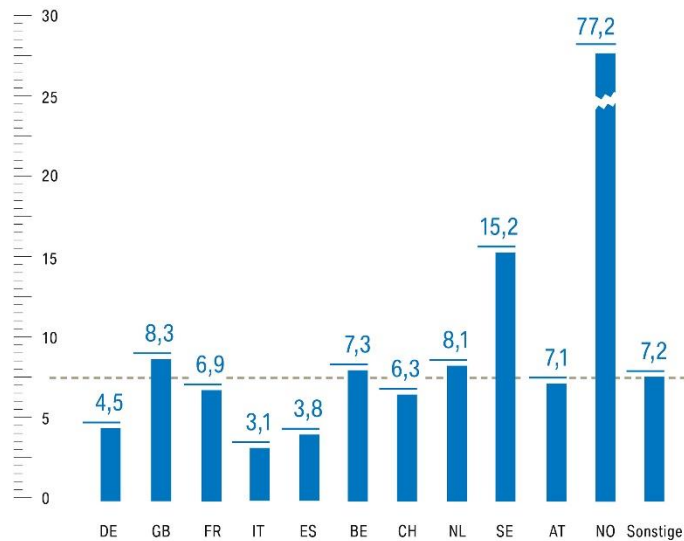


THE EUROPEAN EV MARKET. (BEV + PHEV COMBINED REGISTRATIONS).

BMW Group 12/2018 in Europa:
Anteil elektrifizierter Fahrzeuge am Absatz der BMW Group in Europa nach Ländern

→ G2.03

in %



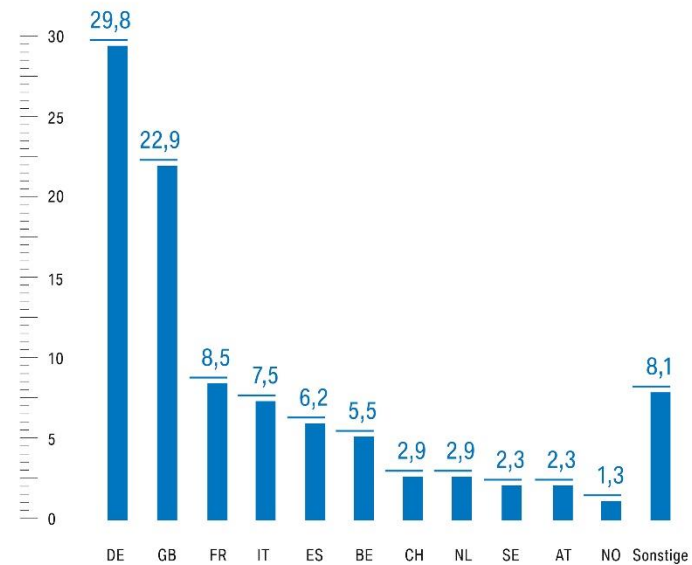
■ Anteil elektrifizierter Fahrzeuge am Absatz der BMW Group in Europa nach Ländern per 12/2018 (BEV & PHEV)

-- BMW Group Ø Europa Marktanteil BEV & PHEV: 7,2%

BMW Group 12/2018 in Europa:
Anteil des Marktes am europäischen Gesamtabsatz der BMW Group nach Ländern

→ G2.04

in %



■ Anteil des Marktes am europäischen Gesamtabsatz der BMW Group nach Ländern per 12/2018 (BEV, PHEV & konventionelle Antriebe)

OUR CLEAR ROADMAP: 25 ELECTRIFIED MODELS BY 2025, INCLUDING 12 FULLY ELECTRIC CARS.

Fully electric



BMW i3
60 Ah / 22 kWh



BMW i3
94 Ah / 33 kWh



BMW i3s
94 Ah / 33 kWh



BMW i3/i3s
120Ah / 42 kWh



MINI BEV**



BMW iX3**



BMW i Vision Dynamics/
BMW i4



BMW iNEXT

2013 — 2014 — 2015 — 2016 — 2017 — 2018 — 2019 — 2020 — 2021 — 2022 — 2023 — 2024 — 2025 —



BMW i8



BMW 530Le China*



BMW 225xe
iPerformance



BMW X1 xDrive25Le
iPerformance (China)



BMW i8 Roadster



BMW X5
xDrive40e
iPerformance



BMW 330e
iPerformance



BMW 530e
iPerformance



BMW 530Le
iPerformance (China)



BMW X5xDrive 45e



BMW 740e
iPerformance



MINI Cooper S E
Countryman ALL4



BMW 330e

Plug-in hybrid

BMW i. FROM “BORN ELECTRIC” TO “ONE PLATFORM SERVES ALL”. FLEXIBLE VEHICLE ARCHITECTURE TO ENSURE QUICK RESPONSE TO DEMAND.

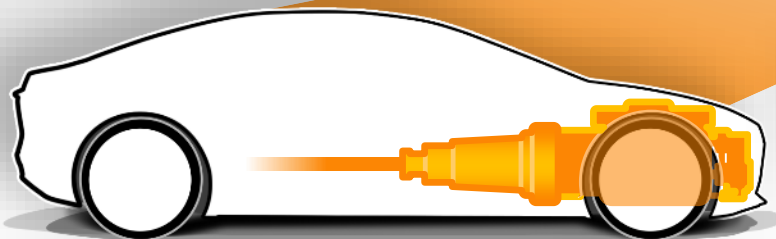
2013

“Born electric”

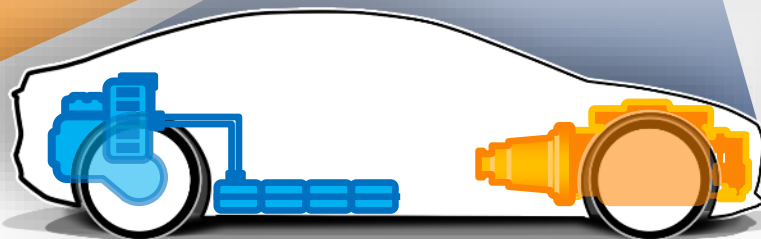


FROM
2021 ON

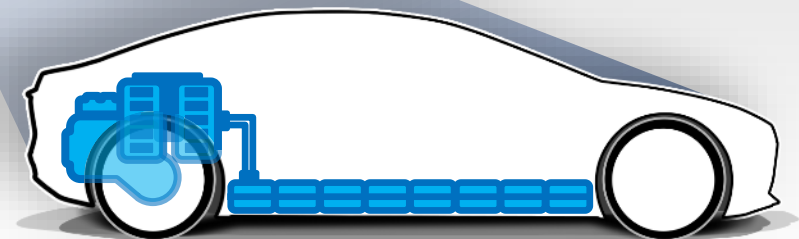
One platform
fits all powertrain
derivatives...



➤ Combustion engine



➤ Plug-In-Hybrid



➤ Pure electric

PRODUCT RESPONSIBILITY.

MOBILITY PATTERNS

The BMW Group will permanently change mobility patterns in selected metropolitan regions by 2020 through the introduction of integrated mobility services. One of the main ways we measure this goal is through the number of DriveNow and ReachNow customers.



By 2030, a projected 60% of people worldwide will live in cities. Therefore we develop our networked vehicles and mobility services.

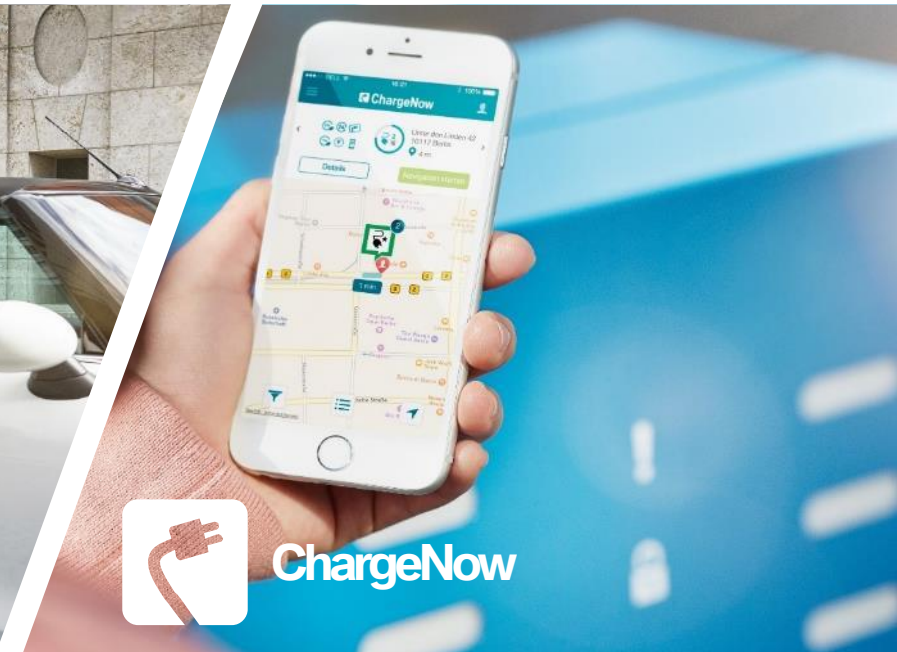
To date, some 334,000 customers have covered around 16.4 million carbon-free kilometers with DriveNow.

BMW Connected Services integrates different modes of transport into personal route planning.

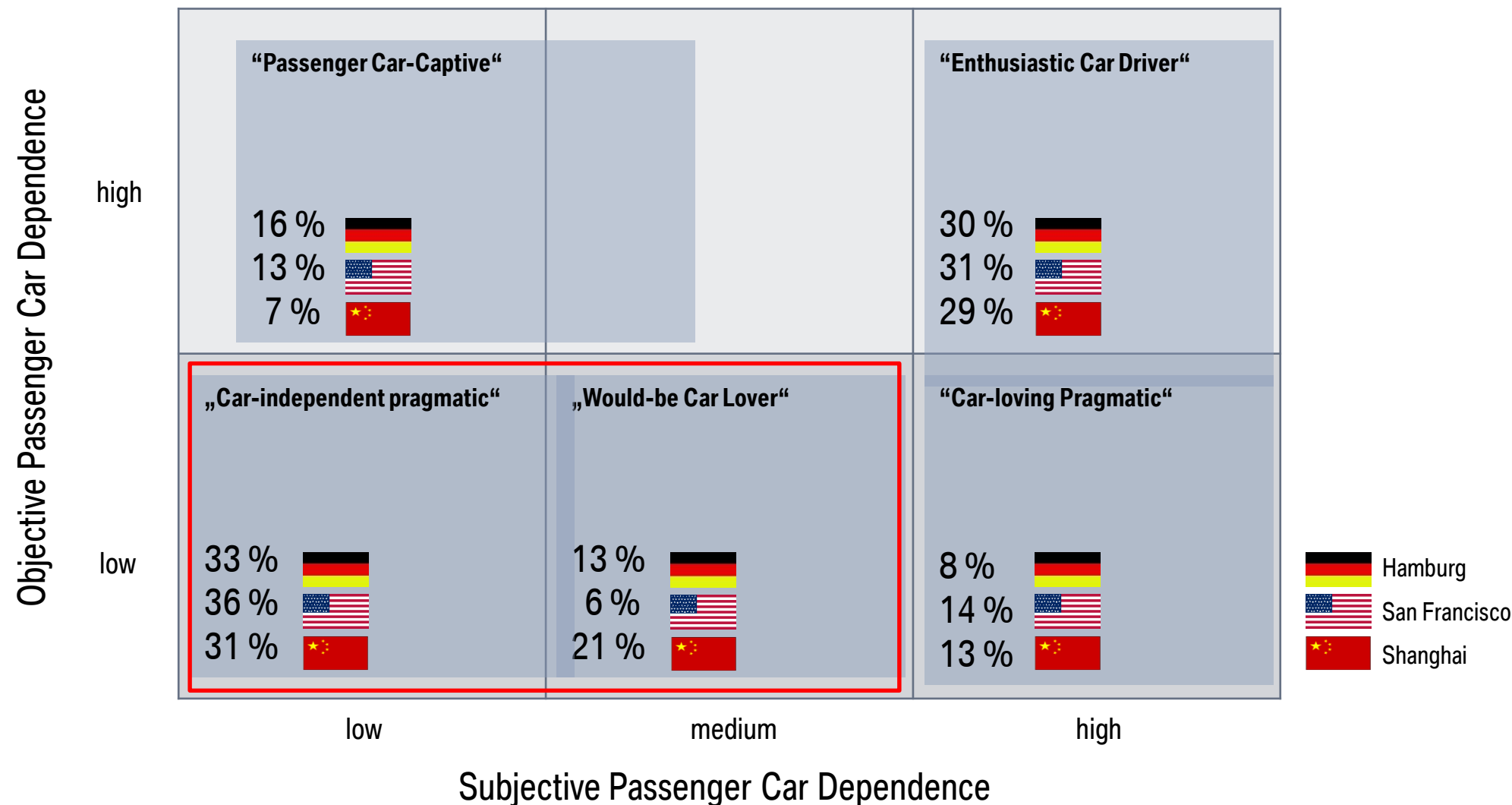
By 2017, more than 23 million customers were already using the BMW Group's mobility services.

MOBILITY SERVICES.

- Options for strategic development.
- 100 million active customers by 2025.
- A complete, all-inclusive ecosystem for our customers.
- Agreement with Daimler AG to form Mobility Services Joint Venture.

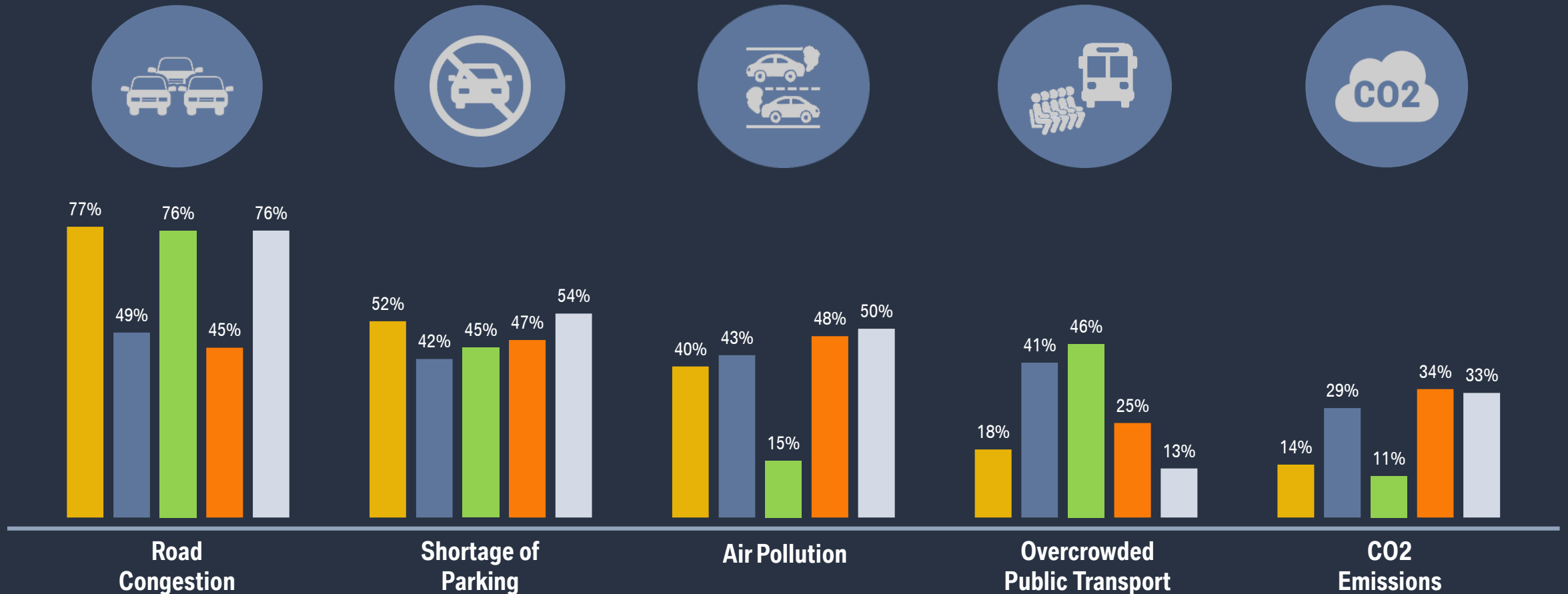


SETTING AND BEHAVIOR-BASED MOBILITY TYPOLOGIES OF CAR-OWNERS



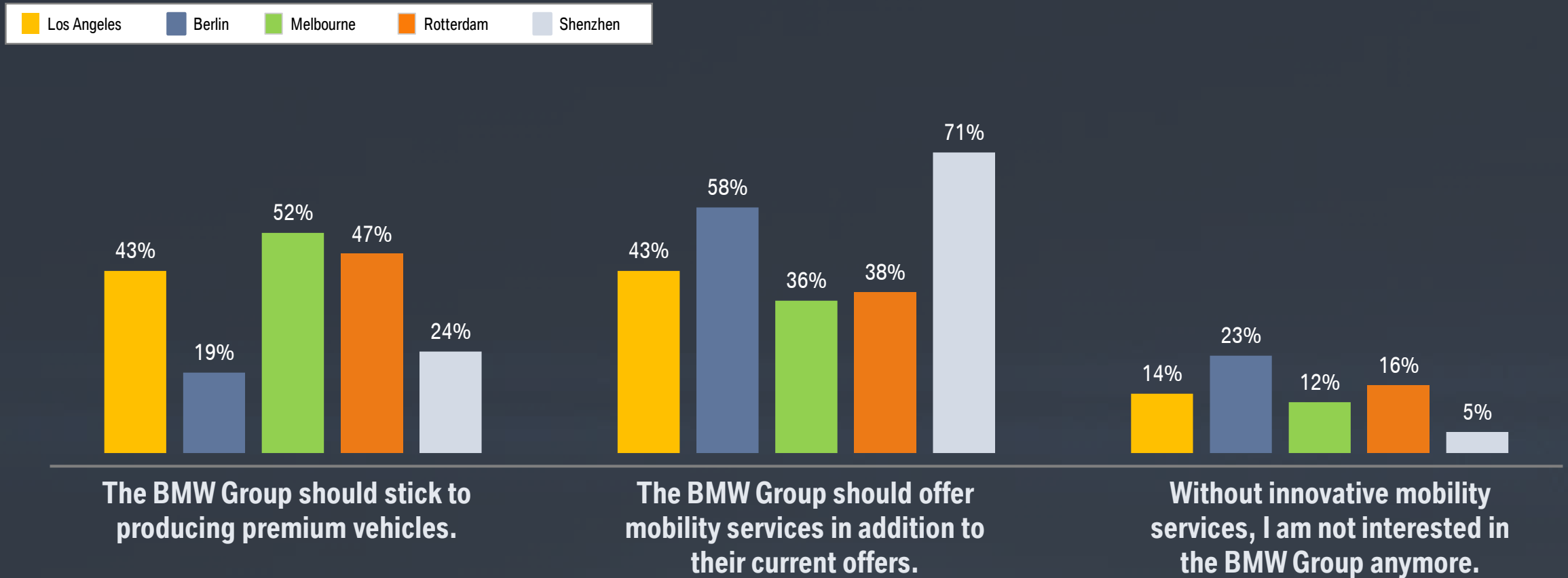
MARKTFORSCHUNG: STAUS, PARKPLATZKNAPPHEIT UND LUFTVERSCHMUTZUNG SIND DIE GRÖSSTEN HERAUSFORDERUNGEN.

Los Angeles Berlin Melbourne Rotterdam Shenzhen



Source: Online Survey. Q6: In your opinion, what are the biggest challenges for urban mobility in your city? MR. n=2500.

MARKTFORSCHUNG: DER WUNSCH NACH ZUSÄTZLICHEN MOBILITÄTSDIENSTLEISTUNGEN ÜBERSTEIGT DIE ZUSTIMMUNG ZUM AKTUELLEN PRODUKTPORTFOLIO.



URBAN MOBILITY IN 2030.

I hope that urban mobility in my city in 2030 ...



... is adapted to the needs of car drivers.

26%



... enables a smooth coexistence of car driving and car-free zones.

61%



... enables an almost car-free city.

13%

PRODUCTION AND VALUE CREATION.

CONSUMPTION OF RESOURCES

The BMW Group will reduce its resource consumption (energy, water, waste, solvents) per vehicle produced by 45% by 2020 (base year 2006).



Since 2006, the BMW Group has reduced its consumption of energy and water in vehicle production, waste and waste water volume as well as solvents and CO₂ emissions per vehicle produced by an average of 53.2%.

The new high-tech paint shop in Munich has reduced CO₂ emissions by around 50% and electricity consumption by 27%.

Since 2006, the BMW Group has reduced its waste per vehicle produced by around 80%.

Investments in corporate environmental protection saved the company more than 161 million euros in costs.

PRODUCTION AND VALUE CREATION.

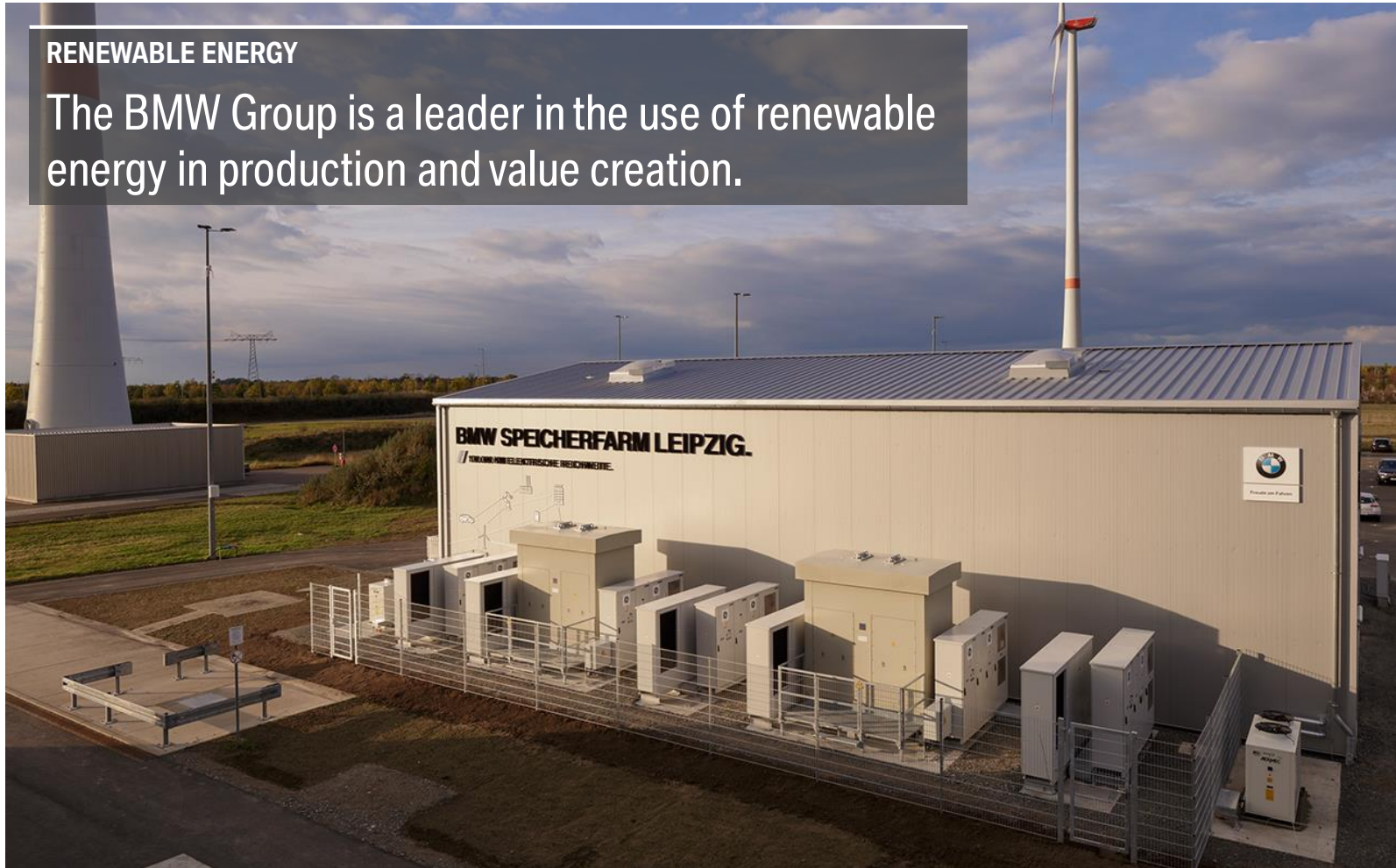
Five-year overview of key sustainability indicators

	2013	2014	2015	2016	2017	Change to previous year in %
BUSINESS ACTIVITIES						
Revenues (in € million)	76,059	80,401	92,175	94,163	98,678	4.8
Profit before tax (in € million)	7,893	8,707	9,224	9,665	10,655	10.2
Sales volume automobiles (in thousand units)	1,963.8	2,118.0	2,247.5	2,367.6	2,463.5	4.1
PRODUCTS AND SERVICES						
CO ₂ emissions of BMW Group Automobiles (EU-28) (in g/km)	133	130	127	124	122	-1.6
Sales of electric and electrified vehicles (number)	311	17,805	32,474	62,255	103,080	65.6
DriveNow and ReachNow users (number) ¹	214,000	395,000	579,000	853,000	1,108,000	29.9
PRODUCTION AND VALUE CREATION						
Energy consumption per vehicle produced (in MWh/vehicle)	2.36	2.25	2.19	2.21	2.17	-1.8
Water consumption per vehicle produced (in m ³ /vehicle)	2.18	2.18	2.24	2.25	2.22	-1.3
Process waste water per vehicle produced (in m ³ /vehicle)	0.47	0.47	0.45	0.42	0.4	-4.8
CO ₂ emissions per vehicle produced (in t/vehicle)	0.68	0.66	0.57	0.54	0.41	-24.1
Waste for disposal per vehicle produced (in kg/vehicle)	5.73	4.93	4.00	3.51	3.86	10.0
Volatile organic compounds (VOC) per vehicle produced (in kg/vehicle)	1.59	1.29	1.22	1.14	1.03	-9.6
Share of renewable energy purchased from third parties (in %) ²	48	51	58	63	81	28.6
Share of production-relevant purchasing volume in the GDP Supply Chain Programme (in %)	—	45	53	69	77	11.6
EMPLOYEES AND SOCIETY						
BMW Group employees at end of year (number)	110,351	116,324	122,244	124,729	129,932	4.2
Attrition rate at BMWAG (as a percentage of workforce)	3.47	1.41	2.08	2.70	2.64	-2.2
Share of women in the entire workforce of the BMW Group (in %)	17.4	17.8	18.1	18.7	19.3	3.2
Share of women in management positions at BMW Group (in %)	13.8	14.2	14.5	15.3	16.0	4.6
Average days of further training per BMW Group employee (days per employee)	3.5	3.9	4.1	3.8	3.4	-10.5
Accident frequency at BMW Group (per one million hours worked)	4.8	5.1	4.4	4.0	3.6	-10.0
Expenditure on corporate citizenship (in € thousand)	28,944	34,524	39,109	87,837	33,436 ³	-61.9
Expenditure on donations by the BMW Group (in € thousand)	8,485	10,199	17,066	70,356	16,205 ³	-77.0

PRODUCTION AND VALUE CREATION.

RENEWABLE ENERGY

The BMW Group is a leader in the use of renewable energy in production and value creation.



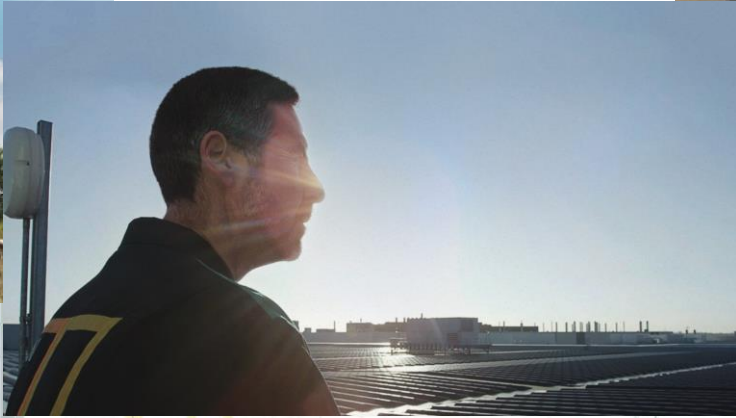
By 2020, the BMW Group will obtain all its power exclusively from renewable energies.

The roughly 500 forklift trucks at the BMW Group plant in Spartanburg in the US are powered by hydrogen.

Around 33% of the power needed by the BMW Group plant in Rosslyn/ South Africa is provided by a biogas plant.

At the BMW Group plant in Leipzig, a storage farm with up to 700 BMW i3 batteries proves that used electric-car batteries can have a useful second life. As a buffer storage for renewable energies.

RENEWABLE ENERGY.



PRODUCTION AND VALUE CREATION.

SUSTAINABLE, RESOURCEEFFICIENT SUPPLY CHAIN

The BMW Group will significantly increase supply chain transparency and resource efficiency by 2020.



Of the 189 BMW suppliers who report to the Carbon Disclosure Project (CDP), 47 already meet the BMW Group's CO₂ requirements.

To supply the plant in Munich, Landshut und Leipzig seven fully-electric vehicles are being used.

The BMW Group has set itself the goal of excluding so-called "conflict minerals" from its supply chain by 2020.

In 2017, the BMW Group became the first automobile manufacturer to make information on smelters and countries of origin for the raw material cobalt available to the public.

SUPPLY CHAIN DUE DILIGENCE. OVERVIEW.

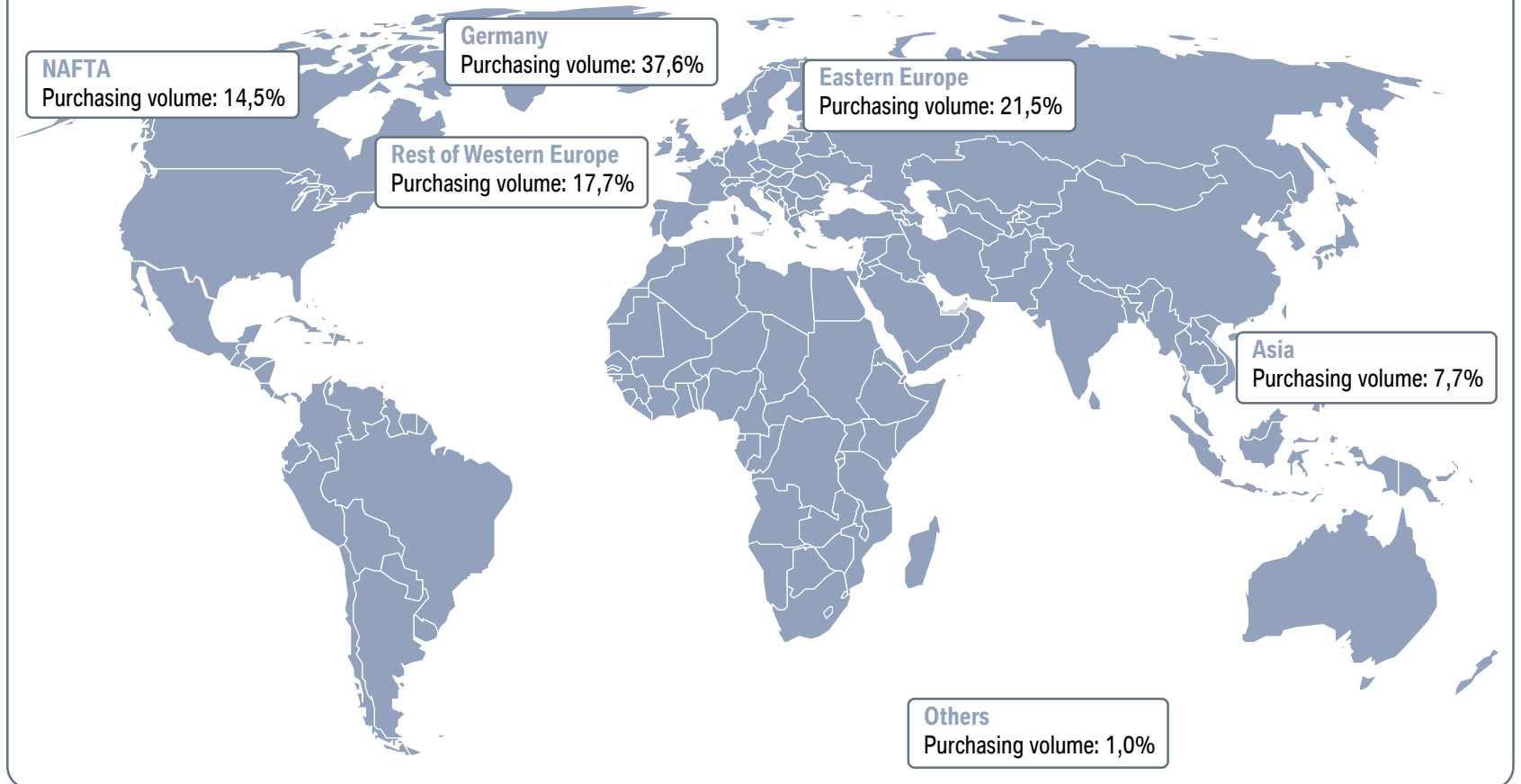
Amongst others, our **due diligence measures** along the procurement process are linked to the geographical distribution of the supplier locations and the purchasing volume. All Commodities for product related and non-product related parts and services are integrated in the contemplation.

In line with supplier selection, since several years, we check critical suppliers with the help of Online Assessments, Onsite Assessments and Audits based on the **BMW Group supplier sustainability policy**.

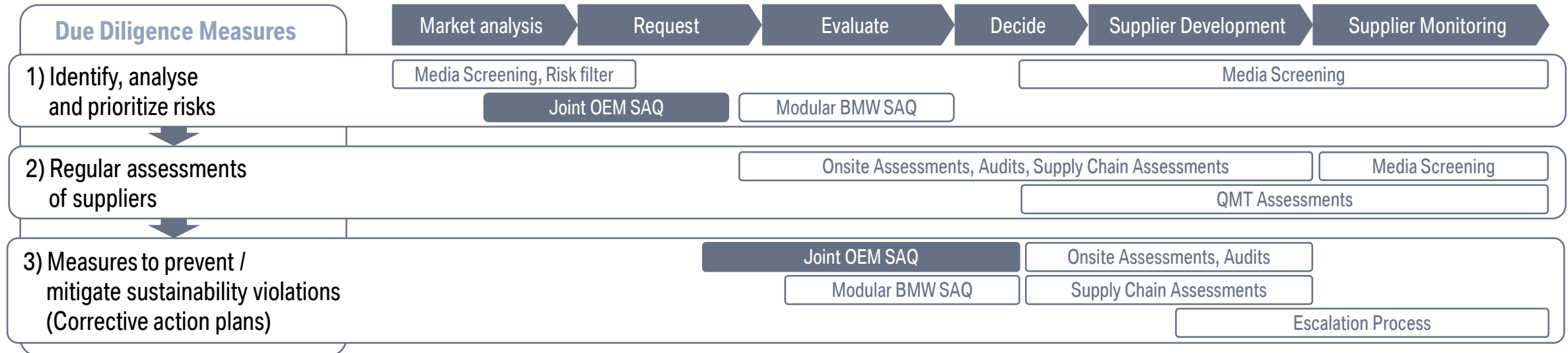
Especially the suppliers, who do not fulfil the sustainability requirements determined by the BMW Group, are critical.

Together, we agree upon corrective actions as well as due dates in order to implement these measures. Nominated suppliers have to implement the measures before start of production (SOP). Verification occurs through independent third parties and own assessors. In case of non-cooperation, our escalation process starts.

Geographical distribution of purchasing volume in % (as of 2017):



SUPPLY CHAIN DUE DILIGENCE. CONFLICT MINERALS.



The BMW Group uses the **result** of the **OEM industry Sustainability Questionnaire** to assess the **sustainability performance** of each supplier location to evaluate the use of **high-risk raw material from conflict affected regions**. According to our **BMW Group supplier sustainability policy** and in respect to our commitment to human rights, the BMW Group adopted the strategy of not sourcing components containing conflict minerals which directly or indirectly finance or benefit armed conflicts.

For these conflict minerals, the BMW Group implemented a complete due diligence process based on the **OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Guidelines)** and **integrated it in the procurement process** within the joint OEM SAQ. This integration allows the BMW Group to continuously evaluate the **transparency and performance of the supply chains** affected by conflict minerals. A **conflict mineral team** is dedicated to the monitoring of relevant KPIs and refers to the **top management** on a regular basis. In case of non-compliance an **escalation process** is started.

The BMW Group is also member of the **Responsible Minerals Initiative (RMI)** (formerly Conflict-Free Sourcing Initiative (CFSI)) and supports through this cooperation the inter-sectoral work of the **Responsible Minerals Assurance Process (RMAP, formerly Conflict-Free Smelter Program, or CFSP)**. The target of the BMW Group is to get a 100% response rate of affected suppliers and to significantly improve the number of conflict free audited smelters and refiners in all its supply chains in the next years.

SUPPLY CHAIN TRANSPARENCY. EXAMPLE COBALT.

In our **materials strategy**, we have identified particularly critical raw materials from a sustainability perspective. In 2017, we addressed the supply chains of **conflict minerals, cobalt, aluminum and steel**, especially. We are working towards establishing **maximum transparency in the supply chain**.

For example, since many years, the BMW Group has aspired to achieve supply chain transparency for cobalt through supplier workshops, discussions with sub-suppliers or reviewing of the audit results from individual smelting plants/ refineries. **The BMW Group is not supplied directly with cobalt, but it does purchase cells containing cobalt.** Based on the information provided by direct suppliers of the BMW Group in 2017, the following table have been generated listing the name and location of processing smelters / refineries and naming countries of origin of cobalt.

Names of Smelting Plants/Refineries	Location	Countries of Origin ²
Ambatovy	Madagascar	Australia
Freeport Cobalt	Finland	Democratic Republic of Congo
Ganzhou Tengyuan Cobalt Industrial Co., Ltd.	China	Finland
Ganzhou Yi Hao Umicore Industries Co., Ltd.	China	Madagascar
Murrin	Australia	Russia
Norilsk Nickel	Finland	
Umicore	South Korea	
South Korea	South Korea	

¹ Recycling

² No direct transparency from Umicore with respect to countries of origin. Proof of compliance with the due diligence obligation on the basis of external auditing report from PwC. PwC obtained full transparency.

The BMW Group is currently working on the standardization of the internal processes for conflict minerals and cobalt, the central focus being on the development / implementation of an audit standard. The BMW Group is forging ahead with this within the framework of its activities within the **Responsible Cobalt Initiative (RCI)**. Development and implementation is to be realized through the cooperation with the “**Responsible Minerals Initiative (RMI)**” by analogy with the conflict minerals.

CROSS-INDUSTRY PILOT PROJECT TO ENHANCE SUSTAINABLE COBALT MINING.

Address challenges to improve artisanal mining working conditions, as well as living conditions for surrounding communities. If proven effective, the approach could be transferred to further mine sites and enhance systemic challenges in the longer run.

Initiated with partners of our supply chain and of the electronics industry, implemented by GIZ.



Project modules:



Professionalising
artisanal mining



Supporting mining
communities



Facts & Figures:



3 years



Kolwezi, DR Congo



GIZ



Up to 10.000 miners

EMPLOYEES AND SOCIETY.

HEALTH AND PERFORMANCE

The BMW Group encourages personal responsibility in a working environment that is designed to maintain the long-term health and performance of its employees.



In 2017, a total of 154 doctors and medical assistants, currently working for the BMW Group health service in Germany treated around 1,280 employees.

Since 2014, more than 24,000 employees have undergone check-ups offered through the BMW Group health initiative.

The BMW Group aims to create workplaces where employees can stay healthy as they grow older: More than 50,000 employees worldwide have already benefitted.

In 2017, once again the BMW Company health insurance fund (BKK) awarded prizes to departments with creative ideas on how to keep everyone fit.

EMPLOYEES AND SOCIETY.

LONG-TERM EMPLOYEE DEVELOPMENT

The BMW Group ensures long-term employee development by nurturing employees' abilities, making the most of their talents, developing potential and enhancing employability.



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

In 2017, around 2,800 ideas of employees were implemented, leading to savings of 18.2 million euros.

The number of employees taking advantage of mobile working increased from **28,100** in 2016 to more than **31,800** in 2017.

The BMW Group is one of the most attractive employers worldwide, as confirmed by studies (e.g. trendence, Universum).

EMPLOYEES AND SOCIETY.

DIVERSITY

The BMW Group's diverse workforce makes the Company more competitive and more innovative.

The BMW Group is active in more than **150** countries around the globe. In Germany, employees from **118** different countries work together.

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

By 2017, women accounted for 44% of participants in the BMW Group's Global Leader Development Programme for young talents.

To promote diversity in German corporate culture, the BMW Group became a member of the Diversity Charter in 2012.

EMPLOYEES AND SOCIETY.

SOCIAL COMMITMENT

The BMW Group is a leader in intercultural understanding.



In collaboration with the United Nations Alliance of Civilisations (UNAOC), the BMW Group inaugurated the Intercultural Innovation Award. A total of more than two million people from 105 different countries have already benefitted.

The organization “Waves for Water” (founded by BMW Financial Services and “Care4water”) gave more than 500,000 needy people access to clean drinking water.

In 2017, the “BMW Group Junior Campus” allowed more than 50,000 children in Germany, Russia, South Korea and the UK to discover mobility and sustainability.

The BMW Group has set itself the goal of funding the vocational education of one million young people by 2025.

REPORTING BY THE BMW GROUP.



Continuous sustainability reporting since 2001

Sustainable Value Report available exclusively online as an interactive PDF
→ Savings as a result:
205 m³ water, 10.5 t paper, 14 t CO₂



Sustainability News Website since 2018
Interesting news in the four categories „Product“, „Sustainable Cities and Communities“, „Production and value creation“ and „People“. **Newsletter available**

SUSTAINABILITY AT THE BMW GROUP. RATINGS AND RANKINGS.

A number of different ratings document our sustainability performance and how it is externally perceived.



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