

# DOING OUR PART

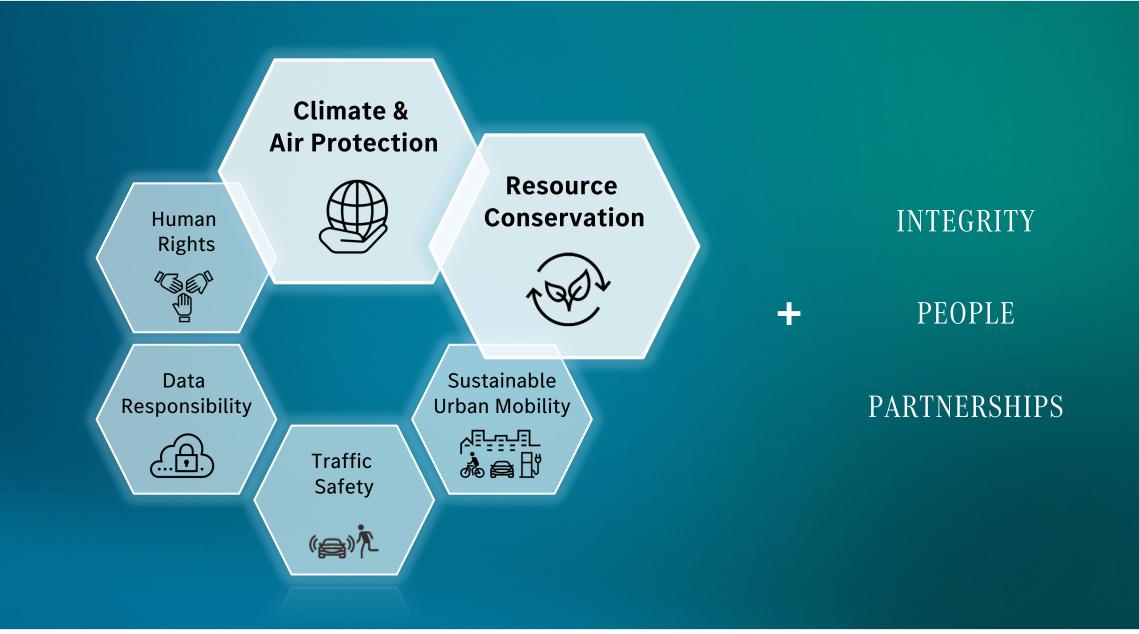
MAKING OUR FLEET OF NEW PASSENGER CARS NET CARBON-NEUTRAL BY 2039.

## CLIMATE & DECARBONISATION STRATEGY

## Markus Schäfer

Member of the Board of Management of Mercedes-Benz Group AG, Chief Technology Officer, Development & Procurement

## SUSTAINABLE BUSINESS STRATEGY: ECOLOGICAL, SOCIAL, ECONOMICAL



ESG

## BEV LAUNCH SUCCESSFUL IN EVERY MERCEDES-BENZ PASSENGER CAR SEGMENT











EQB



EQS

EQS SUV

EQE SUV

ESG CO

## OUR CURRENT PORTFOLIO: NINE FULLY ELECTRIC MODELS



EQA

EQC

EQV



EQT

## WE ARE ON THE WAY TO A FULLY ELECTRIC FUTURE

#### MMA FOLLOWED BY THREE "ELECTRIC ONLY" ARCHITECTURES MID-DECADE:



MEDIUM AND FULL-SIZE CARS Scalable modular system for our EV portfolio



#### PERFORMANCE ELECTRIC VEHICLES Architecture

VAN.EANEW ERA<br/>For electric vans and light commercial vehicles

#### ALONG THE ENTIRE VALUE CHAIN IN THE NEW VEHICLE FLEET IN 2039



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#### ALONG THE ENTIRE VALUE CHAIN IN THE NEW VEHICLE FLEET IN 2039

Supply chain



Production & logistics

SBTI

Well-to-tank

SBTI

Tank-to-wheel

End-of-life

Steel

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Aluminium

Plastics

Raw materials

Battery cell production

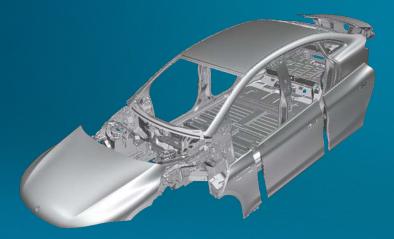
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## STEEL: DECARBONISATION OF OUR SUPPLY CHAIN

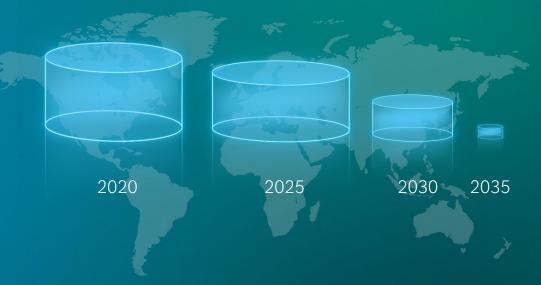
#### FOSSIL-FREE STEEL -BLUEPRINT FOR UPCOMING CAR LINES

First parts for passenger cars manufactured using fossil-free primary steel

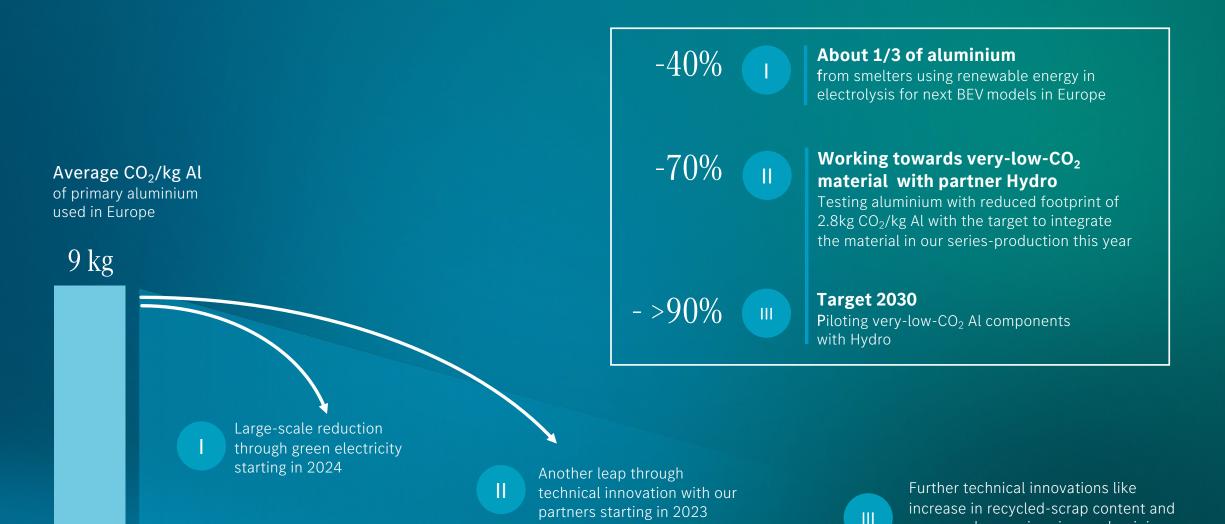
Structural parts for upcoming BEVs



#### STEEL CO<sub>2</sub>-REDUCTION PATHWAY



## ALUMINIUM: OUR PLAN TO SIGNIFICANTLY REDUCE CO<sub>2</sub> FOOTPRINT BY 2030



process changes in primary aluminium

production starting until 2030

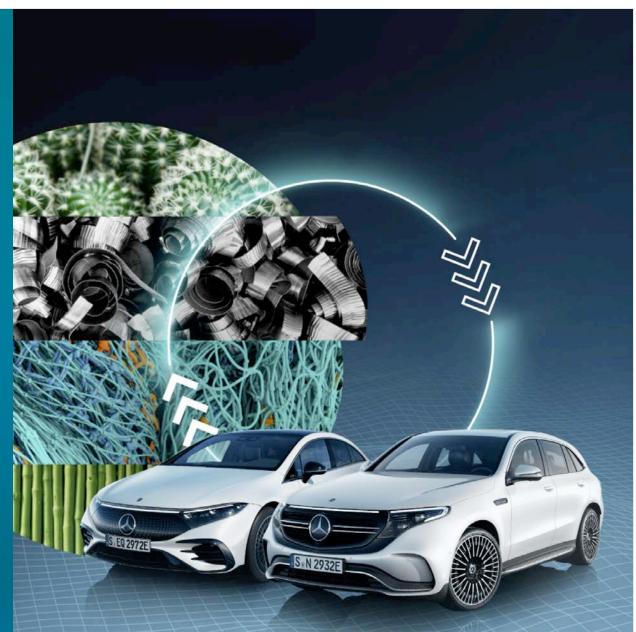
## INNOVATIVE MATERIAL TRENDS: POLYMERS, CHEMICAL RECYCLING, BIO-CIRCULAR

#### FIRST IMPLEMENTATION OF RECYCLING TECHNOLOGIES IN 2022

Upcycling // UBQ Materials Converting household waste into thermoplastic material:

**Cable ducting** in EQS and EQE

Mass Balance Materials closing the loop // Chemical recycling with BASF & Pyrum Turning used car tyres into new plastic parts: Bow door handles in S-Class and EQE



## AIMING FOR 40% RECYCLED-MATERIALS CONTENT BY 2030

#### 360° ENVIRONMENTAL CHECK MERCEDES-BENZ EQS

Recycling process **saving CO<sub>2</sub>** compared to virgin products:

186 components plus parts from **less-resource-consuming materials** 

Old fishing nets, fabric remnants from mills and carpets





## RAW MATERIALS: SOURCING STRATEGY TO MITIGATE SUPPLY RISKS

#### SECURING DEMANDS DIRECTLY AND INDIRECTLY

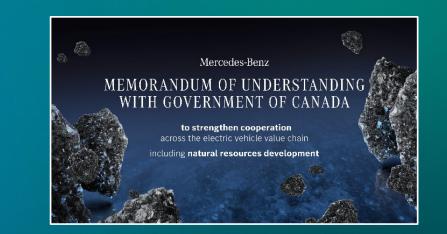


"Local-for-local" approach

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Source raw materials that are **responsibly extracted** and produced in our supply chain with a **low carbon footprint** 

Increase secondary material content



## SAFEGUARDING SUPPLY WITH RAW MATERIALS: LITHIUM





## MEMORANDUM OF UNDERSTANDING WITH GOVERNMENT OF CANADA

Strengthened cooperation along electric vehicle value chain focusing on long-term cooperation in raw materials

#### Natural resources development

Cooperation with strategic partners, e. g. for lithium hydroxide with German-Canadian Rock Tech Lithium Inc.

## BATTERY CELL PRODUCTION: GOAL OF MORE THAN 200 GIGAWATT HOURS BY 2030

#### MILESTONES IN INDUSTRIALISATION OF BATTERY CELL PRODUCTION

Local-for-local strategy **with partners** and new cell factories around the world

#### **Envision AESC**

- Cell production in Bowling Green, USA

- Cell production in Caceres, Spain

#### CATL

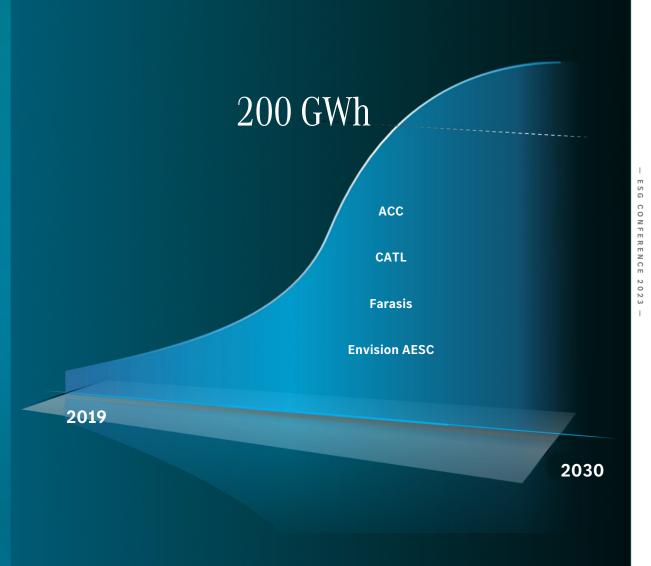
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- New plant in Debrecen, Hungary

#### ACC building 3 plants in Europe

- Douvrin, France
- Kaiserslautern, Germany
- Termoli, Italy



## NET CARBON-NEUTRAL CELL PRODUCTION: ACCELERATING FURTHER REDUCTION

#### © CARBON FOOTPRINT base for cell production

## NET CARBON-NEUTRAL CELL PRODUCTION

already implemented

#### NET CARBON-NEUTRAL CATHODE PRODUCTION confirmed by strategic suppliers

+ FURTHER POTENTIAL in supply chain

#### ALONG THE ENTIRE VALUE CHAIN IN THE NEW VEHICLE FLEET IN 2039

Supply chain

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Well-to-tank



Tank-to-whee

End-of-life



#### WE ARE ON TRACK

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## BUILDING OUR OWN GLOBAL HIGH-POWER CHARGING NETWORK

#### FIRST CHARGING HUBS AVAILABLE IN 2023

We aim to grow the network to more than 2,000 hubs with over 10,000 charging points by the end of the decade in North America, Europe, China and further core markets.

More than **400 hubs** with over **2,500 charging points** in North America



## GREEN CHARGING WITHIN OUR OWN INFRASTRUCTURE AND FOR OUR CUSTOMERS

Charge green within our own branded charging network

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Green electricity supply contracts or energy attribute certificates from an accredited supplier<sup>1</sup>

Photovoltaic systems at selected Mercedes-Benz charging stations



Green Charging with Mercedes me Charge in public<sup>2</sup>

Live in 28 markets around Europe, Canada and USA

> Steady growth of green charging sessions<sup>3</sup>

<sup>1</sup> As Charge Point Operator, we ensure the power supply to the charging points. Regionally, the supply of green electricity is secured differently by electricity providers. Where possible, we choose direct high-quality green electricity supply. If electricity is supplied from non-renewable sources, we will ensure sustainability with energy attribute certificates.

<sup>2</sup> Green Charging available in Europe, Canada and USA: Green Charging uses energy attribute certificates to ensure that an equivalent amount of electricity from renewable sources is fed into the power grid for the charging processes.

<sup>3</sup> In accordance to users charging via Mercedes me charge.

#### ALONG THE ENTIRE VALUE CHAIN IN THE NEW VEHICLE FLEET IN 2039

Supply chain



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## REDUCING CARBON FOOTPRINT, ENABLING HIGHER ELECTRICAL RANGE

#### EFFICIENCY IS THE NEW CURRENCY

Energy-efficient vehicle concepts. Striving to achieve what is technically possible in the luxury segment using key levers:

> AERODYNAMICS POWERTRAIN THERMAL MANAGEMENT VEHICLE ELECTRICS ROLLING RESISTANCE WEIGHT

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Incorporating findings from VISION EQXX into development of upcoming architectures



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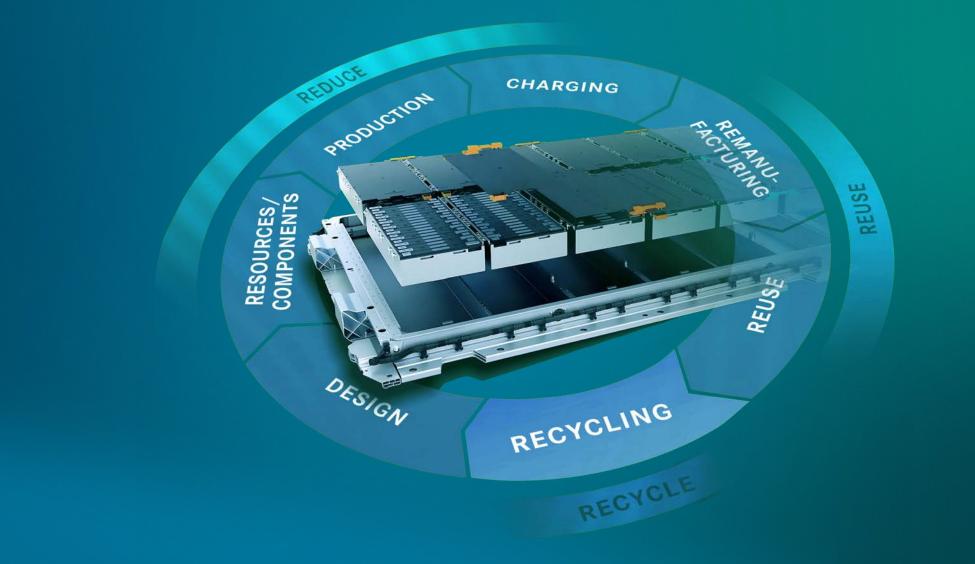


End-of-life

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## DESIGN FOR CIRCULARITY

#### MERCEDES-BENZ IS CLOSING THE LOOP ON BATTERIES THROUGH SUSTAINABLE RECYCLING



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## FIRST CLOSED LOOP IN CHINA FOR BATTERIES: MOU SIGNED

#### STRATEGIC PARTNERSHIP

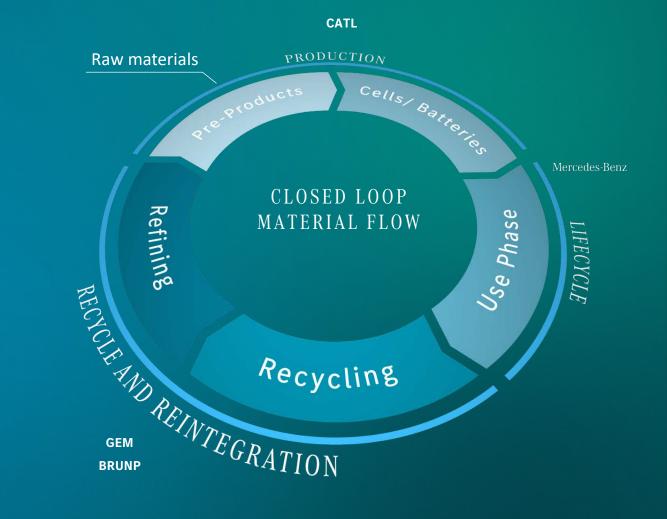
**First closed battery loop at industrial scale** set-up in China with leading partners

4-party MoU signed with CATL, Brunp and GEM to recycle production scrap and integrate material into new battery cells

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Safeguarding secondary material supply and sustainability targets by ensuring backflow of recycling feedstock

Important step towards a circular economy for batteries



## ON OUR WAY TO A SUSTAINABLE VEHICLE LIFECYCLE

Carbon-reducing activities along the entire value chain

Specific contracts with partners & suppliers

**Developing new technologies with partners** 

Aiming for 40% recycled-materials content and to at least halve lifecycle carbon emissions per car by 2030

## DISCLAIMER

This document contains forward-looking statements that reflect our current views about future events. The words "anticipate," "assume," "believe," "estimate," "expect," "intend," "may," "can," "could," "plan," "project," "should" and similar expressions are used to identify forward-looking statements. These statements are subject to many risks and uncertainties, including an adverse development of global economic conditions, in particular a decline of demand in our most important markets; a deterioration of our refinancing possibilities on the credit and financial markets; events of force majeure including natural disasters, pandemics, acts of terrorism, political unrest, armed conflicts, industrial accidents and their effects on our sales, purchasing, production or financial services activities; changes in currency exchange rates, customs and foreign trade provisions; a shift in consumer preferences towards smaller, lower-margin vehicles; a possible lack of acceptance of our products or services which limits our ability to achieve prices and adequately utilize our production capacities; price increases for fuel or raw materials; disruption of production due to shortages of materials or energy, labour strikes or supplier insolvencies; a decline in resale prices of used vehicles; the effective implementation of cost-reduction and efficiency-optimization measures; the business outlook for companies in which we hold a significant equity interest; the successful implementation of strategic cooperations and joint ventures; changes in laws, regulations and government policies, particularly those relating to vehicle emissions, fuel economy and safety; the resolution of pending governmental investigations or of investigations requested by governments and the outcome of pending or threatened future legal proceedings; and other risks and uncertainties, some of which are described under the heading "Risk and Opportunity Report" in the current Annual Report or in the current Interim Report. If any of these risks and uncertainties materializes or if the assumptions underlying any of our forward-looking statements prove to be incorrect, the actual results may be materially different from those we express or imply by such statements. We do not intend or assume any obligation to update these forward-looking statements since they are based solely on the circumstances at the date of publication.

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