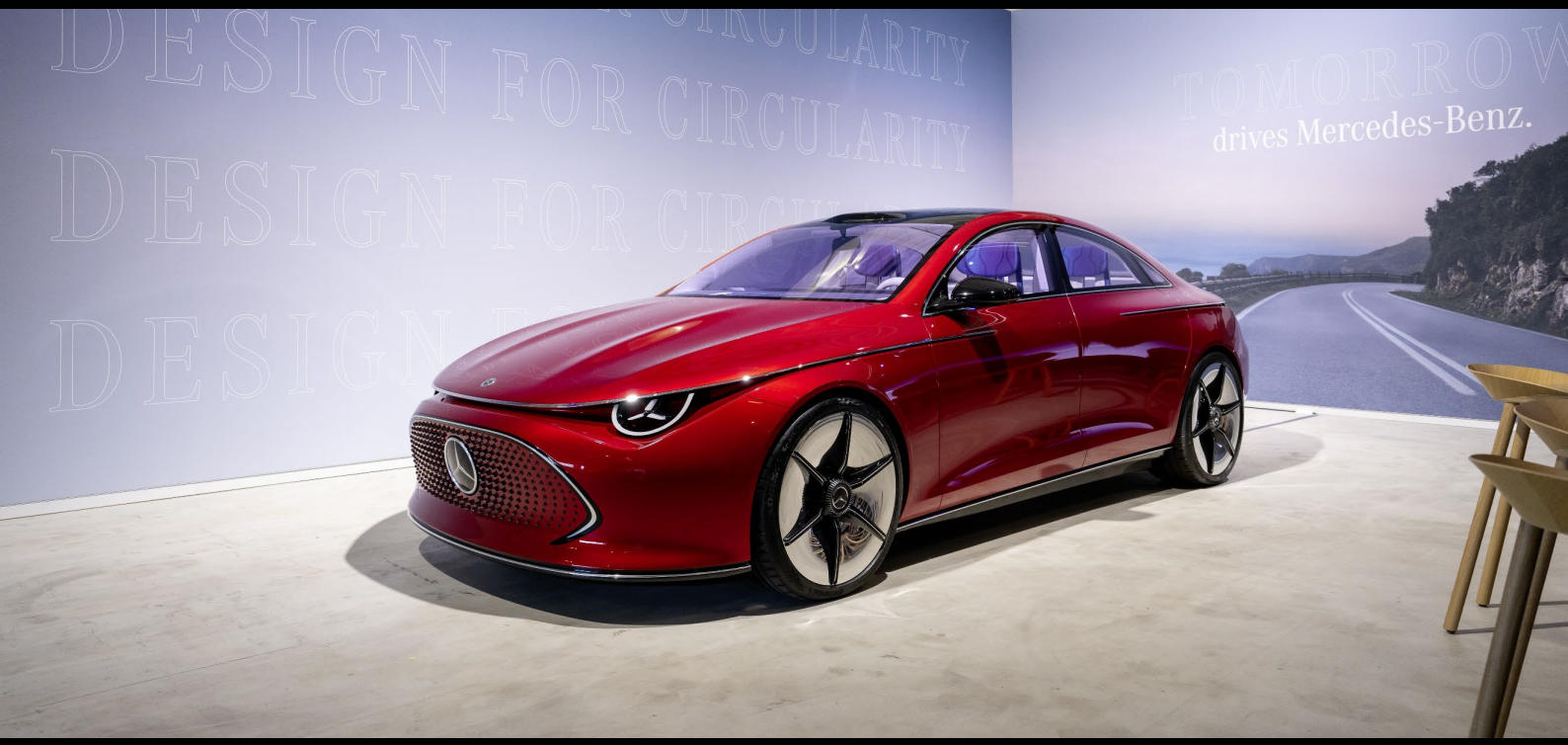


Battery recycling as an integral part of a closed material loop

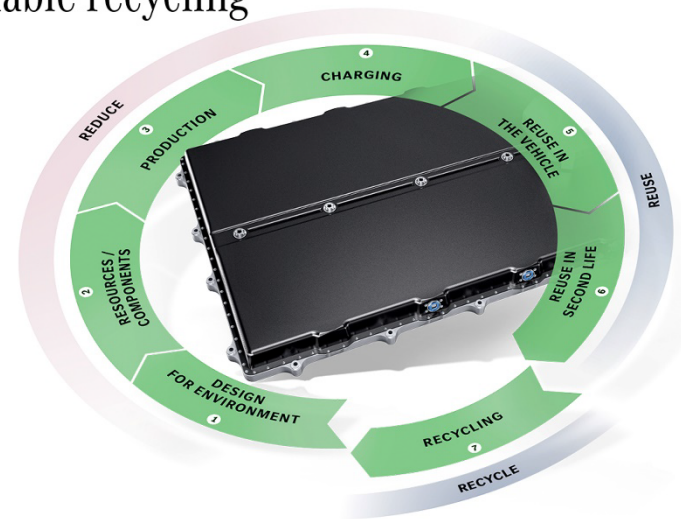
Mercedes-Benz

Mercedes-Benz has firmly anchored the principle of sustainability in its corporate strategy. The Group has set itself the goal of reconciling responsible economic growth and sustainability. In addition to a net carbon-neutral* production and the switch to an all-electric vehicle portfolio[1], a closed material loop to reduce resource consumption is fundamental. One measure to ensure success in this is the circular design of battery recycling.

Global resource consumption is increasing - with negative consequences for the environment and society. That's why the goal of Mercedes-Benz in order to establish a circular economy, is to increasingly decouple the consumption of resources from the growth of the production volume. The objective here is to help promote both economic growth and sustainability. This plan can only succeed if we systematically conserve resources. For example, the Group is increasingly using secondary materials and renewable raw materials in its vehicles. In addition to circular design and value retention, Mercedes-Benz also focuses on recycling. The battery recycling strategy plays a special role here.

In October 2024 Mercedes-Benz opened Europe's first battery recycling plant with an integrated mechanical-hydrometallurgical process making it the first car manufacturer worldwide[2] to close the battery recycling loop with its own in-house facility. The recycling plant in Kuppenheim, southern Germany, creates a genuine circular economy. This underpins the pioneering spirit and innovative strength of Mercedes-Benz as it strives to significantly reduce the consumption of valuable primary resources. Analogous to this technology, it is planned to establish a closed material loop for battery recycling in China and the USA together with high-tech partners.

Mercedes-Benz is closing the loop on batteries through sustainable recycling



1. **More sustainable product design** even in the development phase
2. **CO_2-neutrality** as a central awarding criterion in the supply chain
3. **Net carbon-neutral[1] production** in the own production plants worldwide
4. **Green Charging[2]** in Europe, USA/ Canada with Mercedes me Charge
5. Availability of **reconditioned batteries** in the vehicle
6. Mercedes-Benz Energy **stationary energy storages** give batteries a second life
7. Completing the reusable material cycle through **sustainable recycling**

[1] Net carbon-neutral means that carbon emissions that are not avoided or reduced at Mercedes-Benz are compensated for by certified offsetting projects. [2] Green Charging uses Energy Attribute Certificates to ensure that an equivalent amount of electricity from renewable energy sources is fed into the power grid for charging processes in Mercedes me Charge, if no electricity from renewable energy sources is provided. For this purpose, high-quality green electricity certificates are used, which verifiably certify the origin of the energy and serve as a kind of birth certificate for electricity from renewable energies.

In line with circular thinking and to conserve resources, the company offers reconditioned batteries as spare parts for all its electric vehicles. In addition, its Mercedes-Benz Energy subsidiary, Mercedes-Benz Energy GmbH, has established a successful business model with large-scale stationary storage applications. Batteries that are no longer suitable for vehicle use can enjoy a second life as part of an energy storage system. Refurbishing a used battery consumes significantly less energy and raw materials than new production. Material recycling concludes the end of a battery's life and is the key to closing the material loop. This makes battery recycling a prerequisite for a sustainable business model and the electromobility of the future.

Mercedes-Benz recycling plant in Kuppenheim, Southern Germany

Mercedes-Benz's technology partner for the battery recycling factory is Primobius. The plant is receiving funding from the German Federal Ministry for Economic Affairs and Climate Action as part of a scientific research project with three German universities. The project looks at the entire process chain for recycling, including logistics and reintegration concepts. Together with the partners Mercedes-Benz is making an important contribution to future scaling of the battery recycling industry in Germany.

Unlike the pyrometallurgy established in Europe today, the hydrometallurgical process[3] is less intensive in terms of energy consumption and material waste. The expected recovery rate of the mechanical-hydrometallurgical recycling plant is more than 96 percent. Valuable and scarce raw materials such as lithium, nickel and cobalt can be recovered – in a way which is suitable for use in new batteries for future all-electric Mercedes-Benz vehicles.

The Mercedes-Benz battery recycling plant in Kuppenheim has an annual capacity of 2,500 tonnes. The recovered materials feed into the production of more than 50,000 battery modules for new all-electric Mercedes-Benz models. The knowledge gained could help scale up production volumes in the medium to long term.

[1 All-electric vehicle portfolio: Wherever customer requests and market conditions allow]

[2 According to current knowledge]

[3 Hydrometallurgical process: Metal extraction and refining processes that exploit the solubility and wettability of the elements and their compounds at low temperatures]

**Net carbon-neutral means that carbon emissions that are not avoided or reduced at Mercedes-Benz are compensated for by certified offsetting project.*