

Media Information

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BMW Group significantly increases use of low-carbon steel at European plants

- New agreement with Salzgitter AG provides for delivery of low-carbon steel from 2026
- BMW Group expands sourcing of low-carbon steel to two suppliers, meeting up to 40% of steel demand at European plants
- CO₂ emissions savings of up to 400,000 tonnes per year
- Steel remnants from BMW Group plants will be reused in established circular economy
- Post: "Another important step in reducing CO₂ emissions at source in the supplier network"

Munich. The BMW Group continues to reduce CO₂ emissions in its supplier network as part of its ambitious ongoing sustainability activities. Steel produced using natural gas or hydrogen and green power, instead of fossil resources like coal, makes a vital contribution to this. The BMW Group has now signed a corresponding agreement with Salzgitter AG for delivery of low-carbon steel. The steel will be used in standard production of cars at the BMW Group's European plants from 2026 onwards. With this move, the BMW Group is expanding its sourcing of low-carbon steel to two suppliers. The aim is to use low-carbon steel to meet over 40% of demand at its European plants by 2030, thereby reducing CO₂ emissions by up to 400,000 tonnes per year.

"This is an important step in substantially reducing CO₂ emissions at source in the supplier network," said Joachim Post, member of the Board of Management of BMW AG responsible for Purchasing and Supplier Network. "Our aim is to reduce vehicles' lifecycle carbon footprint with a holistic approach. With steel, in particular, we are leading the way by sourcing low-carbon steel for our plants in Europe in the future."

The BMW Group will also source steel produced using hydrogen and green power from northern Sweden for its European plants from 2025 onwards, reducing CO₂ emissions by up to 95%. BMW Group press plants in Europe process more than half a million tonnes of steel per year.

Gradual transition to low-carbon steel production

Due to its energy-intensive manufacturing process, steel production generates high CO₂ emissions. However, because of its versatility, steel is one of the most important materials for car production and will continue to account for a large proportion of the body and many components.

To lower CO₂ emissions from steel production on a massive scale, Salzgitter AG is gradually switching to virtually carbon-free production. Electricity from renewable sources and its use in production of hydrogen from electrolysis are key elements of the transformation. This green hydrogen will replace the coal currently used in the conventional blast-furnace process. This is made possible by so-called direct reduction plants, which use hydrogen to directly reduce iron ore to iron in the solid state. The solid iron produced in this way is then melted down with steel scrap in an electric arc furnace powered by renewable electricity. Salzgitter AG plans to use this method to gradually reduce CO₂ emissions from steel production to just 5% of what they originally were.

Closed loop conserves resources and reduces CO₂ emissions

The BMW Group already established a closed-loop material cycle for sheet steel waste from BMW Group Plant Leipzig with Salzgitter AG more than five years ago. After delivering steel coils to the plant, Salzgitter AG takes away steel remnants of the kind produced at press plants, for example, when doors are punched out, and uses this material to produce new steel. This steel is then supplied to the BMW Group plants. In this way, raw materials can be used multiple times in a circular economy, thereby conserving natural resources.



Sheet steel waste from the BMW Group's other European plants is also either reused through a direct material cycle or sent back to the steel producer via steel traders and processed into new steel.

Use of secondary steel from circular economy reduces CO₂ emissions

Up to a quarter of the steel in BMW Group vehicles already comes from recycling loops. The BMW Group plans to increase its percentage of secondary steel in stages, reaching up to 50% by 2030.

Since this requires significantly less energy, CO₂ emissions from production of secondary steel are an average of 50-80% lower than from primary steel.

Investment in startups accelerates development of new technologies

In addition to sourcing low-carbon steel, the BMW Group has also invested in an innovative method for carbon-free steel production developed by American startup Boston Metal, through its venture capital fund, BMW i Ventures. Boston Metal uses electricity for its new technology, which, by means of an electrolysis cell, produces molten iron that is later processed into steel. If electricity from renewable energies is used for this process, then steel production is carbon-free. Over the coming years, Boston Metal plans to expand the new method for steel production on an industrial scale.

Through its investment in startups, the BMW Group aims to accelerate development of new technologies, promote competition and provide impetus that will make it easier for young companies to enter the market. Innovative technologies provide better, more sustainable and more efficient access to raw materials. Investing in new technologies is one of many steps the BMW Group is taking to meet its ambitious targets for the steel supply chain – for example, by making low-carbon production an important award criterion for every contract.

The BMW Group

With its four brands BMW, MINI, Rolls-Royce and BMW Motorrad, the BMW Group is the world's leading premium manufacturer of automobiles and motorcycles and also provides premium financial and mobility services. The BMW Group production network comprises 31 production and assembly facilities in 15 countries; the company has a global sales network in more than 140 countries.

In 2021, the BMW Group sold over 2.5 million passenger vehicles and more than 194,000 motorcycles worldwide. The profit before tax in the financial year 2020 was € 5.222 billion on revenues amounting to € 98.990 billion. As of 31 December 2020, the BMW Group had a workforce of 120,726 employees.

The success of the BMW Group has always been based on long-term thinking and responsible action. The company set its course for the future early on and is making sustainability and resource efficiency the focus of the company's strategic direction – from the supply chain, through production, to the end of the use phase, for all its products.

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