

Media Information
11 August 2022

BMW Group backs sustainable packaging in its logistics

+++ Increase in proportion of recycled material in packaging +++

Nikolaides, Head of Logistics: "We are leveraging various options to save carbon emissions and raw materials." +++ Other pilot

projects underway +++

Munich. The BMW Group has implemented several projects in its packaging logistics to further save resources. With these projects, the Group aims to work closely with suppliers to reduce carbon emissions and realize the principles of the circular economy as best it can. As part of this initiative, the European plants will use more recycled material in their packaging. This will mean that, for newly awarded contracts, the proportion of recycled material in reusable packaging for logistics purposes will almost double this year from around 20 percent to over 35 percent. However, using alternative sustainable materials, reducing single-use packaging, introducing lightweight packaging in certain areas and reducing transport volumes will also help cut carbon emissions. The BMW Group is monitoring the impact of individual measures via a CO₂ calculator for packaging. The Group's overall aim is to reduce CO₂ emissions in the supply chain by 20 percent per vehicle (compared to 2019).

Michael Nikolaides, Head of the BMW Group Production Network and Logistics: "Our 're:think, re:duce, re:use, re:cycle' approach is being implemented consistently in packaging logistics, too. We're using innovative strategies to consistently reduce the volume of resources we use, thus reducing our carbon footprint. We in Logistics are also doing our part to get the BMW iFACTORY up and running – with a particular focus on the 'green' side of things." BMW iFACTORY. LEAN. GREEN. DIGITAL. is the strategic vision for the global production network, with an emphasis on flexibility and efficiency, sustainability and digitalization. It provides an answer to the challenges involved in the transformation to e-mobility and takes a global approach. 'Green'



means leveraging the latest technologies to create a production process that uses minimal resources.

Plastic in packaging replaced by recycled material

One example of how the BMW Group is fulfilling the criteria of a circular economy is the use of recycled material in EPP packaging (EPP = expanded polypropylene). Currently, our newly developed EPP packaging already contains 25 percent recycled material. EPP is used in special containers as its shape can be adapted to the components being packaged, allowing them to be transported safely. Around 360,000 of these containers are needed each year. Using 25 percent recycled material allows us to save almost 280 tons of CO₂ annually. There are plans to increase this proportion of recycled material even further, with the first pilot schemes with 100 percent recycled material currently underway. If these tests are successful, this configuration will become standard for new contracts from 2024.

An additional 680 tons of carbon emissions savings can be made every year by using covers and so-called small load carriers with 50 percent recycled contents. As things stand, these measures are focused within the European markets due to the current waste management situation and available recycling infrastructure. We are currently working towards expanding to our locations in Mexico, the USA and China.

Reducing transport volumes

The BMW Group is introducing something that will have an even greater impact on emissions: folding large load carriers. As of this year, instead of pallet cages made of steel, we will be using folding plastic alternatives made from over 90 percent recycled material. These work in a similar way to the collapsible shopping crates that most



people are familiar with: when they are empty, they can be folded up, making them easier to transport. Using 15,000 of these new containers reduces CO₂ by around 3,000 tons per year.

Alternative materials with great potential for the future

When it comes to packaging, the sky's the limit. We're launching pilot projects using bio-based materials to replace oil-based substances polyethylene and polypropylene (PE and PP). We are also investigating whether and in what ways we can use materials from recycled household appliances in our packaging. In the long term, our aim is to use alternatives to raw materials across the board.

The BMW Group production network

The BMW Group has long seen itself as the benchmark in production technology and operative excellence in vehicle manufacturing. The strategic vision of its global production network – BMW iFACTORY. LEAN. GREEN. DIGITAL. – sets out the company's responses to the challenges of the transformation to e-mobility and pursues a global approach.

LEAN stands for efficiency, precision, absolute flexibility and outstanding integrational capabilities. GREEN represents the use of cutting-edge technologies to realise production with minimal resources and cut CO₂ emissions per car in production by 80% compared with 2019. With DIGITAL the focus is on data science, artificial intelligence, planning and

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development. Together, these things make the BMW Group Production Network a key contributor to the profitability of the company.

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 over 30 production sites all over the world; 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 2021 was € 16.1 billion on revenues amounting to € 111.2 billion. As of 31 December 2021, the BMW Group had a workforce of 118,909 employees.

The success of the BMW Group has always been based on long-term thinking and responsible action. The company set the course for the future at an early stage and consistently makes sustainability and efficient resource management central to its strategic direction, from the supply chain through production to the end of the use phase of all products.

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