Cooperation with recycling specialist carboNXT®

Recycling of polycarbonate composites

- Production waste is a valuable raw material
- Reprocessing on an industrial scale possible
- Contribution to more sustainability and resource conservation

The Maezio® brand of continuous fiber-reinforced polycarbonate composites (CFRTPs) developed by Covestro are characterized by their extremely light weight, very high strength and exceptional flexibility of design. This means that waste generated during the production of composites also becomes a valuable raw material. However, because they consist of different materials that cannot be easily separated from one another, the recycling of composites is a challenge. Covestro is cooperating with recycling specialist carboNXT® on this. It has developed a process that allows the waste to be processed on an industrial scale.

"We are very excited about this joint solution, as we cannot process the materials ourselves for technical reasons," explains Lisa Ketelsen, Head of Thermoplastic Composites at Covestro. "By recycling according to type at our partner's plant, the raw materials can be converted back into valuable products with similarly good properties as those characteristic of virgin materials. The recycling of materials makes it possible to use them again in other products. In this way, we save raw material resources and contribute to the focus on the circular economy."

"Our company has many years of experience in recycling carbon fiber-reinforced thermoplastics and has the necessary plant technologies to process such waste. We were therefore the partner of choice for this task," says Tim Rademacker, general manager at Mitsubishi Chemical Advanced Materials and responsible for the carbon fiber recycling business. "From the processed waste,
we produce high-quality new compounds of carbon fiber-reinforced polycarbonate for Covestro at CarboNXT®.

Demand for such recycled products is high because they are valuable raw materials, but also because more and more industrial customers and consumers are looking for more sustainable products. The project will now be further developed to market maturity by Covestro, Mitsubishi Chemical Advanced Materials and possibly other partners. It is part of a global strategic program with which Covestro is focusing all its energy on the circular economy.

About Covestro:
With sales of EUR 10.7 billion in 2020, Covestro is among the world’s largest polymer companies. Business activities are focused on the manufacture of high-tech polymer materials and the development of innovative, sustainable solutions for products used in many areas of everyday life. In doing so, Covestro is fully aligning itself to the Circular Economy. Its main customers are the automotive and transport industries, the construction industry, the furniture and wood processing industries, and the electrical, electronics, and household appliance industries. Other sectors include sports and leisure, cosmetics, healthcare and the chemical industry itself. As of the end of 2020, Covestro produces at 33 sites worldwide and employs around 16,500 people (converted to full-time positions).

About Mitsubishi Chemical Advanced Materials:
Mitsubishi Chemical Advanced Materials is a leading global manufacturer of high-performance thermoplastic materials in the form of semi-finished products and finished parts. The company has locations in 20 countries and more than 2,800 employees. Its specialty engineering thermoplastics and composites are superior in performance to metals and other materials and are used in a wide range of applications, primarily in the capital goods industry. The company is continuously developing new areas of applications in close cooperation with industry leaders in a broad variety of customer markets. The Mitsubishi Chemical Advanced Materials Group is well prepared to further expand its market leadership position.

Supporting the vision of our holding company, Mitsubishi Chemical Holdings Corporation (MCHC), Mitsubishi Chemical Advanced Materials is committed to the realization of KAITEKI, “a sustainable condition which is comfortable for people, society and the Earth”. To realize this vision, the MCHC Group engages in corporate activities that provide products, technologies and services based on the comprehensive capabilities of the Group in the Performance Products Domain, Industrial Materials Domain and Health Care Domain, with chemistry as the basis of our activities. We jointly express and promote our commitment under the corporate brand THE KAITEKI COMPANY.
Forward-looking statements
This press release may contain forward-looking statements based on current assumptions and forecasts made by Covestro AG management. Various known and unknown risks, uncertainties, and other factors could lead to material differences between the actual future results, financial situation, development, or performance of the company and the estimates provided here. These factors include those discussed in Covestro’s public reports. These reports are available at www.covestro.com. The company assumes no liability whatsoever to update these forward-looking statements or to make them conform to future events or developments.