

NEWS RELEASE

Teijin reduces greenhouse gas emissions by waste heat recovery

November 8, 2019 --- Climate protection is very important to Teijin Carbon Europe. Therefore, Teijin and the industrial park operator Veolia are planning to use the waste heat produced at the Heinsberg-Oberbruch site, thereby saving around 1,500 tonnes of CO₂ emissions yearly.

In the thermal processes of the carbon fiber production, a large amount of waste heat is generated and is previously released unused to the environment. Therefore, both companies have decided on a joint project to use the waste heat at the Heinsberg-Oberbruch location. For this purpose, a carbon fiber production plant will be adjusted and approximately 1,500 kW of waste heat will be fed into the Veolia hot water network, which supplies the local industrial companies. In addition, Teijin wants to use the waste heat to heat its own premises. The total yearly savings of 1,500 tonnes of CO₂ correspond to the CO₂ emissions of around 1,000 diesel vehicles with an annual mileage of 10,000 kilometers each.

For the financial implementation of the waste heat recovery project, the two project partners took part in the "Energy Efficiency" funding competition of the Federal Ministry for Economic Affairs and Energy. This funding program specifically targets the reduction of CO₂ emissions in German economy. About half of the eligible costs were approved, the remainder amortized through the use of waste heat at the site due to reduced gas consumption.

About the Teijin Group

Teijin (TSE: 3401) is a technology-driven global group offering advanced solutions in the areas of environmental value; safety, security and disaster mitigation; and demographic change and increased health consciousness. Its main fields of operation are high-performance fibers such as aramid, carbon fibers & composites, healthcare, films, resin & plastic processing, polyester fibers, products converting and IT. The group has over 170 companies and around 20,000 employees spread out over 20 countries worldwide. It posted consolidated sales of JPY888.6 billion (USD 8.1 billion) and total assets of JPY 1020.7 billion (USD 9.3 billion) in the fiscal year ending March 31, 2019.

About Veolia

Veolia group is the global leader in optimized resource management. With over 171,000 employees worldwide, the Group designs and provides water, waste and energy management solutions which contribute to the sustainable development of communities and industries. Through its three complementary business activities, Veolia helps to

develop access to resources, preserve available resources, and to replenish them. In 2018, the Veolia group supplied 95 million people with drinking water and 63 million people with wastewater service, produced nearly 56 million megawatt hours of energy and converted 49 million metric tons of waste into new materials and energy. Veolia Environnement (listed on Paris Euronext: VIE) recorded consolidated revenue of €25.91 billion in 2018 (USD 30.6 billion).

In Germany, around 12,100 employees work for Veolia and its affiliated companies at approximately 300 locations. In partnership with local communities, they serve more than 13 million people. In addition, there are tailor-made services for private and commercial customers, commercial and industrial companies. In its three business units, Veolia in Germany generated annual sales of 1.86 billion Euro in 2018. www.veolia.de

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