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# DIC Corporation

## DIC and SAP Partner in Pilot Project Using Blockchain Technology in the Construction of a Waste Plastics Traceability System

—System will advance the recycling of plastic resources, thus contributing to the realization of a circular economy—

**Tokyo, Japan**—DIC Corporation announced today that it has partnered with SAP SE to undertake a pilot project using blockchain technology<sup>1</sup> in the construction of a waste plastics traceability system that will advance the recycling of plastic resources.

DIC produces and sells polystyrene, which is used widely in containers for food products, among others. As part of its sustainability program, the Company promotes efforts to achieve greater circularity in the market for food packaging, a major focus. In November 2020, DIC announced [plans to collaborate with another company in the practical implementation of a closed-loop recycling system for polystyrene that maximizes the technologies](#), as well as the collection and recycling configurations, of both companies. This system employs chemical recycling technologies to enable the conversion of collected post-consumer foamed polystyrene containers not suitable for material recycling back into styrene monomer, polystyrene’s precursor, thereby facilitating the closed-loop recycling of these items.

Recent years have brought a worldwide increase in demand for the recycling of plastics, reflecting a rising awareness of the importance of sustainability. Companies using recycled plastics require accurate information on the origins of such raw materials and on comingled materials.

The new pilot project will use the GreenToken by SAP system to track raw materials across the entire supply chain, from the point of generation, to enhance the visibility of production and inspection processes, and of data pertaining to physical properties and quality. This will help customers understand how much recycled material is actually contained in the recycled plastics they are using.

GreenToken by SAP uses private blockchain technology to make the supply chain transparent, following materials throughout the



resource life cycle, from origin through manufacture, sale, use, collection, pulverization, recycling and reuse. Digital twin technology<sup>2</sup> makes it possible to record information, including unique raw material attributes related to origin, carbon footprint and source of collected polystyrene containers, as well as sustainability certification data, using tokens.<sup>3</sup> The issue of tokens provides the means to track recycled materials even when they are mixed with other raw materials and processed into new products.

“Consumer awareness of the circular economy is high. This has increased demand for sustainable packaging,” says Yuji Morinaga, Executive Officer and General Manager of DIC’s Packaging Material Products Division. “Our work with the GreenToken helps substantiate environmental claims, and supports our mission to advance the recycling of plastics and build a closed-loop recycling system that employs chemical recycling.”

GreenToken by SAP is a solution developed through SAP’s intrapreneurship program. “Chemical recycling is key to accelerating the shift to a circular economy,” explains its co-founder James Veale. “Plastic from chemically recycled plastic waste is indistinguishable from plastic from conventional sources. Our solution proves that it really is circular plastic and provides complete, auditable supply chain transparency. That means more trust in recycling from customers and ultimately less waste in the environment.”

In its DIC Vision 2030 long-term management plan, DIC identifies responding to a circular economy as a central sustainability strategy and as a challenge critical to the realization of a sustainable society. Looking ahead, the DIC Group will continue collaborating with customers and suppliers across its supply chain with the aim of achieving greater circularity in the important market for food packaging.

1. Blockchain technology is a database technology involving a continuously growing list of linked transaction records called blocks. Because stored transaction data is accessible to all parties and cannot be modified retroactively, blockchain is an effective choice for traceability that facilitates tracking of the production and distribution history of raw materials and products.
2. A digital twin is a virtual representation of a physical asset. Digital twin technology enables the accurate reproduction of production facilities and lines in cyber space, making it possible to grasp status, make future predictions, and enhance the efficiency of production and management.
3. A token is a crypt asset issued using blockchain technology. With GreenToken by SAP, tokens correspond to a specific volume of raw materials or products.

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## About DIC Corporation

DIC Corporation is one of the world's leading fine chemicals companies and the core of the DIC Group, a multinational organization comprising over 190 companies, including Sun Chemical Corporation, in more than 60 countries and territories. The DIC Group is recognized as a global leader in the markets for a variety of products essential to modern lifestyles, including packaging materials, display materials such as those used in television and computer displays, and high-performance materials for smartphones and other digital devices, as well as for automobiles. Through such products, the Group endeavors to deliver safety and peace of mind, and color and comfort, to people everywhere. The DIC Group also seeks to contribute to a sustainable society by developing innovative products that respond to social change and which help address social imperatives. With annual consolidated net sales currently in excess of ¥800 billion and 22,000-plus employees worldwide, we pledge to continue working in close cooperation with our customers wherever they are.

Website: <https://www.dic-global.com/en/>

## About SAP

SAP's strategy is to help every business run as an intelligent, sustainable enterprise. As a market leader in enterprise application software, we help companies of all sizes and in all industries run at their best: SAP customers generate 87% of total global commerce. Our machine learning, Internet of Things (IoT), and advanced analytics technologies help turn customers' businesses into intelligent enterprises. SAP helps give people and organizations deep business insight and fosters collaboration that helps them stay ahead of their competition. We simplify technology for companies so they can consume our software the way they want – without disruption. Our end-to-end suite of applications and services enables business and public customers across 25 industries globally to operate profitably, adapt continuously, and make a difference. With a global network of customers, partners, employees, and thought leaders, SAP helps the world run better and improve people's lives. For more information, visit [www.sap.com](http://www.sap.com).