

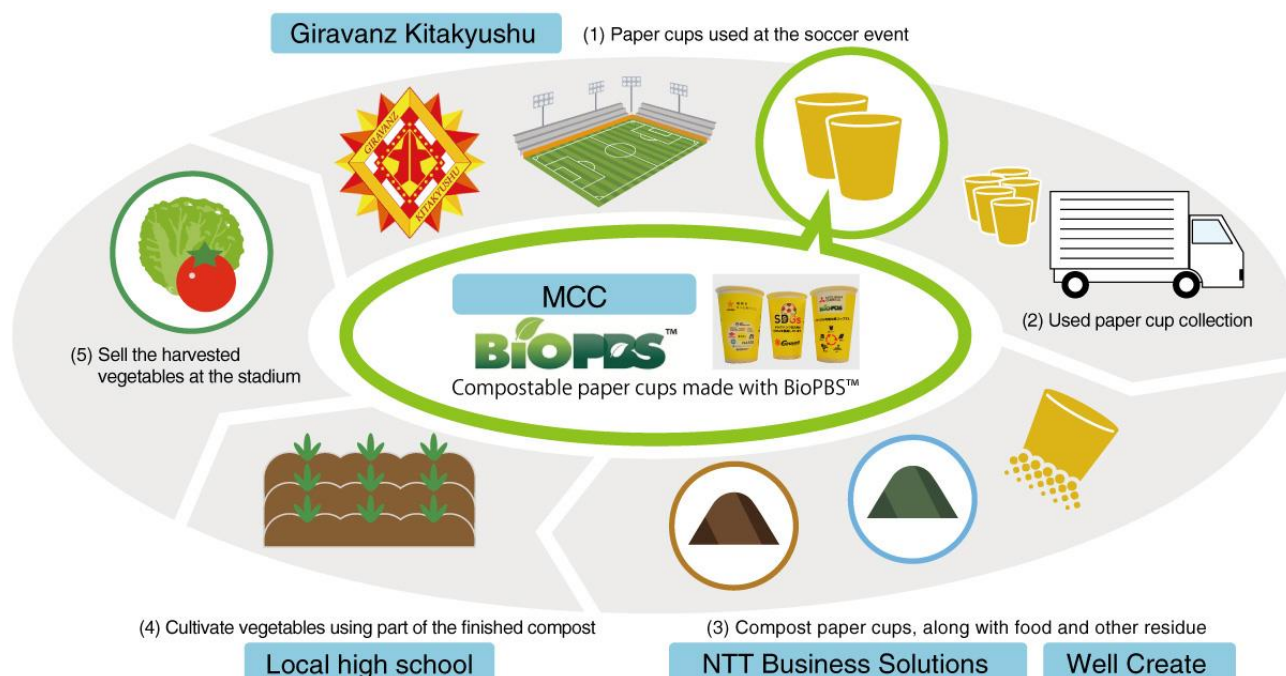
August 5, 2021

**From Paper Cups to Vegetables!**  
**Partnering with Giravanz Kitakyushu to Tackle the Realization of a Recycling System**  
**Utilizing BioPBS™ Compostable Material and the Power of Sports**

Mitsubishi Chemical Corporation

Mitsubishi Chemical Corporation (MCC; Head office: Chiyoda-ku, Tokyo; President: Masayuki Waga) is collaborating with Giravanz Kitakyushu, a Japanese soccer club, to implement a verification test as a step toward realizing circularity using compost derived from paper cups made with MCC's BioPBS™ (manufactured by PTT MCC) compostable material.

For the verification test, MCC will supply about 6,500 paper cups made with MCC's BioPBS™ compostable material to the Giravanz Summer Festival 2021, a soccer event hosted by Giravanz Kitakyushu on August 22nd and 28th, 2021. The used paper cups will then be collected and composted together with any food residues at composting facilities\*1. A portion of the compost that is produced will be used to cultivate vegetables at a local high school, which will then be harvested and sold at the soccer stadium.



For this test, we have cooperated with several companies and a school to form a circular system\*2. MCC is responsible for management of the overall system as well as supplying the BioPBS™ compostable material, while NTT Business Solutions Corporation and Well Create Co., Ltd., will manage the composting process, employing the used paper cups as one of the raw materials.

MCC aims to contribute to the realization of a circular economy by actively building recycling and composting systems in collaboration with various companies and municipalities.

\*1 The compost facility uses Well Create's "Four Stars" food residue fermentation and decomposition equipment.

\*2 Companies and organizations collaborating in this project (in no particular order)

Giravanz Kitakyushu Co., Ltd., Sunmark Inc., Fukuoka Prefectural Yukuhashi High School, Yukuhashi City, Sapporo Breweries Limited, NTT Business Solutions Corporation, Well Create Co., Ltd., Nihon Matai Co., Ltd., Towa Process Co., Ltd., Toyo Aluminium Ekco Products Co., Ltd., HP Japan Inc., Green Sports Alliance Japan, Dentsu Group Inc., Dentsu Inc.

(Reference)

BioPBS™ is a plant-derived biodegradable material developed by Mitsubishi Chemical, which owns the basic patent, and manufactured by PTT MCC Biochem Company Limited, which is a fifty-fifty joint venture of Mitsubishi Chemical and PTT Global Chemical of Thailand. These resin materials have minimal impact on the natural environment as they are decomposed into water and carbon dioxide by microorganisms in nature. In addition, BioPBS™ shows excellent performance in low temperature heat sealability, heat resistance, and flexibility compared to other biodegradable resins.

Typically, the inside of paper cups are laminated with polyethylene, a non-biodegradable plastic, for water resistance. By using BioPBS™ as a laminate material, the entire paper cup can be decomposed in a composting facility or in soil.

< Composting process at the compost facilities >



When composter  
is turned on



After 2 hours



After 24 hours



After 4 days

Contact

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