

■ Reducing water use in automated equipment cleaning

Production equipment at plants, including pipes, tanks and sterilizers, is automatically cleaned with detergent after production ends. The process includes pre-rinsing prior to cleaning and post-rinsing to eliminate detergent residues after cleaning. While these steps are very important to maintain product quality, they account for a large proportion of the water used in production. Our initiatives to reduce the amount of water plants use for pre- and post-rinsing, with full verification and strict quality control, have enabled us to reduce annual water use by approximately 1,440 m³.

Yakult A&G Water Purification System

At every plant in the Yakult Group, regardless of treatment method, our wastewater management is based on voluntarily adopted standards that are more stringent than the wastewater standards required by law and local government ordinances.

At our dairy product plants, we have introduced the Yakult A&G Water Purification System. This system uses *Yakult* containers with the bottoms removed (*Yakult* filter material), in which microorganisms take up residence and break down contaminants in the water.

This system has been installed at four Yakult Honsha plants (Fukushima Plant, Ibaraki Plant, Fuji Susono Plant and Hyogo Miki Plant) and several bottling company plants (Yakult Iwate Plant, Yakult Aichi Plant and Yakult Okayama Wake Plant). Outside Japan, the system was introduced at the Sukabumi Plant operated by P.T. Yakult Indonesia Persada in 2010.

Preventing water pollution and conserving biodiversity

At Yakult Honsha dairy product plants and bottling companies, wastewater such as cleaning water generated during production processes is properly treated at plant wastewater treatment facilities and then discharged into sewers or rivers. Knowing the impact our plants can have on the natural environment of surrounding waterways, at least once per year each plant runs educational training on dealing with emergencies—such as unforeseen situations in the wastewater treatment facility, or oil leaking from a transport vehicle on plant premises—to improve awareness among workers and strengthen our systems for preventing water pollution.

We also endeavor to conserve biodiversity in and around waterways. We use IBAT* to perform ecological risk assessments, and have confirmed that the Abukuma River coast downstream from the Fukushima Plant is a landing zone for northern pintail ducks and designated a Key Biodiversity Area (KBA).

* IBAT (Integrated Biodiversity Assessment Tool): A tool developed by the IBAT Alliance biodiversity project in partnership with the United Nations Environment Programme

Related information ▶ p. 41 Assessment of biodiversity risks for existing operations ▶▶▶

Initiatives in each country and region

■ Reusing treated water to water green spaces: Yakult S.A. de C.V. (Mexico)

At our Ixtapaluca Plant, water treated at wastewater treatment facilities is reused to water green spaces around the plant. In 2021, a monthly average of 1,413 tons for a yearly total of 16,956 tons of water was used for watering.

■ Installing production wastewater purification facilities: Yakult China Group

At our Wuxi Plant, we have installed production wastewater treatment facilities that meet China's Class 1A wastewater standards. Class 1A wastewater is considered of sufficient quality for reuse as industrial water, and the wastewater at our Wuxi Plant is used by plants belonging to other companies after passing through the final water treatment location. We have also installed domestic wastewater purification facilities at our Wuxi Plant and ensure that wastewater meets the standards for external discharge before it is discharged.

Key initiatives in effective use of water by country/region

Country/region	Initiatives
Taiwan	Installing a rainwater recycling system. In 2021, reused 94 tons for toilet water, plant watering, etc.
Thailand	When manufacturing tanks were updated, 8 old tanks were used to store wastewater which was then reused for cleaning vehicles and other purposes. Achieved zero wastewater discharge to rivers in 2021 as a result.
South Korea	Reusing wastewater from the automatic cleaning of production facilities to reduce water consumption.
Philippines	Reusing water used for cooling during production, along with rainwater, in plant watering, fire hydrants, toilets and elsewhere.
Indonesia	Installing water purification facilities for production wastewater at Sukabumi Plant in 2011. Water quality in plant checked daily and audited monthly by external organizations.
China (Tianjin)	Continuously using recycled water as toilet water.
Brazil	Purifying wastewater at third production facility starting from 2021, and reusing an average of 12 m ³ per month as toilet water.
United States of America	Installing a rainwater reuse system on the head office and plant grounds and reusing water to water plants.
India	Using processed wastewater from the plant to water the plants on the premises.