

# Water Recycling-Oriented Society

## Water Resources

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### Our Basic Approach and Strategy

Although Unicharm uses limited amounts of water directly in manufacturing processes, water is an integral part of pulp, paper, and other material manufacturing processes conducted by suppliers of raw materials. Accordingly, we believe it necessary to make effective use of limited water resources, and in the interest of water conservation, we conduct water risk assessments of all our business activities and take measures accordingly, reduce water usage (water withdrawal) at production sites, and recycle and purify water, in accordance with the Unicharm Group Basic Environmental Policy.

**P.022** Unicharm Group Basic Environmental Policy

### Risks and Opportunities

#### Risks

We mainly manufacture and sell disposable diapers and sanitary pads, as well as wet wipes and other hygiene products and pet food. Although we use a small amount of water directly in our manufacturing processes, our upstream suppliers, from whom we procure materials, utilize substantial amounts of water as they use pulp, paper, and forest-derived resources as raw materials. There is a risk we will be forced to suspend operations due to instability in the supply of forest-derived raw materials, which is an underlying cause of water resource depletion; a risk of product sales suspension due to a dwindling supply of water used in wet wipe and pet food manufacturing processes; and a risk of cost increases in line with higher water usage costs and difficulty ensuring stable supplies of water. To this end, we ask all suppliers to understand and cooperate with the Unicharm Group Sustainable Procurement Guidelines.

We have conducted a medium- to long-term water risk assessment using the latest version of the Aqueduct Overall Water Risk Map, a World Resources Institute (WRI) tool, and request that our suppliers operating in particularly high-risk river basins carefully manage water resources and work to alleviate risk.

#### Opportunities

With the proliferation of hygiene awareness and practices, such as the habit of sanitizing with alcohol experienced during the pandemic, demand may increase for wet wipes to clean one's hands and surroundings without the use of water. The strength of our products is that they do not require water for use or disposal, and demand is particularly high in areas where droughts or disasters have occurred and lifeline services have not been established. Proactive involvement in these scenarios presents an opportunity to promote the use of Unicharm products.

**P.104** Unicharm Group Sustainable Procurement Guidelines

### Management Structure

Plans and progress on important matters related to water resources are shared at ESG Committee meetings held four times a year and chaired by the president & CEO, and upon approval from the Board of Directors, a PDCA cycle is implemented toward the achievement of targets. Furthermore, the ESG Division measures and monitors water usage (water withdrawal) on a monthly basis, and wastewater at least once a year.

**P.023** Environmental Management Structure

**P.009** ESG Promotion System

### Indicators and Targets

Implementation Items	Fiscal 2023 Results	Fiscal 2024 Targets	Target Year
Reduce water usage (water withdrawal) by 1% annually YoY	Up 1.4% YoY	1% reduction YoY	Annually
Zero wastewater law and regulation violations at factories	Zero	Zero	Annually

Initiatives and Results

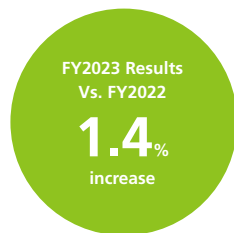
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Water Security

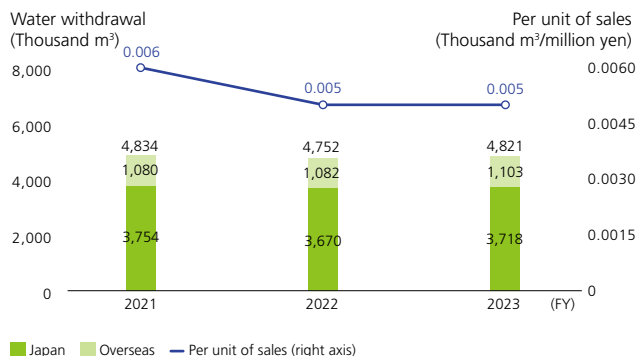
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Unicharm uses water mainly for equipment cooling, cleaning associated with machine maintenance, some nonwoven fabric manufacturing processes, and pet food manufacturing processes. We have set a goal of reducing water usage (water withdrawal) by 1% or higher annually year on year, and are reviewing processes, introducing water-saving equipment, and at some locations using rainwater to water plants. Water usage (water withdrawal) in fiscal 2023 was 4,821 thousand m<sup>3</sup>, an increase of 1.4% from fiscal 2022.

Water Usage (Water Withdrawal)



Water Usage (Water Withdrawal)\*1



\*1 Consolidated net sales are used as the denominator for per unit of sales. Some estimates have been revised since fiscal 2023 and the calculation method has been revised. Accordingly, figures for fiscal 2022 and earlier have been retroactively recalculated.

Reducing Water Usage  
(Water Withdrawal at the Kyushu Factory) (Japan)

The Kyushu Factory has reduced water usage (water withdrawal) and achieved zero wastewater by using an air-cooling system instead of a conventional water-cooling system for air conditioning equipment inside the factory. Going forward, we will expand the introduction of air-cooling systems to other factories when air conditioning systems are upgraded.

Reducing Water Usage (Water Withdrawal) by Recycling Water

Unicharm makes efforts to recycle water, with a focus on factories that use substantial amounts. We are promoting reductions in water usage (water withdrawal) by introducing water recycling systems at nonwoven fabric and Paper-Sand® manufacturing factories.

Recycling Water at Nonwoven Fabric Factories (Indonesia)

Our nonwoven fabric manufacturing factory in Indonesia has been equipped with water recycling equipment since the factory was established in 2013 to recycle water used in the manufacturing process. In fiscal 2023, the factory wastewater recycling rate was 87.3%.

Recycling Water at Peparlet Factories (Japan)

Peparlet factories recycle water by pumping wastewater from the dehydration process during Paper-sand® production back into the manufacturing process. Factory wastewater recycling rates for fiscal 2023 were 100%, achieving zero factory wastewater.

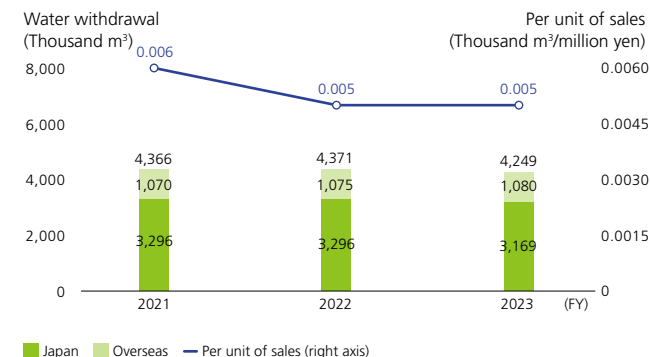
Water Usage and Wastewater Volumes

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Unicharm defines water usage (factory usage + product usage) as “water withdrawal volume – wastewater volume.” Main water usage occurs at factories during the Paper-sand® manufacturing process and the evaporation of cooling water, while product water usage includes wet wipes and pet food.

In addition, wastewater volumes include some locations where wastewater is considered equal to water withdrawal. Wastewater is mainly discharged during the absorbent paper and pet food manufacturing processes. Wastewater in fiscal 2023 amounted to 4,249 thousand m<sup>3</sup>, a 2.8% reduction from fiscal 2022.

Wastewater\*2



\*2 Consolidated net sales are used as the denominator for per unit of sales. At sites where wastewater is not measured, wastewater volume is considered equal to water withdrawal. Some estimates have been revised since fiscal 2023 and the calculation method has been revised. Accordingly, figures for fiscal 2022 and earlier have been retroactively recalculated.

Reducing Wastewater Volumes at the Itami Factory (Japan)

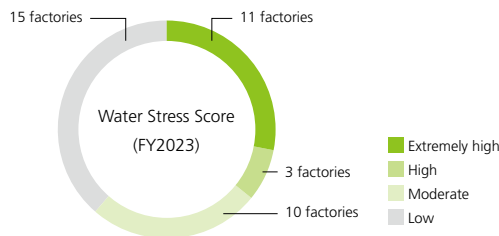
The Itami Factory, which manufactures pet food, invested in equipment to control wastewater in fiscal 2021 and fiscal 2022. Wastewater was reduced approximately 30% compared to wastewater volumes before capital investment by circulating cooling water after use, installing flow meters in each area, and replacing water supply pipes.

## Identifying and Responding to Water Risks\*

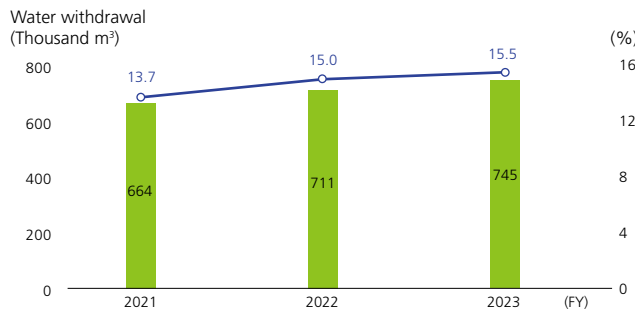
Of 39 total factories in the Unicharm Group, 14 were identified as having “extremely high” or “high” water stress scores in fiscal 2023 using Aqeduct. Even in areas with high water stress scores, we have set the goal of reducing water usage (water withdrawal) by 1% or more annually year on year, and are engaged in efforts to achieve these reductions. Furthermore, based on climate change and other future scenarios, we also identified seven factories that will have “extremely high” water stress scores in 2050, and recognize the need to address water risk going forward.

\* Water stress is identified using the latest version of the Aqeduct Overall Water Risk Map, a World Resources Institute (WRI) tool.

### Water Stress Score of Unicharm's Factories



### Water Withdrawal and Percentages in Areas with High Water Stress



■ Water withdrawal in areas with high water stress  
— Percentage of water withdrawal in areas with high water stress (right axis)

P.065 Environmental Data > Water Usage by Source (Water Withdrawal) (Overseas)

## Collaborating with Relevant Agencies and Associate Companies in Response to Flooding (Thailand)

The Wellgrow Factory in Thailand is located in an industrial park near the Bang Pakong River, which is at high risk of flooding. This factory is an important manufacturing base for disposable diapers and sanitary pads for the domestic market in Thailand, as well as exports to other countries and regions. Although damage to this factory caused by flooding in 2011 was limited, we are cognizant of risks including labor and production capacity reductions and stoppages and sales declines, and are implementing countermeasures in collaboration with relevant agencies and associate companies.

### Logistics Function Responses

- We created a shipping plan with logistics providers taking into account several alternative transportation routes in anticipation of flooding.
- We established a communication system using social media for daily operations and enhanced cooperation.

### Employee-Focused Responses

- We created emergency evacuation procedures from Stage 1 to 6 with the highest priority placed on employee safety.
- We established a factory emergency organizational chart, communication network, and emergency response team that are revised annually in January. Emergency evacuation drills are also held regularly.

### Factory Facility Responses

- Every year before the rainy season, we inspect sandbags and waterproof board partitions, and clean drains and gutters around the factory to prevent clogging.
- We collect river flooding information and monitor water levels as appropriate in cooperation with government agencies and Wellgrow Industrial Estate Co., Ltd.
- We strengthen advance preparations for location, design, and disaster-prevention products to minimize flood damage when building new factories. During factory expansions in 2014, designs were changed to raise the height of factory floors and drainage systems were upgraded.

## Preventing Pollution

### Water Pollution Control

Wastewater is discharged after measuring biochemical oxygen demand (BOD), chemical oxygen demand (COD), and other parameters in accordance with laws and regulations established by the governments of each country and region, after undergoing treatment in accordance with wastewater treatment standards. We strive to prevent pollution by setting and adhering to strict voluntary standards exceeding those of the Water Pollution Control Law and Law Concerning Special Measures for Conservation of the Environment of Seto Inland Sea in Japan, and the Water Pollution Prevention and Control Law of the People's Republic of China. In fiscal 2023, there were no violations of any laws, regulations, or voluntary standards, and the applicable factories properly reported to the government as required by laws and regulations.

P.054 Preventing Water Pollution, Soil Contamination, and Offensive Odors

### Promoting Awareness of Proper Methods for Disposing of Products After Use

Waste disposal methods vary between countries and regions, and in some countries and regions where Unicharm provides its products, it remains common practice to bury disposable diapers in the ground or discard them in rivers. For this reason, we educate customers on proper disposal methods through our product packaging. We also conduct environmental awareness classes for children in Indonesia and Thailand to educate them about waste separation and proper disposal methods. We believe these efforts will help protect rivers as water sources, and other ecosystems.

P.031 Raising Awareness About Proper Disposal of Used Products