

# Waste and Resource Utilization

306-1,396-3,306-4,306-5

## Recycling-Based Society

### Our Basic Approach and Strategy

Aiming to realize a recycling-based society, Unicharm is taking a variety of measures to reduce waste and make use of resources with an eye on reducing impact on the environment at each stage of the life cycle, from raw materials procurement to product development, manufacturing, distribution, and product use and disposal.

We work with suppliers to examine the use of biomaterials and recycled materials at the raw materials procurement stage, while combining and reducing the weight of raw materials and the thickness of packaging during product development. At the manufacturing stage, we strive to reduce product waste and recycle scraps (trim), while at the product sales stage, we work to alleviate environmental impact from sales promotional items. During product use and disposal, we promote awareness of proper disposal methods and the recycling of used disposable diapers. We also ensure that any waste that cannot be avoided is always disposed of in the proper manner. By continuing to engage in these and other efforts, Unicharm will help realize a recycling-based society.

### Selection as a Re-Style Partner Company (Japan)

Unicharm was selected as a Re-Style Partner Company by the Ministry of the Environment (MOE) in Japan with a view to realizing a recycling-based society. We continue to promote the 3Rs (reduce, reuse, recycle) activities among consumers such as by our participation in the MOE-sponsored Let's Choose! 3R Campaign.



### Management Structure

Unicharm reports on issues related to Environmental Targets 2030 and Kyo-sei Life Vision 2030 based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Four times a year, the ESG Committee, which is chaired by the president & CEO, shares the plans and progress of key issues concerning waste reduction and resource use and, upon approval from the Board of Directors, operates a PDCA cycle toward the achievement of our environmental targets.

P010 ESG Promotion Structure  
P036 Management Structure

### Environmental Audits

Environmental pollution prevention activities and controls are carried out in accordance with environmental laws and regulations and ISO 14001. Three types of environmental audits are implemented in order to maintain and improve the level and performance of activities and controls:

- (1) Regular audits in conformance with ISO 14001,
- (2) on-site audits at industrial waste processing partners in order to confirm appropriate practices, and
- (3) audits for specific purposes such as confirmation of legal compliance.

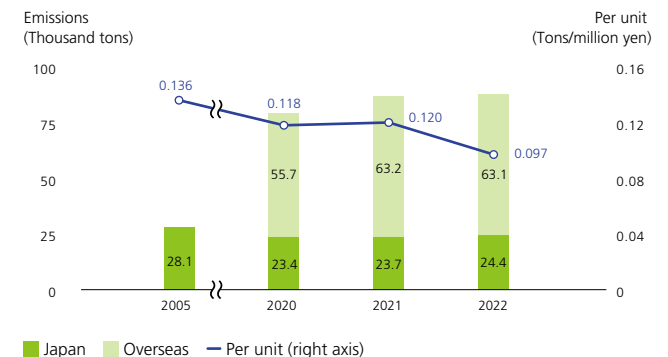
### Initiatives and Results

#### Minimizing Waste Emissions from Our Factories

In 2022, Unicharm's waste emissions amounted to 87,500 tons, an increase of 600 tons over the previous year. However, due to our higher net sales, waste emissions per unit of sales decreased by roughly 19%.

While we are working to minimize waste emissions from our factories through improvements in production technology, certain waste products cannot be disposed of within our factories. In these cases, we look for waste processors that can minimize environmental impact from the perspective of the 3Rs (reduce, reuse, recycle) and consign the waste to them for recycling. Moreover, when selecting waste disposal contractors, we visit their factories to verify their method for disposing of waste.

#### Waste Disposal Volume

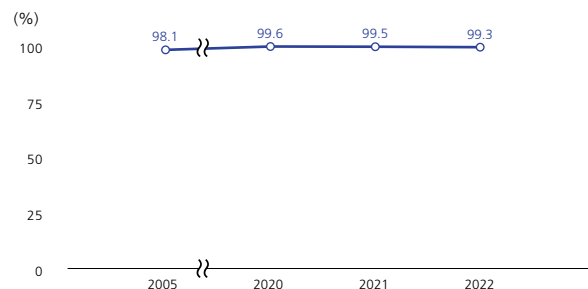


P064 Waste Disposal Volume

## Promotion of Recycling at Production Sites

Unicharm is making a Groupwide effort to reduce production waste and recycle scraps (trim) from disposable diapers at production sites. In 2022, we attained a recycling rate of 99.3% at our production sites (four main factories) in Japan while maintaining the final landfill disposal rate at less than 1%, thereby achieving our target of zero landfill emissions at these sites for the 15th year in a row. As for production sites overseas, our subsidiary in Thailand has adopted use of equipment that crushes products not meeting specifications from the production process and recycles approximately 97% of all waste generated by the factory. In conjunction with our recycling efforts in Japan, we have achieved zero landfill waste at our production sites overseas.

### ► Recycling Rate (Japan)



Note: Figures represent the recycling rate (for material recycling and thermal recycling) of Unicharm's four main production sites in Japan.

P.065 Recycling Rate

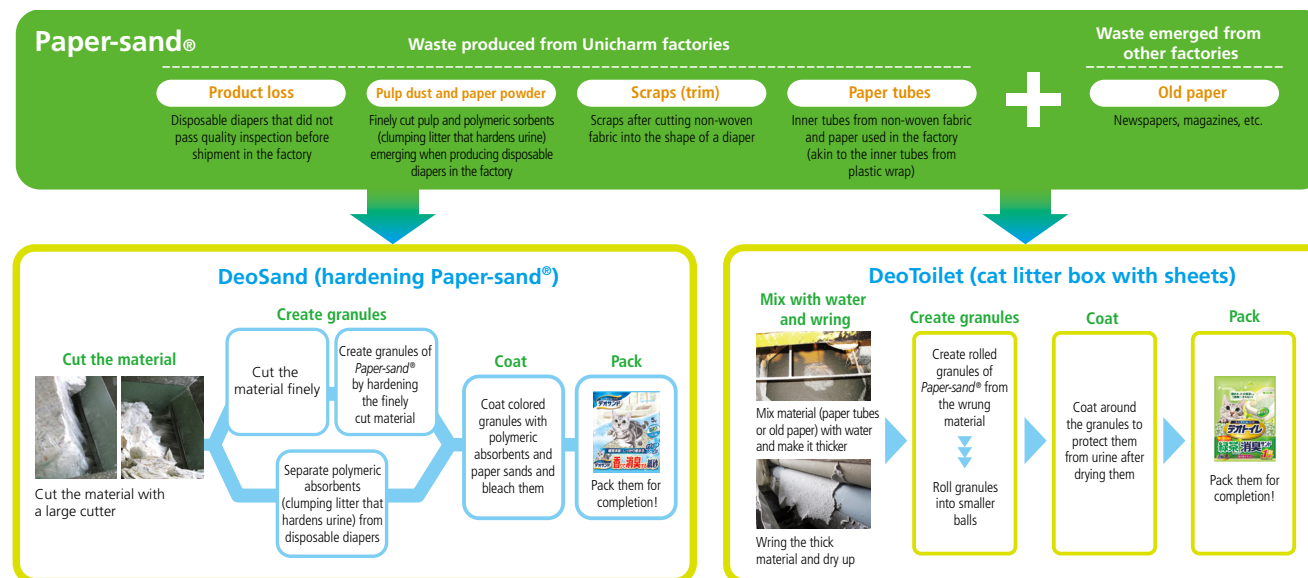
## Promoting the Reuse of Product Waste

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Peparlet Co., Ltd., and Kinsei Products Co., Ltd., Unicharm's production subsidiaries of partner animal (pet) care products, are working to reduce waste by reusing the product waste generated by the Group's production of disposable diapers as raw materials for cat continence care product *Paper-sand*®. In 2022, 16,097 tons of waste was reused as raw material. We are consolidating Peparlet's production sites, which are scattered around the Fujieda region of Shizuoka Prefecture, and constructing a new factory in Shimada City, Shizuoka Prefecture, which is scheduled to be completed in August 2023. In addition to streamlining production and distribution processes, we will continue to focus on reusing and reducing product waste from all of the Group's production sites around the world.

## Promoting the Reuse of Paper Tubes from Rolled Materials (Japan)

At our production sites in Japan, paper tubes (the paper core of rolled materials), which were previously thermally recycled, are now returned to our suppliers for reuse.



## Reducing Waste through the Recycling of Used Disposable Diapers (Japan)

Unicharm's recycling system for used disposable diapers is one in which the collected used diapers are washed and separated and the extracted pulp undergoes a unique ozonation process to kill the bacteria contained in the excrement, ensuring that it is as equally safe and hygienic as virgin pulp.

In June 2022, we began testing the use of *Lifree* disposable adult diapers, which use recycled materials for their absorbent paper layer, at certain nursing care facilities in Kagoshima Prefecture. Through these and other environmentally friendly products, it would be possible to eliminate 23 truckloads (two tons) of waste per year, if disposable adult diapers used by 100 people were recycled over the same period.



P.027 Development of Eco-Friendly Products / Expanding Our Line of Recycled Models

## Promoting Awareness of the Benefits of Using Both Disposable Diapers and Absorption Pads

At Unicharm, we strive to reduce waste by promoting awareness of the benefits of using both tape-type and shorts-type disposable adult diapers (outer layer) and urine absorption pads (inner layer). For example, when using both, only the inner layer needs to be replaced after urinating, reducing waste by roughly 20% compared with using only the outer layer and having to replace it each time.

## Promoting Reuse through Refillable and Replaceable Products

Unicharm is committed to reducing waste through the supply of *Wave* cleaning products that use replaceable sheets, refillable baby wipe and wet wipe products, and other products that enable the container or the main unit to be reused repeatedly.

## Reducing Waste through the Removal of Outer Boxes

In March 2022, we began eliminating the outer boxes of cat litter boxes *Deo-Toilet Half Covered Litter Box* and *Deo-Toilet Fully Covered Litter Box*, reducing waste from cardboard boxes by around 29%. These litter boxes feature a two-layer design in which the urine passes through to the bottom layer where it is absorbed by a sheet. These cat litter boxes contribute to waste reductions of approximately 51% over a period of one month compared with the use of clumping sand.



The mechanism behind *Deo-Toilet*

## Simply Designed Packaging for Bulk Purchases (Japan)

Unicharm has released *Sofy Synchro Fit* (bulk option), packaged in environmentally friendly, simply designed boxes, exclusively online.

