

Carbon Neutrality

Core Principles

Climate change due to global warming is causing serious environmental issues on a worldwide scale, such as by severely impacting biological and water resources. We recognize it as a major business risk. In aiming to contribute to a sustainable society, the Otsuka group is working to reduce greenhouse gas (GHG) emissions throughout the supply chain in line with the international targets and indicators adopted under the Paris Agreement.

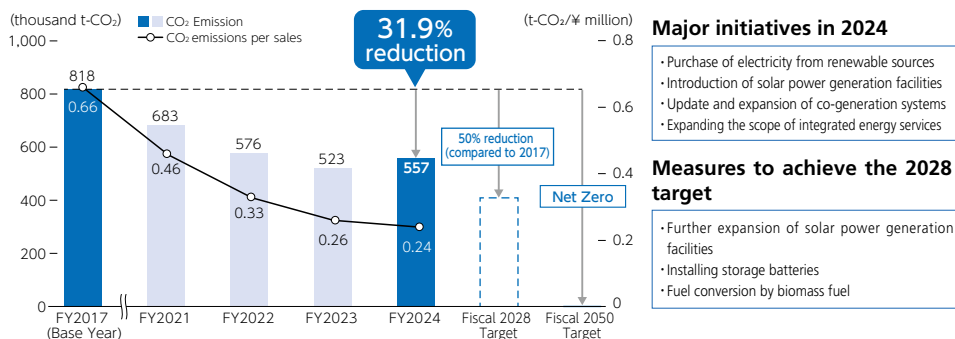
[PDF Governance](#) [PDF Risk Management](#)

Indicators and Goals

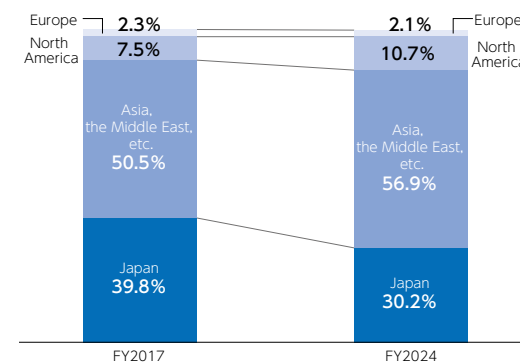
2028 targets

- **Reduction of CO₂ emissions**
 Scopes 1, 2: 50% reduction (compared to 2017)
 Scope 3: Initiatives to achieve carbon neutrality by 2050
- **20% self-generated renewable energy**

Target of CO₂ emission reduction and progress (Scope1,2)



Details of CO₂ emissions by region



Initiatives

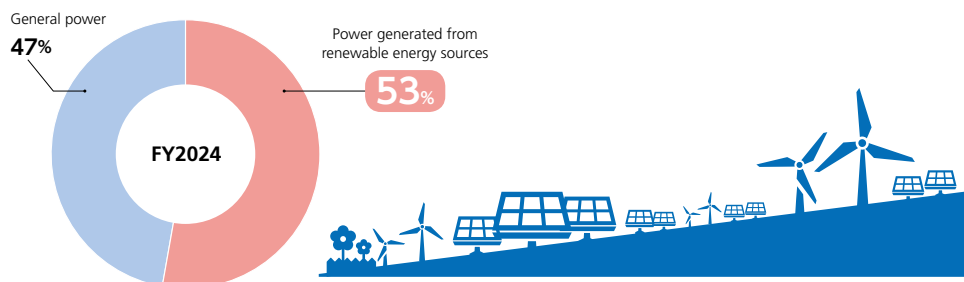
Initiatives to Reduce CO₂ Emissions (Scope1,2)

The Otsuka group has set a target of reducing CO₂ emissions by 50% by 2028 compared to 2017. As of 2024, we have achieved a 31.9% reduction, and we are making steady progress towards our target.

In expanding the use of renewable energy, we place importance on "additionality," which contributes to the creation of new renewable energy. In Japan, large-scale solar power generation facilities were installed at the Kushiro Factory of Otsuka Pharmaceutical Factory Co.,Ltd. in 2020, and in Naka Town, where the Tokushima Wajiki Factory of Otsuka Pharmaceutical Co., Ltd. is located, in 2024. Outside Japan, large-scale solar power generation facilities were introduced at Otsuka Pharmaceutical India in 2020, and at Otsuka Chemical India in 2022. In addition, we are working to maximize energy use efficiency, such as by introducing a cogeneration system* (Tokushima Factory, Otsuka Chemical, started operation in January 2024) that enables us to supply energy, including electricity and steam, to Otsuka group companies, thereby promoting decarbonization.

* The engines, turbines, or fuel cells of co-generation systems generate electricity from natural gas, LPG, or other fuel sources. At the same time, the systems collect the waste heat, thereby achieving efficient use of both heat and electricity

Ratio of electricity from renewable sources



Expansion of introducing solar power generation facilities

The Otsuka group installed a large-scale solar power generation facility with annual power generation of approximately 4,000 MWh in Naka Town, where the Tokushima Wajiki Factory of Otsuka Pharmaceutical Co., Ltd. is located, in September 2024. This is our second mega solar power system in Japan, following the Kushiro Factory of Otsuka Pharmaceutical Factory Co., Ltd. Outside Japan, we have also introduced large-scale solar power generation facilities in India and Indonesia. In FY2024, the group's total solar power generation reached 24,600 MWh.

We will continue to place importance on "additionality," which contributes to the creation of new renewable energy, and actively promote the expansion of its use.

Amount of solar power generated in Otsuka group

24,600 MWh

(Equivalent to the amount of electricity consumed by approximately 6,200 households*)



Solar power generation facilities in Naka Town of Tokushima

*FY2022 Survey on CO₂ Emissions from Households by the Ministry of the Environment

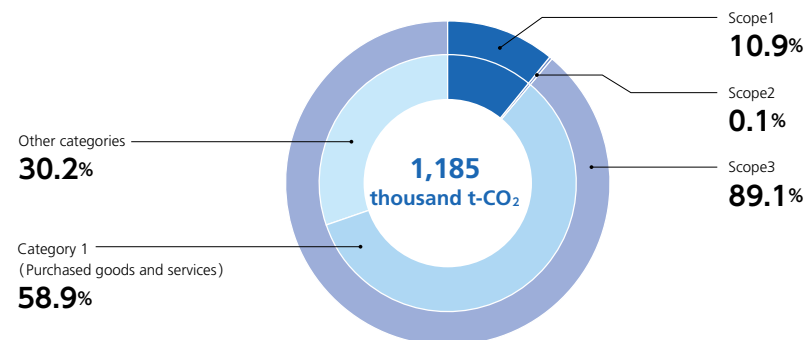
Initiatives to reduce CO₂ emissions throughout the supply chain (Scope 3)

We have adopted the 2050 Environmental Vision, "Net Zero," which calls for us to reduce the total environmental impacts of our business activities to zero. We are working to reduce our environmental impacts throughout our group's business activities and the supply chain. To achieve this vision, we have established an integrated energy service structure within the group and are promoting centralized procurement of renewable energy and the supply of electricity generated within the group to our business sites. In April 2024, we began supplying renewable energy to our business partners, to whom we outsource the production of some of the containers for our group's products. Moreover, we disseminate our procurement policies and conduct assessments also in procurement activities to take initiatives for sustainable procurement, which encourages suppliers to consider the environment, aiming to build a sustainable supply chain. We will continue to work with our business partners to further reduce the environmental impact of our entire supply chain and achieve business growth through utilizing new technologies and solutions.

[Pursuing the optimal energy mix through group-wide integrated energy management in Japan](#)

[Sustainable Procurement](#)

Greenhouse gas emissions (Scopes 1, 2, 3*)



Scope: Five group companies: Otsuka Pharmaceutical, Otsuka Pharmaceutical Factory, Taiho Pharmaceutical, Otsuka Chemical, and Otsuka Foods

*Scope 1 (direct emissions)
Greenhouse gas (GHG) emissions due to using fuel in our group
Scope 2 (indirect emissions)
Greenhouse gas (GHG) emissions due to using purchased electricity, heat, and steam
Scope 3 (other indirect emissions)
Greenhouse gas (GHG) emissions throughout the supply chain, from material procurement to product disposal

Environmental Material Issues

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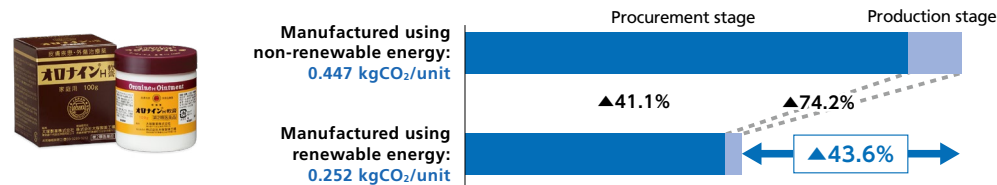
Assessment of reducing the environmental impact by supplying renewable energy to our business partners

In April 2024, the Otsuka group began supplying renewable energy to our business partners, to whom we outsource the production of some of the containers for our group's products. We have evaluated the carbon footprint of our relevant products to quantify the reduction in environmental impact caused by this initiative.

The carbon footprint is a method of converting the greenhouse gas emissions produced throughout the entire lifecycle of our products and services, from raw materials procurement to disposal and recycling, to equivalent CO₂ emissions, and evaluating them quantitatively. The Otsuka group is working to reduce CO₂ emissions throughout the supply chain by periodically evaluating the environmental impact of its products and using the results to take improvement measures.

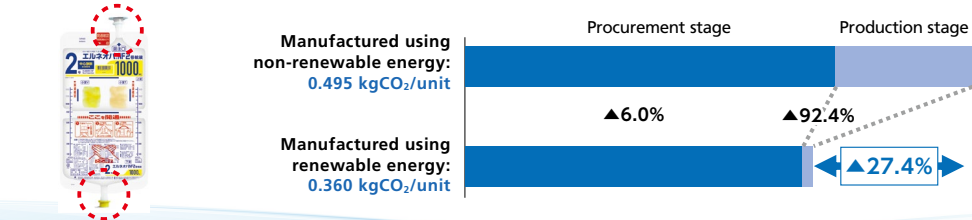
Oronine H Ointment 100g Bottle (excludes product contents)

Oronine-H Ointment is a product for treating minor skin conditions and injuries. The carbon footprint value of this product from the procurement stage to the production stage has been reduced by 43.6%. (At the procurement stage, that includes the carbon footprint values for the containers (bottles) manufactured by a business partner that has adopted renewable energy, as well as the packaging materials (labels, lids, boxes, etc.) manufactured by other suppliers. At the production stage, carbon footprint values from the introduction of renewable energy are included.)



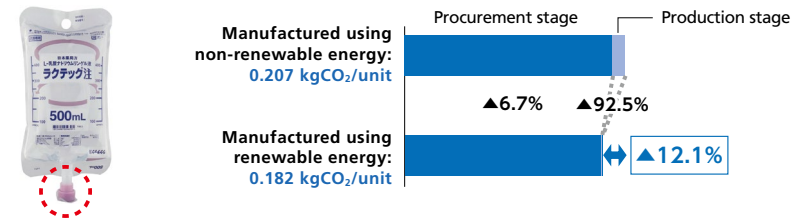
ELNEOPA-NF No.2 Injection 1000mL Soft Bag (excludes product contents)

ELNEOPA-NF No.2 Injection is a kit formulation for high-calorie infusion. The carbon footprint value of this product has been reduced by 27.4%. (At the procurement stage, that includes the carbon footprint values for some of the containers (MP port: circled red) manufactured by a business partner that has adopted renewable energy as well as the packaging materials (such as container films) manufactured by other suppliers. At the production stage, carbon footprint values from the introduction of renewable energy are included.)



Lactec Injection 500mL Soft Bag (excludes product contents)

Lactec Injection is a lactated Ringer's solution mainly used as an infusion. The carbon footprint value of this product has been reduced by 12.1%. (At the procurement stage, that includes the carbon footprint values for some of the containers (NC port: circled red) manufactured by a business partner that has adopted renewable energy as well as the packaging materials (such as container films) manufactured by other suppliers. At the production stage, carbon footprint values from the introduction of renewable energy are included.)



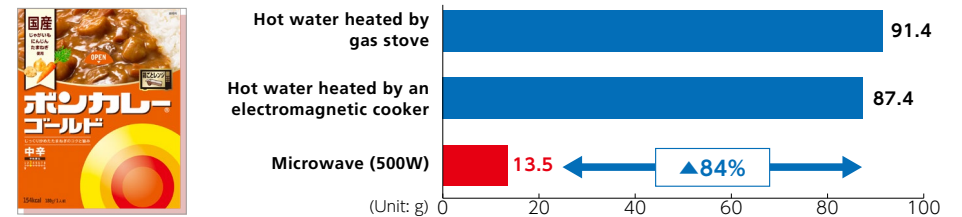
Substantial reduction of CO₂ emissions by adopting a new cooking method in the Bon Curry brand*1

For the Bon Curry brand, Otsuka Foods was one of the first to introduce a microwave-safe pouch that can be microwaved with the entire box after opening the top, instead of the conventional method of cooking with hot water. This improved convenience and reduced CO₂ emissions during cooking by approximately 84%*2.

*1 Carbon footprint calculation based on the new cooking method

*2 When heated for 2 minutes at 500W

Comparison of CO₂ emissions in the Bon Curry brand




Pursuing the optimal energy mix*¹ through group-wide integrated energy management in Japan

The Otsuka group established the Energy Support Department (ES Department) in Otsuka Business Support, a subsidiary responsible for shared services that consolidates indirect operations of Otsuka group companies, aiming to centralize energy management in Japan and establish an advanced management system of supply and demand. Since April 2022, we have been supplying renewable energy to group companies nationwide by purchasing electricity from electricity generation utilities and other sources.

In July 2023, we completed the Otsuka Group Energy Management Building, which serves as the central hub for the group's integrated energy service. Subsequently, we started the operation of a cogeneration system at Otsuka Chemical in January 2024. The ES Department promotes integrated group management of electricity and steam through cooperation with Otsuka Chemical, including centralized procurement of renewable energy, forecasts of power supply and demand, and distribution of electricity and steam generated by the system to the business sites. Furthermore, through introducing a state-of-the-art data management system utilizing various IoT sensors and cameras, the department also manages the usage of water, electricity, and heat within the Kawauchi area factories, where many of the production facilities are located in Tokushima, as well as wastewater from production activities.

A demonstration plant using hydrogen is in operation adjacent to the Energy Management Building, and we are working to validate next-generation energy technologies that do not emit CO₂. The Otsuka group is pursuing the optimal energy mix by upgrading its energy management system and is promoting its initiatives to achieve the 2050 Environmental Vision, "Net Zero."

*1 Promote the optimization of power supply configurations in consideration of environment, economy, and stable energy

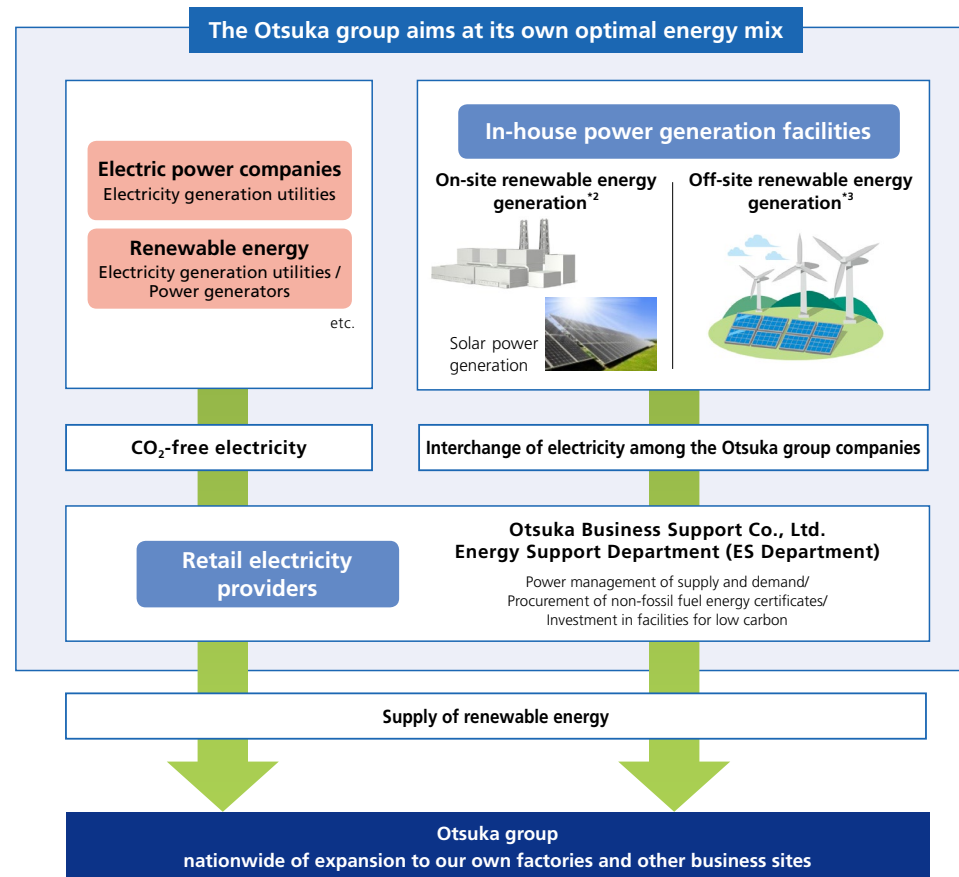
 [Assessment of reducing the environmental impact by supplying renewable energy to our business partners](#)



Otsuka Group Energy Management Building



Integrated energy management



*2 On-site: A system to provide electricity by installing a power generation facility on the premises of a company

*3 Off-site: A system to provide electricity to factories of the Otsuka group via the general power transmission network

