Carbon Neutrality

Approach and Policy

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 risk to our global operations.

In aiming to contribute to a decarbonized, more sustainable society, the Otsuka group is working to reduce greenhouse gas (GHG) emissions throughout the value chain in line with the international targets and indicators adopted under the Paris Agreement.

Initiatives for TCFD Recommendations

In October 2021, Otsuka Holdings announced its support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Accordingly, we are moving forward with the disclosure of information on climate-related risks and opportunities in governance, strategy, risk management, and metrics and targets, according to the framework recommended by the TCFD. From now on, we will work to deepen our efforts based on the results of scenario analysis and expand our disclosure.

Governance

As a global group that contributes to the health of people worldwide, the Otsuka group works sincerely to reduce the impact its businesses have on the global environment, and seeks to contribute to the creation of a sustainable society that protects nature and the future of the earth. Therefore, we have built a system of governance.

The Otsuka group's environmental policies and initiatives are discussed and determined by the Otsuka Holdings Environmental Committee, which consists of the executive deputy president and director of Otsuka Holdings and the directors and executive offices in charge of environmental management in our group companies. Matters on the direction of the entire Otsuka group will be discussed and approved by the Otsuka Holdings Board of Directors, and will be shared with group companies as the Otsuka group's policy. Then, they will be implemented as an implementation scheme of the Otsuka Group Global Environmental Council (hereafter referred to as "OGG Environmental Council"), which consists of directors from the production departments of group companies and persons in charge of environmental management. In 2022, the Board of Directors approved revisions of the targets for each materiality in order to further strengthen environmental initiatives through our business activities. The OGG Environmental Council assesses the risks and opportunities examined and reports the results of monitoring. The Otsuka Holdings Environmental Committee gives instructions for improvement and approves planning. In addition, if the monitoring results have an impact on business strategy and management resources, they will be incorporated into the management plan as matters to be resolved at the Board of Directors. The Committee is positioned as a subordinate organization of the Otsuka Group Sustainability Promotion Committee, which decides overall sustainability strategies and directions. This plays an important role in the group's sustainability initiatives.

■ Otsuka Group Environmental Management System

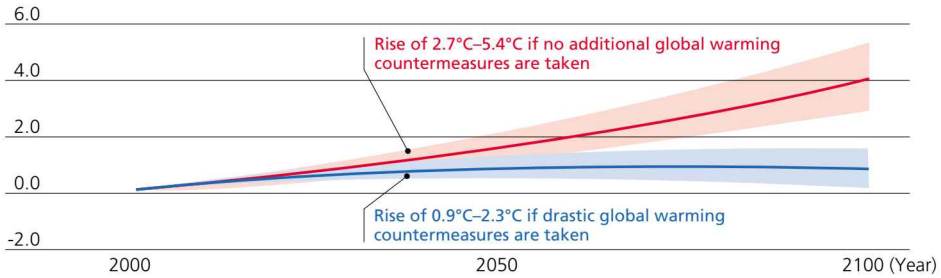
Strategy

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. In addition to reducing CO_2 emissions in our group's business activities, we aim to reduce to zero our environmental impacts throughout the supply chain. In 2021, the Otsuka group conducted the first analysis to identify and assess risks that may have impact on its key finance and strategy related to climate change. In order to realize a sustainable society, we recognize that active decarbonization initiatives in response to climate change are necessary, and we are developing strategies in line with the TCFD Recommendations.

Process of Scenario Analysis

We assessed our climate change-related business risks and opportunities under the below 2°C scenario and the 4°C scenario using scenarios presented by the IEA (International Energy Agency) and the IPCC (Intergovernmental Panel on Climate Change), and examined adaptation measures and financial impacts. We will continue to examine risks and opportunities and expand our scenario analysis.

Climate-related scenarios — Change in Global Mean Surface Temperature —



4°C Scenario

A scenario in which development is dependent on fossil fuels and climate change measures are not introduced. Rising temperatures cause an increase in natural disasters, negative impact on crops, and loss of biodiversity.

Below 2°C Scenario

A scenario in which development is sustainable and climate change measures are proactively implemented to keep the temperature rise below 2°C. Measures to achieve a decarbonized society are enhanced, including the introduction of CO_2 emissions regulations and expansion of the renewable energy market.

Based on the Ministry of the Environment's Japanese translation of Summary for Policymakers, Working Group II Report, Fifth Assessment Report published by the IPCC Main Scenarios Referenced
- IEA World Energy Outlook 2020 (Sustainable Development Scenario, Stated Policy Scenario)
- IPCC (RCP2.6, RCP8.5)
- OECD-FAO Agricultural Outlook 2021–2030

Financial Impacts and Responses Associated with Climate-Related Risks

Category		Contents	Business/Financial Impacts		Our Response/Resilience
			Below 2°C	4°C	
Transition Risks	Policies and regulations	• Increased costs due to tightened regulations such as carbon pricing	Large	Large	• Introduction of internal carbon pricing • Introduction of CO_2-free electricity • Introduction of solar power generation systems including mega solar power systems • Improving energy efficiency through energy saving and fuel conversion • Investment in environmental facilities in Japan and overseas
	Market	• Steep rise in renewable energy prices	Large	Large	
		• Steep rise in energy prices	Large	Large	
	Reputation	• Reputation risk and investment-related risk associated with inadequate response to climate change and water resource risks	Large	Medium	
Physical Risks	Acute	• Risks of damage to production and other facilities due to intensification of extreme weather, and cost increases to prepare for extreme weather events • Risks in raw material procurement such as disruption to supply chains and stable procurement	Medium	Large	• Decentralized production of major products • Formulation, disclosure, and sharing of procurement policies and guidelines with suppliers • Strengthening communication with our suppliers
	Chronic	• Increased energy costs associated with temperature rise	Large	Large	• Systematic renewal of facilities
		• Effects of climate change on drug discovery using crop and other natural products	Medium	Medium	• Collection of information about the impacts on drug discovery using crops and other natural products, risk assessment, and examination of countermeasures

Financial Impacts and Responses Associated with Climate-Related Opportunities

Category		Contents	Business/Financial Impacts		Our Response/Resilience
			Below 2°C	4°C	
Opportunities	Resource efficiency	• Reduction of operating costs through the introduction of energy-efficient equipment	Large	Medium	• Collection of information on new technologies (such as membrane water treatment technology that does not require steam) and examination of introduction of such technologies in a timely manner
	Energy sources	• Reduction of energy procurement risk due to proactive introduction of renewable energy	Large	Small	• Introduction of internal carbon pricing • Collection of information on next-generation energy sources (such as hydrogen and ammonia) and examination of introduction of such sources in a timely manner
	Products and services	• Increased revenue from increased demand for products that mitigate or address climate change (e.g., products for preventing heat stroke and the spread of infectious diseases)	Large	Large	• Formulation of the Otsuka Group Plastic Policy (in 2020) that aims at reducing reliance on fossil fuel-derived materials • Examination of introduction of recycled PET resin or plant-based bio-PET resin for PET bottle beverage containers • Examples: Expand sales of products for preventing heat stroke, and expand sales of products with low environmental impact throughout their lifecycles
	Market	• Increased revenue from expansion into new market categories with products that address climate change	Medium	Medium	• Development of products that mitigate or address climate change (e.g., plant-based products)
	Resilience	• Strengthening business continuity planning (measures against disaster and supply chain disruptions)	Medium	Large	• Strengthening of promotion of energy saving and renewable energy through internal carbon pricing • Business continuity plan measures at manufacturing sites (anti-seismic measures and measures against flooding)

Assessment of business/financial impacts
Large: One billion yen or more (equivalent to 1% of operating income assuming a minimum operating income of 100 billion yen)
Medium: From negligible to less than one billion yen
Small: Negligible

Adaptation measures to strengthen resilience

In order to grasp the risks, opportunities, and financial impact of climate change on our business, the Otsuka group conducted the first scenario analysis and found that the introduction of additional policy measures to deal with global warming such as a carbon tax, and rising energy costs due to the tightening of regulations could have an impact on our business activities.

As adaptation measures to avoid and mitigate these risks, the Otsuka group has upgraded its climate change target to meet the "1.5°C level," which limits the temperature increase to 1.5°C since the pre-industrial era. We also are working on the adaptation measures to further strengthen the resilience of our business activities by promoting the introduction of renewable energy, the introduction of mega-solar facilities, and fuel conversion.

PDF Establishment and promotion of a new integrated energy service structure

Risk Management

The Otsuka group examines and assesses climate-related risks that have the potential to impact its financial affairs and strategies. The Otsuka Holdings Environmental Committee considers related risks, and committee members in charge of environmental management report on any matters that are deemed to be significant in the risk assessment process to the Board of Directors. Resolutions on matters approved by the Board of Directors are communicated to each company in the form of Otsuka group policies, and the whole group works to minimize climate-related risks.

Metrics and Targets

Carbon Neutrality

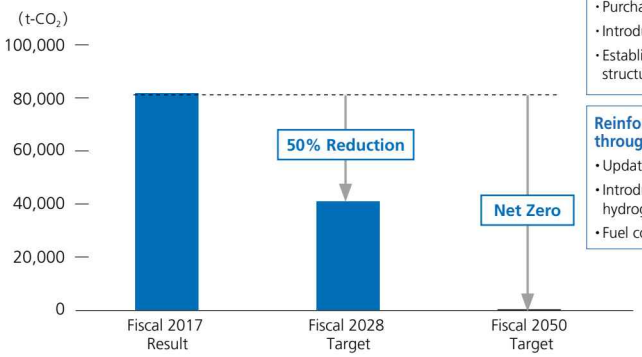
Our Goals **•2028 target: Reduce 50% in CO_2 emissions compared to 2017**

	Fiscal 2017 Result	Fiscal 2022 Result	Compared with 2017
CO_2 Emissions(Scope 1, 2)	818,000t-CO_2	576,000t-CO_2	-29.6%
CO_2 reduction by CO_2-free electricity*	—	248,000t-CO_2	—
CO_2 reduction by self-production of renewable energy	—	12,000t-CO_2	—

* Including the Green Power Certificates for offices

Joining the RE100 Initiative

Target Values of CO_2 Emission



Proactive introduction of renewable energy
- Purchase of electricity from renewable sources
- Introduction of solar power generation facilities
- Establishment of an integrated energy service structure

Reinforcement of reduction initiatives through energy saving
- Update and expansion of co-generation systems
- Introduction of new technologies such as hydrogen
- Fuel conversion to LPG, etc.

Initiatives to Reduce CO_2 Emissions

Increasing Utilization of Renewable Energy and Maximizing Energy Efficiency

In 2022, the Otsuka group accelerated its climate change goals from 2030 to 2028, and also upgraded the SCOPE 1 and 2 targets from 30% (compared to 2017) to 50% (compared to 2017). We have joined the RE100 initiative, which asks companies to commit to using 100% renewable energy in their activities.

To achieve this goal, the Otsuka group is working to maximize energy efficiency of the entire group by utilizing renewable energy through the introduction of CO_2-free electricity and the installation of solar power generation facilities, and by supplying highly efficient energy to the group companies through the co-generation systems*1. In Japan, five group companies*2 have completed the switch of all purchased electricity for all 23 plants and all office divisions to 100% renewable energy-derived electricity, resulting in approximately 61% of all purchased electricity being renewable energy.

We have started emissions-reduction overseas. In April 2022, four group companies*3 introduced CO_2-free electricity in Indonesia, resulting in a reduction of approximately 103,500 t-CO_2 emissions, which is equivalent to 60% of annual emissions in Indonesia. In India, we introduced a large solar power generation facility in June 2022. It is expected to reduce approximately 14,500 t-CO_2 emissions annually.

*1 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
*2 Otsuka Pharmaceutical, Otsuka Pharmaceutical Factory, Taiho Pharmaceutical, Otsuka Chemical, and Otsuka Foods
*3 PT Otsuka Indonesia, PT Amerta Indah Otsuka, PT Widatra Bhakti, and PT Lautan Otsuka Chemical

Reduction in CO_2 Emissions Through Adoption of Renewable Energy*

* Total of CO_2-free electricity and self-production of renewable energy

Joining the RE100 Initiative

The Otsuka group joined the international RE100 initiative, which asks companies to commit to using 100% renewable energy in their business activities. We are working to introduce renewable energy in line with the new technological requirements of RE100.

Introduction of solar power generation facilities

In the procurement of renewable energy, the Otsuka group places importance on "additionality," which contributes to the creation of new renewable energy for the entire society. In Japan, a large-scale solar power generation facility with an output of 1 MW or more was introduced at Kushiro Factory of Otsuka Pharmaceutical Factory in 2020. Following that, Otsuka Pharmaceutical newly installed solar power generation facilities at Tokushima Itano Factory in 2021 and at Takasaki Factory in 2022. Outside Japan, large-scale solar power generation facilities were introduced at Otsuka Pharmaceutical India in 2020, and at Otsuka Chemical India in 2022.

Kushiro Factory, Otsuka Pharmaceutical Factory

Otsuka Group Solar Power Generation Amount

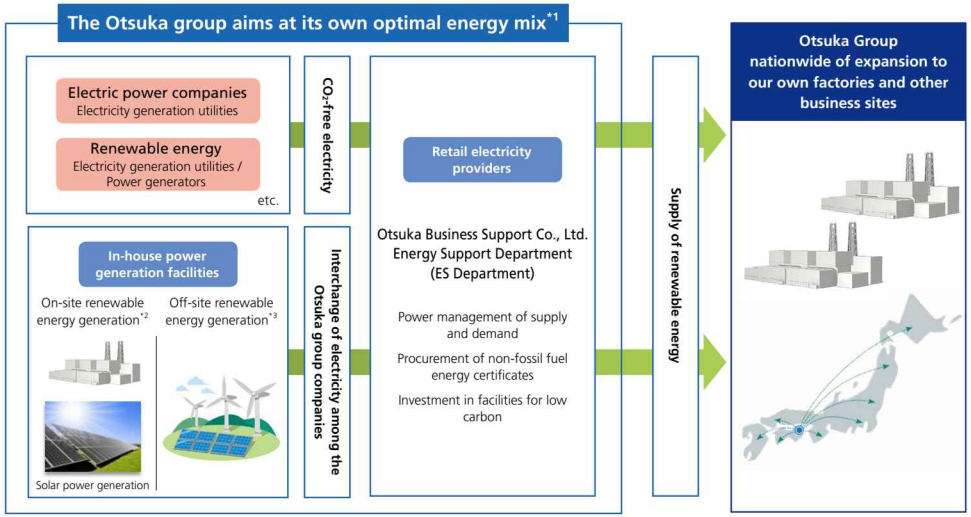
15,152 MWh

Establishment and promotion of a new integrated energy service structure

The Otsuka group established the Energy Support Department (ES Department) in Otsuka Business Support, which aims to pursue the optimal energy mix[*1] in the Otsuka group while expanding renewable energy use through centralizing energy management in Japan and establishing an advanced management system of supply and demand. Since April 2022, we have been supplying renewable energy to five group companies[*2] in the Shikoku region, where many of our production facilities are located, by purchasing electricity from electricity generation utilities and other sources.

In April 2023, we started supplying renewable energy to affiliated companies and welfare facilities in the Shikoku region. Our supply area has expanded to Tohoku, Hokuriku, and Kanto regions as well. ES Department will work to both improve environmental issues and contribute to business growth with the aim of further expanding supply to our group companies.

*1 Choosing the best ratio of diverse energy sources in consideration of the environment, economy, and stable supply of energy
*2 Otsuka Pharmaceutical, Otsuka Pharmaceutical Factory, Taiho Pharmaceutical, Otsuka Chemical, and Otsuka Foods



*1 Choosing the best ratio of diverse energy sources in consideration of the environment, economy, and stable supply of energy
*2 On-site: A system to provide electricity by installing a power generation facility on the premises of a consumer
*3 Off-site: A system to provide electricity to specific consumers via the general power transmission network