# Carbon Neutral Society and Circular Economy

Olympus is fully aware that recent climate change, ecosystem deterioration, and water risks brought about by excessive environmental impact and pollution are issues we need to address promptly. Therefore, we are committed to Carbon Neutral Society and Circular Economy as one of the materiality items. We also set targets of achieving carbon neutrality\*¹ with respect to greenhouse gas (GHG) emissions from our site operations (Scope 1 and 2\*²) by 2030 and using electricity generated 100% from renewable energy for our site operations by 2030. In addition, in May 2023, we formulated and announced a target of achieving net zero\*³ GHG emissions throughout the entire supply chain (Scope 1, 2, and 3\*²) by 2040.

To achieve this target, we continue to improve production efficiency and implement further energy-saving measures, as well as gradually replacing the energy used in our site operations\*4 with renewable energy sources by 2030 to accelerate initiatives to reduce GHG emissions. We also recognize the importance of environmental impact reduction across the supply chain and continuously implement measures to develop environmentally conscious products, improve logistics efficiency, set voluntary reduction targets in cooperation with suppliers, and support decarbonization initiatives.

- \*1 Carbon neutrality refers to reducing GHG emissions from site operations (Scope 1 and 2) and offset an amount equivalent to the remaining GHG emissions using carbon offsets, thereby achieving zero emissions overall.
- \*2 Scope 1: Direct GHG emissions by combustion of fuels in our sites. Scope 2: Indirect GHG emissions from on-site use of electricity, heat or steam supplied by other companies.
- Scope 3: Other, indirect GHG emissions (excluding Scope 1 and 2).
- \*3 Net zero means reducing GHG emissions (Scope 1, 2, and 3) as much as possible (90% or more) in line with the latest climate science (1.5°C scenario) and using credits derived from carbon sequestration and removal (such as afforestation and CO<sub>2</sub> capture and storage) for an amount equivalent to the residual GHG emissions (less than 10%) to achieve a balance.
- \*4 Excluding rental properties, such as sales sites.

## Major Environmental Activity Results in Fiscal Year 2023

Primary Policy		Targets	Measures	FY2023 Achievements and Results	FY2024 Targets
Promotion of environmental management	Enhancement of environmental governance system	• Improve effectiveness and efficiency of the Environmental Management System	Development of long-term environmental targets to reduce greenhouse gas emissions throughout the supply chain	Setting of 2040 net zero target (Scope 1, 2, and 3)     Check 1	Formulation of a plan to reduce greenhouse gas emissions throughout the supply chain and implementation of measures
			Maintenance of ISO 14001 certification	Maintenance of ISO 14001 certification for global major manufacturing sites (Europe, Americas, Australia)     Maintained ISO 14001 multi-site certification of 10 sites in Japan and 3 sites in Asia     Conducted internal audits for administrative functions of 8 sites in Japan and 2 sites in Asia	Ensure appropriate response to indicated points in internal environmental audit and ISO 14001 certification external audit
	Environmental risk reduction activities	Continue to improve the process to comply with environmental laws and regulations	Enhance inspection for compliance status with environmental laws and regulations     Education for environmental laws and regulations	Inspection on the waste management process and operational improvements at each site in Japan     Education on waste and chemical substance management at Olympus Surgical Technologies America (138 persons)     Continue to improve the related internal rules for products and facilities	Expand target sites for the environmental/ health and safety risk assessment     Continue to improve the environmental regulatory compliance process for products and facilities
Environmental initiatives throughout the product life cycles	Product-related initiatives	Create Olympus Eco-Products	Continue to create products that are environmentally conscious and tailored to business characteristics	Created new Eco-Products*5     (3 new, bringing the total to 668)      Including product creation results in past businesses (Imaging Business, Scientific Solutions Business, etc.)	Develop environmentally- conscious design mechanisms to improve resource recycling in product lifecycles
	Facilities-related initiatives	Greenhouse gas emissions: achieve carbon neutrality (FY2031)     Renewable energy rate: 100% (FY2031)     Emissions volume intensity: improve by 1% year-on-year     Water use intensity: improve by 1% year-on-year	Continue to implement improvements such as improving manufacturing processes, saving of energy and material resources and introduction of renewable energy, etc., in accordance with local characteristics	Greenhouse gas emissions: reduced by 45.7% (compared to the FY2020)     Renewable energy rate: 71.9%      Check 2      Emissions volume intensity: improved by 0.8% (compared to FY2022)      Water use intensity: improved by 8.6% (compared to FY2022)	Greenhouse gas emissions: reduce by 55% (compared to FY2020) Renewable energy rate: 75% Emission recycle rate: 85% Improve water use efficiency (compared to FY2023)

# Check 2

# Targets and Achievements for GHG Emissions and Renewable Energy Rates

### Internal (Scope 1, 2) Results

In fiscal year 2023, continual improvements in manufacturing, energy-saving measures, updating Company cars to environmentally conscious cars, and renewable energy use were implemented at its sites around the world. Aomori Olympus installed static electricity removal sheets in its air conditioning equipment to improve operating efficiency and is taking action to reduce energy losses by installing air flow meters to identify air leaks and implementing countermeasures. KeyMed (Medical & Industrial Equipment) Ltd. in Europe switched some of its company vehicles used for sales activities to electric vehicles. In April 2022, we converted 100% of the electricity used at major development and manufacturing sites in Japan (10 sites) to electricity derived from renewable energy sources. In April 2023, we did the same for Olympus Surgical Technologies America (Gyrus ACMI, Inc.) at its Redmond site in the United States. For broader renewable energy use, studies are focusing on widespread adoption, economic feasibility, and other factors in each country. The renewable energy use rate vis-á-vis the total electric power consumption has been increasing substantially. Olympus Corporation participates in the Carbon Neutral LNG Buyers Alliance as a part of new initiatives to reduce GHG emissions, and has started to introduce carbon neutral LNG\*6 to the Hachioji Facility.

#### External (Scope 3) Results

The Olympus Group ascertains and calculates greenhouse gas emissions throughout the entire supply chain for each category and is taking action to reduce greenhouse gas emissions in the entire supply chain through green procurement, improvement of logistical efficiency, development of environmentally conscious products, and other measures.

Scope 3 greenhouse gas emissions account for approximately 90% of all Olympus Group supply chain greenhouse gas emissions (Scope 1, 2, and 3). Among Scope 3 emissions, the percentages from purchased goods and services (category 1), capital goods (category 2), and upstream transportation and distribution (category 4) are high.

In fiscal year 2023, we address purchased goods and services (category 1) by analyzing and evaluating the impact of CO<sub>2</sub> for each supplier with which we do business and requested the cooperation of suppliers in Japan with measures to set environment targets with the aim of achieving carbon neutrality (targets in line with the 1.5°C target of the Paris Agreement) and curtail greenhouse gas emissions. In the future, we will continue our efforts to ascertain and manage greenhouse gas emissions throughout the supply chain and collaborate with suppliers to set voluntary reduction targets, support decarbonization efforts, and reduce greenhouse gas emissions.

<sup>\*6</sup> Carbon neutral LNG: A type of LNG that offsets GHG generated in the process from the extraction to the burning of natural gas with carbon credits created by environmental conservation projects.

	Results				Targ	gets
	FY2020	FY2021	FY2022	FY2023	FY2024	FY2031
Greenhouse gas emissions (Scope 1, 2)	-	Reduced by 0.7% compared to FY2020	Reduced by 11.1% compared to FY2020	Reduced by 45.7% compared to FY2020	Reduce by 55% compared to FY2020	Achieve carbon neutrality
Renewable energy rate	18.5%	18.5%	23.3%	71.9%	75%	100%

## Response to Climate Change (Information Disclosure in Line with TCFD Recommendations)

Olympus recognizes that climate change is a serious issue that threatens the global environment, as well as having grave implications for the Group's business activities. Based on this awareness, we announced our endorsement of the Recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) in May 2021. According to the TCFD's Recommendations, we will disclose climate-related financial information in a timely manner.

Olympus endeavors to reduce the environmental impact from the entire value chain, including product development, procurement, manufacture, logistics, sales, and repair. Under the CEO and Chief Human Resources Officer (CHRO), who are the executive officers responsible for the environment including responses to climate change, the Human Resources Head, who manages the environment, health, and safety (EHS) functions, oversees matters related to EHS for the entire Group. In addition, an officer responsible for the

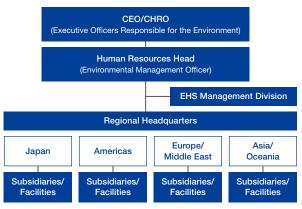
environment, social and governance (ESG) activities was appointed and set targets for the ESG field including GHG emissions in the medium- to long-term business plan to promote ESG initiatives by the Group. Under the Environmental Health and Safety Policy formulated by the Human Resources Head, the EHS division created an environmental action plan for the entire Group in line with the ESG targets set in the medium- to long-term business plan, monitors the status of progress of that plan, and makes continuous improvements. In response to progress reports, the

78 Olympus Integrated Report 2023

#### Carbon Neutral Society and Circular Economy

executive officers responsible for the environment (the CEO and CHRO) give instructions for any improvements required. The Board of Directors monitors the status of the implemented climate change measures while receiving related reports as necessary. Also, to reinforce the commitment of management to the ESGs and climate change initiatives, 20% of the executive officers' performance-based stock remuneration, a part of our long-term incentive remuneration, is linked to the evaluation results of an external ESG evaluation organization.

## **Environmental Management Structure**



Olympus identifies climate change-related risks and opportunities for the short-, medium-, and

long-term periods by using scenario analysis. The influence of climate change on our business activities is analyzed based on the 2°C scenario: RCP2.6, IEA B2DS (holding the increase in the global average temperature to below 2°C above pre-industrial levels) and the 4°C scenario: RCP8.5 and IEA CPS (where the increase is assumed to be up to 4°C above pre-industrial levels), presented by the International Energy Agency (IEA). We identified that the major risks within the short term (one to five years) would be the factory operation suspensions or supply chain breakdowns due to natural disasters; and the risks within the medium to long term (10 to 20 years) would be an increase in business costs due to the introduction of carbon taxes and tighter GHG emission regulations.

Although such climate change risks could affect our corporate strategy and financial plan, we assume that the scope of influence would be limited. For example, the geographical location of our factories in terms of natural disasters, such as typhoons, can be classified as a physical risk. We confirmed that our factories are at low-risk locations and a business continuation plan for each site was created in case of emergency. As a supply chain risk, we have experienced closures of sales sites due to typhoons and flooding

across the world in fiscal year 2023. Still, the influence was limited. We also expect an increase in operational costs due to carbon taxes, etc. as a transition risk. However, the percentage of energy costs in the factories among overall business costs is small, and, therefore, the impact on our business will be limited.

Risk Management

During the company officers, plan formulation stages, Olympus identifies and evaluates risks that have the potential to significantly impact the Group's business operations. These risks include regulations relating to the environment including climate change, technology and other transition risks, and physical risks resulting from natural disasters.

Identified risks are evaluated and prioritized by each organization based on the degree of impact if the risk materializes and the possibility of occurrence, and based on the results, we formulate single-year and multi-year business plans to manage the risks. Regarding risks relating to environmental laws and regulations, the quality control function monitors developments concerning those product-related environmental laws and regulations. The environmental division of each company monitors regulatory developments relating to their business sites, and each periodically evaluates the status of compliance, and takes measures as necessary.

To address those risks that could have a particularly substantial impact on business operations, we periodically monitor the status of organizational risk management and report the results to the Group Executive Committee and Board of Directors. The CEO receives reports on the results of risk management monitoring, and if measures are ineffective, reviews action plans.

Indexes and Targets

Olympus has set targets of achieving carbon neutrality with respect to GHG

emissions from our site operations (Scope 1 and 2) by 2030 and using electricity generated 100% from renewable energy at our site operations by 2030. In order to contribute broadly to the development of a decarbonized society, we believe that it is necessary to take action concerning not just the Group's own GHG emissions, but all GHG emissions throughout the supply chain. In light of this, in May 2023, we set and announced a target of achieving net zero GHG emissions throughout the entire supply chain (Scope 1, 2, and 3) by 2040. This target is in line with the high 1.5°C goal set as a challenge target under the Paris Agreement.

Achievements during fiscal year 2023 include a 45.7% reduction in GHG emissions compared to fiscal year 2020 and a 71.9% introduction rate of electricity derived from renewable energy. To achieve our targets for 2030, we will improve manufacturing and introduce renewable energy at sites around the world and continuously implement measures to develop environmentally conscious products, improve logistics efficiency, set voluntary reduction targets in cooperation with suppliers, and support decarbonization initiatives.

	Environmental Changes	Risks	Opportunities	Measures
2°C scenario	Stronger regulatory action for a low carbon society	<b>Transition risks:</b> Increase in procurement and operating cost* due to carbon tax, carbon emissions trading and stronger regulatory action on greenhouse gas emission by various countries and decline in market competitiveness due to inability to meet stricter regulations on reduction of greenhouse gas emissions from our products	Reduction of business costs by energy-saving measures     Improvements in market competitiveness by	Improvements in energy efficiency     Wider use of renewable energy     Diversification of suppliers     Support for setting voluntary greenhouse gas emission reduction targets and decarbonization activities in collaboration with suppliers     Environmentally conscious design in the product/service design & development stage
4°C scenario	Rise in temperature and increased extreme weather events	Physical risks: Supply chain disruption caused by growing scale of natural disasters, such as typhoons, floods, etc. (suspension of deliveries from suppliers and to customers due to suspension of distribution bases, repair centers and sales branches, etc.)	development of environmentally conscious products • Improvements in evaluation by stakeholders	

<sup>\*</sup> The calculated financial influence was approx. 600 million yen/year based on the carbon tax figures in the World Energy Outlook 2020 by the IEA (2020).



Environment: https://www.olympus-global.com/csr/environment/ Environmental Health and Safety Policy: https://www.olympus-global.com/csr/effort/activity/principle.html