EHS management

Basic approach

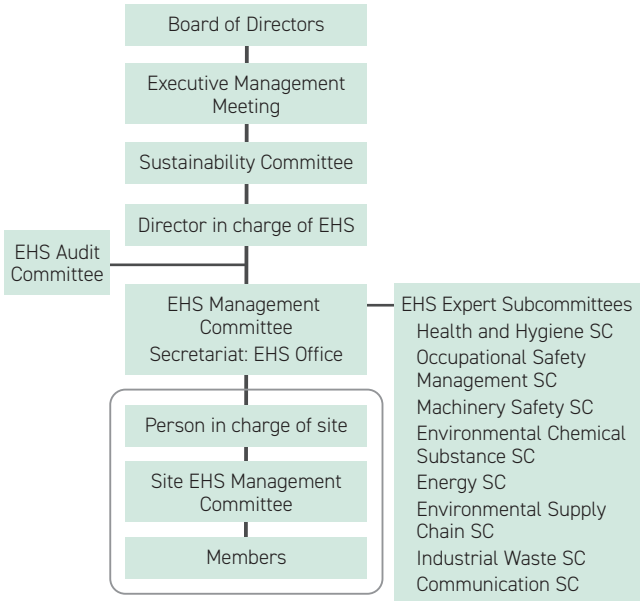
Ensuring occupational safety, promoting the health of employees, and reducing the environmental impact of business activities are important social responsibilities for companies and are crucial to sustainable growth. Acting in accordance with the Terumo Group Environment, Health and Safety (EHS) Policy, the Terumo Group advances initiatives for ensuring occupational safety and promoting the health of its employees throughout all of its business activities, strives to develop safe and comfortable work environments, and works to reduce the impact of its business activities on the environment. (For information on the initiatives to promote occupational safety and health, please refer to "Occupational Safety and Health" on pp. 68-69)

Terumo Group EHS Policy (Please visit the Regulations and Standards section of Terumo's corporate website.)
https://www.terumo.com/about/regulation

EHS management

Based on the Terumo Group EHS Policy, we employ an EHS management system that is compliant with international environmental (ISO 14001: 2015) and occupational health and safety (ISO 45001: 2018) standards. As a key part of Terumo's focus on sustainability in business, EHS policies, risks, opportunities, goals, and activity plans are discussed and related decisions are made by the EHS Management Committee, which is chaired by the director in charge of EHS, and then reflected in EHS activities at Terumo Group sites worldwide. EHS Expert Subcommittees, consisting of experts drawn from individual business sites, have been established under the EHS Management Committee, and these subcommittees propose strategies, policies, targets, and activity plans pertaining to their respective areas of responsibility. In addition, the EHS Audit Committee conducts internal audits of business sites to confirm the implementation status and effectiveness of their systems and their compliance with relevant laws. Ongoing improvements are pursued based on the results of these audits.

Organization for company-wide promotion of EHS management system



ISO 14001 (Environment) certification

Principal manufacturing sites in Japan, a certain number of manufacturing sites overseas, and the head office (EHS Office) have obtained third-party certifications of their compliance with the ISO 14001 standards. The ratio of certifications obtained is 44% on a manufacturing site basis. (For information on ISO 45001 certification, please refer to p. 69.)

Company name	Site
Terumo Corporation	Head office (EHS Office)
	Fujinomiya Factory
	Kofu Factory
	Ashitaka Factory
Terumo Yamaguchi Corporation	–
Terumo Medical Corp.	Elkton Factory
Terumo Europe NV	Haasrode Factory
	Genk Warehouse
Terumo Vietnam Co., Ltd.	Terumo Vietnam Factory
Terumo BCT, Inc.	Terumo BCT Lakewood Factory
Terumo Penpol Pvt. Ltd.	Blood bag factory
Terumo BCT Vietnam Co., Ltd.	Terumo BCT Vietnam Factory
Terumo BCT, Ltd.	Terumo BCT Larne Factory
Vascutek Ltd.	Vascutek factory

(As of April 30, 2024)

EHS risk management

EHS internal audits

The Terumo Group EHS Audit Committee conducts EHS internal audits to confirm the status of initiatives for reducing environmental, health, and safety risks and to assess EHS performance (progress toward the achievement of EHS targets). When nonconformities have been identified, corrective actions are taken and their effectiveness is checked to prevent recurrences. In fiscal 2023, such audits were conducted at 10 business sites.

Audit tasks

1. Check conformity with ISO 14001:2015 and ISO 45001:2018
2. Check compliance with EHS-related laws, regulations, agreements, etc.
3. Check compliance with the Terumo Group EHS Policy and with internal rules and standards
4. Check the operational status of EHS management systems and performance (effectiveness, key performance indicators)
5. Check the status of improvement regarding issues identified through audits, etc.

Audits of waste-treatment contractors

To confirm the appropriate processing of industrial waste generated by Terumo, we perform systematic audits of waste collection and disposal contractors. In fiscal 2023, we conducted audits at 52 contractors in Japan and determined that waste collection and disposal are being performed properly.

Training and education

To ensure a solid understanding of the Terumo Group EHS Policy and EHS activities, we conduct a basic EHS education program for all associates of Terumo once a year. We have also prepared education materials tailored to the needs of factories, R&D bases, and sales offices and use them in regularly conducted education and training programs. Apart from these systematic education initiatives, EHS information is distributed via the intranet and internal bulletin boards. Through these and other such initiatives, we are striving to increase EHS awareness among our associates.

Response training for environment-related emergencies and accidents

Individual business sites have established emergency response procedures to prevent accidents and disasters, and to lessen the severity of such incidents should they occur. They also conduct emergency response training and review the results on a regular basis. In fiscal 2023, there were no serious environment-related accidents or leaks.

Compliance with environmental laws and regulations

In fiscal 2023, there were no major violations, fines, or penalties related to environmental laws or regulations, including air and water pollution. (For more information about major violations, fines, or penalties related to environmental laws or regulations, including air and water pollution, please refer to "Environmental Data" on P. 106.)

Award program for recognizing outstanding EHS activities

At the Terumo Group, we present the "Terumo EHS Sustainability Award" annually (formerly known as the Terumo Human × Eco Award) to recognize initiatives that contribute to environmental, health, and safety (EHS). This award aims to promote EHS activities by evaluating and sharing excellent case studies throughout the Terumo Group.

In fiscal 2023, we recognized efforts to reduce environmental impact through initiatives to achieve carbon neutrality for Scope 1 and 2 emissions. These initiatives included energy conservation measures and transitioning to renewable energy sources. We also recognized the efforts to promote efficient resource utilization through waste reduction. Furthermore, for the second consecutive year, we awarded programs contributing to reducing Scope 3 emissions by reducing energy consumption through improved transportation efficiency. With regard to occupational safety activities, we recognized an initiative focused on preventing work-related injuries in production processes through ergonomic improvement programs.

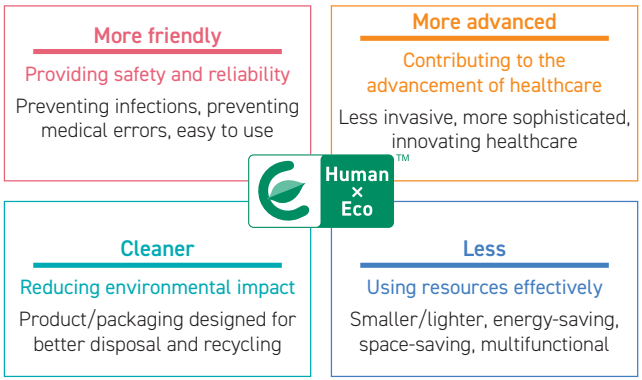
Development of environmentally friendly and safe products

Human × Eco Development Guidelines

Terumo has established and applied to product development its proprietary Human × Eco Development Guidelines, a set of guidelines for developing products that are friendly to both people and the environment.

These guidelines consist of four principles—more friendly (providing safety and reliability), more advanced (contributing to the advancement of healthcare), cleaner (reducing environmental impact), and less (using resources effectively)—and 24 directives based on these principles. Products that exhibit excellence with regard to these principles and directives display the "Human × Eco" logo, an internal certification mark, to make this excellence readily apparent to customers.

"Human × Eco" Development Guidelines



Examples of Human × Eco certified products

Introducer kit for radial approach—Minimally invasive, medically cost-efficient, and resource-conserving

Percutaneous coronary intervention (PCI) can be performed by inserting a catheter at either the wrist or the groin. The radial approach, in which a catheter is inserted through the radial artery in the wrist, entails fewer complications, such as post-procedure bleeding, and is less invasive than the femoral approach. Terumo has developed an innovative introducer kit that features a sheath with a thinner, more finely formed wall for a smaller outside diameter. A narrower sheath makes more treatment options available for patients with small arteries while also reducing costs and resource usage associated with post-procedure complications.

Introducer kit for radial approach

Guiding catheter for radial approach—Minimally invasive, medically cost-efficient, and resource-conserving

Used together with Terumo's introducer kit for the radial approach, this guiding catheter makes it possible to perform the radial approach for treating peripheral artery diseases. Compared with the transfemoral approach, the radial approach is less invasive, places less of a burden on medical professionals and patients, and is more medically cost-efficient. In addition, the packaging type used for this guiding catheter has been changed to realize a 45% reduction in package weight and a 61% reduction in package size. This change is anticipated to contribute to the environment by helping to conserve resources and space and reduce the amount of energy required for transportation.

Guiding catheter for radial approach

Drug-eluting stent—Minimally invasive, medically cost-efficient, and resource-conserving

Drug-eluting stents are medical devices that are embedded in patients' bodies to treat conditions such as angina pectoris and myocardial infarction resulting from contraction or blockage of the coronary artery of the heart. Terumo has proceeded to refine the delivery systems of its drug-eluting stents to improve ease of use and passage in order to facilitate smooth treatment of even complicated lesions. These refinements are expected to reduce the burden placed on healthcare professionals and patients while offering higher economic benefits.
In addition, the packaging type used for these drug-eluting stents has been changed to realize a 14% reduction in package size. This change is anticipated to provide environmental benefits by helping to conserve resources and space and improving transportation efficiency.

Drug-eluting stent

Intravascular ultrasound catheter—Shortened examination times and improved efficiency

Intravascular ultrasound catheters are used during intravascular ultrasounds, an examination that employs ultrasonic waves to visualize the interiors of blood vessels. By improving the image resolution, image acquisition, processing speeds, and ease of operation of our catheters, we have helped reduce the time required for preparations, examinations, and image interpretation in intravascular ultrasounds. We anticipate that the shorter procedure times will reduce the burden on patients and medical professionals, thereby contributing to the realization of safer and more efficient treatments.

Intravascular ultrasound catheter

Infusion pump—Resource conservation and improved usability

An infusion pump is a medical device that administers an intravenous solution (IV) etc. at a specified flow rate. By comparison with conventional devices, this product is around 40% lighter. This makes it easier to carry around, and it is also expected to make a positive contribution to environmental protection through resource conservation and enhanced delivery efficiency. Furthermore, the infusion pump includes a color LCD screen for improved visibility and a wireless communication feature that allows easy transfer of the pump's operational history data. These features are expected to improve the working efficiency of healthcare professionals.

Infusion pump

IV (Intravenous) solution bag—Conservation of resources and reduction of waste

We have developed an IV solution bag designed to be environmentally friendly. It is manufactured with less plastic, in a production process that consumes less energy and emits less CO_2 than previous processes. In addition, because the new IV solution bags weigh 23% less than prior bags, we expect them to generate less waste and reduce the overall impact on the environment.

IV solution bag

Vaccination syringe—Conservation of resources and reduction of waste, timely development to meet medical demand during the COVID-19 pandemic

In 2021, when vaccination against COVID-19 was underway in Japan, there was urgent demand for syringes that could be used for intramuscular injection. To prevent the wasting of precious vaccine doses, Terumo applied the technology from its low dead-volume syringes, initially designed for subcutaneous injections, to create a new syringe specifically for intramuscular injections. This new syringe features a longer embedded needle, measuring 16mm, compared to the 13mm needles found in existing models. This new product received manufacturing and sales approval as Japan's first syringe with an embedded needle for intramuscular injection with COVID-19 vaccine. It was on sale within three months of development beginning. The needle embedded in the syringe allows more efficient use of the vaccine agent while reducing the amount of plastic needed in manufacturing.

Syringe for vaccine

Closed infusion systems—Contributions to safer, more efficient infusion line management

Keeping infusion line mixers closed helps to prevent contamination by external airborne microbes. In addition, our infusion line connectors are designed to not retain any liquid and, therefore, can be used to deliver even very small amounts of drug solutions. Even the connection of syringes and infusion devices requires no special adapters, so drug solution delivery is simple, quick, and more secure from procedural errors. Easy inventory management contributes to greater safety and efficiency in managing infusion line stocks.

Closed infusion system

Safety IV catheter—Improved usability and medical cost efficiency

This Safety IV catheter is designed to improve the success rate of punctures by creating a sharper needle tip angle compared to conventional models. Additionally, it features a unique design that allows the healthcare professional who performed the puncture to visually confirm that the catheter has successfully accessed the blood vessel. These features are expected to increase the success rate of indwelling the catheter in the blood vessel, reducing the psychological burden on healthcare professionals and patients. Moreover, the improved success rate of indwelling the catheter reduces product waste generated by improper insertion into blood vessels, thereby contributing to improved medical cost efficiency. Furthermore, the modified shape of the product has resulted in a 12% reduction in product weight compared to conventional products.

Safety IV catheter

Products free of hazardous substances

Leading the industry toward mercury-free products

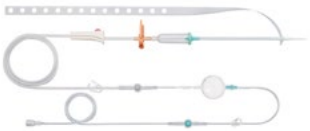
The Minamata Convention on Mercury took effect in August 2017. Under the convention, it has been illegal to manufacture and engage in trade involving products containing mercury since 2021. Terumo stopped producing mercury thermometers in 1984, more than 30 years ago. Since then, we have developed and launched products such as mercury-free digital thermometers and digital blood pressure monitors, which are safer for use and environmentally friendly. Through these efforts, we are committed to eliminating mercury from our products used in medical settings and at home.

Digital thermometer

Digital blood pressure monitor

Promoting PVC-free, DEHP-free products

Terumo helps reduce the release of toxic gas from the incineration of polyvinyl chloride (PVC) by promoting the use of PVC-free packaging. We also use alternatives to Di (2-ethylhexyl) phthalate (DEHP) whenever possible due to concerns over its biological hazards.



Polybutadiene IV solution set

PVC-free IV solution bag

DEHP-free cardiovascular circuit

Initiatives to address climate change

Various international frameworks have been established in regard to climate change, such as the Paris Agreement and the United Nations Sustainable Development Goals, which were both adopted in 2015. Against this backdrop, companies are expected to set and work toward accomplishing greenhouse gas (GHG) emissions reduction targets based on scientific evidence.

Terumo recognizes that reducing the GHG emissions from its business activities is an important management task. To address this challenge, we are focusing on improving energy efficiency and implementing measures to combat climate change through a concerted effort across the Terumo Group. To further accelerate countermeasures against climate change, Terumo revised its reduction target for GHG emissions from its business activities (Scope 1 and 2) in fiscal 2021 and set a new target of achieving carbon neutrality* by fiscal 2040. Terumo's GHG emissions reduction targets for fiscal 2030 have been approved by the Science Based Targets initiative (SBTi) as being aligned with the common goal to limit global temperature rise to 1.5°C above pre-industrial levels. In addition, Terumo has set a target for renewable energy use to achieve its GHG emission reduction targets. Terumo will further promote the use of renewable energy such as solar power in addition to conventional energy-saving activities. Terumo will also work to reduce GHG emissions throughout the value chain such as reducing waste, making effective use of natural resources, developing environmentally friendly products, and advancing joint delivery with other companies.

* Carbon neutrality means that the amount of carbon dioxide emitted and the amount of carbon dioxide absorbed are in balance.

Terumo Group's GHG emissions reduction targets

Scope 1 and 2*

- Reduce absolute GHG emissions by 50.4% by FY2030 compared to FY2018
- Increase the renewable electricity use ratio to 50% by FY2030
- Achieve carbon neutrality by FY2040

Scope 3

- Reduce GHG emissions 60% per unit of revenue by FY2030 compared to FY2018

SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

* Scope: Reporting is based on the following GHG Protocol categories.

Scope 1: Direct GHG emissions by the company (e.g., fuel combustion)

Scope 2: Indirect GHG emissions from energy production such as purchased electricity (e.g., GHG emissions from electric companies)

Scope 3: Other indirect GHG emissions (Emissions from other companies in raw material production, transportation, disposal, and other activities related to the company's business operations)

Reduction of GHG emissions

Scope 1 and 2

The Terumo Group is reducing GHG emissions by improving energy efficiency through adopting high-efficiency equipment and operating facilities efficiently, using renewable energy, and switching to energy with low GHG emissions.

In fiscal 2023, we reduced GHG emissions by approximately 7,500 tons by implementing 181 energy efficiency improvement projects. These projects included upgrading utility facilities and production equipment, improving operational methods for these facilities and equipment, and minimizing unnecessary energy consumption. This reduction volume is equivalent to 3.6% of the Terumo Group's GHG emissions in the previous fiscal year. We are also promoting the transition to renewable energy for electricity, tailored to the specific conditions of each country and region. These measures include advancing the switch to renewable energy power options in Japan and Europe, purchasing non-fossil certificates in Asia, introducing solar power generation facilities for self-consumption, and utilizing corporate power purchase agreements globally. Through these efforts, we have reduced GHG emissions by approximately 82,000 tons, and the ratio of renewable energy to the total electricity used by the Terumo Group in fiscal 2023 was 37.5%. In the Americas, we have three factories that manufacture our products in Costa Rica, where the usage rate of electricity derived from renewable energy is high.

As a result of all these efforts, we reduced the Terumo Group's total GHG emissions by 26.8% in fiscal 2023 compared with the target base year of fiscal 2018, achieving a significant reduction.

To achieve carbon neutrality for the Terumo Group by fiscal 2040, we will continue to advance initiatives to reduce GHG emissions, such as improving energy efficiency and switching to renewable energy for electricity. To support these efforts, we have implemented an internal carbon pricing system. By assigning an internal price to CO_2 emissions reduction (avoided emissions) and incorporating it into our investment decisions, we aim to encourage investments to help us achieve our goal of carbon neutrality.

Participation in the KEIDANREN Carbon Neutral Action Plan

Terumo participates in the activities of the Federation of Pharmaceutical Manufacturers' Association of Japan (FPMAJ) as a member of the Intravenous Solutions Society, an affiliated organization of the JPMA. KEIDANREN (Japan Business Federation) supports the Japanese government's "2050 Carbon Neutral Declaration" and has developed its "Carbon Neutral Action Plan" to achieve the government's goal. In line with KEIDANREN's action plan, FPMAJ has set a long-term vision to achieve net-zero CO_2 emissions by 2050. In addition, it has revised its phase II target (target for 2030) to achieve a 46% reduction in CO_2 emissions by 2030 from research centers, factories, offices, and company vehicles compared with fiscal 2013.

We are also participating in the KEIDANREN Action Plan and actively working to achieve its goal.

Scope 3

Terumo has its proprietary Human × Eco Development Guidelines, which serve as a framework for developing products that benefit both people and the environment. By following these guidelines, we aim to reduce resource use and enhance transportation efficiency by making products smaller and lighter and designing packaging with improved loading efficiency during product transportation. In 2019, we introduced the Supplier Guidelines and began collaborating with our suppliers on joint transportation of procured goods. This initiative also includes transitioning to eco-friendly transportation, specifically shifting from trucks to ships. In fiscal 2020, we launched a new shared transportation initiative within Japan for shipping products and worked on reducing CO_2 emissions associated with product deliveries. (For information about EHS initiatives in procurement, please refer to "EHS Initiatives in Procurement" on p. 54.)

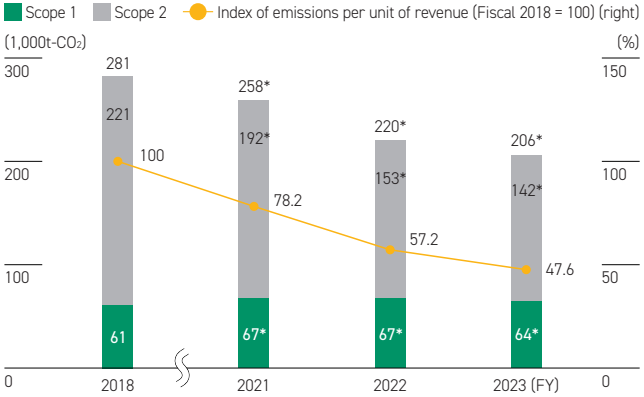
As a result of these measures, the Terumo Group's Scope 3 GHG emissions per unit of revenue in fiscal 2023 were down 24.4% compared to fiscal 2018.

For more information about CO_2 emissions, energy consumption, and renewable energy use, please refer to "Environmental Data" on pp. 104-105.

Recognition by CDP

In 2023, the Terumo Group received an A-minus score for the second consecutive year in the Climate Change survey conducted by CDP, an international non-governmental organization that requires companies to disclose information on climate change, water security, and other environmental issues.

CO_2 emissions (Scope 1 and 2)

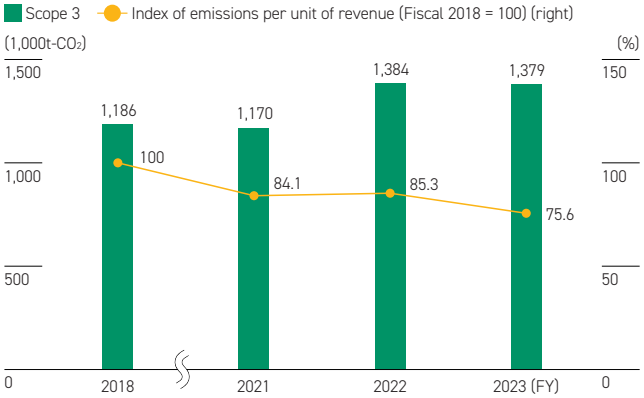


* Data assured by a third party

Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas

Note: CO_2 emissions are calculated by using the CO_2 emission factors for electricity for each fiscal year provided by power companies.

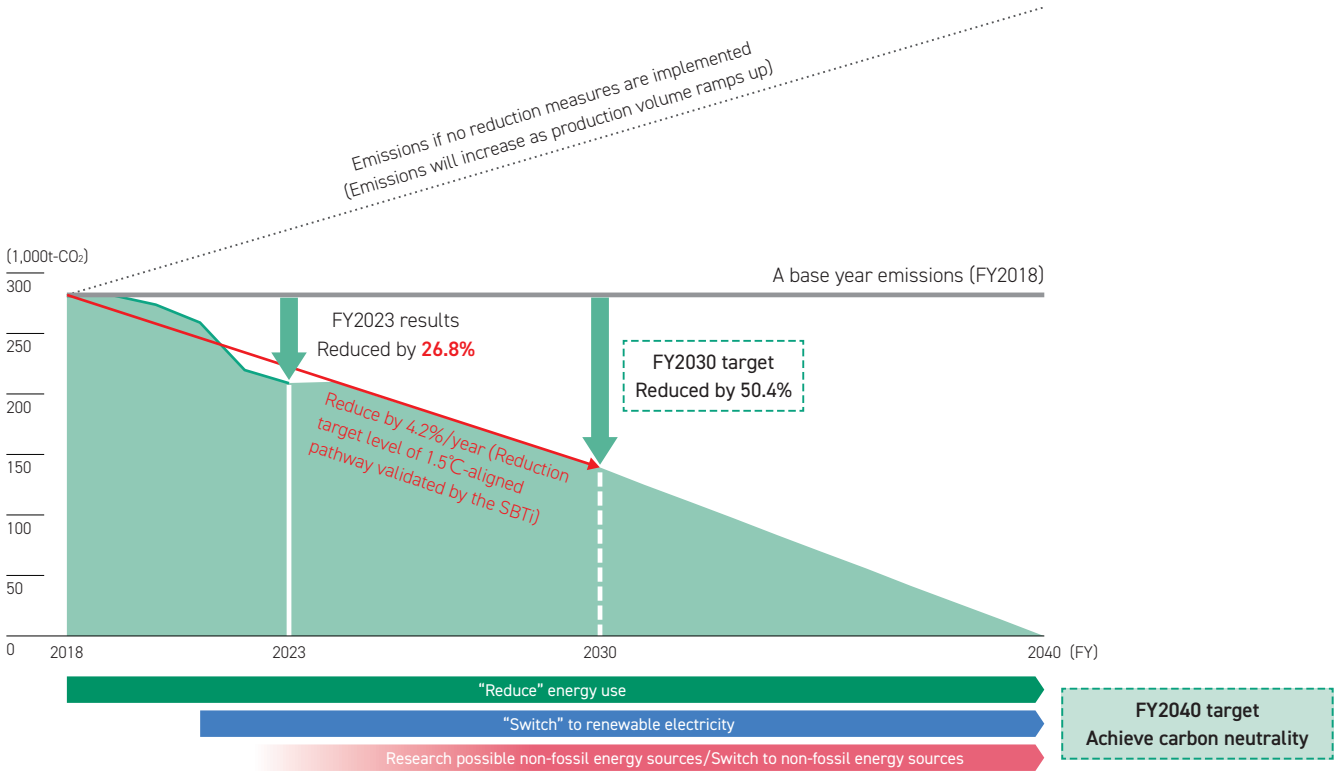
CO_2 emissions (Scope 3)



Scope: Terumo Group

Note: The figures above are calculated based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (ver. 2.6) compiled by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

A roadmap to achieve carbon neutrality (Scope 1 and 2)



TOPICS

Utilization of renewable energy

Introduction of solar power generation equipment

Vietnam

In Vietnam, coal-fired power generation is the main source of electricity supply and with the recent increase in electricity usage, the impacts on the environment are starting to attract attention. At the factory of Terumo BCT Vietnam Co., Ltd. (in Dong Nai Province), which produces blood bags and other products, we advanced the introduction of a solar power generation facility on their premises by utilizing on-site power purchase agreement. In fiscal 2024 to date, we have installed solar panels with a total output of approximately 2 megawatts.

Europe

At Terumo Europe (in Leuven, Belgium), we have installed solar panels with a total output of approximately 1.6 megawatts to date in fiscal 2024.

Japan

We are also promoting the installation of solar panels at our sites in Japan. At the factory of Terumo Yamaguchi Corporation (in Yamaguchi City, Yamaguchi Prefecture), we have installed solar panels with a total output of approximately 0.3 megawatts on the premises to date in fiscal 2024 through an on-site power purchase agreement.

A list of sites where solar power generation facilities have been installed to date

To date, the Terumo Group business sites listed below have already installed solar power generation facilities. In fiscal 2024, we are also continuing to prepare for the introduction of solar power generation facilities at other business sites. Moving forward, we will strive to reduce our environmental impact through the use of renewable energy.

- Fujinomiya Factory (Fujinomiya, Shizuoka)
- Terumo Yamaguchi Corporation (Yamaguchi, Yamaguchi)
- Terumo BCT, Inc. (Colorado, USA)
- Terumo Europe NV (Leuven, Belgium)
- Terumo Medical Products (Hangzhou) Co., Ltd. (Zhejiang, China)
- Terumo Vietnam Co., Ltd. (Hanoi, Vietnam)
- Terumo BCT Vietnam Co., Ltd. (Dong Nai Province, Vietnam)



Newly installed solar panels
(Left) Terumo BCT Vietnam Co., Ltd. (Middle) Terumo Europe NV (Right) Terumo Yamaguchi Corporation

Measures to reduce Scope 1 and 2 emissions

Introduction of new air conditioning equipment that reduces environmental impact and risks at Terumo (Philippines) Corporation

Terumo (Philippines) Corporation updated the design of its air conditioning facility and replaced it with a new one, taking into account the factory's overall energy balance. The new air conditioning facility will contribute to improving energy efficiency and reducing CO_2 emissions, leading to a 2% decrease in the total energy consumption of Terumo Philippines.

In addition, the upgraded air conditioning facility helps combat global warming and minimize environmental risks by using a non-CFC refrigerant with a lower global warming potential.

Measures to reduce Scope 3 emissions

Reduction of CO_2 emissions from transportation by switching to returnable containers

Terumo has changed the packaging of certain TIS business products transported from Japan to Europe from disposable to returnable containers. This change, achieved through collaboration with related sites, departments within Terumo, and logistics companies, contributes to a reduction of approximately 50% in CO_2 emissions from transportation while maintaining product quality. This initiative also reduces waste from shipping cooling package materials by switching to returnable containers, which helped lower transportation costs. We will continue to work on improving transportation efficiency.

Responding to the risks and opportunities resulting from climate change (Information disclosure based on the TCFD recommendations)

In March 2022, Terumo publicly declared its support for the Task Force on Climate-related Financial Disclosures (TCFD) established by the Financial Stability Board (FSB), and for its recommendations. Below, Terumo discloses the impacts of climate change on our business activities and our measures to address them under the TCFD framework.

Governance	・The director in charge of EHS (Environment, Health and Safety), who is a member of the Board of Directors of Terumo Corporation, has responsibility for oversight relating to environmental matters, including climate change. ・The EHS Management Committee, which is chaired by the director in charge of EHS, is the company's highest decision-making body in regard to matters relating to climate change. The Committee identifies climate change related risks and opportunities, formulates and revises related policies, strategies, and targets, monitors the achievement status of targets, and reports to the Executive Management Meeting. The EHS Management Committee meets three times a year, and has established an Energy Subcommittee (Energy SC) under it as an EHS Expert Subcommittee. The Energy SC conducts progress management in regard to energy-related targets, and submits periodic reports to the EHS Management Committee. ・The Sustainability Committee, of which the Director in charge of EHS is a member, also monitors the efforts and progress towards carbon neutrality as one of the ESG themes and KPIs of GS26 and reports regularly to the Executive Management Committee and the Board of Directors.
Strategy	・Under the Group Mission of "Contributing to Society through Healthcare," the Terumo Group recognizes that ensuring an uninterrupted supply of medical devices and pharmaceuticals to safeguard people's lives and health is its most important task. We also believe that, by providing new treatments, we can help to make healthcare provision more efficient and facilitate the reduction of GHG emissions deriving from medical settings. ・Regarding climate change scenarios, we are focusing on two scenarios: the scenario that assumes the highest level of physical risks, with average global temperatures rising by 4.0°C compared to the situation prior to the Industrial Revolution (Representative Concentration Pathways (RCP) 8.5), and the scenario that assumes the highest level of transitional risk, with the rise in average global temperature kept down to within 1.5°C (RCP1.9). For these two scenarios, we have collated the potential opportunities and risks that might affect our business, as shown in the table on the right.
Risk management	・The EHS Management Committee identifies climate change related risks and opportunities, evaluates the potential impact on the company's business operations, directs related departments to implement management in a way that will reduce risk and maximize opportunities, and manages progress status. ・The scope of the risks covered by the Terumo Group's risk management includes climate change-related risks noted by the EHS Management Committee. The climate-related risks are monitored based on the risk management plan under the risk management system established by the Risk Management Committee.
Indicators and targets	Terumo has set its GHG emissions reduction targets which are aligned with the common goal to limit global temperature rise to 1.5°C above pre-industrial levels. Terumo's targets have been approved as science-based by the Science Based Targets initiative (SBTi). Terumo Group's GHG emissions reduction targets Scope 1 and 2 ・Reduce absolute GHG emissions by 50.4% by FY2030 compared to FY2018* ・Increase the renewable electricity use ratio to 50% by FY2030* ・Achieve carbon neutrality by FY2040 Scope 3 ・Reduce GHG emissions 60% per unit of revenue by FY2030 compared to FY2018* *Targets validated by SBTi

Risks affecting our business activities

Risks	Risk content
Physical risks	・Damage to buildings, facilities, or inventory in the event of a natural disaster occurring, and lost opportunities resulting from the disruption of supply of products due to temporary cessation of operations
	・Increased energy costs and reduced labor productivity due to steady temperature rise or water shortages, and lost opportunities due to temporary disruption of operations
	・Sudden, rapid increase in demand for specific products due to the impact of natural disasters on the healthcare system (which constitutes important social infrastructure), and negative impact on revenue resulting from an extended deterioration or stagnation in the functioning of the healthcare system
Transition risks	・Increased energy costs and raw material costs in the event of the introduction or raising of carbon tax
	・Replacement of equipment and accompanying increase in capital expenditure costs, resulting from the tightening up of environmental regulations such as those governing GHG emissions
	・Increased costs in the event of an increase in demand for GHG emissions reduction or demand for the supply of environmentally friendly products from customers or business partners, and loss of opportunities in the event that it is difficult to respond effectively to such demands

Opportunities relating to our business activities

Opportunities	Opportunity content
Physical opportunities	・Provision of products in response to changes in long-term disease patterns as a result of climate change, and provision (stable supply) of products that contribute toward strengthening the resilience of the healthcare system
Transition opportunities	・Reduced costs due to enhancement of energy efficiency in production and in the supply chain
	・Provision of products that contribute toward enhanced efficiency in medical settings or toward reduction of GHG emissions

Initiatives to address climate change

Based on an analysis of the potential impact on Terumo's business of the aforementioned risks and opportunities in both the 4.0°C scenario and the 1.5°C scenario, it is anticipated that the following risks could have a comparatively high impact.

4.0°C scenario

- Damage to buildings, facilities, or inventory in the event of a natural disaster occurring, and lost opportunities resulting from the disruption of supply of products due to temporary cessation of operations

1.5°C scenario

- Damage to buildings, facilities, or inventory in the event of a natural disaster occurring, and lost opportunities resulting from the disruption of supply of products due to temporary cessation of operations
- Increased energy costs and raw material costs in the event of the introduction or raising of carbon tax

Regarding the response to risks relating to business continuity, such as natural disasters, etc., the Group Business Continuity Management (BCM) Policy clearly stipulates the Terumo Group's shared basic approach to business continuity and the related systems and response measures. The risk management representatives at individual production sites, functional departments at the head office involved with raw materials procurement, distribution, etc., individual companies, and overseas subsidiaries liaise with one another and draw up business continuity plans (BCPs) to prevent our operations from being disrupted even under extreme circumstances, and to ensure that operations can be quickly restored and resumed should they be disrupted. If a serious risk emerges that could affect business continuity, the Countermeasures Headquarters, led by the Chief Executive Officer of Terumo Corporation, will be established to swiftly initiate response activities. If it becomes apparent that the Terumo Group's supply chain or operations will be temporarily interrupted, we will strive to restore normal supply chain and operational functions as quickly as possible.

With regard to a possible increase in energy costs or raw materials costs, we are continuing to implement measures to adopt production equipment with high energy efficiency, and to develop products that can be manufactured with less raw materials and less energy.

Effective utilization of resources and initiatives to realize a circular economy

Waste reduction and recycling

As part of its efforts to use resources more efficiently, Terumo sets targets for recycling and for reducing final disposal waste. From a safety perspective, it is difficult to reuse waste (i.e., practice material recycling) internally. We do, however, strive to reduce the amount of plastic and metal waste generated in manufacturing processes and from business activities in offices. In addition, we segregate various types of waste from such processes and activities, and, with the cooperation of a recycling company, turn it into plastic products, refuse plastic fuel (RPF), and organic fertilizer.

In fiscal 2023, the recycling rate for Terumo Group business sites in Japan and manufacturing and R&D sites overseas was 89.3%. Final waste disposal accounted for 0.10% of total waste at Terumo Group business sites in Japan, accomplishing our target for the year.

Terumo will continue to pursue higher levels of resource efficiency going forward through means such as ongoing waste reduction efforts and extensive sorting of waste.

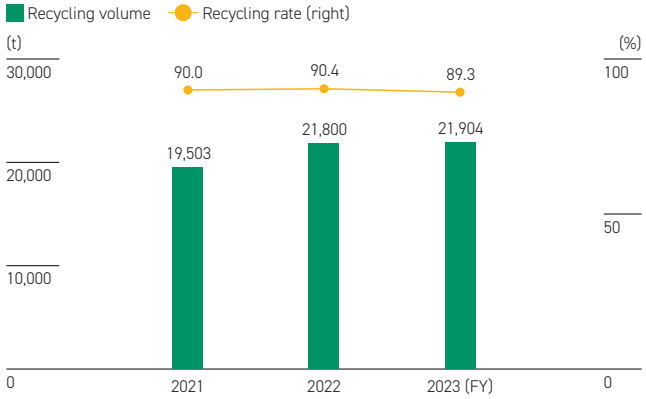
Medium-term targets (FY2023—FY2026)

- Waste recycling rate for the Terumo Group (Terumo Group business sites in Japan and manufacturing and R&D sites overseas): 89% or higher
- Final waste disposal amount of all Terumo Group business sites in Japan: 0.3% or less of total waste generated

Medium- to long-term target (FY2030)

- Waste recycling rate for the Terumo Group (Terumo Group business sites in Japan and manufacturing and R&D sites overseas): 90% or higher

Recycling volume and rate



Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas

Final waste disposal

Scope: Terumo Group business sites in Japan

Initiatives to realize the circular economy

Terumo is implementing initiatives to help realize the circular economy, in response to the issues of resource depletion and climate change. To drive the development of new products that are both user-friendly and environmentally friendly, we have formulated our own unique set of standards—the Human × Eco Development Guidelines (see p. 36 for more details). Based on the guidelines, we are proceeding with efforts to control the amount of waste generated in production processes, choose materials and components that have a small environmental impact, and make both products and packaging smaller and more lightweight.

Ensuring that plastic and other by-products that are produced during the manufacturing process are properly sorted and transferred to recycling firms to create new resources, we are implementing material recycling that recycles waste into new plastic products such as stationery and pallets. In fiscal 2023, we began to sell our first products that are partly made from recycled plastic.

We offer leasing services with maintenance for medical electronic devices such as infusion pumps. We also collect and recycle the devices once the lease contracts have ended.

Pallet made from recycled plastic

Products partly made using recycled plastic

Medical electronic equipment offered with a maintenance lease

Effective utilization of resources and initiatives to realize a circular economy

Initiatives to collect and recycle small rechargeable batteries

Terumo works through the Japan Portable Rechargeable Battery Recycling Center (JBRC) to collect and recycle used rechargeable batteries from Terumo products. This is in compliance with Japan's Act on the Promotion of Effective Utilization of Resources. To promote the proper recycling of small rechargeable batteries, we display a recycling logo on our products and inform customers through product instruction booklets that batteries should be recycled. In addition, for products covered by our maintenance services, we regularly inspect and replace small rechargeable batteries and recycle batteries that are no longer usable. (For more information about performance in relation to the collecting and recycling of small rechargeable batteries, please refer to "Environmental Data" on p. 106.)

Reduction of containers and packaging and promotion of recycling

To effectively use resources and improve ease of use for customers, Terumo is working to reduce its use of containers and packaging materials. These efforts include the development of smaller, lighter, and slimmer containers and packages and the adoption of new containers and package designs.

In Japan, recycling of containers and packaging waste is promoted through the Containers and Packaging Recycling Law, which requires product sellers to recycle containers and packaging discarded as household waste. Terumo fulfills its recycling obligation by outsourcing the recycling of containers and packaging to the Japan Containers and Packaging Recycling Association. In fiscal 2023, Terumo Group business sites in Japan outsourced a total of 293 tons of materials for recycling, which includes 19 tons of paper and 274 tons of plastic packaging materials.

Effective utilization of water resources

Reduction of water use

Terumo uses large quantities of water in its manufacturing processes and for producing infusion solutions. Using the Aqueduct water risk assessment tool developed by the World Resources Institute (WRI), we monitor the risks and opportunities associated with our water usage periodically, examining the status of water resources and the level of water stress, etc., in the countries and regions where each of Terumo's production and R&D sites is located. The survey results indicate that, as of the end of fiscal 2023, among the Terumo Group business sites in Japan and manufacturing and R&D sites overseas, the sites in North America, Europe, China, India, the Philippines, and Vietnam are located in regions with high levels of water stress. Water usage by these sites accounts for around 13% of the Terumo Group's total water consumption.

With reference to SDG Goal 6, which aims to "Ensure the availability and sustainable management of water and sanitation for all," Terumo has set water-related targets and is actively working to reduce water use (water withdrawal) and enhance water recycling. We are implementing several specific measures to reduce water loss in our manufacturing processes. These measures include the installation of flow meters to accurately track water usage for different purposes and systems that effectively visualize our overall water consumption. In addition, we are implementing water-saving equipment, recycling used water for cooling, and other efforts. As a result of these initiatives, we achieved an 11.6% reduction in water consumption per unit of revenue in fiscal 2023 compared to the previous year and a 38.5% reduction compared to fiscal 2018. The Terumo Group is committed to the efficient use of water resources and will continue to pursue these efforts.

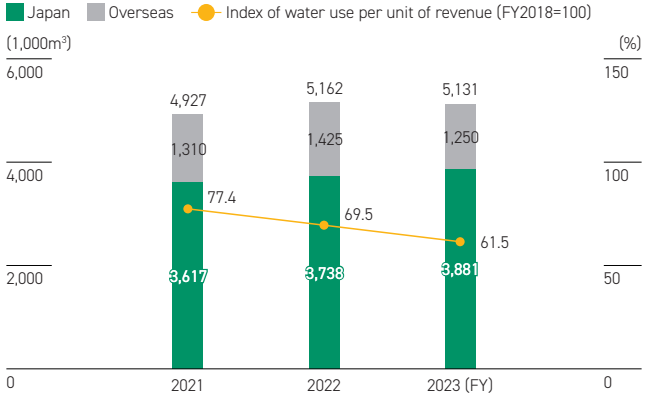
Medium-term target (FY2023—FY2026)

- Overall water use (water withdrawal) per unit of revenue for the Terumo Group (Terumo Group business sites in Japan and manufacturing and R&D sites overseas): Reduce by more than 20% compared to fiscal 2018

Medium- to long-term target (FY2030)

- Overall water use (water withdrawal) per unit of revenue for the Terumo Group (Terumo Group business sites in Japan and manufacturing and R&D sites overseas): Reduce by more than 20% compared to fiscal 2018

Water use (water withdrawal) volume



Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas

Recognition by CDP

In 2023, the Terumo Group received an A-minus score for the fourth consecutive year in the Water Security survey conducted by CDP, an international non-governmental organization that requires companies to disclose information on climate change, water security, and other environmental issues.

Proper control of chemical substances

Terumo manages chemical substances and tracks their use, emissions, and disposal in accordance with the Terumo Group EHS Policy in order to mitigate health risks and reduce environmental impacts associated with these substances. Chemical substance risk assessments are carried out at worksites that use such substances and proper chemical substance control is practiced based on information on hazardous chemical substances derived from the Globally Harmonized System of Classification and Labelling of Chemicals. Voluntary goals have been established with regard to substances that pose a particular risk to people's health and precautions are taken to prevent emissions of these substances.

Voluntary action to reduce chemical substance emissions

Reduction of Dichloromethane emissions

Terumo is working to reduce its emissions of dichloromethane based on its own voluntary targets. At business sites that handle large amounts of dichloromethane, we have installed a recycling system to reduce emissions of this air pollutant as much as possible. As an added measure, we monitor dichloromethane concentrations at the exhaust ports and boundaries of sites.

Reduction of Ethylene Oxide emissions

Ethylene oxide is widely used to sterilize medical devices. At Terumo, we are working to reduce ethylene oxide emissions to the outside environment. To this end, we have installed exhaust gas treatment systems to limit emissions and regularly check the concentration of emissions at outlets. In addition, we have voluntarily set a target for atmospheric concentrations at the boundaries of sites, and we perform periodic monitoring.

Proper disposal of Polychlorinated Biphenyls

At Terumo's business sites in Japan, the disposal of all equipment (transformers, capacitors, etc.) containing high levels of polychlorinated biphenyls (PCBs) has been completed by the Japan Environmental Storage & Safety Corporation (JESCO). Equipment containing low concentrations of PCBs is also being systematically disposed of by private waste disposal management companies.

Compliance with environmental regulations for products

The regulated substances and environmental pollutants contained in products are clearly identified at the product design and procurement stages. We use our Human × Eco Development Guidelines as a tool to raise designer awareness.

Terumo seeks to comply with the Restriction of Hazardous Substances Directive (RoHS*1), the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH*2), and other environmental regulations pertaining to products. For this reason, Terumo is stepping up management of these substances by monitoring the regulated substances contained in procured items.

*1 Directive of the European Union that restricts the use of certain hazardous substances included in electrical and electronic equipment

*2 Regulation of the European Union regarding the registration, evaluation, authorization, and restriction of chemicals

Initiatives for biodiversity conservation

Terumo understands that our lives and health and even the practice of medicine itself depend on the existence of diverse living organisms and ecosystems. As a company whose business draws benefits from nature, Terumo seeks to preserve biodiversity through environmental education and reforestation activities and works to support the development of a society in which humans coexist with nature.

Protecting Forests

Mt. Fuji Reforestation Project

Terumo has two factories in the city of Fujinomiya in Shizuoka, Japan. Both take in groundwater from springs at the foot of Mt. Fuji for use in the production of medical devices, pharmaceuticals, and other products. Recognizing that our business depends on the use of natural resources, we launched the Terumo Mt. Fuji Reforestation Project in fiscal 2003 with the aim of restoring the natural forests in this area. This project involves the reforestation of parts of Mt. Fuji's forests where many trees have been destroyed by typhoons. Repopulating these areas with native tree species will help them become more resistant to future natural disasters and ensure that they can continue to serve as a source of groundwater. In fiscal 2011, three parties—Shizuoka Prefecture, a local forest owner, and Terumo—entered into an agreement called the Shizuoka Mirai-no-Mori (Future Forest) Supporter Pact. Under this agreement, we plant trees and maintain forested areas to create the Terumo Megumi-no-Mori reserve within the Fumoto district of Fujinomiya. Moreover, we are engaged in year-round reforestation activities based on the concepts of resources, living organisms, interaction, and health through this agreement.

In fiscal 2023, we engaged in activities with 58 participants, including associates and their families. We learned about the importance of biodiversity and forests while working on forest maintenance necessary for nurturing saplings, such as reinforcing deer protection nets. Additionally, we maintained benches and tables made from thinned wood.

Tree planting activity

Results of activities under Shizuoka Mirai-no-Mori Supporter Pact (FY2011—FY2023)

- Total number of participants: 2,448
- Activity details:
  - Planting of 2,765 trees (sawtooth oak, konara oak, maple, cherry, etc.)
  - Production of benches and tables using thinned wood, creation of walking paths, forest walking events, etc.

ECO Challenge

We hold the ECO Challenge in which volunteer Terumo associates in Japan conduct a variety of voluntary environmental preservation activities at home and at work. In fiscal 2023, about 4,650 people took part in the ECO Challenge, undertaking seven energy-saving and resource-conservation activities that will contribute toward reducing CO_2 emissions, as well as a carbon neutrality education program. Points were calculated based on the results of participating associates, and Terumo translated these points into a monetary value for donations to the Children's Forest Program (The Philippines) arranged by the Organization for Industrial, Spiritual and Cultural Advancement — International, Japan (OISCA Japan).

Initiatives at overseas business sites

We are organizing events to raise awareness about recycling and conducting tree planting activities at our business sites overseas, as well as at our sites in Japan, to contribute to biodiversity conservation. In fiscal 2023, Terumo (Philippines) Corporation conducted tree planting activities in the Caliraya-Lumot Watershed Forest Reserve in Laguna. In addition, Terumo BCT Poland established a pollinator garden, and many other locations engaged in activities such as cleaning up nearby areas and nature reserves, as well as hosting internal biodiversity awareness events. These initiatives aim to reduce environmental impact through forest conservation and environmental education.

Endorsement of Declaration of Biodiversity by KEIDANREN and Action Policy

Terumo has declared its support of the Declaration of Biodiversity by KEIDANREN (Japan Business Federation) and the Action Policy released by KEIDANREN and the KEIDANREN Committee on Nature Conservation. This declaration and policy will guide our activities going forward.

Environmental data

CO_2 emissions (Scope 1+2)

		FY2018	FY2021	FY2022	FY2023
Japan (t-CO_2)	Scope 1	42,084	44,680	43,080	42,313
	Scope 2	110,203	94,224	46,910	50,329
	Total	152,287	138,904	89,990	92,643
Overseas (t-CO_2)	Scope 1	18,614	21,987	24,069	21,809
	Scope 2	110,477	97,413	106,277	91,579
	Total	129,091	119,400	130,346	113,388
Total (t-CO_2)	Scope 1	60,698	66,667*	67,148*	64,123*
	Scope 2	220,680	191,637*	153,187*	141,908*
	Total	281,378	258,304*	220,335*	206,031*
Increase/decrease compared to FY2018 (%)		–	-8.2	-21.7	-26.8
Index of emissions per unit of revenue (FY2018=100)		100	78.2	57.2	47.6

* Data assured by a third party
Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas
Note: CO_2 emissions are calculated by using the CO_2 emission factors for electricity for each fiscal year provided by power companies.

FY2023 CO_2 emissions (Scope 3)

(t-CO_2)

		Emissions volume	Method of calculation
Category 1	Purchased goods and services	835,664	For the Terumo Group in Japan, emissions volume is calculated by multiplying the amounts of purchased components and materials by their respective emission intensities. For the Terumo Group overseas, emissions volume is calculated based on the amount of revenue.
Category 2	Capital goods	232,074	Multiplying emission intensities per capital goods price by annual capital expenditure amounts
Category 3	Fuel- and energy-related activities (not included in Scope 1 or 2)	41,127*	Multiplying amounts of purchased fuel, electricity, and heat by their respective emission intensities
Category 4	Upstream transportation and distribution	73,070	For the Terumo Group in Japan, emissions volume is calculated by multiplying product transportation in ton-kilometers by the emission intensity for each transport type. For the Terumo Group overseas, emissions data is obtained from logistics providers; if this data is unavailable, calculations are made using transportation costs.
Category 5	Waste generated in operations	2,726	Multiplying amounts of waste generated by the emission intensity for each category of waste
Category 6	Business travel	3,988	Multiplying the number of employees by emission intensity per employee
Category 7	Employee commuting	9,217	Multiplying the number of employees by emission intensity per category of work or area classification
Category 8	Upstream leased assets	0	Emissions associated with leased company vehicles and leased office buildings are included under Scope 1 and 2
Category 9	Downstream transportation and distribution	4,323	Multiplying product weight by emission intensities using a standard transportation and distance model
Category 10	Processing of sold products	0	Intra-group processing is included under Scope 1 and 2
Category 11	Use of sold products	6,681	Calculated based on lifespan and electricity consumption of principal medical engineering products (pumps)
Category 12	End-of-life treatment of sold products	170,450	For the Terumo Group in Japan, emissions volume is calculated by multiplying weight of shipped products by emission intensity for waste processing. For the Terumo Group overseas, emissions volume is calculated based on the amount of revenue.
Category 13	Downstream leased assets	0	Emissions associated with products leased to customers are included under "Use of sold products"
Category 14	Franchise	–	Not applicable as facilities classed as franchise operations are not owned
Category 15	Investments	–	Not applicable as no emissions were generated through investments
Total		1,379,319	

* Data assured by a third party
Scope: Terumo Group
Note: The figures above are calculated based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (ver. 2.6) compiled by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

CO_2 emissions (Scope 3)

	FY2021	FY2022	FY2023
Index of emissions per unit of revenue (FY2018 = 100)	84.1	85.3	75.6

Scope: Terumo Group
Note: The figures above are calculated based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (ver. 2.6) compiled by the Ministry of the Environment and the Ministry of Economy, Trade and Industry. The calculation method for certain data has been updated to enhance accuracy. Consequently, historical data has also been adjusted to align with this new calculation method.

Energy consumption

Fuel type	FY2021	FY2022	FY2023
Electricity (MWh)	479,161	520,938*	522,581*
Gas (MWh)	316,449	318,358*	319,551*
LPG (MWh)	19,204	19,044*	19,632*
Heavy oil (MWh)	6,182	9,017*	8,733*
Diesel oil (MWh)	963	1,619*	2,156*
Steam (MWh)	31,925	32,448*	28,946*
Steam [excluding steam for industrial use], hot water, and cold water (MWh)	0	1,509*	1,242*
Gasoline (MWh)	14,442	12,157*	10,990*
Heating oil (MWh)	287	1*	0*
Cold water (MWh)	0	171*	151*
Total (MWh)	868,612	915,262*	913,984*
Index of consumption per unit of revenue (FY2018 = 100)	90.9	82.0	73.0

* Data assured by a third party
Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas

Renewable energy use

	FY2021	FY2022	FY2023
Renewable energy use (MWh)	50,595	167,463*1	195,894*1
Ratio of renewable energy use (%)*2	10.6	32.1*1	37.5*1

*1 Data assured by a third party
*2 The ratio of renewable energy use to total electricity use
Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas

Total waste volume and recycling rate

		FY2021	FY2022	FY2023
Japan	Total waste (t)	11,408	11,759	11,727
	Hazardous waste (t)*	968	1,433	1,419
	Volume recycled (t)	11,223	11,569	11,487
	Recycling rate (%)	98.4	98.4	98.0
Overseas	Total waste (t)	10,264	12,365	12,811
	Hazardous waste (t)	1,061	1,387	1,732
	Volume recycled (t)	8,280	10,231	10,417
	Recycling rate (%)	80.7	82.7	81.3
Total	Total waste (t)	21,672	24,124	24,538
	Hazardous waste (t)	2,029	2,819	3,151
	Volume recycled (t)	19,503	21,800	21,904
	Recycling rate (%)	90.0	90.4	89.3

*The volume of specially controlled industrial waste as prescribed by Japan's Waste Management and Public Cleansing Act.
Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas

Final waste disposal

	FY2021	FY2022	FY2023
Total waste (t)	11,408	11,759	11,727
Final waste disposal (t)	15	14	12
Ratio of final waste disposal to total waste (%)	0.14	0.12	0.10

Scope: Terumo Group business sites in Japan

Collection and recycling of small rechargeable batteries

	FY2021	FY2022	FY2023
Nickel-cadmium batteries (kg)	1,598	1,327	869
Nickel-metal hydride batteries (kg)	2,869	2,494	2,437
Lithium-ion batteries (kg)	1,424	1,716	1,947
Sealed lead-acid batteries (kg)	112	228	291

Scope: Terumo Group business sites in Japan

Water use (water withdrawal) volume

	FY2021	FY2022	FY2023
Japan (1,000m^3)	3,617	3,738	3,881
Overseas (1,000m^3)	1,310	1,425	1,250
Total (1,000m^3)	4,927	5,162	5,131
Index of water use per unit of revenue (FY2018 = 100)	77.4	69.5	61.5

Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas

Water discharge volume

	FY2021	FY2022	FY2023
Japan (1,000m^3)	2,620	2,836	2,946
Overseas (1,000m^3)	1,115	1,195	1,051
Total (1,000m^3)	3,736	4,031	3,996

Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas

Chlorofluorocarbons emissions

	FY2021	FY2022	FY2023
Emissions (t)	971.8	365.3	326.4

Scope: Terumo Group business sites in Japan

Major violations of environmental laws and regulations (air and water pollution, etc.)

	FY2021	FY2022	FY2023
Total amount of fines (billion yen)	0	0	0
Total number of penalties other than fines	0	0	0

Scope: Terumo Group business sites in Japan and manufacturing and R&D sites overseas

FY2023 site data (Manufacturing and R&D sites)

Region	Site	Location	CO_2 emissions [Scope 1+2] (t-CO_2)	Water Use (1,000m^3)	Total waste emissions (t)	Recycled amount (t)
Japan	Fujinomiya Factory	Fujinomiya, Shizuoka	28,641	1,892	2,580	2,578
	Ashitaka Factory	Fujinomiya, Shizuoka	14,472	492	2,892	2,830
	Kofu Factory	Nakakoma, Yamanashi	24,877	1,122	4,383	4,241
	ME Center	Suntou, Shizuoka	199	2	74	74
	R&D Center (Shonan Center)	Ashigarakami, Kanagawa	3,761	70	220	193
	Terumo Clinical Supply Co., Ltd.	Kakamigahara, Gifu	444	4	34	34
	Terumo Yamaguchi Corporation	Yamaguchi, Yamaguchi	16,771	292	1,450	1,444
Americas	Terumo Medical Corp. (Elkton Factory)	Maryland, USA	8,464	53	501	347
	Terumo Cardiovascular Systems Corp. (Elkton Factory)	Maryland, USA	4,998	29	586	242
	Terumo Cardiovascular Systems Corp. (Ann Arbor Factory) and Terumo Heart, Inc.	Michigan, USA	2,530	0.2	31	17
	MicroVention, Inc.	California, USA	1,694	13	441	253
	Terumo BCT, Inc. (Lakewood Factory)	Colorado, USA	9,306	59	680	328
	Terumo BCT, Inc. (Littleton Factory)	Colorado, USA	3,505	9	557	309
	Bolton Medical, Inc.	Florida, USA	558	4	450	294
	Terumo Puerto Rico LLC	Commonwealth of Puerto Rico	1,032	2	75	37
	MicroVention Costa Rica, S.r.l.	San Jose, Costa Rica	137	36	724	713
	TFB Manufacturing S.r.l. (Terumo BCT Costa Rica Factory)	Cartago, Costa Rica	34	20	1,013	1,013
	Terumo Cardiovascular Costa Rica LLC, S.r.l.	Cartago, Costa Rica	28	7	352	310
	Kalila Medical, Inc.	California, USA	97	2	44	22
Europe	Terumo Europe NV	Leuven, Belgium	3,005	35	521	519
	Vascutek Ltd.	Glasgow, UK	959	32	214	214
	Terumo BCT, Ltd.	Larne, UK	2,738	72	594	593
Asia	Terumo Medical Products (Hangzhou) Co., Ltd.	Zhejiang, China	14,015	231	1,211	1,169
	Terumo (Philippines) Corp.	Laguna, Philippines	28,287	274	1,771	1,611
	Terumo Penpol Pvt. Ltd.	Kerala, India	11,254	43	874	717
	Terumo Vietnam Co., Ltd.	Hanoi, Vietnam	4,036	217	780	671
	Terumo BCT Vietnam Co., Ltd.	Dong Nai, Vietnam	14,586	101	1,373	1,022
	Essen Technology (Beijing) Co., Ltd.	Beijing, China	2,124	12	17	17

Material flow

INPUT

Energy

Electricity	212 GWh
City gas	16 MNm^3
LPG	12 t
Heavy oil	1 kl
Diesel oil	8 kl
Gasoline	989 kl
Cold water	458 GJ
Steam	3,757 GJ

Resources

Industrial water	2,052 thousand m^3
Ground water	1,532 thousand m^3
Paper	17.26 million sheets

R&D/ Manufacturing/ Sales

OUTPUT

Atmosphere

CO_2	75 thousand t-CO_2
Nitrogen oxide	12 t
Sulfur oxide	0 t

Bodies of water

Wastewater volume	2,694 thousand m^3
Biochemical oxygen demand	7.8 t

Waste

Waste generated	10,206 t
Recycled	9,972 t
Landfill	12 t

INPUT

Energy

Diesel oil	135 TJ
Heavy oil	6 TJ
Jet fuel	7 TJ

Distribution (contracted)

OUTPUT

Atmosphere

CO_2	10 thousand t-CO_2

Scope: Terumo Corporation business sites in Japan
Note 1: The volume of energy use and CO_2 emissions to the atmosphere associated with distribution indicates the volume resulting from distribution in Japan.
2: The volume of energy use associated with distribution is the converted value calculated using the ton-kilometer method.
3: The CO_2 emissions factors for electricity are the fiscal 2023 factors provided by power companies.

Independent assurance statement

INDEPENDENT ASSURANCE STATEMENT

To: Terumo Corporation

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) has been engaged by Terumo Corporation (Terumo) to provide limited assurance over sustainability information selected by Terumo. This Assurance Statement applies to the related information included within the scope of work described below.

Selected information

The scope of our work was limited to assurance over the following information included within Terumo Report 2024 for the period of April 1, 2023 through March 31, 2024 (the 'Selected Information'):

1) The following environmental data through business operations of Terumo Group's 49 sites within Japan (six factories, two R&D bases, two headquarters offices, 35 sales offices, one facility for simulated medical experience and three subsidiary offices) and 21 sites outside Japan (20 factories and one R&D base)
   - Scope 1 emissions (CO_2 from energy use)
   - Scope 2 emissions (market-based)
   - Total of Scope 1 emissions (CO_2 from energy use) and Scope 2 emissions (market-based)
   - Scope 3 emissions (Category 3)
   - Energy consumption
   - Renewable energy use
   - Ratio of renewable energy use to total electricity use

Reporting criteria

The Selected Information needs to be read and understood together with the internal reporting criteria defined by Terumo.

Limitations and Exclusions

Excluded from the scope of our work is any verification of information relating to:
- Activities outside the defined verification period;
- Any other information which is not listed as the 'Selected Information'.

This limited assurance engagement relies on a risk based selected sample of sustainability data and the associated limitations that this entails. This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

Responsibilities

This preparation and presentation of the Selected Information are the sole responsibility of the management of Terumo.
Bureau Veritas was not involved in the drafting of the Selected Information or of the Reporting Criteria.
Our responsibilities were to:

Ref: BVJ_ 21827336

- obtain limited assurance about whether the Selected Information has been prepared in accordance with the Reporting Criteria;
- form an independent conclusion based on the assurance procedures performed and evidence obtained; and
- report our conclusions to the Directors of Terumo.

Assessment Standard

We performed our work in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information (Effective for assurance reports dated on or after December 15, 2015) issued by the International Auditing and Assurance Standards Board.
For the greenhouse gas emissions data, we undertook verification in accordance with the requirements of ISO14064-3 (2019): Greenhouse gases - Part 3: Specification with guidance for the verification and validation of greenhouse gas statements.

Summary of work performed

As part of our independent verification, our work included:
1. Conducting interviews with relevant personnel of Terumo;
2. Reviewing the data collection and consolidation processes used to compile Selected Information, including assessing assumptions made, and the data scope and reporting boundaries;
3. Reviewing documentary evidence provided by Terumo;
4. Reviewing Terumo systems for quantitative data aggregation and analysis;
5. Verification of sample of data back to source by carrying out four physical site visits selected on a risk based bases at the following locations:
   [Site visit]
   - Terumo Corporation Head Office
   - Terumo Clinical Supply Co., Ltd.
   - Terumo Corporation Ashitaka Factory
   - Terumo Vietnam Co., Ltd.
6. Reperforming a selection of aggregation calculations of the Selected Information;
7. Comparing the Selected Information to the prior year amounts taking into consideration changes in business activities, acquisitions and disposals.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement.
Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Verified greenhouse gas emissions

We performed our verification work on greenhouse gas emissions data in accordance with the requirements of ISO14064-3(2019).
Verified data in greenhouse gas assertion made by Terumo are as follows.

Ref: BVJ_ 21827336

	Greenhouse gas emissions [t-CO_2e]	Boundary
Scope 1 (CO_2 from energy use)	64,123	Greenhouse gas emissions from fuel, and electricity, steam chilled/hot water through business operations of Terumo Group's 49 sites within Japan (six factories, two R&D bases, two headquarters offices, 35 sales offices, one facility for simulated medical experience and three subsidiary offices) and 21 sites outside Japan (20 factories and one R&D base) for the period of April 1, 2023 through March 31, 2024
Scope 2 (market-based)	141,908	
Scope 3 Category 3	41,127	Upstream emissions from purchased fuel, and electricity, steam chilled/hot water for business operations of Terumo Group's 49 sites within Japan (six factories, two R&D bases, two headquarters offices, 35 sales offices, one facility for simulated medical experience and three subsidiary offices) and 21 sites outside Japan (20 factories and one R&D base) for the period of April 1, 2023 through March 31, 2024

Conclusion

On the basis of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the Selected Information has not been properly prepared, in all material respects, in accordance with the Reporting Criteria;
- It is our opinion that Terumo has established appropriate systems for the collection, aggregation and analysis of quantitative data within the scope of our work.

Statement of Independence, Integrity and Competence

Bureau Veritas is an independent professional services company that specialises in quality, environmental, health, safety and social accountability with over 190 years history. Its assurance team has extensive experience in conducting verification over environmental, social, ethical and health and safety information, systems and processes.

Bureau Veritas operates Quality Management System which complies with the requirements of globally recognized quality management standard, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, quality reviews and applicable legal and regulatory requirements which we consider to be equivalent to ISQM 1 & 2[1].

Bureau Veritas has implemented and applies a Code of Ethics, which meets the requirements of the International Federation of Inspections Agencies (IFIA)[2], across the business to ensure that its employees maintain integrity, objectivity, professional competence and due care, confidentiality, professional behavior and high ethical standards in their day-to-day business activities. We consider this to be equivalent to the requirements of the IESBA code[3].

[1] International Standard on Quality Management 1 & 2
[2] International Federation of Inspection Agencies - Compliance Code - Third Edition
[3] Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants

Ref: BVJ_ 21827336

Bureau Veritas Japan Co., Ltd.
Yokohama, Japan
September 24, 2024

Ref: BVJ_ 21827336