Sustainability

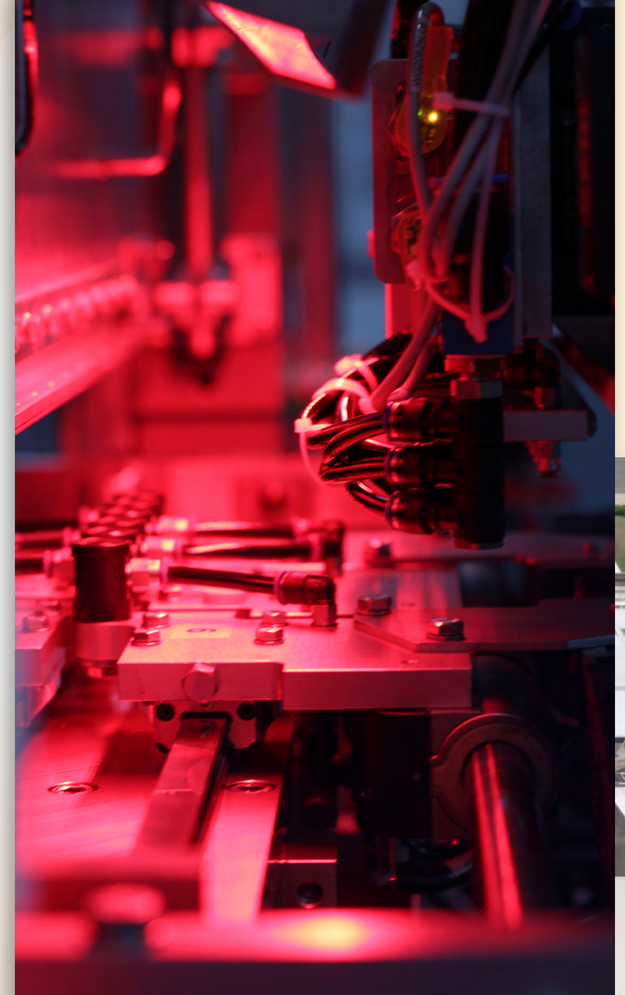
Environmental initiatives and achievements

We strive to minimize our environmental impact with practices and policies that address climate change, energy, water use, and waste while continuing to explore additional ways to make a positive difference.

TERUMO BLOOD AND CELL TECHNOLOGIES

Our approach to **environmental sustainability**

Reducing our environmental impact is a core pillar of Terumo Blood and Cell Technologies' sustainability strategy. We strive to do our part by effectively using resources, reducing waste and energy consumption, and working toward our greenhouse gas (GHG) reduction goals, which have been validated by the Science Based Targets Initiative (SBTi). As we engage with our stakeholders, we will evolve our approach to ensure that we are leading the way in reducing our company's environmental impact.



Inside our Rika Plasma Donation System™ disposables factory in the U.S.

Climate change

Terumo Blood and Cell Technologies aligns with the environmental strategy and targets of our parent company, Terumo Corporation. We recognize that reducing GHG emissions from our business activities is an important part of being a responsible business. We approach it with a focus on improving energy efficiency and adopting renewable energy.

Solar panels on our Vietnam factory

In alignment with the SBTi, Terumo Corporation has set reduction targets for 2030 and 2040 to limit global temperature rise. These SBTi-validated decarbonization goals are aligned with a 1.5 °C scenario. These targets apply to our global operations. Additionally, Terumo Blood and Cell Technologies has committed to net zero for all our U.K. operations by 2050, with a baseline year of 2018.

Terumo Group's Greenhouse Gas (GHG) Emissions Reduction Targets

Scope 1 and 2*

- Reduce absolute GHG emissions by 50.4% by 2030 compared to 2018
- Increase the renewable electricity use ratio to 50% by 2030
- Achieve carbon neutrality by 2040

Scope 3

- Reduce GHG emissions 60% per unit of revenue by 2030 from a 2018 base year

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 companies' business operations)

As part of our GHG emissions efforts, we monitor Scope 1 and 2 emissions across all Terumo Blood and Cell Technologies manufacturing locations monthly. Emissions across our businesses grew 21% between fiscal year 2018 and fiscal year 2023.[1] In part, this is attributable to opening two new state-of-the-art manufacturing facilities in 2022, in Cartago, Costa Rica, and Littleton (Colorado), U.S. Additionally, like other businesses, we experienced operational disruptions due to the COVID-19 pandemic, which impacted our emissions and resource consumption efficiencies.

We have estimated our Scope 3 footprint using Terumo Blood and Cell Technologies' revenue and Terumo Corporation's Scope 3 methodology. With this approach, we identified 86% of our total emissions in fiscal year 2023 as Scope 3.[1] We are now working to develop a methodology specific to Terumo Blood and Cell Technologies, to conduct a Scope 3 screening and hot spot analysis.

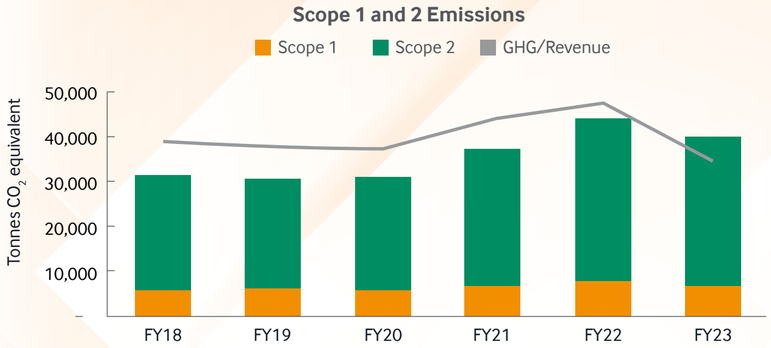


Figure 1. Scope 1 and 2 emissions of Terumo Blood and Cell Technologies manufacturing sites in the U.S., Costa Rica, Vietnam, Northern Ireland, and India.[1]

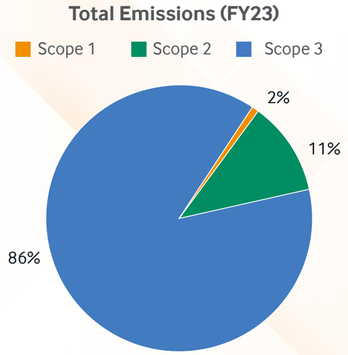


Figure 2. Terumo Blood and Cell Technologies Scope 1, 2, and 3 emissions breakdown for fiscal year 2023. Scope 1 and 2 emissions include manufacturing sites in the U.S., Costa Rica, Vietnam, Northern Ireland, and India.[1]

Energy **consumption**

Improving energy efficiency is critical to meeting our GHG emissions targets. Our sites around the world routinely undergo energy audits to identify opportunities for improvement. Teams at each site implement localized initiatives that move them forward on their energy use journeys. Below are some examples.

Northern Ireland

This facility has replaced most of its lighting with LED, introduced several electric vehicle (EV) charging points, replaced motors, and optimized process running conditions. In 2023, the site underwent an energy audit, which identified several projects to consider for future implementation. These include an improved program for tracking energy management, installation of motion sensors for air conditioning, replacement of older HVAC units, additional motor replacements, solar energy installations, and green energy contracts.

United States

Our two U.S. sites are in the advanced stages of implementing ISO 50001 Energy Management Systems to enable continuous improvements in energy efficiency. Our Lakewood facility has installed LED lighting in its clean rooms and, for more than a decade, has had an on-site rooftop solar system that provides clean energy to the local electricity grid.

Costa Rica

We recently completed the migration of some manufacturing capacity from Lakewood to this new factory. In addition to benefiting from modern design and equipment, this facility's electricity grid is powered by nearly 100% renewable sources, reducing emissions associated with electricity consumption.

Vietnam

This factory has completed several energy-efficiency projects, including the installation of high-efficiency boilers, chiller optimization, and limiting lighting and HVAC when certain spaces are not in use. In 2024, the site also completed the installation of a rooftop solar system to meet over 10% of its own electricity demand.

India

Among other projects, this facility completed modifications to machine cooling systems, drying ovens, and exhaust systems. They also added automatic controls for cooling fans, upgraded to LED lighting, and optimized boiler operations. Their efforts resulted in savings of 118 MWh in electricity consumption and 25 kL of furnace oil.[1]

Supply chain, transportation, and travel

In pursuit of our Scope 3 emissions goals, we have made significant progress in shifting our supply chains closer to our manufacturing facilities and key markets. This has supported business continuity and supply chain resiliency while also reducing associated transport emissions.

Challenging this progress, we saw a significant increase in air freight following COVID-19 disruptions and efforts to meet customer and patient needs. However, during fiscal year 2023, we were able to reduce our air freight to approximately 3% of total logistics (as a percentage of spend). This was a 92% reduction and resulted in significant emissions savings.[1] We will continue exploring opportunities to reduce emissions from the transport of our products in the coming years.

To reduce emissions related to associate travel to and from work — and support a transition to electric vehicles — we have installed multiple EV charging stations at our Lakewood, Colorado, U.S. global headquarters, as well as our Europe, Middle East, and Africa regional headquarters, with plans to add more. Some of our offices also offer no-cost or discounted public transit tickets for staff.

Company policy limits the use of business class travel, resulting in lower travel-related emissions. In addition, an associate travel booking system provides GHG emissions visibility, allowing associates to clearly see the lowest-emission options.

EV charging station

Resource consumption and **operational excellence**

In 2022, Terumo Blood and Cell Technologies implemented an Operational Excellence (OpEx) program, which takes a unified approach to enhance operations, reduce cost, and improve quality across manufacturing sites. Areas of focus include standardizing methods globally, improving performance metrics, and leveraging the unique strengths of each manufacturing site.

In addition, our OpEx program will help drive our environmental stewardship and sustainability improvements across our factories by continuously refining operations and implementing initiatives that create efficient processes. These efforts help minimize environmental impact in part by reducing waste, emissions, and water usage. They can also lead to cost savings that can boost profitability.

Operational Excellence

Larne, Ireland factory: A 50,000-liter tank, used to store water for injection (WFI), which is highly purified, sterile water that is used for the preparation of pharmaceutical products that are administered through injection

Waste **reduction**

As part of its efforts to use resources more efficiently, Terumo Corporation sets targets for recycling and for reducing total waste generation. Terumo Blood and Cell Technologies aligns with the group targets to guide our efforts, and we are beginning to see progress. Total waste generated across our manufacturing sites decreased by 8% between fiscal years 2018 and 2023. In fiscal year 2023, our manufacturing sites achieved a recycling rate of 76% for postindustrial waste.[1]

Target: 90% or higher waste reduction

Terumo Corporation mid- to long-term (FY2030) target for waste recycling rate (business sites in Japan and manufacturing and research and development sites overseas).

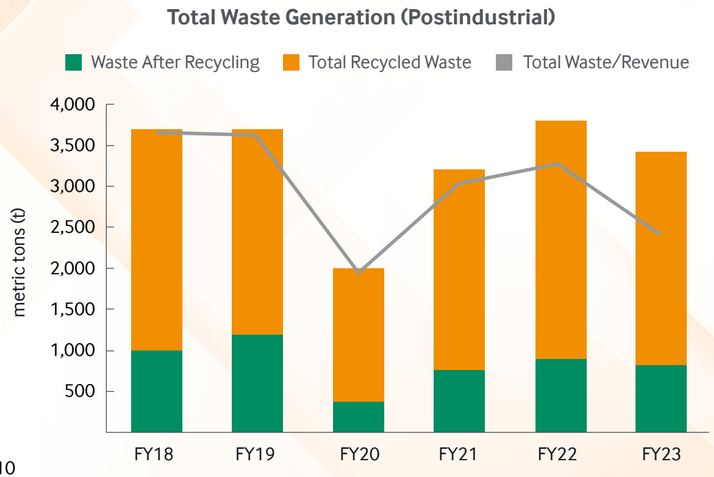


Figure 3. Total waste generated at Terumo Blood and Cell Technologies manufacturing sites (U.S., Costa Rica, Vietnam, Northern Ireland, India) between FY18 and FY23.[1]

Water **usage**

At Terumo Blood and Cell Technologies, we recognize that water is a critical resource for society, our patients, and the communities that we serve and operate in. Reducing water consumption across our operations is a vital element of our sustainability strategy.

While we are aligned with the Terumo Corporation target of a 20% reduction, between fiscal years 2018 and 2023, we are pleased to have achieved a 42% reduction in water use across our manufacturing sites.[1]

Target: 20% or more water use reduction

Terumo Corporation mid- to long-term target (FY2030) for overall water use (water withdrawal) per unit of revenue (business sites in Japan and manufacturing and research and development sites overseas) compared to FY18.

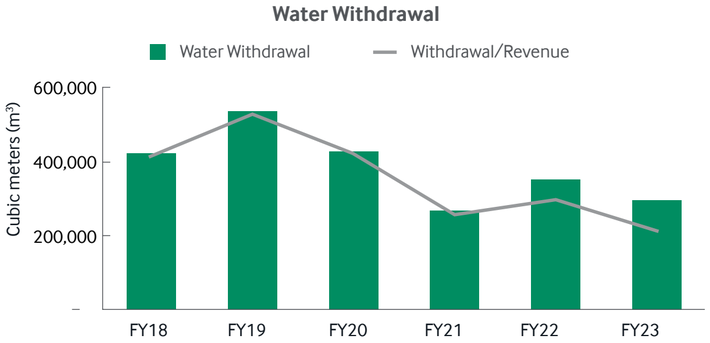


Figure 4. Water withdrawal (city and groundwater) at Terumo Blood and Cell Technologies manufacturing sites (U.S., Costa Rica, Vietnam, Northern Ireland, India) between FY18 and FY23.[1]

Several of our sites implemented water efficiency and reduction efforts that contributed to a decrease in usage, including the examples below.

- India. This site implemented several water recycling initiatives, including systems that recycle cooling water and reverse osmosis system water within the canteen, laundry, boiler, cooling towers, and toilets. The facility will continue exploring additional opportunities for increasing water efficiencies and water recycling.
- Vietnam. This facility initiated a collaborative water reduction project involving the Environment, Health, and Safety team as well as facility management, production, and engineering. The group implemented an advanced data collection system to track and analyze water use, and to identify issues and efficiencies in real time, providing the opportunity to reduce energy and increase water efficiencies. They turned these insights into action, including mechanical modifications to the piping and water tank system, flow rate, and machinery on/off switches — leading to a 50% reduction in water use.[1] The team will continue to identify opportunities for further reduction of energy and water consumption.

Terumo Blood and Cell Technologies has also leveraged the World Resources Institute Aqueduct Tools to identify the water risk and water stress in regions where we manufacture. We learned that three of our facilities — one in India and two in the U.S. — are in high water-stress regions, further highlighting the importance of our ongoing water efficiency efforts.

Water tank system at our Vietnam factory

Product **stewardship**

As part of manufacturing innovative medical technologies, Terumo Blood and Cell Technologies prioritizes mitigating the environmental impacts associated with our products. Along with our operational excellence program and our work on waste reduction and energy and water efficiency, our sustainability focus extends to product packaging, non-DEHP alternatives, and sterilization.

Packaging

We follow best practices in package design as outlined by the Sustainable Packaging Coalition and the Healthcare Plastics Recycling Council (HPRC). We design packaging to:

- Minimize material use from initial design through final production
- Allow packaging to be easily dismantled for recycling and/or disposal
- Have the minimum amount of package volume

An example of this approach is our Rika Plasma Donation System, which has one-third less packaging than originally designed.[1]

Non-DEHP alternatives

A program to transition our products to non-DEHP alternatives is active, and we are working diligently to adhere to the DEHP sunset date of July 1, 2030, identified in the European Union Registration, Evaluation, Authorization and Restriction of Chemicals regulation. Our program includes the development, selection, testing, and release of non-DEHP plastics to replace DEHP-plasticized PVC in our existing CE-marked products. Learn more here.

Sterilization

We use ethylene oxide (EtO) to sterilize lifesaving medical devices in a tightly controlled process that complies with all applicable standards and regulations. The company uses advanced emissions controls that capture over 99% of the EtO we use. Learn more here.

Sterilization stalls at our Lakewood, Colorado, facility

Challenges and **opportunities ahead**

We recognize the challenges in front of us as we work to grow responsibly while achieving our environmental sustainability targets. We are energized by the progress our teams have made across the globe and the opportunities we have to continue minimizing any negative impact on the people we serve and the planet we share.

To learn more about how Terumo Blood and Cell Technologies is addressing its sustainability priorities, visit us online and download additional fact sheets:

- Sustainability home page
- Sustainability strategy and approach
- Diversity, equity, and inclusion
- Contributing to community

[1]Data on file with Terumo Corporation's Environmental, Health, and Safety team.

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