

Environmental Initiatives

**Policy**

In the interest of protecting the global environment, the TS TECH Group will work to reduce the environmental impact of all aspects of its corporate activities, especially the production of interior components for automobiles, and help create a sustainable society, aiming to be “A company sincerely appreciated by all,” which is one of the beliefs enshrined in the Group’s philosophy.

October 2018, Resolution of the Board of Directors (Revised)

**Basic Environmental Policy**

**Environmental Action Plan**

**(1) Compliance with Legal and Other Requirements**

Strive to prevent environmental pollution and protect biodiversity and ecosystems primarily through compliance with requirements, such as environmental laws and regulations and environmental standards, and proper chemical management.

**(2) Reduction of Environmental Impact**

Aim to mitigate the impacts of climate change and realize a sustainable recycling-based society by striving to save energy and resources through collaboration across the supply chain, based on life cycle assessments that cover all stages in the product life cycle, from development through sourcing, production, logistics, marketing, disposal, and reuse.

**(3) Continuous Improvement of Environmental Management**

Endeavor to continuously improve environmental and energy performance by setting environmental targets based on environmental and energy management systems, and regularly reviewing them. Provide the information and management resources needed for such improvement and also work toward the utilization of products and equipment that will improve energy efficiency.

Initiatives to Strengthen Environmental Management

The Group is promoting environmental management system ISO 14001 certification at all of its facilities around the world. We are united in our efforts to continuously reduce the burden on the environment. Seeking additional measures to efficiently reduce CO<sub>2</sub> emissions, TS TECH adopted the ISO 50001 energy management system at all of its sites in Japan in fiscal 2019 and obtained certification. Going forward, we will continue with efforts to bolster our environmental and energy management not only to reduce the burden on the environment but also to decrease costs by using resources more efficiently.

Internal Environmental Audits

TS TECH has established an environmental and energy audit program that consists of annual audits of each site. The audits take into account the environmental and energy impact of the sites and the results of past audits. These internal audits examine measures to reduce environmental impact and energy consumption, the effect of these measures, compliance with related laws and regulations, and the status of the administration of ISO international standards, among other items. We promote swift, proper correction of deficiencies and non-compliance items detected in audits, aiming to improve our environmental management.

Compliance with Environment-Related Laws and Regulations

Under its environmental and energy management systems, TS TECH has prepared a list of legal and other requirements at each site and reviews the laws and requirements that it must comply with at the beginning of each fiscal year. We also evaluate the status of compliance every six months. Over the period from fiscal 2021 to fiscal 2024, there were no violations of environmental laws and regulations.

Environmental and Energy Management Education

TS TECH provides employees with various educational programs related to environmental and energy management under its ISO management system. Under the ISO 14001 standard, we conduct environmental education with the objectives of reducing environmental impact and preventing pollution. Under ISO 50001, in addition to offering energy conservation training tailored to each production facility provided by the Energy Conservation Center, Japan, we have also introduced our own energy-saving diagnostics focused on improving equipment operation.

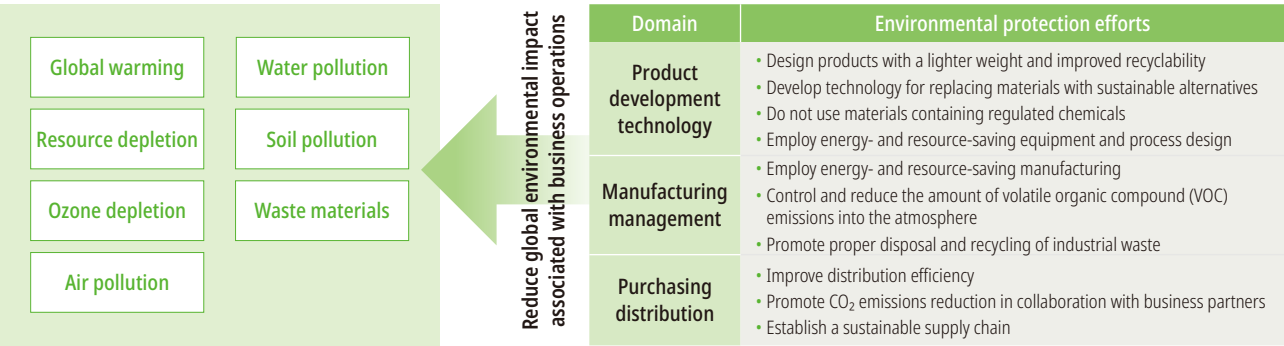
Since 2022, we have been acquiring knowledge on effective energy-saving techniques with the benefit of expert insight and input. We have focused on energy conservation using inverters for motors and equipment, seeking to strengthen the development of human resources specialized in this area. We have been rolling this knowledge out horizontally across the entire Group, including sites outside Japan.

To catalyze even more effective measures, these specialists not only learn the basics of energy management but also delve deeply into specific management methods for particular facilities. Going forward, we will continue to develop human resources who can take the lead in promoting energy conservation at each of our sites. Meanwhile, we will keep providing general education, as well, seeking to improve employees’ environmental awareness and skills.



Environmental education for facility management

Efforts to Reduce Our Environmental Footprint



Development-focused measures

We understand that reducing the weight of our products is one of the most effective ways in which we can reduce our impact on the environment. For example, our seat frames account for a large portion of the weight of our products, so we strive to apply a variety of weight-reducing technologies wherever possible, while further improving safety and comfort in line with evolving needs. The latest seat frame currently in mass production is about 28% lighter than our previous core frame. We accomplished this by using more ultra-high tensile strength steel and thin-plate welding technology. It is now being used in many automobile models worldwide.

In addition to weight-reducing technologies, we are focusing on reducing CO<sub>2</sub> contained in our products through technologies utilizing cellulose nanofiber (CNF) and other plant-derived biomass materials. We have succeeded in reducing the amount of CO<sub>2</sub> contained in our products by 60% compared to petroleum-derived materials and are continuing our research with the aim of applying this technology to mass production of seats, door trims, and the like. As another area of focus, TS TECH is aiming to develop structures that can be disassembled more quickly and efficiently for the reuse of materials, as seats are made up of various materials and parts.

Looking ahead to the future electrification of vehicles, we have also been working on the development of a seat heater system that heats efficiently with low power, thus contributing to better electric efficiency (driving range), and an air-conditioned seat that contributes to power saving. These have been selected for adoption in upcoming models. We will continue to develop technologies that contribute to carbon neutrality from various angles.



Production-focused measures

Under the policy of “Evolving toward sustainable manufacturing and building a globally efficient production system,” our Corporate

Manufacturing Division works hard to ensure our manufacturing is both competitive and environmentally friendly. The main initiatives include accelerating automation of production lines and reducing electricity usage by standardizing energy-saving technologies, introducing next-generation energy-saving technologies, and utilizing regenerative energy.<sup>\*1</sup>

An example of electricity reduction utilizes *karakuri*<sup>\*2</sup> means to achieve work automation without consuming energy. In November 2022, we exhibited a *karakuri* mechanism that uses equipment exhaust air, at the Karakuri Kaizen Exhibition hosted by the Japan Institute of Plant Maintenance, winning the silver award in the parts feeder contest category. We are currently working to further reduce environmental impact by developing equipment that utilizes regenerative energy, such as a method of generating electricity from a *karakuri* mechanism.

<sup>\*1</sup> Converting surplus energy generated from equipment into electricity for reuse  
<sup>\*2</sup> *Karakuri* refers to equipment or mechanisms that improve processes with minimal energy or cost through the use of gravity, gears, the principle of leverage, etc.

Installing environmentally friendly equipment

Initiatives to reduce CO<sub>2</sub> emissions include installing environmentally friendly equipment such as solar power generation systems and rainwater reuse systems when replacing buildings at each site, which helps to reduce CO<sub>2</sub> emissions and groundwater usage. We are also actively working to reduce logistics losses by taking steps such as realigning production with consolidated external warehouse functions. In fiscal 2023, we newly installed solar power generation systems at the Hamamatsu Plant and Suzuka Plant, and expanded the system at the Saitama Plant.

The new building at the Hamamatsu Plant, which began full-scale operations in fiscal 2024, contributes to reducing the environmental impact of the entire plant operation. This is accomplished by reducing CO<sub>2</sub> emissions through solar power generation, effectively utilizing water resources with the introduction of rainwater reuse equipment, and reducing food waste through the introduction of cafeteria waste disposal equipment.



The new building at the Hamamatsu Plant and the solar panels installed on its roof

Environmental Targets and Results

Long-term environmental targets

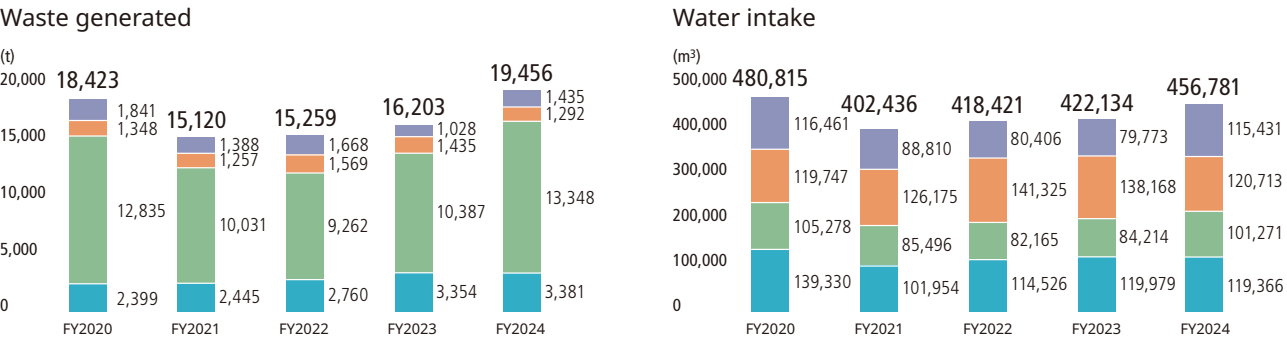
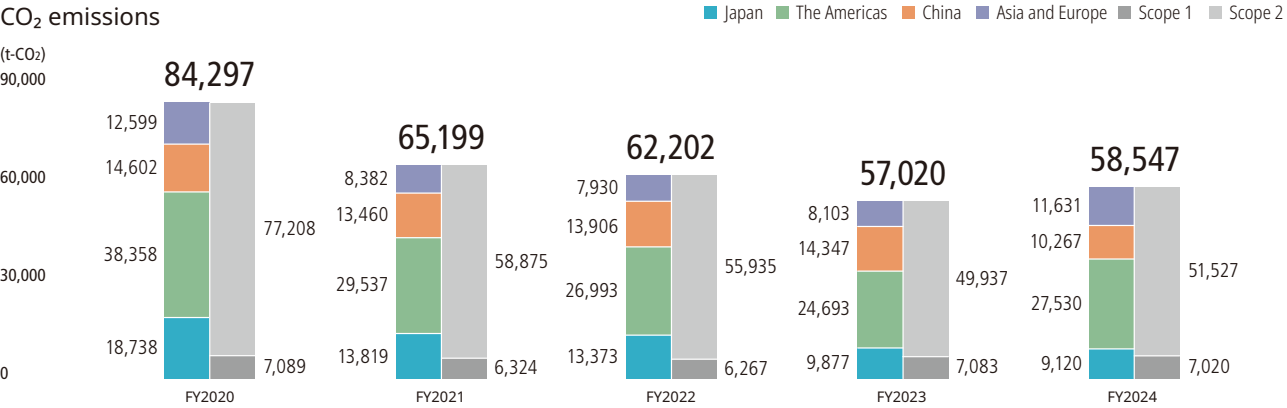
In the interest of protecting the global environment, the Group will work to reduce the environmental impact of all aspects of its corporate activities. Our efforts to build a sustainable world are guided by our vision statement of being “A company dedicated to realizing people’s potential” and “A company sincerely appreciated by all.” We aim to strike a balance between achieving further business growth and

contributing to the resolution of social issues, including the creation of a recycling-oriented society and conservation of water resources, in addition to responding to climate change, which is becoming more serious by the year. Accordingly, we have set long-term targets for such environmental issues. The whole Group will work to achieve these goals by promoting environmental conservation activities.

Items	KPIs	Terms for comparison	2030 targets	2050 targets
CO <sub>2</sub>	CO <sub>2</sub> emissions reduction rate*1	Comparison with FY2020	-50%	-100%
Waste	Waste reduction rate*2	Comparison with FY2020	-50%	-100%
Water	Water intake and wastewater reduction rates*3	Comparison with FY2020	Water intake reduction rate -50%	Wastewater reduction rate -100%
	Environmental impact from wastewater*4	—	Zero	Zero

\*1 CO<sub>2</sub> emissions reduction rate (Scope 1 and 2) resulting from the Group's business activities  
\*2 Rate of reduction of waste (excluding residue, sludge, etc.) resulting from the Group's manufacturing activities  
\*3 Reduction rate of water intake (amount used) at the Group's production facilities and reduction of wastewater resulting from manufacturing activities  
\*4 Environmental impact of wastewater resulting from the Group's manufacturing activities

Trends in environmental results



\* The revenue of the companies within the data scope accounts for 95% or more of the Group's consolidated revenue for each period concerned.

Scope 3 emissions (Consolidated)

(Unit: t-CO<sub>2</sub>)

FY2021	FY2022	FY2023	FY2024
2,381,086	2,658,732	2,583,409	2,846,604

Scope 3 emissions by category breakdown for fiscal 2024

Category	Emissions (t-CO <sub>2</sub> )	Ratio (%)
1. Purchased goods and services	2,602,605	91.4
2. Capital goods	21,566	0.8
3. Fuel- and energy-related activities not included in Scope 1 or Scope 2	11,088	0.4
4. Transportation and distribution (upstream)	69,065	2.4
5. Waste generated in operations	3,536	0.1
6. Business travel	6,654	0.2
7. Employee commuting	5,975	0.2
10. Processing of sold products	87,293	3.1
12. End-of-life treatment of sold products	38,822	1.4
Total	2,846,604	100

Implementing third-party verification

In order to ensure the reliability of environmental data disclosure, the Group has obtained third-party verification from SGS

Japan Inc. Verification results for fiscal 2024 are as follows.

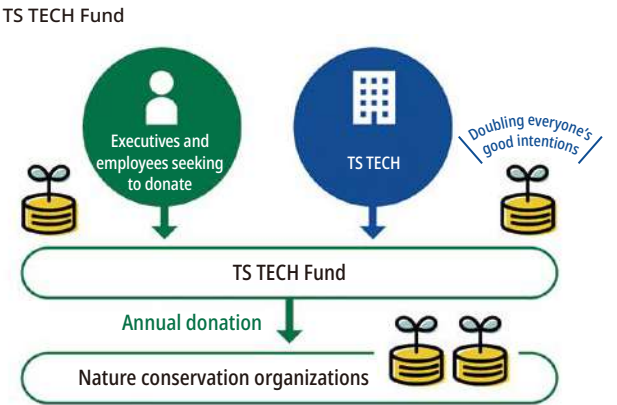
Verification target	Verification range	Results
Scope 1 and 2 (CO <sub>2</sub> emissions from energy use) and energy consumption	6 sites of the Organization, 6 domestic companies, 31 overseas companies	Scope 1: 7,020 t-CO <sub>2</sub> Scope 2: 51,527 t-CO <sub>2</sub>
Scope 3, Category 1 (CO <sub>2</sub> emissions from purchased goods and services)	Products and services extracted from TS production control system	2,602,605 t-CO <sub>2</sub>
Waste generated (including valuable waste)	6 sites of the Organization, 6 domestic companies, 30 overseas companies	19,456 t
Water intake		456,781 m <sup>3</sup>

Initiatives to Instill Sustainability Awareness

For the TS TECH Group to contribute to the realization of a sustainable society, we believe it is important to instill an awareness of sustainability in each and every one of our employees. We are taking various initiatives to accelerate our initiatives to resolve social and environmental issues.

Establishment of the TS TECH Fund

One of the materialities (key material issues) of the Group is “Harmoniously co-existing with nature.” In this connection, it has established the TS TECH Fund, a matching gift program to make donations to nature conservation organizations. The fund's aim is to support activities to protect nature by collecting donations from executives and employees who support the activities, the company then adds matching amounts annually to make donations.



Establishment of the Sustainability Award

We have established a new internal award system called the Sustainability Award. The first award was given to employees involved in the construction of a new building at the Hamamatsu Plant, in recognition of their contribution to the local community and their endeavors to help create a sustainable society. [▶ p. 55](#)