MEC's Measures to Address Climate Change

Disclosing Information in Line with TCFD Recommendations

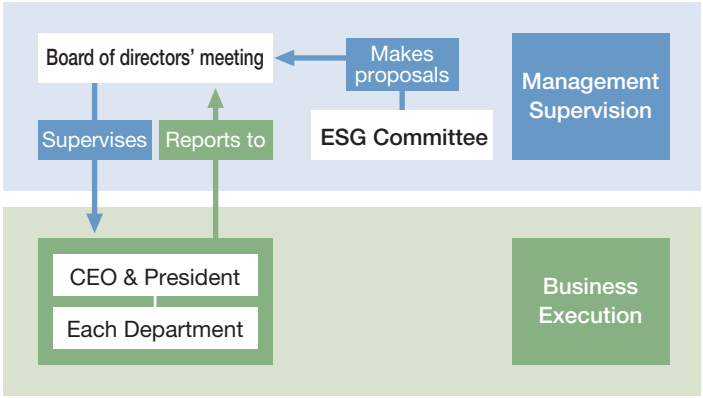
Based on Vision for 2030, "Becoming the world's best creator of interfaces and connecting them to the world.", the MEC Group has identified six material issues that management will address in order to contribute to the creation of a prosperous and enriching society and environment by creating interfacial value through business activities. As a manufacturing company, we regard climate change as an important management issue and have identified "environmental conservation" as one of our material issues. In February 2023, we expressed our support for the TCFD recommendations, and we are promoting activities by disclosing information on the risks and opportunities that climate change poses to our business, as well as the countermeasures we plan to take, in accordance with the recommendations.

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Governance

As an R&D-oriented company, we have positioned climate change as an important management issue and promote activities to curb its effects.
The ESG Committee(*), chaired by the CEO & President, deliberates and formulates the risks and opportunities of climate-related surrounding the Company as well as related proposals, which are then submitted to the Board of Directors at least once a year.
The Board of Directors, upon receiving recommendations from the ESG Committee, is responsible for policy decisions on climate change response, promoting initiatives for risks and opportunities, and achieving targets. It also oversees the effectiveness of the proposed measures.

Climate Change-Related Governance Structure



*ESG Committee
The purpose of the committee is to formulate and propose management strategies (ESG management strategies) to promote corporate governance reform, fulfill social responsibilities, and encourage environmental conservation activities in a unified (co-progressive) manner.
Based on the recommendations of the committee, the Company has realized a broadening and diversification of its management strategies, creating corporate value over the medium to long term through rich relationships with employees, customers, society, and the natural environment.
The committee is chaired by the CEO & President, and the majority of its members are Independent Outside Directors.
Committee meetings are held about four times a year, and the ESG Promotion Department is in charge of the secretariat.

Strategy

The TCFD requests that companies disclose how risks and opportunities related to climate will affect their finances.
In the TCFD recommendations, climate-related risks are classified into the categories of "transition" and "physical".
Based on the recommendations, the Company considered risks, with 2030 as the target year set out as the vision to aim for. In this process, we identified risks that are closely related to our business and pinpointed particularly significant risks. We also worked to ascertain the environmental issues and changes in the business environment associated with climate change as well as the opportunities that will arise from their impacts and identified the opportunities from changes due to "transition".

Impact Assessment Process

Step 1	Step 2	Step 3	Step 4
Identify and assess risks and opportunities	Identify scenario groups	Assess business impacts	Set countermeasures

Scenario Analysis Based on Risks and Opportunities

The Paris Agreement calls for efforts to keep the global average temperature increase well below 2°C above pre-industrial levels, and to limit the increase to 1.5°C.
With reference to the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report, the World Energy Outlook by the International Energy Agency (IEA), and other sources, the Company envisioned the world in 2030 based on a 4°C scenario by CPS*1, a less than 2°C scenario by SDS*2, and a 1.5°C scenario by NZE*3 and began an examination of transition risks and physical risks in business management.
In the "Below 1.5/2°C scenarios", where climate change measures are progressing, policy regulations are strengthened to achieve carbon neutrality, and society as a whole proactively takes measures to combat climate change. In these scenarios, demand for environmentally friendly products is expected to increase, opportunities for new markets in the electronic circuit board and semiconductor industry are created, and production and raw material procurement costs are expected to rise due to the introduction of a carbon tax.
In the "4°C scenario", decarbonization measures are not sufficiently promoted, increasing the possibility of being impacted by more frequent and severe natural disasters such as floods.
In assessing risks and opportunities related to climate change, we considered their relative importance to our company and stakeholders.

*1 CPS: Current Policy Scenario
*2 SDS: Sustainable Development Scenario
*3 NZE: Net-Zero Emissions by 2050 Scenario

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List of Risks Regarding Climate Change

Transition	Policies/ Regulations	●Increased operating costs due to the introduction/expansion of carbon tax ●Difficulty in procuring raw materials and restrictions/prohibitions regarding production and sales of raw materials/products in accordance with laws and regulations in each country
	Technology	●Increased production costs ●Delayed development for environmentally friendly products ●Increased investment costs for development of environmentally friendly products
	Market	●Decreased demand for commodities that use large amounts of water
	Reputation	●Deterioration of corporate brand and reputation due to stricter evaluation standards and delays in responding to the expansion of disclosure requirements
Physical	Acute	●Increased frequency/severity of abnormal weather/natural disasters
	Chronic	●Instability regarding supply of water, electricity, raw materials, and natural resources

Risks considered to be particularly important from the above table and risk list are shown in the following table.

Risks Related to Climate (Below 1.5/2°C Scenarios): Changes to the "Transition" to a Low-Carbon Economy

Assumed Risks		Company Response	Degree of Impact			Timing of Occurrence		
			Small	Medium	Large	Short Term	Medium Term	Long Term
Policies/ Regulations	Decreased sales due to difficulty in procuring raw materials and restrictions/prohibitions regarding production and sales of raw materials/products in accordance with laws and regulations in each country	●Early collection of market needs ●Preemptive development of environmentally friendly products ●Enhance supply chain management	○	—	—	—	○	○
	Increased operating costs due to the introduction/expansion of carbon tax		○	—	—	—	○	○
Technology/ Market	Decreased sales due to customers changing their production processes to make them more environmentally friendly and our Company being unable to follow suit		—	○	○	—	○	○

Risks Related to Climate (Below 4°C Scenario): Changes to the "Physical"

Assumed Risks		Company Response	Degree of Impact			Timing of Occurrence		
			Small	Medium	Large	Short Term	Medium Term	Long Term
Acute	Decreased sales due to suspension of operations at business sites and factories as a result of increasingly severe and frequent abnormal weather and natural disasters, and suspension of purchases and shipments due to transportation network interruptions	●Maintain and strengthen alternative production systems ●Enhance supply chain management ●Develop/strengthen BCPs (Flexible work systems, etc.)	—	○	○	—	○	○

Opportunities arising from the environmental issues and changes in the business environment caused by climate change, as well as the impact of such changes, are shown in the table below.

Opportunities Related to Climate: Changes to the "Transition"

Assumed Opportunities		Company Response	Degree of Impact			Timing of Occurrence		
			Small	Medium	Large	Short Term	Medium Term	Long Term
Resource	Increased sales of environmentally friendly products due to progress in DX/GX	●Early collection of market needs ●Preemptive development of environmentally friendly products	—	○	○	—	○	○
Applications/ Products/ Services	Increased sales due to growth and development of the semiconductor and digital industries along with progress in DX/GX, and due to expansion of demand for electronic components related to the Company resulting from an expansion of areas applying AI technology [Automotive-related] An increase in sales opportunities for the Company's products due to higher demand for automotive semiconductors and substrates in conjunction with the progress of automated driving technologies and the proliferation of EVs [High frequency-related] An increase in sales opportunities for the Company's products due to an expansion of the data center market in conjunction with the proliferation of cloud services and rising demand for big data analysis [Semiconductor-related] An increase in sales opportunities for the Company's products due to an expansion in demand for semiconductor and package substrates to support advances in IoT and AI technologies and highcapacity, high-speed communication	—	○	○	○	○	○

■Scope
MEC Group as a whole

■Impact
Based on frequency of occurrence and monetary impact
Small: Almost no impact (less than 100 million yen)
Medium: Impact on some business (between 100 million and 1 billion yen)
Large: Impact is enough to halt or significantly reduce or expand business (1 billion yen or more)

■Timing for occurrence (manifestation)
Short term: Up to 2027, which is the final year of Phase 2 of the medium-term management plan aimed at achieving the MEC 2030 Vision
Medium term: Up to 2030, which is the final year of Phase 3 of the medium-term management plan aimed at achieving the MEC 2030 Vision
Long term: 2031 onward

Risk Management

The Company identifies, analyzes and assesses risks related to our business and the environment, including climate change, by continually implementing business risk management, information security, quality, environment, and occupational safety and health management systems as part of our risk management process. The secretariat of each committee reports on important matters at monthly quality meetings, semi-annual Risk Management Committee meetings and Compliance Committee meetings.
Each year, the committees work with related departments on climate change-related risks and opportunities to recognize and confirm the progress of such risks and opportunities. The secretariat of each committee reports significant risks and impacts identified through the assessment process to the ESG Committee for its discussion and decision making. The Board of Directors is also consulted as necessary.

Metrics and Targets

Our Group has set the following two qualitative objectives for 2030 as a response to climate change issues related to environmental conservation.

●Earnestly address global environmental issues for the sustainable growth of society
●Reduce energy use and work toward net zero emissions

More specifically, we set the following CO_2 reduction target.

●Reduce actual total Scope 1 and 2 emissions in Japan by **50%** by FY2030 (base year: FY2017)
●Aim for net **zero** CO_2 emissions by 2050

Report on Environmental Conservation

The Company develops, manufactures, and sells chemicals, equipment and related materials used in the production of PCB. In conducting business activities, we consume energy and use resources. Recognizing this, we are working to reduce our environmental burden.
In addition to complying with environmental laws and regulations, etc., related to business activities, we provide products that take into consideration energy conservation measures, waste reduction, proper management of chemical substances, and product life cycle. The aim is to make effective use of resources, prevent pollution, and conserve the environment.

Relationship Between Business Activities and the Environment

We monitor the amount of energy and resources used in our business activities, as well as the amount of CO_2 emissions, wastewater, and industrial waste.

Offices in Japan

Office Name	INPUT							OUTPUT					
	Electricity consumption	City gas usage	Gasoline usage (company owned car)	Kerosene usage (heating of manufacturing sites)	Light oil usage (snowplow)	Water usage	Volume of PRTR target	Production volume	Amount of CO_2 emissions	Amount of wastewater	COD	Industrial waste emissions	Of which amount of final waste disposal
Amagasaki HQ. (Amagasaki Factory)	1,131 thousand kWh	—	45 L	—	—	9,306 m³	139 t	3,614 t	474 t - CO_2	6,128 m³	0.108 t	Included in Amagasaki HQ. (R&D Center)	Included in Amagasaki HQ. (R&D Center)
Nagaoka Factory	682 thousand kWh	1,133 m³	362 L	9.36 kL	0.23 kL	19,482 m³	158 t	13,757 t	301 t - CO_2	9,560 m³	0.685 t	169 t	2.15 t
Amagasaki HQ. (R&D Center)	947 thousand kWh	—	801 L	—	—	5,544 m³	2.5 t (including Higashi-hatsushima HQ (R&D center))	—	399 t - CO_2	4,027 m³	0.071 t	214 t*	44.5 t*
Higashi-hatsushima HQ. (Including some R&D centers and the head office)	478 thousand kWh	—	126 L	—	—	1,288 m³	Included in Amagasaki HQ. (R&D Center)	—	200 t - CO_2	1,288 m³	0.003 t	19.1 t	4.41 t
Amagasaki HQ. (Head Office)	553 thousand kWh	—	1,956 L	—	—	Included in Amagasaki HQ. (Amagasaki Factory, R&D Center)	—	—	236 t - CO_2	Included in Amagasaki HQ. (Amagasaki Factory, R&D Center)	—	—	—
Tokyo Sales Office	21.5 thousand kWh	—	6,939 L	—	—	—	—	—	30.9 t - CO_2	—	—	0.00 t	0.00 t

* Calculated for the entire Amagasaki HQ.

Global Base

MEC (HONG KONG) LTD.

INPUT	
Electricity consumption	3.59 thousand kWh
Water usage	540 m³

OUTPUT	
Amount of CO_2 emissions	1.40 t-CO_2

MEC FINE CHEMICAL (ZHUHAI) LTD.

INPUT	
Electricity consumption	303 thousand kWh
Gasoline usage	8,520 L
Water usage	12,144 m³

OUTPUT	
Production volume	6,336 t
Amount of CO_2 emissions	200 t-CO_2
Amount of wastewater	6,220 m³
Industrial waste emissions	161 t

MEC CHINA SPECIALTY PRODUCTS (SUZHOU) COMPANY LTD.

INPUT	
Electricity consumption	1,192 thousand kWh
Gasoline usage	24,762 L
Water usage	21,114 m³

OUTPUT	
Production volume	9,937 t
Amount of CO_2 emissions	396 t-CO_2
Amount of wastewater	21,114 m³
Industrial waste emissions	144 t

MEC TAIWAN COMPANY LTD.

INPUT	
Electricity consumption	426 thousand kWh
Gasoline usage	10,242 L
Water usage (Excluding groundwater)	2,872 m³

OUTPUT	
Production volume	6,935 t
Amount of CO_2 emissions	234 t-CO_2
Amount of wastewater	8,301 m³
Industrial waste emissions	42.0 t

MEC EUROPE NV.

INPUT	
Electricity consumption	83.4 thousand kWh
Gas usage	21,547 m³
Gasoline usage	8,787 L
Light oil usage	9,210 L
Water usage (For manufacturing)	2,492 m³

OUTPUT	
Production volume	2,010 t
Amount of CO_2 emissions	107 t-CO_2
Amount of wastewater	500 m³
Industrial waste emissions	23.2 t
Solar power generation	69.3 kWh

MEC SPECIALTY CHEMICAL (THAILAND) CO., LTD.

INPUT	
Electricity consumption	299 thousand kWh
Gasoline usage	8,120 L
Light oil usage	324 L
Water usage	5,787 m³

OUTPUT	
Production volume	1,494 t
Amount of CO_2 emissions	157 t-CO_2
Amount of wastewater	1,933 m³
Industrial waste emissions	38.3 t

Electricity consumption, Water usage and discharge status in Japan

Electricity Consumption

Electricity consumption in FY2024 increased from FY2023. Since the manufacturing volume increased more than the electricity consumption did, the intensity has decreased. Electricity use is expected to continue to increase as it is mainly used to improve the working environment. In order to reduce our environmental impact as much as possible, we are generating electricity with solar power on the roof of the Amagasaki Headquarters.

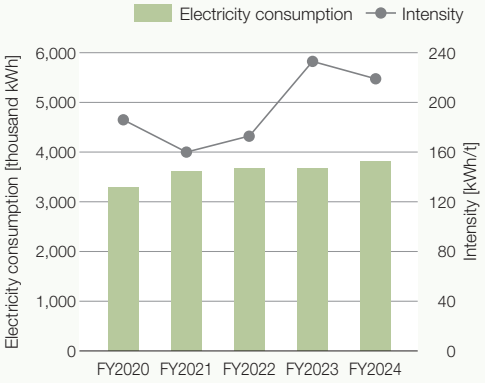
CO_2 Emission

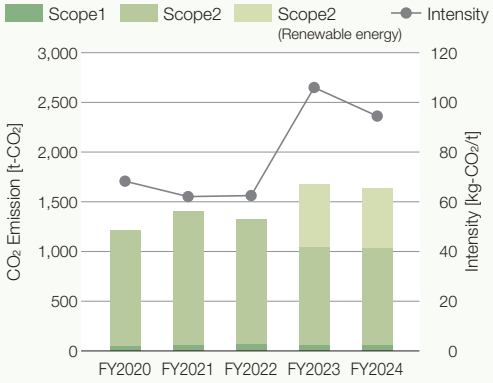
We have calculated the GHG protocol Scope 1 (fuel) and Scope 2 (electricity and heat) as CO_2 emissions. Scope 2 (electrical) accounts for 97%. CO_2 emissions in FY2024 were almost the same as in FY2023, but the intensity decreased because the manufacturing volume increased significantly.
For Scope 3, we calculated for all categories in FY2024.

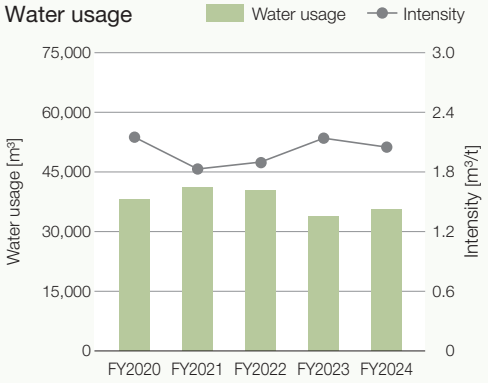
Emissions from the MEC's Supply Chain P.17

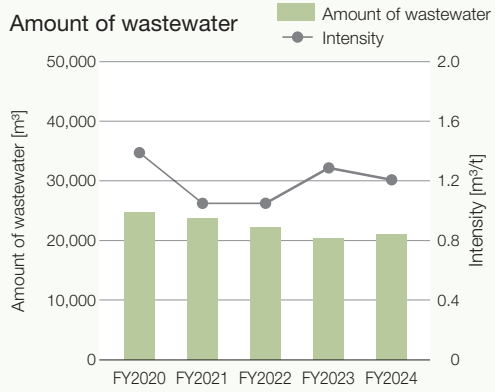
Water usage and Amount of wastewater

Because water is a key ingredient in MEC's products, the amount of water used changes according to changes in the volume of products manufactured.
We understand the amount of water used and are aware that we use a large amount not only in our raw materials but also in our manufacturing facilities, container cleaning, and substrate processing lines in our R&D activities. For this reason, we are working to reduce the number of times equipment is cleaned, to introduce automatic container-cleaning equipment, and to reduce wasteful use in substrate processing line work.
Water used in manufacturing and R&D operations is treated in wastewater treatment facilities in line with the regulated standards and discharged into the sewerage system as wastewater. We manage wastewater to ensure that we do not discharge wastewater that exceeds standards. In FY2024, there were no wastewater discharges that exceeded standards. We will continue to make efforts for appropriate management.









Electricity consumption

FY2023	FY2024	
3,681 thousand kWh	**3,809 thousand kWh**	128 thousand kWh ↑ 3.5 % ↑

Solar power generation (Amagasaki Headquarters)

FY2023	FY2024	
189 thousand kWh	**178 thousand kWh**	11 thousand kWh ↓

*We began purchasing renewable energy at the Amagasaki Headquarters in FY2023. As a result, approximately 35% of our domestic business sites were covered in FY2024. We will continue to purchase in FY2025.
Starting in FY2022, we have been purchasing the "Niigata Prefecture Pack" as a carbon offset, which includes a set of various projects such as forest improvement initiatives throughout Niigata Prefecture. In 2024, we purchased 35 tons and retired the credit. We will continue this effort moving forward.

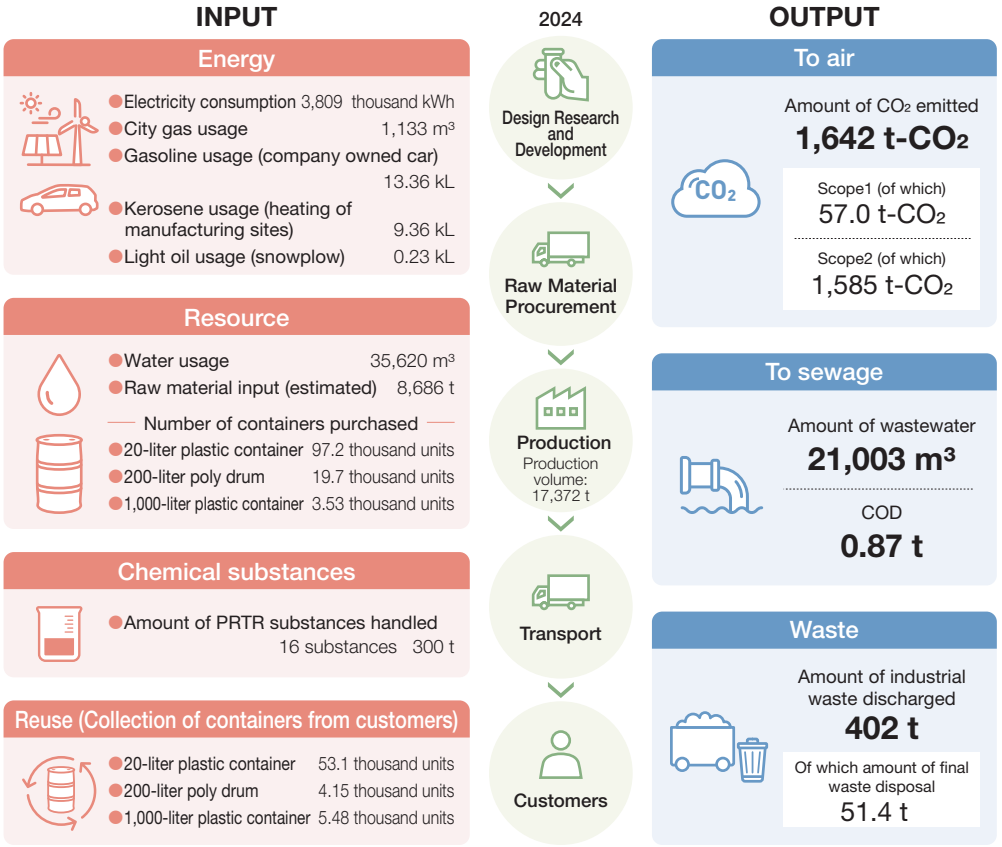
Water usage

FY2023	FY2024	
33,804 m³	**35,620 m³**	1,816 m³ ↑ 5.4 % ↑

Amount of wastewater

FY2023	FY2024	
20,373 m³	**21,003 m³**	630 m³ ↑ 3.1% ↑

Material Flow in Business Activities | Offices in Japan



Reuse of Plastic Containers

In order to make effective use of limited resources without waste, we collect used polyethylene containers of our products from our customers. We sort the containers to determine if they can be reused, and those that can be reused are cleaned and reused by the Company and contractors.

Proper Disposal of Wastes

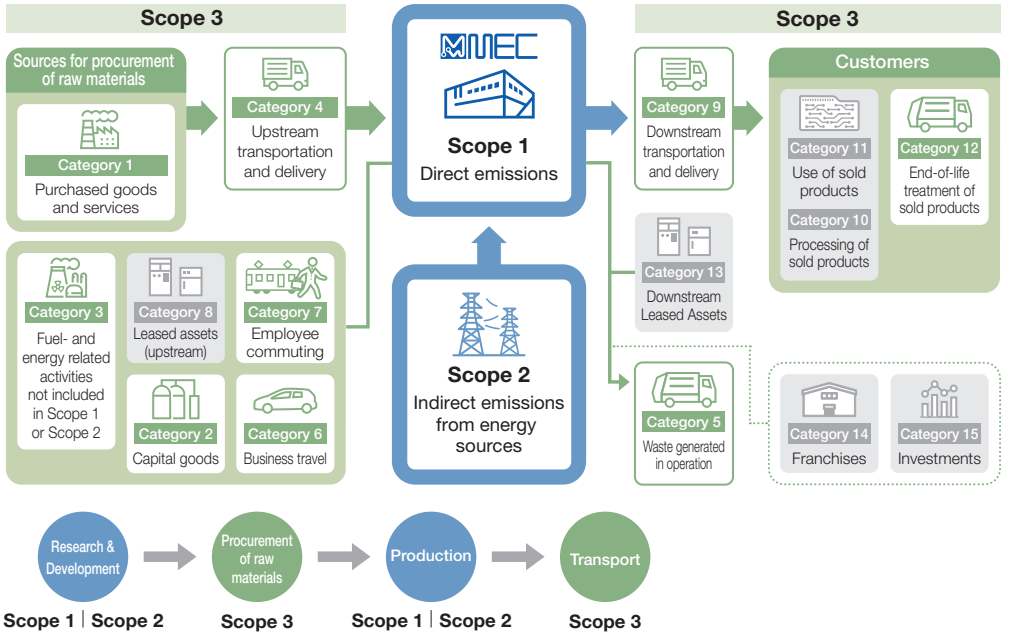
The amount of industrial waste discharge in FY2024 was 402 tons, almost unchanged from FY2023. The amount of specially controlled industrial waste was 152 tons, a decrease of 29 tons from FY2023 (down 16%). The final amount of disposed industrial waste was 51.4 tons.
We will continue our efforts to limit the amount of industrial waste generated, and endeavor to reduce the final disposal volume by thoroughly sorting industrial waste generated.

Environmental accounting data is available with our ESG data.

ESG data → https://www.mec-co.com/en/sustainability/esg-data/

Emissions from the MEC's Supply Chain

Image of Scope 1, Scope 2, and Scope 3 Emissions in the Supply Chain



Scope 1, Scope 2, and Scope 3 Emissions

Unit: t-CO₂

		FY2023	FY2024	Increase and Decrease
Scope 1	Direct emissions	55.5	57.0	1.5 ↑
Scope 2	Indirect emissions from energy sources	1,621	1,585	–36 ↓
Scope 3	Category 1	—	19,548	—
	Category 2	—	592	—
	Category 3	—	260	—
	Category 4	—	438	—
	Category 5	136	143	7 ↑
	Category 6	39.1	36.0	–3.1 ↓
	Category 7	117	109	–8 ↓
	Category 8	—	Since this item is included in scope2, it is deemed not applicable.	—
	Category 9	—	1,077	—
	Category 10	—	Not applicable as no discharge falls under this category	—
	Category 11	—	Not applicable as our products are intermediate products with little impact on the discharge	—
	Category 12	—	22,700	—
	Category 13	—	Since we are not engaged in the rental business, it is deemed not applicable.	—
	Category 14	—	Since we are not engaged in the franchise business, it is deemed not applicable.	—
	Category 15	—	Since we do not acquire shares for investment business, it is deemed not applicable.	—
	Total	—	44,903	—