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### Editorial Policy

TOCALO is a specialized manufacturer of surface treatments focused on thermal spraying. We believe that it is important for us to contribute to society by maximizing the benefits of the various functions of coatings, including saving resources, saving energy, and reducing environmental impact, as well as to progress toward achieving carbon neutrality, including reducing CO2 emissions. This report has been prepared to present up-to-date information (as of August 2022) in an easy-to-understand manner about TOCALO and its consolidated subsidiaries with a focus on the activities of the parent company for fiscal 2021 (April 2021 to March 2022).



We support sustainable development goals (SDGs).

## Message from the president

### **We will continue to grow as we pursue our vision to build a “bright future for people and nature”**

#### **A unified TOCALO led by ESG management**

I believe our goal to build a “bright future for people and nature” is a good guide toward realizing our vision. Even as the business environment around us changes, we will stay focused on attaining our goal.

The biggest change for us in FY2021 was the decision to move to the new Prime Market of the Tokyo Stock Exchange. As a publicly traded company on the Prime Market, we must uphold and even greater level of accountability to society. Companies are being strongly urged to disclose information related to sustainability, including meeting the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). Fulfilling our responsibilities is essential to ensuring sustainable growth for our Company, and TOCALO is advancing a unified effort to step up the measures we have been implementing.

Promoting ESG management will continue to be a priority, but ESG management itself is not our objective. Our ultimate goal is to enhance our corporate value by building a “bright future for people and nature.”



**Noriyuki Mifune**

President and Representative  
Director

## **New Environmental Promotion Department to lead GHG emission reduction**

In the year since the Environmental Promotion Department was created in 2021, we have initiated various efforts to better understand our environmental performance and reduce our environmental impact.

The medium-term management plan includes a target to reduce our greenhouse gas (GHG) emissions in fiscal 2030 by 46% from the fiscal 2013 level (as set by the Japanese government). We are doing our part to realize a carbon-neutral society by taking steps to reduce GHG emissions from our business activities while also using our business to help reduce emission volumes throughout society.

We provide surface modification technologies that give new properties and functions to the products and production equipment of our customers. Our surface treatments lower GHG emissions by improving product performance and extending equipment service life.

One example of how our treatment technologies can improve environmental performance is in coal-fired power generation, which uses fossil fuels. As power companies seek to reduce GHG emissions and make their environmental footprints as small as possible, our surface treatments are indispensable to make existing equipment operate more efficiently and extend their service life. Our technology can also improve power generation efficiency in the renewable energy sector. We are receiving inquiries from an expanding range of fields, including a rapidly increasing number of inquiries from the hydroelectric power generation sector.

In the automotive industry, our technologies are used on production lines for lithium-ion batteries, semiconductors, and other electronic components as well as on numerous production lines for steel sheet used to reduce vehicle weights.

In our own operations, approximately 95% of our GHG emissions are attributable to the use of electricity, and we are taking steps to lower electricity consumption by improving our productivity and by actively converting to renewable energy. The entire company is committed to achieving carbon neutrality.

## **New Diversity Promotion Division enabling various work styles**

We believe that the most important factor for sustainable growth as a company is to allow each individual's personality to shine through and play an active role. In July 2020, we created the Diversity Promotion Committee with the mission to identify issues related to workstyle reform and to ensure the company remains a dynamic environment where employees can work with enthusiasm. Although we have been actively working with each business site to address issues, we decided to establish a dedicated department in the head office to take the lead in advancing reforms, and in February 2022 created the Diversity Promotion Division.



We believe that if we provide positions where each person can use their abilities to the fullest and offer a variety of work styles, then we will be a company of workers who are highly motivated and have long careers at the Company. By communicating to our employees that the Company is fully committed to reform, we believe our employees will change their approach to their jobs, accept each other for who they are, and create a workplace with a diverse workforce.

We are also focusing on developing our human resources. We provide educational programs to enhance expertise in various fields, including plans to develop “digital” and “global” human resources.

## **Encouraging active discussion and strengthening governance**

We are also strengthening our corporate governance. In fiscal 2021, we introduced an executive officer system, strengthened the executive team, and fortified the supervisory function of the Board of Directors. The Board of Directors continues to actively discuss how governance can be further improved. We are also formulating a succession plan and examining ways to strengthen our structure for the future.

The Company's directors are deeply committed to making TOCALO better and are actively engaging with people inside and outside the Company. By maintaining open relationships and holding frank discussions, we can continue our strong growth in the future.

## Rapidly achieving sustainable growth while building a “bright future for people and nature”

The TOCALO Group is working in unity to fulfill our responsibility to society. To be a company that is fully embraced by its stakeholders, I believe we must take steps to further decrease our environmental footprint and continue to give back to society while continuing to secure profits.

We will remain true to our principles as we adapt to the changing times and continue reaching forward to grow as we build a “bright future for people and nature.”



### A leader in surface modification technology helping society achieve carbon neutrality

Hiroshi Hisano  
Director, Senior Managing Executive Officer

As Environmental Director, I am placing particular emphasis on ensuring that all TOCALO employees are aware of environmental issues and that we are all working together to protect the environment. In addition to the Environment Division, we have established the Environmental Promotion Department at the head office to accelerate our efforts to help protect the Earth’s environment. The department is working with the manufacturing division and equipment engineers at each plant to improve equipment operating rates and production efficiency. The exchange of opinions and sharing of good practices among our worksite managers across Japan is adding fresh vitality to our activities. At the same time, we are replacing older equipment with more energy-efficient equipment that consumes less electricity. The Environment Division is working with all worksites on recycling reusable resources and reducing industrial waste, which has been focus points for several years.

We are particularly focused on reducing GHG emissions and have set performance targets in the medium-term management plan to reduce Scope 1 and 2\* emissions, primarily by reducing energy consumption at our plants. We have plans to investigate ways and reduce Scope 3\* emissions in our supply chain.

Note: The Greenhouse Gas Protocol provides international standards for calculating and reporting GHG emissions. Scope 1 is direct GHG emissions from the company’s operations, such as from fuel combustion. Scope 2 is indirect GHG emissions associated with energy, such as electricity, that a company purchases. Scope 3 is indirect GHG emissions from other sources.

The largest portion of our GHG emissions comes from the use of electricity, but we also consider the use of fossil fuels in some thermal spraying processes to be an issue, and we are currently examining ways to convert to other energy sources. As a leading company in surface modification technology, we are dedicated to also being a leader in environmental technology and are engaging in collaborative research with universities and other institutions.

In addition to reducing the environmental impact of our operations, our environmental activities are also having another positive effect. Our employees are gaining a deeper understanding of environmental issues, and they are then able to propose ideas to customers for reducing their environmental impact and improving production efficiency.

Our business is surface modification for customer equipment parts and products. Surface modification for semiconductor manufacturing equipment contributes to higher performance and yield, energy saving, and improved functionality for various types of equipment. Our highly functional coatings also save resources and energy by preventing the wear and tear of equipment parts and by enabling materials to be reused by only processing their surfaces. I would like to attract more attention to the environmental benefits of our surface treatments.

My biggest objective is to unite all employees and use our surface modification technology to contribute to carbon neutrality and resource recycling. We will continue advancing our company-wide effort to address environmental issues and fulfill our vision to build a “bright future for people and nature.”

# Long-term vision and materiality

## Long-term vision and mission

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We are pursuing solutions for social issues and improving our corporate value as a group in line with our Vision (Goal for 2030) and Mission.

### Vision (Goal for 2030)

**Contributing to a bright future for people and nature**

### Mission

**Enhance corporate value through continuous growth focused on ESG**

- Provide high quality and high value-added products (coatings) to customers
- Be always trusted by customers, shareholders, business partners, and local residents
- Contribute to environmentally friendly technologies
- Be a company that all employees and their families are proud of, and create a safe working environment where employees enjoy working

# Materiality

We have identified specific issues (materiality) to focus on to fulfill our Vision (Goal for 2030) and Mission.

We identified the points of materiality by first reviewing international standards, such as the GRI Standards, and then selecting possible candidate issues while considering megatrends, social issues, and the requirements and expectations of stakeholders.

We then considered them in relation to the strategies of the medium-term management plan and selected the issues that were in accord with the medium- and long-term direction of our business. The Board of Directors approved the following five items as issues of materiality.

Materiality	Main initiatives	Related information
<b>Advanced coating and latent market development</b>	Invest with a focus on developing advanced coatings <ul style="list-style-type: none"> <li>● Develop high-performance coatings for the foundational elements of people’s lives (such as digitalization, infrastructure, medical care, agriculture)</li> <li>● Develop coatings that help proliferate and improve the efficiency of renewable energy power generation (such as wind power, hydropower, geothermal power, storage batteries)</li> <li>● Develop coatings that help customers reduce greenhouse gas emissions (by supporting non-fossil fuels, recycling equipment)</li> </ul>	Solutions > Surface modification technology's ability to protect the future global environment > Together with customers and suppliers >
	Offer optimal solutions to customers <ul style="list-style-type: none"> <li>● Grow from a supplier to a partner</li> <li>● Set up projects in priority areas</li> <li>● Foster experts in problem-solving</li> </ul>	

Materiality	Main initiatives	Related information
<b>Environmental impact reduction measures</b>	<p>Advance decarbonization (carbon neutrality)</p> <ul style="list-style-type: none"> <li>● Investigate thermal spraying methods that do not use fossil fuel</li> <li>● Reduce power consumption by improving processing methods</li> <li>● Use renewable energy</li> </ul> <hr/> <p>Measures to reduce waste and protect the environment</p> <ul style="list-style-type: none"> <li>● Reduce, recycle, and properly dispose of waste</li> <li>● Understand and improve water and air pollution conditions</li> <li>● Reduce the use of harmful substances</li> </ul>	<p>Environmental management <a href="#">▶</a></p> <p>Material balance <a href="#">▶</a></p> <p>Targets and results <a href="#">▶</a></p> <p>Measures to reduce environmental impact <a href="#">▶</a></p>
<b>Manufacturing sophistication and quality improvement</b>	<p>Improve manufacturing process sophistication and efficiency</p> <ul style="list-style-type: none"> <li>● Promote automation and IoT</li> <li>● Begin practical application of new coating formation technology</li> <li>● Create smart on-site construction</li> </ul> <hr/> <p>Reinforce the quality control system</p> <ul style="list-style-type: none"> <li>● Establish and promote product performance assurance</li> <li>● Implement quality controls systems (such as ISO)</li> <li>● Construct a Product Qualification Plan</li> </ul>	<p>Together with customers and suppliers <a href="#">▶</a></p>
<b>Cultivate and activate diverse human resources</b>	<p>Form a medium- and long-term human resource development plan</p> <ul style="list-style-type: none"> <li>● Develop human resources and technical training</li> <li>● Methodically develop global human resources</li> </ul>	<p>Together with our employees <a href="#">▶</a></p>

Materiality	Main initiatives	Related information
	<p>Create a comfortable work environment</p> <ul style="list-style-type: none"> <li>● Fully engage in safety first</li> <li>● Promote diversity (value the talents of women, persons with disabilities, mid-career employment)</li> <li>● Promote workstyle reform</li> </ul>	
<p><b>Thorough compliance (acting in accordance with corporate ethics)</b></p>	<p>Lay the management foundation for a long-surviving company</p> <ul style="list-style-type: none"> <li>● Act in accordance with corporate ethics (social mores, ethics and morals, the environment, local community contribution)</li> <li>● Actively promote ESG initiatives</li> <li>● Promote engagement with domestic and foreign investors</li> <li>● Fully comply with the Corporate Governance Code</li> </ul>	<p>Compliance <a href="#">▶</a>  Corporate governance <a href="#">▶</a></p>



# Environmental management

We have established an environmental management system at all of our sites and are making continuous improvements based on proper operation.

Basic philosophy 

Promotion of ISO14001 

Scope of application 

Compliance with environment-related laws and regulations 

Environmental accounting 

Environmental Education and Training 

## Basic philosophy

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### Basic environmental philosophy

TOCALO recognizes that “continuously improving the global environment and preventing pollution” is one of the most important challenges of our time. Our basic environmental philosophy is to use surface modification technologies to save resources, save energy, and reduce our environmental impact to protect the global environment and contribute to society.

### Environmental policy (Revised: May 1, 2021)

Through our activities, products, and services focused on surface modification technologies, TOCALO will strive to continuously improve the environment based on the following policy in accordance with our basic environmental philosophy.

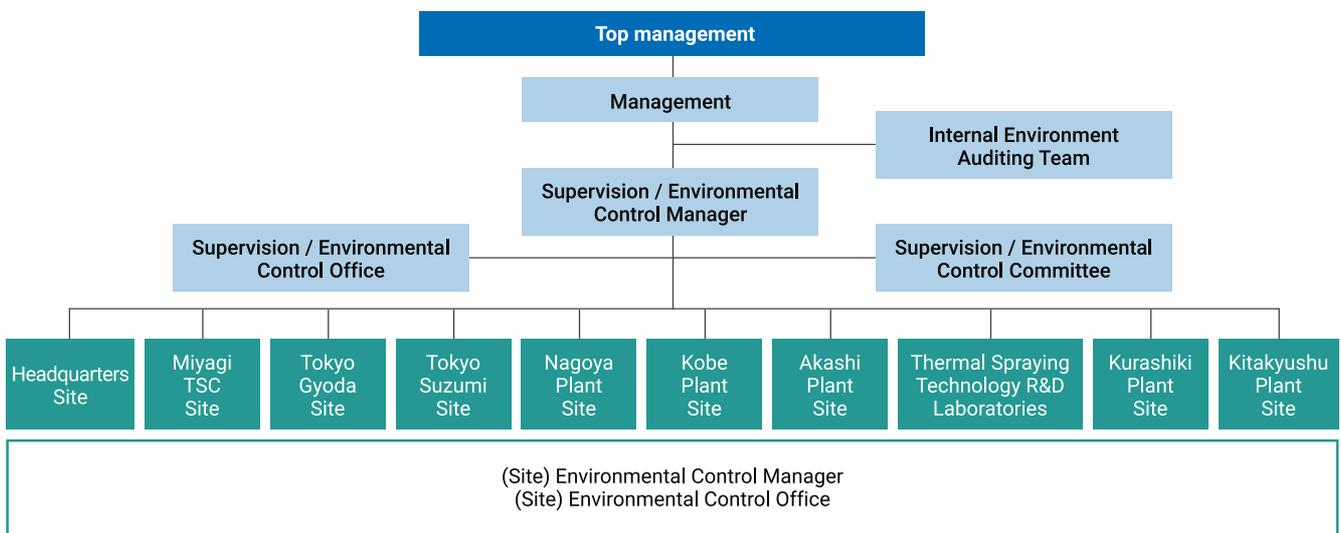
1. Constantly recognize the environmental impact of our activities, products, and services, and establish, implement, and maintain an environmental management system.
2. Commit ourselves to preventing environmental pollution, using sustainable resources, and preventing climate change.
3. Commit ourselves to the continuous improvement of our environmental management system.
4. Comply with environmental laws and regulations relating to our operations, products and services, as well as other requirements to which we agree.

5. Based on this environmental policy and the environmental impact of our activities, products, and services, set environmental targets and engage in activities based on the following themes to contribute to the improvement of the environment:

- (1) Energy and resource conservation in business activities
- (2) Environmental contribution through promotion of business activities

To successfully implement this policy, we will set environmental targets and contribute to environmental conservation by bringing together the strengths of all our divisions and all levels of our workforce.

## Environmental management organization structure



## Promotion of ISO14001

### Certified at all sites

We are continually improving our environmental management system to contribute to society and protect the global environment by conserving resources and energy and reducing our environmental impact.

Since acquiring ISO 14001 certification at all our sites in 2012, we have maintained our 100% certification rate even when relocating or launching new sites.

**Status of ISO 14001 certification (certification number JQA-EM2253) (In order of registration date)**

Acquisition of certification Plants and research laboratories	Expansion of certified sites
Headquarters	March 2002
Thermal Spraying Technology R&D Laboratories	March 2002
Kitakyushu Plant	September 2005
Nagoya Plant	September 2006
Kobe Plant	September 2006
Tokyo Plant Gyoda Workshop	September 2007
Kurashiki Plant *Name changed to Kurashiki Plant in 2022 upon relocation of the former Mizushima Factory.	September 2007
Akashi Plant	September 2009
Miyagi Technical Service Center	August 2012
Tokyo Plant Suzumi Workshop	August 2018

## History of ISO14001 certification

### Close history of ISO14001 certification



March 2002	<b>The Headquarters and Thermal Spraying Technology R&amp;D Laboratories were the first sites in TOCALO to acquire ISO14001 certification.</b>
October 2004	The Thermal Spraying Technology R&D Laboratories relocated from Higashinada-ku, Kobe City to the Minami-Futami Industrial Park, Akashi City.
September 2005	The registered address of the Thermal Spraying Technology R&D Laboratories changed to the new address.  <b>The Kitakyushu Plant was the first plant to acquire certification.</b>
September 2006	<b>The Nagoya Plant, Kobe Plant, and Akashi No. 3 Plant acquired certification.</b>
September 2007	<b>The Tokyo Plant (Gyoda Workshop) and Mizushima Plant acquired certification.</b>
September 2009	<b>The Akashi Plant acquired certification. All major TOCALO sites were certified.</b>
October 2010	Akashi Plant No.3 relocated and integrated with the Akashi Plant.
July 2011	The Miyagi Technical Service Center was established in Miyagi Prefecture.
September 2011	<b>Each sales office acquired certification.</b>  Certification of Akashi Plant No.3 was cancelled.
August 2012	<b>The Miyagi Technical Service Center acquired certification. All TOCALO sites were certified.</b>
August 2014	The Kobe Plant relocated from Higashinada-ku, Kobe City to Nishi-ku, Kobe City. The former plant, where some production processes remained, became the Fukae branch office of the Kobe Plant.

December 2014	The Akashi-Harima Plant acquired and placed under the control of the Akashi Plant.
September 2015	The registered address of Kobe Plant changed to the new address.
February 2016	The Nagoya Plant relocated from Midori Ward, Nagoya City to Tokai City, Aichi Prefecture.
September 2016	<b>The Akashi-Harima Plant acquired certification following the start of full-scale operations.</b>
	The registered address of the Nagoya Plant changed to the new address.
August 2017	The Headquarters relocated from Fukae, Higashinada-ku, Kobe City to Minatojima (Port Island), Chuo-ku, Kobe City.
September 2017	The registered address of the Headquarters changed to the new address.
August 2018	<b>Tokyo Plant No.2 (Suzumi Workshop) was newly certified following the partial relocation (Gyoda Workshop).</b>
July 2020	The Kita-Kanto Sales Office relocated.
August 2020	The registered address of Kita-Kanto Sales Office changed to the new address.
April 2022	The registered name of the Mizushima Plant changed to Kurashiki Plant and the registered address changed from Matsue, Kurashiki City to Unozu, Kojima, Kurashiki City The former Mizushima Plant remained a sub-plant of the Kurashiki Plant
September 2022	The registered name of Tokyo Plant (Gyoda Office) changed to Tokyo Plant Gyoda Workshop.
	The registered name of Tokyo Plant No.2 (Suzumi Workshop) changed to Tokyo Plant Suzumi Workshop.
	The registered name of Mizushima Plant changed to Kurashiki Plant and the registered address changed to the new address.

## Scope of application

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The scope of application of the environmental management system applies to the business activities of TOCALO Co., Ltd.

### (1) Target organization

TOCALO Co., Ltd.

Headquarters / Miyagi Technical Services Center / Tokyo Plant Gyoda Workshop / Tokyo Plant Suzumi Workshop / Nagoya Plant / Kobe Plant / Akashi Plant / Thermal Spraying Technology R&D Laboratories / Kurashiki Plant / Kitakyushu Plant

### (2) Certified activities

R&D, manufacturing, sales, and after-sales service of surface modification products using thermal spray and peripheral technologies

### (3) Location (physical scope) and scope of activities

The contents are in accordance with matters registered with JQA.

Organization name	Address	Scope of activities
①Headquarters, TOCALO Co., Ltd.	6-4-4 Minatojima Minamimachi, Chuo-ku, Kobe, Hyogo	Corporate management and support operations at the Headquarters
②Miyagi Technical Service Center (Miyagi TSC), TOCALO Co., Ltd.	21-11 Kitanaka Bessho, Kawauchi, Osato-Cho, Kurokawa-Gun, Miyagi	Manufacture, sale, and after-sales service of surface modification products using thermal spray technologies
Yamanashi Sales Office, TOCALO Co., Ltd.	1-1-24 Iida, Kofu, Yamanashi	Sales and after-sales service of surface modification products using thermal spray and peripheral technologies

Organization name	Address	Scope of activities
③Tokyo Plant (Gyoda Workshop), TOCALO Co., Ltd.	1-1-1 Gyoda, Funabashi, Chiba	Manufacture and after-sales service of surface modification products using thermal spray and peripheral technologies
④Tokyo Plant No.2 (Suzumi Workshop), TOCALO Co., Ltd.	606-5 Suzumi-cho, Funabashi, Chiba	Manufacture, sale, and after-sales service of surface modification products using thermal spray and peripheral technologies
Kanagawa Sales Office, TOCALO Co., Ltd.	1-14-20 Shinyokohama, Kohoku-ku, Yokohama, Kanagawa	Sales and after-sales service of surface modification products using thermal spray and peripheral technologies
Kita-Kanto Sales Office, TOCALO Co., Ltd.	2F, 1086-45 Shimohamada-cho, Ota, Gunma	Sales and after-sales service of surface modification products using thermal spray and peripheral technologies
⑤Nagoya Plant, TOCALO Co., Ltd.	33-3 Nibanwarishimo, Nawamachi, Tokai, Aichi	Manufacture, sale, and after-sales service of surface modification products using thermal spray technologies
Shizuoka Sales Office, TOCALO Co., Ltd.	Fujioji Bldg.102, 411-1, Motoichiba, Fuji	Sales and after-sales service of surface modification products using thermal spray and peripheral technologies
⑥Kobe Plant, TOCALO Co., Ltd.	1-5 Mitsugaoka, Nishi-ku, Kobe, Hyogo	Manufacture and after-sales service of surface-modified products using thermal spray and peripheral technologies
⑦Akashi Plant, TOCALO Co., Ltd.	14-1, Minamifutami, Futami-cho, Akashi, Hyogo	Manufacture, sale, and after-sales service of surface modification products using thermal spray technologies
Akashi Plant (Akashi-Harima Plant), TOCALO Co., Ltd.	15-1 Higashi-Shinjima, Harima-cho, Kako-gun, Hyogo	Manufacture and after-sales service of surface modification products using thermal spray technologies
⑧Thermal Spraying Technology R&D Laboratories, TOCALO Co., Ltd.	14-3 Minamifutami, Futami-Cho, Akashi, Hyogo	Research and development of surface modification products using thermal spray and peripheral technologies

Organization name	Address	Scope of activities
⑨Kurashiki Plant, TOCALO Co., Ltd.	2030-28, Kojimaunotsu, Kurashiki, Okayama	Manufacture, sale, and after-sales service of surface modification products using thermal spray technologies
⑩Kitakyushu Plant, TOCALO Co., Ltd.	1-48 Torigoe-cho, Kanda- cho, Kyoto-gun, Fukuoka Prefecture	Manufacture, sale, and after-sales service of surface modification products using thermal spray technologies

## (4) Scope of impact

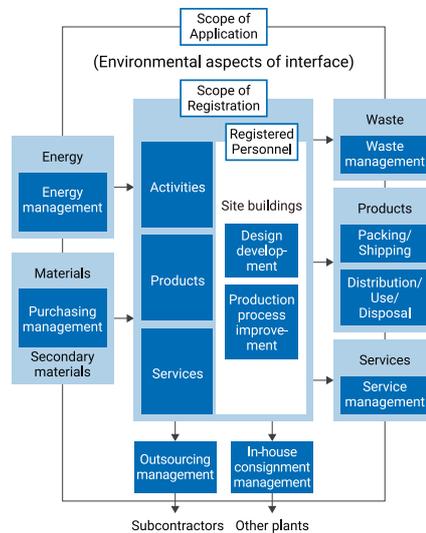
### Within the site

1. Design and development
2. Improvement of production processes

### Environmental aspects of the interface are as follows.

1. Energy management
2. Purchasing management
3. Outsourcing Management
4. In-house subcontracting management of other plants
5. Waste management
6. Distribution, use, and disposal of products after use
7. Service management

### Scope of potential impact



## Compliance with environment-related laws and regulations

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### Identifying laws and regulations to be observed and confirming the status of compliance

TOCALO compiles a list of environmental laws and regulations to be observed and regularly checks the status of compliance. Details of compliance include notifications to the government, appointments, and regulatory values. To date, we have not been subjected to fines or punishment in relation to environmental laws.

### Major environmental laws and regulations related to TOCALO's business

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Waste Management and Public Cleaning Law	Air Pollution Control Law
Water Pollution Control Law	Sewerage Law
Soil Contamination Countermeasures Act	Septic Tank Law
Noise Regulation Law	Vibration Regulation Law
Offensive Odor Control Law	Factory Location Law
Act on Rational Use and Proper Management of Fluorocarbons	Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof ("PRTR Law")
Poisonous and Deleterious Substances Control Law	Fire Service Act
Industrial Safety and Health Act	High Pressure Gas Safety Act
Law Concerning the Promotion of the Measures to Cope with Global Warming	Act on the Rational Use of Energy
Act on Promotion of Resource Circulation for Plastics	

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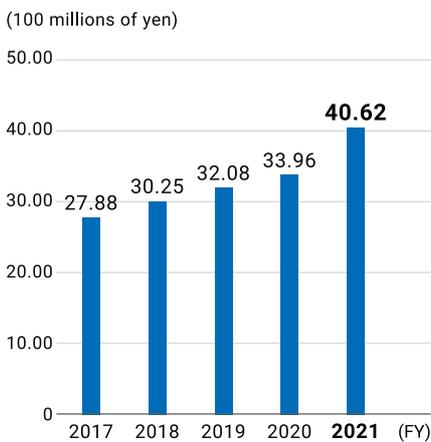
## Environmental accounting

**We focused on investing in environmental facilities, such as wastewater and waste gas treatment systems, and noise-prevention measures at new plants.**

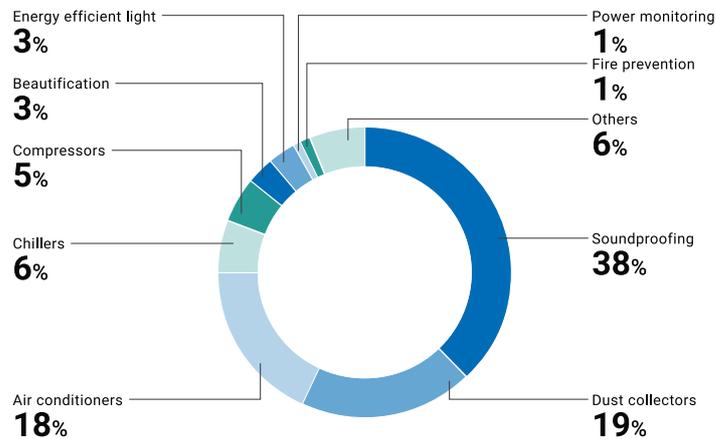
The graph below shows the cumulative amount of environment-related capital expenditures. Our main environmental facilities include dust collectors that do not emit dust, soundproofing equipment that shields noise from dust collectors, and energy-saving equipment.

Investments were higher than usual in fiscal 2021 due to the installation of new equipment with the relocation of the Kurashiki Plant (former Mizushima Plant). Significant investment was also made to soundproof the Tokyo Plant Gyoda Workshop.

### Cumulative environmental investments



### Breakdown of capital expenditures



## Environmental education and training

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### **We provide general education for all employees.**

We systematically conduct education and training on the operation of the environmental management system and how to respond to emergencies, as required by law.

The main themes are "Environmental policy," "Significance of Operating an Environmental Management System," and "Waste Handling," which are taught with initiatives in each workplace.

Through such education and training, we are working to raise awareness and the level of understanding.



Environmental training



## Expectations for surface modification technology to reduce environmental loads

Toshihiko Koyama  
Audit & Supervisory Board Member

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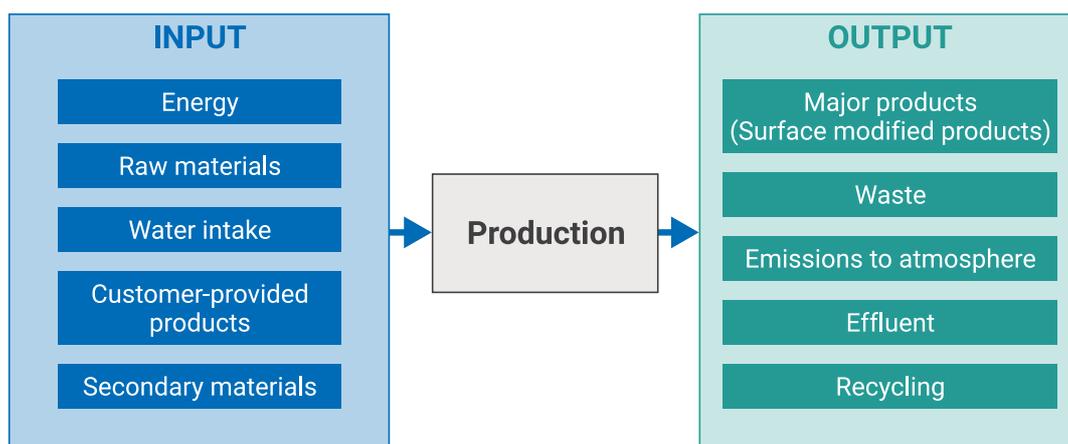
Global trends and environmental buzzwords have changed frequently in recent years with media reports on all sorts of topics appearing every day. In these conditions in November 2021, we announced our medium-term management plan and our vision to contribute a “bright future for people and nature.” TOCALO’s surface modification technology is an environmentally friendly technology that helps our customers save energy and resources, while also being a key element in the manufacturing processes of innovative customer products. Demand from society to reduce GHG emissions and electricity consumption will continue to grow. While continuing to supply surface modification coatings to customers to reduce their environmental impact, we are also anticipating increasing demand for quick provision of materials to reduce the environmental impact of production activities.

My role as an auditor is to audit the management and operational status so TOCALO can generate healthy and sustainable growth and enhance its corporate value over the long term. For this reason, I believe that sharing the good practices that we find in our company audits throughout TOCALO will lead to even more effective environmental activities.

TOCALO was listed on the Prime Market in April 2022. With this new status, I will fulfill my duty as a corporate auditor by rigorously examining the operational status of the executive side so the Company will continue growing and be able to make an even greater contribution to society and protect the environment.

# Material balance

We strive to reduce environmental impact by ascertaining and analyzing the actual status of how much resources and energy are used in our production processes and what kind of environmental impacts are generated.



## Input (Energy, Raw materials, Water intake)

### Energy consumption volume

	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021
Electricity (MWh)	39,817	40,155	39,825	42,491
Kerosene (kl)	217	229	209	203
LPG (kg)	12,807	13,161	10,615	16,014
Diesel (kl)	34	31	31	32
Gasoline (kl)	100	108	101	88
City gas (m³)	110,227	128,768	160,944	165,732

Note: Results for fiscal 2018 to 2020 have been revised to correct omissions in the city gas data.

## Trend regarding volume of use of raw materials

Note: Not including substrates

	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021
Thermal spray materials (t)	291.5	325.2	297.2	271.9
Other materials (t)	59.9	72.6	55.7	90.9

## Trend regarding volume of water intake

	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021
Clean water (m <sup>3</sup> )	63,525.0	63,610.0	65,850.0	69,552.0
Pure water (m <sup>3</sup> )	29.8	19.8	18.1	16.5
Groundwater (m <sup>3</sup> )	0.0	0.0	0.0	0.0

## Output (Waste, Emissions to atmosphere, Effluent, Recycling)

### Trend regarding volume of waste emissions

	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021
General business waste (t)	60	70	59	58
Total industrial waste (t)	1,776	1,841	1,960	2,113

### Trend regarding volume of emissions to atmosphere

	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021
PRTR Law Class 1 Designated Chemical Substances (t)	3.1	2.5	1.0	0.02

### Effluent volume

	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021
Sewage (m <sup>3</sup> )	47,613.0 (2,330.4)	47,625.0 (2,528.0)	49,338.0 (1,640.1)	54,776.0 (1,939.4)
Seawater (m <sup>3</sup> )	11,283.0	10,434.0	10,984.0	9,193.0

Note: The numbers in parentheses are the volume of factory effluent that has undergone wastewater processing

Note: Wastewater discharged from sites using septic tanks is defined as "seawater."

## Recycling volume

	Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021
Metal scraps (t)	145.8	90.6	108.4	90.1
Thermal spray material waste (t)	24.1	28.6	27.4	21.2
Blasting material waste (t)	569.1	570.8	716.4	686.2
Oil waste/Solvent waste (t)	11.2	9.2	12.0	12.0
Paper (t)	29.9	19.2	46.2	38.3
Waste plastic (t)	—	—	5.3	115.1

Note: Waste plastic recycling monitoring commenced in fiscal 2020.

## Targets and results

We have established two major themes and are working on environmental activities by setting targets at each site. We have set a CO<sub>2</sub> reduction target for fiscal 2030 of 46% lower than the level in fiscal 2013 in accordance with government targets. We have been preparing specific measures so that we can start efforts in this regard in fiscal 2023.

Results in fiscal 2021 and targets for fiscal 2022 

## Results in fiscal 2021 and targets for fiscal 2022

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### Results in fiscal 2021

**We achieved 27 of our 33 targets.**

The Energy Conservation and Environment Conference, led by the newly established Environment Promotion Department, was held every three months to further promote environmental activities, including energy conservation throughout the Group. Specific initiatives included converting several sites to 100% power generated from renewable energy sources, upgrading to energy-saving, high-efficiency air conditioners, and creating power consumption visualization to help determine the next plan. Each TOCALO site sets independent environmental targets.

The main themes in fiscal 2021 related to ISO 14001 were conserving energy and resources in our business activities, using our businesses to make a positive contribution to the environment, and mitigating climate change. We achieved 27 of our environmental targets for the year. We came up short but are continuing to pursue 4 energy conservation targets, 1 target for business activity promotion, and 1 target in the other category.

## **Targets for fiscal 2022**

**We are focusing on conserving energy and resources in our business activities, using our businesses to make a positive contribution to the environment, and mitigating climate change.**

TOCALO has set the group goal of reducing greenhouse gas emissions to 54% of the fiscal 2013 level by fiscal 2030. We will achieve that first by improving our production efficiency to consume less electricity and also by using solar power generation to produce our own power source and purchasing electricity generated from renewable energy sources.

We are also replacing the remaining fluorescent lights with LEDs and planning to recycle the cooling water used in plants. Although our environmental performance could waver slightly because of the order-driven nature of our industry, we are working to achieve our reduction targets for greenhouse gas emissions as quickly as possible.

Our main themes in fiscal 2022 related to ISO 14001 will continue to be conserving energy and resources in our business activities, using our businesses to make a positive contribution to the environment, and mitigating climate change. All of our bases will set goals and conduct activities toward the same targets.

😊 : Achieved    😞 : Not Achieved

Site	Environmental target	Target for fiscal 2021	Fiscal 2021 results	
Conserving energy and resources in our business activities				
Headquarters	Promotion of environmental data disclosure	Expand external disclosure of ESG-related investment information	Increased information disclosure on the updated corporate website	😊
Miyagi	Energy- and resource-saving activities	Convert 100% of lighting to LED	100%	😊
	Energy- and resource-saving activities	Develop high-yield thermal spray specifications: 1 project/year	1 project/year Continue advancing technical engineering	😊
Tokyo Gyoda	Energy- and resource-saving activities	Install energy-saving equipment and conduct equipment maintenance: 4 or more projects/year	6 projects/year	😊
	Reduction of the defect rate	Thermal spray material for rework 3.0% or less of total	1.80%	😊
	Reduction of the defect rate	Quality control nonconformance/complaint rate 0.07% or less	0.02%	😊
Tokyo Suzumi	Energy- and resource-saving activities	Improve production facilities and methods to reduce resource consumption: 3 or more projects/year	4 projects/year	😊
	Energy- and resource-saving activities	Recycling to reduce resource consumption	Examined recycling carbide chips, grindstones, other parts	😊

Site	Environmental target	Target for fiscal 2021	Fiscal 2021 results	
	Reduction of the defect rate	Quality control nonconformities: 3 cases or less/month, 36 cases or less/year	35 cases/year	
Nagoya	Reduction of the defect rate	100% non-conformity report issuance	100%	
Kobe	Reduction of electric power consumption	Electric power-saving measures: 1 or more projects/year or more	2 cases/year	
	Energy- and resource-saving activities	Measures to reuse water resources	Project quotation completed but work not begun. Plan to install equipment next year	
Akashi	Promotion of recycling of thermal spray materials by Thermal Spray 1 Department	Recovery rate of A material: 66.5% at Akashi Plant overall, 19.5% or more at No. 4 Plant	Akashi Plant: 79.9% No. 4 Plant: 28.9%	
	Promotion of recycling of thermal spray materials by Thermal Spray 2 Department	Recovery rate of B materials: 27.0% or more	13.50%	
	Promotion of recycling of thermal spray materials by Thermal Spray 3 Department	Recovery rate of C materials: 6.5% or more	4.90%	
	Promotion of recycling of thermal spray materials by Thermal Spray 4 Department	Recovery rate of D materials: 1.5% or more	2.40%	

Site	Environmental target	Target for fiscal 2021	Fiscal 2021 results	
	Reduction in electricity consumption	Installed flow sensors to monitor compressed air flow	Checked for air leaks and implemented repairs	
Kurashiki	Promotion of energy- and resource-saving activities	Reduce paper usage and transition to digital	Completed survey of paper usage, digitized some work reports	
Kitakyushu	Reduction of nonconformities	Nonconformities: 3 or less cases/month, target of 36 cases /year Nonconformance rate: Target under 0.30%	Nonconformities: 28 cases/year, nonconformance rate: 0.20%	
	Reduction of nonconformities	Volume of heat-resistant tape used: Reduce ratio to previous year sales by 10%	9.40%	

Contributing to the environment by promoting business activities

Headquarters	Promotion of new project proposals	New projects: 12 or more projects/month, target of 144 or more projects/year	167 projects/year	
Miyagi	Promotion of new project proposals	Promotion of new item orders: score of 120 or more points/year	330.5 points/year	
Tokyo Suzumi	Orders for new products	Number of orders received for new items: 480 or more cases/year	888 cases/year	
Nagoya	Orders for new products	Receipts of orders for newly evaluated products: 60 or more cases/year	85 cases/year	
Kobe	Proposals for long service life coatings	Collaborate with plant sales departments to attract orders for trial products: 5 orders/year (from June: 1 order every 2 months)	10 orders/year	

Site	Environmental target	Target for fiscal 2021	Fiscal 2021 results	
Akashi	Promotion of new businesses	Number of new customer visits: 18 or more visits/month, 216 or more visits/year	240 visits/year	
R&D	New development activities	Initiatives for new development: 60 or more cases/year	53 cases/year	
	New development activities	In-house development of coatings or equipment to contribute to environmental improvements: 3 or more projects/year	6 cases/year	
Kurashiki	Orders for new products	New item orders: 10 or more cases/month, 120 or more cases/year	171 cases/year	
Kitakyushu	Promotion of new project development	New item orders: 15 or more orders/month, 180 or more orders/year	426 cases/year	
Mitigating climate change				
Nagoya	Promotion of renewable energy	Calculate cost/benefit of installing solar panels (including roof rental)	Determined to install solar panels in the next fiscal year	
Akashi	Global warming mitigation	Systematically eliminate CFC R22 equipment and replace with energy-saving equipment Systematically replace large chillers and air conditioners with energy-saving models When replacing spot coolers, install energy-saving models	Progressing as planned	
Others				
Kobe	Pollution prevention	Introduced filter presses to reduce industrial waste (sludge)	Trial operation conducted, but installation postponed	

## Measures to reduce environmental impact

We at TOCALO are constantly aware of the environmental impact of our business activities, products, and services, and strives to prevent environmental pollution and continuously improve our environmental performance through energy conservation, waste reduction, and appropriate management of hazardous substances.

- Global warming mitigation
- Appropriate management of chemical substances
- Reduction of waste
- Air-pollution countermeasures
- Soil and water pollution prevention
- Noise countermeasures

### Global warming mitigation

**We are implementing comprehensive measures to reduce electricity consumption, installing energy-saving equipment, and planning conversion to renewable energy sources.**

Our main sources of energy are kerosene, diesel oil, LPG, and city gas, which are primary energy sources derived from fossil fuels. Electricity, which is a secondary energy source, accounts for 94.67% of our energy consumption and therefore the vast majority of our CO<sub>2</sub> equivalent emissions.

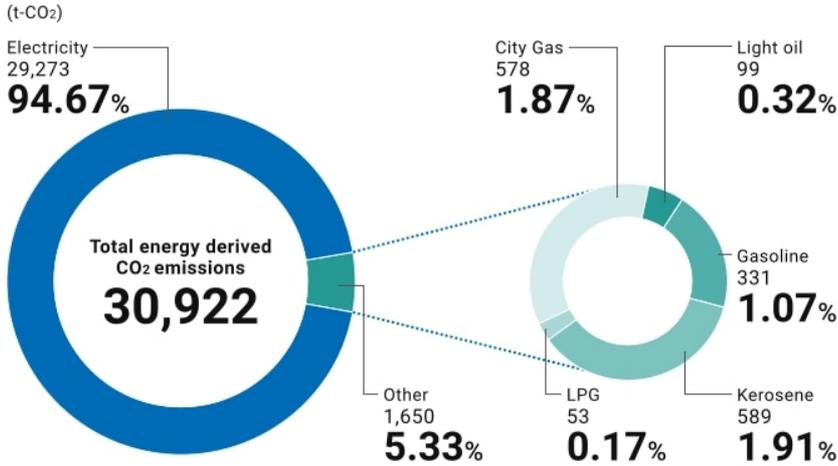
The CO<sub>2</sub> equivalent is calculated by dividing the user's electricity consumption volume into the power company's total volume of CO<sub>2</sub> emissions, and using the resulting coefficient to convert the electricity usage into equivalent CO<sub>2</sub> emission volume. Electric power suppliers publish their coefficients every year. However, even using the same amount of electricity, a company's CO<sub>2</sub> emissions can vary substantially because of the different methods the power companies use to generate electricity.

TOCALO takes meticulous steps to save electricity as a regular component of efficient business operations while also implementing measures including installing energy-saving equipment and upgrading aging equipment with environmentally efficient equipment.

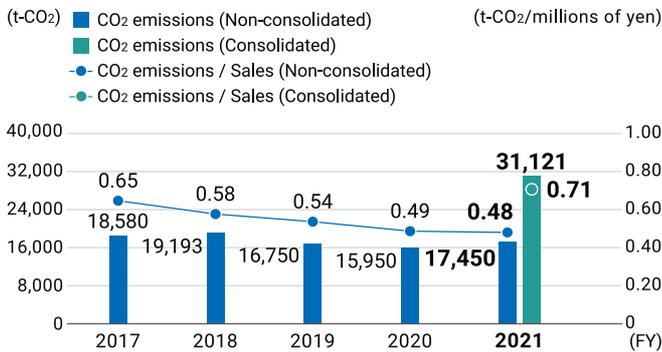
We are also taking steps to convert to renewable energy sources that do not emit CO<sub>2</sub> during power generation. These steps include aggressive measures to cut CO<sub>2</sub> emissions by using solar power generation for in-house energy production and purchasing electricity generated using renewable energy sources.

The installation of energy-saving equipment and our other measures produced tangible results in fiscal 2021, as our ratio of electricity consumption to sales declined from fiscal 2020.

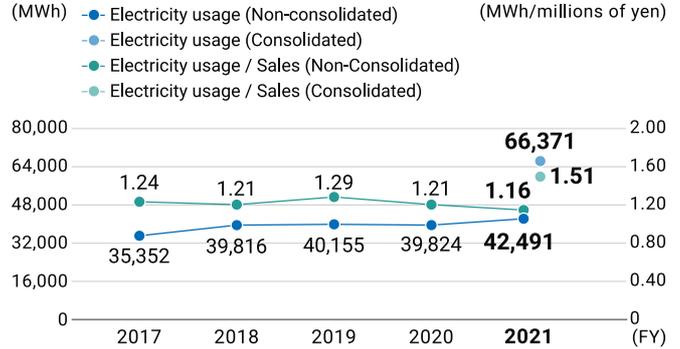
### Breakdown of energy consumption in fiscal 2021 (CO<sub>2</sub> equivalent, consolidated)



### Change in CO<sub>2</sub> emissions (Scope 1 and 2)



### Changes in electricity usage



\*Adjusted emission coefficients are applied to CO<sub>2</sub> emissions from purchased electricity from FY2020 onward.

\*Dry ice was added in FY2021 but is not used as an energy source.

\*The electricity and diesel fuel CO<sub>2</sub> emission coefficients have been revised based on the latest data, and historical data has been retroactively corrected.

Our CO<sub>2</sub> emissions increased in fiscal 2021. The year-on-year increase is due to our increase in production volume as well as higher CO<sub>2</sub> emission coefficients for the power companies from which we source electricity. At the same time, our ratio of CO<sub>2</sub> emissions to sales decreased slightly from the previous fiscal year, indicating that we have improved our production efficiency. Some of the improvement may also have come from several of our business sites converting to purchasing electricity produced using renewable energy.

## Improving fuel efficiency by analyzing vehicle driver data

We use telematics service with in-vehicle communication and GPS equipment to collect vehicle information of vehicles, and then analyze each driver's data for ways to improve fuel efficiency. By analyzing driving distance, fuel efficiency, idling time, the number of sudden accelerations, and the ratio of constant-speed driving time, we can provide individual recommendations for fuel-efficient and safe driving.

We also found that hybrid vehicles provide significantly better fuel efficiency than gasoline-powered vehicles and accordingly allocated hybrid vehicles to long-distance drivers. This is contributing to reducing our overall gasoline consumption. This approach enabled us to visualize the benefits of fuel-efficient vehicles and provided concrete data to use when acquiring vehicles.

Our hybrid-vehicle introduction ratio is currently 26.7%, and we plan to sequentially make all company vehicles hybrid vehicles. We intend all vehicles used in company operations to be hybrid, electric, or other type of environmentally efficient vehicle in the next four years.

### Percentage of hybrid vehicles

Fiscal 2019	Fiscal 2020	Fiscal 2021
19.7%	21.1%	26.7%



Commercial vehicle (hybrid vehicle)

## Generating solar power at the Okayama Kurashiki Plant

Okayama Prefecture is known as the “Land of Sunshine” for its low annual rainfall and generally sunny weather. The new plant we opened in Kurashiki, Okayama, in April 2022 is equipped with the Company’s first full-fledged in-house power generation system including some 3,500 square meters of solar panels on its expansive roof.

During the first two months of full-fledge operation in May and June, the solar power systems generated 39.6% and 34.8%, respectively, of the power we used. Currently, there is some surplus power generation capacity depending on the time of day, but once all plant facilities have been relocated from the Mizushima Plant, it is expected that the plant will be able to fully utilize its power generation capacity.

Along with improving the efficiency of our production operations, using in-house generated electricity to meet our power needs is a key step to reducing our CO<sub>2</sub> emissions. We plan to take this a step further by introducing in-house power generation that uses renewable energy sources to further reduce our environmental impact and greenhouse gas emissions.



Solar panels on the Kurashiki Plant

## Appropriate management of chemical substances

### In accordance with the PRTR Law, we report the amounts of chemical emissions and transfers.

In fiscal 2021, TOCALO reported the amount of designated chemicals released into the environment and transferred for six substances in accordance with the PRTR Law (Pollutant Release and Transfer Register: Chemical Substance Release and Transfer Notification System). Emissions met all regulatory standards under the act.

#### Release and transfer volume of PRTR Law, type 1 designated chemicals in fiscal 2021

	Released amount (kg)				Transferred amount (kg)	
	Emission into the atmosphere	Release into public waters	Discarding into the soil at place of business	Landfill disposal at place of business	Transferring to sewerage	Transferring off-site (industrial waste)
Chrome and trivalent chrome compounds	6.7	0	0	0	0	4,810
Cobalt and its compounds	2.2	0	0	0	0	1,020
Toluene	① 990	0	0	0	0	610
Nickel	8.4	0	0	0	0	7,380
Vanadium compound	0	0	0	0	0	3,600
Boron compounds	0	0	0	0	0	8,700

- \* We handled less than 1 ton of 1-2-4 trimethylbenzene in FY2021, and therefore submitted notification of the amount as 0 in accordance the PRTR Law. We had submitted notification of handling of the substance in FY2020. (PRTR Law requires notification when the annual amount of 1-2-4 trimethylbenzene handled at each business site is 1 ton or more.)
- \* We handled less than 0.5 ton of nickel compounds in FY2021, and therefore submitted notification of the amount as 0 in accordance the PRTR Law. We had submitted notification of handling of the substances in FY2020. (PRTR Law requires notification when the annual amount of nickel compounds handled at each business site is 1 ton or more.)

**1** Toluene emissions into the atmosphere amounted to 990 kilograms.

Toluene is a substance contained in organic solvents (such as thinners), and the emission volume is calculated by estimating the amount of volatile organic compounds (VOCs) evaporated based on the natural drying method used.

## Reduction of waste

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### **We are properly disposing of all types of waste, from general waste to specially controlled industrial waste.**

#### **(1) General waste**

Paper constitutes the majority of business-related general waste, and we are committed to reusing and recycling paper. When confidentiality is an issue, we work with the paper manufacturers to dissolve materials chemically.

#### **(2) Industrial waste**

Waste oil accounted for 39% of our industrial waste, which was the largest component. Waste oil emits from cooling water that is added to grinding oil for use as a coolant with wet grinders (machines for roll grinding). More than 90% of the water is tap water and, after disposal, it is used at cement factories and elsewhere to adjust combustion temperature.

The other main components of industrial waste are sludge (17%), mixed waste (10%), waste plastics (9%), waste alkali (9%), slag (7%), and glass and ceramics (6%).

Sludge contains large amounts of dust generated from thermal spraying. Although thermal spray dust is dry, it is treated as sludge with strict disposal standards.

Mixed waste is defined as a mixture of several types of waste that is difficult to sort. The percentage of mixed waste increased from last year owing to revisions to how the waste is sorted.

Waste plastics include material containers and secondary materials, as well as waste paper and wood scraps that contain oil.

Most of the alkaline waste is washing solution from TD treatment that contains a small amount of sediment. The solution is weakly alkaline due to its boron content. In certain instances, it may be treated as sludge.

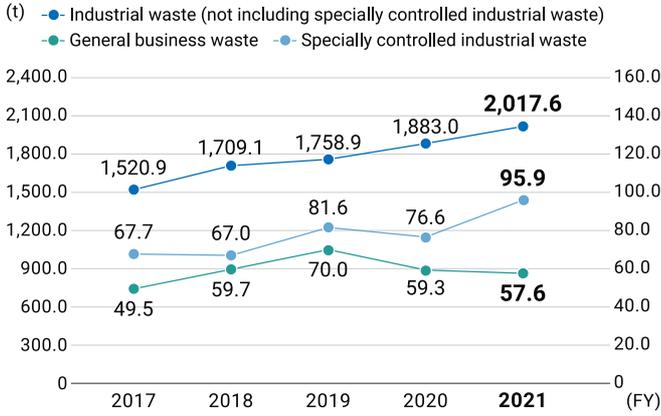
Slag is a mineral slag, and wet slag from industrial operations is considered as sludge which is strictly controlled in waste treatment. TOCALO disposes as sludge any slag tailings that are wet or had the potential of getting wet.

Glass and ceramic scraps, such as refractory bricks, contain ceramic-based grinding materials that cannot be recycled.

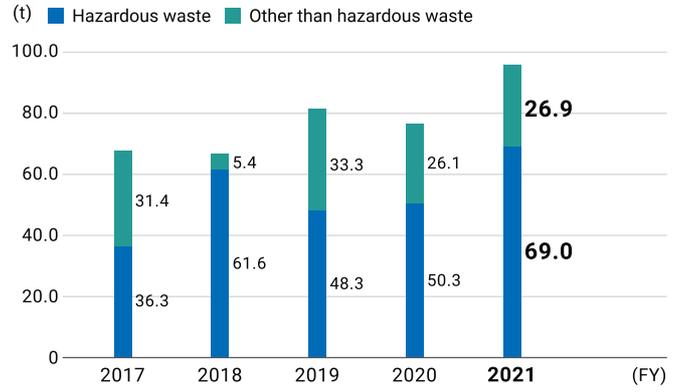
#### **(3) Specially controlled industrial waste**

Dust collectors capture most of the dust generated by thermal spraying using chromium-containing materials (such as stainless steel). When the dust volume exceeds the regulatory limit in dissolution tests, it is disposed of as specially controlled industrial waste.

### Changes in total waste emissions



### Breakdown of specially controlled industrial waste



### Changes in total waste emissions/sales



## Plastic waste reduction

TOCALO is also addressing the global issue of plastic waste.

We are progressively replacing disposable plastic products, such as thermal spray material containers, transportation materials, and packaging materials, with materials that are environmentally friendly and can be reused. We are also actively promoting recycling and taking steps to reduce the amount of materials used.

In July 2021, each business site began examining the possibility of replacing the spoons and other utensils used in their lunch cafeterias with environmentally friendly materials. All locations have introduced utensils made with environmentally friendly materials, such as bioplastics, or switched to reusable metal utensils. We are also testing different materials to use for the lunch containers. Discussions are continuing at all sites to find more ways to reduce waste and food loss.



Paper plate and wooden spoon

## Recycling of miscellaneous recyclable paper at Headquarters (Kobe City)

Kobe City has been implementing an initiative for the recycling of used paper (miscellaneous recyclable paper) that is emitted by business operators targeting the business operators of Port Island and Rokko Island, and the TOCALO Headquarters (within Kobe City Port Island) has been participating in this initiative since March 2020. A large amount of shredder dust is generated at the Headquarters, and this is recovered and transported to designated locations in Kobe City by contracted transport companies.

## Air pollution prevention

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### **Dust generated in the thermal spraying process is safely collected before it can be released into the atmosphere.**

TOCALO's main products modify surfaces by way of thermal spraying, which uses powder or wire as a material. The material is fed into a combustion flame or plasma jet, where it is melted and then sprayed to form a coating.

Powders that did not melt or did melt but were not deposited when sprayed become dust. Dust collectors collect the dust before it can be released into the atmosphere. (Photo)

Thermal spraying is a dry process and the collected dust is mostly dry, so there is no need for waste liquid treatment. A duct draws the airborne dust in a thermal spray booth into the dust collector where it is filtered with internal filters made of woven and nonwoven fabrics. The fine layer of dust that collects on the filter surface becomes thick and can clog the filter, causing the filter to lose suction pressure and reducing the efficiency of the dust collection. Using a pulse jet, compressed air is used at regular intervals to remove the dust and maintain process efficiency.

Dust that can be reused is recycled, and dust that cannot be reused becomes industrial waste.

As of the end of fiscal 2021, we have not confirmed the generation of sulfur oxide (SO<sub>x</sub>) from our operations.



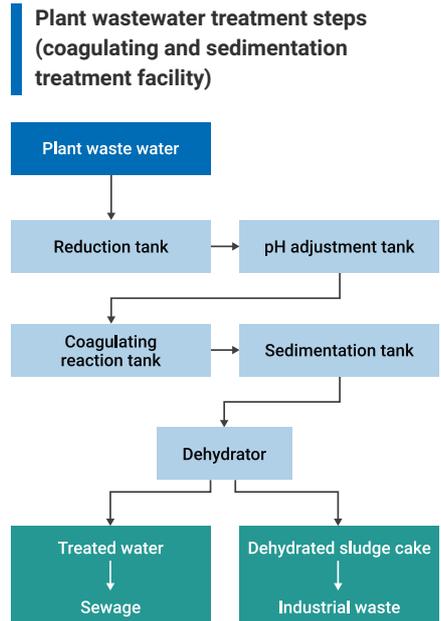
Cartridge-type dust collector

## Soil and water pollution prevention

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**Soil and water pollution prevention is particularly critical because soil and water quality directly affect surrounding communities.**

Processes at the Kobe Plant use surface modification technologies other than thermal spraying. Wastewater that requires detoxification treatment is detoxified at a coagulating sedimentation treatment facility prior to being discharged into the sewage system. As a precaution for an accidental leak of wastewater, the plant has installed pipes and concrete walls to prevent and quickly and visually detect leaks. Anti-spreading materials are also in place to prevent leaks from spreading. In addition to periodic monitoring and measurements, the equipment is controlled by a rigorous system compliant with applicable laws and regulations.





## Using wastewater treatment to reduce our environmental impact

Kiyofumi Kusumoto (Chief, Manufacturing Section, Kobe Plant)

I have been involved in wastewater treatment and in charge of wastewater management at the Kobe Plant for about 25 years. Our wastewater treatment is mostly done by sensors that measure pH and potential values, but there are also elements that cannot be quantified, such as the color or the smell. I am proud of the high level of wastewater treatment that we achieve through accurate measurements and accumulated experience.

Considering the trends in the environment, however, I believe we can do even better. To comply with legal standards, we have no choice but to administer large amounts of neutralizing agents, but those agents remain in the wastewater even after treatment. The neutralizing agents are automatically injected, but we are also making small manual adjustments to prevent the injection volume from becoming excessive. I would like to be able to make the adjustments even more accurate so we can make our environmental impact even smaller.

I would also like to pass on the knowledge and experience from my 25 years to the next generation. I want to quantify the part of my job that I execute based on experience to make a fully automated program. It would be very gratifying if I can contribute even a little to reducing our environmental impact.

## Noise countermeasures

### Noise barriers have been installed and noise measurements are also carried out regularly.

The main types of equipment that generate noise of a concerning level are air compressors, dust collectors, and other blowers. However, in addition to this equipment, there are other noise sources, and we are taking steps to avoid disturbing the neighborhood by implementing soundproofing measures such as installing these facilities inside buildings and installing special soundproof walls.

In addition, we regularly measure noise levels to ensure that our facilities and equipment are within regulatory limits.



Noise measurement using specialized equipment

## Supporting environmental organizations

TOCALO has begun actively supporting the following environmental organizations as another way to help protect the global environment through our activities. We are providing support for greening, protecting biodiversity, and other environmental activities.

In May 2022, we donated ¥500,000 yen to the Green Fund managed by the National Land Afforestation Promotion Organization. The Green Donation Funds is used for forest maintenance in communities in Japan and overseas as well as for disaster relief, forest environment education, and to support greening efforts overseas. We will continue to support efforts to promote forest conservation and greening both in Japan and overseas.

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In August 2022, TOCALO contributed ¥200,000 to WWF Japan.

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You can find out more about TOCALO's contributions to society at the following links.

For further information, [click here](#):

Green Donation Funds: <https://www.green.or.jp/english/>

WWF Japan: <https://www.wwf.or.jp/>



Certificate of Appreciation from the President of the National Land Afforestation Promotion Organization

# Response to the TCFD Recommendations

TOCALO's vision is to contribute to a bright future for people and nature, so we have positioned tackling climate change as a management priority. We are advancing initiatives based on the TCFD\* recommendations and actively disclose information in four core areas: governance, strategy, risk management, and metrics and targets.

Note: The Task Force on Climate-related Disclosures. The TCFD was established in 2015 by the Financial Stability Board, a body representing the central banks and financial authorities of various countries as well as international organizations, following the mutual recognition by influential countries that climate change is having a major impact on financial markets. The TCFD recommendations on climate-related financial disclosures were released in 2017. In addition to encouraging companies and other organizations to disclose information related to climate change, they also provide a framework for making such disclosures.

## Governance

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We have established the Sustainability Committee to formulate sustainability policies and action plans and to monitor the progress of our efforts. It also deliberates on our response to climate change. The committee is chaired by the president and includes full-time directors and the general managers of business divisions among its members. It meets four times a year in principle.

The Board of Directors receives reports from the committee concerning every aspect of sustainability, including climate change, and deliberates on and approves matters as necessary. The Board of Directors approved a medium-term management plan that includes climate change-related targets at a meeting held in October 2021 and material issues that include climate change initiatives at a meeting held in December 2021.

## Strategy

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In 2022, we started identifying risks and opportunities related to climate change. In the table below, we have outlined the risks and opportunities concerning TOCALO Co., Ltd. that have been identified as of June 2022, as well as relevant response measures. Going forward, we intend to engage further in this area, including expanding the scope to include the entire Group and calculating financial impact, as well as to factor these risks and opportunities into our business strategies.

**Risks, Opportunities, and Response Measures**

Category	Type	Details	Timeframe	Impact on Business	Response Measures
Transition risks	Policy and regulatory	Increase in energy procurement costs following the introduction of carbon pricing systems	Medium- to long-term	Medium to large	<p><b>Renewable energy</b></p> <ul style="list-style-type: none"> <li>• Long-term green electricity contracts</li> <li>• Consider incorporating additional renewable energy sources, such as solar power (increase the ratio of renewable energy consumption by switching to renewable energy sources)</li> <li>• Consider methods for storing electricity generated using solar power</li> </ul> <p><b>Facilities</b></p> <ul style="list-style-type: none"> <li>• Upgrade facilities to increase productivity</li> <li>• Replace equipment with leading energy saving models, including air conditioners, refrigeration equipment, LED lightbulbs, and compressors</li> <li>• Upgrade facilities to eliminate CFCs</li> </ul> <p><b>Vehicles</b></p> <ul style="list-style-type: none"> <li>• Switch company vehicles to hybrid models</li> <li>• Consider introducing electric vehicles, etc.</li> </ul>
		Increase in materials procurement costs following the introduction of carbon pricing	Long-term	Medium	Enhance information gathering
	Market	Fall in demand for coatings for facilities that use fossil fuels, such as coal-fired power plants	Short- to medium-term	Medium	Adapt to technology geared toward alternative fuels such as hydrogen, ammonia, and biomass
	Reputational	A loss of reputation among stakeholders, investor outflow and a drop in share price, or rejection of recruitment opportunities due to insufficient response and information disclosure regarding climate change	Short- to medium-term	Medium	<p>Enhance and expand management and information disclosure concerning CO<sub>2</sub> emissions</p> <hr/> <p>Strengthen communication with stakeholders</p> <hr/> <p>Consider acquiring third party certification to improve the trustworthiness of information disclosure</p>
Physical risks	Acute	Incurring of recovery costs due to damage to plants and operational stoppages caused by disasters such as typhoons, heavy rains, lightning strikes, and rising sea levels	Long-term	large	Formulate disaster plans and consider moving plants in coastal areas that have a high risk of flooding due to rising tides and high waves
		Production delays and increased costs due to supply chain disruptions			Counter instantaneous power failures caused by lightning strikes (complete introduction of UPS devices, countermeasures for hydraulic control equipment)
	Chronic	Increased impact on employee health due to heat stroke, infectious diseases, etc.	Short- to long-term	Medium	Strengthen business continuity planning, including measures concerning supply chains
		Procurement difficulties and steep price rises due to decreasing extraction of metals	Medium- to long-term	Medium	Improve working environments using cutting edge air conditioning
					Monitor fluctuations in suppliers' prices due to changes at mines caused by regulations on materials extraction, including metals

Category	Type	Details	Timeframe	Impact on Business	Response Measures
					Pursue customer satisfaction concerning quality by investigating the impact of changes at mines on quality
Opportunities	Technological	Revenue growth through an increase in opportunities to capture new customers driven by the need of customers to adapt to climate change	Short- to long-term	large	Develop and market coating technology tailored to customers' GHG emissions reduction efforts (alternative fuels such as hydrogen, ammonia, and biomass, recycling facilities, etc.)
					Develop and market coating technology tailored to efforts to promote and streamline natural energy power generation (wind power, hydropower, geothermal power, storage batteries, etc.)
	Reputational	Increase in potential orders by encouraging understanding of how coating technology connects to energy saving and GHG emission reductions	Short- to long-term	large	If raw materials producers switch to renewable energy, showcase our ability to supply customers with coatings that generate zero Scope 3 GHG emissions  Actively showcase our position as the leading company for thermal spray coating

Short-term: Within the next five years  
Medium-term: To 2030  
Long-term: To 2050

## Risk management

We have positioned climate change risk as a serious business risk, and it is incorporated into the management of each division. The Sustainability Committee also monitors risk management on a cross-divisional basis. The Board of Directors receives reports on matters such as the results of this monitoring and then deliberates and decides upon company-wide response measures.

## Metrics and targets

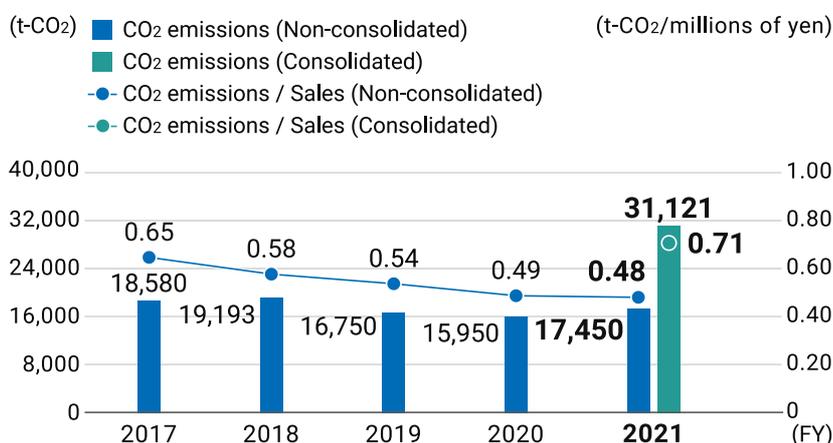
Energy consumption by TOCALO Co., Ltd. includes primary energy derived from fossil fuels in the form of kerosene, light oil, LPG, and natural gas, and secondary energy in the form of electricity.

Converted to CO<sub>2</sub>, electricity and kerosene account for 92.55% and 3.22% of emission respectively, and 95.77% in total, meaning these two energy sources are responsible for the majority of the Company's CO<sub>2</sub> emissions.

TOCALO Co., Ltd. has set the target for fiscal 2030 of reducing Scope 1 and 2 GHG emissions by 46% of fiscal 2013 levels (or in other words, keeping them under 54%). Going forward we plan to implement initiatives that include expanding the coverage of CO<sub>2</sub> emission measurement, setting long-term targets, and broadening efforts to include Scope 3 emissions.

We will also set targets for other climate change response measures.

### Change in CO<sub>2</sub> emissions (Scope 1 and 2)





# Together with customers and suppliers

We are aiming to be a company trusted by customers and are striving to provide products and services that satisfy customer requirements.

We also want our business partners to grow alongside us through activities based on our partnerships.

Enhancing customer satisfaction

Acquisition of ISO 9001 certification

Acquired JIS Q 9100, Nadcap certification (for the aerospace industry)

## Enhancing customer satisfaction

### Working daily to deliver inspiration to customers

We believe that the high value-added coating products that TOCALO delivers satisfy and inspire our customers through our high level of quality control and good services. We strive to communicate the information our customers need diligently and sincerely at every opportunity from proposal, order receipt, and delivery to after-sales service.

We are fully committed to quality control and our research and development. In addition to operating a quality management system compliant with both ISO 9001 and the aerospace industry certification JIS Q 9100, we also hold QA-presentation competitions to announce the results of quality control efforts, and technology report-presentation competitions to announce the results of new research. These tournaments are designed to raise the level of both technologies and quality management throughout the Company. We also established the Quality Headquarters, headed by a director, to strengthen our management system.

In 2017, we moved our headquarters to the Kobe Biomedical Innovation Cluster (KBIC; Chuo Ward, Kobe City), where we are focusing on market development in medical fields and collaborating with manufacturers in the area. We also actively participate in exhibitions on the themes of “Medicine,” “Environment and Energy,” and “Transportation Equipment.” In fiscal 2021,



The TOCALO exhibit at the 7th Mass-Trans Innovation Japan in 2021

TOCALO exhibited at 4 trade shows. As a problem-solving company, we proactively seek to identify customer issues and work with customers to realize better products and services.

### Exhibit in fiscal 2021

- Medtec Japan 2021 (Tokyo Big Site) April
- Manufacturing Fair 2021 (Marinemesse Fukuoka) October
- 13th Kobe Manufacturing SMEs Exhibition November
- 7th Mass-Trans Innovation Japan (Makuhari Messe) November

## Acquisition of ISO 9001 certification

### All plants have acquired certification.

We continually improve our quality management system in order to improve customer satisfaction and earn social trust through quality assurance.

### Status of ISO 9001 certification

ISO 14001-certified plant	Registered date	Registration number	Certified activities
Kitakyushu Plant	Jul. 1998	JQA-2470	Thermal spray processing for industrial machinery parts, equipment parts for the chemical industry, and parts for FPD and semiconductor manufacturing equipment
Tokyo Plant	May 1999	JQA-QM 3344	Surface treatment processing for industrial parts (thermal spray processing and other peripheral technologies)
Akashi Plant	Oct. 1999	JQA-QM 3810	Surface treatment processing for industrial parts (thermal spray processing and other peripheral technologies)
Kobe Plant	May 2003	JQA-QMA 10001	ZAC processing of parts for FPD and semiconductor manufacturing equipment and general industrial machinery parts TD processing of insert block molds for automobile forming mold

ISO 14001-certified plant	Registered date	Registration number	Certified activities
Kurashiki Plant	Dec. 2011	JQA-QMA 14492	Surface treatment processing for industrial parts (thermal spray processing and other peripheral technologies)
Nagoya Plant	Nov. 2017	JQA-QMA15690	Surface treatment of parts for general industrial and aerospace industries (thermal spraying)

## Quality control system

Process	Implementation items	Certified activities
Considering orders	<ul style="list-style-type: none"> <li>● Interviews</li> <li>● Review of customer requirements</li> <li>● Preliminary verification test</li> </ul>	<ul style="list-style-type: none"> <li>● Gathering information through interviews to realize customer requirements</li> <li>● Analysis of the use environment for each customer</li> <li>● Proposal</li> </ul>



Process	Implementation items	Certified activities
Orders (processing instructions)	Processing directives <ul style="list-style-type: none"> <li>● Drawing</li> <li>● Purchase specifications</li> </ul>	<ul style="list-style-type: none"> <li>● Input customer requirements into processing directives (attachment of drawings, purchase specifications, etc.)</li> </ul>



Process	Implementation items	Certified activities
Manufacturing	<ul style="list-style-type: none"> <li>• Incoming inspection</li> <li>• Purchasing process control</li> <li>• Manufacturing process control</li> <li>• Shipment inspection</li> </ul>	<ul style="list-style-type: none"> <li>• Incoming inspection (prevention of non-conforming parts and materials into the manufacturing process based on source management)</li> <li>• Purchasing management (purchase of conforming products from selected suppliers)</li> <li>• Manufacturing process (management of individual processes based on 5Ms to provide stable product quality)</li> <li>• Shipment inspection (provision of products that meet customer requirements)</li> </ul>



Process	Implementation items	Certified activities
Shipment	<ul style="list-style-type: none"> <li>• Traceability management</li> </ul>	<ul style="list-style-type: none"> <li>• Management of process history by product identification</li> </ul>



Process	Implementation items	Certified activities
After-sales service	<ul style="list-style-type: none"> <li>• After-sales follow-up</li> </ul>	<ul style="list-style-type: none"> <li>• Quality surveys of tie-ups in engineering, manufacturing and sales by visiting customers</li> <li>• Sincere response to customer complaints</li> </ul>

## Acquired JIS Q 9100, Nadcap certification (for the aerospace industry)

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### The Nagoya Plant has acquired certification for the aerospace industry.

JIS Q 9100 was established to manage the quality of aerospace defense products, which requires advanced quality control. To satisfy requirements specific to the aerospace industry, the Nagoya Plant acquired certification in November 2008. The Akashi Plant was also certified in 2014, but the aircraft-related work was consolidated at the Nagoya Plant, and the certification was returned at the end of March 2020.

Nadcap is an international certification system under which the Performance Review Institute (PRI), an NPO in the United States, reviews special process operations in the aerospace and defense industry.

#### JIS Q 9100 and Nadcap certification

	ISO 14001-certified plant	Registered date	Registration number	Certified activities
JIS Q 9100	Nagoya Plant	Nov. 2008	JQA-AS 0044	Surface treatment of aerospace components (thermal spraying)
Nadcap		Mar. 2014	967616467	Surface treatment of aerospace components (thermal spraying)



Our company complies regarding the payment of wages above the minimum levels set in each region, and in our Corporate Ethics Guidelines, we state the obligations we have to employees and our determination to meet those obligations so that employees can maximize their abilities and achieve self-fulfillment.

We also comply regarding maintaining working conditions above the standards set forth in laws and ordinances. We hold labor-management gatherings that include company-side management and the management of labor unions around six times per year, and repeatedly engage in talks with the aim of realizing higher quality work environments and treatment.

- Creating an environment for all employees to thrive 
- Respect for human rights 
- Occupational health and safety initiatives 
- Work-life balance 

## Creating an environment for all employees to thrive

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### Initiatives to support balancing work and childcare

- Childcare and caregiver leave
- Shorter working hours and leave for childcare and nursing
- Children nursing care and caregiver holiday leave

### Initiatives to create a comfortable work environment

- Introduced a new e-learning system
- Awards and incentive programs

## Initiatives to create an environment in which all employees can fully demonstrate their abilities

- Re-employment program for retired employees
- Extension of retirement age
- Stress checks
- Introduction of refreshment leave
- Introduction of flextime systems
- Implementation of an hourly-based paid leave system
- Introduction of telework

### Human resources data (non-consolidated)

		Fiscal 2021
Percentage of female employees	Full-time/Career-track	11.1% (43/386 people)
	Full-time/Professional	7.6% (28/364 people)
	Temporary employees	38.5% (67/174 people)
Percentage of female executives		9.0% (2/22 people)
Percentage of female workers in management positions		1.4% (2/140 people)
Percentage of female workers among new hires	Full-time/Career-track	18.1% (4/22 people)
	Full-time/Professional	8.0% (2/25 people)
	Temporary employees	27.2% (6/22 people)
Percentage of temporary employees <sup>1</sup>		18.8% (174/924 people)

		Fiscal 2021
Male and female average number of years of continuous service	Full-time/Career-track	Male 12.5years, Female 9.8years
	Full-time/Professional	Male 13.2years, Female 9.1years
	Temporary employees	Male 13.0years, Female 7.6years
Voluntary turnover rate <sup>2</sup>		2.2% (21/924 people)

1. Temporary employees are directly-hired employees, such as part-time and contract employees, and do not include dispatched employees.
2. Excluding mandatory retirements of regular, contract, and other full-time employees

#### Human resources data (consolidated)

		Fiscal 2021
Percentage of female employees	Full-time	16.5% (198/1196 people)
	Temporary employees	40.3% (111/275 people)
Percentage of female executives		4.4% (2/45 people)
Percentage of female workers in management positions		5.0% (11/218 people)
Percentage of female workers among new hires	Full-time	19.8% (21/106 people)
	Temporary employees	34.8% (15/43 people)
Percentage of temporary employees <sup>1</sup>		18.6% (275/1471 people)
Male and female average number of years of continuous service	Full-time	Male 11.7years, Female 9.7years

		Fiscal 2021
	Temporary employees	Male 9.3years, Female 6.3years
Voluntary turnover rate <sup>2</sup>		5.4% (80/1471 people)

1. Temporary employees are directly-hired employees, such as part-time and contract employees, and do not include dispatched employees.
2. Excluding mandatory retirements of regular, contract, and other full-time employees

### Percentage of mid-career professionals

Fiscal 2018	Fiscal 2019	Fiscal 2020	Fiscal 2021
36%	29%	30%	21%

Note: Including temporary appointments from dispatched employees, and excluding permanent appointments from contract employees

New graduates hired outside of April are considered new graduate hires.

### Competitive ratio in recruitment by gender for the last three fiscal years

Employment management classification	Female competition ratio (A)	Male competition ratio (B)
Career track	2.6 times	2.68 times
Skills and clerical positions	0.33 times	1.06 times

### Total number of hours of overtime and holiday work per worker per month in the most recent fiscal year

The total of overtime and holiday work is less than 45 hours each month in all employment management categories.

## Various career courses

Status of mid-career recruitment and re-employment, such as conversion to regular workers in the last three fiscal years

Last three fiscal years	Action taken	Number of people
Fiscal 2019-2021	A. Conversions to regular workers, hired dispatched workers	21 (Conversions to regular workers, hired dispatched workers)
	B. Conversion between employment management categories that contributes to career advancement	21 (same as above)
	D. Mid-career recruitment of females over age 30 as regular workers	1 (not including the above)

## Publication of General Business Owner Action Plan

We publish a General Business Owner Action Plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children and the Act on the Promotion of Female Participation and Career Advancement in the Workplace.

General Business Owner Action Plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children 

General Business Owner Action Plan based on the Act on Promotion of Female Participation and Career Advancement in the Workplace 



Adobe Reader is required to view PDF files.  
Adobe Reader can be downloaded from the button on the left.

## Respect for human rights

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### Eliminating all discrimination among employees

The Compliance Handbook expressly stipulates that the company shall respect the fundamental human rights of employees and shall not discriminate against or harass individuals for reasons unrelated to the performance of one's duties. This includes race, nationality, ethnicity, beliefs, religion, age, sex, sexual orientation, physical characteristics, presence or absence of disability, internal position, type of employment, property, place of origin, marital status, or any other reason that may harm the dignity of the individual. Furthermore, instructions have been given stating that reasons unrelated to the performance of duties cannot be made selection criteria during the new hiring of employees.

### Prevention of harassment

Measure to prevent harassment included harassment training for all employees in 2020. We introduced harassment training for managers in fiscal 2019.

To raise compliance awareness, the company distributes the Compliance Handbook to all employees, and has established contact points for whistleblowing and consulting on harassment and other issues inside and outside the Company.

- **Employment rate of persons with disabilities**  
2.88% (non-consolidated, end of March 2022)

## Industrial safety and health initiatives

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### **We are also focusing on ensuring safety in the event of a disaster**

We strive to maintain and improve a comfortable work environment that gives consideration to safety and health, as well as enhance various systems related to welfare in compliance with the Labor Standards Act and the Industrial Safety and Health Act. Parallel to this, each business site has established its own measures to ensure safety and minimize damage in the event of a disaster.

In order to prevent occupational accidents from occurring, the entire company is making concerted efforts to vigorously promote safety and health measures.

As one of our initiatives in this regard, we receive tutelage and advice regarding health issues and health & safety from an outside director who is a specially-appointed professor of the Osaka University Campus Life Health and Counseling Center.

### **2022 safety and health policy**

TOCALO's safety and health policy is based on the principle that "safety takes precedence over everything." The policy provides guidelines for "maintaining and improving work environments" and "achieving zero accidents and zero injuries" by showing due consideration to safety and health in ways that safeguard and enhance the health of all employees.

We will strive to create a bright and rewarding workplace by:

1. Complying with laws and regulations related to safety and health related to our business and relevant internal regulations
2. Continuing industrial health and safety activities (inspections, patrols, and education) and striving to raise awareness of health and safety
3. Aiming to reduce the hazards that cause accidents and disasters by promoting visualization and risk assessments based on 5S-activity initiatives and analysis of workplace injuries
4. Showing due consideration to mental health so that employees can work in a healthy state of mind
5. Thoroughly providing health & safety education for new employees beginning when they join the company
6. Promoting the safety activities of on-site partner companies and subcontractors

## **Heat stroke countermeasures at manufacturing sites**

In recent years, summer heat has become increasingly severe, and temperatures at manufacturing sites have been higher than before, increasing stress on employees. The higher the temperature gets, the greater the risk of heat stroke becomes, so this could adversely affect the health of our employees.

To prevent such risks, we are firstly improving our air-conditioners. Air-conditioners are installed at most of our flat panel display (FPD) and semiconductor processing plants (FPD and semiconductors make up just over 50% of total sales), and we are actively introducing them at other worksites as well.

Measures other than air-conditioning are implemented at sites as required, such as exhausting steam generated in operations to the outside, reducing outdoor heat input through the use of heat-shielding coating, and installing large-scale air blowers. In addition, for personnel, we are promoting rehydration and salt supplementation with salt candies, installing spot coolers, and introducing air-conditioned clothing. With these measures in place, many of the workers at sites say that the work has become easier, which has also led to more efficient work.

However, there are some sites where countermeasures are not yet sufficient, and further improvements are necessary. We will continue to consider the health of our employees and take appropriate measures at each business site.

## **Approach to mental health**

Our initiatives to support the employee mental health of our employees include annual stress checks as required by law and give feedback on the results to individuals. We also seek to improve our work environments by performing diagnoses of our company structures to identify structural issues.

We offer stress checks to employees and additionally provide contacts for consultation.

In 2022, we contracted with SOMPO Health Support Corporation to provide health management services that provide employees with mental conditions the opportunity to consult with industrial health advisors. The consultations will serve as a preventive measure to reduce instances of employees taking a leave of absence.

## **Initiatives for raising safety awareness**

Each office holds monthly meetings of the Health and Safety Committee where risks regarding workplaces are assessed, and feedback on the results is given to employees. An effort is made to share the information from the committee meetings at company-wide health and safety meetings in which all offices participate every other month. Effort is also made to raise safety awareness by providing education on entering the Company to new employees that is centered on safety education, and focusing on foreman training that is based on guidance from external consultants.

## Work-life balance

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### Promotion of diversity

In July 2020, we launched the Diversity Promotion Committee with the goal of becoming a company where diverse human resources can work comfortably and enthusiastically. We revised our internal regulations based on the constructive opinions and information employees shared regarding improving our company received from employees from various backgrounds and all genders, ages, and affiliations. We also proactively produce and distribute pamphlets and posters.

In February 2022, we established the Diversity Promotion Division, which will be dedicated to further strengthening these activities. Along with our current priority of promoting the advancement of women, we are taking proactive steps to create a worker-friendly workplace environment.

See here for details [■](#)

Note: The link is for an external website.



## Creating a corporate culture that empowers diversity

Yuka Wakabayashi (Manager, Diversity Promotion Division, HR & General Affairs Division)

TOCALO created the Diversity Promotion Committee and launched a company-wide project in July 2020. The committee gathered people of all ages and all departments, including the company president, whose first task was to identify the good points and issues related to diversity at each operating site. The atmosphere at the committee was one in which people of all perspectives and ages had equal opportunity to openly express their views. The younger members offered numerous fresh opinions that spurred much lively discussion.

Although I believe our company started its discussion of diversity late compared to other companies, considering that many of our employees were not familiar with the concept of diversity, I think that establishing a foundation for our diversity activities was a great achievement.

The Diversity Promotion Division took over the committee's activities in 2022 as a division fully dedicated to diversity activities. The division's first objective is to increase diversity awareness inside the company through events, in-house publications, and other activities.

We have also created special team to promote diversity at all of our plants and offices. Our mission is for these teams to form a nationwide network that will accelerate our efforts.

We have just embarked on a long road ahead for promoting diversity, and I believe the first step is to promote women in the workplace. I am looking forward to creating a corporate culture that not only supports women, but also supports all people who are "different," including foreigners and people with disabilities. I want our corporate culture to be a strength for TOCALO.

## **In addition to reducing long working hours and promoting the use of paid holidays, we are also enhancing our childcare-leave system and raising awareness of workstyle options.**

Employees and management are working together to make changes to support a balance between work and life by reducing extended working hours and encouraging employees to take annual paid leave. We have also established a childcare-leave system to help employees balance work and child-rearing amid Japan's rapidly declining birthrate and aging population. In addition, we are improving the work environment to better support health management during pregnancy and after childbirth.

We are also reforming workstyle options and our workplace culture to support employees who need to work while also caring for family members, and are raising awareness of the available workstyle options.

## Average paid-holiday utilization rate

Note: Paid-holiday utilization rate = number of paid holidays utilized/number of paid holidays granted (not including portion carried over from previous fiscal year) × 100  
 Average paid-holiday utilization rate = total of paid-holiday utilization rates of all employees/number of all employees

Fiscal 2021 result-calculation period: April 2021 to March 2022

Fiscal 2019	Fiscal 2020	Fiscal 2021
Approx. 70%	Approx. 66%	Approx. 66%

## Use of caregiver leaves

Note: Caregiver leave is for taking care of a family member who needs nursing care for at least two weeks

	Fiscal 2019	Fiscal 2020	Fiscal 2021
Number of eligible employees	0	0	0
Number of utilizing employees	0	0	0

## Use of childcare leave

Note: Childcare Leave is for taking care of a child under the age of one in the same household

		Fiscal 2019	Fiscal 2020	Fiscal 2021
Number of eligible employees	Male	25	19	32
	Female	7	8	2
	Total	32	27	34
Number of utilizing employees	Male	0	0	10
	Female	7	8	2
	Total	7	8	12



## Work efficiently and put full effort into both work and childcare!

Keisuke Majima (Tokyo Plant, Sales Division, Sales Department 2)

The job of my Sales Division is to be the point of contact with our customers, to find issues that we can use our surface modification technology to fix, and to propose solutions. We work every day to satisfy our customer and increase orders.

In March 2022, I became the first male employee at our company to take childcare leave for more than a month, and ultimately was away from work for about 80 days. I had heard that no one in the Sales Division had ever taken childcare leave before, so I was a little worried about whether it would be all right to take time off and also whether I would really be able to return to work as it was before.

However, my superiors and coworkers were very supportive when I applied for the leave, and made me feel very comfortable with my decision.

The childcare leave allowed me to spend quality time with my family. I also learned firsthand how difficult it is to take care of an infant, so now even though I'm back at work, my wife and I are continuing to share the child raising duties.

I am giving more of my time to raising our children at home, so I don't have the time to work as much as I did before. Because my time is limited, I am trying to use the time as efficiently as possible when I do my job. I've also noticed that there are a lot of tasks in our department that rely on a specific person to take care of, and I think that getting rid of tasks like that will improve the efficiency of our whole department.

### Use of nursing leave

Note: Nursing leave is for taking care of a family member in need of care

	Fiscal 2019	Fiscal 2020	Fiscal 2021
Male	4	4	8
Female	3	2	5
Total	7	6	13

Note: Including people who took hourly-based leave; a person who took multiple leaves during the fiscal year are counted as 1.

## Use of care leave

Note: Care leave is for raising children until they begin attending elementary school

	Fiscal 2019	Fiscal 2020	Fiscal 2021
Male	18	12	22
Female	7	2	5
Total	25	14	27

Note: Including people who took hourly-based leave; a person who took multiple leaves during the fiscal year are counted as 1.

## Initiatives for human resource development

Our company has established education & training rules in order to promote self-development and mutual development, and enable the development of creativity through the performance of professional duties.

We first of all provide education to new employees and mid-career professionals for the acquisition of basic concepts and knowledge & skills regarding the company and work. Subsequently, education at individual workplaces, managerial education, supervisor education, specialized education, and so on are provided at the appropriate times as necessary.

### Primary Training Programs

- New employee training
- Second and third-year employee training
- New supervisor training
- Management candidate training
- New management training



We are aiming to be a company that enjoys the familiarity of local residents earned through participating in cleanup activities in the surrounding areas, local events, youth development programs, and by promoting sports.

- Community cleanup activities
- Contributing to youth development
- Contributions to society

## Community cleanup activities

### Scaled down activities due to COVID-19

TOCALO scaled down its local cleanup activities in fiscal 2021 as a measure to prevent the spread of Covid-19. In addition, we implemented a policy of wearing masks and avoiding close contact during the cleanups. As always, the cleanups were conducted while paying close attention to traffic and wearing high-visibility orange bibs.

Prior to the pandemic, the Miyagi Technical Service Center picked up garbage in the local industrial park and along local roads, weeded around the plant, and adjusted signs for safe driving in the industrial park. The activities were held four times a year during the snow-free period from April to November. The Thermal Spraying Technology R&D Laboratories regularly cleaned the green area of neighboring Akashi Kaihin Park. The park office kindly gave us permission to clean inside the park, and the park office even posted our cleanup activities on its website.

Our sites also carry out activities according to local needs. The Kobe Plant making a major effort to keep nearby parks clean from large amounts of garbage that are thought to be left behind by people using fireworks and having barbecues. The Akashi Plant conducts monthly cleaning activities at its local industrial parks. Other companies near the Kobe Plant have told us that they are following our example with their own cleanup activities, which is a great encouragement for us.



Cleanup activities near the Tokyo Plant Gyoda Workshop



Cleanup activities near the Nagoya Plant

## Contributing to youth development

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### Supporting the Akashi-jyoki Gakudo Soft Baseball Tournament

After a two-year hiatus due to the Covid-19 pandemic, the Akashi-jyoki Gakudo Soft Baseball Tournament returned in fiscal 2022 thanks to the prevalence of vaccinations and other measures to prevent the infection from spreading. TOCALO has been a special sponsor of the tournament since its launch in fiscal 2012.



Past Akashi-jyoki Gakudo Soft Baseball Tournaments and the Akashi TOCALO Baseball Stadium

## Accepting internships

TOCALO has been hosting interns annually since fiscal 2007. For safety reasons during the pandemic, we did not accept interns in fiscal 2021.

We usually accept one or two interns from Helmut Schmidt University in Germany each year. The interns spend over a month in summer at the Thermal Spraying Technology R&D Laboratories where they experience our business activities and our research and development work on thermal spray technology. Mutual understanding of the German and Japanese cultures is also deepened through exchanges during both work and private time with our employees. We are looking forward to resuming the intern program.



Overseas interns gaining hands-on experience (fiscal 2019)



## Contributions to society

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We maintain a special annual budget for providing donations to community and social contribution activities. The following are a few of our activities in past years.

**In August 2022, TOCALO made a contribution of ¥200,000 in support of WWF Japan.**

**July 2022 Donation to the Kibou no Machi Project of Kitakyushu City**

We donated ¥1 million to help Houboku, an NPO in Kitakyushu City, build an integrated social welfare facility based on its concept of “a city where anyone can ask for help when they need it.”

**May 2022 Endorsement of the Green Fund of the National Land Afforestation Promotion Organization**

We donated ¥500,000 to the Green Fund to support the forest maintenance and greening activities of the National Land Afforestation Promotion Organization.



緑の募金

**May 2022 Donation to the Kobe Philharmonic Orchestra**

At the request from the Kobe Philharmonic Association, we donated ¥1 million to promote cultural and artistic activities in our hometown of Kobe.

**April 2022 Donation for Humanitarian Relief in Ukraine**

We donated ¥3 million to the United Nations High Commissioner for Refugees (UNHCR) for humanitarian aid to those affected in Ukraine and surrounding areas.

### **December 2021 University of Hyogo Global Business Course TOCALO Scholarship**

This fiscal year, we again provided TOCALO Scholarship, a one-year monthly scholarship of ¥80,000 to one international student of the Global Business Course of the School of Economics and Management.

### **June–July 2021 COVID-19 pandemic response support**

We donated a total of ¥5.5 million to the following organizations to help healthcare professionals working day and night to protect society from the impact of the COVID-19 pandemic.

- Kobe Medical Support Fund
- Akashi, Hyogo Prefecture
- Tokai, Aichi Prefecture
- Kurashiki Riverside Hospital (Ohara HealthCare Foundation)
- Funabashi, Chiba Prefecture
- Harima, Kako, Hyogo Prefecture
- Fukuoka Prefecture
- Tohoku University

### **August 2020 University of Hyogo Global Business Course TOCALO Scholarship**

Under our agreement with the University of Hyogo to support the “development of human resources to to play an active role in the international community,” we provided a one-year monthly scholarship of ¥80,000 to one international student of the Global Business Course of the School of Economics and Management. We are the first corporate entity to create a program at the university to provide continuing scholarship support to an international student.

### **June 2020 COVID-19 pandemic response support**

We donated a total of ¥3.9 million to the following organizations to help healthcare professionals working day and night to protect society from the impact of the COVID-19 pandemic.

- Kobe, Hyogo Prefecture: Donation to the Kobe Medical Support Fund
- Kurashiki, Okayama Prefecture: Donation for pandemic response measures
- Funabashi, Chiba Prefecture: Donation to the Funabashi pandemic response measures
- Akashi, Hyogo Prefecture: Donation to the Akashi pandemic response support
- Harima, Kako, Hyogo Prefecture: Donation to support pandemic response measures of medical staff and childcare workers
- Tokai, Aichi Prefecture: Donation to purchase goods for medical professionals engaged in pandemic response activities
- Miyako Medical Association (Yukuhashi, Fukuoka Prefecture): Donation of 6,000 masks

### **December 2019 Support for Typhoon Hagibis reconstruction efforts**

We donated ¥1 million to the reconstruction efforts of the city of Sano in Tochigi Prefecture, site of the Sano Factory of our subsidiary Japan Coating Center, and the town of Osato in Miyagi Prefecture, site of the Miyagi Technical Service Center, in the wake of Typhoon Hagibis in October 2019.

### **November 2019 Donations to the Hojo Railway Revitalization Support Project in Kasai**

We donated ¥3 million to the Hojo Railway Revitalization Support Project to improve the local public transportation infrastructure in the city of Kasai in Hyogo Prefecture, which is within commuting distance from both our Kobe Factory and Akashi Factory.

### **September 2019 Support for international students at the University of Hyogo**

We created a three-year fund to donate ¥1 million annually to the Global Business Course International Student Support Fund at the University of Hyogo. The fund will provide first-year scholarships for new international students

### **July 2018 Donations for heavy rain disasters**

We donated ¥3 million to the city of Kurashiki in Okayama Prefecture, site of our Mizushima Plant, to provide aid to victims and help reconstruct the city following the heavy rain events.

### **October 2016 Donations to the Kumamoto Reconstruction Assistance Project**

We donated ¥5 million to the Kumamoto Reconstruction Assistance Project of Kumamoto University to help the reconstruction of Kumamoto University from damage incurred during the Kumamoto earthquakes in April 2016.

### **March 2011 Great East Japan Earthquake reconstruction support**

We donated ¥20 million to the reconstruction efforts of Miyagi Prefecture and ¥10 million to the town of Osato in Miyagi Prefecture, site of our Miyagi Technical Service Center, which was under construction, from damage caused by the Great East Japan Earthquake.



We promote IR activities from the perspective of our shareholders and investors, with a basis of prompt and accurate information disclosure.

[Information disclosure policy](#)
[Main IR activities](#)
[Dividend policy](#)

## Information disclosure policy

**We strive to disclose information in an easy-to-understand manner through shareholder newsletters and our website.**

We strive to earn the trust of our shareholders and investors by disclosing corporate information, such as management policies and financial data promptly, accurately, and fairly from the perspective of these shareholders and investors.

In disclosing information, we comply with statutory disclosure standards and disclosure rules set forth by the stock exchanges.

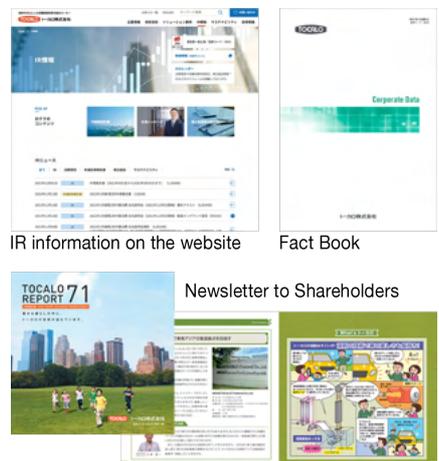
### IR associated tools

- Securities reports and quarterly reports
- Financial Results (Quarterly)
- Newsletter for Shareholders

The latest Newsletter for Shareholders can be viewed on [this page](#) (Japanese only) .

- Fact Book
- Company briefing materials for investors
- IR information on our website

Investor relations information can be found in detail on [this page](#).



## Main IR activities

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### Strong focus on meetings with individual investors

We actively engage in communications with stakeholders through corporate briefings for investors and meetings with analysts and domestic and foreign institutional investors to provide opportunities for direct dialogues between shareholders, investors, and top management.

We also regularly participate in asset management expos to improve our name recognition, broaden our corporate recognition, and expand our base of investors and people interested in our company.

We hold company information sessions for investors twice a year in Tokyo. In response to requests from investors, in November 2021 we added a hybrid meeting format for investors to participate either in-person or online. We are also looking forward to appearing in-person at the upcoming Nikkei IR and Investor Fair that will be held at the Tokyo Big Sight for the first time in three years in August 2022. A virtual presentation booth will also be available so investors can visit us online.

TOCALO also maintains a corporate website with access to the latest investor relations information. The website provides important disclosure information and highlights our business activities and content, including information on the TOCALO Group's strengths and our surface coating technology's contribution to protecting the environment.



President Mifune speaking at an information session for investors (live broadcast)



Nikkei IR and Investor Fair announcement

## Dividend policy

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### **Our dividend was JPY 45 per share in fiscal 2021.**

We consider the return of profits to shareholders to be an important management policy, and strive to continuously pay stable dividends that are based on the outcomes of our business performance. At the same time, we actively strive to enhance shareholder returns.

In fiscal 2021, we paid a dividend of 45 yen per share (including an interim dividend of 20 yen). As a result, the dividend payout ratio (consolidated) was 39.6%. Retained earnings will be allocated to R&D and capital investment, which are indispensable for business growth and strengthening corporate structure, in order to enhance our medium- to long-term share value through business development and expansion.



Risk management 

Information security policy 

## Risk management

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### Comprehensive measures for disasters and other events

Our risk management system is based on the Compliance Committee's cross-sectional oversight of the status of risk management and examination of company-wide measures. A Business Continuity Plan was created on April 1, 2010 and is updated annually.

Each department creates rules and guidelines and publishes manuals to raise awareness of its relevant risks related to compliance, responses to antisocial forces, the environment, disasters, quality, information security, credit management, investment & financing, and export management. When an unexpected situation occurs, an Emergency Management Headquarters is immediately established to implement countermeasures in accordance with our Emergency Management Protocol.

In addition to the above, the Board of Directors promptly appoints directors to be responsible for responding to risks that have newly arisen and establishes systems for responding appropriately.

We also conduct annual disaster prevention drills in preparation for emergencies. Our main sites conduct fire drills and large-scale disaster-response drills envisioning various situations, such as an earthquake or tsunami. Our disaster preparation also includes stockpiles of emergency supplies at all sites.

## Information security policy

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We are a manufacturer specializing in surface modification coatings that is both a solutions provider company responding promptly and suitably to customer needs and an R&D-driven company constantly developing and delivering high-quality, high-performance coatings. Ensuring information security is therefore of utmost importance, and we accordingly implement the following measures:

1. Maintain management rules regarding information security
2. Provide information security training to officers and employees
3. Conduct safety management for contractors handling confidential information
4. Confirm compliance status through self-monitoring and internal audits
5. Regularly review the information security management system

# Countermeasures to prevent the spread of COVID-19

## Countermeasures to prevent the spread of COVID-19

### —Safety for employees and customers—

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The COVID-19 pandemic has affected Japan and the world and has transformed our lives.

TOCALO is implementing measures to prevent the spread of the disease with an emphasis on the following concepts.

- Prioritizing the safety of employees and their families, customers, and business partners.
- Ensuring thorough risk management for business continuity.

In February 2020, in accordance with the basic policies announced by the government, our Company began measures to prevent infections, such as avoiding the three Cs (closed spaces, crowded places, and close-contact settings) and wearing masks, while maintaining the operations of our plants. On March 1, we established the COVID-19 Countermeasure Headquarters headed by our President, and then implemented measures related to commuting to work, sales activities, and internal operations based on “not getting COVID-19,” “not passing on COVID-19,” and “not bringing in COVID-19.” To continue our business and protect the health of employees, we have been revising these measures according to the situation. The measures remain in effect as of August 2022.

During the COVID-19 crisis, we have been doing our utmost to work closely with our customers and fulfill their requests while paying abundant attention to safety. We are continuing our ongoing earnest efforts to contribute to society through our surface modification technologies.

## Specific countermeasures

### TOCALO initiatives (January 2020 to end of August 2022)

(Scope of report: TOCALO domestic facilities)

#### January 2020 to March 2020 Confirmation of COVID-19 infection and prompt launch of measures to prevent spread of infections in Japan

January	<b>1/16 First confirmation of infection in Japan</b>
February	<ul style="list-style-type: none"><li>■ Donation of masks to subsidiaries in China</li><li>■ Checking of employees' temperatures before work every day</li><li>■ Promotion of staggered work hours</li><li>■ Voluntarily refraining from going on business trips</li><li>■ Promotion of web conferencing</li><li>■ Guidance on wearing masks</li></ul>
March	<b>3/9 Expert Meeting calls for "avoiding 3Cs"</b> <ul style="list-style-type: none"><li>■ Establishment of COVID-19 Response Headquarters</li><li>■ Refraining from visits as much as possible</li><li>■ Formulation of Work Attendance Standards as COVID-19 countermeasure</li><li>■ Promoting avoidance of 3Cs at dining halls</li><li>■ Allowing driving to work to avoid public transportation</li></ul>

April 2020 to May 2020 Issuance of state of emergency declaration, enhancement of measures



April	<p><b>4/7 Issuance of state of emergency declaration in seven prefectures</b> <b>4/16 Expansion of state of emergency declaration to all of Japan, with 13 prefectures as Prefectures under Specific Cautions</b></p> <ul style="list-style-type: none"><li>■ Telework Promotion</li><li>■ Distribution of 50 masks per employee, request for thorough wearing of masks</li><li>■ Training of new employees shifted to online training</li></ul>
May	<p><b>5/27 Lifting of state of emergency declaration</b></p> <ul style="list-style-type: none"><li>■ Resumption of customer visits (with prior approval from customers required)</li></ul>

June 2020 Responding to “new normal” and flexible shifting of measures



June	<p><b>6/19 Government announcement of phased easing</b></p> <ul style="list-style-type: none"><li>■ In response to the easing of measures by the government, our measures were reviewed (wearing of masks, telework, staggered work hours, business trips, commuting by car, etc.).</li><li>■ Donations were made to seven domestic medical institutions.</li></ul>
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## July 2020 to December 2020 Start and end of Go To Travel



July	<b>7/22 Start of Go To Travel campaign (excluding Tokyo)</b> <ul style="list-style-type: none"><li>■ Strengthening of measures accompanying spread of infections (regarding wearing of masks, business trips, etc.)</li></ul>
September	<ul style="list-style-type: none"><li>■ Having company partly cover expenses for PCR tests and antibody tests following business trips and construction if requested (including family members)</li></ul>
December	<b>12/15 Decision for nationwide suspension of Go To Travel</b> <ul style="list-style-type: none"><li>■ Recommending commuting by car in order to avoid public transportation</li><li>■ Discouraging company visits by guests</li><li>■ Online implementation of ISO 14001 internal audit regarding some offices</li></ul>

## January 2021 to March 2021 Second state of emergency declaration and start of vaccinations



January	<b>1/8 Issuance of state of emergency declaration in four prefectures</b>
February	<b>2/17 Start of COVID-19 vaccinations in Japan</b>
March	<b>3/21 Lifting of state of emergency declaration</b> <ul style="list-style-type: none"><li>■ Allowing of business trips, including outside of prefecture, as necessary</li><li>■ Allowing of visits by guests</li></ul>

## April 2021 to June 2021 Third state of emergency declaration, strengthening of measures



April	<p><b>4/5 Application of semi-state of emergency measures in three prefectures</b></p> <p><b>4/25 Issuance of state of emergency declaration in four prefectures</b></p> <ul style="list-style-type: none"><li>■ Strengthening measures (wearing of masks, etc.)</li><li>■ Installing disinfection devices and CO<sub>2</sub> measurement devices in closed spaces whenever possible</li><li>■ Recommending telework, staggered work hours, commuting by car, etc.</li><li>■ Voluntarily refraining from going on business trips</li><li>■ Discouraging company visits by guests</li></ul>
May	<ul style="list-style-type: none"><li>■ Permission for taking of compensated half holiday or compensated holiday on day of vaccination (and the next day onward in the case of fever)</li></ul>
June	<p><b>6/20 Lifting of state of emergency declaration in all prefectures except Okinawa</b></p> <ul style="list-style-type: none"><li>■ Establishment of period of isolation measures following returns to Japan from overseas business trips</li></ul>

## July 2021 – Fourth state of emergency declaration and holding of Tokyo Olympics & Paralympics



July	<p><b>7/12 Issuance of state of emergency declaration in Tokyo</b></p> <p><b>7/21 Start of Tokyo Olympics</b></p>
August	<p><b>8/2 Issuance of state of emergency declaration in four prefectures, application of semi-state of emergency measures in five prefectures</b></p> <p><b>8/24 Start of Tokyo Paralympics</b></p>



January	<b>1/18 Internal countermeasures for the Omicron variant reviewed and refortified</b>
March	<b>3/21 Priority prevention measures discontinued, general coronavirus countermeasures maintained</b>  ■ Measures ongoing

## Work style

### Staggered work hours

We implemented this to avoid the 3Cs during commuting. It also helped to reduce the density of locker rooms and dining halls.

### Web conferencing

We actively implemented web conferences in order to avoid the 3Cs. With this, we can also interact with people far away immediately and see their faces. This led to more efficient business operations.

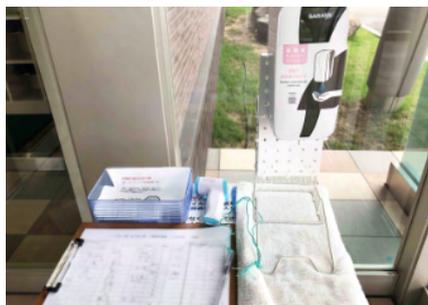
### Telework

We introduced telework actively to divisions/departments capable of such a workstyle. We were able to participate in web conferences from home as well and were able to use time effectively.

### Driving to work

Although driving to work was not permitted except for some business locations, it was temporarily allowed as a countermeasure for COVID-19.

## Daily operations



### Temperature measurement and disinfection

Alcohol disinfectant bottles were set out in various locations to encourage frequent disinfection. Employee and visitor temperatures were taken, and safety measures implemented. Online management of daily temperatures and concerns were begun to provide timely daily assessment of the health status of employees and their families. The system enabled immediate measures to be taken to prevent the infection from spreading.



### Wearing masks

We have distributed masks to all employees, and have decided that masks should be worn during work at all times except in the following situations: (i) when walking alone during commuting, (ii) when alone in an isolated room, and (iii) when eating, smoking, and taking breaks. We have implemented measures to ensure that a distance of at least two meters is maintained from the nearest person, and this has included making marks on the ground for standing positions at locations where masks are removed.



### Cafeteria

We removed seats from one side of tables and prohibited face-to-face seating during meals. At some sites, we divided employees into two groups and staggered lunch times. In addition, CO<sub>2</sub> concentration meters were installed to monitor air circulation.

## Business sites



### Use of conference rooms

To avoid the 3Cs, large meetings were held online and seats were adequately spaced and partitions set up in conference rooms. Desks were moved to make use of unused conference rooms. CO<sub>2</sub> concentration meters were installed in all rooms for regular monitoring of air circulation.



### Desk layout

We rearranged desks to avoid face-to-face seating and create space in between them. Between the desks, shields were installed to prevent spread of droplets.

Note: The shield is marked with a dotted line in the photo.



### 3C countermeasures among workers

Manufacturing sites have relatively more distance between workers, but there are also cases in which people work at a close distance. In such case, 3C avoidance measures were taken with vinyl sheets, etc., and careful consideration was given to the safety of workers and products.

Note: The photograph has been partially edited out of consideration for confidentiality.



Data on this website is presented in reference to the GRI Sustainability Reporting Standards. Further details on each item are available at the provided links.

[102 : General Disclosures](#)
[103 : Management Approach](#)
[200 : Economic](#)
  
[300 : Environmental](#)
[400 : Social](#)

## 102 : General Disclosures

### Organizational profile

Number	Title of disclosure	Corresponding page
102-1	Name of the organization	About us > Company data <a href="#">▶</a>
102-2	Activities, brands, products, and services	Technology <a href="#">▶</a>
102-3	Location of headquarters	About us > Location of plants and offices <a href="#">▶</a>
102-4	Location of operations	About us > Location of plants and offices <a href="#">▶</a>
102-5	Ownership and legal form	About us > Company data <a href="#">▶</a>
102-6	Markets served	About us > Company data <a href="#">▶</a>
102-7	Scale of the organization	About us > Company data <a href="#">▶</a>

Number	Title of disclosure	Corresponding page
102-8	Information on employees and other workers	<a href="#">About us &gt; Company data</a> 
		<a href="#">Sustainability &gt; Together with society: Together with our employees</a> 
102-9	Supply chain	<a href="#">About us &gt; Company data</a> 
102-10	Significant changes to the organization and its supply chain	—
102-11	Precautionary Principle or approach	—
102-12	External initiatives	—
102-13	Membership of associations	—

## Strategy

Number	Title of disclosure	Corresponding page
102-14	Statement from senior decision-maker	<a href="#">About us &gt; Greetings</a> 
		<a href="#">Investor relations &gt; Management policy &gt; Message from the President</a> 
		<a href="#">Sustainability &gt; Message from the President</a> 
102-15	Key impacts, risks, and opportunities	<a href="#">Investor relations &gt; Focus issues</a> 
		<a href="#">Investor relations &gt; Business risks</a> 

## Ethics and integrity

Number	Title of disclosure	Corresponding page
102-16	Values, principles, standards, and norms of behavior	Investor relations > Management policy > Management policy <a href="#">▶</a>
102-17	Mechanisms for advice and concerns about ethics	Investor relations > Management policy > Compliance <a href="#">▶</a>
		Investor relations > Management policy > Corporate governance <a href="#">▶</a>

## Governance

Number	Title of disclosure	Corresponding page
102-18	Governance structure	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-19	Delegating authority	—
102-20	Executive-level responsibility for economic, environmental, and social topics	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-21	Consulting stakeholders on economic, environmental, and social topics	—
102-22	Composition of the highest governance body and its committees	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-23	Chair of the highest governance body	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-24	Nominating and selecting the highest governance body	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-25	Conflicts of interest	Investor relations > Management policy > Corporate governance <a href="#">▶</a>

Number	Title of disclosure	Corresponding page
102-26	Role of highest governance body in setting purpose, values, and strategy	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-27	Collective knowledge of highest governance body	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-28	Evaluating the highest governance body's performance	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-29	Identifying and managing economic, environmental, and social impacts	—
102-30	Effectiveness of risk management processes	—
102-31	Review of economic, environmental, and social topics	—
102-32	Highest governance body's role in sustainability reporting	—
102-33	Communicating critical concerns	—
102-34	Nature and total number of critical concerns	—
102-35	Remuneration policies	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-36	Process for determining remuneration	Investor relations > Management policy > Corporate governance <a href="#">▶</a>
102-37	Stakeholders' involvement in remuneration	—
102-38	Annual total compensation ratio	—
102-39	Percentage increase in annual total compensation ratio	—

## Stakeholder engagement

Number	Title of disclosure	Corresponding page
102-40	List of stakeholder groups	—
102-41	Collective bargaining agreements	—
102-42	Identifying and selecting stakeholders	—
102-43	Approach to stakeholder engagement	—
102-44	Key topics and concerns raised	—

## Reporting practice

Number	Title of disclosure	Corresponding page
102-45	Entities included in the consolidated financial statements	—
102-46	Defining report content and topic Boundaries	—
102-47	List of material topics	Sustainability > Long-term vision and materiality <a href="#">▶</a>
102-48	Restatements of information	Sustainability > For the environment : Material balance <a href="#">▶</a>
		Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>
102-49	Changes in reporting	—
102-50	Reporting period	Sustainability (Editorial Policy) <a href="#">▶</a>

Number	Title of disclosure	Corresponding page
102-51	Date of most recent report	—
102-52	Reporting cycle	—
102-53	Contact point for questions regarding the report	—
102-54	Claims of reporting in accordance with the GRI Standards	GRI Standards reference table <a href="#">▶</a>
102-55	GRI content index	GRI Standards reference table <a href="#">▶</a>
102-56	External assurance	—

## 103 : Management Approach

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Number	Title of disclosure	Corresponding page
103-1	Explanation of the material topic and its Boundary	Sustainability > Long-term vision and materiality <a href="#">▶</a>
103-2	The management approach and its components	Sustainability > For the environment : Environmental management <a href="#">▶</a>
103-3	Evaluation of the management approach	—

## 200 : Economic

### Economic Performance

Number	Title of disclosure	Corresponding page
201-1	Direct economic value generated and distributed	Investor relations > Management policy > Financial highlights <a href="#">▶</a>
201-2	Financial implications and other risks and opportunities due to climate change	Investor relations > Business risks <a href="#">▶</a>
		Sustainability > For the environment : Response to the TCFD Recommendations <a href="#">▶</a>
201-3	Defined benefit plan obligations and other retirement plans	—
201-4	Financial assistance received from government	—

### Market Presence

Number	Title of disclosure	Corresponding page
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	—
202-2	Proportion of senior management hired from the local community	—

## Indirect Economic Impacts

Number	Title of disclosure	Corresponding page
203-1	Infrastructure investments and services supported	—
203-2	Significant indirect economic impacts	—

## Procurement Practices

Number	Title of disclosure	Corresponding page
204-1	Proportion of spending on local suppliers	—

## Anti-corruption

Number	Title of disclosure	Corresponding page
205-1	Operations assessed for risks related to corruption	—
205-2	Communication and training about anti-corruption policies and procedures	—
205-3	Confirmed incidents of corruption and actions taken	Investor relations > Management policy > Compliance <a href="#">▶</a>

## Anti-competitive Behavior

Number	Title of disclosure	Corresponding page
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No violation (FY2021)

## Tax

Number	Title of disclosure	Corresponding page
207-1	Approach to tax	—
207-2	Tax governance, control, and risk management	—
207-3	Stakeholder engagement and management of concerns related to tax	—
207-4	Country-by-country reporting	—

## 300 : Environmental

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### Materials

Number	Title of disclosure	Corresponding page
301-1	Materials used by weight or volume	Sustainability > For the environment : Material balance <a href="#">▶</a>
301-2	Recycled input materials used	—
301-3	Reclaimed products and their packaging materials	—

## Energy

Number	Title of disclosure	Corresponding page
302-1	Energy consumption within the organization	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>
302-2	Energy consumption outside of the organization	—
302-3	Energy intensity	—
302-4	Reduction of energy consumption	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>
302-5	Reductions in energy requirements of products and services	—

## Water and Effluents

Number	Title of disclosure	Corresponding page
303-1	Interactions with water as a shared resource	—
303-2	Management of water discharge-related impacts	—
303-3	Water withdrawal	Sustainability > For the environment : Material balance <a href="#">▶</a>
303-4	Water discharge	Sustainability > For the environment : Material balance <a href="#">▶</a>
		Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>

Number	Title of disclosure	Corresponding page
303-5	Water consumption	Sustainability > For the environment : Material balance <a href="#">▶</a>

## Biodiversity

Number	Title of disclosure	Corresponding page
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	—
304-2	Significant impacts of activities, products and services on biodiversity	—
304-3	Habitats protected or restored	—
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	—

## Emissions

Number	Title of disclosure	Corresponding page
305-1	Direct (Scope 1) GHG emissions	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>
		Sustainability > For the environment : Response to the TCFD Recommendations <a href="#">▶</a>
305-2	Energy indirect (Scope 2) GHG emissions	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>

Number	Title of disclosure	Corresponding page
		Sustainability > For the environment : Response to the TCFD Recommendations <a href="#">▶</a>
305-3	Other indirect (Scope 3) GHG emissions	—
305-4	GHG emissions intensity	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>
305-5	Reduction of GHG emissions	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>
305-6	Emissions of ozone-depleting substances (ODS)	—
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>

## Waste

Number	Title of disclosure	Corresponding page
306-1	Waste generation and significant waste-related impacts	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>
306-2	Management of significant waste-related impacts	—
306-3	Waste generated	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>
306-4	Waste diverted from disposal	Sustainability > For the environment : Material balance <a href="#">▶</a>

Number	Title of disclosure	Corresponding page
306-5	Waste directed to disposal	Sustainability > For the environment : Measures to reduce environmental impact <a href="#">▶</a>

## Environmental Compliance

Number	Title of disclosure	Corresponding page
307-1	Non-compliance with environmental laws and regulations	Sustainability > For the environment : Environmental management <a href="#">▶</a>

## Supplier Environmental Assessment

Number	Title of disclosure	Corresponding page
308-1	New suppliers that were screened using environmental criteria	—
308-2	Negative environmental impacts in the supply chain and actions taken	—

## 400 : Social

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### Employment

Number	Title of disclosure	Corresponding page
401-1	New employee hires and employee turnover	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	—
401-3	Parental leave	Sustainability > Together with society: Together with our employees <a href="#">▶</a>

### Labor/Management Relations

Number	Title of disclosure	Corresponding page
402-1	Minimum notice periods regarding operational changes	—

### Occupational Health and Safety

Number	Title of disclosure	Corresponding page
403-1	Occupational health and safety management system	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
403-2	Hazard identification, risk assessment, and incident investigation	—

Number	Title of disclosure	Corresponding page
403-3	Occupational health services	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
403-4	Worker participation, consultation, and communication on occupational health and safety	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
403-5	Worker training on occupational health and safety	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
403-6	Promotion of worker health	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
403-8	Workers covered by an occupational health and safety management system	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
403-9	Work-related injuries	—
403-10	Work-related ill health	—

## Training and Education

Number	Title of disclosure	Corresponding page
404-1	Average hours of training per year per employee	—
404-2	Programs for upgrading employee skills and transition assistance programs	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
404-3	Percentage of employees receiving regular performance and career development reviews	—

## Diversity and Equal Opportunity

Number	Title of disclosure	Corresponding page
405-1	Diversity of governance bodies and employees	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
405-2	Ratio of basic salary and remuneration of women to men	—

## Non-discrimination

Number	Title of disclosure	Corresponding page
406-1	Incidents of discrimination and corrective actions taken	Sustainability > Together with society: Together with our employees <a href="#">▶</a>

## Freedom of Association and Collective Bargaining

Number	Title of disclosure	Corresponding page
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	—

## Child Labor

Number	Title of disclosure	Corresponding page
408-1	Operations and suppliers at significant risk for incidents of child labor	—

## Forced or Compulsory Labor

Number	Title of disclosure	Corresponding page
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	—

## Security Practices

Number	Title of disclosure	Corresponding page
410-1	Security personnel trained in human rights policies or procedures	—

## Rights of Indigenous Peoples

Number	Title of disclosure	Corresponding page
411-1	Incidents of violations involving rights of indigenous peoples	No violation (FY2021)

## Human Rights Assessment

Number	Title of disclosure	Corresponding page
412-1	Operations that have been subject to human rights reviews or impact assessments	—
412-2	Employee training on human rights policies or procedures	Sustainability > Together with society: Together with our employees <a href="#">▶</a>
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	—

## Local Communities

Number	Title of disclosure	Corresponding page
413-1	Operations with local community engagement, impact assessments, and development programs	Sustainability > Together with society: Together with local communities <a href="#">▶</a>
413-2	Operations with significant actual and potential negative impacts on local communities	—

## Supplier Social Assessment

Number	Title of disclosure	Corresponding page
414-1	New suppliers that were screened using social criteria	—
414-2	Negative social impacts in the supply chain and actions taken	—

## Public Policy

Number	Title of disclosure	Corresponding page
415-1	Political contributions	—

## Customer Health and Safety

Number	Title of disclosure	Corresponding page
416-1	Assessment of the health and safety impacts of product and service categories	—
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	No violation (FY2021)

## Marketing and Labeling

Number	Title of disclosure	Corresponding page
417-1	Requirements for product and service information and labeling	—
417-2	Incidents of non-compliance concerning product and service information and labeling	No violation (FY2021)
417-3	Incidents of non-compliance concerning marketing communications	No violation (FY2021)

## Customer Privacy

Number	Title of disclosure	Corresponding page
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	No violation (FY2021)

## Socioeconomic Compliance

Number	Title of disclosure	Corresponding page
419-1	Non-compliance with laws and regulations in the social and economic area	No violation (FY2021)