

Sustainability

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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 2024) in an easy-to-understand manner about TOCALO and its consolidated subsidiaries with a focus on the activities of the parent company for fiscal 2023 (April 2023 to March 2024).



We support sustainable development goals (SDGs).

Message from the president

We will contribute to a sustainable society by develop human resources and supporting high-value manufacturing

Providing unique TOCALO value through manufacturing craftsmanship

Following my appointment as Representative Director, President and Executive Officer on June 23, 2023, I spent about one year visiting all of our operating sites in Japan and overseas. TOCALO has set a long-term vision (Goal for 2030) of “Contributing to a bright future for people and nature,” and two of our missions are to “Provide high quality and high value-added products (coatings) to customers” and “Contribute to environmentally friendly technologies.” In executing these two missions, we are taking steps to establish a new pillar of business in the environment & energy field. To use our business to contribute to a sustainable society, our challenges are to identify client needs and to unify our employees at our sales, manufacturing, and technology sites to boost our ability to provide solutions.

To do this, at the start of 2024, we introduced an initiative to share the client feedback that the sales departments of our plants across the country receive about our products and services with all employees. We started this initiative because we felt there was a gap in the understanding of client needs between the sales department, which has many opportunities to interact with clients, and employees in the manufacturing, technology, and other departments. Sharing the feedback also gives us opportunities to understand how our products are useful to our clients and how they are being used in society. I believe that even just the small action of sharing client feedback during morning meetings will raise awareness among all employees and motivate all of us at TOCALO to deepen our commitment to our craftsmanship in manufacturing.

Commitment to climate change action

Electricity accounts for 86% of the energy the Company uses. Three types of equipment consume a particularly large amount of electricity: compressors, dust collectors, and refrigeration equipment. While maintaining our standard of quality, we have implemented numerous measures to reduce power consumption, such as improving the efficiency and reducing the usage time of our thermal spraying equipment.

Climate change is having a growing impact around the world, and we are exploring initiatives for using our business to mitigate the impact, such as generating energy from renewable fuel sources. Based on the GHG emissions reduction target decided by the Japanese Cabinet in October 2021, we have set a target to reduce the consolidated Group’s Scope 1 and 2 greenhouse gas emissions by 46% in fiscal 2030



Kazuya Kobayashi
President and Representative
Director



compared to fiscal 2013, representing less than 54% of the fiscal 2013 amount.

We set an interim target of reaching the 54% reduction on a non-consolidated basis by fiscal 2025. However, our efforts to introduce renewable energy sources proved effective, and we reached the interim target early, in fiscal 2022. In addition, roughly 70% of our total energy now comes from renewable energy sources. Our advanced coating technologies are also helping reduce our clients' energy consumption and environmental impacts by increasing the durability and longevity of equipment parts.

The Environment Promotion Department created in fiscal 2021 leads energy conservation and environmental activities throughout the TOCALO Group and holds quarterly Energy Conservation and Environmental Meetings to share information and report on our environmental initiatives. In addition, executive officers attend semiannual Environmental Meetings to confirm the progress of initiatives associated with our global environment and climate change countermeasures. We plan to increase measures to continue raising employee awareness of environmental issues.

Stimulating the “spirit of taking on challenges” and leading us to the next stage of growth



Each and every TOCALO employee must contribute for us to use our “manufacturing craftsmanship” and our business to reduce our environmental impact and help combat the impact of climate change. When I visited our operating sites in Japan and overseas and saw how dedicated our employees are, I decided to create an organization that fully supports and encourages all employees, no matter what level they are at in their careers, who are enthusiastic about pursuing new ideas and new directions. I also started thinking about what makes us TOCALO and reaffirmed that we should use our four corporate mottos of Technology and Ideas, Youth and Passion, Harmony and Reliability, and Good Service as a code of conduct for our employees. I believe that Good Service is especially important because it leads to better craftsmanship and quality for our clients and also improves our technology development.

My goal as president is to ensure that every employee conducts their daily activities guided by the four corporate mottos and that we advance our missions to “Be always trusted by customers, shareholders, business partners, and local residents” and “Be a company that all employees and their families are proud of, and create a safe working environment where employees enjoy working.” We will continue providing high quality and high value-added products as the “best partner for our clients” in all areas as we fulfill our long-term Vision of “Contributing to a bright future for people and nature.”



We will become a 100-year company by everyone working together and aware of the need to earn the trust of all stakeholders

Hiroshi Goto
Director,
Managing Executive Officer; General Manager, Administrative Headquarters

I serve as a Company director and participate in management as the General Manager of the Administrative Headquarters and as the Director of Sustainability. Our company provides high-performance coatings that support the foundation of people's lives, and our products are helping realize a sustainable society by reducing energy consumption and extending the useful life of equipment in the renewable energy field. Focusing our business on "sustainability" has enabled TOCALO's market capitalization to grow to some ¥120 billion.

As we continue expanding our business, I believe our social responsibility will also increase. In many ways, our corporate governance has been driven by outside influences, but I think we have to do more as a company on the Prime Market of the Tokyo Stock Exchange seeking to grow our business in the medium and long term.

Achieving sustainable growth for the Company will require each and every employee to understand that their actions are related to our ability to earn the trust of all of our stakeholders.

This connects to "Thorough compliance (acting in accordance with corporate ethics)," which is one of the five issues of materiality we must address to fulfill our long-term Vision of "Contributing to a bright future for people and nature."

I consider my role to be to promote awareness within the Company so every employee understands that they are part of earning stakeholder trust. Some of the ways we promote awareness are through engagement surveys, purpose training programs, position-specific training sessions that are also attended by management personnel, and direct dialogue with employees. The objective is to engage in dialogue within the company and to make employees at all levels aware of the relationship between their actions and the company's overall growth.

In the purpose training, each employee was asked to define and share their what would make them feel fulfilled in their work. This was the first time we held these training sessions, and it was a great opportunity to learn about and appreciate our employees' positive outlooks, which gave us insight to how TOCALO should seek to evolve in the future. Employees said it was interesting to exchange views with employees at other plants who they do not usually get a chance to talk with. I believe the sessions have made it easier to communicate more spontaneously across the organization.

We are currently at the stage of engaging in dialogue within the company and fostering employee awareness, and we will continue efforts like these to increase employee awareness of their role earning stakeholder trust. I hope to continue providing opportunities for forward-looking employees pursue their visions. Along with our capital investment, we will continue actively investing in our human capital.

We will be particularly active in investing in human resources who we project to become future leaders of the Company. Increasing the number of people capable of leading our growth will be a first step, which we will do by being a company that encourages and rewards employees who are enthusiastic and passionate about their work.

In this year, the 74th anniversary of our founding, we are building the management foundation and raising employee awareness about earning stakeholder trust as we prepare to become a 100-year company. I believe that what TOCALO should do is what I should do, and I will continue to fulfill the responsibility of my position and lead TOCALO to sustainable growth.

Long-term vision and materiality

Long-term vision and mission

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 and KPI

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.

Furthermore, we have set key performance indicators (KPIs) to manage our materiality.

Materiality	Main initiatives	Related information
1. Advanced coating and latent market development	Invest with a focus on developing advanced coatings <ul style="list-style-type: none"> ● Develop high-performance coatings for the foundational elements of people's lives (such as digitalization, infrastructure, medical care, agriculture) ● Develop coatings that help proliferate and improve the efficiency of renewable energy power generation (such as wind power, hydropower, geothermal power, storage batteries) ● Develop coatings that help customers reduce greenhouse gas emissions (by supporting non-fossil fuels, recycling equipment) 	Solutions ▶ Surface modification technology's ability to protect the future global environment ▶ Quality management and customer satisfaction ▶
	Offer optimal solutions to customers <ul style="list-style-type: none"> ● Grow from a supplier to a partner ● Set up projects in priority areas ● Foster experts in problem-solving 	
2. Environmental impact reduction measures	Advance decarbonization (carbon neutrality) <ul style="list-style-type: none"> ● Investigate thermal spraying methods that do not use fossil fuel ● Reduce power consumption by improving processing methods ● Use renewable energy 	Environmental management ▶ Material balance ▶ Targets and results ▶ Climate change measures ▶ Waste reduction and environmental conservation ▶
	Measures to reduce waste and protect the environment <ul style="list-style-type: none"> ● Reduce, recycle, and properly dispose of waste ● Understand and improve water and air pollution conditions ● Reduce the use of harmful substances 	
3. Manufacturing sophistication and quality improvement	Improve manufacturing process sophistication and efficiency <ul style="list-style-type: none"> ● Promote automation and IoT ● Begin practical application of new coating formation technology ● Create smart on-site construction 	Quality management and customer satisfaction ▶

Materiality	Main initiatives	Related information
	<p>Reinforce the quality control system</p> <ul style="list-style-type: none"> ● Establish and promote product performance assurance ● Implement quality controls systems (such as ISO) ● Construct a Product Qualification Plan 	
<p>4. Cultivate and activate diverse human resources</p>	<p>Form a medium- and long-term human resource development plan</p> <ul style="list-style-type: none"> ● Develop human resources and technical training ● Methodically develop global human resources 	<p>Human resource development ▶</p> <p>Occupational safety and health ▶</p> <p>Diversity ▶</p>
	<p>Create a comfortable work environment</p> <ul style="list-style-type: none"> ● Fully engage in safety first ● Promote diversity (value the talents of women, persons with disabilities, mid-career employment) ● Promote workstyle reform 	
<p>5. Thorough compliance (acting in accordance with corporate ethics)</p>	<p>Lay the management foundation for a long-surviving company</p> <ul style="list-style-type: none"> ● Act in accordance with corporate ethics (social mores, ethics and morals, the environment, local community contribution) ● Actively promote ESG initiatives ● Promote engagement with domestic and foreign investors ● Fully comply with the Corporate Governance Code 	<p>Compliance ▶</p> <p>Corporate governance ▶</p>

1. Advanced coating and latent market development

Main initiatives	KPI	Definition	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
<p>Invest with a focus on developing advanced coatings</p> <ul style="list-style-type: none"> Develop high-performance coatings for the foundational elements of people’s lives (such as digitalization, infrastructure, medical care, agriculture) Develop coatings that help proliferate and improve the efficiency of renewable energy power generation (such as wind power, hydropower, geothermal power, storage batteries) Develop coatings that help customers reduce greenhouse gas emissions (by supporting non-fossil fuels, recycling equipment) 	No. of patents owned	(1) Domestic patents (2) Overseas patents	Total: 280	Total: 257	Total: 262	Total: 251
	No. of patent applications	(1) Domestic applications (2) Overseas applications (including Patent Cooperation Treaty applications)	Total: 30	Total: 40	Total: 33	Total: 31
	Ratio of development spending to sales (consolidated)	(R&D spending + technical development spending) ÷ sales x 100	5%	5%	4.7%	5%

Main initiatives	KPI	Definition	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
Offer optimal solutions to customers <ul style="list-style-type: none"> • Grow from a supplier to a partner • Set up projects in priority areas • Foster experts in problem-solving 	Financial value of orders received in environmental field (1) Environmental and energy equipment (2) Repaired and refurbished products	Financial value of orders received for surface treatment processing in the following areas: (1) Environmental and energy equipment (devices, facilities, and services relating to the prevention of environmental pollution, measures to counter global warming, processing of waste and effective use of resources, and conservation of the natural environment) (2) Repaired and refurbished products (items suited to reuse and refurbished use)	(1) 2,000 million yen (2) 8,500 million yen Total: 10,500 million yen	(1) 1,913 million yen (2) 7,229 million yen Total: 9,143 million yen	(1) 1,326 million yen (2) 6,401 million yen Total: 7,727 million yen	(1) 891 million yen (2) 6,117 million yen Total: 7,008 million yen
	Ratio of overseas sales (consolidated)	(1) Sales to foreign companies (2) Royalties received from overseas (3) Sales of overseas subsidiaries	Total: 25%	Total: 28.2%	Total: 23.3%	Total: 21.1%

2. Environmental impact reduction measures

Main initiatives	KPI	Definition	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
<p>Advance decarbonization (carbon neutrality)</p> <ul style="list-style-type: none"> Investigate thermal spraying methods that do not use fossil fuel Reduce power consumption by improving processing methods Use renewable energy 	Greenhouse gas emissions (Scope 1, 2)	Non-consolidated Scope 1 and 2 emissions (Fiscal 2013 emissions: 14,736 t-CO ₂)	7,900 t-CO ₂ (Achieved less than 54% of fiscal 2013 emissions)	7,819 t-CO ₂	6,990 t-CO ₂	17,450 t-CO ₂
<p>Measures to reduce waste and protect the environment</p> <ul style="list-style-type: none"> Reduce, recycle, and properly dispose of waste Understand and improve water and air pollution conditions Reduce the use of harmful substances 	Ratio of waste recycled	Recycled volume ÷ (volume of waste + recycled volume) x 100	40%	48.6%	33.1%	30.7%

3. Manufacturing sophistication and quality improvement

Main initiatives	KPI	Definition	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
Improve manufacturing process sophistication and efficiency <ul style="list-style-type: none"> Promote automation and IoT Begin practical application of new coating formation technology Create smart on-site construction 	Amount of capital investment contributing to improving sophistication and efficiency of manufacturing process	Capital investment for promotion of automation and IoT and practical application of new coating formation technology	400 million yen	298 million yen	—	—
Reinforce the quality control system <ul style="list-style-type: none"> Establish and promote product performance assurance Implement quality controls systems (such as ISO) Construct a Product Qualification Plan 	No. of employees passing QC test	No. of employees passing test (Grade 3 or higher) relating to quality control approved by the Japanese Society for Quality Control (total number)	60 persons	91 persons	49 persons	31 persons
	No. of employees possessing qualifications as nondestructive inspection engineers	No. of employees possessing qualifications as nondestructive testing engineers approved by the Japanese Society for Non-Destructive Inspection (1) Penetrant testing (2) Ultrasonic testing	Total: 25 persons	Total: 20 persons	Total: 18 persons	Total: 15 persons

4. Cultivate and activate diverse human resources

Main initiatives	KPI	Definition	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
Form a medium- and long-term human resource development plan <ul style="list-style-type: none"> • Develop human resources and technical training • Methodically develop global human resources 	No. of technology-related external presentations	(1) Presentations to professional societies (2) Published essays and commentary articles	Total: 25	Total: 21	Total: 28	Total: 18
	Number of certified technicians	Number of employees possessing technical qualifications Number of people possessing the following national qualification (total) (1) Spraying technician (2) Machining technician (Grade 2 or higher) (3) Metal heat treatment technician (Grade 3 or higher)	Total: 240 persons	Total: 231 persons	Total: 226 persons	Total: 178 persons
	Educational spending per employee	Annual educational spending ÷ no. of employees at end of term (including temporary employees)	80,000 yen	75,800 yen	63,200 yen	54,200 yen

Main initiatives	KPI	Definition	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
Create a comfortable work environment <ul style="list-style-type: none"> Fully engage in safety first Promote diversity (value the talents of women, persons with disabilities, mid-career employment) Promote workstyle reform 	Rate of frequency of occupational accidents	No. of deaths and injuries due to occupational accidents ÷ total no. of actual working hours x 1,000,000	Aiming for zero	2.06 (Including temporary employees)	1.80 (Not including temporary employees)	0.62 (Not including temporary employees)
	Severity rate of occupational accidents	Total no. of working days lost ÷ total no. of actual working hours x 1,000	Aiming for zero	0.08 (Including temporary employees)	0.03 (Not including temporary employees)	0.00 (Not including temporary employees)
	Ratio of female full-time employees	No. of female full-time employees ÷ total no. of full-time employees x 100	13%	12.2%	11.0%	9.5%
	Ratio of female managers	No. of female managers ÷ total no. of managers x 100	5%	2.1%	2.3%	1.4%
	Ratio of men taking childcare leave	No. of men taking childcare leave ÷ no. of men eligible for childcare leave x 100	90%	82.8%	68.0%	31.3%

5. Thorough compliance (acting in accordance with corporate ethics)

Main initiatives	KPI	Definition	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
<p>Lay the management foundation for a long-surviving company</p> <ul style="list-style-type: none"> Act in accordance with corporate ethics (social mores, ethics and morals, the environment, local community contribution) Actively promote ESG initiatives Promote engagement with domestic and foreign investors Fully comply with the Corporate Governance Code 	Ratio of employees receiving compliance training	No. of employees receiving compliance training ÷ no. of eligible employees x 100	100%	100% (Conducted 4 times)	100% (Conducted 3 times)	—

Outside Directors Roundtable Discussion

TOCALO is seeking to enhance its corporate value by providing solutions for social issues based on its long-term Vision (Goal for 2030) of “Contributing to a bright future for people and nature,” and its mission to “Enhance corporate value through continuous growth focused on ESG.”

Four of the Company’s outside directors sat down to share their views on TOCALO’s ESG management and talk about future issues they see for the Company.



Kazuyuki Tomita

Director
(Part-time)
[View Career Information](#)

Keiko Takihara

Director
(Part-time)
[View Career Information](#)

Toshimitsu Kamakura

Director
(Part-time)
[View Career Information](#)

Yoko Sato

Director
(Part-time)
[View Career Information](#)

<p>Kazuyuki Tomita began his career in 1982 at Matsushita Electric Industrial Co., Ltd. (currently Panasonic Corporation) where he was in charge of semiconductor process and equipment development. He later served as General Manager of the Elemental Technology Development Center of Panasonic Mobile Communications Co., Ltd., President of Panasonic Eco Technology Center Co., Ltd., President, Panasonic Environmental Technology Solutions Co., Ltd. , and in other positions before his appointment as an outside director at TOCALO in 2021. Mr. Tomita</p>	<p>Keiko Takihara received a Ph.D. as a Medical Doctor from Osaka University in 1986. In 2008, she was appointed as a professor at the Osaka University Health Center (currently the Health and Counseling Center, Osaka University) and professor of cardiovascular medicine at the Department of Cardiovascular Medicine, Osaka University Graduate School of Medicine. She subsequently held positions as director of the Health and Counseling Center, as assistant to the president, and as vice president of Osaka University. She has served as an outside director</p>	<p>Toshimitsu Kamakura registered as an attorney at law and joined Kamakura and Higaki Law Office (currently Higaki-Kamakura-Terahiro Law Office) in 1990, where he has been a partner of the firm since 1995. Mr. Kamakura joined TOCALO as an outside director in 2019 and concurrently serves as an outside auditor of Kinden Corporation.</p>	<p>Yoko Sato began her career at Showa Ota & Co. (currently Ernst & Young ShinNihon LLC) in 1986. She registered as a certified public accountant in 1990 and became a senior partner of Ernst & Young ShinNihon LLC in 2011. In 2019, she opened the Yoko Sato Certified Public Accountant Office. Ms. Sato joined TOCALO as an outside director in 2020 and concurrently serves as an outside auditor of Japan Cash Machine Co., Ltd. and an outside director of Sanyo Electric Railway Co., Ltd.</p>
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concurrently serves as a technical advisor to the Osaka Business Development Agency and an outside director of Qualtec Co., Ltd. at TOCALO since 2018. Ms. Takihara concurrently serves as professor emeritus at Osaka University and director of the Health Promotion Center of The Kinki Sharyo Co., Ltd.

What are your thoughts on TOCALO's current ESG management?

Summary

- ESG management is being applied by using specific KPIs to monitor the Company's performance and in other ways with the aim of generating sustaining growth.
- Management's environmental efforts are contributing significantly to society because the Company's business content addresses social issues.
- The Company has made substantial progress with social activities, which have included creating a Diversity Promotion Office and receiving certification as a Health and Productivity Management Outstanding Organization. However, room for improvement remains, including in the depth of internal adoption of social initiatives.
- Governance has been strengthened in recent years, including establishing a Compliance Committee and Risk Management Committee and revising the whistleblowing system.

Investing in human capital is key to both ESG management and business growth

Kamakura

Surface modification technology helps reduce the environmental impact of manufacturing operations. TOCALO's ESG management and its growth strategy are thus two sides of the same coin because increasing its business provides more contribution to protecting the environment. Investing in human capital is essential to increasing both its business and its environmental contribution. It's pleasing to see management actively discussing ways to better create a growth environment for employees.

Takahara

The Company created the Diversity Promotion Division and has made great progress with human resources initiatives in recent years. I recommended last year that TOCALO apply to the Ministry of Economy, Trade and Industry for certification as a Health and Productivity Management Outstanding Organization, and it was wonderful to see the Company be certified on its first attempt.

At the same time, I am closely following the Company's progress with its items of materiality to "Improvement of manufacturing process sophistication and efficiency" and "Cultivation and activation of diverse human resources." There is particularly more potential to promote the empowerment of women in the workforce. I believe management is aiming to increase the number of female directors and plant managers in the near future. It will be important to increase awareness throughout the Company about the importance of diversity.

Kamakura

The number of female employees has been increasing. However, I think there's also an issue that fewer women and men may want to take on the responsibility of being a manager. I think changing the way managers work may also be necessary. The Company won't be able to cultivate future leaders if employees don't look at their superiors and think they want to rise to that position. I truly believe this is an issue that the management team should seriously consider.



Tomita

When I've talked with female employees, I came away with the impressions that has their

own individual view of how they want to conduct their work. When the Company has more women in management positions, I think the perspective on work-life balance will change as will how managers approach their work.

Sato

Everyone—men and women—have their own personal ideas about their work style and career. It will be important to create situations for ambitious and talented people to freely pursue career opportunities. Having more female managers is one part of increasing diversity, and I think it will be a step forward for other ways to become more diverse.



Takahara

Employee health is also important. People perform their best only when they are physically and mentally healthy. I believe using corporate health management to convey the message that the Company cares about every employee will create a sense of well-being.

What other issues do you think the Company will need to address or improve in the future?

Developing technology to broaden the Company's business range

Tomita

TOCALO's business is providing surface treatment on machine parts, which it performs at various sites, so the Company's employees have little opportunity to have direct contact with the final product or the facilities where the products are used. The Company's technology, however, is certainly contributing to society. TOCALO technology is even playing a part in the recent advances in semiconductors. Unfortunately, this doesn't seem to be widely recognized yet



within the Company.

I believe the Company should communicate to the public that it is now a foundation company for creating a new world and is determined to continue expanding into new fields. Also, I think making people inside the Company aware of this will boost their sense of meaning and satisfaction in their work.

Takahara

I also think it's very important that the Company communicates its intention to apply its thermal spraying technology to new areas. I also think the Company needs to put more effort into research and development.

Kamakura

Ultimately, the source of TOCALO's value creation is its technological capabilities. The semiconductor industry has been a major source for sales, and the question now is how to expand into other fields. With its strong technical capabilities, the Company definitely has potential for success. I would also think that demand for its technologies would be high not just in Japan but overseas as well. Focusing on overseas markets could be a driver for further business growth.

Continuing to develop the global strategy

Takahara

TOCALO already has subsidiaries overseas, and developing those companies, including cultivating employees there, is becoming increasingly important not only for expanding its global business, but also to offset the impact from the decreasing workforce in Japan.

Tomita

That's very true, and I think there is still room for those subsidiaries to grow. Plants with clients in the semiconductor industry, which is its core business area, face a particular challenge because of information confidentiality and the need to have a separate production line for each equipment manufacturer. For the global strategy, I think management should take an overall approach to optimizing its plant operations.



Sato

The Board of Directors meetings and other management meetings also contained less information about the progress of initiatives and about future initiatives than I was expecting.

The role of the management and the outside directors is to think from the long-term perspective about how to balance returning profits to investors and shareholders and how to invest in the Company's employees. It's important to clearly communicate to employees how their daily activities relate to the management's objectives and how much progress is being made. I also think it's important to show both employees and the public how much value thermal spraying can provide to society.

What do you personally want to contribute to TOCALO as an outside director?



Stimulate discussions at the Board of Directors meetings

Kamakura

The job of an outside director is to check for any errors or uncertainties in the facts upon which management is basing its decisions and also to consider if the public will understand the reasons for the management decisions.

The Nomination & Remuneration Advisory Committee, which I chair, discusses advisory matters as well as various other issues. We sometimes receive information that is fundamental to the management of the Company, and I think it is wonderful to have a system that allows discussion of such matters.

It would be great to be able to talk frankly about matters like those as “consultation topics” separate from discussions about management decisions or reporting. I think there are many

matters that should be discussed at board meetings even at the time when the fundamental decision is being made to do or not do something.

Advice for enhancing employee well-being

Takahara

I also think it would be good for the Board of Directors to discuss a wider range of matters. At the monthly Board meetings, it's hard to get a full understanding of what each internal director thinks about an issue or what they envision for the Company. Talking about a wider range of topics would let us get a better understanding of each other's perspectives and enable better discussions.

I look forward to providing more advice on ways to enhance the sense of well-being of people at the worksites and managers and to contributing to the TOCALO's health management and diversity.

Sensing changes in the workplace and preventing governance disruptions

Sato

I want to get to know the worksites better so I can help strengthen governance. TOCALO has an open corporate culture and strong business performance. Many young people have joined the Company, and it seems like there are no significant issues ahead in the immediate future. But that does not mean the currently positive conditions will necessarily continue. I view it as the duty of outside directors to point out and address issues while they are small, before they can undermine governance and lead to misconduct. It's extremely important to allow us to visit the plants and other worksites so we can notice small changes like that. I want to talk to people at the worksites so I can get a better sense of changes that occur in the Company.


Providing the stakeholders' view so the Company can grow


Tomita


In the two years since becoming an outside director, I have visited all of TOCALO's plants. At each plant, I asked the plant managers to share their thoughts on the plant's management


and their contribution to the local community. Hearing what the employees said, which you can't hear at the Board meetings, reminded me of how much I want TOCALO to continue growing its business. Outside directors also must provide the stakeholders' perspective and present a view on management that is different from that of the Company's directors. I want to see TOCALO continue to grow, and an external perspective is important for monitoring the Company's management.

External Evaluations

Inclusion in indices 

Participation in initiatives 

External evaluation of ESG initiatives 

External evaluation for IR disclosure 

Inclusion in indices

S&P/JPX Carbon Efficient Index

TOCALO is a constituent of the S&P/JPX Carbon Efficient Index, which is designed to reflect the performance trend of companies in the TOPIX universe with a focus on the status of environmental information disclosure and carbon efficiency (carbon emissions per unit of sales).

<https://www.jpx.co.jp/english/markets/indices/carbon-efficient/>



JPX-Nikkei Mid Small Index

TOCALO is a constituent of the JPX-Nikkei Mid Small index composed of small- and medium-sized companies in the JPX-Nikkei 400 index that offer high appeal for investors, efficiently use capital, and conduct investor-focused management.



<https://www.jpx.co.jp/english/markets/indices/jpx-nikkei400/> 

Participation in initiatives

Task Force on Climate-Related Financial Disclosures

TOCALO announced its support for the TCFD recommendations in August 2023.



We are committed to disclosing our activities related to climate-related risks and opportunities, which we examine from the perspectives of governance, strategy, risk management, and metrics and targets.

<https://www.tocalo.co.jp/english/sustainability/env/tcfd/>

Declaration of Partnership Building

We have released a Declaration of Partnership Building stating our endorsement of the Council on Promoting Partnership Building for the Future promoted by the Cabinet Office, The Small and Medium Enterprise Agency, and other organizations. This initiative aims to improve the productivity throughout the supply chain by promoting cooperation, coexistence, and co-prosperity among supply chain

suppliers. The declaration states our commitment to working with our business partners to address social issues such as human rights, labor, health and safety, the environment, and ethics.

External evaluation of ESG initiatives

CDP

CDP is an international non-profit organization headquartered in London created in collaboration with institutional investors to collect information on environmental strategies and greenhouse gas countermeasures from major companies around the world. CDP gave TOCALO a score of B in its 2023 CDP Climate Change Report.



<https://www.cdp.net/en> 

Eruboshi Certification

Based on the Act on the Promotion of Women in the Workplace, the Minister of Health, Labour and Welfare recognizes companies for Eruboshi certification that have formulated and submitted a general employer action plan and have met certain criteria. TOCALO received the highest rating of 3 stars on June 11, 2024.

Kurumin Plus Certification

The Minister of Health, Labor and Welfare's Kurumin Plus Certification recognizes companies that have formed and submitted action plans for childcare support, achieved the plan's goals, and met certain criteria. TOCALO received Kurumin Plus certification on


June 7, 2023 as a company supporting employees who are balancing work with raising children and infertility treatment.

Health and Productivity Management Outstanding Organization

The Ministry of Economy, Trade and Industry (METI) and the Japan Health Council (JHCC) established this program to honor corporations of all sizes that are implementing outstanding health management practices, based on initiatives that meet local health issues and promote JHCC activities. TOCALO was certified as a Health and Productivity Management Outstanding Organization in March 2024.

Sports Yell Company

The Japan Sports Agency created the Sports Yell Company program to certify enterprises that are actively promoting measures to improve employee health by increasing participation in sports. TOCALO was certified as a Sports Yell Company in fiscal 2024.

https://www.mext.go.jp/sports/en/b_menu/policy/sportsnation/yellcompany.html 



External evaluation for IR disclosure

Nikko Investor Relations homepage ranking


Nikko Investor Relations annual survey of all Japanese listed company websites in fiscal 2023 ranked the TOCALO website for a second straight year as a AA Corporate Website in the categories of All Markets Ranking and Sector Ranking (Metal Products).


<https://www.nikkoir.co.jp/english/rank/rank.html> 



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

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

TOCALO follows its basic environmental philosophy in all activities, products, and services related to the manufacture and sale of its surface modification technologies. Following is a summary of policies we follow in our efforts to continuously improve our environmental performance.

1. Constantly recognize the environmental impact of our activities, products, and services, and establish, implement, and maintain an environmental management system.
2. Commit to preventing environmental pollution, using sustainable resources, preserving water environments, and preventing climate change.
3. Commit to continuously improving 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 our environmental policy and considering the potential environmental impact of our activities, products, and services, set environmental targets and engage in activities in the following areas to contribute to improving the environment:
 - (1) Energy and resource conservation in business activities
 - (2) Environmental contribution through promotion of business activities
 - (3) Climate change measures
 - (4) Water environment preservation

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.

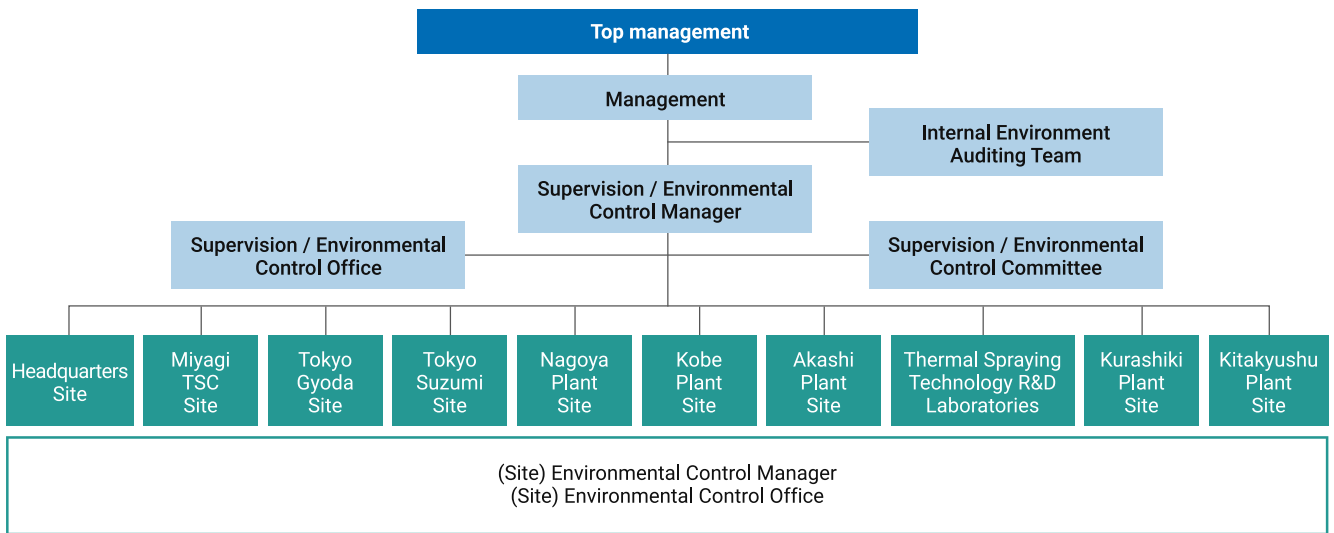
July 17, 2024

Kazuya Kobayashi

Representative Director President and Executive Officer

TOCALO Co., Ltd.

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.

We are promoting the acquisition of ISO 14001 certification, and 50% of the Group companies have currently obtained certification.

Please see the [ESG Data Sheet](#) for Group company ISO 14001 status.

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

Acquisition of certification Plants and research laboratories	Expansion of certified sites
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	The Headquarters and Thermal Spraying Technology R&D Laboratories were the first sites in TOCALO to acquire ISO14001 certification.
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.

	The Kitakyushu Plant was the first plant to acquire certification.
September 2006	The Nagoya Plant, Kobe Plant, and Akashi No. 3 Plant acquired certification.
September 2007	The Tokyo Plant (Gyoda Workshop) and Mizushima Plant acquired certification.
September 2009	The Akashi Plant acquired certification. All major TOCALO sites were certified.
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	Each sales office acquired certification.
	Certification of Akashi Plant No.3 was cancelled.
August 2012	The Miyagi Technical Service Center acquired certification. All TOCALO sites were certified.
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	The Akashi-Harima Plant acquired certification following the start of full-scale operations.
	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	Tokyo Plant No.2 (Suzumi Workshop) was newly certified following the partial relocation (Gyoda Workshop).
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

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
③Tokyo Plant (Gyoda Workshop), TOCALO Co., Ltd.	1-1-1 Gyoda, Funabashi, Chiba	Manufacture, sale, 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

Organization name	Address	Scope of activities
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

Organization name	Address	Scope of activities
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
⑨Kurashiki Plant, TOCALO Co., Ltd.	2030-28, Kojimaunotsu, Kurashiki, Okayama	Manufacture, sale, and after-sales service of surface modification products using thermal spray technologies
Mizushima Plant, TOCALO Co., Ltd.	2-38, 2-chome, Matsue, Kurashiki City, 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

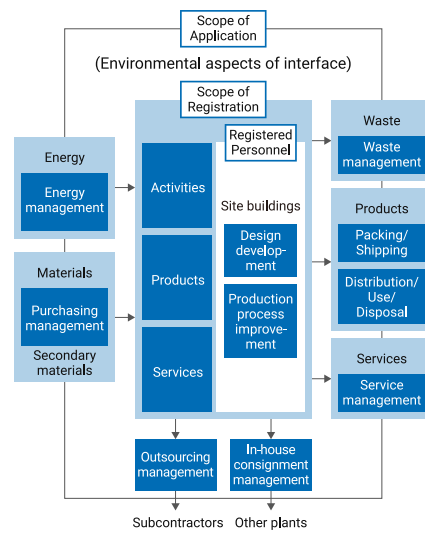
1. Design and development
2. Improvement of production processes

■ Scope of potential impact

■ 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



Compliance with environment-related laws and regulations

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

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 Rationalizing Energy use and Shifting to Non-fossil Energy
Act on Promotion of Resource Circulation for Plastics	

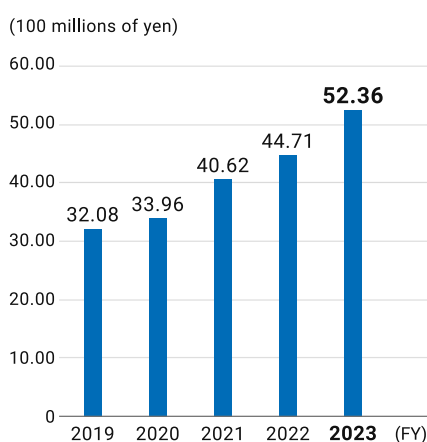
Environmental accounting

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

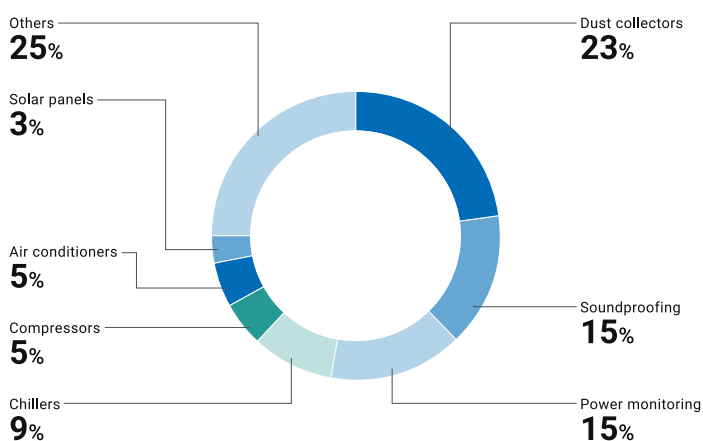
The graph below shows the cumulative amount of environment-related capital expenditures. Our main environmental facilities include dust collectors to prevent dust emissions, soundproofing equipment to block noise from the dust collectors, and energy-saving equipment.

In fiscal 2023, we added additional soundproofing equipment and dust collectors, and continued energy-saving measures from the previous fiscal year, including installing power meter and monitoring devices.

Cumulative environmental investments



Breakdown of capital expenditures



Environmental education and training

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.

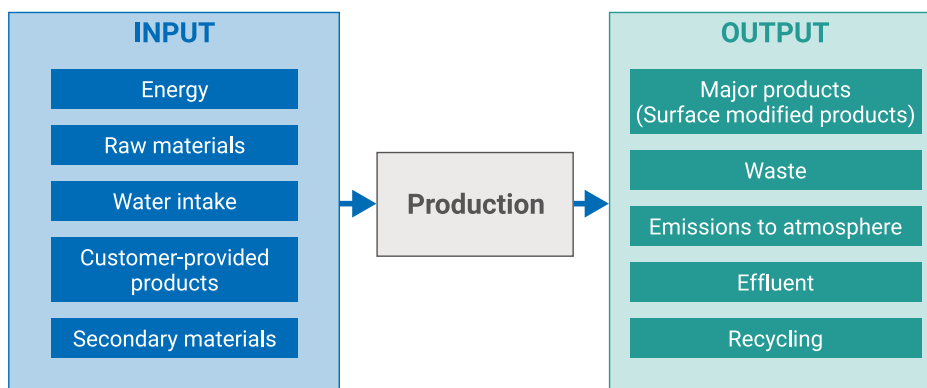


Environmental training

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

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 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Electricity (MWh)	40,155	39,825	42,491	42,891	39,848
Kerosene (kl)	229	209	203	188	177
LPG (kg)	13,161	10,615	16,014	16,188	20,024
Diesel (kl)	31	31	32	26	92
Gasoline (kl)	108	101	88	88	88
City gas (m³)	128,768	160,944	165,732	149,164	154,406
Acetylene (kg)	-	-	-	16,142	45,885
Total energy consumption (crude oil equivalent) (kl)	420,111	417,148	443,572	446,927	10,333

Note: The scope of aggregation was partially revised in fiscal 2023.

Note: Results from fiscal 2019 to fiscal 2022 have been revised to correct an error in the aggregation of data on total energy consumption.

Trend regarding volume of use of raw materials

Note: Not including substrates

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Thermal spray materials (t)	325.2	297.2	271.9	298.7	257.9
Other materials (t)	74.0	59.2	94.3	113.1	138.5

Trend regarding volume of water intake

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Clean water (m ³)	63,610.0	65,850.0	69,552.0	78,410.0	66,901.0
Pure water (m ³)	19.8	18.1	16.5	18.0	16.8
Groundwater (m ³)	0.0	0.0	0.0	0.0	0.0

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

Trend regarding volume of waste emissions

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
General business waste (t)	70.0	59.3	57.6	61.2	46.8
Total industrial waste (t)	1,840.6	1,959.5	2,113.5	2,161.4	1,922.3

Trend regarding volume of emissions to atmosphere

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
PRTR Law Class 1 Designated Chemical Substances (t)	2.5	1.0	1.0	1.3	0.06

Effluent volume

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Sewage (m³)	47,625.0 (2,528.0)	49,338.0 (1,640.1)	54,776.0 (1,939.4)	60,810.0 (1,518.1)	54,097.0 (1,298.5)
Seawater (m³)	10,434.0	10,984.0	9,193.0	9,710.0	10,800.4

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 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Metal scraps (t)	90.6	108.4	90.1	111.7	150.5
Thermal spray material waste (t)	28.6	27.4	21.2	15.1	12.4
Blasting material waste (t)	570.8	716.4	686.2	715.6	723.6
Oil waste/Solvent waste (t)	9.2	12.0	12.0	16.6	32.0
Paper (t)	19.2	46.2	38.3	33.2	38.2

Targets and results

We have established three major themes and are working on environmental activities by setting targets at each site.

We have set a CO₂ reduction target for fiscal 2030 of 46% lower than the level in fiscal 2013 in accordance with government targets.

Results in fiscal 2023 and targets for fiscal 2024 

Results in fiscal 2023 and targets for fiscal 2024

Results in fiscal 2023

We achieved our target in 42 out of 43 categories.

The Environment Promotion Department holds an Energy Conservation and Environment Conference every three months to promote energy conservation and environmental activities throughout the Company. Specific initiatives have included converting to 100% power generated from renewable energy sources, upgrading to energy-saving, high-efficiency air conditioners, and creating visualization for power consumption for use in planning decisions, and installing equipment to improve heat exchange efficiency.

In fiscal 2023, specific measures were aimed at reducing waste and increasing recycling.

Environmental measures related to ISO 14001 in fiscal 2023 were focused on conserving energy and resources in our business activities, using our businesses to make a positive contribution to the environment, and mitigating climate change, with specific targets set for each operating site. Of the 43 energy conservation targets we set for the year, these efforts achieved 42 of the targets and fell short of only one.

Targets for fiscal 2024

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. The first step to achieving that target is to reduce our energy consumption by improving our production efficiency. Other steps will include using solar power generation to produce our own power and purchasing electricity generated from renewable energy sources. We are also making preparations to recycle plastics and oils and to recapture and reuse waste cooling water. We are also planning to begin several activities aimed at achieving carbon neutrality, although we anticipate some variation in the results because of the wide variety of orders we receive our clients.

In fiscal 2023, we used our power consumption data to help formulate measures to reduce our power usage and conducted trial low-power periods and energy-efficiency measures. We are gradually implementing more measures to ensure we attain our targets for reducing greenhouse gas emissions as well to progress toward our goal of being carbon neutral.


Environmental measures related to ISO 14001 in fiscal 2024 will continue to focus on conserving energy and resources in our business activities, using our businesses to make a positive contribution to the environment, mitigating climate change, and

preserving water environments. All of our bases will set goals and conduct activities toward the same targets.







😊 : Achieved 😞 : Not Achieved

Site	Environmental target	Target for fiscal 2023	Fiscal 2023 results	
Conserving energy and resources in our business activities				
Headquarters	Energy- and resource-saving activities	Analyze power consumption, review progress of countermeasures and energy-saving measures	Measure 2023 electricity volume Lower to 96.7% of the previous fiscal year Set summer and winter indoor temperatures (temperature control)	😊
Miyagi	Energy- and resource-saving activities	Use the power monitoring system to confirm the current status of heating and cooling power consumption	Confirm heating and cooling power consumption Complete the acquisition of data, including on the correlation between power consumption and the external temperature	😊
	Energy- and resource-saving activities	Use the power monitoring system to identify aging equipment and energy loss, implement improvement and power-saving measures (1) Reduce by 1,200 kWh/month from the same month of the previous year (2) Identify power and time efficiency fluctuations for each type of equipment	(1) Lower 8,140 kWh/month average consumption (2) Verify compressor efficiency fluctuations	😊
	Energy- and resource-saving activities	Identify the current status to reduce paper resource consumption	Monthly paper waste is approximately eight 90-liter bags	😊
Tokyo Gyoda	Energy- and resource-saving activities	Cumulative amount used for thermal spray touch-up and re-spraying Cumulative amount used in the previous fiscal year: 664,105g	390,027g	😊
	Energy- and resource-saving activities	Produce a minimum of three new products each year using the improved thermal spraying program with 5% less material usage than previous methods	New program used for coating of 5 new items	😊
	Energy- and resource-saving activities	Non-conformity claims and complaints that are the responsibility of quality control: 0.05% or less	0.03%	😊

Site	Environmental target	Target for fiscal 2023	Fiscal 2023 results	
	Energy- and resource-saving activities	Reduce power consumption by 3% in the TD Manufacturing Division	Reduced by 8.1%	
	Energy- and resource-saving activities	Reduce power consumption by attaching dust collectors to thermal spray equipment	Reduced 265 kWh/month per booth	
Tokyo Suzumi	Energy- and resource-saving activities	Reduce operating hours by interlocking dust collectors to thermal spraying machines Reduce operating time of the 9 dust collectors: reduce to under 180% of arc time per year	Total operating rate of 9 units: 178%	
	Energy- and resource-saving activities	Power saving in office buildings (lighting, air conditioning) Reduce night working hours (using "no overtime days") First half: Total hours reduced Second half: Introduce power monitoring systems, to monitor total electricity usage	Reduced 269 hours	
Nagoya	Energy- and resource-saving activities	Reduce power consumption by interlocking dust collectors to thermal spray equipment Reduce by 40% from the previous fiscal year	Reduced by 37% from the previous fiscal year	
Kobe	Energy- and resource-saving activities	Reduce air leakage Reduce power consumption by retrofitting firing furnaces Reuse wastewater Improve heat-retention capacity by using heat-insulating paints Implement at least 2 of the above	All implemented	
	Energy- and resource-saving activities	Reduce copy machine paper usage Reduce blasting media usage Implement at least one of the above	Copy machine paper May-March: Reduced 9,784 sheets in total	
Akashi	Energy- and resource-saving activities	Energy-saving initiatives Reduce power consumption by 43,483 kWh/month or more	Overall reduction at Akashi: 44,601 kWh/month	
R&D	Energy- and resource-saving activities	Reduce power consumption by reducing standby power and interlocking dust collectors to thermal spraying equipment Reduce power consumption by 3%	Reduced by 21,130.4 kWh from the previous fiscal year	

Site	Environmental target	Target for fiscal 2023	Fiscal 2023 results	
		from the previous fiscal year (annual reduction target: 14,604 kWh)		
Kurashiki	Energy- and resource-saving activities	Reduce compressor power consumption by controlling the number of compressors First half: Plan the number of compressors, verify current power consumption Second half: Identify the reduction rate after the measures The first half average was 0.129% of sales, so target less than 0.129% in the second half	Results: The percentage was below 0.129 in 4 of 6 months in the second half	
Kitakyushu	Energy- and resource-saving activities	Reduce annual power consumption by 9% from the previous fiscal year	Reduced by 20.4%	
Contributing to the environment by promoting business activities				
Headquarters	Information disclosure	Expand and organize environmental information on the corporate website	August 2023: Sustainability page information updated October 2023: English sustainability page updated	
	New proposals/orders	New project orders: ¥1.0 million or more/month Target: ¥12.0 million or more/year	¥89.0 million/year	
Miyagi	New development activities	Develop and propose long-life coatings: 2 new types per year	2	
Nagoya	New proposals/orders	"Orders received in the environment and energy sector: ¥108.0 million/year	¥153.0 million/year	
Akashi	New proposals/orders	New visits: 20/month, 240/year	252/year	
R&D	New development activities	New developments: 60 or more/year	65 developments/year	
	New development activities	Implement initiatives develop coatings and equipment that can contribute to environmental improvement Minimum 3/year	3/year	
Kurashiki	New proposals/orders	New product orders: ¥153.0 million/year	¥246.0 million/year	

Site	Environmental target	Target for fiscal 2023	Fiscal 2023 results	
Kitakyushu	New proposals/orders	Orders received in the environment and energy sector: ¥66.0 million/year	¥298.7/year	
Mitigating climate change				
Miyagi	Global warming mitigation	Reduce the number of commutes by promoting and sustaining work from home (1) Telecommute at least one day a week (2) Verify reduction in vehicle CO ₂ emissions when working from home	(1) and (2) both achieved Verified an average of 418 kg/month reduction in CO ₂ emissions for single-occupancy vehicle commutes	
Tokyo suzumi	Global warming mitigation	Reduce gasoline consumption by converting to hybrid vehicles for sales	Reduced by 5% from the previous fiscal year	
Akashi	Global warming mitigation	Eliminate equipment using Freon (HCFC-R22)	Completed September 2023	
Others				
	Pollution prevention	Reduce waste and promote recycling	Developed recyclable thermal spray materials	
Tokyo Gyoda	Law compliance	Reduce industrial noise pollution	Improvement measures implemented	
	Pollution prevention	Reduce hazardous gas emissions	Verified and implemented reduction methods	
Tokyo suzumi	Pollution prevention	Increase material recycling by thoroughly separating waste plastics Increase material recycling rate by 20%	Increased 41% from the previous fiscal year	
	Pollution prevention	Implement noise regulation compliance measures Change from Class 2 to Class 4 agreement standard and install noise leakage prevention equipment	No physical changes were made, but the goal was achieved from the perspective of PDCA.	
Nagoya	Pollution prevention	Reduce mixed waste 5% from the previous fiscal year	Reduced 97% from the previous fiscal year	
Kobe	Pollution prevention	Reduce sludge production and waste Reduce specified wastewater Recycle metals Implement at least one of the above	Reduced specified wastewater by 36 m ³ /year by using water-conserving nozzles Implemented metal recycling	

Site	Environmental target	Target for fiscal 2023	Fiscal 2023 results	
Akashi	Pollution prevention	Waste CO ₂ emissions Reduce by 0.5% from the previous fiscal year	Reduced by 23.2% from the previous fiscal year	
	Pollution prevention	Increase plastic recycling through separate collection and disposal of empty plastic containers of thermal spray materials: 1,200kg or more/year	1,590kg	
	Pollution prevention	Reduce mixed waste: reduce by 22,000kg/year	Reduced by 29,100kg	
R&D	Pollution prevention	Verify waste volume to prepare measures to reduce mixed waste	Verified the percentage of mixed waste	
Kurashiki	Pollution prevention	Reduce waste volume by communicating information about the return and reuse of wooden pallets Average 1,268kg/month"	Average 232.75kg/month	
Kitakyushu	Pollution prevention	Reduce waste as a percentage of sales by 23% from the previous fiscal year	Reduced 27.2% from the previous fiscal year	

Climate change measures

TOCALO is adopting renewable energy sources and implementing other climate change initiatives to reduce CO₂ emissions.

Global warming mitigation

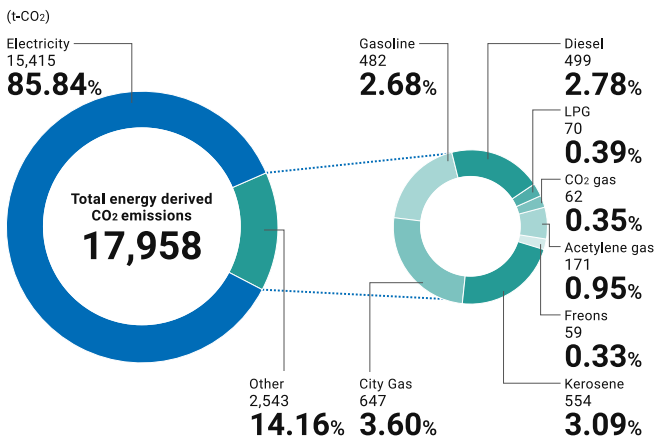
We are implementing comprehensive measures to reduce electricity consumption, installing energy-saving equipment, and planning to convert to renewable energy sources.

The Group's CO₂ emissions are primarily the result of the energy sources we use, which include primary energy derived from fossil fuels, such as kerosene, diesel oil, LPG, and city gas, and the secondary energy source of electricity. Converted to CO₂, electricity accounts for the vast majority—85.84%—of our CO₂ emissions.

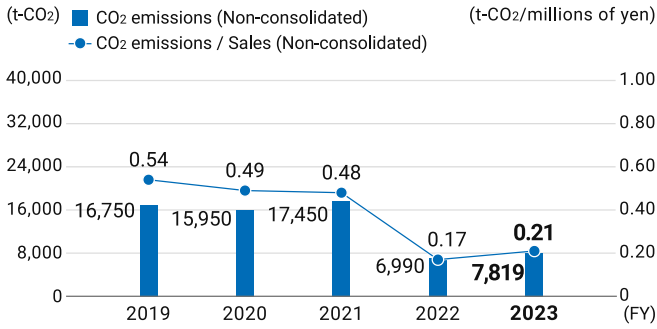
TOCALO takes meticulous steps to conserve electricity as a regular part of efficient business operations while also implementing measures including installing energy-saving equipment and upgrading aging equipment with environmentally efficient equipment. We are also taking steps to convert to renewable energy sources that do not emit CO₂ in power generation. These steps include aggressive measures to reduce CO₂ emissions by using solar power to generate our own energy and by purchasing electricity generated from renewable energy sources.

In fiscal 2023, our CO₂ emissions increased by 8% compared to the previous fiscal year; however, we attribute the increase to changes in the emission factors of the electric power companies. Our actual power usage declined by 6%, and verified that our energy conservation efforts are producing results.

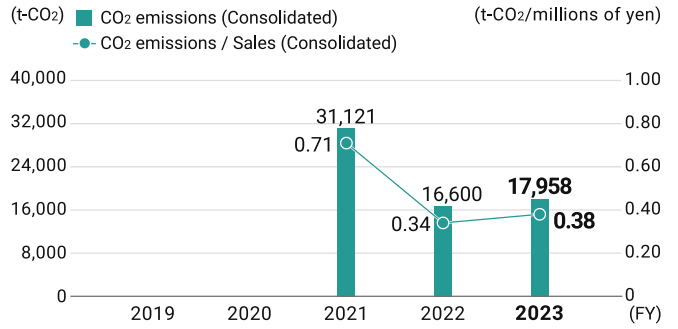
Breakdown of energy consumption in fiscal 2023 (CO₂ equivalent, consolidated)



Change in CO₂ emissions (Scope 1 and 2)(Non-consolidated)



Change in CO₂ emissions (Scope 1 and 2)(Consolidated)



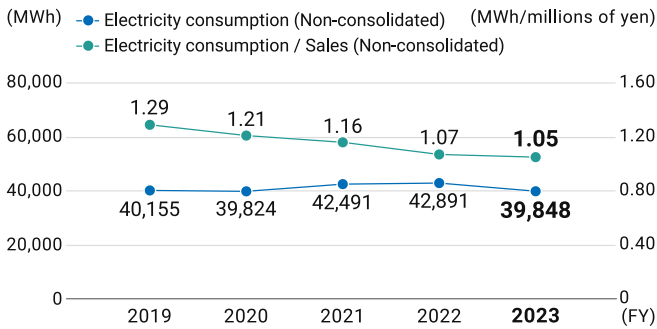
Note:

Adjusted emission coefficients are applied to CO₂ emissions from purchased electricity from FY2020 onward.

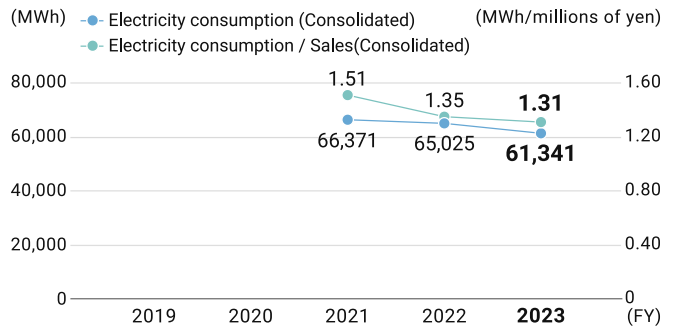
Note:

CO₂ gas added in FY2021, acetylene gas been added in FY2022.

Electricity consumption (Non-consolidated)



Electricity consumption (Consolidated)



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 approximately 3,500 square meters of solar panels on its expansive roof.

The Kurashiki Plant’s solar power system generated electricity covering 21% of the plant’s total electricity need in fiscal 2023. We have also been installing solar panels at other sites. As of August 2024, all of our plants and the technical service center have solar panels and are generating their own power.

Along with improving the efficiency of our production operations, using in-house generated electricity to meet our energy needs is a key step to reducing our CO₂ 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





VOICE

Improving information distribution within the Company and raising awareness of sustainability issues

Akiyo Tomita
Environment Promotion Department

Since returning to the Company in April after two maternity and childcare leaves, I have been in charge of confirming the GHG emission volumes of our domestic and overseas bases, collating the data, and providing guidance on emissions matters.

My daily duties are focused on improving the distribution of information related to reducing the Company's environmental impact to raise awareness of environmental issues among as many employees as possible.

I previously worked in the management section of the Kobe Plant. My experience at the plant and my current work in the Environment Promotion Department has given me an appreciation of the importance of providing information to plants that will be useful for maintaining efficient operations.

I knew very little about environmental issues when I was assigned to the Environment Promotion Department. Unless they have had an opportunity to be directly involved, I think many people don't know anything about our environmental initiatives. I try to provide information in a way that can be easily understood, and I hope to increase the number of people who are interested in the environment.

In June 2023, I also became a member of the Diversity Promotion Team. I myself am balancing work and childcare, so I've been using flextime system and other programs. I want to share information that can help us improve our work situations so the next generation of leaders at TOCALO can have a healthy work-life balance and feel comfortable and fulfilled in their daily jobs.

Supporting the Kobe Airport Island Blue Carbon Project

“Blue carbon” is attracting attention as a new countermeasure for global warming. Blue carbon is the carbon that is absorbed by seaweed, sea grass, phytoplankton, and other sea organisms.

Kobe City is promoting blue carbon in its Kobe Airport Island Blue Carbon Project, which focuses on the various types of seaweed growing on the gentle stone seawall around Kobe Airport Island. The Japan Blue Economy Association certified the volume of CO₂ that the ecosystem is absorbing under its J Blue Credit program in 2022.

As a company headquartered near Kobe Airport, in 2023 we purchased J Blue Credits equivalent to absorbing 3.9 tons of CO₂ as one of our measures to counteract global warming. Through initiatives like J Blue Credit, we will continue to work with local communities to reduce our environmental impact.

Kobe City Carbon Neutral Port Initiative:

https://www.city-kobe-lg.jp.translate.goog/a49918/cnp.html?_x_tr_sl=ja&_x_tr_tl=en&_x_tr_hl=en

Carbon Neutral Ports Initiative:

https://www.mlit.go.jp/en/kowan/kowan_fr4_000011.html

Kobe City is promoting blue carbon initiatives to make Kobe Port a Carbon Neutral Port (CNP).



Monitoring survey (underwater photography)



The Kobe Airport Island waterfront

Participation in the Osaka Bay MOBA Link Initiative

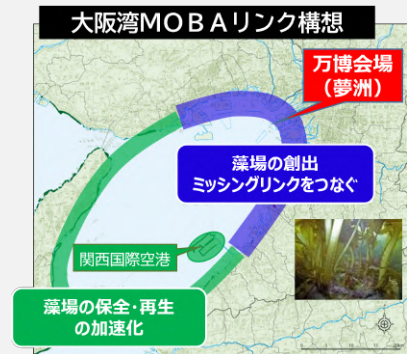
Blue carbon ecosystems benefit the environment in numerous ways, such as absorbing and fixing CO₂, improving water quality, and improving biodiversity. Taking the opportunity of the World Expo 2025 to be held in Osaka in the Kansai region, the prefectures of Osaka and Hyogo established the Members of the Osaka Bay Blue Carbon Ecosystem Alliance (MOBA) in January 2024 and are planning the Osaka Bay MOBA Link Concept to connect the entire Osaka Bay with a corridor of blue carbon ecosystems.

The TOCALO Headquarters, Kobe Plant, Akashi Plant, Akashi-Harima Plant, and Thermal Spraying Technology R&D Laboratories all face Osaka Bay, and we joined the Osaka Bay MOBA Link Concept to contribute our surface modification technology to realizing the concept's goals.

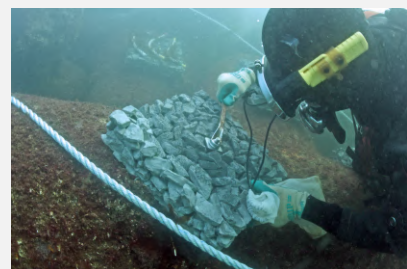
Our efforts to develop and apply surface modification technologies to create habitats where algae can flourish also give us an opportunity to accumulate valuable elemental technologies.

Global warming has progressed to such an extent that the United Nations Secretary-General António Guterres said, "The era of global warming has ended; the era of global boiling has arrived." We are participating in the Osaka Bay MOBA Link Concept to help realize its goal as quickly as possible and with the hope that the concept will be adopted in other places around the world.

For the latest information about the Osaka Bay MOBA Link Concept please visit <https://www.pref.osaka.lg.jp/o120070/kankyohozen/osaka-wan/moba.html> (Japanese language only)



Osaka Bay MOBA Link Concept



Demonstration seaweed bed created in the inner bay area



Checking germinated seaweed

CDP certified scores of B for climate change and C for water security

CDP is an international non-profit organization headquartered in London created in collaboration with institutional investors to collect information on environmental strategies and greenhouse gas countermeasures from major companies around the world. CDP analyzed the data and publishes the results. In fiscal 2023, CDP evaluated some 23,000 companies—representing more than two-thirds of the worldwide market capitalization—on an eight-point scale for environmental disclosure and performance. The 2023 CDP Climate Change Report gave TOCALO a B score, third the highest, for climate change and a C score, fifth from highest, for water security.



Waste reduction and environmental conservation

TOCALO is constantly monitoring the environmental impact of its business activities, products, services, and strive to prevent pollution.

Through the reduction of waste and the appropriate management of hazardous substances, TOCALO is committed to continuous improvement.

Appropriate management of chemical substances  Waste Reduction  Air pollution prevention 

Soil and water pollution prevention  Noise countermeasures 

Appropriate management of chemical substances

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

In fiscal 2023, 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). The emissions met all regulatory standards under the act.

Release and transfer volume of PRTR Law, type 1 designated chemicals in fiscal 2023

	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	4,970
Cobalt and its compounds	2.2	0	0	0	0	1,370
Nickel	8.8	0	0	0	0	7,820
Nickel compounds	1.1	0	0	0	0	790

	Released amount (kg)				Transferred amount (kg)	
Boron compounds	0	0	0	0	3.2	11,900
Silicon carbide	43.0	0	0	0	0	35,300

Note: Following the PRTR Law, the volume of Toluene, for which we submitted a report in fiscal 2022, was reported as zero in fiscal 2023 because the volume handled that year was less than 1 ton. (The PRTR Law requires reporting when the annual amount of Toluene handled at a business site exceeds 1 ton.)

Note: Silicon carbide was added to the calculation in fiscal 2023 in accordance with a revision to the PRTR Law.

Waste Reduction

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 34% 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. After disposal, it is used at cement factories and elsewhere to adjust combustion temperature.

Percentages of other waste materials were sludge 27%, waste alkali 11%, mixed waste 8%, slag 7%, waste plastic 6%, and glass and ceramic waste 5%.

The majority of the sludge and waste alkali is waste liquid after cleaning, and most of it is water. We plan to install a system to distill and filter this water for reuse.

Mixed waste is defined as a mixture of several types of waste that is difficult to sort.

Slag refers to residue thermal spray material, such as waste blasting material and collected fumes.

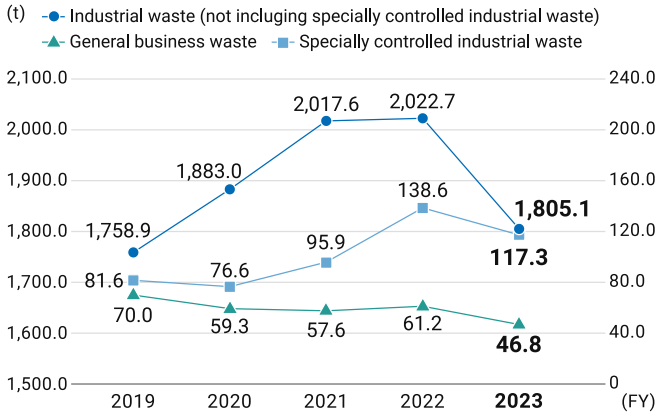
Waste plastics include material containers and secondary materials, as well as waste paper and wood scraps that contain oil.

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

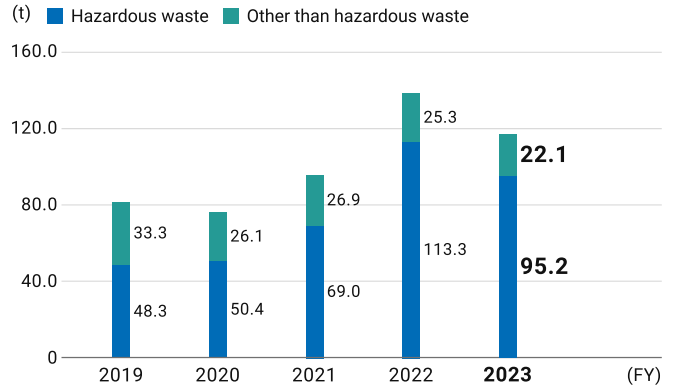
(3) Specially controlled industrial waste

Most of this waste is dust generated by thermal spraying using chromium-containing materials (such as stainless steel) and collected by a dust collector. 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





VOICE

Using resources efficiently to help achieve carbon neutrality

Mitsugu Yoshida (Quality Control Department Akashi Plant)

I have been part of the environmental secretariat at the Akashi Plant for 15 years. I'm also responsible for waste management, and focus a lot of my efforts on ensuring the proper disposal and recycling of waste.

The waste from the thermal spraying process contains a large amount of dust that did not adhere to the products. Some of the fine dust contains harmful components which, if it exceeds the standard value, becomes a specially controlled industrial waste that must be properly disposed of.

However, simply discarding it would waste scarce resources, so we actively recycle content. Impurities like harmful chemicals are detoxified. Substances that cannot be detoxified and contain compounds classified as non-medical poisonous substances can be recycled because we are registered as a commercial business of poisonous substances.

Registration as a commercial business of poisonous substances comes with stricter law compliance obligations, such as appointing certified managers and maintaining strictly protected storage areas. We cleared these requirements one at a time until we qualified as a commercial business of poisonous substances in 2023. One of the results of these efforts is that we now can recycle about 20% of waste dust recovered from specially controlled industrial waste.

We seek to comply with all laws and to explore and implement ways to conduct our business without putting a burden on the environment. The Akashi Plant is TOCALO's largest manufacturing site, and I have spent a very rewarding 15 years managing various areas. I look forward to one day passing on the job to my successor so I can focus my efforts more on implementing initiatives to achieve carbon neutrality.

TOPICS

Introducing translucent clear paper files

We produce clear file folders printed with our corporate mascot. The folders used to be made of transparent plastic, but to reduce the impact of plastic on the environment, in fiscal 2022 we started producing semi-transparent file folders made of paper.

We wanted a material that would provide the benefit of plastic's transparency and the environmental friendliness of paper, and came up with the idea of making file folders using semi-transparent tracing paper.

We started by trying the folders in-house, and now are sharing them outside the Company, such as by inserting them in the pamphlets we give out at exhibitions. The clear paper file folders are even better than plastic folders in many ways because they last longer and are stronger. Every day, we are thinking of ways to make the ideal folder that is easy to use and good for the environment. The clear paper folders are giving us more opportunities to think about what we can do to protect the earth.



Clear file folders made of paper

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

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 2023, we have not confirmed the generation of sulfur oxide (SOx) from our operations.



Cartridge-type dust collector

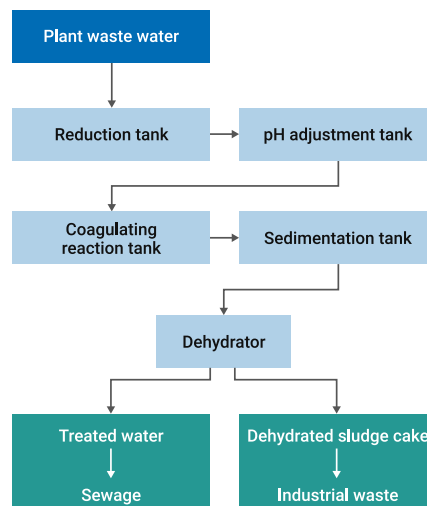
Soil and water pollution prevention

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

**Plant wastewater treatment steps
(coagulating and sedimentation
treatment facility)**

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.



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 2023, 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.

In August 2022, we became a corporate member supporting the environmental conservation activities of World Wildlife Fund Japan.

Founded in 1961, WWF is an environmental conservation organization active in more than 100 countries. Aiming for a future where people and nature live in harmony, the WWF engages in numerous environmental activities, such as restoring the disappearing richness of biodiversity and preventing global warming.

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/eng/>



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

Response to the TCFD Recommendations

In August 2023, TOCALO announced its support for the TCFD^{*1} 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 will focus our expertise as a coating manufacturer to help clients conserve resources, reduce labor, and lower environmental burden for a decarbonized society. We will also actively disclose our efforts concerning climate-related risks and opportunities. Following the change in the basis of climate-related disclosure regulations from the TCFD to the ISSB^{*2}, we will continue to stay informed and up to date on the changes in disclosure standards and further enhance disclosure of our climate change activities.

*1 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. The TCFD disbanded in October 2023.

*2 The International Sustainability Standards Board. The International Financial Reporting Standards (IFRS) Foundation formed the ISSB in November 2021 as an entity to develop international sustainability standards. Following the TCFD disbandment, in 2024 the ISSB assumed the responsibility of monitoring the progress of corporate disclosure of climate-related data.

Governance

The president is responsible for supervising activities related to climate change risks.

The Sustainability Committee formulates sustainability policies and action plans, monitors the progress of our efforts, and deliberates on our response to climate change. The committee, which meets four times a year in principle and is chaired by the president who acts as the individual in charge, includes full-time directors and the general managers of business divisions among its members.

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.

The Sustainability Committee consists of a full-time director, general manager of the Sales Headquarters, general manager of the Production Headquarters, general manager of the Quality Management Headquarters, general manager of the Administrative Headquarters, general manager of the Thermal Spraying Technology R&D Laboratory, division manager of the Marketing Planning Division, division manager of the Environment Promotion Division, division manager of the Personnel and General Affairs Division, division manager of the Overseas Business Division, division manager of the Accounting Division, and division manager of the Corporate Planning Division. The following 10 individuals are the main members of the committee in positions of executive officers or higher.

Name	Position
Kazuya Kobayashi	Representative Director, President and Executive Officer
Noriyuki Mifune	Chairman & Representative Director
Nobuyuki Kuroki	Director, Deputy President and Executive Officer
Hiroshi Goto	Director, Managing Executive Officer; General Manager, Administrative Headquarters
Takayuki Yoshizumi	Director, Managing Executive Officer; General Manager, Sales Headquarters
Hiroyuki Aisaka	Executive Officer; General Manager, Quality Management Headquarters
Katsunori Nakai	Executive Officer; Division Manager, Personnel and General Affairs Division
Yasuki Nakahira	Executive Officer; General Manager, Overseas Business Headquarters
Takeshi Takabatake	Executive Officer; General Manager, Production Headquarters
Takema Teratani	Executive Officer; General Manager of Thermal Spraying Technology R&D Laboratories

Strategy

In 2022, we launched a broad examination of climate-related risks and opportunities and in June identified countermeasures for the main risks and opportunities to TOCALO Co., Ltd.

In 2023, we deepened our analysis by calculating the financial impact of each risk and opportunity and used the results to set indicators and targets for the countermeasures that we have deemed of critical importance.

In June 2024, we updated our scenario analysis and verified the progress of our countermeasures. The updated analysis is based on the global trend to target 1.5°C warming, and we are conducting analysis using the Decarbonization Scenario (1.5°C to 2.0°C) and the Global Warming Progression Scenario (4.0°C).

We will continue to refine our analysis and apply measures guided by indicators and targets to reduce risks and increase opportunities.

- Scope: Carbon tax items are TOCALO Corporation consolidated; other items are TOCALO Corporation non-consolidated
- Period: Present to 2050
- Scenarios
 - Decarbonization Scenario (1.5°C to 2.0°C): A world in which the average global temperature rise since the Industrial Revolution is limited to 1.5°C to 2.0°C
 - Global Warming Progression Scenario (4.0°C): A world in which the global average temperature rise since the Industrial Revolution is about 4.0°C
- Scenario reference materials
 - IEA WEO 2023 NZE · SPS · APS
 - Fifth Assessment Report of the IPCC, RCP2.6 (2.0°C), RCP8.5 (4.0°C)
 - Sixth Assessment Report of the IPCC, SSP1-1.9 (1.5°C), SSP5-8.5 (4.0°C)

Risks, Opportunities, and Response Measures

Category	Type	Details	Timeframe	Impact on Business	Financial Impact Unless indicated, the scenario is 1.5°C to 2.0°C in fiscal 2030	Response Measures
Transition risks	Policy and regulatory	Increase in energy procurement costs following the introduction of carbon pricing systems	Medium- to long-term	Medium	<p>Carbon tax: ¥380 million* *TOCALO Co., Ltd consolidated *2030 carbon tax estimated to be \$140/t-CO₂ *Foreign exchange rate \$1 = ¥153</p>	<p>Renewable energy</p> <ul style="list-style-type: none"> ● Long-term green electricity contracts ● Consider incorporating additional renewable energy sources, such as solar power (increase the ratio of renewable energy consumption by switching to renewable energy sources) ● Consider methods for storing electricity generated using solar power <p>Facilities</p> <ul style="list-style-type: none"> ● Upgrade facilities to increase productivity ● Replace equipment with leading energy saving models, including air conditioners, refrigeration equipment, LED lightbulbs, and compressors ● Upgrade facilities to eliminate CFCs <p>Vehicles</p> <ul style="list-style-type: none"> ● Switch company vehicles to hybrid models ● Consider introducing electric vehicles, etc.

Category	Type	Details	Timeframe	Impact on Business	Financial Impact Unless indicated, the scenario is 1.5°C to 2.0°C in fiscal 2030	Response Measures
		Increase in materials procurement costs following the introduction of carbon pricing	Medium- to long-term	Medium	—	Enhance information gathering
	Market	Decreased coating demand from coal-fired power plants and other power generation facilities that use fossil fuels	Short- to medium-term	Medium	Decrease in sales related to thermal power generation: ¥1.11 billion (down 51% from fiscal 2023*) *The rate of decline in thermal power generation is based on the Japanese government's Sixth Strategic Energy Plan	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	—	Enhance and expand management and information disclosure concerning CO ₂ emissions
Strengthen communication with stakeholders						
Consider acquiring third party certification to improve the trustworthiness of information disclosure						

Category	Type	Details	Timeframe	Impact on Business	Financial Impact Unless indicated, the scenario is 1.5°C to 2.0°C in fiscal 2030	Response Measures
Physical risks	Acute	<p>Incurring of recovery costs due to damage to plants and operational stoppages caused by disasters such as typhoons, heavy rains, and lightning strikes</p> <p>Production delays and increased costs due to supply chain disruptions</p>	Medium- to long-term	Large	<p>Many of our business sites are located in coastal areas, where potential flood risk damage is higher from storm surges than from other sources, such as river flooding. Event of a flood-class disaster at the six business sites^{*1} located in potential storm surge flood areas:</p> <p>Sales loss due to shutdown: ¥5.89 billion^{*2}</p> <p>Damaged facility restoration cost: ¥9.29 billion^{*3}</p> <p>^{*1} Local government hazard maps indicate six business sites located in potential storm surge areas: Nagoya Plant, Head Office, Akashi Plant, Thermal Spraying Technology R&D Laboratories, Kurashiki Plant, and Kitakyushu Plant</p> <p>^{*2} The number of days of shutdown is based on the Manual for Economic Evaluation of Flood Control Investment of the Ministry of Land, Infrastructure, Transport and Tourism</p> <p>^{*3} Assumption is one flood event will cause 70% of machinery and equipment to fail beyond repair</p>	<p>Formulate disaster plans and consider moving plants in coastal areas that have a high risk of flooding due to rising tides and high waves</p> <hr/> <p>Counter instantaneous power failures caused by lightning strikes (complete introduction of UPS devices, countermeasures for hydraulic control equipment)</p> <hr/> <p>Strengthen business continuity planning, including measures concerning supply chains</p>

Category	Type	Details	Timeframe	Impact on Business	Financial Impact Unless indicated, the scenario is 1.5°C to 2.0°C in fiscal 2030	Response Measures
	Chronic	Procurement difficulties and steep price rises due to increasing metal demand amid decreasing extraction volume	Medium- to long-term	Large	<p>Increase in processing material costs: ¥1.24 billion (an increase of 43.0% of fiscal 2023*)</p> <p>*The rate of price increase for processed materials is based on the market growth forecast for the main metal materials used by the Company</p>	<p>Lower material volume by reducing consumption and improving efficiency (including recycling), pass on price increases</p> <hr/> <p>Monitor fluctuations in suppliers' prices due to changes at mines caused by regulations on materials extraction, including metals</p> <hr/> <p>Pursue customer satisfaction concerning quality by investigating the impact of changes at mines on quality</p>
		Plant damage due to rising sea level	Long-term	Large	<p>(+4°C 2050) Nagoya Plant, which is located in a flood zone, is inundated or much of the neighborhood is under water*</p> <p>Plant relocation cost: ¥1.63 billion</p> <p>*Assumption of a 0.3 meter sea level rise from 2023 to 2050</p>	<p>Strengthening information gathering and flood countermeasures</p>
		Increased impact on employee health due to heat stroke, infectious diseases, etc.	Short- to long-term	Medium	—	<p>Improve working environments using cutting edge air conditioning</p>

Category	Type	Details	Timeframe	Impact on Business	Financial Impact Unless indicated, the scenario is 1.5°C to 2.0°C in fiscal 2030	Response Measures
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	Medium	Revenue increase in environmental energy-related businesses: ¥1.94 billion (an increase of 101% of fiscal 2023)	<p>Develop and market coating technology tailored to customers' GHG emissions reduction efforts (alternative fuels such as hydrogen, ammonia, and biomass, recycling facilities, etc.)</p> <p>Develop and market coating technology tailored to efforts to promote and streamline natural energy power generation (wind power, hydropower, geothermal power, storage batteries, etc.)</p> <p>If raw materials producers switch to renewable energy, showcase our ability to supply customers with coatings that generate zero Scope 3 GHG emissions</p>
	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	Revenue increase from repair and revitalization-related businesses: ¥4.16 billion (an increase of 58% of fiscal 2023)	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.

The Sustainability Committee meets twice yearly to discuss the progress of KPIs for converting to renewable energy and reducing and improving the efficiency of electricity consumption and to reevaluate risks related to climate change.

Metrics and targets

The Company has set specific indicators and targets related to climate change. The indicators and targets are reviewed by the Sustainability Committee, which is chaired by the president, which then reports them to the Board of Directors for deliberation by the directors and others for final approval. The indicators and targets are considered as important management indicators and are the basis for long-term climate change measures.

Electricity accounts for 85.84% (CO₂ equivalent) of the energy consumed by the Company and the vast majority of our CO₂ emissions.

In October 2021, the Japanese government approved a revision of the Plan for Global Warming Countermeasures that sets target of reducing greenhouse gas emissions by 46% in fiscal 2030 compared to fiscal 2013. Based on this plan, we have set a target for fiscal 2030 Scope 1 and 2 greenhouse gas emissions to be below 54% of the level of fiscal 2013, representing a 46% decrease. We have also set a medium-term target to reduce non-consolidated GHG emission to under 54% by fiscal 2025.

We are also working to increase the waste recycling rate to 40% by fiscal 2025 as a countermeasure for the soaring cost of processing materials due to rising demand for metals and a declining extraction volume.

We are preparing to meet increasing opportunities to secure orders for our coatings by advancing our technological development and engaging in public relations to communicate how our coating technologies help conserve energy and reduce GHG emissions. We have also set targets for fiscal 2050 for order volume in the environmental field, encompassing environmental energy equipment and repaired and refurbished products.

Countermeasure	KPI	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
Convert to renewable energy, improve efficiency, and reduce electricity consumption	GHG emissions (non-consolidated, Scope 1 and 2)	7,900 t-CO ₂ (Less than 54% of fiscal 2013 emissions)	7,819 t-CO ₂	6,990 t-CO ₂	17,450 t-CO ₂
Improve efficiency and reduce consumption (including recycling) of materials	Waste recycling rate	40%	48.6%	33.1%	30.7%
Advance development of our coating technologies and engage in public relations to communicate how our coatings contribute to client efforts to reduce GHG emissions, conserve energy, and promote the adoption and efficiency of natural energy power generation.	Financial value of orders received in environmental field (1) Environmental and energy equipment (2) Repaired and refurbished products	(1) 2,000 million yen (2) 8,500 million yen Total: 10,500 million yen	(1) 1,913 million yen (2) 7,229 million yen Total: 9,143 million yen	(1) 1,326 million yen (2) 6,401 million yen Total: 7,727 million yen	(1) 891 million yen (2) 6,117 million yen Total: 7,008 million yen





Sustainability | Society

Quality management and customer satisfaction


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 

Quality Policy 

Acquisition of ISO 9001 certification 

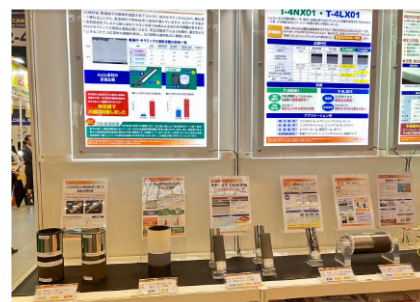
Acquired JIS Q 9100, Nadcap certification (for the aerospace industry) 

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.



Photographs from the exhibition (Kyushu Mechanical Components & Technology Expo in fiscal 2023)

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 2023, TOCALO exhibited at four trade shows. As a problem-solving company, we proactively seek to identify customer issues and work with customers to realize better products and services.

Exhibits in fiscal 2023

- 8th Ceramic Japan Osaka (INTEX Osaka) May
- 20th International Hydrogen & Fuel Cell Expo (Makuhari Messe) September
- Kansai Healthcare and Medical Equipment Development Exhibition 2023 (INTEX Osaka) October
- Nagoya Green Factory Expo (Port Messe Nagoya) October
- 1st Kyushu Mechanical Components & Technology Expo (Marine Messe Fukuoka) November



EMPLOYEE VOICES

Searching for new ideas and making proposals unique to Tocalo

Yoshifumi Tomita (Sales Department Chief, Tokyo Plant)

In my sales department, I am mainly in charge of clients who are manufacturers in the petrochemical and electric power industries. TOCALO's technologies and products are in a specialized niche, and there are many aspects that are very difficult to convey to customers. When talking with clients, I try to provide information in an easy-to-understand manner, and try to be creative and use analogies.

The recent changes in society have brought the petrochemical and electric power industries to a major turning point. Proposing the TOCALO technologies and proven capabilities requires that I not only be on top of the latest information in their industries, I also must have a grasp about the direction the industry and the clients are planning to move forward.

There were instances when technologies we proposed did not produce the desired results. When that happens, we collect and examine data to determine what is hindering the result, then present new solution proposals until we attain the results we were looking for. I've had clients say to me that TOCALO is the only company that has ever been so responsive and accommodating.

Customer needs are diversifying, and conventional ideas and coatings may no longer completely or adequately solve their problems. We will do our best to find solutions for all sorts of modern-day needs by making the Company's latest coating expertise available to clients as quickly as possible, finding new applications for existing technologies, while constantly exploring the potential of new ideas.

Quality Policy

TOCALO quickly formulates and submits product and service proposals using its surface modification technology to fulfill customer needs and continuously improve quality.

1. Create products that fulfill customer quality requirement
2. Clarify and strictly adhere to quality standards
3. Set quality targets and evaluate degree of attainment
4. Continuously improve the quality management system

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

ISO 14001-certified plant	Registered date	Registration number	Certified activities
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 TD processing of insert block molds for automobile forming mold
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-QMA 15690	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"> • Interviews • Review of customer requirements • Preliminary verification test 	<ul style="list-style-type: none"> • Gathering information through interviews to realize customer requirements • Analysis of the use environment for each customer • Proposal



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



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



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



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

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

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	9676204446	Surface treatment of aerospace components (thermal spraying)



The TOCALO Group respects the human rights of all employees, business partners, and stakeholders and is committed to eliminating and preventing discrimination and harassment. The Company complies with the minimum wage regulations of each country and region, and our Guidelines for Corporate Ethical Behavior state our obligations to employees and commitment to promoting their efforts to achieve their full potential and self-fulfillment. Working conditions at TOCALO comply with and exceed standards set forth by laws and regulations.

Respect for human rights

TOCALO Group Human Rights Policy

The TOCALO Group is a company that sincerely and creatively promotes sound business activities and contributes to creating a flourishing society. The Corporate Code of Conduct stipulates ethical standards that all Group officers and employees are expected to follow. The Code of Conduct states the Group's basic policy on human rights is to respect for basic human rights, prohibit discriminatory treatment and child and forced labor, and foster a workplace culture that recognizes diversity and individuality.

*[Corporate Code of Conduct](#)

In accordance with the Code of Conduct, the TOCALO Group Human Rights Policy clearly states the Group's responsibility to uphold human rights. The Group recognizes that any of its business activities has the potential to directly or indirectly infringe human rights. The

president and chief executive officer are responsible for efforts to ensure human rights are respected for all people involved in its business activities.

1. Respect for human rights

The Group respects internationally recognized human rights as stipulated in the International Bill of Human Rights and the International Labor Organization Declaration* on Fundamental Principles and Rights at Work. The Group complies with applicable laws and regulations in the countries and regions where we conduct business activities in accordance with the United Nations Guiding Principles on Business and Human Rights. We respect the internationally recognized human rights when a contradiction exists between internationally recognized human rights and the laws and regulations of a country or region.

*Includes support and respect for core labor standards for the abolition of child labor, elimination of forced labor, elimination of discrimination, and recognition of freedom of association and the right to collective bargaining.

2. Scope of application

The Human Rights Policy outlines the Group's responsibility to implement measures to respect human rights and applies to all officers and employees of the Group. The TOCALO Group expects all of its business partners to follow the policy.

3. Human rights due diligence

The Group maintains a system for conducting human rights due diligence and identifies and takes steps to prevent and minimize actual and potential human rights infringements in the Group's business activities and value chain.

The Group also appropriately discloses information about our human rights measures and their progress on our website and via other means.

4. Correction and remedy

If it becomes clear that a Group business activity has directly or indirectly caused, promoted, or been involved in a human rights infringement, we will take appropriate internal and external steps to correct and remedy the situation. We will additionally develop effective corrective and remedial mechanisms.

5. Dialogue and discussion with stakeholders

The Group will engage in dialogue with various stakeholders about ways to improve its efforts to respect human rights based on Human Rights Policy.

6. Education and training

We will provide Group officers and employees with appropriate education and training to ensure the Human Rights Policy is taken into consideration and effectively put into practice in all of our business activities.

June 23, 2023

Kazuya Kobayashi

Representative Director President and Executive Officer

TOCALO Co., Ltd.

Identifying and assessing adverse human rights impacts

The Group has established a structure for human rights due diligence and enforcement based on the United Nations Guiding Principles on Business and Human Rights. As a first step of enforcement, in fiscal 2023 the Group identified and prioritized action on potential human rights issues for each business activity.

Human rights risk identification procedure

1. Organize potential business-related human rights issues with reference to the Universal Declaration of Human Rights, OECD Guidelines for Multinational Enterprises, ILO International Labor Standards, SA8000 Standard, Guidelines on Respecting Human Rights in Responsible Supply Chains, and related practical materials.
2. Assess the severity and likelihood of each risk based on internal interview meetings to determine the awareness level of human rights risks; recommendations and requests from NGOs and other organizations; risks considered important by other companies in the industry and leading companies in Japan; and investigations and media reports on human rights issues.
3. Discuss the risks with external experts

- Review the risks at Sustainability Committee meetings and identify priority risks (approved at the March 2024 Board of Directors meeting)

Human rights risk assessment method

- Set five general risk categories of occupational safety and health, discrimination, community, information management, and intellectual property, and 28 risk scenarios.

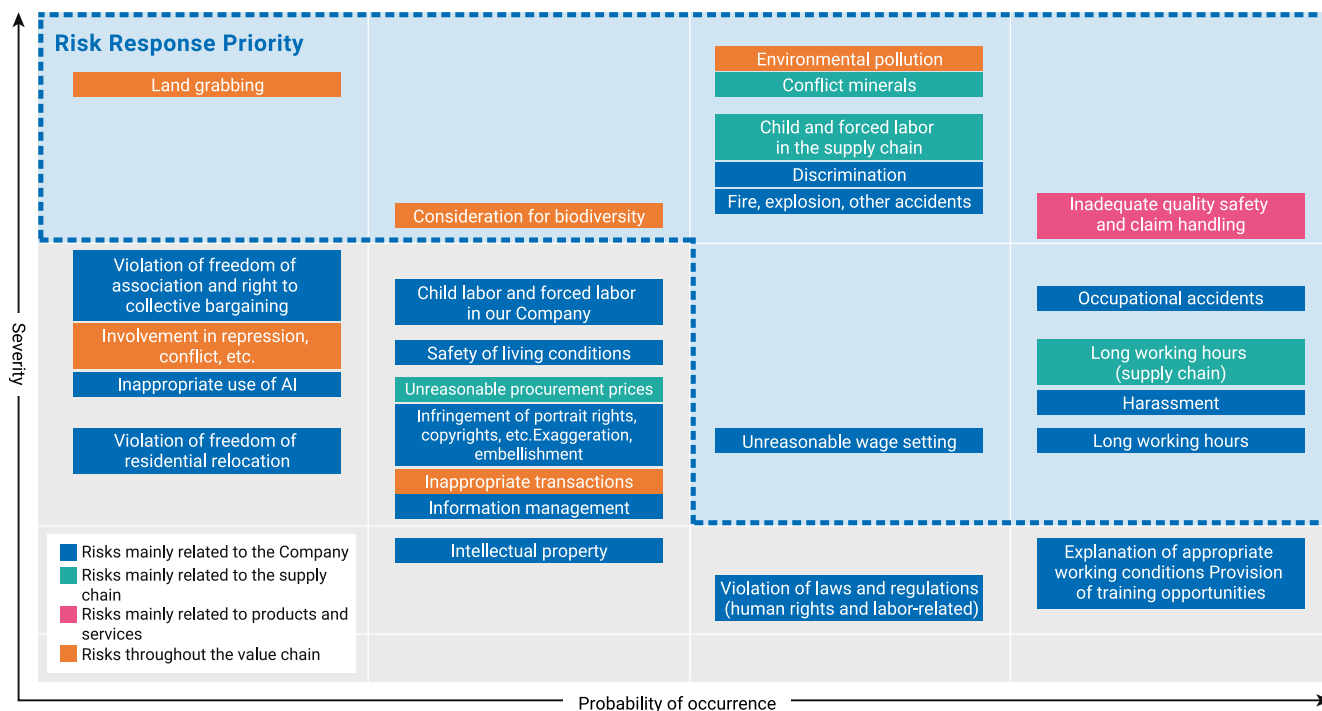
Category	28 risk scenarios
Occupational safety and health	Poor working conditions, occupational accidents, rights violations and restrictions, child labor, forced labor, law and regulation violations
Discrimination	Sex/gender, origin, nationality/ethnicity, ideology/beliefs, medical history/health (including pregnancy), physical/mental disability, employment status, discriminatory language, other
Community	Planning and technology development, raw material procurement, manufacturing and processing, public relations, sales and after-sales service, disposal
Information management	Inappropriate use, data leak, legal violations, security, technology/AI
Intellectual property	Proper compensation, inappropriate use

- Evaluate and analyze the risks and create a risk map based on (1) severity* and (2) probability of occurrence

* Based on the scale and scope of the human rights violations and the difficulty to remedy the situation

- Prioritize addressing high severity risks; when multiple risks of equal severity exist, prioritize by probability of occurrence

Human rights risk map



Future plan

The human rights risk map will be used to recognize the actual current status of human rights in the Group, to formulate procurement guidelines, and to work with the supply chain safeguard human rights.

Other measures

Eliminating discrimination

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.

- **Percentage of employees with disabilities**

2.86% (non-consolidated, end of March 2024)

Employee consultation desk

Consultation services concerning compliance violations, including harassment, are available internally and externally (third parties). The consultation services cover a broad range of issues, including mental health issues and employee opinions and requests.

Internal education

We actively seek to increase employee awareness of human rights through compliance training (e-learning) to educate all employees with basic knowledge of the UN Guiding Principles on Business and Human Rights, human rights policy, and approach to respect for human rights. We also regularly conduct training on harassment prevention and corporate ethics awareness.

Proper relations between management and labor

The Company facilitates relations between management and labor and promote its business by holding discussion meetings between company and labor union executives attended by company executives and labor union leaders about six times a year. At the meetings, the Company regularly explains its business plans, performance, and organizational reforms, and holds discussions with the intention of improving the work environment and treatment of employees.



Human resource development

The people we seek

We seek individuals who will embody our corporate mottos of Technology & Ideas, Youth & Passion, Harmony & Reliability, and Good Service and seek to take them to a new level.

Human resource development policy

We aim to be the best partner for our clients by creating value with our surface modification technologies. To achieve this, we must cultivate personnel with the ability to work autonomously in the four key areas of reinforcing our market development, reinforcing our technological development, enhancing the sophistication of our manufacturing, and realizing sustainable growth to become a 100-year company. We accordingly provide various growth opportunities to employees to bring out their potential and motivation and support the advancement of their careers.

Human resource development policy

1. Improve proposal-based sales capabilities to provide optimal solutions

We strengthen our proposal-based sales capabilities so we can provide optimal solutions to diverse customer needs. We do this by providing employees with opportunities to join projects in our priority fields and our conference where employees give presentations about actual business case examples so they can expand their specialized knowledge and learn from actual application cases.

2. Encourage ingenuity in manufacturing and solidifying our foundation (personnel development)

We encourage thinking creatively about ways to improve manufacturing efficiency so we can both provide coatings designed to individual customer specifications and increase our production capacity. One of the ways we do this is through initiatives to improve manufacturing, including holding QA-presentation competitions. We also have mechanisms (personnel development) to ensure work processes are performed according to specifications and procedure manuals, which are overseen and supervised by a foreman.

3. Continuously enhancing quality control

A quality management system is of fundamental importance to our business because of the extreme difficulty confirming the quality of a coating after it has been applied. To maintain strict control of the coating application process, we encourage employees to obtain skills that will further improve our quality control systems, including earning quality control certification (QC Kentei) and non-destructive inspection engineer qualifications.

4. Cultivate a corporate culture with a flexible approach to technology development

The technology report presentation competitions and technical conferences we hold for employees are events that embody our Technology & Ideas motto. We foster a corporate culture that creates enthusiasm for technological development and flexible thinking unbound by pre-existing concepts.

5. Provide digital education and selecting DX human resources

Digitalization and DX are important to improving the productivity and quality of all operations. We are implementing digital education to raise the digital literacy (the ability to understand and use it) throughout our organization. We are also selecting and training individuals as DX human resources who can use data and digital technology to lead to innovation.

6. Cultivate strategic thinking by broadening perspectives with a global experience program

We are launching a new global experience program to develop human resources who will lead not only our global expansion but also for our corporate development in the long term. The program is intended to broaden the perspectives and nurture the strategic thinking of highly motivated employees.

KPIs for human resource development (non-consolidated)

Item	KPI	FY2025 target	FY2023 result	FY2022 result	FY2021 result
Encourage ingenuity in manufacturing and solidifying our foundation (personnel development)	Number of certified technicians (total)	240	231	226	178
Continuously enhancing quality control	Number of people passing QC certification tests (total)	60	91	49	31
	Number of qualified non-destructive testing engineers (total)	25	20	18	15
Cultivate a corporate culture with a flexible approach to technology development	Number of external presentations (academic society presentations, research papers, commentary articles)	25	21	28	18
Overall	Education expense per employee	¥80,000	¥75,800	¥63,200	¥54,200

Human resource programs (non-consolidated)

	Young employees	Mid-career personnel and professionals	Management level
Market development and services	Business case presentation meetings		
	Salesperson development training		
	Focus area projects and working groups		
Technology development	Joint development with customers, industry-academia-government collaboration		
	Technical Report Presentation Competition	Technical meetings	
Manufacturing and quality	QA-presentation competitions (improvement initiatives)		
	Thermal spraying/machining/metal heat treatment technicians		
		Meister system	
	Quality management system (quality meetings)		
	QC testing, non-destructive testing engineer qualifications		
Management	Global experience system		
		Management candidate development training	Training for newly appointed managers
Foundations	New employee training	New manager training	
	Second- and third-year training	Career planning training	
	Digital education		
	Compliance training		
	E-learning (self-development)		



VOICE

Providing full support to employees taking on new challenges

Hiroshi Goto
Director, Managing Executive Officer, General Manager of Administrative Headquarters

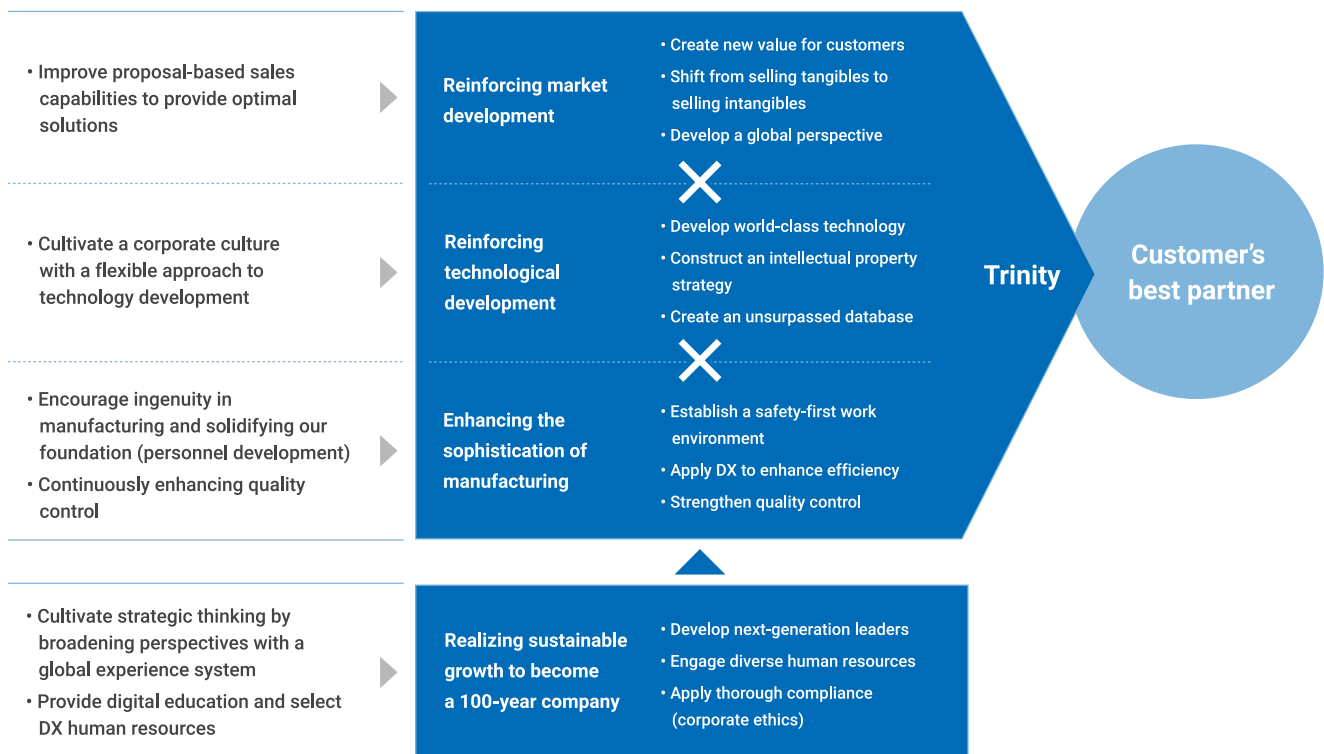
For TOCALO to continue growing and developing into the best company it can be, all of our employees must likewise continue growing. One of our missions is to create an environment where our employees can grow. I am particularly focused on creating an environment where employees are eager to take on new challenges.

In fiscal 2022, we launched the global experience program to train the human resources that will lead our global development into the long term and introduced an internal “DX human resources recruitment” in which we are selecting and training individuals to use data and digital technology for innovation. Younger employees in particular have been very interested in these programs, and the applications have far outnumbered the number of spaces.

We are creating an environment that encourages employees to take on new challenges and providing full support. We expect these efforts to greatly support the growth of highly motivated employees which will contribute to the Company’s overall growth.

Investment in human capital

Our human resource development policy is to actively invest in developing and strengthening the human resources we need to become the best partner for our customers. TOCALO Co., Ltd. invested a total of ¥76 million, or ¥75,800 per employee, in employee education in fiscal 2023.



¥76 million education investment in FY 2023 (non-consolidated)

Creating a comfortable work environment

Work environment policy

We will maintain a comfortable work environment for all employees so that they can express their individuality and abilities and achieve harmony between their work and private lives.

Work environment principles

1. Foster corporate culture with psychological safety

Foster an open corporate culture where all employees feel comfortable expressing their opinions and feelings and where everyone is supportive of taking on challenges.

2. Maintain and improve a comfortable work environment, including health and safety

We ensure employee workplace safety and health in accordance with the Labor Standards Act and the Industrial Safety and Health Act and strive to maintain a clean, functional, and people-friendly working environment.

Please see [Occupational safety and health](#) for details.

3. Provide equal-opportunity career advancement and merit-based evaluations

We actively employ human resources with various attributes (nationality, age, presence or absence of disabilities) who can feel motivated to work to their full potential. We promote the active participation of women. We provide equal opportunity for career advancement and merit-based evaluations.

Please see [Diversity Promotion Activities](#) and [Human resource development](#) for details.

4. Support employees balancing work with childcare and nursing care

We provide career assurance to employees who are raising children or providing nursing care by offering and disseminating information about our temporary leave, holidays, shortened work hours, and other programs. We also take steps to maintain the understanding and cooperation of superiors and others in the workplace.

Please see [Supporting work-life balance](#) for details.

5. Create a workplace environment allowing flexible work styles and healthy work activity

We strive to provide and develop flexible work structures (work locations, hours) and to create a work environment where employees can physically and mentally work in a healthy manner. We believe that a flexible and healthy work environment improves productivity and enables work-life balance.

Please see [Supporting work-life balance](#) for details.

6. Provide learning opportunities and establish an award program

We provide a variety of learning opportunities for employees to improve their work skills and advance their personal development. We also created an award system to stimulate employee motivation.

Please see [Human resource development](#) for details.

KPIs for work environment (non-consolidated)

Item	KPI	FY2025 target	FY2023 result	FY2022 result	FY2021 result
Maintain and improve a comfortable work environment, including health and safety	Occupational safety incident frequency	Target is zero	2.06 (Including dispatched employees)	1.80 (Not including dispatched employees)	0.62 (Not including dispatched employees)
	Labor safety incident severity rate	Target is zero	0.08 (Including dispatched employees)	0.03 (Not including dispatched employees)	0.00 (Not including dispatched employees)
Equal career opportunity and merit-based evaluations	Percentage of female full-time employees	13%	12.2%	11.0%	9.5%
	Percentage of female managers	5%	2.1%	2.3%	1.4%
Support balancing work and childcare/nursing care	Percentage of male employees taking childcare leave	90%	82.8%	68.0%	31.3%

Please see the section [ESG data](#) for data on human resources.



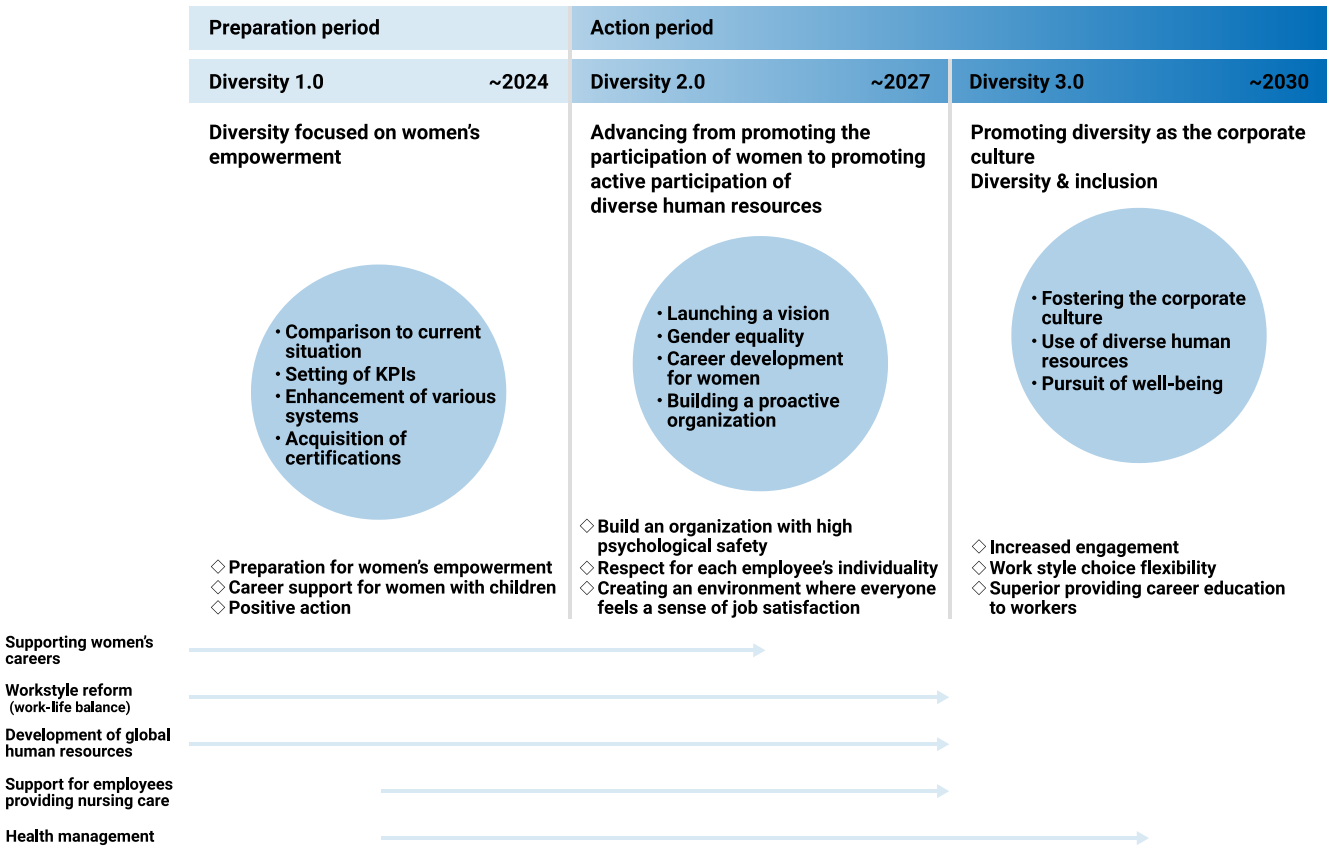
TOCALO has set “Cultivating and actively engaging diverse human resources” as a material issue (materiality) for our sustainable growth. We also provide employee training and an internal work environment where employees can actively express their individuality and abilities.

Company executives meet with labor union representatives once a month, in principle, to further ensure that work conditions comply with laws and regulations as well as to discuss ways to realize a comfortable working environment.

[Approach to promoting diversity](#)
[Promotion of diversity](#)
[Objectives](#)
[Diversity promotion initiatives](#)
[External evaluations](#)

Approach to promoting diversity

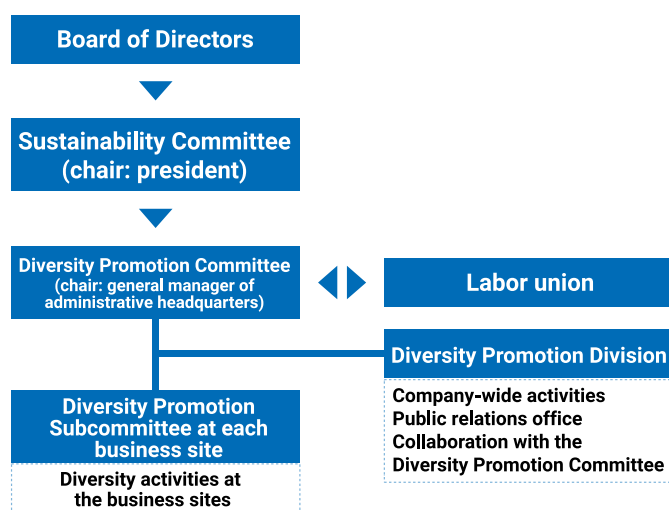
Vision for 2030: A workplace where everyone feels job satisfaction and individuality shines



Promotion of diversity

Our objective is to be a company where diverse human resources can work energetically and rewardingly. We established the Diversity Promotion Committee in July 2020 to actively lead our diversity activities. Under the direct control of the president, the committee includes members of various genders, ages, and company responsibilities who gather information and engage in constructive discussion for improving diversity in the Company.

To further advance our initiatives, we established the Diversity Promotion Division in February 2022. The Diversity Promotion Committee and Diversity Promotion Division work with labor unions to advance various activities related to diversity, including implementing measures related to our material issue of promoting the advancement of women in the workforce and to creating a workplace that emphasizes job satisfaction.



Goal

To realize the Vision (Goal for 2030) and fulfill the mission of the medium-term management plan, we have set KPIs associated with our priority material issues (materiality). The following goals have been set for diversity.

KPI	Definition	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
Ratio of female full-time employees	No. of female full-time employees ÷ total no. of full-time employees x 100	13%	12.2%	11.0%	9.5%
Ratio of female managers	No. of female managers ÷ total no. of managers x 100	5%	2.1%	2.3%	1.4%

KPI	Definition	Fiscal 2025 goal	Fiscal 2023 achievement	Fiscal 2022 achievement	Fiscal 2021 achievement
Ratio of men taking childcare leave	No. of men taking childcare leave ÷ no. of men eligible for childcare leave x 100	90%	82.8%	68.0%	31.3%

Please see the section [ESG Data Collection](#) for data on human resources.

Diversity promotion initiatives

Advancement of women in the workforce

We publish a General Employer Action Plan based on the Act on the Promotion of Female Participation and Career Advancement in the Workplace.

[General Employer Action Plan based on the Act on Promotion of Female Participation and Career Advancement in the Workplace](#)

(Japanese Only) 

The General Employer Action Plan under the Act on the Promotion of Women in the Workplace (excerpt)

Goal 1	Hire at least 20% women among new graduates each year Main initiatives: Increase PR activities aimed at female students and create a work environment where women can play an active role
Goal 2	Raise the percentage of female management to a minimum of 5% Main initiatives: Provide career development training for female employees and unconscious bias training for managers
Goal 3	Facilitate balancing professional and personal life Main initiative: Create a support system, such as flextime and telework, for employees needing workstyle flexibility

We are actively promoting the participation of female employees, and, in line with the action plan of the Act on the Promotion of Women in the Workplace, we have set a KPI of increasing the percentage of women in management positions to 5% by the end of fiscal 2025.

To nurture future leaders among our female employees, we are focusing on developing management candidates through training programs designed to cultivate a management perspective, such as skill improvement training and a program of temporary management positions where participants build experience guided by managers in other departments. We have also introduced regular training for all employees and diversity training for managers in an effort to raise awareness and eliminate unconscious bias.

In addition, to provide conditions to best retain and support the success of women and a diverse workforce, we are enhancing our systems for improving the work conditions, including improving the workplace environment, providing paid childcare and nursing care leave, introducing hourly-based paid leave, and extending the shortened working hours system for childcare to cover all of the elementary school years.



Female Employee Forum*

Note: Career planning and network building for female employees

Employment of senior human resources

In April 2022, we raised the mandatory retirement age from 60 to 65. Raising the retirement age boost the morale of veteran employees and increased the overall vitality of the workplace. Retaining senior human resources allows them to continue activating the high-level expertise gained from their long careers and share techniques with younger personnel, helping to cultivate future generations. Leveraging the expertise of senior human resources enhances our manufacturing capabilities and will further strengthen our competitiveness.

Hiring of foreign nationals

TOCALO hires individuals based on experience and skill regardless of race or nationality. Our recruitment activities are designed to provide equal opportunity to all applicants and no special circumstances are provided to foreign nationals. When a foreign nationals is hired to work in Japan, we support the acquisition of work visas, sponsor residence (with conditions), and other necessary procedures.

Hiring of people with disabilities

As of March 31, 2024, persons with disabilities represented 2.86% of our workforce, which is above the 2.3% statutory employment rate (2.5% as of April 1, 2024). We consider the employment of persons with disabilities as an important contribution to the Company's vitality and provide an environment that supports active engagement by persons with various disabilities. We will continue to provide support and opportunities to maximize the power of each individual.

Enhancement of work-life balance

We publish a General Employer Action Plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children.

(Japanese Only) 

Our General Employer Action Plan under the Act on Support for Raising Next-Generation Children

Goal 1	Increase the use of paid leave to 68% Main initiatives: Increase understanding of paid leave eligibility and promote its usage
Goal 2	Raise the percentage of male employees taking childcare leave to 80% Main initiatives: Continued conducting childcare leave interviews supervisors present, increase understanding of the program and eligibility

We help employees maintain a healthy work-life balance by promoting labor and management efforts to reduce long working hours and encouraging employees to take annual paid leave, including refreshment leave, with the intention of creating an environment where employees can carry out their jobs in a way that is comfortable for them. With more women joining the workforce, we are supporting individuals seeking to maintain a professional career while raising children by encouraging the use of childcare leave and fostering a work environment that accommodates health management during pregnancy and after childbirth. We also consider male participation in childcare to be essential to promoting and understanding diversity, and accordingly provide partially paid leave to encourage all eligible employees to use childcare leave. While expanding our workstyle flexibility, we are also seeking to raise workplace awareness and change the workplace culture. This includes a program to raise awareness about employees who are working while also providing nursing care to a family member. We introduced a nursing care leave program for up to 183 days and with up to five days of paid nursing care leave per year. In addition, in March 2023, we introduced infertility treatment leave, with eligibility conditions, to support employees undergoing infertility treatment.

External evaluations

Eruboshi Certification

Eruboshi Certification is a system to recognize companies providing work environments conducive to women demonstrating their full capabilities as evaluated in the five categories of employment, continued length of employment, working hours and work styles, percentage of management positions, and diverse career paths. TOCALO fulfilled all five certification criteria and received the highest rating of 3 stars on June 11, 2024.

Kurumin Plus Certification

To be a company with a diverse and enthusiastic workforce, the Diversity Promotion Committees at each worksite are leading efforts to strengthen our employee support programs, such as for people balancing childcare and work, and to encourage male employees to take childcare leave. In March 2023, we introduced a leave program to support employees undergoing infertility treatment and ran programs to promote awareness and understanding of infertility treatment. These efforts earned us Kurumin Plus certification on June 7, 2023 as a company supporting employees who

are balancing work with raising children and infertility treatment. We were the first company in Hyogo Prefecture to earn the certification.

Please see the section [External evaluations](#) for further information.



At TOCALO, we are committed to the upkeep and improvement of a facilitative work environment where employee health and safety is an important consideration.

In addition, we are committed to achieving zero occupational accidents and are working to create safe work environments where employees can work with greater comfort and peace of mind.

Occupational safety and health

2024 safety and health policy

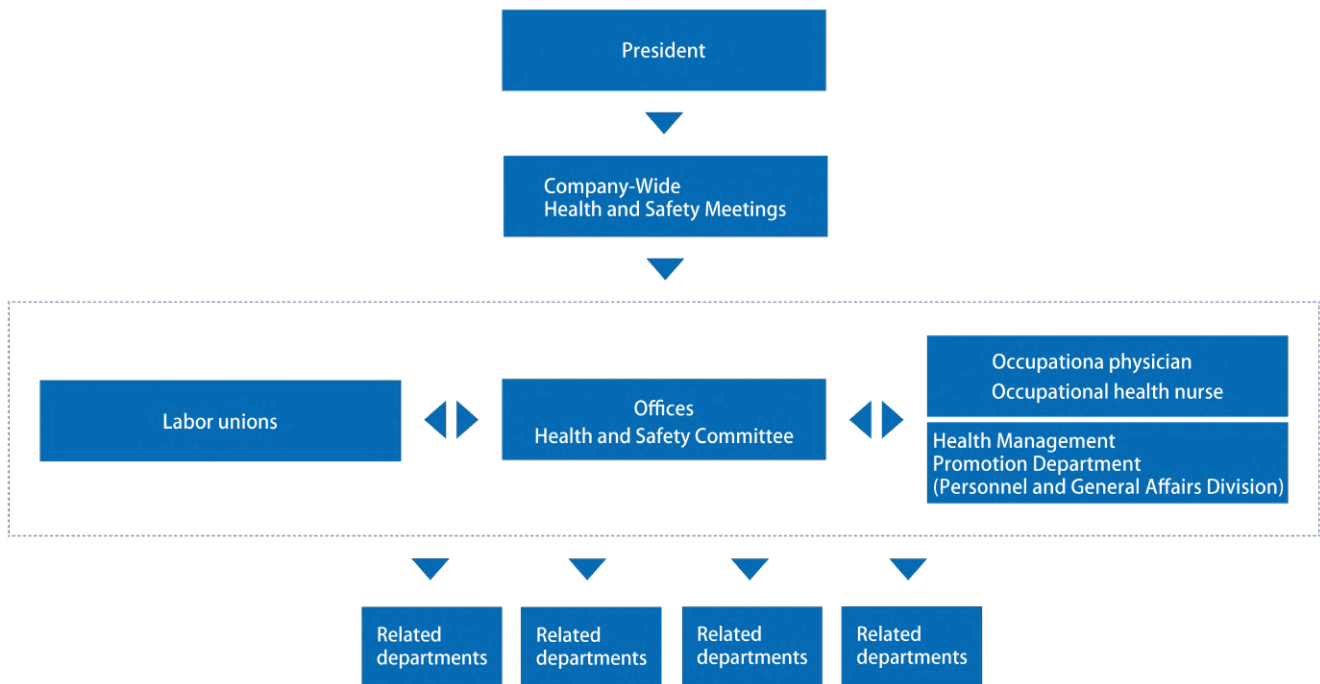
TOCALO's safety and health policy is based on the principle that "safety takes precedence over everything." The policy provides guidelines for "maintaining and improving work environments" and "achieving zero accidents and zero injuries" by showing due consideration to safety and health in ways that 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. Communicating with all employees, systematically carrying out occupational health and safety activities (inspections, patrols, and education) with the participation of all employees, and taking steps to raise safety and health awareness.
3. Aiming to reduce risk factors for accidents and disasters by increasing visualization through the 5S cycle, risk assessment, and analysis of occupational accidents, and by continuously promoting occupational safety and health in accordance with the JIS Q 45100 standard.
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

Occupational Health and Safety Management System

TOCALO maintains an occupational health and safety management system headed by the president and dedicated to providing a comfortable and safe work environment. Safety and health committees at each business site meet each month to assess workplace risks and provide feedback to employees on the assessment results. Risk information issued by the committee is shared at Company-wide health and safety meetings headed by the General Manager of the Production Headquarters. The Company also works with each business site, the Health Management Promotion Department, labor unions, occupation health nurses, and external experts (occupational physicians) to raise employee safety awareness and continuously improve health and safety conditions.



Industrial safety and health initiatives

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.

The Company makes concerted efforts to prevent occupational accidents and vigorously promotes safety and health measures. One ongoing initiative that we have been conducting for several years is to receive advice on health issues and health and safety from an outside director who for many years was a professor at the Osaka University Health Care Center.

Effort is also made to raise safety awareness by providing education centered on safety education to new employees entering the Company that is and focusing on foreman training that is based on guidance from external consultants.

Initiatives to create a comfortable work environment

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 hot air and 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 implement measures geared to conditions at each worksite.

Health initiatives at overseas sites

The company implements various measures to ensure the health and safety of employees and their families who are posted overseas. To ensure that employees can work overseas with peace of mind, we provide medical examinations and vaccinations against infectious diseases prior to traveling overseas and require medical examinations upon temporary returns to Japan. While overseas, individuals are registered for medical examination support services and support is made available for mental and physical issues as well as daily life activities.

Initiatives to prevent occupational accidents

TOCALO is thoroughly committed to a safety-first policy and aims to achieve zero occupational accidents.

In fiscal 2023, the Company recorded 15 occupational accidents (0 fatalities, 5 lost-time accidents).

When a work-related accident occurs, we immediately disseminate the information to all worksites. The Group safety and health meetings investigate the causes and discuss countermeasures, which are then horizontally implemented at all worksites.

Our activities to prevent accidents before they occur includes sharing information at the Group safety and health meetings about injury accidents as well as about near-miss and other incidents that had potential to lead to serious accidents.

Type of accident		Incident status				
		Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Occupational accidents	Employees who missed work because of injury or illness	—	5	1	3	5
	Number of days	—	48	1	43	203
Fatalities		—	0	0	0	0

Occupational health and safety management system

Four of our business sites have acquired and are operating under ISO 45001:2018 certification (the international standard for occupational health and safety management systems) and JIS Q 45001 certification, which has additional requirements for daily health and safety activities.

We are constructing a safe and healthy work environment by conducting risk assessments aimed at reducing and controlling safety and health risks and by supervising compliance with laws and regulations.

Preparations are under way to obtain ISO 45001 and JIS Q 45100 certification for the remaining sites.

We are promoting the acquisition of ISO 45001 certification, and 16.7% of the Group companies have currently obtained certification.

Please see the [ESG Data Sheet](#) for Group company ISO 45001 status.

ISO 45001 and JIS Q 45100 certification status

Plants with certification	Registered date	Registration number
Kitakyushu Plant	March 2019	ISO45001:JISHA-O-102
	March 2024	JQA-OH0290
Nagoya Plant	December 2023	ISO45001:JISHA-O-105
	December 2023	JISQ45100:JISHA-105
Kobe Plant	December 2023	ISO45001:JISHA-O-104
	December 2023	JISQ45100:JISHA-104
Kurashiki Plant	January 2024	ISO45001:JISHA-O-111
	January 2024	JISQ45100:JISHA-111
Akashi Plant	September 2024	ISO45001:JISHA-O-122
	September 2024	JISQ45100:JISHA-122



Health management is a priority management issue at TOCALO and we take steps to provide full support for employee mental health care and work-life balance so all employees can work energetically and safely.

Basic approach to Health management

Positioning of Company Health management

In 2023, we announced our Declaration on Health management based on the belief that efforts to maintain and improve employee health are fundamental to human capital management. We are actively implementing Health management as part of our drive for sustainable growth toward becoming a 100-year company.

Sustainable growth to become a 100-year company

Human capital management

Considering people as capital and invest in our human resources to create new corporate value

Health management

Foundations for improving health

Sense of purpose

Self-actualization

Job satisfaction

Employee engagement (self-motivation)

Human resource development

Medium- to long-term perspective

Investment in training

Mental and physical health support

Implement health management and raise awareness

Investment in health

Workstyle reform and worksite safety

Support flexible workstyles and create clean, functional, and people-friendly worksites

Declaration on Health management

Our medium-term management plan stated our mission to “make employees and their families proud of our Company as a place to work with enthusiasm and safety,” and we accordingly implemented measures to “develop human resources” and “create a work environment that is clean, functional, and people-friendly.”

In addition to the above, fulfilling our mission will also include actively advancing Health management measures by “promoting mental and physical health” and “increasing employee engagement (eagerness to contribute to the Company).”

Kazuya Kobayashi

Representative Director,

President and Executive Officer

Health management policy

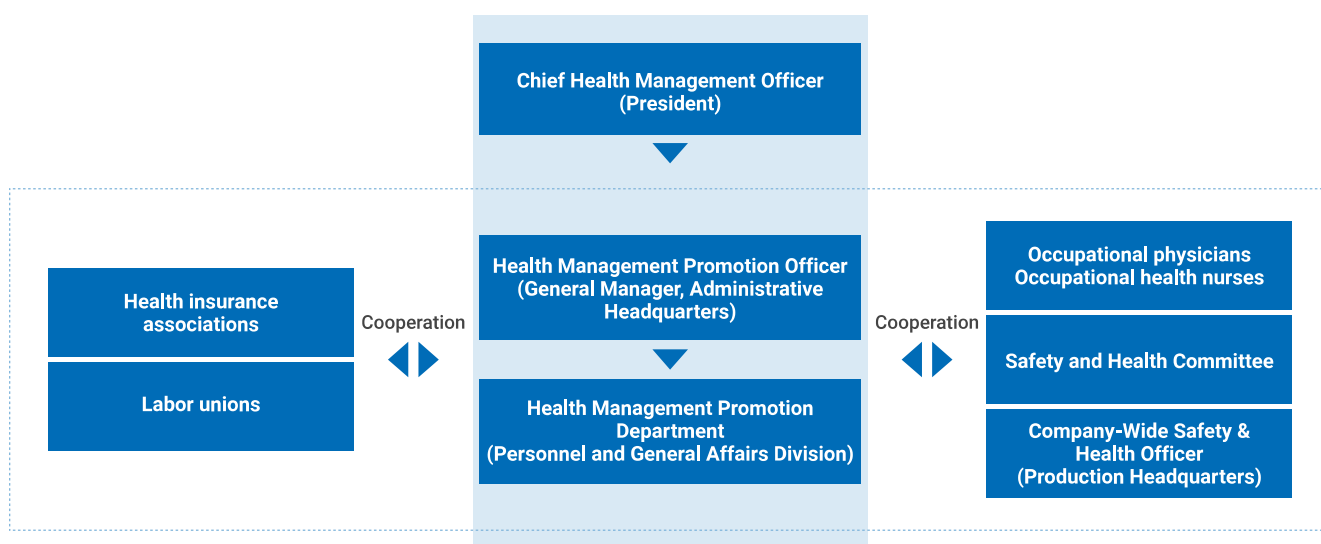
1. We actively support each and every employee so they can work independently to improve their physical and mental health.
2. We create comfortable worksites that are clean, functional, and people-friendly.

3. We regularly evaluate the results of health and productivity management initiatives and maintain a system for continuous improvement. Management will demonstrate leadership to promote employee participation in Health management.

Health management promotion initiatives

Health management promotion structure

The Personnel and General Affairs Division promotes the Company's Health management. The TOCALO President serves as the Chief Health management Officer and the General Manager of the Administrative Headquarters serves as Health management Promotion Officer. The Personnel and General Affairs Division forms and executes its policies and strategies while cooperating fully with the Production Headquarters in charge of safety and health, labor unions, external organizations (health insurance associations), and external experts (occupational physicians).



Health Issues

1. Promoting physical health

2. Promoting mental health
3. Creating a clean, functional, and people-friendly work environment
4. Improving work-life balance

Main health initiatives

- Early detection and treatment of diseases
- Reduction lifestyle disease risk (smoking cessation awareness, etc.)
- Reduction of mental disorders
- Improvement of work-life balance

Health initiative areas

Early detection and treatment of diseases

TOCALO's health management is led by employees who are qualified occupational health nurses. One of our fundamental activities is providing regular and periodic medical checkups for 100% of our employees. For individuals who receive results indicating recommendations for detailed examinations or reexamination, our occupational health nurses encouraging them to make examination appointments at medical institutions and follow up on their condition until receiving the new results. The Company covers the cost of initial consultations at medical institutions. In addition, we support the early detection and treatment of diseases by also covering the costs of employee screenings for cancer and lifestyle diseases, gynecological checkups, and dental examinations.

Reduction of lifestyle disease risk

We seek to help employees reduce the risk of lifestyle diseases by having our occupational health nurses offer individual health guidance, consultations, and smoking cessation support. The percentage of smokers in our company is currently higher than the national average, and we have accordingly launched a Smoking Cessation Challenge Campaign to encourage and support people to quit. Employees who sign up to join the campaign receive an incentive payment if they are smoke-free for one year. Occupational health nurses also conduct regular seminars on quitting to assist individuals interested in quitting.

Mental health care support measures

We take steps to prevent the development of serious mental issues by seeking to recognize the early signs of mental health struggles through daily checks by supervisors, stress checks, employee career development questionnaires, and employee engagement surveys. When a stress check indicates a person may be feeling a high level of stress, occupational health nurses urge the individual to talk with an occupational physician. Group analysis results are shared with the person in charge of the workplace, and the head office works with them to identify the source of the stress and implement countermeasures.

Raising employee health awareness

As part of our efforts to raise employee awareness of health issues, in 2023 we introduced an e-learning health course that has been taken by 100% of employees. We encourage all employees to gain a deeper understanding of their personal health, which we believe will motivate them to adopt healthy lifestyle habits.

Improving work-life balance

We have introduced flexible work systems, including telework and flextime, as part of our ongoing efforts to accommodate diverse workstyles and life circumstances of our employees. In fiscal 2023, we began conducting employee engagement surveys to identify current problems and issues, and are developing initiatives to improve employee engagement. We are creating an environment in which all employees can work with enthusiasm and a sense of fulfillment.

Health initiatives at overseas sites

To ensure the health and safety of employees and their families who are posted overseas, we provide vaccinations and health checkups for infectious diseases prior to traveling overseas, and encourage employees to undergo medical examinations when they return to Japan, even for temporary visits. We also support employee physical and mental health so that they can work overseas with peace of mind, including by engaging a medical consultation support service (WellBe Risk Management Service) at the place of assignment. In addition, the division manager of the Personnel and General Affairs Division conducts online interviews with overseas assignees at the once a year.



VOICE

Using employee ideas to create an environment where everyone can work with enthusiasm

Tomoko Sasaki (Personnel General Affairs Division, Human Resources Department)

My department, Human Resources & General Affairs, is in charge of promoting health management promotion and managing the health of employees.

My job as a certified occupational health nurse is to provide health-related information, make recommendations for lifestyle improvements based on health checkup results, and to provide follow-up care to employees returning from health-related leaves to help ensure they maintain their health as they transition back to work. When I am managing the health of individual employees, I place importance on listening to each individual and considering what they need to be healthy and enthusiastic about their work.

The health management promotion staff meets regularly to discuss ideas for future initiatives. One of the things we emphasize in our health management is maintaining a sense of unity throughout the Company. This year, we held our first event and seminar on quitting smoking. We received many positive comments from the participants, but unfortunately there were actually few participants. I want to devise ways to encourage more employees to participate in future sessions, so we can make a bigger contribution to improving employee health.

We are working every day to identify the health issues that our employees are facing so we can help them maintain and improve their health and continue working with enthusiasm.

Health measure indicators

	Fiscal 2021	Fiscal 2022	Fiscal 2023
Percentage of employees receiving regular health checkups	100%	100%	100%
Percentage of employees participating in health-related seminars	—	—	100%
Average percentage of paid leave taken	66.0%	76.5%	75.6%
Employee engagement survey results (average of 0 to 5)	—	—	3.56


External evaluations


In fiscal 2024, we were certified as a Health and Productivity Management Outstanding Organization.


Please see the section [External Evaluations](#) for further information.



We aim to be a company that enjoys friendly relations with its neighbors through cleanup activities in the surrounding areas, participation in community events and youth development programs, and promotion of sports.

Community cleanup activities 

Contributing to youth development 

Contributions to society 

Community cleanup activities

Cleanups tailored to business locations and the particular traits of their surrounding communities

TOCALO's community cleanup activities began as part of our activities to contribute to local communities. As always, the cleanups are conducted while paying close attention to traffic and wearing high-visibility orange bibs.

Quite a bit of garbage tends to find its way to the area around the Kobe Plant, often fireworks residue and barbecue leftovers discarded at a nearby park. Something that has been encouraging in our regular cleanup activities is that our neighbor companies have told us they would like to start their own activities based on ours.

A team from the Thermal Spraying Technology R&D Laboratories, with the proper permissions, cleans the green area of the nearby Akashi Seaside Park.

The Akashi Plant engages in monthly cleanup activities in conjunction with the cleanup activities of its industrial park.

At the Head Office, we pick up litter on sidewalks and in gutters around the office on a monthly basis.

We will continue our community cleanup activities in a way that is tailored to each business location and the characteristics of their surrounding communities.



Cleanup activities near the Nagoya Plant



Cleanup activities near the Head Office

Contributing to youth development

Supporting the Akashi-jyoki Gakudo Soft Baseball Tournament

TOCALO has been a special sponsor of the Akashi-jyoki Gakudo Soft Baseball Tournament since its launch in 2012. Teams from the local prefecture (Hyogo) battled it out in the 2023 tournament, and the head of the Akashi Plant presented the tournament awards at the closing ceremony.



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

Extracurricular classes at nearby elementary schools

In fiscal 2023, Tokyo Plant's Gyoda Workshop hosted a school field trip by elementary students, who particularly enjoyed opportunities to experience our technologies in person. Tocalo is dedicated to continue providing educational activities for children in nearby communities.



Elementary students at the plant

Accepting internships

TOCALO has been hosting interns annually since fiscal 2007. For safety reasons during the pandemic, we did not accept interns in fiscal 2023.

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

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

June 2024 Endorsement of the Green Fund of the National Land Afforestation Promotion Organization

In fiscal 2024, we donated ¥500,000 to the Green Fund as part of our continuing support for the forest maintenance and greening activities of the National Land Afforestation Promotion Organization.



緑の募金

June 2024 Sponsorship of the Tokai Fireworks Festival

As part of our contributions to the development of the local communities, we donated ¥500,000 to help sponsor the Tokai City's midsummer Tokai Fireworks Festival.

May 2024 Donations to support children's causes and promote SOGIE understanding

We donated a total of ¥1.3 million to organizations promoting the healthy development of children, the creation of environments supportive of raising children, and to promote understanding of sexual orientation, gender identity, and expression (SOGIE). Donations were made to the following organizations.

- Akashi, Hyogo Prefecture (corporate hometown tax)
- Harima, Kako District, Hyogo (corporate hometown tax)
- Akashi Children's Fund
- NPO Hyogo Children Supporting Organization
- Akashi Rainbow Fund

April 2024 Donation to support aid for victims of the East Taiwan earthquake

We donated ¥1.0 million through the Japan Red Cross Society to aid victims of the 2024 earthquake off the eastern coast of Taiwan.

(Yen in thousands)

	FY2021	FY2022	FY2023
Total spending for social contribution	6,460	10,600	14,260

過年度の取り組みを閉じる



March 2024 Donation to the Funabashi City Children and Childcare Support Project

We donated ¥1.0 million to Funabashi City in Chiba Prefecture (via the corporate hometown tax scheme) to support activities contributing to the healthy development of children and the creation of environments supportive of raising children.

March 2024 Sponsorship of the 51st Kobe Festival

We contribute to local communities by donating ¥300,000 to sponsor the Kobe Festival, an open participation festival with parades and stage shows.

March 2024 Donation to the National Institute of Technology, Akashi Colleg extracurricular program

We donated ¥500,000 to the Eco-Run and Ene-1 extracurricular programs of National Institute of Technology (KOSEN), Akashi College, which is educating leading engineers for the future. Eco-Run is a competition in which student-designed vehicles compete to travel the furthest on one liter of gasoline. Ene-1 is a competition in which student-designed vehicles and motorcycles running on 40 batteries compete in speed and distance.

*1 Eco-Run is a competition in which student-designed vehicles compete to travel the furthest on one liter of gasoline.

*2 Ene-1 is a competition in which student-designed vehicles and motorcycles running on 40 batteries compete in speed and distance.

March 2024 Donation to the Young Member Fellowship Fund of the Japan Thermal Spray Society

We donated ¥200,000 to foster young researchers involved in thermal spraying and to advance the development of the thermal spray industry.

January 2024 Donation to the University of Hyogo Global Business Course International Student Support Fund

In addition to our TOCALO scholarship, we donated ¥1 million to the Global Business Course International Student Support Fund. The fund is used for start-up scholarships for first-year international students.

January 2024 TOCALO Scholarship for International Students in the University of Hyogo Global Business Course

We provided our annual ¥1 million scholarship for an international student in the Global Business Course of the School of Economics and Management, University of Hyogo. This marks the fourth grant of the TOCALO scholarship.

January 2024 Donation to the TREK KOBE Project

We donated ¥100,000 for trail maintenance of popular trekking trails in the Kobe area.

January 2024 Sponsorship of Kobe Luminarie

In memory of those lost in the Great Hanshin Earthquake, we donated ¥100,000 to the Kobe Luminarie illumination event to help foster the hopes and dreams for the city's reconstruction and revitalization.

January 2024 Relief donations for the Noto Peninsula Earthquake

We donated ¥3 million to Ishikawa Prefecture to aid in the relief of victims of the 2024 Noto Peninsula Earthquake and the reconstruction of affected areas.

December 2023 Donation to the Kibou no Machi Project of Kitakyushu City

We donated ¥1 million for a second straight year to NPO Hoboku in Kitakyushu City, which is promoting the construction of a social welfare complex under its philosophy of creating a society in which no one is left behind.

November 2023 Donation to Nagoya Christmas Gift Project for Children

We donated ¥360,000 to a project of the Nagoya Chamber of Commerce & Industry to deliver Christmas presents to children and students at orphanages in Nagoya City.

October 2023 Sponsorship of the Japan Beach Games Suma 2023

We donated ¥300,000 as part of our sports promotion activities to sponsor the Japan Beach Games held on Kobe's Suma beach under the Japan Beach Games Invitation Project. The games at Suma were the first official beach games to be held in Japan.

September 2023 Support for green funding for the Aichi Prefecture Green Transformation Project

We donated ¥200,000 to the "Green Funding" project of the Aichi Prefecture Revegetation Promotion Committee to raise funds for forest maintenance and greening activities.

August 2023 Donation to the 100th Anniversary Commemorative Project of the Department of Metallurgical Engineering of the School of Engineering at Tohoku University

We donated ¥1 million to the project to help the prestigious department continue cultivating materials researchers for another 100 years.

August 2023 Donation to Kobe University 120th Anniversary Commemoration

On the 120th anniversary of the founding of Kobe University, we donated ¥500,000 to help generate knowledge, develop human resources, enrich and improve the environment, and provide grants for student scholars.

August 2023 TOCALO Scholarship for International Students in the University of Hyogo Global Business Course

Following the ¥1 million scholarship provided in February, we decided to provide an additional ¥1 million scholarship for a second international student in the Global Business Course of the School of Economics and Management, University of Hyogo.

August 2023 Sponsorship of Hyogo Machinami Garden Show in Akashi 2023

We donated ¥100,000 to a flower and green event held in Akashi Park, which is home to the Akashi TOCALO Baseball Stadium*

Note: TOCALO has acquired naming rights to the stadium

May-June 2023 Donations to support children and child-rearing

We donated to the following organizations to support their activities helping to raise healthy children and create environments that facilitate raising children.

- Kurashiki City Children's Fund (¥100,000)
- Food Bank Kitakyushu Life Again (¥500,000)
- Tokai City Picture Book Support Project for Families (¥500,000)

May 2023 Donations to Okayama University of Science

We donated ¥100,000 to be used for educational and research activities to foster the success of talented individuals in society.

May 2023 Corporate membership in the Kobe Philharmonic

Since fiscal 2023, we have become a corporate member of the Kobe Philharmonic Association (annual membership fee of ¥500,000), supporting the orchestra and showing a continued commitment to the arts in the Kobe area.

May 2023 Endorsement of the Green Fund of the National Land Afforestation Promotion Organization

In fiscal 2023, we once again donated ¥500,000 to the Green Fund to support the forest maintenance and greening activities of the National Land Afforestation Promotion Organization.

March 2023 Sponsor of the 40th Kobe Jazz Street

We contributed ¥300,000 to the Kobe Jazz Street event, which will be held in October 2023 to celebrate the 100th anniversary of jazz music in Kobe.

February 2023 Donation to the Be Kobe Mirai Project

We became a corporate ambassador and donated ¥500,000 to the Be Kobe Mirai Project to support the youth who will be the future leaders of the city. Kobe Mayor Kizo Hisamoto is the honorary project leader.

February 2023 TOCALO Scholarship for International Students in the University of Hyogo Global Business Course

We continued our scholarship program by providing a ¥1 million scholarship to an international student in the Global Business Course of the School of Economics and Management, University of Hyogo.

February 2023 Endorsement of the Blue Carbon Creation Project on Kobe Airport Island (Purchase of J Blue Credits)

J Blue Credits are offset credits for “blue carbon,” which is carbon dioxide absorbed by marine and coastal ecosystems, such as seagrass beds. The funds generated by this project will be used to support private organizations working to conserve and create blue carbon as part of the Port of Kobe’s efforts to become carbon neutral and Kobe Airports’ efforts to decarbonize its operation. TOCALO has announced its endorsement and contributed ¥900,000 to the project.

January-February 2023 Donations to support children and child-rearing

We donated a total of ¥2.2 million to the following organizations to support their activities helping to raise healthy children and create environments that facilitate raising children.

- Funabashi, Chiba Prefecture (Corporate Hometown Tax)
- Akashi, Hyogo Prefecture (Corporate Hometown Tax)
- Harima, Kako, Hyogo Prefecture (Corporate Hometown Tax)
- Akashi City Children’s Fund
- Hyogo Children’s Support Organization NPO

January 2023 Donation to the Young Member Fellowship Fund of the Japan Thermal Spray Society

We donated ¥200,000 to foster young researchers involved in thermal spraying and to advance the development of the thermal spray industry.

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.

■ 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 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.

Environment Society Governance 

Environment

Climate change measures

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
CO ₂ emissions (Scope 1 and 2) (Non-consolidated) (t-CO ₂)	16,750	15,950	17,450	6,990	7,819
CO ₂ emissions (Scope 1 and 2) / Sales (Non-consolidated) (t-CO ₂)	0.54	0.49	0.48	0.17	0.21
CO ₂ emissions (Scope 1 and 2) (Consolidated) (t-CO ₂)	—	—	31,121	16,600	17,958
CO ₂ emissions (Scope 1 and 2) / Sales (Consolidated) (t-CO ₂)	—	—	0.71	0.34	0.38
Electricity usage (Non-consolidated) (MWh)	40,155	39,824	42,491	42,891	39,848
Electricity usage / Sales (Non-consolidated) (MWh / millions of yen)	1.29	1.21	1.16	1.07	1.05
Electricity usage (Consolidated) (MWh)	—	—	66,371	65,025	61,341
Electricity usage / Sales (Consolidated) (MWh / millions of yen)	—	—	1.51	1.35	1.31

Note:

See [Climate change measures](#) for more information.

Energy consumption volume

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Electricity (MWh)	40,155	39,825	42,491	42,891	39,848
Kerosene (kl)	229	209	203	188	177
LPG (kg)	13,161	10,615	16,014	16,188	20,024
Diesel (kl)	31	31	32	26	92
Gasoline (kl)	108	101	88	88	88
City gas (m ³)	128,768	160,944	165,732	149,164	154,406
Acetylene (kg)	—	—	—	16,142	45,885
Total energy consumption (crude oil equivalent) (kl)	10,734	10,754	11,435	11,503	10,333

Volume of use of raw materials

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Thermal spray materials (t)	325.2	297.2	271.9	298.7	257.9
Other materials (t)	74.0	59.2	94.3	113.1	138.5

Total volume of water handled

		Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Volume of water intake	Clean water (m ³)	63,610.0	65,850.0	69,552.0	78,410.0	66,901.0
	Pure water (m ³)	19.8	18.1	16.5	18.0	16.8
	Groundwater (m ³)	0.0	0.0	0.0	0.0	0.0
Effluent volume	Sewage (m ³)	47,625.0	49,338.0	54,776.0	60,810.0	54,097.0
	Sewage (treated plant wastewater) (m ³)	2,528.0	1,640.1	1,939.4	1,518.1	1,298.5
	Seawater (m ³)	10,434.0	10,984.0	9,193.0	9,710.0	10,800.4

Volume of waste emissions

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Total industrial waste (t)	1,840.6	1,959.5	2,113.5	2,161.4	1,922.3
Industrial waste (not including specially controlled industrial waste) (t)	1,758.9	1,883.0	2,017.6	2,022.7	1,805.1
General business waste (t)	70.0	59.3	57.6	61.2	46.8
Specially controlled industrial waste (t)	81.6	76.6	95.9	138.6	117.3
Specially controlled industrial waste (hazardous waste) (t)	48.3	50.4	69.0	113.3	95.2
Specially controlled industrial waste (non-hazardous waste) (t)	33.3	26.1	26.9	25.3	22.1
Industrial waste / Sales (t / billions of yen)	56.4	57.4	55.3	50.3	47.5
General business waste / Sales (t / billions of yen)	2.2	1.8	1.6	1.5	1.2
Specially controlled industrial waste / Sales (t / billions of yen)	2.6	2.3	2.6	3.5	3.1

Volume of emissions to atmosphere

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
PRTR Law Class 1 Designated Chemical Substances (t)	2.5	1.0	1.0	1.3	0.06

Recycling volume

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Metal scraps (t)	90.6	108.4	90.1	111.7	150.5
Thermal spray material waste (t)	28.6	27.4	21.2	15.1	12.4
Blasting material waste (t)	570.8	716.4	686.2	715.6	723.6
Oil waste/Solvent waste (t)	9.2	12.0	12.0	16.6	32.0
Paper (t)	19.2	46.2	38.3	33.2	38.2

Group companies with ISO14001 certification

Company	Certification	Number of Group consolidated companies with certification
TOCALO Co., Ltd.	JQA-EM2253	3 of 6 companies (50% of the consolidated Group)
JAPAN COATING CENTER Co., Ltd.	JP020227	
TOCALO & HAN TAI Co., Ltd.	0070023E51380R3M	

Human resources data (non-consolidated)

			Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Percentage of female employees	Regular employees		—	—	9.5% (71 of 750)	12.3% (100 of 811)	13.8% (1123 of 889)
	Temporary employees		—	—	38.5% (67 of 174)	39.9% (55 of 138)	37.6% (44 of 117)
Percentage of female executives			—	—	9.1% (2 of 22)	9.1% (2 of 22)	9.1% (2 of 22)
Percentage of female workers in management positions			—	—	1.4% (2 of 140)	2.3% (3 of 131)	2.1% (3 of 140)
Percentage of female workers among new hires	Regular employees		—	—	12.8% (6 of 47)	27.7% (13 of 47)	23.0% (17 of 74)
	Temporary employees		—	—	27.3% (6 of 22)	45.8% (11 of 24)	25.0% (4 of 16)
Percentage of temporary employees*1			—	—	18.8% (174 of 924)	14.5% (138 of 949)	11.6% (117 of 1,006)
Average consecutive tenure by gender	Regular employees	Male	—	—	12.8 years	13.1 years	13.7 years
		Female	—	—	9.5 years	9.7 years	8.4 years
	Temporary employees	Male	—	—	13.0 years	11.1 years	9.2 years
		Female	—	—	7.6 years	4.8 years	7.5 years
Voluntary turnover rate*2			—	—	2.2% (21 of 924)	0.8% (8 of 949)	2.0% (21 of 1,006)
Rate of frequency of occupational accidents*3			—	3.21	0.62	1.80	2.06
Severity rate of occupational accidents*3			—	0.03	0.00	0.03	0.08
Number of occupational accidents			—	9	7	10	15

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Number of fatal accidents	—	0	0	0	0

*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

*3 Temporary employees are not included prior to fiscal 2022 and included from fiscal 2023 onwards.

Human resources data (consolidated)

		Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023	
Percentage of female employees	Regular employees	—	—	16.6% (198 of 1,196)	19.4% (252 of 1,300)	20.6% (286 of 1,389)	
	Temporary employees	—	—	40.4% (111 of 275)	43.3% (71 of 164)	42.1% (59 of 140)	
Percentage of female executives		—	—	4.4% (2 of 45)	4.2% (2 of 48)	4.1% (2 of 49)	
Percentage of female workers in management positions		—	—	5.0% (11 of 218)	5.3% (11 of 207)	4.2% (9 of 213)	
Percentage of female workers among new hires	Regular employees	—	—	19.8% (21 of 106)	35.7% (41 of 115)	29.5% (31 of 105)	
	Temporary employees	—	—	34.9% (15 of 43)	53.6% (15 of 28)	38.1% (8 of 21)	
Percentage of temporary employees ^{*1}		—	—	18.7% (275 of 1,471)	11.2% (164 of 1,464)	9.2% (140 of 1,529)	
Average consecutive tenure by gender	Regular employees	Male	—	—	11.7 years	11.9 years	12.2 years
		Female	—	—	9.7 years	9.3 years	8.4 years
	Temporary employees	Male	—	—	9.3 years	11.5 years	9.6 years
		Female	—	—	6.3 years	5.6 years	7.7 years
Voluntary turnover rate ^{*2}		—	—	5.4% (80 of 1,471)	3.1% (45 of 1,464)	3.0% (46 of 1,529)	

*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 hires (non-consolidated)

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Percentage of mid-career hires	29%	30%	21%	46.8% (22 of 47)	13.5% (10 of 74)

Note: Including appointments of dispatched employees to regular employee positions, and excluding appointments of contract employees to regular employee positions. New graduates hired outside of April are considered new graduate hires

Average paid holiday utilization rate (non-consolidated)

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Average paid holiday utilization rate (non-consolidated)	70%	66%	66.0%	76.5%	75.6%

Note: Paid holiday utilization rate = Number of paid holidays utilized / Number of paid holidays granted (not including portion carried over from previous fiscal year) x 100

Average paid holiday utilization rate = Combined paid holiday utilization rate for all employees / Total number of employees

Use of caregiver leave (non-consolidated)

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Number of eligible employees	0	0	0	0	0
Number of employees utilizing leave	0	0	0	0	0

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

Use of childcare leave (non-consolidated)

		Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Number of eligible employees	Male	25	19	32	25	29
	Female	7	8	2	3	1
	Total	32	27	34	28	30
Number of employees utilizing leave	Male	0	0	10	17	24
	Female	7	8	2	3	1

		Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
	Total	7	8	12	20	25

Use of nursing leave (non-consolidated)

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Male	4	4	8	13	8
Female	3	2	5	7	8
Total	7	6	13	20	16

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

Note: Including people who took hourly-based leave; a person who took multiple leaves during the fiscal year is counted as a single person taking leave

Use of care leave (non-consolidated)

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Male	18	12	22	27	29
Female	7	2	5	8	9
Total	25	14	27	35	38

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

Note: Including people who took hourly-based leave; a person who took multiple leaves during the fiscal year is counted as a single person taking leave

Percentage of employees with disabilities (non-consolidated)

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Percentage of employees with disabilities	—	—	2.88%	2.71%	2.86%

Gender pay gap (non-consolidated)

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Regular employees	—	—	—	70.2%	70.3%

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Temporary employees	—	—	—	62.3%	68.9%

Note:

See [Diversity](#) for more details about our human resource initiatives.

Group companies with ISO 45001 certification

Company	Number of Group consolidated companies with certification
TOCALO & HAN TAI Co., Ltd.	1 of 6 companies (16.7% of the consolidated Group)

Note:

TOCALO (parent) has obtained certification for the Kitakyushu Plant, and is working to obtain certification for all sites. (Reference: [Occupational Health and Safety](#))

Governance

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022	Fiscal 2023
Percentage of outside directors	—	—	50.0% (4 of 8)	50.0% (4 of 8)	44.4% (4 of 9)
Percentage of female directors	—	—	25.0% (2 of 8)	25.0% (2 of 8)	22.2% (2 of 9)
Number of consultations received through the Clean Line System	—	—	6	4	3
Number of consultations received through the external reporting system	—	—	9	4	13



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.

[GRI 2 : General Disclosures](#)
[GRI 3: Material Topics](#)
[200 : Economic](#)
[300 : Environmental](#)
[400 : Social](#)

GRI 2 : General Disclosures

1.The organization and its reporting practices

Number	Title of disclosure	Corresponding page
2-1	Organizational details	About us > Company data
2-2	Entities included in the organization’s sustainability reporting	—
2-3	Reporting period, frequency and contact point	Sustainability

Number	Title of disclosure	Corresponding page
2-4	Restatements of information	Sustainability > Environment > Material balance ▶
2-5	External assurance	—

2. Activities and workers

Number	Title of disclosure	Corresponding page
2-6	Activities, value chain and other business relationships	About us > Company data ▶
		Technology ▶
2-7	Employees	Sustainability > ESG data ▶
2-8	Workers who are not employees	—

3. Governance

Number	Title of disclosure	Corresponding page
2-9	Governance structure and composition	Investor relations > Governance > Corporate governance ▶

Number	Title of disclosure	Corresponding page
2-10	Nomination and selection of the highest governance body	Investor relations > Governance > Corporate governance ▶
2-11	Chair of the highest governance body	Investor relations > Governance > Corporate governance ▶
2-12	Role of the highest governance body in overseeing the management of impacts	Investor relations > Governance > Corporate governance ▶
2-13	Delegation of responsibility for managing impacts	Sustainability > Governance > Corporate governance ▶
		Sustainability > Environment > Response to the TCFD recommendations ▶
2-14	Role of the highest governance body in sustainability reporting	Investor relations > Governance > Corporate governance ▶
2-15	Conflicts of interest	Sustainability > Governance > Corporate governance > Corporate Governance Report ▶
2-16	Communication of critical concerns	Sustainability > Governance > Risk management ▶

Number	Title of disclosure	Corresponding page
2-17	Collective knowledge of the highest governance body	Investor relations > Governance > Corporate governance ▶
2-18	Evaluation of the performance of the highest governance body	Investor relations > Governance > Corporate governance ▶
2-19	Remuneration policies	Investor relations > Governance > Corporate governance ▶
2-20	Process to determine remuneration	Investor relations > Governance > Corporate governance ▶
2-21	Annual total compensation ratio	—

4. Strategy, policies and practices

Number	Title of disclosure	Corresponding page
2-22	Statement on sustainable development strategy	Sustainability > Message from the president ▶
2-23	Policy commitments	Sustainability > Society > Respect for human rights ▶

Number	Title of disclosure	Corresponding page
2-24	Embedding policy commitments	Sustainability > Society > Respect for human rights ▶
2-25	Processes to remediate negative impacts	Sustainability > Governance > Risk management ▶
		Sustainability > Governance > Compliance ▶
2-26	Mechanisms for seeking advice and raising concerns	Sustainability > Governance > Compliance ▶
2-27	Compliance with laws and regulations	No violation (FY2023)
2-28	Membership associations	—

5. Stakeholder engagement

Number	Title of disclosure	Corresponding page
2-29	Approach to stakeholder engagement	—
2-30	Collective bargaining agreements	Sustainability > Society > Respect for human rights ▶

GRI 3: Material Topics

Number	Title of disclosure	Corresponding page
3-1	Process to determine material topics	Sustainability > Long-term vision and materiality ➤
3-2	List of material topics	Sustainability > Long-term vision and materiality ➤
3-3	Management of material topics	Sustainability > Long-term vision and materiality ➤

200 : Economic

Economic Performance

Number	Title of disclosure	Corresponding page
201-1	Direct economic value generated and distributed	Investor relations > Management policy > Financial highlights ▶
201-2	Financial implications and other risks and opportunities due to climate change	Investor relations > Business risks ▶
		Sustainability > Environment > Response to the TCFD recommendations ▶
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	Sustainability > Long-term vision and materiality ▶
205-3	Confirmed incidents of corruption and actions taken	Investor relations > Governance > Compliance ▶

Anti-competitive Behavior

Number	Title of disclosure	Corresponding page
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No violation (FY2023)

Tax

Number	Title of disclosure	Corresponding page
207-1	Approach to tax	—

Number	Title of disclosure	Corresponding page
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

Materials

Number	Title of disclosure	Corresponding page
301-1	Materials used by weight or volume	Sustainability > Environment > Material balance ▶
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 > Environment > Material balance ▶
		Sustainability > Environment > Climate change measures ▶

Number	Title of disclosure	Corresponding page
302-2	Energy consumption outside of the organization	—
302-3	Energy intensity	—
302-4	Reduction of energy consumption	Sustainability > Environment > Material balance ▶
		Sustainability > Environment > Climate change measures ▶
302-5	Reduction 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 > Environment > Material balance ▶

Number	Title of disclosure	Corresponding page
303-4	Water discharge	Sustainability > Environment > Material balance ▶
		Sustainability > Environment > Waste reduction and environmental conservation ▶
303-5	Water consumption	Sustainability > Environment > Material balance ▶

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 > Environment > Climate change measures ▶
		Sustainability > Environment > Response to the TCFD recommendations ▶
		Sustainability > ESG data ▶
305-2	Energy indirect (Scope 2) GHG emissions	Sustainability > Environment > Climate change measures ▶
		Sustainability > Environment > Response to the TCFD recommendations ▶
		Sustainability > ESG data ▶
305-3	Other indirect (Scope 3) GHG emissions	—
305-4	GHG emissions intensity	Sustainability > Environment > Climate change measures ▶
305-5	Reduction of GHG emissions	Sustainability > Environment > Climate change measures

Number	Title of disclosure	Corresponding page
		▶ Sustainability > ESG data ▶
305-6	Emissions of ozone-depleting substances (ODS)	—
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Sustainability > Environment > Waste reduction and environmental conservation ▶

Waste

Number	Title of disclosure	Corresponding page
306-1	Waste generation and significant waste-related impacts	Sustainability > Environment > Waste reduction and environmental conservation ▶
306-2	Management of significant waste-related impacts	—
306-3	Waste generated	Sustainability > Environment > Waste reduction and environmental conservation ▶

Number	Title of disclosure	Corresponding page
306-4	Waste diverted from disposal	Sustainability > Environment > Material balance ▶
306-5	Waste directed to disposal	Sustainability > Environment > Waste reduction and environmental conservation ▶

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

Employment

Number	Title of disclosure	Corresponding page
401-1	New employee hires and employee turnover	Sustainability > ESG data ➤
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	—
401-3	Parental leave	Sustainability > Society > Diversity ➤
		Sustainability > ESG data ➤

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 > Society > Occupational safety and health ➤
403-2	Hazard identification, risk assessment, and incident investigation	Sustainability > Society > Occupational safety and health ➤
403-3	Occupational health services	Sustainability > Society > Occupational safety and health ➤
403-4	Worker participation, consultation, and communication on occupational health and safety	Sustainability > Society > Occupational safety and health ➤
403-5	Worker training on occupational health and safety	Sustainability > Society > Occupational safety and health ➤
403-6	Promotion of worker health	Sustainability > Society > Occupational safety and health ➤
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Sustainability > Society > Occupational safety and health ➤

Number	Title of disclosure	Corresponding page
403-8	Workers covered by an occupational health and safety management system	Sustainability > Society > Occupational safety and health ▶
403-9	Work-related injuries	Sustainability > Society > Occupational safety and health ▶
		Sustainability > ESG data ▶
403-10	Work-related ill health	Sustainability > Society > Occupational safety and health ▶
		Sustainability > ESG data ▶

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 > Society > Human resource development ▶

Number	Title of disclosure	Corresponding page
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 > ESG data ▶
405-2	Ratio of basic salary and remuneration of women to men	Sustainability > ESG data ▶

Non-discrimination

Number	Title of disclosure	Corresponding page
406-1	Incidents of discrimination and corrective actions taken	Sustainability > Society > Respect for human rights ▶

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	Sustainability > Society > Respect for human rights ▶

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 (FY2023)

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 > Society > Respect for human rights 
412-3	Significant investment agreements and contracts that include human rights	—

Number	Title of disclosure	Corresponding page
	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 > Society > Social engagement ▶
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 (FY2023)

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 (FY2023)

Number	Title of disclosure	Corresponding page
417-3	Incidents of non-compliance concerning marketing communications	No violation (FY2023)

Customer Privacy

Number	Title of disclosure	Corresponding page
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	No violation (FY2023)