

# Environmental Policies and Frameworks

“Protect the environment and work to conserve limited resources” is part of our management philosophy. Bearing the importance of conserving the global environment in mind, we will conduct our operations so as to reduce environmental impact in all our business areas, thereby helping to achieve a society that can develop sustainably and a healthy global environment.

## Environmental policies

TOKYO KEIKI has contributed to society by using electronics technology to commercialize the functions of human senses, such as measurement, cognition, and control.

We have always given full consideration to the environment in the course of our business activities, but we have now reaffirmed the importance of environmental conservation on a global scale. As such, in order to pass on a rich natural environment and limited resources to the next generation, we will go one step further and work with the participation of all employees to conserve and improve the environment to the extent technically and economically possible.

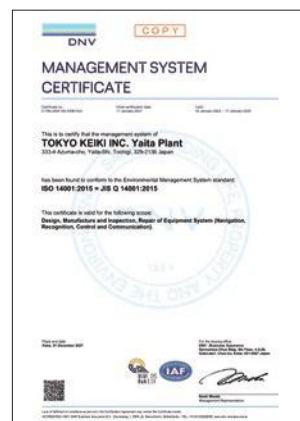
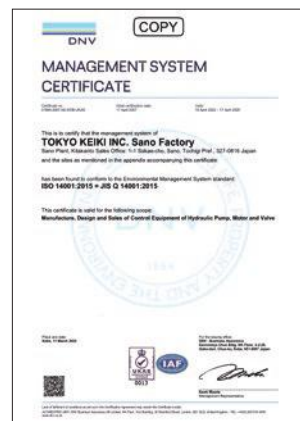
1. We will evaluate the environmental impact of all our business activities and the products we provide to our customers at during production, use, and disposal, and strive to save resources and energy, reduce waste, and prevent pollution.
2. We will establish and maintain a PDCA cycle by setting environmental objectives and targets for these initiatives.
3. In addition to complying with environmental laws and regulations, ordinances, industry codes of conduct, and agreements with local communities, we will establish and maintain independent management standards wherever possible.
4. We will establish an environmental management system in which all employees participate, using audits and reviews to make improvements on an ongoing basis.
5. We will provide education to all employees to improve their awareness of the environment and the environmental management system, as well as asking our affiliates and partner companies for their understanding and cooperation.
6. These environmental policies shall be publicly disclosed.

## Environmental policies at our plants

Our Nasu, Yaita, and Sano plants have drawn up their own environmental policies based on the company-wide policies, taking into account the characteristics of the manufacturing they perform and consideration for the surrounding environment. In order to put our basic philosophy into practice, the environmental managers of each plant have drawn up environmental policies and is working actively to acquire various certifications, including ISO 14001.

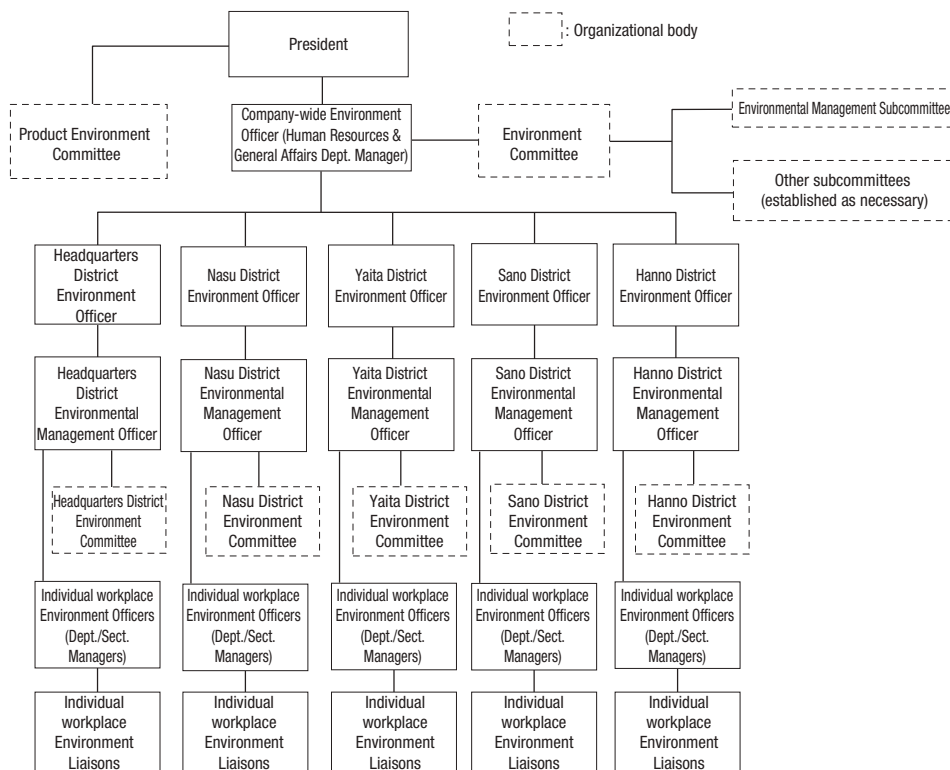
### ISO 14001 compliance status

Location	Date acquired
Nasu Plant	December 2005
Yaita Plant	January 2007
Sano Plant	April 2007
Tanuma Plant	November 2006



## Organizational structure

The Environment Committee is in charge of company-wide environmental policy, and the Environmental Management Subcommittee has been established beneath it. The head of the Human Resources & General Affairs Department chairs both committees, and the managers of the Nasu, Yaita, and Sano plants serve as committee members.



## Environmental targets

The Group's Environmental Management Subcommittee, headed by the head of the Human Resources & General Affairs Department, sets targets for environmental activities, draws up environmental plans, and puts them into practice. In addition to company-wide targets, targets have also been set for each plant, with efforts ongoing at each.

### New TOKYO KEIKI Group environmental targets

As part of the environmental management system, our Group has long worked to reduce its overall energy usage. In FY 2021, we aimed to engage in management that is even more environmentally and socially conscious than ever before. The newly established Sustainability Office took the lead in re-evaluating our Group's medium- to long-term greenhouse gas (GHG) emissions reduction

targets, which were then deliberated on and approved by the Sustainability Committee. In line with the thinking behind the Japanese government's GHG emissions reduction targets (in the industry sector) for FY 2030, our new target for FY 2030 for Scope 1 and 2 GHG emissions is a 37% reduction in comparison with FY 2013.

### Business-specific targets

For each plant, reduction targets are set for failure costs, electricity consumption, waste, material consumption, etc., and KPIs are set to serve as indicators for meeting these targets. By implementing a PDCA cycle to promote initiatives aimed at achieving these KPIs, we are working to reduce our environmental impact.

# Climate Change Initiatives

Adapting to and taking measures to prevent climate change, which poses an international threat to human security, are shared global challenges. As a company that operates globally, we are committed to reducing the environmental impact of our business activities, thereby contributing to the resolution of climate change and the realization of a sustainable world.

## Our approach to climate change

The TOKYO KEIKI Group strongly recognizes the impact and risk posed by climate change to the group's businesses and all of our stakeholders as important business issues. In order to fulfill our responsibility as a company to mitigate climate change, we are promoting initiatives to reduce greenhouse gas (GHG) emissions from each of our divisions.

As part of this, we announced our endorsement of the Task Force on Climate-related Financial Disclosures (TCFD) recommendations

in August 2022 and have started an initiative aligned with the recommendations' framework of governance, risk management, strategy, and metrics and targets. Through this initiative, we will strive to enhance our climate change-related information disclosure and will also be working to further increase the Group's resilience.



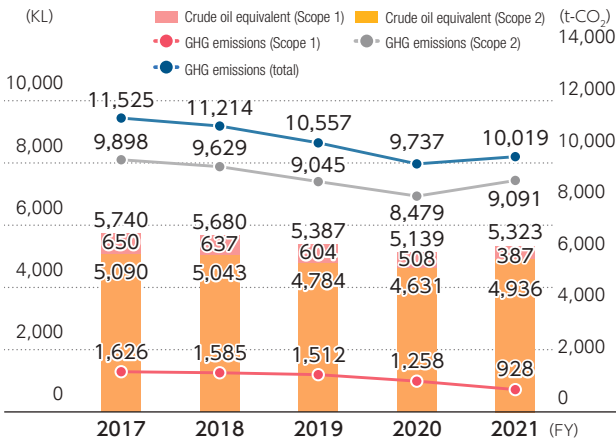
## Specific measures to fight climate change

### FY 2021 targets and performance

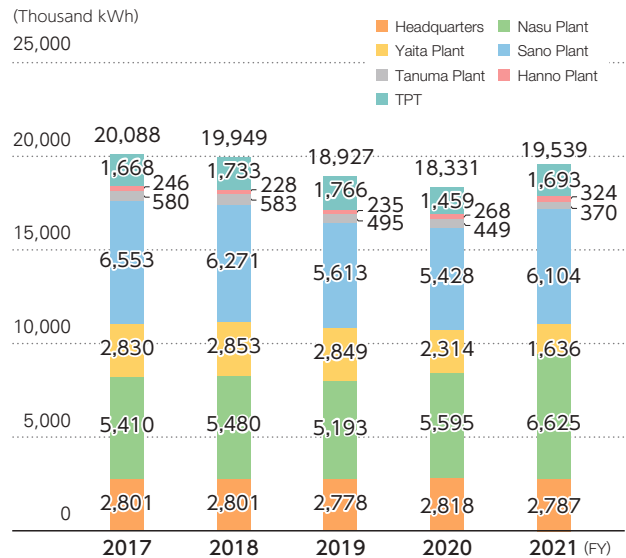
The Group established a new environmental target for FY 2030 to reduce Scope 1 and 2 GHG emissions by 37% in comparison with FY 2013. However, due to a recovery in orders, which had declined because of the impact of COVID-19, facility operating hours increased. As a result of this and other factors, our emissions were 10,019 t-CO<sub>2</sub>, a 2.9% increase in comparison with the previous fiscal year.

Going forward, we will accelerate reduction of our GHG emissions, promoting not only routine energy-saving initiatives, but also the introduction of renewable energy facilities and the procurement of renewable power.

### Energy consumption and GHG emissions (Scope 1, 2)



### Electricity use



### More efficient energy use to reduce GHG emissions

We are working to make efficient use of energy. Our efforts include implementing energy-saving measures at our facilities, such as switching to new energy-saving air conditioners, high-efficiency power reception facilities, and inverter compressors; increasing transformer energy conservation; and using heat shield paint on roofs and exterior walls. We are also engaging in activities to conserve energy, including power demand-based power monitoring, and proactively turning off lights. Other measures we are taking include curbing the occurrence of defects in the design stage, and engaging in continuous improvement of production processes.

### Conclusion of power purchase agreement for solar power

TOKYO KEIKI PRECISION TECHNOLOGY (TPT), which produces hydraulic equipment for Asia in Vietnam, made the decision to switch approximately 30% of the power used in its factory to solar power as an initiative to reduce GHG emissions and concluded a power purchase agreement (PPA) for solar power in March 2022. With this agreement, TPT expects to reduce its GHG emissions by approximately 400 tons annually.

This initiative is a first for our Group, and we will be considering similar arrangements for other production sites.

### Heat shield paint applied to the roof of Sano Plant

Due to climate change, in recent years, severe rainfall occurs frequently in the Sano Plant area. Because of the increased risk of such damage as roof leaks resulting from the sudden increase in rainfall, we, at Sano Plant, conducted maintenance and repainted on the plant's entire roof. As a result of using a heat shield paint, which reflects infrared rays to control an increase in the temperature of the roof, we confirmed an energy conservation effect by reducing the load on air conditioning equipment during the summer months.



### Calculating Scope 3 greenhouse gas emissions

In order to understand supply chain GHG emissions across all of our business activities and effectively reduce them, we calculated the total emissions of all of our supply chains.

The table to the right provides a breakdown of our Scope 3 emissions (indirect emissions other than a company's own from its supply chain).

Emissions from purchased goods and services (category 1) were the greatest at 49.6% of the total, followed by use of sold products (category 11) at 38.4%.

Going forward, we will continue to maintain an awareness of, and promote reductions of, GHG emissions across all of our supply chains.

### Overview of Scope 3 CO<sub>2</sub> emissions calculation (FY2021)

	Category	CO <sub>2</sub> emissions (t-CO <sub>2</sub> )	Percentage
1	Purchased goods and services	114,172	49.6%
2	Capital goods	1,992	0.9%
3	Fuel- and energy-related activities	1,520	0.7%
4	Upstream transportation and distribution	721	0.3%
5	Waste generated in operations	398	0.2%
6	Business travel	808	0.4%
7	Employee commuting	611	0.3%
8	Upstream leased assets <sup>*1</sup>	-	
9	Downstream transportation and distribution <sup>*2</sup>	-	
10	Processing of sold products <sup>*3</sup>	-	
11	Use of sold products	88,398	38.4%
12	End-of-life treatment of sold products	21,498	9.3%
13	Downstream leased assets <sup>*4</sup>	-	
14	Franchises <sup>*5</sup>	-	
15	Investments <sup>*6</sup>	-	
	<b>Total</b>	<b>230,118</b>	<b>100.0%</b>

\*1: Not applicable (emissions from leased assets included in Scope 1 and 2).

\*2: Not applicable (finished product logistics outsourced and thus included in category 4).

\*3: Not applicable (as TOKYO KEIKI's products are finished products, they are not processed after sale).

\*4: Not applicable (no relevant leased assets).

\*5: Not applicable (no relevant franchises).

\*6: Not applicable (no relevant investments).

Calculation method: Based on standard guidelines from the Ministry of the Environment and the Ministry of Economy, Trade and Industry concerning the calculation of greenhouse gas emissions from supply chains.

Calculation period: April 1, 2021–March 31, 2022

Calculation scope: TOKYO KEIKI (non-consolidated)

### MIRAI, a fuel cell vehicle, selected for President's vehicle

MIRAI is a fuel cell vehicle (FCV) from Toyota that runs on hydrogen fuel and emits zero GHGs. The Group's TOKYO KEIKI Vision 2030 identifies hydrogen and other energy businesses as candidates for new growth drivers. Based on this, the MIRAI was selected when updating the President's vehicle.



# Realization of a Recycling-Oriented Society

In the manufacturing industry, it is our social responsibility to try to minimize our impact on the environment when we choose materials and use energy to make our products. By fulfilling this responsibility while engaging in business activities, we will contribute to the realization of a sustainable society.

## Our approach to the creation of a recycling-oriented society

Based on a recognition of the fact that all activities of human civilization, including those of the TOKYO KEIKI Group, are dependent on coexistence with the natural

environment, the Group is promoting initiatives for the development of a sustainable, recycling-oriented society.

## Specific measures for reducing waste

### Compliance with laws and regulations

Waste is disposed of appropriately in accordance with laws and government ordinances, as well as the regulations of the municipalities where our factories and plants are located.

### Promoting the “3 Rs”

#### • Reuse

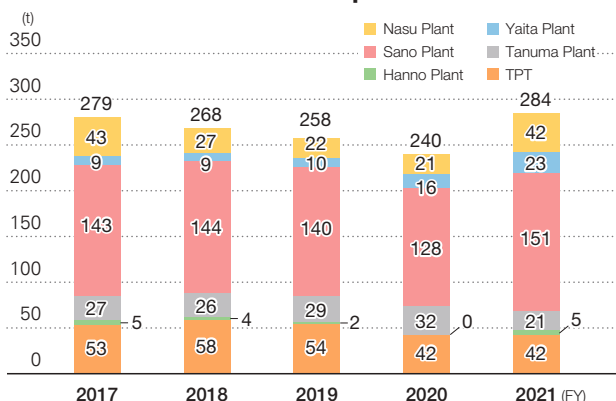
We are now reusing some of our used products and parts (including electronic parts) with the approval of our customers.

#### • Reduce

We are engaging in an initiative in which we have introduced reusable containers with some of our customers and our partner factories that can be used to move goods between each other's factories, eliminating waste such as cardboard and packaging materials. In addition, the use of equipment to reclaim wash oil and the evaporation and drying of waste water from glass processing are helping to reduce the amount of waste water and waste oil we produce.

In FY 2021, the amount of industrial waste we output increased due to such factors as increased PCB waste at the Sano Plant and etchant at the Nasu Plant. Note that figures from TOKYO KEIKI PRECISION TECHNOLOGY (TPT) are included from this report forward.

### Amount of industrial waste produced

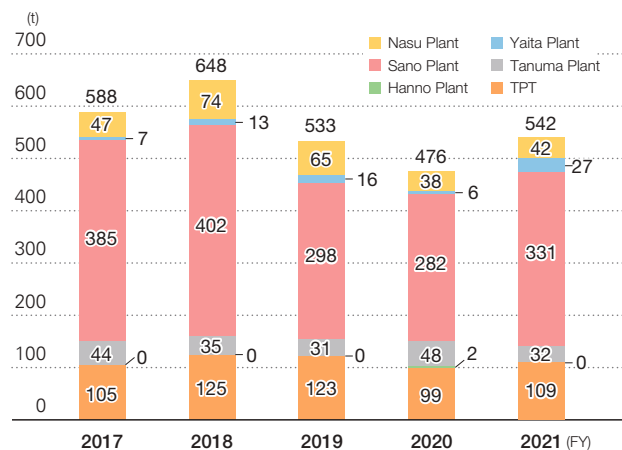


#### • Recycle

We hire contractors to take our scrap metal, waste oil, and waste paper, which are valuable recyclable materials, and accordingly thoroughly separate our waste.

The breakdown for these valuable recyclable materials for FY 2021 was 469 t of scrap metal, 19 t of waste oil, and 54 t of waste paper.

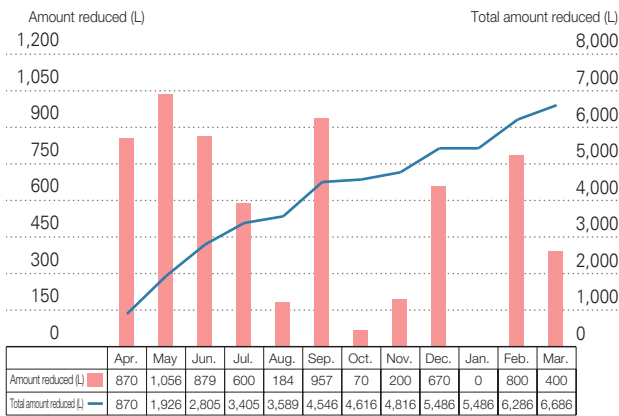
### Valuable recyclable materials produced



### Recycling used wash oil

The Sano Plant alone accounts for approximately two-thirds of the company's overall waste output, and roughly half of that is water-soluble cutting fluid, wash oil, and other types of waste oil. To date, we have hired contractors to collect all of this. Having established a goal of reducing waste, however, we installed equipment in the factories to recycle hydrocarbon wash oil, making it possible to separate the oil content from wash oil before disposing of the leftover fluid. This has enabled us to recycle 90% of waste oil and use it like new wash oil, contributing to the effective utilization of resources. In FY 2021, we achieved a reduction in waste oil of 6,686 liters, double that of FY 2020. Going forward, we will continue to recycle waste oil to reduce our waste output.

**Amount of waste oil reduced through use of wash oil recycling equipment (FY2021)**



**Initiative to reduce waste from processing defects**

Ductile iron is a very strong material used in our high-pressure hydraulic products, and when drilling small-diameter holes or tapping this material, tools can sometimes break. In the past, when this happened, we would discard the entire part being worked on. Because of this, when such a defect occurred with a large part just before being completed, not only was there a loss of material; there was also a significant loss in terms of the energy put into processing, and it could even lead to delayed product delivery.

Because this issue could not be completely prevented solely by improving the tools or processing conditions, we installed an electrical discharge machine at the Sano Plant that enables broken tools to be removed without damaging the part being worked on.

In the one-year period after installing the machine, approximately 50 parts were able to be saved without discarding them, including large parts weighing over 30 kilograms. This also enabled savings in power consumption by processing equipment, which takes over an hour per part. Going forward, we will continue to promote initiatives aimed at the effective use of limited resources.



Broken tap drill bit



Electrical discharge machining in progress

**Going paperless with design issuing**

In the past, the design section in the Engineering Department was in charge of issuing design documents used by the Production Department, printing blueprints and parts lists before sending them. However, the fact that the printing work took time as well as that a large amount of paper resources were consumed for each issue were problems. In order to improve on these problems, the Engineering & Products Service Office, which supervises the entire Group, developed a design issue management tool.

The genres of the products that the Group produces differ greatly depending on business segment and production site, and their production flows also differ. Accordingly, it was thought that development of such a tool would be extremely difficult. It was determined, however, that swift improvements were necessary from a sustainability perspective and, with the help and understanding of a great number of departments, development moved forward in a short span of time. The Production Departments provided full cooperation in the development of the tool. After analyzing the flow of production, every effort was made to avoid significantly impacting existing work operations in the perfection of a generic, all-purpose routine for issuing electronic designs for products at the Yaita Plant, serving as a first stage for the development of the tool.

The result was the elimination of an equivalent of 160,000 A4-sized printed pages of paper, as well as an approximate 1,000-hour reduction in the work involved in issuing and receiving blueprints over a one-year span. There was also an incidental benefit in terms of a reduction in time spent dealing with inquiries regarding the progress of designs being issued.

Going forward, these results will be extended to the Nasu and Sano Plants as we engage in continuous improvements in work operations and contribute to the conservation of resources.

**A screenshot of the design issue management tool input screen**



## Specific measures for proper management of chemicals

### Policies

Some chemical substances have harmful effects on the environment and human body. As such, it is companies' social responsibility to manage them properly and to take the environment and occupational safety into account. We are working to cut our emissions of chemicals by setting voluntary reduction targets.

### Switching to alternatives to hazardous chemicals

Each of our factories is actively switching to alternative materials to hazardous chemicals.

- **Cleaning agents for hydraulic products**  
Switched from dichloromethane to hydrocarbon-based
- **Thinners**  
Switched to alternatives free from toluene and xylene
- **Cutting fluid**  
Switched to alternatives free from chlorine

### Green partner initiative

The "Green Partner System" is an initiative to eliminate hazardous substances from production processes throughout the supply chain in order to encourage environmentally friendly manufacturing. TOKYO KEIKI is putting this system into practice alongside our suppliers, subcontractors, and other partners.

Under this initiative, partners who meet our management standards and have the ability to conduct independent quality management to prevent hazardous substances being used in or contaminating their production lines are certified as Green Partners. This eliminates the need to submit a non-inclusion certificate for each product or part and to conduct some of the tests on the chemical substances they contain. We also provide various services to Green Partners, such as support for the testing and analysis of chemical substances contained in parts and materials, provision of environment-related information, and support for environment-related education.

### Reducing hazardous waste

We are working to reduce the amount of hazardous substances that we dispose of by reviewing purchase lots, reducing excess inventory by subdividing orders, and encouraging the purchase of products that do not use hazardous substances.

In the past, we used dichloromethane to remove oil from

the surface of hydraulic products produced at the Sano Plant prior to the coating process. Dichloromethane, however, is a highly toxic chemical substance. We made the decision to switch to a less toxic hydrocarbon-based cleaning agent and designed and built our own dedicated cleaning equipment. We began using this equipment in January 2021 and ultimately used 495 kilograms of dichloromethane in FY 2021. This was a drastic 95% reduction in comparison with FY 2020.



**PRTR emissions: Sano Plant** \*Emissions only (excluding transfers)

FY	Dichloromethane (kg)	Toluene (kg)
2017	15,400	1,140
2018	18,400	1,330
2019	14,000	1,100
2020	11,000	990
2021	495	989

**PRTR emissions: Nasu Plant** \*Emissions only (excluding transfers)

FY	Xylene (kg)	1,2,4-Trimethylbenzene (kg)
2017	43	11
2018	66	17
2019	51	12
2020	50	12
2021	49	13

## Specific measures on biodiversity

### Headquarters grounds certified as an Ota Ward Protected Forest

Technoport Kamata, the location of TOKYO KEIKI's Headquarters, is an office building block that was built as a redevelopment of the site of our former headquarters and plant. Construction was completed in September 1990. Two-thirds of the vast grounds were turned into a tranquil green space environment.

Now, more than 30 years after the completion of construction, the trees planted at that time have grown, turning the grounds into a conspicuous green oasis in Kamata, a district with little verdure.

The area around our Headquarters, in particular, is surrounded by a variety of trees, and Ota Ward has designated the more than 2,000-m<sup>2</sup> green space around the Headquarters building as a "Protected Forest."



Ota Ward Protected Forest

### Measures to prevent the death of cherry trees due to an invasive insect

Several large cherry trees that are nearly 50 years old grow on the grounds of the Sano Plant. Each year, they bloom stunningly, delighting the eyes of many people who live in the area. In recent years, however, cherry trees withering and dying due to *Aromia bungii* or the red-necked longhorn, an invasive insect that has entered the area from neighboring prefectures, has become a problem. We received contact that damage due to this insect had also occurred at the Sano Industrial Park. We conducted an inspection of the cherry trees on the grounds and discovered signs of damage caused by the insect's larvae feeding. Accordingly, we injected the trees with larvicide and set up nets to capture adult insects. Going forward, we will continue to carefully maintain these trees as a symbol of the Sano Plant.



Injecting a tree with larvicide



Capturing an adult insect



Installation of netting