# Environment Sustainability Report 2024

# **Environmental Policy**

# **Environmental Principle**

Amano Corporation recognizes we have a social responsibility to contribute to the creation of a "sustainable society" that balances both the environment and economy under the theme of "People and Time" and "People and Air". We will promote business activities and environmental management that always consider environmental conservation from a broad-ranging perspective.

# **Environmental Policy**

# **Basic Policy**

Based on our "Environmental Principle", from research & development to production, sales and services, Amano will endeavor to achieve and maintain high environmental qualities across all levels of business activities.

# **Conduct Guidelines**

- 1. Amano will establish an environmental management system that will be continuously maintained and improved by restructuring our organization and operations to practice environment-conscious business activities.
- 2. All employees of the Amano Group will adhere to all environment related laws, regulations, and internal standards.
- 3. Effective use of resources environmentally friendly will be practiced by reducing, reusing and recycling, etc. We will promote efficiency and rationalization at all levels of business activities, namely, production, sales, and services.
- 4. Amano will endeavor to research, develop, and produce products, which are environmentally friendly to reduce environmental impact.
- 5. All employees of the Amano Group will be subject to environment education and will strive to raise environmental consciousness.
- 6. All employees of the Amano Group will be notified of this "Environmental Policy", and will be made available on demand by the public.

Established: March 10, 2004 Revised: April 20, 2023

### Sustainability Report 2024

# **Addressing Climate Change**

In recent years, natural disasters caused by climate change are on the rise around the world, and the impact of extreme weather and changes in the natural environment on social life and corporate activities is becoming increasingly significant.

Amidst growing social demands to reduce environmental burden, the Amano Group recognizes that addressing environmental issues, including climate change, is one of the most important management issues for solving social issues and improving corporate value, and we have defined the contribution to addressing climate change and realizing a decarbonized society as one of our materiality. We will continue to work toward climate change mitigation and adaptation in all of our business activities, and we will strive to proactively disclose information in accordance with the TCFD information disclosure framework.

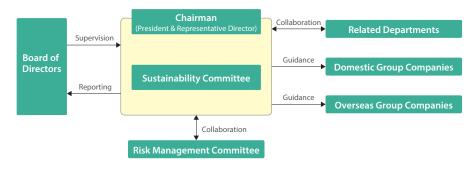
# Endorsement of the TCFD (Task Force on Climate-related Financial Disclosures)

Amano discloses its evaluation of the impact of climate change on our business in four areas: Governance, Strategy, Risk Management, and Metrics and Objectives, compliant with the TCFD Recommended Framework. Considerling the response to climate change to be an important issue, we expressed our endorsement of the TCFD recommendations in October 2022. We will continue our efforts to address climate change and disclose information based on the TCFD recommendations.

# **Corporate Governance**

In order to respond to environmental issues such as climate change, the Amano Group has created an Environmental Management Committee and implemented initiatives such as reducing CO<sub>2</sub> emissions, etc. In addition, in April 2022, we created the Sustainability Committee to promote efforts to both achieve a sustainable society and improve corporate value. The Committee, chaired by the President & Representative Director, is responsible for the Amano Group's sustainability management response to climate change, materiality formulation, in-house education, and information disclosure functions, etc. Specifically, in coordination with relevant departments and the Risk Management Committee, the Committee formulates the basic policy, activity goals, and implementation issues related to climate change response. The matters agreed by the Committee are then deployed to group companies. In addition, the Board of Directors receives a report at least once a year on the basic policies and activity goals examined by the Committee regarding how our business contributes to the realization of a sustainable society and environmental issues such as reductions of CO<sub>2</sub> emissions to respond to climate change, evaluates their progress, approves the effectiveness of the activity policies, and provides monitoring and supervision.

# Climate Change Governance Structure



# Strategy

At the Amano Group, the Sustainability Committee works to identify and evaluate climate change scenario analysis and the financial impact of risks and opportunities for each business. Currently, in the Group, which develops, manufactures, and sells products in Time Information System business and Environment System business, the risks and opportunities common to all businesses are identified as follows. In addition, we are preparing to identify risks and opportunities in our domestic group companies. We will disclose the information as soon as it is ready for disclosure.





# Transition Scenario (Temperature Rise of 2°C)

Emission Restrictions			Risks and Opportunities (R & O)					
Main Classification	Sub Classification	Assumptions	Specific Examples	R	0	High, Medium, Low	Measures & Actions	
	CO <sup>2</sup> Emission Restrictions	Strengthening energy-saving standards for buildings (i.e.mandatory compliance with ZEB(*))	<ul> <li>Increase in capital investment costs for energy-saving measures in self- owned factories and offices</li> </ul>	0		Μ	<ul> <li>Expand adoption of renewable energy such as solar power generation, invest more to energy-saving facilities</li> <li>Relocate branches and offices to buildings with high energy- saving performance</li> </ul>	
Policies, Laws & Regulations	Implementation of Carbon Tax	Implementation of carbon tax and adoption of emissions trading (carbon pricing)	<ul> <li>Increase in raw material procurement costs due to carbon taxes imposed on emission at suppliers and passed on to purchase prices</li> </ul>	0		Н	<ul> <li>Negotiate to pass on the increase in material costs to sales prices</li> <li>Find new procurement sources / investigate alternatives</li> <li>Modify design to reduce materials with high CO<sub>2</sub> emissions</li> <li>Shift to materials and parts with low carbon emissions</li> </ul>	
			<ul> <li>Increased tax costs due to the burden of carbon tax imposed on own CO<sub>2</sub> emissions</li> <li>Increased costs of own emissions trading and purchase of certificates (credits)</li> </ul>	0		Н	• Promote energy-saving measures and expand adoption of renewable energy for self-consumption	
Market	Changes in the Energy Mix	Promoting the adoption of expensive clean energy (renewable energy and hydrogen) •Increased production costs due to rising energy bills O		<ul> <li>Reduce energy costs by promoting energy-saving activities</li> <li>Renew or modify the facilities that use energy sources with high CO<sub>2</sub> emissions</li> <li>Negotiate to pass on cost increases to selling prices</li> </ul>				
Technology	Changes in Demand and Consumer Intentions	mand and Research and development associated with transition	<ul> <li>Increased introduction and development costs for CO<sub>2</sub> capture, utilization, and storage technology (CCUS)</li> </ul>	0		М	•Technical cooperation with advanced low-carbon technology companies	
rechnology		to low-carbon technology	<ul> <li>Increase in R&amp;D expenses and capital investment costs to expand the development of environmentally friendly products (other than CCUS)</li> </ul>	0		М	• Develop energy and resource saving products that meet customer needs	
Reputation	Changes in Consumer Behavior	In order to utilize resources more efficiently, recycling and circular economy are making progress	•Reduced product manufacturing costs and waste disposal costs associated with progress in recycling-oriented (manufacture $\Rightarrow$ use $\Rightarrow$ retrieve $\Rightarrow$ manufacture) economy and processes		0	_	Initiatives to retrieve usable materials from discarded products	
		Due to the growing demand for low-carbon products and services, environmentally friendly products and services are expanding to meet that demand	<ul> <li>Increase in sales by selling products that contribute to a low-carbon society as well as environmentally friendly products and services</li> </ul>		0	M-H	Develop energy efficient products which reduce environmental burden to meet customer needs     Expand the use of recycled materials	

(\*) ZEB : Net "Zero Energy Building" (A building that aims to achieve a comfortable indoor environment while achieving zero annual primary energy balance.)

# Physical Scenario (Temperature Rise Over 4°C)

Emission Restrictions			Risks and Opportunities (R & O)					
Main Classification	Sub Classification	Assumptions	Specific Examples R		o	High, Medium, Low	Measures & Actions	
Acute Intensification of Extreme		Severity and frequency of natural disasters/extreme weather due to extreme temperature changes (heavy rain, floods, typhoons, etc.)	<ul> <li>Loss of sales opportunities and increased recovery costs due to damage to self-owned factories, etc.</li> </ul>	0		н	•Continuous review of BCP •Strengthen the capability of mutual alternative production between the factories	
Weather Conditions	•Loss of sales opportunities and decreased sales due to damage to the suppliers' production equipment			н	Thoroughly practice multi-company purchasing			
Chronic Rise in Average Temperatures		Improving the working environment and considerations given for health risks	<ul> <li>Increase in employee health maintenance and air conditioning costs due to rising average temperatures</li> <li>Reduced work efficiency due to restrictions on outdoor work hours and time zones due to extreme weather conditions (heatwave, heavy rain, etc.)</li> </ul>	0		М	<ul> <li>Improve the work environment and upkeep the infrastructure</li> <li>Promote work efficiency to shorten the work time</li> </ul>	
Chronic	and Extreme Weather	Spread of infectious diseases such as viruses and outbreaks of pandemics	<ul> <li>Loss of sales opportunities and decreased sales due to factory shutdowns caused by the spread of infectious diseases</li> <li>Loss of sales opportunities and decreased sales due to stagnated operations arising from shortages of parts and supplies caused by the spread of infectious diseases</li> </ul>	0		M-H	•Constrain losses through damage prevention measures in line with the guidelines and policies of each country	

# **Flood Risk Assessment**

In recent years, damage caused by flooding in Japan has been increasing. In particular, typhoons and torrential rains have caused physical damage to factories and other facilities, forcing them to suspend operations. We strive to understand the status of risks that may affect our business, especially flood risk. In the current fiscal year, we have expanded the scope of our assessment to include not only our major factories but also our head office and important sales offices.

- \* Referring to the Ministry of Land, Infrastructure, Transport and Tourism's "Guidelines for Physical Risk Assessment in TCFD Recommendations," we calculate the financial impact as an incremental future risk by taking into account changes in future flood frequency multipliers based on the current 100-year and 1,000-year probability of inundation.
- \* Regarding a storm surge risk, we conducted a risk analysis of it, but we disclose only the flood risk as the calculated damage came to zero.

### Forecast of Damages caused by Physical Risks at Domestic Key Sites (period: until 2100)

Name of Sites	Flood Depth once in 1,000years	4°C Scenario Incremental Risk (hundred million yen)	2°C Scenario Incremental Risk (hundred million yen)	Risk Reduction Measures
Head Office	0.5m~3.0m	Single year : 0.0 Cumulative total : 5.1	Single year : 0.0 Cumulative total : 1.1	
<b>Factories</b> Sagamihara Factory Hosoe Factory	0.0m∼0.5m	Single year : 0.0 Cumulative total : 6.2	Single year : 0.0 Cumulative total : 1.1	Currently under consideration
Sales Offices Tokyo branch Kanagawa branch Nagoya branch Osaka branch	3.0m~5.0m	Single year : 0.2 Cumulative total : 17.0	Single year : 0.0 Cumulative total : 3.7	

\* 0.0 hundred million yen" in the table indicates that the incremental risk is less than 10 million yen. The incremental risk includes decreases in assets and sales.balance.

### Calculation Steps for Damage Forecast

STEP 1	Checking the current flood depth at each assessment site
STEP 2	Calculating the current damage and loss amounts
STEP 3	Confirming the future flood frequency multiplier and calculating future damage and loss amounts at the targeted flood scale
STEP 4	Evaluating the future incremental risk at the targeted flood scale (*)

### See below and other

Ministry of Land, Infrastructure, Transport and Tourism publication: Future forecasts of flood frequency,

Geographical Survey Institute: Overlapping Hazard Maps, Flood Inundation Navigation System, Flood Control Economy Manual.

(\*) Future incremental risk: Expected impact amount in the future

# **Risk Management**

In consultation with the relevant departments, the Sustainability Committee annually identifies sustainability risks, including climate-related risks, and conducts scenario analyses and financial impact assessments as appropriate. The Sustainability Committee and the Risk Management Committee that manages risks discuss and review the strategy for responding to the significant risks identified.

The identified key risks and response policies are to be reported to the executives in charge of risk management via the Risk Management Committee and approval is obtained.

# **Metrics and Targets**

Amano set a target to reduce CO<sub>2</sub> emissions in December 2021, aiming to reduce greenhouse gas emissions. We will continue our efforts to reduce CO<sub>2</sub> emissions in order to prevent global warming.

# $CO_2$ emissions reduction target: Reduce $CO_2$ emissions by 46% by the fiscal year 2030, compared to the 2013 baseline.

\* Scope 1+2 emissions are included in the target.



## Results and Targets for CO<sub>2</sub> Emissions Reduction

# Initiatives for CO<sub>2</sub> Emissions Reduction

- Completed switching solar power generation to private consumption (Hosoe Factory)
- Completed the introduction of an electric power visualization system (Hosoe Factory)
- Planning to switch solar power generation to private consumption (Sagamihara Factory)

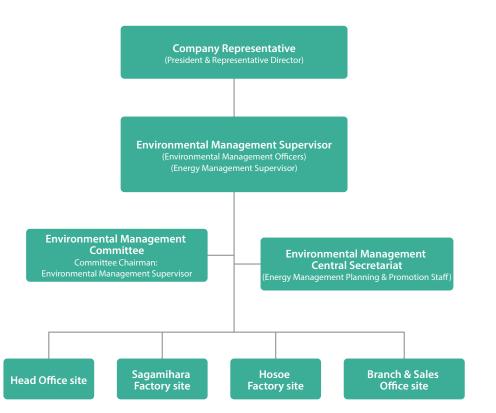
# Items to be Disclosed in the Future

We are preparing to calculate Scope 3 of our CO<sub>2</sub> emissions.

# **Initiatives toward Environmental Management**

Amano recognizes that our social responsibility is to contribute to the formation of a "sustainable society" that balances the environment and the economy. All business activities at Amano will always take into consideration environmental protection and will actively promote environmental management. In order to do this, we have acquired the international certification "ISO14001" for environmental management.

### Overall Company Environmental Management Structure



# **ISO14001** Certification

August 1999	Acquired by the Hosoe Factory
January 2000	Acquired by the Sagamihara Factory
April 2007	Acquired by the former Miyakoda Factory and a group subsidiary, the Environmental Technology Co., Ltd. located at the same premises.
April 2014	With the restructuring of the factories, the Hosoe Factory and the Sagamihara Factory acquired ISO14001:2004
July 2017	The Hosoe Factory and the Sagamihara Factory updated to ISO14001:2015

# Certifications obtained at each factory

Factory	Certification standard	Certifying Institution	Examination registration No.	Initial registration date	Renewal date	Expiration date		
Concernitions.	ISO14001:2015	SGS	JP00/017315	2000/01/24	2023/07/03	2026/07/03		
Sagamihara Factory	Certification scope : "Manufacture of Parking System" "Manufacture of Time Recorders and Products for Time Information System"							
	ISO14001:2015	SGS	JP99/016547	1999/08/13	2023/07/05	2026/07/05		
Hosoe Factory	Certification scope : "The design and manufacture of dust collectiorn systems, pneumatic powder conveyance systems and floor cleaners" "Manufacture of electrolytic water generator " "Measurements for working environment"							

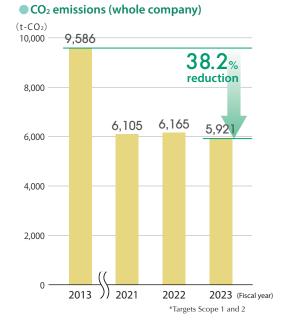
# **Initiatives to Reduce our Environmental Burden**

# **Energy Saving Initiatives**

In order to reduce  $CO_2$  emissions, Amano is promoting energy-saving activities at each business site. As reducing electricity and gasoline consumption is the most effective way to reduce energy consumption, to achieve this, each business site is making continuous efforts by sharing and applying ideas.

Energy reduction measures that are common among the sites are as follows:

- Appropriate air-conditioner temperature settings (implementation of Cool Biz and Warm Biz)
- LED lighting and power saving
- Turning off unnecessary computers
- Energy saving and optimization measures for production equipment and air conditioning equipment
- Reducing power consumption and number of units by adopting energy-saving multifunctional copiers
- Reducing standby power consumption during long vacations
- Promoting the conversion of high power consumption equipment to energy-saving models using the electric power visualization system
- Promoting company-wide eco-driving
- Proceeding with the switch to eco-cars







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Shifting to self-consumption solar power generation (Hosoe Factory)

New LED lamps (Head Office)

6



Replacing laser beam machines with highefficiency machines (Hosoe Factory)



Switching to high-efficiency air conditioning equipment (Head Office)



Replacing dehumidifiers with resin dehumidifiers consuming less electricity (Sagamihara Factory)



Renewal of energy-saving injection molding machines (Sagamihara Factory)

# **Reducing the Consumption of Copy Paper**

The three sites (Head Office, Sagamihara Factory, and Hosoe Factory) are continuing their efforts to reduce the amount of copy paper used, such as by promoting double-sided printing, paperless meetings using notebook PCs with large display screens, and the computerization of inspection sheets, etc.

As a result of these efforts, the amount of paper used in FY2023 was reduced by 7.1% compared to the previous fiscal year.

We will continue to promote these initiatives.

# **Battery Recycling**

As part of initiatives to contribute to the creation of a recyclingoriented society, since December 2012, we have been extracting all depleted batteries from cleaning products and recycling them. In FY2023, 90.8 tons (3,026 batteries) were recycled.



Water is an indispensable resource in manufacturing activities. As such, we are setting goals to reduce environmental impact, avoid risks, and achieve sustainable water use in order to use limited water resources efficiently and appropriately.

Old used

batteries

ustome

AMANO

Old discarded

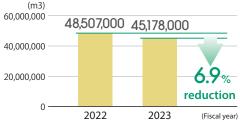
batteries

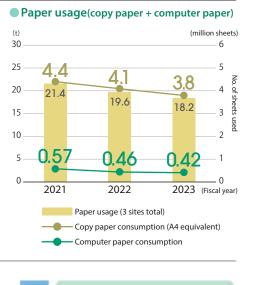
operator

### Water reduction target

Reduce water usage by 1% compared to 6 the previous year. (Targets are Head Office, Sagamihara Factory, and Hosoe Factory sites) 4

In FY2023, we achieved our target of reducing <sup>20,000,000</sup> water usage by 1% through the introduction of water-saving toilets and other measures. <sup>0</sup>





Recycling

Battery manufacturer

Raw

material

recycling

Recycling plant

# **Criteria for Water**

At the Hosoe Factory, we regularly measure the water quality of wastewater and manage it so that it does not discharge outside the factory, and there are no items that do not meet the current emission standards.

		Drainage	Voluntary	FY2023				
	ltem	reference value (mg/l)	reference value (mg/l)	Wastewater outlet 1(mg/l)	Wastewater outlet 2(mg/l)	Wastewater outlet 3(mg/l)		
	рН	5.8 to 8.6	6.1 to 8.2	7.0 to 7.3	6.7 to 8.0	7.1 to 7.6		
	BOD (maximum value)	30	(daily average 20)	8.5	19	20		
	COD (maximum value)	30	27 (daily average 20)	13	20	25		
	SS (maximum value)	40	36 (daily average 30)	5.8	2.5	18		
	n-Hexane extractants (mineral oil content)	5.0	4.5	Less than 1.0	Less than 1.0	*		
Stan	Phenols	1	0.9	Less than 0.5	Less than 0.5	Less than 0.5		
Standard items	Copper	1	0.9	Less than 0.1	Less than 0.1	Less than 0.1		
:ems	Zinc	2	1.8	Less than 0.20	Less than 0.2	*		
	Total iron	10	9	Less than 0.30	Less than 0.3	*		
	Total chromium	2	1.8	Less than 0.05	Less than 0.05	Less than 0.05		
	Total nitrogen	120	108	16	17	62		
	Total phosphorus	16	14.4	1.9	Less than 0.80	9.5		
	Number of coliform bacteria	3,000	2,700	68	24	120		
	Cadmium	0.002	0.0018	Less than 0.0002	Less than 0.0002	Less than 0.0002		
	Cyanogen	1	0.9	Less than 0.1	Less than 0.1	Less than 0.1		
т	Organic phosphorus	0.1	0.09	Less than 0.01	Less than 0.01	Less than 0.01		
Hazardous substances	Lead and its compounds	0.1	0.09	Less than 0.01	Less than 0.01	Less than 0.01		
	Fluorine compounds	8	7.2	Less than 0.80	Less than 0.80	Less than 0.80		
	Arsenic and its compounds	0.001	0.0009	0.0006	Less than 0.0003	0.0007		
	Trichloroethylene	0.3	0.27	Less than 0.005	Less than 0.005	Less than 0.005		
	Tetrachloroethylene	0.1	0.09	Less than 0.005	Less than 0.005	Less than 0.005		
	Dichloromethane	0.2	0.18	Less than 0.02	Less than 0.02	Less than 0.02		

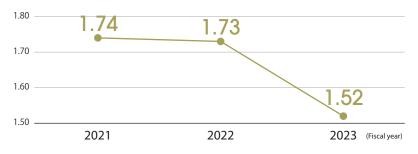
\* Drainage outlet 3 is excluded from measurement since it is used for septic tank drainage

# **Initiatives at Branches and Sales Offices**

# **Energy-Saving Measures of Branches and Sales Offices**

Since FY2007, Amano Branches and Sales Offices have begun collecting data on environmental burden (consumption of electricity, gas, gasoline and other fuel, and water, etc.) from each regional office.

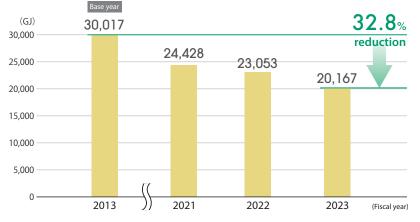
### • Energy consumption per unit (total for all branches and sales offices)



\* Calculated based on the Energy Conservation Act (Act on Rationalizing Energy Use and Shifting to Non-fossil Energy). (Energy consumption/total floor area)

\* Figures for FY2023 onward are calculated based on the amended Energy Conservation Act that came into effect in April 2023.

### Purchased electrical power (total for all branches and sales offices)



\* Figures for FY2023 onward are calculated based on the amended Energy Conservation Act that came into effect in April 2023.

# **Initiatives for Company Car Usage**

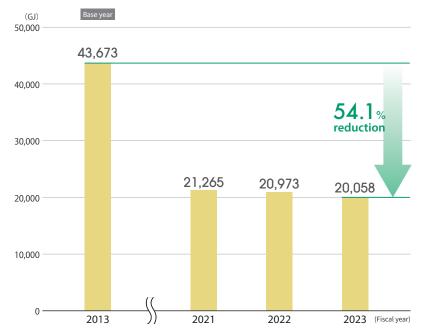
Regarding company vehicles running on public roads, we reduce and renew units to maintain an optimal number of vehicles, progressively replacing them with eco-cars. We have also begun to introduce hybrid vehicles (HV) and plan to continue to replace the fleet gradually.

6

In addition, we will introduce electric vehicles (EVs) that are more environmentally friendly and install charging stations.

We are also conducting educational activity through a booklet "10 eco-driving recommendations"

# • Fuel consumption by company vehicles (total for all branches and sales offices)



\* Figures for FY2023 onward are calculated based on the amended Energy Conservation Act that came into effect in April 2023.

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# **Initiatives to Reduce Waste Material**

# **Waste Reduction Target**

Riding on the increase in efforts to promote a circular economy, since FY2022, we have set specific numerical targets for waste emissions and are working to reduce the amount of waste generated and achieve zero waste emissions.

**Waste reduction target:** Reduce total waste emissions intensity by 1% from the previous year. (Targets are Head Office, Sagamihara Factory, and Hosoe Factory sites)

intensity

250

200

150

100

50

0

Reducing the total waste emissions intensity

14.8% reduction

Factories

41.9

2023

\* Intensity Head Office: Total waste emissions/number of employees, Factories: Total waste emissions/production output

49.2

2022

# **Reducing the Total Waste Emissions Intensity**

In FY2023, we reduced total waste emissions intensity by 14.8% at each of the factories. However, the total waste emissions intensity for the Head Office increased by 18.0% as a result of the waste generated in connection with the demolition of the office building. This impact may continue to be felt in FY2024. However, we will continue our efforts to reduce waste emissions.

18.0%

increase

163.1

2022

Head Office

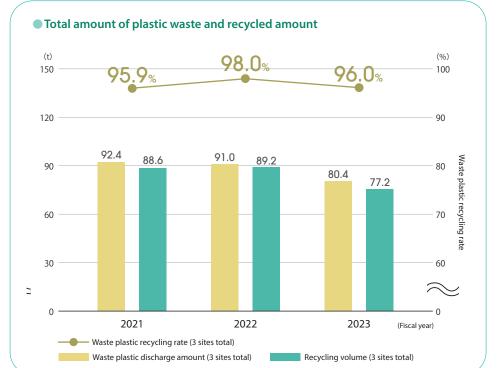
192.4

2023

(Fiscal year)

# Promoting Waste Plastic Recycling

In FY2023, the total amount of plastic waste generated by our three sites (Head Office, Sagamihara Factory, and Hosoe Factory) was 80.4 tons, which was 12% less than the previous fiscal year. Meanwhile, the recycling rate decreased by 2% as a result of an increase in waste paint associated with increased production volume. We will continue to promote thorough sorting and strive to recycle and reduce plastic waste.





23



Subdivision of dry battery separation (Sagamihara Factory)

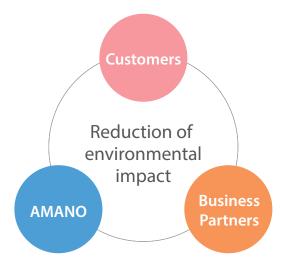
# **Green Procurement Initiatives**



# **Promotion of Green Procurement (Green Procurement Guidelines)**

We are advocating "promotion of green procurement" in line with the environmental management system "Environmental Action Guidelines". With a view to reducing environmental stress in our supply chain, we formulated the "Amano Corporation Green Procurement Guidelines." Based on these guidelines, we conduct surveys on raw & product materials, parts, and halffinished products including component units, delivered by our business partners to check whether they contain any substances that we designate as hazardous. We ask our suppliers to comply with the following requirements:

- Conduct a content test of regulated chemical substances for each batch of raw material and parts we procure. (submission of a chemSHERPA file)
- In our manufacturing processes, we do not use substances that Amano has designated as being banned from use in production processes. (submission of a certificate of non-use)



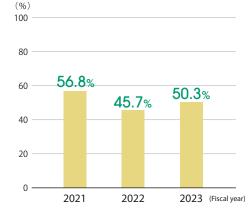
# **Green Purchasing and Procurement Activities**

- Regarding the equipment and supplies managed by General Affairs Department, since 1999, Amano has been promoting the purchase of "eco-mark" products and energy saving equipment along with "green" office supplies. We are progressively switching the stationery and office supplies used in our office to "Green" products and working to reduce the environmental burden and make effective use of resources. The "Green" product purchasing rate for stationery and office supplies in FY2023 was 50.3%.
- We will select and purchase products that have been adequately considered for recycling after disposal.
- For electronic devices with high energy consumption, such as multifunctional copiers, we will carefully compare the functionalities and energy consumption levels and select models that are superior in terms of cost performance. We will then promote device renewals.
- We repair usable equipment and supplies as much as possible to extend their lifetime in order to reduce disposals from simple renewals.
- When renewing machinery, materials and office equipment, we will select those which are environmentally friendly.
- When purchasing items for production, we implement measures to reduce waste, such as returning and reusing wooden frames and pallets for heavy parts, reusing packaging materials, and introducing returnable boxes, etc.
- We have improved traditional quotation methods (using paper forms) by promoting a system for supplier quotations using electronic estimations.



Simplify product packaging

### Green procurement purchase rate





Reuse of cushvioning material

# **Initiatives for Biodiversity**

# Kanagawa Reforestation Partner System

In April 2020, Amano became a partner in a system sponsored by Kanagawa Prefecture that supports and cooperates with forest restoration and conservation projects through donations and forest volunteering by employees of partner companies. The goal of this activity is to develop Kanagawa water resources, in which we provide public management and support of private forests (forests owned by forest cooperatives, etc.) in target areas of approximately 60,900 ha centered around the upstream areas of the Shiroyama dam, Miyagase dam, and Miho dam, etc.

In May 2024, we held an environmental event for Amano Group employees and their family members in the prefectural 21st century forest which involved a forest walk, environmental education, and craft-making.

# **Green Fundraising**

At the Sagamihara Factory, we participate in green fundraising sponsored by the Kanagawa Trust Midori Foundation Prefectural North District Promotion Council. In FY2023, donations and sales of green products totaled 51,556 yen.



# **Purchasing Eco-friendly Uniforms**

We have adopted an eco-marked unisex work wear that uses at least 50% recycled PET fiber. In addition, for each work wear purchased about two saplings are donated to the Green Belt Campaign to plant trees around the foothills of Kenya.



# Compliance Management concerning Air Pollution and Wastewater Standards

14 LIFE BELOW WATE

Since 2016, We have not used heavyoil-fired boilers at any sites. We have no facilities that fall under the Air Pollution Control Act. We have measured levels of water pollutants, and there are no reports of any legal or regulatory values being exceeded.

> 14 LIFE BELOW WATEF

AMANO

# **Environmentally Friendly Products**

Amano is actively promoting environmentally friendly product designs by incorporating energy efficiency, resource efficiency (Reduce, Reuse, and Recycle), safety, and rigid control of environmentally burdensome substances when developing and modifying its products.

# **Electric Dust Collector "MR series"**

Filterless mist collector "MR series" collects water-soluble mist generated in metal cutting processes, which is global specification mist collector with long-life capture performance, energy-saving effect, and enhanced maintainability compared to the conventional "MJ series". By newly designing PM motor and inverter respectively, we have achieved global specifications that comply with high-efficiency regulations in various countries and the CE standard, while reducing CO<sub>2</sub> emissions.



# Small Robotic Floor Scrubber "HAPiiBOT"/ Electrolyzed Water Unit

"HAPiiBOT", a small robotic floor scrubber targeting small and mediumsized facilities such as supermarkets. The conventional autonomous driving technology is equipped with AI image technology, making it possible to clean complex and narrow areas. In addition, by installing an electrolyzed water unit, it is possible to generate and use washing water that does not contain surfactants without the need for an electrolyzed water generator, water softener, or water storage tank, etc. In this way, there are no  $CO_2$  emissions in the wastewater treatment process after use, which contributes to reducing the environmental impact.

# **Chemical Management**



# **RoHS\*2 Compliant Products**

Europe enacted the RoHS2 Directive, which restricts the use of certain hazardous substances in electrical and electronic equipment in order to prevent adverse effects on people and the environment during the recycling and disposal of such equipment. A total of 10 substances namely, cadmium, mercury, lead, hexavalent chromium, PBB (polybrominated biphenyls), PBDE (polybrominated diphenyl ethers), the 4 Phthalate ester substances namely DEHP (bis-2-ethylhexyl phthalate), BBP (benzyl butyl phthalate), DBP (dibutyl phthalate), and DIBP (diisobutyl phthalate)) have been specified as specific harmful substances. In line with this, we are working towards the total abolition of these 10 substances.

We have also established "RoHS Regulation Management Provisions" to be included in our Environmental in-house guidelines to monitor and confirm the progress towards RoHS2 compliancy.

\*RoHS: Restriction of the use of certain Hazardous Substances in electrical and electronic equipment

# **RoHS2-compliant products (partial)**









TX-300

\$ · · · ID ID

MX-1000

SX-200







EX3000J





BX6000W

# The Management of PRTR Designated Chemical Substances

In accordance with the PRTR Act\*1, we carefully monitor the types of notifiable chemical substances that are discharged and the amount handled, and aggregate the totals each month. In FY2023, the total volume handled by the three sites was 21.8 tons, a reduction of 29.9% from the previous year. We will continue to promote the reduction of emissions by replacing target substances and parts.

Of the target substances, the following three substances were notifiable substances under the PRTR Act and had a handling volume of 1 ton or more. We notified and reported these substances to the local government.

Substances subject to PRTR	FY2023 handling volume (t)
Xylene	5.8
Toluene	8.7
Ethylbenzene	4.8

With regard to the reduction of VOC\*2, in FY2023, we continued to build and promote a system for proper ordering of organic paints and thinners (diversion through high repeatability bespoke paint inventory management) and proper use (reduction in the number of paint color changes, reuse of thinners for cleaning).

- \*1 PRTR Act: "Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement". A law that requires companies to monitor and control the amount of harmful chemicals that are emitted and transferred.
- \*2 VOC: Volatile Organic Compounds

### The trend of PRTR substances handled

