Environment Report

Forest-In Office 2023

AMADA

Table of Contents

Editorial Policy

■ **Editorial Policy**

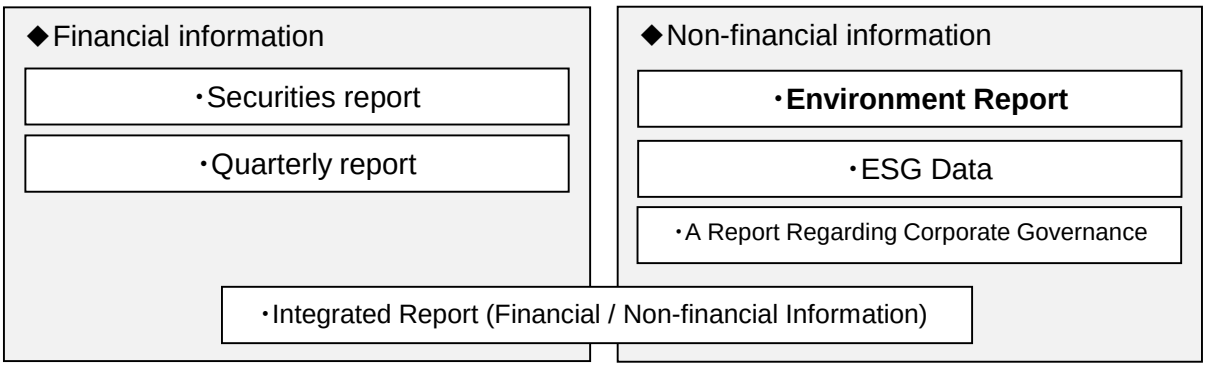
This content consists mainly of the environmental activities of AMADA CO., LTD. and the AMADA Group in Japan.
This report is intended for the various stakeholders of the company. The report is designed to provide an overview of the environmental activities and social contributions of the AMADA Group.

■ **About the name "Forest-In Office"**

"Forest-in" is a neologism created by AMADA.
AMADA seeks to be an office of the forest, rather than an office in the forest. The term thus refers to AMADA as "an office of the forest" that promotes activities that protects the natural environment.

■ **The significance of Environment Report as part of AMADA's information disclosing media**

The significance of the Environment Report among all of AMADA Group's information disclosing media is as follows:



■ **Scope of the content**

Reporting period: Fiscal 2022 (April 2022 to March 2023)
Relevant organizations: 14 domestic and 51 overseas companies

■ **Issues**

Nov. 2023

■ **Referenced guidelines**

Environmental Reporting Guidelines 2018 of the Japanese Ministry of Environment, ISO26000

AMADA Group’s management philosophy

Management Philosophy

1. Growing together with our customers

Our company has been sharing this philosophy as a starting point for all of our business activities since its formation. We believe that the creation and provision of new values based on customers' perspectives will strengthen the relationship of mutual trust between our customers and the AMADA Group, and become a source of mutual development.

2. Contribute to the international community through our business

Our company recognizes that contributing to "manufacturing" conducted by our customers throughout the world leads to the development not only of local communities, but also the international community as a whole, and we conduct our business activities with the aim of providing the highest quality of solutions in each market around the world by optimally distributing our group's management resources.

3. Develop human resources who pursue creative and challenging activities

Rather than being content with the present situation, we are constantly in search of new and better ideas to put into action in order to improve and enhance our business activities.
This is the AMADA Group's basic philosophy of human resource development, and we believe that AMADA's unique corporate culture will be further developed by continuing to practice this philosophy.

4. Corporate activities based on high ethics and fairness

We promote transparency and we comply with regulations in the AMADA Group's management and in all aspects of its business activities, and strive to further enhance its corporate value while conducting sound activities.

5. Take good care of people and the earth's environment

By treating the AMADA Group's stakeholders (such as shareholders, customers, business partners, employees and local residents) and the global environment with respect, we strive to continue to be a good company for both people and the earth.

AMADA Group's Basic Policy on Sustainability

Basic Policy on Sustainability

AMADA Group, based on our management philosophy, environmental principles and policy and the code of conduct, we emphasize having dialogue with all stakeholders including our customers, suppliers, shareholders / investors, employees and local communities, and while proactively taking part in constructing a sustainable society, we will put effort into improving our corporate value.

1. Initiative for addressing environmental problems through our businesses

In every process of our business, AMADA addresses issues including, the reduction of CO_2 emission, the acceleration of reduction and reusing of wastes and protecting the global environment including its biodiversity, by also providing products and services considerate of the environment through our businesses, we contribute into actualizing a society that cares for the people and global environment.

2. Honoring human rights

Without regard to the attribution of each individual's gender and nationality, we emphasize the importance of respecting the human rights of each stakeholder including persons who stand on a socially volunerable position, and we are promoting this by arranging a workplace where our diverse workers can actively put effort into their work while feel rewarded, as well as an environment where they can work feeling that their safety and health is secure, both mentally and physically.

3. Human resource cultivation

By arranging a personnel system and structure for education and trainings in order for the employees, an essential resource for the management as a source of innovation, to maximize their abilities, we are putting effort into developing workers who pursue creative and challenging activities.

4. Participating and contributing to the local community

In the region where we run our business, we are committed to actively participating in vitalizing the local community and enriching the living environment through our business and other social contribution activities such as our cultural projects.

5. Establishing trust from the society

By strictly complying to legislations and regulations, we will continue to run a honest and fair business that values fair competition, provide high-quality products, appropriate disclosure of products and corporate information, etc., and by strengthening the business foundation, we are committed to a management that will be highly trusted from the society.

AMADA Group Our Environmental Principles and Policy / Environmental Declaration

Environmental Principles and Policy

◇AMADA Group's environmental principles

AMADA Group thinks that preservation of the earth, a small planet in macrocosmos, for the next generation is the biggest theme for human beings. Based on this idea, AMADA Group positions environmental preservation as one of its important management issues, and is committed to contributing to a prosperous future for people around the world through eco-friendly manufacturing, in order to pass down this beautiful earth to our descendants.

◇AMADA Group's environmental policies

1. Provision of products and services for protection of the environment

Evaluate the environmental load of products throughout its lifecycle, provide services contributing to energy and resource savings and elimination of hazardous substances, mitigate and adapt to climate changes, and contribute to the protection of the global environment.

2. Reduction of environmental load in business activities

In every process of business activities, thoroughly pursue reduction of environmental load by promoting energy efficiency improvements, energy saving, resource saving and recycling. Also, aggressively promote green procurement and try to eliminate the use of hazardous substances.

3. Efforts toward coexisting with nature

Comprehend the effect of the group's business on the environment, and make efforts for our coexistence with nature through the effective utilization of water resources and the protection of biodiversity and ecosystems.

4. Compliance with environment-related laws

Comply with environment-related laws and other agreements concluded with stake holders.

5. Continuous improvement of environment management system

Build an environment management system and make continuous improvement of it. Grasp the effects of business activities, products and services on the environment. Set environmental goals and targets and reduce environmental load as well as prevent contamination.

6. Enhancement of education about environment

Provide education aimed at environment protection to improve employees' sense of responsibility as a member of the company and also boost awareness of environment preservation.

Apr. 2023
AMADA CO., LTD.
Representative Director,
President; Executive Officer
Takaaki Yamanashi

Environmental Declaration

AMADA Group aggressively promotes environmental preservation activities to its management in order to realize sustainable development of its business and society. AMADA will help to build a bright and prosperous future for people around the world by optimally utilizing the engineering capabilities we have cultivated, and by providing environmentally-friendly, energy-saving products as a general manufacturer of metalworking machinery.

"Linkage through Eco-conscious Manufacturing"

AMADA Group aspires to become a business enterprise to link with customers, society and the world through eco-conscious manufacturing.

Producing eco-friendly machine at eco-friendly business establishment

All AMADA Group's operations are carried out with the aim of achieving optimal compatibility between environmental preservation and business activities through promotion of energy -and resource- saving efforts.

Our eco-friendly merchandise assists customers to manufacture eco-friendly products

AMADA Group's eco-friendly products enable customers to manufacture energy savings and highly efficient products at their plants.

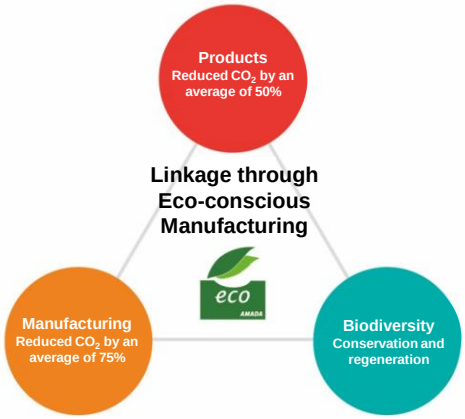
Creating eco-friendly environment at customers' plants

AMADA Group contributes to the creation of eco-friendly environments at customers' plants by utilizing its accumulated environmental know-how.

The AMADA Group's Initiatives for the Environment

Passion for the initiatives

As the AMADA Group's initiative for the environment, the group w aim to connect with customers, society and the world under the them "Linkage through Eco-conscious Manufacturing". Continuing with th "Environmental Declaration", established in fiscal 2010 as the mid-ter goal for FY 2020, AMADA has established "AMADA GREEN ACTIO PLAN 2030" as the mid-term goal for fiscal 2030. The group commits three major agendas: "actualizing a carbon neutral society", "actualizir a recycle-based society" and "preservation and restoration biodiversity".



1. Reducing products' CO_2 emission (in clients' facilities): Reduce 50% by fiscal 2030 (compared to fiscal 2013) Scope 3 – C11

Within the AMADA Group's business, Scope 3 (indirect emission of greenhouse gases from activities within the supply chain) makes up over 90% of the total CO_2 emissions, therefore AMADA finds it imperative to reduce CO_2 emissions that occurs during the clients' usage of company products. To tackle this issue, the company is promoting the replacement of its conventional CO_2 laser machines to fiber laser machines that reduces the energy consumption by approximately one-third. By creating numbers of AMADA ECO PRODUCTS with high productivity that unifies manufacturing processes and reduces power consumption, and renewing products entirely to aim for carbon-neutrality, AMADA aims to reduce CO_2 emissions of the products in clients' facilities by 50 % (compared to fiscal 2013) by fiscal 2030.

Furthermore, at AMADA's new exhibition hall "Amada Global Innovation Center (AGIC)", renovated in February 2023, displays a lineup of environment friendly products equipped with cutting edge technology, to match the issues of clients and society. 85% out of the 90 models of products displayed at AGIC are new products. The exhibited items include machines equipped with the new NC system "AMNC 4ie" that displays the amount of emitted CO_2, new model of fiber laser machine that reduces CO_2 emissions by 65% (compared to major products in 2013), electric servo bending machine that enabled an oil-free drive shaft, a multiple rack system that enables automated processing overnight, etc. Through these efforts, AMADA will practice its environmental policy "Linkage through Eco-conscious Manufacturing" (1. make ecological machines in ecological facilities, 2. AMADA Group's Eco Products make the clients' ecological products, and 3. make an ecological environment inside the clients' factory) Currently there are 37 AMADA Eco Products certified items, and their share is increasing by 87% in sales and 61% in numbers (both compared to results of fiscal 2022).

■ Actions against climate change "SBT certification"

Recently, environmental issues such as climate change are deepening worldwide. Japan has been affected by frequent large scale natural disasters rooting to extreme weather, therefore climate change is no longer a matter companies can overlook. Under this circumstance, AMADA Group has designated actions against climate change as the most important issue out of various environmental problems, and is currently working on reforming the merchandising strategies and business models within the whole value-chain in order to achieve carbon-neutrality by 2050. While aiming to boost the reduction of CO_2 emissions, the installation of highly energy efficient processes and equipment and the introduction of renewable energy in the production process both domestically and internationally, and by supporting the reduction of electric power consumption by providing products and services utilizing energy saving technology, AMADA will continue to act against climate change. Furthermore, the group will work on the reduction of CO_2 emissions from purchased products / services through supplier-client cooperation and make further efforts to adapt to climate change, enacting with its carbon-neutrality strategy.

AMADA Group announced the support to the TCFD (Task Force on Climate Related Financial Disclosures) recommendation in April, 2022. Also, based on the recommendation, AMADA is disclosing information regarding the evaluation, etc. of the effect from risks and opportunities related to climate change to the company (scenario analysis), based on the TCFD framework. Furthermore, regarding the fiscal 2030 CO_2 emissions reduction goal, AMADA was certified with the "SBT(Science-Based Targets)" for greenhouse gas reduction in November, 2022.

2. Reducing CO_2 emissions in facilities / factories: Reduced 75% by fiscal 2030 (compared to fiscal 2013) Scope 1+2

Under the Paris Agreement, the trend for the decarbonization goal by 2050 is accelerating worldwide, aiming to reach the long-term goal of keeping the rising temperature under 1.5℃ compared to the pre-industrial revolution.

AMADA Group, in the **new** mid-term environmental goals for fiscal 2030, has established goals regarding environmental protection including "actualizing a carbon neutral society (reducing CO_2 emissions)", "actualizing a recycle-based society (reducing landfill waste, use of water, etc.)", "chemical substance management" and "preservation and restoration of biodiversity". In 2022, the "Environmental and Ecological Committee" was established to put project ideas into effect, and its subcommittees for products, factory, facility, etc. will take actions to reach these goals.

For CO_2 emissions from facilities and factories (Scope1+2), the group is taking energy consumption reduction measures such as installing energy saving systems including: the lighting system, updating air-conditioning and heating equipment with higher efficiency, improving productive efficiency for each process, taking energy-saving measures, etc. As for the usage of renewable energy, after introducing it in parts of domestic and international facilities, the group continues to make efforts to introduce renewable and green energy coordinately in a wider scope.

■ Joining the "RE100", adopting nature-based energy

AMADA Group has a history of taking initiatives in the utilization of nature-based energy. Since 2009, AMADA Solution Center in Haan, Germany, uses its heat pump utilizing geothermal heating. The ground heat exchangers located in 52 areas, 130m underground, covers 80% of required energy for air conditioning and heating (annually), and they are contributing to reducing the emission of CO_2 by 40%. (Reduced 460MWh, 138t of CO_2 in fiscal 2022). In addition, the ratio of facilities introduced with renewable energy overseas as of fiscal 2022 is 11% (approximately 4,200MWh).

In Japan, the group took steps in installing solar panels in five major facilities / factories, introducing renewable energy. Furthermore, AMADA was validated with the Non-Fossil Certificate for using a nature-based renewable energy for all electricity used in domestic bases, achieving 100% of consumed power being renewable energy virtually.

As a result, the introduction rate of renewable energy in AMADA Group overall is now 68% (approximately 71,000MWh). AMADA Group promises to actualize further energy-saving results and continue efforts with sophisticated renewable energy measures.

According to the IPCC Sixth Assessment Report, the average global temperature has risen by 1.1℃. To take specific and immediate actions in accordance to the 1.5℃ target, and to actualize a carbon-neutral society, AMADA Group pulled up the fiscal 2030 CO_2 emissions reduction target to 75% from 50% (compared to 2013). Additionally, in 2023, the group joined RE100, a global environmental initiative for businesses aiming for 100% renewable energy in all electricity used in every one of their bases.

Solution Center Haan

Ground heat exchanger piping header

3. Preservation and restoration of biodiversity

AMADA Group has been making efforts in the "Preservation and restoration of biodiversity" since it was added to the Environment Policy in 2010. For the preservation of biodiversity, it is crucial to understand the status of the ecosystem per location. Since 2015, AMADA Group is taking actions for every base in Japan based on the survey of biodiversity in each domestic office by using a land evaluation tool from "JBIB" (Japan Business Initiative for Conservation and Sustainable Use of Biodiversity).

Isehara Works, AMADA's headquarters, is aiming to be a facility that coexists with the natural environment that roots to Mount Tanzawa system nearby, bringing biodiversity in the urban area. Currently, 9 orders, 21 families and 32 species of wild birds have been observed within the facility. Furthermore, these efforts have been awarded by the Factory Greening Awards (Japan Greenery Research and Development Center) with the "Chairman's Award" (fiscal 2016) and "Kanto Bureau of Economy, Trade and Industry Director's Award" (fiscal 2019). At Fujinomiya Works, a major production base, "AMADA's Forest" that makes up 60% of its premise is maintained systematically, and over 1,000 species of animals and plants have been observed; the facility is making efforts to protect rare species (mainly plants). In addition to winning the "Kanto Bureau of Economy, Trade and Industry Director's Award"(fiscal 2021) in the Factory Greening Awards, the facility was awarded for it's excellence in the "Disaster Prevention / Relief" criteria at the "3rd Green Infrastructure Awards" (Ministry of Land, Infrastructure, Transport and Tourism). In fiscal 2023, the facility is working on reporting its forest management plan to Fujinomiya City, planning to take initiative in improving the environment of local forests.

In 2022, United Nations Biodiversity Conference (COP15) has agreed to make over 30% of both land and waters worldwide a conservation area. "Nature-positive", meaning to stop the loss of natural ecosystems and to revive them, has become the common target worldwide for biodiversity and natural capital. Taking the nature-related risks as an opportunity, as a goal for 2030, AMADA Group will continue to work on the forest management planning in Fujinomiya, implement green infrastructure in each facility and factory, and make further efforts for the conservation and regeneration of biodiversity.

Information Disclosure Related to Climate Change, Based on the TCFD Recommendations

AMADA Group, recognizing actions against climate change as a crucial agenda regarding its management, announced the support for the recommendations of TCFD (Task Force on Climate-Related Financial Disclosures) in April, 2022. Furthermore, based on the TCFD framework, the group is disclosing information regarding the evaluation, etc. of the effect from risks and opportunities related to climate change to the company (scenario analysis).

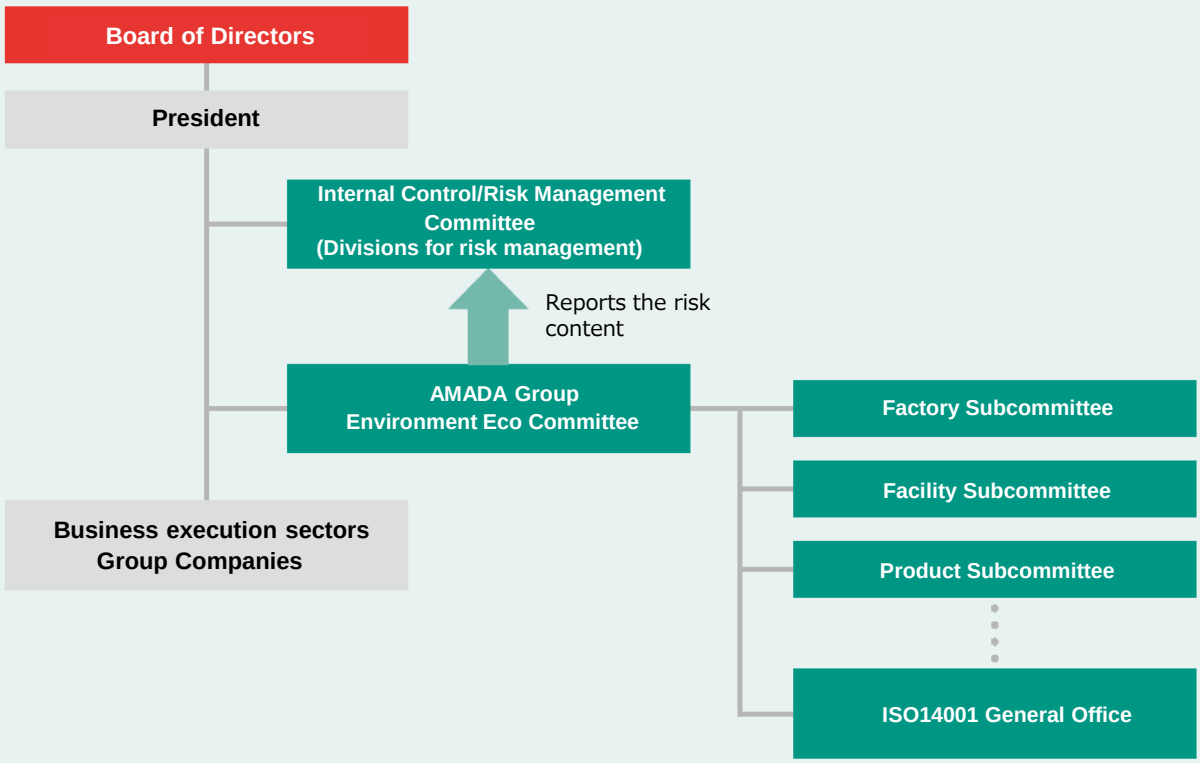
◆Governance

AMADA Group takes actions for environmental issues including climate change under AMADA Group Environmental and Ecological Committee and its chairman who is the Representative Director, President.

The AMADA Group Environmental and Ecological Committee has subcommittees such as “Factory Subcommittee” and “Facility Subcommittee” that plans environmental projects regarding workplaces and “Product Subcommittee” that plans environmental projects related to products; information regarding the environment is gathered from each facility in Japan and overseas, and environmental projects are planned appropriately for each area, while the progress is also managed by the committee.

The risks and opportunities from the environment, including climate change, and the set goals and plans that takes them into consideration, as well as their progress are reported to the Board of Directors periodically, which are utilized for the decision-making of the management.

◆Climate change risk management structure



◆Strategy

When assessing risks and opportunities regarding climate change, it can roughly be sorted into two categories, one is the “transition” based on changes being made from new legislations and technologies due to the society aiming to achieve carbon neutrality and also changes in the market needs. The other is “physical” based on the rising temperature and extreme weather caused by it, and also chronic climate change. The AMADA Group evaluated the content, its impact to the businesses, time-period for the lasting effect, etc., depending on these two types of risks and opportunity framework; they are identified as listed below. Furthermore, taken measures for these risks and opportunities and the financial impact from them are also indicated. To indentify the risks and opportunities mentioned, we have analyzed several scenarios, and the results are reflecting those scenario analysis.

AMADA Group considers that, for the 2℃ scenario which is the main scenario, the merchandising strategy to create a highly efficient and energy saving AMADA ECO PRODUCTS and to innovate manufacturing with fiber optics controlling technology and automation in the laser business, is crucial as this will be the opportunity to increase sales.

Major climate change related risks and opportunities

Items of risks and opportunities			Business impact		Future risk severity※1		Response to the risk / opportunity
Category	Sub-category	Further sub-category	Time period ※2	Consideration	2℃ Scenario	4℃ Scenario	
Transition risk	Political policies / regulations	Carbon pricing / emissions trading	Long-term	■By carbon pricing and emissions trading being introduced, the production cost will increase	↗	→	With reduced CO_2 emissions based on the mid-term environmental plan, the aim is to reduce the cost of carbon pricing within production
	Market	Energy and materials Rise of cost	Mid- to long-term	■Rise of crude steel price as a response to decarbonization technologies ■Rise of electricity prices due to the increased price for renewable energy promotion surcharge	↗	→	Creation of producible product with less resources and expand the utilization of renewable energy
	Reputation	Changes of reputation from stakeholders (investors, etc.)	Short- to mid-term	■Inadequate measures to address climate change will have a negative impact on the reputation of investors, the cost of complying with disclosure and reporting requirements in some countries, financial arrangements, and recruitment. ■Increased costs for complying to the ESG information disclosure standard from it being more strict	↗	→	Taking actions for international initiatives such as acquiring SBT certificate and publicizing sufficient information regarding actions against climate change using the company’s website, etc.
Opportunities	Products and services	Diffusion of low-carbon products	Mid- to long-term	Creation of new AMADA ECO PRODUCTS (highly efficient energy-saving products). Increased profits by resolving the agendas regarding product creation, such as implementing fiber optical control technology and automization in the laser business, energy-saving utilizing IoT and stable operation	↗	→	Further creation of AMADA ECO PRODUCTS based on the mid-term environmental plan
Physical risk	Chronic	Decreased productivity by water stress	Long-term	■In case of a drought, the production cost could increase by the restriction of the use of water, and further investment may be required for system maintenance.	→	↗	Promote the reduction of water used in production
	Acute	Intensified extreme weather	Long-term	■Damage on factory(ies) of the AMADA Group due to a typhoon, etc., could require for it to shutdown, decreased production, further investment for facility recovery, etc. ■In the occurrence of a flood, etc., supply chains may be cut off, causing a shutdown or decreased production	→	↗	Take measures with BCP, for example, installation of power generators and / or accumulators

※1 Evaluation of risks and opportunities are given for two scenarios: 2℃ scenario and 4℃ scenario. 2℃ scenario uses the SDS (Sustainable Development Scenario) of the IEA (International Energy Agency) and RCP 2.6 scenario of the IPCC (Intergovernmental Panel on Climate Change) as an external referential scenario.
On the other hand, 4℃ scenario refers to the CPS (Current Policies Scenario) of the IEA and RCP8.5 scenario of the IPCC.
※2 Regarding the time period, short-term refers to one year, mid-term refers to 1 to 10 years, and long-term refers to over 10 years.

◆ Financial impact from climate change risks (2℃ scenario)

In the 2℃ scenario, which is likely to impact the AMADA Group more, the financial impact caused by climate change related risks are estimated as stated below.

Regarding the risk of a possible increase of cost due to the future rise of carbon pricing, the cost AMADA will cover is estimated below based on the 2030 carbon pricing being 10,000 yen / t-CO_2, calculated from advanced countries' price assumption under SDS scenario of the IEA.

Index	Intended year	Estimated unit price	Estimated CO_2 emission※	Cost
Carbon pricing	2030	10,000 yen/t-CO_2	14,796 t-CO_2	148 (million yen)

※CO_2 emission is estimated as Δ75% of Scope 1 + 2 volume of emission in fiscal 2013 from all facilities and factories, based on the Group's target.

Risk Management

Actions and management of climate change risks are managed by the AMADA Group Environmental and Ecological Committee. Specified r1isks and opportunities are reported to the Risk Management Department within the Internal Control/Risk Management Committee. The Internal Control/Risk Management Committee determines the policies regarding significant risks from the group level (people, goods, capital, information, etc.), and they are managed while integrated with other risks. The risk management results are reported to the Board of Directors at the end of the fiscal year, to be utilized for the decision-making process for the management.

◆The flow for climate change risk management

Aggregate information regarding climate change from both domestic and international operation centers, and evaluate the climate change risks and opportunities (including the scenario analysis) by the AMADA Group Environmental and Ecological Committee.

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Report the climate change risks and opportunities identified by the Environmental and Ecological Promotion Committee to the Internal Control/Risk Management Committee.
Internal Control/Risk Management Committee conducts risk management, integrating the climate risks with all the other risks.

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Internal Control/Risk Management Committee reports the risk management result to the Board of Directors once a year at the end of each fiscal year.

Indicators and goals

As goals to manage the risks and opportunities related to climate change, the group has established two targets, "reduce 75% of CO_2 emissions in Scope 1 and 2 compared to fiscal 2013 by 2030" and "reduce 50% of CO_2 emissions in category 11, Scope 3 (during the use of AMADA product) compared to fiscal 2013 by 2030", and continuous efforts are being taken to achieve these goals. For the details of other efforts regarding the environment, please refer to "AMADA Group Mid-Term Environmental Plan (AMADA GREEN ACTION 2030)" on the next page.

Further, please refer to the "AMADA Group ESG Data" (issued separately) for CO_2 emission results for Scope 1 to 3.

Mid-Term Environmental Plan (AMADA GREEN ACTION 2030)

	Goals for FY 2030	Goals for FY 2025 (intermediate)
① Actualizing a carbon neutral society	・To provide AMADA ECO PRODUCTS that contribute to decarbonization CO_2 emission from all products: △50.0% ※FY 2013 reference: 811,635t-CO_2 (Japan: 336,011t-CO_2, overseas: 475,624t-CO_2)	・To provide AMADA ECO PRODUCTS that contribute to decarbonization CO_2 emission from all products: △50.0%
	・To take energy-saving measures (upgrading lighting and AC systems, improving productivity) CO_2 emission from all facilities and factories: △75.0% ※FY 2013 reference: 59,185t-CO_2 (Japan: 37,163t-CO_2, overseas: 22,022t-CO_2) 【SCOPE1+2】	・To take energy-saving measures (upgrading lighting and AC systems, improving productivity) ・CO_2 emission from all facilities and factories: △70.0% (41,429t-CO_2) (Japan: 26,014t-CO_2, overseas: 15,415t-CO_2)
② Actualizing a recycle-based society	**Effective use of resources** ・Total volume of waste※1 (compared to FY 2019) : △10.0% ※FY 2019 reference: 6,251t (Japan: 3,735t, overseas: 2,516t) ・Total volume of landfilled waste (compared to FY 2019): △10.0% ※FY 2019 reference: 30.2t (in Japan) ・Zero-emission rate※2 (compared to FY 2019): under 0.73% (in Japan) ※FY 2019 reference: 0.81% (in Japan) ・Reduced volume of water used (compared to FY 2019): △10.0% ※FY 2019 reference: 427,500㎥ (Japan: 265,300㎥, overseas: 162,200㎥)	**Effective use of resources** ・Total volume of waste (compared to FY 2019): △5.5% ・Total volume of landfilled waste (compared to FY 2019): △5.5% ・Zero-emission rate (compared to FY 2019): under 0.765% (in Japan) ・Reduced volume of water used (compared to FY 2019): △5.5%
③ Regulated Chemicals Control	**Appropriate management and reduction of regulated chemical substances (in Japan)** ・Hazardous chemicals (compared to FY 2019): △10.0% (Fujinomiya Works) ※FY 2019 reference: 36,395kg ・Abolishment of all mercury contained equipment (fluorescent lamp)	**Appropriate management and reduction of regulated chemical substances (in Japan)** ・Hazardous chemicals (compared to FY 2019): △5.5%
④ Biodiversity	**Grasp the nature related risks and opportunities, and take actions on preservation and restoration of biodiversity (in Japan)** ・Forest management (Fujinomiya) and installation of green infrastructure (each facility / factory)	**Grasp the nature related risks and opportunities, and take actions on preservation and restoration of biodiversity (in Japan)** ・Forest management (Fujinomiya) and installation of green infrastructure (each facility / factory)

※1 Part of the related company data for the fiscal 2019 waste reference uses the data from FY 2020 (due to the year's data being non-existent)
※2 Zero-emission rate = (the weight of landfilled waste / the weight of all)

Mid-Term Environmental Plan (AMADA GREEN ACTION 2030)

	Goals for FY 2022	2022 Performance
① Actualizing a carbon neutral society	・By providing the AMADA ECO PRODUCTS that contribute to decarbonization, CO_2 emission from all products: △26.5% (compared to FY 2013)	・CO_2 emission from all products: △57.5% (345,141t-CO_2) [Accomplished] 【Japan】△51.8%（161,961t-CO_2） 【Overseas】△61.5%（183,180t-CO_2）
	・With energy-saving actions (upgrading lighting and AC systems, improving productivity), CO_2 emission from all facilities and factories: △52.5% (compared to FY 2013) 【Scope 1 + 2】	・CO_2 emission from all facilities and factories: △71.5%（16,878t-CO_2）[Accomplished] 【Japan】△89.5%（3,892t-CO_2） 【Overseas】△41.0%（12,986t-CO_2）
② Actualizing a recycle-based society	・Total volume of waste: △2.7%（compared to FY 2019） ・Total volume of landfilled waste: △2.7%（compared to FY 2019） ・Zero-emission rate: under 0.786% (in Japan) ・Total volume of water used: △2.7%（compared to FY 2019）	・Total volume of waste: increased by 7.6% (6,725t) [Unaccomplished] 【Japan】Increased by 16.1% (4,336t) 【Overseas】△5.0%（2,389t） ・Total volume of landfilled waste: △29.5% (21.3t) [Accomplished] ・Zero-emission rate (compared to FY 2019): 0.49% (in Japan) [Accomplished] ・Total volume of water used (compared to FY 2019): △23.3% (3,264,000㎥) [Accomplished] 【Japan】△27.3% (1,930,000㎥) 【Overseas】△17.8% (1,334,000㎥)
③ Regulated Chemicals Control	・Hazardous chemicals (compared to FY 2019): △2.7% (Fujinomiya Works)	・Hazardous chemicals (compared to FY 2019): △5.5%（1,988kg） [Accomplished] (Fujinomiya)
④ Biodiversity	・Green infrastructure※ introduced (Fujinomiya Works) ※Green infrastructure refers to the actions that utilize various functions in the natural environment in the development of social infrastructure, land use, etc. in both tangible and intangible ways, making efforts for a sustainable national and regional development.	・Introduced a green infrastructure at Fujinomiya Works (installed a “rain garden” with a function of storing rain water)

The AMADA Group has set targets that are SBT (Science-based Targets) (Certified in November, 2022).

The AMADA Group has set reduction targets, or “SBT (greenhouse gasses reduction targets based on scientific facts)”, that are based on the “Paris Agreements” that stands as the international framework for global warming countermeasures. The reduction targets of greenhouse gasses set by each certified company is expected to contribute to the international target of controlling the increasing global temperature to well below 2℃ from pre-industrial revolution period, and aim to limit it to 1.5℃. The AMADA Group’s SBT (Scope 1 + 2) fulfils the requirements for the scenario of limiting global warming to under 1.5℃.

■ Scope 1 +2: FY 2030 △46.2% (FY 2019 reference: 54,197t-CO_2); Scope 3 (Category 1 and Category 11): △27.5% (FY 2019 reference: 1,843,569t-CO_2) The fiscal 2022 results were △ 68.9% (16,878t-CO_2) for Scope 1+2 compared to fiscal 2019 and 10.4% increase (2,035,473t-CO_2) for Scope 3 compared to fiscal 2019.

Actualizing a carbon neutral society

Reducing CO_2 emissions associated with our products

The AMADA Group will reduce CO_2 emissions throughout the product lifecycle, contributing to the actualization of a carbon neutral society. As the AMADA Group products are industrial goods, the reduction of CO_2 emissions in our products' life cycles during times of use by our customers is of particular importance. We will promote product development with high technological skills, and will create highly ecological products that are productive but can also conserve energy (AMADA Eco Products).

The Amada Group operates with two systems to evaluate the ecological features of its products, which are product assessment and AMADA Eco Products certification.

◆Product assessment system

The product assessment system is a process of conducting a design review (DR)*1 during every product development stage, aimed to prevent providing our customers with products with a large environment load compared to conventional machines. A total of 25 evaluation items are set from eight different criteria for the product assessment to evaluate ecological features of products, such as energy consumption (the amount of CO_2 emission) when using the product. The assessment is applied to every new product being developed, and we have established a general rule that the products that do not reach the standard cannot be released.

◆AMADA Eco Products certification system

The AMADA Eco Products certification is a system that certifies a product as one of the AMADA Eco Products if it passes the company's "energy-saving improvement rate" and "productivity improvement rate" standards compared to a comparative machine (or a past model), examined after the completion of product assessment conducted after the final design review (DR). Certified products are granted the AMADA Eco Products mark.

From the time planning and design is conducted for new products, AMADA Eco Products take into consideration new technologies meant to improve environmental performance, including resource conservation, noise reduction and energy-saving performance. The AMADA Eco Products certification system examines the effectiveness of these efforts.

The following 4 items provide the definition of AMADA Eco Products:

① Achieves energy conservation at the time of use compared with conventional models.
② Achieves increased productivity as well compared with conventional models.
③ Lowers running costs for product processing and reduces manufacturing costs through energy conservation and increased productivity, enabling the product to generate profit.
④ Enables provision of proposals for new product processing methods through the use of new processing technology. (Recommended requirements)

① and ② are evaluated using processing samples from actual processing carried out by customers. The assessment method involves actually processing the processing samples with both conventional models and new products and evaluating their improvements of environmental performance based on their rates of energy-saving performance improvement and productivity improvement.

ECO PRODUCTS Mark

Trademark #4631897

The green color symbolizes the protection of the environment, while the mark depicts a new leaf bud formed from the letters 'E' and 'P' (standing for 'eco products

Resource-Saving Machine: Indicates a machine that saves natural resources by consuming less oil, gas etc. than conventional models.

Low-Noise Machine: Indicates a machine that produces less noise during use than conventional models.

Energy-Saving Machine: Indicates a machine that saves energy by consuming less power than conventional models.

*1 Design Review (DR): A review of the design proposal created by the design department that all of the departments involved in the product evaluate from their own standpoint and give opinions and request improvements as needed, in order to develop products that satisfy our customers.

【 Activities, Fiscal 2022】

Reducing CO_2 emissions associated with our products

Introducing AMADA ECO PRODUCTS (added in 2022)

◆Handy Fiber Laser Welder

FLW 1500 MT

	Rate of improvement	AMADA Eco Products Eligibility standards (for laser machines)
Energy-saving performance (Rate of electrical consumption reduction)	88%	≧30%
Productivity (Rate of production cost reduction)	45%	≧10%

※Compared to FLW-600MT, the company's previous model

Reducing CO_2 emissions associated with our business activities

・Toki Works

■Controlling CO_2 emissions by reducing assembling processes

The Toki Assembly and Production Department of Toki Works is saving energy consumption by reducing parts of the assembling processes, making efforts to reduce the volume of CO_2 emissions. In the manufacturing process of "ASFH3015G", a peripheral device for the laser system, by creating a jig and using it, rail positioning can now be done by a single touch, resulting in reducing man-hours by 0.5 hours. Other than this, 172 improvements were made for the assembling processes, aiming for the reduction of CO_2 emission.

Reduced man-hours for the assembly of "ASFH-3015G", a peripheral device for the laser system

・Fujinomiya Works

■Automation of measuring process

Fujinomiya Works developed an automation program for measuring the optical pulse waveform from laser machines' AJ oscillator. With this program, automation and alarm functions were added, allowing automatic measurements and data input. Having an automated measurements feature, labor efficiency of workers has improved, which is contributing to CO_2 reduction in production.

Automation of AJ oscillator optical pulse waveform measurement

Actualizing a Recycle-based Society

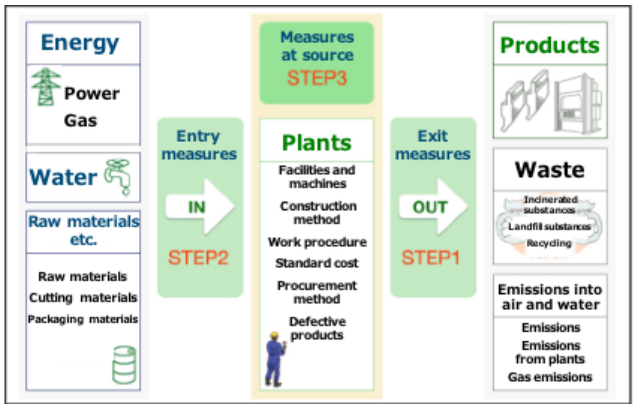
Effective use of resources

The AMADA Group promotes the effective use of limited resources to make contributions to realizing a recycling-oriented society. Regarding domestic production centers, we are promoting activities to actualize zero-emission factories taking the transition to a sustainable society seriously, aiming to make them clean factories.

◆ Zero-emission factories

Five of AMADA Group's manufacturing bases in Japan have achieved zero-emission factories: Isehara Works (AMADA TOOL), Fujinomiya Works, Toki Works, Noda Works, and Fukushima Plant, Isehara-suzukawa Works. We have stipulated our achievement standard for a zero-emissions at plants to be, "less than 1% (zero-emission rate) of all waste used as landfill for a continuation of at least one year," through efforts according to three steps of activity.

The AMADA Group achieved a Group-wide zero-emission rate of under 1% (0.81%) for fiscal 2019. It was maintained under 1% (0.49%) in fiscal 2022, and this effort is to be continued.



【Activities, Fiscal 2022】

Effective use of resources

・Toki Works

Large-diameter tooling manufactured at Toki Works (Molding Department) traditionally used bubble wrapping for packaging before shipping to the suppliers for heat treatment. As bubble wrapping required replacement after reusing them multiple times due to their cushion feature wearing out, Toki Works created their own packaging material made of a blowing agent. With the utilization of this packaging material, plastic wastes were reduced, and the packing time was reduced by 96 hours per year.

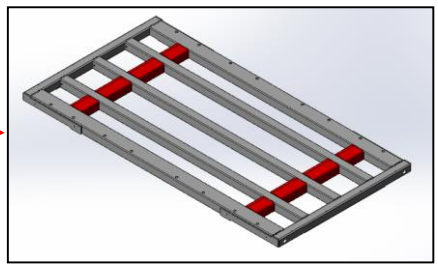
Bubble wrapping

Shipping dies with original packaging material

・Fukushima Plant

Scraps from ASR (cycle loader = material stack and supply system) are utilized for IT-TSU (die exchanger) frames, MARS (Automated material storage and retrieval system) pallets, etc., benefiting reduced waste disposals and material purchases.

ASR scraps
(Disposed traditionally)



Utilized for pallets, etc. in MARS
(automated storage)

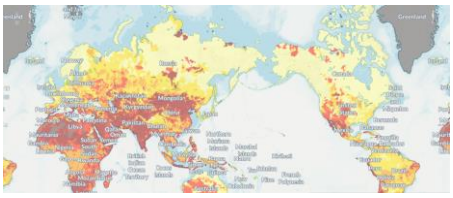
Effective use of water resources

In AMADA Group's environmental policy, "3. Efforts for coexisting with nature" rules to make efforts towards coexisting with nature by understanding the effect of the business to the natural environment, utilize water resources effectively and protect the biodiversity and ecosystems. Aiming for the sustainable use and preservation of valuable water resources, action plan was designed based on the water-related risk assessment, and the group targets for a 10% reduction of water used by the group in total by fiscal 2030 (compared to fiscal 2019).

◆Leveraging global tools to assess water-related risks (as of September, 2023)

Assessment of AMADA Group's water-related risks were made using "Aqueduct", a global tool by World Resources Institute.

This year, the assessment was made, widening the scope to all bases instead of only choosing manufacturing bases as it was in previous years. Water related risks are now checked and confirmed for all 66 bases (21 manufacturing bases: nine in Japan, 12 overseas).

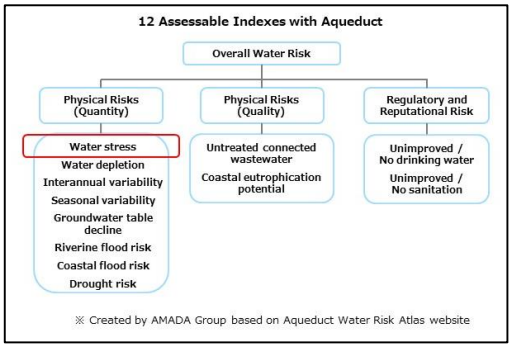


◆ Results of water-related risk assessment

As a result of the general water-related risk assessment, physical risk (quantity) was determined high. The assessment showed that there were 20 Amada bases (seven in North America, three in Europe and six in China) that were located in level 4 (highest) "water stress risk" areas.

The total amount of water intake in these high water stress risk areas (49,815m³) makes up 15.3% of total water intake by overall foreign bases (133,361m³).

*Water stress risk, calculated as the level of demand for water considered against the level of available water resources, indicates a region's degree of water shortage.



◆ Fiscal 2022 results based on the action plan

In countries abroad, use of water was reduced by utilizing water efficiently with irrigation management and improving several facilities (reduced by approximately 9,000m³). In Japan, a detailed control for the use of water within the facility, for example sprinkling, depending on the season has contributed largely (reduced by approximately 22,000m³). As a result, the overall use of water in fiscal 2022 was reduced by 23.3% (compared to 2019) compared to 2.7% target, achieving a result that largely exceeded the target.

Regulated Chemicals Control

Appropriate management and reduction of regulated chemical substances

The AMADA Group has bolstered initiatives regarding regulated chemical substances in order to give our customers peace of mind in using our products. We will implement suitable information management for chemical substances to promote initiatives enabling customers to use safe machinery utilizing safe materials.

◆Green Procurement

AMADA Group positions “green procurement,” procuring materials with small environmental loads, as one of its important environmental preservation activities for providing environmentally-friendly products to customers.

We request our suppliers for chemical substance analysis and information on materials being used in parts based on the “AMADA Group Green Procurement Guidelines”*1 that we established in April 2004.

◆Chromate Treatments

With regard to surface treatment of in-house design mechanical parts, we have shifted from hexavalent chromium, which has a large environmental burden, to the more environmentally-friendly trivalent chromate.

◆Oils

All oils marketed by the AMADA Group, including hydraulic fluid, lubricants and cutting oil, are RoHS compliant. Information on their GHS*2 physical and health/environmental hazard classifications is stated on the SDS*3.

◆RoHS*4 Compliance

The AMADA Group’s principal products are classified in the Exempted Product Category of LSSIT (large-scale stationary industrial tools) in RoHS directives. Still, in order to give our customers peace of mind in using our equipment, as an initiative of our own we have completed compliance with the standards laid out in Category 11, as published on July 22, 2019, for parts of our equipment with which customers come in direct contact.

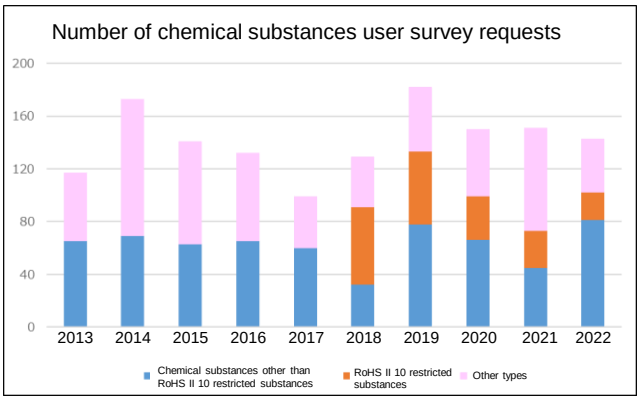
◆Safety management and control of chemical substance use in the manufacturing process

In addition to products supplied to customers, all of the AMADA Group’s manufacturing plants are working to reduce the amount of regulated chemical substances during the manufacturing process, based on the mid-term environmental plan.

【Activities, Fiscal 2022】

Number of chemical substances user survey requests

The graph below aggregates trends in the number of customer survey requests concerning chemical substance content and other matters.



■ Chemical substances other than RoHS 10 restricted substances

The items include a certificate of non-use, composition table, PCB, asbestos, MSDS, etc.
The content of the non-use certificate
Containment of TSCA, MCCP, PFAS, UV-328, etc.

■ RoHS 10 restricted substances

Since the list of restricted substances has been expanded to 10 as of July 22, 2019, an increase was seen in inquiries in the previous year of fiscal 2018 concerning 4 appended substances. These are 4 phthalate esters: DEHP, BBP, DBP and DIBP.

■ Other types:

Environment surveys, CSR, questions concerning ISO 14001 certification and REACH, etc.

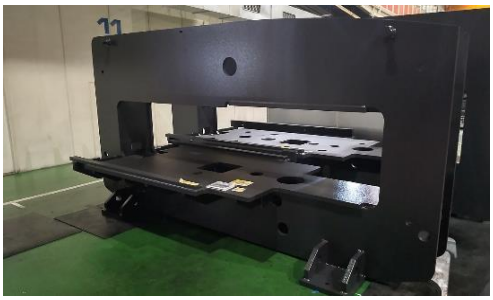
*1 The AMADA Group Green Procurement Guidelines are revised according to amendments in the laws.
*2 GHS: abbreviation for "Globally Harmonized System of Classification and Labeling of Chemicals"
*3 SDS: A Material Safety Data Sheet (SDS) is a document mentioning the hazardous and harmful chemical substances of a product, and is delivered when the product is given or provided to another company.
*4 RoHS: RoHSⅡ(Directive2011/65/EU) RoHS directive is an EU law regarding the limited use of specific toxic substances, such as electric and electronic equipment (EEE).

Chemical control within facilities and factories

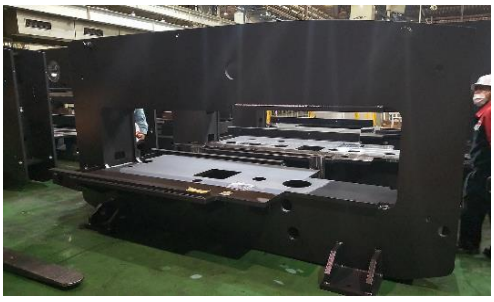
・Fujinomiya Works

For the painting process of the frames for punching / combination machines and bending machines, paint ingredients were revised and quantified, and attempts were made to reduce the paint used in the process.

With this, by revising the ingredients, it is now possible to create the same design with double coating, when it conventionally required triple coating. As a result, volume of paint required are now reduced by14% to 24%.



■ Example of conventional triple coating



■ Example of double coating with ingredients revised paint

Preservation and regeneration for biodiversity

The AMADA Group works to promote “AMADA Forest Creation” efforts contributing to the preservation of biodiversity.
Grasping the nature related risks and opportunities, the Group takes actions on preservation and restoration of biodiversity in an organized fashion.

◆ Fujinomiya Works / AMADA's Forest

Approximately 60% of the Fujinomiya Works premises, or roughly 43 hectares is left as forest. About 80% of that is man-made cypress forest. It has already been 40 to 50 years since reforestation and AMADA is making positive improvements, proceeding systematically in order to transform it into a forest rich in animals and plants.

Forestland at Fujinomiya Works (Fujinomiya, Shizuoka Prefecture)

Creatures confirmed at Fujinomiya Works (in part)

◆Green Infrastructure initiative (Isehara Works / Fujinomiya Works)

AMADA Group is participating in the “Green Infrastructure” initiatives promoted by Ministry of Land, Infrastructure, Transport and Tourism. In November, 2021, “Green Infrastructure” was introduced on the exterior area of the south garden of AMADA FORUM, Isehara Works. They were then, renovated into a “Rain Garden” with a feature that can store rain water※1.

“Rain Garden” was also introduced in the west side of Factory Three, West Block, Fujinomiya Works, in Spring 2022. During heavy rain, the garden controls the flow of the rain water while purifying the water to help the soil absorb them, and in ordinary climate, it is a green space for preserving the grassland ecosystem.

Isehara Works Rain Garden

※1 Green Infrastructure refers to an initiative to utilize a wide range of features from a natural environment for a sustainable and attractive nation / city / community-building. Rain Gardens fall under this category, which are water permeable planting areas that store rain water which will then be purified and are slowly soaked underground. They help mitigate the load on drains, preventing flooding on sidewalks and roadways, improving water quality, etc., under heavy rain, while white gravels, stone arrangements and vegetation provides a sophisticated view as a garden.

◆Cultivating “fragrant eupatorium” (Ono Plant)

At Ono Plant (Ono City, Hyogo Prefecture), the workers are cultivating “fragrant eupatorium” (endemic specie of Kakogawa) that were divided to them at the end of March, 2022 by Ono City (Road and River Division), within the Plant premises. The fragrant eupatorium that sprouted in March 2023 were donated to Ono City (Road and River Division).

Donation of “fragrant eupatorium” to Ono City

External assessments

◆Rating in report by CDP

AMADA obtained a “B” rating in the “Climate Change Report 2022” compiled by CDP, a UK NGO. AMADA also obtained a “B-” rating in the “Global Water Report”. We will continue our promotion of climate change initiatives in the future along with our contributions to sustainable social development to match the expectations and trust of all stakeholders.

◆Fujinomiya Works’ “Rain Garden” awarded for its excellence in the “3rd Green Infrastructure Awards”

As part of “Green Infrastructure” project pursued by AMADA Group, a “Rain Garden” was introduced in the west side of Factory Three, West Block, Fujinomiya Works, in Spring 2022. During heavy rain, the garden controls the flow of the rain water while purifying the water to help the soil absorb them, and in ordinary climate, it is a green space for preserving the grassland ecosystem. Every award at the “Third Green Infrastructure Awards” ran by the “Green Infrastructure Public-Private Partnership Platform”, consisting of the government, public companies, academic associations, etc., are given to projects that were voted by its members (approximately 1,600 companies / organizations). The Rain Garden of Fujinomiya Works was given an award for its excellence in the “Disaster Prevention / Relief” criteria.

Rain Garden (Fujinomiya Works)

■ Third Party Assurance

In order to enhance the reliability of AMADA Group's environmental data, the group obtained assurance from a third-party organization.

The data subject to this assurance and their criteria are as follows:

・Volume of CO_2 emissions, energy consumed, and the ratio of renewable energy-based power in SCOPE 1, 2 and 3 at affiliated companies in Japan and overseas.

Domestic Standards on Assurance Engagements: ISAE 3000 and ISAE 3400

SUSA
Sustainability Accounting Co.,Ltd.

Independent Assurance Statement

October 19, 2023

Mr. Takaaki Yamanashi
Representative Director, President
AMADA CO., LTD.

1. Purpose

We, Sustainability Accounting Co., Ltd., have been engaged by AMADA CO., LTD. ("the Company") to provide limited assurance on the Company's following data for the fiscal 2022, 144 GWh of energy consumption, 68.0% for the ratio of renewable electricity consumption and CO_2 emissions which are 7.23 kt-CO_2 for Scope1, 9.65 kt-CO_2 for market-based Scope2 and 2.18 Mt-CO_2 for Scope3 (collectively, "the Environmental performance data"). The purpose of this process is to express our conclusion on whether the Environmental performance data were calculated in accordance with the Company's standards. The Company's management is responsible for calculating the Environmental performance data. Our responsibility is to independently carry out a limited assurance engagement and to express our assurance conclusion.

2. Procedures Performed

We conducted our assurance engagement in accordance with International Standard on Assurance Engagement 3000 (ISAE 3000) and International Standard on Assurance Engagement 3410 (ISAE 3410). The key procedures we carried out included:

- Interviewing the Company's responsible personnel to understand the Company's standards and reviewing the Company's standards
- Performing cross-checks on a sample basis and performing a recalculation to determine whether the Environmental performance data were calculated in accordance with the Company's standards.

3. Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the Environmental performance data have not been calculated in all material respects in accordance with the Company's standards.

We have no conflict of interest relationships with the Company.

Takashi Fukushima
Representative Director
Sustainability Accounting Co., Ltd.

Environmental data assured by this written assurance are stated below.

- ESG Data: Volume of CO_2 emissions, energy consumed, and the ratio of renewable energy-based power in SCOPE 1, 2 and 3 at affiliated companies in Japan and overseas
- Integrated Report 2023 – AMADA Group mid-term management plan (AMADA GREEN ACTION PLAN 2030): Emitted CO_2 in Scope 1 and 2
- Environment Report 2023 – AMADA Group mid-term management plan (AMADA GREEN ACTION PLAN 2030): Emitted CO_2 in Scope 1 and 2

ISO14001 Certification / Other

■ Status regarding ISO14001 certification

AMADA Group has been promoting the environmental management system to provide solutions to agendas regarding environmental management. Starting with the first base certified in 1998 in Japan, the group has also been applying for a unified certificate since 2010, and 10 bases are currently certified. 5 manufacturing bases are currently ISO14001 certified overseas.

ISO14001 Certified Bases (Facility / Factory)		
Bases in Japan	Certified Year	Unified Certification
Isehara Works	1998	2010
Fujinomiya Works	2002	2010
Ono Plant	2008	2010
Toki Works	1999	2012
Kansai Technical Center	2012	2012
Miki Plant	1998	2013
Noda Works	2000	2014
Fukushima Plant	2015	2015
Isehara-suzukawa Works	2020	2020
Kawaguchi Works	2020	2020
International Bases	Certified Year	
AMADA AUSTRIA GmbH	2000	—
AMADA LIANYUNGANG MACHINE TECH CO., LTD.	2008	—
AMADA EUROPE S.A.	2014	—
AMADA SHANGHAI MACHINE TECH CO., LTD.	2015	—
AMADA AUTOMATION EUROPE LTD.	2019	—

※10 out of 13 domestic associate companies are certified (5 out of 7 manufacturing bases) 97% environmental load cover rate in certified facilities based on CO_2 emissions.
※5 out of 65 associate overseas companies are certified (5 out of 12 manufacturing bases). 37% environmental load cover rate in certified facilities based on CO_2 emissions.

※Frequency of internal audit
An annual internal environmental audit is conducted in every sector at certified bases, with the evaluation of compatibility to environmental management systems, conformity to laws and regulations, and performance effectiveness, along with giving out management reviews.

■ Designated Parts Collection (Japan)

Within AMADA Group's products, there are models that include parts that uses materials that were later listed on controlled substances, due to not having an alternative material technologically at the point of its sale. These parts will not usually be exposed to customers, however, they may be disposed along with other parts. To prevent this, AMADA Group operates a system to collect and treat the replaced parts at the end of its lifespan appropriately to take responsibility as the manufacturer.

	2018	2019	2020	2021	2022
Lenses	2,174	1,425	1,835	1,458	1,000
Ion exchange resin	224	239	193	135	20
Recycling filters	974	942	750	466	142
Total	3,372	2,606	2,778	2,059	1,162

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