# Sustainability Environmental and Social Report

Forest-In Office 2019



Data



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#### Issues

Published Mar. 2020

#### Scope of the content

Reporting period: Fiscal 2018 (April 2018 to March 2019)

Relevant organizations: (Domestic data) 22 consolidated companies in Japan (Overseas data) 69 consolidated overseas companies \*See notes on relevant page for each data set's scope of tabulation

#### About the name "Forest-In Office"

"Forest-in" is a neologism created by AMADA.

The 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.

About the name "The AMADA Group"

Due to a merger between AMADA HOLDINGS and AMADA as well as the structural reorganization that took place on April 1, 2020, the names of companies in the AMADA Group have changed as indicated below. In this report, new company names are represented in a uniform manner.

New company names (as of April 1, 2020)

 AMADA CO., LTD. (Merger between AMADA HOLDINGS and AMADA)
AMADA KACHINERY CO., LTD. (Company name change due to merger between AMADA MACHINE TOOLS, AMADA TECHNICAL SERVICE, AMADA SANWA DAIYA and NICOTEC)

AMADA WELD TECH CO., LTD. (Company name change from AMADA MIYACHI)



## Environmental accounting

AMADA Group has adopted environmental accounting to use for reasonable decision making by understanding the costs and benefits related to environmental preservation activities.

## The adoption of environmental accounting

AMADA Group has adopted environmental accounting since FY2005 for the purpose of understanding the costs and the economic impact associated with environmental preservation measures, and providing information useful for decision making by stakeholders.

The scope has gradually expanded and environmental accounting is now implemented at seven bases in Japan, including the Ono Plant (from 2008), Fujinomiya Works (from 2009), Toki Works (from 2011), Miki Plant (from 2013), and Fukushima Plant (from 2015).

To summarize the cost and economic impact (profit of actual results) associated with the environmental preservation measures, an "environmental accounting" item was added to the monthly accounting system for automatic calculation.

## Environmental preservation cost

Environmental preservation costs and expenses (¥1,359,370,000 JPY) in fiscal 2018 can be itemized as follows: research and development costs (¥1,205,840,000 JPY), resource circulation costs such as for waste disposal and recycling (¥81,580,000 JPY), pollution prevention costs in order to prevent air and water pollution (¥20,240,000 JPY), etc. The research and development cost, the largest in the breakdown, is calculated by integrating all the costs related to the models currently certified as AMADA Eco Products, as well as the development models newly applying to be certified as AMADA Eco Products. The main content is the cost of test material and jig production, and does not include expenses for experimental research or employee man-hours needed for development.

## Economic impact associated with environmental preservation measures

The main economic impacts for fiscal 2018 were business income, including income from recycling waste products of business activities, and capital investment.

The main sources of recycling income are metals such as iron, aluminum and stainless steel.

					Ur	nit: Thousand yen
Environmental accounting items		2014	2015	2016	2017	2018
Environmental preservation cost	Cost	891,509	382,331	1,041,022	496,259	1,359,371
	Investment	36	53	33,827	15,526	18,019
	Total	891,545	382,385	1,074,849	511,785	1,377,392
Economic impact accompanying environmental preservation measures		26,485	17,581	20,969	28,180	35,223

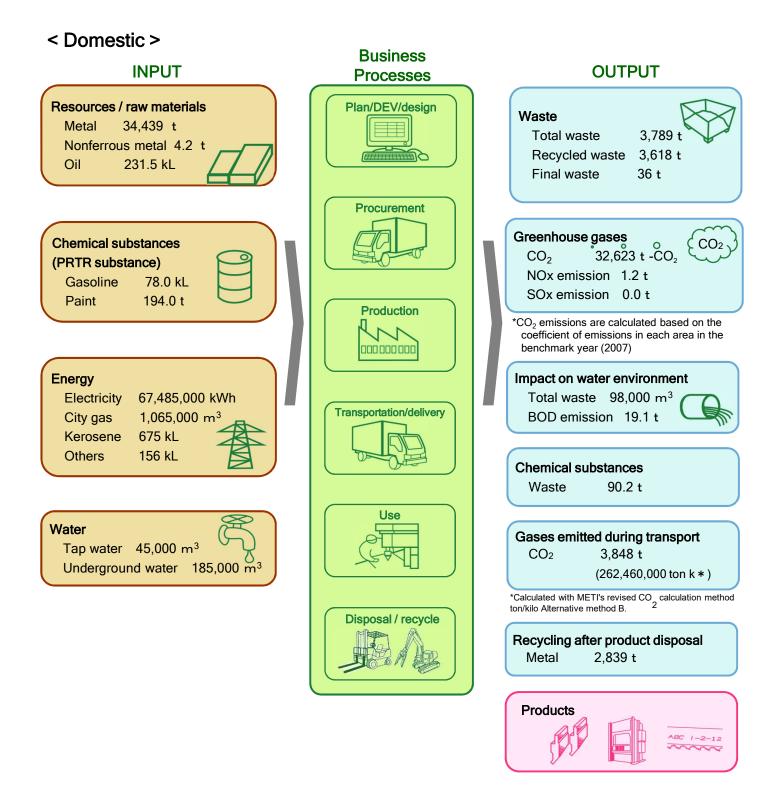
Unit: (CO<sub>2</sub>) t-CO<sub>2</sub> (Wast)t

Environmental accounting items		2014	2015	2016	2017	2018
The material effects related to the environmental	CO <sub>2</sub>	790.3	969.6	820.6	716.3	1630.1
conservation policy	Waste	16.0	18.9	46.0	39.5	126.7

\*CO<sub>2</sub> emissions are calculated based on the coefficient of emissions in each area in the benchmark year (2007). Scope of tabulation: 15 key companies out of 22 consolidated companies in Japan



# Material balance



Scope of tabulation: 15 key companies out of 22 consolidated companies in Japan



## Detailed Data

		2014	2015	2016	2017	2018
CO <sub>2</sub> emission	Total amount (t)	30,403	29,617	29,929	32,599	32,623
-	Intensity	0.8106	0.8231	0.8405	0.8897	0.8524

\* CO2 emissions are calculated based on the coefficient of emissions in each area in the benchmark year (2007)

\* Intensity is calculated as a weighted average of the ratio of improvement in comparison with fiscal 2007 for "CO<sub>2</sub> intensity", which is calculated by dividing the amount of CO<sub>2</sub> emissions by each location's quantity of activities that are closely connected with the emission of CO<sub>2</sub>, such as production yield, production quantity, etc.

	-	2014	2015	2016	2017	2018
Air pollutant	NOx	1.15	0.45	0.40	0.99	1.23
(ton)	SOx	0.01	0.00	0.00	0.00	0.00
		2014	2015	2016	2017	2018
	Total amount (t)	3,392.1	3,775.7	3,548.2	3,421.0	3,789.0
Waste (ton)	Recycled waste	3,141.8	3,535.3	3,281.4	3,193.7	3,618.1
	Final waste	48.7	39.6	63.1	37.9	36.0
		2014	2015	2016	2017	2018
PRTR-reportable chemical subs (ton)	tances in tons	107.5	83.3	75.8	67.3	90.2
		2014	2015	2016	2017	2018
Amount of water resources use (in 000s m³)	Amount of water resources used in 000s m3 (in 000s m³)		173.3	174.3	154.2	229.5
		2014	2015	2016	2017	2018
Impact on the aquatic environment (waste) (in 000s m³)		90.4	95.4	94.6	97.1	98.3

Scope of tabulation: 15 key companies out of 22 consolidated companies in Japan

## < Overseas >

	2014	2015	2016	2017	2018
Greenhouse gases (ton)	17,235	18,497	18,110	20,388	16,274
Total amount of waste (ton)	2,164	2,432	2,512	2,643	2,757
Amount of water resources used in 000s m3	120.4	96.6	103.1	106.5	115.7

\*CO2 emissions are calculated based on the coefficient of emissions in each area in the benchmark year (2007)

Scope of tabulation: (Greenhouse gases) 35 key companies out of 69 consolidated overseas companies (Waste) 5 key overseas production bases

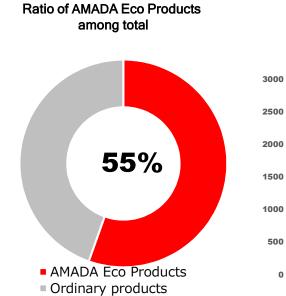
# Parts designated for recovery (Pieces recovered)

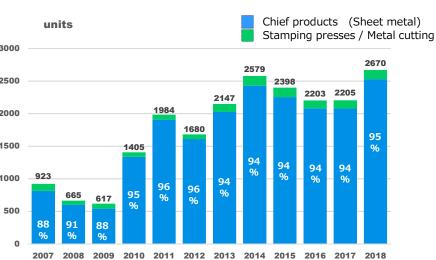
	2014	2015	2016	2017	2018
Lenses	2,718	1,521	1,396	1,424	2,174
lon exchange resin	217	235	246	246	224
Recycling filters	1,262	1,374	1,124	1,016	974
Total	4197	3,130	2,766	2,686	3,372

\* AMADA's system for recovering parts designated for recovery: The AMADA Group's original system for recovering and properly disposing of parts containing substances designated as restricted chemical substances as our duty as a manufacturer

# AMADA Eco Products

Fiscal 2018





#### Trends in AMADA Eco Products unit sales

Fiscal 2018	
No. of product units sold (Component ratio) & No. of AMADA Eco Products units (	Component ratio)

	Bending	Punching	Combination machines	Lasers (incl. welding)	Chief products (Sheet metal) Total	Stamping presses	Metal cutting	Grand total
Total units (Component ratio)	1663 (34.5%)	427 (8.9%)	234 (4.9%)	701 (14.5%)	3025 (62.8%)	499 (10.4%)	1294 (26.9%)	4818 (100%)
Eco Products units (Component ratio)	1454 (54.5%)	426 (16.0%)	234 (8.8%)	414 (15.5%)	2528 (94.7%)	120 (4.5%)	22 (0.8%)	2670 (100%)

\* No. of domestically produced units sold (incl. exports)

#### Fiscal 2018 Proportion of AMADA Eco Products units & sales for chief products (sheet metal)

	AMADA Eco Products	Ordinary products
Proportion of units	83.6%	16.2%
Proportion of sales	85.4%	14.6%

# Response to Scope 3

## ♦ Grasping the quantity of greenhouse gas emissions from business activities with regard to Scope 3

Japan's Energy Conservation Act requires companies to carry out management of their own direct emissions of greenhouse gases covered in Scope 1 (fossil fuels, natural gas, etc.) and indirect emissions covered in Scope 2 (electrical power, etc.) Scope 3 covers emissions from throughout the entire supply chain including "Scope 3 (other indirect emissions)" that were previously outside the scope of calculations—in other words, not only the company's own emissions, but also those occurring from their full range of business activities, upstream and downstream alike—and brings them within the scope of calculations.

It is AMADA's position that bringing visibility to the greenhouse gas emissions occurring from the full range of business activities, including the supply chain, is an important policy in reducing  $CO_2$  emissions. Starting in the current fiscal year, AMADA has begun tackling efforts in 15 categories (for domestic operations in Japan) provided in Scope 3 regulations.

Value chain	Category	Item	Grasp
Upstream	1	Purchased products & services	0
	2	Capital goods	0
	3	Fuel & energy-related activities not included in Scope 1 or 2	0
	4	Transport & delivery (Upstream)	0
	5	Waste produced by business operations	0
	6	Business travel	0
	7	Employees' commuting	0
	8	Lease assets (Upstream)	- (N/A)
Downstream	9	Transport & delivery (Downstream)	-
	10	Processing of sold products	-
	11	Use of sold products	Uncalculated
	12	Disposal of sold products	-
	13	Lease assets (Downstream)	-
	14	Franchises	_
	15	Investment	_



# Employee Data

						NUMBER OF PEOPLE	
Numbe	er of	2016	2017		)17	2018	
employees	(Global)	8,208		8,4	146	9,256	
Breakdown			Domestic			Overseas	
and ove employ (201	/ees		4,666 (50.4%)			4,590 (49.6%)	
		Scope of tabulation:	All 22 consol	idated companies	s in Japan / All 69	consolidated overseas companie	
<b>D</b>	•		20	16	2017	2018	
Domestic compa Male/fema	nies	Male ratio	85.	6%	81.8%	85.0%	
matoriona		Female ratio	14.4	4%	18.2%	15.0%	
		Full time empl	oyees	Contrac	t workers	Part time employees	
Breakdown employ		89.3%		8.	0%	2.7%	
Breakdown employ		42.4%		22	.3%	35.3%	
Employee disabili		2016		20	)17	2018	
Legally ma employme	andated	2.0%		2.2%		2.2%	
			20 <sup>.</sup>	16	2017	2018	
		No. of births	111		120	145	
		No. to take leave as legally mandated	0		1	1	
	Male	Percentage to take leave as legally mandated	0.0%		0.8%	0.7%	
		No. to take leave through AMADA system	3		4	4	
Parental leave		Percentage to take leave through AMADA system	2.7	%	3.3%	5.5%	
utilization rate		No. of births	8		12	5	
		No. to take leave as legally mandated	8		12	5	
	Female	Percentage to take leave as legally mandated	100	1%	100%	100%	
		No. to take leave through AMADA system	0		8	1	
		Percentage to take leave through AMADA system	0.0	%	66.7%	20.0%	

Scope of tabulation: 21 out of 22 consolidated companies in Japan

## Third Party Warranty

In order to enhance the reliability of the environmental data given in our report, we have obtained assurance by a thirdparty organization.

The target data and assurance standards for this certification are as follows: Amount of  $CO_2$  emissions from our 7 domestic business facilities (in Japan)

International Standards on Assurance Engagements: ISAE 3000 and ISAE 3400

\* The target of this assurance report is p.03 and p.05's greenhouse gas emissions data.



#### **Independent Assurance Statement**

September 6, 2019

Mr. Tsutomu Isobe President AMADA HOLDINGS CO., LTD.

#### 1. Purpose

We, Sustainability Accounting Co., Ltd., have been engaged by AMADA HOLDINGS CO., LTD. ("the Company") to provide limited assurance on the Company's CO<sub>2</sub> emissions which are 32,623 tons-CO<sub>2</sub> ("the CO<sub>2</sub> emissions data") from 7 domestic business facilities (Isehara / Fujinomiya / Toki / Ono / Miki / Noda / Fukushima) during the fiscal year 2018. The purpose of this process is to express our conclusion on whether the CO<sub>2</sub> emissions data were calculated in accordance with the Company's standards. The Company's management is responsible for calculating the CO<sub>2</sub> emissions 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
- Visiting to one of the Company's sites
- Performing cross-checks on a sample basis and performing a recalculation to determine whether the CO2 emissions 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 CO2 emissions 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.

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Takashi Fukushima ' Representative Director Sustainability Accounting Co., Ltd.



## External assessments

#### Rating in report by CDP

AMADA obtained a "B" rating in the "Climate Change Report 2019" compiled by CDP, a UK NGO. AMADA also obtained a "C" 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.



## ENSIS-AJ Series fiber laser machinery receives "Kanagawa Global Environment Award"

The environmental performance of AMADA's "Eco Products development: the ENSIS-AJ series of fiber laser machinery" was highly appraised in the Global Warming Countermeasure Division (for the development of technology to reduce greenhouse gases) of the "2018 Kanagawa Global Environmental Award" promoted by Kanagawa Prefecture, leading to receipt of the award.

#### Isehara Works receives "FY2019 Factory Greening Award"

The Isehara Works was a recipient of the "FY2019 Factory Greening Award", which gives public recognition to factories and plants that are actively working to promote greening and have shown considerable achievements in making environmental improvements onsite and off.

## Acquisition of ISO 14001 certification

The AMADA Group has acquired integrated ISO 14001 certification for 7 of its operations centers in Japan. Overseas as well, the Group has acquired ISO 14001 certification for 4 of its production centers.

ISO 14001-certified operations centers						
Domestic (Japan) locations	Overseas locations					
lsehara Works	AMADA AUSTRIA GmbH					
Fujinomiya Works	AMADA LIANYUNGANG MACHINERY CO., LTD.					
Toki Works	AMADA SHANGHAI MACHINE TECH CO., LTD.					
Ono Plant	AMADA EUROPE S.A.					
Miki Plant						
Fukushima Plant						
Noda Works						

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