Environmental and Social Report

Forest-In Office 2020





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Issues

Published Sept. 2020

Scope of the content

- Reporting period: Fiscal 2019 (April 2019 to March 2020) Relevant organizations: (Domestic data) 21 consolidated companies in Japan (Overseas data) 71 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.

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.



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 (¥994,090,000 JPY) in fiscal 2019 can be itemized as follows: research and development costs (¥782,480,000 JPY), resource circulation costs such as for waste disposal and recycling (¥104,460,000 JPY), pollution prevention costs in order to prevent air and water pollution (¥33,800,000 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 2019 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.

						Unit: 1000 yen
Environmental accounting items		2015	2016	2017	2018	2019
Environmental preservation cost	Cost	382,331	1,041,022	496,259	1,359,371	992,690
	Investment	53	33,827	15,526	18,019	1,400
	Total	382,385	1,074,849	511,785	1,377,392	994,090
Economic impact accompanying environmental preservation measures		17,581	20,969	28,180	35,223	27,259

Unit: (CO₂) t-CO₂, (Wast) t

Environmental accounting items		2015	2016	2017	2018	2019
The material effects Conception Conceptin Conception Conception Conception Conception Co	CO ₂	969.6	820.6	716.3	1630.1	1106.1
environmental conservation policy	Waste	18.9	46.0	41.1	130.7	21.4

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

Scope of tabulation: 14 key companies out of 21 consolidated companies in Japan



Material balance



Scope of tabulation: 14 key companies out of 21 consolidated companies in Japan



Detailed Data

	2015	2016	2017	2018	2019		
Total amount (t-CO ₂)	29,617	29,929	32,599	32,623	31,815		
Intensity	0.8231	0.8405	0.8897	0.8524	0.8915		
*CO ₂ emissions are calculated based on the coefficient of emissions in each area in the benchmark y * Intensity is calculated as a weighted average of the ratio of improvement in comparison with fiscal 2007 for "CO ₂ intensity", which is calculated by dividing of CO ₂ emissions by each location's quantity of activities that are closely connected with the emission of CO ₂ , such as production yield, production quantity of activities that are closely connected with the emission of CO ₂ such as production yield, production quantity of activities that are closely connected with the emission of CO ₂ .							
	2015	2016	2017	2018	2019		
NOx	0.45	0.40	0.99	1.23	0.79		
SOx	0.00	0.00	0.00	0.00	0.00		
	2015	2016	2017	2018	2019		
Total amount (t)	3,775.7	3,548.2	3,421.0	3,789.0	3,580.4		
Recycled waste	3,535.3	3,281.4	3,193.7	3,618.1	3,320.5		
Final waste	39.6	63.1	37.9	36.0	29.1		
	2015	2016	2017	2018	2019		
PRTR-reportable chemical substances (ton)		75.8	67.3	90.2	58.7		
	2015	2016	2017	2018	2019		
Amount of water resources used (in 000s m³)		174.3	154.2	229.5	152.9		
	2015	2016	2017	2018	2019		
Impact on the aquatic environment (waste) (in 000s m³)		94.6	97.1	98.3	96.2		
	(t-CO ₂) Intensity culated as a weighted a ions by each location's NOx SOx Total amount (t) Recycled waste Final waste Ibstances s used	Total amount (t-CO2)29,617Intensity0.8231*CO2 emit *CO2 emit tors by each location's quantity of activities that20152015NOx0.45SOx0.00Total amount (t)3,775.7Recycled waste3,535.3Final waste39.6Jbstances83.3s used173.320152015	Total amount (t-CO ₂) 29,617 29,929 Intensity 0.8231 0.8405 "CO ₂ emissions are calculated bas culated as a weighted average of the ratio of improvement in comparison ions by each location's quantity of activities that are closely connected within the second	Total amount (t-CQ ₂) 29,617 29,929 32,599 Intensity 0.8231 0.8405 0.8897 *CQ ₂ emissions are calculated based on the coefficient of emissions by each location's quantity of activities that are closely connected with the emission of CQ ₂ , supervised to a verage of the ratio of improvement in comparison with fiscal 2007 for "CQ ₂ ions by each location's quantity of activities that are closely connected with the emission of CQ ₂ , supervised to a verage of the ratio of 0.00 2016 2017 NOx 0.45 0.40 0.99 32,599 SOx 0.00 0.00 0.00 0.00 SOx 0.45 0.40 0.99 32,599 SOx 0.00 0.00 0.00 0.00 SOx 0.00 0.00 0.00 0.00 Recycled waste 3,535.3 3,281.4 3,193.7 Final waste 39.6 63.1 37.9 Ibstances 83.3 75.8 67.3 s used 173.3 174.3 154.2	Total amount (t.CO ₂) 29,617 29,929 32,599 32,623 Intensity 0.8231 0.8405 0.8897 0.8524 'CO ₂ emissions are calculated based on the coefficient of emissions in each area in th culated as a weighted average of the ratio of improvement in comparison with fiscal 2007 for 'CO ₂ intensity', which is calculate ions by each location's quantity of activities that are closely connected with the emission of CO ₂ , such as production yield, pr 2015 2016 2017 2018 NOx 0.45 0.40 0.99 1.23 SOx 0.00 0.00 0.00 0.00 Content and the coefficient of emissions in each area in the coefficient of emissions in each area in the coefficient of emission of CO ₂ , such as production yield, pr 2015 2016 2017 2018 NOx 0.45 0.40 0.99 1.23 SOx 0.00 0.00 0.00 0.00 Total amount (t) 3,775.7 3,548.2 3,421.0 3,789.0 Recycled waste 39.6 63.1 37.9 36.0 Ibstances 83.3 75.8 67.3 90.2		

Scope of tabulation: 14 key companies out of 21 consolidated companies in Japan

< Overseas >

	2015	2016	2017	2018	2019
Greenhouse gases (t-CO ₂)	18,497	18,110	20,388	16,274	19,753
Total amount of waste (ton)	2,432	2,512	2,643	2,757	2,516
Amount of water resources used (in 000s m³)	96.6	103.1	106.5	115.7	162.2

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

Scope of tabulation: (Greenhouse gases) 51 key companies out of 71 consolidated companies in Japan (Waste) 5 key overseas production bases

Parts designated for recovery (Pieces recovered)

	2015	2016	2017	2018	2019
Lenses	1,521	1,396	1,424	2,174	1,425
lon exchange resin	235	246	246	224	239
Recycling filters	1,374	1,124	1,016	974	942
Total	3,130	2,766	2,686	3,372	2,606

* 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 2019 ratio of AMADA Eco Products units out of total



Fiscal 2019 ratio of AMADA Eco Products sales out of total



Total unit sales of AMADA Eco Products (in number of units)



Total unit sales and sales totals for Fiscal 2019 AMADA Eco Products

	Units	Sales total (¥ million)
Eco Products total	3,100	109,000
Non-Eco Products	3,600	38,000
Sum total	6,700	147,000



■ 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)	– (N/A)
	10	Processing of sold products	– (N/A)
	11	Use of sold products	Uncalculated
	12	Disposal of sold products	– (N/A)
	13	Lease assets (Downstream)	– (N/A)
	14	Franchises	– (N/A)
	15	Investment	– (N/A)



■ Employee Data

						NUMBER OF PEOPLE	
Number of	employees	2017	2017		18	2019	
(Global)		8,446		9,2	256	9,531	
Breakdown of Japan and overseas employees (2019)				Overseas			
		Scope of tabulation: A	4,664 (48.9%)	dated companies	4,867 (51.1%) nies in Japan / All 67 consolidated overseas compa		
						-	
Domesti comp	c Group	Male ratio	20 81.		2018 85.0%	2019 84.9%	
Male/fem	ale ratio	Female ratio	18.	-	15.0%	15.1%	
		I		I			
		Full time emplo	oyees	Contract	tworkers	Part time employees	
Breakdow emplo		89.9%		8.0	6%	1.4%	
Breakdown of female employees		42.5%		23.7%		33.9%	
AMADA Group Employment rate for people with disabilities		2017	2018		18	2019	
		2.31%		2.1	4%	2.21%	
			20'	17	2018	2019	
		No. of births	12	20	145	134	
		No. to take leave as legally mandated	1		1	11	
	Male	Percentage to take leave as legally mandated	0.8	%	0.7%	8.2%	
		No. to take leave through AMADA system	4		4	14	
Parental leave utilization		Percentage to take leave through AMADA system	3.3%		5.5%	10.5%	
rate		No. of births	1:	2	5	15	
		No. to take leave as legally mandated	1:	2	5	15	
	Female	Percentage to take leave as legally mandated	100%		100%	100%	
		No. to take leave through AMADA system	8	3	1	6	
		Percentage to take leave through AMADA system	66.7	7%	20.0%	40.0%	

Scope of tabulation: 19 out of 21 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 third-party organization.

The target data and assurance standards for this certification are as follows:

• Amount of CO₂ 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.04's greenhouse gas emissions data.



Independent Assurance Statement

August 25, 2020

Mr. Tsutomu Isobe 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 CO₂ emissions which are 31,815 tons-CO₂ ("the CO₂ emissions data") from 7 domestic business facilities (Isehara / Fujinomiya / Toki / Ono / Miki / Noda / Fukushima) during the fiscal year 2019. The purpose of this process is to express our conclusion on whether the CO₂ emissions data were calculated in accordance with the Company's standards. The Company's management is responsible for calculating the CO₂ 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
- 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.

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.



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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