

Environmental Accounting

Concept of environmental accounting

The Brother Group performs environmental accounting as an effective means to continuously improve the efficiency of environmental management, targeting eight business sites in Japan ("in Japan") and manufacturing facilities outside Japan ("outside Japan"). The Brother Group quantitatively assesses their effects, and then uses the results to plan environmental activities to be carried out the next fiscal year.

Calculation results for FY2024

These are the expenses, investments, and effects of environmental activities in FY2024 (April 1, 2024–March 31, 2025) which is the last year in the Brother Group Environmental Action Plan 2024 (2022–2024) (the increases/decreases are based on comparisons with the previous fiscal year).

Environmental conservation costs

The Brother Group invested JPY 63 million in Japan (a decrease of JPY 296 million) and JPY 1,139 million outside Japan (an increase of JPY 294 million). The total amount was JPY 1,202 million (a decrease of JPY 2 million). Investments were made mainly to conserve the global environment, such as for implementing energy conservation measures and solar power generation both in Japan and overseas.

Expenditures and labor costs for various environmental conservation activities were JPY 986 million in Japan (a decrease of JPY 24 million) and JPY 362 million outside Japan (a decrease of JPY 53 million).

In FY2024, approximately JPY 10 million was spent on the purchase of non-fossil certificates, both in Japan and overseas.

Classification of environmental conservation costs		Details of main activities and their effects	Investment (unit: JPY million)		Expenses (unit: JPY million)	
			In Japan	Outside Japan	In Japan	Outside Japan
1. Business area cost	1) Pollution prevention costs	Pollution prevention measures (including air, water, vibration and noise)	0 (-3)	0 (-1)	15 (2)	121 (-57)
	2) Global environmental conservation costs	Global warming prevention (energy-saving) measures	60 (-275)	1139 (295)	296 (-17)	84 (-3)
	3) Resource circulation costs	Recycling and reduction in waste generation	3 (3)	0 (0)	108 (2)	85 (12)
2. Upstream/ downstream cost	Costs incurred to reduce environmental impact when procuring parts and materials and after selling products	Green procurement activities; collection and recycling of used products/consumables	0 (0)	0 (0)	114 (7)	0 (0)
3. Administration cost	Costs incurred by activities that contribute indirectly to reducing the environmental impact of business operations	Establishment, administration, and maintenance of the ISO 14001 system; environmental training for employees; disclosure of environmental information; greening and cleanup of manufacturing facilities and their surrounding areas	0 (-4)	0 (0)	273 (-2)	59 (-6)
4. R&D cost	R&D costs for reducing environmental impact	Development of eco-conscious products and technologies that help mitigate climate change such as energy saving and resource conservation designs; implementation and design improvement of product environmental assessments	0 (-17)	0 (0)	123 (-12)	1 (-4)
5. Social activity cost	Costs of environmental conservation that is not directly linked with corporate activities	Support for environmental conservation groups and organizations; support for environmental activities by local citizens; information services	0 (0)	0 (0)	44 (-3)	8 (4)
6. Cost to deal with environmental damage	Costs incurred to restore the natural environment (including soil remediation)	Soil contamination surveys; soil remediation	0 (0)	0 (0)	13 (-1)	4 (1)
Total			63 (-296)	1139 (294)	986 (-24)	362 (-53)

Figures in parentheses show increases/decreases in the amount from the previous fiscal year.

Environmental conservation effects

Energy input increased 5.9% in Japan and increased 12.3% outside Japan.

Water consumption increased 11.0% in Japan and increased 13.6% outside Japan, resulting in an overall increase of 13.2%.

CO₂ emissions decreased 0.7% in Japan and increased 3.4% outside Japan, resulting in an overall increase of 2.4%.

Content of environmental conservation effects		Classification of index to measure environmental conservation effects		In Japan	Outside Japan
Effects resulting from business area cost	Effects related to resource input into business operations	Energy input	(kL: converted into crude oil quantity)	11,185 (620)	26,626 (2,911)
		Water input	m ³	94,915 (9,412)	446,474 (53,615)
	Effects related to environmental impact and waste released from business operations	Release into the atmosphere from energy use	CO ₂ (t-CO ₂ /year) * from energy use Based on the emission factors of international standards	18,613 (-131)	58,866 (1,917)
			NO _x (kg/year)	2,050 (-154)	3,891 (-954)
			SO _x (kg/year)	8 (-2)	208 (-100)
		Generation of waste	Generation of waste	2,405 (366)	7,514 (814)
			Landfill waste (t)	0 (0)	322 (160)

Figures in parentheses show increases/decreases in the amount from the previous fiscal year.

Economic effects derived from environmental conservation measures*

The main economic effects were reduction in waste treatment costs mainly due to recycling in Japan, and operating income from the waste recycling and reduction in energy cost due to energy conservation measures outside Japan.

Content of economic effects		In Japan (unit: JPY million)	Outside Japan (unit: JPY million)
Income	Operating income from recycling of waste generated from main business operations	12.2 (-3.4)	103.0 (18.1)
Cost reduction	Reduction in energy cost by energy saving	21.6 (-7.7)	80.0 (-14.9)
	Reduction in waste treatment cost due to resource conservation and recycling	51.0 (7.7)	748.9 (465.2)
Other	Publicity effects, such as newspaper reporting, calculated in terms of advertising expenses	72.1 (50.7)	43.3 (43.1)
Total		156.9 (47.3)	975.2 (511.5)

Figures in parentheses show increases/decreases in the amount from the previous fiscal year.

*: Economic effects derived from environmental conservation measures are those that can be calculated in monetary terms from among the effects derived from the environmental conservation activities. Effects that cannot be calculated based on solid grounds (i.e., assumed effects and accidental effects) are not calculated.

Scope of aggregation

Eight business sites in Japan (head office of Brother Industries, Ltd., Mizuho Factory, Hoshizaki Factory, Minato Factory, Momozono Factory, Kariya Factory, Research & Development Center, Logistics Center*), Brother Industries (U.K.) Ltd., Brother Industries (Slovakia) s.r.o., Taiwan Brother Industries, Ltd., Zhuhai Brother Industries, Co., Ltd., Brother Machinery Xian Co., Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd., and Brother Industries (Philippines), Inc.

*: For Logistics Center, only "Environmental conservation effects" was aggregated.

Environmental Accounting (Detailed Data: FY2020-FY2024)

Environmental Conservation Effects

Content of Environmental Conservation Effects		Classification of Index to Measure Environmental Conservation Effects	In Japan					Outside Japan					
			FY2020	FY2021	FY2022	FY2023	FY2024	FY2020	FY2021	FY2022	FY2023	FY2024	
Effects resulting from business area cost	Effects related to resource input into business operations	Total energy input (kL: converted into crude oil quantity)	10,169	10,775	11,054	10,565	11,185	23,392	25,122	25,190	23,715	26,626	
		Water input (m ³)	80,331	76,787	85,755	85,503	94,915	454,540	477,739	446,417	392,859	446,474	
	Effects related to environmental impact and waste released from business operations	Release into the atmosphere from energy use	CO ₂ (t-CO ₂ /year) from energy use	20,299	20,654	20,449	18,744	18,613	47,112	54,876	61,595	56,949	58,866
			NOx (kg/year)	2,208	2,437	2,920	2,204	2,050	3,438	4,085	3,837	4,845	3,891
		SOx (kg/year)	11	11	13	10	8	142	197	186	308	208	
Generation of waste	Amount of waste generation (t)	1,668	1,944	1,956	2,039	2,405	6,832	6,575	7,494	6,700	7,514		
	Landfill waste (t)	0	0	0	0	0	123	174	227	162	322		

Economic Effects Derived from Environmental Conservation Measures

Unit: millions of Yen

Content of Economic Effects		In Japan					Outside Japan				
		FY2020	FY2021	FY2022	FY2023	FY2024	FY2020	FY2021	FY2022	FY2023	FY2024
Income	Operating income from recycling of waste generated from main business operations	3.2	14.3	14.5	15.6	12.2	51.6	114.0	176.4	84.9	103.0
Cost reduction	Reduction in energy cost by energy-saving	10.3	15.2	36.9	29.3	21.6	121.9	43.2	58.7	94.9	80.0
	Reduction in waste treatment cost due to resource-saving and recycling	34.3	37.0	39.3	43.3	51.0	167.1	78.3	599.2	283.7	748.9
Other	Publicity effects, such as newspaper reporting, calculated in terms of advertising expenses	15.4	17.6	42.0	21.4	72.1	0.2	0.2	0.3	0.2	43.3
Total		63.2	84.1	132.7	109.6	156.9	340.8	235.7	834.6	463.7	975.2

Environmental Conservation Costs

Unit: millions of Yen

Classification of Environmental Conservation Costs		Details of Main Implementation and the Effects	In Japan									
			Investment Amount					Expense Amount				
			FY2020	FY2021	FY2022	FY2023	FY2024	FY2020	FY2021	FY2022	FY2023	FY2024
1. Business area costs: Costs for reducing direct environmental impacts occurring within the facility area			258	372	181	338	63	385	373	447	432	419
Breakdown:	(1) Pollution prevention cost	Pollution prevention measures (including air, water, vibration and noise)	0	1	2	3	0	21	17	20	13	15
	(2) Global environmental conservation cost	Global warming prevention (energy-saving) measures	257	318	179	335	60	259	245	317	313	296
	(3) Resource circulation cost	Recycling and reduction in waste generation	1	53	0	0	3	105	111	110	106	108
2. Upstream/downstream cost: Costs incurred to reduce environmental impact when procuring parts and materials and after selling products		Green procurement activities; collection and recycling of used products/consumables	1	0	0	0	0	82	85	92	107	114
3. Administration cost: Costs incurred by activities that contribute indirectly to reducing the environmental impact of business operations		Establishment, administration and maintenance of the ISO 14001 system; environmental training for employees; disclosure of environmental information; greening and cleanup of manufacturing facilities and their surrounding areas	43	93	3	4	0	288	266	273	275	273
4. R&D cost: R&D costs for reducing environmental impact		Development of eco-conscious products and technologies that help mitigate climate change such as energy conservation and resource conservation designs; implementation of product environmental assessments; design improvement	42	8	7	17	0	151	340	354	135	123
5. Social activity cost: Costs of environmental conservation that is not directly linked with corporate activities		Support for environmental conservation groups and organizations; support for environmental activities by local citizens; information services	0	0	0	0	0	22	18	26	47	44
6. Cost to deal with environmental damage: Costs incurred to restore the natural environment (including soil remediation)		Soil contamination surveys; soil remediation	5	0	0	0	0	4	3	3	14	13
Total			349	473	191	359	63	932	1085	1195	1,010	986

Unit: millions of Yen

Classification		Details of Main Implementation and the Effects	Outside Japan									
			Investment Amount					Expense Amount				
			FY2020	FY2021	FY2022	FY2023	FY2024	FY2020	FY2021	FY2022	FY2023	FY2024
1. Business area costs: Costs for reducing direct environmental impacts occurring within the facility area			257	69	78	845	1139	144	177	418	338	290
Breakdown:	(1) Pollution prevention cost	Pollution prevention measures (including air, water, vibration and noise)	148	35	39	1	0	75	102	120	178	121
	(2) Global environmental conservation cost	Global warming prevention (energy-saving) measures	109	34	39	844	1139	23	23	212	87	84
	(3) Resource circulation cost	Recycling and reduction in waste generation	0	0	0	0	0	46	52	86	73	85
2. Upstream/downstream cost: Costs incurred to reduce environmental impact when procuring parts and materials and after selling products		Green procurement activities; collection and recycling of used products/consumables	0	0	0	0	0	0	0	0	0	0
3. Administration cost: Costs incurred by activities that contribute indirectly to reducing the environmental impact of business operations		Establishment, administration and maintenance of the ISO 14001 system; environmental training for employees; disclosure of environmental information; greening and cleanup of manufacturing facilities and their surrounding areas	0	0	0	0	0	35	47	58	65	59
4. R&D cost: R&D costs for reducing environmental impact		Development of eco-conscious products and technologies that help mitigate climate change such as energy conservation and resource conservation designs; implementation of product environmental assessments; design improvement	0	0	0	0	0	0	0	0	5	1
5. Social activity cost: Costs of environmental conservation that is not directly linked with corporate activities		Support for environmental conservation groups and organizations; support for environmental activities by local citizens; information services	0	0	0	0	0	4	5	6	4	8
6. Cost to deal with environmental damage: Costs incurred to restore the natural environment (including soil remediation)		Soil contamination surveys; soil remediation	0	0	0	0	0	0	0	0	3	4
Total			257	69	78	845	1139	183	229	482	415	362

Scope of aggregation

Fiscal Year	Target Period	Name of Site	
		In Japan	Outside Japan
FY2020	April 1, 2020–March 31, 2021	Head office, Mizuho Factory, Hoshizaki Factory, Minato Factory, Momozono Factory, Kariya Factory, Research & Development Center, Logistics Center ^{*1}	Brother Industries (U.K.) Ltd., Brother Industries (Slovakia) s.r.o., Taiwan Brother Industries, Ltd., Zhuhai Brother Industries, Co., Ltd., Brother Machinery Xian Co., Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd., Brother Industries (Philippines), Inc.
FY2021	April 1, 2021–March 31, 2022	Head office, Mizuho Factory, Hoshizaki Factory, Minato Factory, Momozono Factory, Kariya Factory, Research & Development Center, Logistics Center ^{*1}	Brother Industries (U.K.) Ltd., Brother Industries (Slovakia) s.r.o., Taiwan Brother Industries, Ltd., Zhuhai Brother Industries, Co., Ltd., Brother Machinery Xian Co., Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd., Brother Industries (Philippines), Inc.
FY2022	April 1, 2022–March 31, 2023	Head office, Mizuho Factory, Hoshizaki Factory, Minato Factory, Momozono Factory, Kariya Factory, Research & Development Center, Logistics Center ^{*1}	Brother Industries (U.K.) Ltd., Brother Industries (Slovakia) s.r.o., Taiwan Brother Industries, Ltd., Zhuhai Brother Industries, Co., Ltd., Brother Machinery Xian Co., Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd., Brother Industries (Philippines), Inc.
FY2023	April 1, 2023–March 31, 2024	Head office, Mizuho Factory, Hoshizaki Factory, Minato Factory, Momozono Factory, Kariya Factory, Research & Development Center, Logistics Center ^{*1}	Brother Industries (U.K.) Ltd., Brother Industries (Slovakia) s.r.o., Taiwan Brother Industries, Ltd., Zhuhai Brother Industries, Co., Ltd., Brother Machinery Xian Co., Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd., Brother Industries (Philippines), Inc.
FY2024	April 1, 2024–March 31, 2025	Head office, Mizuho Factory, Hoshizaki Factory, Minato Factory, Momozono Factory, Kariya Factory, Research & Development Center, Logistics Center ^{*1}	Brother Industries (U.K.) Ltd., Brother Industries (Slovakia) s.r.o., Taiwan Brother Industries, Ltd., Zhuhai Brother Industries, Co., Ltd., Brother Machinery Xian Co., Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd., Brother Industries (Philippines), Inc.

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