

Environmental Accounting (Detailed Data: FY2009-FY2013)

Environmental Conservation Effects

Content of Effect		Classification of Index to Measure Environmental Conservation Effect		In Japan					Outside Japan				
				FY2009	FY2010	FY2011	FY2012	FY2013	FY2009	FY2010	FY2011	FY2012	FY2013
Effects resulting from business area cost	Effects related to resource input into business operations	Total energy input	(KJ: converted into crude oil quantity)	9,480	10,382	10,875	10,676 ¹	10,715	12,071	15,015	15,067	15,169	17,051
		Water input	m ³	98,091	103,722	109,047	113,451	104,890	455,432 ²	621,840	582,401	608,441	612,757
	Effects related to environmental impact and waste released from business operations	Release into atmosphere	CO ₂ (t-CO ₂ /year)	15,405 ¹	16,841 ¹	16,317	16,033 ²	16,033	21,351	24,903	25,626	25,545	28,034
			NO (x kg/year)	1,345	2,000 ¹	1,958	2,023	2,031	8,976	3,647	4,081	3,147	3,329
		SO (x kg/year)	5.8	8.6 ¹	9	9	8	2,150	111	221	72	81	
	Generation of waste	Amount of waste generation (t)	2,142	2,154	2,362	2,023	1,937	2,280 ¹	3,900	4,087	4,073	4,362	
	Landfill waste (t)		0	0	0	0	0	20	8	16	2	5	

¹: The figures were reviewed retrospectively at the time of reporting FY2012.

²: The figures were reviewed retrospectively at the time of reporting FY2014.

Economic Effects Involving Environmental Conservation Effects

(Unit: millions of Yen)

Content of Effect		In Japan					Outside Japan				
		FY2009	FY2010	FY2011	FY2012	FY2013	FY2009	FY2010	FY2011	FY2012	FY2013
Income	Operating income from recycling of waste generated from main business operations	4.8	10.1	8.5	4.7	6.8	23.9	33.7	39.9	38.0	41.5
Cost reduction	Reduction in energy cost by energy-saving	1.9	3.6	6.4	1.1	1.4	113.6	97.3	30.7	24.3	26.3
	Reduction in waste treatment cost due to resource-saving and recycling	32.7	31.3	37.9	27.5	29.3	62.8	63.1	13.9	51.1	31.9
Other	Publicity effects, such as newspaper reporting, calculated in terms of advertising expenses	3.5	2.2	1.4	0.8	3.7	0.0	10.7	10.1	16.5	3.1
Total		42.9	47.1	54.3	34.0	41.2	200.2	204.8	94.6	130.0	102.9

Environmental Conservation Costs

(Unit: millions of Yen)

Classification	Details of Main Implementation and the Effects	Outside Japan									
		Investment Amount					Expense Amount				
		FY2009	FY2010	FY2011	FY2012	FY2013	FY2009	FY2010	FY2011	FY2012	FY2013
1. Business area costs: Costs for reducing direct environmental impacts occurring within the facility area		2	8	30	8	113	131	128	260	181	167
Breakdown :	(1) Pollution prevention cost	1	0	5	0	3	27	24	32	44	29
	(2) Global environmental conservation cost	0	8	21	8	109	22	20	62	60	61
	(3) Resource circulation cost	1	0	4	1	1	81	83	166	76	77
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	4	0	0	0	5	119	123	113	114	99
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	84	91	179	179	98	276	295	313	328	323
4. R&D cost: R&D costs for reducing environmental impact	Development of eco-conscious products and technologies; implementation of product environmental assessments; design improvement	2	54	19	14	2	108	109	154	124	132
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	11	11	13	13	10	12
6. Cost to deal with environmental damage: costs incurred to restore the natural environment (including soil remediation)	Soil contamination surveys; soil remediation	2	0	0	0	0	2	3	4	2	3
Total		94	153	228	201	229	647	671	857	760	737

(Unit: millions of Yen)

Classification	Details of Main Implementation and the Effects	Outside Japan									
		Investment Amount					Expense Amount				
		FY2009	FY2010	FY2011	FY2012	FY2013	FY2009	FY2010	FY2011	FY2012	FY2013
1. Business area costs: Costs for reducing direct environmental impacts occurring within the facility area		161	109	88	53	169	65	138	100	92	70
Breakdown :	(1) Pollution prevention cost	0	0	26	0	0	24	21	27	34	34
	(2) Global environmental conservation cost	161	102	62	53	169	19	95	50	34	5
	(3) Resource circulation cost	0	7	0	0	0	21	22	22	23	30
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	2	1	1	1
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	13	10	15	26	42
4. R&D cost: R&D costs for reducing environmental impact	Development of eco-conscious products and technologies; implementation of product environmental assessments; design improvement	0	0	0	0	0	0	0	0	0	0
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	2	3	3	2	3
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	0	0
Total		161	109	88	53	169	80	152	119	122	116

Scope of aggregation

Aggregation Scope	Target Period	Name of Site	
		In Japan	Outside Japan
FY2009	April 1, 2009 ~ March 31, 2010	Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistic 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. ^{2,3} , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd. ⁴
FY2010	April 1, 2010 ~ March 31, 2011	Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistic 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. ^{2,3} , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd.
FY2011	April 1, 2011 ~ March 31, 2012	Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistic 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. ^{2,3} , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd.
FY2012	April 1, 2012 ~ March 31, 2013	Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistic 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. ^{2,3} , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd.
FY2013	April 1, 2012 ~ March 31, 2013	Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistic 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. ^{2,3} , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd.

¹: For Logistic Center, only "Environmental Conservation Effects" was aggregated.

²: Xian Typical Brother Industries, Co., Ltd. (whose name was changed to Xian Brother Industries, Co. Ltd. in October 2009) merged with Brother Sewing Machine Xian Co., Ltd. in 2010 to become Brother Machinery Xian Co., Ltd.

³: Brother Sewing Machine (Shanghai) Co., Ltd. transferred its business to Brother Machinery Xian Co., Ltd. in 2010.

⁴: For Brother Industries (Vietnam) Ltd. the data cover only the "Economic Effects of Environmental Conservation Efforts" and "Environmental Conservation Effects."