

# Environmental Accounting (Detailed Data: FY2010-FY2014)

## Environmental Conservation Effects

Content of Effect		Classification of Index to Measure Environmental Conservation Effect	In Japan					Outside Japan					
			FY2010	FY2011	FY2012	FY2013	FY2014	FY2010	FY2011	FY2012	FY2013	FY2014	
Effects resulting from business area cost	Effects related to resource input into business operations	Total energy input (kL: converted into crude oil quantity)	10,382	10,875	10,676 <sup>2</sup>	10,715	10,483	15,015	15,067	15,169	17,051	18,838	
		Water input (m <sup>3</sup> )	103,722	109,047	113,451	104,890	101,060	621,840	582,401	608,441	612,757	664,084	
	Effects related to environmental impact and waste released from business operations	Release into atmosphere	CO <sub>2</sub> (t-CO <sub>2</sub> /year)	16,841 <sup>1</sup>	16,317	16,033 <sup>2</sup>	16,033	15,659	24,903	25,626	25,545	28,034	31,085
		NOx (kg/year)	2,000 <sup>1</sup>	1,958	2,023	2,031	2,046	3,647	4,081	3,147	3,329	3,603	
		SOx (kg/year)	8.6 <sup>1</sup>	9	9	8	8	111	221	72	81	88	
	Generation of waste	Amount of waste generation (t)	2,154	2,362	2,023	1,937	2,302	3,900	4,087	4,073	4,362	4,851	
Landfill waste (t)		0	0	0	0	0	8	16	2	5	2		

<sup>1</sup>: The figures were reviewed retrospectively at the time of reporting FY2012.

<sup>2</sup>: 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				
		FY2010	FY2011	FY2012	FY2013	FY2014	FY2010	FY2011	FY2012	FY2013	FY2014
Income	Operating income from recycling of waste generated from main business operations	10.1	8.5	4.7	6.8	6.9	33.7	39.9	38.0	41.5	55.6
Cost reduction	Reduction in energy cost by energy-saving	3.6	6.4	1.1	1.4	3.0	97.3	30.7	24.3	26.3	25.3
	Reduction in waste treatment cost due to resource-saving and recycling	31.3	37.9	27.5	29.3	31.7	63.1	13.9	51.1	31.9	11.3
Other	Publicity effects, such as newspaper reporting, calculated in terms of advertising expenses	2.2	1.4	0.8	3.7	2.3	10.7	10.1	16.5	3.1	17.2
Total		47.1	54.3	34.0	41.2	43.9	204.8	94.6	130.0	102.9	109.4

## Environmental Conservation Costs

(Unit: millions of Yen)

Classification	Details of Main Implementation and the Effects	In Japan									
		Investment Amount					Expense Amount				
		FY2010	FY2011	FY2012	FY2013	FY2014	FY2010	FY2011	FY2012	FY2013	FY2014
1. Business area costs: Costs for reducing direct environmental impacts occurring within the facility area		8	30	8	113	124	128	260	181	167	168
Breakdown :	(1) Pollution prevention cost	0	5	0	3	4	24	32	44	29	20
	(2) Global environmental conservation cost	8	21	8	109	120	20	62	60	61	63
	(3) Resource circulation cost	0	4	1	1	0	83	166	76	77	85
2. Upstream/downstream cost: Costs incurred to reduce environmental impact when procuring parts and materials and after selling products		0	0	0	5	0	123	113	114	99	95
3. Administration cost: Costs incurred by activities that contribute indirectly to reducing the environmental impact of business operations		91	179	179	98	155	295	313	328	323	358
4. R&D cost: R&D costs for reducing environmental impact		54	19	14	2	58	109	154	124	132	145
5. Social activity cost: Costs of environmental conservation that is not directly linked with corporate activities		0	0	0	11	0	13	13	10	12	13
6. Cost to deal with environmental damage: Costs incurred to restore the natural environment (including soil remediation)		0	0	0	0	0	3	4	2	3	3
Total		153	228	201	229	337	671	857	760	737	782

(Unit: millions of Yen)

Classification	Details of Main Implementation and the Effects	Outside Japan									
		Investment Amount					Expense Amount				
		FY2010	FY2011	FY2012	FY2013	FY2014	FY2010	FY2011	FY2012	FY2013	FY2014
1. Business area costs: Costs for reducing direct environmental impacts occurring within the facility area		109	88	53	169	137	138	100	92	70	165
Breakdown :	(1) Pollution prevention cost	0	26	0	0	0	21	27	34	34	84
	(2) Global environmental conservation cost	102	62	53	169	137	95	50	34	5	25
	(3) Resource circulation cost	7	0	0	0	0	22	22	23	30	56
2. Upstream/downstream cost: Costs incurred to reduce environmental impact when procuring parts and materials and after selling products		0	0	0	0	0	2	1	1	1	2
3. Administration cost: Costs incurred by activities that contribute indirectly to reducing the environmental impact of business operations		0	0	0	0	0	10	15	26	42	55
4. R&D cost: R&D costs for reducing environmental impact		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		0	0	0	0	0	3	3	2	3	11
6. Cost to deal with environmental damage: Costs incurred to restore the natural environment (including soil remediation)		0	0	0	0	0	0	0	0	0	0
Total		109	88	53	169	137	152	119	122	116	233

## Scope of aggregation

Aggregation Scope	Target Period	Name of Site	Outside Japan
FY2010	April 1, 2010 ~ March 31, 2011	In Japan	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. <sup>2,3</sup> , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd.
		Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistics Center <sup>1</sup>	
FY2011	April 1, 2011 ~ March 31, 2012	In Japan	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. <sup>2,3</sup> , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd.
		Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistics Center <sup>1</sup>	
FY2012	April 1, 2012 ~ March 31, 2013	In Japan	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. <sup>2,3</sup> , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd.
		Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistics Center <sup>1</sup>	
FY2013	April 1, 2013 ~ March 31, 2014	In Japan	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. <sup>2,3</sup> , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd.
		Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistics Center <sup>1</sup>	
FY2014	April 1, 2014 ~ March 31, 2015	In Japan	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. <sup>2,3</sup> , Brother Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd., Brother Machinery Vietnam Co., Ltd.
		Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, Research & Development Center, Logistics Center <sup>1</sup>	

<sup>1</sup>: For Logistics Center, only "Environmental Conservation Effects" was aggregated.

<sup>2</sup>: 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.

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