

# Environmental Accounting (Detailed Data: FY2011-FY2015)

## Environmental Conservation Effects

Content of Environmental Conservation Effects		Classification of Index to Measure Environmental Conservation Effects		In Japan					Outside Japan				
				FY2011	FY2012	FY2013	FY2014	FY2015	FY2011	FY2012	FY2013	FY2014	FY2015
Effects resulting from business area cost	Effects related to resource input into business operations	Total energy input (kL: converted into crude oil quantity)	10,875	10,676	10,715	10,483	10,116	15,067	15,169	17,051	18,838	18,820	
		Water input (m <sup>3</sup> )	109,047	113,451	104,890	101,060	93,989	582,401	608,441	612,757	663,961	698,704	
	Effects related to environmental impact and waste released from business operations	Release into atmosphere	CO <sub>2</sub> (t-CO <sub>2</sub> /year)	16,317	16,033	16,033	15,659	15,117	25,626	25,545	28,034	31,085	30,993
			NOx (kg/year)	1,958	2,023	2,031	2,046	2,020	4,081	3,147	3,329	3,603	2,894
			SOx (kg/year)	9	9	8	8	8	221	72	81	88	72
	Generation of waste	Amount of waste generation (t)	2,362	2,023	1,937	2,302	1,998	4,087	4,073	4,362	4,851	5,259	
Landfill waste (t)		0	0	0	0	0	16	2	5	2	1		

\* The figures were reviewed retrospectively at the time of reporting FY2014.

## Economic Effects Derived from Environmental Conservation Measures

(Unit: millions of Yen)

Content of Economic Effects Derived from Environmental Conservation Measures		In Japan					Outside Japan				
		FY2011	FY2012	FY2013	FY2014	FY2015	FY2011	FY2012	FY2013	FY2014	FY2015
Income	Operating income from recycling of waste generated from main business operations	8.5	4.7	6.8	6.9	2.9	39.9	38.0	41.5	55.6	81.3
Cost reduction	Reduction in energy cost by energy-saving	6.4	1.1	1.4	3.0	8.2	30.7	24.3	26.3	25.3	12.8
	Reduction in waste treatment cost due to resource-saving and recycling	37.9	27.5	29.3	31.7	27.6	13.9	51.1	31.9	11.3	29.7
Other	Publicity effects, such as newspaper reporting, calculated in terms of advertising expenses	1.4	0.8	3.7	2.3	3.1	10.1	16.5	3.1	17.2	13.9
Total		54.3	34.0	41.2	43.9	41.8	94.6	130.0	102.9	109.4	137.7

## Environmental Conservation Costs

(Unit: millions of Yen)

Classification		Details of Main Implementation and the Effects		In Japan					Outside Japan				
				Investment Amount					Expense Amount				
				FY2011	FY2012	FY2013	FY2014	FY2015	FY2011	FY2012	FY2013	FY2014	FY2015
1. Business area costs: Costs for reducing direct environmental impacts occurring within the facility area				30	8	113	124	141	260	181	167	168	208
Breakdown :	(1) Pollution prevention cost	Pollution prevention measures (including air, water, vibration and noise)	5	0	3	4	24	32	44	29	20	21	
	(2) Global environmental conservation cost	Global warming prevention (energy-saving) measures	21	8	109	120	117	62	60	61	63	83	
	(3) Resource circulation cost	Recycling and reduction in waste generation	4	1	1	0	0	166	76	77	85	104	
2. Upstream/downstream cost: Costs incurred to reduce environmental impact when procuring parts and materials and after selling products				0	0	5	0	0	113	114	99	95	89
3. Administration cost: Costs incurred by activities that contribute indirectly to reducing the environmental impact of business operations				179	179	98	155	33	313	328	323	358	329
4. R&D cost: R&D costs for reducing environmental impact				19	14	2	58	10	154	124	132	145	152
5. Social activity cost: Costs of environmental conservation that is not directly linked with corporate activities				0	0	11	0	0	13	10	12	13	12
6. Cost to deal with environmental damage: Costs incurred to restore the natural environment (including soil remediation)				0	0	0	0	0	4	2	3	3	4
Total				228	201	229	337	184	857	760	737	782	794

(Unit: millions of Yen)

Classification		Details of Main Implementation and the Effects		Outside Japan					Expense Amount				
				Investment Amount					Expense Amount				
				FY2011	FY2012	FY2013	FY2014	FY2015	FY2011	FY2012	FY2013	FY2014	FY2015
1. Business area costs: Costs for reducing direct environmental impacts occurring within the facility area				88	53	169	137	115	100	92	70	165	237
Breakdown :	(1) Pollution prevention cost	Pollution prevention measures (including air, water, vibration and noise)	26	0	0	0	49	27	34	34	84	86	
	(2) Global environmental conservation cost	Global warming prevention (energy-saving) measures	62	53	169	137	66	50	34	5	25	92	
	(3) Resource circulation cost	Recycling and reduction in waste generation	0	0	0	0	0	22	23	30	56	59	
2. Upstream/downstream cost: Costs incurred to reduce environmental impact when procuring parts and materials and after selling products				0	0	0	0	0	1	1	1	2	15
3. Administration cost: Costs incurred by activities that contribute indirectly to reducing the environmental impact of business operations				0	0	0	0	0	15	26	42	55	35
4. R&D cost: R&D costs for reducing environmental impact				0	0	0	0	0	0	0	0	0	4
5. Social activity cost: Costs of environmental conservation that is not directly linked with corporate activities				0	0	0	0	0	3	2	3	11	4
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				88	53	169	137	115	119	122	116	233	295

## Scope of aggregation

Fiscal year	Target Period	Name of Site	
		In Japan	Outside Japan
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, 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 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, 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 Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd.
FY2013	April 1, 2013 ~ March 31, 2014	Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, 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 Industries (Shenzhen), Ltd., Brother Technology (Shenzhen) Ltd., Brother Industries Technology (M) Sdn. Bhd., Brother Industries (Vietnam) Ltd., Brother Industries Saigon, Ltd.
FY2014	April 1, 2014 ~ March 31, 2015	Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, 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 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.
FY2015	April 1, 2015 ~ March 31, 2016	Head office, Mizuho Manufacturing Facility, Hoshizaki Manufacturing Facility, Minato Manufacturing Facility, Momozono Manufacturing Facility, Kariya Manufacturing Facility, 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 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., Brother Industries (Philippines), Inc.

\* For Logistics Center, only "Environmental Conservation Effects" was aggregated.