

Casio Corporate Report 2009

>>> Ref.

Reference Material

October 2009

CASIO

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I Product Targets

1. Development target for eco-products

Increase Casio Green Star product sales to 30% of total sales by FY2013.

II Plant and Business-site Targets

1. Energy conservation targets (electrical power, fuel etc.)

Japan production sites Reduce CO₂ emissions per unit of actual production by 35%, averaged over 5 years from fiscal 2009 to 2013 compared with fiscal 1991.

Japan office sites Reduce total CO₂ emissions by 9%, averaged over 5 years from fiscal 2009 to 2013 compared with fiscal 1991.

Production sites outside Japan Reduce CO₂ emissions of per unit of production by 30% by fiscal 2013 compared to fiscal 2005.

Office sites outside Japan Reduce total CO₂ emissions by 3% by fiscal 2013 compared to fiscal 2005.

2. Reduction target for greenhouse gases other than CO₂

Reduce total emissions of greenhouse gases other than CO₂ (CO₂ equivalent) to below 2000 level by 2010.

3. Resource conservation targets (water, paper)

Japan production sites Reduce water usage per unit of actual production by 25% by fiscal 2013 compared to fiscal 2001.

Production sites outside Japan Reduce water usage per unit of production by 15% by fiscal 2013 compared to fiscal 2005.

Japan sites Reduce paper usage in offices per unit of sales by 10% by fiscal 2013 compared to fiscal 2008.

4. Waste reduction targets

Japan sites Reduce generation of waste per unit of actual production by 50% by fiscal 2013 compared with fiscal 2001.

Production sites outside Japan Reduce generation of waste per unit of production by 30% by fiscal 2013 compared to fiscal 2005.

II Plant and Business-site Targets

5. Volatile organic compound (VOC) reduction target

Japan production sites Reduce emissions of VOCs by 30% by fiscal 2011 compared to fiscal 2001.

6. Hazardous substance phase-out target

Detoxify PCB-containing equipment now in storage as Japan Environmental Safety Corporation (JESCO) starts program in each region.
 •Kofu Casio Co., Ltd: By fiscal 2014

*Store stabilizers, including the low concentration capacitors kept at Hachioji R&D Center, until they can be accepted by JESCO.

7. Target for output reduction of PRTR substances

Japan production sites Reduce output of PRTR substances per unit of actual production by 40% by fiscal 2013 compared to fiscal 2004.

8. Green procurement target

Achieve 100% green parts procurement rate (all supplied parts are green parts) by fiscal 2011.

9. Green purchasing target

Raise the green purchasing ratio at Japan sites to 70% of total purchases (based on the number of purchases) by fiscal 2010.

*Applicable to sites using the CATS e-P system

10. Targets for logistics-related global warming countermeasures

Reduce CO₂ emissions from logistics within Japan per unit of Japan sales by 40% by fiscal 2010 compared to fiscal 2001 (the scope is the reduction value for logistics processes involved in the sale of products)

Reduce CO₂ emissions from logistics outside Japan per unit of overseas sales by 5% by fiscal 2010 compared to fiscal 2005 (the scope is the reduction value for logistics processes involved in the sale of products)

Fiscal 2009 Casio Environmental Action Plan Performance Report (Details)

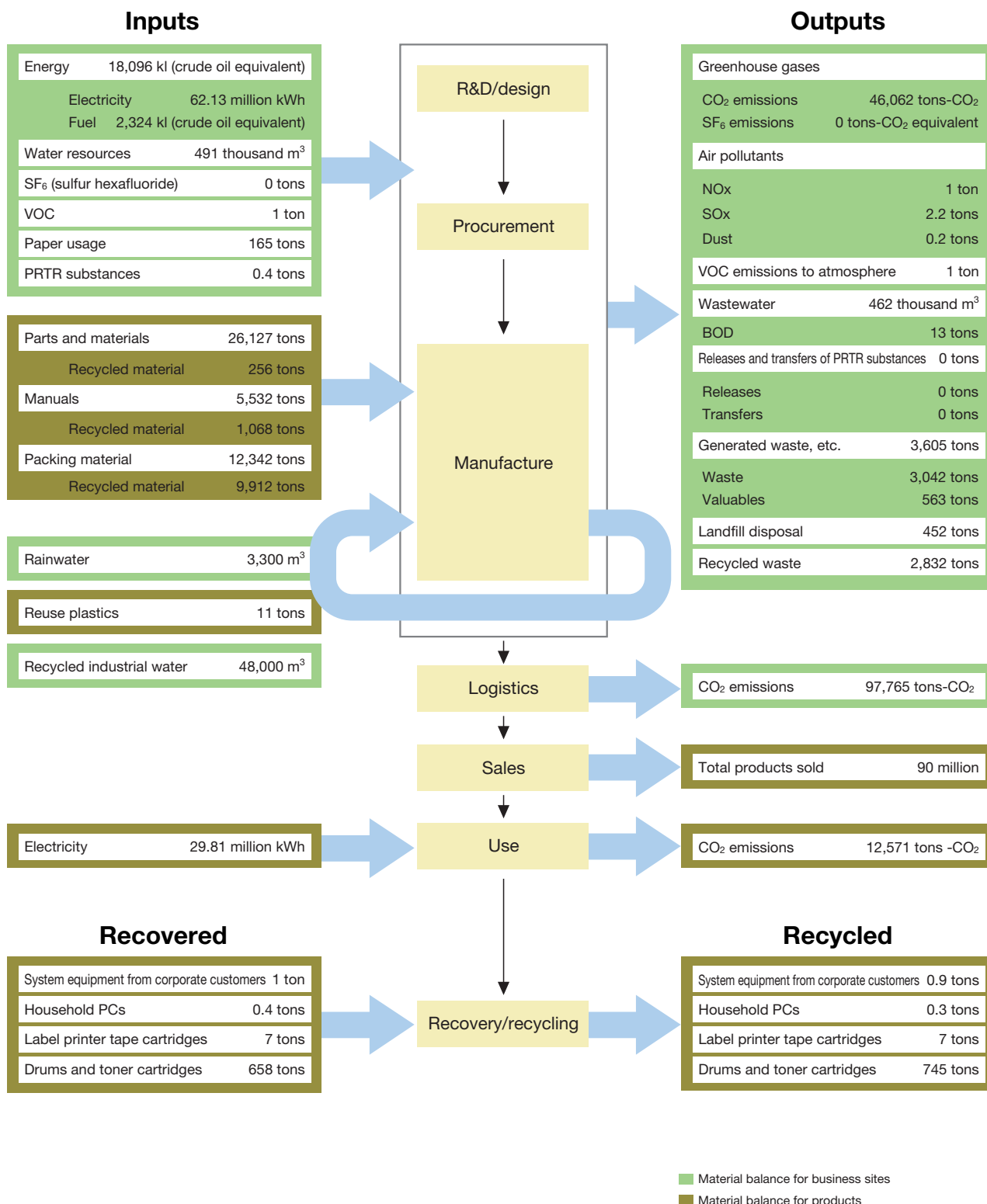
Fiscal 2009 Casio Environmental Action Plan Performance Report (Details)

	Theme	Target	Per-unit value of base year, etc.	Target per-unit value of target year, etc.	Actual performance of per-unit value for FY2009, etc.	Performance by end of FY2009	Progress assessment
<p>Lower level in parentheses (): FY2008 Upper level: Compared with base year Lower level: (Compared with previous year)</p>							
Product targets							
1. Eco-products	Raise share of green product sales in total sales.	Increase green product sales to 80% of total sales by FY2009.	—	80%	84%	Exceeded target by 4 percentage points	FY2009 ☆☆☆☆
Plant and business-site targets							
1. Energy conservation (electrical power, fuel, etc.)	Reduce CO ₂ emissions (Japan production sites)	Reduce emissions per unit of actual production by 35%, averaged over 5 years from fiscal 2009 to 2013, compared with fiscal 1991.	0.312 tons-CO ₂ /¥ million	0.183 tons-CO ₂ /¥ million	0.181 (0.205) tons-CO ₂ /¥ million	Reduced by 42.0% (Reduced by 17.0%)	FY2009 ☆☆☆
	Reduce CO ₂ emissions (Japan office sites)	Reduce total emissions by 9%, averaged over 5 years from fiscal 2009 to 2013, compared with fiscal 1991.	11,492 tons-CO ₂	10,458 tons-CO ₂	9,655 (9,350) tons-CO ₂	Reduced by 16.0% (Reduced by 3.3%)	FY2009 ☆☆☆
	Reduce CO ₂ emissions (production sites outside Japan)	Reduce emissions per unit of production by 30% by FY2013 compared to FY2005.	0.235 tons-CO ₂ /¥ million	0.164 tons-CO ₂ /¥ million	0.291 (0.272) tons-CO ₂ /¥ million	Increased by 24.3% (Increased by 7.2%)	●
	Reduce CO ₂ emissions (office sites outside Japan)	Reduce total emissions by 3% by fiscal 2013 compared to fiscal 2005.	5,099 tons-CO ₂	4,946 tons-CO ₂	6,493 (6,489) tons-CO ₂	Increased by 27.3% (Increased by 0.1%)	●
2. Reduction of greenhouse gases other than CO ₂	Reduce total emissions of greenhouse gases other than CO ₂ (CO ₂ equivalent) to below 2000 level.	Reduce total emissions to below 2000 level by 2010.	7,278 tons-CO ₂	7,278 tons-CO ₂ or below	18,021 (21,032) tons-CO ₂	Increased by 147.6% (Reduced by 14.3%)	☆
3. Resource conservation (water, paper)	Reduce water usage (Japan production sites)	Reduce usage per unit of actual production by 10% FY2009 compared to FY2001.	0.0077 thousand m ³ /¥ million	0.0069 thousand m ³ /¥ million	0.0061 (0.0072) thousand m ³ /¥ million	Reduced by 20.5% (Reduced by 15.9%)	☆☆☆☆
	Reduce water usage (production sites outside Japan)	Reduce usage per unit of production by 15% by FY2013 compared to FY2005.	0.0039 thousand m ³ /¥ million	0.0033 thousand m ³ /¥ million	0.0031 (0.0031) thousand m ³ /¥ million	Reduced by 20.1% (Increased by 0.6%)	☆☆☆
	Reduce paper usage (Japan sites)	Reduce usage per unit of actual production by 30% by FY2009 compared to FY2004.	0.00025 tons/¥ million	0.00018 tons/¥ million	0.00035 (0.00028) tons/¥ million	Increased by 37.5% (Increased by 26.5%)	●
4. Waste reduction	Reduce generation of waste (Japan sites)	Reduce waste per unit of actual production by 40% by FY2009 compared to FY2001.	0.024 tons/¥ million	0.0017 tons/¥ million	0.014 (0.016) tons/¥ million	Reduced by 41.8% (Reduced by 14.5%)	☆☆☆☆
	Reduce generation of waste (production sites outside Japan)	Reduce waste per unit of production by 30% by FY2013 compared to FY2005.	0.012 tons/¥ million	0.008 tons/¥ million	0.0124 (0.0110) tons/¥ million	Increased by 3.6% (Increased by 12.4%)	●
5. Reduction of volatile organic compounds (VOCs)	Reduce emissions of VOCs to atmosphere (Japan production site)	Reduce emissions by 30% by FY2011 compared to FY2001.	47 tons	33 tons	39 tons (43 tons)	Reduced by 16.0% (Reduced by 9.4%)	☆☆
6. Hazardous substance phase-out	Detoxify PCB-containing equipment now in storage as Japan Environmental Safety Corporation starts	Detoxify all PCBs stored at Kofu Casio by FY2009.	—	—	Finished delivering this equipment to JESCO. Continuing to store equipment until it can be accepted for treatment.	—	—
7. Output reduction of PRTR substances	Reduce output of PRTR substances (Japan production sites)	Reduce output per unit of actual production by 10% by FY2013 compared to FY2004.	0.00011 tons/¥ million	0.00006 tons/¥ million	0.00004 (0.00004) tons/¥ million	Reduced by 61.3% (Reduced by 1.7%)	☆☆☆
8. Green procurement	Achieve 100% response rate (percent of parts covered by supplier surveys) for green parts (sites in and outside Japan)	Achieve a 100% response rate in Japan in FY2009 Achieve a 100% response rate outside Japan in FY2009	—	100%	100%	—	☆☆☆
9. Green purchasing	Raise green purchasing ratio to 70% of total purchases of office supplies and office equipment (Japan sites)	Raise the ratio to 70% of total purchases by FY2009 (based on the number of purchases)	—	70%	72.7%	—	☆☆☆
10. Logistics-related global warming countermeasures	Reduce CO ₂ emissions (distribution in Japan)	Reduce emissions per unit of sales in Japan by 40% by FY2010 compared to FY2001.	11.4 tons/¥ billion	6.8 tons/¥ billion	0.72 (0.67) tons/¥ billion	Reduced by 36.7% (Reduced by 7.4%)	☆☆
	Reduced CO ₂ emissions (distribution outside Japan)	Reduce CO ₂ emissions per unit of sales outside Japan by 5% by FY2010 compared to FY2005.	171.3 tons/¥ billion	157.8 tons/¥ billion	18.50 (18.07) tons/¥ billion	Increased by 8.0% (Increased by 2.4%)	●

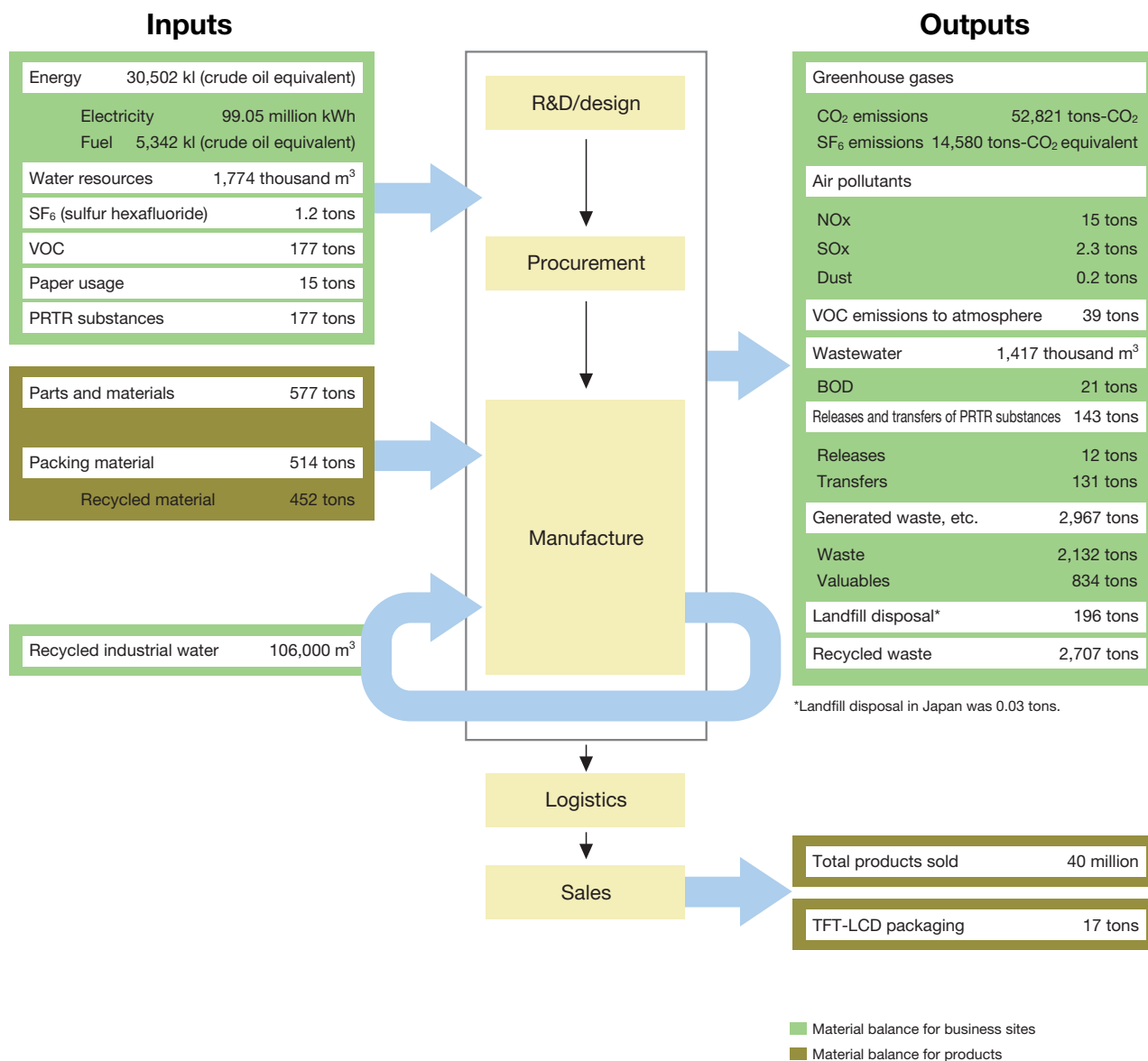
* The scope of target for logistics-related global warming countermeasures in and outside Japan is distribution for product sales.

Progress assessment key 1. Target was achieved and a new, higher target was established. ☆☆☆☆ 2. Target was achieved. ☆☆☆
 3. Target not achieved, but steady improvement made over previous fiscal year. ☆☆☆ 4. Making progress toward achieving target and expect results next fiscal year and beyond. ☆
 5. Same as or worse than base value. ●

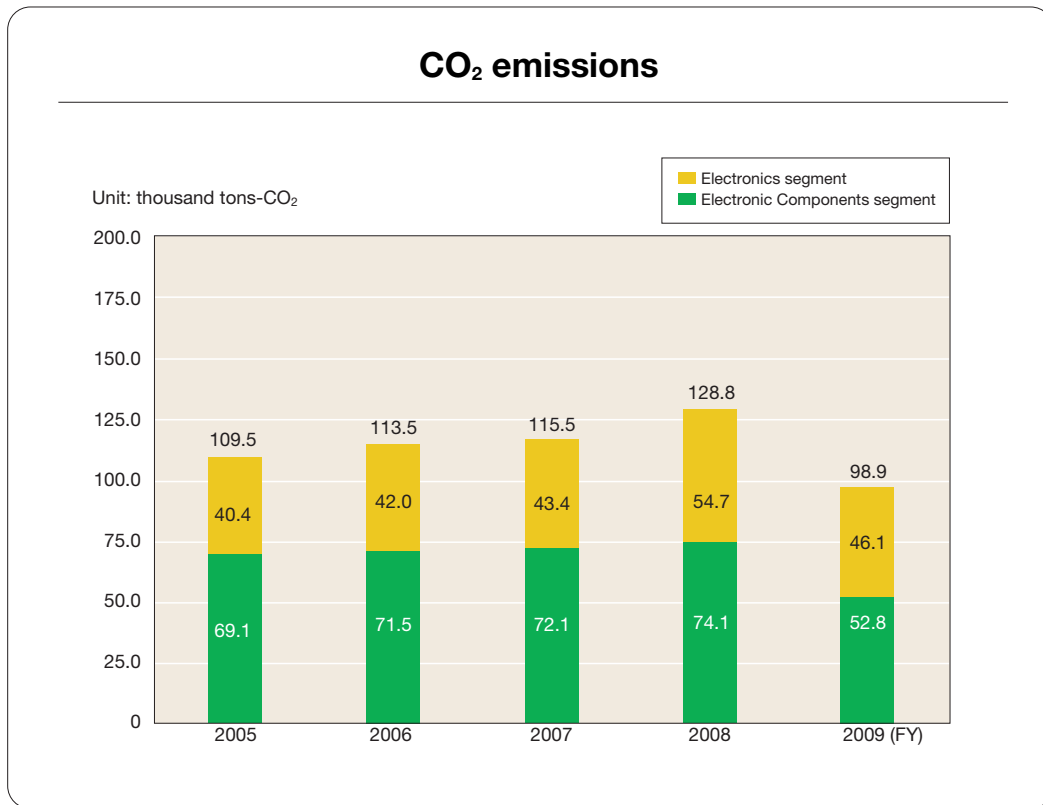
Material Balance (Electronics Segment)



Material Balance (Electronic Components Segment)

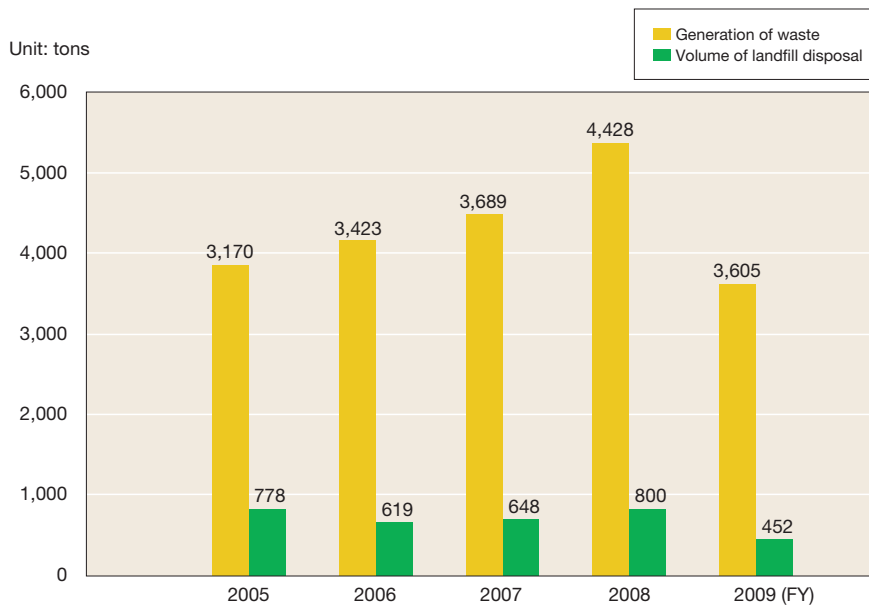


Note: The companies and organizations included in the Electronic Components segment are as follows.
 Kofu Casio Co., Ltd. (headquarters and Ichinomiya Factory), Kochi Casio Co., Ltd.,
 Casio Micronics Co., Ltd. (Factory No.1, headquarters, Factory No.2),
 Hachioji R&D Center of Casio Computer Co., Ltd., PT. Casio Electronics Indonesia.
 (All other group companies and organizations are included in the Electronics segment.)

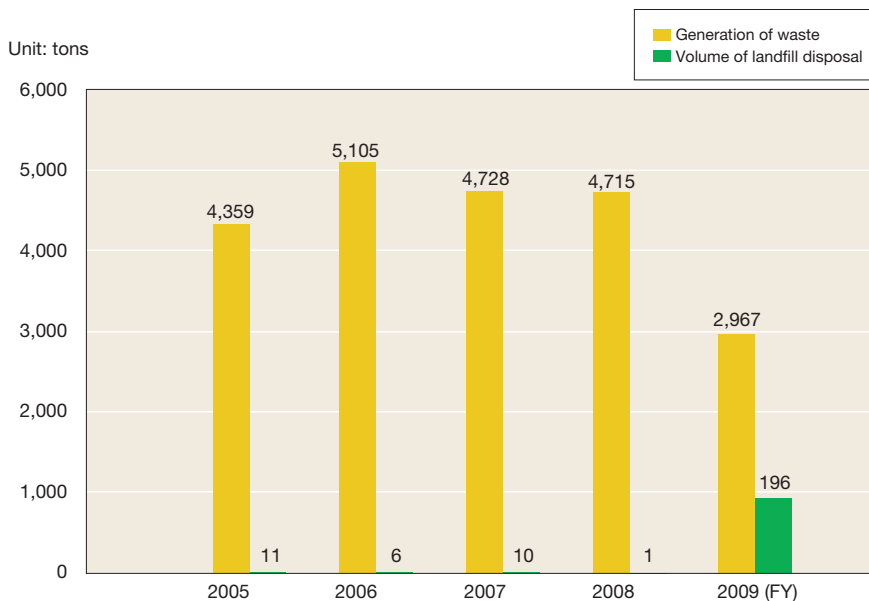


*Represents CO₂ emissions from energy source (electricity, fuel, etc.).

Reduction in generation of waste and volume of landfill disposal, by segment (Electronics segment)

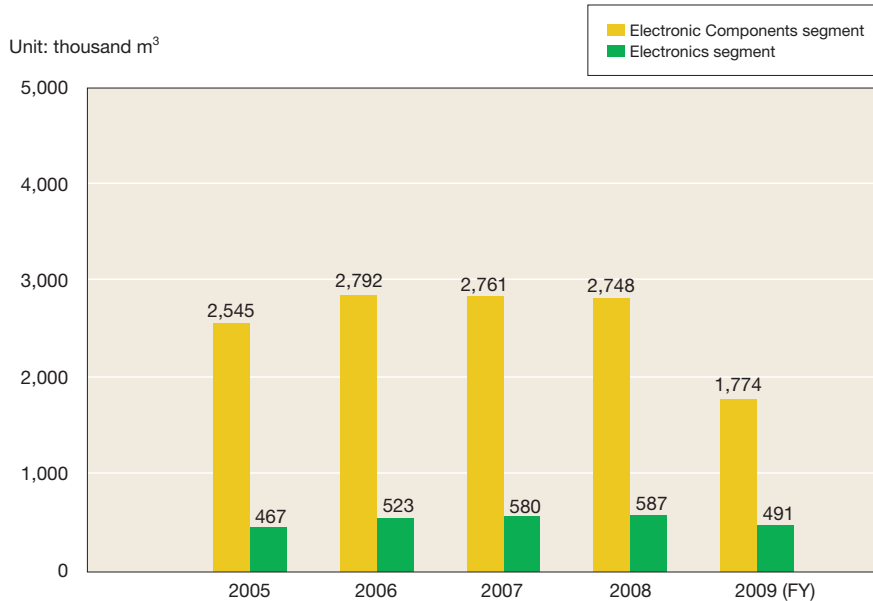


Reduction in generation of waste and volume of landfill disposal, by segment (Electronic Components segment)



*Plants outside Japan were added to the scope in fiscal 2009. Landfill disposal in Japan was 0.03 tons.

Reduction in usage of water resources



**Amounts of PRTR Substances Handled, Released,
and Transferred in Fiscal 2008 (Japan Production Sites)**

(Unit: tons)

Class 1 designated chemical substance ^{*1}	Substance No.	Sites using 1 or more tons of the substance	Amount handled	Amount released		Amount removed	Amount transferred, amount of waste	Amount consumed	Amount recycled
				Atmosphere	Public waters				
Hydrogen fluoride and its water-soluble salts ^{*2}	283	1	115.16	0.04	2.54	—	108.15	—	4.43
2-Amino ethanol	16	2	33.21	0.06	—	11.40	4.56	—	17.19
Xylene	63	1	18.44	8.17	—	—	10.27	—	—
Ethylene glycol	43	2	5.89	—	—	—	5.89	—	—
Ethylbenzene	40	1	2.94	1.29	—	—	1.65	—	—
Benzene	299	0	0.97	—	—	0.97	—	—	—
Lead and its compounds	230	0	0.39	—	—	—	—	0.26	0.13
Nickel compounds	232	0	0.36	—	—	—	0.36	—	—
Toluene	227	0	0.06	0.06	—	—	—	—	—
Total			177.42	9.62	2.54	12.37	130.87	0.26	21.75

*1. Casio has not handled the following substances, which were reported in the previous fiscal year, due to the following reasons.

(1) 2-Ethoxyethyl acetate: switch completed to substitutes in the previous fiscal year.

(2) Water-soluble copper salt, theouria, organotin compounds: The plant handling these substances was transferred to third party.

*2. For hydrogen fluoride and its water-soluble salts, the amount handled increased by 42% compared to fiscal 2008 due to the continuing size reduction of electronic components, but the amounts removed were held to an 11% increase.

● Some of the calculated results in the table may not match due to the rounding of fractions.

VOC Inputs and Emissions to Atmosphere in Fiscal 2009 (Total of Production Sites and Office Sites)

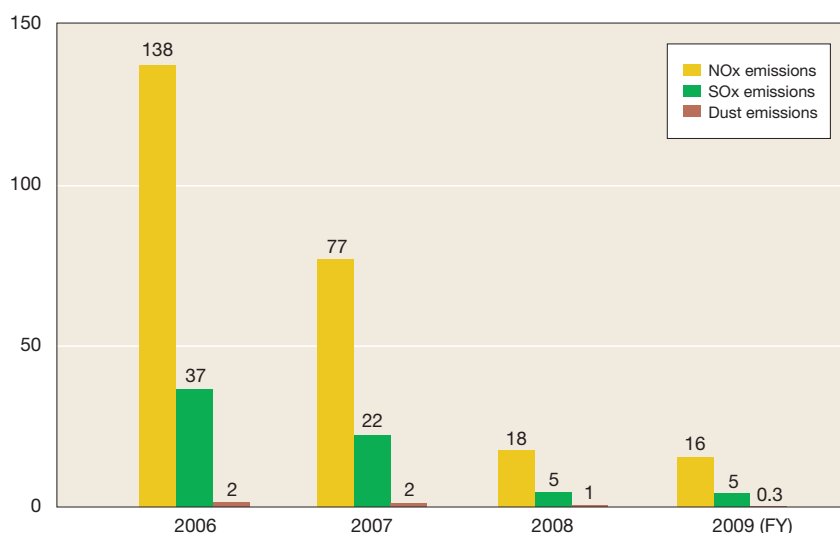
(Unit: tons)

VOC classifications	Amount handled	Emissions to atmosphere	Remarks
Isopropyl alcohol	116.9	17.5	
Toluene	0.1	0.1	*
Acetone	14.0	9.3	
Butyl acetate	6.9	0.7	
Methanol	0.3	0.3	
Xylene	18.5	8.2	*
Ethanol	10.8	2.1	
Ethylbenzene	2.9	1.3	*
1-methoxy-2-propanol	7.0	0.2	
Total	177.5	39.7	

*Substances targeted by PRTR

NOx, SOx and dust emissions to atmosphere

Unit: tons



>> p47. Reducing VOCs, Reducing NOx, SOx, and Dust