Environmental Performance

In order to comply with environmental laws and regulations, Casio's main sites have acquired ISO14001 certification and operate an environmental management system. Under the environmental management system, Casio plans and executes environmental protection activities based on a range of environmental legislation and the Casio Group Environmental Action Plan as well as various voluntary action plans established by Keidanren and the industry association. Moreover, Casio applies and operates its own unique environmental management system to relatively small office sites, which takes into account the extent of their environmental impact.

■ CO_2

Reducing CO_2 emissions

「Production sites in Japan」
The target for production sites in Japan was a 35% reduction in CO_2 emissions per unit of actual production compared to fiscal 1991 in the average for fiscal 2009 to fiscal 2013 (simple average of evaluation results for each year). Due to the transfer of production subsidiaries in the device business, including Kochi Casio and Casio Micronics, energy conservation activities, including power saving, the target was achieved with a 52.7% reduction in CO_2 emissions compared to fiscal 1991. The figure for CO_2 emissions volume in fiscal 1991, the base year, uses the CO_2 emissions volume for businesses at the time as is without any special adjustments of the base year. Going forward, Casio will strive to achieve the new target to be established for the entire group starting in fiscal 2014.

「Office sites in Japan」
The target for office sites in Japan was a 9% reduction in the total amount of CO_2 emissions compared to fiscal 1991 in the average for fiscal 2009 to fiscal 2013. The performance was a 30.5% reduction compared to fiscal 1991, achieving the target. Casio's independent efforts, which included the construction of energy-efficient buildings at the Hatsudai headquarters and Hachioji R&D Center, made a major contribution to achieving the target. The decline in sales compared to fiscal 2008, when the target was established, also had an impact. Going forward, Casio will strive to achieve the new target to be established for the entire group starting in fiscal 2014.

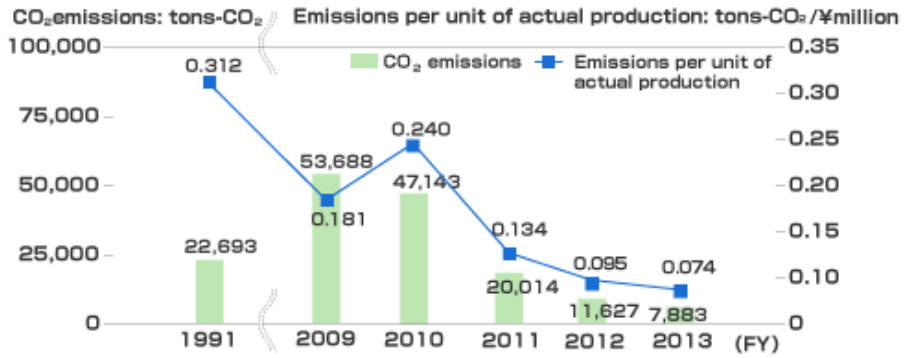
「Production sites outside Japan」
The target for production sites outside Japan was a 30% reduction in CO_2 emissions per unit of production in fiscal 2013 compared to fiscal 2005. In fiscal 2013, emissions were 9.8% lower than in fiscal 2005, so the 30% reduction target was not achieved. Production sites outside Japan underwent frequent relocation of sites and reorganizations and closures, making it difficult to address reductions consistently. Going forward, Casio will strive to achieve the new target to be established for the entire group starting in fiscal 2014.

「Office sites outside Japan」
The target for office sites outside of Japan was a 3% reduction in the total amount of CO_2 emissions in fiscal 2013 compared to fiscal 2005. In fiscal 2013, emissions were 41.2% higher than in fiscal 2005. Since fiscal 2005, the number and size of office sites have increased in conjunction with the growth in the overseas market, resulting in a significant increase in total floor space. Although Casio has also constructed some new energy efficient buildings, the increase in the amount of emissions has outpaced the reductions achieved by these buildings. Going forward, Casio will strive to achieve the new target to be established for the entire group starting in fiscal 2014.

「Logistics in Japan」
The target for CO_2 emissions from logistics activities in Japan was a 22% reduction per unit of domestic sales in fiscal 2013 compared to fiscal 2006. In fiscal 2013, emissions were 51.0% lower than in fiscal 2006, achieving the target. In August 2011, the logistics center was relocated from Suzuka City, Mie Prefecture to Toda City, Saitama Prefecture. In January 2012, the Eastern Distribution Center in Koto-ku, Tokyo was amalgamated with the logistics center. Through this staged effort, Casio reduced the number of consumer distribution centers in Japan from five to four. This transition not only shortened transportation distances, but also facilitated a modal shift from truck to rail, helping to further reduce CO_2 emissions. In fiscal 2013, Casio began an initiative to send products manufactured overseas directly to the Western Distribution Center in Osaka. This allows transport distances to be shortened significantly by cutting out transit through the Toda Logistics Center.

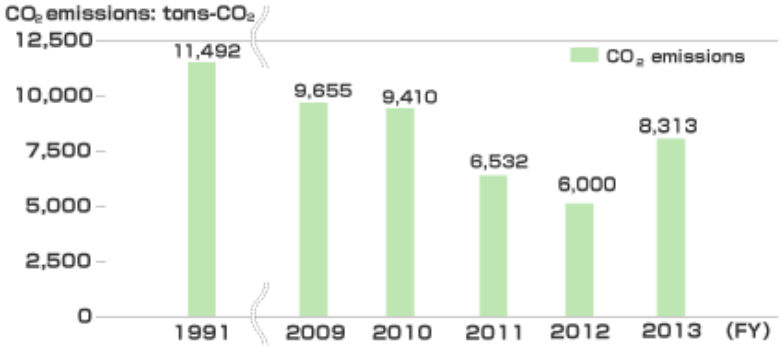
「Logistics outside Japan」
No specific CO_2 emissions reduction target has been set for logistics activities outside Japan. Cargo shipped from China to North America used to be sent to a sales company warehouse in Chicago, before being forwarded to client logistics centers. Since 2009 however, the cargo has been shipped from China direct to the various central logistics centers of clients, which is helping to reduce CO_2 emissions. Going forward, Casio will continue striving to improve energy efficiency and production processes at all of its production sites in and outside Japan. Moreover, Casio will promote energy efficiency, including for lighting and heating and cooling equipment, as it works to reduce the amount of CO_2 emissions at its office sites in and outside Japan.

CO_2 emissions (production sites in Japan)



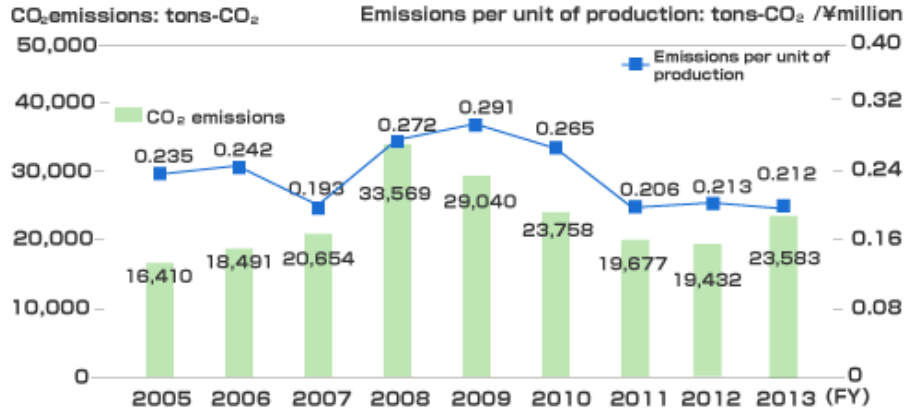
*Trends in CO_2 emissions from energy sources (electrical power, fuel, etc.) used at production sites in Japan.

CO_2 emissions (office sites in Japan)



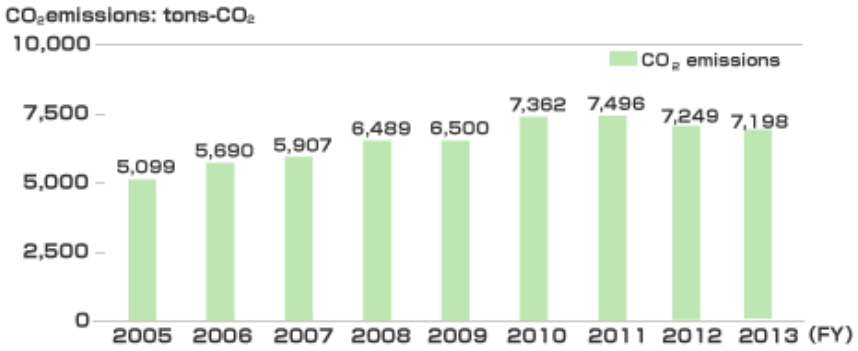
*Trends in CO_2 emissions from energy sources (electrical power, fuel, etc.) used at office sites in Japan.

CO_2 emissions (production sites outside Japan)



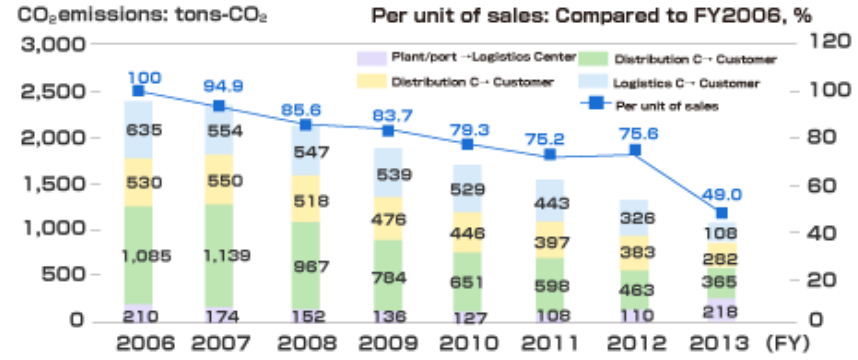
*Trends in CO_2 emissions from energy sources (electrical power, fuel, etc.) used at production sites outside Japan.

CO_2 emissions (office sites outside Japan)

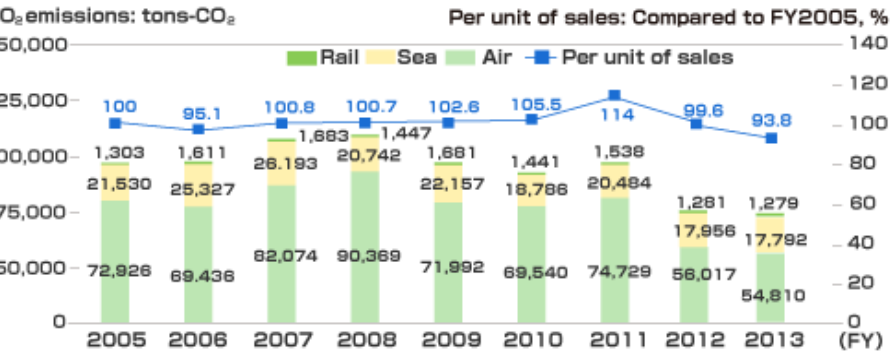


*Trends in CO_2 emissions from energy sources (electrical power, fuel, etc.) used at office sites outside Japan.

CO_2 emissions and emissions per unit of sales for logistics in Japan



CO_2 emissions and emissions per unit of sales for logistics outside Japan

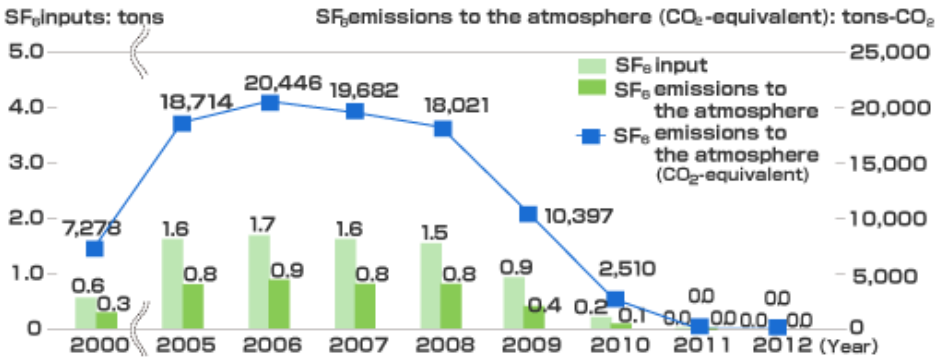


Greenhouse gases other than CO_2

Reduction of greenhouse gases other than CO_2

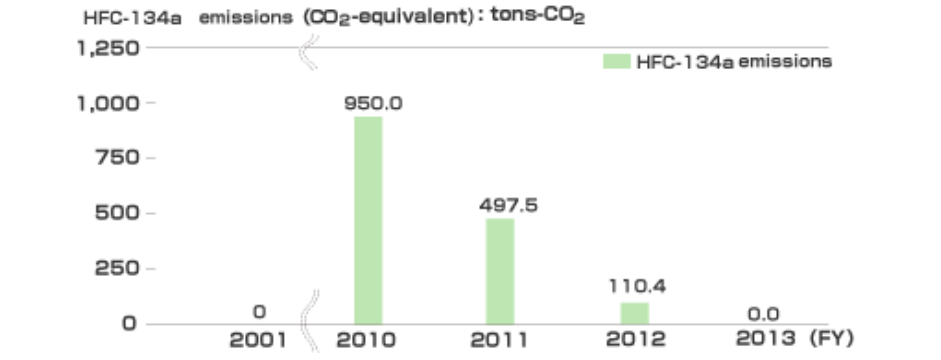
The target for reduction of greenhouse gas emissions other than CO_2 is at least a 90% reduction compared to fiscal 2001 by fiscal 2013. Usage of SF_6 was reduced substantially due to the sale of the device business in which SF_6 was used in the past. Casio has also been promoting a switch to alternative HFC-free spray products for the remaining HFCs (contained in dust blower sprays used in product repairs), already achieving the target in fiscal 2012.
Consequently, starting in fiscal 2014 Casio will transition to maintenance management, which includes confirmation of amount of usage for each specific period without setting a new target.

SF_6 gas usage and emissions to atmosphere (Japan production sites)



*Years shown in this graph are calendar years, to match industry action targets.
*The input and emissions of SF_6 were zero in 2011.

HFC emissions



*During fiscal 2013, changes were made to the amount of spray products used in fiscal 2012 at some office sites in Japan, and the amount of HFC emissions for fiscal 2012 has been revised.

Waste

Reducing waste

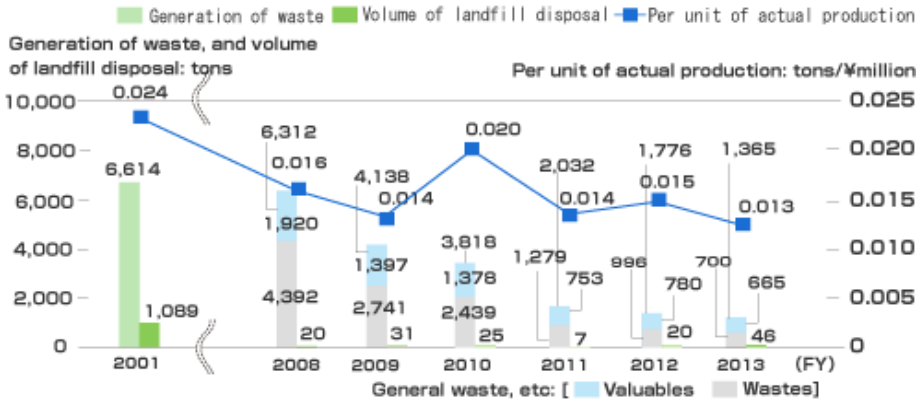
「Sites in Japan」

The target for reducing waste from sites in Japan was a 50% reduction in waste per unit of actual production in fiscal 2013 compared to fiscal 2001. In fiscal 2013, waste was 46.3% lower than in fiscal 2001, which fell slightly short of the 50% target.
Starting in fiscal 2014, Casio will transition to management of total volume, which will not be affected by production volume.

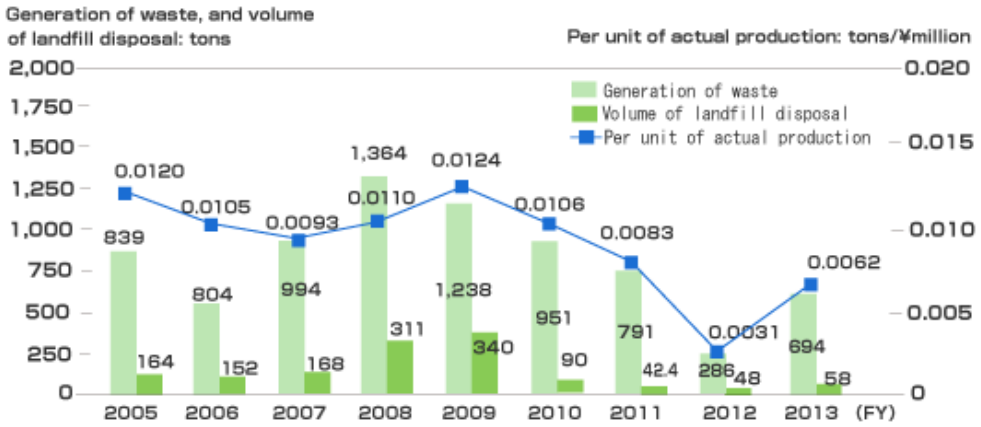
「Production sites outside Japan」

The target for reducing waste from sites outside Japan was a 30% reduction in waste per unit of production compared to fiscal 2005. In fiscal 2013, waste was 48.0% lower than in fiscal 2005, meeting the target.
Starting in fiscal 2014, Casio will transition to management of total volume, which will not be affected by production volume.

Generation of waste, volume of landfill disposal, and waste per unit of actual production (all sites in Japan)



Generation of waste, volume of landfill disposal, and waste per unit of production (production sites outside Japan)



Water resources

Reducing input of water resources

「Production sites in Japan」

The target for production sites in Japan was a 25% reduction in water resource input per unit of actual production in fiscal 2013 compared to fiscal 2001. In fiscal 2013, water input per unit of actual production was 93.0% lower than in fiscal 2001, meeting the target. The reasons for this significant reduction were, as with the reduction in CO_2 emissions at production sites in Japan, the sale of production subsidiaries in the device business and liquidation of companies.

Starting in fiscal 2014, Casio will establish a new target for total usage.

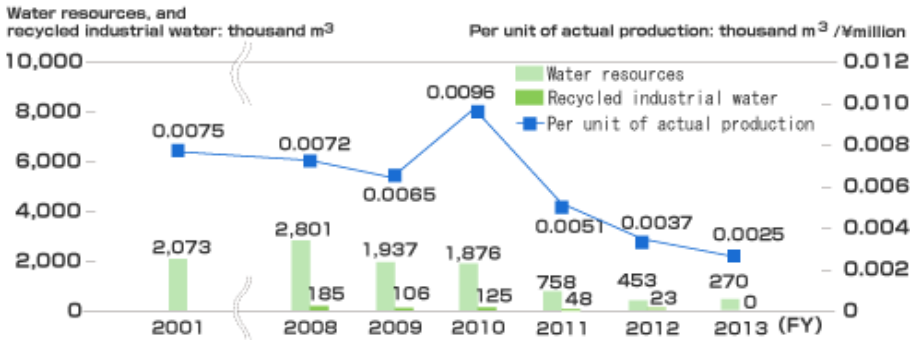
「Production sites outside Japan」

The target for production sites outside of Japan was a 15% reduction in water resource input per unit of production in fiscal 2013 compared to fiscal 2005.

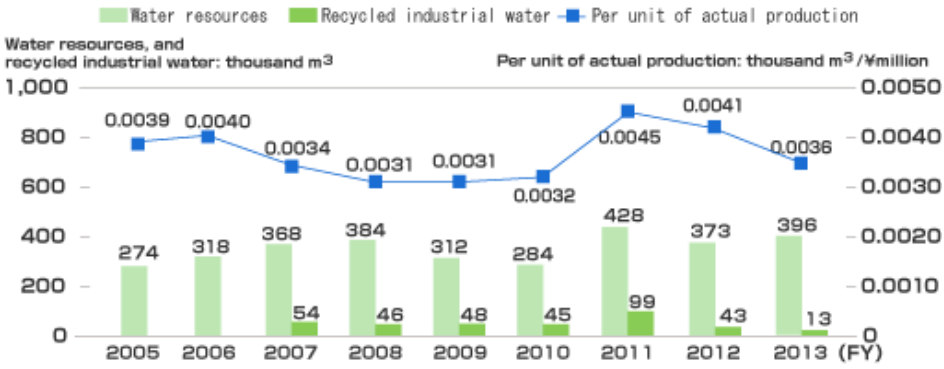
The result was an 8.7% reduction compared to fiscal 2005, which did not meet the 15% target.

Starting in fiscal 2014, Casio will establish a new target for total usage and strive to make reductions through such means as reviewing production processes.

Usage of water resources and recycled industrial water, and input per unit of actual production (Japan production sites)



Usage of water resources and recycled industrial water, and usage per unit of production (production sites outside Japan)



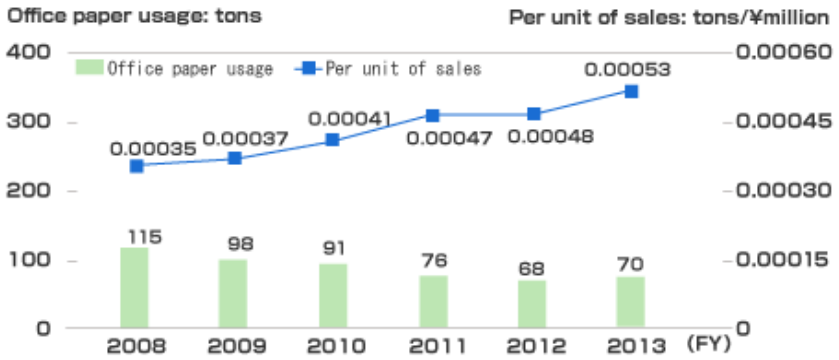
Paper resources

Reducing usage of paper resources

The reduction target for the usage of office paper at sites in Japan was a 10% reduction compared to fiscal 2008 by fiscal 2013, per unit of sales.

The result for fiscal 2013 was 51.8% higher than in fiscal 2008, failing to meet the target. The reasons for the increase were that reductions in paper usage have plateaued and sales were sluggish. Starting in fiscal 2014, Casio will establish a new target for total usage, which will not be affected by sales.

Office paper usage (all sites in Japan)



PRTR

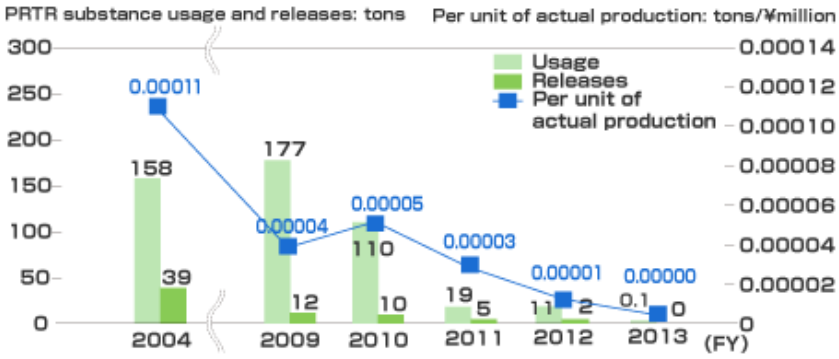
Reducing PRTR substances

The target for reduction of usage and releases of substances specified by Japan's PRTR Act was a 40% reduction per unit of actual production compared to fiscal 2004, by fiscal 2013.

The result for fiscal 2013 was 100% lower than fiscal 2004, meeting the target.

The reason for achievement of the target was that the main sources of emissions no longer existed due to the liquidation of production subsidiaries that used to release PRTR substances. Consequently, starting in fiscal 2014 Casio will transition to maintenance management, which includes confirmation of amount of usage for each specific period without setting a new target.

PRTR substance usage, releases, and releases per unit of actual production (Japan production sites)

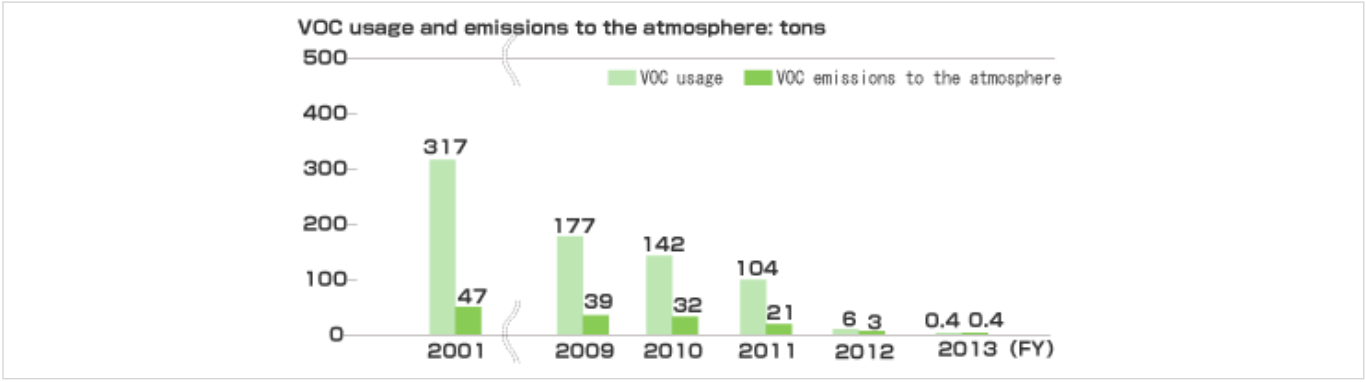


VOC, NOx, SOx, dust

Reducing VOCs

The target for reducing atmospheric emissions of volatile organic compounds (VOCs) from production sites in Japan was a reduction of 45% compared to fiscal 2001, by fiscal 2016. The result for fiscal 2013 was 99.1% lower than in fiscal 2001, meeting the target. The reason for achievement of the target was that the main sources of emissions no longer existed due to the liquidation of production subsidiaries that used to release VOCs. Consequently, starting in fiscal 2014 Casio will transition to maintenance management, which includes confirmation of amount of usage for each specific period without setting a new target.

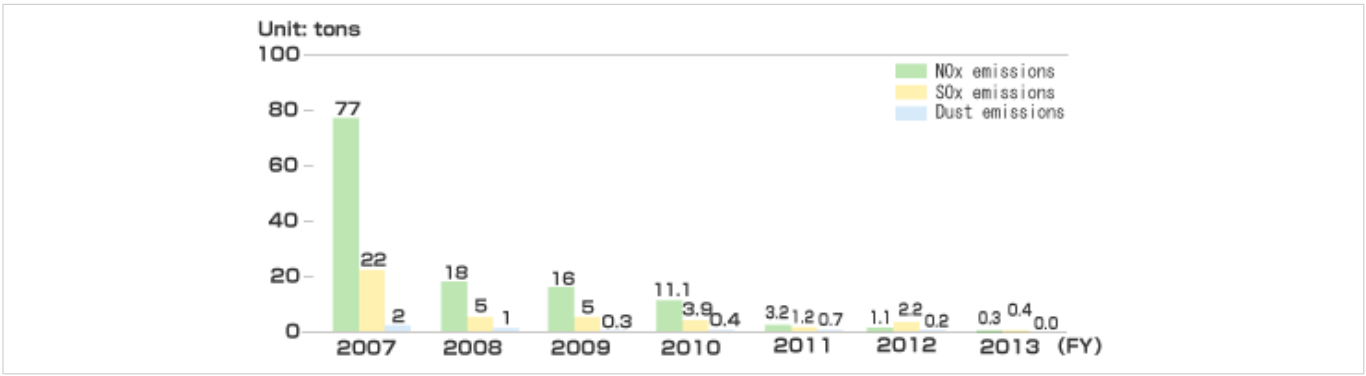
VOC usage and emissions to atmosphere (Japan production sites)



Reducing Nox, SOx, Dust

Casio's atmospheric emissions of nitrogen oxides (NOx), sulfur oxides (SOx) and dust in the peak year of FY2006 were 138 tons, 37 tons, and 2 tons, respectively. Emissions in FY2013 were dramatically lower, at 0.3 tons, 0.4 tons, and 0.0 tons, respectively. The reason for these significant reductions was the transfer of a company out of the Casio Group, and its removal from the scope of computation, along with a decrease in production activities following a business closure. By adjusting settings and practicing indoor temperature management, Casio also intends to continue reducing emissions of atmospheric pollution generated by air conditioning equipment such as hot and chilled water generators.

NOx, SOx and dust emissions to atmosphere (Japan production sites)



Scope of Data

Environmental performance data was compiled using results from the following Casio sites for FY2013 (April 1, 2012 to March 31, 2013).

Production sites in Japan	Yamagata Casio Co., Ltd.	Casio Electronic Manufacturing Co., Ltd.
	Yamagata Casio Co., Ltd. (Yamanashi)	
Office sites in Japan	Casio Computer Co., Ltd. (Headquarters)	Casio Computer Co., Ltd. (Hamura R&D Center)
	Casio Computer Co., Ltd. (Hachioji R&D Center)	Casio Computer Co., Ltd. (Kudan sales office)
	Casio Computer Co., Ltd. (Osaka sales office)	Casio Computer Co., Ltd. (Sendai sales office)
	Casio Computer Co., Ltd. (Saitama sales office)	Casio Computer Co., Ltd. (Nagoya sales office)
	Casio Computer Co., Ltd. (Hiroshima sales office)	Casio Computer Co., Ltd. (Fukuoka sales office)
	Casio Business Service Co., Ltd. (Headquarters)	Casio Business Service Co., Ltd. (Fuji)
	Casio Business Service Co., Ltd. (Fujinomiya)	Casio Business Service Co., Ltd. (Kofu)
	Casio Information Systems Co., Ltd. (Headquarters)	Casio Techno Co., Ltd. (Headquarters)
	Casio Communication Brains, Inc.	Casio Human Systems Co., Ltd. (Headquarters)
	CXD Next Co., Ltd.	Casio Marketing Advance Co., Ltd.
	Casio Information Service Co., Ltd.	
Production sites outside Japan	Casio (Hong Kong) Ltd. (Panyu Factory)	Casio (Hong Kong) Ltd.
	Casio Electronic Technology (Zhongshan) Co., Ltd.	Casio (Thailand) Co., Ltd.
Office sites outside Japan	Casio Taiwan Co., Ltd.	Casio Electronics (Shenzhen) Co., Ltd.
	Casio (Guangzhou) Co., Ltd.	Casio Soft (Shanghai) Co., Ltd.
	Casio America, Inc.	Casio Canada Ltd.
	Casio Europe GmbH	Casio Electronics Co., Ltd.
	Casio France S.A.	Casio India Co., Pvt. Ltd.
	Casio Singapore Pte., Ltd.	Casio Espana S.L.
	Casio (Shanghai) Co., Ltd.	Casio Mexico Marketing, S. de R. L. de C.V.
	Guangzhou Casio Techno Co., Ltd.	Casio Benelux B.V.
	Casio Scandinavia AS	Casio Brasil Comercio De Produtos Eletronicos Ltda.
	Casio Italia S.r.l.	

Calculation Standards

1. Input
    1. Energy input amount
        - Includes fuel (gasoline and diesel) for company vehicles
    2. Crude oil equivalent
        - Calculated in accordance with the Law Concerning the Rational Use of Energy
    3. Input of greenhouse gases other than SF_6
        - Applicable gases are HFCs in sprays such as dust blowers and quenching agents, and the total spray quantities were used as the gas input amounts.
    4. VOC input amount
        - Applicable VOCs are amounts from sites that use over 50 kg annually.
    5. Paper usage amount
        - Applies to paper used for page printers, fax machines, and copiers.
    6. Plastic material usage amount
        - Applies to re-input of material on plastic molding lines at group companies.

2. Outputs
    1. CO_2emissions
        - The CO_2 conversion factors for electricity used to calculate output amounts are as follows.
          For emissions in Japan, Casio used an emission coefficient of 0.00035 (t-CO_2/kwh), as announced by the Federation of Electric Power Companies to reflect an adjustment for depreciation credit. This coefficient was also adopted by the Japan Business Federation in its voluntary action plan.
          For emissions outside Japan, the “emissions factor adjusted for the CO_2 emissions from CHP (combined heat and power) generated electricity” was used. It is taken from the latest year value (2003 estimate) in the Japan Electrical Manufacturers’ Association (JEMA) estimate survey (June 2006).
    2. Other greenhouse gas emissions
        - These were calculated in accordance with Japan’s Act on Promotion of Global Warming Countermeasures
    3. Waste
        - Recycling amount is calculated as the amount of material consigned to consignees for intermediate processing plus the amount of material consigned to consignees for thermal recycling
        - Results related to waste for sales sites calculated by applying independent estimates with reference to manifest tickets, etc.
    4. Base year values
        - The base year values are established by aggregating results for all business sites in existence at the time of the base year without making revisions for sales of businesses and so on.
    5. Method for calculating average values for amount of CO_2 emissions
       For production sites in Japan, the average value for amount of CO_2 emissions is calculated as a simple average per unit of actual production for each of the five years between fiscal 2009 and fiscal 2013. For office sites in Japan, the average amount of CO_2 emissions is calculated as a simple average of the amount of emissions for each of the five years between fiscal 2009 and fiscal 2013.