

# Environmental Report



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# Environmental Executive Message

## Increasing Corporate Value by Integrating Environmental and Business Activities

### Addressing Global Environmental Issues with a Medium- to Long-term Perspective

Under the Casio Environmental Vision 2050, a long-term environmental management policy with a target year of 2050, Casio has identified three material environmental goals—realizing a low carbon society, building a recycling society, and living in harmony with nature—through which it is aiming to contribute to a sustainable global society. Under this long-term vision, we have also established medium-term goals for fiscal 2031 and are carrying out environmental activities based on annual action goals.

Recently, the international community has been accelerating environmental measures as transnational global issues. The year 2015 witnessed several epoch-making events: adoption of the Sustainable Development Goals (SDGs) at the United Nations and a consensus on the Paris Agreement, which seeks to keep a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels. In response, international initiatives such as Science Based Targets (SBTs) for setting corporate goals in line with the Paris Agreement's target of 2 degrees Celsius and Renewable Energy 100% (RE100) for running business operations on 100% renewable energy are attracting more and more attention. Even in Japan, which got a late start, the winds are shifting, and the number of companies committing to these initiatives is increasing rapidly.

The public today expects for companies to incorporate environmental initiatives into their business operations while keeping a close watch on global trends. At present, Casio is exploring how to link each of its businesses with the SDGs. Our three material environmental goals—realizing a low carbon society, building a recycling society, and living in harmony with nature—are closely related to SDGs 6, 7, 12, 13, 14, and 15: namely, clean water and sanitation, affordable and clean energy, responsible consumption and production, climate action, life below water, and life on land, respectively. These will be important keys for us to take into account in our future business planning.



Makoto Kobayashi

Executive Officer  
General Manager  
Sustainability Promotion Department

Moreover, in February 2017, we revised our goal for the reduction of greenhouse gas emissions, which requires an ultra-long-term perspective. Our new and higher goal is an 80% emissions reduction by fiscal 2051, compared with fiscal 2014. We also adjusted our medium-term goal. Aligning with the Japanese government's goal adopted in response to the Paris Agreement, our new goal is a 26% emissions reduction by fiscal 2031, compared with fiscal 2014. This is an extremely challenging goal. To achieve it, Casio is reviewing all of its businesses on a company-wide basis and is working hard to strengthen environmental measures. I am confident that Casio—which has a long track-record of “creating something from nothing”—will leverage creativity to contribute to the environment with original initiatives, and that this will, in turn, also drive up Casio's corporate value.

## **Pursuing Three Material Environmental Goals Company-Wide**

In order to pursue its three material environmental goals in a company-wide framework, Casio has reformed its environmental management system (EMS) and has been operating under the new system since April 2017. During that time, we integrated the individual ISO 14001 certifications for three main sites—Hatsudai Headquarters, Hamura R&D Center, and Hachioji R&D Center—and acquired certification under the latest 2015 revised standards. We also established three committees tied to each of our three material environmental goals and are strengthening our initiatives from a macro perspective that drives shared goals and objectives company-wide and across departments.

For our goal of realizing a low carbon society, we conducted energy-saving assessments of business sites, in order to get an accurate understanding of our greenhouse gas emissions from the manufacturing and distribution processes and tie that into formulation of a reduction roadmap. In Japan, among our three main sites, buildings and equipment are aging, especially at the Hamura R&D Center, which opened in 1979. There are big issues with energy efficiency for the Center as a whole. It needs to be rebuilt, and so we are now examining how to incorporate environmental measures into a new facility.

While our long-term goal of an 80% emissions reduction by fiscal 2051, compared with fiscal 2014, includes making reductions in scope 1 and scope 2 (activities at production sites and offices in and outside Japan) emissions, in fact approximately 80% of emissions due to our business are scope 3 emissions (resulting from activities in the supply chain, including suppliers' manufacturing sites). How we face up to this challenge will be a major key to our future success.

It is also vital that we reduce energy used by products. We will continue to focus on developing energy-saving products, which we have done for a long time. Meanwhile, we will turn our attention to greenhouse gas emissions that can be reduced by using Casio' products. For example, in March 2018, Casio started selling a 2.5D printing system, which is able to recreate fine irregularities and hues of materials such as wood, cloth, stone, and metal on special sheets without making a die. Making various kinds of design prototyping drastically more efficient will likely contribute to a reduction in energy consumption in the manufacturing process. Going forward, we will redefine our contribution through products and technologies, taking this new way of thinking into account.

For our goal of building a recycling society, we have continued to develop environmentally friendly products in every aspect of planning and design, in order to minimize the environmental impact of our products. Casio Green Star Products and Casio Super Green Star Products, which have met certain standards, accounted for 69% of our total sales in fiscal 2018. Going forward, we will keep working aggressively on new development in this area.

In goal setting, on the other hand, the two classifications of “recycling through products” and “recycling at plants/sites” are ill defined and, in terms of products, initiatives follow convention. This has shed light on the issue of ambiguity in progress management. We must therefore reconsider our KPIs based on a proper understanding of the present condition.

As for our goal of living in harmony with nature, in fiscal 2018, we completed biodiversity surveys at each of our business sites based on our Biodiversity Guidelines. At present, we are exploring the possibility of linking our projects in this area with marketing and sales based on the analysis of the surveys. Casio has demonstrated a presence as a brand that makes outdoor activities more fulfilling, such as with our outdoor watches. We will keep seeking ways to help people live in harmony with nature by making distinctively Casio contributions.

We have also continued to work at expanding utilization of FSC®-certified paper in our product catalogues and packaging. While the switchover in the use rate has moved ahead to the point that 65% of the paper in our product catalogues for the Japanese market is FSC® certified, it is not enough to just have “using FSC®-certified paper” as the goal. It is important to deepen awareness that using paper based on Casio’s Paper Procurement Policy leads to protection of forest resources and conservation of biodiversity and to then tie that into enhancement of our corporate value and disseminate that message appropriately in and outside the company.

## **Future Issues Brought to Light by Our New EMS System**

After the initial year of efforts under our new EMS system, my sense is that we have laid out a course for achieving our medium-term goals in fiscal 2031 and realizing the Casio Environmental Vision 2050. Then again, issues have emerged in some areas, such as where we are not producing the envisioned performance. One issue is the difficulty of changing the conventional system, which involved department-based initiatives, as we move to the new committee system. While establishing the three committees gave us a viewpoint for thinking about company-wide environmental activities along the axis of material goals, the committees are still very much lacking the organizational power to strongly lead each department. We plan to address this by establishing a setup that enables the committees to exercise leadership.

Additionally, it has been three years since we identified our material goals, and now changes in the external environment have revealed aspects where the goals themselves do not exactly fit the current situation. For example, although we set the goal of realizing a low carbon society, the world is already moving beyond “low carbon” to “decarbonization.” We recognize that we must scrutinize the validity of our material goals and establish measures that allow us to implement our EMS at a higher level based on revised goals and KPIs.

We also understand how important it is to think about impact throughout the supply chain. Due to its business characteristics, Casio has never had sites or business processes with extremely large environmental impacts. Given that fact, if we are to keep reducing greenhouse gas emissions, increasing recycling, and conserving biodiversity, cooperating with the suppliers that provide products to Casio is critical. In the past, we have given Responsible Business Alliance (formerly EICC) questionnaires to our primary suppliers to foster CSR procurement, but the question now is how to influence those suppliers based on a grasp of the current situation.

In my view, what is needed to obtain the understanding of diverse suppliers and ensure we share the same goals is not to cast the significance of initiatives as a “request from Casio,” but rather to make the appeal that they are “unsurprising demands within the broad framework of society.” Even in reducing greenhouse gas emissions, it is crucial to clearly establish the point that it is obvious that today’s global current demands this. We want suppliers to work on that issue together with us as a matter of course.

Toward that end, we must first of all demonstrate Casio’s commitment to environmental friendliness. Committing to international initiatives like RE100 and SBTs should be powerful expressions of our determination to promote company-wide efforts. We will fully participate in these initiatives on the way to a more strategic environmental contribution under global standards.

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## Pursuing Further Evolution in Our Environmental Management

In recent years, I have sensed the rising interest in environmental friendliness even in dialogues with institutional investors. Then again, we are often asked regarding Casio's various measures, "How is what you are doing any different from mere risk management?" I realize that it is not enough for individual initiatives to just prevent risks that could occur if those initiatives were not taken and that what we are being asked to do is to create positive value that is distinctive of Casio.

I also recognize that we need to articulate, not only for the world outside the company but also for members of the company, how environmental contributions are tied to Casio's corporate value, and to promote understanding of their significance. It is essential to tell the story in terms of daily business activities so that all employees can embrace these matters as their own concern and take action.

The SDGs set out as common goals by the international community express Casio's aims, laid on top of global currents, and they will hopefully be of great use in aligning awareness throughout the company. At present, we are identifying what kinds of opportunities and risks for Casio's sustainable growth will be caused by social issues related to the SDGs. We will finish that first, and then attempt to coordinate the SDGs with our business. The protagonists of our initiatives are none other than each and every employee, and we will examine systems to encourage behavioral transformation tied to the SDGs and our material goals.

In the company-wide organizational reforms we made in April 2018, we changed the name of the CSR Promotion Division, which had led our environmental activities thus far, to the Sustainability Promotion Division, and merged it with the Governance Department, which had been in the General Affairs Division, and the Human Resources Division. As the ESG Headquarters, these organizations will make use of environmental, social, and governance (ESG) factors in their role of strategically enhancing Casio's corporate value.

Under the new organization, we will organize and analyze the progress of and issues with our past initiatives and further increase our capacity to respond to global challenges. Going forward, we will maximize the functions of our EMS across the entire company to advance our environmental management in steady pursuit of the Casio Environmental Vision 2050.

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# Environmental Management

## Casio Environmental Vision 2050

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In 2012, Casio established the Casio Environmental Vision 2050, a long-term environmental management policy with a target year of 2050.

At the same time, the company also formulated the Casio Environmental Declaration 2020, its medium-term action guideline, but this was discontinued when the medium- and long-term target for greenhouse gases was revised in 2017.

Casio's determination to become a leading environmental company is demonstrated by its commitment to visionary global initiatives to help build a more sustainable world, driven by the Casio Environmental Vision 2050.

### Casio Environmental Vision 2050

With a target year of 2050, the Casio Group will create and implement its own visionary initiatives to promote the sustainable use of energy and resources and facilitate the healthy coexistence of all living things, the planet's greatest assets.

Casio's aim is to become a leading environmental company that contributes not only to a sound and sustainable global environment but also to the spiritual richness of people's lives. Casio's unique way of achieving this is by creating new value and lifestyle possibilities that give rise to markets and cultural phenomena never seen before.

To become a leading environmental company, Casio will apply its spirit of going from "0" to "1," or creating "something" from "nothing," to develop unique environmental initiatives and create products and services that make the most of its innovative ideas and leading technologies, focusing in particular on the following areas:

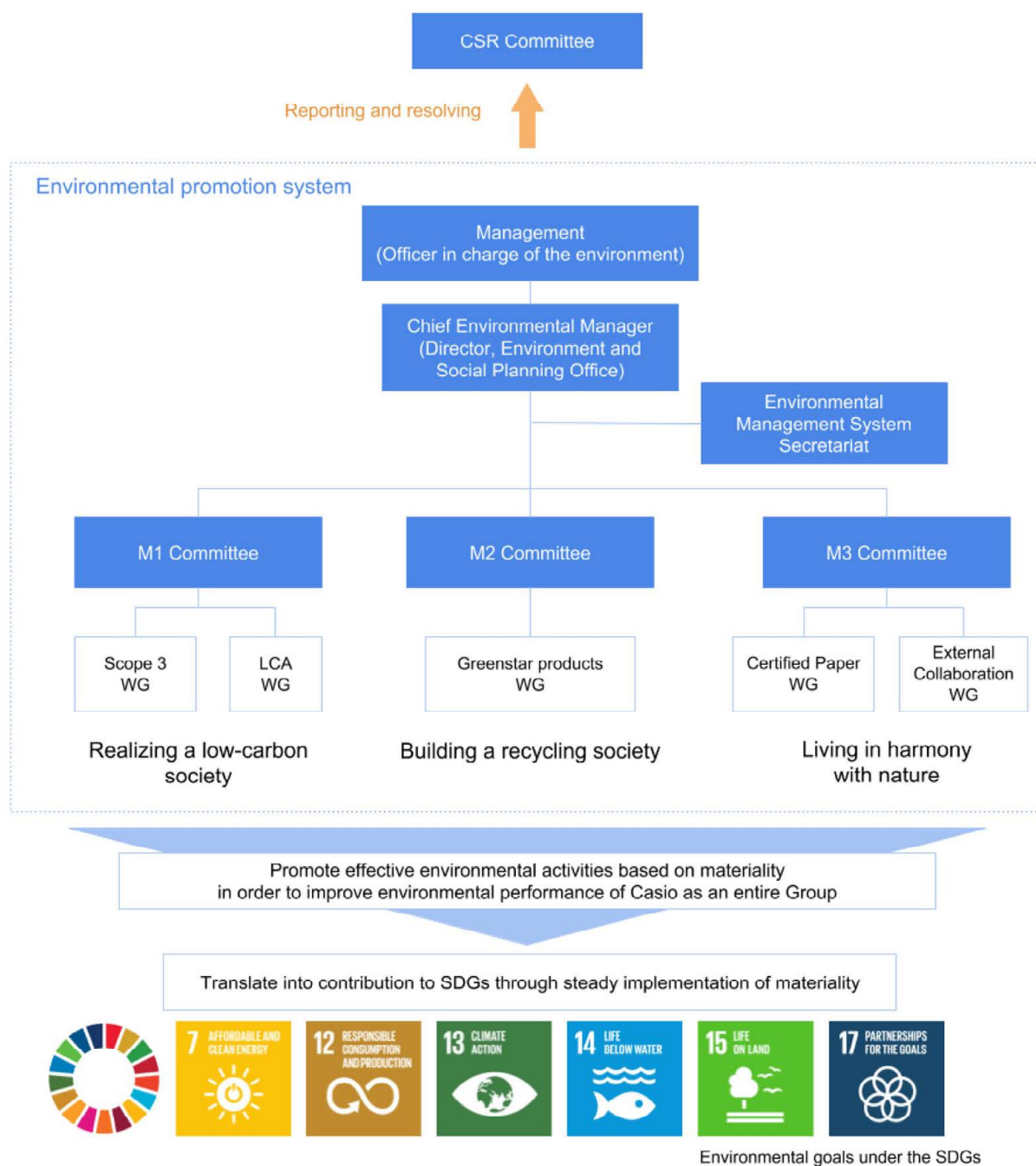
- Realizing a low-carbon society
- Building a recycling society
- Living in harmony with nature

## Implementation System

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In 2016, Casio started to integrate its environmental management system into a group-wide system. First, the three main sites at headquarters, the Hamura R&D Center, and the Hachioji R&D Center of Casio Computer Co., Ltd. were integrated under ISO 14001: 2015 certification. In addition, the company established committees to handle the three areas of environmental material goals and set up working groups underneath them. The system was changed to a materiality-based, top-down structure rather than the previous structure, which was based on individual departments and bottom-up. Casio will continue to manage environmental activities effectively as an entire Group using ISO 14001.

In the new system, there is a concern that variations will appear between departments in the level of involvement in and awareness of the environmental management system. This is why Casio has clarified the relationship between "committee activities" and "the core business of departments." Casio will continue working to improve the environmental performance of the entire Group while remaining aware of issues related to implementing a Group-wide environmental management system.



## List of ISO 14001 Certified Sites

Certified and registered site	Date acquired	Remarks
Yamagata Casio Co., Ltd.	November 1997	
Casio Business Service Co., Ltd.	January 2000	Compliance with 2015 certification
Hamura R&D Center, Casio Computer Co., Ltd.	December 2000 ( Registered name: Casio Computer Co., Ltd. )	In April 2017, Casio integrated ISO 14001 certifications for these 3 sites
Hachioji R&D Center, Casio Computer Co., Ltd.		
Headquarters, Casio Computer Co., Ltd. (including seven sales sites)		
Casio Human Systems Co., Ltd.	December 2001	Compliance with 2015 certification
Casio Techno Co., Ltd.	May 2002	
Casio Computer (Hong Kong) Ltd.	December 1999	Compliance with 2015 certification
Casio (Thailand) Co., Ltd.	July 2012	Compliance with 2015 certification
Casio Taiwan Co., Ltd.	December 2001	
Casio Electronics (Shenzhen) Co., Ltd.	February 2002	Compliance with 2015 certification
Casio Electronic Technology (Zhongshan) Co., Ltd.	April 2002	
Casio Electronics (Shaoguan) Co., LTD.	January 2018	Compliance with 2015 certification

\*The percentage of Group employees at sites with ISO certification has reached 87.4%.

## Environmental Education

Casio provides employees with environmental education in order to promote environmental activities smoothly. In addition to general education to raise awareness and promote understanding of the environment, each committee and working group identifies the competencies required for each activity at the beginning of the fiscal year and provides specific education in accordance with an annual plan for those who need to upgrade their competency following an evaluation of the competency of each committee member.

# Environmental Action Plan (Targets and Performance)

Under its Environmental Vision 2050, Casio has established Environmental Action Plan targets from a global perspective, and is carrying out environmental activities accordingly. Here are the targets and performance for fiscal 2018, along with the targets for fiscal 2019 based on the current results.

Evaluation ◎: All targets met, ○: Most targets met, △: Remaining issues outweigh results, ×: No progress made

Theme	Medium and Long-term Targets	FY2018 Targets and KPI	FY2018 Performance	Evaluation	FY2019 Targets
Realizing a low-carbon society	Long-term target: To reduce the total volume of the Casio Group's greenhouse gas emissions (scope 1 and 2) by 80% compared to FY2014 by FY2051	Reduce the FY2018 CO <sub>2</sub> emissions for the entire Casio Group by 8.25% compared with FY2014	Achieved a 6.0% reduction	△	Reduce the FY2018 CO <sub>2</sub> emissions for the entire Casio Group by 7.95% compared with FY2014
	Medium-term target: To reduce the total volume of the Casio Group's greenhouse gas emissions (scope 1 and 2) by 26% compared to FY2014 by FY2031	Implement energy conservation diagnosis at major sites in Japan to clarify the energy savings potential, then create an energy reduction roadmap	Conducted energy conservation diagnosis at major sites in Japan and clarified the energy savings potential at the sites concerned, but an energy reduction roadmap has not yet been created	△	Create scenarios to reduce CO <sub>2</sub> emissions and achieve medium and long-term targets
Building a recycling society	To increase the percentage of sales accounted for by Green Star products to 90% by FY2026	Maintain the Casio Green Star product sales ratio at 60% or more	Casio Green Star Product sales ratio: 69%	◎	Maintain the Casio Green Star product sales ratio at 70% or more
		Promote the development of new Casio Super Green Star Products	No new certified models in FY2018 (35 certified models to date)	△	* Without performing target management, continue to promote the development of Casio Super Green Star products

	Archive 100% recycling rate for business site waste by fiscal 2031	To investigate the actual status of recycling	Investigated the actual status at five sites in the South China region Casio Computer (Hong Kong) Ltd. Casio Electronics (Shenzhen) Co., Ltd. Casio Electronic Technology (Zhongshan) Co., Casio Timepiece (Dongguan) Co., Ltd. Casio Electronics (Shaoguan) Co., LTD.	○	Achieve a recycling rate for business site waste of at least 92%
Living in harmony with nature	To increase the use of sustainable paper to 100% by FY2031	Ensure that 40% of product catalog paper used in Japan is FSC® certified paper	Ratio of certified paper in catalogs in FY2018: 65%	◎	Ensure that 65% of product catalog paper used in Japan is FSC® certified paper  Develop scenarios for achieving medium-term targets relating to usage ratios for sustainable paper
		-	The Hamura R&D Center formed a team of employee volunteers to carry out observation and conservation activities for endangered species such as Golden Orchid and Silver Orchid that are native to Japan	○	* Without using target management, continue the employee volunteer activities
Water resources	-	Japan production sites: Use no more than 56,000m3 of water in FY2018	42,000 m3	◎	Use no more than 500,00m3 of water
		Production sites outside Japan: Use no more than 421,000m3 of water in FY2018	371,000 m3	◎	

# Realizing a Low-Carbon Society

## Approach

### Social Background

Recent times have seen the emergence of global scale problems, including global population growth and an increase in average temperatures around the world. In 2015, the United Nations Sustainable Development Goals (SDGs) and the COP21 Paris Agreement were adopted as stepping stones in solving these problems.

Companies exist in a social context, so it is vital that they face these issues resolutely and take specific steps to help solve them, not only for the present but also to ensure a sustainable life for future generations.

This is why Casio has made “realizing a low-carbon society” one of its material issues and will continue to work to achieve this goal.



### Risks and Opportunities for the Casio Group

As a result of the March 2011 Great East Japan Earthquake and the ensuing accident at the Fukushima nuclear power station, virtually all nuclear power stations across Japan have suspended operations. Japan is faced with such risks as rising electricity tariffs and power shortages in summer and winter. Moreover, the greenhouse gas emission coefficient for electricity has risen as a result of the decline in the utilization of nuclear power generation, resulting in an increase in real CO<sub>2</sub> emissions, which is a challenge when it comes to realizing a low-carbon society. This translates into greater risk of incurring emissions trading costs under the Ordinance on Environmental Preservation to Secure the Health and Safety of the Tokyo Metropolitan Area (Environmental Preservation Ordinance). Also in 2011, there was major flooding in Thailand, which may be partially attributable to global warming and upstream deforestation. Consequently, global risks have become apparent including threats to the value chain for production and parts.

In order to avoid these risks, Casio plans to expand the introduction of renewable energy, and secure alternatives in the value chain.

On the other hand, the greenhouse gas reduction effect at time of product usage offered by Casio products which promote paperless lifestyles, such as data projectors and electronic dictionaries, has been identified as a significant opportunity to address climate change over the product life cycle. Casio will work to further expand its business in these products.

In order to minimize the various risks mentioned above, and expand opportunities, Casio must contribute to the sustainability of the planet and its human societies. Casio recognizes that this is an extremely important issue for further strengthening its business foundation, and will make even more strenuous efforts in the fight against climate change.

## Policy

Casio has set medium and long-term targets for achievement by 2030 and 2050. Casio will put the highest priority on realizing a low-carbon society.

The Casio Group will provide products and services that make an even greater contribution to the reduction and absorption of CO<sub>2</sub> emissions. In addition to expanding products and services that use energy sources that are friendly to people and the planet, including solar, wind, and hydro power, Casio will incorporate these renewable energy sources into its own business operations.

Moreover, the committee working on the material issue of realizing a low carbon society will implement an energy conservation diagnosis at the company's main business sites to identify the potential for CO<sub>2</sub> reductions and formulate a roadmap aimed at carbon reduction as well as share the roadmap with every relevant department to promote all possible measures.

## Management Approach

### Environmental Action Plans and Performance

Evaluation ◎: All targets met, ○: Most targets met, △: Remaining issues outweigh results, ×: No progress made

Medium and long-term targets	FY2018 Target	FY2018 Performance	Evaluation	FY2019 Targets and KPI
Long-term target: Reduce the FY2051 CO <sub>2</sub> emissions (Scope1 and 2) for the entire Casio Group by 80% compared with FY2014	Reduce the FY2018 CO <sub>2</sub> emissions (Scope 1 and 2) for the entire Casio Group by 8.25% compared with FY2014	Achieved a 6.0% reduction	△	Reduce the FY2019 CO <sub>2</sub> emissions (Scope 1 and 2) for the entire Casio Group by 7.95% compared with FY2014
Medium-term target: Reduce the FY2031 CO <sub>2</sub> emissions (Scope1 and 2) for the entire Casio Group by 26% compared with FY2014				

## Activity Results

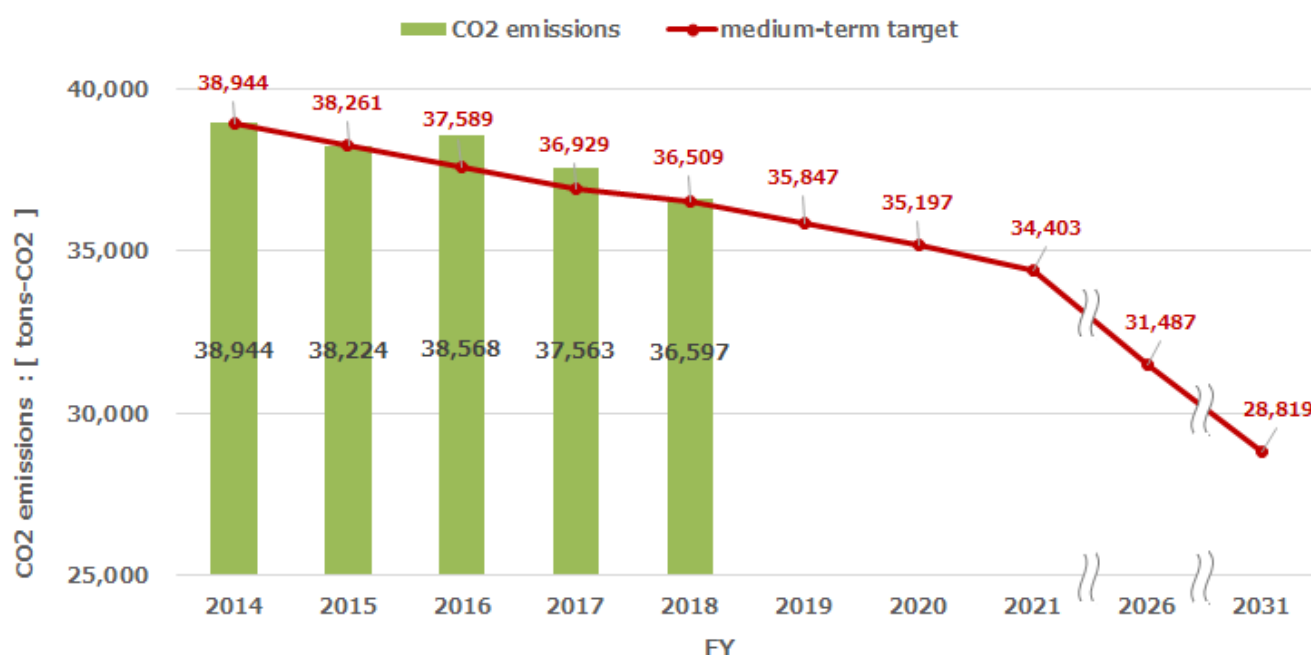
In fiscal 2018, Casio reconsidered its medium- and long-term reduction targets for Scope 1 and 2 greenhouse gas emissions.

In conjunction with this, the company brought the following sites that were not included in the scope of calculations at the time of base year into line with the GHG Protocol and added each of their past GHG emissions to each fiscal year since the base year.

- Casio Electronics (Shaoguan) (a production site purchased from another company in fiscal 2017)
- Small-scale sales office in Japan (not included in scope of calculations up to fiscal 2017, but included in scope from fiscal 2018)

The targets established at the beginning of fiscal 2018 were not achieved, which is partly attributable to the recalculation of base-year greenhouse gas emissions. Compared with the medium-term reduction targets for each fiscal year based on the recalculated base-year emissions, the fiscal 2018 results were close to the medium-term reduction targets. Going forward, Casio will continue to formulate and implement reduction scenarios aimed at achieving the 2030 targets while examining cost effectiveness based on more objective analysis of reduction potential and making the appropriate investment decisions.

### Changes in greenhouse gas emissions (Scope 1 and Scope 2)



(t-CO<sub>2</sub>)

FY		2014 (Base year)	2015	2016	2017	2018	2019	2020	2021	2026	2031
CO <sub>2</sub> emissions		38,944	38,224	38,568	37,563	36,597	-	-	-	-	-
medium-term target	CO <sub>2</sub> emissions	-	38,261	37,589	36,929	36,509	35,847	35,197	34,403	31,487	28,819
	Reduction rate	-	1.76%	3.48%	5.17%	6.25%	7.95%	9.62%	11.66%	19.15%	26.00%

➤ [CO<sub>2</sub> Emissions throughout the Entire Value Chain](#)

## Life Cycle Assessment

In the past, Casio implemented unscheduled life cycle assessment (LCA) for products, but there was no systematic framework for conducting LCA for newly developed products.

In fiscal 2018, Casio brought together members of development departments, distribution departments, IT departments and others for each product to establish an in-house LCA Working Group and commenced studies in order to implement constant product LCA. In the initial fiscal year, the CO<sub>2</sub> impact of the component and material stage in representative models for each item were calculated using the intensity in IDEA version.2.

- Watches: 2.86kg-CO<sub>2</sub>
- Musical instruments: 20.3kg-CO<sub>2</sub>
- Projectors: 12kg-CO<sub>2</sub>
- Digital cameras: 13.4kg-CO<sub>2</sub>
- Electronic dictionaries: 11.1kg-CO<sub>2</sub>

Going forward, Casio will identify issues and formulate a roadmap for the constant implementation of LCAs with the aim of building a system that can perform LCAs for 100% of new models by fiscal 2026.

# Realizing a Low-Carbon Society

## Business Sites Initiatives

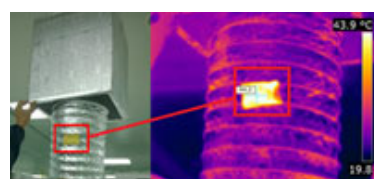
### Initiatives at Casio (Thailand) Co., Ltd.

#### Using insulation to reduce energy use

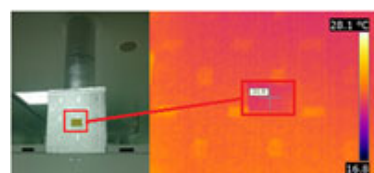
The company reduced the air-conditioning cooling load by installing insulation around the exhaust ports of the reflow system and dryer to block heat conduction. This reduced energy use by 4,651 Kwh per year.



Reflow systems insulation



Before installation  
(surface temperature 44.2°C)



After installation  
(surface temperature 21.9°C)

Surface temperature decreased from 44.2°C to 21.9°C.

## Introducing buses to reduce CO<sub>2</sub> emissions

The company has 40 buses that it provides for employees to use for their daily commute. Around 2,000 employees use these commuting buses. This measure accounts for an annual reduction of CO<sub>2</sub> emissions of 1,567 tons.

Item		Consumption rate (km/L) <sup>*1</sup>	Distance (km) <sup>*2</sup>	Emission coefficient (kg-CO <sub>2</sub> /L) <sup>*3</sup>	Amount <sup>*4</sup>	Days/year	GHG emission (kg-CO <sub>2</sub> /year)	Special notes
Before introduction	Motor cycle (gasoline)	50	60	2.32166	1600 people	268	1,194,633	
	Car (gasoline)	14,763	60	2.32166	400 people	268	1,011,510	
	Total						2,206,143	
After introduction	Bus (diesel)	2.6	60	2.58496	40 units	268	639,479	
Total							1,566,664	Reduction

<sup>\*1</sup> Value published by the Ministry of Science and Technology of the Kingdom of Thailand

<sup>\*2</sup> Employees' average commuting distance (round trip)

<sup>\*3</sup> Based on the Casio Group's calculation standard (emission coefficient from Japan's Act on Promotion of Global Warming Countermeasures)

<sup>\*4</sup> The number of people before introduction was calculated as 80% of all employees commuting by motorcycle and 20% commuting by car.



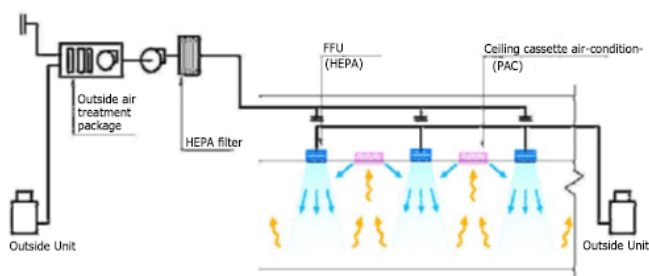
Commuting buses at Casio (Thailand)

## Initiatives at Yamagata Casio Co., Ltd.

### Introducing the latest energy-saving air-conditioning systems

A new watch plant that started operations in May 2018 uses the latest energy-saving air-conditioning systems, such as an air-conditioning system with several air-conditioners with FFUs<sup>\*1</sup> and ceiling cassettes, zoning and separate air-conditioning for clean rooms. These systems enable efficient operation according to the production situation.

<sup>\*1</sup> FFU: Fan-filter unit. A system that passes air sucked in by the fan through a filter to purify it before sending it out as clean air.



Air-conditioning system at Yamagata Casio



Clean room with latest air-conditioning system

## Initiatives at Casio America

Casio America has been carrying out energy-saving measures for many years.

In 2017, it won an ENERGY STAR Award from the U.S. Environmental Protection Agency (EPA).

The award recognized Casio America's efforts to ascertain data on and efficiently manage electricity usage at its data center, and its initiatives to use a building management system to more effectively use cooling and heating. This ENERGY STAR Award was the fourth the company has received, following 2012, 2013 and 2016. Going forward, it will continue to carry out environmentally friendly initiatives to help achieve a sustainable society.



Casio America, Inc.



ENERGY STAR plaque

## Initiatives at Hachioji R&D Center

The Hachioji R&D Center has installed automatic blinds and grows a green wall of vegetation at its facility to reduce CO<sub>2</sub> emissions. The automatic blinds calculate the location of the sun, use sensors to detect the strength of the sunlight, and open and close automatically, thereby reducing the cooling and heating load. Since 2012, the Center has also grown a green wall of vegetation as a summertime energy-saving measure in an effort to reduce the cooling load even more. Through a process of trial and error to balance watering, fertilization, and sunlight, in the summer of 2017, the green wall (planted with two kinds of morning glories) grew splendidly to a size of 8.5 meters wide by 10 meters tall. Local residents even stopped by to take photos of it. This initiative to grow a green wall of vegetation won the first place award out of 36 entries in the “organization grouping” in the “green wall of vegetation category” in the “energy-saving contest” of the Environmental Lecture Presentation and Energy-Saving Contest, which was an event held in December 2017 to commemorate the 100th anniversary of the incorporation of Hachioji as a city.



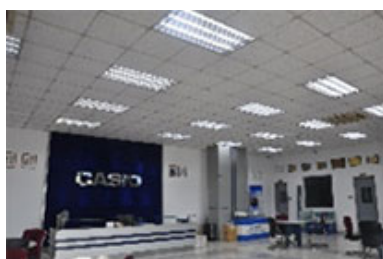
Green wall of vegetation at the Hachioji R&D Center



Award certificate and first place gift

## Installation of LED Lighting

Casio is installing LED lighting at its business sites to reduce electricity consumption. By March 2018, it had installed LED lighting at the Hatsudai Head Office, Hamura R&D Center, Hachioji R&D Center, Yamagata Casio, Casio Electronics (Shenzhen) Co., Ltd., Casio (Thailand) Co., Ltd., Casio America, Inc., Casio Mexico Marketing, S. de R. L. de C.V., and Casio Electronics (Shaoguan) Co., Ltd., and other sites. The installed LED lighting has brought about substantial CO<sub>2</sub> emissions reductions.



LED lighting in Casio Electronics (Shenzhen)'s lobby



LED lighting in Casio (Thailand)'s plant

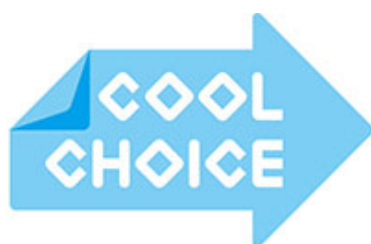


LED lighting in Yamagata Casio's plant

## Participation in Light Down Campaign

Casio supports COOL CHOICE, a national movement promoted by the Japanese government, and the Fun to Share climate change campaign implemented by the Ministry of the Environment. The Group has also been taking part in the Light Down campaign since fiscal 2011.

In fiscal 2019, nine sites at four companies (Casio Computer Co., Ltd. [headquarters, Hamura R&D Center, Hachioji R&D Center, Fukuoka Sales Office, and Higashi-fussa Dormitory], Yamagata Casio [headquarters and Yamanashi Office], Casio Electronics Manufacturing and Casio Techno [Akihabara and Inadaira]) took part in the campaign.



## Reducing Power Consumption through Server Integration

Casio has vastly reduced its energy consumption by integrating the servers that had once been disparately located across the group.

Server integration results: A total of 1,200 servers had been integrated by March 2018.

Effects of reducing power consumption through server integration : A total reduction in power consumption of 1,800,000 kWh, yielding a reduction in CO<sub>2</sub> emissions of 992 tons.

	Through Mar.2017	Apr. 2017 - Mar. 2018	Cumulative total
Number of servers integrated (machines)	1,140	60	1,200
Power consumption reduction (kWh) <sup>*1</sup>	1,710,000	90,000	1,800,000
CO <sub>2</sub> reduction (tons -CO <sub>2</sub> ) <sup>*2</sup>	942.2	49.6	991.8
Number of Japanese cedar trees needed to absorb this amount <sup>*3</sup>	67,301	3,542	70,843

<sup>\*1</sup> Calculated based on a 1,500 kWh reduction per server per year.

<sup>\*2</sup> Calculated based on CO<sub>2</sub> emissions of 0.551kg kg/kWh.

Figures for past fiscal years have been recalculated using the GHG Protocol Calculation Tools.

<sup>\*3</sup> Based on a document published by the Forest Agency of Japan's Ministry of the Environment, "Absorption Source Countermeasures for Greenery to Prevent Global Warming," indicating that a single Japanese cedar tree absorbs about 14 kg of CO<sub>2</sub> annually.

# Realizing a Low-Carbon Society

## Logistics process initiatives

Casio is actively reducing its environmental impact by striving to reduce CO<sub>2</sub> and waste emissions arising from logistics. In order to reduce CO<sub>2</sub> emissions in the logistics process, Casio is promoting the following three action plans.

- *Shortening transport distances* : Promoting direct shipping to customers from logistics centers in and outside Japan
- *Promoting a modal shift* : Actively using modes of transport with low environmental impact such as rail for transport between sites
- *Improving loading efficiency and reducing transport volume* : Improving the packaging design of electronic dictionaries, musical instruments electronic cash registers, and other products, and reducing the volume of packaging

### Relocation and Consolidation of Logistics Centers in Japan

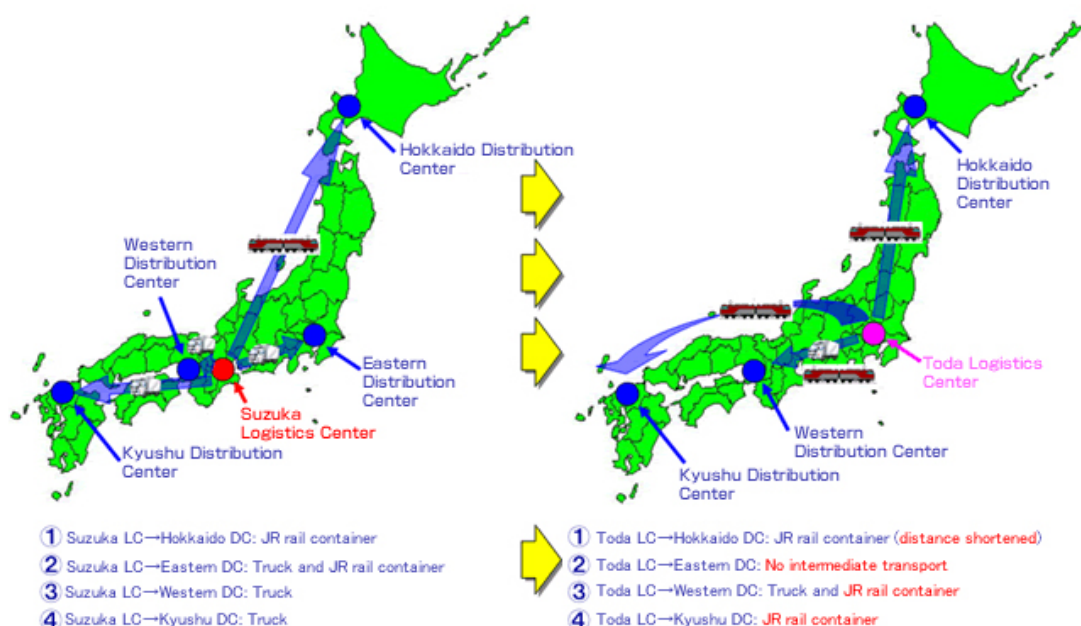
Casio's logistics center in Mie Prefecture was moved to Saitama Prefecture, and then its distribution center in Tokyo was ultimately consolidated with the logistics center, a transition that was achieved in stages.

In August 2011, the logistics center was moved from Suzuka City, Mie Prefecture, to Toda City, Saitama Prefecture. Then in January 2012, the company's Eastern Distribution Center in Koto-ku, Tokyo, was consolidated with the logistics center.

With this change, Casio reduced the number of consumer product distribution sites in Japan from five to four. This transition not only shortened transport distances, but also promoted a significant shift from truck to rail shipment, and has contributed greatly to CO<sub>2</sub> emissions reduction.

### Promoting Modal Shift and Reducing Intermediate Transport

#### ◎ Promoting Modal Shift and Reducing Intermediate Transport



## Results of the Transfer and Consolidation

### 1. Elimination of intermediate transport

Shortened the distance from the logistics center to the Hokkaido Distribution Center in Sapporo

Intermediate transport no longer required from the logistics center to the Eastern Distribution Center in Tokyo

### 2. Promotion of modal shift

Partial shift to rail between the logistics center and the Western Distribution Center in Osaka

Switch to rail between the logistics center and the Kyushu Distribution Center in Fukuoka

### 3. Transport distance shortened

Shortened the transport distance in the Kanto (Tokyo) region which accounts for about 46% of direct shipments from the logistics center (delivery direct to customers without going through a distribution center)

\* As a result of the efforts above, annual CO<sub>2</sub> emissions were reduced by about 216 tons.

In fiscal 2013, Casio began an initiative to send products manufactured outside Japan 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.

## Introduction of reusable shipping cartons in Asian distribution

Introduction of reusable shipping cartons in Asian distribution

In an effort to switch to plastic reusable shipping cartons in its air freight shipments between Japan, Hong Kong, and Thailand, Casio launched the use of new cartons in September 2009.

These cartons can be used to ship parts made in Japan to Hong Kong for use at Chinese production sites, and to ship timepiece parts from vendors in China, from Hong Kong to Thailand. By then transporting finished timepieces or timepiece parts from Thailand to Japan, the cartons never have to travel empty between the three countries.

Unlike traditional cardboard boxes, these cartons do not have to be discarded, and instead can be used many times over, thereby reducing environmental impact.



A reusable shipping carton employed for distribution in Asia

Casio has now begun to introduce even larger shipping cartons. The large shipping cartons are mainly used for ocean transport. Packaging damage can be avoided through the use of LCL shipping (freight from different companies in one ocean shipping container), which also eliminates the need to use air transport when the shipping volume is small. Casio has been using these large shipping cartons to ship products since fiscal 2012, and in fiscal 2014 new shipping cartons with even greater strength were added to the lineup of shipping supplies.



Shipping carton receives Chairman of Japan External Trade Organization (JETRO) Award

On October 4, 2012, the large shipping carton shown here received the Chairman of Japan External Trade Organization (JETRO) Award at the Japan Packaging Contest 2012, one of Japan's biggest packaging competitions, which is organized by Japan Packaging Institute.

## Four products obtain Eco Rail Mark certification

On February 28, 2013, Casio obtained Eco Rail Mark certification from the Railway Freight Association for four products: clocks, digital pianos, electronic keyboards and electronic cash registers.

The Eco Rail Mark indicates that a product or company is proactively addressing global environmental issues by using rail freight transport. Rail transport produces about one sixth of the CO<sub>2</sub> emissions of commercial trucking, making it an environmentally friendly method of transport with a low environmental impact.

The criteria for certification are utilization of rail for at least 30% of land freight transport for distances of 500km or more for a product, and utilization of rail for at least 15% of land freight transport for distances of 500km or more for a company.

Casio obtained Eco Rail Mark certification as a company in October 2009 and successfully obtained product certification as a result of further expanding rail transport due to the relocation, amalgamation and closure of business sites.

Casio now actively uses rail for transport from its logistics center in Saitama Prefecture to distribution centers in Hokkaido, Osaka and Fukuoka. Going forward, Casio will make active efforts to reduce environmental impact by pursuing environmentally friendly transport.



Eco Rail Mark



Promoting a modal shift to rail transport



Environmentally friendly rail containers

# Building a Recycling Society

## Approach

### Social Background

Rapid economic growth brings with it problems such as the depletion of natural resources, the destruction of nature due to extraction of resources, and pressure on landfill sites for waste and pollution around them, accompanying the increase in resources consumed. In this situation, the 3Rs (Reduce and Reuse waste and Recycle resources) have become increasingly important in order to utilize the world's finite resources effectively. Moreover, efforts from a life-cycle perspective must go beyond the range of a single company's business activities to include suppliers and users.



### Risks and Opportunities for the Casio Group

When the depletion of resources becomes more serious, the cost of raw materials increases, and there are concerns that this will have a major impact on production. Moreover, as a manufacturer, it is essential to develop eco products that help to build a sustainable world, and the expectations and demands of customers are also increasing. In this situation, delays in the development of eco products could lead to the loss of support from and selection by customers. Waste produced in business activities could also cause environmental pollution due to landfill disposal and other issues.

In order to prepare for these risks, Casio will improve product design, including the selection of materials and development of new structures that are easy to recycle during product development. This is expected to translate into cost reductions by helping to create new technologies and increasing resource efficiency. Furthermore, Casio will aim to achieve zero landfill for the waste produced by its business activities.

### Policy

Casio aims to help build a recycling-oriented society and is pursuing conservation of resources and resource recycling throughout the entire value chain.

In product initiatives, the company creates eco products by focusing on environmental performance from the development and design stage through recycling after use. These eco products are compact, lightweight, have a long life, and feature a recyclable design. Products that meet Casio's own standards are certified as Casio Green Star Products and Casio Super Green Star Products.

Casio strives to reduce waste and improve the recycling rate at each business site, aiming for zero landfill disposal.

## Management Approach

### Environmental Action Plans and Performance

Evaluation ◎: All targets met, ○: Most targets met, △: Remaining issues outweigh results, ×: No progress made

Medium and long-term targets	FY2018 Target	FY2018 Performance	Evaluation	FY2019 Targets and KPI
Increase Casio Green Star product sales ratio to 90% by fiscal 2026	Maintain the Casio Green Star product sales ratio at 60% or more	Casio Green Star Product sales ratio: 69%	◎	Maintain the Casio Green Star product sales ratio at 70% or more
	Promote the development of new Casio Super Green Star Products	No new certified models in FY2018 (35 certified models to date)	△	— * Without performing target management, continue to promote the development of Casio Super Green Star products
Achieve 100% recycling rate for business site waste by fiscal 2031	Investigate actual status of recycling processing	Investigate actual status at 5 sites in south China region • Casio Computer (Hong Kong), Casio Electronics (Shenzhen), Casio Electronic Technology (Zhongshan), Casio Timepiece (Dongguan), Casio Electronics (Shaoguan)	○	Achieve a recycling rate for business site waste of at least 92%

# Building a Recycling Society

## Developing Eco-products (Casio Green Star Products)

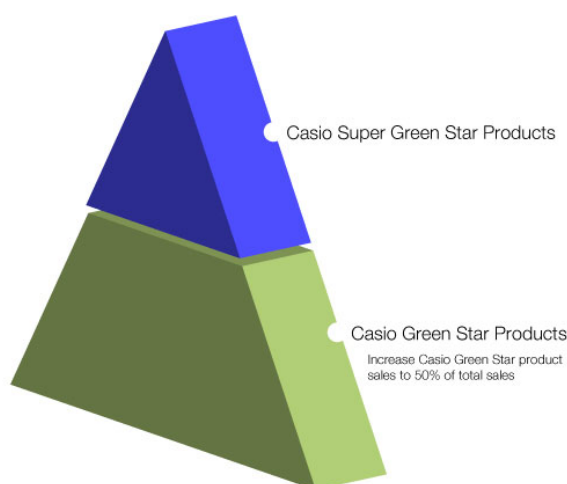
In order to minimize the environmental impact of its products, Casio is promoting the development of environmentally friendly products in every aspect of planning and design.

In 1993, Casio began product assessment in order to systematize and promote its development of eco products. New products had to undergo a preliminary assessment for their environmental impact and meet certain criteria in order to be certified as Casio Green Products. Casio has been working to increase the ratio to total sales of these products.

Since fiscal 2010, Casio has offered products that achieved outstanding evaluations under more rigorous assessments of environmental performance as Casio Green Star Products.

Then, in fiscal 2017, the Group established and started offering Casio Super Green Star Products, which have even greater environmental performance.

### Assessment categories of Casio Green Star Products and Casio Super Green Star Products



#### Assessment criteria for products

Product environmental assessment
1.Promotes recycling
2.Designed for recycling
3.Components of products can be separated,disassembled
4.Improved recycling
5.Improved energy efficiency
6.Regulated use of chemical substances
7.Recyclability of batteries
8.Recycling label on batteries
9.Regulatory compliance
10.Components of packaging can be separated, disassembled
11.Regulated use of packaging materials
12.Preserves the natural environment

\*80 points or more, out of a total 100 points possible

Assessment criteria for Casio Green Star Product
1.Improved energy efficiency G
2. Effective utilization of resources G
3.Contains no specific hazardous chemical substances
4.LCA environmental assessment G
5.Special criterion G

\*Fulfill one of the above criteria

Assessment criteria for Casio Super Green Star Product
1.Improved energy efficiency S
2. Effective utilization of resources S
3.LCA environmental assessment S
4.Special criterion S

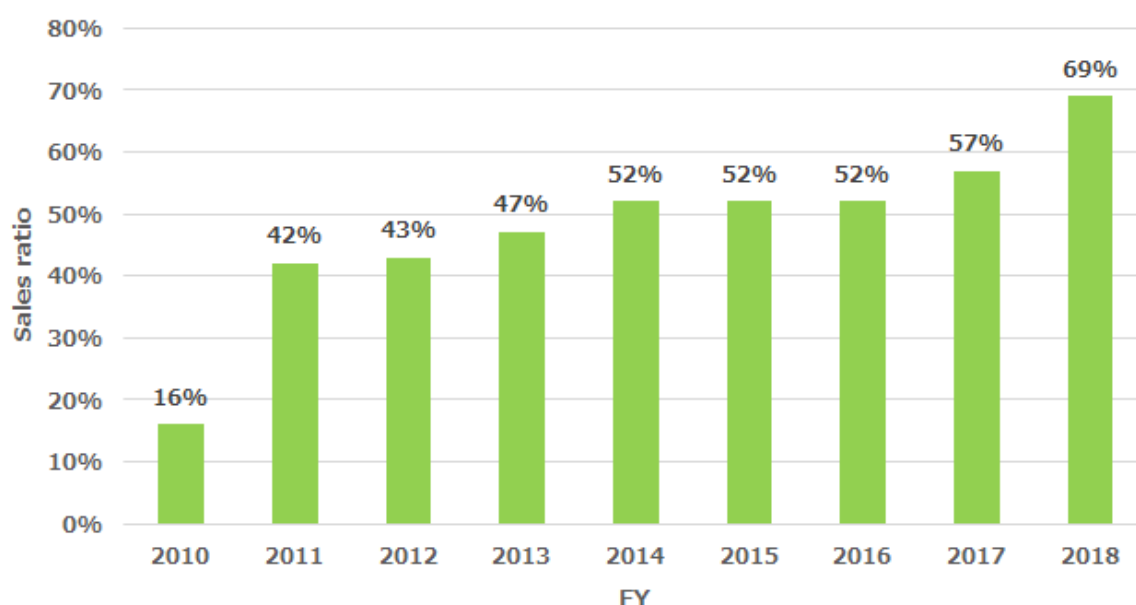
\*Fulfill one of the above criteria

## Casio Green Star Product Sales Ratio

Casio has set targets for the Green Star Product sales ratio and has worked to achieve them. In fiscal 2017, Casio established a medium-term target to “increase the Casio Green Star product sales ratio to 70% of total sales by fiscal 2021.” However, the result for fiscal 2018 was 69%, and it was expected that the company would be able to achieve the target ahead of schedule. Therefore, Casio established a new medium-term target to “increase the Casio Green Star product sales ratio to 90% by fiscal 2026” in order to set an even higher target.

Casio will also continue to increase certification of Casio Super Green Star Products, which it established in fiscal 2017 as the ranking for the highest standard of its eco products.

### Casio Green Products and Casio Green Star Products



## Casio Super Green Star Products

So far, 35 product models have been certified as Casio Super Green Star Products. Some of the certified products (product series) are featured here.

**Calculator \*Contains at least 70% recycled plastic (percentage of gross weight of plastic)**



SL-760ECO, SL-760GT



SL-305ECO, SL-300AECO



JF-120ECO



DF-120ECO



DS-2DB

Projector \*Light flux of at least 12 lm/w



XJ-F10X, F100W, F20XN, XJ-F210WN



XJ-UT351W, UT351WN



XJ-V1, XJ-V10X, V100W, V110W

## Casio Green Star Products



See the product lineups that were certified as Casio Green Star Products (photos show product examples).

This mark shows that a product was developed based on the Green Star concept.

### Calculator JS-20WK-N



#### Environmental Features

- Solar battery powered
- Contains at least 40% recycled plastic (gross weight ratio of plastic)

### Electronic dictionary XD-Z4800



#### Environmental Features

- Transport efficiency increased by 102% by reduced packaging (compared to Casio's XD-SP6600)

### Scientific Calculator FX-JP900



#### Environmental Features

- Solar battery powered
- Transport efficiency increased by 34% by reduced packaging (compared to Casio's FX-375ES)

### Label printer KL-V460



#### Environmental Features

- Energy consumption during use reduced by 28% (compared to Casio's KL-V450)

### Data projector XJ-F210WN



#### *Environmental Features*

- We do not use a mercury light source

### Electronic musical instrument GP-500



#### *Environmental Features*

- Energy consumption during use reduced by 24% (compared to Casio's AP-500)

### Watch OCW-S4000C/SHW-5000LTD



#### *Environmental Features*

- Solar battery powered

### Handheld terminal IT-G50



#### *Environmental Features*

- Energy consumption during use reduced by 24%
- Transport efficiency increased by 53% by reduced packaging (compared to Casio's DT-5300)

### Smart Outdoor Watch WSD-F20



#### *Environmental Features*

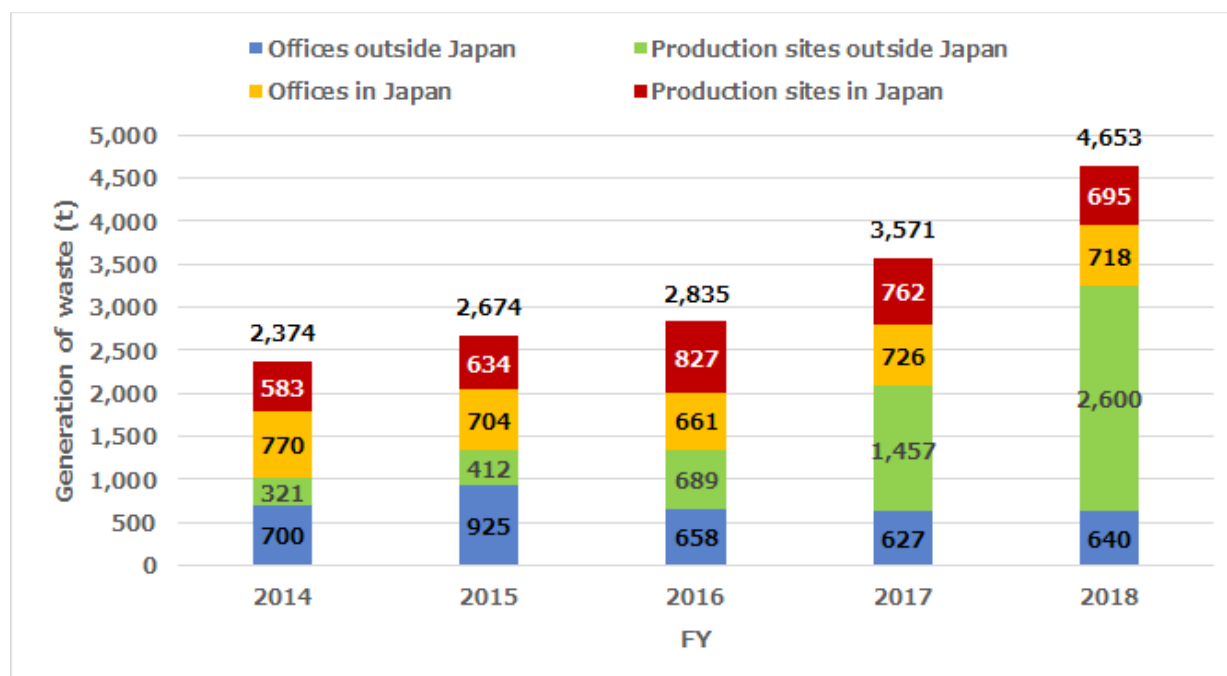
- Saves energy by using two LCDs for different purposes

# Building a Recycling Society

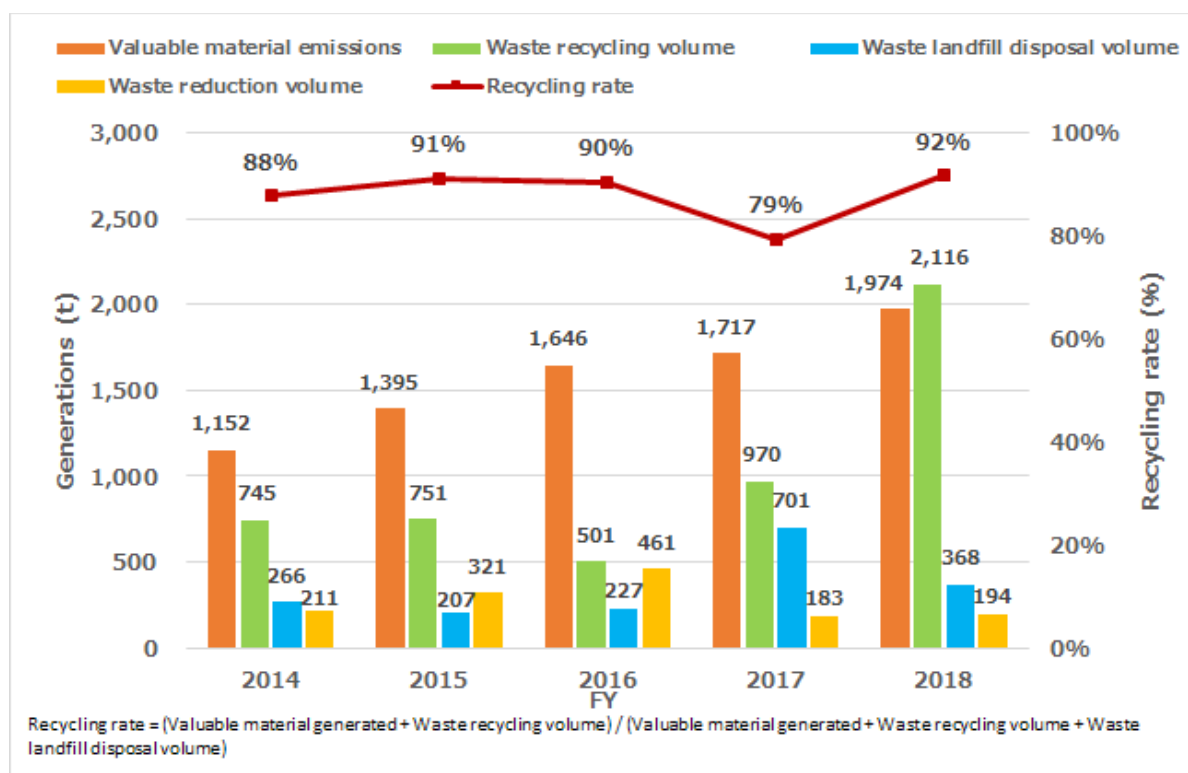
## Reducing and Recycling Waste

Casio is working to reduce and recycle the waste generated in its business activities. Generation of waste, etc. (total of waste and valuable material) has been on the rise since fiscal 2017, but the main reason for this is the increasing number of production sites outside Japan. In addition, Casio has set a target recycling rate of 100%, aiming for zero landfill disposal. However, as the company's understanding about the status of waste disposal at each site was inadequate, Casio investigated the actual status at overseas production sites in fiscal 2018. Going forward, Casio will focus on reducing waste at overseas production sites and strengthen its initiatives to increase the recycling rate.

### Generation of waste



## Disposal breakdown and recycling rate for generation of waste, etc.



# Building a Recycling Society

## Collection and Recycling

This section describes Casio's initiatives in the area of product collection and recycling.

### Product recycling efforts

The collection of used products includes activities that are performed to comply with relevant laws, and activities that are performed by companies voluntarily. This section introduces Casio's voluntary used-product recycling activities.

#### Recycling with No Waste Disposal

Casio is recovering and dismantling used tape cartridges and ink ribbon cassettes, and utilizing the materials to make the same products again. Casio actively requests the cooperation of product users in this effort.



### Product Recycling in Europe

European recycling regulations include the Waste Electrical and Electronic Equipment (WEEE) Directive, the Battery Directive and the Packaging Directive.

These regulations provide a framework under which manufacturers collect and recycle end-of-life products and are obliged to bear the costs of doing so.

Casio fulfills its obligations by participating in collection and recycling organizations with government authorization.

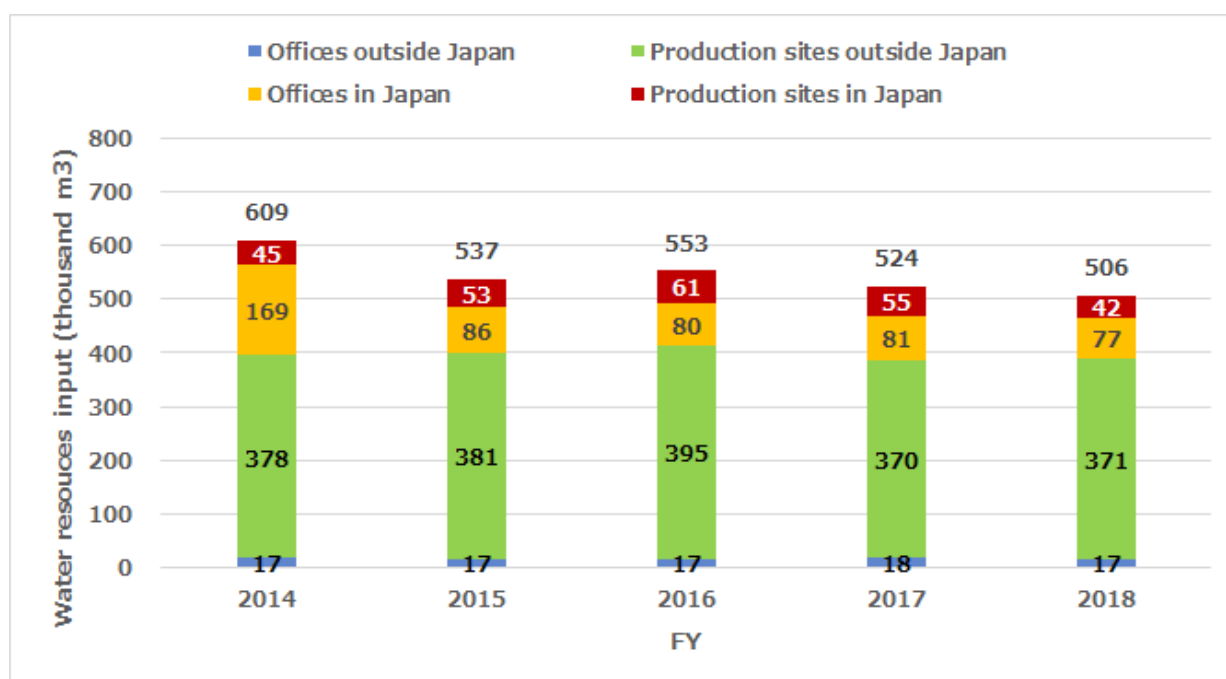
# Building a Recycling Society

## Reducing water usage

Casio has set and managed absolute volume goals for water usage. Based on the characteristics of Casio's business, the majority of water usage in its business activities is used by employees, with water usage for production activities limited to such things as washing a few components.

For this reason, minimization of water usage at the main sites that have continued to operate an environmental management system for many years has advanced to a certain level. Casio has therefore reached the situation where there are big fluctuations only in years with circumstances that differ from usual business activities, such as the discontinuation or new establishment of sites. Casio will work to reduce water usage by managing targets for water usage at production sites.

### Changes in input of water resources



# Living in Harmony with Nature

## Approach

### Social Background

As set out in SDGs 14 and 15, “living in harmony with nature” is a shared global issue. Realizing a sustainable society requires corporations to implement initiatives through their core business, regardless of the impact of their business activities. Casio has positioned “living in harmony with nature” as one of its material issues, and the company will promote not only initiatives of its own but also working through the value chain and in collaboration with stakeholders, such as NGOs, NPOs, and governments, while raising the awareness of employees.



### Risks and Opportunities for the Casio Group

Operations in Casio product manufacturing processes mainly consist of assembly, so the company’s business has little direct impact on biodiversity. Nevertheless, complacency creates a risk of being inadvertently complicit in the negative impact on biodiversity through the production activities of component suppliers or negative impact from the use and disposal of Casio products by users. As a result, circumstances may arise in which suppliers face social criticism, making procurement of components difficult, and causing the company to be shunned by consumers. In conducting business activities, it is important to consider the entire value chain, including the impact that suppliers have on the environment and environmental impact at the time of product use and disposal.

Meanwhile, Casio has introduced numerous products that make activities in nature more enriching, such as outdoor watches. Increasing the social momentum for biodiversity preservation and protecting and restoring nature has the potential to increase the population of nature-lovers and expand sales. Moreover, collaboration with NGOs and NPOs aimed at solving social issues and contributing through the company’s core business by providing collaboration product models has the potential simultaneously to achieve preservation of biodiversity and enhance customer acquisition.

## Policy

Casio formulated the Casio Group Biodiversity Guidelines in March 2011. Subsequently, the company established the Paper Procurement Policy in June 2015 as a response to indirect impact at suppliers.

### Casio Group Biodiversity Guidelines

#### Basic Policy

The Casio Group recognizes that its existence and business activities depend on the benefits afforded by biodiversity, and that these activities also have an impact on biodiversity. Casio emphasizes biodiversity preservation activities as well as efforts to fight climate change. By including biodiversity preservation in environmental management and creating a system for implementation, the Casio Group is working to build a more sustainable world.

#### Specific Initiatives

##### *1. Business Activities:*

Casio will help to build a more sustainable world by creating and providing products and services that encourage consumers to care more about the environment. This will be done by learning from nature and developing technologies that utilize this wisdom.

- Facilitating a paperless society
- Contributing to resource saving by developing original technology
- Developing products with care for nature

##### *2. Impact Assessment:*

Casio will survey and analyze its impact on biodiversity through activities including R&D, design, procurement, manufacturing, logistics, sales, product use, disposal, and recycling, and at its office and plant locations. It will establish improvement measures and implement them starting with areas of highest environmental impact and benefit.

- Actively taking initiatives for proper procurement of parts (leather, wood, paper, etc.) and materials (mineral resources, etc.) that depend on ecosystem services.
- Conducting questionnaire surveys across the supply chain in order to check ecosystem protection efforts for parts and materials that make up products.
- Establishing impact assessment methods (checklists and indices) for the Casio Group

##### *3. Information Disclosure:*

Casio will strive to improve social awareness of biodiversity, by actively disclosing the results of its environmental activities.

##### *4. Community Involvement:*

Casio will actively support activities that contribute to biodiversity preservation by NPOs and NGOs, government agencies, and local citizens.

##### *5. Full Employee Participation:*

Casio is aiming for activities that involve the participation of all employees, by increasing understanding of biodiversity preservation, and training employees to act on their own initiative.

## Social partnership through products

Casio aims to contribute to activities undertaken by nature conservation groups seeking to protect endangered species through its core business by providing related products (collaboration product models) to those groups and others. In addition, Casio seeks to create systems that facilitate employee participation in protection activities organized by nature conservation groups.

## Full employee participation: Employee awareness raising

As part of employee education and awareness-raising about biodiversity related to the protection of endangered species, Casio commenced employee volunteer activities to conserve rare plants found on the premises of its sites. In addition, Casio recognizes the need to promote better understanding of the problem of plastic pollution in the oceans, which has been attracting more and more attention in recent years as a social issue, and to explore ways to contribute through its core business. To address this, Casio takes steps to allow employees to take part in onsite activities for social issues, such as the problem of plastic garbage in areas with which they are relatively familiar, to raise their awareness.

## Management Approach

### Environmental Action Plans and Performance

Evaluation ◎: All targets met ○: Most targets met △: Remaining issues outweigh results ×: No progress made

Theme	Medium and long-term targets	FY2018 Target	FY2018 Performance	Evaluation	FY2019 Targets and KPI
Living in harmony with nature	Use only sustainable paper by fiscal 2031	Ensure that 40% of product catalog paper used in Japan is FSC® certified paper	Ratio of certified paper in catalogs in FY2018: 65%	◎	Ensure that 65% of product catalog paper used in Japan is FSC® certified paper  Formulate scenarios for achieving medium-term targets related to usage rate for sustainable paper
	—	Set specific activity initiatives for biodiversity preservation based on the results of the biodiversity	The Hamura R&D Center formed a team of employee volunteers to carry out observation and conservation activities for endangered species such as Golden Orchid and Silver Orchid that are native to Japan	○	—  * Without using target management, continue the employee volunteer activities

# Living in Harmony with Nature

## Using Sustainable Paper

Casio takes initiatives from the two perspectives of procurement and use to foster the sustainable use of forest resources.

### Paper Procurement

Forests have multi-faceted functions, including the preservation of ecosystems on land, the absorption and fixation of CO<sub>2</sub>, and the protection of watersheds, in addition to the supply of nutrients from decomposing forest matter to the marine ecosystem.

Casio has established the Paper Procurement Policy to prevent a negative impact on the sustainability of forest resources from the procurement and use of paper in its business, and the company procures its paper based on this policy.

### Paper Procurement Policy

#### Casio Group Paper Procurement Policy

*Purpose:* To preserve biodiversity by protecting and sustainably using the forest resources which provide the raw material for paper.

*Scope:* All paper products procured by the Casio Group worldwide

*Policy:* Casio will procure paper for use in its business activities according to the following standards:

1. Paper must be made from trees harvested in accordance with the laws and regulations governing the logging area concerned.
2. Products must not come from companies that are destroying any forest with high conservation value or that are a source of serious environmental or social issues.
3. Priority must be given to reliable certified paper or recycled paper.

### Promoting Use of Certified Paper

Since fiscal 2017, Casio has established targets for the percentage of FSC®-certified paper used for product catalogues and has been working hard to increase the percentage used based on environmental management systems.

In fiscal 2017, the result was 15% compared with the target of 30%, but in fiscal 2018 the result was 65% compared with the target of 40%, which was partly attributable to an increase in the FSC®-certified paper lineup.

Casio periodically conducts surveys of manufacturers of the paper products used in its business activities and continually engages in activities to maintain the use of paper products in business activities that comply with the procurement policy.



The mark of  
responsible forestry  
FSC® N002433

## Participation in the Consortium for Sustainable Paper Use

In June 2014, Casio joined the Consortium for Sustainable Paper Use, which was established to promote the use of paper in a way that is both environmentally and socially responsible throughout society. Casio has been working hard as a dedicated member of the Consortium. The Consortium was established in November 2013 by five companies that are making progressive efforts related to their use of paper, the WWF Japan, and Response Ability, Inc, which promotes corporate sustainability. By enabling each member to promote uses of paper that are environmentally and socially responsible from their various perspectives, the Consortium hopes to expand the sustainable use of paper throughout the broader society.

The Casio Group Paper Procurement Policy, formulated in 2015, was also based on exchange of information with member companies and other such external input.

### Activities of the Consortium

From fiscal 2015 through fiscal 2016, the Consortium engaged in dialogue with suppliers of paper products, and in July 2016 it organized a symposium entitled “Corporate Collaboration in the Supply Chain: Toward Expanding Sustainable Use of Paper.”



Over 100 participants attended the symposium



### Participating Companies (as of March 2017 in Japanese phonetic order)

Ajinomoto Co., Inc. AEON Co., Ltd. Kao Corporation Casio Computer Co., Ltd. Kirin Holdings Co., Ltd. JSR Corporation Sony Corporation  
Nikon Corporation Sumitomo Mitsui Trust Bank, Ltd. Operations Advisor: Response Ability, Inc

Details regarding the consortium can be found on the WWF Japan website below.

➤ [“Consortium for Sustainable Paper Use” WWF Japan website](#)



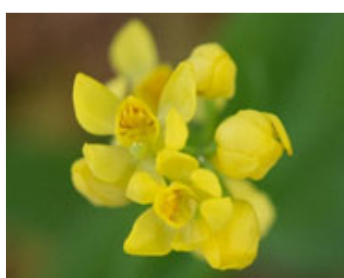
Member of Consortium

Going forward, Casio will contribute to the sustainable use of forest resources through initiatives mentioned above while seeking to develop forest conservation activities that enable employees to understand the social issues around the forests more deeply as issues that affect them personally.

# Living in Harmony with Nature

## Biodiversity Preservation at Business Sites

In 2017, Casio conducted a biodiversity study at the Group's main sites in Japan. As shown in Table 1, the results found that, even at the Headquarters in Shibuya Ward, Tokyo, over 50 species of insects and around 70 species of plants find their home. Most notably, Golden Orchid (*Cephalanthera falcata*), which is included on the Ministry of the Environment's species red list, was found at the Hamura R&D Center in Hamura, Tokyo. Rare plants and insects including the plant *Lespedeza tomentosa* Sieb. ex Maxim. and the insect *Canthophorus niveimarginatus* (Scott), which are included on the prefectural species red list in Yamanashi Prefecture, were found at the Yamanashi Office in the city of Fuefuki.



Photographs of the Golden Orchid and the Silver Orchid taken by the protection team

Based on the results of this study, the Casio Group commenced biodiversity preservation activities with advice from experts, including conservation of the rare species discovered.

### Examples of Hamura and Hachioji

In 2018, a protection team of employee volunteers recorded in daily photos the Golden Orchid and Silver Orchid, which were confirmed to be growing at Hamura R&D Center, from the time they were seedlings in early April until they flowered. These records were disseminated via an internal website to raise employee awareness about biodiversity preservation.



Installing signs for protected plants at Hamura R&D Center

The *Ophioglossum petiolatum* at Hachioji R&D Center is not a particularly spectacular plant, but site employees recognized that it is a rare species and set up a protection zone, increasing its numbers from 30 to around 50 in 2018.



*Ophioglossum petiolatum* at Hachioji

## Yamanashi case study

Casio requested Ryokusei Research Institute Inc., which was commissioned for a biodiversity study at the business site, to place markers for protected species, including *Lespedeza tomentosa*, *Potentilla chinensis*, Siberian *Lespedeza juncea*, and *Thesium chinense*, which is the larval food plant for *Canthophorus niveimarginatus*. Going forward, Casio will call on employees to launch a protection team for the Yamanashi Office with plans to continue promoting protection activities.



Placing markers in Yamanashi



Placing markers

## Results of business site biodiversity study

site	Number of species		Remarkable insects and plants
	Insects	Plants	
Casio Computer Co., Ltd.			
Headquarters	55	82	
Hamura R&D Center	105	187	Plants: Golden Orchid, Silver Orchid, ophioglossum petiolatum
Hachioji R&D Center	51	110	Plant: <i>Ophioglossum petiolatum</i>
Yamagata Casio Co., Ltd.			
Headquarters	82	173	
Yamanashi	91	150	Insect: <i>Canthophorus niveimarginatus</i> Plant: <i>Lespedeza tomentosa</i>
Casio Electronic Manufacuring Co., Ltd.	58	108	
Casio Business Service Co., Ltd. (Kofu)	82	160	Plant: <i>Rorippa cantoniensis</i>

➤ [List of plants at the Casio Group's main sites in 2017\(PDF\)](#) (PDF / 372KB)

➤ [List of insects at the Casio Group's main sites in 2017\(PDF\)](#) (PDF / 331KB)

# Living in Harmony with Nature

## Collaboration with Stakeholders

### Preserving Biodiversity through Collaboration with Environmental Protection Groups

Casio Computer Co., Ltd. has developed many brands of watches. In addition to offering the value of enjoying time in nature in diverse usage situations by providing a wide range of functions and designs, the company engages in biodiversity preservation activities in collaboration with environmental protection groups with the aim of protecting a wide range of ecosystems from the land to the oceans.

### G-SHOCK and BABY-G Collaboration Models with the International Cetacean Education Research Centre (ICERC Japan) and Earthwatch Japan

Based on a theme of “Love the Sea and the Earth,” the G-SHOCK and BABY-G brands support the activities of two environmental protection groups, the International Cetacean Education Research Centre (ICERC Japan) and Earthwatch Japan, with collaboration models that promote these groups.



ICERC Japan collaboration model



Earthwatch Japan collaboration model

### BABY-G Collaboration Model with International Year of the Reef (IYOR) and Aqua Planet

In 2018, the third International Year of the Reef (IYPR), Casio Computer became an official supporter of IYOR with the objective of protecting the bounty and beauty of the seas.

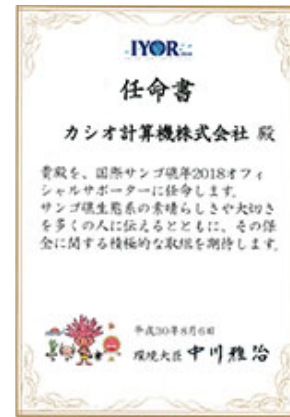
In 2018, a new BABY-G collaboration model for Aqua Planet was released to support [reef conservation activities](#).



Aqua Planet collaboration model



Presenting Casio initiatives at an IYOR official supporters' meeting



Official supporter letter of appointment

## PRO TREK Collaboration Model with The Nature Conservation Society of Japan (NACS-J)

In 2018, PRO TREK began providing support for The Nature Conservation Society of Japan (NACS-J), which engages in ongoing activities to study, protect and utilize nature all around Japan.

PRO TREK also released a collaboration model with the motif of a golden eagle, an endangered species for which preservation activities are being conducted in Akatani no Mori, Minakami-machi in Gunma Prefecture and Minami Sanriku-cho in Miyagi Prefecture.



The Nature Conservation Society of Japan collaboration model

## Participating in The Nature Conservation Society of Japan studies

Prompted by the launch of The Nature Conservation Society of Japan collaboration model, members of Casio's Sustainability Promotion Department participated in study and protection activities for the *Shijimiaeoides divina*, an endangered species, planned by The Nature Conservation Society of Japan in Nagano Prefecture in May 2018. The study recorded the number of shoots on *Sophora flavescens* (a larval food plant) and how many eggs had been laid on each shoot.

Although it is simple and unexciting work, the data obtained through the study forms the scientific basis for how far apart the *Sophora flavescens* can be planted and will be useful for the protection of the *Shijimiaeoides divina* in the future.



Counting *Shijimiaeoides divina* eggs



*Shijimiaeoides divina* eggs



*Shijimiaeoides divina*

# Living in Harmony with Nature

## Reef Conservation Activities

### Casio Coral Field

In collaboration with various environmental protection groups, Casio has been promoting its “Love The Sea And The Earth” project to support the activities of the groups. In 2018, Casio began providing support for Aqua Planet, an NPO that preserves coral, which is chaired by actress Ritsuko Tanaka. In January, the Casio coral field was established in the seas of Ishigaki, Okinawa Prefecture, and 200 coral “seedlings” were planted with the objective for them to reproduce in three years’ time. Casio carried out this activity as an official supporter of the International Year of the Reef 2018 appointed by the Ministry of the Environment.



The Casio coral field lies to the south of Ishigakijima island, Okinawa Prefecture in shallow seas about 4 meters deep at high tide. The coral coexists with a phytoplankton called *zooxanthella*, and 200 coral seedlings from more than seven resilient varieties, including *Acropora Copiosa Nemenzo* in the genus *Acropora* of the family *Acroporidae*, were planted.

These coral seedlings were ones that had been newly collected with permission and divided seedlings cultivated in other coral fields.

## Progress report on coral field

January 21, 2018: coral planting started



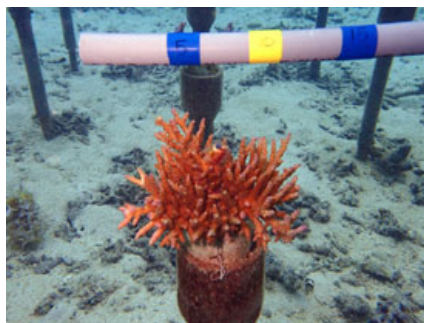
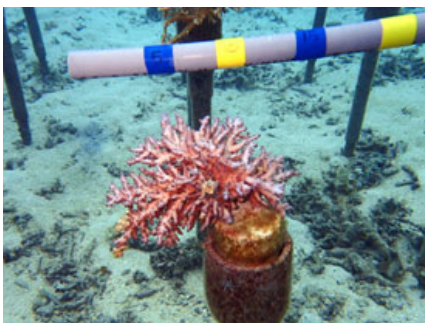
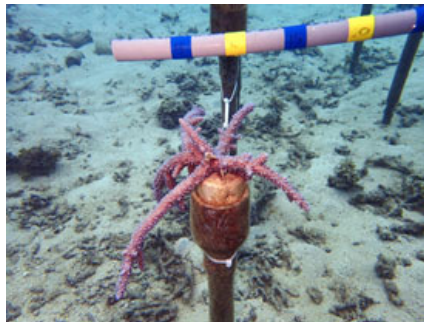
Coral seedlings are secured with stainless steel wire to Magwhite foundations. Compared to gypsum and cement, Magwhite is slightly alkaline, so seems suited to growing coral.

January 28, 2018: coral planting completed



The Casio coral field was completed by attaching the 200 coral seedlings to posts standing about 35cm apart.

## February 18, 2018 status

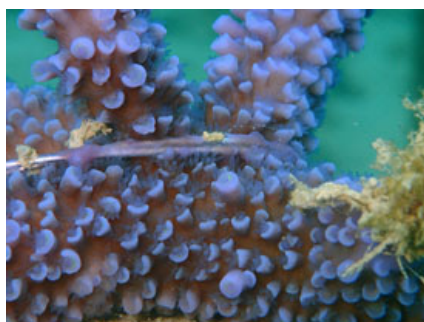


With a water temperature of 22.6°C, no significant changes has been observed in the coral.

## March 7, 2018 status



With a water temperature of 23.6°C, no major changes compared with February could be observed in the coral at a glance, but, looking carefully, the soft body of the coral had begun to cover the stainless steel wire. It was confirmed that the coral was steadily becoming established.



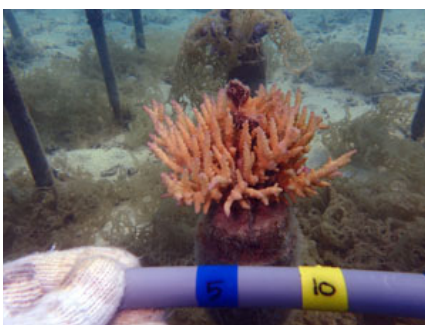
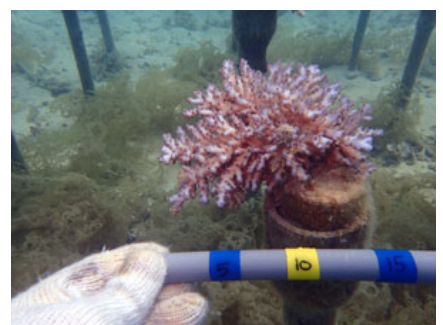
## April 14, 2018 status



Water temperature of 25.4°C. Around this time, an extremely large amount of seaweed was present, so removal of seaweed was carried out. The left photograph shows before removal of seaweed and the right photograph shows after removal of seaweed.



The wire has been completely assimilated and can no longer be seen. It was also confirmed that the coral had adhered to the Magwhite foundation.



Photographs supplied by Aqua Planet

# Living in Harmony with Nature

## Education

### Arakawa River Clean-aid

Over the past few years, the focus on the problem of plastic pollution in the oceans has been rapidly growing. In order to deepen awareness of this social issue from the perspective of biodiversity, Casio held an investigational clean up (collecting garbage while counting each type of garbage) in the lower basin of the Arakawa River on July 12, 2018 in conjunction with classroom learning commissioned from Arakawa Clean-aid Forum (ACF), an NPO that has been working the problem of garbage in the rivers and seas for over 20 years.

In intense heat, 12 employees collected garbage washed ashore for an hour over an 85m stretch with the objective of personalizing social issues through onsite experience and exploring contributions through core business. The employees collected 34 bags (45 liters) of garbage, mainly food trays and plastic bottles. From this initiative, each participant learned the serious reality that large volumes of plastic flow into the sea via the river. Much of this garbage is used containers and packaging. As Casio uses plastic in its products and packaging materials, the company cannot claim that it is not involved in the problem of marine pollution. Spurred by this experience, Casio will continue to examine initiatives.

The results of the investigational clean up were included in some of the data compiled by Japan Environmental Action Network (JEAN) via ACF and will be used as reference materials for the policies of government agencies, including the Ministry of the Environment and the Ministry of Land, Infrastructure, Transport and Tourism.



Before



After



Working up a sweat picking up and counting garbage



Tough but rewarding work

# Living in Harmony with Nature

## The Biodiversity Working Group, The 4 Electrical and Electronic industry Associations

In fiscal 2017, Casio started taking part in The Biodiversity Working Group, The 4 Electrical and Electronic industry Associations (JEMA: The Japan Electrical Manufacturers' Association, JEITA: Japan Electronics and Information Technology Industries Association, CIAJ: Communications and Information Network Association of Japan, JBMIA: Japan Business Machine and Information System Industries Association). Through the working group's activities, Casio will contribute to biodiversity conservation in addition to continuing to expand the scope of its own biodiversity initiatives, taking into consideration the efforts of the pioneering companies that are taking part in the working group.

In March 2018, the working group published "Let's Try Biodiversity! (LTB)" for enterprises wishing to commence biodiversity conservation initiatives in the future.

Details regarding the working group can be found on the JEMA website below.

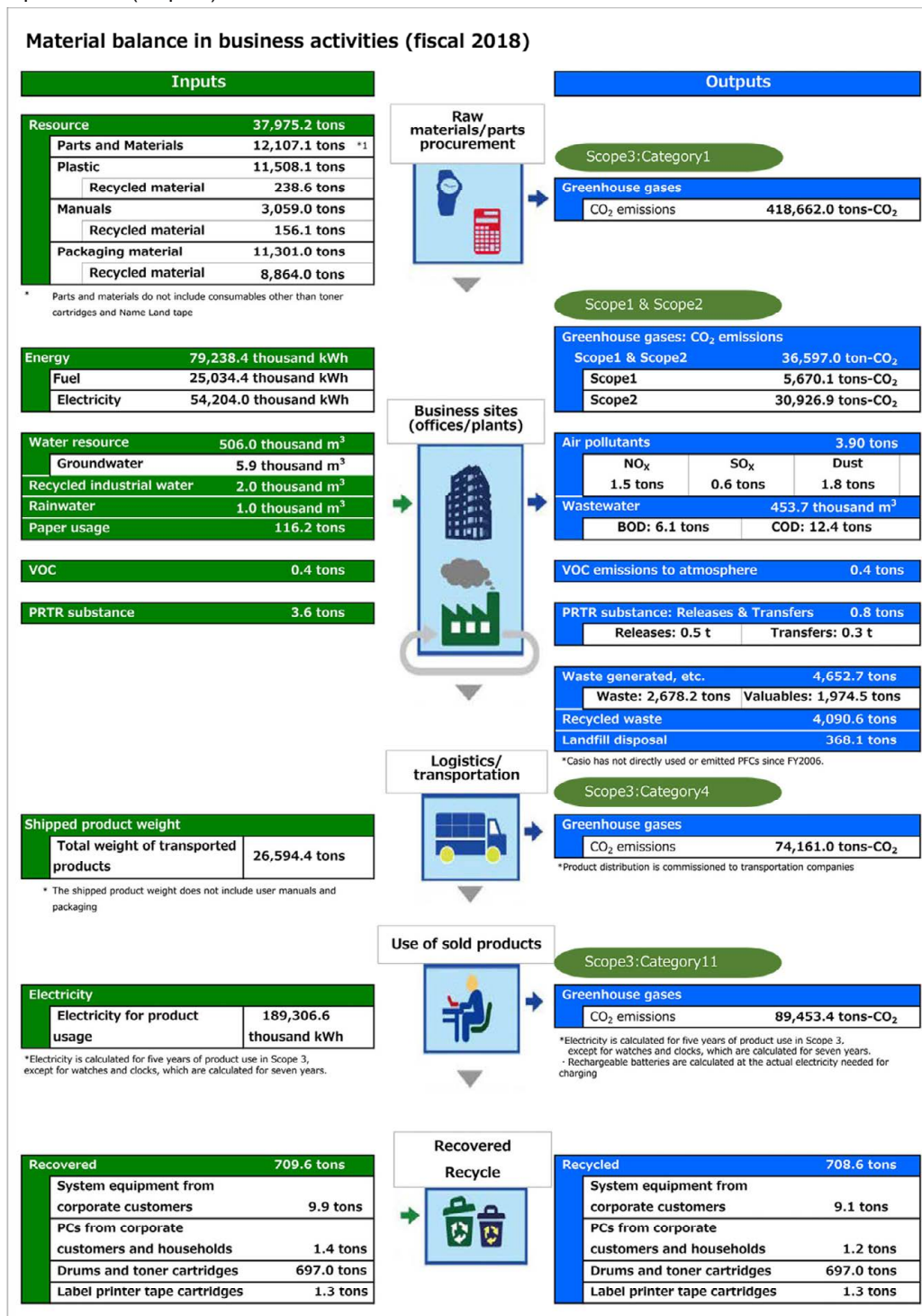
➤ [The Biodiversity Working Group, The 4 Electrical and Electronic industry Associations](#)



# Material Balance

## What is a material balance?

The material balance shows the overall picture for energy and resources used in the process of Casio's business activities including R&D, design, parts procurement, manufacturing, distribution, recovery and recycling, and the energy used in the process of product use by customers (inputs) plus the environmental impacts that are produced in each of those processes (outputs).



[View as PDF \(678KB\)](#)

Environmental Performance Data of Each Site

[Group Companies in Japan \(238KB\)](#)

[Overseas Group Companies \(238KB\)](#)

# CO<sub>2</sub> Emissions Throughout the Entire Value Chain

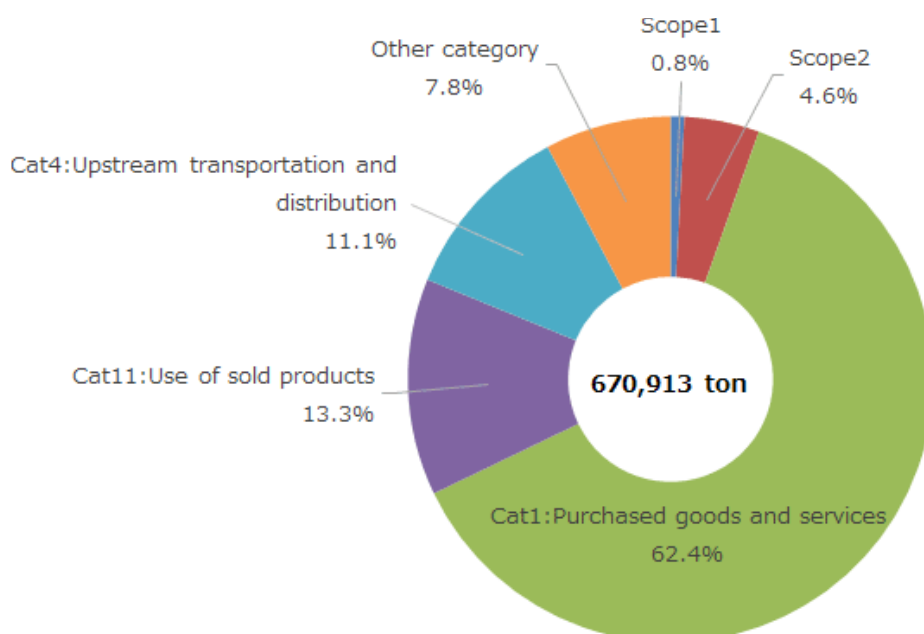
## CO<sub>2</sub> Emissions throughout the Entire Value Chain

Casio has identified and calculated greenhouse gas emissions produced by its own business activities (Scope 1 and Scope 2) and emissions located upstream and downstream in the overall value chain (Scope 3). Casio has calculated CO<sub>2</sub> emissions for 11 out of 15 categories of Scope 3 CO<sub>2</sub> emissions, excluding four categories with little impact, with reference to the GHG Protocol, which is the international standard. Scope 3 emissions accounted for approximately 95% of all emissions in fiscal 2018, which is similar to the previous fiscal year. Within Scope 3, purchased goods and services accounted for the greatest share, about 62%.

Going forward, Casio will focus on the three themes below in relation to Scope 3 emissions.

- Enhance accuracy in the calculation of each category
- Draft and implement measures to reduce emissions in each Scope 3 category
- Promote emissions reduction upstream and downstream in the value chain

### CO<sub>2</sub> Emissions throughout the Entire Value Chain



Category	CO <sub>2</sub> emissions in fiscal 2018	
	t-CO <sub>2</sub>	rasio
Scope 1	5,670	0.85%
Scope 2	30,927	4.61%
Scope 3	634,316	94.55%
1 Purchased goods and services	418,662	62.40%
2 Capital goods	23,920	3.57%
3 Fuel- and energy-related activities not included in Scope 1 or Scope 2	2,353	0.35%
4 Upstream transportation and distribution	74,161	11.05%
5 Waste generated in operations	1,308	0.19%
6 Business travel	1,599	0.24%
7 Employee commuting	1,074	0.16%
8 Upstream leased assets	2,124	0.32%
9 Downstream transportation and distribution	-	-
10 Processing of sold products	-	-
11 Use of sold products	89,453	13.33%
12 End of life treatment of sold products	12,553	1.87%
13 Downstream leased assets	-	-
14 Franchises	-	-
15 Investments	7,109	1.06%
Total	670,913	100.00%

The breakdown of Category 4 (Unit: t-CO<sub>2</sub>)

Japan) Truck: 738, Railway: 47

Overseas) Railway: 1,048, Airplane: 54,822, Ship: 17,506

# Environmental Data

## Environmental Data

### Greenhouse gas emissions(Scope1 and Scope2)

(t-CO<sub>2</sub>)

	FY2014	FY2015	FY2016	FY2017	FY2018
Scope1	6,043.2	5,729.3	5,483.1	5,619.2	5,670.1
Scope2	32,901.2	32,494.4	33,084.5	31,944.0	30,926.9
Total	38,944.3	38,223.7	38,567.6	37,563.2	36,597.0

(Breakdown by type of site)

	FY2014	FY2015	FY2016	FY2017	FY2018
Production sites in Japan	8,431.8	8,472.4	8,984.6	7,941.0	6,953.6
Office sites in Japan	10,150.5	9,613.6	8,854.6	8,951.1	9,108.9
Production sites outside Japan	14,220.3	14,031.7	14,461.8	14,199.9	14,178.3
Office sites outside Japan	6,141.6	6,106.0	6,266.7	6,471.2	6,356.3

## Waste related data

### Emissions of waste, etc. by type of site

(t)

	FY2014	FY2015	FY2016	FY2017	FY2018
Production sites in Japan	582.9	634.4	827.3	761.6	694.6
Office sites in Japan	769.9	703.6	661.1	725.5	718.0
Production sites outside Japan	320.6	411.6	689.1	1,456.9	2,599.6
Office sites outside Japan	700.2	924.7	657.6	626.8	640.5
Total	2,373.5	2,674.3	2,835.1	3,570.8	4,652.7

### Disposal breakdown and recycling rate for generation of waste, etc.

(t)

		FY2014	FY2015	FY2016	FY2017	FY2018
Generation	Valuables	1,151.8	1,394.6	1,645.8	1,716.7	1,974.5
	Waste	1,221.7	1,279.7	1,189.3	1,854.1	2,678.2
Disposal	Recycled	1,897.0	2,146.1	2,146.9	2,686.6	4,090.6
	Landfill disposal	265.5	207.2	227.0	701.3	368.1
	Reduction	211.0	321.0	461.2	182.8	194.0
Recycling rate		88%	91%	90%	79%	92%

Recycling rate = Recycled waste / (Recycled waste + Landfill disposal)

## Water resources

(thousand m3)

	FY2014	FY2015	FY2016	FY2017	FY2018
Production sites in Japan	44.9	52.9	60.9	55.1	41.5
Office sites in Japan	168.6	85.9	79.7	81.5	76.7
Production sites outside Japan	377.7	381.5	394.8	369.7	371.1
Office sites outside Japan	17.4	17.2	17.2	17.7	16.7
Total	608.7	537.4	552.6	524.0	506.0

## Usage of parts, materials, instruction manuals, packaging materials and recycle materials

(t)

		FY2014	FY2015	FY2016	FY2017	FY2018
Usage of parts and materials		25,669.0	26,209.0	24,676.0	13,985.0	11,508.1
	recycle materials	1,239.0	877.0	439.0	244.0	238.6
	recycle rate	4.8%	3.3%	1.8%	1.7%	2.1%
Usage of instruction manuals		3,235.0	3,790.0	3,683.0	3,122.0	3,059.0
	recycle materials	77.0	221.0	88.0	149.0	156.1
	recycle rate	2.4%	5.8%	2.4%	4.8%	5.1%
Usage of packaging materials		12,308.0	12,148.0	11,720.0	11,821.0	11,301.0
	recycle materials	9,732.0	9,457.0	9,061.0	9,173.0	8,864.0
	recycle rate	79.1%	77.8%	77.3%	77.6%	78.4%

## Third-party verification

In order to ensure the reliability of its environmental data reporting, in fiscal 2011 Casio began requesting third-party verification.

Casio commissioned SGS Japan Co., Ltd. to conduct the audit in fiscal 2018. The audit covered greenhouse gas emissions (Scope 1, 2 and Categories 1, 4 and 11 of Scope 3), water intake, waste and emissions of atmospheric pollutants.

Of the sites covered, on-site surveys were conducted at the Casio (Thailand) Co., Ltd., and the Casio Electronic Technology (Zhongshan) Co., Ltd.

Leased-office sites are not included in the scope of calculation because water usage and waste was difficult to ascertain.

[See the third-party verification statement](#)  (PDF / 137KB)

## Scope of Data

The scope of the environmental performance data for fiscal 2018 is shown below.

Period covered: April 1, 2017 – March 31, 2018

Sites covered: 73 Casio Group sites (covering 99.6% of employees)

Numerical data on environmental performance for each site is listed separately.

Production sites in Japan(3 sites)	<ul style="list-style-type: none"><li>• Yamagata Casio Co., Ltd.</li><li>• Yamagata Casio Co., Ltd. (Yamanashi)</li><li>• Casio Electronic Manufacturing Co., Ltd.</li></ul>
Office sites in Japan(44 sites)	<ul style="list-style-type: none"><li>• Casio Computer Co., Ltd. (Headquarters)</li><li>• Casio Computer Co., Ltd. (Hamura R&amp;D Center)</li><li>• Casio Computer Co., Ltd. (Hachioji R&amp;D Center)</li><li>• Casio Computer Co., Ltd. (33 sales sites) (Kudan, Osaka, Sendai, Saitama, Nagoya, Hiroshima, Fukuoka and other sites)</li><li>• Casio Techno Co., Ltd. (Headquarters)</li><li>• Casio Techno Co., Ltd. (Technical Center)</li><li>• Casio Marketing Advance Co., Ltd.</li><li>• Casio Business Service Co., Ltd. (Headquarters)</li><li>• Casio Business Service Co., Ltd. (Kofu)</li><li>• Casio Information Service Co., Ltd</li><li>• CXD Next Co., Ltd.</li><li>• Hatsudai Estate Building</li><li>• Replex Inc.</li></ul> <p>* Data for Casio Human Systems Co., Ltd., and Casio Communication Brains Co., Ltd. have been included in the data for the sites where they are located.</p>

Production sites outside Japan (4 sites)	<p>Asia (4 sites)</p> <ul style="list-style-type: none"> <li>• Casio (Thailand) Co., Ltd.</li> <li>• Casio Electronic Technology (Zhongshan) Co., Ltd.</li> <li>• Casio Timepiece (Dongguan) Co., Ltd.</li> <li>• Casio Electronics (Shaoguan) Co.,Ltd.</li> </ul>
Office sites outside Japan(22 sites)	<p>Asia (9 sites)</p> <ul style="list-style-type: none"> <li>• Casio Electronics (Shenzhen) Co., Ltd.</li> <li>• Casio Computer (Hong Kong) Ltd.</li> <li>• Casio (Guangzhou) Co., Ltd.</li> <li>• Casio India Co., Pvt. Ltd.</li> <li>• Casio (China) Co., Ltd.</li> <li>• Casio Taiwan Co., Ltd.</li> <li>• Casio Soft (Shanghai) Co., Ltd.</li> <li>• Casio Singapore Pte., Ltd.</li> <li>• Guangzhou Casio Techno Co., Ltd.</li> </ul>
	<p>Europe (8 sites)</p> <ul style="list-style-type: none"> <li>• Casio Europe GmbH</li> <li>• Casio Electronics Co., Ltd.</li> <li>• Casio France S.A.</li> <li>• Casio Espana S.L.</li> <li>• Casio Scandinavia AS</li> <li>• Casio Benelux B.V.</li> <li>• Casio Italia S.r.l.</li> <li>• Limited Liability Company Casio</li> </ul>
	<p>Middle East (1 site)</p> <ul style="list-style-type: none"> <li>• Casio Middle East FZE</li> </ul>
	<p>Americas (4 sites)</p> <ul style="list-style-type: none"> <li>• Casio America, Inc.</li> <li>• Casio Canada Ltd.</li> <li>• Casio Brasil Comercio De Produtos Eletronicos Ltda.</li> <li>• Casio Mexico Marketing, S. de R. L. de C.V.</li> </ul>

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## Calculation Standards

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### 1. Overall

- (1) Items with no input, usage, handling or discharge performance have been left blank.
- (2) Figures are rounded off to the second decimal point, in the specified units (figures shown as “0.0” are less than “0.05”).
- (3) When total Casio Group values for VOC inputs/emissions and PRTR are 1 ton or more, data is shown separately for the individual site.

### 2. Inputs

#### (1) Energy input amount

All fossil fuels and power used in business activities are totaled for sites indicated in the Scope of Data.

Includes fuel usage by company vehicles, but does not include energy used for contracted logistics services, commuting, and business trips.

#### (2) Water resource input amount

Usage amounts of tap water, industrial water and groundwater are combined.

#### (3) VOC input amount

For substances subject to follow-up surveys related to VOC emission controls by the four main electrical and electronics industry associations, those whose annual usage at each site exceeds 50 kg are included in the tabulations.

#### (4) Paper usage amount

Managed and tabulated based on the purchased amounts of paper used in printers, fax machines, and copy machines each year.

The weight of one sheet is determined for each paper size, and weights are calculated based on the amounts purchased.

#### (5) PRTR substance input amount

Calculated for chemical substances subject to Japan's PRTR Act whose annual amount handled per substance is 0.05 tons or more at each site.

### 3. Outputs

#### (1) CO<sub>2</sub> emissions

Used the fiscal year- and country-specific CO<sub>2</sub> emission factors for electricity listed in the GHG Protocol's calculation tool (GHG emissions from purchased electricity 4.8) to calculate CO<sub>2</sub> from electricity. The latest factors for a given country are temporarily used for fiscal years not listed in the calculation tool.

Regarding CO<sub>2</sub> equivalent for fuel, CO<sub>2</sub> conversion coefficients were calculated using the emission coefficients and unit calorific values by fuel type based on Japan's Global Warming Act, and then applied to different fuel types and totaled.

#### (2) Air pollutants

Calculated at sites that have smoke generating facilities based on the concentration measurements and gas emissions at each facility.

Yamagata Casio, Hamura R&D Center and Casio (Thailand) are included in tabulation of results.

Concentrations of dust emissions, NO<sub>x</sub>, and SO<sub>x</sub>, which must be managed by law, are measured at target sites, to confirm that they are below regulation levels.

The following substances are not used at any Casio site: dichloromethane, trichlorethylene, tetrachlorethylene, chloroform, vinyl chloride monomer, 1,3-butadiene, benzene, acrylonitrile, 1,2-dichloroethane, formaldehyde, trinickel disulfide, nickel nitrate, and acetaldehyde.

#### (3) Wastewater

Calculated from values at sites that measure wastewater amounts. Sites that do not measure wastewater amounts but can ascertain tap water use treat the amount of tap water used as their wastewater amount.

At sites with special facilities that fall under the Water Pollution Prevention Act and/or the Sewer Act, water quality surveys are conducted based on applicable laws, and confirmation is made that emissions are below regulatory limits. Since fiscal 2014, the applicable facilities have not been operating.

In the case of discharge into public sewer systems, BOD is left blank, but figures are shown if voluntary measurements are taken.

#### (4) PRTR

Release and transfer quantities are calculated for each chemical substance subject to Japan's PRTR Act whose annual usage is 0.05 tons or more.

#### (5) Waste

Waste is tabulated as the total amount of industrial waste generated when product is transferred from a Casio site to the processor, general waste derived from sites, and the quantity of valuables.

#### (6) Base year figures

For the evaluation of greenhouse gases and energy conservation, emissions and usage of divested businesses are excluded from data in and after the base year in accordance with the GHG Protocol.

For sites that were included in the scope in and after the base year due to acquisition, etc., historical data on emissions and use is only added to historical data for fiscal years in and after the base year when it is available in accordance with the GHG Protocol, which is the international standard.

#### 4. Scope 3 calculation methods

Category 1	Purchased goods and services	<p>Amount of activity: Amount of purchased consumables, raw materials, and packaging materials, salaries of temporary staff, purchased tap water, industrial water, and advertising expenses.</p> <p>Unit: Calculated by multiplying each item by the emissions unit of the purchased amount and adding together the total.</p> <p>Emission factor database for calculating organizational GHG emissions throughout the supply chain version 2.5 issued by Japan's Ministry of Environment and CFP COMMUNICATION PROGRAM DB version 1.01.</p>
Category 2	Capital goods	<p>Amount of activity: Amount of capital investment by all consolidated subsidiaries.</p> <p>Unit: Calculated by multiplying the emissions unit corresponding to the amount of capital investment.</p> <p>Emission factor database for calculating organizational GHG emissions throughout the supply chain version 2.5 issued by Japan's Ministry of Environment.</p>
Category 3	Fuel-and-energy-related activities (not included in Scope 1 or 2)	<p>Amount of activity: Amount of purchased electricity and fuels.</p> <p>Unit: Calculated by multiplying the emissions unit of each type and adding together the total.</p> <p>Emission factor database for calculating organizational GHG emissions throughout the supply chain version 2.5 issued by Japan's Ministry of Environment and CFP COMMUNICATION PROGRAM DB version 1.01.</p>
Category 4	Upstream transportation and distribution	<p>Amount of activity: Amount of domestic and overseas shipment.</p> <p>Unit: Calculated by multiplying the weight and transportation distance by the emissions unit of each transportation type and adding together the total.</p> <p>(Trucks: Specific fuel consumption using the improved ton/kilo method. Trains, ships and airplanes: CO2 emissions output level using the conventional ton/kilo method)</p>
Category 5	Waste generated in operations	<p>Amount of activity: Emissions of each type of waste.</p> <p>Unit: Calculated by multiplying the emissions unit of each type and adding together the total.</p> <p>Emission factor database for calculating organizational GHG emissions throughout the supply chain version 2.5 issued by Japan's Ministry of Environment.</p>
Category 6	Business travel	<p>Amount of activity: Number of domestic and overseas employees.</p> <p>Unit: Emissions unit per employee.</p> <p>Emission factor database for calculating organizational GHG emissions throughout the supply chain version 2.5 issued by Japan's Ministry of Environment.</p>

Category 7	Employee commuting	<p>Amount of activity: Transportation expenses paid to employees.</p> <p>Unit: Calculated by estimating the train/car ratio from employee commuting style, multiplied by the emissions unit of the amount of transportation expenses for each style and adding together the total.</p> <p>Emission factor database for calculating organizational GHG emissions throughout the supply chain version 2.5 issued by Japan's Ministry of Environment.</p>
Category 8	Upstream leased assets	<p>Amount of activity: Domestic G-SHOCK stores, sales area for digital paintings and other and number of business days.</p> <p>Unit: Calculated by determining the total sales area, and multiplying the emissions unit of the sales area. The number of business days is calculated on a pro-rate basis.</p> <p>Emission factor database for calculating organizational GHG emissions throughout the supply chain version 2.5 issued by Japan's Ministry of Environment.</p>
Category 9	Downstream transportation and distribution	<p>Transportation to retailers from the distribution hubs of regular sales companies is outside the scope of Casio's expense payment. Since this is difficult to ascertain and the CO2 emissions are deemed to be fairly small compared to Category 4 upstream transportation and distribution, it is not included in calculations.</p>
Category 10	Processing of sold products	<p>Although one of our group companies provides name printing and other services, emissions of CO2 and other substances from this business activity is included in Scopes 1 and 2.</p>
Category 11	Use of sold products	<p>Amount of activity: Number of products by category.</p> <p>Unit: Use of products is calculated by multiplying the emissions unit of each product for the supported period (five years; seven years for timepieces).</p> <p>Regarding the use period, relevant industrial standards are followed. In cases when such an industrial standard does not exist, Casio defines the use period. Regarding electricity, CO2 emissions were calculated by applying the GHG Protocol, which is the international standard. (Factors were used for Japan, Europe, Asia, the UK, and North America.)</p> <p>Regarding products that require battery replacement, CO2 emissions related to manufacture of the battery are also included in the calculation. (The purchased cost for the manufacturer of each battery is used in the calculation.)</p> <p>Emission factor database for calculating organizational GHG emissions throughout the supply chain version 2.5 issued by Japan's Ministry of Environment.</p>

Category 12	End of life treatment of sold products	<p>Amount of activity: Emissions from the product itself and container packaging materials.</p> <p>Unit: Calculated by multiplying the emissions unit of each type and adding together the total.</p> <p>Emission factor database for calculating organizational GHG emissions throughout the supply chain version 2.5 issued by Japan's Ministry of Environment.</p>
Category 13	Downstream leased assets	Due to the disposal of relevant buildings, it is not subject to calculation from fiscal 2016.
Category 14	Franchises	The franchise formula is not used.
Category 15	Investments	<p>Amount of activity: Emissions from equity method affiliates and companies which hold specific annual stocks and constructive stocks.</p> <p>Unit: Calculated by multiplying the emissions from investment destinations by the equity method ratio or the share holding ratio.</p>

## Verification Statement



21 July 2018

CASIO COMPUTER CO., LTD.

### Objective

SGS Japan Inc. (hereinafter referred to as "SGS") was commissioned by CASIO COMPUTER CO., LTD. (hereinafter referred to as "the Organization") to conduct independent verification based on Criteria of Verification (ISO 14064-3: 2006 and the SGS verification protocol) regarding the data prepared by the Organization on the scope of verification (hereinafter referred to as "the assertion"). The objective of this verification is to confirm that the assertion in the Organization's applicable scope has been correctly calculated and reported in the assertion in conformance with the criteria, and to express our views as a third party.

### Scope

The scope of verification is defined by the Organization and limited to i) Scope 1 and 2 (energy-related CO<sub>2</sub> emissions at 47 domestic and 26 overseas environmental results reporting sites), ii) Scope 3 (category 1 for the purchased goods and services of the consolidated account, category 4 for the transportation/delivery by the Organization, and category 11 for the Casio brand products of the consolidated account), iii) Waste generated (Waste and Valuables) at 19 domestic and 18 overseas environmental results reporting sites, iv) Water intake at 21 domestic and 11 overseas environmental results reporting sites, and v) Air pollutants (NO<sub>x</sub>, SO<sub>x</sub> and Dust emissions) at 2 domestic and 1 overseas environmental results reporting sites.

The period subject to report is from 1 April 2017 to 31 March 2018.

### Procedure of Verification

The assertion was verified in accordance with Criteria of Verification, and the following processes were implemented at a limited level of assurance:

- Verification of the calculation system: Interviews on the measurement, tabulation, calculation and reporting methods employed by the Organization as well as review of related documents and records.
- Verification of the assertion: On-site verification and review of vouchers at the CASIO (THAILAND) CO., LTD. and the CASIO ELECTRONIC TECHNOLOGY (ZHONGSHAN) CO., LTD., and performance of analytical procedures and interviews at the head office for the other sites in the scope of verification.

The criteria for this review are based on the GHG Emissions Calculation and Reporting Manual (Ver. 4.2), the Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ver. 2.3) and the Database of emissions unit values on the same Accounting (Ver. 2.5), the Joint Guidelines for the CO<sub>2</sub> Emissions Calculation in Logistics Field (Ver. 3.1), the Basic Database of the Carbon Footprint Communication Program (Ver. 1.01) and the protocol specified by the Organization.

### Conclusion

Within the scope of the verification activities employing the methodologies mentioned above, nothing has come to our attention that caused us to believe that the Organization's assertion (Scope 1: 5,670 t-CO<sub>2</sub>, Scope 2: 30,927 t-CO<sub>2</sub>, Scope 3 (Cat. 1: 418,662 t-CO<sub>2</sub>, Cat. 4: 74,161 t-CO<sub>2</sub>, Cat. 11: 89,453 t-CO<sub>2</sub>), Waste generated (Waste: 2,678 t, Valuables: 1,974 t) and Water intake: 506 km<sup>3</sup>) was not calculated and reported in conformance with the criteria.

SGS Japan Inc. affirms our independence from the organization, being free from bias and conflicts of interest with the organization.

**For and on behalf of SGS Japan Inc.**  
Senior Executive & Business Manager  
Certification and Business Enhancement

Yuji Takeuchi

Signed:



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# Environmental Accounting

## Overview of fiscal 2018 performance

In fiscal 2018, environmental accounting showed that investment in environmental conservation decreased from the previous fiscal year while costs and the economic benefits (real effects) associated with environmental conservation measures increased.

Investments in environmental conservation, including energy monitoring systems, were valued at ¥76 million. The costs of environmental conservation included ¥581 million for recycling products, parts, and toner cartridges and other consumables and ¥529 million for energy saving, air and water pollution measures and the like, bringing the total to ¥1,110 million. The economic benefits associated with environmental conservation measures were ¥761 million and included business revenue from recycling activities as real effects.

### Environmental conservation costs (April 2017 - March 2018)

Category by business activity		Environment al investment (¥ million)	Environment al expenses (¥ million) <sup>*1</sup>
	Main initiatives		
Business area costs (costs arising in the main areas of business activity (manufacturing, processing, sales, distribution etc.))		76	372
(1) Pollution prevention cost	Preventing air and noise pollution	42	30
(2) Global environmental conservation cost	Maintenance of energy-saving systems	31	226
(3) Resource circulation cost	Processing, reducing in volume, and recycling of general and industrial waste	3	116
Upstream/downstream cost <sup>*2</sup>	Collection and recycling of products, parts, supplies	-	581
Administration cost	Secretariat operation costs, environmental information disclosure	0	148

R&D cost	R&D for reduction of environmental impact	-	3
Social activity cost	Participation in, donations to, and support for environmental conservation organizations	-	6
Total		76	1,110

\*1 Depreciation costs are included in the expenses.

\*2 Costs arising before and after the processes of the main business activities.

### Economic benefits of environmental conservation (April 2017 - March 2018)

Type of benefit		Amount (¥ million)
Actual benefit (benefit that contributes to profits as a result of the promotion of environmental conservation measures) <sup>*3</sup>		
Profits	Business revenue from recycling of used products, etc.	732
Cost reduction	Cost reduction through energy saving activities	26
	Reduction of waste processing costs arising from resource saving or recycling	3
Total		761

\*3 Starting in fiscal 2016, only economic benefits that could be aggregated were included, and deemed benefits based on estimates were not included.

## Environmental conservation effect

Types of environmental conservation effects	Environmental performance indicator	Unit	FY2017	FY2018	Environmental conservation effect <sup>*4</sup>
Environmental conservation effect relating to resources used in business activities	Water resources	Thousand m <sup>3</sup>	523	506	17
Environmental conservation effect relating to environment impact and waste generated by business activities	CO <sub>2</sub> emissions <sup>*4</sup>	Tons-CO <sub>2</sub>	36,682	36,597	85
	Waste emissions	Tons	3,571	4,653	-1,082

<sup>\*4</sup> The country-specific coefficients published in the GHG Protocol's calculation tool are used in the calculation of CO<sub>2</sub> emissions for electricity. See "Calculation Standards" in the "Environmental Data" section for details.

Scope of data compilation for accounting: Casio Computer Co., Ltd., and consolidated subsidiaries in and outside Japan.  
Reference guideline: Environmental Accounting Guidelines 2005, Ministry of the Environment, Japan.

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# Environmental Compliance

**Worldwide, environmental regulations are being strengthened to preserve the beauty of the Earth. Whether global or local, compliance with environmental regulations has become an integral part of the corporate mission. Companies today recognize the need to address issues such as risk management and environmental information disclosure, while complying with greenhouse gas emissions regulations, the prohibition of products containing harmful chemical substances and ISO 14001 legal requirements. Here is an overview of Casio's environmental compliance initiatives.**

## Standards management and audits: Regular internal audits and third-party audits

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There are 13 Casio sites which have obtained ISO 14001 certification.

Of these, three sites belonging to Casio Computer Co., Ltd. (Headquarters [which includes seven sales sites], Hamura R&D Center, and Hachioji R&D Center) began working under integrated certification in fiscal 2018.

Each of these sites regularly implements conditions management and improvement activities by measuring concentrations of dust, SOx, and NOx in exhaust emissions, based on voluntary standards and standards established by national and local governments. They also measure wastewater quality (water containing harmful substances). Moreover, the sites measure and report usage conditions for harmful atmospheric pollutants, as well as handling quantities and atmospheric emissions of volatile organic compounds (VOCs).

Further, each site trains internal environmental auditors, conducts internal audits, and also undertakes regular third-party audits by external organizations. If there is any non-conformity, corrective measures are taken in accordance with internally specified procedures and continuous improvement activities are carried out.

With a view to strengthening Casio's environmental risk management and improving its environmental performance in the future, internal environmental auditors are expected to play a role as front-line leaders of environmental compliance. Toward this end, they are enhancing their ability to perceive environmental risks, increasing their specialized knowledge of environmental laws and regulations as well as chemicals management, and also identifying issues and proposing improvements.

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## Compliance Audits in the Phases of Product Development, Design, and Manufacturing

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In recent years, laws and regulations on the environmental performance of products have become stricter. In addition to stricter regulations in EU nations and US states, stronger laws are also being discussed and enacted in the newly emerging economies of Asia and Latin America, referencing those already established by developed countries. In some cases, the newer laws are based on the established ones, but they often have small differences in the specific requirements. It is vital for Casio to interpret these regulations properly, and make whatever product adjustments are needed.

Casio has established an Expert Sub-Committee on Environmental Law within its Product Regulation Committee. The sub-committee includes representatives from technology, development/design, procurement, sustainability and sales departments. It checks information on environmental laws and regulations and studies measures to ensure compliance with them. The members share information, rapidly establish reasonable response policies, and confirm response progress not only for currently established laws and regulations but also for new laws and regulations currently being considered. Through these activities, they provide support for development, design, manufacturing, and sales departments. They also share information on product regulations other than those related to the environment (such as electrical safety, radio, and wireless regulations), in an effort to comprehensively rationalize Casio's response to product regulations.

The Expert Sub-Committee on Environmental Law focuses on investigating and checking the following matters:

- Gathering and sharing legal information from and with sources such as industrial associations, sales companies in each region, information services, and other companies in the same industry
- Analyzing and interpreting legal information
- Ensuring obligations are met by manufacturing, import, export, and sales entities
- Creating development and design standards, and conducting inspections
- Improving the usage efficiency for design support tools (database of chemical substances contained in products, etc.)

Casio carries out environmental assessments of each product before new products ship to market, to check to ensure environmental design that complies not only with laws and regulations but also with the Casio Green Star Plan. The environmental management departments also conduct environmental audits.

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## Compliance Relating to Chemical Substances Contained in Products

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Countries around the world have implemented new laws pertaining to chemical substances contained in electrical and electronics products, while existing laws continue to be strengthened each year. Individual laws and regulations vary in terms of the applicable chemical substances, regulated applications, exempt applications, threshold values, scope, and requirements (content restrictions, labeling, and information provision, etc.).

Casio consolidated the requirements of various laws on chemical substances contained in products and has incorporated them into the Casio Green Procurement Standards. Then, the development and design departments established a system to ensure compliance with regulations worldwide by checking a database to see whether a part or material to be included in a product meets the Casio Green Procurement Standards.

Further, when making shipment decisions, a chemical substance audit is conducted to check compliance with chemical laws and regulations in the sales region and make sure that all the parts and materials used in a product meet the chemical substance standards.

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## Environmental laws and regulations related to Casio products and green procurement

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As a company with operations around the world, Casio must comply with the laws and standards of many different countries.

This is why Casio starts with the design and procurement stages to ensure that its products comply with restrictions on specified chemical substances in parts and materials, while complying with obligations for labeling, information provision and energy-saving standards for finished products.

Covering the procurement stage, Casio has formulated Casio Green Procurement Standards to cover the legal regulations for the chemical substances contained in Casio products, and is procuring its parts and materials in accordance with those standards. To ensure that Casio products comply with the latest laws and standards around the world, the Casio Green Procurement Standards are constantly reviewed and updated. Thus, by procuring parts and materials that meet its own strict standards, Casio can be confident that its product development meets legal requirements worldwide. Casio also ensures the compliance of its products by scientifically verifying and analyzing the content of chemical substances in parts and materials used.

In the design stage, the company confirms that all parts and materials that will go into a completed Casio product meet the Casio Green Procurement Standards. Products are approved for production only after confirmation using a database of the chemical substances contained in procured materials.

Casio selects recyclable materials and provides symbol marks and the necessary information to ensure separate collection, complying with the relevant laws and standards worldwide on product recovery and recycling as well as on chemical substances contained in products.

In response to laws and regulations requiring more energy-saving designs (such as the ErP Ecodesign Directive), Casio is creating technical documents and other internal standards.

The table below shows the principal environmental laws relating to the distribution of Casio products in countries around the world.

## Major environmental laws and regulations related to Casio products

(as of June 2018)

	Product			Packaging		Battery	
	Collection and Recycling	Hazardous Substances	Energy conservation	Collection and Recycling	Hazardous Substances	Collection and Recycling	Hazardous Substances
EU	WEEE	RoHS REACH Biocidal Products Regulations POP Regulation	ErP	EU Directive on Packaging and Packaging Waste		Batteries directive	
Norway		Chemical substance regulations					
Turkey	Turkey WEEE & RoHS		Turkey ErP	Turkey packaging regulations		Turkey batteries regulations	
Serbia	Serbia WEEE & RoHS					Serbia batteries directive	
Ukraine		Ukraine RoHS					
Customs Union (Eurasian Economic Commission)		Customs Union: RoHS	Customs Union: ErP (draft)				
Belarus			Belarus ErP				
US	Each state's TV/PC recycling laws	Each state's mercury regulations, California Proposition 65, California SB50, federal and California regulations on formaldehyde, safer consumer product regulations	US federal law, and external power supply efficiency regulations in each state	California's Rigid Plastic Packaging Container recycling program, and rigid plastic container labeling regulations in each state	Each state's packaging and heavy metal regulations	Each state's rechargeable battery recycling regulations	

Canada	Each state's electric appliance recycling regulations	Products Containing Mercury Regulations, Canada Chemical substance regulations	Federal and each state's external power energy efficiency regulations	Each state's packaging material collection programs			Products Containing Mercury Regulations
Mexico			Energy consumption labeling regulations, External power energy efficiency regulations				
Brazil	Brazil's Solid Waste Law			Brazil's Solid Waste Law		Brazil's Solid Waste Law	Brazil batteries regulation
Argentina	Argentina WEEE (draft)					Argentina WEEE (draft)	Argentina batteries regulation
Peru	Peru WEEE						
Paraguay							Paraguay batteries regulations
Columbia						Columbia batteries regulations	Columbia batteries regulations
Israel	Israel WEEE			Israel packaging regulations			
Jordan	Jordan WEEE (draft)	Jordan RoHS (draft)	Jordan ErP				
Gulf countries		Gulf countries RoHS (draft)					
UAE		UAE RoHS					
China	China WEEE	China RoHS	China Energy Label	China RoHS			China RoHS
South Korea	South Korea RoHS/WEEE/ELV		South Korea Energy Conservation Law	South Korea Recycling Law		South Korea Recycling Law	South Korea batteries regulations
Taiwan		Taiwan RoHS				Battery recycling regulations	Regulations on heavy metal in batteries

Australia			External power energy efficiency regulations				
India	India's e-waste law						
Viet Nam	Viet Nam WEEE	Viet Nam RoHS				Viet Nam WEEE	
Indonesia	Household waste regulations						
Singapore		Singapore RoHS, Singapore Mercury Regulations					Singapore batteries regulations
Thailand	Thai WEEE (draft)						
Philippines	Philippines WEEE (draft)						
Japan	Small Electronic Devices Recycling Act		Energy Conservation Law	Container and Packaging Recycling Law		Recycling Law	Act on Preventing Environmental Pollution from Mercury
Global convention s		Convention on Persistent Organic Pollutants (POPs), Mercury Convention			Convention on POPs		Mercury Convention

As an initiative to help prevent climate change in the procurement stage, Casio requests suppliers not to use greenhouse gases in the manufacturing process, and also to ascertain and reduce their emissions of CO<sub>2</sub>. In the development and design stages, Casio promotes product development by setting targets that surpass its competitors' products with the best energy consumption efficiency in the same category.

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## Compliance Relating to the Proper Collection, Recycling, and Disposal of Used Products

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Countries around the world also have regulations for the collection and recycling of used electrical and electronics products, packaging materials, and batteries. Companies must comply with the requirements of each law including product design to save resources and facilitate recycling, labeling and information provision to promote user participation in the sorted collection of products for recycling, as well as information provision for proper product disposal.

Casio evaluates products in terms of resource savings, ease of dismantling, recycling potential, and recycled material content. Confirmation is also made to see whether the recycling labels and displayed information meet legal requirements worldwide.

In response to the enactment of Japan's Small Electronic Devices Recycling Act in April 2013, Casio has put together a project team including employees involved in every product category (such as designers), aiming to ensure products being developed are easily recyclable. Casio is asking intermediate processors and metal smelters who recycle used small household appliances to participate in interviews regarding dismantling methods and other issues. The lessons learned are being incorporated into internal design manuals, helping Casio to develop products that are easy to recycle.

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## Compliance Relating to Power Consumption

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There are also regulations on power consumption and efficiency for electrical and electronics products including external power supplies and chargers, based on product categories and power source types. Companies must also meet various requirements relating to power consumption and efficiency, including regulations that require the meeting of minimum standards and those that mandate the display of power consumption information. Casio confirms the applicable regulations for each of its products, and carries out product development and design to meet the requirements. Approval applications and reports are made to the relevant agencies as necessary.

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## Compliance Relating to Energy Saving and the Prevention of Global Warming

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Casio is committed to further consideration and strengthening of its voluntary efforts, such as the targets included in the Casio Group's Environmental Action Plan, to reflect laws and regulations related to energy-saving and the fight against global warming.

Casio has measures addressing regulations around the globe, but this section focuses on the steps Casio is taking to comply with the laws and regulations in Japan that apply to its relatively large business facilities.

### 1. Act on the Rational Use of Energy

Pursuant to the requirements of the Energy Conservation Law, Casio is separately evaluating the rational use of energy at the business level. Casio Computer Co., Ltd. and Yamagata Casio are both currently designated as specified businesses. Since fiscal 2010, Casio has been regularly submitting reports and medium and long-term plans on this issue, and in accordance with the determination standards relating to the rational use of energy at plants and facilities, has been promoting the development of management systems, such as creating the new position of energy management supervisor.

## 2. Act on the Promotion of Global Warming Countermeasures

Casio does not exceed the standards for emissions of greenhouse gases other than CO<sub>2</sub> arising from energy use set by Japan's Act on the Promotion of Global Warming Countermeasures. It is complying with requirements for the reporting of greenhouse gas emissions, by regularly submitting reports under the Act on the Rational Use of Energy.

## 3. Environmental Regulations in Tokyo

In fiscal 2016, total energy usage for Casio's small and medium-sized facilities on a crude oil equivalent basis (energy usage below 1,500kl/year on a crude oil equivalent basis) within the Tokyo Metropolis was below 3,000kl/year. Based on this result, Casio received a confirmation notice that it is not subject to the obligation to submit reports under the Global Warming Countermeasures Reporting Program from the Tokyo Metropolitan Government, and is exempt from such reporting.

However, total energy use on a crude oil basis in fiscal 2018 exceeded 3,000kl/year, as the number of facilities included had increased. Accordingly, Casio submitted reports to the Tokyo Metropolitan Government for fiscal 2018. Regardless of its reporting obligation, Casio will continue to work hard in the fight against global warming based on regulations in Tokyo.

[>Fiscal 2018](#)  (PDF / 855KB)

[>Fiscal 2017](#)  (PDF / 262KB)

[>Fiscal 2016](#)  (PDF / 310KB)

[>Fiscal 2015](#)  (PDF / 306KB)

## Compliance relating to environmental information disclosure

There is a growing international movement calling for the creation of information disclosure standards for companies.

Along with the need for Japanese standards to coincide with the International Financial Reporting Standards (IFRS), there is a movement calling for the provision of Management Commentaries (MC) as a form of disclosure of non-financial and corporate forecast information. In other words, companies will need to disclose non-financial data which describes the connections between the company's current situation, business strategy, risks, and financial performance, and other relevant information.

In order to provide its stakeholders with the proper environmental information in a way that it is easy to understand, Casio has the following aims.

1. To adopt more accurate indices relating to environmental impact, and to provide comparable information
2. To provide non-financial information including environmental information that indicates the connections with corporate strategy
3. To explain the capability of environmental information to improve corporate performance

Along with working to disclose environmental information, Casio will promote international disclosure standards for non-financial information, and work towards standardization.

## Compliance with Environmental Laws

Casio was not subject to any legal violations, penalties, fines, or lawsuits relating to the environment in fiscal 2018.