

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%

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Developing Eco-products (Casio Green Star Products)

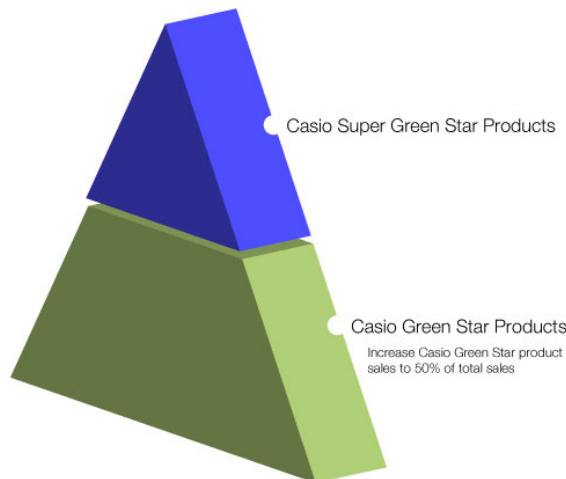
In order to minimize the environmental impact of its products, Casio is promoting the development of environmentally friendly products in every aspect of planning and design.

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

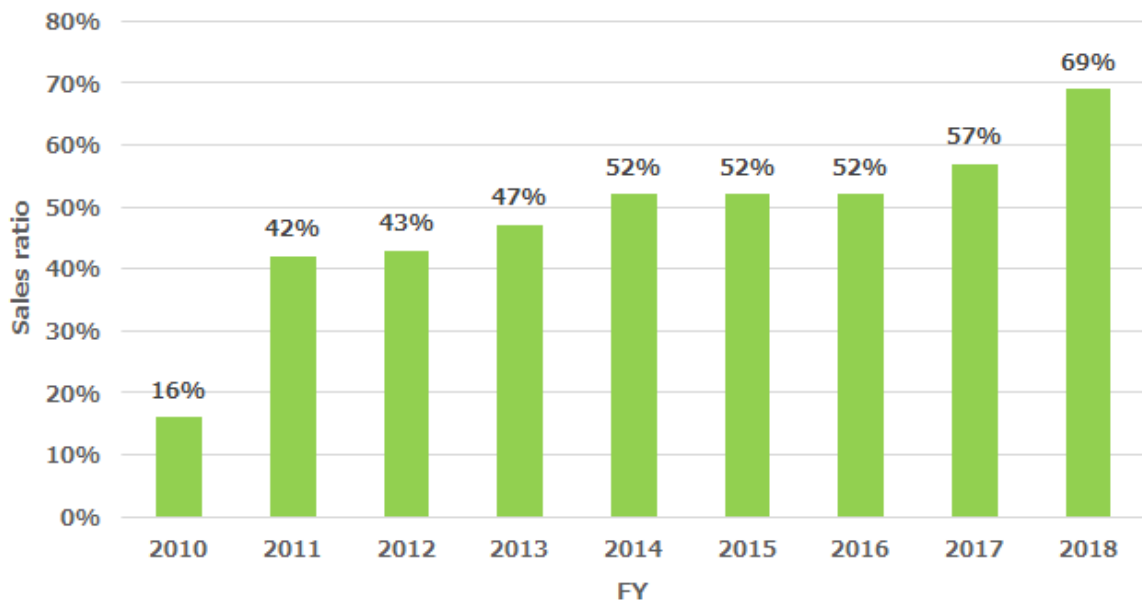
*Fulfill one of the above criteria

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

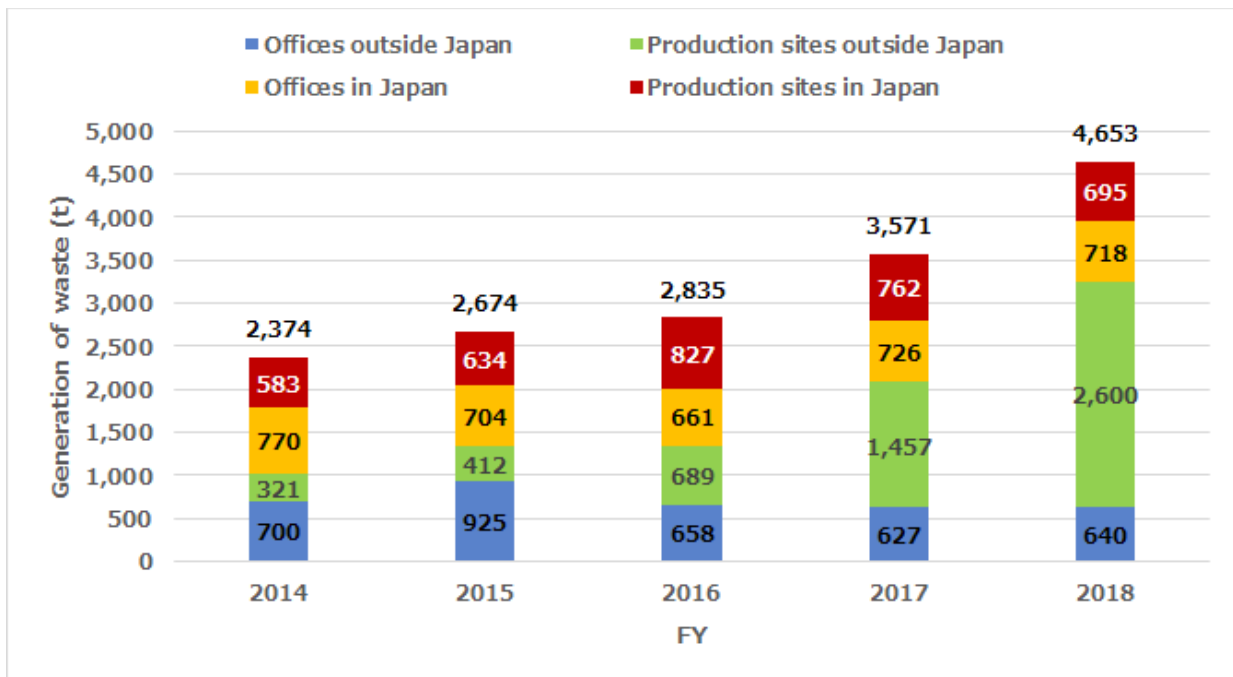
- Saves energy by using two LCDs for different purposes

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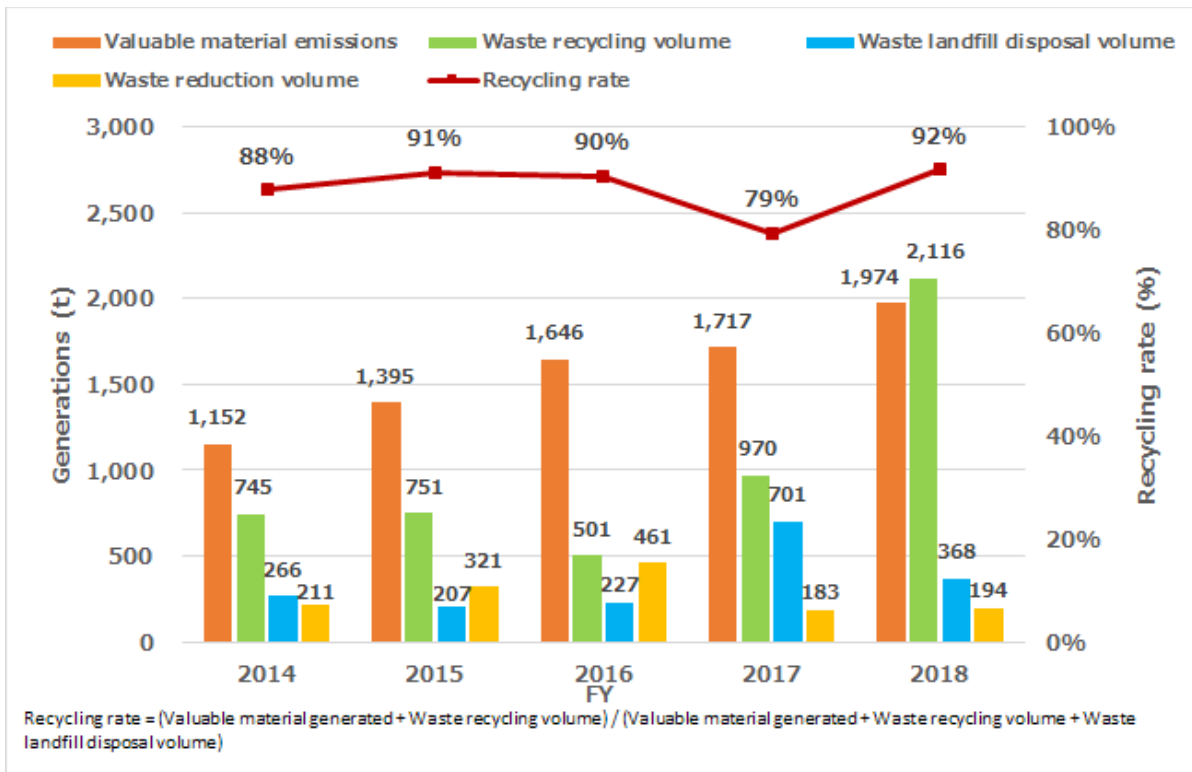
Reducing and Recycling Waste

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.



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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.

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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

