

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 CO₂, 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



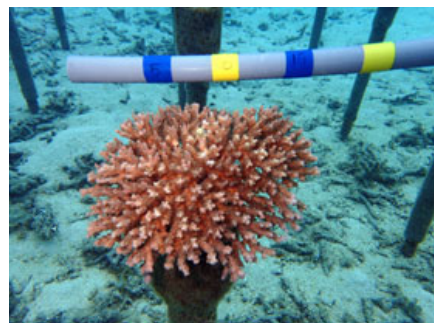
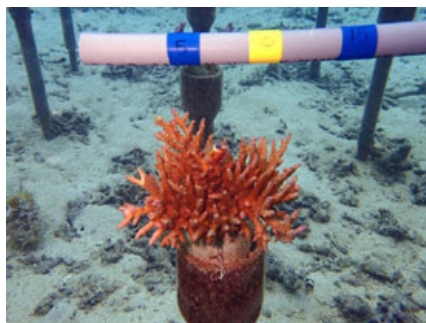
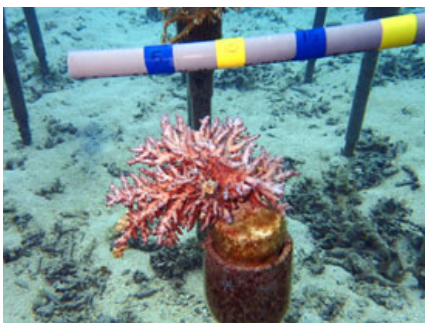
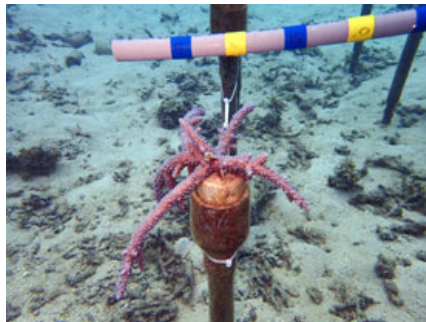
Coral seedlings are secured with stainless steel wire to Magwhite foundations. Compared to gypsum and cement, Magwhite is slightly alkaline, so seems suited to growing coral.

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



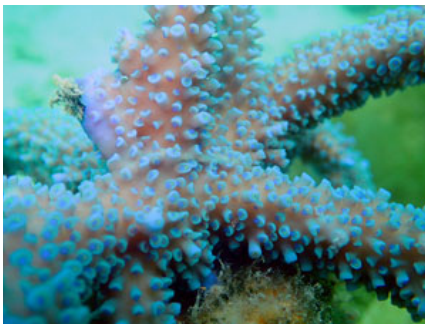
With a water temperature of 23.6°C, no major changes compared with February could be observed in the coral at a glance, but, looking carefully, the soft body of the coral had begun to cover the stainless steel wire. It was confirmed that the coral was steadily becoming established.



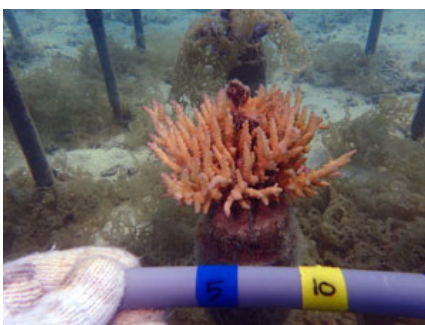
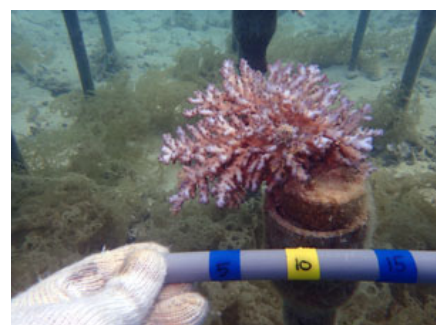
April 14, 2018 status



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](#)

