

# Environmental Activities within CSR Promotion—1 What Are Sanden's Environmental Activities?

Among the key areas with regards to CSR activities, "Environment," which is indicated clearly in Management Policies, is an area that Sanden promotes strongly. Environment-related technologies are one of Sanden's strengths, and it can best contribute to environmental preservation, fulfill its social responsibilities, and, thereby, have its existence and value accepted by society by continuing to enhance these technologies. Taking full advantage of opportunities presented by the holding company structure, the Sanden Group will implement environmental preservation initiatives on a global basis.



## Environmental Issues Surrounding Sanden

The environmental preservation issues surrounding not only Sanden but also corporations in general are quite urgent and action must be taken. Many causes for this exist, including climate change, the exhaustion of resources, and the water shortage problem at the global level. While many of these are being addressed by governments in environmental regulations, such as energy conservation policies, recycling measures, policies related to waste management, measures related to fluorocarbon emission controls, and policies related to chemical substances, Sanden's customers also have their requirements. These include providing more environment-friendly designs, increase recycling ratios, computation of the environmental footprint of products, green procurement, and reduction in emissions of harmful chemical substances. Moreover, companies are being watched more carefully by society. Requirements for disclosure of activities to deal with environmental issues and environmental assessments are being required, and environmental rankings of companies are being published. It is no exaggeration to say that survival of corporations lacking environment-response policies will not be possible.

## Sanden's Basic Approach to the Environment

What and how should the Sanden Group, including Sanden Holdings, its seven operating companies, and other Group companies in Japan and overseas, do regarding environmental issues? In considering this, Sanden has placed its Corporate Philosophy at the end of its thinking. The Corporate Philosophy states, "We will endeavor to preserve the environment in every aspect of our corporate activities to ensure that future generations will inherit our beautiful, irreplaceable earth." Therefore, the Corporate Philosophy affirms the universal and unchanging value of environmental preservation. In addition, the Sanden Group issued its "Sanden Environmental Charter" in October 1993 and revised it in May 1997.

The Environmental Charter is composed of an Environmental Doctrine and Environmental Principles of Action, which all Group employees in Japan and overseas are expected to abide by.

Based on this Charter, all Sanden Group employees have the responsibility of conducting their activities with due regard for environmental preservation.

### Environmental Charter

#### Environmental Doctrine

Sanden, as a worldwide corporate citizen, recognizes that preserving the earth's environment is the most-important shared responsibility of mankind. In order to pass on a safe and clean Earth to the next generation, Sanden will take appropriate steps in all areas of business activities to preserve the environment.

<http://www.sanden.co.jp/csr/disp.cgi?mode=detail&id=13&lang=en>

## Environmental Activities as a Priority Issue

The Sanden Group is an enterprise that provides systems and services to its customers operating in the automotive systems, commercial store systems, and living & environment systems and it is working to reduce the burden that its products place on the environment over their respective life cycles. Even after the transition to the holding company structure, these activities will continue unchanged, and, by applying the Sanden Group's original technologies, Sanden intends to continue to contribute to the Earth's environment. For this reason also, Sanden has positioned environment-related activities as a key CSR issue under its Environmental Charter, and the Group, including Sanden Holdings, its seven operating companies, and other Group companies in Japan and overseas are implementing environment-related initiatives.

## The Sanden Group's "Medium-Term Basic Policy on the Environment"

### Fundamental Principle

The Sanden Group will contribute to society as an environmental protection pioneer by leveraging its environment-friendly technologies and manufacturing expertise to provide environment-friendly products, systems, and services that benefit customers.

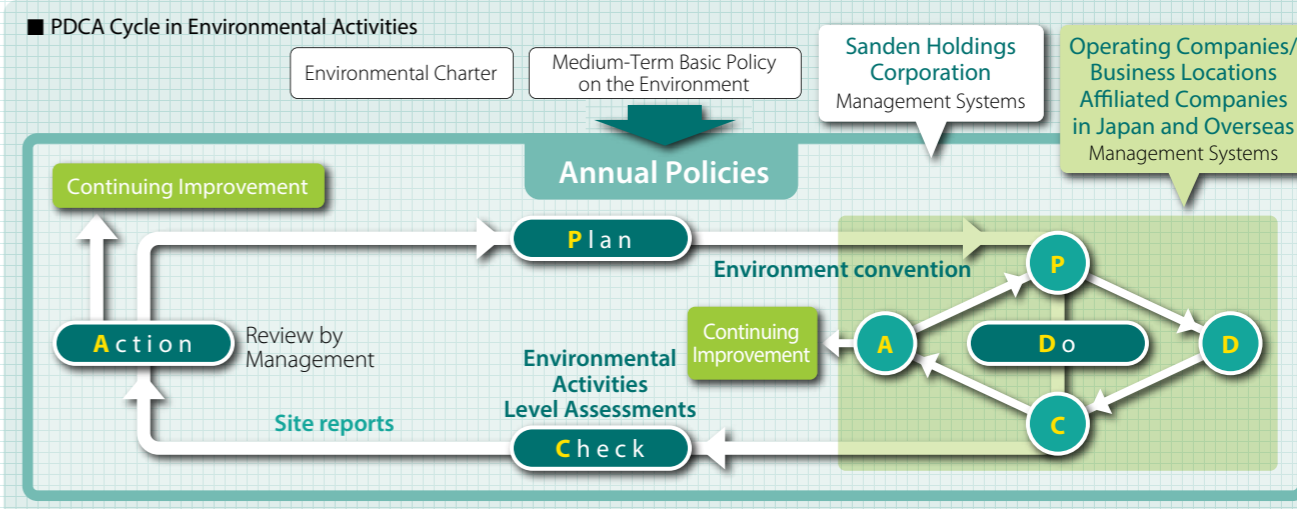
### Strategies

- Green Technologies:** Develop unique environment-friendly technologies to increase product environmental values  
[Target]
  - Attain product environmental value targets (targets set for individual products)
- Green Processes:** Take thorough measures to eliminate all kinds of waste and thereby reduce the environmental impact of operational processes  
[Targets]
  - Reduce environmental impact/energy consumption by 15% or more
  - Reduce waste product volume by 15% or more and reduce water consumption by 5% or more
  - Reduce harmful chemical substance emissions by 5% or more (All targets set based on actual performance in fiscal 2013)
- Green Management:** Strengthen global environmental governance and thereby upgrade environmental activities  
[Target]
  - Realize "A" or higher evaluations of environmental activities at all business sites
- Green Communication:** Upgrade environmental brand value through information dissemination and communication with entities outside the Group  
[Target]
  - Realize "A" evaluations of environmental activities from external entities

## Basic Environmental Policies and the Environmental Management Cycle

Sanden's Medium-Term Basic Policy on the Environment states four "Green" strategies: Green Technology, Green Process, Green Management, Green Communication. Specific numerical goals will be established annually for each year through fiscal 2018, and, to attain these, Sanden has introduced the "plan, do, check, action" (PDCA) management cycle.

The operating companies and other business locations of the Group will be required to conduct their business activities in a manner that will result in continuing improvement, based on their respective basic policies in their business domains. In addition, Sanden Holdings will take initiatives to achieve continuing improvements by monitoring the "Do" cycle of the operating companies.





Special Feature

## Environmental Activities within CSR Promotion—2 Aiming for Harmonious Coexistence of Industry and the Environment through the Four “Greens”

The Sanden Group positions “environment” as one of the Basic Principles of its Corporate Philosophy and issued its Environmental Charter in 1993. As part of initiatives related to the environment, which is at the core of Sanden’s Management Policies, Sanden has set goals based on its Medium-Term Basic Policy on the Environment. Through business activities in line with the four “Green” strategies contained in the Medium-Term Basic Policy on the Environment, Sanden works to nurture employees who have “environmental mind,” to develop technologies, and to conduct manufacturing activities that make use of environment-friendly technologies as well as thoroughly eliminate all forms of waste. Through these various activities, Sanden works to contribute to the environment. The following sections explain Sanden’s four “Green” strategies.

### Green Technology— Enhancing the Environmental Value of Products

Since fiscal 2011, Sanden has introduced its “Product Environmental Indicator” for all new products. The indicator is calculated from the three elements of “energy-saving,” “compact and lightweight,” and “efficient.” The benchmark product for comparison is set at “1,” and the performance of new products is measured in 1% units. The three elements are multiplied together to compute the product score. Since 2011, Sanden has been working to attain a score of 0.9 or less in comparison with the benchmark. In the Medium-Term Basic Policy on the Environment, for the goal, 0.9 or less, has been maintained, and additionally for businesses and product types where product development lead times may be long, Sanden is setting goals by product to secure its product superiority in the long term, and is implementing initiatives to develop products with even better environmental performance.

At present, Sanden, which has “cooling” and “heating” products as core environment-related technologies, is working to make advances in natural coolant technology. Sanden has given attention to coolants and their effect on the natural environment for many years and it received the Ozone Layer Protection Prize from the U.S. Environmental Protection Agency (EPA) in 1996. Sanden is focusing especially on the development of high-efficiency compressors that use CO<sub>2</sub>, which is present in the atmosphere, as a coolant for use in compressors in vending machines, freezer and refrigeration showcases, and heat pump water heaters. Through these various activities, Sanden products are making contributions to the environment.



EPA Award



### Green Management— Reducing the Environmental Burden

The Sanden Group has worked to reduce the burden it places on the natural environment through thoroughgoing activities to eliminate all forms of waste in its business processes. Under the Medium-Term Basic Policy on the Environment, Sanden monitors

its environmental footprint by keeping up with energy usage (as measured on a CO<sub>2</sub> conversion basis), waste emissions, water usage, and emissions of harmful chemical substances. Goals for each of these measures of the environmental burden are “reduction in energy usage of 15% or more,” “reduction in waste emissions of 15% or more,” “reduction in water usage by 5% or more,” and “reduction in emissions of harmful chemical substances by 5% or more.” (All of these are measured on a per unit of sales basis. The year for attainment of the goals is 2018, and reductions are in comparison with 2013 levels.) In addition, to further reduce the burden on the environment, beginning in fiscal 2015, along with reduction in unit usage, Sanden is working to reduce the total volume of usage and emissions.

Regarding energy usage, in addition to SCOPE 1 and SCOPE 2, described below, Sanden is also computing SCOPE 3 and working to reduce SCOPE 3 emissions.

#### Meaning of Scope 1, 2, and 3

- SCOPE 1:** Volume of direct emissions of greenhouse gases through the use of natural gas and certain other sources of energy
- SCOPE 2:** Volume of indirect emissions of greenhouse gases through purchasing electric power from external sources
- SCOPE 3:** In addition to the volume under SCOPE 1 and SCOPE 2, reduction in the volume of greenhouse gas emissions along all the supply chains that are linked to Sanden businesses

### Green Management— Stepping Up the Level of Environmental Activities

Specific initiatives related to environmental preservation are being implemented in various regions and at various business locations, companies, and departments. The results of these initiatives and assessments based on these results are tallied for the Sanden Group as a whole. Therefore, even though there may be differences in the circumstances surrounding different business units, there should be no differences in the level of enthusiasm or other such difference by unit. At Sanden, assessments of each business location, mainly (production plants in Japan and overseas) regarding the state of environmental activities are calculated based on replies to a wide range of questions from Environment Division. Sanden takes the transition to the holding company structure, changes in the operating environment are taken as an opportunity, and measures are being implemented to raise the level of environmental activities at individual locations.

Under the Medium-Term Basic Policy on the Environment, the goal is “realize “A” evaluations of environmental activities at all business locations.” Therefore, Sanden is working to revitalize environmental activities, focusing on locations that do not meet standards, principally in the emerging countries. In addition, by strengthening education and training related to the natural environment, Sanden is working to nurture employees with “Sanden Environmental Mind” around the world.

### Green Management— Enhancing Sanden’s Environmental Brand

The many activities and initiatives of the Sanden Group in the area of environmental preservation are receiving attention not only from stakeholders but also from society at large, and this attention is leading to an enhancement of Sanden’s reputation as a corporation. The clearest example of this is the evaluation of customers of the environmental performance of Sanden products, which is supported by Sanden technology.

Sanden’s Medium-Term Basic Policy on the Environment sets the goal: “Upgrade environmental brand value through information transmission and communication with entities outside the Group” and set the target of “Realize “A” evaluations of environmental activities from external entities” by winning high and objective assessments.

Sanden has been taking environment-related initiatives such as those of the Sanden Forest/Akagi Plant, holding and participating in environmental events for the community in various parts of the world, collaborating with local governments and economic/business organizations, and participating in international conferences. Going forward, Sanden will continue to communicate information both internally and externally on the benefits of Sanden products for the environment in order to firmly establish the Sanden brand as one synonymous with effective environment preservation.

### Harmonious Co-Existence between Environment and Industry— Sanden Forest/Akagi Plant

What Sanden is aiming for in the years ahead is embodied in the Sanden Forest/Akagi Plant. This facility is a plant located in a verdant wooded area with broad open spaces, where cutting-edge research on technologies and manufacturing take place. This facility is Sanden’s “environmental symbol” and has received highly favorable recognition, including the Prime Minister’s Award for Work on Greening Promotion in 2013 and the Superlative Stage certification of Social and Environmental Green Evaluation System (SEGES) in 2014.

