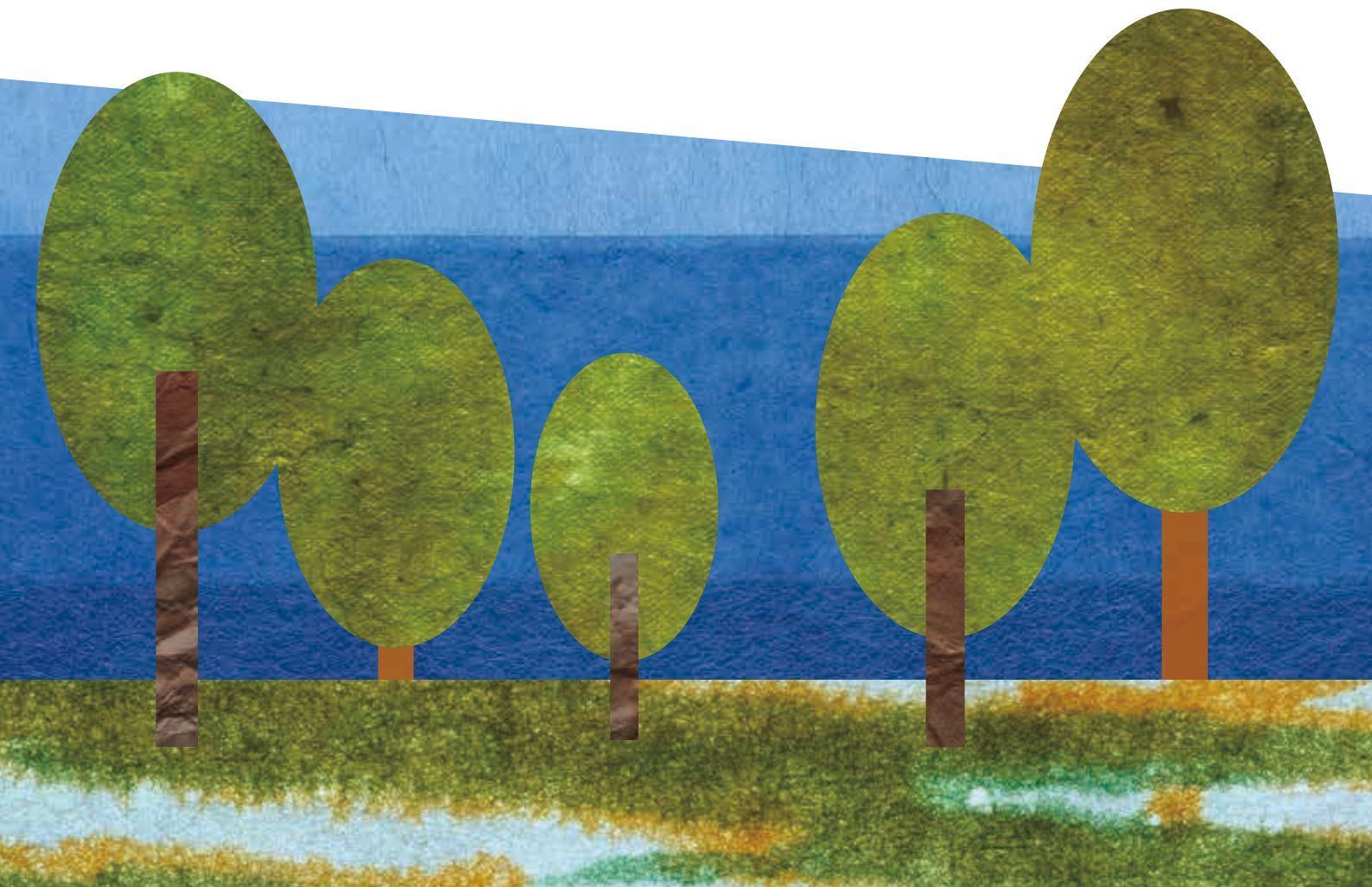




Environmental Management Report

2015

SANYO DENKI CO., LTD.



We at SANYO DENKI Group Companies, aim to help all people achieve happiness, and work with people to make their dreams come true.

To carry out the corporate philosophy, we do the following:

For Environment...	For society and the natural environment, we will help preserve the global environment and contribute to the prosperity of mankind through our corporate activities.
For Customers...	For customers and users, we will create new values through our technology, products and services.
For Suppliers...	For suppliers and vendors, we will strive for integrated technical development and harmonious mutual prosperity through parts purchase, production contracting and joint development.
For Investors...	For investors and financial institutions, we will increase our investment worth and credit through sound and management policy and good access to information.
For Competitors...	For competitors and the industry, we will strive to build industrial and technical development through technical alliances and competition.
For Employees...	For all of our employees, we will help individuals to achieve self-fulfillment through their work and the company.

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Scope of the report

Organizations covered by the report: The Head Office, the Technology Center and factories in Japan (Kangawa Works, Shioda Works and Fujiyama Works)

Period: Fiscal 2014 (from April 1, 2014 through March 31, 2015, in principle)

INTRODUCTION

We would like to express our sincere appreciation for your continued support and patronage of SANYO DENKI Group.

Like many, we have also been feeling the impact of the serious increase in damage from record heat waves, typhoons, tornadoes, severe rain falls, and heavy snowfalls in recent years, and we have been aware of the global change in weather. Global warming is said to be one reason for these severe weather changes.

We consider preservation of the global environment, through measures such as reducing global warming, to be very important, but we also consider economic development to be important. We see the creation of a sustainable and recycling-based society as an important issue for achieving both preservation of the environment and economic development.

BUILDING A SUSTAINABLE SOCIETY

SANYO DENKI Group conducts business activities that contribute to the creation of a sustainable and recycling-based society. Companies should perform their social responsibilities in relation to society, and the responsibility to preserve the global environment is central to our corporate activities. Companies are expected to undertake activities that contribute to the preservation of the global environment, and a forthright approach for such activities can gain society's trust.

Our company has a slogan of "help preserve the global environment and contribute to the prosperity of mankind," and our business activities themselves are directed at environmental activities by incorporating the preservation of the global environment.

AIMING TO ACHIEVE BOTH BUSINESS ACTIVITIES AND ENVIRONMENTAL ACTIVITIES

There are three main areas in our business activities. These are servo systems for motors and motor controlling products, power systems for power supply products, and cooling systems for cooling fans. All these businesses provide society with important products, and environmental consideration is required in all of our processes from product development to sales, and from material procurement until delivery to customers.

Even within these processes, our company is striving to attain the world's leading performance in our product development processes. Progress in attaining leading performance in the products themselves is also linked to advanced environmental activities. We refer to the effective use of resources so that in comparison to previous products new ones use less power consumption, have extremely high energy conversion, last two or three times longer, and are more light-weight and smaller, etc. We have an internal certification system for our products that meet certain environmental standards, including world leading performance, as "eco-products." We commenced the internal certification of "eco-products" from FY2002, and had certified 201 products as "eco-products" by FY2014.

While working on the direct reduction and management of resources such as power consumption, paper use, and zero emission of waste at our development, production, and sales sites, we strive to assist our customers through our products to increase their products' competitiveness while assisting with their environmental activities. We hope that our environmental initiatives will mean our products contribute widely to reducing environmental impact.

Our company will continue to promote environmental preservation activities and disclose relevant environmental information to society. We hope this Environmental Management Report will demonstrate how we engage in environmental management initiatives/activities. We welcome any opinions and feedback on our future environmental activities.

Senior Executive Operating Officer
Nobumasa Kodama

児玉 辰全



Environmental Policy

Basic Philosophy

SANYO DENKI helps preserve the global environment and enhance humanity's prosperity through its corporate activities for society and the environment.

Basic Policy

SANYO DENKI CO., LTD., comprising Kangawa Works, Shioda Works, Fujiyama Works, Technology Center and Head Office, develops, designs, manufactures and sells cooling fans, UPS, power conditioners for photovoltaic generation system, engine generators, servo systems, stepping systems, controllers, encoders, and driving devices. Under the principles listed below, each member of SANYO DENKI will take part in eco-friendly activities to help preserve our abundant global environment.

1. We will continuously improve the environmental management system and work hard to prevent pollution and reduce the environmental impact of our activities.
2. We will assess the environmental impact of our corporate activities and focus on our environmental objectives and targets.

We will also deal with the following as high-priority themes for environmental management.

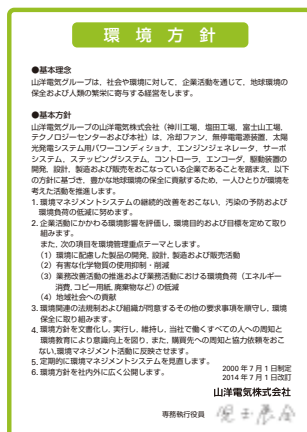
- (1) Develop, design, manufacture, and sell environment-friendly products
 - (2) Reduce or eliminate the use of hazardous chemicals
 - (3) Reduce the environmental impact (energy consumption, number of copies, waste, etc.) of business activities
 - (4) Contribute to the local community
3. We observe environmental laws, restrictions and other rules agreed upon by organizations and work hard for environmental preservation.
 4. We document, carry out and maintain our environmental principles, make them known to all our employees, and ask that our employees both cooperate in the pursuit of these principles and reflect them in our environmental management.
 5. We will review the environmental management system periodically.
 6. We will openly publicize the environmental principles to parties in and outside the company.

Our System

It has been 15 years since the Environmental Committee was established in April 2000. The committee has been working to maintain a level of energy saving and waste reduction in factories since fiscal 2004. In addition to reducing environmental burdens, the committee is also striving to reduce the volume of hazardous chemical substances and develop Eco-products to achieve its major environmental management goals.

Major Responsibilities of the Environmental Committee

1. Formulation of policies on environmental conservation activities, and reporting and instructions on the same
2. Formulation and enforcement of company rules and procedures (including company-wide environmental manuals) concerning environmental conservation activities
3. Promotion of environmental conservation activities at the head office, factories and branch offices through those in charge of environmental management
4. External contacts concerning company-wide environmental conservation activities
5. Surveys on social situations relating to environmental conservation activities



Environmental Policy Brochure



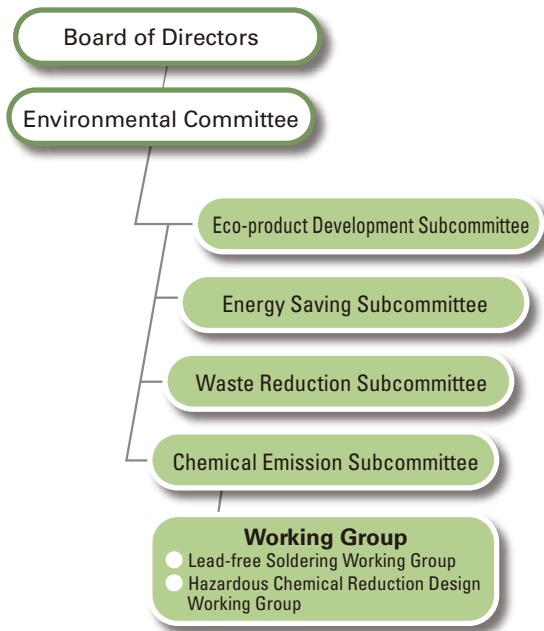
Environmental Committee

Environmental Management System

Environmental Management System



Positions within the Environmental Committee and Its Structure



Organization Chart for the Environmental Management System



Eco-product Development Subcommittee

It promotes the development of competitive products designed to protect the environment in accordance with eco-design standards.

Energy Saving Subcommittee

It promotes energy saving through its daily activities the EMS (environmental management system). It also formulates long-term energy-saving strategies and proposes cost-effective investments.

Waste Reduction Subcommittee

It works to reduce waste and disposal costs and achieve zero emissions.

Chemical Emission Reduction Subcommittee

It strives to reduce emissions of hazardous chemical substances and minimize environmental pollution via self-management. It also works to promote the use of lead-free soldering and lead-free electric wires, reduce hazardous chemical substances, and develop measures for the PRTR (pollutant release and transfer register).

Activity Report for Fiscal 2014

We developed 20 new certified Eco-products in this fiscal year and were also able to raise the sales ratio for Eco-products to 40%. We achieved a 99.7% level of zero emissions for the company as a whole.

Activity	Goal for fiscal 2014	Track record in fiscal 2014		
Promotion of eco-design	Creation of Eco-products	Twenty new products certified as Eco-products		
Sales activities	Sales ratio of Eco-products: 40% or higher	Sales ratio of Eco-products: 40%		
Reduction of hazardous chemical substances	Use of lead-free soldering Development of products with reduced amounts of RoHS-6 hazardous substances Reduction of substances defined in the PRTR Law	Lead-free solder usage in each division is now nearly 100%, and we will continue promoting this effort in the future. Almost all models of cooling fans, stepping motors and servo motors now comply with the RoHS-6 hazardous substance directive. Other models are being brought into compliance upon request.		
Reduction in power consumption	Kangawa Works	9%	13%	
	Shioda Works	36%	74%	
	Fujiyama Works	5%	5%	
	Technology Center	(8%)	(6%)	
	Head Office	15%	21%	
Reduction in fuel consumption	A-type heavy oil: 268 kl *Total of the Shioda and Fujiyama Works	19%	21%	A-type heavy oil: 259 kl
	LPG: 49,000 m ³ N *Total of the the Technology Center	41%	46%	LPG: 45,000 m ³ N
	Town gas: 750,000 m ³ N *Total of the the Kangawa Works	(5%)	3%	Town gas: 693,500 m ³ N
	LPG: 35,000 m ³ N *Total of the Fujiyama Works	(30%)	(23%)	LPG: 33,300 m ³ N
Reduction in the use of copy paper	Kangawa Works	(37%)	(29%)	
	Shioda Works	48%	66%	
	Fujiyama Works	(9%)	(6%)	
	Technology Center	(2%)	11%	
	Head Office	39%	44%	
Reduction of waste	Kangawa Works	(10%)	(12%)	
	Shioda Works	53%	57%	
	Fujiyama Works	50%	52%	
	Technology Center	39%	43%	
	Head Office	67%	70%	
Contribution to local communities	Head Office, Technology Center, Cleaning of areas around the factories conducted at least once every month	Goal achieved		
Promotion of zero emission	Raising the company-wide waste recycling rate to 99.6% or higher	Company-wide rate: 99.7%		

Note:

1. The reduction rate is calculated using fiscal 2000 as the base year, except for electric power and town gas, for which fiscal 2006 and 2010 were used as the respective base years.

2. Figures in parentheses indicate increases.

Energy Saving

Specific Energy-Saving Measures

As a countermeasure against global warming, we consider the restriction of CO2 emissions through energy-saving activities as our top-priority task, and are promoting the improvement of energy use efficiency and energy saving activities.

Production volumes were up in FY2014 compared to the previous year, so electricity consumption was higher and CO2 emissions increased, but the unit cost of production fell.

Results of Introduction

- When renewing the chillers molding machines for Fujiyama Works, we attempted optimize the cooling capacity of all molding machines (we decreased the number of chillers from 5 to 3). In addition, we reduced electricity consumption by installing energy-saving machines.
- We reduced electricity consumption from lighting by using LED lighting for all lights in F1 and F3 Wings at Fujiyama Works.
- When introducing the electric heating equipment, we reduced electricity consumption by switching in-house equipment from existing furnace heating system to a localized heating system which reduced the standby power consumption.



Typical electrical heating system

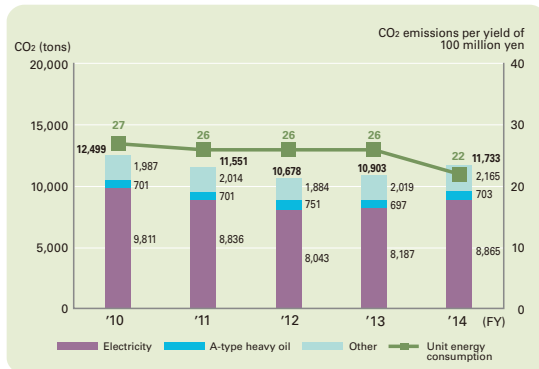


Equipment introduced in the Kangawa Works

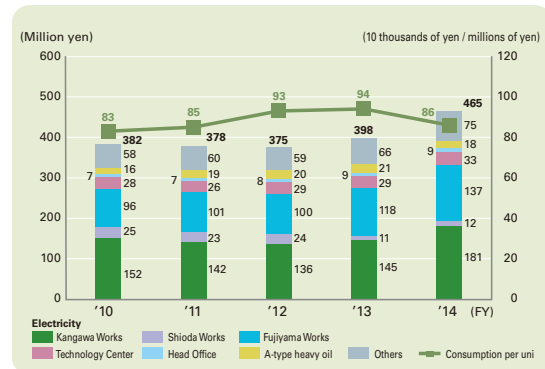


Electricity monitoring system

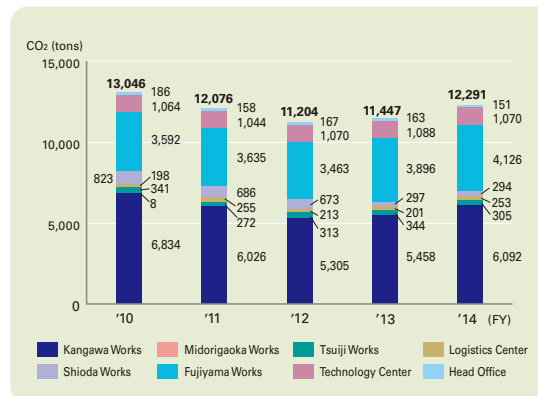
Energy consumption measured in terms of the amount of CO2



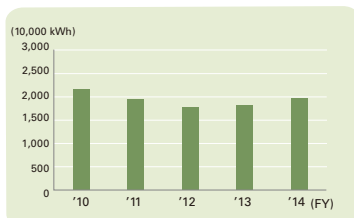
Consumption value per production value



Amounts of CO2 emissions by factory



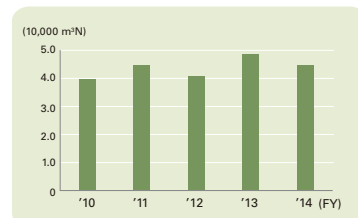
Power consumption



A-type heavy oil



LPG



Energy Saving

Energy Saving Measures Implemented in Manufacturing Processes at Factories

Works	Measures implemented	Effects
Kangawa Works	<ol style="list-style-type: none"> (1) Cutting down on unnecessary lighting in warehouses and on equipment (2) Lower air-pressure setting, repairing air leaks (3) Promoting the use of solar power 	<ol style="list-style-type: none"> (1) Savings in commercial power use as a result of limiting the amount of lighting (2) Reduced commercial electricity by lowering the load factor of the air compressors (3) Savings in commercial power use
Shioda Works	<ol style="list-style-type: none"> (1) Affixing calendar timers to machines (2) Dealing with the new model of production facilities (3) Systematic operation of boilers according to weekly calendar timers 	<ol style="list-style-type: none"> (1) Savings in electricity by preventing switches from being left on (2) Savings in electricity by reducing the production cycle time (3) Control of the use of A-type heavy oil
Fujiyama Works	<ol style="list-style-type: none"> (1) Cutting down on unnecessary lighting (2) Adjusting the operating hours of air conditioners (3) Shifting the operating hours of production equipment (4) Adjusting the operating hours of loading equipment for tests (5) Promoting the use of solar power 	<ol style="list-style-type: none"> (1) Savings in electricity by reducing lighting hours (2) Energy savings through reduced operating hours, reduced the use of heavy oil A, reduced the use of LPG (3) Savings in commercial power (4) Savings in electricity by reviewing the test run time (5) Savings in commercial power



Solar panels at Kangawa Works



Solar panels at Logistics Center



Solar panels at Fujiyama Works



PV Inverters at Fujiyama Works

Transportation

Our company is using vehicles that comply with the regulations on diesel car exhaust in seven municipal communities to transport supplies between factories. A company-wide "Stop Idling" campaign is also under way, in order to reduce the environmental burden.



Signboard for stop idling



Low emission vehicles



Electric vehicle



Vehicle that complies with the regulations on diesel car exhaust

Environmental Accounting

SANYO DENKI has been employing an environmental accounting system since fiscal 2003 with the aim of implementing efficient and effective measures for environmental conservation. We measure the costs required for environmental conservation in our business activities and the effects produced by these activities using quantitative indicators (measured in terms of monetary units or physical quantities) to the greatest extent possible, and analyze these costs and effects in order to improve the efficiency and activity levels of environment management

Performance in fiscal 2014

(1) Environmental Conservation Costs

Environmental Conservation Costs in fiscal 2014 were 1,168 million yen in total: 199 million yen for investment and 969 million yen for costs and expenses.

Investment was made into switching to LED lighting at the Fujiyama Works as global environment preservation cost, and developing environmentally-friendly products as R&D cost.

As for costs and expenses, R&D costs and management activities costs posted the high rates of 58.1% and 28.2%, respectively.

(2) Environmental Conservation Effects

The increased production at the factory meant there was a negative impact on resources input into business activities other than on the amount of heavy oil A used and the amount of kerosene used.

In particular, The introduction of the energy has increased CO₂ emissions by 788 tons, and electric power consumption by 1,560 thousands kWh, as compared with the previous fiscal year.

(3) Economic Effects

The cost savings attributed to the energy savings due to the increased production at the factory rose about 2.5 fold from the previous year to 67 million yen.

Meanwhile, profits from sales of useful materials were 67 million yen, up about 5% from the previous year.

"Environmental Accounting Guidelines" published by the Ministry of the Environment, Format for publication C Data range (company-wide)

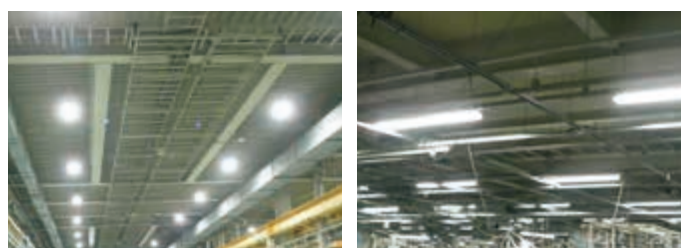
Period covered: April 1, 2014 to March 31, 2015

Environmental Conservation Costs

(In thousands of yen)

Category		Details of major activities	Investment	Cost
(1) Costs within the area of business	1. Pollution prevention costs	Air pollution prevention (measurement of smoke and soot) Water pollution prevention (inspection of wastewater treatment tanks, extraction of sludge, sewage disposal, etc.)	0	23,015
	2. Global environment conservation costs	Periodic electricity checks	122,216	27,985
	3. Resource recycling costs	Reduction of waste, recycling, and proper waste disposal	0	56,540
	Total of items 1 through 3			122,216
(2) Upstream and downstream costs		Green procurement of office supplies and commissions for refurbishing and reconditioning products	0	17,778
(3) Administration costs		Development and operation of EMS and environmental training for employees	0	273,248
(4) R&D costs		Development of Eco-products (such as testing equipment and molds)	77,220	563,129
(5) Social activity costs		Annual membership fee for the Japan Environmental Management Association for Industry, and other fees	0	6,219
(6) Environmental damage measure costs		Assessment of soil contamination, and costs for countermeasures	0	1,002
Total			199,436	968,916

Expenses include depreciation of facilities and personnel costs.



LED lighting at Fujiyama Works

Environmental Accounting

Effects of Environmental Conservation

Classification	Indicators for the effects of environmental conservation			
	Indicators for environmental burdens	Indicators	Indicator value ^(Note)	
Effects on resources input for business activities	Input of energy	Decrease in energy consumption	Energy consumption measured in terms of the amount of CO ₂ : △ 788 tons of CO ₂	
			Electricity consumption: △ 1,560,000 kWh	
			A-type heavy oil consumption: 21.6 kL	
			LPG consumption: △ 19.7 t	
			Kerosene consumption: 0.9 kL	
			Light oil consumption: △ 5.4 kL	
Effects on environmental burdens due to emissions and waste produced by business activities	Discharge of waste and other materials	Decrease in the total discharge of waste and other materials	Town gas consumption: △ 54,000 Nm ³	
			Gasoline consumption: 2.9 kL	
			Photovoltaic power generation: △ 0.141% (company-wide)	
Effects on environmental burdens due to emissions and waste produced by business activities	Input of water	Decrease in water consumption	Water consumption: 2,100 m ³	
	Input of other resources	Decrease in the input of other resources	Copy paper consumption: △ 100,000 sheets	
Effects on environmental burdens due to emissions and waste produced by business activities	Discharge of waste and other materials	Decrease in the total discharge of waste and other materials	Total discharge of waste: △ 747 t	
			Increase in the percentage of recyclable materials in the total discharge of waste	Recyclable materials and useful materials: 0.125%
			Decrease in the discharge of hazardous waste	Discharge of hazardous waste: △ 2.2 t

△ : Indicates that there was no difference compared to last year.

(Note): The measure of the amount will be stated as the difference from the amount of the reference period compared with the year.

Economic Effects of Environmental Conserving Measures (Substantive Effects)

(In thousands of yen)

Classification		Amount
Profits	Sales of useful materials	88,932
Reduction of costs	Reduction of costs by energy saving	△ 67,490
	Reduction of waste disposal costs by recycling	△ 2,180
	Reduction of expenses for copy paper	△ 650

△ : Triangles indicate that there was no difference compared to last year.

Eco-products

Efforts for designing Eco-products

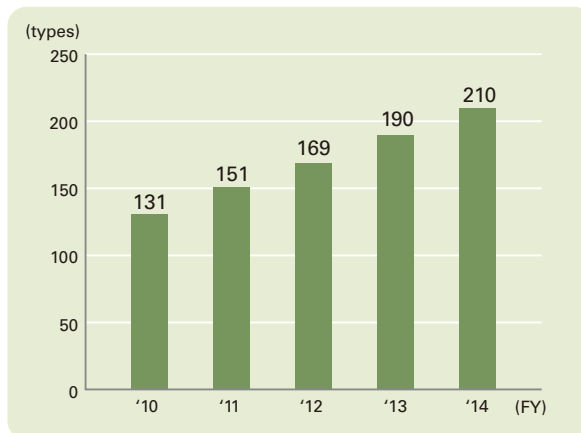
As for product design, we are carrying out R&D to incorporate the latest energy-saving technologies into our new products. At the same time, we carry out product assessments to evaluate the environmental impact of products at each stage, such as component and material procurement, manufacture, distribution, use, recycling, and disposal. Newly developed products are compared with commercially available and existing products and are certified as Eco-products (Eco-design products) if they satisfy the specified evaluation standards. In fiscal 2014, 20 types of products were certified as Eco-products, bringing the total to 210. Eco-products are presented in catalogues and other materials with a LEAF symbol.



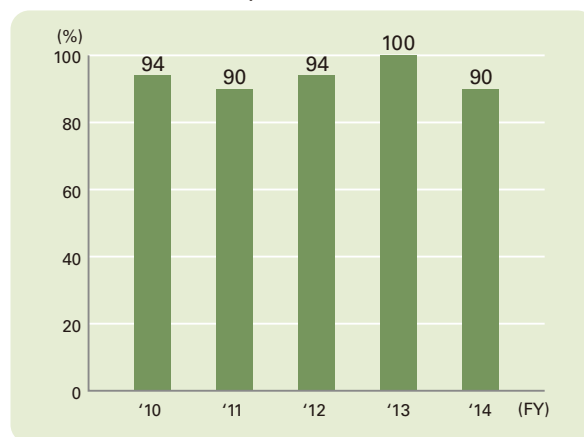
Life cycle assessment (LCA)

LCA is one of the techniques used to provide a general quantitative measure of levels of environmental impact including global warming that products have through their life cycles. We evaluate the environmental compatibility of a product using this method. Our rate of implementing LCA in our Eco-products was 100% in fiscal 2013.

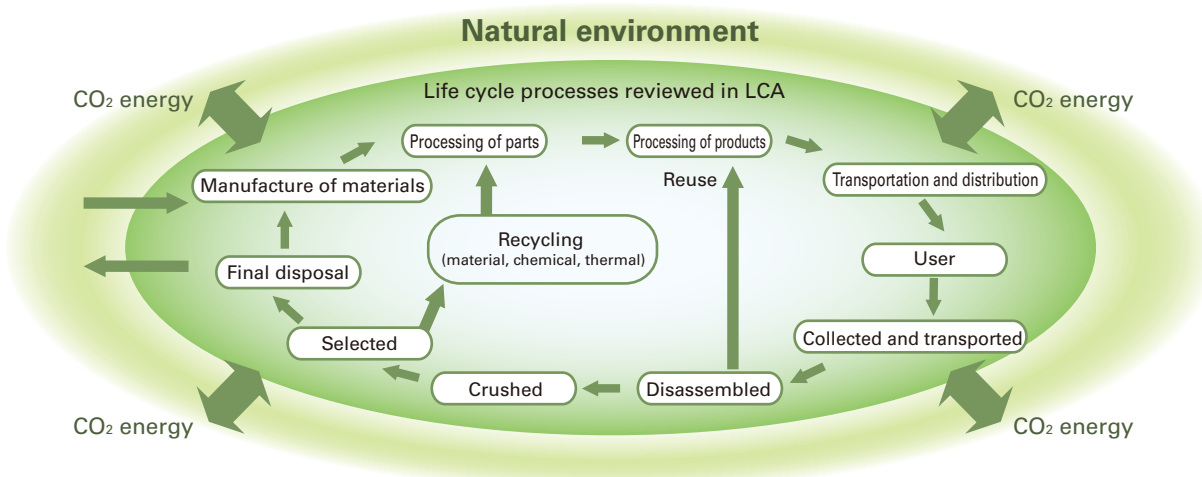
Number of products certified as eco-products
(Total number of products in all divisions)



LCA implementation rate



Life Cycle Processes Reviewed in LCA



Effects on the natural environment (global warming) are assessed at each stage of the life cycle, based on energy consumption and the amount of CO₂ emissions.

Representative Eco-products of Fiscal 2014

Results of LCA

Twenty new Eco-products were developed in fiscal 2014. We will present the results of the LCA of three representative products. The results are based on a comparison of the amounts of CO₂ emitted during the time of use between newly developed models and their immediate predecessors. Since these products are used for a long time, the reduction of CO₂ emitted during the time of use will be effective in preventing global warming.

120 x 120 x 38 mm high airflow long life fan "San Ace 120L" 9LG type



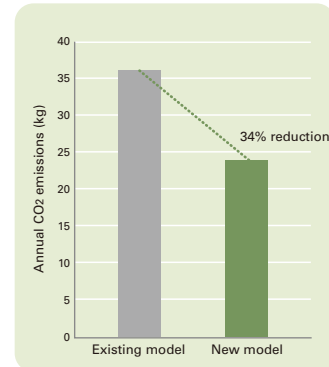
■ Features

- Reduces power consumption by about 33% as compared with conventional models
- Achieves noise reduction of 2dB(A)
- Expected product life increase by 2.25 times

■ Models compared for LCA

New model: 9LG1212P1H001
Existing model: 9GL1212G101

Comparison of CO₂ emissions



Online UPS "SANUPS A11K"



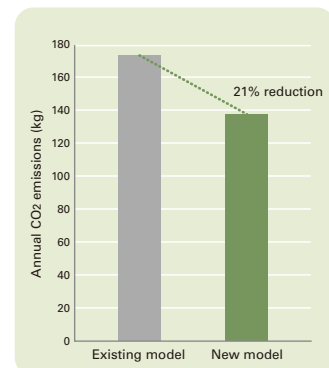
■ Features

- Industry-leading 92% Efficiency
- High Reliability
Online UPS
Periodically performs battery self-tests
- Wide Input Range: -40% to +20%
- Easy Maintenance
Front-replaceable battery and inverter
Maintenance can be performed while it continues supplying power

■ Models compared for LCA

New model: A11K102
Existing model: A11F102

Comparison of CO₂ emissions



20 mm sq. Compact AC Servo Motors



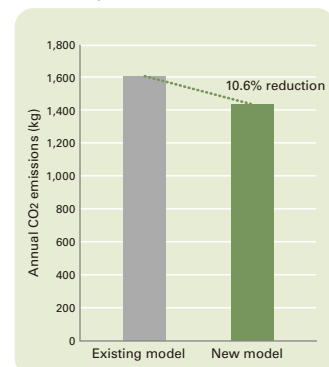
■ Features

- **[High Output]**
Instantaneous maximum torque has been raised by approximately 17%, Maximum rotational speed has been increased by 20%.
- **[Lightweight]**
Mass has been reduced by approximately 8.5%.
- **[Low Loss]**
Power loss has been decreased by approximately 20%.

■ Models compared for LCA

New model: R2GA02D20FXC00
Existing model: P50B02002DXS00 or P50B02002BXS2C

Comparison of CO₂ emissions



Promoting Green Supplies

Establishment and Use of Chemical Substance Management Guidelines

In August 2005, we established our Chemical Substance Management Guidelines for the management of hazardous substances, concerning parts and materials used for our company's products.

Our Guidelines provide management rules concerning substances specified in various laws and regulations, such as substances whose use is restricted or prohibited by the RoHS Directive*¹, SVHC (high-concern material) in REACH*³, substances banned by domestic and foreign legislation, and substances designated by the Japan Green Procurement Survey Standardization Initiative (former JGPSSI).

We keep these guidelines up-to-date by making necessary revisions in response to changes in relevant laws and regulations (last updated in January 2014). These include definitions of terms, RoHS threshold values, survey questionnaires for our suppliers on chemical substances that affect the environment, and a guarantee form to assure that no RoHS-restricted substances are included in the materials we use.

Currently, we request that our suppliers agree to abide by our Guidelines, and that they submit a survey questionnaire and a guarantee form to assure that their supplies contain no RoHS-restricted substances.

Green Purchases

Our company actively purchases stationery and office supplies that are environmentally friendly, such as products using recycled materials, substitute materials and waste materials, refillable products, products with replaceable parts, and products designed for recycling.

Reduction of Hazardous Chemical Substances

The Hazardous Chemical Reduction Design Working Group, a subordinate body of the Chemical Emission Subcommittee, is working together with the design sections of business divisions to focus on dealing with regulated substances or those banned by the RoHS directive.

- Compliance of applicable products with the RoHS directive cooling fans and stepping motors are now compliant. Servo motors, servo amplifiers, stepping motor drivers, and power supply systems are on their way toward becoming compliant.
Models complying with the RoHS directive are expanding.
- Inclusion surveys and alternatives for new chemicals and additional regulated substances are being dealt with.
- An examination of substances will be conducted upon the request of the customer.
- An examination of hazardous chemical substances contained in our products is under way, based on the Chemical Substance Management Guidelines.
- Our company guidelines concerning China RoHS*² and countermeasures for substances banned by the revised RoHS directive and REACH have been disseminated inside our company.
- RoHS6 substances contained in procured materials are being analyzed using an X-ray fluorescence analyzer (XRF).
- We are conducting inclusion surveys for SVHC materials (substances of high concern: 161 substances) in REACH regulations and providing information to our customers.
- We are conducting inclusion surveys according to AIS specified by JAMP (Joint Article Management Promotion Consortium), and providing information to our customers.

Lead-free solder

The Fujiyama Works, which manufactures cooling fans, has been using lead-free solder for high-temperature soldering since March 2006, following the introduction of lead-free solder in all manufacturing processes in January 2004 (except for high temperature soldering exempted from the RoHS standards.) As for production lines mounting substrates for servo amplifiers and power supply systems, lead-free soldering facilities were first installed in fiscal 2004, and full installation has finally been completed.

- Cooling fans, stepping motors, servo motors: Installation of equipment for surface mount soldering has been completed.
- Servo amplifiers, stepping motor drivers: Lead-free solder is being implemented and expanded to RoHS-applicable products. A shift towards lead-free products is being promoted.
- Power supply devices: Lead-free solder is being implemented and expanded to RoHS-applicable products. A shift towards lead-free products is being promoted.

Compliance with the PRTR

Our company registers and reports the amount of discharge and transportation of reportable PRTR-controlled substances when over one ton is consumed at a factory annually.

In fiscal 2014, it became necessary to report the use of styrene at the Kangawa Works, as well as antimony and its compounds and triphenyl phosphate at the Fujiyama Works. Lead has not been required to be reported for the last eight years because of the reduction of lead usage due to RoHScompliant soldering.

PRTR (pollutant release and transfer register): A system for collecting, aggregating and publishing data on various hazardous chemical substances to see how much of these substances are released into the environment from what sources, or are transferred with waste from what facilities.

PRTR-controlled substances	PRTR-controlled substances (that are required to be reported and used in amounts of one ton or more)	
Styrene	Kangawa Works	12.0 t
Antimony and its compounds	Fujiyama Works	2.9 t
Triphenyl phosphate	Fujiyama Works	2.5 t



An X-ray fluorescent analysis device at the Kangawa Works



Lead-free high-temperature soldering equipment at the Fujiyama Works

Reuse & Recycling

Zero-emission Activities

In fiscal 2014, SANYO DENKI set out to achieve a waste recycling ratio of 99.6% as part of its recycling initiatives. This goal was achieved as a result of our efforts to stop producing wastes that are simply buried or incinerated through all-out reduction and recycling of general and industrial wastes that occur in our production activities.

Reuse

We promote in-house recycling of unneeded supplies such as OA equipment, desks, shelves and chairs.

Reuse of Materials

We are returning wooden pallets used to transport purchased materials to carriers in order to promote their reuse.

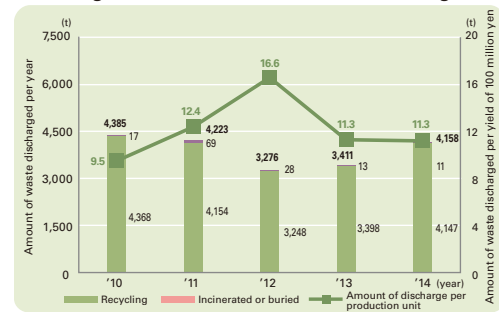
[Other examples of reuse of materials]

Cardboard boxes: returned to suppliers

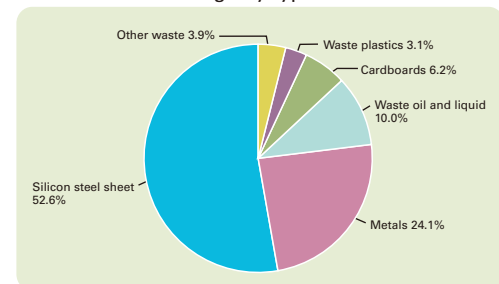
Shock absorbers: reused within the company

Inscription board mounts: recycled

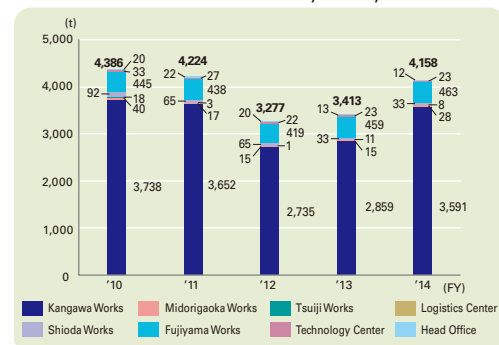
Changes in the amount of wastes discharged



Percentage by type of waste



Amounts of waste by factory



Waste		Amount discharged (tons)	Amount recycled (tons) / Recycling rate (%)	Recycling method
Sludge	Organic sludge	6.7	6.7 / 100	After oil and water are separated, dehydrated residues are turned into compost.
	Inorganic sludge	19.2	18.0 / 93.5	After intermediate treatment, some of the sludge is recycled as road construction materials. Some is also gasified by furnaces, with residues recycled as cement materials.
Waste liquid	Oil-based materials	4.4	4.4 / 100	After oil and water are separated, the material is recycled as fuel.
	Water-soluble materials (detergents, grinding liquid, etc.)	323.6	323.6 / 100	Reuse and incinerated residues are used as cement materials.
	Volatile materials	7.0	7.0 / 100	Distilled and used as recycled oil.
	Waste acid (batteries)	82.0	82.0 / 100	Crushed, sorted, and all recycled.
Waste plastics	OA equipment and circuit boards	20.9	20.9 / 100	Crushed, sorted, and all recycled.
	Vinyls and films	67.5	67.5 / 100	Turned into solid fuel (refuse derived fuel), reducing agents (using furnaces), and materials for power generation (thermal recycling)
	Molding scraps	32.8	32.8 / 100	
	Other solid scraps	2.5	1.8 / 72.6	Turned into raw materials (material recycling); immersed in solvent to be turned into soil, and recycled as raw material
Styrofoam recycling	6.2	6.2 / 100		
Metal scraps	Scraps generated in manufacturing processes	3189.9	3189.9 / 100	Recycled as metal materials
	Metals (including empty cans)	0.4	0.4 / 100	
Paper scraps	Used paper	7.4	7.4 / 100	Turned into raw materials for recycled paper
	Newspapers, magazines, and other papers	58.0	58.0 / 100	
	Cardboards	259.7	259.7 / 100	
Wood scraps	Packages and transportation pallets	58.7	58.7 / 100	Crushed and turned into combustion improver
Glass and ceramic scraps	Empty bottles, glass, and ceramics	2.6	2.6 / 100	Crushed and turned into road construction materials
Other waste	Paper scraps and other waste	9.3	0 / 0	Incinerated
Total		4158.8	4147.5/99.7	

Social Contribution

Exchange and cooperation with local communities

Members of the Head Office, the Technology Center, and the factories in Japan clean the areas around their office buildings and factories at least once a month. At the Kangawa Works, large-scale cleaning was carried out in cooperation with the neighborhood community association.

Wrestling with diversification of living things

The preservation related to the diversification of living things is said to be an important issue, as well as countermeasure against global warming. SANYO DENKI performs energy-saving activities and makes efforts by using our resources, including our technologies and products.

Education and Training

Training curriculum

SANYO DENKI's training system is composed of training programs by employee level, career training programs, and training programs by division.

In fiscal 2014, we held the following workshops and meetings:

- August 2014

Workshop on designs to reduce hazardous chemical substances (Recent trends of chemical substances and the RoHS Directive and REACH)

- March 2015

Presentation of Eco-products



Outdoor cleaning activities (Head Office)



Company lecture



Outdoor cleaning activities (Ueda Area)



Product presentation meeting

Internal Audits

We have employees conduct internal audits to check that the environmental management system created by the company is being properly implemented and effectively managed and maintained in accordance with regulatory requirements. To ensure the fairness and objectivity of internal audits, we created a certification system for internal auditors to avoid the auditing of divisions by their own members and conduct internal audits in accordance with the standards for internal audits. The results of internal audits are reported to the top management and divisions audited, with the aim of making improvements to the environmental management system.

Safety and Health

To prevent occupational accidents and to ensure the safety and mental and physical health of employees, we formed the Safety and Health Committees and opened its branches at the Head Office and the Ueda branch office (for the Technology Center and the factories). The Safety and Health Committee aims to provide a safe and healthy working environment, and to that end, it allocates officially certified administrators and experts in environmental management to ensure occupational safety and provide health care.

Activities of the Safety and Health Committee

- Inspection visits to workplaces
When a monthly committee meeting is held, committee members make an inspection visit to workplaces. The committee checks whether appropriate measures have been taken to solve the problems pointed out in the previous month, and whether or not any other problems can be detected.
- Prevention of occupational accidents
During inspection visits to workplaces, committee members check certain priority issues to prevent occupational accidents. All branch offices and factories are informed of occupational accidents that occur at workplaces so that they can implement appropriate measures to prevent any recurrence.
- Reports from administrators
The committee receives reports from safety and health administrators concerning environmental measurements, inspection schedules, announcements, training sessions and revisions to laws and regulations.
- Activities for maintaining and improving health
Medical examinations are conducted to achieve a 100% examination rate. Employees with health problems are provided with medical counseling and follow-up examinations. The committee also provides health consultant services to prevent lifestyle diseases in accordance with the annual schedules of branch offices and factories.
- Mental health care
We provide contacts for consultant services, training sessions for managers or those on self-care for general employees, and counseling by nurses.
- Installation of automatic external defibrillators (AED)
Automatic external defibrillators are installed at the Head Office and the Ueda branch office (for the Technology Center and the factories). In addition, to be able to act quickly in unexpected situations, training sessions on general emergency life-saving methods are periodically provided.
- Training and drills
Emergency drills are conducted.



Training on general emergency life-saving methods



AED



Emergency drills

Goals for Fiscal 2015 and Challenges for the Future

We created 20 eco-design products (Eco-products) in fiscal 2014, a year during which 40% of our sales were accounted for by Eco-products. We will continue to promote the LCA-based development of products designed to reduce CO₂ emitted during their use and to be eco-friendly.

Item	Goals for Fiscal 2015	Goals to be achieved by fiscal 2015
Promotion of Eco-products	Creation of Eco-products	Creation of Eco-products
Sales activities	Sales ratio of Eco-products: 45% or higher	Sales ratio of Eco-products: 45% or higher
Reduction of hazardous chemical substances	Promotion of the use of lead-free solder Implementation of measures to meet the RoHS & REACH standards Reduction of PRTR-controlled substances	Promotion of the use of lead-free solder Implementation of measures to meet the RoHS & REACH standards Reduction of PRTR-controlled substances
Reduction in power consumption	Reduction by 9% compared to fiscal 2006	Reduction by 9% compared to fiscal 2006
Reduction in fuel consumption	Consumption of LPG (Technology Center) Maintaining it at the current level (reduced by 52% compared to fiscal 2000)	Consumption of LPG (Technology Center) Maintaining it at the current level (reduced by 52% compared to fiscal 2000)
	Consumption of LPG (Fujiyama Works) Maintaining it at the current level (reduced by 48% compared to fiscal 2013)	Consumption of LPG (Fujiyama Works) Maintaining it at the current level (reduced by 48% compared to fiscal 2013)
	Consumption of A-type heavy oil Maintaining it at the current level (reduced by 21% compared to fiscal 2000)	Consumption of A-type heavy oil Maintaining it at the current level (reduced by 21% compared to fiscal 2000)
	Consumption of town gas Reduction by 8% compared to fiscal 2010	Consumption of town gas Reduction by 8% compared to fiscal 2010
Reduction in copier paper consumption	Maintaining it at the current level (reduced by 15% compared to fiscal 2000)	Maintaining it at the current level (reduced by 15% compared to fiscal 2000)
Reduction of waste	Maintaining it at the current level (reduced by 0% compared to fiscal 2000)	Maintaining it at the current level (reduced by 0% compared to fiscal 2000)
Contribution to local communities	Cleaning of the area around factories at least once every month Participation in environment-related events	Cleaning of the area around factories at least once every month Participation in environment-related events
Promotion of zero-emission	Maintaining a company-wide waste recycling rate at 99.6% or higher	Maintaining a company-wide waste recycling rate at 99.6% or higher

General Environmental Manager Hiroyuki Nishimura



SANYO DENKI established its environmental management system and obtained ISO14001 certification in 1999. Our general environmental manager works in the environmental management system under the direction of the top management to promote environmental activities at our Head Office and factories. In addition to the energy conservation and waste reduction activities at each of our factories, we aim to reduce the global environmental burden by developing high-efficiency energy-saving products for our customers and providing power equipment to reduce consumption using maximum power peak cutting functions and regenerating electric power from braking forces. We also disclose environmental information to a wide spectrum of both internal and external stakeholders and place great importance on communication with local communities and relevant individuals. The Environmental Committee works with environmental managers at our factories to organize specialized subcommittees in order to discuss measures for ongoing environmental improvements and to take an active part in promoting environmental conservation activities to achieve our goals.

Head Office Kazutomi Kaneko



- Location: 3-33-1 Minami-otsuka, Toshima-ku, Tokyo
- Area: 3,378 m²
- Number of employees: 259
- ISO certificate obtained: March 2002



Following its relocation, the Head Office works towards further energy saving. In addition to providing support for improving the sales ratio of Eco-products and for local environmental activities, the Head Office prioritizes measures to save energy and reduce waste and copy paper consumption.

- Improvement in the sales ratio of Eco-products by supporting sales activities
- Proper temperature management for air conditioning
- Improvement in the sorting of waste and the recycling rate
- Economize on photocopy paper by using multi-function machines
- Volunteer activities for cleaning areas around the Head Office

We will continue to promote environmental activities at the Head Office and all our sales offices and branches.

Technology Center Hiroyuki Nishimura



- Ueda Research Park, 812-3 Shimonogo, Ueda-shi, Nagano
- Area: 44,908 m²
- Number of employees: 304
- ISO certificate obtained: November 1999



Our Technology Center is engaged in the design and development of products, and is committed to promoting eco-designs and developing products that are free of hazardous chemicals. To promote the development of products designed for the environment, we certified 20 new items as Eco-products in fiscal 2014. We have nearly completed the installation of equipment required to meet the RoHS standards for our target products, in order to achieve our goal of developing products that are free of hazardous chemicals. At the moment, assessments are underway to check for the presence of SVHCs (substances of very high concern) in compliance with the REACH regulations. We have also worked to reduce the consumption of electricity, LPG and copy paper, as well as the amount of waste, and cleaned areas around the Ueda Research Park for the local community. We will continue to promote energy savings with high efficiency products designed to be environmentally-friendly, reuse of electric energy using power regeneration functions, etc., in order to help customers reduce their environmental burden when using our products.

Kangawa Works Kazuhiko Takizawa



- Location: Ueda Research Park, 812-3 Shimonogo, Ueda-shi, Nagano
- Area: 67,141 m²
- Number of employees: 425
- ISO certificate obtained: March 2010
- Major products: AC / DC servo motors, stepping motors, and linear servo motors



The Kangawa Works is working on process improvements for energy savings, such as cutting down on lighting, waste reduction, curtailed use of copy paper, and the promotion of zero emission.

In the motor assembly and inspection processes, a production and inspection guidance system has been introduced to prevent operational mistakes and accidental leakage of defective products so that unnecessary processes can be omitted. Also, the use of paper check sheets has been discontinued, leading to a reduction in copy paper use.

We have also been engaged in the large-scale cleaning of the surrounding area in cooperation with the neighborhood community association. We will be working on further reduction of environmental burdens through the use of the BEMS central monitoring system that can oversee the energy consumption of the entire site.

Shioda Works Satoshi Atou



- Location: 517 Goka, Ueda-shi, Nagano
- Area: 5,698 m²
- Number of employees: 16
- ISO certificate obtained: March 2001
- Major products: power conditioners for photovoltaic power generation systems



The Shioda Works is promoting activities to save energy, reduce waste, and eliminate hazardous substances from the manufacturing processes.

- Reduction in power consumption (planned operation of air conditioners by using timers and checking room temperatures, and a reduction in the operation time of production lines by improving the operation rate)
- Reduction in the consumption of A-type heavy oil (planned operation of boilers using timers)
- Reduction in the consumption of copy paper (use of projectors, use of electronic means for checking the progress of processes, and printing on both sides of printed paper) and reuse of the backs of printed paper)
- Thorough sorting of waste materials and promotion of the reuse of the delivery boxes for purchased parts
- Use of components and materials meeting the RoHS directive
- Volunteer activities for cleaning areas around the factory
- Reduction of incinerated waste (Ongoing surveillance and detailed analysis of waste)

Fujiyama Works Shunsuke Niimi



- Location: 4016 Fujiyama, Ueda-shi, Nagano
- Area: 99,828 m²
- Number of employees: 395
- ISO certificate obtained: December 1999
- Major products: Cooling fans, UPS's (uninterruptible power supply devices), power conditioners for photovoltaic power generation systems, emergency self-power generation systems, power source monitoring systems, AC / DC servo amplifiers, stepping drivers and system controllers.



The Fujiyama Works operates its production activities in the F1, F2 and F3 wings which are occupied by the Cooling Systems Division, Power Systems Division and Servo Systems Division, respectively. Each division is working on the reduction of environmental burdens, energy saving and waste reduction and zero emissions through improvements of their operations. In fiscal 2015, our efforts will continue toward the achievement of our environmental goals.

- Reduction in the consumption of electricity, A-type heavy oil and LPG
- Reduction in the consumption of lead by using lead-free solder
- Reduction of waste (waste plastics and cardboards) and zero emission activities
- Use of components and materials meeting the RoHS directive
- Volunteer activities for cleaning areas around the factory

Data on Air Quality, Water Quality and Noise

Kangawa Works	Item	Regulatory standard	Voluntary standard	Actual value
Air quality Air pollution control laws and ordinances	Smoke and soot (g / m ³ N)	Exempted (no data)		
	Nox (ppm)			
	Sox (m ³ N / h)			
Water quality Water pollution control laws, ordinance and agreements	PH (pH)	5.8 to 8.6	—	7.7
	BOD (mg / L)	20	19	8.7
	SS (mg / L)	30	28	24.0
Noise Laws, ordinances and agreements for noise regulation	(dB)	65	64	59

Shioda Works	Item	Regulatory standard	Voluntary standard	Actual value
Air quality Air pollution control laws and ordinances	Smoke and soot (g / m ³ N)	0.3	0.03	0.0027
	Nox (ppm)	180	130	74
	Sox (m ³ N / h)	1.4	0.7	0.0064
Water quality Water pollution control laws, ordinance and agreements	PH (pH)	Exempted (No water disposal tank)		
	BOD (mg / L)			
	SS (mg / L)			
Noise Laws, ordinances and agreements for noise regulation	(dB)	65	64	50

Technology Center	Item	Regulatory standard	Voluntary standard	Actual value
Air quality Air pollution control laws and ordinances	Cold and hot water generator Smoke and soot (g / m ³ N)	Exempted		
	Power generation equipment Smoke and soot (g / m ³ N)	Exempted		
	Cold and hot water generator Nox (ppm)	150	130	61
	Power generation equipment Nox (ppm)	600	550	55
	Sox (m ³ N / h)	Exempted		
Water quality Water pollution control laws, ordinance and agreements	PH (pH)	5.8 to 8.6	—	7.7
	BOD (mg / L)	20	19	16.0
	SS (mg / L)	60	54	11.0
Noise Laws, ordinances and agreements for noise regulation	(dB)	65	64	Exempted

Fujiyama Works	Item	Regulatory standard	Voluntary standard	Actual value
Air quality Air pollution control laws and ordinances	Smoke and soot (g / m ³ N)	0.3	0.03	0.0067
	Nox (ppm)	180	130	67
	Sox (m ³ N / h)	5.0	2.5	0.038
Water quality Water pollution control laws, ordinance and agreements	PH (pH)	5.8 to 8.6	—	7.5
	BOD (mg / L)	50	48	16.0
	SS (mg / L)	60	54	20.0
Noise Laws, ordinances and agreements for noise regulation	(dB)	65	64	Exempted

Business Profile and Company Profile

Business Profile

SANYO DENKI is working to develop new technologies and products, with the aim of creating “technologies to protect the global environment,” “technologies to ensure human health and safety” and “technologies to exploit new energy sources and save energy.”

■ Cooling Systems Division

Development, manufacture and sales of cooling fans and cooling systems

■ Power Systems Division

Development, manufacture and sales of uninterruptible power supplies, power conditioners for photovoltaic power generation systems, and engine generators

■ Servo Systems Division

Development, manufacture, and sales of servo systems, stepping systems, controllers and encoders

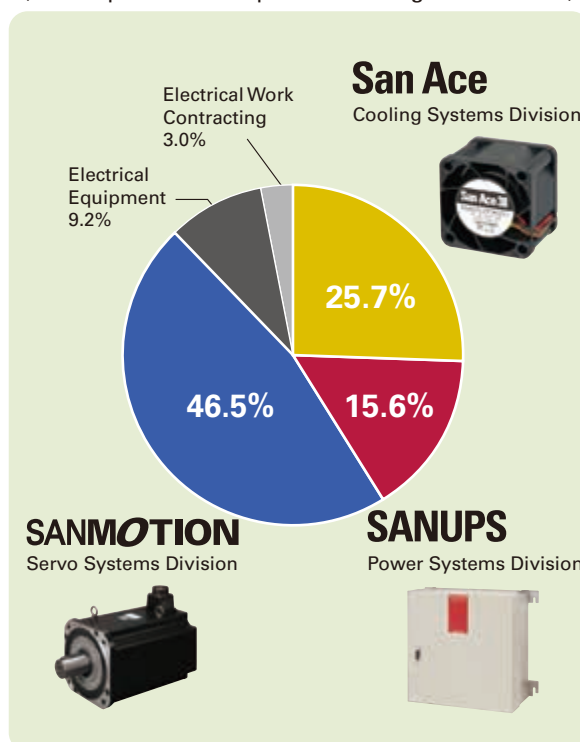
■ Electrical Equipment

Sales of domestic and foreign manufacturers’ electrical and electronic products

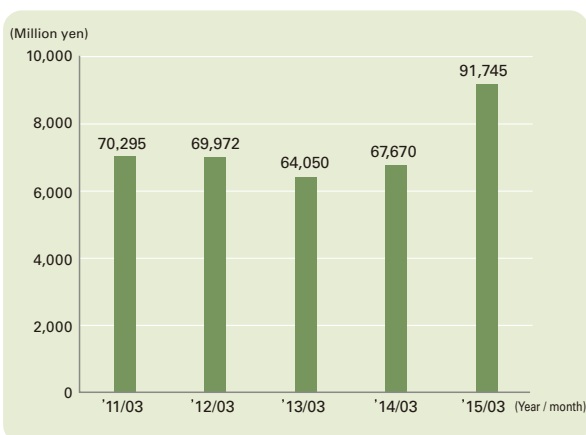
■ Electrical Work Contracting

Planning, design, construction and maintenance of industrial control systems

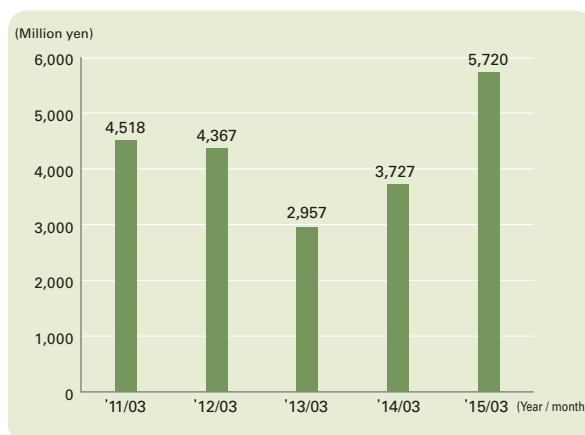
Sales Ratio
(for the period from April 2014 through March 2015)



Changes in sales (consolidated)



Changes in current net income (consolidated)



Company Profile

Founded: August 1927

Capital: 9.9 billion yen (as of March 31, 2015)

Sales (consolidated): 91.7 billion yen (for the period from April 2014 through March 2015)

Number of employees (consolidated): 3,001 (as of March 31, 2015)

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