SANYO DENKI

2011 Environmental Management Report

SANYO DENKI CO., LTD.

Corporate philosophy

We, SANYO DENKI make the dreams of people come true for the happiness of people in cooperation with people.

To carry out our corporate philosophy, we do the following

For Environment...	For society and the natural environment we 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 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 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.

Contents

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 covered by the report: Fiscal 2010 (from April 1, 2010 through March 31, 2011; more recent information is included in the Environmental Topics section)

Message from the Major Operating Officer

In 2011, we are forced to recognize how important the electric energy is for our daily life. And also, we are returning to the origin in the sense of the effective use of electric energy. After the East Japan Great Earthquake Disaster occurred on the 11th of March, the nuclear power station was stopped, power saving was requested, radioactive contamination was spread out. Thus, we are making efforts to overcome this serious condition aiming at reconstruction. Since the problem of radioactivity has not been assumed in the environmental problems up to now, we feel a crisis for the global environment from the seriousness of the present radioactive contamination. Various problems to be solved are included in the environmental problems. However, each of them originates in the human society and is greatly related to the convenience of life.

We are requested to review the dependence on the nuclear power generation. Hereafter, it will be accelerated to make more efforts to use recyclable energies represented by natural energy. Our human society has the responsibility for the preservation of the human environment.

It has been 10 years after the report of environmental management of the company was started as an environmental report, and this report enters upon the 11th year. The situation related to energies comes to a turning point on a worldwide scale starting from Japan in 2011. We think that this year is the first year to shift the helm toward the use of natural energies without resorting to fossil fuels.

The company mentions "Technologies for using new energies and for energy-saving" as one of the policies of development and wrestles with the development of products.

In the Power Systems Division, the power conditioner for photovoltaic generation system is much in demand. The energy to be produced at deceleration of many motors used in the production equipment of the factory has been consumed as heat. However, the Regenerative power compensator can contribute to energy reduction on the customer side.

The Cooling Systems Division has been supplying low-power consumption fans as series for cooling servers and storage devices, in which many fans are used, from an early time. These products contribute to cooling various devices including photovoltaic generation system and fuel cells that require a proper performance for environment.

The Servo Systems Division has been supplying servo amplifiers and controllers for high-efficiency motors and to control them. This Division wrestles with the development of products characterized by high efficiency, low-power consumption, high performance, miniature, and high output.

The company authorizes the developed products that satisfy a certain level of assessment standard, as "Eco Products" being designed products in conformity with the environment. When customers use "Eco Products", these products make a contribution to uses' environmental activities and aim at leading to the reduction of environmental load of the whole earth.

Regarding environmental control measures for the soil and underground water of the former Midorigaoka Works land, we disclosed the information on progress on our home page in December 2010 and held an explanation meeting for inhabitants. As a result of scheduled investigation, we found that the range polluted by underground water was more extensive than estimated in the site. Accordingly, we reviewed the contents of engineering work for environmental improvement and then started the engineering work in February 2011. This engineering work is expected to be finished in August. We would like to look forward to obtaining cooperation from the surrounding inhabitants.

The company will positively promote and practice activities for environmental preservation. It is important to disclose environmental information to secure the transparency of management. The activities for environmental preservation will lead to the reduction of en environmental load in the life cycle of products and reduce the total energy by reuse. We would like to ask you to understand our wrestling with environmental management and to obtain cooperation from you.

Director and Major Operating Officer
Nobumasa Kodama

Environmental Policy and System

Environmental Policy

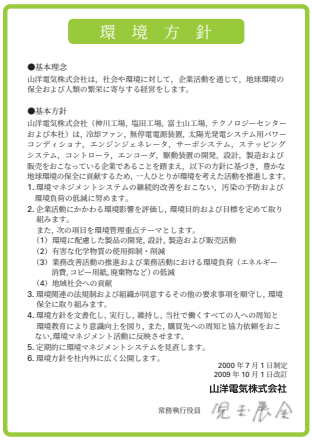
● Basic Philosophy

SANYO DENKI helps preserve the global environment and enhance the mankind's prosperity through its corporate activities for the 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 fan, UPS, power conditioner for photovoltaic generation system, engine generator, servo system, stepping system, controller, encoder, and driving device. Under the principles listed below, each member of SANYO DENKI will take part in eco-friendly activities to help preserve the 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.



環　境　方　針

●基本理念
山洋電気株式会社は，社会や環境に対して，企業活動を通じて，地球環境の保全および人類の繁栄に寄与する経営をします。

●基本方針
山洋電気株式会社（神川工場，塩田工場，富士山工場，テクノロジーセンターおよび本社）は，冷却ファン，無停電電源装置，太陽光発電システム用パワーコンディショナ，エンジンジェネレータ，サーボシステム，ステッピングシステム，コントローラ，エンコーダ，駆動装置の開発，設計，製造および販売をおこなっている企業であることを踏まえ，以下の方針に基づき，豊かな地球環境の保全に貢献するため，一人ひとりが環境を考えた活動を推進します。
1. 環境マネジメントシステムの継続的改善をおこない，汚染の予防および環境負荷の低減に努めます。
2. 企業活動にかかわる環境影響を評価し，環境目的および目標を定めて取り組みます。
また，次の項目を環境管理重点テーマとします。
（1）環境に配慮した製品の開発，設計，製造および販売活動
（2）有害な化学物質の使用抑制・削減
（3）業務改善活動の推進および業務活動における環境負荷（エネルギー消費，コピー用紙，廃棄物など）の低減
（4）地域社会への貢献
3. 環境関連の法規制および組織が同意するその他の要求事項を順守し，環境保全に取り組みます。
4. 環境方針を文書化し，実行し，維持し，当社で働くすべての人への周知と環境教育により意識向上を図り，また，顧客先への周知と協力依頼をおこない，環境マネジメント活動に反映させます。
5. 定期的に環境マネジメントシステムを見直します。
6. 環境方針を社内外に広く公開します。

2000年7月1日制定
2009年10月1日改訂

山洋電気株式会社

常務執行役員

Environmental policy brochure

System

It has been 11 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

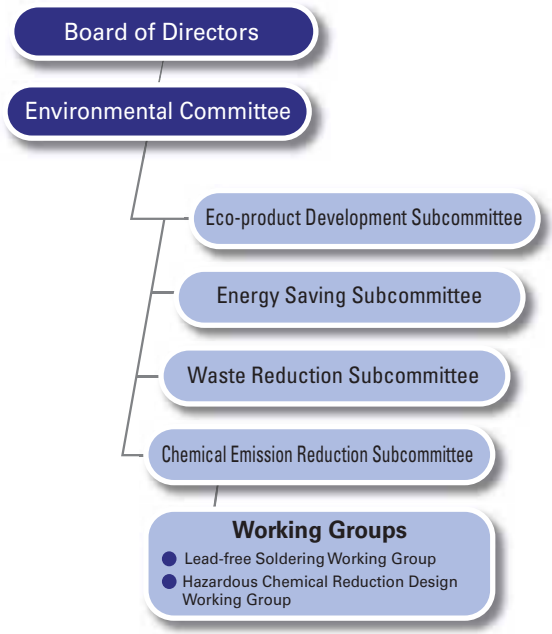
Formulation of policies on environmental conservation activities, and reporting and instructions on the same
Formulation and enforcement of company rules and procedures (including company-wide environmental manuals) concerning environmental conservation activities
Promotion of environmental conservation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

Environmental Committee

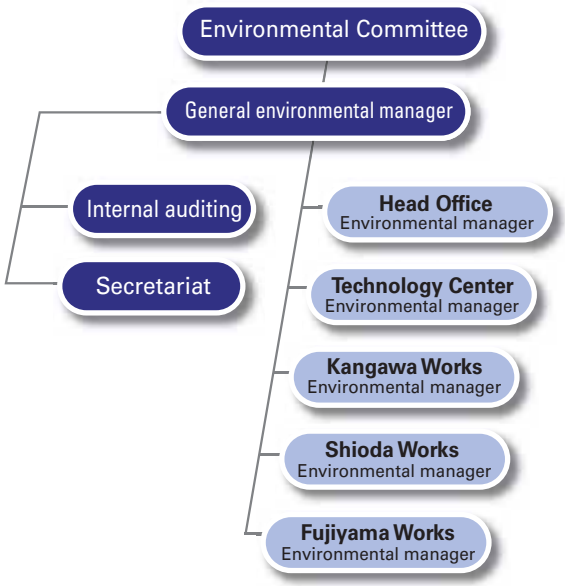
Environmental Management System

Scheme of Environmental Management System

Position of the Environmental Committee and Its Organization



Organization Chart for Environmental Management System



○Eco-product Development Subcommittee
The subcommittee promotes the development of competitive products designed to protect the environment in accordance with eco-design standards.
○Energy Saving Subcommittee
The subcommittee promotes energy saving through its daily activities for the environmental management system. It also formulates long-term energy saving strategies and proposes cost-effective investments.
○Waste Reduction Subcommittee
The subcommittee works to reduce waste and disposal costs and achieve zero emissions.
○Chemical Emission Reduction Subcommittee
The subcommittee 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 PRTR (pollutant release and transfer register).

Activity Report for Fiscal 2010

We developed 17 new certified eco-products in this fiscal year
and were also able to raise the sales ratio for eco-products to 30.6%.
We achieved a 99.7% level of zero emissions for the company as a whole.

Activity	Goal for fiscal 2010	Track record in fiscal 2010
Promotion of eco-designing	Creation of eco-products	Seventeen new products certified as eco-products
Sales activities	Sales ratio of eco-products: 40% or higher	Sales ratio of eco-products: 30.6%
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	The usage rate for lead-free soldering has reached almost 100% in each department, and we will continue to promote this. Nearly all types of cooling fans and stepping motors have been converted to RoHS-6 compliant devices. Other machines are also being converted to RoHS-6 compliant devices.
Reduction in power consumption	Kangawa Works 8% Shioda Works 17% Fujiyama Works 12% Technology Center 0% Head Office (2%)	(1%) 16% 14% (7%) 2%
Reduction in fuel consumption	A-type heavy oil : 230kl 30% *Total of the Shioda and Fujiyama Works LPG : 36,000㎥N 56% *Total of the the Technology Center Town gas : 499,000㎥N (30%) *Total of the the Kangawa Works	21% A-type heavy oil : 259kl 52% LPG : 39,500㎥N (86%) Town gas : 712,000㎥N
Reduction in the use of copying paper	Kangawa Works (46%) Shioda Works (67%) Fujiyama Works 22% Technology Center 24% Head Office 39%	(40%) (34%) 30% 33% 44%
Reduction of waste	Kangawa Works 6% Shioda Works (17%) Fujiyama Works 62% Technology Center 12% Head Office 49%	(16%) (19%) 53% 19% 50%
Contribution to local communities	Cleaning of areas around the Head Office, the Technology Center and the factories conducted more than once every month	Goal achieved
Promotion of zero emission	Raising the company-wide waste recycling rate 99.6% or higher.	Company-wide rate: 99.7%

Notes: 1. The reduction rate is calculated using fiscal 2000 as the base year, except for electric power and town gass, for which fiscal 2006 and 2009 were used as the respective base years.
2. Figures in parentheses indicate increases.

Prevention of Global Warming

Specific Measures for Energy Saving

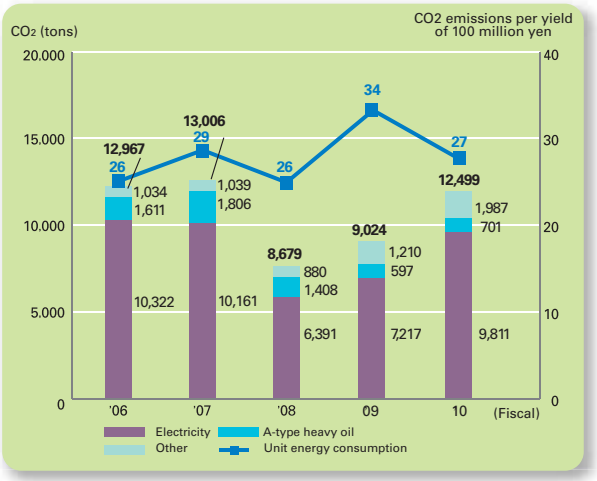
We recognize the crucial importance of energy saving activities aimed at reducing CO2 emissions as a measure to prevent global warming, and are working to promote energy saving activities by improving energy consumption efficiency and using clean energy.
In 2010, the consumption of electric power and fuels was more increased than the last year because of expansion of production resulting from the recovery of the market and the fierce heat in the summer season, thereby increasing the amount of CO2 emission. The cost unit of production was reduced.

Effects of introducing the monitoring system

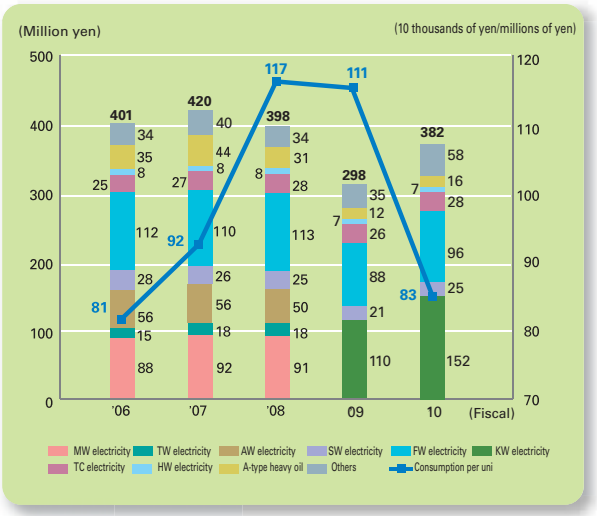
- We selected and introduced energy-saving equipment at the time of the replacement of the old air-conditioning equipment in the Fujiyama Works F1 Building, resulting in reduced fuel consumption.
- We selected and introduced energy-saving equipment at the time of the replacement of the old chiller for production facilities in the Fujiyama Works F1 Building, resulting in reduced electricity consumption.
- We introduced an energy measurement system in the Kangawa Works to eliminate idle operations.

Energy measurement system

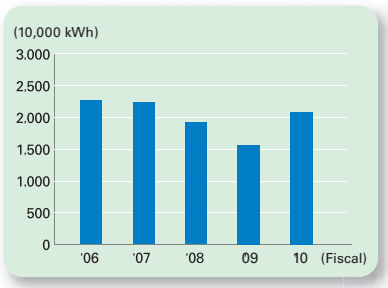
Energy consumption measured in terms of the amount of CO_2



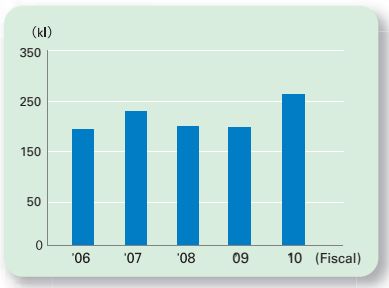
Consumption value per production value



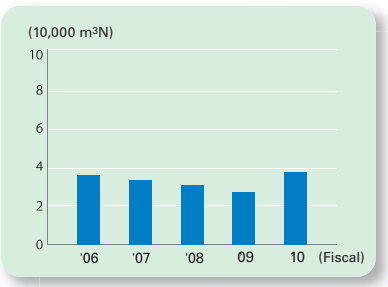
Power consumption

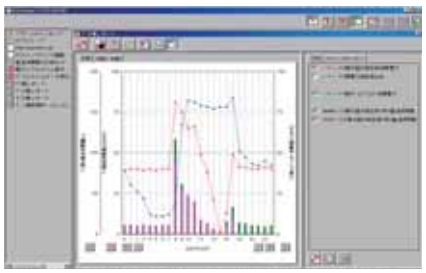


A-type heavy oil

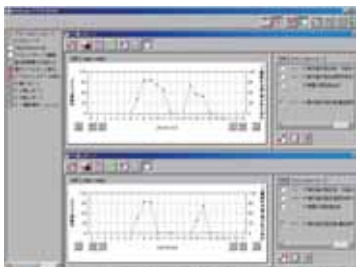


LPG





Screen to show the power consumption of building F3



Comparison with past records

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) and analyze these costs and effects in order to improve the efficiency and activity levels of environment management.

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

Period covered: April 1, 2010 to March 31, 2011

Track records for fiscal 2010

(1) Cost of environmental preservation

In 2010, the cost of environmental preservation reached to 1,754,000,000 yens in total consisting of the investment amount of 80,000,000 yens and the expense of 1,674,000,000 yens. Regarding the investment, we make efforts to develop designed products fitted for the environment as the cost of research and development. The expense consists of the cost of research and development of 31.1%, cost of management activities of 12.4%, and also the cost for environmental damage of 49.6% which occupies a high percentage in this fiscal year. The amount of 817, 000,000 yens out of the cost for environmental damage corresponds to the expense related to the engineering work for soil and underwater of the former Midorigaoka works site.

(2) Effects of environmental conservation

Because of the expansion of production, the effect resulted in "minus" except for the consumption of gas oil in relation to the resources to be applied to business activities. In particular, regarding the use of energies, the conversion amount of CO2 increased 3,312 t-CO2 and the consumption of electric power increased 5646,000 kWh.

(3) Economic effects

Because of the expansion of production, the earnings resulting from the sale of valuables was 111,000,000 yens being about 294% of the last year. However, the reduction of expenses by energy-saving could not be attained and the expense increased 78,000,000 yens.

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	20,133
	2. Global environment conservation costs	Periodical electricity checks	0	29,730
	3. Resource recycling costs	Reduction of waste, recycling, and proper waste disposal	0	45,309
	Total of items 1 through 3		0	95,172
(2) Upstream and downstream costs		Green procurement of office supplies and commissions for refurbishing and reconditioning product	0	17,909
(3) Administration costs		Development and operation of the EMS and environmental training for employees	0	207,391
(4) R&D costs		Development of eco-products (such as testing equipment and making molds)	80,433	520,120
(5) Social activity costs		Annual membership fee for the Japan environmental management association for industry, and other fees	0	3,281
(6) Environmental remediation costs		Soil contamination measures and survey costs	0	830,130
Total			80,433	1,674,003

Expenses include depreciation of facilities and personnel costs.

Effects of Environmental Conservation

Classification	Indicators for the effects of environmental conservation		
	Indicators for environmental burdens	Indicators	Indicator value (Note1)
Effects on resources input for business activities	Input of energy	Decrease in energy consumption	Energy consumption measured in terms of the amount of CO2 : △ 3,312 tons of CO2
			Electricity consumption : △ 5,646,000kWh
			A-type heavy oil consumption: △ 32.3kL
			LPG consumption: △ 53.4t
			Kerosene consumption : △ 1.2kL
			Light oil consumption : 4.2kL
			Town gas consumption : △ 327,000Nm3
			Gasoline consumption : △ 5.5kL
		Increase in the percentage of renewable energy in total energy consumption	Photovoltaic power generation : △ 0.381% (company-wide)
	Input of water	Decrease in water consumption	Water consumption : △ 15.900m3
	Input of other resources	Decrease in the input of other resources	Copying paper consumption : △74.7 million 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 : △ 2,105t
		Increase in the percentage of recyclable materials in the total discharge of waste	Recyclable materials and useful materials: 0.11%
		Decrease in the discharge of hazardous waste	Discharge of hazardous waste : 16.9t

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

(Note1) If the measure of the amount will be stated as the difference between 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	111,942
Reduction of costs	Reduction of costs by energy saving	△ 78,640
	Reduction of waste disposal costs by recycling	△ 3,108
	Reduction of expenses for copying paper	△ 4,877

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

Product Development

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 2010, eco-products were made up of a total of 131 types with a sales ratio of 29.5%.

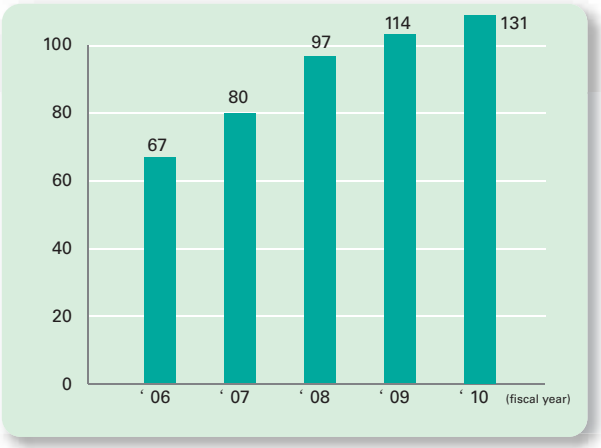
Eco-products are presented in catalogues and other materials with " LEAF symbols. "

ECO PRODUCTS

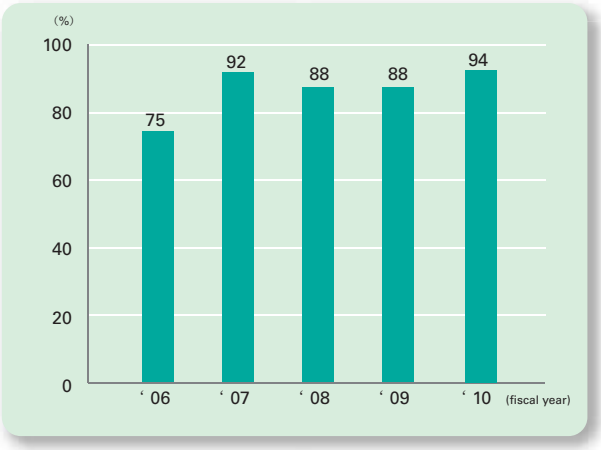
●Life Cycle Assessment (LCA)

LCA is one of the techniques used to provide a general quantitative measure of levels of environmental impact, including global warming, and evaluate the impact of products through their life cycles. We evaluate the environmental compatibility of a product using this method. Our rate of implementing LCA in our eco-products has been about 90% since fiscal 2007.

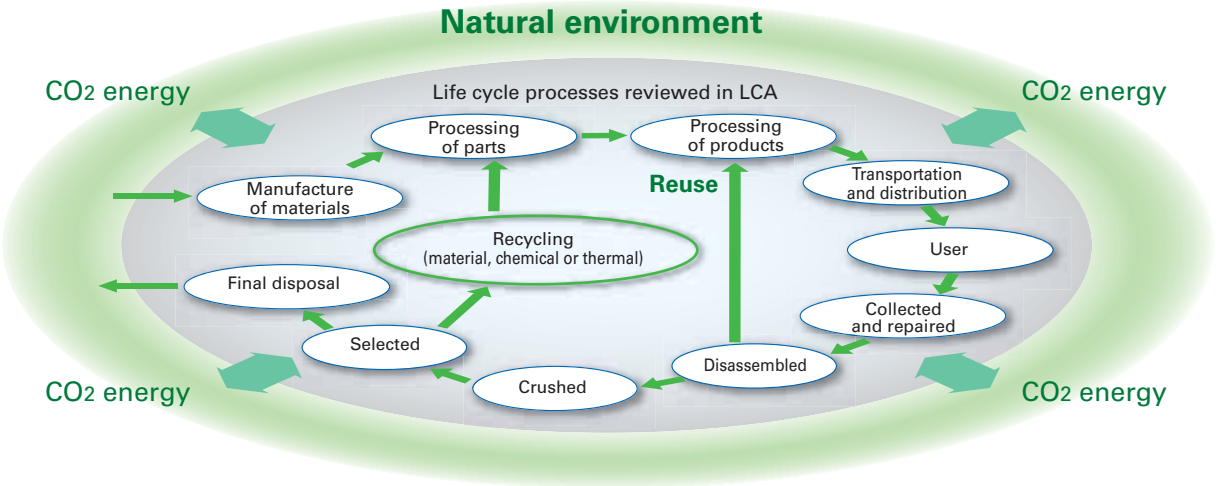
Number of Products Certified as Eco-products
(Total Number of Products in All Divisions)



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 the energy consumption and the amount of CO_2 emission.

Results of LCA

Seventeen new eco-products were developed in 2010. We will present the results of the LCA of three representative products. The results are based on a comparison of the amounts of CO_2 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 CO_2 emitted during the time of use will be effective in preventing global warming. The following results show the CO_2 emission volumes for one year (result of LCA divided by the service life of a product).

80×80×32mm Low Power Consumption Fan "San Ace 80" GA type

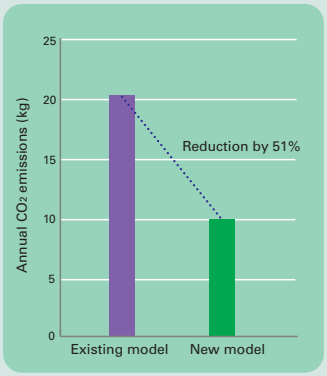
Features

- Power consumption is reduced by approx. 51 % compared with our conventional fan
- Sound pressure level is reduced by 5 dB(A)
- The product is RoHS compliant

Models compared for LCA

New model : 9GA0812P2H001
Existing model : 109P0812C201

Comparison of CO_2 emission



10kW Power Conditioner for Photovoltaic Generation System "SANUPS P73H"

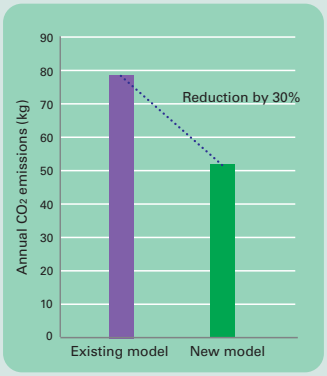
Features

- Industry's top conversion efficiency of 94.5%
- Superior in waterproof / dustproof performance.
- Three-phase 3-wire system 202 V AC
- JET certification

Models compared for LCA

New model : P73H103
Existing model : P73D103

Comparison of CO_2 emission



High-multiplier Incremental encoder「PP038H」

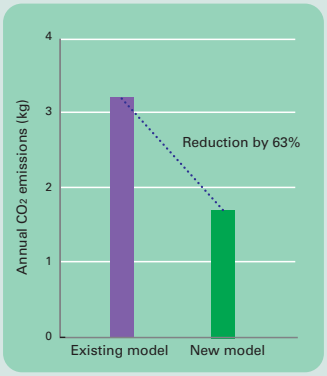
Features

- The number of component items is reduced 40%.
- The consumption of current is reduced below 50%.
- The product is RoHS compliant

Models compared for LCA

New model : PP038H
Existing model : PP038

Comparison of CO_2 emission



Supply

Promoting Green Supply

●Establishment and Implementation of the Chemical Substance Management Guidelines

We established in August 2005 our Chemical Substance Management Guidelines for the management of hazardous substances concerning parts and indirect materials used for our company ' s products and manage chemical substances in accordance with it. Our Chemical Substance Management Guidelines provide management rules concerning substances specified in laws and regulations, such as substances whose use is restricted or prohibited by the RoHS Directive, SVHC (high-concern material) in REACH, substances banned by legislation, and substances designated by the Japan Green Procurement Survey Standardization Initiative (JGPSSI). We keep these guidelines updated by making necessary revisions to them in response to changes in relevant laws, (Revision was made twice in 2010.) regulations, and other rules. They 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 contained in the materials we use. At present, we request that our suppliers agree to abide by our Chemical Substance Management Guidelines and submit a survey questionnaire and a guarantee form to assure that their supplies contain no RoHS-restricted substances.

●Green Purchasing

We are taking the initiative to purchase stationery and office supplies that are environment-friendly, such as products using recycled materials, substitute materials and waste materials, refillable products and products with replaceable parts, and products designed for recycling.

Reducing Hazardous Chemical Substances

The Hazardous Chemical Reduction Working Group, a subgroup of the Chemical Substance Emission Reduction Subcommittee, is working together with design sections of manufacturing divisions to achieve the goal of eliminating substances strictly prohibited by the RoHS Directive.

● Compliance of applicable products with the RoHS Directive

The installation of equipment required to meet the RoHS standards for cooling fans and stepping motors has been completed.

Measures requiring compliance with RoHS standards for applicable servo motors, servo amplifiers, and stepping motor drivers are being implemented and expanded.

●Preparations are currently under way to conduct a survey on hazardous substances designated by the JGPSSI and other organizations at the request of customer.

●Based on the Chemical Substance Management Guidelines, a survey is being conducted on hazardous chemicals contained in products.

● Our company guidelines concerning China RoHS are disseminated inside our company.

● Analysis of six RoHS substances contained in materials is being conducted using an X-ray fluorescent (XRF) analysis system.

● SVHC of REACH (substances of very high concern: 46) conducted a survey of content, to provide ongoing information to customers.

* RoHS Directive: The Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment adopted by the European Parliament and the European Council RoHS six substances: lead, hexavalent chromium, cadmium, mercury, and specified brominated flame retardants (PBB and PBDE)
* China RoHS is a directive implemented by the Chinese government prohibiting the use of specified toxic chemical substances in electronic information products.
* REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): The regulation in Europe to totally administer the registration, evaluation, authorization, and restriction of chemical substances.

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).

Also, the Shioda Works, which manufactures servo amplifiers and substrates for power supply devices, has been working since fiscal 2004 to install a series of equipment for lead-free manufacturing, and has finally completed its installation.

● Cooling fans and stepping motors: Installation of equipment for surface mount soldering completed

● Servo motors: Installation of equipment for surface mount soldering completed

● Servo amplifiers and stepping motor drivers: Changing to lead-free solder is being implemented and expanded to RoHS applicable products. A shift towards lead-free products is being promoted.

● Power supply devices: The change to lead-free solder is being implemented and expanded to RoHS applicable products.

An X-ray fluorescent analysis device at the Kangawa Works

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

Production and Distribution

Energy Saving Measures Implemented in Manufacturing Processes at Factories

Works	Measures implemented	Effect
Kangawa Works	(1) Cut down unnecessary lighting in warehouses and on equipment (2) Repair air leaks (3) Promote use of solar power	(1) Savings in commercial electricity (2) Savings in commercial electricity (3) Savings in commercial electricity
Shioda Works	(1) Affixing calendar timers to machines (2) Redesigning of mounter programs (3) Miniaturize the equipment to be newly installed (4) Systematic operation of boilers according to weekly calendar timers	(1) Savings in electricity by preventing switches from being left on (2) Savings in electricity by reducing the production cycle time (3) Save energy through miniaturization of heater capacity (4) Control of use of A-type heavy oil
Fujiyama Works	(1) Stop use of unnecessary lighting (2) Adjustment of the operation time of air conditioners (3) Shift the operating hours of production equipment (4) Adjust the operating hours of loading equipment for test	(1) Savings in electricity by reducing lighting hours (2) Savings in electricity by reducing operation hours, Reduce the consumption of A heavy oil (3) Savings in commercial electricity (4) Saves electric power by reviewing the test run time

Compliance with the PRTR Law

Sanyo Denki keeps accurate records of the amounts of discharge and transportation of PRTR-controlled substances that are required to be reported and used in amounts of more than one ton in any one of the factories, and submits reports to relevant organizations.
In this year, styrene at the Kanagawa Works and antimony and toluene at the Fujisan Works were put under a reporting obligation. In addition, the Shioda Works has been exempted for the last four years from reporting obligations regarding lead due to our change to lead-free products for RoHS compliance.

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)	
Antimony	Fujiyama Works	4.7t
Toluene	Fujiyama Works	1.0t
Styrene	Kangawa Works	9.6t

Signboard for idling stop


Vehicle that complies with the regulations on diesel car exhaust in seven municipal communities

Transportation

We are using vehicles that comply with the regulations on diesel car exhaust in seven municipal communities to transport supplies between factories. We are also promoting activities to stop idling in order to reduce environmental burdens.

Vehicle that complies with the regulations on diesel car exhaust

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

Waste and Recycling

Zero-emission Activities

Sanyo Denki is working as a member of the Zero-emission Promotion* Committee and the Zero-emission Promotion Workshop (formed in April 2003) of the Nagano Techno Foundation* Asama Technopolis Region Center to promote environmental conservation activities in collaboration with companies in the surrounding areas.
The Zero-emission Promotion Workshop holds sessions for activity reports and makes inspection visits to member companies to see how waste is sorted by type and processed, and carefully examines how to improve waste disposal methods. The Workshop has eight subpanels to study the cooperative collecting and disposing of waste. Seven sub-panels were established in the Workshop last year to study the cooperative collecting and disposing of waste.

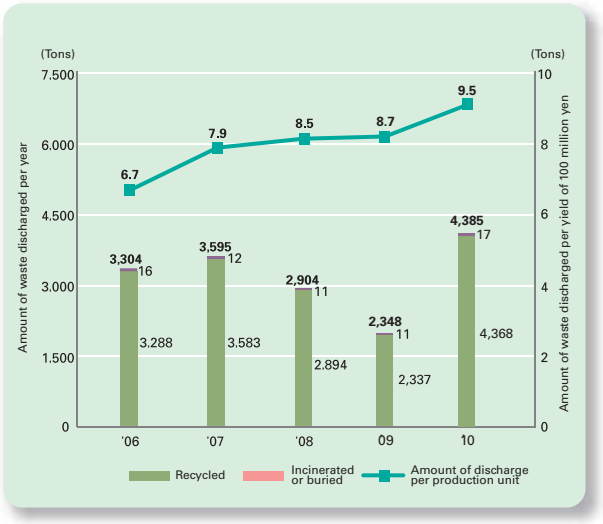
*The Nagano Techno Foundation was established to bring new life to the local economy and provide an autonomous basis for its development. To this end, the foundation is working to improve the level of local industries through technological innovation and develop new industries by exploiting local industry resources in five areas in Nagano Prefecture. The Asama Technopolis Region Center is one of its organizations.

[Nagano Techno Foundation] URL: www.tech.or.jp
[Asama Technopolis Region Center] URL: www.asatech.or.jp

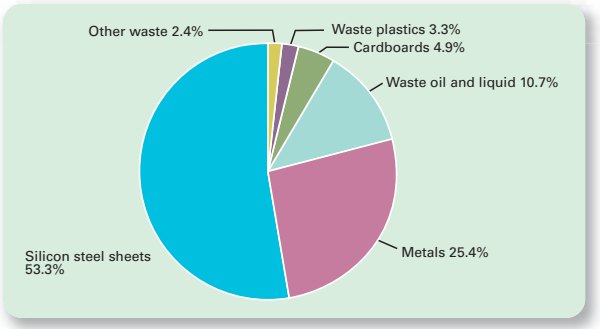
Recycling

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

Changes in the Amount of Waste Discharged



Percentage by Type of Waste



Waste		Amount discharged (tons)	Amount recycled (tons) / Recycling rate (%)	Recycling method
Sludge	Organic sludge	4.7	4.7/100	After oil and water are separated, dehydrated residues are turned into compost.
	Inorganic sludge	16.5	13.7 /83	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 oil	Oil-based materials	4.7	4.7/100	After oil and water are separated, the material is recycled as fuel.
	Water-soluble materials (detergents, grinding liquid, etc.)	310.2	310.2 /100	Reuse and incinerated residues are used as cement materials.
	Volatile materials	7.3	7.3 /100	Distilled and used as recycled oil.
	Waste acid (batteries)	85.5	85.5 /100	Crushed, sorted and all recycled.
Waste plastics	OA equipment and circuit boards	36.3	36.3/100	Crushed, sorted and all recycled.
	Vinyls and films	43.0	42.8 /99.4	Turned into solid fuel (refuse derived fuel), reducing agents (using furnaces) and materials for power generation (thermal recycling)
	Molding scraps	17.4	17.4/100	
	Other solid scraps	43.7	41.4/94.7	
	Styrofoam	4.4	4.4/100	Turned into raw materials (material recycling); immersed in solvent to be turned into soil, and recycled as raw material
Metal scraps	Scraps generated in manufacturing processes	3442.5	3442.5 /100	Recycled as metal materials
	Metals (including empty cans)	10.6	10.6/100	
Paper scraps	Used paper	9.6	9.6/100	Turned into raw materials for recycled paper
	Newspapers, magazines, and other papers	46.4	46.4/100	
	Cardboards	216.3	216.3 /100	
Wood scraps	Packages and transportation pallets	69.6	69.6 /100	Crushed and turned into combustion improver
Glass and ceramic scraps	Empty bottles, glass, and ceramics	4.8	4.8 /100	Crushed and turned into road construction materials
Other waste	Paper scraps and other waste	11.5	0/0	Incinerated
Total		4385.0	4368.2/99.6	

For Local Communities and Employees

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 offices and factories more than once a month. At the Kangawa Works and the Shioda Works, large-scale cleaning was carried out in cooperation with the neighborhood community association. The Technology Center engaged in large scale cleaning by expanding its cleaning area.

●Wrestling with diversification of living things

The preservation related to the diversification of living things is said to be an important problem as well as counter measures for global warming. Sanyo Denki performs energy-saving activities and makes efforts by using our resources including our technologies and products.

Outdoor cleaning activities

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 2010, we held the following company lectures and meetings:

- August 2010

Lecture on designs to reduce hazardous chemical substances (Regarding the recent trend of chemical substances and REACH regulations)

- February 2011

Briefing session on eco-products

Company lecture

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 on self-care for managers and other 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

Results of the soil inspection at the former works site

The results of our voluntary inspection of soil and groundwater on the Midorigaoka Works site have revealed that the levels of volatile organic compounds and heavy metals in the soil and groundwater are above the threshold values. The engineering work for environmental improvement will be started in February 2011 and finished in August.

AED


Training on general emergency life-saving methods

Goals for Fiscal 2011 and Challenges for the Future

We created 17 eco-design products (eco-products) in fiscal 2010, a year during which 30.6% 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 2011	Goals to be achieved by fiscal 2012
Promotion of eco-products	Creation of eco-products	Creation of eco-products
Sales activities	Sales ratio of eco-products: 50% or higher	Sales ratio of eco-products: 60% or higher
Reduction of hazardous chemical substances	Promotion of the use of lead-free solder Implementation of measures to meet the RoHS-6 standards Reduction of PRTR-controlled substances	Promotion of the use of lead-free solder Implementation of measures to meet the RoHS-6 standards Reduction of PRTR-controlled substances
Reduction in power consumption	Reduction by 5% compared to 2006	Reduction by 6% compared to 2006
Reduction in fuel consumption	Maintaining the consumption of LPG at the current level (reduced by 58% compared to 2000)	Maintaining the consumption of LPG at the current level (reduced by 58% compared to 2000)
	Maintaining the consumption of A-type heavy oil at the current level (reduced by 29% compared to 2000)	Maintaining the consumption of A-type heavy oil at the current level (reduced by 29% compared to 2000)
	Gas consumption Reduction by 3% compared to 2010	Gas consumption Reduction by 5% compared to 2010
Reduction in copier paper consumption	Maintaining the consumption at the current level (reduced by 5% compared to 2000)	Maintaining the consumption at the current level (reduced by 5% compared to 2000)
Reduction of waste	Maintaining the consumption at the current level (reduced by 17% compared to 2000)	Maintaining the consumption at the current level (reduced by 17% compared to 2000)
Contribution to local communities	Cleaning of the area around factories once or more every month Participation in environment-related events	Cleaning of the area around factories once or more 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

Activities at Offices and Works

The number of employees is as of August 2011.

Head Office

- Location : 1-15-1 Kita-otsuka, Toshima-ku, Tokyo
- Area : 1,761m²
- Number of employees : 204
- ISO certificate obtained : March 2002

Technology Center

- Location : Ueda Research Park, 812-3 Shimonogo, Ueda-shi, Nagano
- Area : 44,908m²
- Number of employees : 331
- ISO certificate obtained : November 1999

Kangawa Works

- Location : 5-4, Tonoshiro, Ueda-shi, Nagano
- Area : 67,140m²
- Number of employees : 793
- ISO certificate obtained : March 2010
- Products manufactured: AC/DC servo amplifiers, stepping motor linear servo motor, and encoders

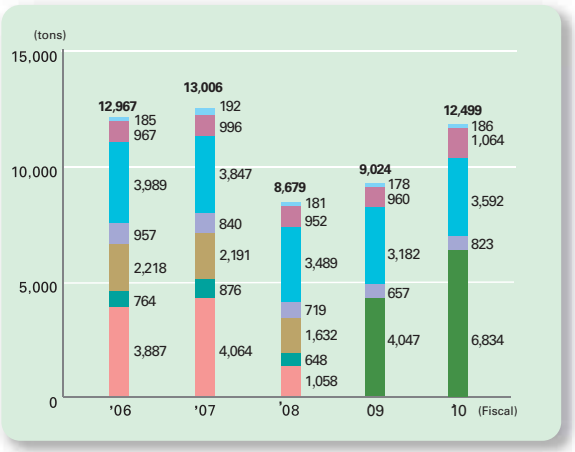
Shioda Works

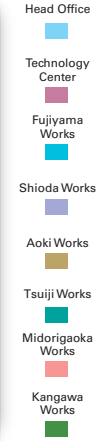
- Location : 517 Goka, Ueda-shi, Nagano
- Area : 5,698m²
- Number of employees : 181
- ISO certificate obtained : March 2001
- Products manufactured: AC/DC servo amplifiers, stepping motor drivers, system controllers and printed circuit boards.

Fujiyama Works

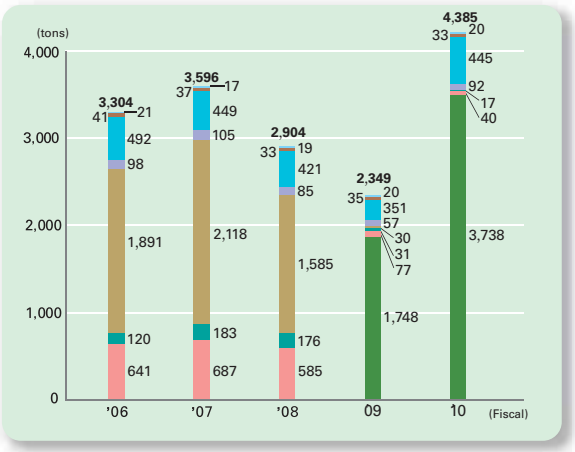
- Location : 4016 Fujiyama, Ueda-shi, Nagano
- Area : 86,260m²
- Number of employees : 446
- ISO certificate obtained : December 1999
- Products manufactured: Cooling fans, UPS's (uninterruptible power supply devices), power source monitoring systems, power conditioners for photovoltaic power generation systems, and emergency self-power generation systems

Amounts of CO_2 emission by factory





Amounts of waste by factory



Environmental Managers

General Environmental Manager — Hideyuki Takahashi

Sanyo Denki established its environmental management system and obtained an ISO14001 certificate in 1999. Our general environmental manager works in the environmental management system under the direction of top management to promote environmental activities at our Head Office and factories. By developing highly efficient products, we intend to perform activities, which can lead to the reduction of the environmental load of the whole earth, such as reduction of the environmental load when customers use products and supply of power supply equipment reusing regenerative electric power. We also disclose environmental information to a wide spectrum of both internal and external stakeholders and place a great importance on communication with local communities and with relevant individuals. The Environmental Committee works with environmental managers at factories to organize various specialized subcommittees in order to discuss measures to make ongoing environmental improvements and to take an active part in promoting environmental conservation activities to achieve our goals.

Head Office — Kazutomi Kaneko

The Head Office being in the power supply area of the Tokyo Electric Power Co., Ltd. aims at 15% reduction of the demand value at the peak time of the last year.
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 copier paper consumption.

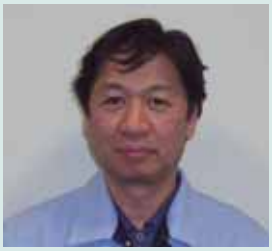
- Improvement in the sales ratio of eco-products by supporting sales activities
- Proper temperature management for air conditioning (26℃ to 28℃ for cooling)
- Improvement in the sorting of waste and the recycling rate
- Volunteer activities for cleaning areas around the Head Office

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

Technology Center — Hideyuki Takahashi

The Technology Center, which is engaged in designing and developing products, 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 17 new products as "eco-products" in fiscal 2009. 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 under way 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 copier paper as well as the amount of waste, and cleaned areas around the Ueda Research Park for the local community. We intend to reduce the environmental load when customers use products, through energy-saving based on the design fitted for the environment and reuse of electric power by high-efficiency and power regenerative function in the future.

Kangawa Works — Masahiro Koyama



The Kangawa Works, a highly energy-saving and environment-friendly factory, went into full operation in May 2009, as an integration of three factories, namely the Midorigaoka Works, Aoki Works, and Tsuiji Works, thereby reducing transportation between the different factories.
We have introduced a 150 kW photovoltaic power generation system, rain recycling system, energy-saving lighting, GHP (gas heat pump) air conditioner, and other ecological systems while endeavoring to reduce noise, vibrations, water discharges, and odors and to improve the external environment in other ways as well. We have also carried out large-scale cleaning in cooperation with the local community association for the neighborhood of our new works. In addition, we have introduced a central supervisory control system (BEMS) to collectively monitor our energy consumption and collect data, based on which we will work in future to further reduce our impact on the environment.

Shioda Works — Norio Arai

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 copier paper (use of projectors, use of electronic means for checking progress, 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 standards
- Volunteer activities for cleaning areas around the factory

Fujiyama Works — Hirohisa Yamazaki

The Fujiyama Works is reducing environmental burdens by improving fundamental work activities and is working on the promotion of activities to save energy, reduce waste, and achieve zero-emissions. In particular, we are making efforts to reduce electric power at the request of the Chubu Electric Power Co., Ltd. for proper power consumption not exceeding the contracted electric power.

- Energy saving (a reduction in the consumption of electricity and A-type heavy oil for air conditioning).
- Reduction in the consumption of lead by using lead-free solder
- Reduction of waste (reduction of waste plastics and cardboards) and zero emission activities
- Use of components and materials meeting the RoHS standards
- 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^3N)	Exempted		
	Nox(ppm)			
	Sox(m^3N/h)			
Water Quality Water pollution control laws, ordinance and agreements	PH(pH)	5.8 to 8.6	—	7.3
	BOD(mg/L)	20	19	14.0
	SS(mg/L)	30	28	25.0
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^3N)	0.3	0.03	0.0033
	Nox(ppm)	180	130	87
	Sox(m^3N/h)	1.3	0.7	0.013
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	56

Technology Center	Item	Regulatory standard	Voluntary standard	Actual value
Air Quality Air pollution control laws and ordinances	Smoke and soot (g/m^3N)	Exempted		
	Cold and hot water generator Nox(ppm)	150	130	73
	Emergency power generation equipment Nox(ppm)	600	550	120
	Sox(m^3N/h)	Exempted		
Water Quality Water pollution control laws, ordinance and agreements	PH(pH)	5.8 to 8.6	—	7.5
	BOD(mg/L)	20	19	13.0
	SS(mg/L)	60	54	9.0
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^3N)	0.3	0.03	0.0079
	Nox(ppm)	180	130	73
	Sox(m^3N/h)	5.0	2.5	0.057
Water Quality Water pollution control laws, ordinance and agreements	PH(pH)	5.8 to 8.6	—	7.6
	BOD(mg/L)	50	48	12.0
	SS(mg/L)	60	54	9.0
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, drivers, and encoders

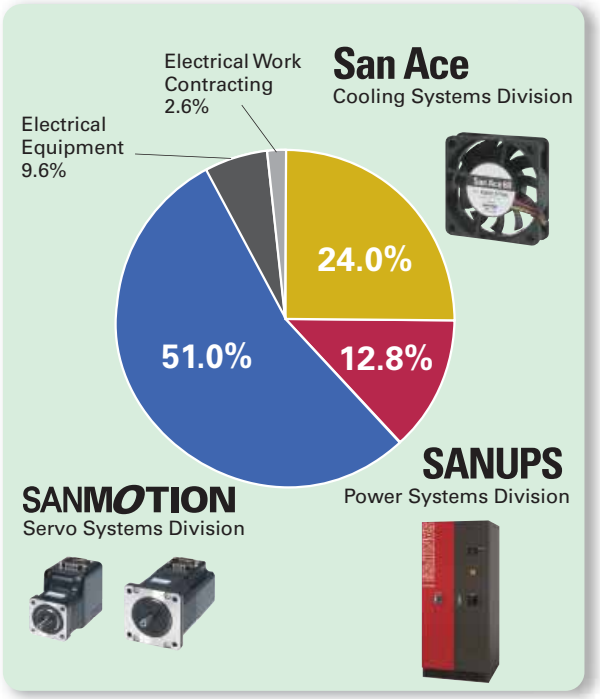
■ Electrical Equipment

Sales of domestic and foreign manufacturers of electrical and electronic

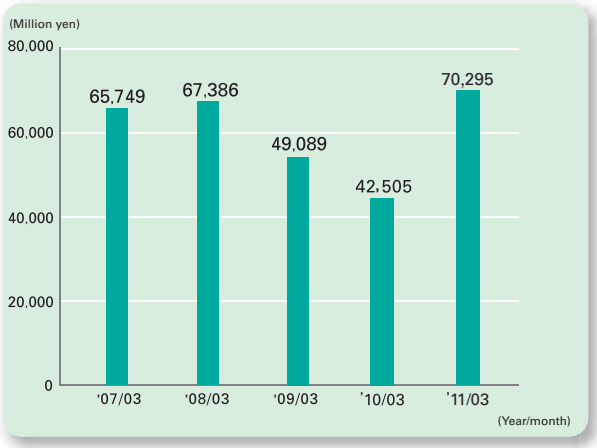
■ Electrical Work Contracting

The planning, design, construction and maintenance of industrial control systems

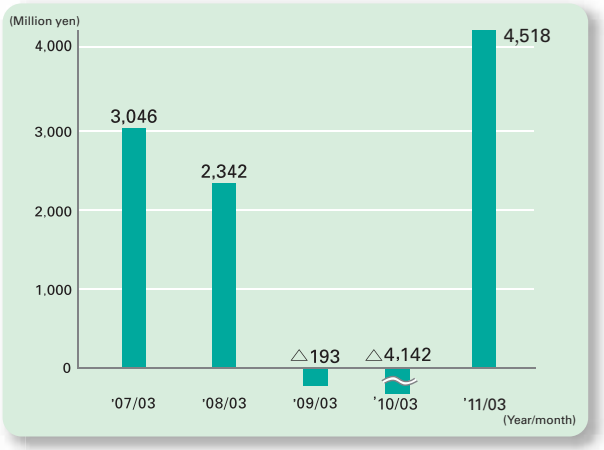
Sales Ratio (for fiscal 2011, consolidated)



Changes in Sales (Consolidated)



Changes in Current Net Income (Consolidated)



Business Profile

Founded: December 31, 1936

Capital: 9.9 billion yen (as of April 1, 2011)

Sales (consolidated):

70.3 billion yen (for the period from April 2010 through March 2011)

Number of employees (consolidated):

2,803(as of April 1, 2011)

■ For inquiries about the Environmental Management Report, please contact:

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