SANYO DENKI

Environmental Management Report 2008

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Scope of the report Organizations covered by the report: The Head Office, the Technology Center and factories in Japan (Midorigaoka Factory, Shioda Factory, Tsuiji Factory, Aoki Factory and Fujiyama Factory)
Period covered by the report: From April 1, 2007 through March 31, 2008

Message from the Chief Operating Officer

In its corporate philosophy, Sanyo Denki declares its intention to "implement management strategies to contribute to the conservation of the global environment and human prosperity through its activities for society and the environment." The company is working to promote business activities based on this declaration.

One of the conditions required for us today is to be aware of the importance of conserving the global environment and to implement environmental conservation measures through daily business activities.

We have been repeatedly told over recent years that the global temperature is increasing. Protecting the environment and preventing global warming are becoming increasingly important.

As the Sanyo Denki Group expands its production in Asia and worldwide, increasing amounts of materials and parts required for production are supplied at overseas production sites. Our finished products are used in countries around the world. As an enterprise that intends to live in harmony with all the peoples of the world, the Sanyo Denki Group recognizes the ever-growing importance of adopting business policies aimed at realizing sustainable society.

In addition to adopting measures to save and control energy and reduce hazardous substances, we are working to contribute to coexistence with the global environment by developing new products based on the following three technologies:

- Technologies to protect the global environment
- Technologies to protect human health and safety
- Technologies to use new energy resources and save energy

When developing new products, we avoid the use of hazardous substances, and design products to ensure their high performance and long life and to reduce power consumption and save energy through product life cycles for customers.

We also develop products aimed at reducing the amount of materials and parts and reducing environmental burdens, including the use of energy required for material production.

The development of products designed for environmental conservation is of crucial importance in all environmental conservation activities of Sanyo Denki, which certifies newly developed products that satisfy evaluation standards for environmental conservation as "eco-products" (eco-design products). Meanwhile, Sanyo Denki is also committed to providing maintenance services for products that are used for a long time and reducing environmental burdens by managing product life cycles.

When customers use our products created according to these standards, we contribute to our customers' environmental activities and our goal is to thereby reduce the global environmental burden.

Working on manufacturing with such policies enhances product value, and at the same time reduces production cost. In other words, we believe that environmental conservation activities also produce substantial effects for business management development.

Sanyo Denki will continue to play an active role in protecting the global environment for the future. We would like to request your understanding and cooperation for our activities.

Director and Chief Operating Officer
Taketomi Kotani

Environmental Policy and System

Environmental Policy

Basic Philosophy

Sanyo Denki Co., Ltd. will implement business management strategies to contribute to the conservation of the global environment and human prosperity through its activities for society and the environment.

Basic Policy

Recognizing its responsibilities as a company engaged in the development, design and sales of servo motors and amplifiers, stepping motors and drivers, servo sensors, fan motors, power supplies, industrial PCs, and industrial machine control systems, every member of Sanyo Denki (at the Midorigaoka Works, Tsuiji Works, Shioda Works, Aoki Works, Fujiyama Works, the Technology Center and the Head Office) will adopt the following policy and promote activities that are environmentally friendly, with the aim of contributing to the conservation of a healthy global environment.


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（緑が丘工場、築地工場、塩田工場、青木工場、富士山工場、テクノロジーセンターおよび本社）は、サーボモータ／アンプ、ステッピングモータ／ドライバ、サーボセンサ、ファンモータ、電源装置、工業用パソコン、産業機械制御システムの開発、設計、製造および販売を行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、一人ひとりが環境にやさしい活動を推進します。

1. 環境マネジメントシステムの継続的改善を行い、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行い、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。

2005年7月1日制定
2007年6月1日改訂

山洋電気株式会社

専務執行役員

Environmental policy brochure

System

It has been eight 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.

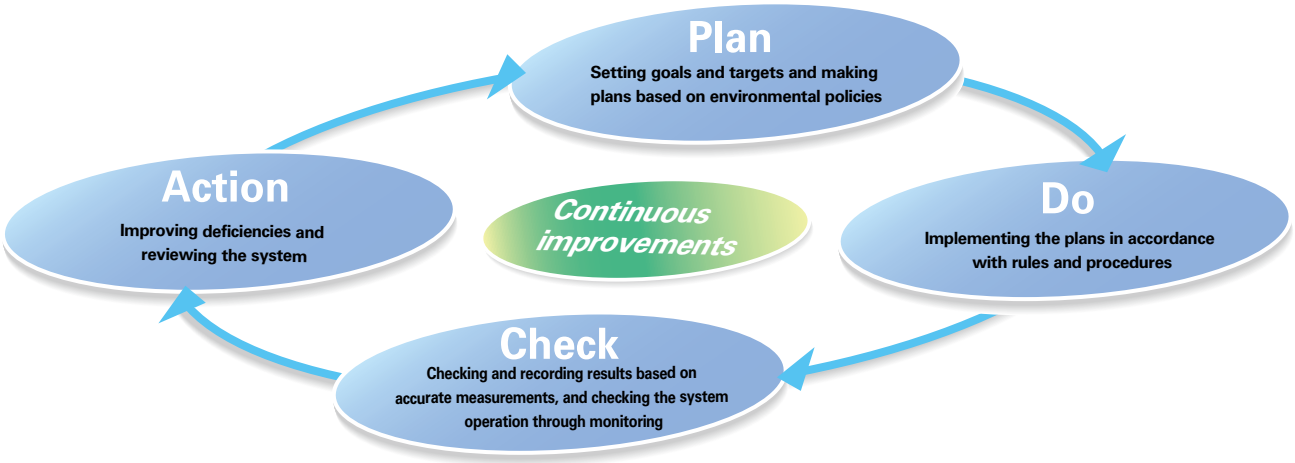
Major Responsibilities of the Environmental Committee

Formulation of policies on environmental conservation activities, and reporting and instructions on the sameFormulation and enforcement of company rules and procedures (including company-wide environmental manuals) concerning environmental conservation activitiesPromotion 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

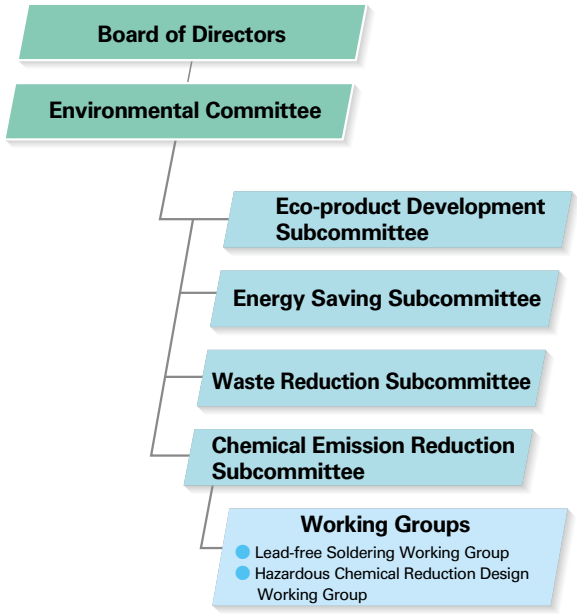
Environmental Committee

Environmental Management System

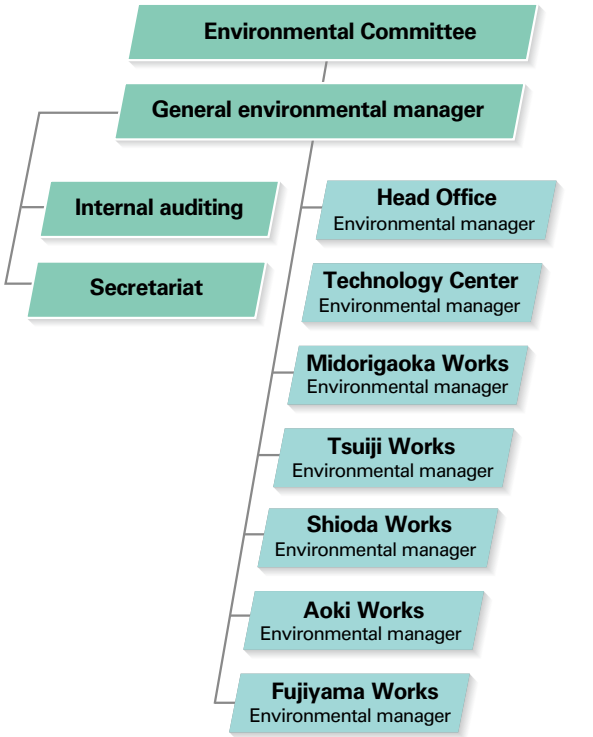
Scheme of Environmental Management System



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).

Track Records for Fiscal 2007

We developed 13 new eco-products this fiscal year and were also able to raise the sales ratio of eco-products to 36.7%. We achieved a 99.6% level of zero emissions for the company as a whole.

Activity	Goal for fiscal 2007	Track record in fiscal 2007
Promotion of eco-designing	Creation of eco-products	Thirteen new products certified as eco-products
Sales activities	Sales ratio of eco-products: 30% or higher	Sales ratio of eco-products: 36.7%
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	Employing lead-free soldering has been increasing with each passing year in each department, and we will continue promoting it.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	Midorigaoka Works (1%) Tsuiji Works (3%) Shioda Works (10%) Aoki Works 1% Fujiyama Works 1% Technology Center 1% Head Office (23%)	(2%) (20%) 15% 3% 5% (3%) (5%)
Reduction in fuel consumption	A Fuel oil:695 kL ※Total of the Midorigaoka, Tsuiji, Shioda and Fujiyama Factories 14% LPG：100,000 ㎥N ※Total of the Aoki Factory and the Technology Center 39%	18% A-type heavy oil：667kl 40% LPG：98,500 ㎥N
Reduction in the use of copying paper	Midorigaoka Works (27%) Tsuiji Works (8%) Shioda Works (32%) Aoki Works 30% Fujiyama Works 11% Technology Center 30% Head Office 32%	(20%) (18%) 17% 33% 19% 36% 42%
Reduction of waste	Midorigaoka Works (44%) Tsuiji Works 74% Shioda Works (30%) Aoki Works 16% Fujiyama Works 46% Technology Center 0% Head Office 41%	(54%) 60% (38%) 8% 53% 8% 57%
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 recycling rate of waste company-wide to 98% or higher.	Company-wide rate：99.6%

Notes:1.Electric power is based on fiscal 2006 data. The reduction rate is calculated using fiscal 2000 as the base year, except for copying paper, for which fiscal 1999 was used as the base year. 2. Figures in parentheses indicate increases. * Factories are managed based on absolute values.

Prevention of Global Warming

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. While the amount of electricity usage decreased in 2007 compared with last year, CO2 emissions slightly increased due to increases in the amount of energy usage other than A-type heavy oil and electricity energy. There was also an increase in energy consumption per production unit.

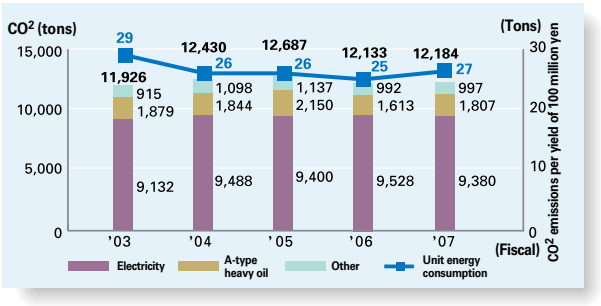
●Specific Measures for Energy Saving

Effects of introducing the monitoring system
Full-time monitoring using a measuring system for the consumption of electricity and A-type heavy oil at the Fujiyama Works.
◆ Preventing the idle operation of equipment by using the measurement system introduced in fiscal 2007.
◆ Monitoring the use conditions of A-type heavy oil, preventing air compressors from operating on non-business days, etc.

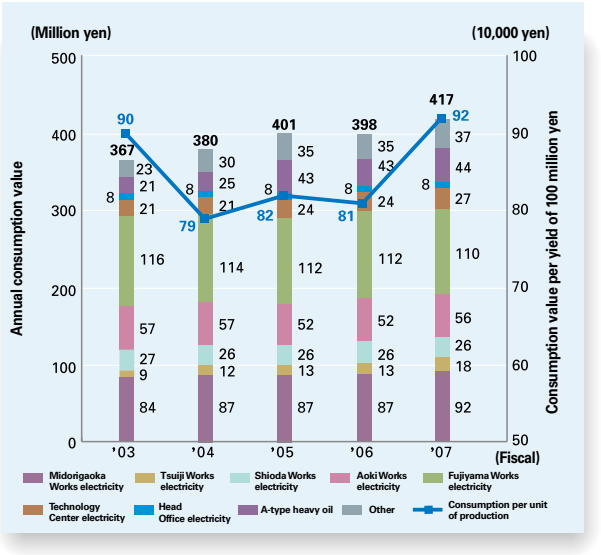
A-type heavy oil flow meter

Power meter

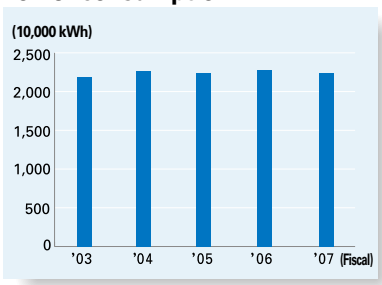
Energy Consumption Measured in Terms of the amount of CO2



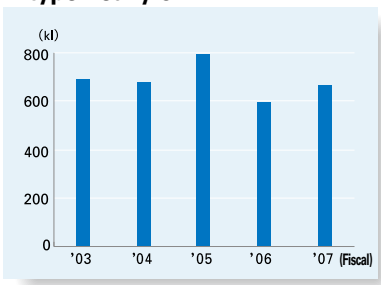
Consumption Value per Production Value



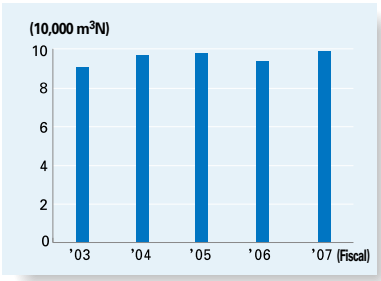
Power consumption

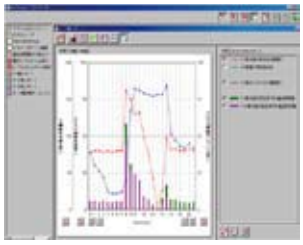


A-type heavy oil

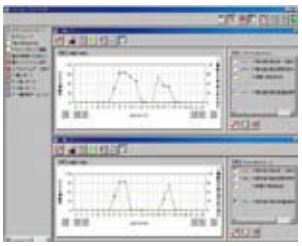


LPG





Comparison with past records



Screen to show the power consumption of building F3

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, 2007 to March 31, 2008

Track records for fiscal 2007

(1) Environmental conservation costs

The environmental conservation costs for fiscal 2007 amounted to 856 million yen, with 64 million yen for investments and 792 million yen for expenditure. Investments were concentrated on research and development costs where we worked on the development of eco-products. As for expenditures, research and development (64.5%) and management (23.7%) accounted for a large part of the expenditure.

(2) Effects of environmental conservation

We were able to reduce the amount of electric power usage as much as 353 thousand kWh thanks to environmental management on resources input for business activities.

(3) Economic effects

In terms of the economic effects of environmental conservation, we were able to make a profit of 96 million yen through the sales of useful materials, whereas we were not able to reduce costs through energy saving measures.

Environmental Conservation Costs

(In thousands of yen)

Category		Details of major activities	Investment	Expense
(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	16,319
	② Global environment conservation costs	Periodical electricity checks	0	14,147
	③ Resource recycling costs	Reduction of waste, recycling, and proper waste disposal	0	47,753
	Total of items ① through ③		0	78,219
(2) Upstream and downstream costs		Green procurement of office supplies and commissions for refurbishing and reconditioning products	0	12,002
(3) Administration costs		Development and operation of the EMS and environmental training for employees	0	187,455
(4) R&D costs		Development of eco-products (such as testing equipment and making molds)	64,759	511,086
(5) Social activity costs		Annual membership fee for the Japan Environmental Management Association for Industry, and other fees	0	3,357
(6) Environmental remediation costs			0	0
		Total	64,759	792,119

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 (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: △51 tons of CO^2
			Electricity consumption: 353,000 kWh
			A-type heavy oil consumption: △71.7 kL
			LPG consumption: △12.2 tons
			Kerosene consumption: 13.7 kL
			Light oil consumption: 0.6 kL
			Town gas consumption: △2,100 Nm^3
		Increase in the percentage of renewable energy in total energy consumption	Photovoltaic power generation: 0.004% (company-wide)
	Input of water	Decrease in water consumption	Water consumption: 8,800 m^3
	Input of other resources	Decrease in the input of other resources	Copying paper consumption: 0.675 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: △288.6 tons
		Increase in the percentage of recyclable materials in the total discharge of waste	Recyclable materials and useful materials: 0.136%
		Decrease in the discharge of hazardous waste	Discharge of hazardous waste: △11.0 tons

(Note) The indicators in volume are shown as the difference comparing the total volume between this fiscal year and the base year.

Economic Effects of Environmental Conservation Measures (Substantive Effects)

(In thousands of yen)

Detail of effects		Amount
Profits	Sales of useful materials	96,965
Reduction of costs	Reduction of costs by energy saving	△19,160
	Reduction of waste disposal costs by recycling	△2,953
	Reduction of expenses for copying paper	△136

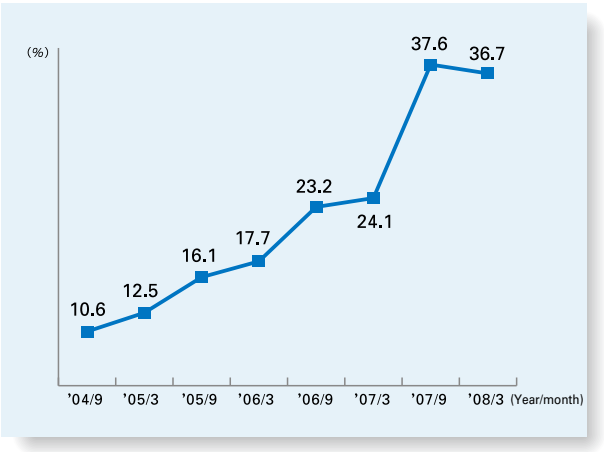
Eco-products

Initiatives for Eco-designs

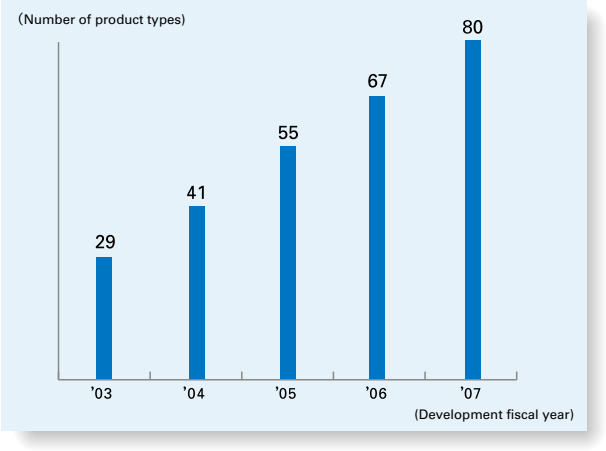
Sanyo Denki assesses products at the design stage and evaluates their effects on the environment during all production processes, including the supply of parts and materials, manufacturing, distribution, utilization, recycling, and disposal. Newly developed products are compared with commercially available and existing products and are certified as "eco-products" (eco-design products) if they satisfy the specified evaluation standards. In fiscal 2007, eco-products make up a total of 80 types with a sales ratio of 37%. Eco-products are presented in catalogues and other materials with "LEAF symbols."

ECO PRODUCTS

Sales Ratio of Eco-products



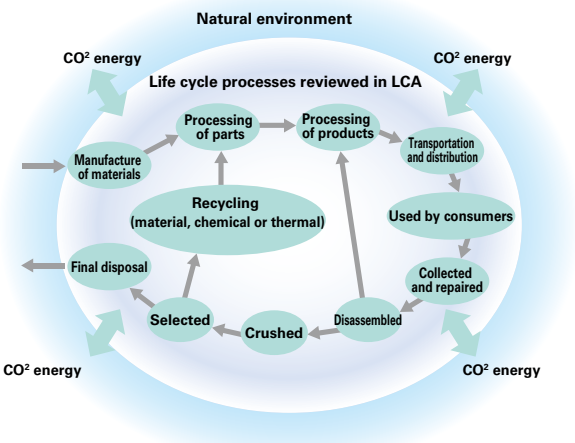
Number of Products Certified as Eco-products
(Total Number of Products in All Divisions)



Life Cycle Assessment (LCA)

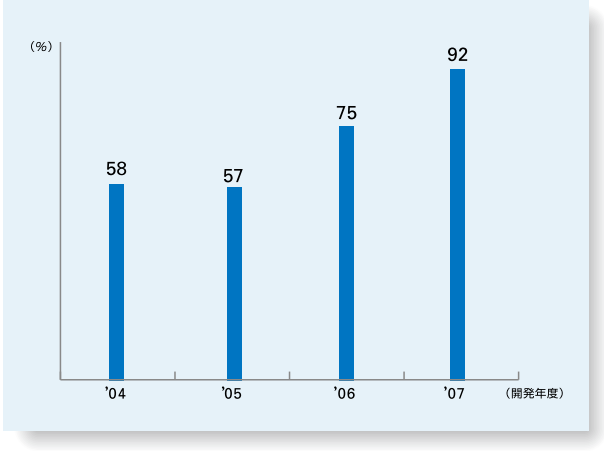
We evaluate the environmental adaptability of a product, based on its life cycle assessment. LCA is one of the techniques used to provide general quantitative measures for environmental effects, including global warming, and evaluate the effects of products through their life cycles. The rate of implementing LCA in eco-products increases with each passing year, reaching 92% in fiscal 2007.

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.

Life Cycle Processes Reviewed in LCA



Representative Eco-products of Fiscal 2007

Results of LCA

Thirteen new eco-products were developed in 2007. 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. The following

Cooling fan San Ace 120CR Type
120×120×76mm
Counter rotating fan

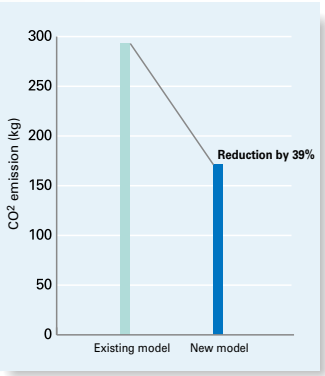
Features

Compared with two of an existing fan model combined in line, the static pressure was increased by 40%, the air flow by 20%, while the mass was reduced by 16%, the power consumption by 39%, and the sound pressure level by 4 dB (A). The product is RoHS compliant.

Models compared for LCA

Newly developed model: 9CR1212G0002
Existing model: 9G1212G102 x 2 fans
The CO2 emission volumes at the time of use include only the power consumption of the fans; calculated based on the assumption that they are operated at a rated rotation speed throughout their entire service lives.

Comparison of CO^2 emission



Power Conditioner for PV Inverter
SANUPS P73F

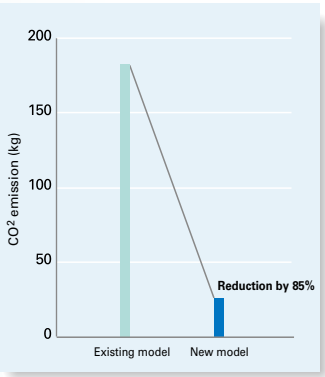
Features

This is a dedicated system for utility connected system using a three-phase four-wire scheme, which is widely employed overseas, being capable of a wide range of capacities from 10 kW to 60 kW.
By eliminating the need for external transformers, a system efficiency of 93% was achieved. Compared with one of our existing models, the new model increases system efficiency by approximately 4%.

Models compared for LCA

New model: P73F103
Existing model: P73E103 (transformer externally installed)
The CO2 emission volumes at the time of use include the power consumption of the systems; calculated based on the assumption that they are operated at a rated power level for 12 hours a day, 365 days a year while supplying power to loads throughout their entire service lives.

Comparison of CO^2 emission



5-Phase Stepping Motor
SANMOTION F

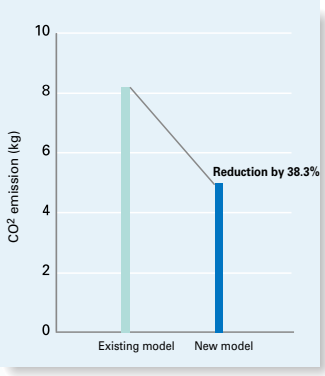
Features

Compared with one of our existing models, the holding torque was increased by approximately 44%, while the noise was reduced by approximately 13% and the power consumption by 40%. The product is RoHS compliant.

Models compared for LCA

New model: SH5281-3211
Existing model: 103F3505-3211
The CO2 emission volumes at the time of use was reduced by 38.3%.

Comparison of CO^2 emission



Promoting Green Supply

Establishment and Implementation of the Chemical Substance Management Guidelines

We are implementing the "Chemical Substance Management Guidelines." These guidelines were established in August 2005 for the management of hazardous substances concerning parts and indirect materials used for our company's products.
These guidelines provide management rules concerning substances specified in laws and regulations, such as substances whose use is restricted or prohibited by the RoHS Directive, substances banned by laws and regulations, and substances designated by the Japan Green Procurement Survey Standardization Initiative (JGPSSI). They include definitions of terms, RoHS threshold values, survey questionnaires on chemical substances affecting the environment that we request our suppliers to fill out, and a guarantee form to assure that no RoHS-restricted substances are contained in the materials. We request that our suppliers understand our Chemical Substance Management Guidelines and submit the survey questionnaire and the guarantee form to ensure that no RoHS-restricted substances are contained in their supplies.

Green Purchasing

We are taking the initiative to purchase stationery and office supplies that are environmentally 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.
◆The installation of equipment required to meet the RoHS standards for cooling fans has been completed.
◆The installation of equipment required to meet the RoHS standards for stepping motors has been completed.
◆Measures required to meet the RoHS standards for applicable servo motors, servo amplifiers, and stepping motor drivers are being implemented and expanded.
◆Measures required to meet the RoHS standards for power system products are being expanded.
◆Preparations are currently underway to conduct a survey on hazardous substances designated by the JGPSSI and other organizations.
◆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 being presented to adopt appropriate measures for customers.
◆Analysis of six RoHS substances contained in materials is being conducted using an X-ray fluorescent (XRF) analysis system.
◆Measures for PFOS and compliance with REACH

* 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)
* PFOS: Perfluorooctane sulfonate, commonly called PFOS (pronounced pee-foh-s). PFOS and PFOS related compounds are being debated about between the Stockholm Convention signatory countries that their production, use, and import/export should be banned on a worldwide scale as a persistent organic pollutant compound.
* REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals): The regulation in Europe to totally administer the registration, evaluation, authorisation, 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 is a major manufacturing branch of the Servo System Division and the Power System Division, has been working to install a series of equipment for lead-free manufacturing since fiscal 2004, and finally completed the 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.
◆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 Aoki 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	Effects
Midorigaoka Works	(1) Decrease in the idling time of local ventilating fans (2) Decrease in the operation time of compressors and other machines on holidays (3) Use of energy-efficient equipment	(1) Savings in electricity through the efficient combination of the operation of facilities and local ventilation fans (2) Savings in electricity by minimizing unnecessary holiday operation time of large-scale equipment (3) Savings in electricity by installing a series of energy-efficient devices such as energy-saving mercury lamps and air dusters
Shioda Works	(1) Affixing calendar timers to machines (2) Redesigning of mounter programs (3) Replacement of the general aging method used in testing by the discrete aging method	(1) Savings in electricity by preventing switches from being left on (2) Savings in electricity by reducing the production cycle time (3) Savings in electricity
Tsuiji Works	(1) Operation of compressors using timers (2) Installation of insulators on the exterior walls of the transfer furnace (3) Promotion of energy saving during holidays by monitoring demand data	(1) Savings in electricity by reducing the operation time (2) Savings in electricity by improving thermal efficiency and by reducing rises in room temperature (3) Savings in electricity
Aoki Works	(1) Prevention of air leaks of machines, and replacement and repair of the same (2) Operation of ventilation fans using temperature sensors (3) Installation of insulators in the dryer (4) Operation management of air conditioners	(1) Savings in electricity by reducing wasted energy (2) Savings in electricity by improving the efficiency in machine operation (3) Savings in electricity by preventing heat radiation (4) Savings in LPG consumption by combining scheduled and manual operations
Fujiyama Works	(1) Economical use of lights at parking lots and passages (2) Adjustment of the operation time of air conditioners (3) IPromotion of the use of solar energy (for lighting and power for facilities) (4) Saving energy required for air conditioning	(1) Savings in electricity by reducing lighting hours (2) Savings in electricity by reducing operation hours (3) Savings in commercial electricity (4) Savings in electricity

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. Lead at Shioda Works was exempted last fiscal year from the reporting obligation due to the 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	6.4t
Bisphenol A epoxy resin (liquid)	Midorigaoka Works	1.0t
Bisphenol A epoxy resin (liquid)	Tsuiji Works	3.2t
Styrene	Midorigaoka Works	6.9t
Styrene	Tsuiji Works	1.9t

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.

Signboard for idling stop


Low-emission diesel car

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

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

Zero-emission Activities

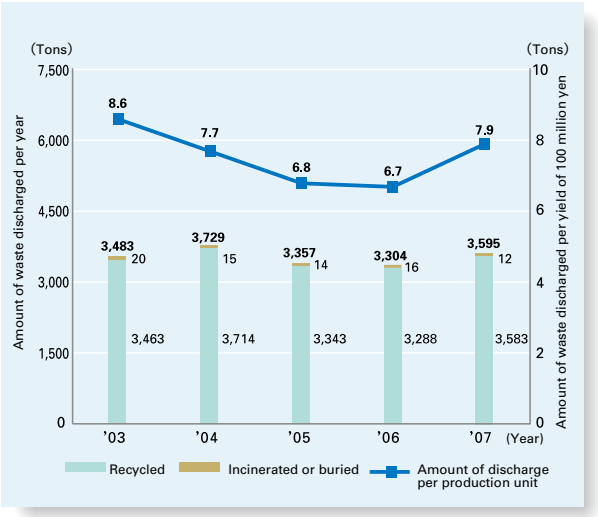
Sanyo Denki is working as a member of the Zero-emission Promotion Committee and the Zero-emission Promotion Workshop (formed in April 2003) of the Nagano Techno Foundation* Asama Technopolis Region Center to promote environmental conservation activities in collaboration with companies in the surrounding 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.
Since the last fiscal year, the Workshop has deployed seven subpanels 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

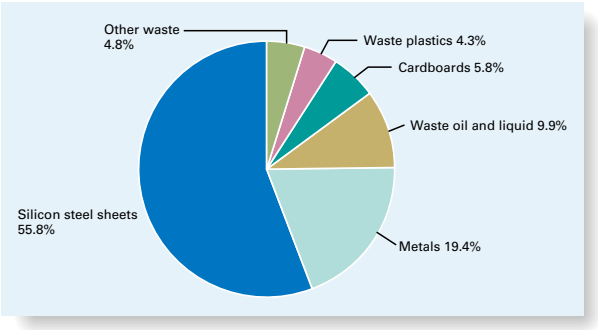
Recycling

We created a recycling section for employees at the Tsuiji Works in 2003 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	6.4	6.4 / 100	After oil and water are separated, dehydrated residues are turned into compost.
	Inorganic sludge	9.1	9.1 / 100	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	6.4	6.4 / 100	After oil and water are separated, the material is recycled as fuel.
	Water-soluble materials (detergents, grinding liquid, etc.)	293.0	293.0 / 100	After oil and water are separated, some of the treated water is released into rivers, and incinerated residues are used as cement materials.
	Volatile materials	6.6	6.6 / 100	Distilled and used as recycled oil.
	Waste acid (batteries)	50.1	50.1 / 100	Crushed, sorted and all recycled.
Waste plastics	OA equipment and circuit boards	39.9	39.9 / 100	Crushed, sorted and all recycled.
	Vinyls and films	51.3	51.3 / 100	Turned into solid fuel (refuse derived fuel), reducing agents (using furnaces) and materials for power generation (thermal recycling)
	Molding scraps	27.2	27.2 / 100	
	Other solid scraps	30.6	30.2 / 98.7	
	Styrofoam	7.3	7.3 / 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	2668.2	2668.2 / 100	Recycled as metal materials
	Metals (including empty cans)	35.2	35.2 / 100	
Paper scraps	Used paper	11.3	11.3 / 100	Turned into raw materials for recycled paper
	Newspapers, magazines, and other papers	42.6	42.6 / 100	
	Cardboards	208.0	208.0 / 100	
Wood scraps	Packages and transportation pallets	81.2	81.2 / 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
	Fluorescent light bulbs	0.2	0.2 / 100	Crushed, sorted, and recycled
Other waste	Paper scraps and other waste	18.7	6.5 / 35	Incinerated and recycled
	Total	3595.7	3883.1 / 99.6	

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.
The Aoki Works also participates in the "Clean Environment Campaign" organized by Aoki Village every year.
At the Midorigaoka Works and the Shioda Works, a large scale of cleaning was carried out cooperating with the neighborhood community association.
The Technology Center engaged in large scale cleaning by expanding its cleaning area.

Outdoor cleaning activities

Education and Training

Training Curriculum

Sanyo Denki's training system is composed of training programs by stratum, career training programs, and training programs by division.
In fiscal 2007, we held the following company lectures:

◆ July 2007
Lecture on LCA software
◆ August 2007
Lecture on designs for hazardous chemical substance reduction
◆ February 2008
Briefing session on eco-products

In-house Awards Ceremony for Environmental Activities

We have held awards ceremonies since 2003 to honor the activities of the working groups of the Environmental Committee and the results of the environmental activities of branch offices and factories, aiming to enhance the awareness of employees about the environment.
Activities that were awarded honors in fiscal 2007:

◆ Social contribution and volunteer activities: Technology Center
◆ Eco-products: AC Servo Motor "SANMOTION R," 40x40mm square, 56mm thick, Dual Counter-rotating Fan "San Ace 40 CRA Type"

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.

IActivities 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, 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 and company counselors.
◆ 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
· Lectures for dietary guidance

AED


Training on general emergency life-saving methods

Goals for Fiscal 2008 and Challenges for the Future

We created 13 eco-products in fiscal 2007. We will continue to promote the development of products designed to reduce CO2 emissions during their use and to be eco-friendly based on LCA. The sales ratio of eco-products was 36.7% in fiscal 2007, and we will continue striving to increase the sales ratio.

Item	Goals for Fiscal 2008	Goals to be achieved by fiscal 2009
Promotion of eco-products	Creation of eco-products	Creation of eco-products
Sales activities	Sales ratio of eco-products: 40% or higher	Sales ratio of eco-products: 50% 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 2% compared to 2006	Reduction by 3% compared to 2006
Reduction in fuel consumption	Maintaining the consumption of LPG at the current level (reduced by 44% compared to 2000)	Maintaining the consumption of LPG at the current level (reduced by 44% compared to 2000)
	Maintaining the consumption of A-type heavy oil at the current level (reduced by 14% compared to 2000)	Maintaining the consumption of A-type heavy oil at the current level (reduced by 14% compared to 2000)
Reduction in copier paper consumption	Maintaining the consumption at the current level (reduced by 30% compared to 1999)	Maintaining the consumption at the current level (reduced by 30% compared to 1999)
Reduction of waste	Maintaining the consumption at the current level (reduced by 19% compared to 2000)	Maintaining the consumption at the current level (reduced by 19% 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 99.5% or higher	Maintaining a company-wide waste recycling rate at 99.5% or higher

Activities at Offices and Works

As of December 2007

Head Office

◆Location: 1-15-1 Kita-otsuka, Toshima-ku, Tokyo
◆Area: 1,761 m²
◆Number of employees: 318
◆ISO certificate obtained: March 2002

Shioda Works

◆Location: 517 Goka, Ueda-shi, Nagano
◆Area: 5,698 m²
◆Number of employees: 121
◆ISO certificate obtained: March 2001
◆Products manufactured:
AC/DC servo amplifiers, stepping motor drivers, system controllers, UPS's (uninterruptible power supply devices), and printed circuit boards

Tsuiji Works

◆Location: 827 Tsuiji, Ueda-shi, Nagano
◆Area: 9,580 m²
◆Number of employees: 29
◆ISO certificate obtained: March 2001
◆Products manufactured: AC/DC servo motors

Technology Center

◆Location: Ueda Research Park, 812-3 Shimonogo, Ueda-shi, Nagano
◆Area: 44,908 m²
◆Number of employees: 278
◆ISO certificate obtained: November 1999
◆Other: A solar power generation and a gas engine cogeneration system adopted

Aoki Works

◆Location: 252-5 Oaza Tonodo, Aoki-mura, Chiisagata-gun, Nagano
◆Area: 21,487 m²
◆Number of employees: 147
◆ISO certificate obtained: April 1999
◆Products manufactured: Stepping motors

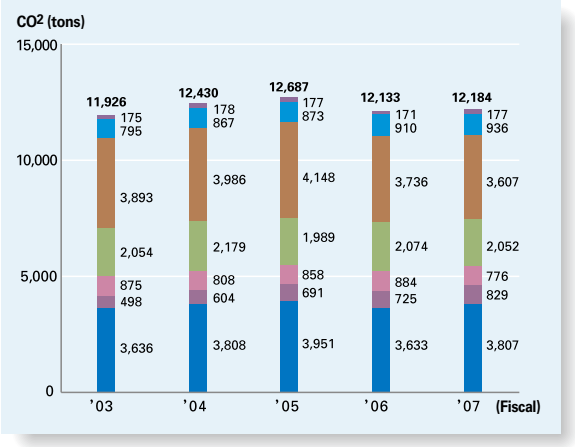
Midorigaoka Works

◆Location: 1-1-7 Midorigaoka, Ueda-shi, Nagano
◆Area: 33,423 m²
◆Number of employees: 286
◆ISO certificate obtained: March 2001
◆Products manufactured:
AC/DC servo motors and encoders

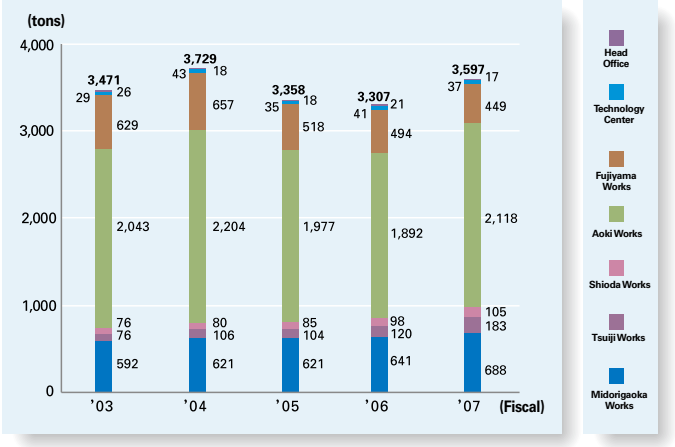
Fujiyama Works

◆Location: 4016 Fujiyama, Ueda-shi, Nagano
◆Area: 86,260 m²
◆Number of employees: 350
◆ISO certificate obtained: December 1999
◆Products manufactured: Cooling fans, UPS's (uninterruptible power supply devices), power source monitoring systems, power conditioners for solar-electric 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 the ISO14001 certificate in 1999. The general environmental manager works in the environmental management system under the direction of top management to promote environmental activities at the Head Office and the factories. We aim to help our customers reduce environmental burdens when using our products and to contribute to reducing global environmental burdens by developing highly efficient products, in addition to saving energy and reducing waste at our factories. The Environmental Committee works with environmental managers at factories to organize various specialized subcommittees in order to discuss measures to make continuous improvements for the environment and to take an active part in promoting environmental conservation activities to achieve our goals.

Head Office

Fukuichi Tamegai

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
◆ 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 13 new products as "eco-products" in fiscal 2007. To achieve our goal of developing products that are free of hazardous chemicals, we have nearly completed the installation of equipment required to meet the RoHS standards for our target products. 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 will continue to develop eco-design products and work to save energy and improve efficiency in order to help customers reduce environmental burdens when using our products.

Tsuiji Works

Yuji Kojima

The Tsuiji Works is promoting activities to save energy, reduce waste and reduce hazardous substances.

◆ Reduction in power consumption (operation of compressors using timers and monitoring and repairing of air leaks)
◆ Reduction in the consumption of A-type heavy oil (monitoring of air-conditioning temperatures and use of partition curtains)
◆ Reduction in the consumption of copier paper
◆ Reduction of waste (returning packages and containers to suppliers)
◆ Volunteer activities for cleaning areas around the factory

Midorigaoka Works

Masahiro Koyama

The Midorigaoka Works focused primarily on saving power consumption and reducing the amount of waste.

◆ Lowering power consumption by reducing the idle operation of bulky equipment such as large-scale local ventilation fans and by increasing thermal efficiency in drying furnaces
◆ Reuse of wooden pallets and cardboard boxes
◆ Volunteer activities for cleaning surrounding areas (cleaning areas around the factory once a month, cleaning large areas once a year, and carrying out a large scale cleaning once a year in cooperation with three neighborhood communities)

Aoki Works

Katsuya Kodaira

The Aoki Works is promoting activities to reduce LPG consumption and improve the recycling rate.

◆ Reduction in power consumption
◆ Reduction in LPG consumption
◆ Reduction of waste and improvement in the recycling rate
◆ Reduction in the consumption of copier paper
◆ Volunteer activities for cleaning areas around the factory

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 lead-free surface mount soldering
◆ Volunteer activities for cleaning areas around the factory

Fujiyama Works

Hirohisa Yamazaki

TThe 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 addition, activities to eliminate hazardous substances from manufacturing processes and prevent air pollution are also being worked on.

◆ Energy saving (a reduction in the consumption of electricity and A-type heavy oil for air conditioning).The Fujiyama Works, a type-2 designated energy management factory, is reducing energy consumption every year.
◆ Reduction in the consumption of lead by using lead-free solder
◆ Reduction of waste (reduction of waste plastics and cardboards) and zero emission activities
◆ Volunteer activities for cleaning areas around the factory

Data on Air Quality, Water Quality and Noise

Technology Center	Item	Regulatory standard	Voluntary standard	Actual value
Air Quality Laws and ordinances for air pollution prevention	Smoke and soot (g/m³N)	0.10	0.08	0.0005
		0.05	0.045	0.0017
	Nox (ppm)	150	130	77
		600	550	89
	Sox (m³N/h)	Exempted		
Water Quality Laws, ordinances and agreements for water pollution prevention	PH (pH)	5.8～8.6	—	6.8～7.2
	BOD (mg/L)	20	19	7.1～9.2
	SS (mg/L)	60	54	2.0～5.0
Noise Laws, ordinances and agreements for noise regulation	(dB [A])	55～65	54～64	Excluded from measurement

Tsuiji Works	Item	Regulatory standard	Voluntary standard	Actual value
Air Quality Laws and ordinances for air pollution prevention	Smoke and soot (g/m³N)	0.30	0.03	0.0067
	Nox (ppm)	250	200	71
	Sox (m³N/h)	1.7	0.8	0.017
		0.63	0.3	0.0073
Water Quality Laws, ordinances and agreements for water pollution prevention	PH (pH)	5.8～8.6	—	5.9～7.8
	BOD (mg/L)	30	28	2.9～3.8
	SS (mg/L)	60	54	1.0～2.0
Noise Laws, ordinances and agreements for noise regulation	(dB [A])	55～65	54～64	Excluded from measurement

Midorigaoka Works	Item	Regulatory standard	Voluntary standard	Actual value
Air Quality Laws and ordinances for air pollution prevention	Smoke and soot (g/m³N)	0.30	0.03	0.0047
	Nox (ppm)	250	200	68
		180	130	77
	Sox (m³N/h)	1.7	0.8	0.019
		2.1	1.0	0.009
Water Quality Laws, ordinances and agreements for water pollution prevention	PH (pH)	No water disposal tank		
	BOD (mg/L)			
	SS (mg/L)			
Noise Laws, ordinances and agreements for noise regulation	(dB [A])	60～65	59～64	47～63

Aoki Works	Item	Regulatory standard	Voluntary standard	Actual value
Air Quality Laws and ordinances for air pollution prevention	Smoke and soot (g/m³N)	Exempted		
	Nox (ppm)			
	Sox (m³N/h)			
Water Quality Laws, ordinances and agreements for water pollution prevention	PH (pH)	Exempted		
	BOD (mg/L)			
	SS (mg/L)			
Noise Laws, ordinances and agreements for noise regulation	(dB [A])	65～70	64～68	Excluded from measurement

Shioda Works	Item	Regulatory standard	Voluntary standard	Actual value
Air Quality Laws and ordinances for air pollution prevention	Smoke and soot (g/m³N)	0.30	0.03	0.0045
	Nox (ppm)	180	130	52
	Sox (m³N/h)	1.3	0.7	0.0066
Water Quality Laws, ordinances and agreements for water pollution prevention	PH (pH)	No water disposal tank		
	BOD (mg/L)			
	SS (mg/L)			
Noise Laws, ordinances and agreements for noise regulation	(dB [A])	55～65	54～64	47～60

Fujiyama Works	Item	Regulatory standard	Voluntary standard	Actual value
Air Quality Laws and ordinances for air pollution prevention	Smoke and soot (g/m³N)	0.30	0.03	0.0052
	Nox (ppm)	180	130	65
	Sox (m³N/h)	5.0	2.5	0.022
Water Quality Laws, ordinances and agreements for water pollution prevention	PH (pH)	5.8～8.6	—	6.1～7.3
	BOD (mg/L)	50	48	5.9～8.4
	SS (mg/L)	60	54	4.0～12.0
Noise Laws, ordinances and agreements for noise regulation	(dB [A])	55～65	54～64	Excluded from measurement

Business Profile

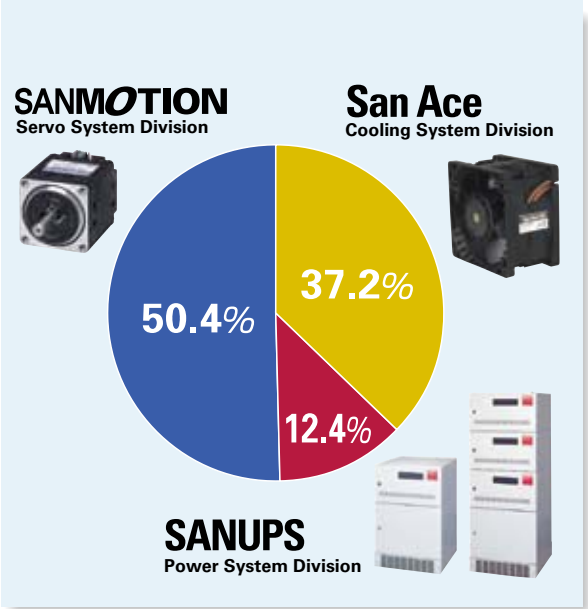
Sanyo Denki is working to develop new technologies and products, with the aim of creating "technologies to protect the global environment," "technologies to ensure human health and safety" and "technologies to exploit new energy sources and save energy."

Cooling System Division
Development, manufacture and sales of cooling fans and cooling systems

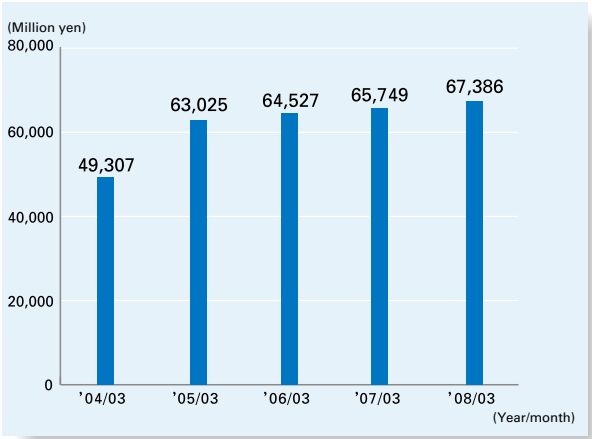
Power System Division
Development, manufacture and sales of uninterruptible power supplies, power conditioners for solar-electric power generation systems, and engine generators

Servo System Division
Development, manufacture, and sales of servo motors, stepping motors, sensors, encoders, and control systems

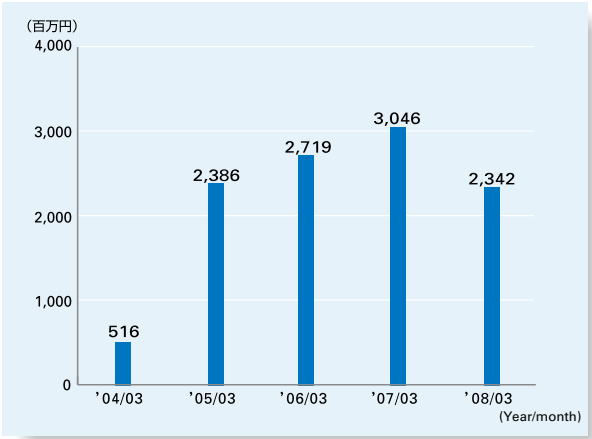
Sales Ratio (for fiscal 2007, consolidated)



Changes in Sales (Consolidated)



Changes in Current Net Income (Consolidated)



Company Profile

Founded: December 31, 1936
Capital: 9.9 billion yen (as of March 31, 2008)
Sales (consolidated): 65.7 billion yen (for the period from April 2007 through March 2008)
Number of employees (consolidated):
2,357 persons (as of March 31, 2008)

For inquiries about the Environmental Management Report, please contact

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