



## Environmental Report 2001

For Protection of the Environment for Harmonious Coexistence of Human and Nature

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## Company Profile

Corporate name: Anritsu Corporation

Head office: 5-10-27, Minamiazabu, Minato-ku, Tokyo

Origin: Sekisansha founded in 1895

Year of incorporation: Anritsu Electric Co., Ltd.  
was incorporated in 1931.

Representative Directors: Yasuo Nakagawa, Chairman and  
Representative Director  
Akira Shiomi, President and Representative  
director

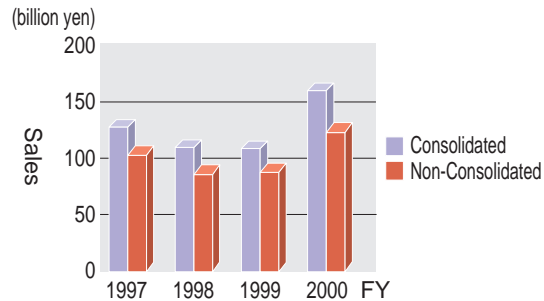
Capital: ¥14,024,000,000 (as of March, 2001)

Consolidated: ¥159,000,000,000 (in fiscal 2000)

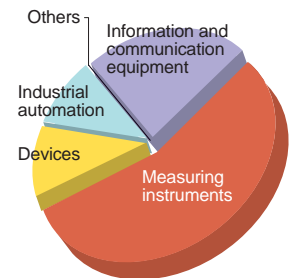
Non-Consolidated: ¥122,400,000,000 (in fiscal 2000)

No. of employees: 2,700

Major products: Information and communication equipment, measuring  
instruments, devices and industrial automations



Review of Sales



Sales breakdown

### Scope of the Anritsu Environmental Report 2001

Period: April 1, 2000 to March 31, 2001

Places: Head Office and Atsugi Works of Anritsu

Range of activities: Development, manufacturing and sale  
of information and communication  
equipment, measuring instruments,  
devices and industrial automation



Head Office Minato-ku, Tokyo



Atsugi Plant  
Atsugi City, Kanagawa Prefecture

## Message from the President

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In this initial year of the 21st century, the century of the environment, efforts on creating a recycling-oriented society will be accelerated. Last year, the Basic Law for Establishing the Recycling-based Society and associated laws and regulations were enacted. Among these, the enforcement of the Green Purchasing Law requires that corporate products be environment-friendly. This suggests that corporations failing to meet this requirement will not survive in the future. Anritsu group has an environmental principle that we, with sincerity, harmony, and enthusiasm, will contribute to make an affluent, peaceful society in which humans can coexist with nature. The Company will also continue to ensure that every employee is fully aware of global environmental issues, and acts accordingly.

In 1970, Anritsu established the Environmental Preservation Committee to initiate energy saving, resource saving and waste reduction efforts; to control the risks involved in chemicals; and to conduct various other activities for environmental preservation.

In 1994, the Company set up the Product Assessment Committee to commence environmental improvement from the outset of the development and designing stage. In 1999, it compiled a database, collecting information on the allocation of parts and materials to suppliers according to the Green Procurement Guideline, energy saving, hazardous chemicals, etc. And last year, the Company established criteria for evaluating its ecological products. It will aggressively promote the technological development of environmentally conscious products by using all of these.

Anritsu's environmental management system is now in its fourth year since receiving certification to ISO 14001. We will continue to make improvements and encourage associated companies to follow suit. We hope that through our "Mobile and Internet"-related businesses, our employees will engage in environment-friendly corporate activities to supply products that have less impact on the environment to create a sustainable society.

This environmental report 2001 reviews our environmental activities in the year 2000. We hope that it helps clarify our approach toward environmental conservation and our activities. We welcome your opinions and feedback.

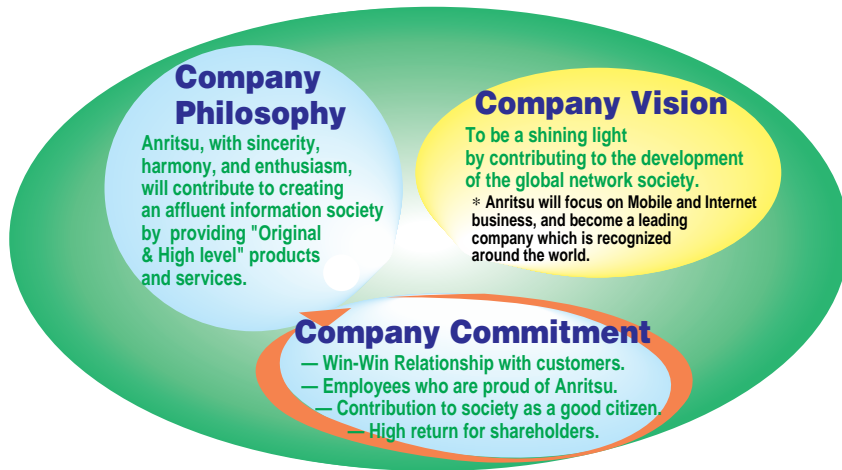
Sept., 2001

*Akira Shiomi*  
Akira Shiomi

President and Representative Director



## Company Philosophy, Company Vision and Commitment



### Environmental Policy

#### Environmental Principle

Anritsu pursues the idea of sincerity, harmony and enthusiasm, aims to develop and produce goods, which do not damage the environment, and contributes to making an affluent, peaceful society in which humans can coexist with nature.



#### Action Guideline

Anritsu will act on the principle of preference of a sound environment in all spheres of business activity for the creation of an affluent, peaceful society.

- (1) We will practice an environmental management activity with due regard to the impact upon the globe in all spheres of business activity from development and design to scrapping.
- (2) We will set environmental objectives and targets with an organizational and operational structure to perform the environmental management activities. Moreover, Anritsu will implement the internal audit, and establish and maintain the environmental management system that is constantly improved.
- (3) We will abide by legal and regulatory controls and with the setting of autonomous management standards, and endeavor to continuously improve the environmental performance within the limits of the technical and economical possible.
- (4) We will promote the energy and resource conservation and waste reduction measures in terms of preventing pollution. Furthermore, Anritsu will take precautionary measures in order to prevent leakage, etc. of wastewater and chemicals in an accident or emergency.
- (5) We will notify this environmental policy in the bulletin and documents in order to make it known to all the company members without exception, and conduct environmental education and training with the aim of increasing understanding and consciousness thereof.
- (6) We will disclose this environmental policy to the public.

Established on 1 Sep.1997, Revised on 9 Jan.2001

# Environmental Management System

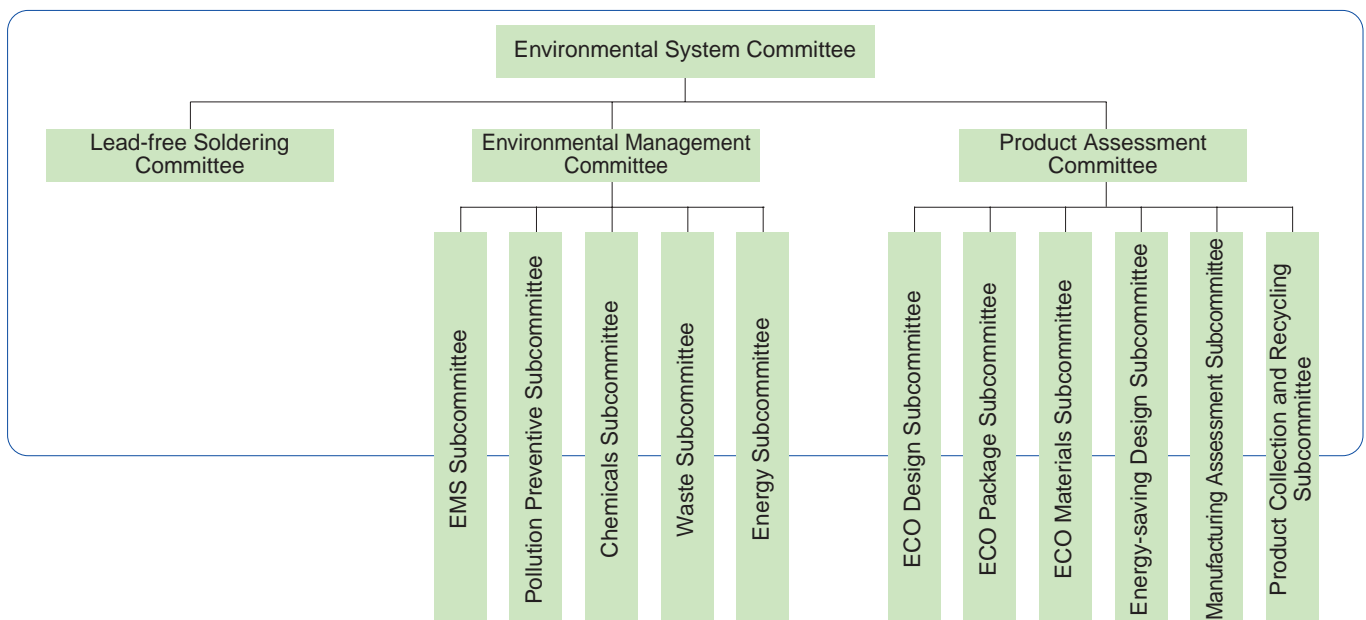
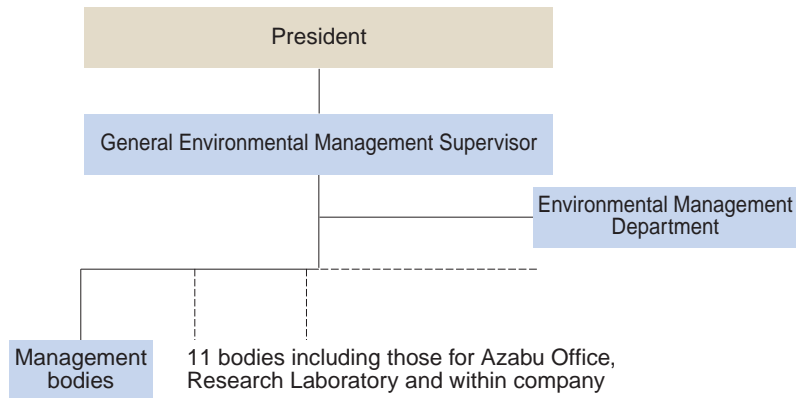
## Environmental Management Organization

In January, 2001, we unified the environmental management organizations in the Azabu Office (Head Office) and the Atsugi Works. The new organization is composed of 11 environmental management bodies under the general environmental management supervisor (Vice President in charge of environmental management). The Environmental Management Department promotes environmental management activities in support of the above. The Head Office (Azabu Office) will be registered and undergo another ISO14001 examination this year. The Environmental System Committee is at the apex of all examination bodies, examining the environmental management activities of entire Anritsu Group. The Environmental Management Committee was set up to examine the environmental management activities of Anritsu itself. This committee sets targets for such activities, examines rules and conducts associated activities. The Product Assessment Committee and the Lead-free Soldering Committee, both of which promote the production of environment-friendly products, operate in parallel with the Environmental Management Committee. Both the Environmental Management Committee and Lead-free Soldering Committee have specialized subcommittees which assist the parent committee.

## Environmental Audit

In addition to ISO compliance examinations by external bodies, internal environmental audits are carried out. The internal audit consists of an audit to check primarily for compliance with ISO requirements (for all managed items) and an audit of compliance with laws (equipment subject to the Law for Water Pollution Prevention, Noise Control Law and other environmental regulations). Both of these audits are carried out once a year. Patrols are performed twice a year by the Pollution Preventive Subcommittee and the Energy Subcommittee to monitor the environmental conservation and energy saving activities. No nonconformity was detected as a result of the external bodies' examinations, but two issues (items needing improvement) were found and resolved. Anritsu was highly rated for establishing its Anritsu Green Procurement Guideline which sets criteria for controlling hazardous substances in materials.

\*The Head Office (Azabu Office) was registered on August 10, 2001.





## Environmental Objectives and Results for Fiscal 2000

Resource waste reduction, saving, saving energy and other environment-related targets set for 2000 were all attained

### (Achievements as against targets for fiscal 2000)

Items	FY 2000 Objective	FY 2000 Result	Evaluation
<b>Waste reduction, recycling</b> <ul style="list-style-type: none"> <li>Reduction of the volume of industrial waste incinerated/buried by 77% by FY 2003 of the corresponding volume in FY 1990.</li> <li>Raising of the industrial waste recycling rate to 40% by FY 2003.</li> </ul>	70% 32%	87% 39%	○ ○
<b>Resource saving and energy saving</b> <ul style="list-style-type: none"> <li>Reduction of electricity consumption by 18% by FY 2003 of the consumption in FY 1990 in terms of unit initial input.</li> <li>Development of 10 or more models per year for resource saving of 10% or more. (Items: Volume, mass, decomposition time and power consumption)</li> <li>Reduction of copy paper consumption by 15% by FY 2003 of the consumption in FY 1998.</li> </ul>	17% 10 models (4 items)  8%	21% 17 models (4 items)  26%	○ ○  ○
<b>Prevention of pollution</b> <ul style="list-style-type: none"> <li>Maintenance of zero excess over the voluntary control limits for inorganic drain water.</li> </ul>	0	0	○
<b>Reduction of risks due to chemicals</b> <ul style="list-style-type: none"> <li>Action against risks due to chemicals</li> <li>Reduction of cyanic compound consumption by 73% by FY 2003 of the consumption in FY 1990.</li> <li>Raising of the usage rate of Anritsu-made MSDS for production purposes to 100% by FY 2003.</li> </ul>	3  70%  20%	8  71%  20%	○ ○ ○
<b>Greening</b> <ul style="list-style-type: none"> <li>Increase of green-procurement stationery items to 80 by FY 2003.</li> </ul>	40 items	54 items	○

○: Attained ×: Not attained

## Environmental Objectives for Fiscal 2001

Anritsu formulated a long-term environmental management plan and has been making consistent improvements ever since.

In 2001, we will execute a zero emission plan, to contribute to the construction of a recycling-oriented society. We will also execute a plan for introducing pollution-control vehicles as we step up our activities.

### (Environmental objectives for fiscal 2001)

Items	FY 2001 Objectives
★ Waste reduction, recycling <ul style="list-style-type: none"> <li>Reduction of the volume of industrial waste incinerated/buried by 99% by FY 2005 of the corresponding volume in FY 1990.</li> <li>Raising of the industrial waste recycling rate to 99% by FY 2005.</li> <li>Zero emission should be achieved by FY 2005.</li> </ul>	82% 80% —
☆ Resource saving and energy saving <ul style="list-style-type: none"> <li>Reduction of electricity consumption by 22% by FY 2005 of the consumption in FY 1990 in terms of unit initial input (Atsugi).</li> <li>The detected amount of carbon dioxide should be reduced by 25% by FY 2005 of the similar amount in FY 1999 (Atsugi).</li> <li>Annual development of 10 or more models for resource saving of 10% or more. (Items: Volume, mass, decomposition time and power consumption)</li> <li>Reduction of copy paper consumption by 14% by FY 2005 of the consumption in FY 1998.</li> </ul>	20% 23% 10 models (Average 4 items) 10%
☆ Preservation of pollution <ul style="list-style-type: none"> <li>Maintenance of zero excess over the voluntary control limits for inorganic drain water.</li> <li>Pollution-control vehicles should be increased to 30% of all vehicles by FY 2005.</li> </ul>	0 7%
Reduction of risks due to chemicals <ul style="list-style-type: none"> <li>Action against risks due to chemicals</li> <li>Raising of the usage rate of Anritsu-made MSDS for production purposes to 100% by FY 2003.</li> <li>The amount of chemicals under statutory control will be reduced by 6% by FY 2005 of the similar amount in FY 1999.</li> <li>The consumption of solder containing lead used should be reduced to zero by the end of FY 2003.</li> </ul>	1 40% 2% —
<b>Greening</b> <ul style="list-style-type: none"> <li>Increase of green-procurement stationery items to 100 by fiscal FY 2004.</li> </ul>	60 items

☆: New plan ★: The recycling of water is presupposed for the years from 2001 onward. This was and will be reflected in the calculation of the recycling rate.

# ■ Environmental Accounting

Environmental accounting has been introduced as part of our quantitative evaluation of the environmental management activities, to raise the efficiency of those activities and ensure continuous improvements.

## ■ Introduction of environmental accounting

In the past, we recorded the expenses incurred for environmental preservation, which were divided into nine categories within our organization, under the heading "environmental investments". When the Environmental Agency's "Guide to Establishment of Environmental Accounting System" (edition for 2000) was published in March, 2000, we introduced environmental accounting based on the cost figures in 2000 according to the guideline.

## ■ Purpose of introduction of environmental accounting

Environmental accounting data will be fully used to raise the efficiency of investment in the environment and environmental management activities and for executing long-term continuous environmental measures. We will refine our environmental accounting system to disclose information to society and make our corporate policy better understood.

## ■ Coverage by our system

Data on Anritsu corporation (Head Office and Atsugi Works) were gathered. We are considering expanding the environmental accounting system to cover companies in our group in the future.

## ■ Cost figures in fiscal 2000

The cost figures in fiscal 2000 are presented below.

Environmental preservation costs				Effect		
Category	Breakdown		Investments (in million yen)	Costs (in million yen)	Economic effect (in million yen)	Volume reduction effect
Business areas costs	Costs for pollution control (risk measures included)		3.3	23.3	0.5 (539.6) (Note 1)	—
	Global environmental preservation cost	Prevention of global warming	50.9	103.0	5.6	132 (t-CO <sub>2</sub> )
	Resource recycling costs	Resource recycling/ utilization activities	7.7	25.8	26.4	4.7 (thousand tons) (Water resource reduction) 7 (tons) (Paper reduction) 149 (tons) (Reduction of waste incinerated and buried)
		Waste disposal cost	—	24.7		
Upstream/ downstream costs	Green Purchase/Procurement cost		—	5.8	[55.7] (Note 4)	[1,326 (t-CO <sub>2</sub> )] (Note 4)
	Design for environmentally conscious products		—	12.0		
Management activity costs	Environmental education/manpower training		—	22.5	—	—
	Operation and maintenance of EMS and internal audit		—	64.5	0.2	—
	Environmental load monitoring and measurement cost		—	1.5	—	—
	Personnel expenses of environmental preservation organization		—	202.2	—	—
Social activity costs	Protection and cleaning and enhancement of scenic beauty	Greening and upkeep of greenery	—	11.1	—	—
	Support and fund contribution to community groups, environmental preservation bodies, etc.		—	1.6	—	—
	Disclosure of information		—	2.1	(0.9) (Note 2)	—
Research and development cost	Research and development to reduce environmental loads		—	25.3	—	—
	Total		61.9	525.4	32.7 (573.2) (Note 3)	—

(Note 1) Presumed profit in parentheses: The sum of presumed profit, i.e., profit due to the precluding of environmental repair and the profit due to the precluding of payment of a fine or penalty by complying with rules.

(Note 2) Presumed profit in parentheses: Profit estimated by converting the effect of an article in a public notice into an advertising expense.

(Note 3) The economic effect in parentheses is the total profit including presumed profit.

(Note 4) The customer's energy consumption reduction when the product is used (3,713 MWh/year) is presented in terms of the economic effect (charge for electric power) and the equivalent volume of carbon dioxide discharged. Not included in the total economic effect.

# Environmental Preservation

Anritsu has set voluntary control criteria in addition to the statutory controls and other figures in respect of drain water, substances emitted into the air, noise, etc. in an effort to reduce environmental loads. As in the previous year, none of these exceeded the applicable criteria or the like in 2000. Soil analyses and other tests revealed no instance of pollution.

## Drain water

To prevent the pollution of drain water into the public sewerage system, Anritsu started inspecting the drain water processing plant and the draining system, and analyzed and monitored important items more frequently than prescribed by law. The Company indicated substances not to be discharged at washrooms and took other measures to prevent water pollution. In 2000, we reviewed our operations in the past and abolished chromium-plating and painting processes. Consequently, the environmental loads imposed by drain water and the volume of chemicals handled were reduced.

## Air

Air pollution preventive facilities prescribed by laws, ordinances, etc. are not provided at the Atsugi Works. Abolition of the painting process in 2000 resulted in further decrease of the environmental loads on the air. Monitoring by periodical voluntary measurements is continued in an attempt to preserve the cleanliness of air. We used a high-quality fuel (Special A Heavy Oil) in our only heavy-oil boiler (soot and smoke emitting facility specified in the Air Pollution Control Law) which functions as a room heater at the Head Office and took other measures to reduce air pollution. Even this boiler will be discontinued in 2001.

## Containment of noise

Noise control and other measures including checks of the equipment at the beginning of the day, periodical patrols and preliminary examination prior to introduction of the equipment are taken to contain the noise.

## Checks for soil pollution

We monitor and check for organic chlorine substances which are major factors responsible for soil and underground water problems. We had a soil analysis conducted by a measurement and certifying agent, focusing on 6 substances including trichloroethylene which was totally discontinued in 1970 and 1,1,1-trichloroethane which was totally discontinued in 1993. None of these substances were found to be in excess of the appropriate environmental criterion.

**Measurement of drain water properties (Atsugi Works, drain water from processes)**

Unit: mg/l

Object of measurement	Water discharge criterion		Actual measurement (max.)
	Criterion stipulated by law or ordinance	Voluntary control criterion	FY2000
Watertemperature °C	40	35	28.5
pH	>5.7, <8.7	6.0-8.4	6.2-7.8
BOD	300	180	17.5
SS	300	180	3.2
Extract from n-hexane	5	3	1.4
Iodine consumption	220	130	4.5
Phenols	0.5	0.3	Less than the specified lower quantitative limit
Copper and its compounds	3	1.8	0.85
Zinc and its compounds	3	1.8	0.13
Iron and its compounds	10	6	0.12
Manganese and its compounds	1	0.6	0.03
Chromium and its compounds	2	1.2	0.09
Fluorine and its compounds	15	9	0.81
Nickel compounds	1	0.6	0.50
Cyanic compounds	1	0.6	0.44
Lead and its compounds	0.1	0.06	0.027

**Measurements for air (Atsugi Works, exhaust gas cleaning device)**

Unit: ppm

Object of measurement	Water discharge criterion		Actual measurement (max.)
	Criterion given by prefectural ordinance	Voluntary control criterion	FY2000
Hydrogen chloride	5	3	Less than the specified lower quantitative limit
Cyanic compounds	10	6	0.3

**Measurements for air (Head Office, heavy-oil boiler)**

Object of measurement	Unit	Criterion given by law or Tokyo Metropolitan Government's ordinance	Actual measurement in 2000
Dust and soot	g /Nm <sup>3</sup>	0.2	0.005
Sulfur oxides	Nm <sup>3</sup> /h	1.06	0.014
Nitrogen oxides	ppm	180	65

**Noise measurements (Atsugi Works)**

Unit: dB

Location of measurements	Regulatory criterion		Actual measurement
	Criterion given by prefectural ordinance	Voluntary control criterion	FY2000
Boundary line of the eastern part of the Atsugi Works premises	70	68	57
Boundary line of the western part of the Atsugi Works premises			56
Boundary line of the southern part of the Atsugi Works premises			58
Boundary line of the northern part of the Atsugi Works premises			63



# Waste Reduction and Recycling Activities

We continued the industrial waste reduction activities while pushing forward with recycling. To contribute to the construction of a circulatory society, we are continuing our efforts to accomplish zero emissions by 2005.

## Waste reduction and recycling activities in 2000

Faced with problems related to waste disposal such as the difficulty in securing landfill sites and the generation of dioxins from incineration processes, we made extensive efforts to reduce and recycle the industrial waste generated at our factory (Atsugi Works). Discharge and collection of presorted waste, which are fundamental to industrial waste reduction and recycling, were promoted by waste re-categorizing and intra-company environmental education and awareness programs. A Waste compactor was introduced to reduce waste volume. In addition to the recycling of industrial waste (scrap metal, scrap wood, scrap glass, etc.) through agents, a blast-furnace reducer was tested on waste plastics, which account for approximately 30% of the total volume of waste generated. RDF (conversion into a solid fuel), conversion of waste oil into a cement baking fuel and other measures were taken to promote recycling.

The 3R (reduce, reuse and recycle) drive will be continued to accomplish zero emissions.

## Objectives and Results in 2000

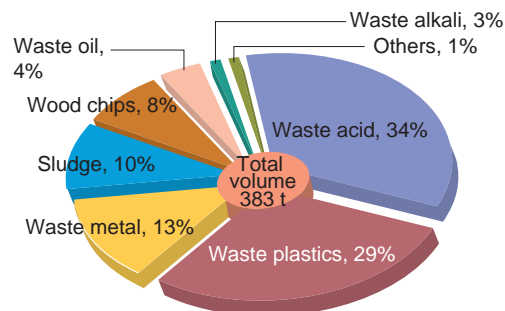
**Objective:** Reduction of the volume of industrial waste incinerated/buried by 70% of the corresponding volume in FY 1990.

**Result:** The objective was achieved by reducing by 87% of the volume in 1990.

**Objective:** Raising the industrial waste recycling rate to 32%

**Result:** The objective was accomplished by raising the recycling rate to 39% (149 t).

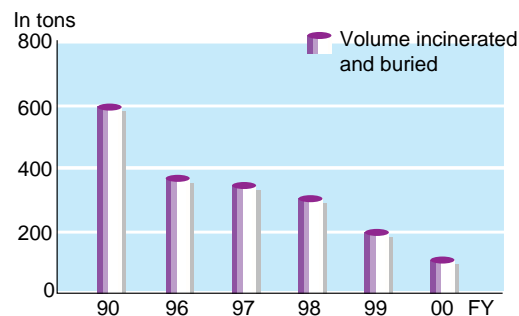
- Volume of recycled waste plastics 50 t
- Volume of recycled waste oil 14 t
- Volume of recycled scrap metal 49 t
- Volume of recycled scrap wood 32 t
- Volume of recycle scrap glass 4 t



Breakdown of industrial waste generated (at Atsugi Works)



Waste compactor



Volume of industrial waste incinerated and buried (Atsugi Works)

## Energy Saving Activities

We are enthusiastically carrying out energy-saving activities as part of the effort to prevent global warming, which is a major task in the 21st century.

### Energy-saving activities in 2000

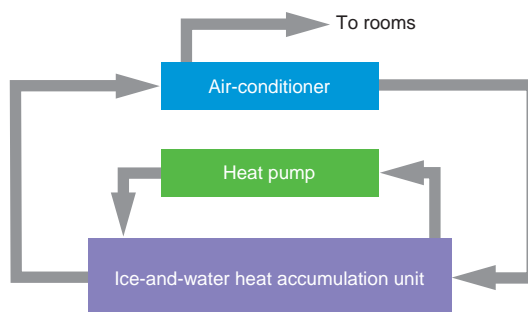
We estimated that the absolute consumption of power, which accounts for the greater part of the consumption of all kinds of energy at Anritsu, would increase by 10% of the power consumption in the previous year due to the completion and use of an additional building, increases in production and the unprecedented hot summer. Our countermeasures included adopting air-conditioning by an iceheat-accumulation system, which can level out the power consumption by consuming power at night and a zoning\* air-conditioning system; adopting an inverter system and zoning illumination; introducing other inverter units; and adopting small-loss transformers, all to save energy. Unnecessary lights were turned off every day, employees were reminded of the importance of energy saving, and various other measures were taken. As a result, the absolute increase in consumption was limited to 5.6% of the consumption in the previous year.

\*Zoning: Indoor zoning to save air-conditioning power.

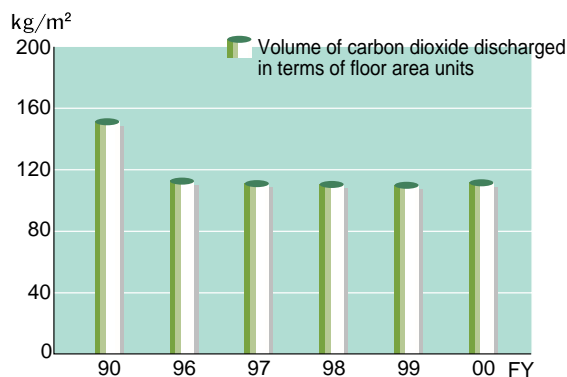
### Energy saving achieved

The power consumption in 2000 in terms of building floor space crude units was 272 kWh/m<sup>2</sup> (97kg/m<sup>2</sup> in volume of discharged carbon dioxide equivalent) or down 21% from the level in 1990. Thus the target reduction of 17% was accomplished.

The volume of carbon dioxide discharged was calculated by using the conversion coefficient prescribed by the execution order for the Law Concerning the Promotion of the Measures to cope with Global Warming. The conversion coefficient for 1999 was used to calculate the figure for the year 2000.



Iceheat-accumulation system



Energy saving achieved (Atsugi Works)

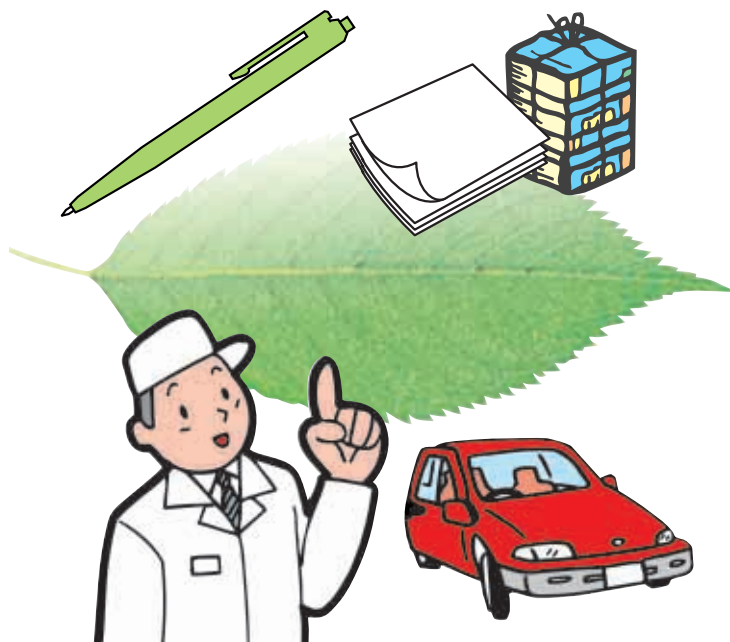
## Green Purchasing

### Purchase of green office supplies

Preference is given to environment-friendly office supplies such as stationery and copying paper as part of the Company's green purchasing activities. In 2000, we listed 54 items according to our unique purchasing standard, thus promoting green purchasing until 2004.

### Purchase of pollution-control motor vehicles

As carbon dioxide and oxidized nitrogen discharged from motor vehicles increase, they exacerbate global warming and air pollution. Automobile manufacturers are therefore developing pollution-control vehicles and have released various models for sale in recent years. The Green Purchasing Law was promulgated in 2000, and the national government specified pollution-control vehicle models and others. We have been introducing pollution-control business-use vehicles including leased cars, according to the administration's criteria or other criteria, to increase such vehicles to 30% or more by 2005.



# Management of Chemical Substances

Before a chemical substance is newly introduced, we conduct a preliminary examination. This year we set a new target: reduction of the consumption of chemical substances subject to statutory controls.

## Preliminary examination of chemical substances

Chemicals undergo one of the following three preliminary examinations:

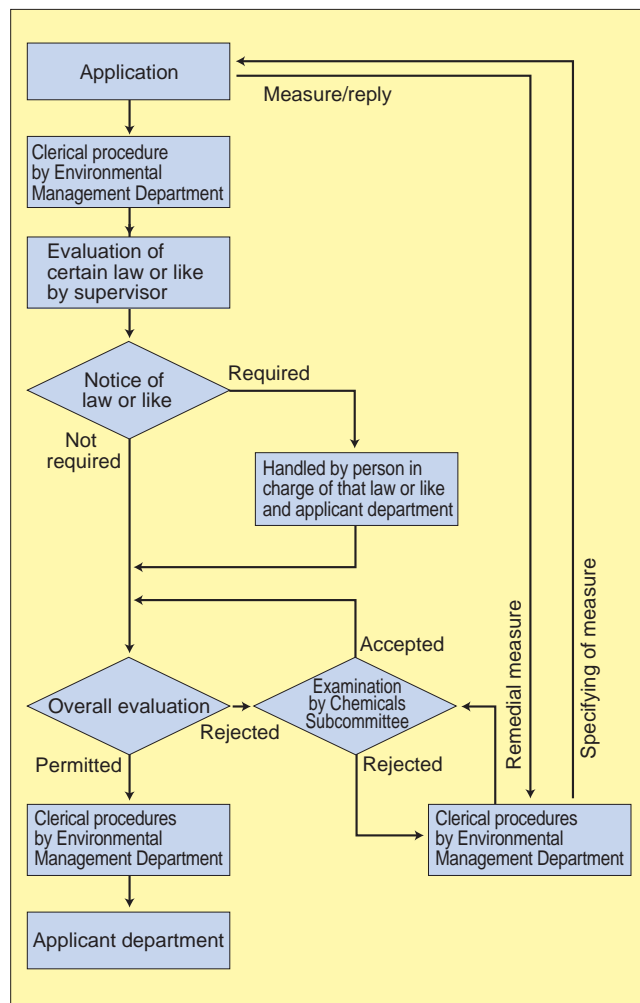
1. Examination of a substance to be newly registered
2. Examination of a substance for use by the section which is to use that substance after registration
3. Examination for a change in consumption of a chemical substance

An application to register a new chemical substance is made by a department which is to use a chemical substance not registered by the Company. Such aspects as the environment, safety and hygiene, disaster prevention, etc. are examined by the respective persons in charge, and the environmental management representative conducts an overall evaluation. Those substances (five of them) whose use we have prohibited are rejected (not registered). An application for registration of a substance whose use is controlled (there are 8 such substances) in the production process is examined by the Chemicals Subcommittee under the Environmental Management Committee for acceptance/rejection.

Only the applicant department is permitted to use a newly registered substance. An application for use by the chemicals department is required if any other department is to use it. An application for a change in consumption of chemical substances is required to change the maximum consumption or maximum storage volume of a newly registered chemical substance, or such maximum consumption or maximum storage volume indicated on the application by the department using the chemical substance. A check is made to see if the change will result in non-conformance to the volume stipulated in the Fire Prevention Law or whether safety measures will be compromised. In 2000, 114 applications for registration of a new substance, 94 applications for use by a specific department and 18 applications for a consumption change were made.

## Chemical substance management system

The purchase quantities of chemicals in use, quantities in storage and quantities discarded are entered at a computer terminal for all chemicals used every three months. These quantities are accumulated in a database. The Environmental Management Department adds up the quantities and checks for any sharp change in stored quantity or any item exceeding the quantity specified in the Fire Prevention Law. The database is used for summation under different laws during a year and for summation substance by substance by the PRTR law. The chemical purchase quantities and others are entered also by the production subsidiaries. The Environmental Management Department checks data received from various companies and supplies necessary information.



Flow of steps for preliminary examination of chemical substance



On-line screen entry of chemical substance

# Products

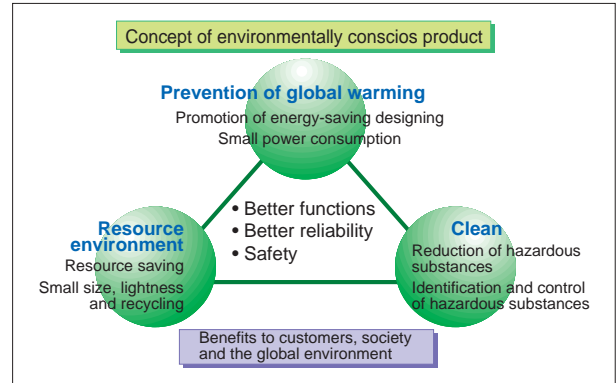
We are now promoting the development of environmentally conscious products which impose less burden on the environment throughout their life cycles (procurement of materials, manufacturing, distribution, use and disposal). Specifically, development involves a wide range of activities including construction of a database for energy-saving designing and control of hazardous substances; promotion of widespread use of environmental effect evaluation tools; promotion of awareness of the significance of design; study of manufacturing process evaluation methods; and dealings with materials suppliers according to the Green Procurement Guideline. Last year, we introduced the Anritsu environmental label "Anritsu Eco Product" to accelerate the development of environmentally conscious products. We will expand the lines of Eco Products and introduce them into our subsidiaries and associated companies.

## Environmental Label - "Anritsu Eco Product"

In October, 2000, the Company initiated lines of "Anritsu Eco Products" conforming to our unique criteria to enhance the environment-friendliness of our products and to promote their environmental benefits to consumers. We will introduce such lines of products in 2001.

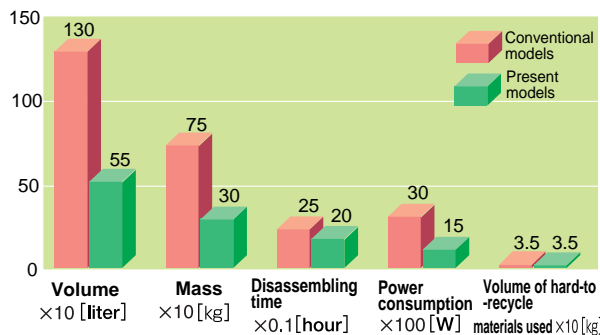
Our environment-friendliness criteria:

- Top-level environment-friendly properties in the industry
- Full information disclosure
- Product assessment completed, and objectives achieved
- Manufacturing assessment completed
- Volume of discharged carbon dioxide discharge evaluated by LCA



## Typical product assessment tool: X-ray Inspection System

This X-ray Inspection System combines advanced sensor technology with unique image processing technology to detect even the finest fragments of iron, stainless steel, bone, shell, stone, glass, rubber, plastics or the like. Use of integrated digital circuits and a new chassis material make it very small and light. Power consumption was drastically reduced by raising the conveyor motor efficiency and incorporating lower-voltage circuits.



Anritsu Eco Product mark

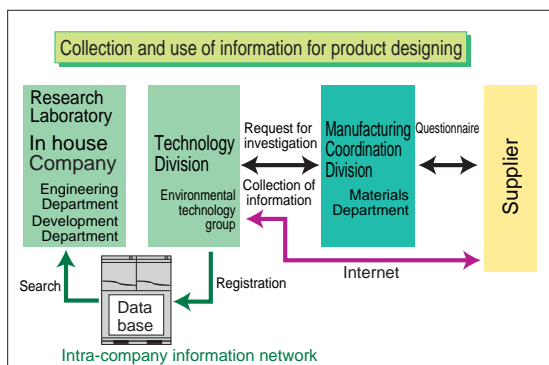


X-ray Inspection System  
 Nisshoku's 3rd Excellent Food Processing Machine Award

## Promotion of green procurement

In June 1999, we established the "Anritsu Green Procurement Guideline for Product Development", which asks our materials suppliers to provide information and promote the supply of "green" products.

The information on hazardous substances and energy-saving components gathered by the questionnaire is compiled into a database and used for designing.



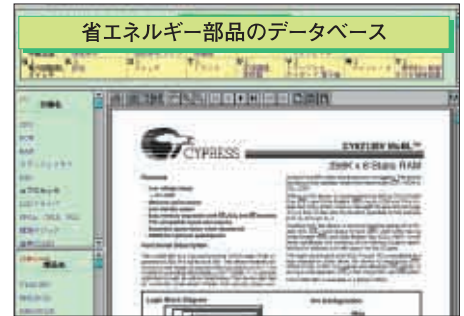
Green Procurement Guideline



## Efforts To Design for Environmentally Conscious Products

### Energy design

Carbon dioxide emissions must be controlled as soon as possible by reducing the power consumed for products as part of activities to prevent global warming, which has become a major issue for society. We drew up plans for reducing power consumption for major new products on the basis of our energy saving objectives, and have been aggressively promoting energy-saving designing. We have compiled a database of information on energy-saving technology and power-saving parts, and have started using it for designing products.



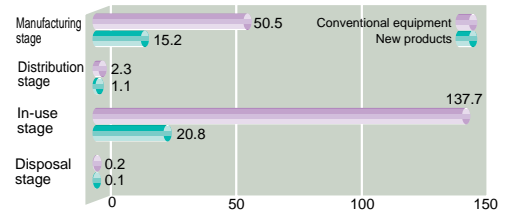
### Control of hazardous substances

A database was also compiled of information on hazardous substances in the parts and materials used for products, and is disclosed within the Company. It is used for searching for parts during the product development stage and for summing figures related to hazardous substances in products already designed. More data will be added to this database, and preparations are under way for automatic summation of figures about hazardous substances at the new-product evaluation stage.

部品名	鉛	六価クロム	多環芳香族炭化水素	ポリブレン	PCB	合計
部品名	鉛	六価クロム	多環芳香族炭化水素	ポリブレン	PCB	合計
数量	20000	10000	2000	100		
含有率 (%)						
鉛	17	17	20			
六価クロム		10	10			
多環芳香族炭化水素			0.2	0.2		
ポリブレン				0.01		
PCB					0	
有害量 (g)	0	0	0	0	0	0
鉛	3400	1700	400	0	0	5500
六価クロム	0	0	0	0	0	0
多環芳香族炭化水素	0	0	0	0	0	0
ポリブレン	0	0	0	0	0	0
PCB	0	0	0	0	0	0
合計	0	0	0	0	0	0
備考						
入力						
発行年						
発行部						
発行日						

### Manufacturing assessment and LCA (Life Cycle Assessment)

We will reduce the power consumption for products and the environmental loads at the manufacturing stage, drawing on the data gained by using LCA, a method of quantitatively evaluating the environmental loads at all stages from extraction of resources to disposal. In December, 2000, we started assessing processes after a revision. This is a method of evaluating the effect of a manufacturing process on the environment by analyzing figures on the volume of carbon dioxide discharged, volume of materials used and volume of hazardous substances used which were obtained by LCA.



Volume of Discharged Carbon Dioxide (kg) During Life Cycle of Measuring Instrument

### Lead-free Soldering

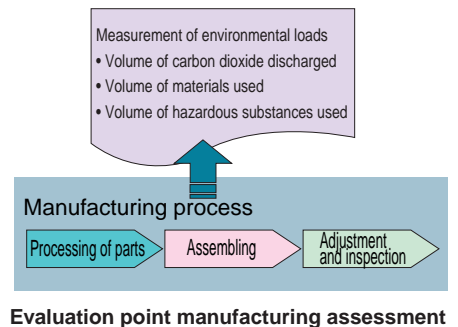
Concern has been growing about acid-rain-induced elution of lead from soldered parts on printed-circuit boards in discarded products, which may pollute the ground. In December 1998, we set up the Lead-free Soldering Committee to investigate the possibility of lead-free soldering. By last year, we had selected suitable soldering materials, fluxes, etc., studied soldering equipment and set-up techniques, collected information on electronic parts and taken other steps, and established the basic technique for practical application of a lead-free soldering method. In 2001, we started trial application of the method to create solder-free products.

### Packaging

In addition to developing environment-friendly products, we focused on the reduction of weight of packing boxes and buffer materials, use of recyclable materials, development of structures that are easy to disassemble and sort, to reduce the weight of resources used and encourage effective recycling of resources. Following the enactment of the Containers and Packing Recycling Law, we started the quantity control of packaging materials in 2000.

### Recycling of used products

Six laws regarding environmental management including the Basic Law for Establishing the Recycling-based Society were enacted or revised in 2000 to provide legal support for the creation of a recycling-oriented society. Statutory controls of our products are far ahead, but the trend in society is undoubtedly toward retrieval and recycling based on the producer's responsibility. We have always assessed products in terms of environmental protection through all phases of the product life cycle—development, production, use and disposal. We finally set up a recycling center in December, 2000 to commence the recycling of used products, and initiated a study prior to full-scale operation of the center.



Recycling Center



# Education and Enlightenment / Contribution to the Local Communities

We hold training courses, seminars, intra-company exhibitions, etc. which are open to all employees.

## Environmental education

Environmental education is given to our employees and contractors' employees to make them aware of the importance of the environment and motivate them to join the environmental preservation effort.

## Environmental Technology Seminar

At the Environmental Technology Seminar, which is intended for the Designing and Development Departments, laws related to the environment, other companies' environmental management activities and other external topics were outlined. Explanations were given on the Company's efforts, the importance of design for environment and good use of an environmental information database as an aid in product development. Representatives of Matsushita Communication Industrial Co., Ltd. which developed power-efficient products and compact products, were invited to give lectures at the Environmental Technology Lectures.

## Intra-company exhibition

The Exhibition of Products of Cooperating Companies for Anritsu (exhibits of 126 companies) was held, and an environmental corner, marked by the catch phrase "The New Millennium — Get information, preserve resources", was set up to explain the new system of developing environmentally conscious products to development and designing engineers and to exhibit various products to improve awareness.

## Contribution to the community

The Company's employees participated in the Volunteer Walk, an environmental event for the entire Company, the Clean Atsugi Campaign and others. Through the collection of waste and cleaning up, they learned how to live harmoniously with the environment.



Volunteer Walk



Clean Atsugi campaign

## Environmental education

Education Program	Time of development/no. of participants
Training of new employees	April/33
Practical employees training	December/76
Training of supervisory employees (Atsugi Office)	June/77
Training of supervisory employees (Azabu Office)	December/103
Department training	All employees from time to time
Training of subcontractors on Company premises	June and December/36
Training of internal environmental auditors	April and November/56
Training of chemicals-handling specialists	June/92

## Environmental engineers

Education Program	Time of development/no. of participants
Seminar for environmental engineers	April/149
Environmental Technology Lectures by lecturers invited from outside	June/83
Environmental Technology Seminar	March/117



Exhibition of Products of Cooperating Companies for Anritsu (environmental corner)

# Environmental Management Activities of Subsidiaries

Anritsu has 5 major manufacturing subsidiaries. Two of these subsidiaries, Tohoku Anritsu and Anritsu Limited (in the U.K.), have attained ISO 14001 accreditation. Other subsidiaries are currently working to acquire similar accreditation.

## Tohoku Anritsu

Tohoku Anritsu received certification to ISO 14001 in October, 1999 and has been carrying out environmental improvement activities such as reduction of industrial waste, the recycling of waste plastics by using a reducer for the blast furnace, energy saving and reduction of hazardous chemicals. Tohoku Anritsu uses the database constructed by its parent company, and actively participates in the environmental improvement activities of the entire Anritsu Group.



Cultivation of Kenaf

## Anritsu Limited

Anritsu Limited in the UK consists of two main facilities at Luton and Stevenage. Both facilities received certification to ISO 14001 in 2000. We have a number of initiatives aimed at reducing consumption, increasing recycling and minimising waste. Specifically, we are reviewing ways of reducing electricity and paper consumption. We also have a number of recycling initiatives for paper, aluminum drinks cans, cups, toner cartridges and ink cartridges. For our efforts recycling paper during 2000, Anritsu Limited was awarded a tree to plant in St Albans near to Anritsu Luton office.



Box for specific waste categories on the premises



The Anritsu Tree planted in St. Albans

# ANRITSU CORPORATION



This report was printed on recycled paper with the recognition ECO mark.



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This report was printed with environment-friendly vegetable soybean oil ink.

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