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Greetings from the President



The 21st century is named the century of environment. This naming signifies that it is necessary for the human beings to grapple the global environmental problems caused by mass production, mass consumption and massive emission of pollutant gasses accompanying the technological advancement in the 20th century. It is their most important and common task not to pass on these environmental problems to their descendants.

Enterprises have thus developed resource-, energy-saving and resource-recycling activities on their respective standings with the keyword of "constructing a long-lasting environmental society that can coexist with the earth."

In retrospect, companies indicated remarkable trends during 2002 for managing their companies by giving priority to the environmental protection in addition to various environmental load reduction activities. During last year, they accelerated the flow toward the demand for controlling the use of toxic chemicals, restricting transactions and setting the environmental rating. Thus environmental protection has become essential in business management.

Having understood the importance of the environmental management activities, this company has promoted these activities with reviews given each year on the basis of the NEC-TOKIN mid-term environmental protection project (Green Program).

Last year, under the newborn NEC TOKIN management, the company clearly indicated its stance on giving importance to the environment problems in the corporate philosophy. At the same time, in addition to the conventional concept of giving priority to the environmental protection, the company promoted activities for establishing environmental management.

Under this policy, the company made efforts for the current term in expanding the Green purchasing, reducing the use of toxic chemicals, completely discontinuing the use of lead solder, etc. beside increasing the production of environment-friendly products.

Meanwhile, this company expanded the scope of its activities to outside NEC TOKIN from a global point of view. It promoted the activities to its group companies domestic and overseas to strengthen activities as the NEC TOKIN group.

For example, all of its production companies including the overseas group companies have successfully acquired the certification of the international environmental standard of ISO14001.

Through these activities, we at this company are determined to further strengthen our consciousness and responsibilities as part of the environment-oriented society and make contribution to the society through deeper devotion to the environmental management.

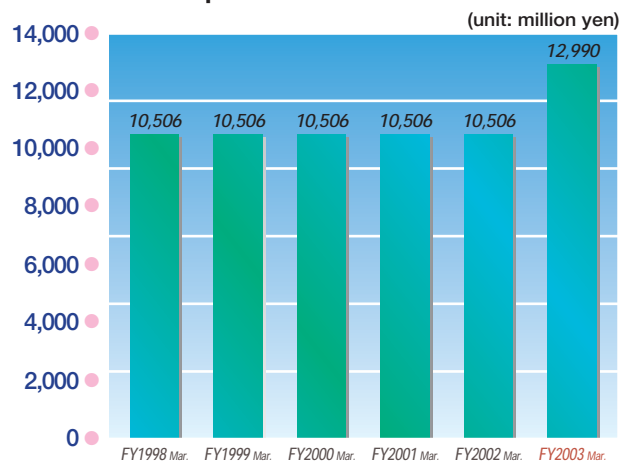
The present report is a summarization of our activity records for the fiscal 2002. We hope that it will give you better understanding on the state of our working. We would most appreciate to receive your frank opinions on its content, etc.



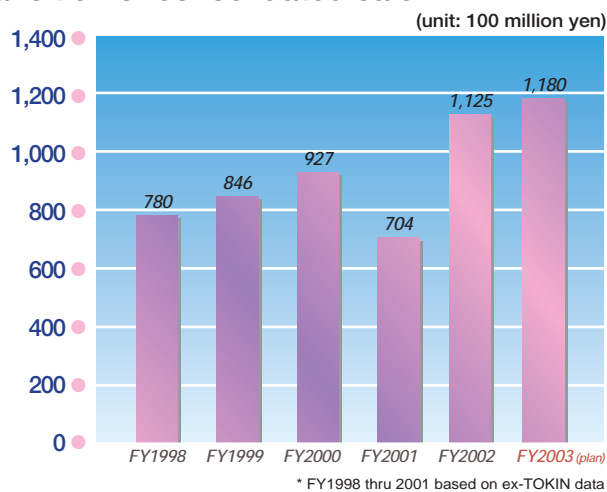
Yuichi Haneta, president and CEO
NEC TOKIN CORPORATION

Trade name NEC TOKIN Corporation
Incorporation April 8, 1938 as Tohoku Kinzoku Kogyo Co., Ltd.
 (Consolidated with Electronics Component Division, NEC in April 2002 and the trade name changed to NEC TOKIN Corp.)
Head Office 7-1, 6-chome, Koriyama, Taihaku-ku, Sendai, Miyagi 982-8510
Tokyo Office 5-8, 2-chome, Kita Aoyama, Minato-ku, Tokyo 107-8620
Capital ¥12,990,212,211 (as of March 31, 2003)
Employee 1,700 (as of March 31, 2003)
 (Consolidated companies, domestic: 1,600 and overseas: 11,000)
Sale ¥112.5 billion (for fiscal 2002)

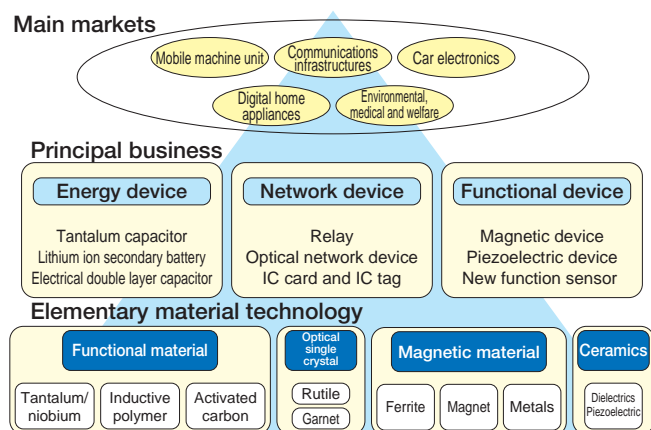
Transition of capital



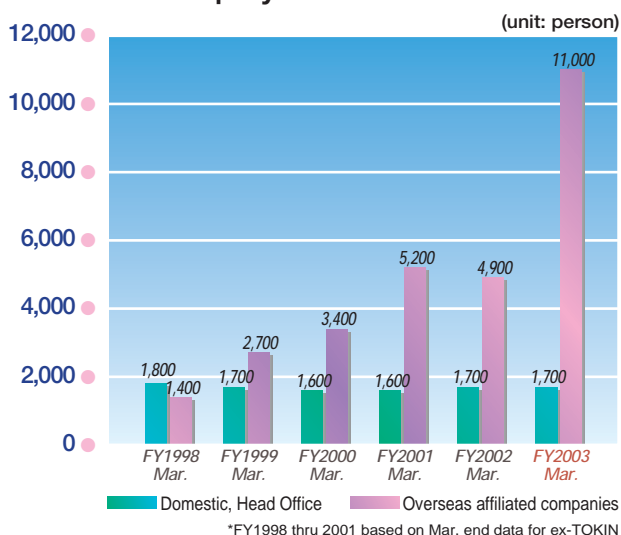
Transition of consolidated sale



NEC TOKIN chart of business development



Transition of employee number



Annual Environmental Report Annual Environmental Report Annual Environmental Report

NEC TOKIN has been grasping the state of environmental activities conducted by the affiliated production companies, domestic and overseas, since fiscal 2002. Therefore, this report covers their environmental management activities in addition to those by NEC TOKIN. In this report, NEC TOKIN refers to the production plants of NEC TOKIN (Sendai, Shiroishi and Tsukuba Plants), and the NEC TOKIN group refers to the companies including affiliated production plants.

*Sagamihara Plant is not included in the report as it represents an R&D section manned by 30 persons only. Sagamihara Plant located within the premises of Sagamihara Plant of NEC Corporation conducts the environmental management activities within the latter's framework.

■ Scope of coverage for the Annual Environmental Report

- Period covered: Fiscal 2002
(Apr. 1, 2002 through Mar. 31, 2003)

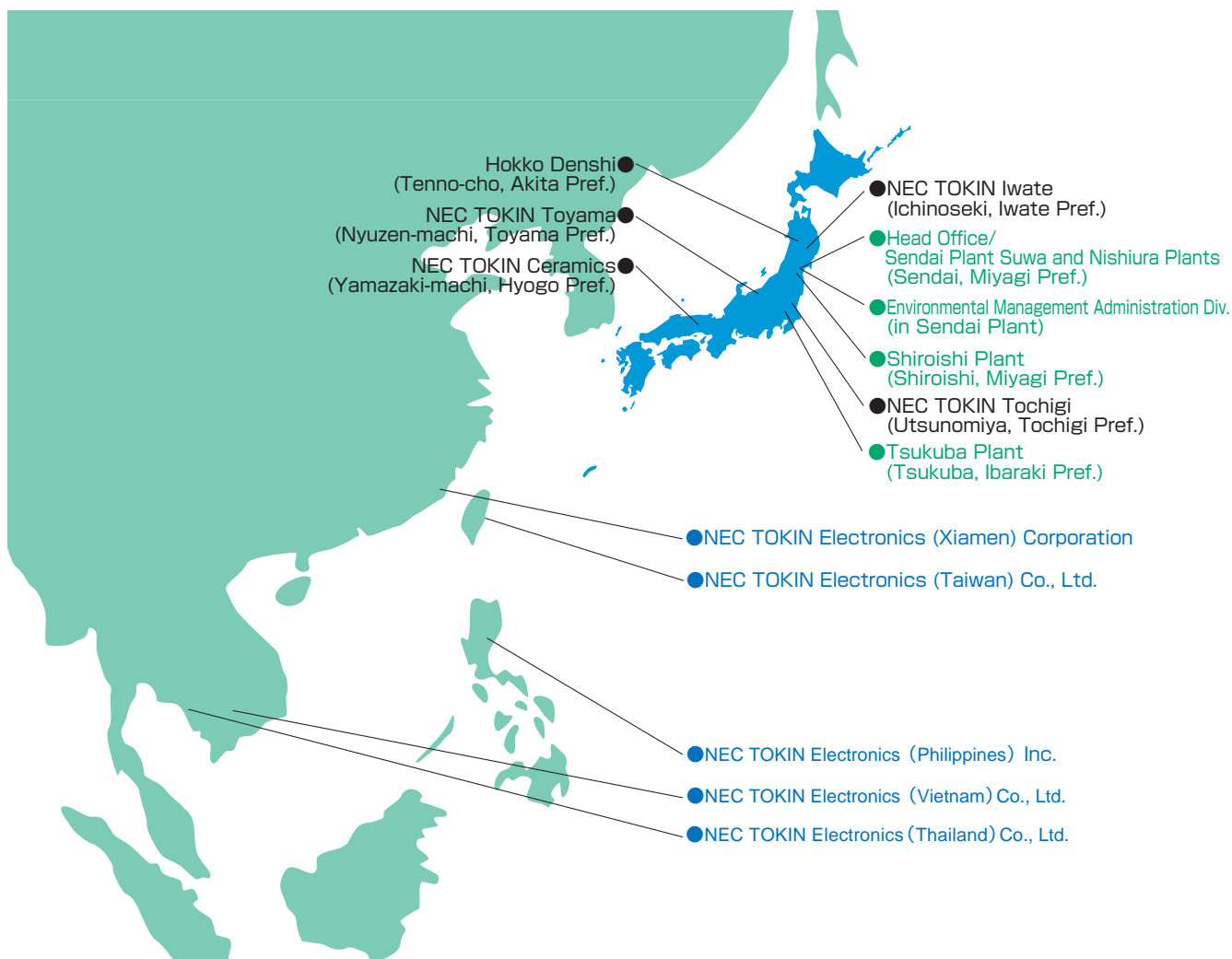
- Companies covered:
NEC TOKIN and affiliated production companies

【Domestic】

- NEC TOKIN Corporation
- Hokko Denshi Co., Ltd.
- NEC TOKIN Iwate Corporation
- NEC TOKIN Tochigi Corporation
- NEC TOKIN Ceramics Corporation
- NEC TOKIN Toyama Corporation

【Overseas】

- NEC TOKIN Electronics (Taiwan) Co., Ltd.
- NEC TOKIN Electronics (Xiamen) Corporation
- NEC TOKIN Electronics (Philippines) Inc.
- NEC TOKIN Electronics (Vietnam) Co., Ltd.
- NEC TOKIN Electronics (Thailand) Co., Ltd.





Annual Environmental Report
Annual Environmental Report
Annual Environmental Report

Environmental Philosophy

On the basis of our corporate philosophy, we have established the "Environmental Philosophy" and "Action Guidelines." Accordingly, environment-oriented activities are incorporated into the business activities.

The environment-oriented activities mainly comprise two aspects.

One of them aims at saving energy, resources, reducing wastes and other environmental load in addition to observing laws and regulations in developing business activities and making efforts in conserving environment by setting autonomous management standards.

Another aspect aims at achieving coexistence between the business enterprise and the global environment by providing its products with environment-friendly functions.

We develop our environment-oriented business activities participated by everyone in order to realize these objectives.

Environmental Philosophy

In all domains of company activities, NEC TOKIN promotes activities for global environmental protection by pursuing technologies and production in consideration of environment.

Action Guidelines

1. In all stages from design and production to disposal, we will strive to promote energy saving, resource saving and reduction of wastes, simultaneously providing customers with environment-friendly products.
2. We will endeavor to continuously improve EMS and prevent pollution.
3. We will comply with the environmental legislation and regulations, and make efforts for environmental protection to set up voluntary rules taking account of other requirements.
4. On developing environmental activities on the basis of this policy, we will set up environmental objectives and targets, and clearly define the measures in environmental management program and review them.
5. We will document this policy and have all employees understand it, and implement and maintain it through the environmental management system.
6. We will disclose this policy to the general public upon request.

Annual Environmental Report Environmental Management Promotion System

NEC TOKIN group promote the environmental protection activities under the Central Environmental Management Committee, which serves as the highest decision-making organization for promoting environmental management. Under the Central Committee, respective sub-committees are organized for development of the management policy.

The Central Environmental Management Committee makes decisions on the "Mid-term Project (Green Program)" and others for development through the NEC TOKIN group companies.

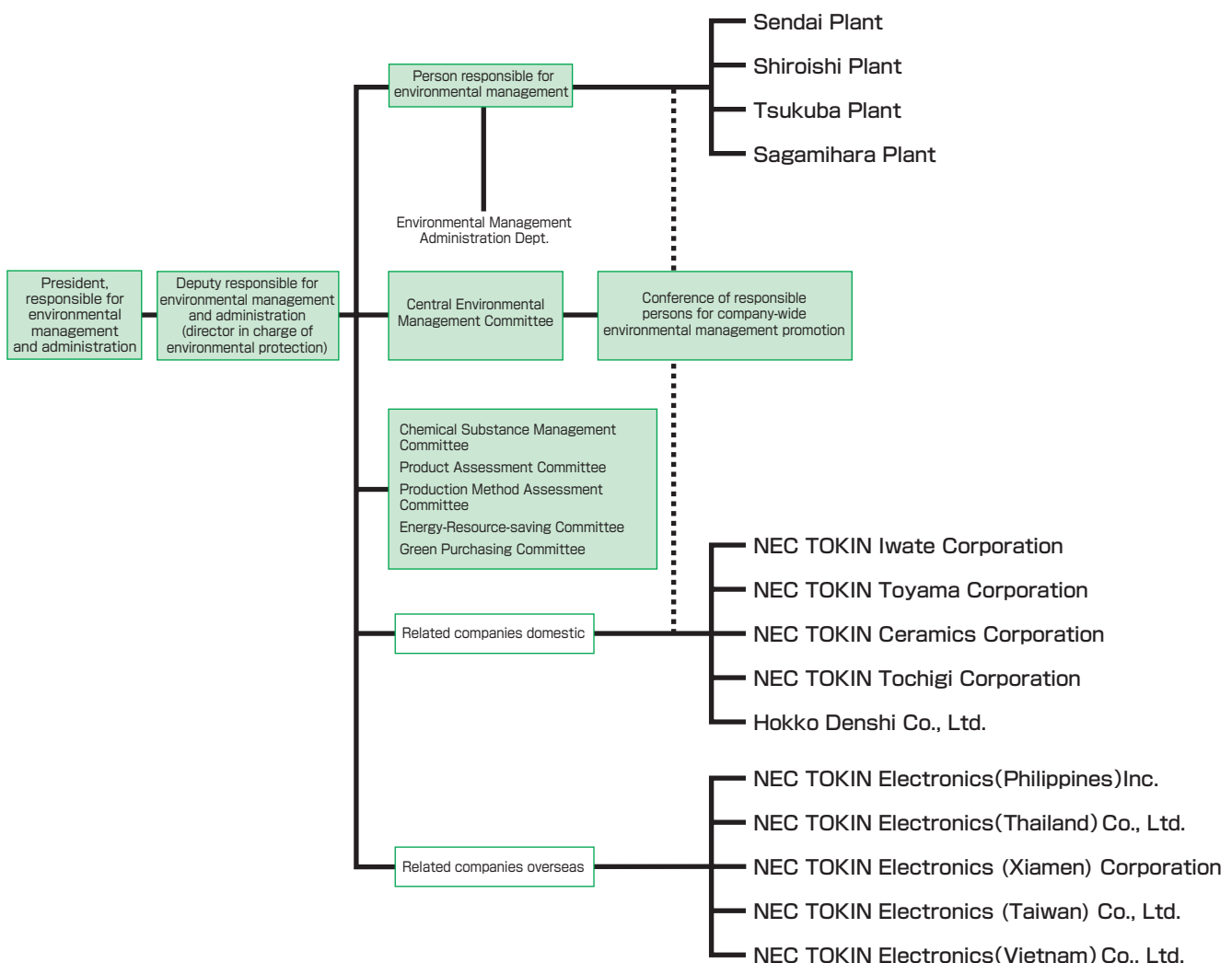
Conference of responsible persons for company-wide environmental management promotion is organized to ensure development of the company policy to whole the NEC TOKIN group. This organization consists of responsible persons of the domestic plants and related companies for environmental management and the Environmental Management Administration Department, which acts as the secretariat. This conference sees to it through respective responsible persons for environmental management that the policy of the Central Environmental Management Committee is thoroughly promoted and developed for actual implementation.

Upon receiving the Central Committee policy, respective plants and related companies formulate their activity programs in consideration of respective business content and actually carry on their environmental man-

agement activities.

Area Environmental Management Committee at respective plants and related companies verifies the result of environmental management activities. Environmental Management Administration Dept. in Environmental Safety Division totals the results and assesses the state of achievement of environmental management by overall NEC TOKIN group.

In addition, respective sub-committees for chemical substance management, energy and resources saving, etc. are organized as the institution for deliberating and reviewing company-wide tasks. Each sub-committee meeting is held as may be required to promote company-wide activities in consideration of environment.



Construction of Environmental Management System

NEC TOKIN understands the environment management system is an important system in promoting environmental management. Accordingly, it has been promoting acquisition of ISO14001 certification by every activity base for the NEC TOKIN group. As the result, all of the production bases of NEC TOKIN group have acquired the certification during fiscal 2002 except for some bases certified in early part of fiscal 2003. In the future, we will promote the acquisition of the certification by other bases of non-production system.

Transition of the Certification acquisition by NEC TOKIN

Starting with Shiroishi Plant that acquired the certification first among the NEC TOKIN companies in 1998, Sendai Plant and Hiroshima Plant (closed in Sept. 2002) followed suit in turn. In 2001, a multi-site system was formed centering on the Head Office Administration Division by integrating respective NEC TOKIN plants. In Oct. 2002, the multi-site system newly integrated Tsukuba Plant, completing acquisition of the Certificate for the entire NEC TOKIN production bases.

Transition of the Certification acquisition by related companies

Among the related companies of NEC TOKIN group, NEC TOKIN Iwate and NEC TOKIN Toyama, which were separated from NEC TOKIN in Jan. 2002 to become the related companies, have acquired the certification again in June and September respectively. NEC TOKIN Electronics (Vietnam) and Hokko Denshi established in fiscal 2002 acquired the certification in early part of fiscal 2003. This has completed the acquisition of ISO14001 certification by all the production bases, domestic and overseas, including NEC TOKIN Ceramics, NEC TOKIN Tochigi, NEC TOKIN Electronics (Philippines), NEC TOKIN Electronics (Thailand), NEC TOKIN Electronics (Xiamen) and NEC TOKIN Electronics (Taiwan), which had already acquired the certification before.

On the other hand, NEC TOKIN Electronics (Malaysia) was removed from the original project following the closing of the production base in 2002.

ISO 14001 certification acquisition state for respective plants of NEC TOKIN Group

Name of plant	Location	Environmental certification body	Month of certification registration
NEC TOKIN Sendai, Shiroishi and Tsukuba Plant	Sendai, Miyagi Pref.	JQA	1998. 9
NEC TOKIN Iwate	Ichinoseki, Iwate Pref.	JQA	2002. 6
NEC TOKIN Tochigi Pref.	Utsunomiya, Tochigi Pref.	JQA	2000. 9
NEC TOKIN Toyama	Nyuzen-machi, Toyama Pref.	JQA	2002. 9
NEC TOKIN Ceramics	Yamazaki-machi, Hyogo Pref.	JQA	1997.12
Hokko Denshi	Tenno-machi, Akita Pref.	JQA	2003. 6
NEC TOKIN Electronics (Xiamen) Corporation	Xiamen, China	XECC	2001. 5
NEC TOKIN Electronics (Taiwan) Co., Ltd.	Kaohsiung, Taiwan	SGS	2001. 5
NEC TOKIN Electronics (Vietnam)	Vietnam	AFAQ	2003. 4
NEC TOKIN Electronics (Thailand) Co., Ltd.	Thailand	JQA	1998. 9
NEC TOKIN Electronics (Philippines) Co., Ltd.	Philippines	SGS	1998. 3

*For details on the related companies, see pages 34~43.



Mid-term Environmental Management Activity Projects and Achievement of 2002 Activities

To concretely develop its environmental philosophy and policy, NEC TOKIN formulates the environmental objectives (mid-term projects) and environmental targets (annual targets) and makes efforts for achieving them. For the current year, it has adopted a new priority target of "Providing environment-friendly products", a new environmental grappling by way of our products in addition to the environmental protection activities it had been carrying on.

Environmental management activity plan and achievement

1. Result and evaluation

Item	Mid-term plan	Annual target	Activity result (records for FY2002)	Evaluation	Related page
Provision of environment-friendly products	30% of candidate products to be made environment-friendly (for FY2004)	Changeover to lead-free solder (10% or over of the candidate products)	8% of the candidate products changed to be lead-free	△	11~12
Reduction of earth-warming gas emission	16%-reduction from FY1994 (FY2002: in terms of unit production) or 7%-reduction from FY1995 (FY2010: absolute amount)	Reduction of 12% or over from the preceding year (in terms of unit production)	Reduced 24% from the preceding year.	○	17
Reduction of industrial waste	To achieve zero-emission at all the plants in FY2004	To achieve zero-emission (for Sendai and Shiroishi) and 10%-reduction from the preceding year (Tsukuba)	Sendai Plant:Failed to achieve zero-emission(recycling ratio: 84.2%) Shiroishi Plant:Achieved zero-emission in succession Tsukuba Plant:Achieved 48%- reduction	△	19
Reduction of general waste	To reduce 90% in FY2004 (from FY1994)	To reduce 23% or over from the preceding year	Achieved 33%-reduction from the preceding year (84% reduction from 1994)	○	20
Reduction of emission of environmental pollution substances	To reduce 4% from 1999 (FY2003)	To reduce 1% or over from the preceding year	Achieved 5% reduction from the preceding year.	○	21
Promotion of resource-saving (reduced use of packing material)	To reduce 1% from the preceding year (FY2004)	To reduce 3.7% or over from the preceding year	A sharp reduction of 24.7% over the preceding year was achieved.	○	-
Strengthening of risk management	Zero environmental pollution accident	Zero generation of environmental pollution	Zero generation achieved	○	22
Green purchasing	To maintain 100% green purchasing ratio for office supplies	To achieve 100% green purchasing ratio for office supplies	Achieved 100% green purchasing ratio for office supplies	○	13
Reduction of automobile emission	2% reduction from FY2002 (FY2004)	Grasping emission data of vehicles (company-owned cars)	Actual records retained by respective plants.	○	-
Improving the corporate ranking for environmental management	To rank within top 100 entities (FY2004) (No. 237 for FY2001)	To rank within top 200 manufacturers in terms of survey on the level of environmental management conducted by the Nikkei Shimbun	Ranked No. 89 among the manufacturers surveyed on the level of environmental management by the Nikkei Shimbun.	○	-

Evaluation: △ = Achieved over and above the target; ○ = Achieved 80 to 100%; X = Achieved less than 80%

Definition of zero emission: NEC TOKIN defines zero emission as when over 99% of the total wastes generated are recycled and less than 1% is disposed by landfilling.

2. General evaluation

Regarding the item for the "provision of environment-friendly products", we failed achievement within the current year because of insufficient appeal within the company on the importance of said item, on top of changes in the development projects, delay in acquiring approval from the purchasers, etc. However, having found various problems to cover, we will promote thorough education of the technical staff to improve their awareness of the importance of the matter in the coming year. Simultaneously we will improve the target setting standard.

Regarding the item for the "reduction of industrial waste", we failed to achieve zero emission at Sendai Plant. The reason for it was that we could not establish an appropriate method of recycling for the waste generated during the manufacture of new products, and the waste increased as the production expanded. We will achieve the target in the coming year since we have found the means to do it. Regarding other items, we have achieved respective targets.

Environmental Accounting

NEC TOKIN has been implementing the environmental accounting at principal plants (Sendai and Shiroishi) and Environmental Management and Administration Division since fiscal 1999 (trial). It has been three years since we introduced the full-scale environmental accounting in fiscal 2000. For the current year, we have improved the accuracy of accounting by reviewing the definition of certain evaluation items.

In this report, we state the result summarized by our own method along with the "2002 Guideline for Environmental Accounting" provided by the Ministry of Environment. Same as before, our environmental accounting includes no predictable effect.

The result for the current year is characterized by a sharp reduction of the environmental protection cost. This is attributable to reduced cost of waste disposal along with the reduced disposal quantities of industrial and general wastes. It is also attributable to the reviewed evaluation definition of planting and beautifying activities.

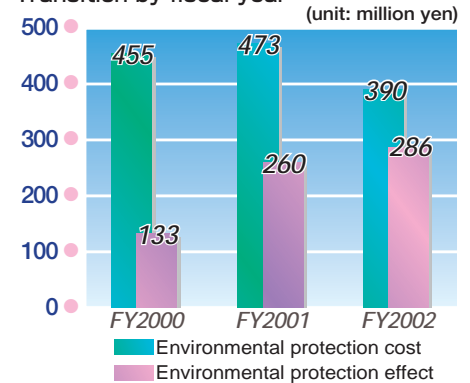
Transition by the fiscal year (unit: million yen)

Item	Division	FY2000	FY2001	FY2002
Environmental protection cost	Administration	28	25	34
	Sendai Plant	192	255	243
	Shiroishi Plant	228	186	113
	Hiroshima Plant	7	7	(closed)
	Total	455	473	390
Environmental protection effect	Administration	0	0	0
	Sendai Plant	38	125	165
	Shiroishi Plant	90	134	121
	Hiroshima Plant	5	1	(closed)
	Total	133	260	286

*Scope of coverage: NEC TOKIN Head Office and 2 domestic plants

Period: Apr. 2002 to Mar. 2003/09/13

Transition by fiscal year (unit: million yen)

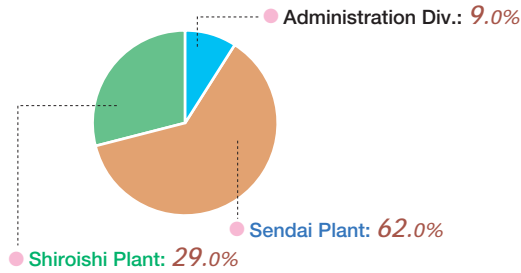


Actual records of environmental accounting Environmental protection cost

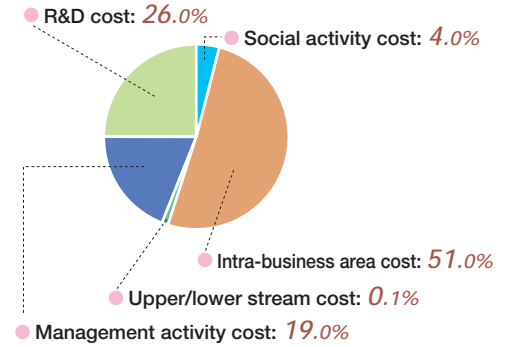
(unit: million yen)

Major classification	Medium classification	Minor classification	Cost incurred				
			Total cost for FY2002		Total cost for FY2001		
Intra-business area cost	Pollution prevention cost	Air pollution prevention cost, etc.	126.3	126.4	130.0	130.0	221.2
		Earth environment protection cost	0.1	1.8	1.0	1.0	
	Resource circulation cost	Efficient use of resources	0.1	70.5	0.4	90.2	
		Water saving, use of rainwater, etc.	0.2		0.4		
		Reduction, recycling, etc. of industrial wastes	21.9		23.8		
		Reduction, recycling, etc. of general wastes	2.4		2.6		
		Processing and disposal of industrial wastes	34.4		42.2		
		Processing and disposal of general wastes	11.5		20.8		
		Other	0.0		0.0		
	Upper and lower stream cost	Green purchasing	0.2	0.2	0.1	0.1	
Recycling, recovery, re-development as resource and processing of products		0.1	0.1	0.0	0.0		
Recycling, recovery, re-development as resource and processing of containers, packages, etc.		0.0	0.0	3.5	3.5		
Other		0.1	0.1	0.0	0.0		
Management activity cost	Environmental education, etc. for the employees	3.5	3.5	4.9	4.9	69.5	
	Construction, operation and acquisition of certification on EMS	10.7	10.7	6.1	6.1		
	Monitoring and measuring of the environmental load	5.1	5.1	5.8	5.8		
	Personnel expenses of the environmental protection measure organization and the above-mentioned 3 items	52.9	52.9	52.7	52.7		
R&D cost	Researches and development of the products, etc. for environmental protection, manufacturing phases, etc., logistics and selling phases, planning development, and the load reduction	102.8	102.8	102.8	118.9	118.9	118.9
Social activity cost	Environment improvement measures including the protection of nature, green planting, beautification and retention of scenic beauties	11.9	11.9	15.4	58.3	58.3	59.8
	Support of local community activities, etc.	0.1	0.1	0.1	0.1		
	Contribution, etc. to organizations carrying on environmental protection activities	0.0	0.0	0.0	0.0		
	Disclosure of the environmental information, notice on environment	3.5	3.5	1.4	1.4		
Cost of environmental disruptions	Repair of soil pollution, environmental disruption, etc.	0.0	0.0	0.0	0.0	0.0	
	Transfer of allowance for environmental disruptions, and insurance premium	0.0	0.0	0.0	0.0		
	Reconciliation fee, compensation money, penalty and the cost of legal action	0.0	0.0	0.0	0.0		
Total			389.5		473.0		

Environmental protection cost ratio (by site)



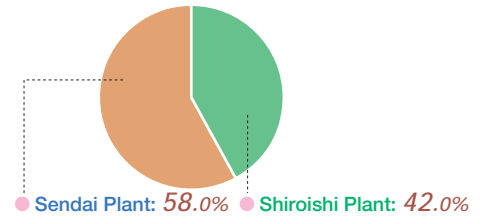
Environmental protection cost ratio (by classification)



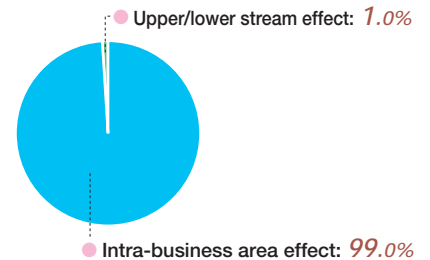
Environmental protection effect (unit: million yen)

Item			Effect	
Major classification	Medium classification	Minor classification	Total for FY2002	Total for FY2001
Intra-business area effect	Pollution protection effect	Avoidance of suspension of operation due to violence of laws and regulations in terms of amount	Counting not completed	Counting not completed
	Earth environmental protection effect	Cost effect accompanied by the reduction of energy consumption including power, gas, oil, etc.	247.1	217.8
	Resource recycling effect	Reduction of resource consumption by the reduction and effective use of wastes	36.2	41.9
Upper/lower stream effect		Green purchasing effect, etc.	2.5	0.3
Management activity effect		Intra-education effect, and upgrading of corporate images by PR activities	Counting not completed	Counting not completed
R&D		Contribution of environment-friendly products, etc. to sales amount	Counting not completed	Counting not completed
Effect of environmental disruption measures		Avoidance of environmental troubles in terms of amount (risk avoidance effect)	Counting not completed	Counting not complete
Total			285.8	260.0

Environmental protection effect ratio (by site)

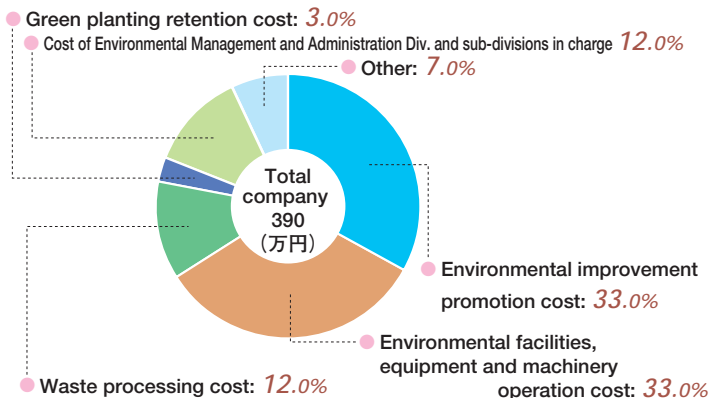


Environmental protection effect ratio (by classification)

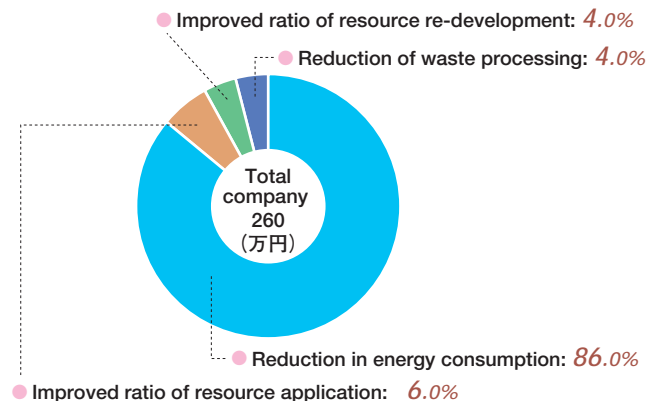


For the sake of comparison, the environmental protection cost and effect summarized using the accounting method of this company's own are as follows:

FY2002 environmental protection cost by management item



FY2002 Environmental protection effect by management item



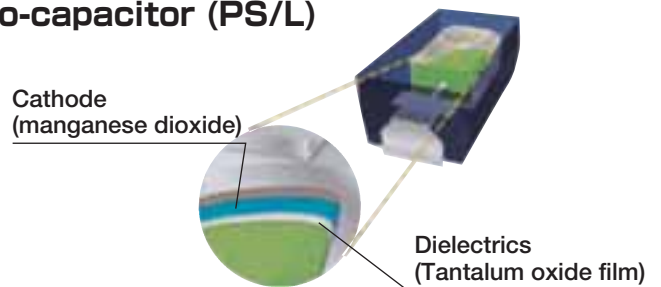
(2) Lead-free compliance product

By setting a target for "achieving lead-free production by 2003", NEC TOKIN has organized the lead-free WG as the promoting body for company-wide lead-free development. The lead-free WG develops activities by standardizing the solderability and reliability of the lead-free solder. As the result, changeover to lead-free soldering has been made for a number of products.

Chip tantalum capacitor (E/SV) and neo-capacitor (PS/L)

A large number of tantalum capacitors are used in the compact, portable equipment as the essential parts. We have developed lead-free chip tantalum capacitor "E/SV series" of manganese dioxide system and neo-capacitor "PS/L series" of inductive polymer system for cathodic material.

Solder for the terminals has been made lead-free to sharply improve environmental protection performance.



Energy and Resource Saving Bone transmission receiver

Sound is sensed through the eardrum. It is also recognized by the vibration transmitted to the skull. The latter method is called bone transmission.

For the bone transmission, coil receiver method using electromagnet was mainly used. This time, NEC TOKIN has proposed a method using piezoelectric ceramics.

This method enables to sharply reduce the number of parts, power consumption and weight compared with the conventional coil receivers.



Bone transmission receiver

Resource Saving IC card

NEC TOKIN has supported the card society by supplying magnetic telephone cards and transportation cards. Since those cards were of disposable type, however, there were high cries for cyclically usable cards from the viewpoint of forming circulating type society. This led to the debut of the IC card. As it can be used repeatedly, we think that it contributes to resource saving.



IC card and IC card reader

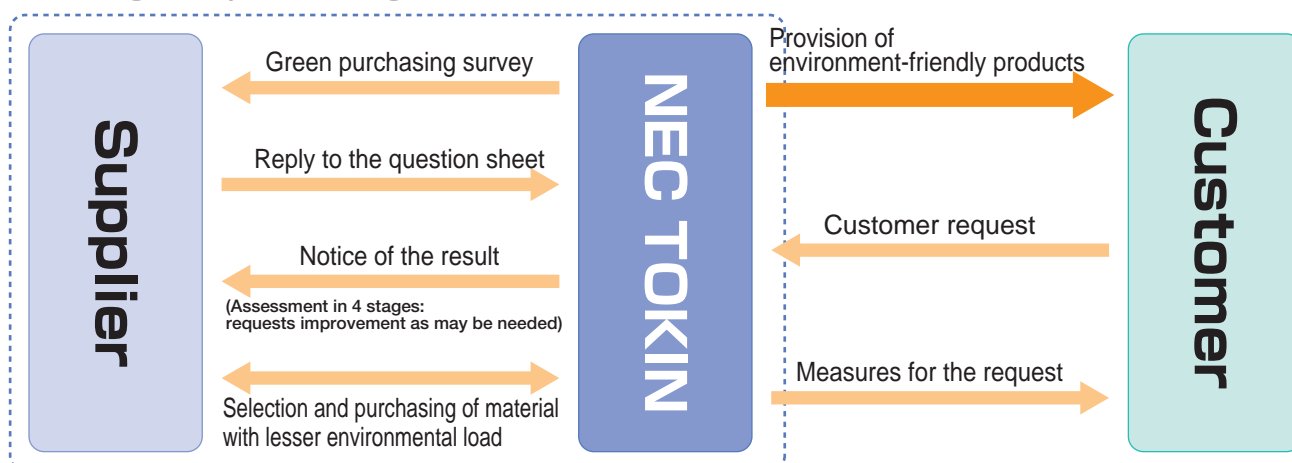
Promotion of Green Purchasing

NEC TOKIN promotes the purchasing of materials of the lesser load to the earth environment from the viewpoint of "promoting the earth environmental protection activities by pursuing environment-friendly technologies and production in every area of the company activities."

1. Green purchasing guideline

This company formulated the green purchasing guideline from fiscal 1999 and has promoted the green purchasing since then. With the rising awareness of environmental protection, social responsibility of business enterprises is evermore strongly demanded. As part of the trend, strong demand for reduction or non-use of chemicals contained in the products was voiced domestically and from overseas. In this connection, we manifested the "construction of green purchasing system and permanent establishment" and "expansion of green purchasing items" as the priority measures for fiscal 2002. We made major revision of the in-house regulations and guideline on the conventional green purchasing. In the future, we will promote the green purchasing positively from suppliers who are positive in their stance on the environmental protection according to the revised purchasing guideline. In addition, we have enhanced the green purchasing items for the office supplies.

■ Flow of green purchasing



Survey item

Environment-related task item

- Acquisition state of ISO 14001
- State of construction of voluntary management system

Product-related task item

- Chemicals used during production process
- Chemical contents in product
- Cooperation to various surveys

Toward 100% green purchasing

Fiscal year	Implementation item
Fy2002	Green purchasing regulations formulated Green purchasing guideline revised
Fy2003	Environmental survey on suppliers started Supplier's rating implemented
Fy2004	Selection of suppliers Toward 100% green purchasing

Requested item

- Construction of environmental management system
- Compliance with non-use of specific chemicals on the NEC TOKIN production process
- Compliance with limited use of specific chemicals on the NEC TOKIN production process
- Compliance with non-containing of specific chemicals inhibited in the NEC TOKIN products
- Compliance with non-containing of specific chemicals totally discontinued to use in the NEC TOKIN products
- Compliance with non-containing of total chemicals limited to use in the NEC TOKIN products

Environmental Load of NEC TOKIN Group

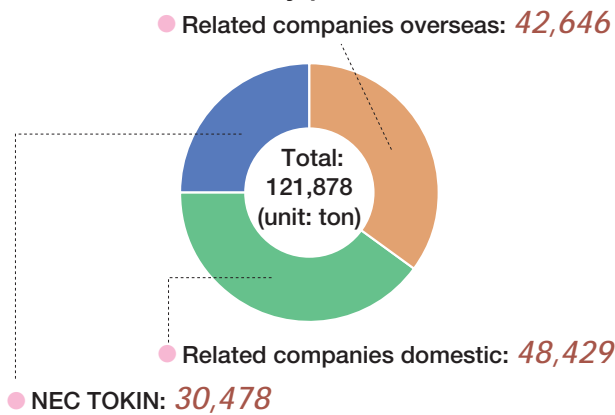
In April 2002, three domestic related companies and two overseas companies newly joined NEC TOKIN. Taking this opportunity, we grasped the environmental load of the NEC TOKIN group including said related companies domestic and overseas during fiscal 2002. Here, we report on CO₂ emission, industrial and general wastes. This company is currently transferring its production lines to overseas. In the future, we will develop the emission reduction activities by NEC TOKIN group as a whole.

1. CO₂ emission

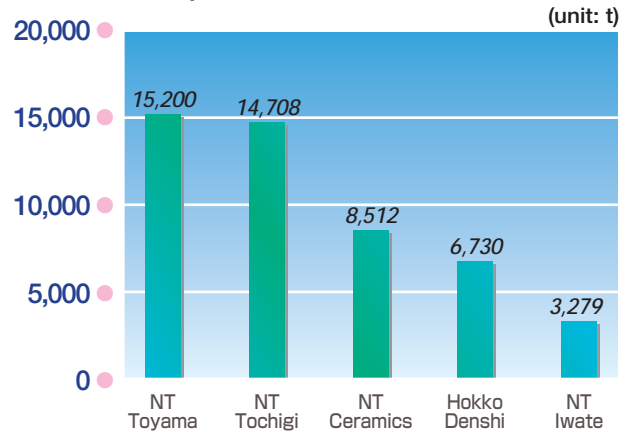
The total emission for fiscal 2002 read slightly over 120,000 tons for the NEC TOKIN group. The emission is broken down among the related companies domestic (48,000 tons), overseas (43,000 tons) and NEC TOKIN (30,000 tons) in this order. The figures are partly attributable to the domestic emission reduction activities and the recent trend for overseas production development. The graphs indicate the emission by company, showing difference due to the variation of business operation and the size scale.

In calculating the CO₂ emission, we applied for calculating convenience the coefficient based on the "Examination results concerning calculation of greenhouse effect gas emission" by the Ministry of the Environment.

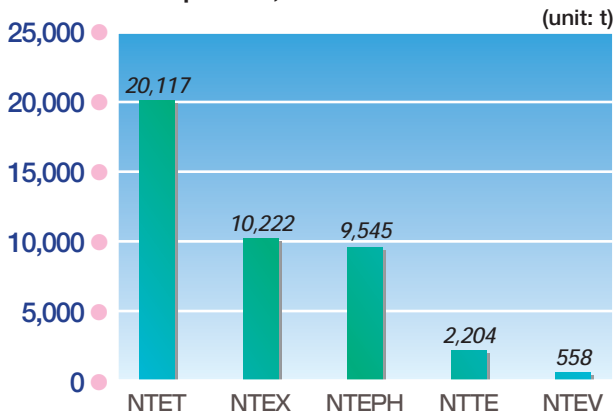
CO₂ emission ratio by plant



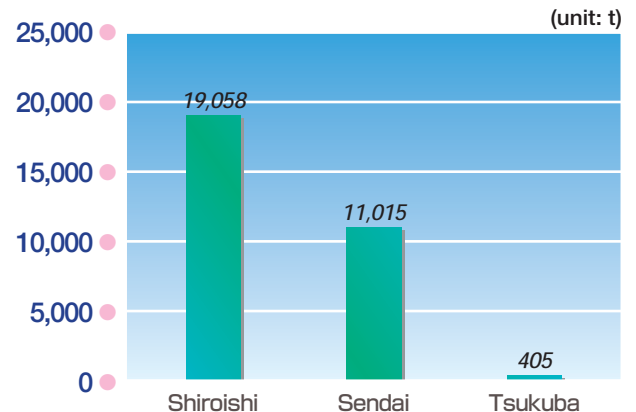
Related companies, domestic



Related companies, overseas



NEC TOKIN



*For calculation, the CO₂ emission coefficient based on the "Examination result concerning the calculation of greenhouse effect gas emission" by the Ministry of the Environment. (Note: Similar coefficient is used for calculating the CO₂ emission by overseas companies.)

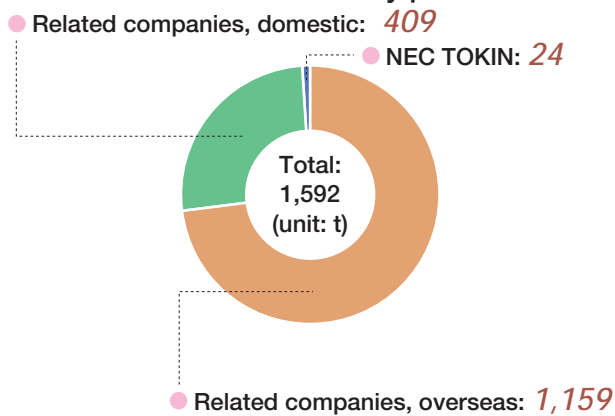


2. Industrial waste emission

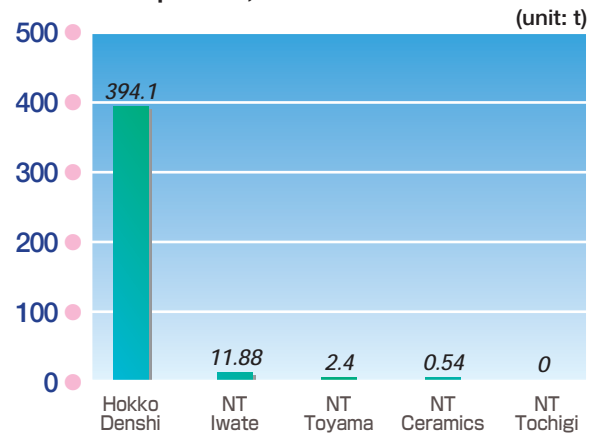
The total emission of industrial wastes for fiscal 2002 by the NEC TOKIN group was less than 1,600 tons. Related companies overseas accounted for over 70% of the emission, followed by the related companies domestic and NEC TOKIN in this order. Among the overseas companies, NTEX distinguished itself, and together with NTET, they occupy 97% of the overseas emission. This is attributable to the difference of business type and company scale similar to the case of CO₂ emission. Difference in the national conditions toward the environmental protection may be in the back of this situation.

Regarding the domestic related companies, Hokko Denshi shows high emission. Resource re-development is expected to start with this company before long, however, and the situation is being improved. NT Toyama, NT Ceramics and NT Tochigi have achieved zero emission respectively.

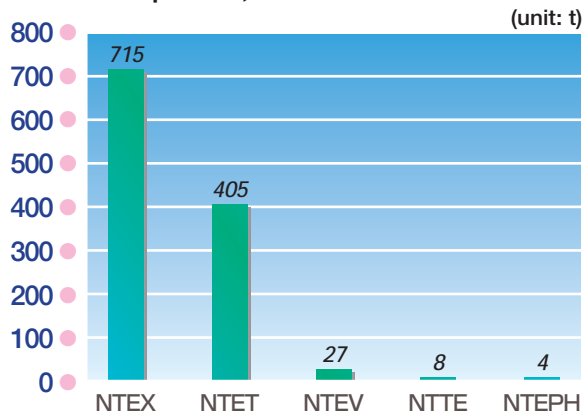
Industrial waste emission by plant



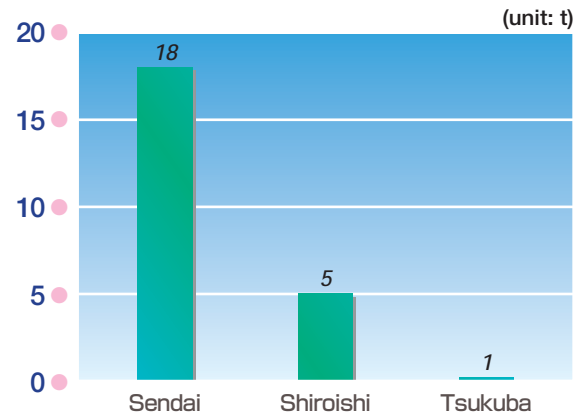
Related companies, domestic



Related companies, overseas



NEC TOKIN

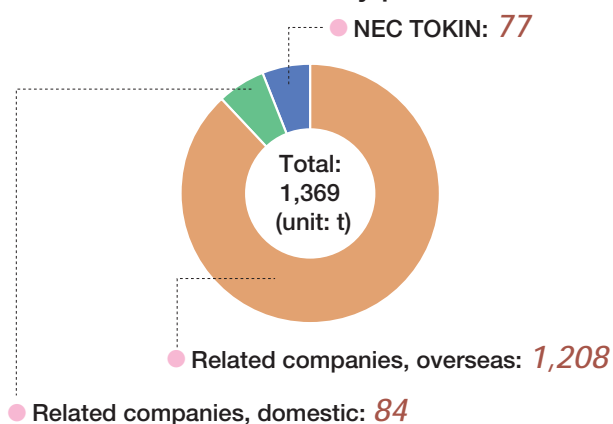




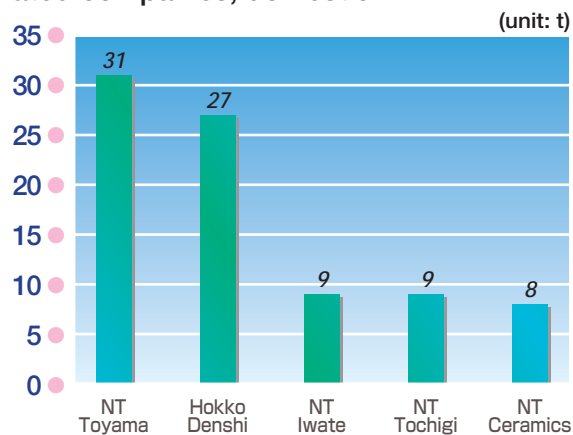
3. General waste emission

The total emission of general wastes for fiscal 2002 by the NEC TOKIN group was less than 1,400 tons. Related companies overseas accounted for 88% of the emission with NTEX accounting for 67% NTEX has a large company scale (employees: 7,400 persons). About 2,000 employees live in the company dormitories, whose domestic wastes are also included as the corporate waste, causing the waste emission to rise sharply. Total emission of general wastes by the domestic related companies was just about the same with that of NEC TOKIN.

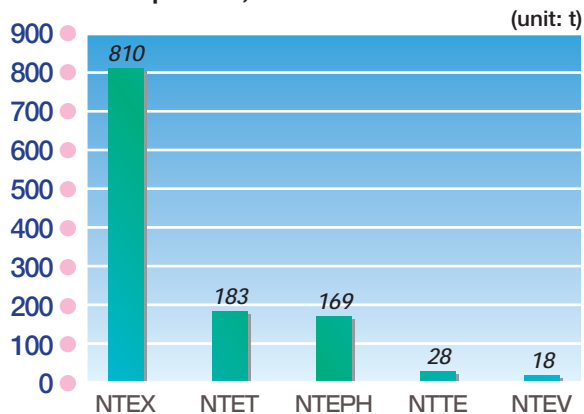
General waste emission by plant



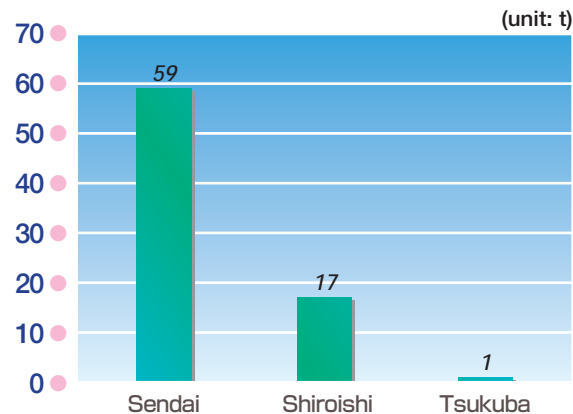
Related companies, domestic



Related companies, overseas



NEC TOKIN



Annual Environmental Report Environmental Load Reduction Activities

1. Reduction of the green house gases

At NEC TOKIN, we grapple with the reduction of CO₂ emission that causes the earth warming by promoting energy-saving activities. Beside routine power saving (thorough practice of turning the lighting and OA equipment OFF while not in use), we have drastically reviewed the production process to promote the introduction of lean equipment and cell production system.

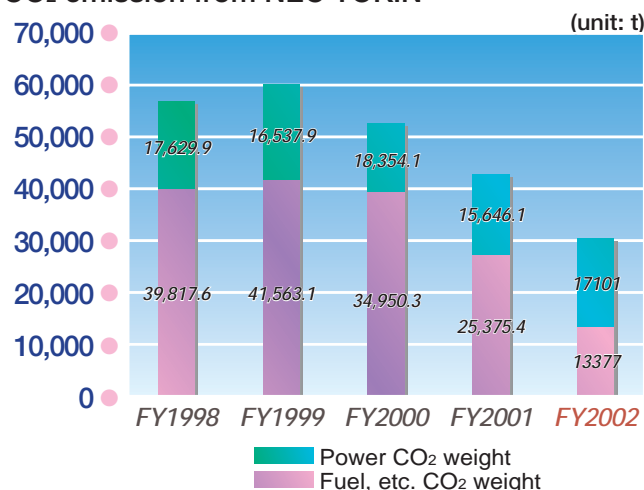
In addition, following the retreat from semiconductor business at Shiroishi Plant, steam consumption in the "co-generation system (private power generation and heat supply system)" dropped drastically. It was generally judged to suspend the use of said system and purchasing power for energy.

This resulted in sharp reduction of Class A gas oil consumption at Shiroishi Plant. Accelerated by the fall in production, CO₂ emission was reduced by 25.7% over the preceding year in absolute quantity.

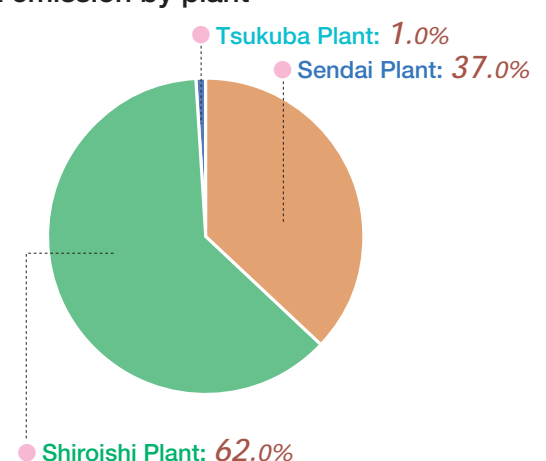
Development index for lean equipment (partial)

Evaluation item		Index	Definition	Remarks
Investment efficiency • Reduced investment • Cost reduction	Equipment cost reduction ratio	$\leq 1/10$	$= \frac{\text{Current cost of introduction}}{\text{Cost of existing equipment}}$	Simple execution amount ratio, skill conversion ratio
	Processing cost	$\leq 1/5$	$= \frac{\text{Current cost of introduction (depreciation + personnel expenses)}}{\text{Cost of existing line (depreciation + personnel expenses)}}$	<ul style="list-style-type: none"> For the depreciation period, economic durable years are adopted in which the equipment does not become obsolete in terms of function and cost. For the personnel expenses, the cost at the point of installation is adopted.
	Energy saving	$\leq 1/10$	$= \frac{\text{Operating energy of the currently introduced line}}{\text{Operating energy of the existing line}}$	
	Floor area saving	$\leq 1/5$	$= \frac{\text{Floor area occupied by the currently introduced line}}{\text{Floor area occupied by the existing line}}$	

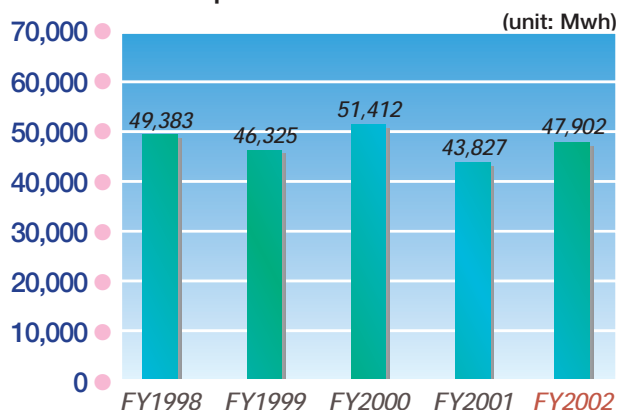
CO₂ emission from NEC TOKIN



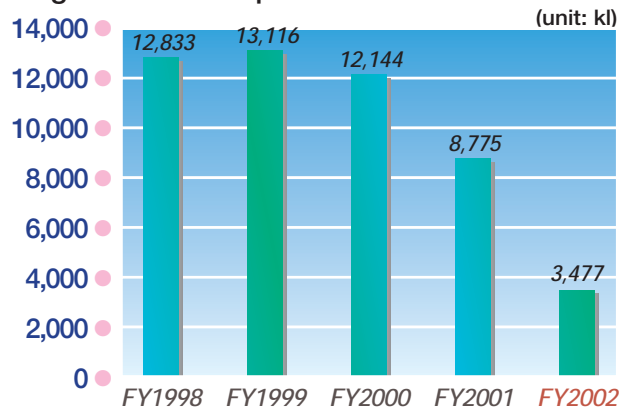
CO₂ emission by plant



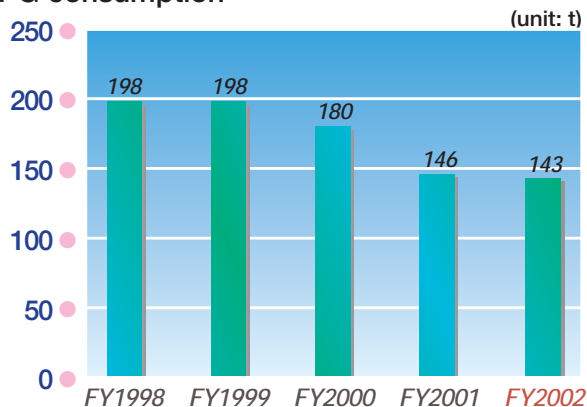
Power consumption



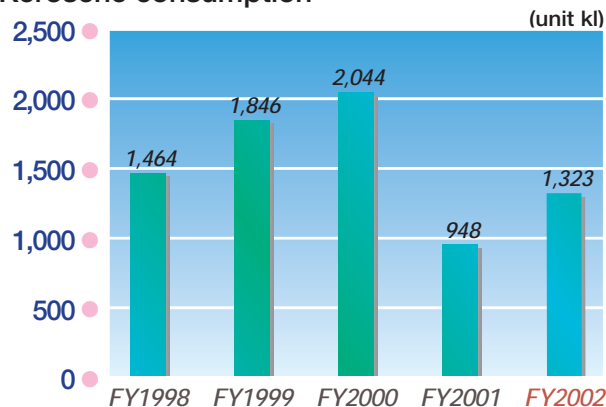
A-gas oil consumption



LPG consumption



Kerosene consumption



Energy-saving diagnosis conducted by NEDO (Shiroishi Plant: Nov. 19 to 21, 2002) Result of diagnosis

The result was as follows:

1. Aptitude operation of compressors
Control the number of compressor units to meet pressure requirement.
2. Reduction of load on air-conditioners
 - ① Correct excessive emission from the equipment through control of CO₂ concentration.
 - ② Implement heat insulation for the exhaust duct of the continuous dryer and the hot air feed duct.
3. Aptitude operation of the equipment cooling device
Control the IN/OUT temperature of the equipment cooling water chiller to optimize the heat emitted from the equipment.

Measures for the diagnostic results

We will appropriate a budget according to the result of the diagnosis and carry on company-wide lateral development of the corrective actions.





2. Reduction of wastes

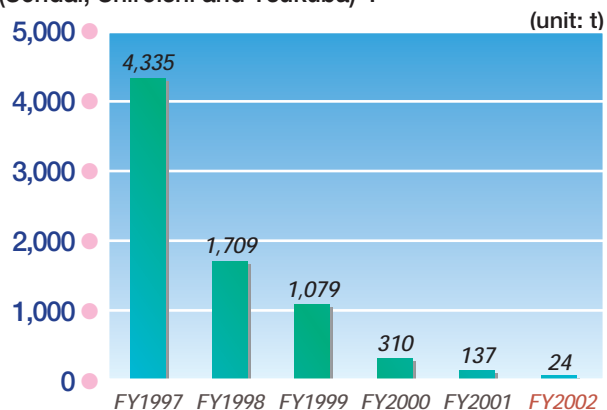
The waste reduction activity policy of NEC TOKIN calls for "suppressing waste generation itself, simultaneously challenging the zero emission by re-developing resources out of the wastes." It strengthens the source management, introduces reduction of environmental load and promotes the 3R (Reduce, Reuse and Recycle) as the priority measures.

For fiscal 2002, we have targeted the zero emission of industrial wastes at respective plants. Regarding general wastes, we have set up the target for reducing it by minimum 23% over the preceding year under the mid-term plan for 90% reduction over fiscal 1994 before fiscal 2004.

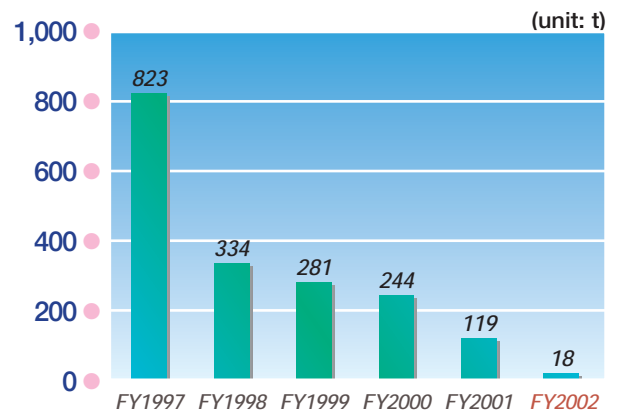
■ Reduction of industrial waste emission

Regarding the industrial wastes, emission is steadily being reduced. Regarding the zero emission, Shiroishi Plant has achieved the target for the current year in succession to the last year and the year before last (with resource re-development ratio of 99.6%). Sendai Plant could not achieve the target perfectly as it failed to put the resource re-development from the waste generated during the production of new products on the right track (with the resource re-development ratio of 92%). Sendai will achieve the target perfectly in the coming year as the plant has a good prospect for it.

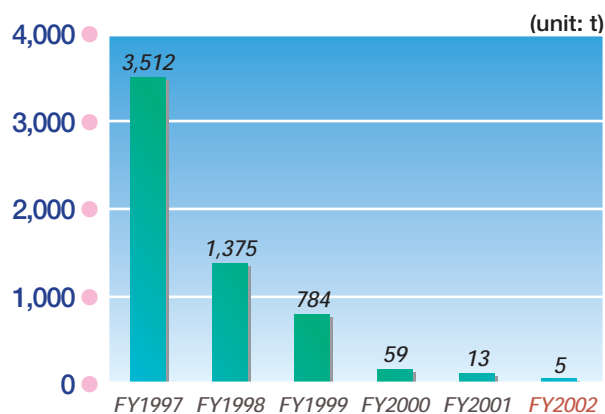
Total industrial waste emission from respective plants (Sendai, Shiroishi and Tsukuba)*1



Industrial waste emission from Sendai Plant



Industrial waste emission from Shiroishi Plant



*1: Actual records from fiscal 1997 to 2001 include the records of now closed Hiroshima Plant.

Note 1: Regarding Tsukuba Plant, formal summarization of records has started from the current year.

It generated the industrial waste of 0.98 ton but not emitted outside.

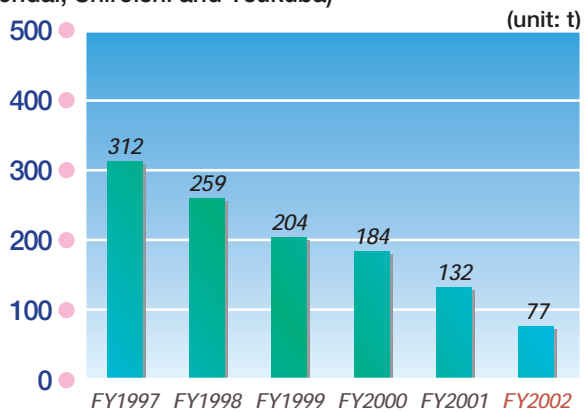
Note 2: Emission here refers to the waste quantity disposed by landfilling without being re-developed as recycled resource.



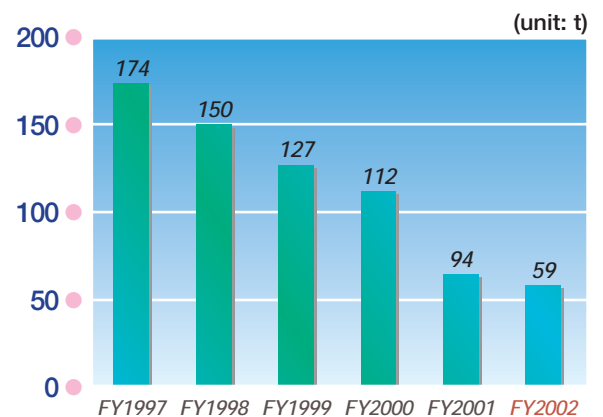
■ Reduction of general waste emission

Similar to the industrial wastes, the emission of general wastes is steadily being reduced. Thorough practice of waste sorting has produced this effect. The reduction ratio reads 84% over fiscal 1994, and we are proceeding steadily toward the achievement of the mid-term target. The reduction is 33% over the preceding year, achieving the target reduction (of 23% or over).

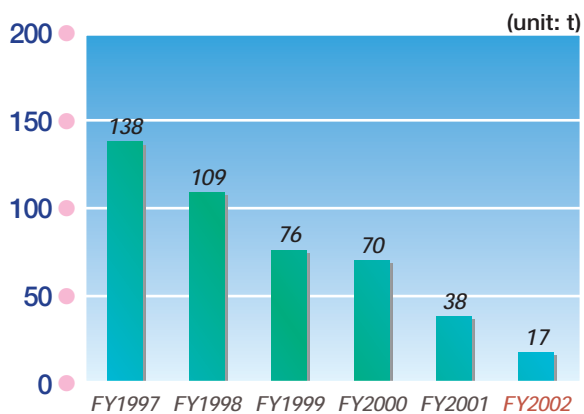
Total emission of general wastes from respective plants (Sendai, Shiroishi and Tsukuba)*1



General waste emission from Sendai Plant*2



General waste emission from Shiroishi Plant*2



*1: Actual records for fiscal 1997 to 2001 include the records of now closed Hiroshima Plant.

Regarding the records for Tsukuba Plant, it is added to the fiscal 2002 portion only (1.4 t/FY2002).

*2: Emission here refers to quantity entrusted to the Administration for disposal by incineration without resource recovery.

3. Reduction of chemical substances (PRTR compliance)

NEC TOKIN autonomously established the "Chemical substances inhibited to use" and "Chemical substances with limited use" from the viewpoint of toxicity.

In the case of newly using a chemical substance, review is made under the advance deliberation system on the following points:

- ① Checking on the management method of the substance in question
- ② Investigation of the environment to use the substance in (with priority given to safety)
- ③ If the substance is of toxicity or hazard, possibilities for substituting it with other substance

The use of chemical substance is implemented by considering the reduction of environmental load.

Moreover, we conduct the inventory of chemical substance once a year. Through the checking of the state of use and management, we make efforts in grasping the problems in the aspect of the environment and safety and the state of conformity to the regulations.

On the other hand, we have established a system to promptly respond to inquiries by customers and other interested parties on our state of use of chemical substances. (For further details, read p.28 Responses to customers' request for environmental investigation, Communication.)

■ Substances subject to PRTR Law

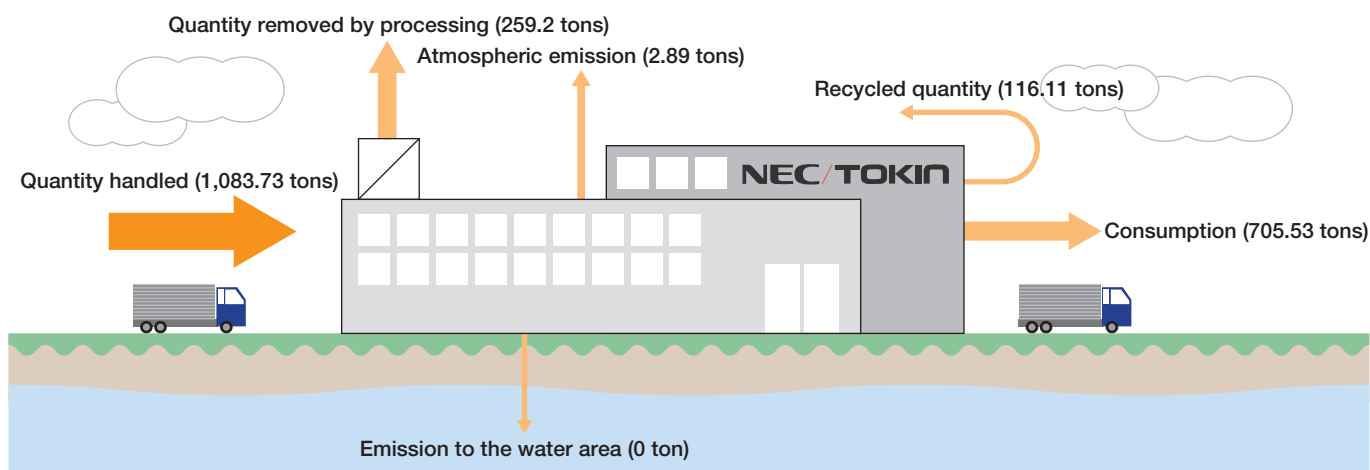
Regarding the PRTR Law, environment management divisions of respective plants have been giving instructions to each division on implementing the incoming and outgoing balance management of the subject substances to grasp the quantities of substances used and the waste emission.

●List of investigation results on the substances subject to the PRTR Law

(unit: t/year)

Substance No.	Name of substance	Sendai (plant)	Shiroishi (plant)	Tsukuba (plant)	Total quantity handled	Atmospheric emission	Recycling	Disposal	Consumption
63	Xylene	3.19	—	—	3.19	1.92	1.27	—	—
68	Chromium	16.61	—	—	16.61	—	—	—	16.61
100	Cobalt	59.8	—	—	59.8	—	0.10	—	59.7
227	Toluene	57.57	310.8	—	368.37	0.97	88.0	259.2	20.2
230	Lead and compound	43.16	—	—	43.16	—	0.82	—	42.34
231	Nickel	41.07	—	—	41.07	—	0.02	—	41.05
283	Hydrofluoric acid	2.9	—	—	2.9	—	2.9	—	—
311	Manganese	9.93	538.7	—	548.63	—	23.0	—	525.63

Quantity of over 1 ton is handled for the above-mentioned substances. "-" represents none.



*Toluene is emitted atmospherically after going through the removal processing device as it emits offensive odor if emitted without purification.

Environmental Risk Management

To prevent air, water, soil pollution, etc., NEC TOKIN has established autonomous management standards. It complies with the laws and regulations, and implements the environmental risk measures by supposing an accident, emergency, etc.

1. Introduction of a risk management case

At all the plants, a 24-hour wastewater monitoring system is installed to measure and control pH values of wastewater. An alarm is linked to the wastewater monitor system to sound alarm if the reading exceeds the set upper/lower pH limit values based on the autonomous management standard. This system prevents wastewater of abnormal pH values from being discharged.

Tsukuba Plant has the most advanced pH monitoring system. It can monitor the pH state over the in-house LAN system around the clock.



The web screen monitoring pH 24 hours a day (Tsukuba Plant)



Integrated monitoring cabinet for the environmental facilities, etc. (Sendai Plant)

2. Emergency action drill

Each plant holds action training in preparation for accident/emergency according to respective state of environment load, etc.



Scene of an emergency on-site action training held jointly with a solvent carrier (Shiroishi Plant)



Scene of an emergency on-site action training assuming a kerosene leak accident (Sendai Plant)



3. Investigation results of soil and groundwater pollution

Regarding the state of pollution, each plant designates the measuring points and conducts periodical (once/year) investigation (analytical measuring). We will continue the investigation of soil and/or groundwater in the future.

Results of periodical investigation

Name of plant	Measuring point	State of pollution
Sendai Plant	8 points	No pollution*
Shiroishi Plant	2 points	No pollution*
Tsukuba Plant	2 points	No pollution*

* No pollution: No pollution over and beyond the environmental standard was found as the result of the investigation (analytical measuring).

4. Storage management of equipment using PCB

NEC TOKIN implements storage management of equipment using PCB, which the company used in past in compliance with the related laws and regulations. Regarding the power capacitors, the company places a pan under them for leakage measures and keeps them in a storage under a strict control.



Storage for equipment using PCB



State of PCB storage

5. Response to environmental accident/complaints

NEC TOKIN received no notice and/or instruction by the state, prefectural administration, etc. on the violation of the environment-related laws and regulations for fiscal 2002.

No environmental accident took place that affected outside the company.

We received no complaints from the neighboring inhabitants during fiscal 2002.

Environmental Education and Awareness

NEC TOKIN provides the individual employees with continual education on environmental protection. It enhances their environmental awareness to enable them take appropriate action under all sort of circumstances with strong consciousness of the environmental protection. For the current year, we made special efforts in giving education on the energy saving and chemical substance management. In addition to this, we implemented a survey on the employees' environment-consciousness with the objective of improving their awareness on the needs for environmental protection.

1. Environmental education

At NEC TOKIN, we implement environmental education for all the employees including the "hierarchical education" and the "education by specialty field" and each plant promotes the development for thorough implementation.

To meet the legal requirements, we implement "High pressure gas supervisor education", "Chemical substance management education" and other.

In addition, to promote continuous improvement of the environmental management system, we hold the training courses for the internal environment auditors and the skill-upgrading

■ In-house environmental education

Environmental training programs implemented for fiscal 2002

Name of education	Content	Object person	Period	Number of attendants
New recruits education	Earth environmental problems; the company's grappling with the environment protection; environment management system and the environmental objectives and targets	New recruits	April	22 persons
Environment management promoter education	FY2002 environmental objectives/targets; environment management program; company-wide environmental education program; remarkable environmental aspects	Environmental management promoters	Apr. to May	30 persons
Environment specialist education	Business assignment to remarkable environmental aspects (education to meet respective aspects of the environment)	Personnel in charge of division concerned	May to Jun.	83 persons
Management and senior manager education	International trends concerning environment; environmental trends surrounding this company; environmental protection mid-term projects	General managers in direct control, general managers and executive directors	Jun.	42 persons
New manager education	Environmental management system and NEC TOKIN's environmental activities	Newly appointed managers	Nov.	27 persons
General employee training and education	Earth environmental problems; environmental grappling of this company; environmental management system, environmental objectives/targets, etc.	Every employee including candidate for qualification acquisition	Apr. to Mar.	All employees
Internal environment auditor training	Internal environment auditor training (based on the company curriculum)	Every person eligible for internal environment auditor training	Nov.	17 persons
	follow-up education and training for those appointed to the internal auditor during current year	Object persons	Jul.	46 persons
High pressure gas supervisor training	Training course and lecture meeting by outside lecturers	Personnel in charge of shops handling high pressure gas	Oct. and Dec.	40 persons
Chemical substance supervisor training	Same as above	Personnel in charge of chemical substance supervision	Nov.	33 persons
Energy saving education	Energy-saving measures; report on the results of the NEDO diagnosis, etc.	Environmental management promoter	Feb.	11 persons

2. Awareness promotion activities

(1) In-house intranet

At Environmental Safety Div. of the Head Office, we create the environment-related homepage to disclose company-wide environmental activities, data, updating of laws and regulations concerned to share information among the employees while enhancing their environmental consciousness.



(2) Information distribution to every employee

We issue the company journals (4 times a year in each season) for distribution to every employee.

We report on various topics concerning environmental activities, etc. on the environment pages to promote the employees' environment awareness.



(3) Intra-plant information distribution

At Sendai and Shiroishi Plants, we issue the environment news respectively (once a month) to enhance the employees' awareness of environment.

The news covers a wide range of information including the environmental management activities within the plant, social trends on the environment and related topics.



(4) Implementation of environment-consciousness survey with employees

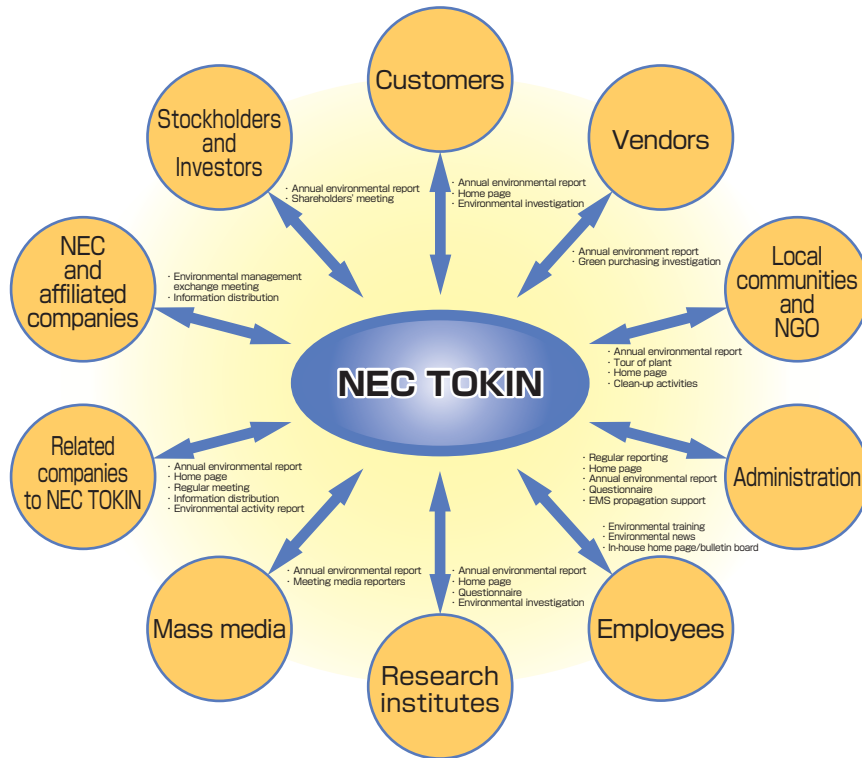
To check the depth of infiltration of environment-consciousness to the employees, we conducted the first "Environment-consciousness Survey (questionnaire)" using e-mail.

The subjects for the survey were owners of e-mail address. Questionnaire was sent to each owner, who entered the answer and returned to the sender.

As the result, 221 employees or 16% of the total survey subjects of 1,382 answered the questionnaire. We assume that those who answered the survey are on the level of "being environmental-conscious."

Further, regarding the survey item of environmental problems, if we define the subject who has selected 5 or more problems (out of total 11 items; multiple answers admitted) as having high environment-consciousness, 54 persons or 25% have fallen on this category. On the other hand, if we define those who selected 2 problems or under as having low environment-consciousness, 36 persons or 16% have fallen on this category. In the future, we will conduct this survey and promote to have more number of employees reach the level of "being environment-conscious", simultaneously developing activities for training employees having higher level of environment consciousness. We will continue this survey next year onward.

NEC TOKIN is prompt and positive in disclosing correct information concerning the environmental protection to various stakeholders including our customers, inhabitants of local communities, and people from various assessment institutions by using various tools. The parties shown below are the stake holders for NEC TOKIN:



We think it is important to have bi-directional communication with such wide range of stake holders. Accordingly, we use various means of communication including the environmental report, home page on Internet and many others.

■ Environmental report

NEC TOKIN understands the environmental report as the most important communication tool with the stake holders. We have started the issuance every year since fiscal 2000.

On the environmental report, we disclose our concept concerning environmental protection, and report on the content and records of environmental protection activities and product information.. We also promote bi-directional communication with the readers through the questionnaire.

The environmental report used to be issued in Japanese only. To meet the request for English version by overseas customers and others interested, we have newly issued the English version from fiscal 2002.

■ Internet home page

Recognizing that the number of the environmental report is limited and that it is necessary for us to distribute information more widely, we have opened the environmental protection activity corner in the home page since fiscal 2001.

The main content of the information is from the environmental report. NEC TOKIN's policy on handling the environmental protection and the environmental report in English are newly added to the home page to enhance the content.





■ Lecture on environment

In response to the request from the Ministry of the Environment and local autonomous body, NEC TOKIN supports ISO 14001 propagation and construction of simple type EMS. For fiscal 2002, we promoted communication with the Administration by becoming a construction member of "Environment Management System for Sendai City, Miyagi Prefecture (Michinoku Eco-stage)."



Site of the lecture meeting during the Sen-nan Area Convention of Public Health

■ Participation to exhibitions

NEC TOKIN is positive in exhibiting its concept and grappling with environmental protection at various exhibitions.

During fiscal 2002, the company participated to an environmental exhibition sponsored by a major customer. We introduced our handling of environmental protection and environment-friendly products to a number of visitors.



Environmental Audit

NEC TOKIN has further enhanced the environmental audit system this year. In addition to the existing system, it has established and implemented a new audit system and procedure by giving priority to the viewpoints on the environmental management and risk minimization.

Environment audit system

The environment audit systems of NEC TOKIN are as follows. Two newly introduced audit systems are NEC TOKIN group (NT group) mutual environment audit and the environment compliance audit.

Content of audit	Auditor	Implementation frequency and object
ISO 14001 conformity examination	(JQA → CEAR: ISO 14001 examiner)	Once/year/total NT
Environmental examination of NEC-related companies	(Environmental management exchange meeting for NEC-related companies → Certification examiner)	Once/year/applicant plant or domestic related company
Environmental examination of NT group (new)	(Environmental management exchange meeting for NT group → Certification examiner)	Once/year/plant or domestic related company
Internal environment audit	(NT environmental management system → Certification audit)	Once/year/total NT
Environment compliance audit (new)	(Environmental management exchange meeting for NEC-related companies → NEC auditor)	Once/year/applicant plant or domestic related company

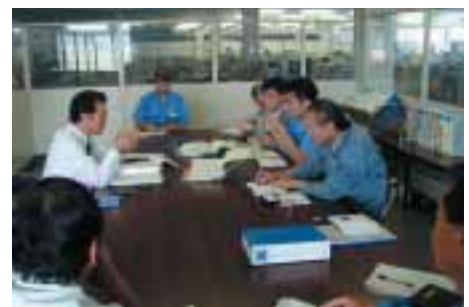
Results of auditing

ISO 14001 conformity examination

ISO 14001 conformity examination was conducted from Oct. 2 to 4, 2002. We have received an integrated and expanded examination incorporating Tsukuba Plant. The following items were pointed out and the items requested for improvement have been all corrected:

Oct. 2 to 4, 2002

Items pointed out	Number of items pointed out	Corrective measure
Excellent content that can be a model for others (positive observation)	2 cases	
Items not meeting requirements (Category B)	Zero	
Items requiring improvement (improvement opportunity)	13 cases	Completed



Scene of ISO 14001 compliance examination

Environmental examination for NEC-related companies

The environmental examination for NEC-related companies is characterized by that importance is given to the performance including the environmental management viewpoint. This year Sendai Plant received the examination and the following matters were pointed out. These matters pointed out for corrective action have all been corrected.

Jan. 28, 2003

Items pointed out	Number of items pointed out	Corrective measure
Point positively evaluated	11 cases	
Items requiring improvement	9 cases	Completed
Tasks and request	11 cases	Completed



Environmental examination for NEC-related company

Environment examination for NT group

Environment examination for NT group newly started in fiscal 2002. This aims at improving the environmental management and upgrading of activities for overall NEC TOKIN group and sharing mutual environmental protection know-how. Of course, the points for examination are the environmental management viewpoint and the stance that places importance on performance. This was reported by the mass media. The results of the examination were as indicated below:

Audit period	Companies receiving audit	Auditing company (principal auditor)	Number of items pointed out		
			Positively evaluated point	Items requiring improvement	Tasks and requests
Dec. 24, 2002	NEC TOKIN Shiroishi Plant	NEC TOKIN Iwate	7 cases	19 cases	3 cases
Jan. 22, 2002	NEC TOKIN Toyama	NEC TOKIN Environmental Management and Administration Div.	9 cases	16 cases	5 cases
Feb. 14, 2002	NEC TOKIN Iwate	NEC TOKIN Toyama	12 cases	7 cases	13 cases
Feb. 24, 2002	NEC TOKIN Tochigi	NEC TOKIN Environmental Management and Administration Div.	7 cases	11 cases	14 cases



Scene of NT group examination



The Kahoku Shimpo dated Dec. 18, 2002



The Nikkan Kogyo Shimbun dated Dec. 13, 2002

Internal environment audit

Internal environment audit is conducted on the basis of NEC TOKIN environmental management system and all the divisions are subject to the audit. This year, intending to start earlier improvement and corrective activities, we advanced the audit timing 6 months to July. The audit results are as follows:

Audit period	Subject division	Number of items pointed out	Corrective measure
Jul. 26, 2002	Environmental Management and Administration Div., Head Office	4 cases	Completed
Jul. 19, 24 and 26, 2002	Sendai Plant	73 cases	Completed
Jul. 29 and 30, 2002	Shiroishi Plant	40 cases	Completed
Jul. 22, 2002	Tsukuba Plant	34 cases	Completed



Environment conformity audit (Object: Shiroishi Plant)

This audit has been newly started from this year. It is characterized by the close checking of the state of conformity to the environment protection laws and regulations and the inclusion of the related laws on Industrial Safety and Hygiene. The audit was conducted with Shiroishi Plant from Jan.29 to 30, 2003. The results of the audit are indicated below. Though no matter was pointed out requiring urgent correction, we found that we had rather more omissions concerning the Industrial Safety and Hygiene Law to our reflection and new task.

Jan. 29 and 30, 2003

Items pointed out	Number of items pointed out	Corrective measure
Request A: Matters requiring prompt improvement from the viewpoint of conformity	Zero	
Request B: Matters requiring improvement without urgency from the viewpoint of conformity	7 cases	Plan for improvement measures submitted on Mar. 25, 2003
Request C: Matters improvement is desirable with from the viewpoint of conformity	13 cases	Completed
Opinion: Matters requiring caution though no problem is predicted currently	3 cases	Completed



Scene of environment conformity audit

Social Contribution Activities

NEC TOKIN makes positive participation to the social contribution activities including the area environmental protection as a corporate citizen. For fiscal 2002, we implemented the activities jointly with the neighboring enterprises in wider scale.

■ Cleaning activities



- **Area cleaning and investigation of careless dumping of trash (Sendai Plant)**
"Investigation of dumped trash and Gamo Higata beach cleaning activities"
A volunteer activity sponsored by Sendai City held twice a year. A total of 95 persons participated during fiscal 2002.



- **Area cleaning activities (Shiroishi Plant)**
"Cleaning activities of the surrounding areas of the plant and the river embankment"
The activities are held twice a year jointly with NEC INFRONTIER with a total of 248 persons participating.



- **Area cleaning activities (Tsukuba Plant)**
"Cleaning activities"
Designated group cleaned the areas surrounding the plant once a month during lunchtime break.



- **Area cleaning activities (Sendai Plant)**
"Cleaning activities around the plant"
Employees cleaned the area surrounding the plant four times a year.



- **Traffic safety activities (Sendai Plant)**
A gatekeeper controls traffic of school children and commuting employees every morning on the road in front of the front gate to Sendai Plant as part of traffic safety activities.



- **Blood donation activities (Sendai and Shiroishi Plants)**
At both plants, employees donated their blood twice a year. A total of 123 persons from Sendai Plant and 113 persons from Shiroishi Plant donated blood for fiscal 2002.

Occupational Health and Safety Management Activities

NEC TOKIN has been developing "Health and Safety Management Activities" up to the present. Also, we have been promoting the introduction of the health and safety Management System as the tool for achieving this objective. During the fiscal 2002, the company developed the rules and regulations along the Health and Safety Management System. In line with this system, it announced the safety and health guideline and developed activities by setting the target accordingly. In addition, to re-check our health and safety management activities from the viewpoint of legal conformity, Shiroishi Plant has received the conformity audit by NEC. Regarding the matters pointed out by the auditor, we have taken corrective measures and promoted lateral development to all the companies.

NEC TOKIN

安全衛生方針

基本理念

NECトーキンは、従業員の安全確保と健康管理の重要性を認識し、快適な職場作りを追求するために、継続的な安全衛生管理活動を推進します。

行動指針

NECトーキンは、次の事を達成するため厚生労働省指針に基づき安全衛生マネジメントシステムを構築します。

1. 全員参加により災害防止の活動を展開します。
2. 継続的な安全衛生マネジメントシステムの改善と共に、危険及び有害要因の削減に努めます。
3. 法規制及びその他の取り決め事項を遵守します。
4. 健康保持増進に努め快適な職場作りを努めます。
5. 本方針を文書化し、全従業員に周知徹底すると共に、その内容を理解し行動します。
6. 本方針に基づく安全衛生管理活動を展開するにあたり、当該目標を定め、その施策を安全衛生管理計画の中で明確にすると共に、これを見直します。

平成15年4月1日
NECトーキン株式会社
代表取締役社長
羽田 祐一

health and safety Policy

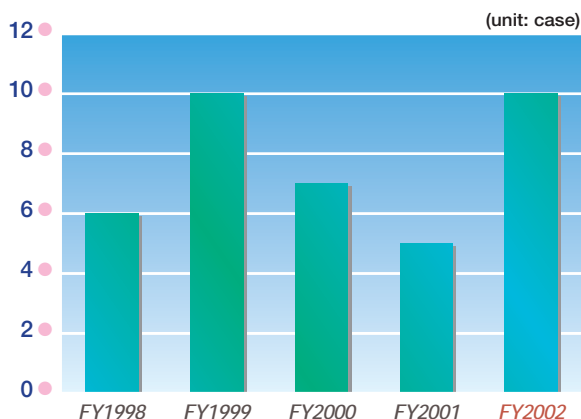
Activity content

During fiscal 2002, we carried out our activities with priority given to the strengthening of the health and safety management system, promotion of zero-accident activities, creation of pleasant workshop environment, and education and training. To strengthen the health and safety management system, we developed the emergency communication network and re-structured the company-wide information distribution network. To promote the zero-accident activities, we held the study meeting every month under different theme and implemented the checking of various machines and equipment to achieve zero-business, -commuting, and -fire accidents. To develop the pleasant workshop environment, we measured the working environment, and implemented periodical physical checkup and special health checkup for all the employees based on the Industrial Safety and Hygiene Law to prevent and/or discover diseases at an early date. We implemented preventive health checkup for the employees of 35 of age or above for diseases caused by living and eating habits. These employees of 45, 50 and 55 of age are obligated to receive one-day thorough medical examination under closer health management program. To prevent or improve condition of those employees diagnosed as having symptom of the disease of living/eating habits are invited to attend the follow-up health lectures by specialists. They also receive periodical health guidance from a medical supervisor. For education, we have updated the health and safety-related pages on the intra-network. We carried the articles on our health and safety policy, activity plan, measuring of working environment, medical checkup plan, etc. to promote thorough understanding of the safe and health management by the employees. To enhance their health-consciousness and help improve their health, we provided education through the Safe and Health Committee.

Activity results

We retained the records of zero-accident requiring sick leave for fiscal 2002. We had 10 cases of labor accident without sick leave, however, and 2 cases of traffic accident during commutation. We kept zero-fire records for fiscal 2002. Employees' consultation ratio under the health checkup program remained 100% for fiscal 2002.

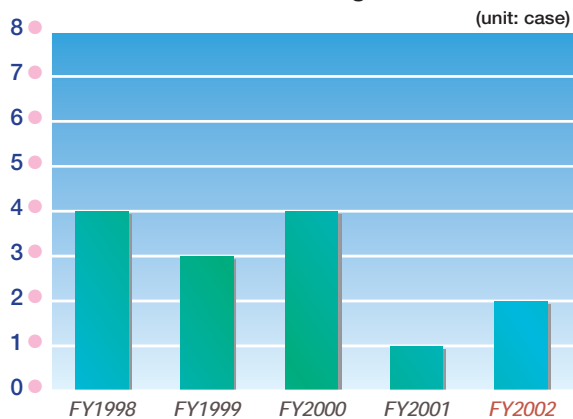
① Transition of labor accident without sick leave



Scene of a high-pressure gas safety training course

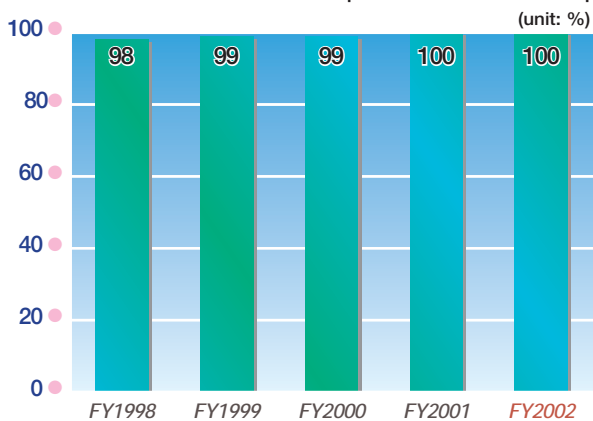


② Transition of accidents during commutation

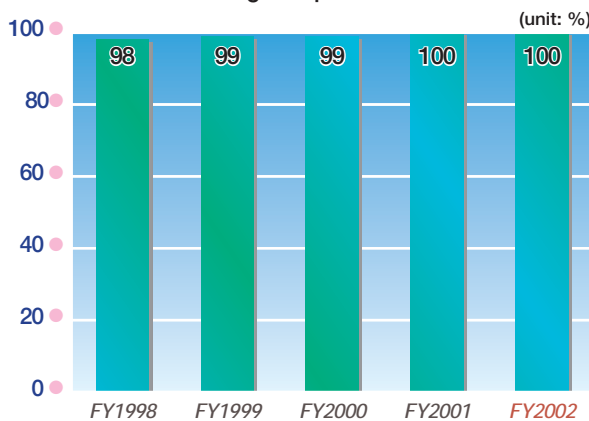


Scene of safety driving course for drivers (Shiroishi)

③ Transition of consultation ratio of periodical health checkup



④ Transition of receiving complete medical examination



*As the result of these activities, a class 2 zero-accident labor record (10.5 million hours) was established at the Sendai place of business.

Results of conformity audit

Page 30 shows the items pointed out as the result of conformity audit. Of 23 cases, 14 cases were associated with the related laws of industrial safety and health. We promoted the lateral development of these matters to other plants, simultaneously creating the plan for improvement and completed the corrective measures.



Conformity auditors at work on site

State of Activities of Group Companies

Environmental protection activities at the group companies are described in their own reports. The activities are also stated in this report as the activities of NEC TOKIN group. Therefore, this section introduces the topics and unique activities of respective group companies.

(1) Related companies, domestic

1. NEC TOKIN Iwate Corporation

Address: 1, Karagai, Ichinoseki, Iwate

President: Katsumi Harada

Employees: 236

Principal products: Compact relays and connectors



Main entrance to the company



Certificate of registration, ISO 14001

Environmental activities of NEC TOKIN Iwate

NEC TOKIN Iwate acquired ISO 14001 certification in Oct. 1995 then as NEC Tohoku. Following the separation in Jan. 2002. Under the new name of NEC TOKIN Iwate, the company newly acquired the certification in Jun. 2002.

During the current year, it further expanded the sphere of activities outside in addition to the environmental protection activities it has been continuing up to the present. It develops environmental activities in cooperation with the local communities. It is a member of the "Fureai Eco-Seminar Executive Committee" and also serves as the secretariat in charge of the "Tohoku Environmental Counselors Federation." In the aspect of occupational safety and health, the company has been renewing its "zero-accident" records since Nov. 1998. It has been commended for its zero-accident records for the year.

A number of the employees participated to the customary "Voluntary Fertilization Activities for Senbon-zakura cherry trees" along the embankment of the Kitakami river.



Scene of the "Fureai Eco-Seminar"



Participants to the cherry tree fertilization activities of the Kitakami river



Citation for zero-accident record year



Scene of examination for registration



2. NEC TOKIN Toyama Corporation

Address: 560, Nyuzen, Nyuzen-machi, Shimo-Niikawa-gun, Toyama

President: Fuyuki Okawa

Employees: 388

Principal products: Capacitors and electrode material (lithium ion secondary batteries)



View of the company



Certificate of registration, ISO 14001



Certificate of Eco-Plant

■ Environmental activities of NEC TOKIN Toyama

NEC TOKIN acquired ISO 14001 certification in Jan. 1997 as NEC Toyama. Following the separation in Jan. 2002, the company has newly acquired the certification for NEC TOKIN Toyama in Sept. 2002.

The company has been certified as an Eco-Plant by Toyama Prefecture for its continuous grappling with the environmental protection up to the present. It also participated to "Toyama Environment Fair 2002" to exhibit its environmental stance to a number of visitors. The company is positive in holding lecture meetings and presentations outside the company on environmental protection.



Exhibition at Toyama Environment Fair



Presentation at the energy symposium sponsored by Toyama Prefecture



Scene of examination for registration



Environmental patrol of a group company



3. NEC TOKIN Ceramics Corporation

Address: 231, Sugazawa, Yamazaki-cho, Shiso-gun, Hyogo

President: Masamitsu Watanabe

Employees: 311

Principal products: Double layer capacitors, piezoelectric transformers, actuators and reed switches



View of the company



Certificate of registration, ISO 14001

■ Environmental activities of NEC TOKIN Ceramics

NEC TOKIN Ceramics acquired ISO 14001 certification in Dec. 1997. The company reduced wastes and continually promoted energy saving. In recent years, the company places emphasis on measures for earth warming starting with the introduction of a co-generation system. As part of local environment protection activities, the company has joined the Kansai Eco-Office Declaration Movement jointly promoted by Kansai Conference for Wider Cooperation and Hyogo Prefecture. The company is qualified as an Eco-Declaration office.



Private generation facilities



Energy-saving using sprinklers



Growing of kenaf



Kansai Eco-Office Declaration



4. NEC TOKIN Tochigi Corporation

Address: 484, Harigaya-cho, Utsunomiya, Tochigi

President: Tadatoshi Shiba

Employees: 238

Principal products: Principal products: Lithium ion secondary batteries



View of the company



Certificate of Registration, Certificate of registration, ISO 14001

Environmental activities of NEC TOKIN Tochigi

NEC TOKIN Tochigi acquired ISO 14001 certification in Sept. 2000. It has been carrying on activities with the environmental philosophy of "establishing itself as an earth-friendly enterprise trusted by environment."

It implements environmental load reduction activities continuously. As part of its volunteer activities, the company offered a section of the company premises to the mountain bicycle race, in which a number of employees took part as the voluntary management staff. Compost produced from kitchen refuse of employees' dining room was distributed to the visitors free of charge at the site of the bike racing.

In March last year, the company introduced a compression crusher to reduce the volume of wastes and subsequently the frequency of waste transportation.



Scene of Suzumenomiya mountain-bicycle festa



Distribution of compost and the display of NT Tochigi environmental activities



Compression crusher newly introduced

Metal foil reduced to 1/4 of original volume



Cleaning activities



5. Hokko Denshi Co., Ltd.

Address: 26-41, Oiwake-nishi, Tenno-cho, Minami-akita-gun, Akita

President: Yukio Nagayama

Employees: 165

Principal products: Ferrite magnets, soft ferrite, electronic devices



View of the company



Certificate of registration of
Certificate of registration, ISO 14001

■ Environmental activities of Hokko Denshi

Hokko Denshi developed its structure toward the introduction of ISO 14001 in fiscal 2002 and promoted preparation accordingly. Though slightly behind the original schedule, the company acquired the certification by JQA in Jun. 2003.

During these periods, the company devoted itself to energy saving by improving the operating efficiency of the gas reactor and to waste reduction by reducing ferrite sludges. In addition, to strengthen risk management, it newly introduced a system for discharging wastewater from the production lines through the wastewater processing unit as part of the improvement and risk reduction activities.



Wastewater processing unit



Portable environment policy card



(2) Related companies, overseas

1. NEC TOKIN Electronics (Philippines) Inc. (NTEPH)

Address: 1 Ring Road Right Industry and Science Park 2, Barangay, La Mesa, Calamba, Laguna, Philippines

President: Kaoru Katsumata

Employees: 857

Principal products: Power relays



View of the company



Environmental policy



Certificate of registration of ISO 14001

Environmental activities of NEC TOKIN Electronics (Philippines)

NTEPH acquired ISO 14001 (certified by SGS) in Mar. 1998. Since then it has been particularly promoting recycling of wastes within and without the company in addition to energy saving, waste reduction, and water use reduction. It is also strengthening risk management and took measures for the waste and chemical substance storages accordingly. The management is also making efforts in improving the employees' environment awareness through environmental education and brisk voluntary activities.



State of risk management at a scrap house



Scene of emergency evacuation drill



Planting activities



Environmental education



2. NEC TOKIN Electronics (Thailand) Co., Ltd. (NTET)

Address: 60/76 Moo 19 Navanakorn Industrial Estate(Phase II) Paholyothin Road, Klongnung, Klongluang, Pathumthani 12120, Thailand

President: Tetsuo Suzuki

Employees: 2,581

Principal products: Capacitors



View of the company

Environmental Policy

NTET will make harmony with environment as one of the primary goals of our business activities. We shall respect to related regulations and implement continual improvement activities to preserve good environment.

Commitment

1. To promote the improvements of environmental management system and strive to preserve the global environment through the production of Tantalum Capacitor.
2. To comply fully with the legal regulations of the country and requirements from Navanakorn Industrial Promotion Zone.
3. To make up concrete objectives and targets to develop the environmental activities such as pollution prevention, energy saving, resources saving, reuse of material and waste reduction.
4. To grasp actual status of environmental activities and take measures for improvements through internal environmental audit.
5. To ensure that all personnel of the company shall be provided with the appropriate education and training in order to improve environmental awareness and to understand the environmental aspects.
6. To make this policy available and accessible to all employees and publish it externally for the public as the

Environmental policy



Certificate of registration of ISO 14001

■ Environmental activities of NEC TOKIN Electronics (Thailand)

NTET acquired ISO 14001 (certified by JQA) in Aug. 1998. It has been grappling with continuous energy saving, waste and chemical substance reduction as the environmental protection activities.

As part of measures for reducing toxic substances, the company has introduced a chiller system that uses no CFC refrigerant, an ozone depleting substance, for the current year. It has positively improved the employees' environment consciousness through various activities including area cleaning, green planting, opening of a recycle market, protection of sea turtles, etc.



Non-CFC type new chiller unit



Adoption of returnable packing material



Opening a recycle market



Protection activities of sea turtles and clean beach activities



3. NEC TOKIN Electronics (Xiamen) Corporation (NTEX)

Address: No. 9, Ri-Xen Rd., Xing-Lin Zone Xiamen, China

President: Koji Nakado

Employees: 7,372

Principal products: Ferrite cores, coils, transformers, noise filters, gyros, piezoelectric inverters, sensors, and lithium ion secondary batteries



View of the company



Environmental policy



Certificate of registration of ISO 14001

Environmental activities of NEC TOKIN Electric (Xiamen)

NTEX acquired ISO 14001 (certified by XECC) in May 2001. Later, upon multiplying the production scale through the transfer of production, etc., the company improved the environmental management level. At the same time, it strengthened the risk management through disaster prevention training and education of senior members of employees.

Regarding the green-planting in the plant premises, company continues to make efforts and its planting activities were commended a number of times by Xiamen municipal administration, etc. as the model for other plants. As the social contribution activities, the company cleaned up the roads and parks in Xiamen on the Environment Day on June 5. A total of 1,500 employees participated to this major cleaning activities. Following the visit of advanced plant by the officials from Xiamen Bureau of Environment last year, some 70 officials from Xiamen Municipal Administration led by Vice Chairman Wang of Standing Committee, Fujian province visited the plant and inspected the inside and the outside of the premises. This news was reported by the local TV stations.



Vice Chairman Wang visiting the plant



Voluntary cleaning activities outside the plant



Training of senior members of employees



Scene of firefighting drill



4. NEC TOKIN Electronics (Taiwan) Co., Ltd.

Address: 51-1, Kai-Fa Rd., Nan-Tze Export Processing Zone, Kaohsiung, Taiwan

President: Jun Yonekura

Employees: 58

Principal products: Chip inductors, coils and transformers



View of the company



Environmental policy



ertificate of registration of ISO 14001

■ Environmental activities of NEC TOKIN Electronics (Taiwan)

NTTE acquired ISO 14001 (certified by SGS) in May 2001 and its environmental activities are being established. For the current year, the company has promoted activities by setting target on reducing power consumption, sludge and other industrial wastes and environmental pollutants. Also, as part of environmental protection measures, it has installed the organic solvent waste processing facilities to reduce the risk from the waste.



Organic solvent waste processing facilities.



5. NEC TOKIN Electronics (Vietnam) Co., Ltd. (NTEV)

Address: A5&A6 Long Binh Techno Park EPZ, Long Binh Ward, Bien Hoa City, Dong Nai Province, Vietnam

President: Masayuki Tada

Employees: 678

Principal products: Transformer, noise filter, optical network device, antenna filter, and sensor



View of the company



Environment policy



Certificate of registration of ISO 14001

■ NEC TOKIN Electronics (Vietnam) Co., Ltd. (NTEV)

Aiming at acquiring ISO 14001 during fiscal 2002, NTEV started structuring EMS in Aug. 2002 and successfully acquired the certificate (by AFAQ) in Mar. 2003. Meanwhile, the company has made efforts in improving the risk management mainly concerning chemical substances and wastes.

NTEV received the letter of thanks from Vietnam Federation of Labor Unions for its Green-Clean-Beauty and the safety and health activities.



Letter of thanks for Green-Clean-Beauty and the safety and health activities



Scene of planting activities in the plant



Visiting of waste processing subcontractor



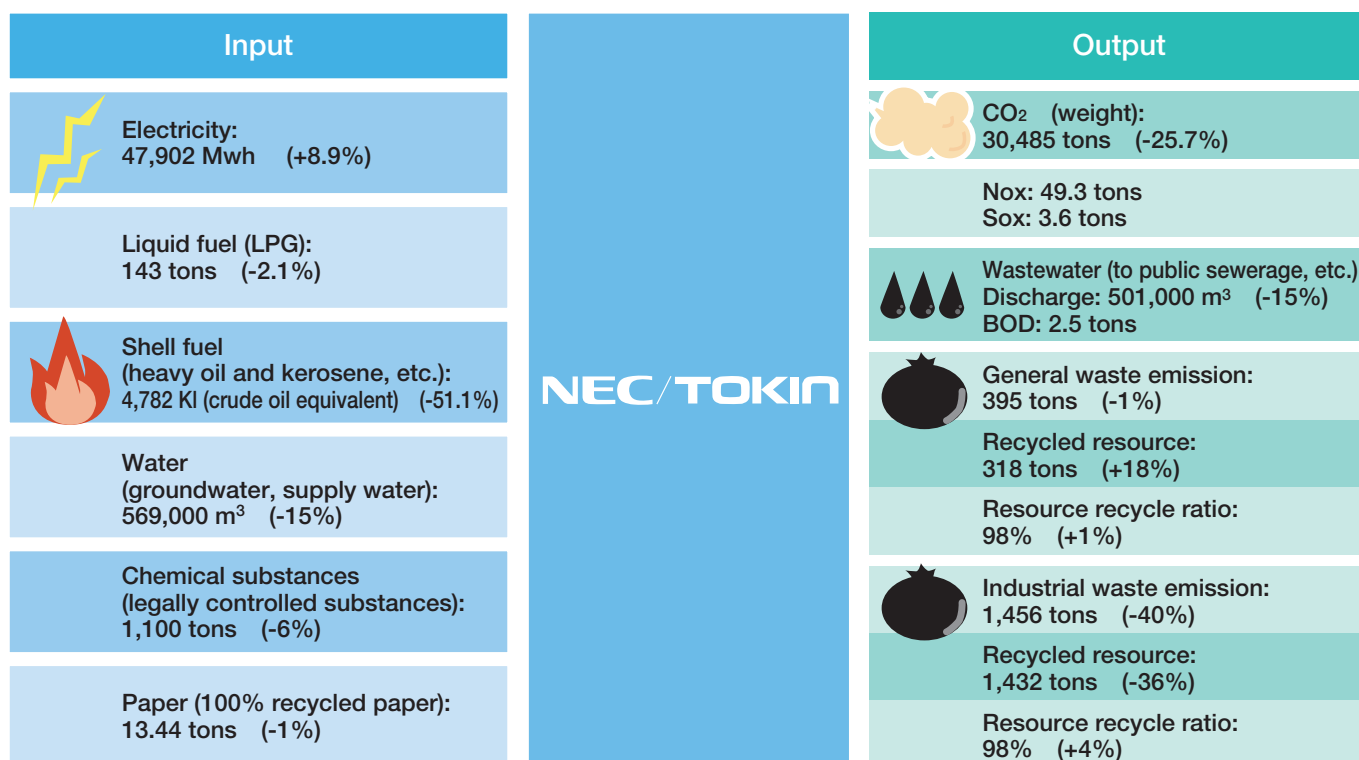
Scene of the environmental education

Environmental Load Mass Balance

Business activities of whole NEC TOKIN (Sendai, Shiroishi and Tsukuba Plants) and the environmental load are indicated as the total environmental load like the mass balance.

Regarding Hiroshima Plant portion, it was omitted from the reporting as the plant was closed in Sept. 2002.

The portion for Tsukuba Plant was newly added to the range for the reporting since fiscal 2002.



Terminology

[Input]

Electricity: Electricity purchased from power companies

Gas: LPG and city gas used for energy

Fuel: Heavy oil, kerosene, gas oil and gasoline used for energy

Water: Supply water and groundwater (excluding recycled water)

Chemical substances: Legally restricted chemicals used for production

(poisonous and deleterious substance, hazardous substance, organic solvent, specific chemicals and PRTR object substance)

Paper: copying paper, computer paper

[Output]

CO₂: Electricity+Liquid fuel+Shell fuel are converted to CO₂ by using the factor

Nox: Nitrogen oxides generated from using gas and fuel

Sox: Sulfur oxides generated from using fuel

Wastewater: Wastewater from production and living systems

BOD: Biochemical Oxygen Demand

The amount of dissolved oxygen required to meet the metabolic needs of aerobic microorganisms in wastewater rich in pollutants (organic matter)

General waste: Wastes other than industrial wastes generated from business activities
(wastepaper, old paper, cardboard, garbage, chips of wood, etc.)

Industrial wastes: Of the industrial wastes generated from business activities, those specified by "Waste Disposal and Public Cleaning Law"
(sludge, waste oil, waste acid, waste alkali, waste plastic, waste metal, waste glass, earthen and porcelain ware, etc.)

Recycled resource: Wastes are used as resource or material by re-use or recycling.

Awards Received

	No.	Commended organization	Award	Commended by	Date of commendation
Environment	1	Shiroishi Plant	Commendation for good energy management	Director, Tohoku Economy and Industry Bureau	Feb. 2003
Safety and health	1	Sendai Plant	Commendation for promotion of blood donation in Miyagi Prefecture	President, Miyagi Prefecture Association for Blood Donation	Nov. 2002
	2	Sendai Plant	Commendation for traffic safety	Station Master, Sendai Minami Police Station, Miyagi Prefecture	Jan. 2003
	3	Sendai Plant	Commendation for non-accident record (achieved in Aug. 2002)	Director, Labor Standard Bureau, Ministry of Health and Labor	Apr. 2003

Employees with Official Environment Qualifications

Type of qualification	Number of holder
Anti-pollution managers (Air quality)	10 persons
Anti-pollution managers (Water quality)	14 persons
Anti-pollution managers (Noise levels)	7 persons
Anti-pollution managers (Vibration levels)	7 persons
Manager for special administration of industrial wastes	15 persons
Industrial waste disposal facility engineer (interim disposal)	4 persons
Energy controllers (Heat)	8 persons
Energy controllers (Electricity)	5 persons
Energy control staff (Heat)	8 persons
Energy control staff (Electricity)	15 persons
Person in charge of safety for high-pressure gas production (Class A and others)	27 persons
Person in charge of poisonous and deleterious substance handling	11 persons
Person in charge of measuring working environment	1 person