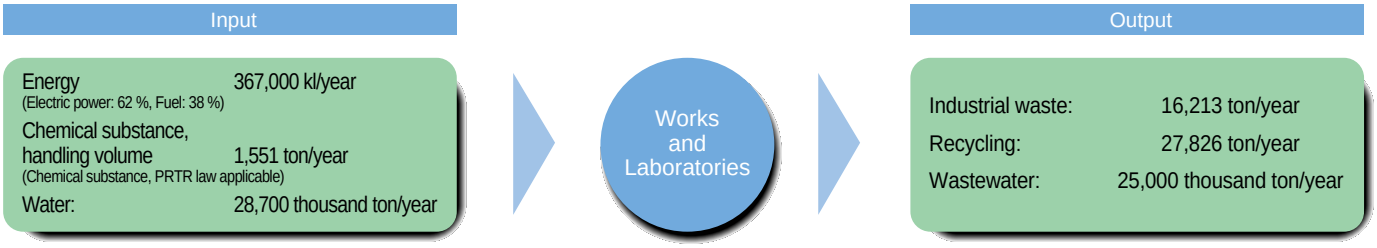
4 Data Regarding Environment Preservation

1. Entire Company



Energy: Converted into crude oil
Water: Industrial water, clean water and well water

Industrial waste: Excluding industrial waste to be recycled
Recycling: Including recycled industrial waste and valuables converted from industrial waste

2. Major Works

Below is presented the data for atmospheric emission and wastewater quality, including NO_x, SO_x and dust from major production facilities for the former, and pH, COD, SS and oil mist (mineral oil) for the latter.

■Atmospheric Emission Data (April 2000 - March 2001)

Chiba Works

Item	Facility	Controlled value by law	Agreed value	Measured value
NO_x (ppm)	Melting furnace	200	63	<30
	Boiler	150	82	46~67.3
SO_x (ppm)	✻	58	58	3.2~24.9
Dust (g/Nm^3)	Melting furnace	0.2	0.013	0.009~0.012
	Boiler	0.25	0.010	0.0015~0.0019

✻Control by immutable weight

Mie Works

Item	Facility	Controlled value by law	Agreed value	Measured value
NO_x (ppm)	Melting furnace	180	-	26~59
	Annealing furnace	180	-	9~35
SO_x (Nm^3/h)	Melting furnace	0.6	-	0.095
Dust (g/Nm^3)	Melting furnace	0.3	-	0.02~0.23
	Annealing furnace	0.2	-	<0.01

Nikko Works (Kiyotaki District)

Item	Facility	Controlled value by law	Pref. tightened value	Measured value
NO_x (ppm)	Heating furnace	200	-	17~70
	Melting furnace	200	-	75~170
	Boiler	230	-	45~140
SO_x (K value)	Heating furnace	17.5	14.5	0.03~0.21
	Melting furnace	17.5	14.5	0.26~2.15
	Boiler	17.5	14.5	<0.10
Dust (g/Nm^3)	Heating furnace	0.2	-	0.002~0.022
	Melting furnace	0.2	-	0.001~0.003
	Boiler	0.25	-	0.001~0.006

Fukui Works

Item	Facility	Controlled value by law	Pref. tightened value	Measured value
NO_x (ppm)	Melting furnace	180	120	3~86
	Heating furnace	130	120	1~59
	Annealing furnace	130	120	1~11
	Boiler	130	120	28~113
SO_x (ppm)	Melting furnace	17.5(K value)	160	5~41
	Boiler	17.5(K value)	380	5or less
Dust (g/Nm^3)	Melting furnace	0.2	0.2	0.005~0.172
	Heating furnace	0.25	0.12	0.005~0.059
	Annealing furnace	0.25	0.12	0.005~0.050
	Boiler	0.1	0.1	0.005~0.008

Nikko Works (Sheet Plant)

Gothic figure means averaged value

Item	Facility	Controlled value by law	Pref. tightened value	Measured value
NO_x (ppm)	Melting furnace	180	-	**50**~81
	Heating furnace	200	-	**18**
	Annealing furnace	200	-	**26**~27
	Boiler	230	-	**69**~101
SO_x (K value)	Melting furnace	17.5	14.5	**0.29**~0.35
	Heating furnace	17.5	14.5	**0.06**
	Annealing furnace	17.5	14.5	**0.05**~0.08
	Boiler	17.5	14.5	**0.49**~0.68
Dust (g/Nm^3)	Melting furnace	0.3	-	**0.03**~0.04
	Heating furnace	0.25	-	**0.05**
	Annealing furnace	0.25	-	**0.03**
	Boiler	0.25	-	**0.05**~0.08

✻Only major production facilities are shown.

4 Data Regarding Environment Preservation

■Wastewater Quality Data (April 2000 - March 2001)

Chiba Works

Item		Controlled value by law	Agreed value	Measured value
pH		5~9	5~9	7.6~8.5
COD	(mg/ℓ)	25	15	3~13
SS	(mg/ℓ)	50	20	1~6.8
Oil mist	(mg/ℓ)	10	2	0.1~0.3

Mie Works

Gothic figure means averaged value

Item		Controlled value by law	Agreed value	Measured value
pH		5.8~8.6	5.8~8.6	**7.38**~7.67
COD	(mg/ℓ)	160	10	**1.49**~4.53
SS	(mg/ℓ)	200	25	**1.14**~1.91
Oil mist	(mg/ℓ)	5	5	**0.14**~0.16

Nikko Works (Kiyotaki District)

Item		Controlled value by law	Pref. tightened value	Measured value
pH		5.8~8.6	5.8~8.6	7.0~7.4
COD	(mg/ℓ)	160	25	0.8~2.7
SS	(mg/ℓ)	200	50	1.1~9.5
Oil mist	(mg/ℓ)	5	5	0.04~0.05

Fukui Works

Item		Controlled value by law	Pref. tightened value	Measured value
pH		5~9	5~9	6.87~8.48
COD	(mg/ℓ)	600	180 Note)	3~114
SS	(mg/ℓ)	600		5~120
Oil mist	(mg/ℓ)	5	5	0.1~2.6

Note: (COD+0.4×SS) = 180

Nikko Works (Sheet Plant)

Gothic figure means averaged value

Item		Controlled value by law	Pref. tightened value	Measured value
pH		5.8~8.6	5.8~8.6	7.1~8.1
COD	(mg/ℓ)	160	25	**2.2**~3.0
SS	(mg/ℓ)	200	50	<0.1
Oil mist	(mg/ℓ)	5	5	<1

3. Environment-Related Accounting

Covered business bases: All Works excluding the Shinagawa Works
Covered period: April 1, 2000 - March 31, 2001

Unit of amount: million yen

Cost of Environment Preservation

Category	Major contents	Amount of cost
(1) Cost of environment preservation to suppress environmental impact caused by the production or service activities of business generated within the business area (In house cost)	Pollution prevention, global environment preservation, resource recycling, etc.	3,360
(2) Cost of environment preservation to suppress environmental impact caused by the production or service activities of business generated within the upstream and downstream areas of business area (Up- and down-stream cost)	Retrieval and recycling of containers, packaging, drums, etc.	456
(3) Cost of environment preservation associated with management activities (Management cost)	Construction, maintenance and management of environment managing system, maintenance of environment preservation, measurement of environmental impact, etc.	452
(4) Cost of environment preservation associated with research and development activities (Research and development cost)	Publication of information, greening, etc.	420
(5) Cost of environment preservation associated with social activities (Social activity cost)	R&D of environment-friendly products, research in substitutes for toxic substances, R&D of environmental impact reduction in manufacturing processes, etc.	36
(6) Cost of environment preservation dealing with environmental impact (Environmental impact cost)	Assessment for environmental impact, inquiries and measures for soil contamination and groundwater, etc.	21
Total		4,745

*The amount of cost excludes investment cost.

Investment and Research Costs

Environment-related investment	3,788
(Entire investment cost	48,100)
(Entire research cost	15,300)

Economic Effects Associated with Environment Preservation Measures

Content	Amount
(1) Income gained by recycling	169
(2) Reduction in waste disposal costs through recycling	-28

Physical Effects Associated with Environment Preservation Measures

Environmental impact	Quantity	Reduction (over previous year)
(1) Industrial waste (disposed of by landfills) (ton)	16,213	-901
(2) Emission of volatile chemical compounds (ton)	120	1
(3) CO_2 (carbon ton)	172,088	2,434
(4) SO_X (ton)	71	3
(5) NO_X (ton)	641	86
(6) Dust (ton)	80	43