ONO Environmental Report 2012

We establish Charter for Good Behavior based on corporate mission and also environmental policy with regard to environmental protection as follows.

Environmental Guidelines

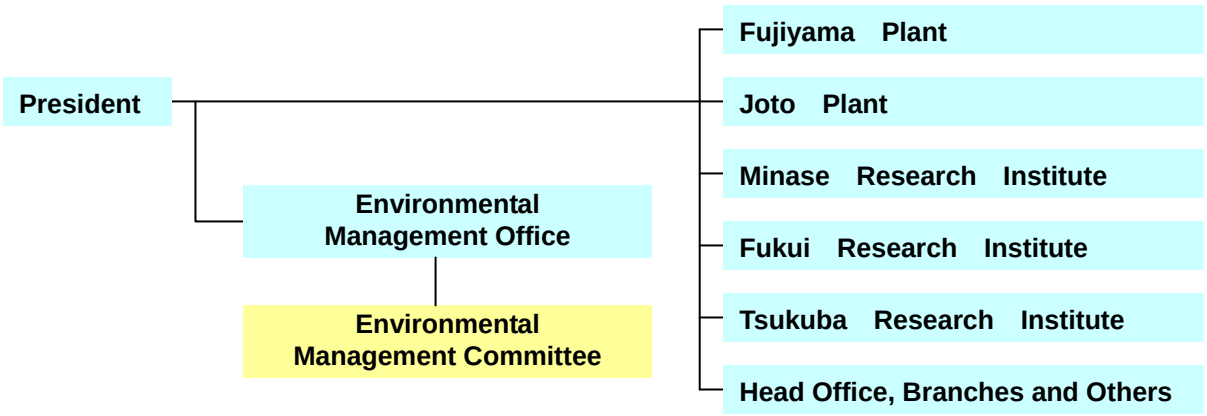
We recognize that our company has a social responsibility regarding the environment, and we will work to protect and preserve the global environment in all of our business operations.

- In addition to fully complying with all environment-related laws and regulations, we will establish targets and action plans in a continuous effort to protect and preserve the environment and natural resources.
- In all of our business operations, we will promote resource conservation, energy conservation and recycling, and will implement environment-focused measures such as reducing waste and preventing pollution.
- We will endeavor to produce eco-friendly products and will cooperate with society.
- With the participation of every employee, we will strive to further understand environmental issues and to promote environment-related activities.

Environmental Management Organization

Environmental Management Office is responsible for all environment-related issues at Ono. Meanwhile Environmental Management Committee consisting of members from sections across the company gains understanding of the current situation and promotes environmental management .

In addition, a facility with greater environmental burdens such as a research institute and a manufacturing plant establishes a subcommittee at each site and work on environmental issues.



Certification of compliance with ISO 14001 environmental management standards has been obtained for both the Fujiyama Plant in November 2002 and the Joto Plant in February 2004.

Environmental Self-regulating Action Plan

Objectives	Targets	Fiscal 2011 Results
Commitment to a Low Carbon Society	CO_2 emission for 2020 will be 23% less than the 2005 emission level.	In 2011, CO_2 equivalent emission increased by 1% compared to that of 2010. Compared to that of 2005, it has been reduced by approximately 12%.
Management of chemical substances	Discharge and displacement of first class PRTR chemicals is allowed around 10 tons or less. However we not only strengthen compliance of laws and regulations but also wrestle for discharge reduction as much as possible.	The volume of discharge and displacement of classified chemicals was 13 tons.
Waste reduction measures	By 2015 final disposal of wastes will be reduced to 40% of volume disposed in 2010.	Compared to 135 tons in 1990, final disposal of wastes was reduced to 19 tons in 2011, which is only 14% of volume disposed in 1990. Recycling rate was 32.6% in 2011 while it was 7.5% in 1990.
Measures against air and water pollution	Compliance of emission standards will be carried out thoroughly and continue our efforts so that there will be no environmental accident nor complaint from local communities.	There was no complaint about environmental issues such as noise, bad smell or vibration.
Environmental accounting	Environmental accounting has been disclosed based on guidelines of Ministry of the Environment.	We carried out assessment of environmental efficiency in addition to disclosure of environmental cost, plant and equipment investment, economic effect, and environmental preservation effect. According to the assessment, environmental burden was reduced by 26.3% in 2011, compared to that in 2000.
Environmental communication	In local communities, we participate in cleaning activity and make endeavor not to cause worker’s accident.	At our major business establishments such as manufacturing plants and research institutes, we participated in a cleaning campaign and firefighting activities in local communities.

Environmental Accounting

Costs for environmental preservation activities, plant and equipment investment, economic effect and environmental efficiency have been disclosed based on guidelines of Ministry of the Environment. Environmental efficiency index, which is an assessment indicator, is also disclosed. According to the assessment, environmental burden were reduced by 26.3% in 2011, compared to that in 2000.

(Thousands of yen)

Items of Costs	Expenses		Investment	
	2010	2011	2010	2011
Pollution prevention (air, water, soil subsurface water, harmful chemicals, noise, vibration and bad smell)	119,100	132,368	54,223	30,891
Global environmental preservation (global warming prevention and environmental preservation)	323,429	452,976	153,030	206,381
Resources circulation (waste reduction, proper disposal of waste, effective use of resources)	89,651	94,305		
Management (time and other costs required for engagement in the committee, ISO activity and environmental management)	6,619	11,010		
Research and Development	176,495	185,703		
Social contribution activity (landscaping and planting promotion in local communities)	967	888		
TOTAL	716,263	877,252	207,254	237,272

Economic Effect by Environmental Activity

(Thousands of yen)

Environmental definition	2010	2011
1 Expense reduction by energy saving	9,700	3,292
2 Reduction of waste disposal expense by recycling	0	0
3 Gain on sale of products collected by recycling	599	563
TOTAL	10,299	3,855

Environmental Preservation Effect

Environmental definition		Reduction of environmental burden		Environmental burden	
		2010	2011	2010	2011
Effect corresponding to costs in business areas	SO_X emission (tons)	0.0	0.0	0.0	0.0
	NO_X emission (tons)	2.9	0.7	6.6	7.3
	Water use (thousand m^3)	5.2	-1.0	28.7	27.7
	BOD burden (tons)	1.1	-1.4	3.4	2.0
	CO_2 emission (thousand tons-CO_2)	-0.2	0.0	2.14	2.2
	Energy use (thousand GJ)	2.7	-1.2	51.52	50.3
	Total waste emission (tons)	3.0	12.3	622.2	634.5
	Landfill waste emission (tons)	-3.2	-4.7	15.9	11.2

Environmental Efficiency Index

	2000	2007	2008	2009	2010	2011
Environmental efficiency index	100	84.4	74.6	75.2	91.2	**73.7**

(Factors used in environmental efficiency index and its calculation method)

Quantity of Environmental burden means such quantity of each item affecting environment by business activities and the following environmental factors were used for evaluation.

Chemicals:	Quantity of PRTR designated material emission
Global warming:	Quantity of carbon dioxide emission
Waste:	Quantity of final disposal
Water:	Quantity of BOD emission
Air:	Quantity of dusts, NO_X and SO_X emission

Environmental burden basic unit: quantity of each item of environmental factors divided by sales of the fiscal year

Environmental burden index: Total environmental burden index
$= 20 \times (A / A_0 + B / B + C / C_0 + D / D_0 + E / E_0)$

Environmental burden factors in base year (2000) are described as A, B, C, D and E, and those in the year of evaluation are described as A_0, B_0, C_0, D_0, and E_0.