Overview of "Environmental Performance Indicators for Businesses (Fiscal Year 2000 Version)"

I. Objectives of Environmental Performance Indicators

- [1] Provide information to enable businesses, as insiders, to assess and make decisions on environmental conservation activities.
- [2] Provide information to enable stakeholders, as outsiders, to assess environmental conservation activities of businesses.
- [3] Form an information foundation to enable executives of individual businesses and countries to make decisions by coordinating the environmental indicators of the macro level that are used by countries (comprehensive environmental indicators) comprehensively.

II. Requirements of Environmental Performance Indicators

- [1] Relevance (Accurately reflect important environmental burdens and conditions of the efforts that are made)
- [2] Comparability (Comparable with other data secular change comparison, comparison with other company's indicators, and comparison with conditions of the Japanese environment)
- [3] Verifiability (Measures for third parties to verify reliability of information that is available)
- [4] Clarity (Definitions and scope are clear and the contents can be understood easily.)

III . Framework of Environmental Performance Indicators

- <u>1. Organization and classification of indicators</u> See the attached table.
- [1] Environmental management indicator (management performance indicator)
 ••• Indicator that provides information on management's efforts made regarding influence on environmental performance
- [2] Environmental burden related indicator (business operation performance indicator)
 ••• Indicator that provides information on environmental performance associated with business operation

Businesses are requested to achieve the following objectives while maintaining and enhancing economic efficiency regarding environmental performance associated with business operation in addition to enhancement of environmental performance associated with management.

- [1] Reduce the total amount of input (materials, energy, water, etc.) to business activities. Reduce the amount of harmful substances and increase the ratio of recycled resources.
- [2] Promote preferential purchase (green purchasing) of products and services based on reduction of environmental burdens as the upstream measure of the business area.

- [3] Reduce the total amount of output (environment polluting substances, wastes, etc.). Reduce the amount of harmful substances and increase the ratio of reutilization and recycling.
- [4] Provide products and services of minimal environmental burdens as the downstream measure of the business area. In addition, minimize as much as possible the products that are presently being disposed of as wastes.
- [5] Reduce environmental burdens associated with transportation.
- [6] Prevent and clean stock (accumulated) pollution.
- [7] Maintain a good ecosystem in terms of land utilization.

2. Selection of indicators

- [1] Common core indicator: Important indicator in terms of environmental issues that is applicable to most businesses regardless of the industry and for which usable calculation method is currently available
- [2] Industry-specific indicator: Important indicator in terms of environmental issues that is applicable to most businesses in the related industry and for which a usable calculation method is currently available

IV. Evaluation by Environmental Performance Indicators

1. Time-series comparative evaluation

Comparative evaluation with the past performance value or a future target value is necessary.

2. Comparative evaluation with the baseline

Evaluation using the difference (baseline) between the environmental burdens as a result of taking measures, and the environmental burdens obtained without using measures is also useful.

V. Indicators Associated with Management Indicators

The key to sustainable management is to maximize economic values while minimizing environmental burdens. Therefore, it is appropriate to use indicators that are created by environmental burden related indicators and management related indicators (turnover, production, total floor area, etc.) for evaluation. The actual indicators are:

[1] Environmental burdens per unit product/service value (environmental burden concentration degree)
 (Evemple) A mount of greenhouse gas evenueted per turnover unit (t/wen)

(Example) Amount of greenhouse gas exhausted per turnover unit (t/yen)

[2] Product/service per environmental burden unit (environmental efficiency (ecoefficiency))

(Example) Production of products/services per substance input amount unit (t/t)

VI. Environmental Performance Indicators

<u>1. Common core indicators</u> See the attached table.

2. Industry-specific indicators (Indicators whose importance varies according to the industry such as harmful substance input amount, amounts of Sox, Nox, and COD emitted, energy efficiency related to the products, and recovery/recycling of used products)

Attachment

Organization and classification of environmental performance indicators and common core indicators

			Environmental burdens within	Environmental burdens at
			business areas (Area where	downstream and upstream (Area
			businesses can manage direct	where businesses can manage indirect
			influences on the environment)	influences on the environment)
Indicators related	Input	Materials	Total input of materials	Indicators for Green Purchasing etc,
to environmental				according to the characteristics of
burdens				products and services purchased
(Operational		Energy	Total energy consumption	
Performance		Water	Amount of water used	
Indicator	Output	Air	Amount of greenhouse gases and	
(OPI))			ozone depleting substances	
			released	
		Water/soil	Total amount of drainage	
		Wastes	Total amount of disposal,	
			Amount reused and recycled,	
			Amount of final disposal, etc	
		Products/services	Amount of mult disposal, etc	Indicators for environmental burdens
		1 Toddets/ services		according to the characteristics of
				products/services e.g., Energy
				consumption rate of each product
				group, Amount of product used,
				containers and packaging collected.
			-	n, CO_2 emissions resulting from
			transportation	
	Cumulat	ive soil contamination	(Stock pollution)	
	Land utilization			
	Other en	vironmental risks	[
Indicators related to environmental management E			Environmental Management Systems, Design for the Environment,	
(Management Performance Indicators (MPI))			Environmental Accounting, Disclosure of information, communication,	
			Compliance with regulations, social contributions	

(Example) Total amount of disposed materials such as waste products (Unit: t)

••••For the calculation, the business is to add all the amounts disposed and delivered

outside of the premises (outside of the management) except those that are delivered as products. Secondary substances obtained by business activities in addition to waste products shall be included in the calculation. Building materials that are disposed of as a result of renovation or demolition of facilities or equipment shall be separated from other wastes.