

Environmental Glossary

■ Glossary of Terms Used in This Report

Term	Definition	Term	Definition
Alternative refrigerants	Alternative refrigerants such as hydrofluorocarbons (HFCs) were developed to replace chloro-fluorocarbon (CFCs) based refrigerants, which cause ozone layer depletion. Toyota Industries uses the alternative refrigerant HFC-134a, which has now also been identified as contributing to global warming.	ISO 14001	International standard for environmental management systems. Utilizes a Plan, Do, Check, Action (PDCA) cycle to improve environmental activities.
Automobile Recycling Law	Japanese law that stipulates the recycling of end-of-life vehicles.	Lead-free	Absence of lead from products and parts.
Biological Oxygen Demand (BOD)	Demand for oxygen produced by pollutants suspended in water necessary for the pollutants to be broken down by microorganisms. The BOD factor indicates the level of water pollution caused by organic substances.	Life cycle assessment (LCA)	Assessment of the total environmental impact of a product starting with the raw materials and extending to the manufacturing, transport, product use and product disposal. Life cycle assessments are conducted by measuring the substances consumed at each stage of the product life cycle.
Chemical Oxygen Demand (COD)	Amount of oxygen required to break down organic substances suspended in water, using a chemical such as an oxidizing agent or potassium permanganate. The COD factor indicates the level of organic pollution caused in lakes, rivers and oceans.	Nitrous Oxides (NOx)	Compounds consisting of nitrogen and oxygen. NOx are produced during incineration of petroleum and coal. NOx are a cause of air pollution and acid rain.
Chlorofluorocarbons (CFCs)	Production and use of chlorofluorocarbons has been banned since 1995 due to their contribution to ozone layer depletion.	Occupational safety and health management system	Management system that utilizes a Plan, Do, Check, Act (PDCA) cycle to manage the safety and health of employees.
Cogeneration system	System that uses gas turbines and engines to generate electricity, while simultaneously utilizing heat generation to supply hot water and fuel.	Pollutant Release and Transfer Register (PRTR)	System in which chemical substances that are harmful to persons or ecosystems are tracked by producers to determine the level of release into the environment, or the amount transferred to other locations as part of industrial waste. The data are submitted to government authorities, which track the total emissions and transfer of pollutants. PRTR data are made available to the public by government authorities. Japan's PRTR Law was passed in July 1999.
Endocrine disruptors	Substances that have been discovered to have a detrimental effect to the human body and animals. PCBs and dioxins have been identified as endocrine disruptors, although little is known about the mechanism by which they affect humans and animals.	Risk management	Risk management is used to forecast accidents and risks in order to establish appropriate countermeasures and systems for dealing with accidents. Examples of risk management include measures designed to prevent global pollution caused by substances of concern.
End-of-life vehicle (ELV) directive	Directive issued by the European Union that mandates the reduced use of substances of concern and improved recyclability for end-of-life vehicles.	Sulfur oxides (SOx)	Sulfur oxides are produced during boiler and other incineration of fuel sources that contain sulfur. SOx are a cause of air pollution and acid rain.
Eutrophication	Release of substances containing nitrogen and phosphorous into lakes and rivers from household wastewater and industrial wastewater, leading to the multiplication of plankton and microbes that affect water quality.	Suspended solid (SS) concentration	Concentration of a substance suspended in water. Higher SS concentrations equate to poor water quality.
Functional unit	Reference unit for measuring the quantified performance based on a unit of measurement such as the number of units manufactured or net sales. Used to measure environmental factors such as energy consumption, water consumption and VOC emissions.	Sustainability	Concept of achieving growth and development of society without sacrificing the lifestyle standards of future generations.
Green procurement, green purchasing	Green procurement and green purchasing refer to the prioritized purchase of products and services that have less impact on the environment. Relevant legislation in Japan includes the Law on Promoting Green Purchasing, which was passed in 2000. At Toyota Industries, "green procurement" is used to refer to the procurement of raw materials and other items used to manufacture products. Purchasing of stationary and other office-related products is separately referred to as "green purchasing."	Volatile Organic Compounds (VOCs)	Refers to chemical substances found in paint and other solvents.
		Zero emissions of landfill waste	Defined by Toyota Industries as a 95% or greater reduction in direct landfill waste compared with FY 1998 levels, and a greater reduction in indirect landfill waste compared with FY 1999 levels.

■ Definitions of Environmental Conservation Costs (see p.13)

Environmental Conservation Categories		Definition
Business area costs	Pollution prevention	Investments and costs incurred by the construction of facilities and other measures aimed at preventing the seven typical types of pollution: air pollution, water contamination, soil contamination, noise pollution, vibration, land subsidence and foul odors.
	Global environmental conservation	Investments and costs incurred by measures dealing with global-scale environmental issues such as global warming and ozone layer depletion.
	Resource recycling	Costs incurred by equipment investments and other measures aimed at resource recycling.
Upstream/downstream costs		Investments and costs incurred by measures aimed at reducing the upstream and downstream environmental impact of the company's business activities.
Management costs		Costs incurred by indirect measures such as those aimed at reducing environmental impact. Examples include community dialog activities and environmental PR activities.
R&D costs		Investments and costs incurred by research and development conducted so that the company can provide environmentally friendly products to its customers.
Social activity costs		Costs incurred by environmental activities taking place in the community, which are not directly related to the company's business activities.
Environmental damage costs		Investments and costs incurred by countermeasures aimed at addressing damage caused to the environment.

■ Definitions for Industrial Waste and Zero Emissions (p.34-35)

		Waste Processing Category				
		Landfill Waste		Recycling		
		Direct	Indirect			
Waste	Waste that requires costs on disposal	Industrial waste	Waste produced from business activities	A	B	C
		Non-industrial waste	Other waste not categorized as industrial waste (including paper scraps, wood scraps and waste plastic producer from non-business activities)		D	E
Reusable materials	Waste materials that yield gain on disposal				F	

- A+B+C=Industrial waste generated (managed using targets set by Environmental Action Plan)
- A+B=Final disposal of industrial waste
- $\frac{C}{A+B+C}$ =Recycling rate
- Zero emissions of direct landfill waste: 95% or greater reduction in direct landfill waste (A) compared with FY 1998 levels
- Zero emissions of indirect landfill waste: 95% or greater reduction in indirect landfill waste (B) compared with FY 1999 levels