



Environmental Report

2016

Denyo
 **Denyo Co., Ltd.**

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Editorial Statement

Information Disclosure

Denyo Co., Ltd. will use the media shown below to disclose information to all stakeholders about its environmental initiatives aimed at delivering a sustainable society.

【Annual Environmental Report】

<http://www.denyco.co.jp>



Reporting Period

Fiscal 2016 (April 2015 to March 2016) and for some content, the periods before and after.

Publication Date

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Guidelines

Environmental Reporting Guidelines (2012), Ministry of the Environment

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Disclaimer

This Environmental Report may contain predictions or forecasts about the future. Actual results may vary from forecasts due to a variety of factors.

Management

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Management

Message from the President

Frequent natural disasters have struck many parts of the world in recent years. One of the significant factors in such phenomena is global warming. Reports state that an increase of one degree in the average global temperature raises the risk of extreme weather, such as torrential rain, and an increase of two degrees raises the number of species that will become extinct due to their inability to cope with these environmental changes.

To prevent such progress of global warming, society as a whole must urgently reduce greenhouse gases and protect the forests.

Given this situation, the roles of companies, as members of society, continue to expand. In response, the Denyo Group is working to increase its eco-friendly products such as those equipped with an automatic engine stop system to reduce CO2 emissions and products with an environmentally friendly base that minimizes oil spillage outside the product in the event of oil leakage. We have also been installing energy-efficient facilities especially at our production and development bases and are actively promoting efforts to reduce CO2 and waste materials through 3R activities, tree planting, and other initiatives.

All members of the Denyo Group will continue to earnestly address environmental issues to preserve our precious plant Earth in a safe condition for the future and contribute to building a rich society.



Shoichi Shiratori,
President
Denyo Co., Ltd.

A handwritten signature in black ink that reads "S. Shiratori".

October 2016

Management

Environmental Philosophy

As well as contributing to social infrastructure upgrades worldwide through our power source products, Denyo is profoundly aware of its corporate social responsibility to conserve the environment, and tirelessly promotes environmentally sound business activities.



Environmental Policies

1. In our business activities, we strive to prevent pollution and to promote eco-friendly products while seeking ways to maintain a healthy environment by conserving materials and energy, cutting back on solid waste, and reducing odors and noise.
2. We comply with environmental regulations and other agreed requirements, and we respect related demands from society.
3. As well as building a system of management to engage with environmental conservation and finding ways to make continual improvements, we set environmental goals and targets, and improve environmental performance by carrying out reviews.
4. As well as documenting the environmental policies to inform employees and everyone who works on behalf of the company, we disclose the information in the public domain.

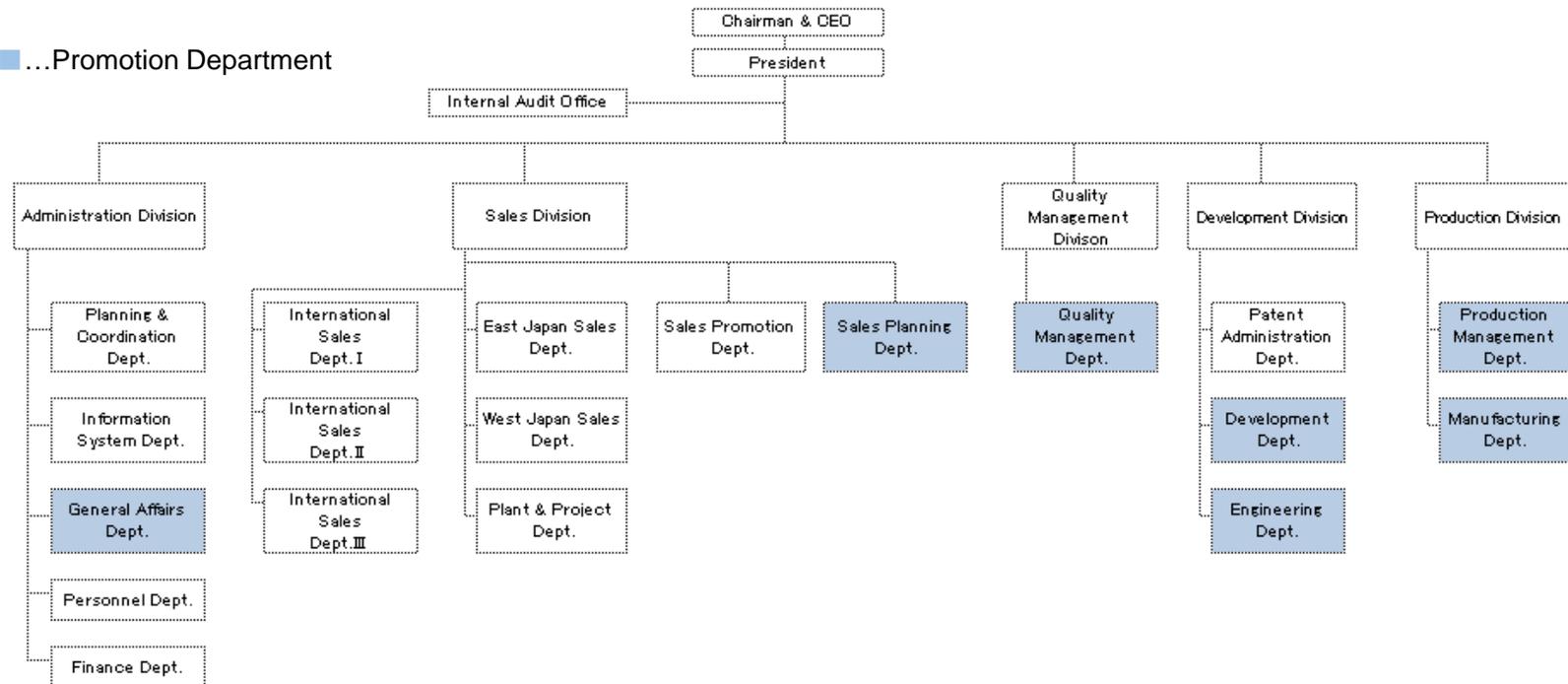
Management

Environmental Management Structure

Promotion System

Denyo is carrying out promotion activities aimed at reducing the total environmental impact by the following promotion Dept. intensively.

...Promotion Department



ISO14001 Certification

We obtained ISO14001:2004 certification for our environmental management systems on October 19, 2006. And one of the Denyo group companies, Denyo Vietnam Co., Ltd. also obtained ISO9001, ISO14001 this time. We control CO2 emissions by conserving resources and energy. Through our business, we also carry out activities aimed at reducing the total environmental impact.

Management

Environmental Targets and Achievements

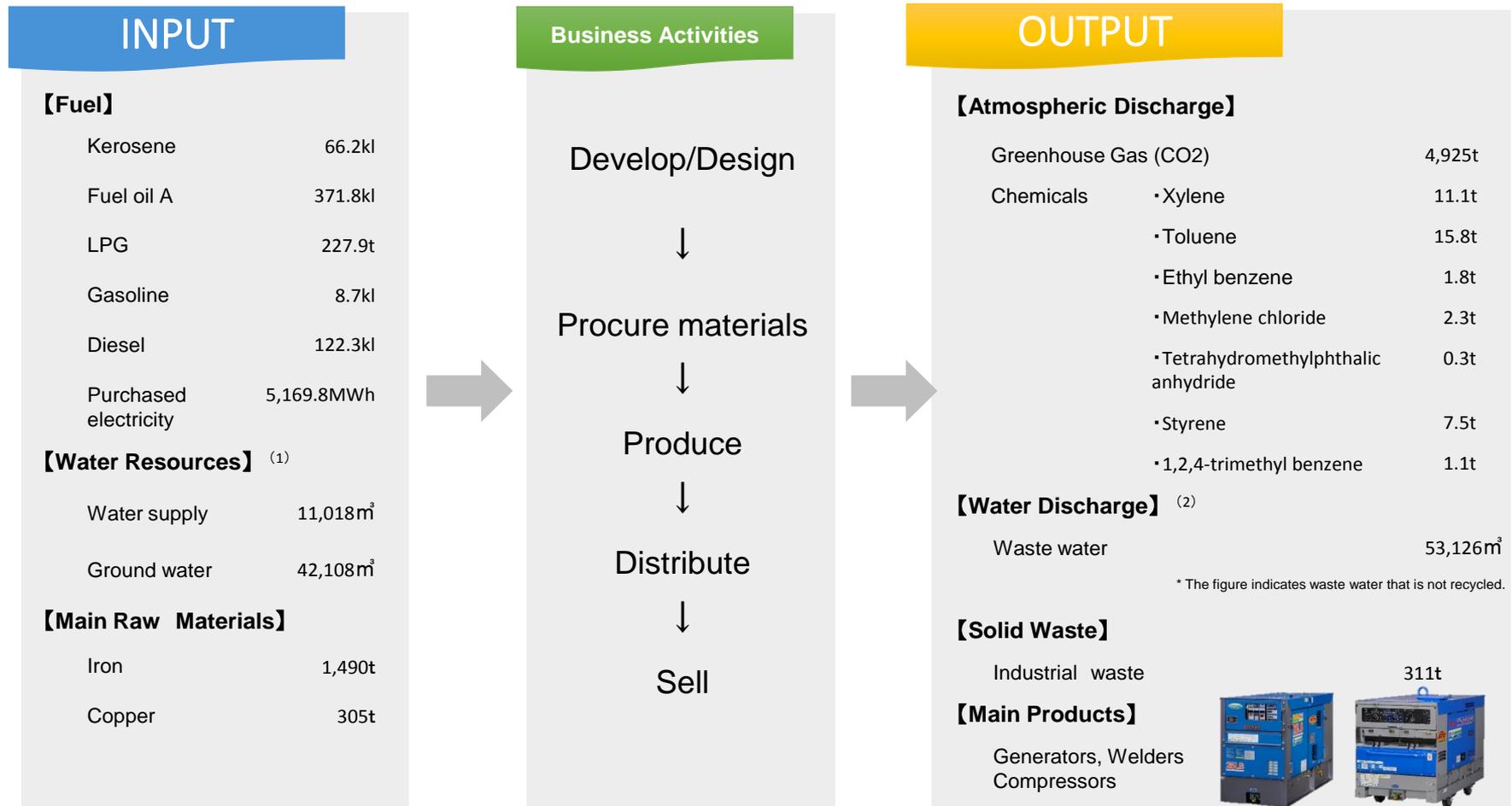
To implement environmental management, we set targets for each financial year and carry out evaluations from time to time.

Item	FY2016 Target	FY2016 Achievements	FY2017 Target
Develop products with high environmental performance	We will develop eco-friendly products.	We developed the products that standardly equipped with an environmentally friendly base and idling stop function.	We will develop eco-friendly products.
Formation of a recycling-based society	By the end of FY2016, we will cut the volume of industrial waste per output by at least 10% compared to FY2012 levels.	-14.9% year-on-year reduction in discharge volume compared to FY2012 levels -21.3% year-on-year reduction per output compared to FY2012 levels	By the end of FY2017, we will cut the volume of industrial waste per output by at least 15% compared to FY2012 levels.
	By the end of FY2016, we will cut the volume of crude oil equivalent energy used per output by at least 25% compared to FY2012 levels	-20.5% year-on-year reduction in consumption volume compared to FY2012 levels -26.7% year-on-year reduction per output compared to FY2012 levels	By the end of FY2017, we will cut the volume of crude oil equivalent energy used per output by at least 30% compared to FY2012 levels.
Contribute to society	Enhance maintenance in green belts adjoining the areas around our business facilities.	-We carried out the cleaning activities around the Fukui Plants and did deadwood felling, plants pruning, etc. -We participated in the cleanup work organized by the local industrial association and carried out a tree-planting work in Shiga Plants. - The Development Department cleaned and mowed surrounding the Laboratory & Training Center.	Enhance maintenance in green belts adjoining the areas around our business facilities.

Management

Environmental Impact Overview

At Denyo, we understand the material input for our business activities and we endeavor to reduce the environmental impact.



* The figure indicates waste water that is not recycled.



N.B.
(1) and (2) are totals for the Fukui and Shiga Plants.

Eco-Friendly Products

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Engine Compressor with Environmentally friendly Base
Lithium-ion Battery Welder



Eco-Friendly Products

Developing Products with High Environmental Performance

● Engine Compressor with Environmentally friendly Base

An engine compressor is a power source that is indispensable in civil engineering and construction sites that require a supply of compressed air. We are working to increase the engine compressor models equipped with an environmentally friendly base.

With the environmentally friendly base integrated into the main unit of the compressor, the product minimizes fuel or engine oil spillage outside of the product in the event of leakage by collecting the leaked fuel or oil in the environmentally friendly base at the bottom of the main unit. It can be easily used even in locations such as riversides or ports where installation standard is strict.

DIS-60LBE has an environmentally friendly base, yet is extremely lightweight with a dressed engine mass of 330 kg, which allows for transportation on a light truck. It is also environmentally friendly in the sense that it reduces the CO2 emissions associated with its transportation.



DIS-60LBE

● Lithium-ion Battery Welder

Battery welders are environmentally friendly products that allow for indoor use without discharging exhaust gases and without creating stress in the surrounding area by making engine sounds. We have mounted lithium-ion batteries to the battery welders to create a new line, BDW-150Li, with a higher environmental performance.

The use of lithium-ion batteries extends the battery life to more than seven times the life of lead batteries, achieving only 10% degradation of the batteries, even after repeated charges and discharges 4,500 times. This reduces not only the replacement work, but also the amount of used batteries that become waste materials.



BDW-150Li

Eco-Friendly Production

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Eco-Friendly Production

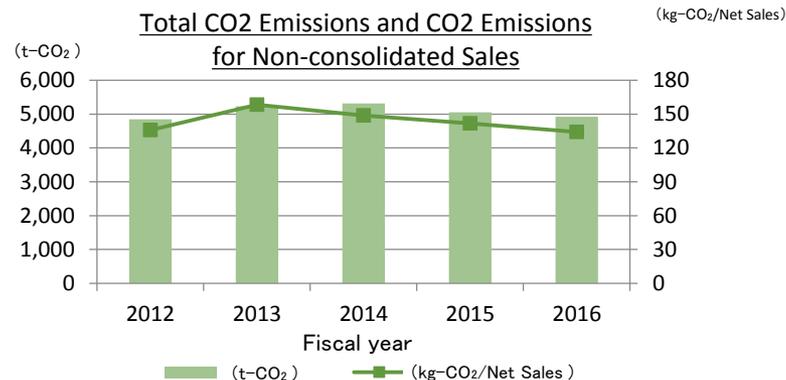
Global Warming Prevention

● Reduce CO2 Emissions

Denyo endeavors to prevent global warming through initiatives to reduce CO2 emissions due to business activities. CO2 emissions in FY2016 were 4,925 tons, an increase of 1.5% from the FY2012 levels. After the Great East Japan Earthquake, the conversion coefficients to CO2 emission increased along with the increase in consumption of thermal power generation, numeric value has worsened compared to FY2012, but power consumption before conversion to CO2 emissions coefficients decreased 16.9% from the FY2012 levels. The amount of the consumption of fuels also decreased 19.8% from the FY2012 levels. We will continue to implement initiatives to cut CO2 emissions during FY2017.

	Power consumption (thousand kWh)	Fuel consumption (GJ)	CO2 emission after conversion (t)	CO2 emissions/ Non-consolidated sales (kg)
FY2016	5,169.8	33,466.9	4,925	134.2
FY2012	6,224.3	41,736.6	4,850	135.9
Change from FY2012	△ 16.9 %	△ 19.8 %	1.5 %	△ 1.3 %

※Net sales is Denyo Non-consolidated Sales



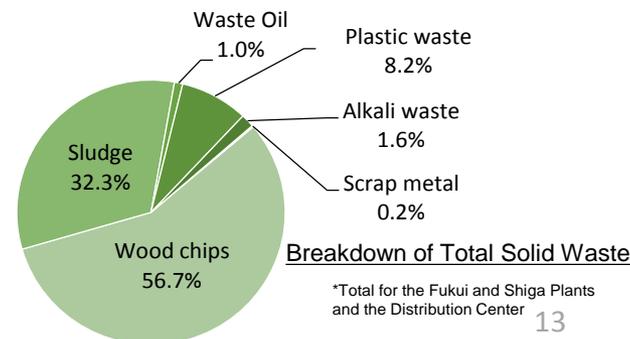
Formation of a Recycling-based Society

● Reduce Solid Waste

We manage and process solid waste appropriately and in compliance with all laws and ordinances.

In FY2016, we discharged about 311 tons of industrial waste, down by 21.3% per output compared to the FY2012 levels, which is far above the target.

We are also working toward to implement initiatives to reduce a certain amount or more of Solid Waste stably.



Eco-Friendly Production

Managing Chemicals

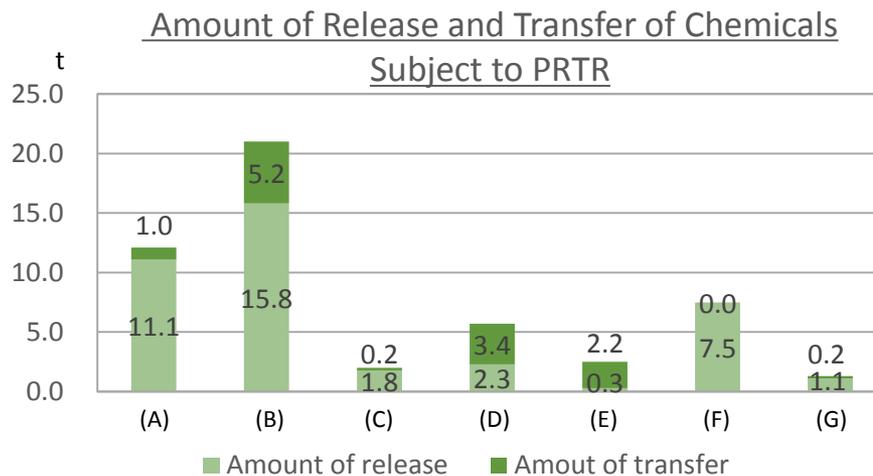
Managing Chemicals Subject to PRTR

Based on the PRTR Law, we compile and release data on chemicals subject to the PRTR including amounts released into the environment or transferred as solid waste.

*A Pollutant Release and Transfer Register (PRTR) is a system for compiling and disclosing data on hazardous chemical substances including their sources, how much is released into the environment or transferred off-site with solid waste.

Substance	Amount released to the atmosphere	Amount of transfer
(A) Xylene	11.1	1.0
(B) Toluene	15.8	5.2
(C) Ethyl benzene	1.8	0.2
(D) Methylene chloride	2.3	3.4
(E) Tetrahydromethyl phtalic anhydride	0.3	2.2
(F) Styrene	7.5	0.0
(G) 1,2,4-trimethylbenzene	1.1	0.2

(Unit: t)



Topics

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Topics

Environmental Measures for Production Base

● Green (Plant) Curtains

At the Fukui Plant, we create green curtains (curtains made of plants). A green curtain blocks the strong summer sunlight and reflects the infrared rays that cause heat, which helps to maintain a low temperature inside.

The plants also remove the heat from the surrounding air by dispersing the water ingested by the roots and stored in the stems from the leaves, which helps to reduce the use of air-cooling facilities such as air-conditioners. Green curtains are visually refreshing and prevent heat accumulation in the walls of the building, which also helps to ease the heat island effect. From next year, we will expand the areas covered with green curtains as part of our increased energy-saving efforts.



Green curtains made of bitter melons



● Cherry Tree Planting Activities

At the Shiga Plant, we planted cherry trees on the premises, which already flowered with beautiful blossoms in the spring of this year. We will expand the tree-planting areas this year and carefully nurture the plants for the local residents to enjoy. The Denyo Group will continue to actively plant trees and other greenery and do cleaning activities to maintain the work environment.

Topics

Community Contribution Activities

- Visit by Students from Mikata Junior High School, Wakasa, Fukui Prefecture

Students from Mikata Junior High School in the town of Wakasa, where our Fukui Plant is located, visited our Tokyo head office as part of their company visit program. They exchanged opinions with our employees from Wakasa about what they could do to improve Wakasa's future and protect the town's beautiful nature. Encouraged by the variety of ideas provided by the junior high school students who will lead future generations, we are committed to continuing business activities that are in harmony with the environment in an effort to contribute to further growth while protecting the nature of Wakasa, home to our production base.



- Other Community Contribution Activities



Workplace tours by high school students in Fukui Prefecture



Blood donation activity

Developing Technology Tomorrow's Power Needs.

Denyo[®]

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