

Summary of Environmental Activities in Fiscal 2017

Summary of Fiscal 2017 Results

Kawasaki has formulated and started implementation of its Ninth Environmental Management Activities Plan, which runs from fiscal 2017 to fiscal 2019. This plan emphasizes sustained efforts to integrate business management and environmental management, which were priorities under the Eighth Environmental Management Activities Plan. In addition, we have positioned as new key aspects a response to procurement diversification accompanying liberalization of energy supply in Japan, compliance with country emissions targets* set at the 21st Conference of Parties (COP) under the United Nations Framework Convention on Climate Change, and efforts to ensure appropriate disclosure and transparency in providing environmental information to institutional investors, corporate assessment organizations and other performance-tracking groups. Toward achieving Environmental Vision 2020, we will tackle key strategies related to four issues—(1) CO₂ and energy cost reduction, (2) promotion of the 3Rs, (3) reduction of environmental load/promotion of resource conservation, and (4) enhancement of the Kawasaki Group environmental management system—and strive to heighten awareness as an environmentally friendly brand.

Key Strategies	Ninth Environmental Management Activities Plan (FY2017–FY2019)	Fiscal 2017		Page Number	
		Targets	Results		
Realization of a low-carbon society CO ₂ and energy cost reduction	1. Reduce resource and energy costs, mainly through wider application of energy visualization system	Target Reduce annual resource and energy costs by at least 5%	Reduce annual resource and energy costs by at least 5%	Reduced resource and energy costs by 7.1%, achieving the target.	P.11
	2. Reduce CO₂ emissions	Target Reduce CO ₂ emissions per unit of sales by at least 3% year on year	Reduce CO ₂ emissions per unit of sales* ¹ by 3% year on year (previous fiscal year: 28.7t-CO ₂ /100 million yen)	CO ₂ emissions per unit of sales amounted to 28.6t-CO ₂ /100 million yen; the target was not achieved.	
	3. Reduce CO₂ emissions through product-based contributions	Target Identify CO ₂ emission reduction effect through product-based contributions and disclose to public	Disclose CO ₂ emission reduction effect through product-based contributions	The CO ₂ emission reduction effect through product-based contributions was 898,000t-CO ₂ . This information was disclosed in the Kawasaki Report and the Environmental Report.	
Realization of a recycling-oriented society Promotion of the 3Rs	1. Reduce total waste generation and maintain zero emission status	Target Reduce total waste generation per unit of sales by at least 1% from level achieved under the Eighth Plan, and push final disposal ratio below 1%	Reduce total waste generation per unit of sales* ¹ by at least 1% from the average achieved under the Eighth Plan (4.65t/100 million yen), and push final disposal (landfill) ratio below 1%	Total waste generation per unit of sales amounted to 4.36t/100 million yen, achieving the target. The final disposal (landfill) ratio was 0.2%, achieving the target.	P.16
	2. Promote reuse and recycling	Target Boost recycling rate above 98%	Boost recycling rate above 98%	The recycling rate reached 98%, achieving the target.	
	3. Promote PCB treatment	Target Systematically treat high- and low-concentration PCB waste	Systematically treat high- and low-concentration PCB waste	The processing of high- and low-concentration PCB waste progressed to 79%, on a disposal cost basis.	
Realization of a society coexisting with nature Reduction of environmental load/promotion of resource conservation	1. Reduce chemical substances	Target Reduce major VOCs* ² per unit of sales by at least 1% from level achieved under the Eighth Plan Cut dichloromethane by at least 1% year on year Strive to reduce hexavalent chromium to zero, in principle, by fiscal 2021	Reduce major VOCs per unit of sales* ¹ by at least 1% from the average achieved under the Eighth Plan (81.6kg/100 million yen) Cut dichloromethane by at least 1% year on year (previous fiscal year: 39t) Reduce hexavalent chromium to zero, in principle, by fiscal 2021	Major VOCs per unit of sales amounted to 72.9kg/100 million yen, achieving the target. Dichloromethane was at 47t; the target was not achieved. The reduction of hexavalent chromium progressed.	P.18
	2. Conserve water	Target Reduce annual consumption of water per unit of sales by at least 1% Track cost effect of measures to conserve tap water and prevent leaks from clean-water pipes	Reduce consumption of water per unit of sales* ¹ by at least 1% year on year (previous fiscal year: 0.508 thousand m ³ /100 million yen)	The consumption of water per unit of sales was 0.520 thousand m ³ /100 million yen; the target was not achieved.	
	3. Conduct forest conservation activities	Target Carry out forest conservation activities at least twice a year	Carry out forest conservation activities at least twice a year	Activities were undertaken a total of four times in Hyogo and Kochi prefectures, achieving the target.	
Establishment of environmental management systems Enhancement of the Kawasaki Group environmental management system	1. Reinforce environmental management capabilities and lower environmental risk	Target Certified business sites to complete transition to ISO 14001:2015 Visit domestic and overseas production sites to better pinpoint status of environmental management	Promote the transition to ISO 14001:2015 at certified business sites Pinpoint status of environmental management at domestic and overseas production sites	Transition was completed at Precision Machinery Company and Ship & Offshore Structure Company. Preparations are under way at other business segments for a renewal audit in fiscal 2018. Visited four companies with high CO ₂ emissions among domestic subsidiaries and began studying Group-wide targets. Studies are scheduled to begin at overseas subsidiaries in fiscal 2018.	P.23
Heightened awareness environmental image Heightened awareness as an environmentally friendly brand	1. Leverage Kawasaki Green Product Promotion Activity	Target Register Kawasaki-brand Green Products every year and release data to public	Register Kawasaki-brand Green Products and release data to public	Assessed and registered 10 new products in 2017, and released the data in the Kawasaki Report and the Environmental Report.	P.28
	2. Enhance image through external evaluations and rankings	Target Announce results of third-party verification, improve evaluations from external organizations such as CDP, and sustain placement in Dow Jones Sustainability Index	Receive third-party verification on environmental data Improve evaluations under such schemes as CDP, and sustain placement in Dow Jones Sustainability Index	Received and announced third-party verification on greenhouse gas emissions. Received a "B" rating (management level) in CDP evaluation, and sustained placement in Dow Jones Sustainability Index.	

*1 Net sales of Kawasaki used as the denominator in "per unit of sales."

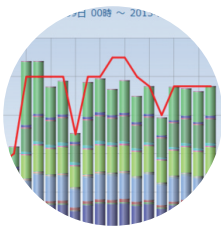
*2 Main VOCs: For the Kawasaki Group, the major VOCs are toluene, xylene and ethylbenzene. VOCs: Volatile Organic Compounds

*National CO₂ emissions reduction target
COP21 (held December 2015 in Paris, France)
..... Targeting 26% reduction from fiscal 2014
level by fiscal 2031

Group Mission

“Kawasaki, working as one for the good of the planet”

Target Profile of the Kawasaki Group in 2020



- **Energy consumption and CO₂ emissions**
Major reductions achieved
- **Contribution from products**
Major reductions achieved in CO₂ emissions during utilization



- **3Rs**
Major reductions achieved per unit of sales
Recycling rate of more than 97%
Zero emissions maintained
- **PCB treatment**
All treatment completed



- **Major VOCs**
Major reductions achieved per unit of sales or in total amount
- **Heavy metals**
Major reduction in amount utilized
- **Forest conservation activity**
Forest conservation activity continued



- **Establishment of EMS**
Establishment completed across the Kawasaki Group as a whole



- **Heightened awareness as an environmentally friendly brand**
Information distributed externally regarding Kawasaki-brand Green Products
Environmental information disclosed

Environmental Vision 2020

Realization of a low-carbon society

Contribute to the prevention of global warming through our products and manufacturing that use energy without waste

- ① Reduce 2020 greenhouse gas emissions in line with national targets
- ② Offer customers energy-efficient products and services, and reduce emissions of greenhouse gases on a planetary scale
- ③ Promote energy conservation in production and logistics processes, and reduce emissions of greenhouse gases

Realization of a recycling-oriented society

Engage in manufacturing that uses resources without waste to recycle and fully utilize limited resources

- ① Practice design that uses resources effectively, and work to make products lighter, more durable and more recyclable
- ② Practice the 3Rs (reduce, reuse and recycle of waste) in production activities, and achieve zero emissions at all plants
- ③ Completely and appropriately treat all PCB waste and PCB-containing devices

Realization of a society coexisting with nature

Contribute to reduction of the environmental impact and conservation of the ecosystem through manufacturing that is in harmony with the global environment

- ① Offer customers products and services that prevent air and water pollution, and advance environment improvements and ecosystem protection
- ② Reduce the use of chemical substances in products and production activities
- ③ Cooperate in regional forest conservation and other activities to protect the environment of ecosystems

Establishment of environmental management systems

Build a foundation for environmental management that will achieve the Environmental Vision 2020

- ① Establish EMS at all consolidated subsidiaries in Japan and overseas to promote environmental management Group-wide
- ② Comply with environmental laws and regulations, and regularly follow up on compliance status
- ③ Communicate environmental data within and beyond the Group, and maintain two-way dialogue while protecting the environment

Material Balance of Business Activities for Fiscal 2017 (Overall Picture of the Environmental Impact)

Kawasaki has drawn up a summary of the impact of our business activities on the environment during fiscal 2017.

Compared with fiscal 2016, energy consumption, materials, and water, which are inputs, all increased. In terms of outputs, although there was a decrease in air pollution and waste, the amount of wastewater increased.

Furthermore, compared with the average for fiscal 2014 to fiscal 2016, which is the period of the Eighth Environmental Management Activities Plan, although inputs increased, there was a reduction in the outputs of SOx and NOx emissions and wastewater.

