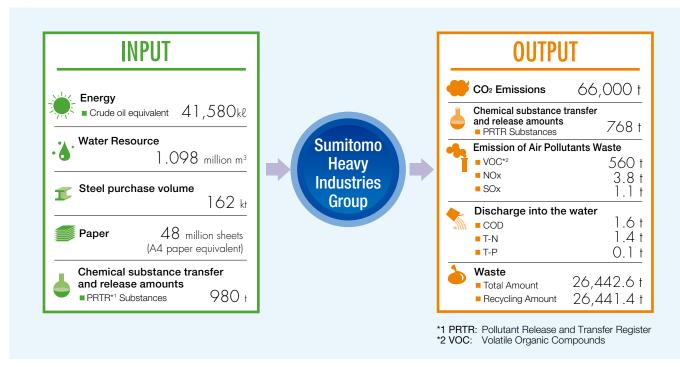
Environmental Objectives (Medium-Term Plan) and Results

We formulated the fourth medium-term environmental plan, for which FY2016 was the final year, and worked to reduce environmental impact.

Overall view of the FY2014 environmental impact (Sumitomo Heavy Industries Group, domestic)



Environmental Accounting for FY2014

Active Investment in Administration and Maintenance of ISO 14001 Standards

As a yardstick for measuring the investment, expenditure and effect of environmental protection, we have conducted environmental accounting in accordance with the Environmental Accounting Guidelines, 2005, issued by the Ministry of the Environment.

										Unit: million yen	
Costs for environment protection									Effectiveness of environmental protection		
Category		Details of the main activities and the effects		Investment amount		Costs		Economic effect		Main content	
				2013	2014	2013	2014	2013	2014	main content	
(1) Costs within Business Areas (Sites)		Maintenance and amortization of environmen reduction equipment and facilities	ntal impact	286	435	599	732	248	205		
Breakdown	(1) - 1 Costs for Preventing Pollution	Maintenance management of facilities for pre air pollution and water pollution and measure noise and vibration of facilities		83	157	181	198	0	0		
	(1) - 2 Costs for Global Environment Protection	Investment in energy-saving measures (electr power monitoring, energy-saving equipment, upgrades, etc.)		195	234	29	59	-11	-47	Cost reduction with introduction of energy conservation, natural energy	
	(1) - 3 Resource Recycling Costs	Investment in waste material reduction and recycling (recycling, reuse)	8	44	389	475	0	0	Reducing landfill by separating rubbish, cost reduction by cutting back on waste		
							259	252	Proceeds from sale of valuables, etc.		
(2) Upstream and Downstream Costs		Reduction of product packaging material, recappliances, use of reverse side of paper	cycling of	1	2	7	6				
(3) Management Activity Costs		Administration and maintenance of ISO 14001 standards, expansion of green areas		17	18	192	1,230				
(4) Research and Development Costs		Research and development to reduce the environmental impact of products, research and development of environmental equipment		717	1,873	557	852				
(5) Social Activity Costs		Local environmental protection and greening activities		0	0	1	1				
(6) Cost of dealing with environmental damage		Levies on air pollution loads; share of green belts and pollution compensation		0	0	0	0				
			Total	1,021	2,328	1,357	2,821	248	205		

Environmental Objectives (Medium-Term Plan) and Results

General Overview of Fiscal Year 2014 Activities and the 4th Medium-Term Environmental Plan (2014-2016)

Targets Achieved in All 18 Items

We promoted the 4th Medium-Term Environmental Plan (FY2014-2016), for which fiscal year 2016 is the final target year. The fiscal year 2014 targets under the 4th Medium-Term Environmental Plan (FY2014-2016) and the status of achievement of fiscal year 2014 activities are shown below.

		Ath Madium Torm Environmental Dise		eved $ riangle$ Achieved by 90% or more $ imes$ Achieved by let	ss than 90%
Index	Item	4th Medium-Term Environmental Plan (2014-2016)	Targets in FY2014	Achievements in FY2014	Evaluation
Environmental Management	 Zero environmental accidents (legal violations) 	Continue zero environmental accidents (legal violations) Expand environmental risk assessments in Japan and to other countries	 Continue zero environmental accidents (legal violations) Expand environmental risk assessments in Japan and to other countries 	Continuing achieving zero environmental accidents (legal violations) Expanding environmental risk assessments in Japan and to other countries	0
	 Increase in the number of ISO 14001 certifications 	Total number of factories outside Japan that have acquired certification rises to 17 or more	Total of 14 Group companies outside Japan have acquired certification	 Certification acquired by a total of 16 overseas factories in 15 companies 	0
	③ Expansion of the scope of the Consolidated Environmental Management	 Expand to marketing and service centers outside Japan Expand local guidance by head office and periodic environmental audits to all principal manufacturing bases outside Japan 	 Expand to marketing and service centers outside Japan Expand local guidance by head office and periodic environmental audits to all principal manufacturing bases outside Japan 	 Environmental audits conducted at five factories in China, two in Vietnam, one in Indonesia and two in the United States 	0
Prevention of Global Warming	 Reduction in CO₂ emissions at works and offices 	 In Japan: In FY2016, 32% reduction compared to FY2004 Global (Japan + overseas): 22% reduction compared to FY1990 	In Japan: 30% reduction compared to FY2004 Global (Japan + overseas): 20% reduction compared to FY1990	In Japan: 33% reduction compared to FY2004 Global (Japan + overseas): 25% reduction compared to FY1990	0
	 Improved energy productivity Energy productivity = Net sales/CO₂ emissions 	 In Japan: In FY2016, 10% improvement compared to FY2008 Outside Japan: In FY2016, 3% improvement compared to FY2013 	 In Japan: Improvement by 8% compared to FY2008 Outside Japan: 1% improvement compared to FY2013 	In Japan: Improvement by 16% compared to FY2008 Outside Japan: 6% improvement compared to FY2013	0
	③ Promotion of green logistics (Reduction in CO ₂ emissions during transportation)	By FY2016, 10% reduction per basic unit of transportation against FY2006 benchmark	 8% reduction per basic unit of transportation against FY2006 benchmark 	 12% reduction per basic unit of transportation against FY2006 benchmark 	0
Expansion of	 Expansion in environmentally friendly products 	Number of products certified as environmentally friendly: 23 Annual CO ₂ emissions from product use reduced 15% (Contribution to reduction is equivalent to 270,000 tons annually)	 Number of products certified as environmentally friendly: 19 11% annual reduction in CO₂ emissions from product use 	 Actual number of products certified as environmentally friendly: 19 products 19% annual reduction in CO₂ emissions from product use 	0
Line-up of Environmentally Friendly Products	(2) Promotion of measures for green procurement (purchase of raw materials and components)	Promote green procurement (purchase of raw materials and components)	 Promote green procurement (purchase of raw materials and components) 	Start promotion of green procurement (purchase of raw materials and components)	0
	③ Responding to chemical substance regulations that apply to our products	 Expand operation of system for managing chemical substances 	 Expand operation of system for managing chemical substances 	 Continue operation of system for managing chemical substances 	0
	 Reduction of product packaging material 	10% reduction compared to FY2010 by basic sales unit	 10% reduction compared to FY2010 by basic sales unit 	21% reduction compared to FY2010 by basic sales unit	0
	① Reduction of waste emissions	 In Japan: Generated volume reduced 13% compared to FY2007 3% reduction in both Japan and other countries compared to FY2013 basic unit 	 In Japan: Generated volume reduced 13% compared to FY2007 1% reduction in both Japan and other countries compared to FY2013 basic unit 	In Japan: Generated volume reduced 25% compared to FY2007 In Japan: 6% reduction compared to FY2013 basic unit Outside Japan: 3% reduction compared to FY2013 basic unit	0
Promotion of Resource	② Achievement of zero emissions	 In Japan: Continued by all sites Outside Japan: 95% or higher rate of non- landfill treatment 	 In Japan: Continued by all sites Outside Japan: 93% or higher rate of non-landfill treatment 	 In Japan: Continued by all sites Outside Japan: 97% of non-landfill treatment 	0
Conservation and Recycling	③ Reduction in paper usage	In Japan: Maintenance management (autonomously assigned issues) Outside Japan: 6% reduction compared to FY2013 by basic sales unit	In Japan: Maintenance management (autonomously assigned issues) Outside Japan: 2% reduction compared to FY2013 by basic sales unit	In Japan: Continue maintenance management Outside Japan: 4% reduction compared to FY2013 by basic sales unit	0
	④ Reducing Water Consumption	 In Japan: 40% reduction compared to FY2005, continuing achievement at all sites Outside Japan: 3% reduction compared to FY2013 by basic sales unit 	 In Japan: 35% reduction compared to FY2005, continuing achievement at all sites Outside Japan: 1% reduction compared to FY2013 by basic sales unit 	 In Japan: 43% reduction compared to FY2005, continuing achievement at all sites Outside Japan: 14% reduction compared to FY2013 by basic sales unit 	0
Promotion of Prevention of Environmental Pollution	 Emission control of organochlorine chemicals (Soil Contamination Countermeasures Law, Montreal Protocol) 	Continuing complete abolition of dichloromethane Continuing complete abolition of trichloroethylene Continuing complete abolition of tetrachloroethylene Continuing complete abolition of HCFC-141b and HCFC-225	Continuing complete abolition of dichloromethane Continuing complete abolition of trichloroethylene Continuing complete abolition of tetrachloroethylene Continuing complete abolition of HCFC-141b and HCFC-225	Continuing complete abolition of dichloromethane Continuing complete abolition of trichloroethylene Continuing complete abolition of tetrachloroethylene Continuing complete abolition of HCFC-141b and HCFC-225	0
	 Emission control of substances designated as VOC (Air Pollution Control Law) 	 In Japan: 34% reduction compared to FY2006 Outside Japan: 3% reduction compared to FY2013 by basic sales unit 	 In Japan: 34% reduction compared to FY2006 Outside Japan: 1% reduction compared to FY2013 by basic sales unit 	 In Japan: 43% reduction compared to FY2006 Outside Japan: 25% reduction compared to FY2013 by basic sales unit 	0
	③ Total abolition of equipment that uses PCB	 Make appropriate disposal of equipment with high concentration of PCB after receipt of disposal notice For low concentrations, continue removing and storing in accordance with plans 	 Make appropriate disposal of equipment with high concentration of PCB after receipt of disposal notice For low concentrations, continue removing and storing in accordance with plans 	Make appropriate disposal of equipment with high concentration of PCB after receipt of disposal notice For low concentrations, remove and store in accordance with plans	0
Community Contribution	① Contribute to biodiversity	 Systematic tree planting, greening, and other such activities at each factory Continue making quantitative determination of impact from business activities on biodiversity 	 Systematic tree planting, greening and other such activities at each factory Continue making quantitative determination of impact from business activities on biodiversity 	Systematic tree planting and greening at each factory Make quantitative determination of impact from business activities on biodiversity	0

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