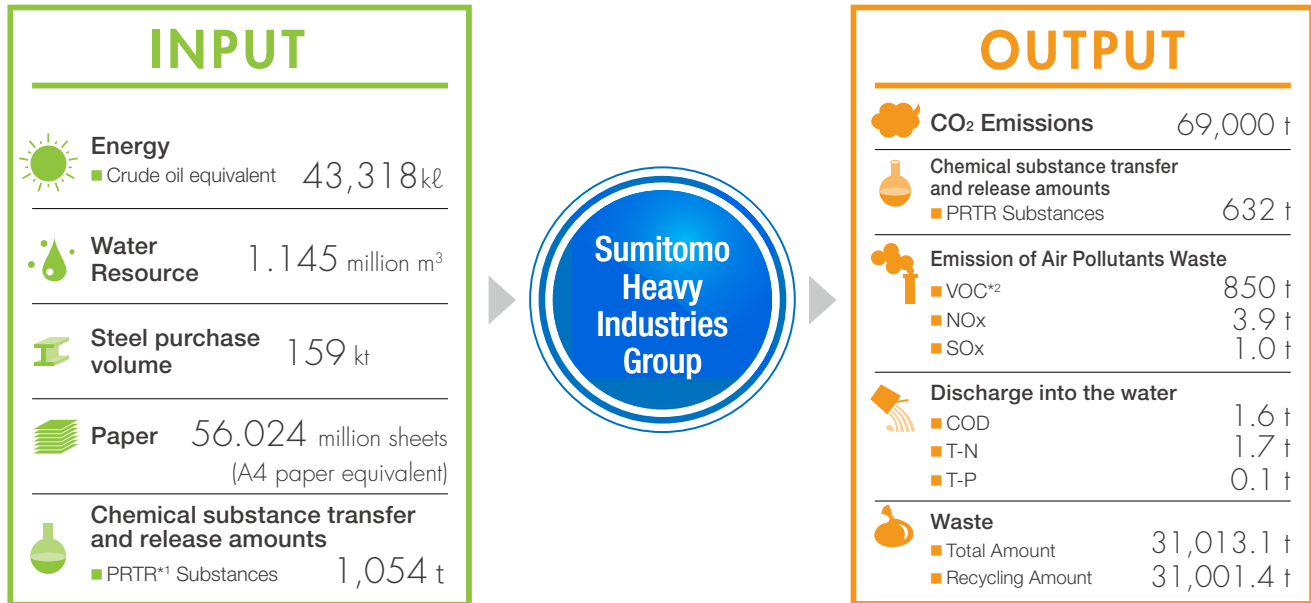


# Environmental Objectives (Medium-Term Plan) and Results

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 FY2015 environmental impact (Sumitomo Heavy Industries Group, domestic)



\*1 PRTR: Pollutant Release and Transfer Register  
\*2 VOC: Volatile Organic Compounds

## Environmental Accounting for FY2015

### 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
		2014	2015	2014	2015	2014	2015	
(1) Costs within Business Areas (Sites)	Maintenance and amortization of environmental impact reduction equipment and facilities	435	457	732	630	205	223	
Breakdown	(1) - 1 Costs for Preventing Pollution	157	59	198	210	0		
	(1) - 2 Costs for Global Environment Protection	234	271	59	58	-47	67	Cost reduction with introduction of energy conservation, natural energy
	(1) - 3 Resource Recycling Costs	44	127	475	363	0		Reducing landfill by separating rubbish, cost reduction by cutting back on waste
						252	156	Proceeds from sale of valuables, etc.
(2) Upstream and Downstream Costs	Reduction of product packaging material, recycling of appliances, use of reverse side of paper	2	2	6	3			
(3) Management Activity Costs	Administration and maintenance of ISO 14001 standards, expansion of green areas	18	4	1,230	825			
(4) Research and Development Costs	Research and development to reduce the environmental impact of products, research and development of environmental equipment	1,873	2,096	852	622			
(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			
	<b>Total</b>	<b>2,328</b>	<b>2,559</b>	<b>2,821</b>	<b>2,081</b>	<b>205</b>	<b>223</b>	

# Environmental Objectives (Medium-Term Plan) and Results

## General Overview of Fiscal Year 2015 Activities and the 4th Medium-Term Environmental Plan (2014-2016)

### Targets Achieved in 15 out of 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 2015 targets under the 4th Medium-Term Environmental Plan (FY2014-2016) and the status of achievement of fiscal year 2015 activities are shown below.

Evaluation: ○ Achieved △ Achieved by 90% or more × Achieved by less than 90%

Index	Item	4th Medium-Term Environmental Plan (2014-2016)	Targets in FY2015	Achievements in FY2015	Evaluation
Environmental Management	① Zero environmental accidents (legal violations)	<ul style="list-style-type: none"> <li>Continue zero environmental accidents (legal violations)</li> <li>Expand environmental risk assessments in Japan and to other countries</li> </ul>	<ul style="list-style-type: none"> <li>Continue zero environmental accidents (legal violations)</li> <li>Expand environmental risk assessments in Japan and to other countries</li> </ul>	<ul style="list-style-type: none"> <li>Continuing achieving zero environmental accidents (legal violations)</li> <li>Expanding environmental risk assessments in Japan and to other countries</li> </ul>	○
	② Increase in the number of ISO 14001 certifications	<ul style="list-style-type: none"> <li>Total number of factories outside Japan that have acquired certification rises to 17 or more</li> </ul>	<ul style="list-style-type: none"> <li>Total number of factories outside Japan that have acquired certification is 15</li> </ul>	<ul style="list-style-type: none"> <li>Certification acquired by a total of 17 overseas factories in 16 companies</li> </ul>	○
	③ Expansion of the scope of the Consolidated Environmental Management	<ul style="list-style-type: none"> <li>Expand to marketing and service centers outside Japan</li> <li>Expand local guidance by head office and periodic environmental audits to all principal manufacturing bases outside Japan</li> </ul>	<ul style="list-style-type: none"> <li>Expand to marketing and service centers outside Japan</li> <li>Expand local guidance by head office and periodic environmental audits to all principal manufacturing bases outside Japan</li> </ul>	<ul style="list-style-type: none"> <li>Environmental audits conducted at two factories in China and two factories in the Philippines</li> </ul>	○
Prevention of Global Warming	① Reduction in CO <sub>2</sub> emissions at works and offices	<ul style="list-style-type: none"> <li>In Japan: In FY2016, 32% reduction compared to FY2004</li> <li>Global (Japan + overseas): 22% reduction compared to FY1990</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: 31% reduction compared to FY2004</li> <li>Global (Japan + overseas): 21% reduction compared to FY1990</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: 29% reduction compared to FY2004</li> <li>Global (Japan + overseas): 25% reduction compared to FY1990</li> </ul>	△
	② Improved energy productivity Energy productivity = Net sales/CO <sub>2</sub> emissions	<ul style="list-style-type: none"> <li>In Japan: In FY2016, 10% improvement compared to FY2008</li> <li>Outside Japan: In FY2016, 3% improvement compared to FY2013</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: Improvement by 9% compared to FY2008</li> <li>Outside Japan: 2% improvement compared to FY2013</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: Improvement by 13% compared to FY2008</li> <li>Outside Japan: 7% improvement compared to FY2013</li> </ul>	○
	③ Promotion of green logistics (Reduction in CO <sub>2</sub> emissions during transportation)	<ul style="list-style-type: none"> <li>By FY2016, 10% reduction per basic unit of transportation against FY2006 benchmark</li> </ul>	<ul style="list-style-type: none"> <li>9% reduction per basic unit of transportation against FY2006 benchmark</li> </ul>	<ul style="list-style-type: none"> <li>12% reduction per basic unit of transportation against FY2006 benchmark</li> </ul>	○
Expansion of Line-up of Environmentally Friendly Products	① Expansion in environmentally friendly products	<ul style="list-style-type: none"> <li>Number of products certified as environmentally friendly: 23</li> <li>15% annual reduction in CO<sub>2</sub> emissions from product use (Contribution to reduction is equivalent to 270,000 tons annually)</li> </ul>	<ul style="list-style-type: none"> <li>Number of products certified as environmentally friendly: 21</li> <li>13% annual reduction in CO<sub>2</sub> emissions from product use</li> </ul>	<ul style="list-style-type: none"> <li>Actual number of products certified as environmentally friendly: 19 products</li> <li>19% annual reduction in CO<sub>2</sub> emissions from product use</li> </ul>	△
	② Promotion of measures for green procurement (purchase of raw materials and components)	<ul style="list-style-type: none"> <li>Promote green procurement (purchase of raw materials and components)</li> </ul>	<ul style="list-style-type: none"> <li>Promote green procurement (purchase of raw materials and components)</li> </ul>	<ul style="list-style-type: none"> <li>Continue promotion of green procurement (purchase of raw materials and components)</li> </ul>	○
	③ Responding to chemical substance regulations that apply to our products	<ul style="list-style-type: none"> <li>Expand operation of system for managing chemical substances</li> </ul>	<ul style="list-style-type: none"> <li>Expand operation of system for managing chemical substances</li> </ul>	<ul style="list-style-type: none"> <li>Continue operation of system for managing chemical substances</li> </ul>	○
	④ Reduction of product packaging material	<ul style="list-style-type: none"> <li>10% reduction compared to FY2010 by basic sales unit</li> </ul>	<ul style="list-style-type: none"> <li>10% reduction compared to FY2010 by basic sales unit</li> </ul>	<ul style="list-style-type: none"> <li>18% reduction compared to FY2010 by basic sales unit</li> </ul>	○
Promotion of Resource Conservation and Recycling	① Reduction of waste emissions	<ul style="list-style-type: none"> <li>In Japan: Generated volume reduced 13% compared to FY2007</li> <li>3% reduction in both Japan and other countries compared to FY2013 basic unit</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: Generated volume reduced 13% compared to FY2007</li> <li>2% reduction in both Japan and other countries compared to FY2013 basic unit</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: Generated volume reduced 8% compared to FY2007</li> <li>In Japan: 12% increase compared to FY2013 basic unit</li> <li>Outside Japan: 3% increase compared to FY2013 basic unit</li> </ul>	×
	② Achievement of zero emissions	<ul style="list-style-type: none"> <li>In Japan: Continued by all sites</li> <li>Outside Japan: 95% or higher rate of non-landfill treatment</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: Continued by all sites</li> <li>Outside Japan: 94% or higher rate of non-landfill treatment</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: Continued by all sites</li> <li>Outside Japan: 95% of non-landfill treatment</li> </ul>	○
	③ Reduction in paper usage	<ul style="list-style-type: none"> <li>In Japan: Maintenance management (autonomously assigned issues)</li> <li>Outside Japan: 6% reduction compared to FY2013 by basic sales unit</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: Maintenance management (autonomously assigned issues)</li> <li>Outside Japan: 2% reduction compared to FY2013 by basic sales unit</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: Continue maintenance management</li> <li>Outside Japan: 4% reduction compared to FY2013 by basic sales unit</li> </ul>	○
	④ Reducing Water Consumption	<ul style="list-style-type: none"> <li>In Japan: 40% reduction compared to FY2005, continuing achievement at all sites</li> <li>Outside Japan: 3% reduction compared to FY2013 by basic sales unit</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: 37% reduction compared to FY2005, continuing achievement at all sites</li> <li>Outside Japan: 2% reduction compared to FY2013 by basic sales unit</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: 41% reduction compared to FY2005, continuing achievement at all sites</li> <li>Outside Japan: 14% reduction compared to FY2013 by basic sales unit</li> </ul>	○
Promotion of Prevention of Environmental Pollution	① Emission control of organochlorine chemicals (Soil Contamination Countermeasures Law, Montreal Protocol)	<ul style="list-style-type: none"> <li>Continuing complete abolition of dichloromethane</li> <li>Continuing complete abolition of trichloroethylene</li> <li>Continuing complete abolition of tetrachloroethylene</li> <li>Continuing complete abolition of HCFC-141b and HCFC-225</li> </ul>	<ul style="list-style-type: none"> <li>Continuing complete abolition of dichloromethane</li> <li>Continuing complete abolition of trichloroethylene</li> <li>Continuing complete abolition of tetrachloroethylene</li> <li>Continuing complete abolition of HCFC-141b and HCFC-225</li> </ul>	<ul style="list-style-type: none"> <li>Continuing complete abolition of dichloromethane</li> <li>Continuing complete abolition of trichloroethylene</li> <li>Continuing complete abolition of tetrachloroethylene</li> <li>Continuing complete abolition of HCFC-141b and HCFC-225</li> </ul>	○
	② Emission control of substances designated as VOC (Air Pollution Control Law)	<ul style="list-style-type: none"> <li>In Japan: 34% reduction compared to FY2006</li> <li>Outside Japan: 3% reduction compared to FY2013 by basic sales unit</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: 34% reduction compared to FY2006</li> <li>Outside Japan: 2% reduction compared to FY2013 by basic sales unit</li> </ul>	<ul style="list-style-type: none"> <li>In Japan: 48% reduction compared to FY2006</li> <li>Outside Japan: 7% reduction compared to FY2013 by basic sales unit</li> </ul>	○
	③ Total abolition of equipment that uses PCB	<ul style="list-style-type: none"> <li>Make appropriate disposal of equipment with high concentration of PCB after receipt of disposal notice</li> <li>For low concentrations, continue removing and storing in accordance with plans</li> </ul>	<ul style="list-style-type: none"> <li>Make appropriate disposal of equipment with high concentration of PCB after receipt of disposal notice</li> <li>For low concentrations, continue removing and storing in accordance with plans</li> </ul>	<ul style="list-style-type: none"> <li>Start to make appropriate disposal of equipment with high concentration of PCB after receipt of disposal notice</li> <li>For low concentrations, remove and store in accordance with plans</li> </ul>	○
Community Contribution	① Contribute to biodiversity	<ul style="list-style-type: none"> <li>Systematic tree planting, greening and other such activities at each factory</li> <li>Continue making quantitative determination of impact from business activities on biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>Systematic tree planting, greening and other such activities at each factory</li> <li>Continue making quantitative determination of impact from business activities on biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>Continue systematic tree planting and greening at each factory</li> <li>Continue making quantitative determination of impact from business activities on biodiversity</li> </ul>	○