

# Activities for Managing Chemical Substances

We manage chemical substances with the aim of preventing of environmental pollution.

## Complete Abolition of Organochlorine Chemicals

### Continuing with complete abolition

#### Complete abolition of substances subject to the Soil Contamination Countermeasures Law

We are continuing our initiative for complete abolition of dichloromethane, tetrachloroethylene and trichloroethylene, which are organochemical substances covered by the Soil Contamination Countermeasures Law.

#### Total abolition of ozone-depleting substances

We totally eliminated use of the ozone-depleting substance HCFC-225 in fiscal year 2008, and that of HCFC-141b in fiscal year 2010. We have maintained the total elimination of such use.

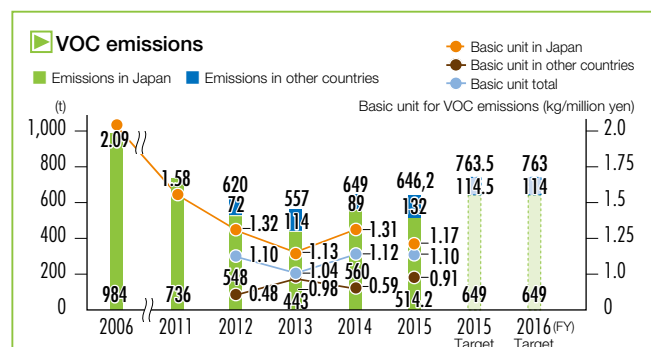
## Emission Control of VOC (Volatile Organic Compounds)

### Emissions in Japan reduced 48% in comparison with fiscal year 2006, a 44% reduction in terms of basic sales unit

Toluene, xylene and ethylbenzene in paint solvents account for over 90% of the VOC we use. Our goal is to reduce emissions of these chemicals by at least 34% by FY2016 compared with the level in FY2006.

In fiscal year 2015, the reduction reached 48% in comparison with fiscal year 2006 due to a variety of factors. These include the introduction of solvent regenerators, the use of low-solvent coatings, the adoption of detergents that contain no VOC substances and reduction in the amount of coating used. This was also a 44% reduction in terms of the basic sales unit. Continuing from fiscal year 2015, measures to control emissions in fiscal year 2016 will include expanding the range within which low-solvent coatings and detergents with no VOC content are adopted as well as the use of powder coatings. We will also make every effort to reduce waste and reduce the amount of coatings and other such substances used, among other measures, in order to reduce emissions.

We also started activities outside Japan in fiscal year 2012, and in fiscal year 2015 these yielded a 7% reduction by basic sales unit compared to fiscal year 2013.



## Emissions and Transfer of PRTR Substances

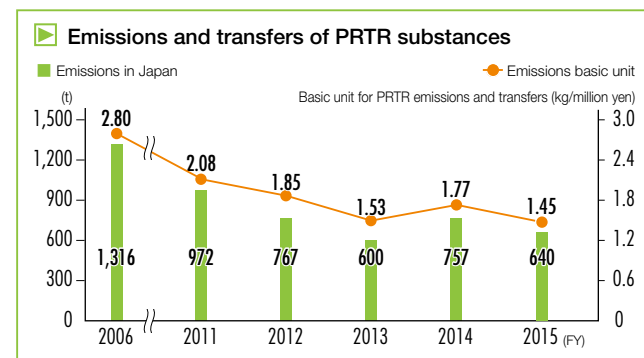
### Emissions reduced 51% in comparison with fiscal year 2006, a 48% reduction in terms of basic sales unit

More than 90% of PRTR substances are paint solvents (toluene, xylene, ethylbenzene). In FY2015, we reduced these substances by 51% of the level in FY2006. This also represents a 48% reduction in terms of the basic sales unit. We will continue to expand the use of low-solvent paint while ensuring that we maintain the quality of our products. We will also install and expand solvent collection and removal equipment to reduce the emission and transfer of PRTR substances.

#### Emissions and transfer volume of Class I Designated Chemicals Substances under the PRTR Law in FY2015 (Substances subject to reporting)

Substance number	Substance designation	Emissions + transferred amount*	
		2014	2015
53	Ethylbenzene	147,184	117,203
80	Xylene	400,897	308,729
240	Styrene	1,580	853
296	1, 2, 4-trimethylbenzene	9,066	7,269
297	1, 3, 5-trimethylbenzene	4,973	3,938
300	Toluene	143,680	157,680
349	Phenol	516	423
374	Hydrogen fluoride and its water-soluble salts	24,227	19,162
384	1-bromopropane	12,404	15,369
392	Normal hexane	1,259	494
405	Boron and its compounds	2,311	584
412	Manganese and its compounds	8,752	8,571

\* Emissions + transferred amount is the total amount for Sumitomo Heavy Industries and all Group companies



## Management of PCB (Polychlorinated Biphenyl) and Total Abolition of Equipment Containing PCB

### Gradually upgrading and disposing of stabilizers that contain PCBs

We have completed early registration of all equipment containing high concentrations of PCB with the processing company, Japan Environmental Safety Corporation, and we are undertaking systematic detoxification based on the Act on Special Measures Concerning Promotion of Proper Treatment of PCB Wastes. We are gradually upgrading and disposing of transformers that contain PCBs and lighting equipment stabilizers that contain PCBs. The survey of equipment containing low concentrations of PCBs was completed, as well, and we have started gradual disposal.