

## Targets and Results

The goals and results of the initiatives for environmental preservation under the fiscal 2014 Responsible Care activities are as follows.

### Review of FY2013 Targets and Results

★★★Target reached   ★★Target almost reached   ★Improvement needed

Theme	FY2013 Targets	FY2013 Results	Self-assessment	FY2014 Targets
<b>Eliminate environment incidents</b>	Zero environment incidents	Environment incidents: 0	★★★	Zero environment incidents
<b>Reduce environmental impact</b>	(1) Implement voluntary management plan for air-polluting toxic substances			
	Reduce acrylonitrile emissions from 2012 level of 13.6 tons to 10 tons	Acrylonitrile: 11.7 tons	★	Reduce acrylonitrile emissions from 2014 level of 12 tons
	(2) Implement zero emissions plan for industrial waste			
	Less than the volume of waste sent to landfill in 2012 (9.6 tons)	Final landfill amount 1.3 tons* <sup>1</sup>	★★★	Less than the volume of waste sent to landfill in 2013 (1.3 tons)
	Final amount to landfill for domestic group companies 7.5 tons (Landfill disposal rate: 2007 emission standards) 0.3%	Final landfill amount 11.2 tons	★	Final amount to landfill for domestic group companies under 7.5 tons (Landfill disposal rate: 2007 emission standards) 0.3%
	(3) Strengthen company-wide energy conservation project			
	Reduce unit energy consumption <sup>2</sup> to 67.8%→66% of 1990 level	Unit energy consumption was 65.1% of the 1990 level	★★★	Energy consumption at 65.1% <sup>3</sup> of 1990 level
Reduce unit CO <sub>2</sub> emissions to 68.7% of 1990 level (less than 2012 level)	Unit CO <sub>2</sub> emissions was 67.8% of the 1990 level	★★★	Reduce unit CO <sub>2</sub> emissions to under 68.2% <sup>3</sup> of 1990 level	

\*1 The final landfill amounts at each plant were as follows: Takaoka Plant: 3.4 to 0; Mizushima Plant: 5.4 to 1.3; R&D Center: 0.9 to 0.

\*2 Per production volume

\*3 The annual unit CO<sub>2</sub> emissions reduction target of 1% below the 2010 level was calculated as follows:  $0.7100 \text{ (2010 level)} \times (0.99)^{\sqrt{4}} = \text{approx. } 68.2\%$ .  
The annual unit energy consumption reduction target of 1% below the 2010 level was likewise calculated to equal 65.1%.

## FY2014 CSR Website CSR > Environment > Targets and Results

There were no environment incidents\* in fiscal 2013.

ZEON Corporation offices continue to maintain the FY2011 achievement of zero industrial waste emissions. ZEON group companies had a final landfill amount of more than 600 tons in 2007, but that figure was reduced to around 10 tons in both 2012 and 2013, which is roughly 0.4% of the 2007 industrial waste amount, and can therefore be viewed as zero emissions. We will continue to promote further reductions in order to reach 0.1% or less of the 2007 amount, as we have done at ZEON Corporation offices.

Acrylonitrile emission reduction plans are behind schedule, but we are now investigating the introduction of equipment for this purpose.

We will continue to work towards reducing unit energy consumption and CO<sub>2</sub> emissions by an average of 1% per year.

\* Environmental incident

In company rules, an environmental incident is defined as, "Any instance in which standards set by laws related to the environment, or standards set independently are not met. Or, any instance in which there is a chance that standards will not be met under normal procedures, even if standards are actually met. Or, any instance a complaint is received or a complaint would have been received if things had been left alone, even if there is no set standard."