

## ZEON Group (Japan)

### ZEON Kasei Co., Ltd.

#### Introduction to ZEON Kasei Co., Ltd.

ZEON Kasei Co., Ltd. was established in 1981 from the “Manufactured Products Division” of ZEON Corporation. As the core company in the category of manufactured products within the ZEON Group, ZEON Kasei has developed by business expansion of “Plastic Compounds”<sup>\*1</sup>, “Packing Materials,” “Housing Materials,” “Films,” “Thermal Conductive Sheets,” “Deodorants” and “Logistics Materials.” As part of our global strategy, in Feb. 2012 we established a factory for “Powder Compounds for slush molding”<sup>\*2</sup> in China, which started commercial production in July. Furthermore, we will launch a Vietnam plant for “STEC®,” distribution container for synthetic rubbers, in 2013.



President Yoshiro Ogura

Based on the keywords “Ecology” and “Amenity,” we continue contributing to society in various fields.

\*1 Plastic Compounds

Molding materials composed of plastic resin, colorants and other additives.

\*2 Powder Compounds for slush molding

Powder compounds for one of the production methods for soft and thin skins, particularly for car interior or toys



ZEON Kasei's Yamaguchi Plant



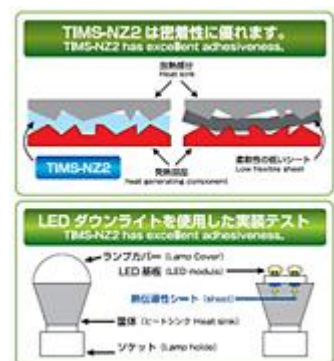
Zeon Kasei (Changshu) Co.,Ltd.

## Environmental and Safety Activities

### 1. Saving Energy with our Products

In February 2012, a major consumer electronics manufacturer adopted our high-thermal-conductivity sheet for its LED lamps. Since then, the number of companies employing our sheets has been increasing. LED lighting, which consumes little electric power, is gaining attention as a key solution for saving electricity.

Dissipating the heat that LED lamps create is crucial to realizing their energy-saving benefits. Our high-thermal-conductivity sheet was adopted in recognition of the superb balance it achieves between various properties, including lateral cooling performance (at a right angle to its exterior and interior surfaces), flexibility, and adhesiveness. We expect the application of this product to expand since heat dissipation solutions are needed not only in lighting but in a wide range of applications from electronic devices to automotive parts.



## 2. Reducing Waste in Our Operations

Based on the ZEON Group's medium-to-long-term environmental plan, our Ibaraki Factory has been working to reduce industrial waste sent to the landfill from 95 tons in fiscal 2009 to 0 tons by fiscal 2015. By April 2011, the plant had reduced landfill waste to 0 tons—4 years ahead of schedule!—and has continued to produce zero landfill waste as of March 2012. All worksites at ZEON Kasei, including the Yamaguchi Plant, which has already achieved the 0-ton target for landfill waste, have been landfill-waste-free since April 2011.



Green curtain at Ibaraki Factory

## 3. Environmental Data

ZEON Kasei Co., Ltd. Ibaraki Factory		FY2008	FY2009	FY2010	FY2011	FY2012
<b>Substances covered by PRTR law</b>	Number of substances	4	5	7	7	8
	Consumption (tons)	90	70	95	61	40
	Amount emitted (tons)	5.5	0.0	0.0	0.0	0.0
<b>Industrial waste</b>	Amount generated (before volume reduction) (tons)	550	530	648	529	446
	Amount sent to landfill (tons)	176	95	69	0.0	0.0
<b>Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m<sup>3</sup>)</b>		14	22	34	41	30
<b>CO<sub>2</sub> emissions (tons)</b>		4,440	3,309	4,257	3,845	3,283
<b>Energy consumption (crude oil equivalent, kL)</b>		1,833	1,992	2,328	2,191	1,807

ZEON Kasei Co., Ltd. Yamaguchi Factory		FY2008	FY2009	FY2010	FY2011	FY2012
<b>Substances covered by PRTR law</b>	Number of substances	1	3	3	3	3
	Consumption (tons)	0.8	0.0	0.0	0.0	0.0
	Amount emitted (tons)	0.4	0.0	0.0	0.0	0.0
<b>Industrial waste</b>	Amount generated (before volume reduction) (tons)	71	187	99	91	57
	Amount sent to landfill (tons)	0.0	0.0	0.0	0.0	0.0
<b>Water resources (Industrial water + Ground water + Waterworks) consumption (1,000 m<sup>3</sup>)</b>		0.3	0.2	0.2	0.2	0.2
<b>CO<sub>2</sub> emissions (tons)</b>		234	213	231	412	416
<b>Energy consumption (crude oil equivalent, kL)</b>		97	105	94	147	151

### Activities with the Local Community

#### 1. “No waste, no weeds” activities at the Ibaraki Factory

At the Ibaraki Factory, we held a Zero Waste Day on June 8, 2012, and a Zero Weed Day on October 5.

The weather was nice on Zero Weed Day. Many employees turned out to remove weeds around the factory and tidy up. The area around the factory was visibly more attractive.



Prior to “Zero Weed Day”



After “Zero Weed Day”

## **2. Cooperation to hold the 2013 calendar recycling fair**

At the ZEON Kasei head office, we did not want to waste the spare calendars we had received from our customers. We looked for a way that they could be of some use. We discovered the calendar recycling fair, sponsored by the Shiraoi Council of Social Welfare, in Hokkaido, and have been sending them our spare calendars. In fiscal 2012, the council holds its 6th calendar recycling fair (January 15 to 18, 2013). After the fair was over, we received a polite letter of thanks from the council, which informed us that the proceeds were being used to support volunteer services in the area.