


**PT. PANASONIC LIGHTING INDONESIA**

Panasonic Group Site Report 2009  
 FY2009 :April 1, 2008 - March 31, 2009

Address	REMBANG INDUSTRI RAYA 47, INDUSTRIAL ESTATE PIER PASURUAN, INDONESIA - 67152			
Lot area	100920m <sup>2</sup>	Total floor area	99975m <sup>2</sup>	
Establishment day	1996/9	Employees	4063 persons	
ISO14001 certification date	1999/12	ISO14001 renewed	2008/10	
Major Products	Palook ball, Fluorescent lamp, Glass tube,			
Environmental Information disclosure	Communication FY2009 0 items visitors on factory tour 0 persons			
Contact	ENVIRONMENTAL, HEALTH AND SAFETY		TEL: 0343 740 230	collaboration with municipality 2 items

**Message from Compliance Administrator**

As a part of the global community, Panasonic Lighting Indonesia bears the responsibility to take part in the world's environment preservation. The climate change and the needs to develop environmental friendly products have continually become a global concern as well as ours.

In our every business activity, Panasonic Lighting Indonesia is operating on a strict basis of ecological aspects, such as reduction of energy consumption and restriction of hazardous substances in our products.

We are conscious that the spirit of environment preservation shall be sustained to realize a better world for all of us in the future

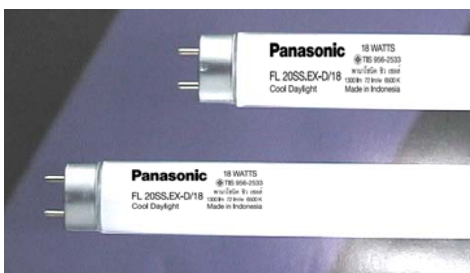


**WILDA CIPTA YUWANA**

**Main activities in FY2009**

Target	Result
Reduce CO2 emission 38,300 Ton	CO2 emission (until July 2009) = 13,324
Increase waste recycling rate = 92.5 %	Waste recycling rate = 90.31 % (until July 2009)
Water saving 10 % of previous FY water usage	Water usange (until July 2009) = 130,057.48 m3

**Products of Environmentally-conscious information**



**Turbular Lamp (FL Lamp)**

- High quality lamp with life time is up 12000 hour
- Rapid start technology (without starter for Nesa Type)
- Free blackening

**Point of environmentally-conscious**

- Save energy 80 %
- Hg Capsule technology
- RoHS comply

**Compact Fluorescent Lamp**

- Quick ramp-up time (40% after 1 second)
- Lowest minimum starting temperature -30 ° C
- Ultra-compact design
- Approved for use in totally enclosed fixtures
- 10,000 hour rated service life
- Excellent lumen maintenance
- CSA approved for damp locations
- Improved energy efficiency (80% savings vs. incandescent)
- Outstanding performance (61.5 lumens/watt)

**Point of environmentally-conscious**

- Save energy 80 %
- RoHS comply

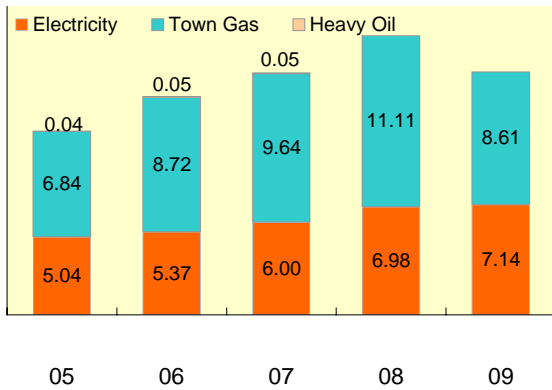


**Environmental performance data**

Year displayed in graph ex) 2009: April 1, 2008 - March 31, 2009

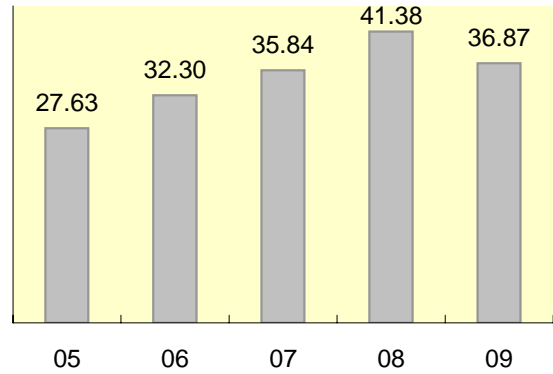
**Energy**

Unit: 1000kl



**CO2 Emission**

Unit: 1000t-CO2

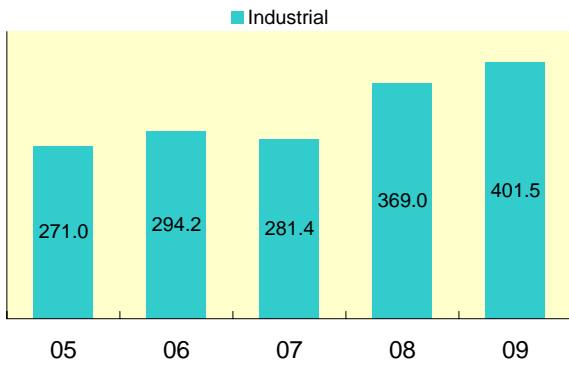


**Calculation standards**

Numerical values for respective countries listed on the Calculation Tools in GHG Protocol website by World Business Council for Sustainable Development (WBCSD) and World Resource Institute (WRI). Levels for 2002 (Electricity-Heat Steam Purchase\_tool1.0\_final) has been used for all years.

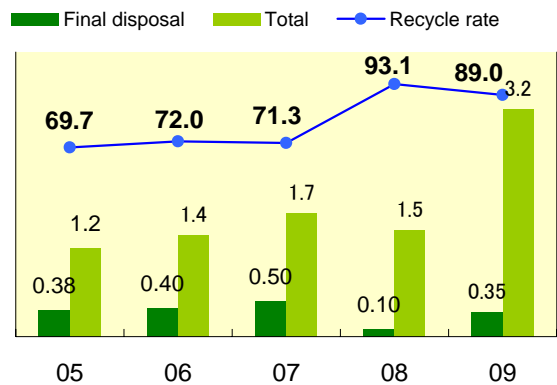
**Water**

Unit: 1000m<sup>3</sup>



**Waste**

Unit: 1000t, %

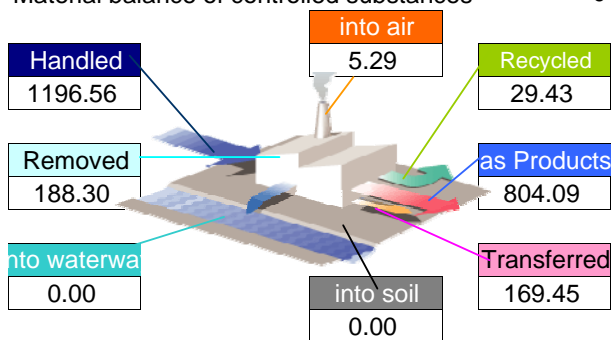


**Chemical substances**

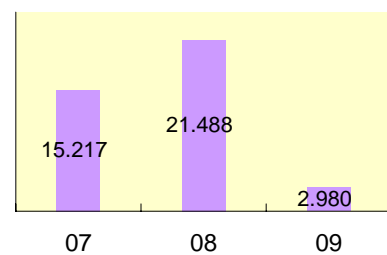
09

**Material balance of controlled substances**

0



**Key target reduction substances**



About The Panasonic Group's Chemical Substances Management in Factories  
[http://panasonic.net/eco/factory/chemical\\_substance/](http://panasonic.net/eco/factory/chemical_substance/)

About the above data

We have commitment to control the chemicals substance that using in our product

**Compliance FY2009****<Air pollutant measurement results>**

	Unit	Facility name	Legal limit	Voluntary limit	Average measured	Maximum measured	Measuring frequency
SOx	Nm <sup>3</sup> /h				0.00		
NOx	ppm	glass factory	3.00		0.03	0.04	Per six month
		spiral assembly	3.00		0.02	0.03	Per six month
		lighting factory	3.00		0.02	0.03	Per six month
Particulate	g/Nm <sup>3</sup>	glass factory	10.00		0.17	0.18	Per six month
		spiral assembly	10.00		0.21	0.33	Per six month
		lighting factory	10.00		0.31	0.62	Per six month

**<Water pollutant measurement results>**

	Unit	Facility name	Legal limit	Voluntary limit	Average measured	Maximum measured	Measuring frequency
COD	mg/l	Main outlet	3000.00		45.85	103.11	once per month
BOD	mg/l	Main outlet	1500.00		20.86	43.40	once per month
Nitrogen	mg/l	Main outlet (NO <sub>3</sub> )	50.00		3.58	4.55	once per month
Phosphorus	mg/l						

**<Noise and vibration>**

	Unit	Measurement Area	Legal limit	Voluntary limit	Average measured	Maximum measured	Measuring frequency
Noise	dB	DT	85.00		82.50	83.80	Per six month
		NT					
Vibration	dB	DT			0.00		
		NT			0.00		

\*Legal limit: The strictest value out of those specified by laws, ordinances or agreements.

\*N/A(not applicable):The meaning when the facility is exempted from the regulation.

**About excess of legal limit value**

There is no item to report

**Improvement of direction by government, or point outs by neighbor**

Occurrence situation	Countermeasure
There is no item to report	

## **Environmental Policy**

As the producer of Fluorescent lamp and part of lamp, we make sincere efforts in all of our activities to comply with relevant environmental regulations and other requirements in order to minimize environmental impact.

We identify the important items as follows and give priority to them

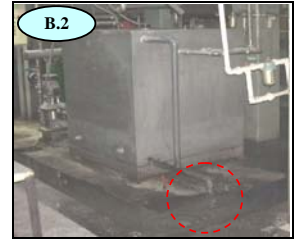
1. Reduction of negative impact release to environment
2. Prevention of environmental pollution
3. Compliance with legal requirements and environmental policy
4. Reduction of energy and material consumption through adequate and effective operation
5. Reduction and recycling of industrial waste, especially glass waste
6. Reduction of hazardous and chemicals consumption
7. Control of dust, noise, and toxic material
8. Improvement of environmental care for the employee by training
9. Reduction and recycling of paper
10. Contribution to the worldwide environment through manufacturing and distribution of energy-saving products
11. Continual improvement in manufacturing activities

If unforeseen circumstances cause a temporary violation of applicable standards, we make all efforts to comply in the shortest possible time.

**Aiming to reduction of environmental impact**

**A. Energy Saving Project**

- 1 Loss Control by Meta-geji Program
- 2 Furnace oxy-fuel
- 3 Inverter for industrial water pump in production area
- 4 Production roof changing
- 5 Lamp type changing (with HF Lamp)
- 6 Natural Gas boiler change by Heat Recovery Boiler
- 7 Reduce Furnace temperature



**B. Wastewater recyle**

- 1 Recycle wastewater from reverse osmosis unit treatment
- 2 Recycle wastewater from glass blowing process

**C. Planting Trees inside PLI area**

Planting trees to overcome air pollution in PLI area and increase catchment area



**Environmental Communication**

Socialization of REACH and RoHS regulation and explanation to supplier as one of effort to produce our environmental friendly products



**Emergency preparedness and response**



**Evacuation Drill of Eartquake and Fire Accident**

December 27, 2008

The condition is setted by P2K3 Unit, as actual possibility