


PT. Panasonic Electric Works Gobel Manufacturing Indonesia

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

| | | | | | |
|--|--|---------------------------------------|---------------------|---|---------------------------------|
| Address | EJIP Industrial Park Plot 3D, Cikarang Selatan, Bekasi, West Java, | | |  | |
| Lot area | 55345m ² | Total floor area 21682 m ² | | | |
| Establishment day | 1992/4 | Employees | 873persons | | |
| ISO14001 certification date | 2000/7 | ISO14001 renewed | 2009/8 | | |
| Major Products | Lighting Fixtures, Electronic Ballast, Wiring Devices, | | | | |
| Environmental CommunicationFY2009 Information disclosure | 1items | visitors on factory tour | 320persons | | collaboration with municipality |
| Contact | QE System | | TEL: +62-21-8970044 | | |

Message from Compliance Administrator

PT. Panasonic Electric Works Gobel Manufacturing Indonesia is joint venture manufacturer established by Matsushita Electric Works, Ltd., a leading and comprehensive manufacturer of housing and building products in the world. It mainly manufactures lighting fixtures and wiring devices, with a purpose to fully fulfil customers various needs. Our policy is based on the concept "Environmental Preservation for the Next Generation".

Our initiatives are to:

1. strive for pollution prevention and continuous environment improvement;
2. obey the environmental regulation and other requirements;
3. strive for resources conservation;
4. allow all employees to join in preserve the environment.

Give fully support company sustainability through environmental policies & regulations fulfillment in order



Compliance Administrators

Masaharu Michiura

Main activities in FY2009

| Target | Result |
|---------------------------------------|--------|
| Business Plan Achievement Rate 100% | 99.94% |
| Generation Reduction Rate 3% | 13.40% |
| Recycle Ratio 90% | 97.00% |
| Final Disposal Reduction Rate 30.0% | 65.40% |
| Total Amount Reduction Rate 6% | 57% |
| Release and Transfer Total Amount 2% | 6% |
| Water Consumption Reduction Rate 2.5% | 9.75% |

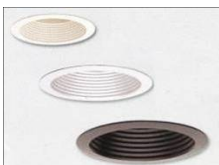
Products of Environmentally-conscious information



Down Light
High efficient reflector
Reduce light loss
Reduce energy loss



Electronic Ballast VPH
Save energy up to 88% compare with incandescent lamp



Aluminum Die Casting Down Light
Stylish compact design
Less Resource



Passive Sensor Switch
Automatic switch lamp on and off to prevent energy lost

Point of environmentally-conscious

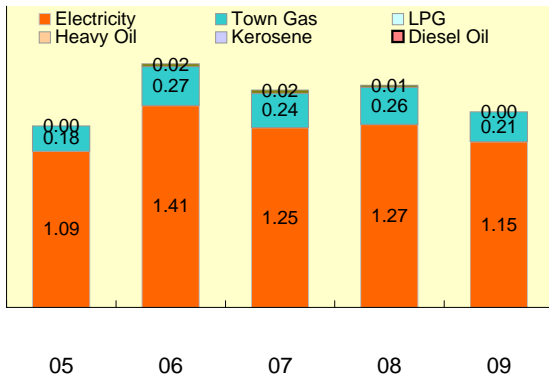
PEWGMID continue to innovate and create environment-friendly products including energy efficient product and contribute to environmental globally. And we applied control of prohibited substances in all products, start from raw material selection in order to ensure the RoHS and GP compliance of our product.

Environmental performance data

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

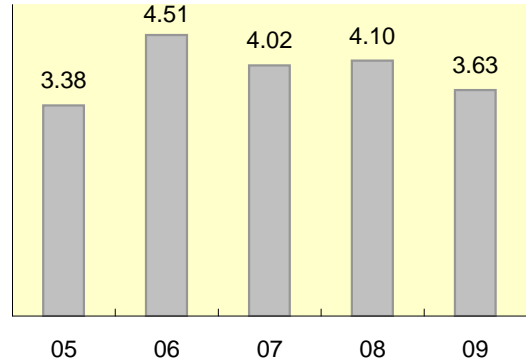
Energy

Unit: 1000kl



CO2 Emission

Unit: 1000t-CO2

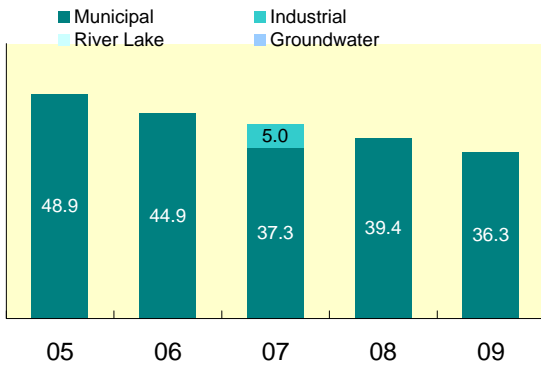


Calculation standards

CO2 emission = (Amount of electric power use in kwh x 0.7168 kgCO2/kwh)
+ (Amount of town gas use in m3 x 2.290 kgCO2/m3) + other . . .

Water

Unit: 1000m³



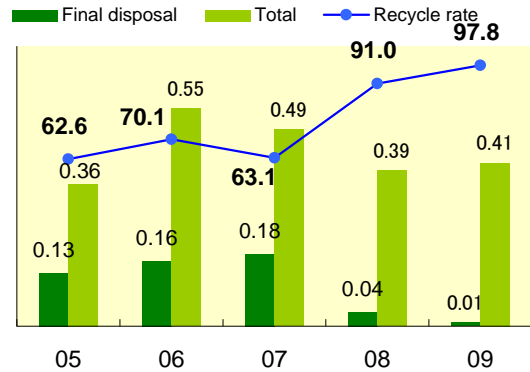
Circulated water

FY2009

600.00 m³

Waste

Unit: 1000t, %

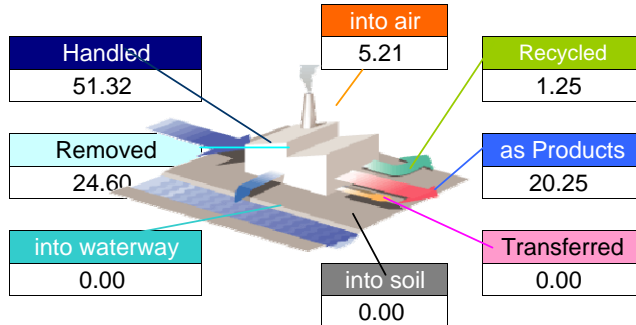


Chemical substances

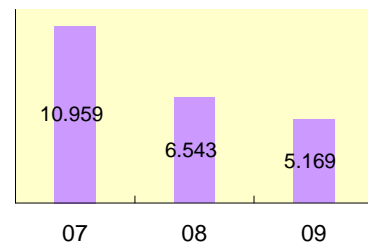
09

Material balance of controlled substances

FY2009



Key target reduction substances



About The Panasonic Group's Chemical Substances Management in Factories

http://panasonic.net/eco/factory/chemical_substance/

About the above data

There is no item to report

Compliance FY2009

<Air pollutant measurement results>

| | Unit | Facility name | Legal limit | Voluntary limit | Average measured | Maximum measured | Measuring frequency |
|-------------|--------------------|--------------------|-------------|-----------------|------------------|------------------|---------------------|
| SOx | Nm ³ /h | Boiler 1 | 0.04 | 0.04 | 0.00 | 0.00 | twice a year |
| | | Boiler 2 | 0.04 | 0.04 | 0.00 | 0.00 | twice a year |
| | | Scrubber | 0.04 | 0.04 | 0.00 | 0.00 | twice a year |
| NOx | ppm | Boiler 1 | 0.65 | 0.65 | 0.00 | 0.00 | twice a year |
| | | Boiler 2 | 0.65 | 0.65 | 0.00 | 0.00 | twice a year |
| | | Scrubber | 1.00 | 1.00 | 0.00 | 0.01 | twice a year |
| Particulate | g/Nm ³ | Moulding Injection | 0.35 | 0.35 | 0.00 | 0.00 | twice a year |
| | | Manual Solder | 0.35 | 0.35 | 0.01 | 0.01 | twice a year |
| | | Scrubber | 0.35 | 0.35 | 0.01 | 0.01 | twice a year |

<Water pollutant measurement results>

| | Unit | Facility name | Legal limit | Voluntary limit | Average measured | Maximum measured | Measuring frequency |
|------------|------|---------------|-------------|-----------------|------------------|------------------|---------------------|
| COD | mg/l | WWTP1 | 800.00 | 800.00 | 240.36 | 435.51 | once a month |
| | | WWTP2 | 800.00 | 800.00 | 90.70 | 267.41 | once a month |
| BOD | mg/l | WWTP1 | 500.00 | 500.00 | 186.18 | 193.24 | once a month |
| | | WWTP2 | 500.00 | 500.00 | 41.49 | 132.67 | once a month |
| Nitrogen | mg/l | N/A | | | | | |
| Phosphorus | mg/l | N/A | | | | | |

<Noise and vibration>

| | Unit | Measurement Area | Legal limit | Voluntary limit | Average measured | Maximum measured | Measuring frequency |
|-----------|------|------------------|-------------|-----------------|------------------|------------------|---------------------|
| Noise | dB | DT Panasert Area | 85.00 | 85.00 | 78.35 | 82.55 | twice a year |
| | | NT N/A | | | | | |
| Vibration | dB | DT N/A | | | | | |
| | | NT N/A | | | | | |

*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

With the belief that human beings have a responsibility to maintain the balance of nature, then carry on with the harmony with community and environment, PEWGMID endeavored to preserve the harmony of future generations. PEWGMID always seek pollution prevention and environmental improvement
PEWGMID always follows the environmental regulations and other requirements that apply.
PEWGMID continues to seek savings of resources, especially on CO2 emissions reduction
PEWGMID always include all employees maintain the environment
PEWGMID always set environmental objectives and targets and review regularly

Aiming to reduction of environmental impact



Change the R22 to Hydrocarbon refrigerant

For CO2 Reduction activity, we change the R22 to Hydrocarbon type which can reduce the CO2 emission until 18.5 %. Total electricity saving is $1,557,696 \text{ kwh/year} \times 18.5\% = 288,174 \text{ kwh/year}$ or 206 ton CO2/year.



Install the timer

After timer installation, the operational of AC package set with idle condition (6 minutes on and 3 minutes off for the compressor only). Total power consumption after set the idle conditions is 504,841 kwh/year or 361.87 ton CO2/year.



Change Mercury to Efficient Lamp Type

To reduce the CO2 emission, we change the mercury lamp to efficient lamp (Model V Shape FXP440001) which power consumption 4 x 32 watt. Total power consumption after installation is $145 \text{ unit} \times 4 \times 0.032 \text{ kw/unit} \times 16 \text{ hours/day} \times 21 \text{ day/month} \times 12 \text{ month/year} = 74,834 \text{ kwh/year}$ or 53,64 ton CO2/year. Total electricity reduction is $233,856 \text{ kwh/year} - 74,834 \text{ kwh/year} = 159,022 \text{ kwh/year}$ or 113.96 ton CO2/year.



Change The Operational for Cooling Tower

Previously the cooling tower operational are using double system (2 unit) and then to reduce the CO2 emission, we change the operational to single cooling tower (1 unit) and it give the CO2 reduction until 101 ton CO2/year

Environmental Communication



Environmental Board

Installation environment posters in the canteen is meant to add perspective to the general employees. The material is a poster about the importance of environment in the cartoon, pictures or photo and a brief description



Environmental Training in House

In house training has been done to increase employee awareness of the environmental. Training materials consist of the global and local issue of the environment. Training is conducted periodically once every 2 months.

Emergency preparedness and response



Evacuation Drill of Fire Accident

February, 2009

The condition was setted by P2K3 Team, as actual possibility