

PESTH : Panasonic Ecology Systems (Thailand) Co.,Ltd.

Panasonic Group Site Report 2010
FY2010 :April 1, 2009 - March 31, 2010

Address 101 Moo 2 Tearak Rd. Tambol Bangsaothong,
Amphur Bangsaothong, Samutprakarn 10540 Thailand.

Establishment day 1996/12

ISO14001certification date 1998/1 ISO14001renewed 2010/6

Major Products The manufacture of electrical fan , ventilating fan , mini sirocco, industrial electrical fan , industrial ventilating fan, industrial air moving equipment , accessories and air filter.



Environmental CommunicationFY2010

Information disclosure	0items	visitors on factory tour	250persons	collaboration with municipality	0items
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Contact Management System Section TEL: 02-723-3000 ext. 4502

Message from Compliance Administrator

Company is located in Samutprakarn province. We perform environmental friendly promotion in site of PTHC (Panasonic Thailand Co.,Ltd) Group. Our products are Electric fan, ventilating fan, mini sirocco, industrial electric fan, industrial ventilating fan, industrial air moving equipment, accessory and air filter. Our factory was certified by ISO14001:2004 "Environmental Management System" Since1998, and we had implemented "energy saving", "resources saving & recycling", "prevention of pollution" systems. In addition, we keep on promoting all-employees participation activities on everyday environment friendly awareness.



Compliance Administrators
Mr.Yamada Yutaka

Main activities in FY2010

Target	Result
CO ₂ Emission Plan FY2010 = 1,413 Ton-CO ₂	CO ₂ Emission Result = 1,408 Ton-CO ₂ (Data from Apr'09-Mar'10)

Products of Environmentally-conscious information



Ventilating Fan :
Ventilating Fan helps air ventilation by intake & exhaust functions.
Point of environmentally-conscious
Usage of low electricity consumption Motor. Produced at less global environmental effect process. Follow RoHS standards.



Electrical Fan :
Electrical Fan produces wind and creates cool and comfortable living environment.
Point of environmentally-conscious
Energy saving at the top rank (Number. 5) in Thailand (Reference to TIS.)



AME :
Air Moving Equipment (AME) is suitable for the ventilation in large space such as in an office or a factory.
Point of environmentally-conscious
Ventilation in a large space.This Product compliance with RoHS.

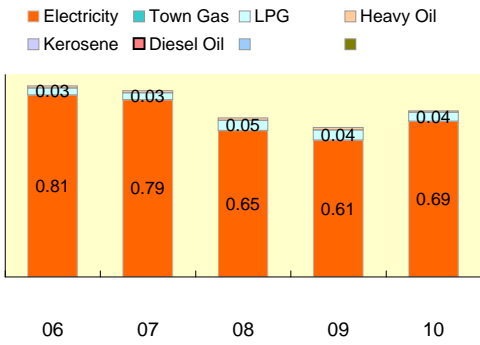


Fine Factory Fan :
Fine Factory Fan helps adjusting temperature in working environment especially in factory, warehouse by intaking fresh air from outside into the building and exhausting hot air out of the building.
Point of environmentally-conscious
This Product compliance with RoHS.

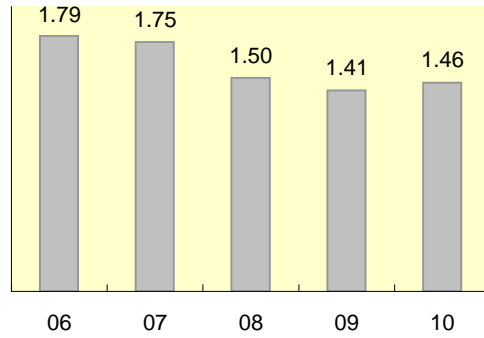
<http://pesth.panasonic.co.th/eng/Default.aspx>

Environmental performance data Year displayed in graph ex) 2010: April 1, 2009 - March 31, 2010

Energy Unit: 1000kl



CO2 Emission Unit: 1000t-CO2

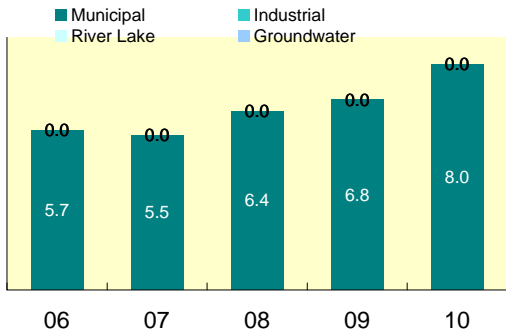


Natural Energy FY2010
 N/A 0.00 1000kW/h

Calculation standards

Conversion coefficients : Electricity =0.257 , LPG=1.295, Fuel oil=1.009

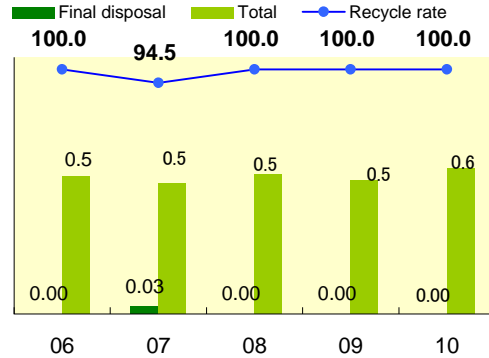
Water Unit: 1000m³



Circulated water FY2010
 0.00 m³

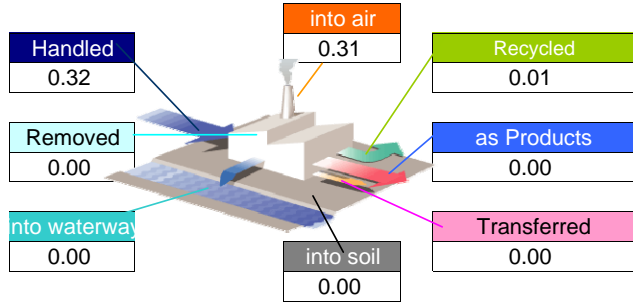
Rain-water FY2010
 0.00 m³

Waste Unit: 1000t, %

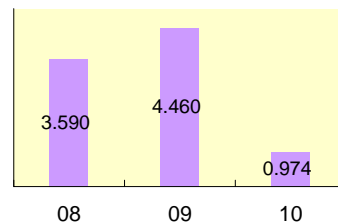


Chemical substances Unit: t

Material balance of controlled substances FY2010



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

Compliance FY2010

<Air pollutant measurement results>

	Unit	Facility name	Legal limit	Voluntary limit	Average measured	Maximum measured	Measuring frequency
SOx	Nm ³ /h	N/A					
NOx	ppm	N/A					
Particulate	g/Nm ³	Dust Collector 1	320.00			0.14	Once a year
		Dust Collector 2	320.00			1.45	Once a year

<Water pollutant measurement results>

	Unit	Facility name	Legal limit	Voluntary limit	Average measured	Maximum measured	Measuring frequency
COD	mg/l	N/A					
BOD	mg/l	N/A					
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 HP Stator Line	90.00			78.90	Twice a year
		NT					
Vibration	dB	DT					
		NT					

*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

- 1) Complying with environmental legal and other requirement which the company subscribes.
- 2) Preventing and controlling water and air pollution from our performances.
- 3) Promoting an energy saving policy and minimizing the resource consumption.
- 4) Minimizing the waste by implementing the waste management program.
- 5) Reviewing the environmental management system in accordance to the condition changes to ensure continual improvement of our environmental performance.
- 6) Communicate to employees at all relevant functions and level including all persons working for or on behalf of the company to understand the environmental policy and performance by providing appropriate training in awareness and competence including bulletin board postings.
- 7) Promoting our environmental policy and activities to the public, advertising in important areas by the distribution of a variety of printed material (board posting, brochures, etc.)

Aiming to reduction of environmental impact

The Introduction to PESTH.

On fiscal year 2009. We aim to focus on the CO₂ reduction. Due to last year we had done the 1st floor project by move the production line and office from the 2nd floor to manufactured by one floor .There effect to energy consumption (an electricity and water) were a few decrease. So we continue to reduce an energy consumption and aiming to reduction of environment impact an CO₂ Emission as following.

Save energy plan 2009

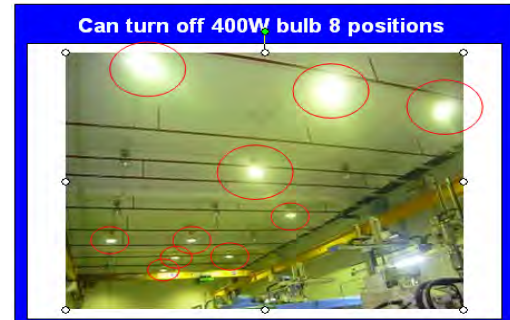
No.	Activity	Status
1	Installation a pull switches at AME office and silk screen room.	Done
2	Installation a pull switch at G/A office.	Done
3	Installation a time control at drink's tank and vending machine.	Done
4	Take off Hibay lamp and repalce to install by fluoresecent lamp at injection line.	Done
5	Take off Hibay lamp and repalce to install by fluoresecent lamp at production office.	Done
6	Air leakage repaired at production.	Done



Drink tank 3 sets and Vending M/C 2 sets

Store Area <u>250 W</u>	Raw material LH area / Rest room area <u>400 W.(2 Sets)</u>	Staff's locker <u>1,280 W.</u>	Die cast area <u>250 W.</u>

Installation a timer control at drink's tank & vending machine.



Take off Hibay lamps & replace install by fluoresecent.

Environmental Communication



Eco Educational project for primary school.

Jun 26'09 : Eco Education for student on world environmental day
 23 employees from Panasonic in Thailand 20 Companies participate in the eco education project at Wat Bang Preang School to promote Panasonic eco ideas and raise environmental awareness. Under this project, Panasonic employees donate recycle garbage bin for waste separation and educate environmental knowledge for students of 150 primary students through 4 education learning groups; 1.Waste separation, 2.Energy conservation, 3.Water conservation and 4.Global warming by students are more involve this activities and also communicate environmental information to family and communities too.



Eco ideas experience exhibition

Dec 3-6 ,2009 Vanue ; Central World / Eden Zone
 Environmental committee from 20 Panasonic Companies in Thailand collaborated with Advertising & Promotion Dept. of Panasonic Sale Companies to organize the Eco Exhibition at Central World to promote eco-ideas strateries for product, manufacturing and everybody/ everywhere to elementary students and general visitor for 4 Days.



The 3rd Mangrove Reforestration Project

Oct 3,2009 Vanue ; Klongtamru / Chonburi province.
 349 volunteers consisting of Panasonic employees = 260 persons,employee's family = 39 persons (26 adults, 13 children) and secondary school student = 50 persons.They planted a total of 2,000 mangrove trees(Rhizophora mucronata Poir).Educated the student on mangrove ecosystem and their importance and donated information boards on the mangrove ecology to raise visitor's awareness.



shuttle bus in PTHC premise (1.2 km x 0.3 km).



Public Relation Poster

" Walk instead of use Shuttle Bus Campaign" (Continued project on Nov 4,11,18,25'2009)

Continue promote "Walk instead of use Shuttle Bus Campaign" that organized on last year to all employees around 3,718 persons in PTHC Group to reduce carbon dioxide emission as the following activities;

1. Shuttle bus service on request between 8.00 - 11.00 am. and 1.00 - 5.00 pm. instead of service every 10 minutes which promote on Wednesday of November 2009.
2. Encourage all employees to walk instead of use shuttle bus to go to other buildings in PTHC Group.

※ Remark : Shuttle bus service supporting car for everyone to go to other buildings in PTHC's group. (1.2 km x 0.3 km).
 We can reduce CO₂ emission around = 17.55 kg.CO₂



The show on singing by representative of employee to promote employees participated in the energy saving activity on Wednesday of Nov'09.

"Energy Saving Exhibition at canteen "

Organized the event of "Energy Saving Exhibition" by focus on reduce carbon dioxide emission at home to all employees (3,718 person) in PTHC Group as the following activities;

1. The show on " Envi. Man & Innocent Girl" at canteen on Nov 4, 09. (The story about energy saving activity at home, no plastic bag, leave car at home, planting tree)
2. Arrange Eco Booth for registration of employees who participated in energy saving activities at Canteen on Nov 4, 11, 25, 2009. (Activities; 1. No plastic bag, 2. Shuttle bus on request, Other)
3. Display eco relay sport concerning energy saving activity, no plastic bags, shuttle bus on request via projector screen 158 inch at canteen on lunch time (11:00-13:00 hrs.) every Wednesday of November (Nov 4, 11, 25, 2009.) to induce the employees to participated in the activity.



" No use plastic bag Campaign" (Continued project on Nov 4,11,18,25'2009)

Continue campaign "No Use Plastic bags" that organized on the last year for all employees around 3,718 person in PTHC Group to reduce carbon dioxide emission from plastic bag production and reduce plastic waste as the following activities;

1. There are 7 Shops in canteen participated in one of this activity by posted poster "No use plastic bags campaign" and ask all employees in polite manner for their bring reusable bag or need plastic bags.
2. Encourage all employees use reusable bags instead of single use plastic badgs and say No to plastic bags when buying only a few small items through display spot at canteen.

※ Remark :We can reduce CO₂ emission around 1,120 kg.CO₂ and save cost 532 Baht. Other effect we can reduced plastic waste around 5,600 bags.



" Reduce operation time of Canteen's Air Conditioner" (Continued project on Nov 4,11,18,25'2009)

Continue promote " Reduce operation time of Canteen's Air Conditioner" that organized on the last year to conserve energy and reduce carbon dioxide emission by reducing air conditioner in 2 times as follows;

1. Time : 03.00-05.00 p.m.(2 hrs.) turn off 6 air conditioners.
2. Time : 05.00-07.00 p.m.(2 hrs) turn off 4 air conditioners.

※ Remark : 10 Conditioners at canteen. Turn on around 8 hrs.Normal working day, 10 air conditioners were turn on between 06.00-08.00 a.m., 10.45 a.m. - 01.00 p.m., 03.00 - 07.00 p.m. Each air conditioner consume around 23.2 kW. Assuming that 1 kWh produce CO₂ = 0.58 kg.CO₂ (Refer : http://www.egat.co.th/images/stories/pdf1/CO2_egat.pdf)

So, we can reduce CO₂ emission = 1076.48 kg.CO₂ and saved cost = 6,230.40

Emergency preparedness and response

PESTH provided the plan for respond to accidents and emergency including the way for preventing and mitigating the environmental impacts that may be associated with them. The potential emergency cases of the company that have to be provided testing of the emergency are following ;

- 1) Fire fighting and evacuation.
- 2) Chemical leakage or spillage.
- 3) First aids training.

These contents of each plan are included responsibility for response , communication for emergency services such as fire fighting police or rescued units , internal and external communication system and safety data sheet(SDS) with its environmental impact.

Fire evacuate practices



Basic fire fighting training



First aids training

