


Panasonic Energy (Thailand) Co., Ltd. (Old name: Panasonic Battery (Thailand) Co.,Ltd.)

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

Address	166 M.4 Sukhumvit RD, Teeparak , Muang, Samutprakarn 10270			
Lot area	49376m ²	Total floor area	36582m ²	
Establishment day	1996/12	Employees	633persons	
ISO14001certification date	1997/7	ISO14001renewed	2008/10	
Major Products	Dry Battery, Storage Battery, Battery appliances, Environmental CommunicationFY2009			
Information disclosure	1items	visitors on factory tours	253persons	collaboration with municipality 0items
Contact	Standard Coordination Office		TEL: +66 (0) 2384-1156-8 ext 4430	

Message from Compliance Administrator

On December 1996, The company was established, we are recognizing our responsibilities as industrialist we have improved our quality side by side in environment and society. Our factory takes pride in being the first and only battery manufacturer in Thailand to have obtained both ISO 14001 as well as ISO 9001 certificates. This has proved us not only the quality is our first priority, but also that the responsibilities we have towards the environment and society. Our initiatives are to :

- 1.Promote the environmental preservation and zero accident (preventive measures).
- 2.Promote eco ideas for product , eco ideas for manufacturing and ecos idea for everybody everywhere.
- 3.Promote CO₂ emission reduction by support global CO₂ reduction 300,000 TonCO₂ policy.
- 4.Promote 3 R Activity ; Recycle, Reuse and Reduce.



Compliance Administrators
Miss Sangjan Charoensuksa

Main activities in FY2009

Target	Result
CO2 emissions reduction 23 % VS FY2006 (CO2 emissions target as of 12,731 TonCO2)	PECTH has a lot of activity reduction project such as we changed LPG to electricity by setting heater at Casting process, Reduce gross of melting pot from 145.9 g to 125 g at Lead part process, Stop working on Sunday at Dry battery factory, Adjust diameter of air compressor from 2 mm. to 1.2 mm. at Manganese process etc. As a result we can emit CO ₂ emission do not over target, we could emit CO ₂ as of 10,577 TonCO ₂ , we
Waste Reduction 3 % VS FY2008 Waste Recycling 90 % base on current year	For waste reduction ,PECTH reduce Noro waste by reuse noro waste in Storage battery product, reuse inner carton box , decrease Dry battery defect in process etc. As a result we could waste reduction as 4.157 %,we are achieve target. For waste recycling, PECTH do not achieve target, we could waste recycling as 74.19%.
Chemical substances : Release/Transfer Reduction of Chemical substance in Key reduction target and Chemical substance.	For chemical substance, PECTH do not achieve target, we could Release/Transfer Key chemical substance 44.114 Ton and Release/Transfer Chemical substance 85.265 Ton.

Products of Environmentally-conscious information



Extra Grade Car Battery

New Dimension of Electric Power and Durability Increased by 120% Under Technological Development of Panasonic Corporation (Japan). This new Extra Grade of Panasonic car battery, with its electric power and durability increased by 120%, results from progress in research into and development of design technology, and from modern manufacturing Process, aiming at the highest quality and performance through 5 technological features as follows.



Maintenance Free Car Battery

Panasonic Car-Expanded type automotive battery has been many Japanese car manufacturers sold and for over 20 years. During the past 20 years, the battery performances endurance under high temperature, have been remarkably developed and been used by innovated Japanese car manufacturers. As the result of continuous improvements, Panasonic Ca-expanded type automotive battery gains excellent performance and high reliability, and is widely used in the world.



Alkaline Batteries

Panasonic's new alkaline batteries use advanced materials that extend service life by 160% compared with previous models. They have been developed for upcoming demand of high drain discharge for digital devices and are being improved year by year to meet evolution of today's digital products, which should work at peak performance by using Panasonic alkaline batteries. Panasonic alkaline batteries are available almost anywhere, making it easy to find a high-quality replacement for a battery that suddenly runs down.



Manganese Battery

Manganese batteries are an especially good choice for equipment that needs a small but continuous supply of power, such as clocks, lights, remote control and so on. Manganese batteries play an essential role in products used every day by people all over the world with environmental friendly concern we are the first dry battery manufacture in Thailand which implemented Mercury and Cadmium free in manganese batteries.



Flashlight

With focusing on every details, Panasonic's touch has long life and outstanding high quality torch in Thailand. Our unique official bulb makes it differential on the quality of light.

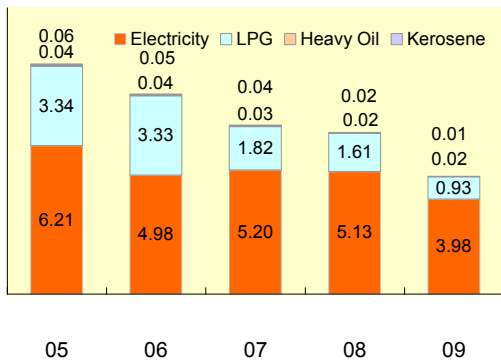
-> link to a product information web-site.

Environmental performance data

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

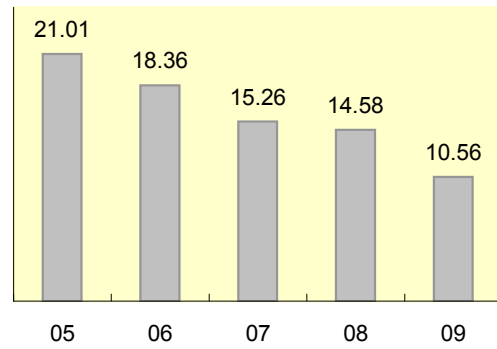
Energy

Unit: 1000kl



CO2 Emission

Unit: 1000t-CO2

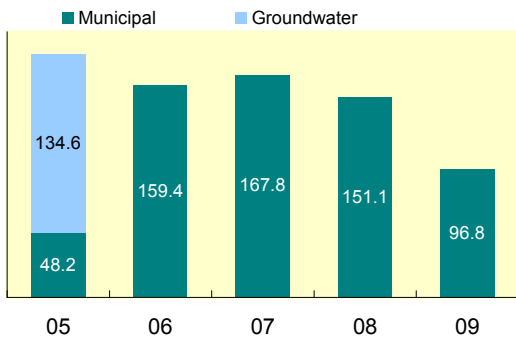


Calculation standards

In FY09 CO2 emission as of 10,557.14 TonCO2 = ((0.5385 kgCO2/kwh*15,468,300 kwh)+(2.489 kgCO2/l* 5,534 l)+(3 kgCO2/kg*721,453 kg)+(2.71 kgCO2/l*18,200 l))/1000 kgCO2/TonCO2

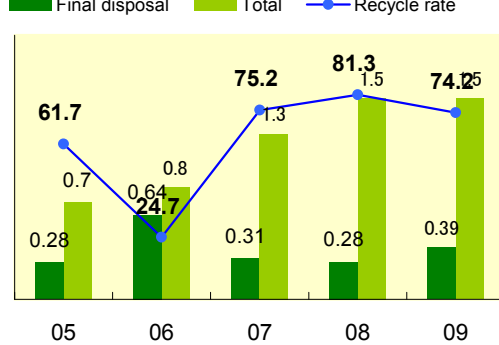
Water

Unit: 1000m³



Waste

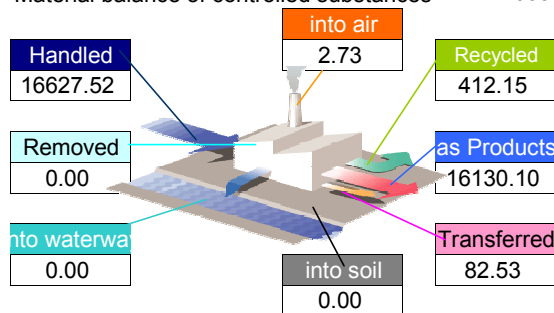
Unit: 1000t, %



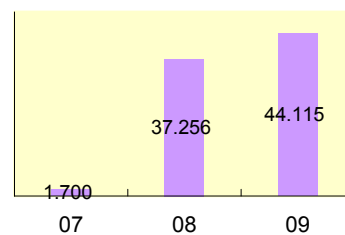
Chemical substances

Unit: t

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

For Chemical substances, PECTH revise formular for calculate chemical substance follow to guideline version 3.1 and PECTH have a lot of productions.

Compliance FY2009

<Air pollutant measurement results>

	Unit	Facility name	Legal limit	Voluntary limit	Average measured	Maximum measured	Measuring frequency
SOx	Nm³/h	N/A			0.00		
		N/A			0.00		
		N/A			0.00		
NOx	ppm	Unformation Dryer F	200.00	200.00	37.40	37.40	1 Time/Year
		Pre Heat	200.00	200.00	14.90	14.90	1 Time/Year
		Dry Room No.1 (Po	200.00	200.00	10.70	10.70	1 Time/Year
Particulate	g/Nm³	Mixing Dust Collecto	400.00	400.00	32.50	32.50	1 Time/Year
		Collector M/C No.1	400.00	400.00	25.80	25.80	1 Time/Year
		Wet Scrubber No.5/	400.00	400.00	11.00	11.00	1 Time/Year

<Water pollutant measurement results>

	Unit	Facility name	Legal limit	Voluntary limit	Average measured	Maximum measured	Measuring frequency
COD	mg/l	Effluence(Manhole)	120.00	120.00	34.67	61.35	1 Time/Mth
					0.00		
					0.00		
BOD	mg/l	Effluence(Manhole)	20.00	20.00	8.25	12.30	1 Time/Mth
					0.00		
					0.00		
Nitrogen	mg/l				0.00		
					0.00		
					0.00		
Phosphorus	mg/l				0.00		
					0.00		
					0.00		

<Noise and vibration>

	Unit	Measurement Area	Legal limit	Voluntary limit	Average measured	Maximum measured	Measuring frequency
Noise	dB	DT	70.00	70.00	57.60	78.30	1 Time/Year
		NT			(Leg24, 24 hrs C		
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

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Improvement of direction by government, or point outs by neighbor

Occurrence situation	Countermeasure

Environmental Policy

Panasonic Energy (Thailand) Co.,Ltd., a subsidiary Company of Panasonic Group as Battery Manufacturer which located at Samrong District, is fully aware and concern of global environmental condition and our responsibility to society both internally and company surroundings. Therefore, We always manage the best way to secure and maintain the world good environmental status for benefit of our own employees and other people in communities.

We, Panasonic Energy (Thailand) Co.,Ltd. would like to declare that we will take the best effort to improve our environmental management continuously by setting up and operating as Company Environmental Policy as below statement ;

1. Establish the Management System, Implementation, World Ecology Conservation
2. Make and Revise the Environmental Objectives and Targets so that they are in compliance with the changes and continuous development.
3. Follow the procedures and laws.
4. Control the activities which may have significant impacts on environment example Hazardous Chemical Substance, Waste Water Pollution, Air Pollution Hazardous Waste.
5. Promote the use of energy and resources to their full efficiencies.
6. Promote and make all the employees realize and be responsible for the environment by training and continuously acknowledging.

Aiming to reduction of environmental impact

Energy Saving



To change energy consumption from LPG to electricity by setting Heater at Casting section. (SB Casting) : LPG consumption is main energy of lead melting at casting process, this process, LPG loss from melting and emit heat more than other process, so We could change type of energy for reduce heat exchange in area, reduce energy expense and CO₂ too.



Total effects after measure : We could reduce CO₂ emission 131.07 TonCO₂

Industrial waste reduction



Increase noro 35% in negative plate of CV Battery :

For waste reduction , we recycle noro 35 % to negative plate in Conventional Battery , As a reult we can recycle waste as 22.6 Ton

Water conservation



To reuse treated water (After treatment) to circulate wet scrubber media. : Wastewater treatment plant has a lot of water treated in working day, and wet scrubbers need some water for treat acid in process. So, we can reuse treated water to wet scrubber for reduce water supply in process.



Total effects after measure : We could reduce water supply 7,402 m³

Environmental Communication



Thailand Environmental Functional Group Meeting (PEFG) :

Every month , We have meeting among Panasonic group in thailand (PEFG) for exchanging experience, knowledge and update environmental information.



Reforestation with Samrong municipal district :

PECTH and Samrong municipal district reforest Planting (Bougainvillea) at Soi Santikam on 25 July 2008



Milk box(UHT) Donation to Thaitv3 channel : PECTH donated milk box (UHT) from factory to "Jeaw love Earth" project of Thaitv3 channel on 11 September 2008

Panasonic Eco Relay " Mangrove Reforestation" :

PECTH and volunteers of Panasonic's group employees and their family reforest mangrove trees (Avicennia alba Blume) at Bangpoo Resort, Samutprakarn Province On 12 October 2008



CO₂ training :

1. On 7-8 April 2008, Dry Battery Business Unit to training "CO₂ reduction Technician " course with PECTH.
2. On 23-24 February 2009, Panasonic Asia Pacific to training " CO₂ reduction technical training in Asia Pacific region" course with Panasonic group in Thailand and region country at PECTH.



Green Procurement audit :

For compliance RoHS activity, PECTH setting team for Green Procurement audit to suppliers for ensure parts/Material restrict Hazardous substance. The audit timing started in September 2008 To March 2009.



Supplier Training (Safety and Environmental Rule) : On 4-5 September 2008, PECTH invite all suppliers training in subject Safety and Environmental enforcement when working in PECTH.

Emergency preparedness and response

Emergency preparedness and response plan

We have Occupational Health and safety management plan. The plan is manage all activity in safety and Emergency situation. This plan include that Identify on-site hazards , periodic testing of emergency, evacuation routes, mitigation and respond action of emergency situation and training.



Case of a training :

On 4 April 2008, We have LPG gas leakage practice and training by World Gas Co., Ltd.

On 26 December 2008, We have advance fire fighting practice and training by Department of Disater Prevention and Mitigation and we have fire evacuation route testing.

Advance fire fighting practice and training



Fire evacuation route testing

