

Toshiba Consumer Products (Thailand) Co.,Ltd. Site Report Information

Address : 144/1 Moo 5 Bangkadi Industrial Park Tivanon Rd. Pathumthani 12000

Lot area : 169,512 m², Building area: 123,167 m², Green ratio: 27%

Establishment : January 9th, 1989, Employees: 4,554 (as of May 2011)

Major products : Refrigerators and Washing machines

ISO 14001 certified : April, 1998, Latest updated : May 13rd 2011
(ISO Certificate number : AJA 98/1162)



Message from Environmental Preservation Chief

TPT was established in 1989 and located at Bangkadi Industrial Park (BIP) in Pathumthani province where as well known as a province of top rank of an agriculture resource and export a highly quality of Thai rice. Moreover, Pathumthani is praised as one of a great attractive natural tourism place of Thailand. Therefore base on our strong determination, We have been driving our business under committed to manufacture and deliver products in a manner that minimize environmental impacts and its activities have on the environment by applying appropriate technology and conserve natural resources.



Mr. Yoshiaki Kawamura
President & EMR

Major environmental activities in 2010

- ☆ ISO 14001 Environmental Management System
Certification obtained in April 1998 and continually implemented surveillance audit (ISO14001:2004) on May 13rd 2011.
- ☆ Enforcement of environmental preservation system
Compliance with laws and regulations; reinforcement of on site management.
- ☆ Reduction of chemical substances released
Reduction of the total chemical substances released in FY2000 by 54% within FY2012. (Target = 10.40 tons)
- ☆ Reduction of CO₂ emission
Reduction of CO₂ (energy-originated) emission ratio in FY1990 by 47% within FY2012. (Target = 2.90 t-CO₂/MB)
- ☆ Reduction of waste generated
Reduction of the total waste generated ratio in FY2000 by 24% within FY2012. (Target = 0.496 ton/MB)
- ☆ Continuation of zero waste emission
Reduction in the quantity of waste for final disposal to be less than 0.5% of total generated within FY2012. (Target = 0.30%)
- ☆ Environmental awareness activities across the organization
Environmental awareness activities by through the Environment & Energy saving Promotional Month in June and August every year.
- ☆ Collaboration with local people
President signed MOU with DIW Network "Establishment Cooperation Sustainable Corporate Social Responsibility Support Project "
To joined with Toshiba group in Thailand and Pollution Control Department " WEEE CAN DO Project " for celebration His Majesty's 84th Birthday

Development of products and environmental technologies, Environmental consideration point

To improve pulsator for increase wash ability

14kg

S-DD INVERTER
NEODYMIUM

HYDRO
Twin Power

To adopt Zero standby power system to washing machines

To improve cooling system by new inverter compressor

Environmental communication



- Arranged the Environment conservation promotional month in June of every year.
- President signed MOU with DIW Network "Establishment Cooperation Sustainable Corporate Social Responsibility Support Project "
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TPT Environmental Policy

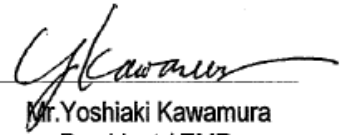


Mr. Yoshiaki Kawamura
President & EMR

On behalf of Toshiba Consumer Products (Thailand) Co., Ltd. (herein-after be called "TPT"), as one branch of Toshiba Corporation Japan, who is running business as a main manufacturer and exporter of white goods (Refrigerators & Washing machines) of Thailand located in Pathumthani province where is well-known as a province of nice Thai culture, Top rank of an agriculture resource and export a high quality Thai rice. Moreover, Pathumthani is praised as one of a great attractive natural tourism location of Thailand. Therefore, basing on our strong determination, TPT has been driving a business under Environment Commitment as trying the best to protect and preserve such a good social environment.

Furthermore, TPT never stop developing Social Commitment concerning to be better via our great effort as a grateful of social kindness. All these activities are continuously promoted and carried on under potential technology and financial stability of TPT, refer to the following description.

1. Promotion of Environmental Protection is one of the most significant items of TPT's management. By the assessment the impacts of its business activities, products and services on Environment including with regarding to the biodiversity, and objectives and targets are set up with respect to reduce environmental impacts and prevention of pollution with a particular focus on the preventing of global warming, efficient utilization of resources and control chemical substance. Continual improvement and progress are promoted by participation of all employees.
2. Compliances with relevant environmental legislation and regulations are recognized as TPT's duty. We shall follow all the laws and regulations enforced in Thailand and to observe relevant international regulations and comply with the global policies of Toshiba. And we shall promote the level-up of environmental protection by means of establishing our own standards.
3. Promotion of efficient use of natural resources, based on the recognition of finiteness of its resources. Our products are durable consumer goods & energy consumed goods. Considering the environmental aspect of products, TPT shall promote the Environmental Conscious Products especially to regard creation of energy saving products that are high energy consumption appliances during their life cycle.
 - (3.1) To develop and provides Environmentally Conscious Products (ECP) and services which contribute to the reduction of environment impacts throughout their life cycle.
 - (3.2) Adoption of materials and parts that can be easy to recycle.
 - (3.3) Promotion of non-global warming potential substances instead of existing HFC. (Refrigerant, Blowing agent of Insulation)
 - (3.4) Promotion to the European RoHS Directive (Pb, Hg, Cd, Cr-V, PBB, PBDE).
4. Promotion of environmental protection activities for environmental impact reduction concerned about environmental aspects of operation activities and services.
 - (4.1) Management reinforcement and reduction of restricted chemical materials.
 - (4.2) 3R (Reduce, Reuse & Recycle) for reduction of industrial waste, such as paper, steel and plastic etc.
 - (4.3) Promotion of Energy Saving activities (Electricity, Water and other energy in production) and using green energy such as solar cell, clean energy such as NGV for boiler etc. to prevent global warming.
 - (4.4) To promote Clean Technology (CT) through our business activities.
5. Promotion of the total environmental protection activities throughout TPT's group including relevant external organizations, and committed to the society.
 - (5.1) Encouragement, support and guidance of suppliers and contractors to establish EMS.
 - (5.2) Cooperation and commitment to maximize disclosure and transparency in communication Stakeholders and society.

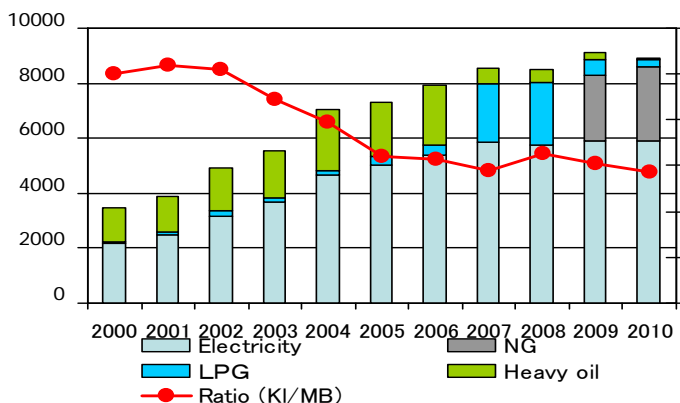


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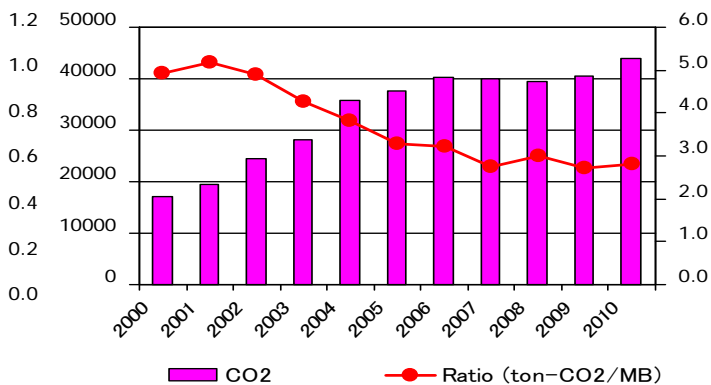
2 Nov. 2010

Environmental load data

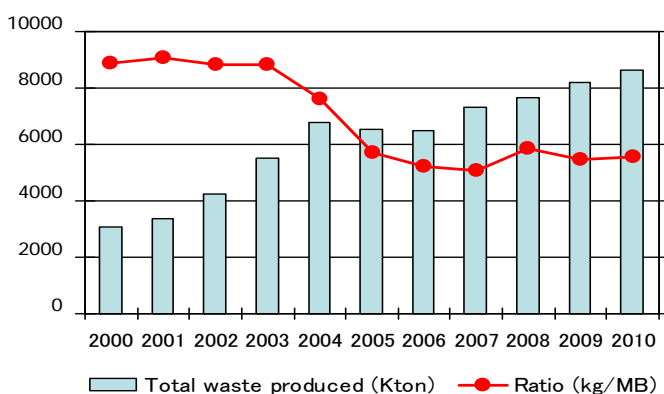
Energy usage (unit: KL)



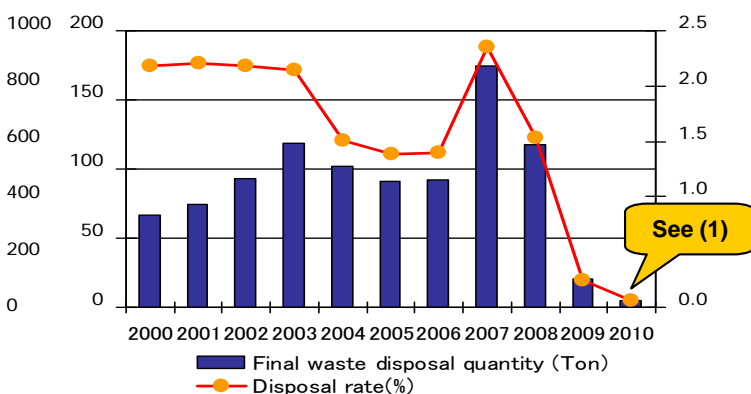
CO2 emission (unit: ton-CO2)



Total waste generated (unit: ton)

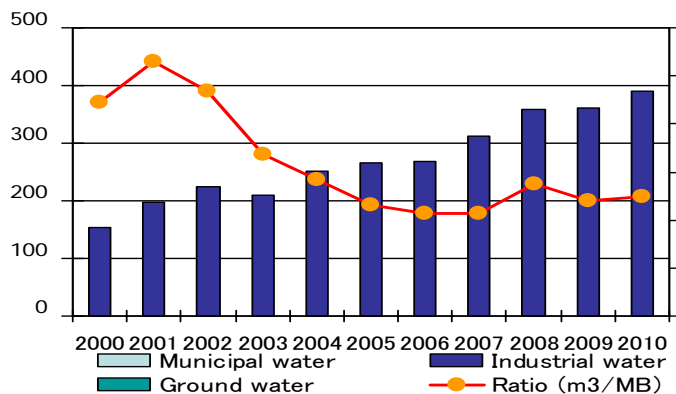


Final waste disposal quantity & disposal rate (unit: ton,%)

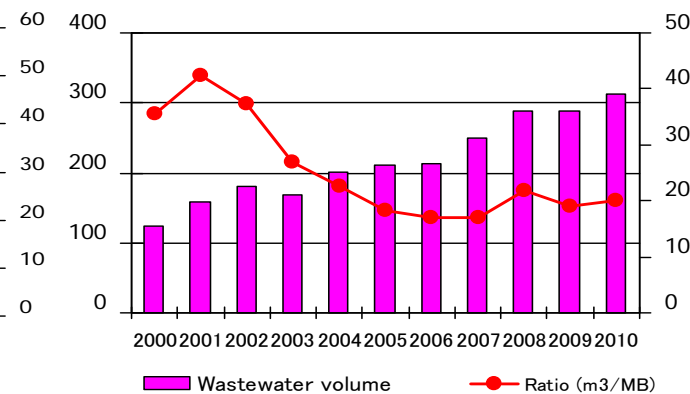


(1) : Due to we have changed disposal method of urethane foam by burning in cement kiln as substitute fuel since August, 2010.

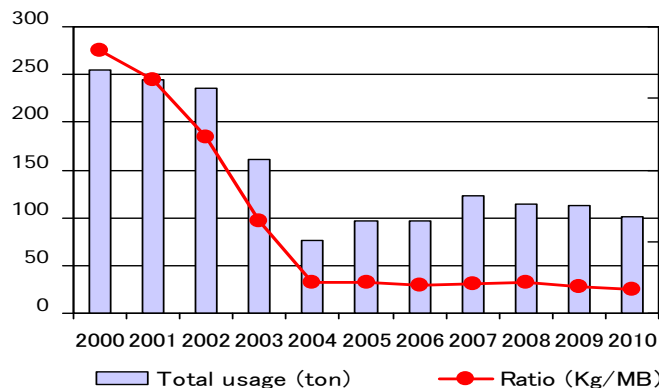
Water usage (unit: 1,000m³)



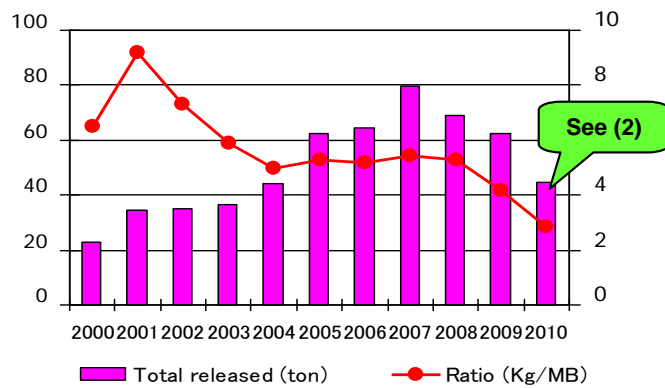
Wastewater volume (unit: 1,000m³)



Handing substances (unit: ton)



Substances volatilized and released to water (unit: ton)



(2) : Due to since FY2009 R/F manufacturing factory has studied to reduce Methanol usage in cleaning process of refrigerators.

Compliance management

Atmospheric measurement results (Fire-tube type of 4 tons Boiler (fuel : NG and Heavy oil A) , totally 3 units)

	Regulation value	Self-control value	Actual measurement	Measurement frequency
NOx (ppm)	200	180	43.5	twice/year
SO2 (ppm)	950	700	ND	twice/year
CO (ppm)	690	30	1.0	twice/year
Soot & dust (mg/Nm3)	240	210	23.6	twice/year

Wastewater measurement results (Major results) (Pre-treatment facility : After treated wastewater is discharged to the Central waste water treatment plant in the Industrial park (for final treatment)

(Remark : Waste water treatment plant in TPT has been started operation since August '07)

	Regulation value	Self-control value	Actual measurement	Measurement frequency
Hydrogen ion concentration (pH)	5-9	6.0-8.5	7.2	Once/month
BOD (mg/l)	500	400	65	Once/month
COD (mg/l)	750	600	165	Once/month
SS (mg/l)	200	190	59	Once/month
TDS (mg/l)	3000	1900	832	Once/month
Oil & Grease (mg/l)	5	4.9	2.85	Once/month
Zinc (mg/l)	5	4	0.46	Once/month

Noise & vibration measurement results (Specific facilities (noise: 162 (press/injection m/c), vibration: 47(press m/c)

	Location: Time	Regulation value	Self-control value	Actual measurement	Measurement frequency
Noise (dB)	Lot boundary: Day	70	68	56	Twice/year
	Lot boundary: Night	70	68	56	Twice/year
Vibration (dB)	Lot boundary: Day	None	None	None	None
	Lot boundary: Night	None	None	None	None

Other measurement results (Sewage Water Law: Major results)

	Regulation value	Self-control value	Actual measurement	Measurement frequency
Hydrogen ion concentration (pH)				
BOD (mg/l)				
SS (mg/l)				

Referred to data as shown in the waste water measurement results (sewage water is mixed with treated wastewater at final discharge outlet)

Environmental accidents, administrative advices and complaints

	State
Environmental accident	None
Environmental problem around the factory and in the local area	None
Administrative advice or direction	None
Complaint from neighboring residents	None