

Thai Toshiba Electric Industries Co., Ltd. (abbreviation :TTEI) Site Report Information

Address: 129/1-5 Tivanon Rd., Thasai, Muang, Nonthaburi 11000, Thailand

Lot area: 57,468 m², Building area 57,030 m², Green ratio: 1.00%

Establishment: 29-September-1969, Employees: 1,733 (as of Mar 2020)

Major products : Refrigerator, Microwave oven, Small home appliances

ISO 14001 version 2015 Certificate number: AJA98/1178



Message from Environmental Preservation Chief

The environmental conservation is the most important for TTEI refers to attempts to make humans relationship with the environment sustainable. TTEI are enhancing our environmental management to achieve our mission "to bring good things to life" and to contribute to society by the concept of "Green of Products", "Green of Process" and "Green Management". We committed to manufacture and deliver electrical household appliance in a manner that minimizes the environment impacts and continue to improve and to accelerate our environmental activity for the sustainable future and we sincerely hope that our management can be accepted by all stakeholders



Environmental Preservation Chief
Mr. Huixiang Huang

Major environmental activities in 2018

ISO 14001 Environmental Management System (Surveillance visit on Aug 28-30,2019)

- ☆ Reduction in CO2 emissions
Reduction of CO2 (energy) emissions ratio in CY2019 plan 2.63 ton/MB, actual 2.61 ton/MB.
- ☆ Reduction of chemical substance emissions
Reduction of the total chemical substance released in CY2019 plan release 12.08ton, actual release 9.50 ton.
- ☆ Reduction of total waste generated
Reduction of the total waste generated in CY2019 plan generate 1,687 ton, actual generated 1,393 ton.
The quantity of waste generate ratio in CY2019 plan 0.3580 ton/MB, actual 0.3337ton/MB.
- ☆ Continuation of zero waste emissions
Reduction in the quantity of waste for final disposal in CY2019 plan 0.5%, actual 0.81%.
- ☆ Reduction in volume of water receive
☆ The quantity of water receive ratio in CY2019 plan 24.93 ton/MB, actual 26.63 ton/MB

Product Line up



Microwave Oven



Single Door Refrigerator & Portable Refrigerator



Rice Cooker



Electric Pot

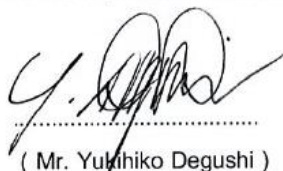
TOSHIBA

Announced No.06/2019

Environmental Policy

Thai Toshiba Electric Industries CO.,LTD. is committed to conducted production process, product and service of organization that minimizes the environmental impacts. These activities are under-taken and promoted within our context by the contents mentioned below.

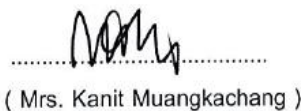
1. TTEI shall enhance consciousness and implant in environmental protection and continual improvements as be responsibility of all employees ,employees 's family and all persons, who is working for or on behalf of the organization.
2. TTEI shall fulfill compliance obligation (relevant environmental legal, local environmental legal, requirement of interesting parties and requirement of TTEI) such as RoHS, TTEI green procurement ,TLSC Group Site Environmental Audit and MIB EHS Management System abide with our Standard.
3. TTEI shall promote environmental protection concerned on environmental aspects of operation activities and services as the most significant items of TTEI's management and implement 5th Environment Action Plan of Toshiba group for establishment of "Environmental Objectives and Targets".
 - 3.1) To eliminate and prevent air pollution, soil pollution, noise, waste water , industrial waste the distribution of the radiation, heat, light and scenery.
 - 3.2) Reduce and control risks those have the environmental impacts.
 - 3.3) Promotion of water and energy (electricity and gas) saving by efficient usage.
 - 3.4) Reduce usage of energy generate CO2 Emission.
 - 3.5) Control to not leak of chemical that cause greenhouse gases into the atmosphere
 - 3.6) Reduce usage of chemicals substances usage that evaporate into the air , soil , water resources and the distribution of the radiation.
 - 3.7) Production waste reduction and control waste to landfill.
 - 3.8) Reduce usage of city water.
4. TTEI shall promote total environmental protection activities throughout Toshiba group.
 - 4.1) To support and guidance to External service providers (Suppliers of raw materials ,Suppliers of production equipment, Subcontractors and Service Providers
 - 4.2) To participate and promotion Environmental activities.
 - 4.3) To conservation of biodiversity (both plant and animal).
5. TTEI shall participate with community and society for prevent and improve the environment continually.
 - 5.1) To participate with government and other for environmental project
 - 5.2) To improve environmental with plant trees in other area.
 - 5.3) To support trees planting with the distribute trees to TTEI employees and neighbor to plant tree
6. TTEI shall communicate to all employees and all persons, who is working for or on behalf of the organization to understand for practice correct and distribute to interesting parties and public.



(Mr. Yukihiro Degushi)

President

Announcement on January 22, 2019

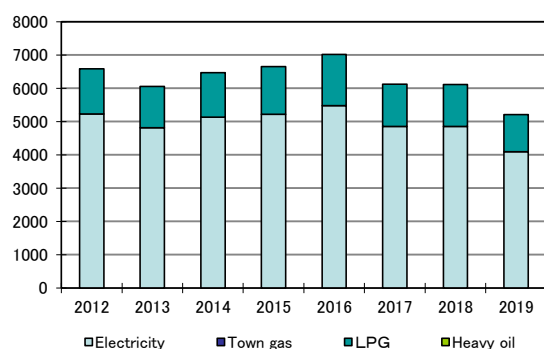


(Mrs. Kanit Muangkachang)

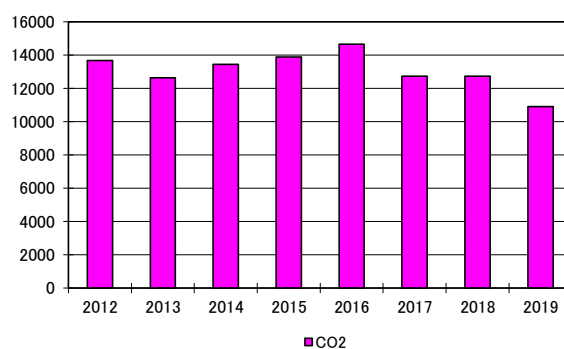
Vice president

Environmental load data

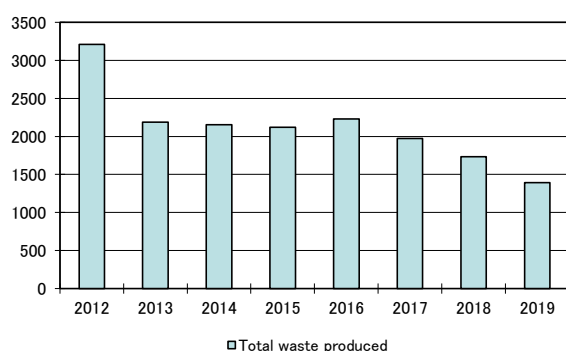
Energy usage (unit: KL)



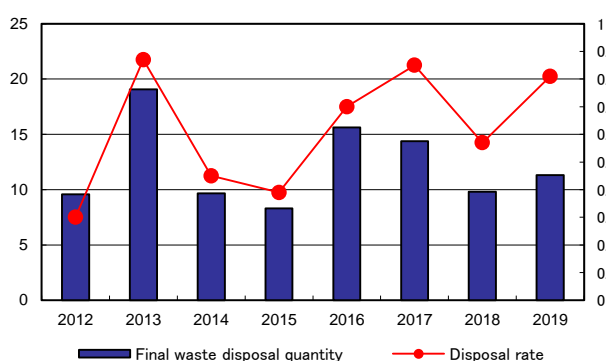
CO₂ emission (unit: ton-CO₂)



Total waste produced (unit: ton)

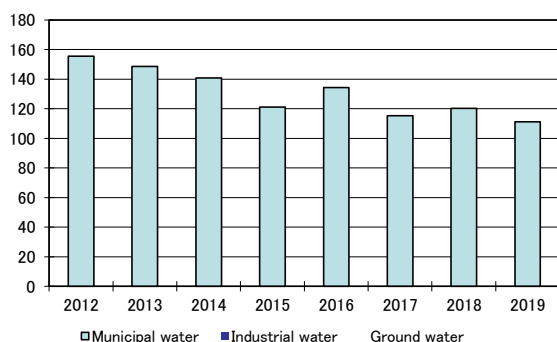


Final waste disposal quantity & disposal rate (unit: ton,%)

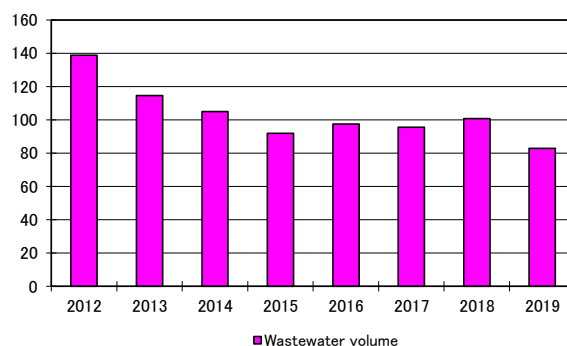


Major wastes: Acid, sludge, metal, glass, plastic, oil, etc.

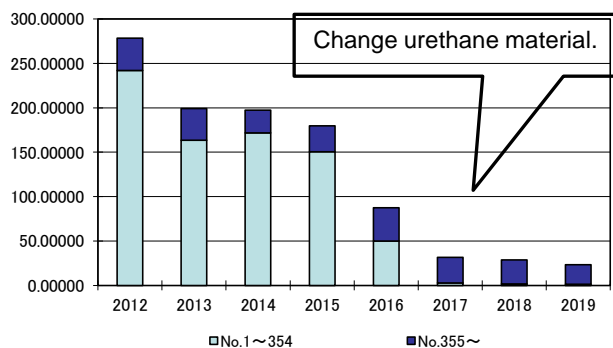
Water usage (unit: 1,000m³)



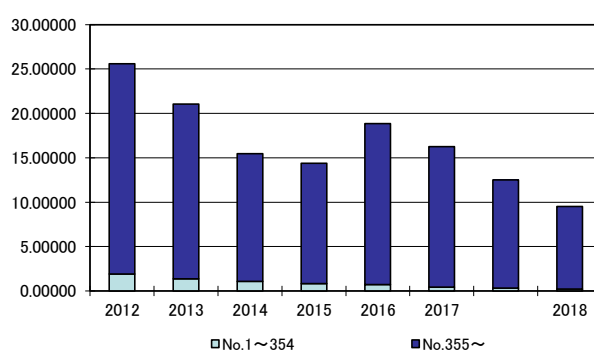
Wastewater volume (unit: 1,000m³)



Handing substances (unit: ton)



Substances volatilized and released to water (unit: ton)



Major chemical substances: Hydrogen Chloride, Zinc compound, Isopropanol, Sulfuric acid, Etc

Compliance management

Atmospheric measurement results (Fire tube boiler 3 tons and once through boiler 2.5 tons. (gas LPG): 2 units)

| | Regulation value | Self-control value | Actual measurement | Measurement frequency |
|----------------------|------------------|--------------------|--------------------|-----------------------|
| NOx (ppm) | 200 | 180 | 64.45 | Twice /year |
| SOx (Nm3/h) | 60 | 10 | 0.01 | Twice /year |
| Soot & dust (mg/Nm3) | 240 | 50 | 28.28 | Twice /year |

Wastewater measurement results (major results) Wastewater is discharged to Chao-phaya rivers

| | Regulation value | Self-control value | Actual measurement | Measurement frequency |
|---------------------------------|------------------|--------------------|--------------------|-----------------------|
| Hydrogen ion concentration (pH) | 5.5 – 9.0 | 6.0-8.0 | 7.24 | Once/ month |
| BOD (mg/l) | ≤ 20 | ≤ 18 | 11.22 | Once/month |
| COD (mg/l) | ≤120 | ≤96 | 47.34 | Once/ month |
| SS (mg/l) | ≤ 50 | ≤ 25 | 6.5 | Once/month |
| Nickle (mg/l) | ≤ 1 | ≤ 0.9 | 0.15 | Once/month |
| Zine (mg/l) | ≤ 5 | ≤ 3 | 0.06 | Once/month |

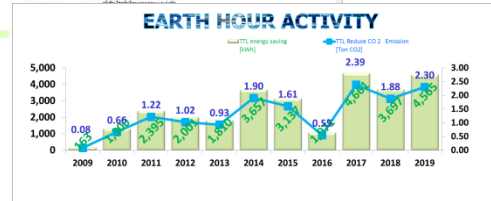
Noise & vibration measurement results (specific facilities (noise: 9(mech. press))

| | Location: Time | Regulation value | Self-control value | Actual measurement | Measurement frequency |
|----------------|---------------------|------------------|--------------------|--------------------|-----------------------|
| Noise (dB) | Leq 24 hr | 70 | 65 | 61.1 | Once/year |
| | L (Max) | 115 | 105 | 91.7 | Once/year |
| Vibration (dB) | Lot boundary: Day | Excluded | - | - | - |
| | Lot boundary: Night | Excluded | - | - | - |

<Global Environmental Action>

<Earth hour 2019>

TTEI promote Earth Hour activity via poster, e-mail, intranet and letter to employees and supplier. TTEI 's employees and supplier join together turn off lighting and home appliance at home on Mar 30, 2019. TTEI building also turn off signboard lighting and fence lighting between 20:30-21:30.



<Tree planting and paint school>

On May 1, 2019 (Labor Day), 32 TTEI's employees joined with Electrical, Electronics and Telecommunication industries group (Total 300 members) re-painting school and plant 10 trees in Samutsakorn.

Outline

- Date: May 1, 2019 09:00AM-15:00PM
- Total 300persons joined..
- Plant 10 trees.



<Clean-up public road & Distribute trees for employees and neighbor activity >

On Thailand's Father day event. Employees clean the 1 km roadside surrounding of TTEI factory. Our top management are going to distribute tree to neighbors surrounding of TTEI factory and distribute to our employees.

- Date: Dec 5, 2019
- Number of people participated: 250 persons.
- Total 300 mango trees distribute to employees and neighbors.



<Clean-up Bangka-sor canal activity >

TTEI's employees 180 persons joined with Nonthaburi city municipality and Nonthaburi community clean Aquatic weed and waste in Bangka-sor canal beside of Nokhook night market, Nonthaburi.

- Date: Aug 04, 2019.
- Number of people participated: 250 persons.



Environmental communication

<Environmental awareness activity>

On the week of World Environment day. TTEI's Environment week have set up Safety, Environment and Energy saving exhibition at first floor of Canteen building. Top management and employees joined with this exhibition. On exhibition also have recycle contest, Safety-man contest and global warming, waste management, Grease trap, 3R and energy awareness training to employees.

- Date: Jun 5-6, 2019 08:00AM-15:00PM
- Number of people participated: 500 persons.



<Green factory>

On 31 May 2019, Nonthaburi city municipality audit TTEI about waste water management and waste water treatment, industrial waste and municipal solid waste management, energy management and energy conservation.

On 21 June 2019, TTEI received Green factory award (1st prize) from Nonthaburi city municipality.



<3R activity>

On 5 July 2019, Department of industrial works audit TTEI about waste management such as waste management in production line, industrial waste storage area, waste disposal treatment, legal and 3R project.

On 8 August 2019, TTEI received 3R award and 3R+ award from Department of industrial works .



<Environmental Government activity>

On 22 July 2019, Department of industrial works audit TTEI about Environmental Government such as material and product, pollution treatment, safety, resource management, complain and Participation And responses that benefit the community.

On 4 December 2019, TTEI received Environmental Government activity award from Department of industrial works .

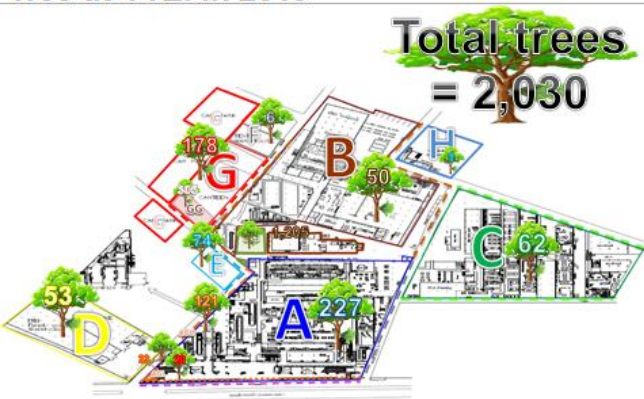


< Survey biodiversity at TTEI October,2019 >

Oct23-Oct30,2019

| No. | Building | Place | Location | Fl. | Tree | | Animal | |
|-----|----------|---|----------|-------|---------|-------|---------|------|
| | | | | | Species | Q'Ty | Species | Q'Ty |
| | | TTL TTEI | | | 68 | 2,030 | 7 | 279 |
| 1 | A | Main Factory Indoor | | 1,2,3 | 17 | 183 | 2 | 2 |
| 2 | A | Garden1 and Fish pool at REF division | | 1 | 6 | 33 | 2 | 62 |
| 3 | A | Garden2 at Sawafuji division | | 2 | 8 | 20 | 1 | 200 |
| 4 | A | Garden3 outside wall of Main Factory Building-REF | | 1 | 9 | 121 | 0 | 0 |
| 5 | A | Pathway outside wall of Main Factory Building-MTL | | 1 | 1 | 13 | 0 | 0 |
| 6 | A | Pathway outside wall of Main Factory Building-Front | | 1 | 2 | 31 | 0 | 0 |
| 7 | B | MWO-SHA-CDC-CQAC indoor and PNF office , E&E (Mechanical) | | 1,2 | 5 | 9 | 0 | 0 |
| 8 | B | Garden4 and Fish pool at WWWT | | 1 | 8 | 1,205 | 4 | 13 |
| 9 | B | Pathway outside MWO wall | | 1 | 2 | 17 | 0 | 0 |
| 10 | B | Pathway outside SHA wall | | 1 | 3 | 24 | 0 | 0 |
| 11 | C | PLA Indoor (include scarp area) | | 1,2 | 2 | 6 | 0 | 0 |
| 12 | C | Pathway outside wall of PLA Building | | 1 | 4 | 56 | 0 | 0 |
| 13 | D | PCB Indoor (include TLGT) | | 1,2 | 5 | 27 | 0 | 0 |
| 14 | D | Pathway outside wall - PCB | | 1 | 14 | 26 | 0 | 0 |
| 15 | E | E&E (Maintenance) Office & Shop | | 1,2 | 14 | 40 | 2 | 2 |
| 16 | E | Pathway outside wall of E&E/REF/PNF Shop | | 1 | 7 | 34 | 0 | 0 |
| 17 | F | Pathway outside wall of MTL Storage | | 1 | 4 | 6 | 0 | 0 |
| 18 | G | Canteen Indoor | | 1 | 8 | 24 | 0 | 0 |
| 19 | G | Garden5 at Canteen | | 1 | 19 | 131 | 0 | 0 |
| 20 | G | Pathway outside wall of Canteen | | 1 | 4 | 23 | 0 | 0 |
| 21 | H | Pathway outside wall of Container | | 1 | 1 | 1 | 0 | 0 |

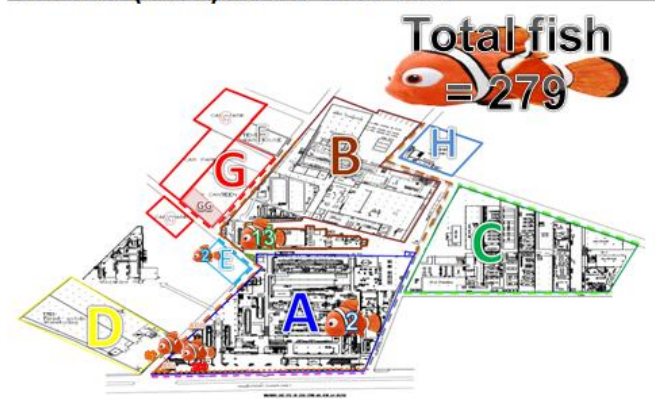
Tree at TTEI in 2019



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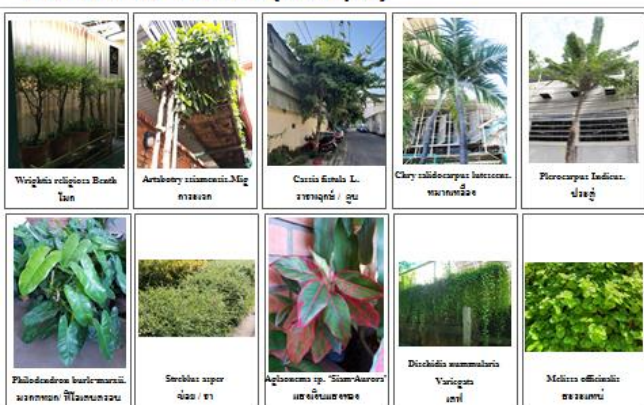
Animal (Fish) at TTEI in 2019



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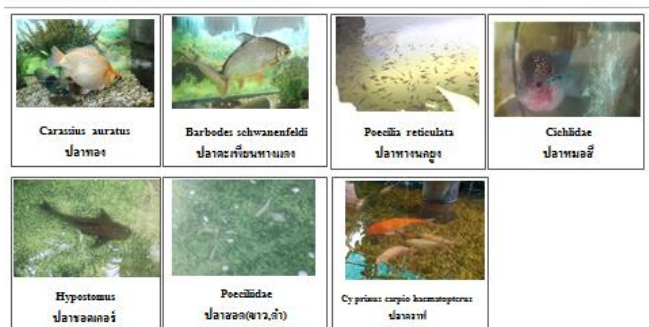
Tree at TTEI in 2019 (Example)



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Animal at TTEI in 2019



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