

## TOSHIBA TEC Singapore Pte. Ltd. Site Report Information

Address: 2 Ang Mo Kio Street 62 Singapore 569138

Lot area: 15,011 m<sup>2</sup>, Building area: 8,019 m<sup>2</sup>, Green ratio: 5.0 %

Establishment: Dec, 1988, Employees: 377 (as of March 2020)

Major products: POS Products, Barcode Printers, Multi functional Printers, Self-Service Kiosk and Dot Matrix Printers.

ISO 14001 certified: April, 1998, Latest update: 8 Apr 2020  
(ISO 14001:2015 Certificate number: 2020-0804)



## Message from Environmental Preservation Chief

Toshiba TEC Singapore (TSE) put concerns for the environment as a priority in our business activities, with respect to the prevention of environmental pollution, use of sustainable resources, mitigation of climate change, adaptation to climate change and conservation of biodiversity. We promote environmental awareness for sustainable tomorrow.



Environmental Preservation Chief  
Jasmine Goh

## Major environmental activities in 2019

### Reduction in CO2 emissions

- Shut down central air-conditioner and lighting when there is no production.
- Replace conventional lighting at office and common areas with LED lighting.
- Promotion for energy reduction to employees through poster and video.

Reduction of CO2 (energy) emissions by 3% per year.

### Reduction in wastes

- 3R awareness promotion
- Reduce chemical waste from CNC milling machine by reusing waste coolant.
- Reuse carton box for service part packaging.

Reduction of final waste disposal by 1% per year.

### Corporate Social Responsibility

- Participate in Blood Donation Drive.

### Biodiversity

- Butterfly watch Seasonality Survey (Mar – Aug)
- Half yearly Bird and Butterfly Survey
- Plant endangered native species in company.

## Development of products and environmental technologies, Environmental consideration point

### BA400



#### <Halogen Free PCB>

- Halogen-free material was adopted for the lead wires of Panel PWB.
- Use rate of halogen-free PWB in a product is 1/5 (20%)

### Zoot



#### <Resource Saving>

- Replaced reflex cushion with air bag achieve saving in material cost and reduce carton box size by 10%.
- Increase printer unit per pallet from 64 unit to 80 units.

# TOSHIBA

## TOSHIBA TEC SINGAPORE PTE LTD

### Integrated Management System Policy

We shall integrate Quality, Environmental, Health & Safety considerations in our business decision making to enhance customer satisfaction, manage environmental impact, provide safe and healthy workplaces to prevent injury & ill health and safety hazards, such information are readily available to interested parties. We strive to continually improve our management system with the following commitments:

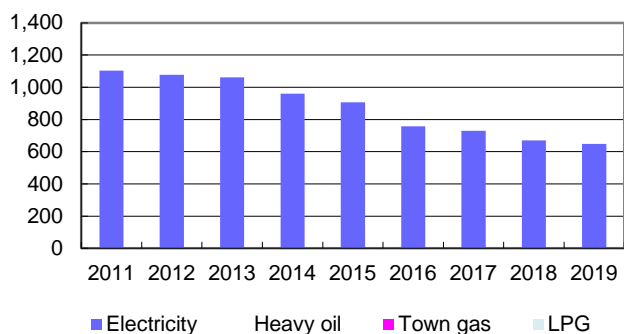
1. “Monozukuri\*” – We create quality products and services with pride and passion, keeping our customers in mind all the time and everywhere.
2. We respect each and individual employee, develop one’s abilities and together we foster an open and healthy corporate culture and we tirelessly seek new challenges.
3. We fulfill our responsibilities toward each country and community in which we operate, we respect the local culture and history, and we comply with the statutory and regulatory requirements.
4. We improve and maintain a healthy and safe work environment through proper safe work procedures, managing hazards and implementing risk controls, these includes consultation, participation and feedback from employees.
5. We put concerns for the environment as a priority in our business activities, with respect to the prevention of environmental pollution, use of sustainable resources, mitigation of climate change, adaptation to climate change and conservation of biodiversity.
6. We take the necessary information security measures to prevent information leakage.
7. We strive to maximize our corporate value to achieve appropriate profits and reserves to meet the expectations of our stakeholders through implementing management innovation and investing in research and development.

\*“Monozukuri” is the ongoing process of creating new values realized in quality products and services that exceed customer expectations by applying superior proprietary technology and knowledge nurtured over long years.

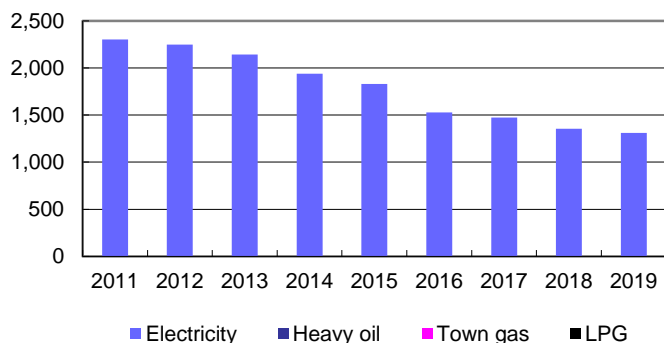
Tetsu Oda  
President & Chief Executive Officer  
22<sup>nd</sup> Jan 2020

## Environmental load data

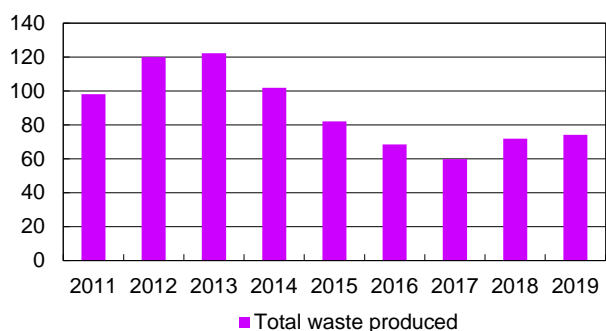
Energy usage (unit: KL)



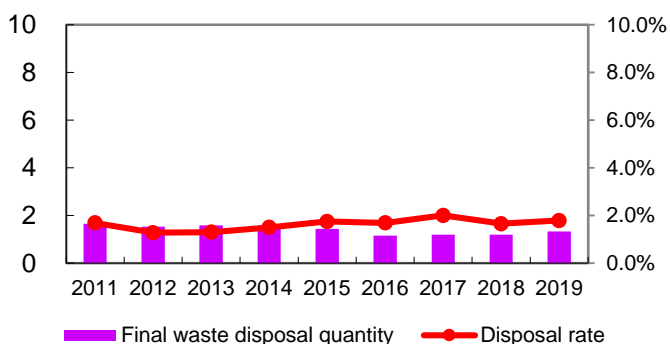
CO<sub>2</sub> emission (unit: ton-CO<sub>2</sub>)



Total waste produced (unit: ton)

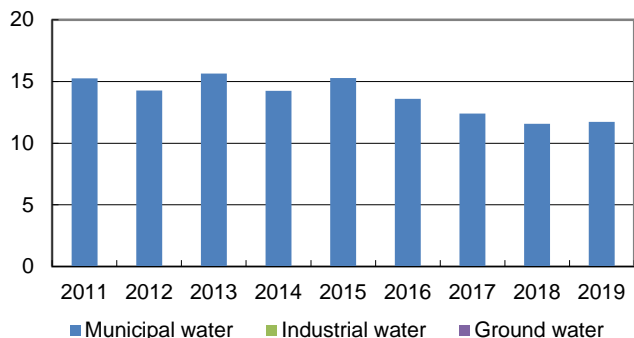


Final waste disposal quantity & disposal rate (unit: ton,%)

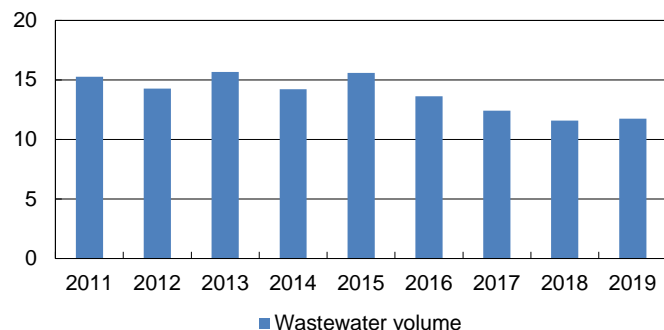


Major wastes: Paper, Plastic, etc.

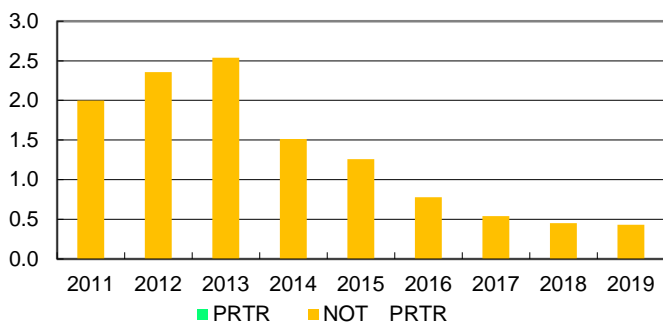
Water usage (unit: 1,000m<sup>3</sup>)



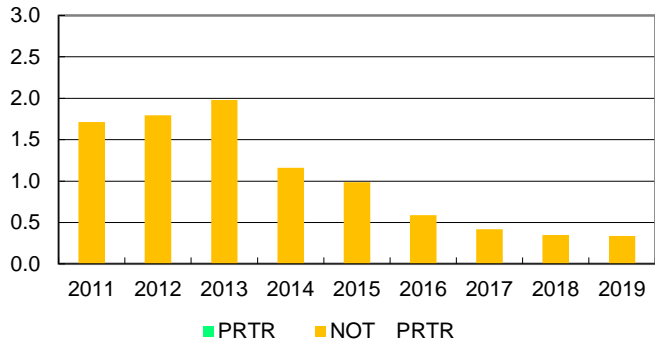
Wastewater volume (unit: 1,000m<sup>3</sup>)



Handing substances (unit: ton)



Substances volatilized and released to water (unit: ton)



Major chemical substances: Isopropanol, etc.

## Compliance management

### Atmospheric measurement results (multi-pipe small-type through flow boiler (city gas): X units)

	Regulation value	Self-control value	Actual measurement	Measurement frequency
NOx (ppm)	Not Applicable	Not Applicable	Not Applicable	Not Applicable
SOx (Nm3/h)	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Soot & dust (mg/Nm3)	Not Applicable	Not Applicable	Not Applicable	Not Applicable

### Wastewater measurement results (major results) (Facility, IC at Guard house and IC near Bin Centre): Wastewater is discharged to drainage)

	Regulation value	Self-control value	Actual measurement	Measurement frequency
Hydrogen ion concentration (pH)	6-9	6.5 – 9.0	8.8	Once/2 years
BOD (mg/l)	400	350	28.9	Once/2 years
COD (mg/l)	600	500	70	Once/2 years
SS (mg/l)	400	300	51	Once/2 years
Nitrogen (mg/l)	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Fluorine (mg/l)	Not Applicable	Not Applicable	Not Applicable	Not Applicable

### Noise & vibration measurement results (Boundary noise)

	Location: Time	Regulation value	Self-control value	Actual measurement	Measurement frequency
Noise (dB)	Lot boundary: Day	75	72	58.1	Once/3 years
	Lot boundary: Night	65	62	56.9	Once/3 years
Vibration (dB)	Lot boundary: Day	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Lot boundary: Night	Not Applicable	Not Applicable	Not Applicable	Not Applicable

### Other measurement results (Sewage Water Law: Major results)

	Regulation value	Self-control value	Actual measurement	Measurement frequency
Hydrogen ion concentration (pH)	6-9	6.5 - 9	8.8	Once/2 years
BOD (mg/l)	400	350	28.9	Once/2 years
SS (mg/l)	400	300	51	Once/2 years

### 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

## Environmental communication

### <Annual Workplace E-waste Recycling Week>

In conjunction with the government's initiative to manage end-of-life for ICT equipment, we have been actively holding annual "E-waste Recycling Week" to promote the recycling of electronic equipment used at home and at work, including computer monitors and laptop. Recycling fund collected is contributed to Toshiba Carbon Balance Fund for "Plant-A-Tree programme".

Date: 29 Apr to 3 May 2019

A total of 489 kg of e-waste was collected and sent to Toshiba's approved e-waste vendor for disposal.



## Conservation of Biodiversity

### <Bird and Butterfly Survey>

Half-yearly, we conducted butterfly and bird surveys at neighbouring Ang Mo Kio Town Garden East and West as per planned by National Parks Board. The data collected from this survey are submitted to National Parks Board to help understand common species residing at the parks and this contributed to rehabilitation efforts of Singapore.

A total of 7 butterfly species and 7 bird species spotted at Ang Mo Kio East and West Garden.

### < Butterfly Watch Seasonality Survey >

On top of above survey, we joined seasonality survey initiated by National Parks Board to study butterfly phenology in Singapore. Regular monitoring would help to study the seasonal variations in the abundance of butterflies and understanding the conditions which cause these variations. Data collected will devise management strategies to sustain Singapore's butterfly diversity.

Date: Mar 2019 to Aug 2019

A total of 14 butterfly species spotted at AMK-Bishan Park.



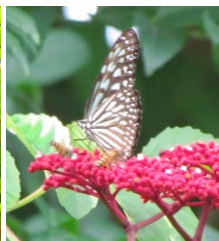
Asian Koel



Oriental Pied Hornbill



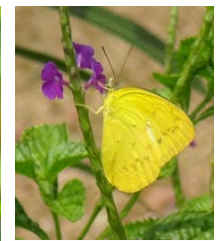
Yellow Vented Bulbul



Blue Glassy Tiger



Bush Brown



Orange Emigrants

### < Plant Critically Endangered Native Species >

Family Name	: Orchidaceae
Common Name	: Aloe-like Dendrobium
Plant Morphology	: It was thought to be extinct in the wild in Singapore until it was rediscovered in 2010 (Ang et al., 2010).
Local Conservation Status	: Native to Singapore
Plant Care & Propagation	
Light Preference	: Semi-shade
Water Preference	: Little water, occasional misting



## Environmental targets

The main Environmental targets for FY2020.

Item	Indicator	Target for FY2020
Global warming prevention	In the ratio of CO2 emissions to net output relative to FY2005	38% reduction
Optimization of resources	In the ratio of total amount of waste generated to output relative to FY2005	17% reduction
Control of Chemical Substances	Reduction in the quantity of the toxic chemical FY2005	69% reduction

## Environmental objectives

The main Environmental objectives for FY2022.

Item	Indicator	Objective for FY2022
Global warming prevention	In the ratio of CO2 emissions to net output relative to FY2005	38% reduction
Optimization of resources	In the ratio of total amount of waste generated to output relative to FY2005	23% reduction
Control of Chemical Substances	Reduction in the quantity of the toxic chemical FY2005	84% reduction