

# 2023

## SATL's Environmental Site Report

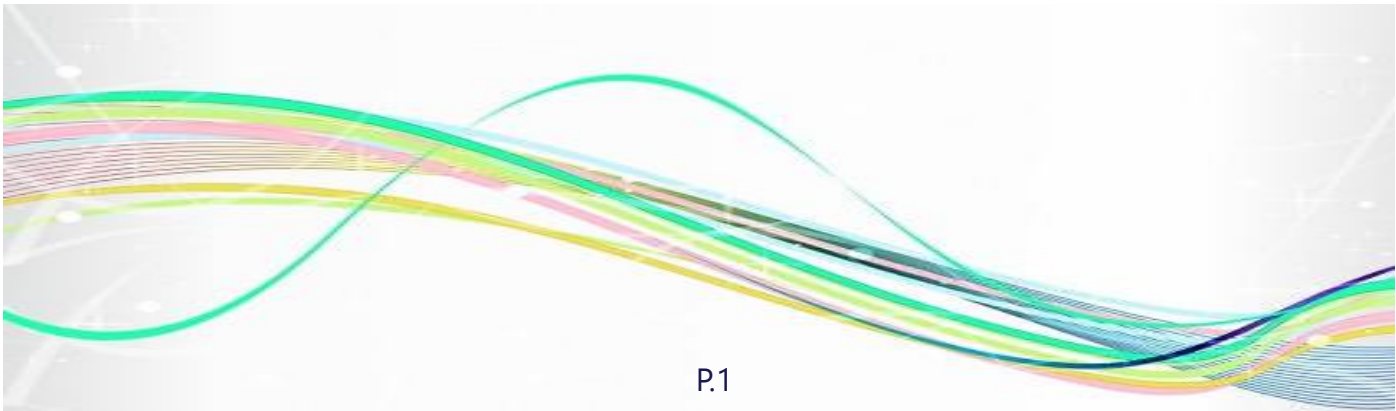


"Sincerity and Creativity"

**SHARP**  
Be Original.

# Contents

Contents	P.1
Company Profile	P.2
Environmental Policy	P.3
<b>Environmental Management</b>	<b>P.4</b>
Certification on Environment Management System	P.4
Environmental Management Organization	P.5
<b>Environmental Initiatives</b>	<b>P.6</b>
Achievement of Objectives	P.6
Environmental Performance Data	P.12
Promoting Occupational Health and Safety	P.13
Communication with Local Communities	P.14



## Company Profile

Company Name : Sharp Appliances (Thailand) Limited  
Capital : 948,650,000 Baht  
Established : 1987

### Directors

Managing Director : Mr. Akihisa Masuo  
Director : Mr. Kazuma Nakahara

### Employees

Permanent : 1,600 persons (included Japanese 2 prs.)  
Temporary : Depending on Production (Average 1,700 prs.)

Factory Area : 266,900 m<sup>2</sup>  
Building Area : 169,399 m<sup>2</sup>

Business Activities : Manufacturer of consumer electric and electronic products (Refrigerator Microwave Oven, Water Oven, Air conditioner, Air Purifier & Ion Generator, Humidifier and Vacuum Cleaner)

Achieved : ISO9001 Certification by JQA since March 2000  
ISO14001 Certification by MASCI since September 2002

## SATL Products




## Environmental Policy

Environmental policy was issued since September 2002 to define environmental management direction and commitment to preserve environment in company then yearly reviewed by Managing Director.

In 2017, Environmental policy was reviewed & updated to comply with international standard of ISO14001 version 2015 and published since 1<sup>st</sup> November 2017.

Since year 2021 onwards, SATL's management organization has been changed and then the Environmental policy has been reviewed and still up to date as international standard of ISO14001 (Environmental Management) and SHARP Eco Vision 2050.



Sharp Appliances (Thailand) Ltd. (SATL), located at Chachoengsao province, a manufacturer of consumer electric and electronic products (Refrigerator, Microwave Oven, Water Oven, Air conditioner, Air Purifier & Ion Generator, Humidifier and Vacuum Cleaner) which internationally reliable. SATL is pursuing the basic environmental philosophy of Sharp Corporation :

**"Creating an Environmentally Conscious Company with Sincerity and Creativity"**

SATL has developed and implemented continual improvement and enhance customer satisfaction in product and develop environmental protection systematically in consistent with Sharp environmental policy and Eco-Positive strategies.

**Commitment:**

1. Conducting the business and operation in compliance with the applicable environmental legal and other related requirements to environmental aspects.
2. Procuring raw materials are environmentally friendly.
3. Protecting the limited resources and making the most of the resources available, by reduce energy consumption to reduce greenhouse gas emissions and reduce waste at the source.
4. Preventing pollution from activity of the company by control wastewater, air pollution and hazardous waste that generated within the company.
5. Encouraging employees to aware in the environment and conducting social and environmental responsibility (CSR), taking into account the satisfaction of the stakeholders from the activities of the company.

SATL will publish this policy to employees including all personal who work for company and fully available to stakeholders, implement and maintain the environmentally conscious performance for sustainable society.

# Environmental Management

## Certification on Management System

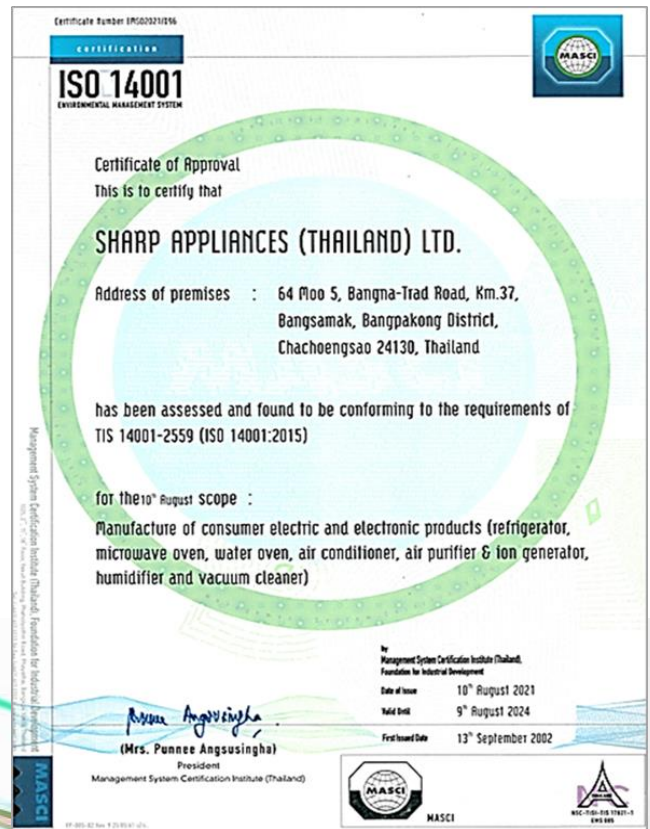
SATL started up environmental management system and applied for all activities in factory site, then SATL got certification for ISO14001 version 1996 : Environmental Management System since September 2002.

In 2017, SATL reviewed and developed the environmental management system to conform with new ISO14001 version 2015 and got certification for a manufacture of all SATL's products since 10th August 2018.

In year 2021, SATL achieved renewal assessment by certified body and got continued certification since 10th August 2021.

In year 2022 onwards ,  
SATL achieved 1<sup>st</sup> Surveillance assessment  
by certified body of Thailand (MASCI)  
and got continued certification with  
No non-conformity from assessment.

\*MASCI :  
Management System Certification Institute (Thailand)



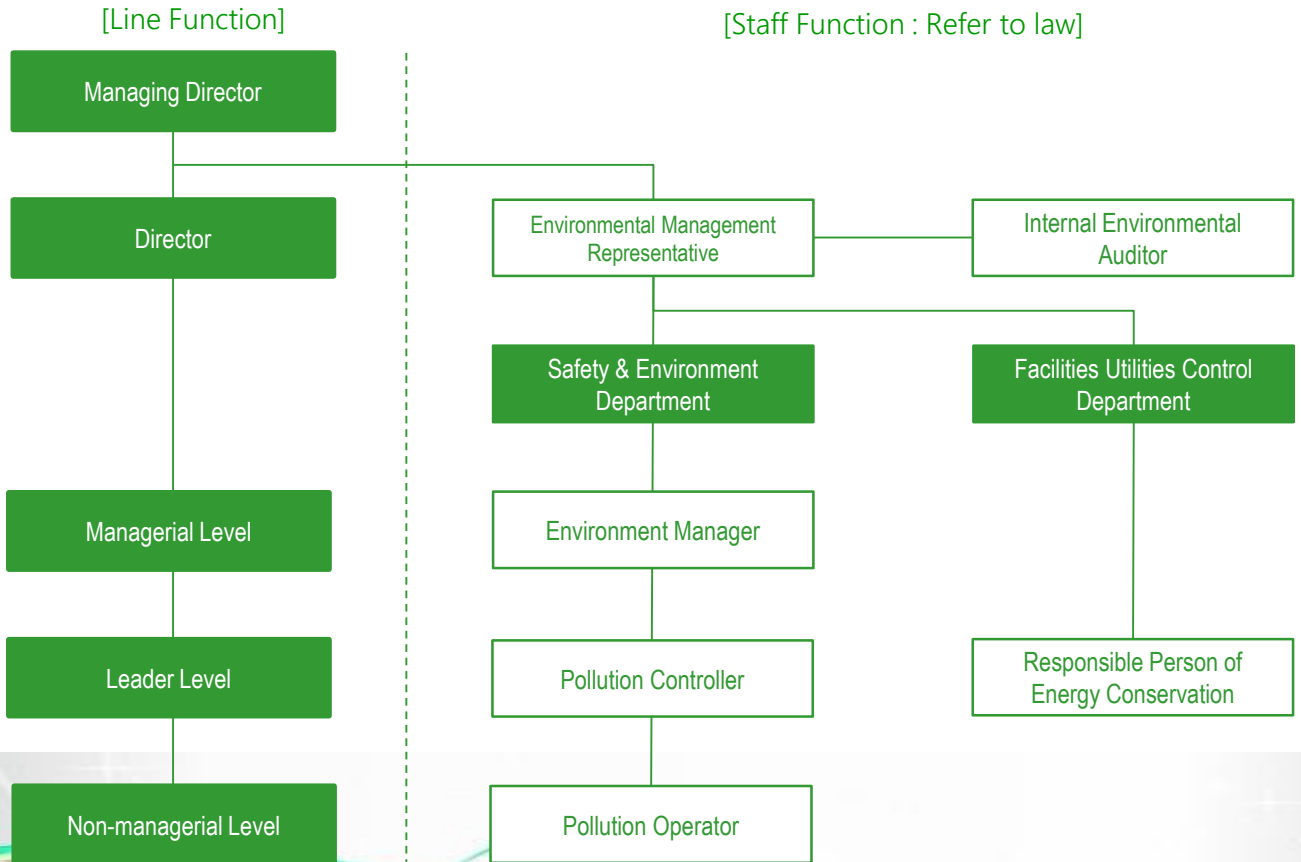
# Environmental Management

## SATL Environmental Management Organization

SATL has been established to maintain and promote good environment by defining the basic matters regarding organization and operation system for environmental management.

The management organization include to unit and personal who work in environmental personal as the Thailand's law.

### Environmental Management Organization

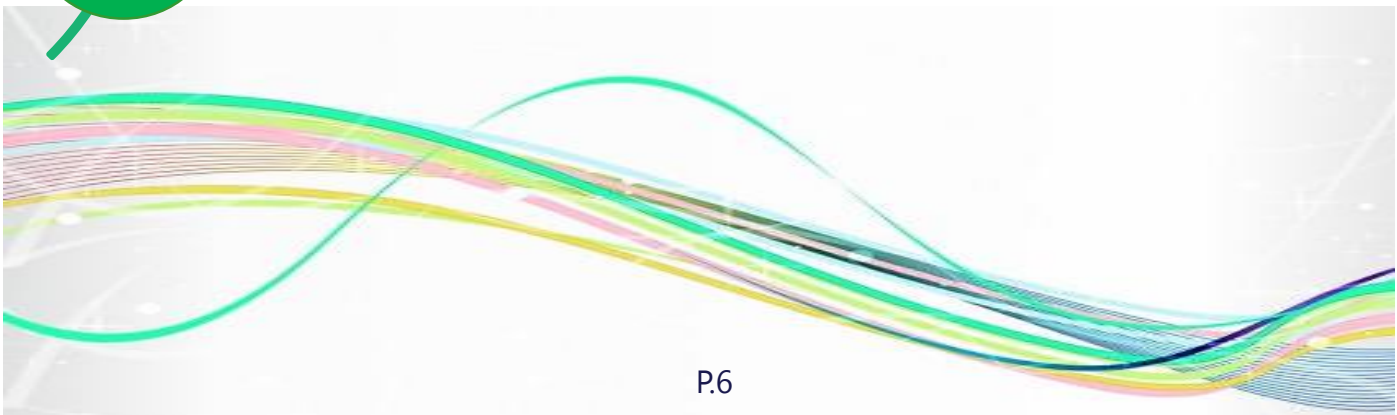
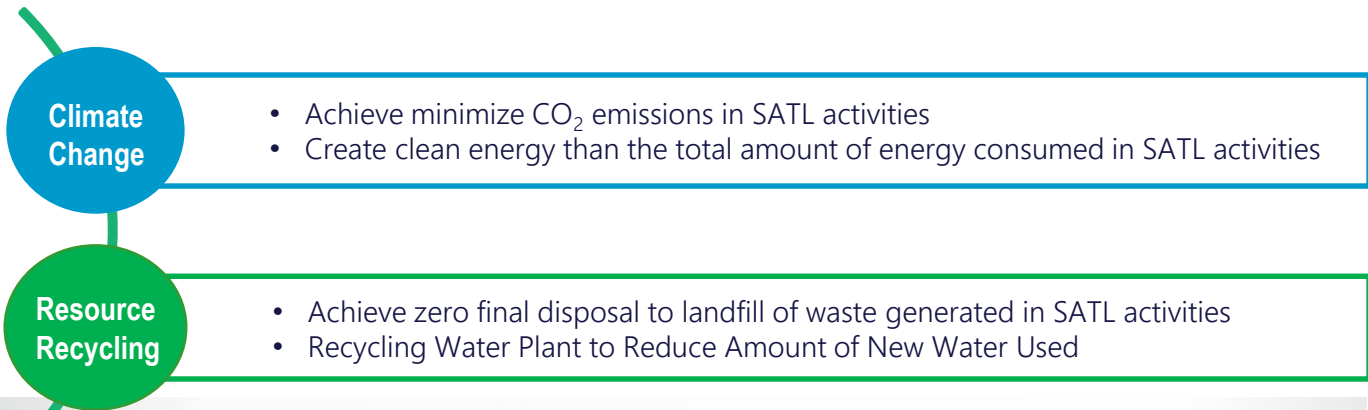


## Environmental Initiatives :

### SATL's Long Term Environmental Goals



In order to achieve about SHARP Eco vision 2050, SATL set up two goals for climate change and resource recycling to create more clean energy consumed in our factory activities , minimize the environmental impact in SATL.



# Environmental Initiatives :

## SATL Environmental Objectives and Achievement

Climate Change

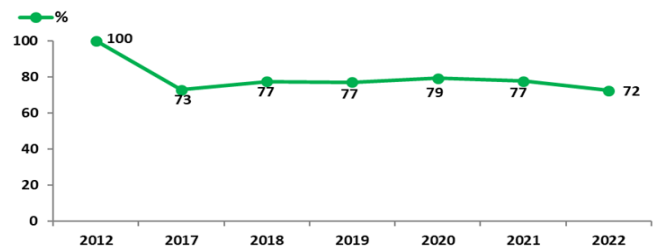
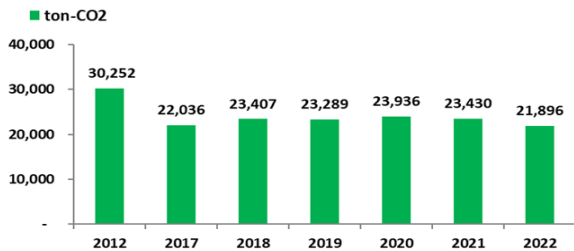
- Achieve minimize CO<sub>2</sub> emissions in SATL activities

In order to minimize the environmental impact and curbing greenhouse gas emission, SATL take more energy saving activities to support these CO<sub>2</sub> emission reduction, F-GHG emission reduction.

In year 2022, SATL can minimized CO<sub>2</sub> emission by 5% to 21,896 ton CO<sub>2</sub> compared to the previous fiscal year. The energy intensity ratio reduced 28% compared to the baseline year of fiscal year 2012.

Fiscal 2022 Objectives	Fiscal2022 Targets	Fiscal2022 Achievement	Evaluation
1. Climate change	Reducing CO2 emission 20% (baseline : fiscal2012)	Reduced by 28% (baseline : fiscal2012)	●

● = Achieved , ▲ = Not Achieved



SATL continual improvement to minimize GHG emission by action to reduce electricity and energy in utility system and production process..

■ new air compressor system

■ Saving heat generator at production

■ Air conditioner in energy saving type





## Environmental Initiatives :

### SATL Environmental Objectives and Achievement

#### Climate Change

- Create clean energy than the total amount of energy consumed in SATL activities

#### □ Utilizing Renewable Energy

SATL has introduced the use of PV systems, green power, and other power sources to its production bases and is advancing the use of renewables to do its part to create a decarbonized society.

In fiscal 2021, The existing solar system, capacity 124 kW, can generated electricity 111,139 kWh per year and in this year, SATL started up to install new solar rooftop project , total capacity 2,451.06 kW to generated electricity 3,480,000 kWh per year since December 2022.

SATL will continue to work hard at reducing carbon emissions even further in the future.

■ Existing solar system 124 kW



■ New solar rooftop system at Warehouse-1 ; 1,634.04 kW



■ New solar rooftop system at Warehouse-2 ; 817.02 kW



# Environmental Initiatives :

## SATL Environmental Objectives and Achievement

**Resource Recycling** ■ Achieve zero final disposal to landfill of waste generated in SATL activities

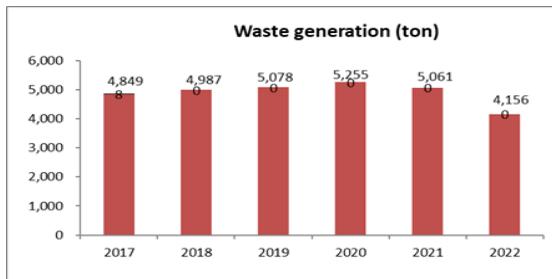
SATL has been working to reduce waste and to recycle as much of it as possible in an effort to contribute to building a resource recycling society.

In fiscal 2022, the amount of waste, etc. generated by decreased by 18% compared to the previous fiscal year to 4,156 tons, Additionally, the amount of industrial waste recycling continued to achieved zero final disposal to landfill since 2018.

Fiscal 2022 Objectives	Fiscal2022 Targets	Fiscal2022 Achievement	Evaluation
2. Resource recycling	Continued Zero final landfill	Zero industrial waste to landfill disposal	●

● = Achieved , ▲ = Not Achieved

□ Amount of Industrial Waste Generation



■ Industrial waste separation to recycling at storage center



Since 8<sup>th</sup> August 2019 onwards, SATL got award of 3Rs [Reduce, Reuse, Recycle] and continued zero final disposal to landfill from Department of Industrial Works, Thai's Government and the activities continual improve from 2019.



■ Scene on Representative of SATL got award from Director General

# Environmental Initiatives :

## SATL Environmental Objectives and Achievement

**Resource Recycling**

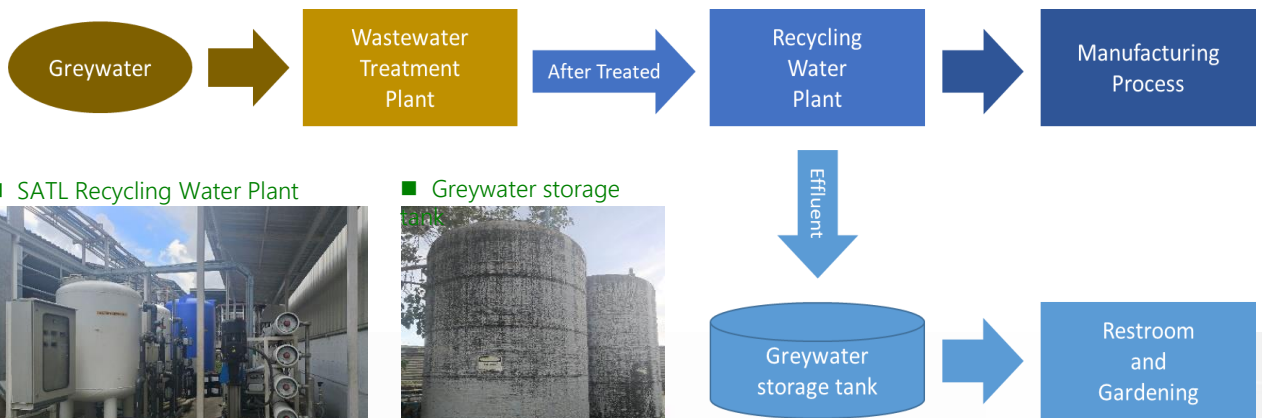
■ Recycling Water Plant to Reduce Amount of New Water Used

At SATL, a production base in Thailand, large volumes of greywater are generated from manufacturing process and restroom of human daily life in SATL. This greywater was previously treated and discharged wastewater to outside environment.

Now SATL has set up Recycling Water Plant to improve wastewater quality to be pure water for use in the manufacturing process (water quality same as RO soft water and applied directly to process) For greywater from Recycling Water Plant, SATL can applied for restroom and gardening.

In year FY2022, SATL has been able to reduce usage of Tap water compared to the previous fiscal year to 196,892 m<sup>3</sup> per year. The overall water used can reduce.

□ Water Recycling Flow



■ SATL Recycling Water Plant



■ Greywater storage tank



## Environmental Initiatives :

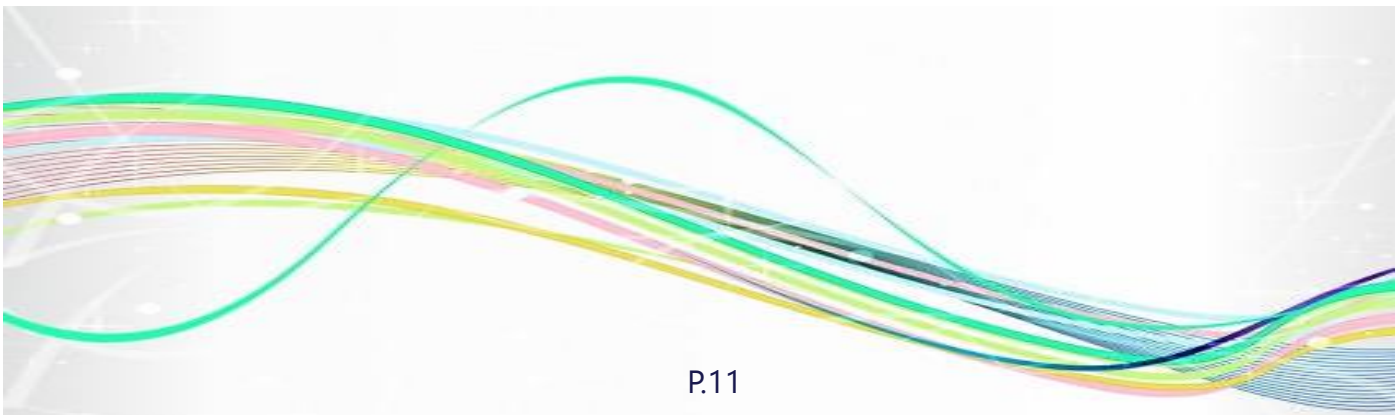
### SATL Environmental Performance Data

Sharp gathers data to gain an overview of the burden its business activities place on the environment. Measured items include the consumption of energy and materials in business activities, the emissions of greenhouse gases, and the generation of waste. Sharp then uses these values to reduce its environmental burden.

As these issues, SATL continued monitor and report environmental performance data to Sharp corporation by quarterly. SATL uses these values to set up environmental objectives and take activities to reduce environmental burden.

#### □ SATL Environmental Performance Data

Objectives		Unit	2018	2019	2020	2021	2022
CO2 emission	Scope1	kg-CO2	1,536,229	1,535,323	1,383,800	1,298,300	1,302,149
	Scope2	kg-CO2	21,871,100	21,753,800	22,551,800	22,131,500	20,593,881
F-GHG	Scope1	kg-CO2	1,332,649	370,825	-	-	-
Water	Water supply of a local community and other public/private water networks	m3	259,547	233,514	214,579	222,557	196,892
	Recycled water	m3	54,603	54,290			
	Discharge to public waters	m3	92,070	96,032	68,920	65,741	24,022
Waste emission	Generated	ton	4,987	5,078	5,255	5,061	4,156
	Recycled	ton	4,987	5,078	5,255	5,061	4,156
	Landfilled	ton	0	0	0	0	0



# Promoting Occupational Health and Safety

## Occupational Health and Safety Management System

SATL has established occupational health and safety management system.

In 2021, SATL started up to transfer certification to be new international version ISO45001 and plan to receive it in 2022.

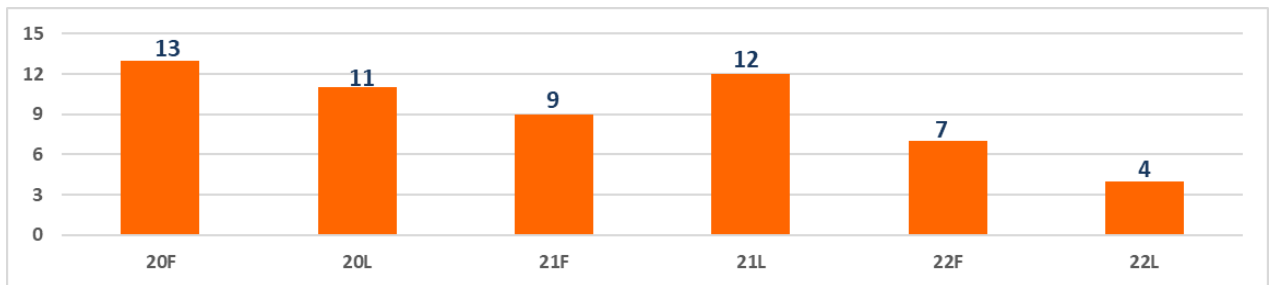
This occupational health and safety management activities that can be managed in the entire area of the manufacture activities of SATL to provide safe and healthy workplace by preventing work-related injury & ill health and improve its performance

## Initiatives to reduce Industrial Accidents

SATL defined industrial accident reduction in goal of business plan and set up strategies to achieve it. Then strongly to implement and control unsafe action, unsafe condition in manufacturing.

From the past year, the accident case continued reduce.

### SATL Industrial Accident (case)



### SATL 2022 Business Plan (Target of Industrial Accident Reduction)

**[1] 22F Target**  
7 cases (▼40% vs21L), No major case

Year	Minor (Stop work)	Major (Organ loss)	Total
19F	4	0	4
19L	2	0	2
20F	2	0	2
20L	3	1	4
21F	9	0	9
21L	4	8	12
22F	7	0	7

22F vs 21L Target ▼40%

**[2] Re-Training Safety with Penalty**

**(1) Safety Regulation to employee**

- Don't enter in dangerous area
- Don't modify emergency equipment
- Don't cross conveyor line
- Don't work without communication
- Don't stand under lifting work
- Don't bring flammable chemical in hot work area
- Must always use PPE during working

**(2) Promote Safety Behavior & Culture**

STOP UNSAFE BEHAVIOR

**[3] Infrastructure Development**

**(1) Machine & Process Safety Inspection**

**(2) Fire Prevention System Improvement**

## Promoting Occupational Health and Safety

### ■ Emergency Response and Preparedness

To comply with Thai safety law and preparedness for all employees ready in emergency situation that may be occurred and can apply knowledge for daily life.

SATL has established the fire fighting practice and chemical leakage practice to all concerned and prevent any effect to human and environment.

#### □ SATL Fire fighting & fire evacuation practice



#### □ SATL chemical leakage practice

##### Acid-Alkaline practice



##### Chemical waste practice



##### Fire Evacuation practice



## Communication with Local Communities

The Covid-19 pandemic has ushered in what is being called “the new normal” and worldwide spread out.

In year 2021 onwards, The Covid-19 situation and spread out in Chachoengsao province to be high, many people must quarantine in local hospital and field hospital.

SATL joined with Office of Chachoengsao's Public Health to donate 20 electric fans which supported healthcare of people who rest in local quarantine hospital This activity is one part of social contribution activities.

### □ SATL Donation Activity [Donated 20 electric fans to local quarantine for Covid-19]



■ Presentation of the donation



■ Representative of SATL and Chachoengsao Public Health



■ Donated bedding set to Chachoengsao Red Cross Society



**SHARP**  
Be Original.

Sharp Appliances (Thailand) Ltd.  
64 Moo 5, Bangna-Trad KM.37 Bangsamak  
Bangpakong, Chachoengsao 24130 ,Thailand

Published in October 2023