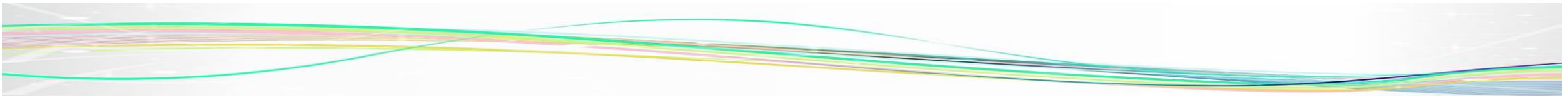




2024

SATL's Environmental Site Report



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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 m²
Building Area : 169,399 m²

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



*JQA : Japan Quality Assurance Organization

**MASCI : Management System Certification Institute (Thailand)

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 1st 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

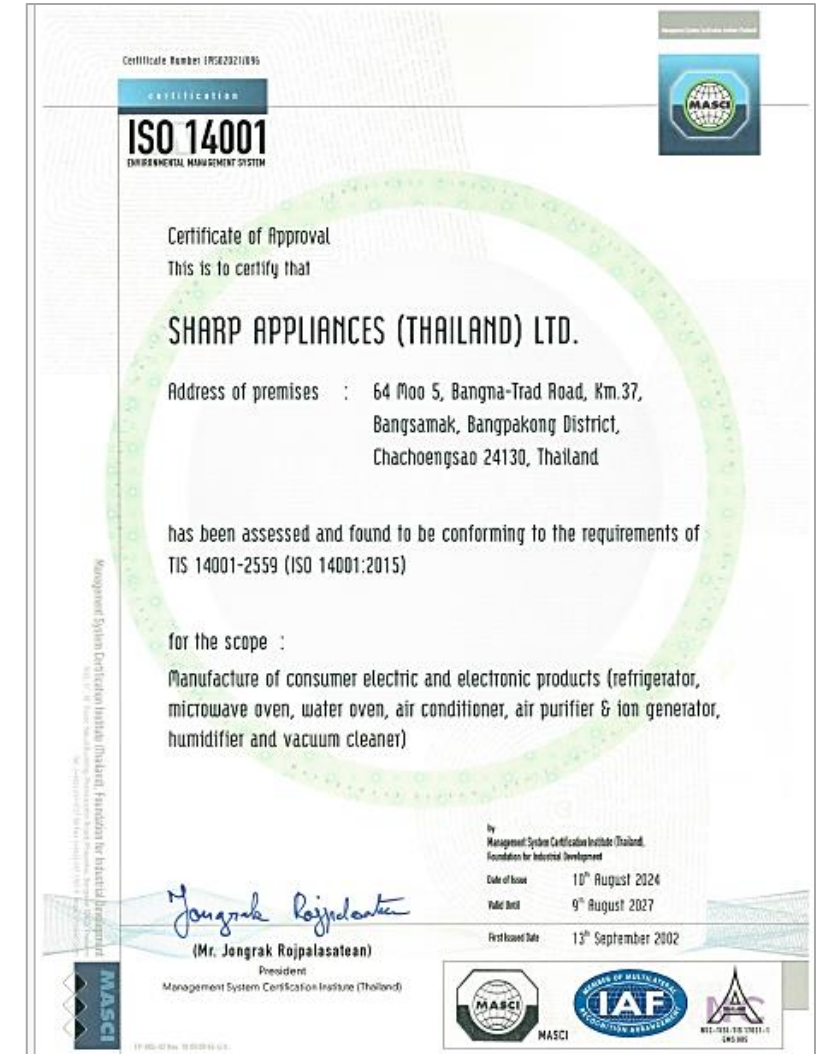
Certification on Management System

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 year 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 2024, SATL achieved renewal assessment by certified body of Thailand (*MASCI) and got continued certification since 10th August 2024.

*MASCI : Management System Certification Institute (Thailand)



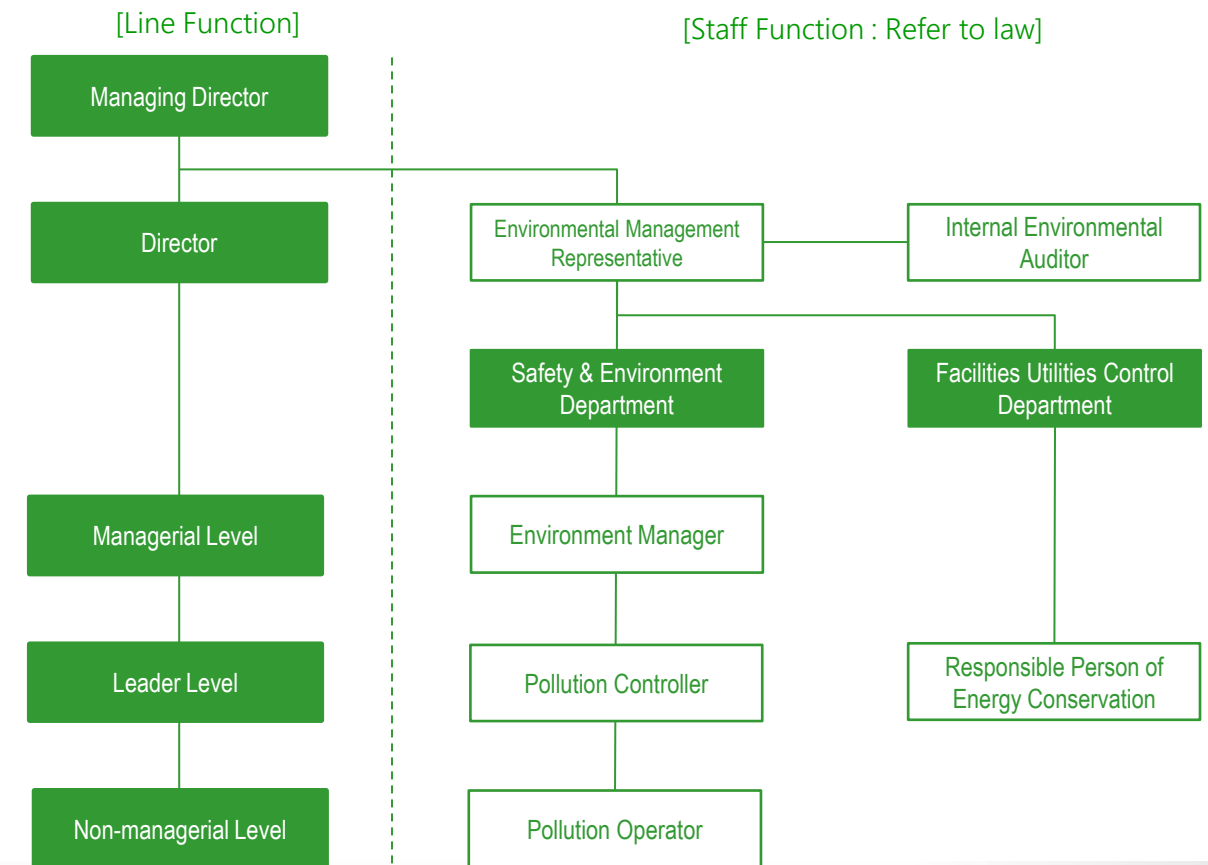
Environmental Management

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 Line functional unit of SATL's organization 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 Management Emphasizing on ESG and 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.



Climate Change

- Achieve reduce greenhouse gas emission in SATL activities
- Create clean energy than the total amount of energy consumed in SATL activities

Resource Recycling

- Achieve zero final disposal to landfill of waste generated in SATL activities
- Recycling Water Plant to Reduce Amount of New Water Used

Environmental Initiatives @ Climate Change

SATL Environmental Objectives and Achievement

Climate
Change

Achieve reduce greenhouse gas emissions in SATL activities

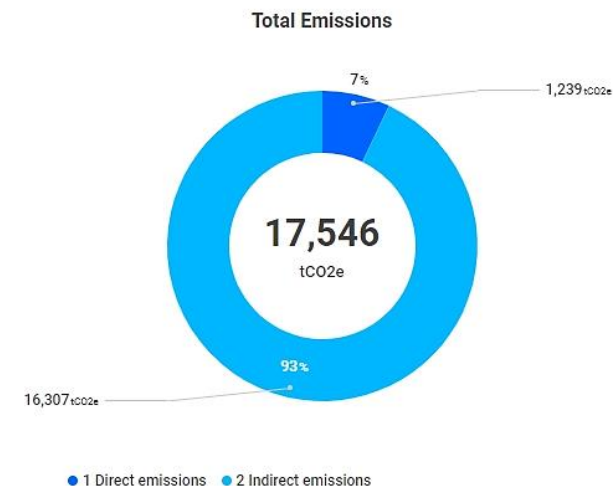
In order to minimize the environmental impact and curbing greenhouse gas emission, SATL is working to reduce GHG emissions from it business activities to ZERO by fiscal 2030 as SHARP BU target, then take more energy saving activities to support these GHG emission reduction.

In fiscal 2023, GHG emissions in SATL business activities was down by 26.2% to 17,546 ton CO₂ compared to fiscal 2021.

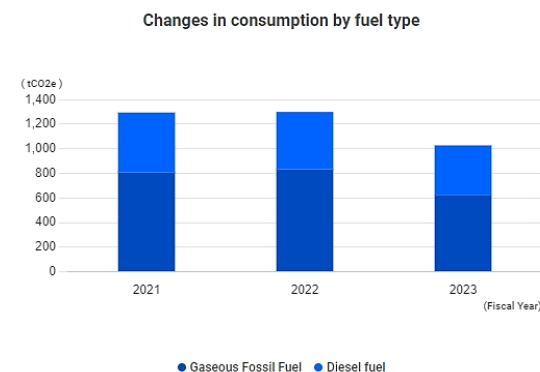
Fiscal 2023 Objectives	Fiscal2023 Targets	Fiscal2023 Achievement	Evaluation
Climate change	Reduce greenhouse gas emissions by 8.4% (baseline year : fiscal2021)	Reduced greenhouse gas emissions by 26.2% (baseline year : fiscal2021)	●

● = Achieved , ▲ = Not Achieved

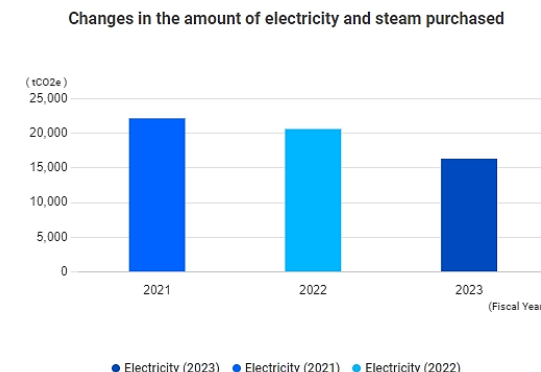
SATL's GHG emissions from business activities



Scope-1 : GHG emissions by fuel



Scope-2 : GHG emissions by electricity



Environmental Initiatives @ Climate Change

SATL Environmental Objectives and Achievement

Climate
Change

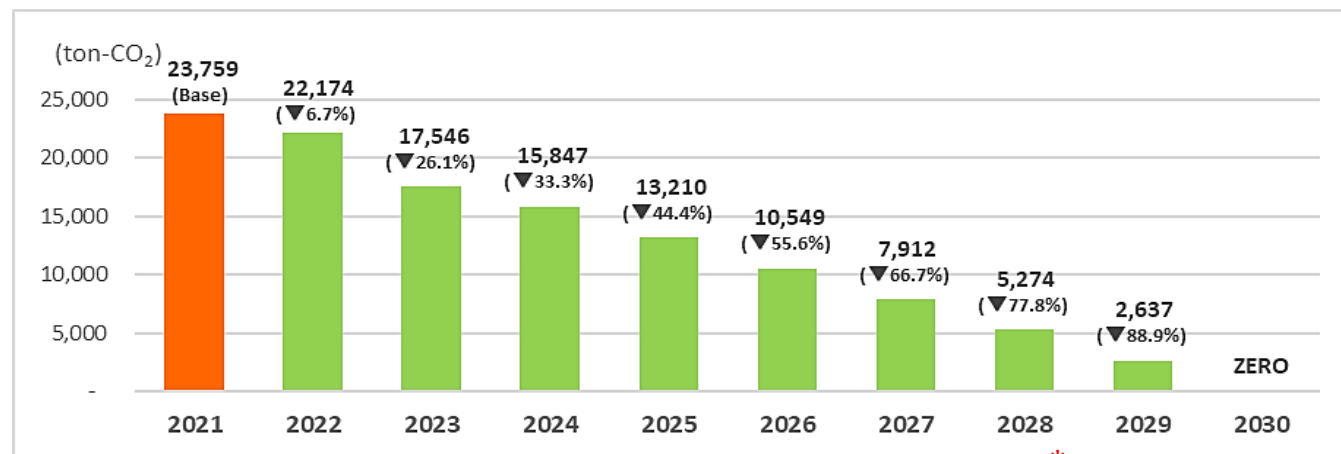
Priority Objectives for Fiscal 2024

In order to minimize the environmental impact and curbing greenhouse gas emission, SATL is working to reduce GHG emissions from its business activities to ZERO by fiscal 2030 as SHARP BU target, then take more energy saving activities to support these GHG emission

In fiscal 2024, SATL's target GHG emissions must be down by 33.3% to 15,847 ton-CO₂ compare to fiscal2021

Priority Objectives	Priority initiative	Fiscal 2024 target
Climate change	Reduce greenhouse gas emissions associated with business activities	<ul style="list-style-type: none">● Achieve net zero CO2 emissions from Sharp business activities by 2030● Reduced greenhouse gas emissions by 33.3% (baseline year : fiscal2021)

■ SATL's Target : Reduction of GHG Emission to Zero by 2030*



* Refer to SHARP ESG Target

Environmental Initiatives @ Climate Change

SATL Environmental Objectives and Achievement

Climate
Change

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

❑ Utilizing Renewable Energy and saving activities

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 2023, SATL's solar system can generated electricity totally 3,822,019 kWh per year.

Additionally, SATL done to applied energy saving activities for utilities and machine improvement for more efficiency.

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

■ Solar rooftop system at Warehouse-1 ;
(1,634.04 kW)



■ Solar rooftop system at Warehouse-2 ;
(817.02 kW)



■ new air compressor system



■ Saving heat generator at production



Environmental Initiatives @ Resource Recycling

SATL Environmental Objectives and Achievement

Resource Recycling

Achieve zero final disposal to landfill of waste generated in SATL activities

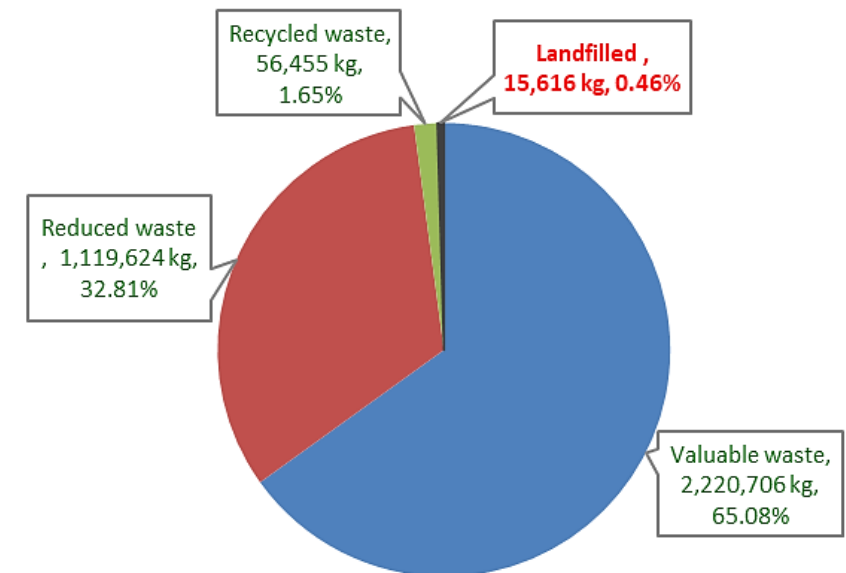
SATL has been working to reduce waste and to recycle as much of it as possible in an effort to contribute to building a resource recycling society.

In fiscal 2023, the amount of waste generated by decreased by 18% compared to the previous fiscal year to 3,412 tons, Additionally, the amount of recycling waste was 3,397 tons. Meanwhile, the final landfill disposal rate was 0.46% or 16 tons generated. Achieved as target 0.5% or less.

Fiscal 2023 Objectives	Fiscal2023 Targets	Fiscal2023 Achievement	Evaluation
Reducing final disposal to landfill of waste	Final landfill disposal rate of less than 0.5%	Final landfill disposal rate 0.46%	●

● = Achieved , ▲ = Not Achieved

■ SATL's Result : Landfill disposal rate 0.46%



** Generated waste = 3,412,401 kg

Environmental Initiatives @ Resource Recycling

SATL Environmental Objectives and Achievement

Resource Recycling

Priority Objectives of Waste Emission for Fiscal 2024

Background ; [Sustainability Action Plan by SAS BU]

Formulated in SHARP environment vision with the goal of “reducing Landfilled amount of waste from our own activities to ZERO” toward 2050.

Our company defines “ZERO Landfill amount” as less than 0.44% of Landfilled amount rate for the fiscal year.

Priority Objectives	Priority initiative	Fiscal 2024 target
Waste Emission Reduction	Reduce waste associated with business activities	Final landfill disposal rate of less than 0.44%

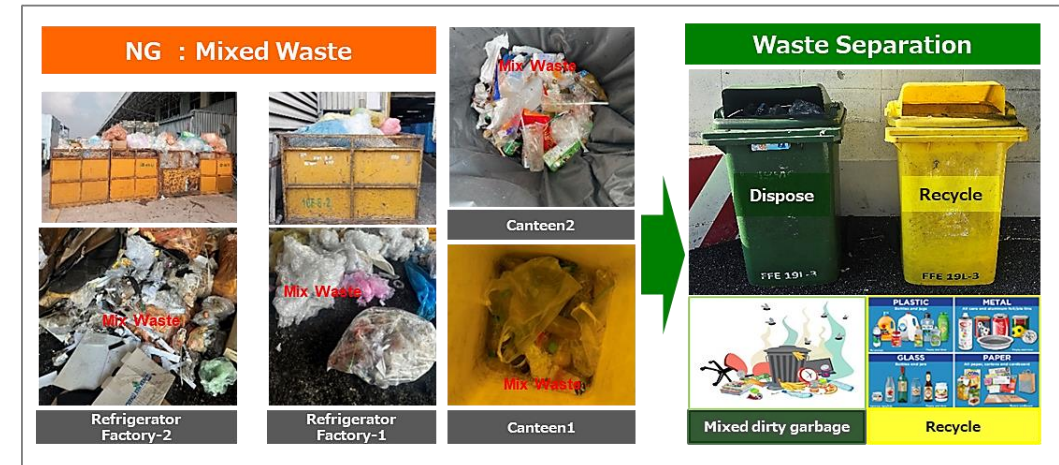
Additionally, Since 8th August 2019 onwards, SATL got award of 3Rs [Reduce, Reuse, Recycle] and continued zero final disposal to landfill from Department of Industrial Works, Thai's Government and the activities continual improve from 2019.



■ SATL got award of 3Rs since 2019

2024 ACTION

- ▶ Do inhouse separating general garbage & keeping by each type ,
- ▶ Taking general garbage back to home for recycling ,
- ▶ Prohibit bringing foods and snacks to production, WH area or office area (To avoid mix into recycle waste)



Environmental Initiatives @ Resource Recycling

SATL Environmental Objectives and Achievement

Resource Recycling

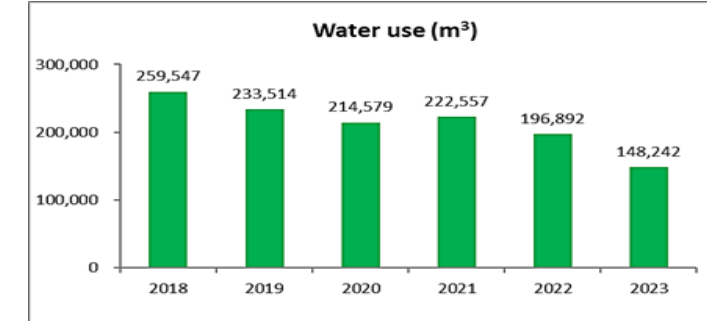
Recycling Water Plant to Reduce Amount of New Water Used

At SATL, 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.

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.

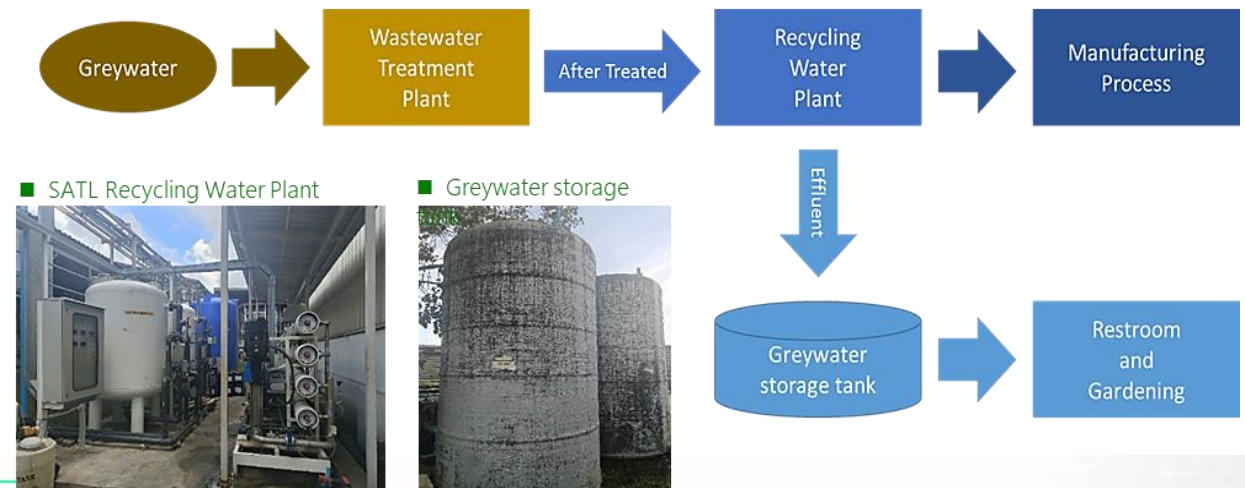
In year FY2023, SATL has been able to reduce usage of new water compared to the previous fiscal year to 148,242 m³ per year. Overall water used can reduce.



Fiscal 2023 Objectives	Fiscal2023 Targets	Fiscal2023 Achievement	Evaluation
Improve water intensity	Improvement rate of water intensity :10% (baseline year : fiscal2021)	Improvement rate of water intensity :33.4% (baseline year : fiscal2021)	●

● = Achieved , ▲ = Not Achieved

Water Recycling Flow



Environmental Initiatives @ 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's Environmental Performance Data

Item		Unit	2021	2022	2023
CO2 emission	Scope1 (direct GHG emissions from business activities)	ton-CO2e	1,627	1,580	1,239
	Scope2 (indirect GHG emissions from energy usage in business activities)	ton-CO2e	22,132	20,594	16,307
Water	Water supply of a local community and other public/private water networks	m3	222,557	196,892	148,242
	Recycled water	m3	71,859	84,284	85,084
	Discharge to public waters	m3	65,741	24,022	11,942
Waste emission	Generated	ton	5,061	4,156	3,412
	Recycled	ton	5,061	4,156	3,397
	Landfilled	ton	0	0	16

Occupational Health and Safety

■ Occupational Health and Safety Management System

SATL has established international occupational health and safety management system.

In 2024, SATL started up to transfer certification to be new international version ISO45001 and plan to receive it in 2025.

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 and ill health and improve its performance

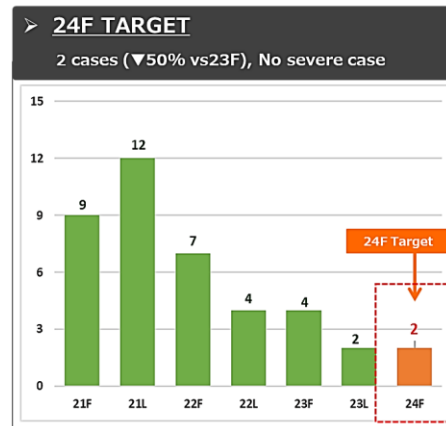
■ Initiatives to reduce Industrial Accidents

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

From the past 3 years, the accident case continued reduce and keep zero fire accident.

□ SATL Safety KPI Issue

23L RESULT	:	1) 2 cases ; No severe case 2) No fire accident
24F TARGET	:	1) 2 cases [▼ 50% vs 23F] ; No severe case 2) No Fire accident



► Review 23F & 23L Situation

Reflection :

Since Y21 accident reduced & No severe case , BUT vs 22L Result not achieved target.
⇒ Due to Lack on 5S, safety rule and unsafe operation with MC & tool.

► 24F Action/Activity

[MAN]

- 5S and safety awareness training

[MACHINE]

- Safety MC inspection & operation / Automation

[METHOD]

- 5S and safety rule with penalty
- Onsite promotion activities

[ENVIRONMENT]

- Work environment & industrial hygiene improvement (Heat, noise, lighting, etc.)

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 chemical leakage practice

Acid-Alkaline practice



Chemical waste practice



□ SATL Fire fighting & fire evacuation practice

Fire fighting training



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.

In fiscal 2023, SATL communicated with local communities to donate many things to support their activities such as bedding set for National children day, Soft drink for police in Songkran festival, etc.

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



■ Presentation of donation



■ Representative of SATL and Chachoengsao Public Health



■ Donated bedding set to Chachoengsao Red Cross Society provincial labor office for donated children





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