2024 Environmental Sustainability Report

Dunlop International (Philippines) Inc.

Environmental Policy

Dunlop International (Philippines), Inc., in the manufacture of tennis and squash balls, is determined to preserve and protect the environment to make everyone happy.

We commit to the continual improvement of our processes with the aim of reducing the impact to the environment.

We commit to the prevention of pollution of our surroundings.

We commit to comply with all legal and other requirements related to our environmental aspects.

We commit to set up plans, which are consistent with this policy, to achieve objectives and targets related to reduce our impact on our environment.

山川淳

JUN YAMAKAWA
President
Dunlop International
(Philippines), Inc.

Introduction

The Company has been committed to sustainability and, in particular, its relationship with the environment through its mission statement. Our Environmental Sustainability Vision, Policy and Strategy is aligned with this mission, and core values.

Our Environmental Sustainability is divided into five sections, each covering a different priority area of environmental sustainability with an overarching aim.

The work to achieve these aims is led by the Environment section and focuses on the operational activities of the plant. In order to maintain our position, we have continued to grow, leading to more dedicated employees.

With this continued growth, which presents the most significant challenge to Environmental section to work on reducing our environmental wastes.
The environmental section is now being challenged to further work on the reduction of waste.

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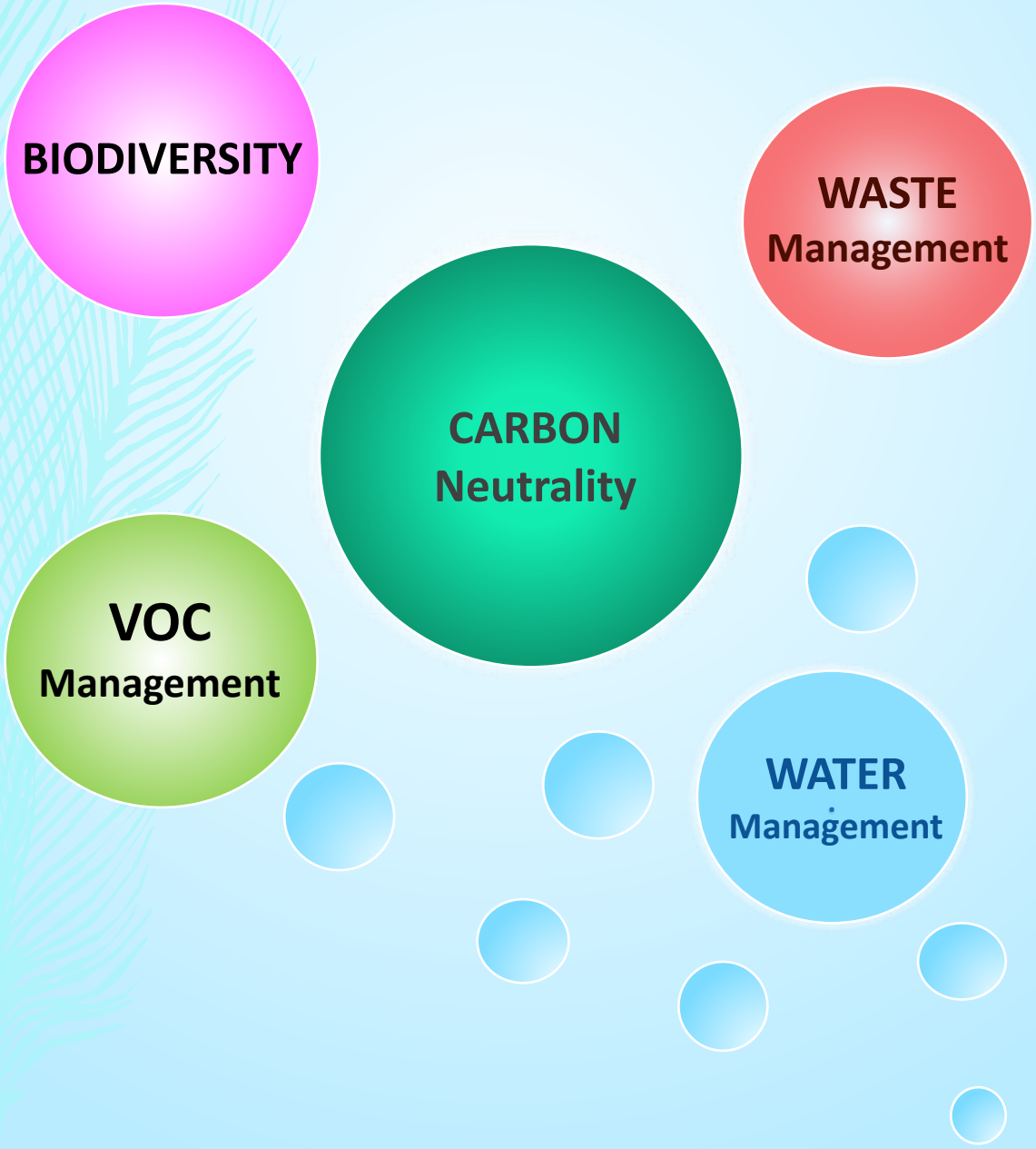
I. Environmental Sustainability Section

Our Environmental Sustainability is divided into five sections

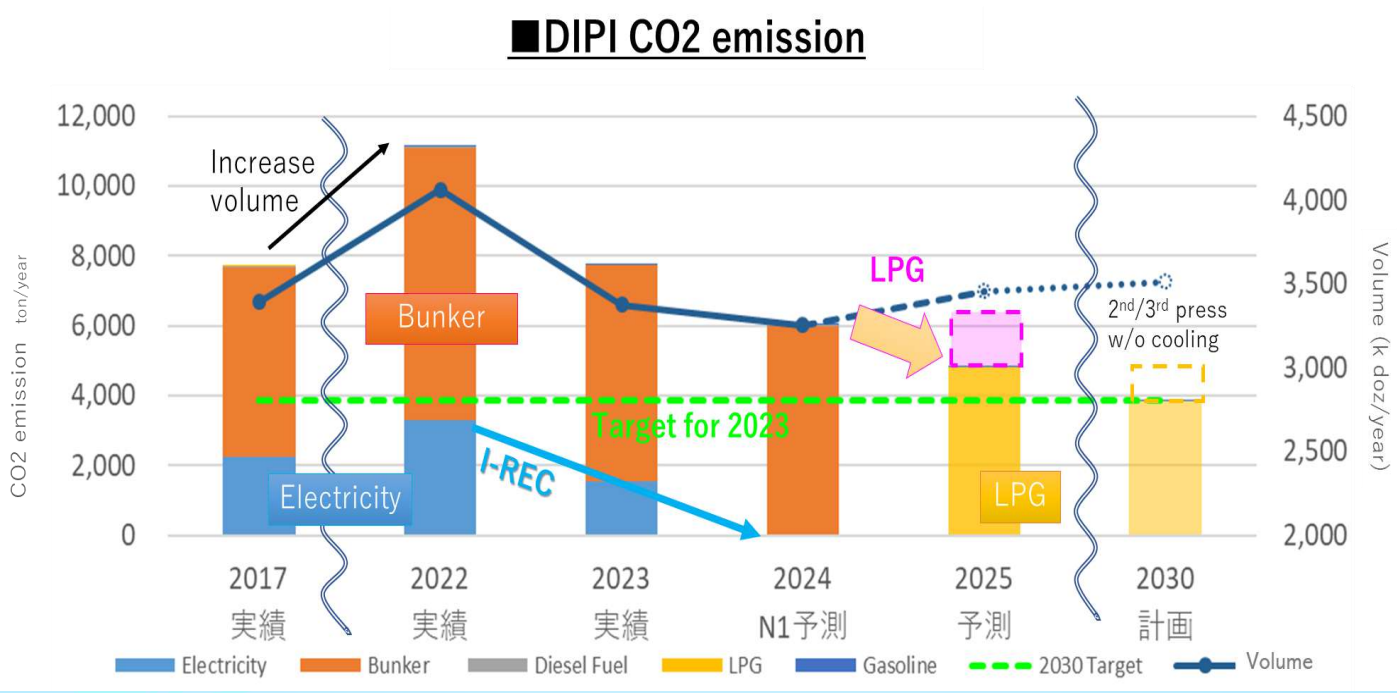


II. Carbon Neutrality (CN)

The basic policy of Sumitomo Rubber Industries Group aims to reduce to 50% of CO2 in 2030 in comparison with 2017, and become carbon neutral in 2050. To develop technologies and business models for creating a sustainable energy cycle by reducing CO2 emissions and achieving negative emissions for society as a whole.

As a subsidiary company of Sumitomo Rubber Industries, Ltd., Dunlop International Philippines Incorporated, has created its CO2 reduction plan of in accordance to the policy.

In the current situation, there was increase of CO2 emission due to increase of production output from 2017 to 2022.



DIPI will change from Bunker Fuel Oil (BFO) to LPG Boiler in 2025

In all the subsidiary company of SRI, Dunlop International Philippines Incorporated is one of the highest users of fuel with an electricity to fuel ratio of 30:70.

DIPI have acquired International Renewable Energy Certification (I-REC) in 2023, thus eliminating CO2 emission contributed by electricity.

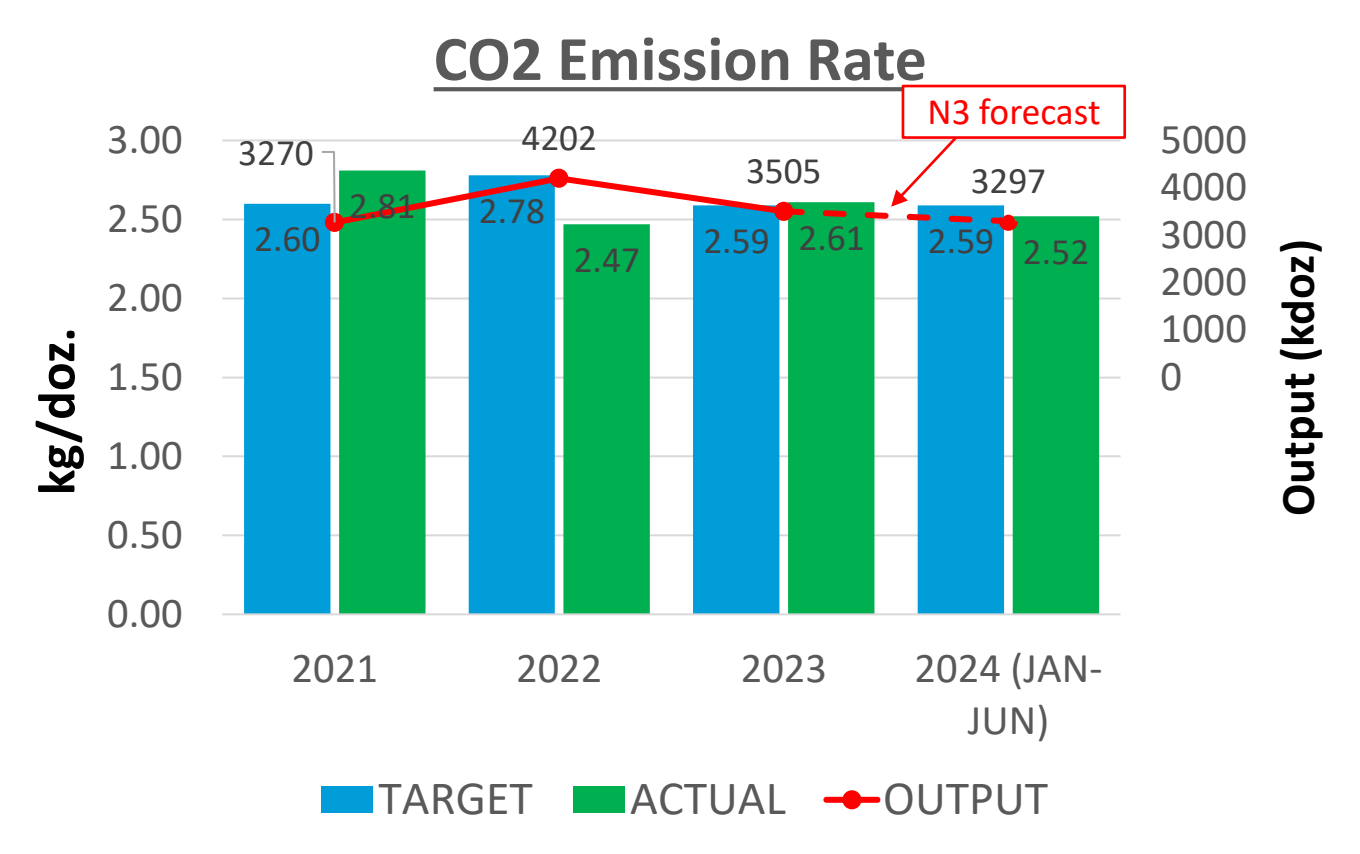
We will also be changing from bunker fuel oil to LPG boiler in 2025, expecting more than 15% total CO2 emission reduction.

To realize the CO2 reduction plan, the company has created various activities to be implemented to achieve 50% carbon emission by the end of 2030 in comparison with 2017, and zero emission by the end of 2050.

a. CO2 Emission Rate

In 2022, the emission rate decreased by 8% compared to 2021: 0.74 kg/dozen in 2021, and decreased to 0.68 kg/dozen in 2022

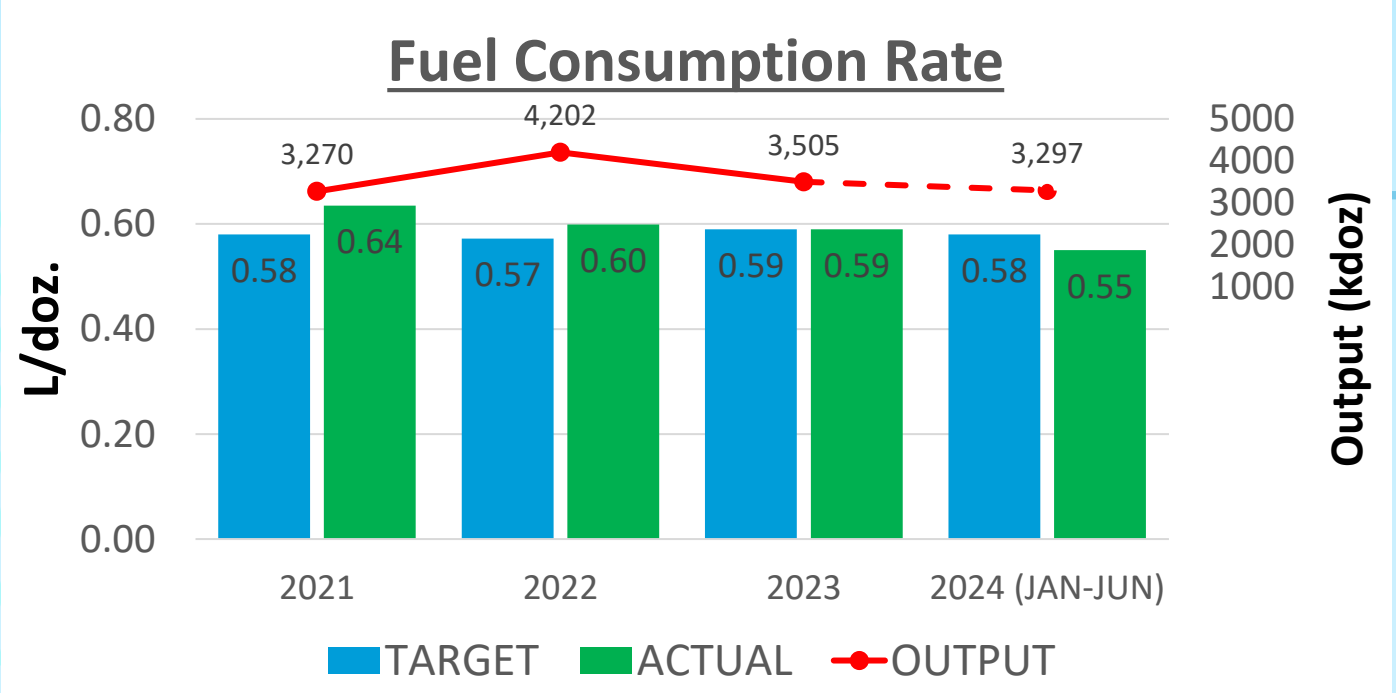
In 2023, the CO2 emission rate was off-target at 2.61 kg/doz. > target of 2.59 kg/doz. In 2024 (January to June) decreased by 9% with 2.52 kg/doz. < target of 2.59 kg/doz.



Carbon dioxide is a by product of energy such as electricity and fuel. And with the participation of both management and employees, step by step we are moving to reaching our environmental goals. Various energy conservation activities have been created.

b. Fuel Consumption

In 2023, fuel consumption per output decreased by 1.69% compared to 2022, 0.60 L/doz (2023) > 0.59 L/doz. (2023). In 2024 (January to June), achieved 0.55 L/doz. < 0.58 L/doz. Target.



2023 Activities:

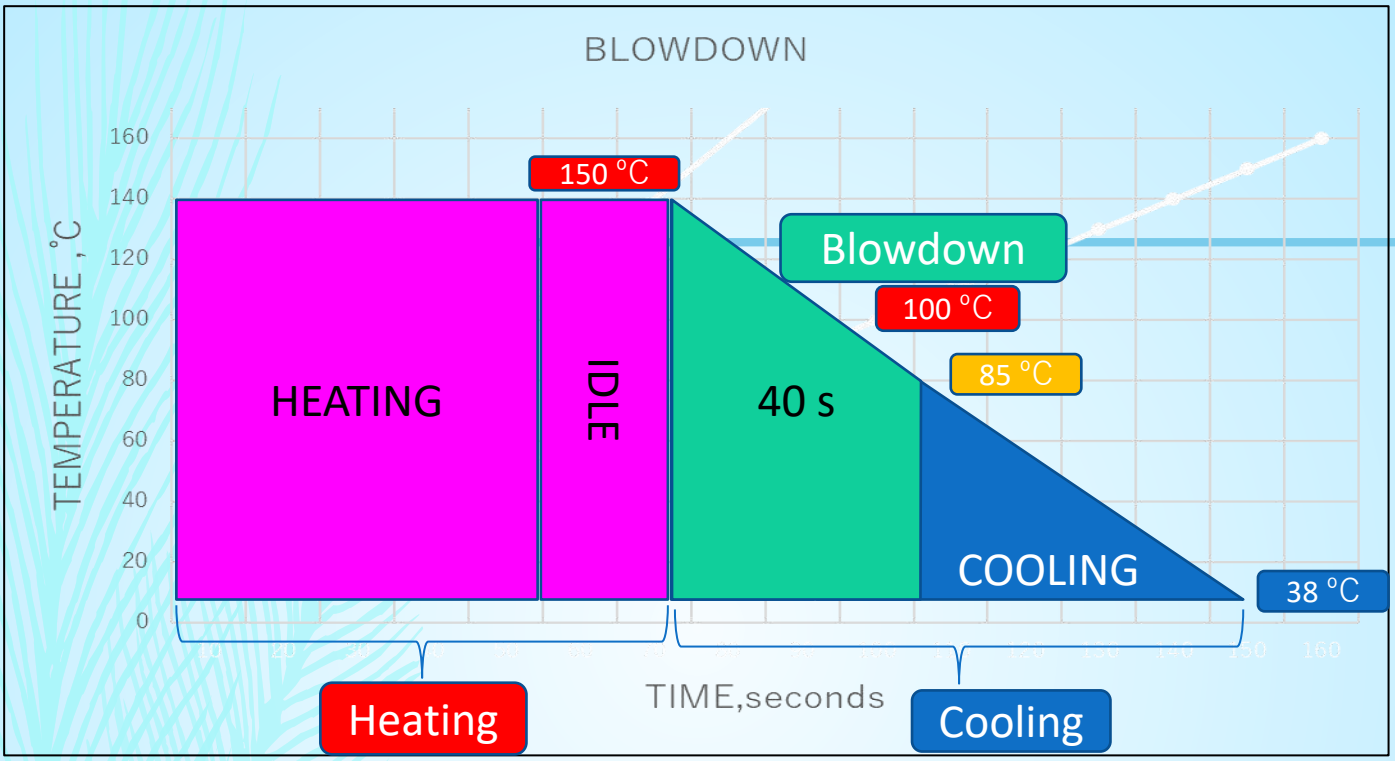
- Continuous trials on blowdown activity. (50% completed)
- Final Curing Without Cooling activity. (70% completed)
  Heating→Cooling→Heating Only, 38°C~138°C→125°C~138°C
  Estimated fuel reduction of more than 10%
- Steam trap leak corrections (June 2023), 65% completed
- Insulation of bare pipes (January 2023)

2024 Plans:

- Transition to Liquid Petroleum Gas (LPG) Boiler
- 100% Completion of blowdown activity by the end of 2024
- 100% Completion of Final Curing Without Cooling activity.
- Continuous steam trap leak corrections
- Continuous insulation of bare pipes

Blowdown Activity

Blowdown Activity (Core Molding 2nd press)

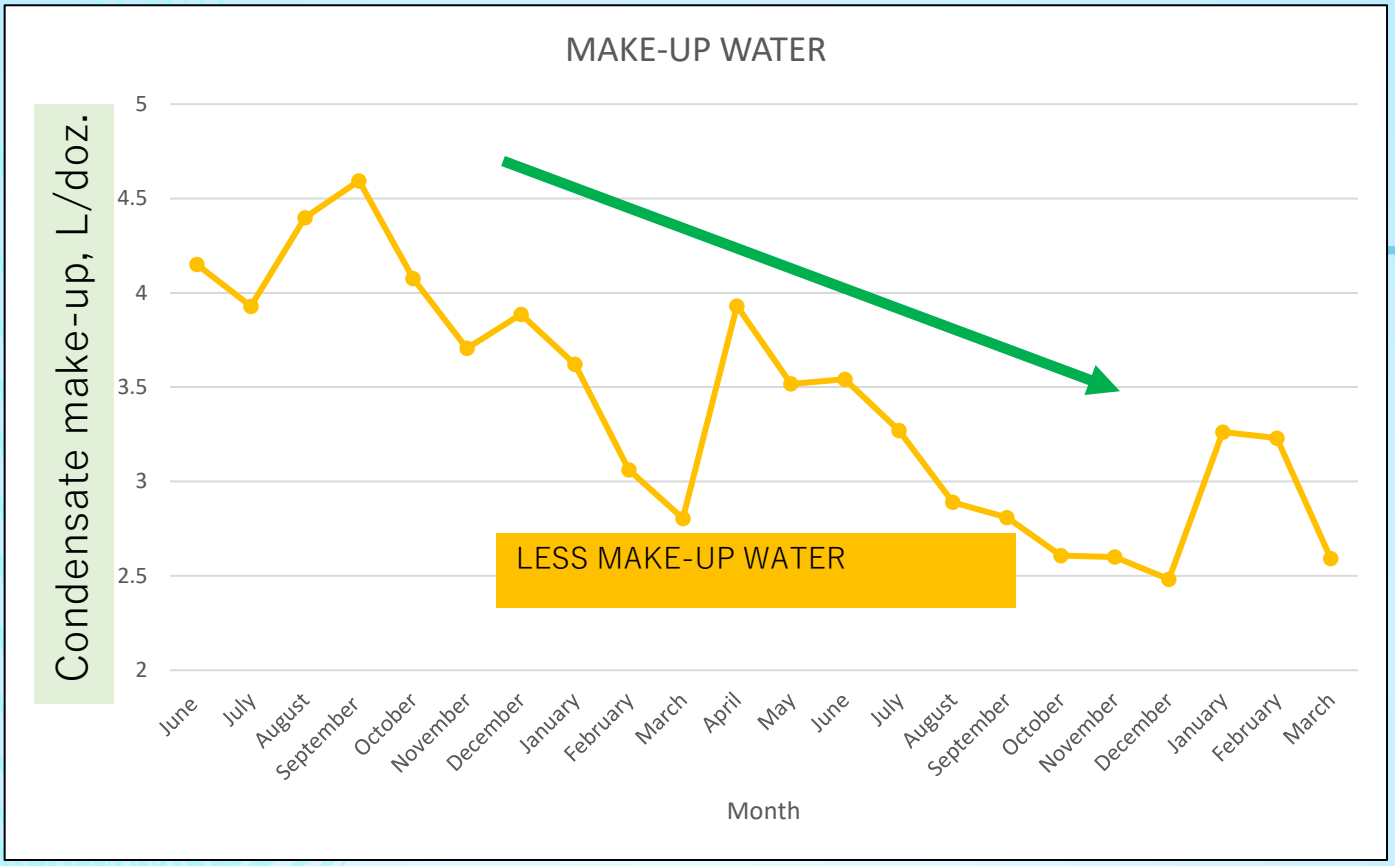


Purpose: The purpose of the blowdown activity is to harness the hot water during the transition of heating to cooling as indicated in the temperature time diagram.

As shown in the diagram above, we increased the time of blowdown and harness the water with more than **85** °C

Blowdown Activity

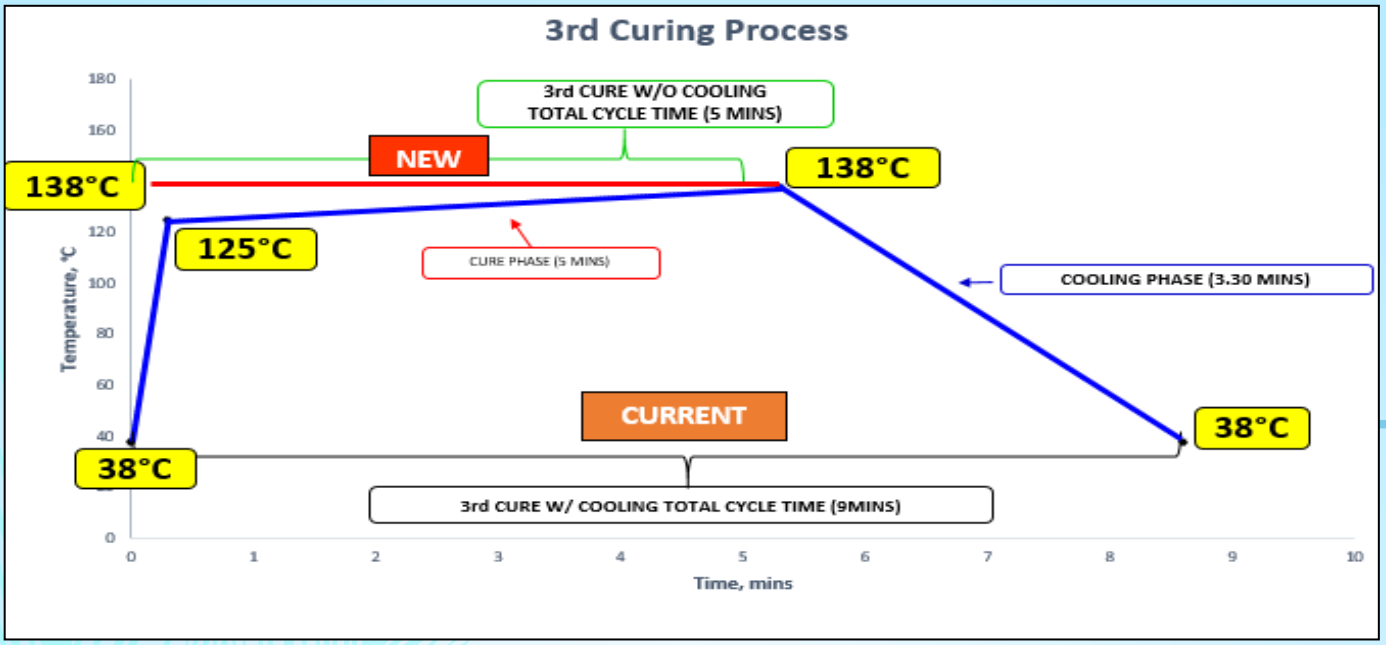
Result:



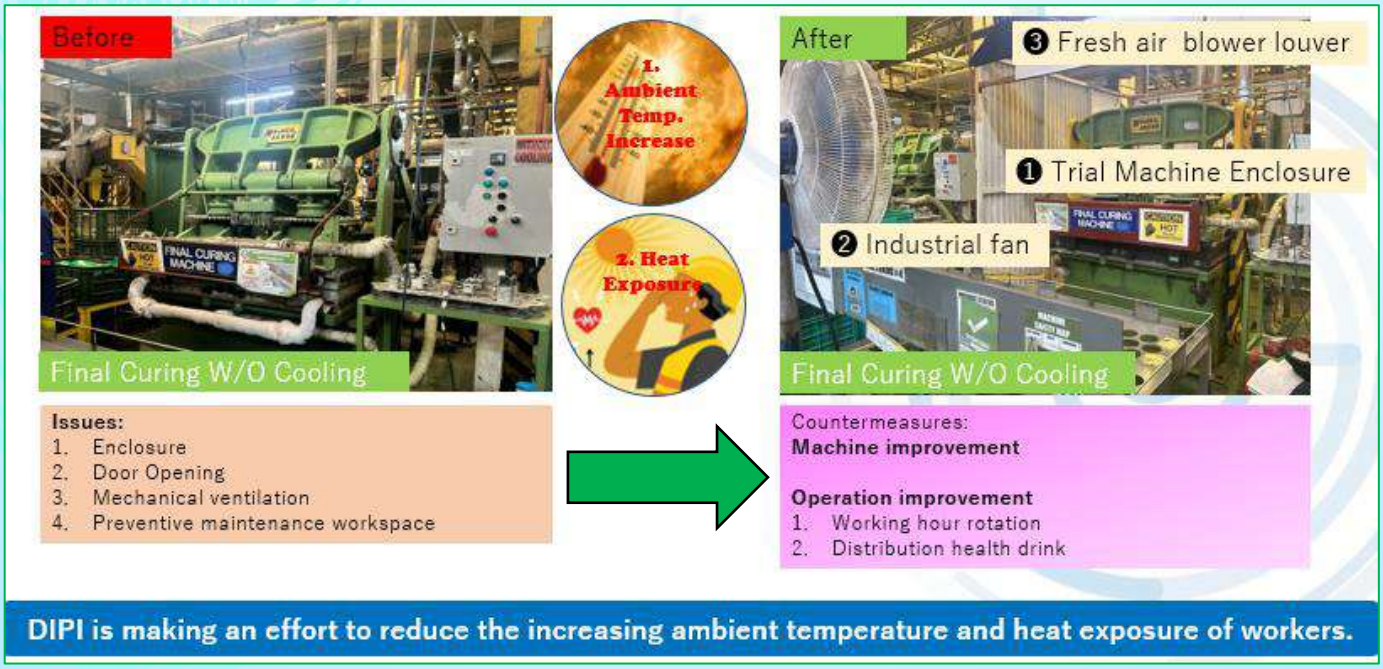
Impact: Our make-up water in the feed water used by boiler decreases and the temperature increases. as we increase the temperature of feed water we are reducing our fuel consumption to produce steam.

Lower condensate make-up water = Less Fuel usage

Final Curing without Cooling



- Heating~Cooling → Heating only
  38°C~138°C → 125°C~138°C
- Estimated fuel reduction of more than 10%
- Completion rate 70%

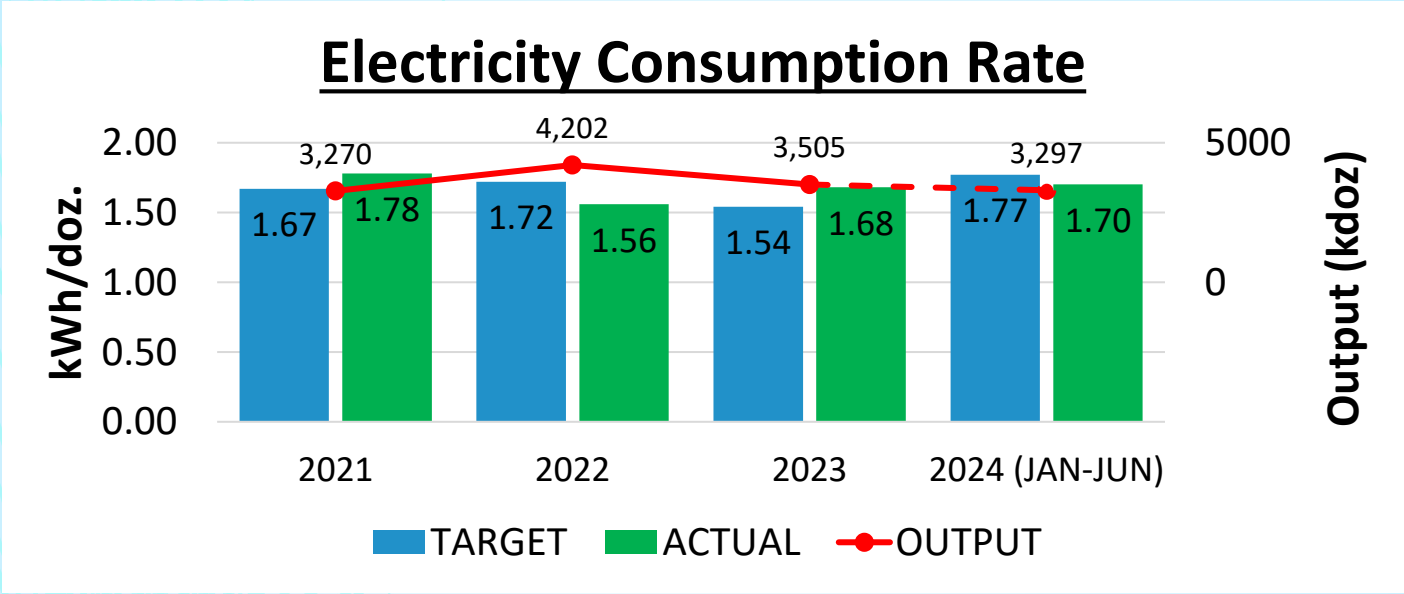


- Actual set-up of Final Curing without Cooling

c. Electricity Consumption

In 2022, the electricity consumption per output decreased by 12% compared to 2021: 1.78 kwh/dozen in 2021, and decreased to 1.56 kwh/dozen in 2022

In 2023, the electricity consumption per output increased by 7.69%. From 1.56 kWh/doz. (2022) to 1.68 kWh/doz. (2023). This is due to low volume in 2023 compared to 2022.



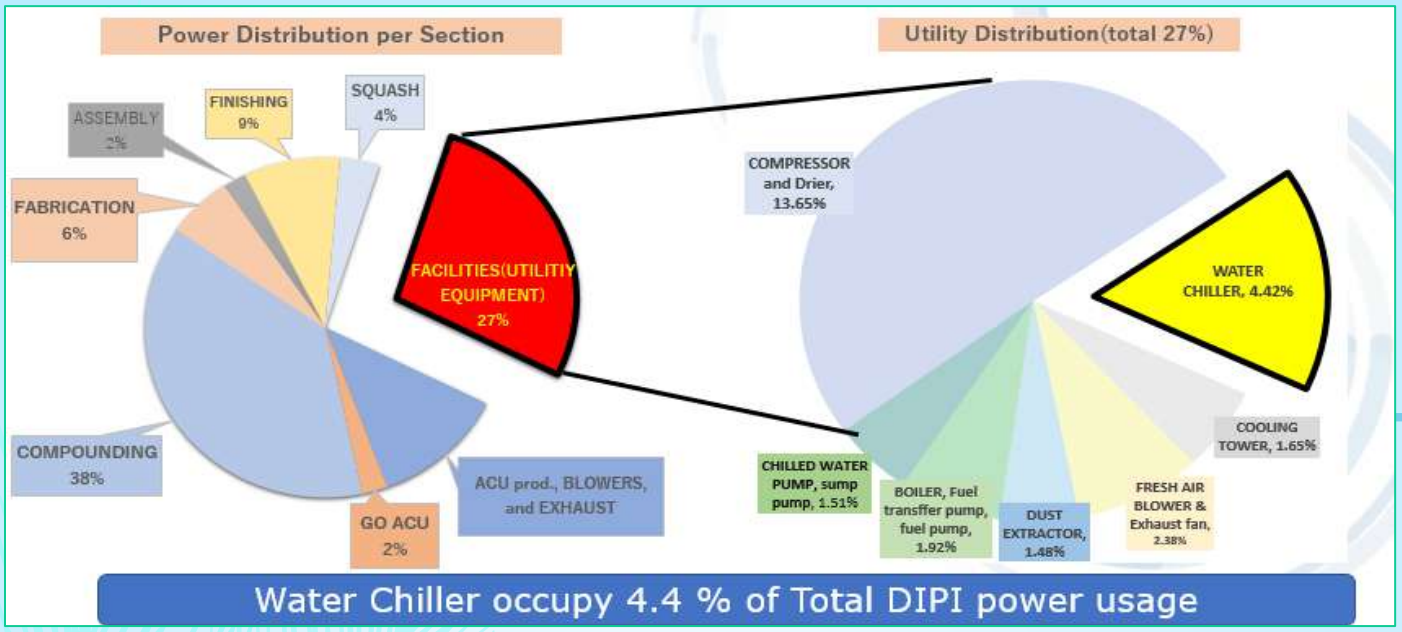
2023 Activities:

- Acquired International Renewable Energy Certification (I-REC)

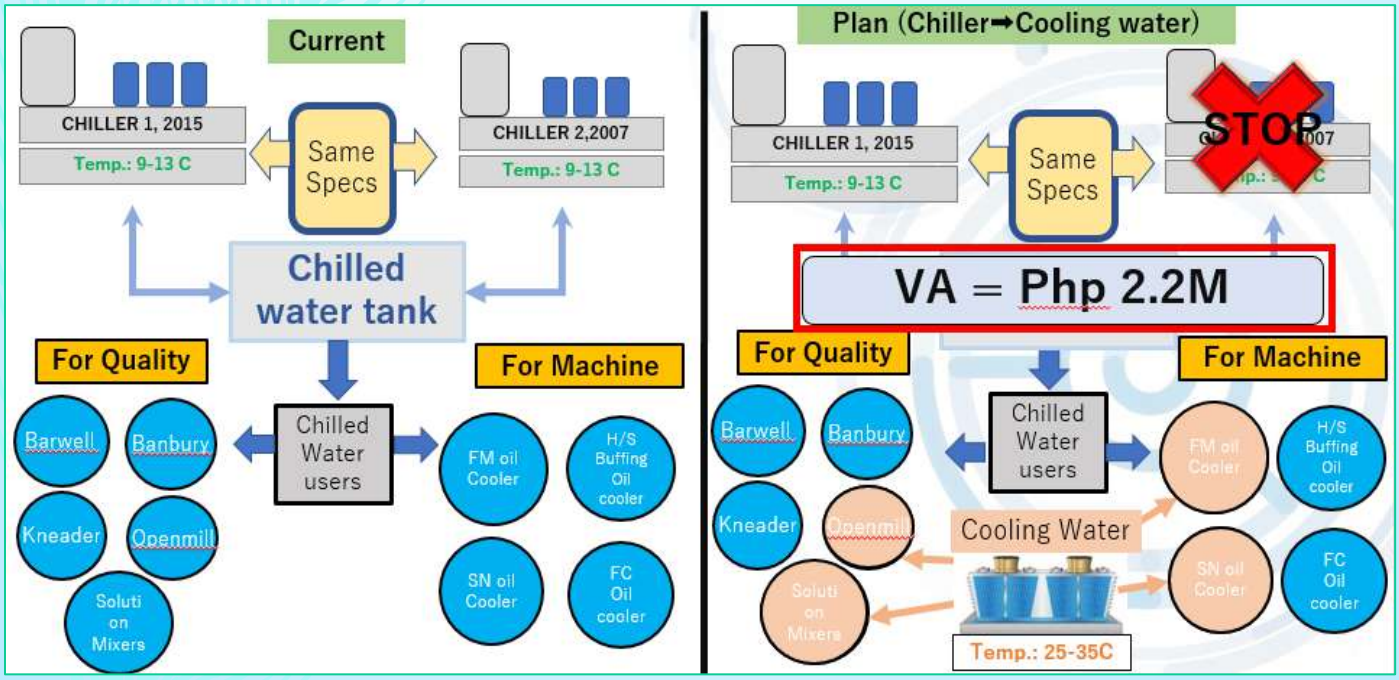
2024 Plans:

- Installation of inverters in cloth clicking and forming machines
- Optimization of compressor equipment (air leak correction)
- Conversion from chilled water to cooling water (Open Mill) (expecting 2% reduction in electricity consumption)
- Installation of power meters to measure and identify electricity consumption per section

c.1. Electricity Reduction



- Facilities (Utilities) equipment contributes 27%
- Water chiller is at 4.42%

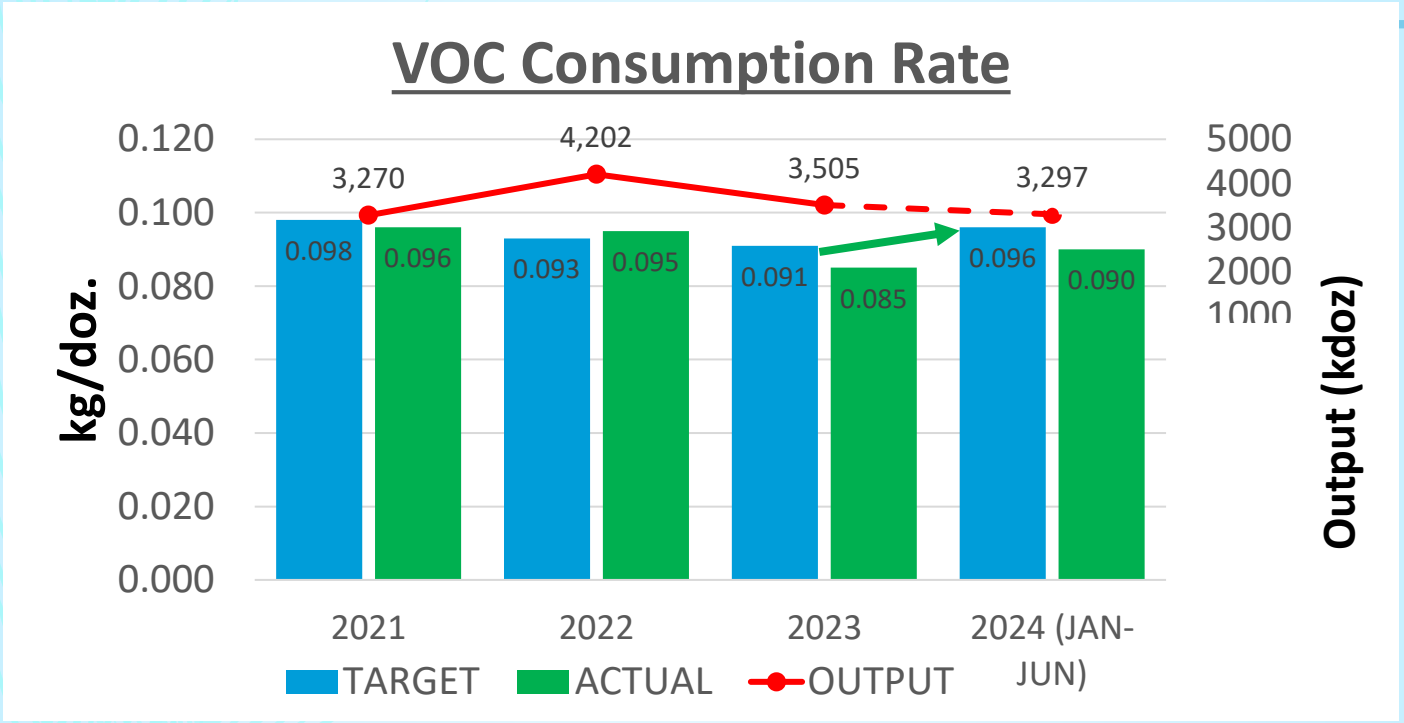


- Conversion from chilled water to cooling water

III. VOC Management

In 2022, the VOC consumption per output decreased by 1% compared to 2021: 0.096 kg/dozen in 2021, and decreased to 0.095 kg/dozen in 2022.

Increased the target in 2024, from 0.091 to 0.096 (1st half) due to increase in consumption of solution due to Double Dip Process (DDF)



2023-2025 Activities:

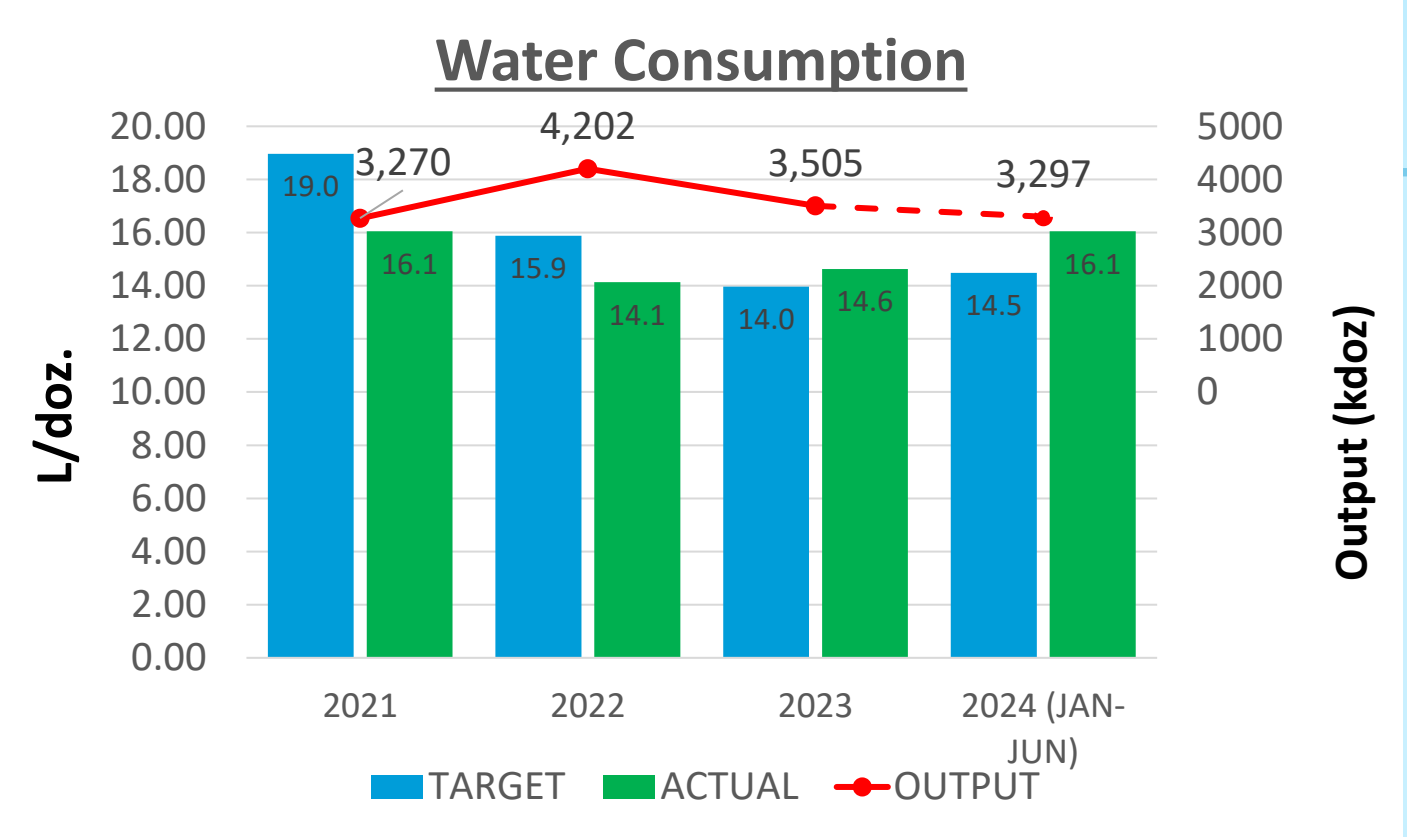
- As of May 2024, the current latex production is at 81%. VOC Usage is at 0.093 kg/doz. and target 100% latex production.

2024 Plans:

- P42→P50: trials for knife change and conversion to DDF
- GT Balls (P41) : 2nd sample for playtest for completion
- Conversion of Tournament Ball P30T, P35T.

IV. Water Management

In 2022, the water consumption per output decreased by 12% compared to 2021: 16.05 L/dozen in 2021, and decreased to 14.12 L/dozen in 2022.



2023 Activities:

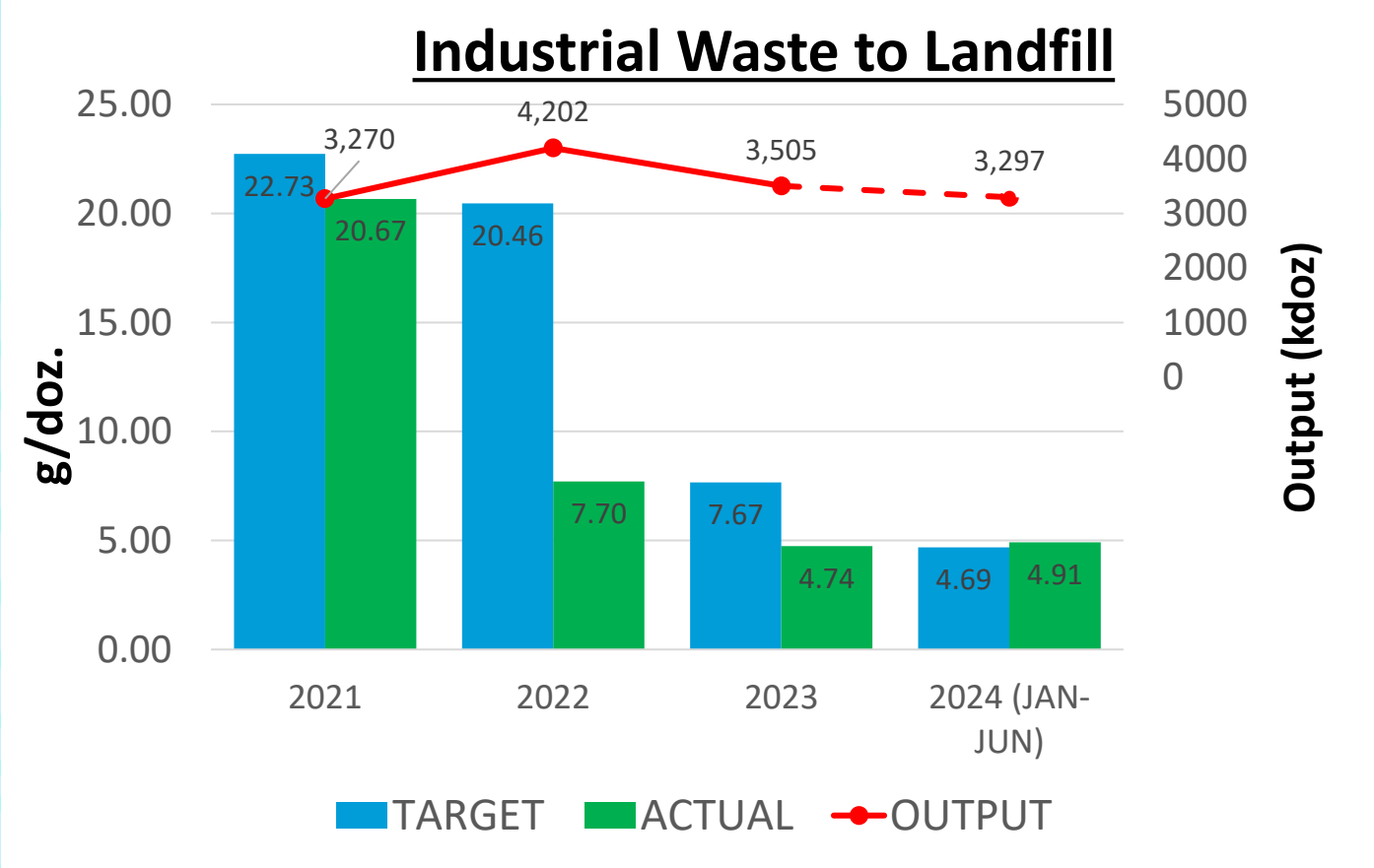
- Conducted posting of water conservation signage as part of awareness campaign.
- Intensify water leak patrol and correction. This also affect the fuel consumption.

2024 Plans:

- Continue leak patrol and correction

V. Waste Management

In 2023, the waste per output decreased by 38% compared to 2022, from 7.70 g/doz (2022) > 4.74 g/doz (2023).



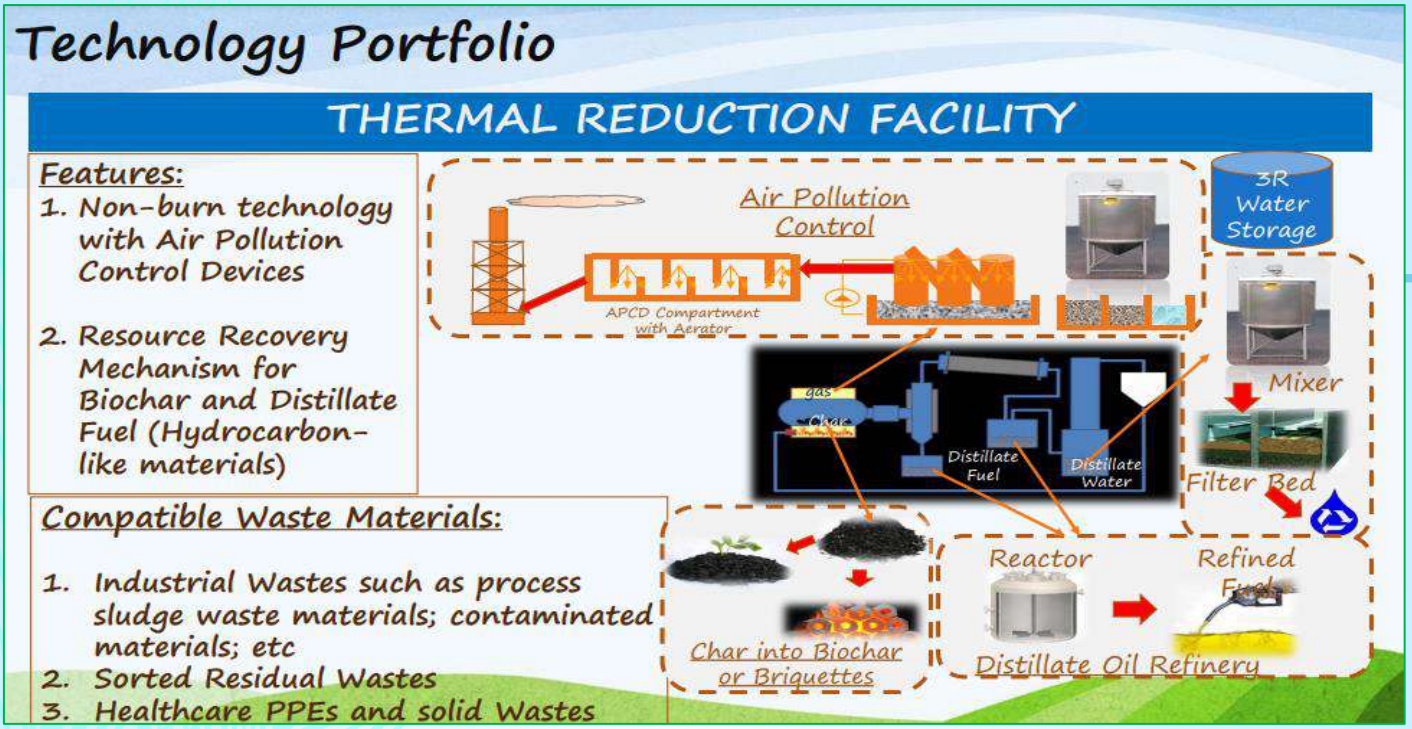
Accumulated wooden pallets were disposed of only in December of 2022, causing an increase of waste to landfill. In 2023, wooden pallets were donated to schools and employees as part of Corporate Social Responsibility (CSR).

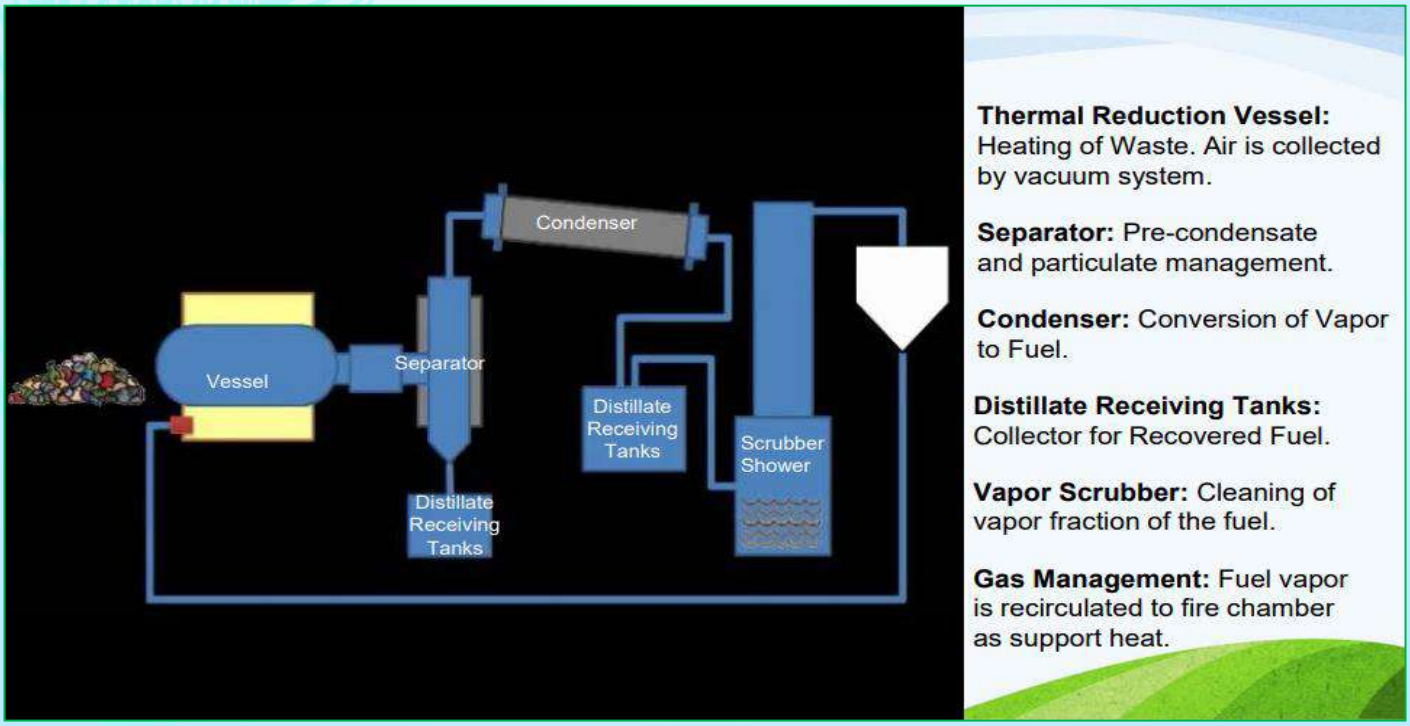
2024 Plans:

1. Accreditation of SEPAR Environmental Corporation (June 2024) to achieve “zero wastes to landfill”

V. Waste Management

SEPAR Environmental Corporation uses thermal reduction technology to achieve “zero waste to landfill”





DIPI officially started doing business with SEPAR in June 2024

VI. Biodiversity & Ecosystem

a. Tree Planting Activity

The Authority of Freeport Area of Bataan encourages all locators to participate in AFAB Environmental activity. DIPI has organized tree planting activity, in coordination with the Department of Environment and Natural Resources (DENR).

Tree planting activity scheduled last November 2023 was cancelled due to unforeseen circumstances.

Tree Planting this year is scheduled on October 2024

VII. Environmental Data

	Facility	Item	Unit	Regulation Value	2023 Emission Test Results (Boiler No. 1)			2023 Emission Test Results (Boiler No. 2)		
					Min.	Max	Ave.	Min.	Max.	Ave.
*Emission to the atmosphere	Boilers	Sulfur Oxide (SO2) Emissions	mg/Ncm	700	25.75	30.35	28.78	105.18	130.18	119.15
		Nitrogen Oxide (NO2) Emissions	mg/Ncm	500	15.39	30.31	23.64	15.25	15.87	15.56
		Dust Particulate Matter	mg/Ncm	150	36.72	49.36	41.70	33.51	45.08	37.88
**Drainage	Waste water	BOD	mg/L	7	-		-	-	-	-
		Suspended Solids	mg/L	80	-		-	-	-	-
		pH	-	9	-		-	-	-	-
		Oil Content	mg/L	2	-	-	-	-	-	-

* RA 8749 Philippine Clean Air Act (DENR-EMB)
**RA 9275 Philippine Clean Water Act
DAO 2016 – 08 Department Administrative Order

Note : We don't have monitoring of our waste water due to we are connected to AFAB Sewer and our storm drain only contains water from the outside DIPI Plant passed through our drainage system.