



# Environmental Sustainability 2023

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.

# Table of Contents

	Page
I. Environmental Sustainability Section .....	5
<hr/>	
II. Carbon Neutrality (CN) .....	6-7
a. CO2 Emission .....	8
b. Fuel Consumption .....	9
c. Electricity Consumption .....	10
III. VOC Management .....	11
IV. Water Management .....	12
V. Waste Management .....	13-14
VI. Biodiversity and Ecosystem .....	15-16
VII. Environmental Data .....	17

# I. Environmental Sustainability Section

**Our Environmental Sustainability  
is divided into five sections**

---

**BIODIVERSITY**

**WASTE  
Management**

**CARBON  
Neutrality**

**VOC  
Management**

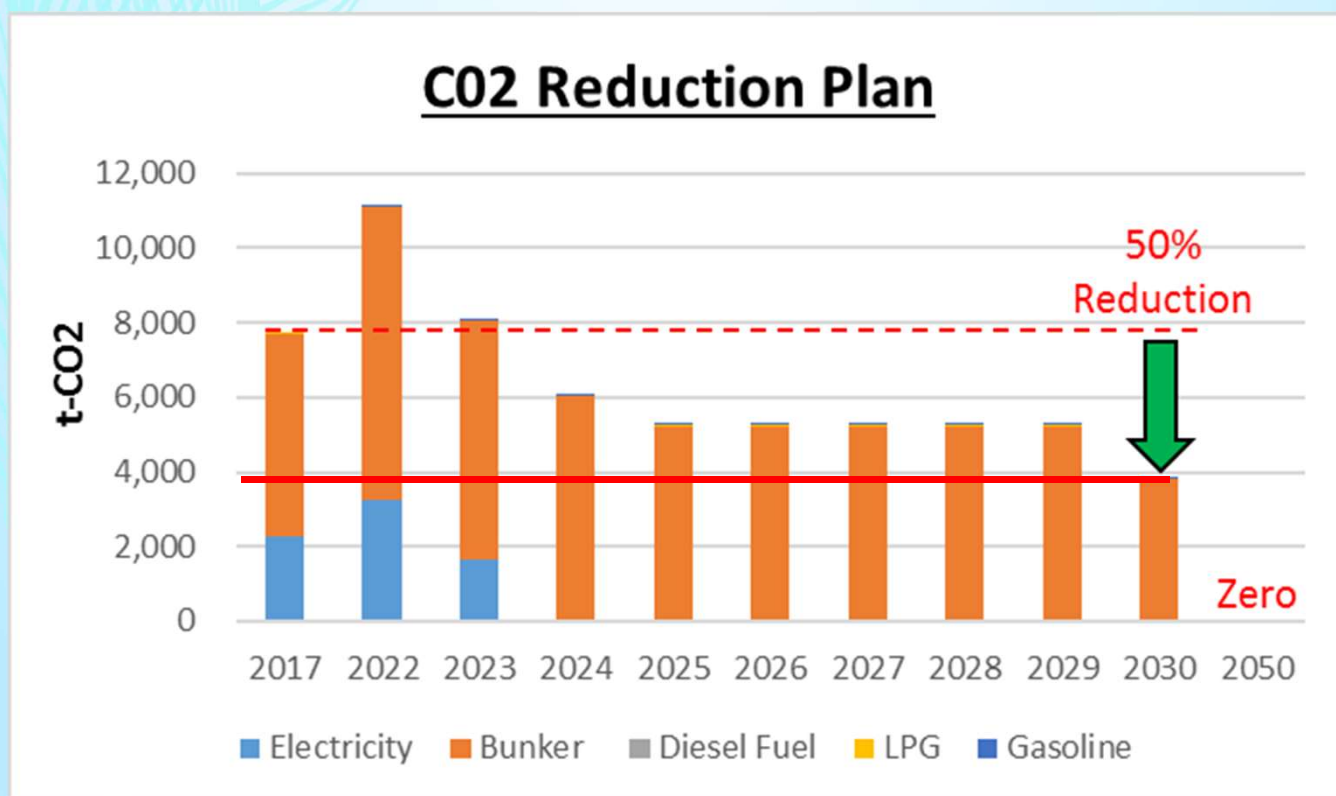
**WATER  
Management**

## II. Carbon Neutrality (CN)

The basic policy of Sumitomo Rubber Industries Group aims to reduce to 50% of CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub> reduction plan of in accordance to the policy.

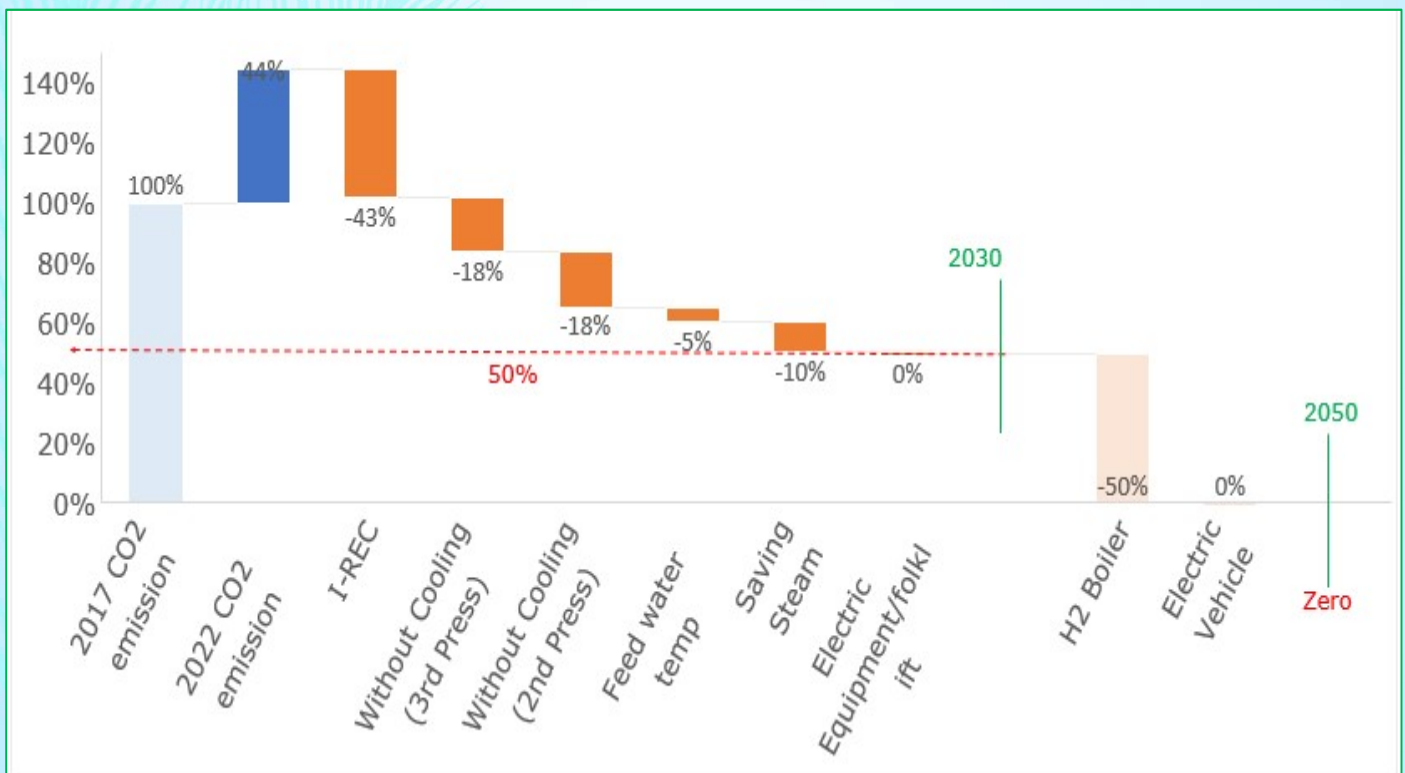
In the current situation, there was increase of CO<sub>2</sub> emission due to increase of production output from 2017 to 2022.



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.

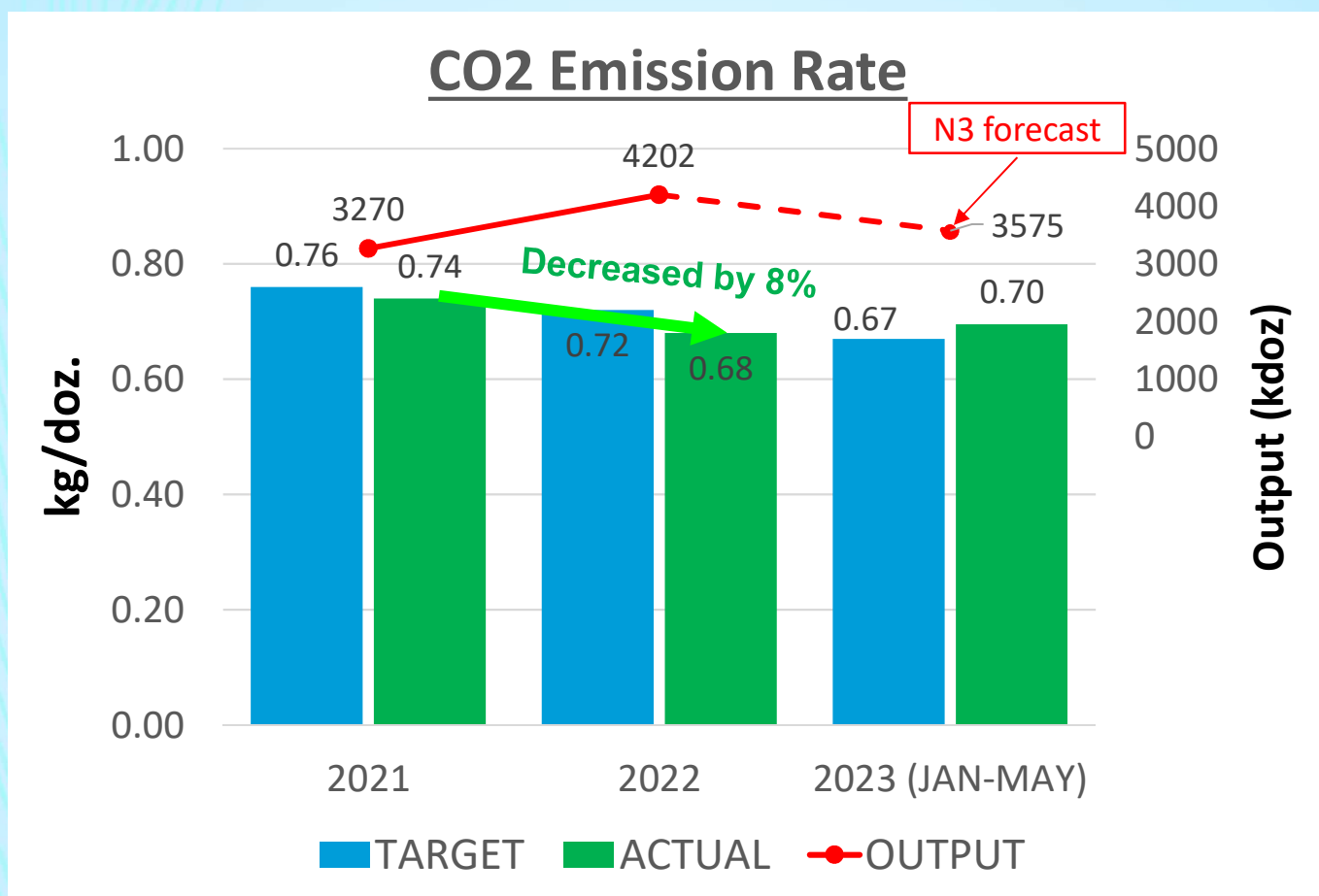
To realize the CO2 reduction plan, the company has created various activities to be implemented to achieve 50% carbon emission by the end of 2030 in comparison with 2017, and zero emission by the end of 2050.

## Reduction Activities



## 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

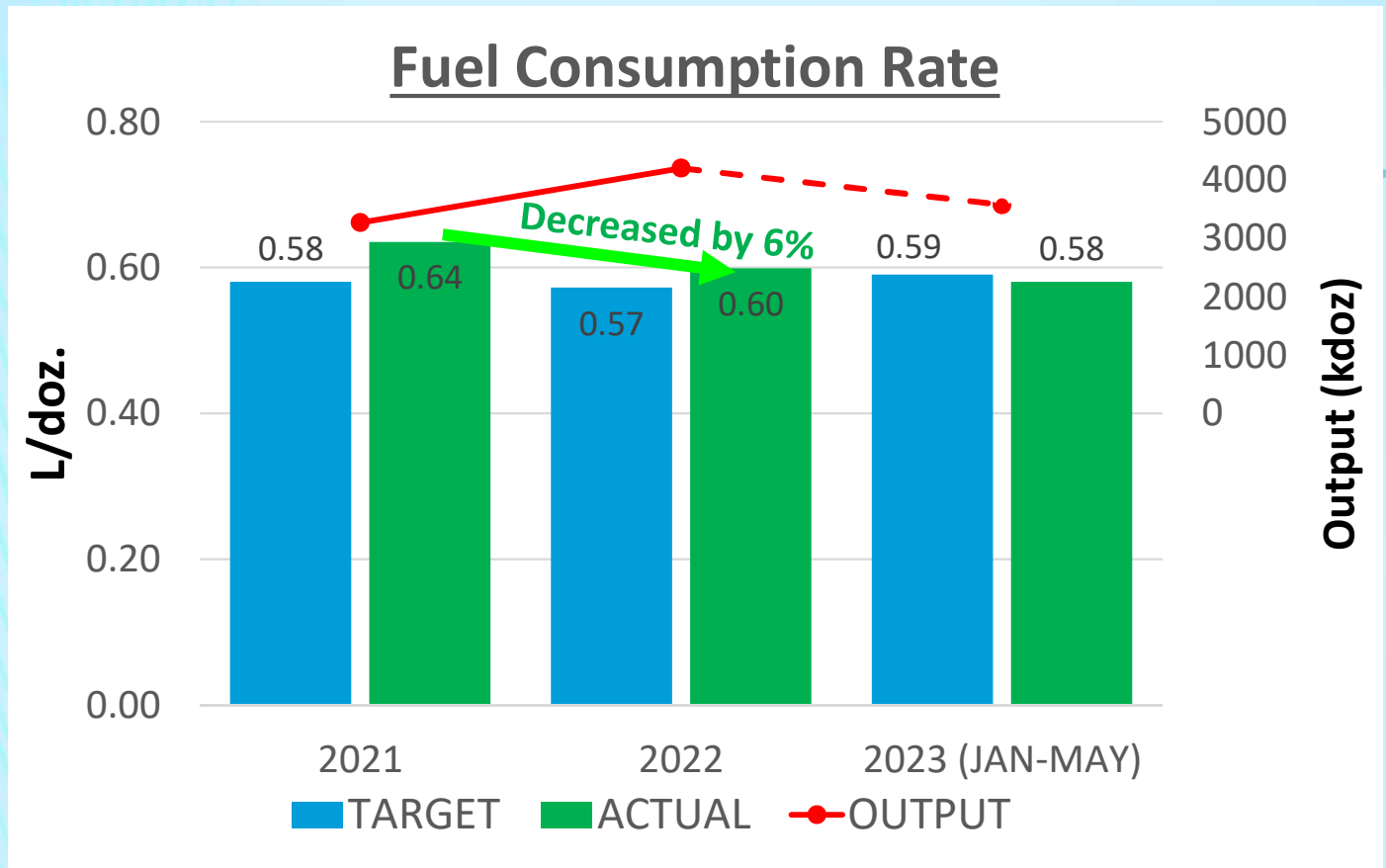


Carbon dioxide is a by product of energy such as electricity and fuel. And with the participation of both management and employees, step by step we are moving to reaching our environmental goals. Various energy conservation activities have been created.



## b. Fuel Consumption

In 2022, the fuel consumption per output decreased by 6% compared to 2021: 0.64 kg/dozen in 2021, and decreased to 0.60 kg/dozen in 2022.



### 2022 Activities:

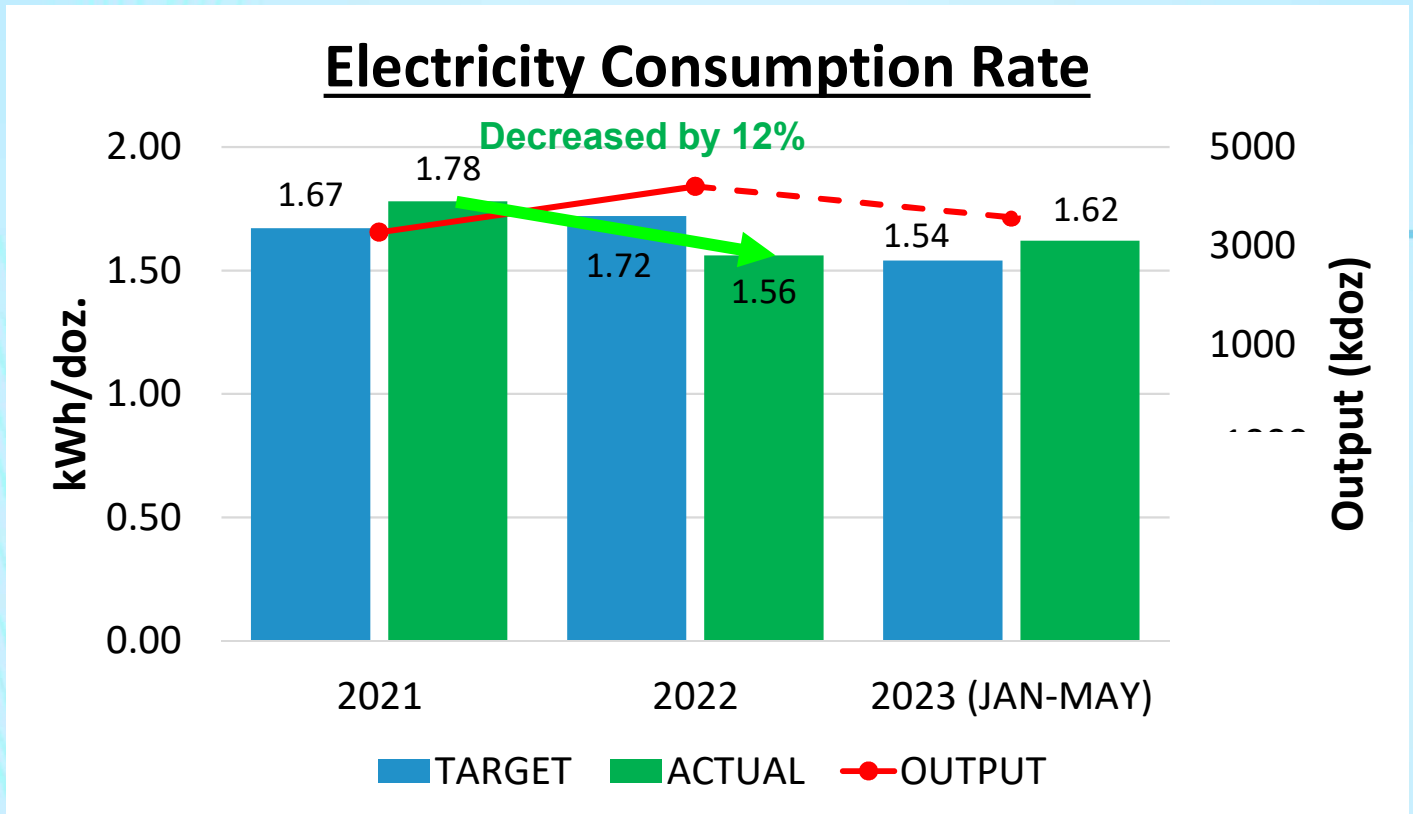
- Checked, monitored, and replaced two defective pump traps.
- Created plan and trial on how to utilize hot water from blowdown of core molding process to increase feed water temperature.

### 2023 Plans:

- Continuous trial on blowdown activity.
- **Final Curing Without Cooling activity.**  
Heating~Cooling→Heating Only, 38°C~138°C→125°C~138°C  
Estimated fuel reduction of more than 10%

## 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



### **2022 Activities:**

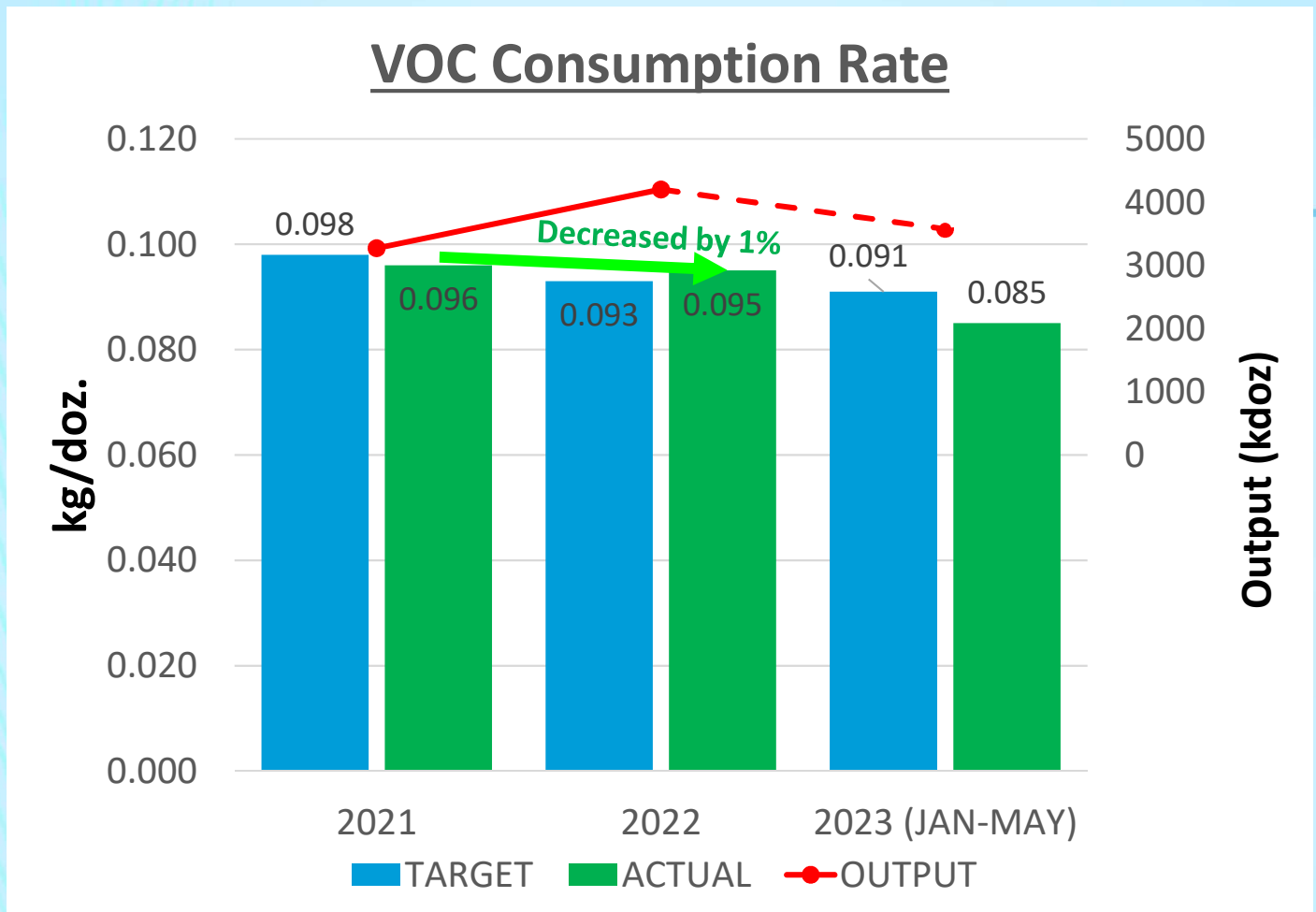
- Renew two units of old R22 Freon based to R32 Daikin floor mounted Air conditioning unit. (Up to 2030 Activity)
- Converted 10 unit of Halogen to LED Street
- Utilize installed power meter for mixers
- Intensify the Patrol and correction of air leakage.
- Setting air-conditioning temperature to 25°C.

### **2023 Plans:**

- Acquire International Renewable Energy Certification (I-REC)

## 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.



### **2022 Activities:**

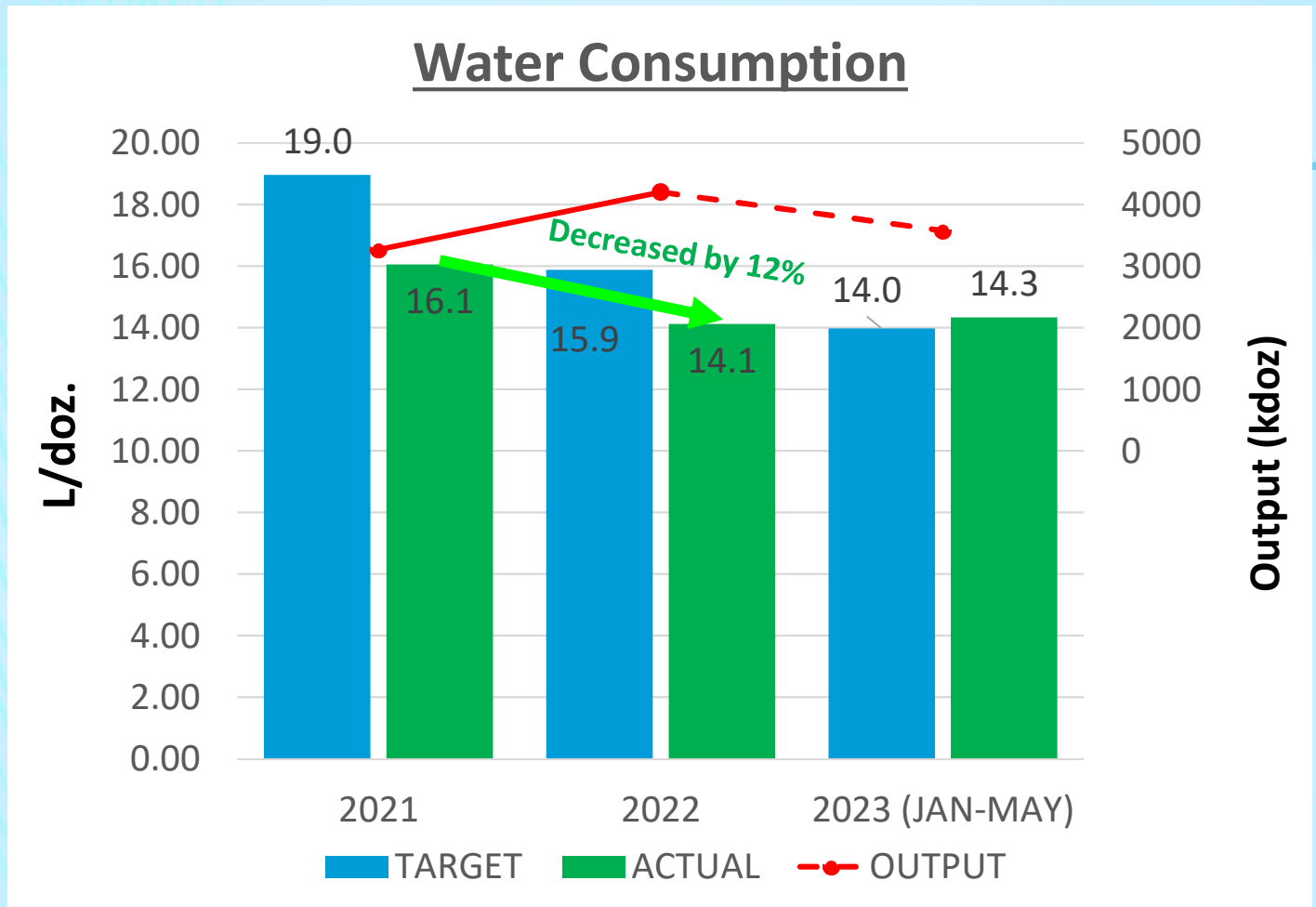
- Latex production at 61% at the end of December 2022.

### **2023-2025 Activities:**

- As of May 2023, the current latex production is at 79%. And targets 100% latex production, except for tournament balls until 2025.

## 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.

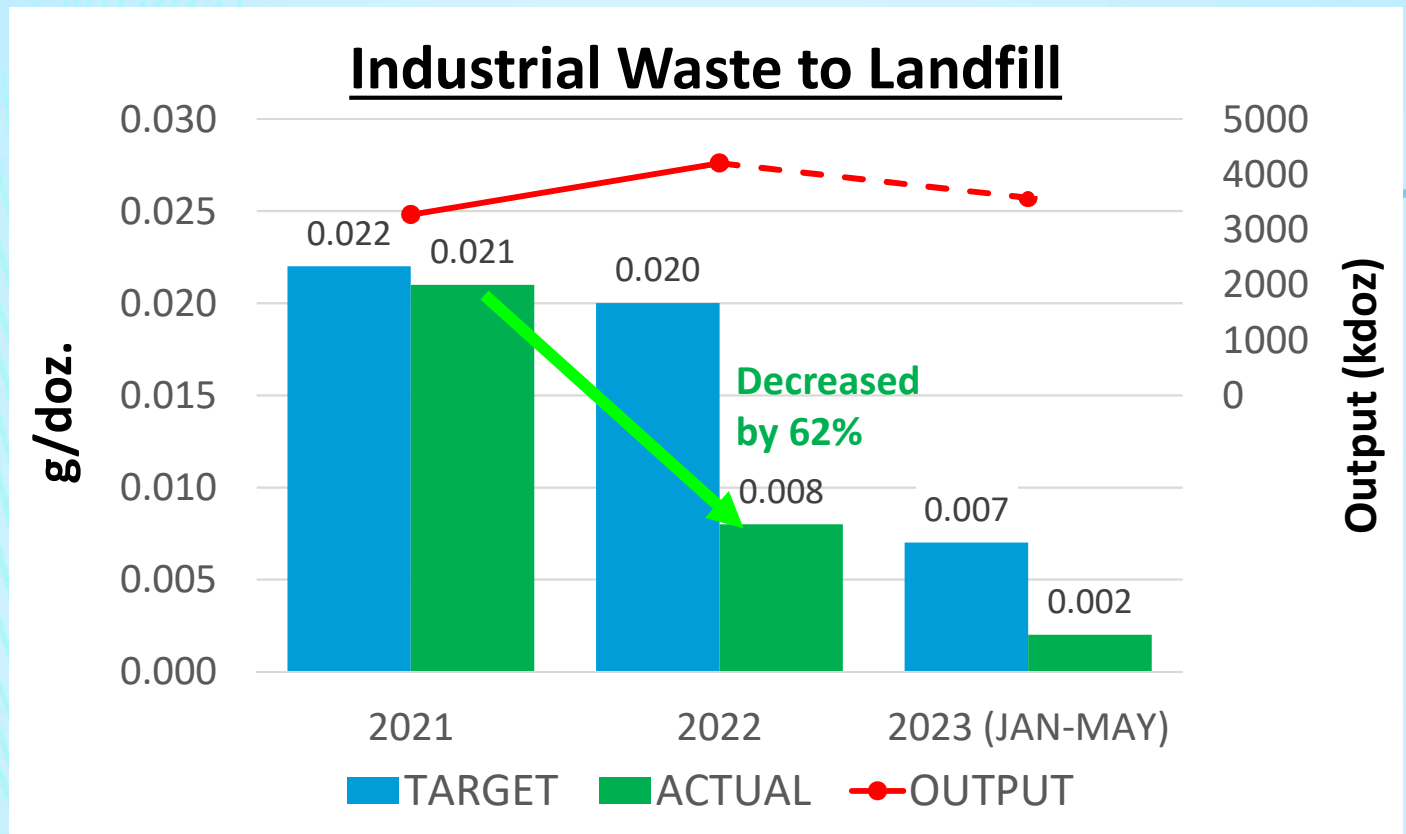


### 2022 Activities:

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

## V. Waste Management

In 2022, the waste per output decreased by 62% compared to 2021: 0.021 grams/dozen in 2021, and decreased to 0.008 L/dozen in 2022.



Continuing segregation activities from 2021. In addition, to further reduce the waste going to land fill, we have included rubber dust being sent to a cement factory as its fuel.

Accumulated wooden pallets were disposed of only in December of 2022, causing an increase of waste to land fill. In 2023, wooden pallets will be donated as part of Corporate Social Responsibility (CSR).

# V. Waste Management

In 2022, topics in waste management are included in the pre-employment orientation.



## 2023 Plans and programs:

1. Categorize the segregation process further into three parts;  
1. Recyclable (valuable), 2. Non-recyclable (valuable), and 3. Residual (waste to landfill).
2. To further reduce waste, scrap wooden pallets with no value will be donated to the community as part of Corporate Social Responsibility (CSR) Activity.
3. Adopting a circular economy framework which utilizes the three R's Reduce, Re-use, and Recycle. At the same time, complying with Republic Act 11898, also known as Extended Producers Responsibility law, to reduce the plastic footprint of the Philippines.

# 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). Three hundred Seedlings (150pcs. Narra, 150pcs. Cashew) were planted at this event last October 09, 2022, in Mt. Tarak, Mariveles, Bataan.



## b. Clean Up Drive

DIPI is committed to participating in environmental activities led by the Authority of Freeport area of Bataan, such as coastal clean-up. DIPI- Environmental Section organized its own version of a clean-up drive within the factory and its surrounding premises.



**Done in July 2022**





## VII. Environmental Data

	施設 Facility	項目 Item	単位 Unit	規制値 Regulation Value	2022年度実績 FY 2022 results		
					最小 Min	最大 Max	平均 Ave.
* 大気への排出 Emission to the atmosphere	ボイラー Boiler	SOx	mg/Ncm	700	220	360	276
		NOx	mg/Ncm	500	30	36	33
		ばいじん Dust, Particulate matter	g/Nm <sup>3</sup>	150	11	30	18
** 水域への排出 Drainage	排水 Waste Water	BOD	mg/L	7	—	—	—
		SS濃度 Suspended solids	mg/L	80	—	—	—
		pH	-	9	—	—	—
		油分濃度 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.