



ELEVATING LIVES

# WASTE MANAGEMENT



■ HIGH IMPORTANCE  
 ■ MEDIUM IMPORTANCE  
 ■ LOW IMPORTANCE

## SIGNIFICANCE

**M**anaging waste efficiently is a key concern as a highway operator, especially given the substantial amount of waste produced in various segments of our operations. This encompasses everything from construction and maintenance debris and litter from road users to waste in our rest & service areas.

Recognising this challenge, we are deeply committed to managing waste effectively and responsibly, which is integral to our operational strategy. While Waste Management is categorised as a low-importance issue in our materiality matrix, our dedication to handling it environmentally underscores our broader responsibility towards ecological conservation and sustainable practices.

### OUR APPROACH WASTE MANAGEMENT

**01** SYSTEMATIC AND EFFECTIVE WASTE SEGREGATION

At PROLINTAS, our waste management strategy has a dual focus: optimising efficiency and enhancing environmental sustainability.

**01:** Prioritising the meticulous sorting of various waste types at the source to ensure responsible management and disposal.

**02** ADVANCING WASTE CIRCULARITY AND LANDFILL REDUCTION

This comprehensive approach begins with two primary elements:

**02:** Emphasising increased recycling and repurposing to conserve resources and uphold the principles of a circular economy.





## OUR PERFORMANCE

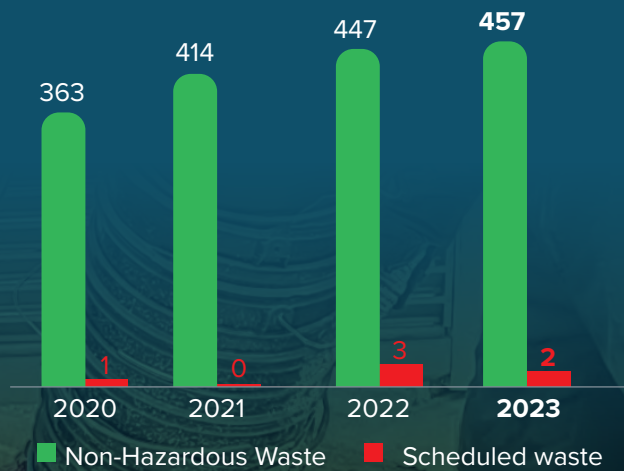
We monitor the effectiveness of our Waste Management initiatives by tracking key performance indicators, including the volume of municipal waste and scheduled waste generated on our highways and within our business operations.

Additionally, we measure the amount of waste recycled and repurposed for practical use along our highways and within our broader business activities.

### WASTE GENERATED, DIVERTED AND DISPOSED (mt)

Type of Waste	2020	2021	2022	2023
Non-Hazardous Waste	363	414	447	457
Scheduled waste	1	0	3	2
<b>Total Generated</b>	<b>365</b>	<b>414</b>	<b>450</b>	<b>459</b>
Recycled waste	36	37	60	37
% of total waste	10%	9%	13%	9%
Disposed waste	328	377	389	421
% of total waste	89%	91%	86%	91%

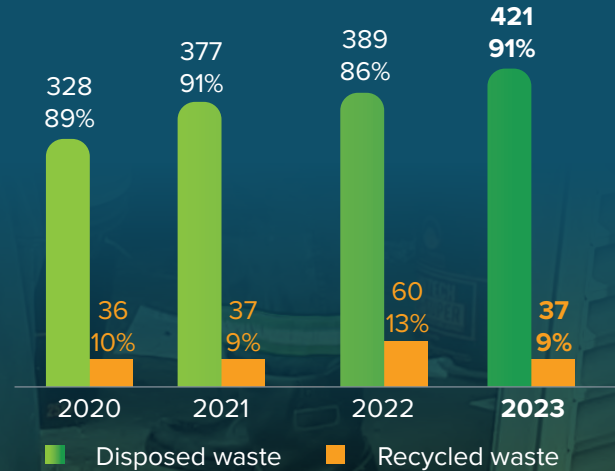
### TOTAL WASTE GENERATED FROM PROLINTAS OPERATIONS (tonnes)



#### Breakdown of type of waste in FY2023:

1. Disposed Waste - Mixed Waste (Highway & Office Operations) - 275 tonnes, Branches - 146 tonnes, Scheduled Waste 2 tonnes.
2. Recycled Waste - Food Waste 1.8 tonnes, Paper - 3.6 tonnes, Aluminium - 0.02 tonnes, Plastic - 0.429 tonnes, Scrap Metal - 32 tonnes.

### BREAKDOWN OF WASTE DIVERTED AND DIRECTED TO DISPOSAL (tonnes)



### KEY HIGHLIGHT

**FY2023:**  
**37,850 kg**  
of waste diverted from disposal.

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## 01

### SYSTEMATIC AND EFFECTIVE WASTE SEGREGATION

From the outset, we systematically segregate our waste materials at the source into municipal and scheduled waste. This approach optimises our waste-handling processes, minimises the risk of contamination through the safe disposal of hazardous substances, and facilitates practical recycling efforts.

### 1. GENERAL WASTE



#### SOURCE & DESCRIPTION OF WASTE:

##### Activity: Daily Highway Operations

- Waste generated by operations staff at the administration building.
- Trash on highways discarded by road users.

#### PROCESSES:

- Provision of 3R bins at Office Buildings, RSAs & Lay-Bys.
- Routine waste collection by licensed contractors.
- Waste disposal at landfill or recycled.

### 2. MILLING WASTE



#### SOURCE & DESCRIPTION OF WASTE

##### Activity: Pavement Rehabilitation

- Debris from pavement rehabilitation activities such as resurfacing, patching and repairing.

#### PROCESSES:

- Waste collection by appointed contractor.
- Waste disposal at landfill.

### 3. BIOMASS WASTE



#### SOURCE & DESCRIPTION OF WASTE:

##### Activity: Pruning

- Biomass from trimming trees and shrubbery along highways to ensure road safety and visibility of traffic signs and signals.

##### Activity: Trimming Trees and Grass Cutting

- Trimming trees, mowing grass and shrubbery along highways

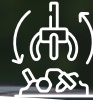
#### PROCESSES:

- Waste collection by appointed contractor.
- Waste disposal at landfill.





#### 4. SCRAP METAL



**SOURCE & DESCRIPTION OF WASTE:**

**Activity: Highway Maintenance**

- Obsolete or damaged materials and components such as old road sections, worn-out road signs, damaged guard rails and barriers.

**PROCESSES:**

- Waste collection at each operation site by licensed contractors for recycling.

#### 5. SCHEDULED WASTE



**SOURCE & DESCRIPTION OF WASTE:**

**Activity: Road Accidents and Highway Maintenance**

- Debris from accidents such as spilled fuel and other hazardous chemicals requiring specialised handling and disposal.
- SW 102, SW 103, SW 109, SW 110, SW 408 and SW 409.

**PROCESSES:**

- Waste is handled, transported, and disposed of safely by a licensed contractor equipped to handle hazardous materials.

#### 6. FOOD WASTE



**SOURCE & DESCRIPTION OF WASTE:**

- Organic waste such as leftover food discarded by RSA patrons.

**PROCESSES:**

- Installation of food waste composter at RSA.
- Conversion of food waste to fertiliser to be used in landscaping along our highways.

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## 02

### ADVANCING WASTE CIRCULARITY AND LANDFILL REDUCTION

By intensifying our recycling efforts, PROLINTAS is steadily advancing towards a circular economy wherein waste materials are repurposed and reused instead of indiscriminately disposed of in landfills. These endeavours contribute to the conservation of finite natural resources and mitigate the impact of our operational activities, ultimately reducing our environmental footprint.



#### INITIATIVE 1 PROVISION OF FABRIC RECYCLING BIN

On 21 October 2022, we launched our first-ever recycling bins for textile recycling in collaboration with Kloth Cares, the first textile-recycling movement in Southeast Asia.

Sungai Balak Lay-By, Kajang SILK.

13,000 kg

2023 : 9,500 kg  
2022 : 500 kg



#### INITIATIVE 2 SCRAP METAL COLLECTION AND RECYCLING

Unused steel or metal structures from highway maintenance or the detritus from accidents are collected for recycling including guard rails, variable message sign (VMS) panels, air conditioning units, fire extinguishers and lantern lights.

All six highways.

Weight of scrap metal collected (kg)	Total collected (RM)
2023 : 32,622	2023 : 66,768
2022 : 57,094	2022 : 101,685
2021 : 37,156	2021 : 56,865
2020 : 36,705	2020 : 2,460



#### INITIATIVE 3 FOOD WASTE COMPOSTER

Food composting helps to reduce the amount of organic waste generated by RSA tenants and road users, thereby reducing the waste for disposal at landfills. The food waste composter converts this waste into nutrient-rich compost, which are then used as fertiliser for landscaping.

Both bounds of RSA Elmina, GCE.

Weight of food waste composted (kg)	Fertiliser produced (kg)
2023 : 1,080	2023 : 216
2022 : 630	2022 : 126
2021 : 700	2021 : 140

\*Note: Every 100 kg of food waste yields approximately 20% (20 kg) of fertiliser.

What Where Target

Performance Total





# ELEVATING LIVES WASTE MANAGEMENT



## INITIATIVE 4 3R BINS FOR RECYCLING

3R bins have been placed at strategic locations at our highways, office, RSAs and lay-bys since 2021 for employees and road users to segregate their waste.

All six highways and headquarters.

	Paper (kg)		Tin (kg)
<b>2023 : 3,600</b>		<b>2023 : 20</b>	
2022 : 2,428		2022 : 13	
2021 : 86		2021 : 0	
	Plastics (kg)		Total collected (kg)
<b>2023 : 429</b>		<b>2023 : 4,049</b>	
2022 : 495		2022 : 2,936	
2021 : 0		2021 : 86	



## INITIATIVE 5 OLD SOLES NEW LIFE (OSNL)

Initiated in 2023, this initiative focused on the proper management of shoe waste in collaboration with a local NGO.

A total of 20 OSNL bins were placed in areas within the proximity of our highways between December 2023 and March 2024.

Total collected (kg)  
**2023 : 273 Shoes Collected**



## INITIATIVE 6 CIRCLE PROGRAMME (UPCYCLING USED COOKING OIL)

Started in 2023, this initiative focused on proper management of organic waste, particularly used cooking oil in collaboration with a local NGO.

- 1. Kampung Sg Balak, Kajang.
- 2. PPR Sri Jelatek.

Total collected (kg)

**2023 : 12** of used cooking oil upcycled to soaps.

## GOING FORWARD

**P**ROLINTAS will remain dedicated to advancing our waste management practices. We will focus on sustainability, innovation, and collaboration to minimise waste, increase recycling, and promote a circular economy. We aim to continuously improve processes, reduce environmental impact, and positively impact the communities we serve.

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