EUROPEAN UNION

SPREP
Secretariat of the Pacific Regional Environment Programme

PacWastePlus
PACIFIC WASTE MANAGEMENT

This initiative is supported by **PacWastePlus**-a 85-month project funded by the European Union (**EU**) and implemented by the Secretariat of the Pacific Regional Environment Programme (**SPREP**) **to sustainably and cost effectively improve regional management of waste and pollution.**

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PAPUA NEW GUINEA

Waste Data Profile

June 2025

Papua New Guinea and PacWastePlus

Papua New Guinea (PNG) is one of fifteen countries to participate in the SPREP implemented and European Union's Delegation to the Pacific funded PacWastePlus Programme. The PacWaste Plus Programme aimed to improve waste management activities across the islands and strengthen the capacity of governments, industries, and communities to manage waste and protect human health and the environment.

About Papua New Guinea

Papua New Guinea has the largest population of the Pacific Islands with over 7 million people estimated in the 2011 National Census, the majority (87%) of which are living in rural areas and the remaining (13%) living in urban areas. The nation has a high level of cultural diversity with over 800 languages spoken and 10,000 ethnic populations identified by World Bank in 2021. Papua New Guinea also has a diverse natural environment with mountain ranges, lowland rainforests, wetlands, and coastal plains. The main industries are agriculture, forestry, and fishing and minerals and energy extraction.

Government, Policies, Strategies, and Responsibilities

As per the 2011 Census, there are four regions within Papua New Guinea, Southern, Highlands, Momase, and New Guinea Islands that host 22 provinces between them. There are central, provincial, and local (urban and rural) governments across Papua New Guinea. Waste management activities are the responsibility of several Central Government ministries, where Conservation and Environment Protection Agency (CEPA) have the responsibility of policy and legislative development for solid waste management according to the Environment Act.

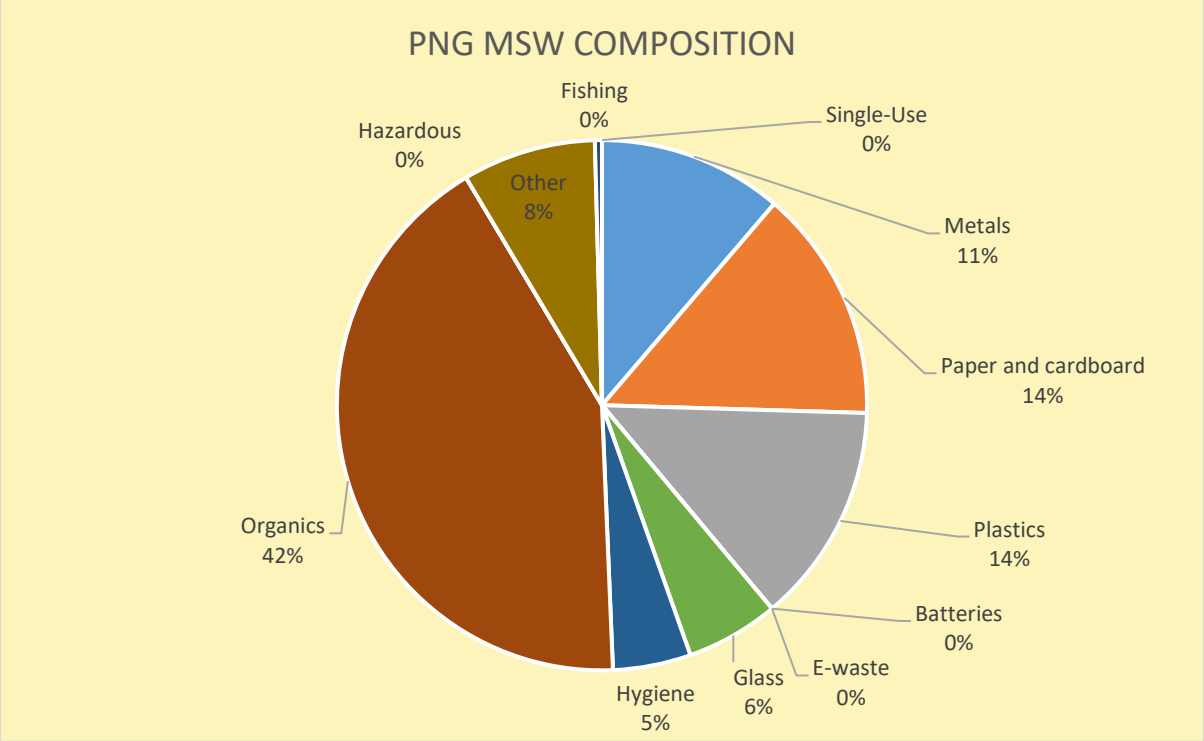
Waste Practices

Given Papua New Guinea's size and number of local councils, the waste management practices vary greatly, especially between urban and rural areas. In urban areas, households typically have access to collection services, whereas in rural areas households are likely to dump, burn, or bury waste.

Waste recovery is managed by private operators who target scrap metals, e-waste, used oil, used lead-acid batteries, and PET plastic for export. There is also informal waste recovery by waste pickers that recover metals and plastic and take to landfills to sell. Stockpiles of bulky waste of been identified with the goal of recovery for end-of-life vehicles, scrap metal, tyres, e-waste, whiteware, etc. Some retailers have basic product stewardship schemes for printer cartridges, mobile phones, and e-waste to export for recycling.

Core KPIs	Result
1. Count / capacity of modern waste facilities	**4 / Unknown**
2. Count / capacity of unregulated waste facilities	**25 / Unknown**
3. National recovery rate (%)	**No Data from Recycling facilities**
4. Per capita waste generation rate (kg/capita/year)	**134**
5. Municipal Solid Waste (MSW) composition (%)	Error! Reference source not found. **Next Page**
6. Household waste capture rate (%)	**12%**
7. Household collection service coverage (%)	**13%**
8. Fulfilment of MEA reporting requirements (%)	**12%**

Supplementary KPIs	Result
1. Cost of disposal to landfill ($/tsonne/annum)	**8.03 USD**
2. Weight of waste disposed (tonnes per annum)	**No Data**
3. Weight of waste recovered (tonnes per annum)	**No Data**
4. Volume and type of stockpiled hazardous waste (m3)	**E-Waste – 738m³**
5. Marine plastic pollution potential (tonnes per annum)	**126,000**
6. Awareness and support of waste management services (%)	**75%**
7. Proportion of strategic waste management initiatives implemented (%)	**81%**
8. Commercial waste capture rate (%)	**No data**
9. Commercial collection service coverage (%)	**79%**
10. Total weight of disaster waste disposed (tonnes per annum)	**No data**



National Waste Analysis Snapshot

About the Data

The waste audit was carried out in March 2021 by Total Waste Management Group, commissioned by SPREP.

The quantitative audit sampled 96 households, 32 sample each from Port Moresby Peri-urban areas, Port Moresby Urban areas, and rural areas form the Central province.

A visual landfill audit assessed 88 loads, and 43 stockpile assessments were also conducted.

The 2025 project endeavoured to update data on the landfill by completing the Waste Facility Register.

Data Collection Challenges

Despite clear requests and engagement efforts, limited data sharing significantly constrained the comprehensiveness of the analysis, resulting in gaps that affected the accuracy of waste generation estimates and the identification of key waste management issues. This challenge highlights the need for strengthened data management systems and improved coordination mechanisms among stakeholders in PNG to support effective reporting, informed decision-making, and the development of targeted waste management interventions in the country.

Highlights

- Papua New Guinea has ramped up its waste management efforts in recent years through a combination of policy development, infrastructure investment, and community-driven initiatives. Supported by PacWastePlus and SPREP, PNG completed a comprehensive national waste audit in 2021 that gathered data across urban and rural settings—using this to establish a baseline MSW composition: ~40% organic, ~13% paper/cardboard, ~13% plastics, and ~11% metal
- In July 2022, a stakeholder workshop in Port Moresby validated the country's draft waste management policy—a key milestone toward stronger regulatory frameworks
- PNG's first Resource Recovery Centre near Port Moresby and a dedicated hazardous-waste landfill in Roku mark significant steps in diverting up to 80% of waste from landfills and generating over 7,000 t of recycled materials annually
- **T**raining has empowered waste pickers and local authorities with composting skills at Baruni landfill, turning organic waste into valuable soil enhancement and reducing landfill burden
- Complementing infrastructure and skills, UNDP initiatives are helping pilot community-led waste collection and recycling schemes—especially targeting plastic pollution in coastal areas—as part of a shift toward circular economy practices
- Together, these efforts showcase a strategic, multi-sectoral approach combining data, policy, facilities, and capacity building to improve waste outcomes across PNG.

Emerging Issues

Emerging issues in waste management across the Pacific, including in PNG, reflect the growing challenges posed by increasing waste volumes, limited disposal capacity, and the complex management of problematic waste streams such as plastics, e-waste, and end-of-life vehicles. Rapid urbanisation and population growth are placing additional pressure on already strained waste infrastructure, while informal settlements often lack access to organised waste collection, leading to illegal dumping and open burning

Image: Agenzia Info Salesiana

Waste Management Practices and KPI Narrative

Waste Facilities and Waste Handled Each Year	In PNG there are 4 modern facilities and 25 unregulated facilities with limited data available to determine shared annual processing capacity of Z. The cost spent on disposal to landfill is $8.03/tonne per year.	**Hazardous Waste Stockpiles**	There were 311m³ of hazardous waste stockpiles identified
Household per Capita Waste Generation	The per capita waste generation rate is 134 kilograms per person per year, which comes in 12th place (where number 1 is the lowest per capita waste generation rate) when considering the other 12 participating countries in PacWaste Plus programme that provided data to this project.	**Disaster Waste**	The total weight of disaster waste disposed was not determined as there were no disaster recorded in the audit year. .
Household Waste Statistics	The awareness and support of waste management services is 75%. The top three waste categories identified in household municipal waste are organic material, paper and cardboard, and plastics. The household waste capture rate is 12%, and the household collection service has a coverage of 13%.	**Marine Waste**	As calculated in the 2023 report, the marine plastic pollution potential was identified as 126,000 tonnes per year.
Commercial Waste Statistics	The commercial waste capture rate was not calculated due t insufficient data and the commercial collection service coverage of 79%.	**Strategic Initiatives and MEA Reporting**	PNG has committed to 2 Multilateral Environmental Agreements including the Basel and Stockholm Conventions, they have fulfilled 12% of the requirements to the MEAs.