





BAT

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.

# **TUVALU** Waste Data Profile June 2025

#### **Tuvalu and PacWastePlus**

Tuvalu 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 Tuvalu

The nation of Tuvalu is a small island country in the Polynesian region of the central Pacific Ocean, located about midway between Hawaii and Australia. Tuvalu comprises nine islands-six atolls and three reef islands-scattered across approximately 749,790 km<sup>2</sup> of ocean. These low-lying coral islands, with narrow land areas and a highest elevation of just 4.6 meters above sea level, are highly vulnerable to sea level rise and climate change impacts.

According to the 2022 census, Tuvalu's total population is approximately 11,200, with about 60% residing in Funafuti and the remainder spread across the outer islands. The traditional governance structure includes high chiefs and community councils (Falekaupule) on each island, blending customary authority with elected local leadership

#### Government, Policies, Strategies, and Responsibilities

Tuvalu's waste management system is guided by the Tuvalu Integrated Waste Policy and Action Plan (2017–2026), which aims to create cleaner and healthier islands by focusing on prevention, minimization, reuse, recycling, recovery, and safe disposal of waste. The policy emphasizes strong government leadership, stakeholder partnerships, and community engagement to improve environmental and public health outcomes. Recycling efforts is supported by a Waste Levy (Advance Recovery Fee) on imported items like aluminium cans, PET bottles, glass bottles, and car batteries to fund waste management activities.

The Solid Waste Agency of Tuvalu (SWAT) oversees waste management operations, supported by the Ministry of Home Affairs and Rural Development and local governments. SWAT manages communal waste bins, collection services, and public awareness programs, particularly on the main island, Funafuti.

#### **Waste Practices**

Waste collection coverage is 100% in Funafuti and about 80% on the outer islands. Communal bins are placed in public locations, and collection services have expanded with increased staffing and equipment.

Each of Tuvalu's nine islands has a dumpsite, totalling nine unregulated landfill sites and one transfer station. Only the Funafuti landfill and transfer station are staffed; all facilities lack engineered controls such as leachate management or daily cover, increasing environmental and health risks, especially during extreme weather events. The main landfill in Funafuti is nearing capacity, but rehabilitation and expansion projects are underway.

Green waste diversion and composting are ongoing, with shredded green waste used for compost or sent to nurseries.

Core KPIs	Result	Supplementary KPIs	Result
1. Count / capacity of modern waste facilities	1 / unknown	1. Cost of disposal to landfill (\$/tsonne/annum)	62.33
2. Count / capacity of unregulated waste facilities	1 / unknown capacity	2. Weight of waste disposed (tonnes per annum)	730
3. National recovery rate (%)	34.79 (Organics only)	3. Weight of waste recovered (tonnes per annum)	71.70
4. Per capita waste generation rate (kg/capita/year)	unknown capacity	4. Volume and type of stockpiled hazardous waste (m3)	Stockpiled hazardous wastes: • Asbestos: 33 m <sup>3</sup> • E-waste: 30 m <sup>3</sup> • Used oil: 2 m <sup>3</sup> • Used tyres: 4 m3
5. Municipal Solid Waste (MSW) composition (%)	Error! Reference source not found. <b>Next</b> <b>Page</b>	5. Marine plastic pollution potential (tonnes per annum)	4.1
6. Household waste capture rate (%)	91%	6. Awareness and support of waste management services (%)	72%
7. Household collection service coverage (%)	91%	7. Proportion of strategic waste management initiatives implemented (%)	86%
8. Fulfilment of MEA reporting requirements (%)	40%	8. Commercial waste capture rate (%)	Insufficient data
		9. Commercial collection service coverage (%)	84%
		10. Total weight of disaster waste disposed (tonnes per annum)	No data



### **National Waste Analysis Snapshot**

#### About the Data

The data used to inform the KPIs include the Tuvalu 2022 National Census, the APWC 2019 waste audits and surveys through Pacific Region Infrastructure Facility (PRIF), the 2025 household and commercial surveys and Eunomia 2025 Waste Facility Register surveys. The APWC audits undertaken include a compositional waste audit of 195 household and 15 commercial samples and qualitative surveys involving 140 household and 21 commercial samples representing Vaitupu and Funafuti. The 2025 survey consisted of 183 household and 38 commercial samples covering more islands (Funafuti, Niutao, Nanumanga, Nukulaelae, Vaitupu, Nui, Nukufetau). The Waste Facility survey undertaken by Eunomia was undertaken in all disposal and recycling facilities in Tuvalu.

#### **Data Collection Challenges**

- Various facilities operate without licenses and as such capacity to accept waste in all facilities is not known.
- Waste data is often based on estimates. There is no system for tracking material flow or calculating capture rates.
- Except for organics, most recovered materials are stockpiled and not processed/exported. It is hard to quantify the materials which are diverted from the landfill. It could be possible that some of non-moving stockpiled materials would eventually end up in landfill.
- Many sites operate below standard with fixed budgets and as such will not reflect true costs of managing waste and will not capture changing disposal patterns.
- There are significantly unreported stockpiles of materials which are lying in backyards and visually observed but are not accounted.

- Disaster waste is usually unmonitored due to the emergency nature of its generation. In most cases, these materials remain close to the affected areas until demolition and as such are not recorded properly.
- While there is an available online tool to record data such as the Kobo Toolbox, there is some degree of reluctance on its use due to preference for paper-based records and low technology literacy.
- The total number of businesses cannot be determined which is needed to calculate the total commercial waste generated to allow measurement of commercial capture rate.

#### Highlights

- Tuvalu has a high household waste collection coverage, particularly in the main islands. Regular collection schedules and community participation have led to increased collection efficiency.
- Community awareness programs and pilot segregation initiatives have led to higher-thanaverage rates of source separation in some parts of Tuvalu, especially in Funafuti.
- Facilities such as the Funafuti Waste Facility have improved operations, supported by development partners. This includes enhanced staff training, upgraded waste sorting bays, and improved site management.
- Tuvalu, with support from regional and international partners (e.g., EDF 11, SPREP, EU), has implemented or piloted several recovery-oriented initiatives.
- Pilot projects in organic composting have been introduced in communities and schools. These help reduce biodegradable waste volumes going to landfill and improve soil health in local agriculture.
- A container deposit or buy-back scheme for PET bottles and aluminium cans has been initiated. This has increased community participation in resource recovery and led to reduced marine litter.
- Tuvalu has started to segregate and store electronic waste (e-waste), with the intent of exporting to regional recycling hubs under the PacWastePlus program.
- There have been efforts to encourage the reuse of bulky items and textiles through informal reuse or bring to repair centres, often operated in collaboration with local women's groups.

#### **Emerging Issues**

- The main landfill in Funafuti is nearing capacity. All nine island dumpsites are unregulated and lack engineered controls such as leachate management, daily cover, or fencing. Environmental risks increase during extreme weather events due to open and unmanaged sites. In the future, a licensing system with corresponding Environmental Impact Assessment, if necessary, prior to waste facilities are allowed to operate will enable these concerns to be addressed.
- There is inconsistent waste service provision among the main islands and the outer islands. Remote islands have limited staffing, equipment, and logistical support for effective waste collection and disposal. There is also inadequate infrastructure on the outer islands to support recycling, composting, or hazardous waste management.
- There may be changes in consumption and waste generation pattern within a span of 5 years or so. A waste compositional audit every 5 years could be necessary to capture these changes and provide the policy-makers evidence-based strategies to address waste issues.
- There could be a big opportunity to promote the DCMR framework at the national level to enable the availability of more reliable regional data for strategic planning by SPREP through this project. However, this would entail more intensive training at the country level to ensure uptake of knowledge and sustained compliance to the framework. In addition, there should be a pilot year set-up for data collection before new annual KPI calculations are made.

## Waste Management Practices and KPI Narrative

Waste Facilities and Waste Handled Each Year	In Tuvalu there are no modern facilities and 10 unregulated facilities with unknown annual processing capacity. On average, 730 tonnes of waste is disposed of, and 72 tonnes of waste is recovered each year. The cost spent on disposal to landfill is estimated at \$62.33. Of the 9 landfills, 1 is already reaching its capacity.	Hazardous Waste Stockpiles	Asbestos, e-waste, used oil, and used tyres are stockpiled in the waste facilities.
Household per Capita Waste Generation	The per capita waste generation rate is 13.12 kilograms per person per year.	Disaster Waste	The last major disaster experienced in Tuvalu was king tides in 2024. However, there were no quantities of disaster waste recorded during this event.
Household Waste Statistics	The awareness and support of waste management services is 72%. The top three waste categories identified in household municipal waste are plastics, paper and cardboard and metals. The household waste capture rate is 91%, and the household collection service has a coverage of 91%.	Marine Waste	The marine plastic pollution potential was estimated as 4.1 tonnes per year
Commercial Waste Statistics	The commercial waste capture rate cannot be determined due to insufficient data and the commercial collection service coverage is 84%.	Strategic Initiatives and MEA Reporting	Tuvalu has committed to 3 Multilateral Environmental Agreements including Basel Convention, Stockholm convention, and Minamata Convention, they have fulfilled 40% of the requirements to the various MEAs. Tuvalu has 21 waste management initiatives planned and have implemented 18, the proportion of strategic waste management initiatives implemented is 25%