

Tonga

Status: Tonga is in the Polynesia region of the Central Pacific Ocean, covering 749km² and with a coastline of 419km. It has more than 170 islands, of which 45 are inhabited. Nuku’afola, the capital, is located on the main island of Tongatapu. There are four main island groups, including Tongatapu, Ha’apai, Vava’u, and Niuaus.

Population: Tonga’s population was 103,252 in 2011, most of whom live on the island of Tongatapu, with more or less 76% (or 78,471) on the outer islands

Accessibility: As of November 2023, there is a flight into Tonga from Auckland and Fiji Airways plans to fly there in 2023.

Statistics around Waste (including plastic waste data)

A recent study (Jenna et al., 2015) indicates a daily plastic waste generation of approximately 22.7 tonnes (t).¹ An estimated 18.1t are mismanaged daily and are predicted to enter the marine environment through release from uncontained disposal sites or by direct littering. Approximately 6,624t of plastic waste were released in Tongan waters in 2010. If not addressed, the amount is expected to rise to 10,272t by 2025.

Of the 22.7t of plastics generated each day, approximately 2.5t may comprise PET or high-density polyethylene (HDPE) plastic that is eligible for recovery under a container disposal scheme (CDS). Based on an average reduction rate of 40% in mismanaged waste with a CDS in place, approximately 0.80t of PET and HDPE plastic could be recycled each day. This could increase to an 80% or above reduction rate, depending on access to recycling collection services and viable markets, among others. Nonetheless, a 40% reduction in mismanaged PET and HDPE would result in approximately 6,331t of plastic becoming marine debris each year.

	Coastal population	Waste generation rate [kg/person/day]	% Plastic in waste stream	% Inadequately managed waste	Waste generation [kg/day]	Plastic waste generation [kg/day]	Inadequately managed plastic waste [kg/day]	Plastic waste littered [kg/day]	Mismanaged plastic waste [kg/person/day]	Mismanaged plastic waste in 2010 [tonnes]	Mismanaged plastic waste in 2025 [tonnes]	
Tonga	102,872	3.71	6	78	381,655	22,708	17,694	454	0.176	6,624	10,272	

Source Jambek 2016

A 2012 study of Vava’u rated the daily household generation at 0.5kg per day, made up of over 51% organic waste and 13.4% plastic waste. Tonga’s major waste exports are PET containers, scrap steel, and used lead-acid batteries.

Tongatapu Island is serviced by a single integrated solid waste management system, managed by Waste Authority Ltd. Approximately 170 community recycle cages are spread across most villages and throughout Nuku’alofa. Householders deposit their recyclables in cages that are cleared by a private recycling company. Refunds are made to a local community organisation. Neither WAL nor the private sector appears to offer household recycle collection services. The Ministry of Health is responsible for waste management on the outer islands until such time as service areas are declared.²

Legal/Policy framework to address single use plastics Waste Management Act 2005 provides legislation for the development of the waste management sector with wide ranging powers and responsibilities for WAL.

¹ The outcome of mismanaged plastic can be divided into three groups: plastic that remains on the surface of the sea as floating debris, plastic that sinks to the ocean floor, and plastic that washes up on beaches. A CDS that recovers 40% of HDPE and PET bottles in Tonga may achieve the following reductions in marine debris each year: n 44t in floating plastic n 205t in sunken plastic.

² file:///C:/Users/andreav/Desktop/PRIF/prif_waste_book_web_0.pdf

Waste Management (Plastic Levy) Regulations 2013 impose a 10% levy on the import of certain plastic bags, empowering authorised officers to ensure that correct payments are made. WAL is the collection authority. In 2015, an amendment to the *Waste Management (Plastic Levy) Regulations 2013* was proposed to expand the levy to cover PET bottles³. Stakeholder consultations were underway at the time, however, there are no further details on the status of this amendment and it has not been passed.

Environment Management (Litter and Waste Control) Regulations 2016 is the governments response to growing coastal pollution and poor public waste management attitudes. This regulation defines the activities and offences that relate to waste pollution. These include the dumping of waste and hazardous waste, waste that causes pollution, and the burning of litter and waste.

Single Use Plastic policy: There is no SUP in place. Cabinet (2020) directed Department of Environment to initiate the process to ban Single Use Plastics but no funding committed by Cabinet yet.⁴ NZ offered a grant to MEIDECC's Department of Environment, solely focused on developing and implementing a single use plastics ban policy and roadmap for the Government and people of Tonga. This Roadmap will be developed by relevant stakeholders, representatives from the private sector, government, non-government and communities to pave the way on how Tonga will phase out single use plastics," CEO Paula Ma'u said.⁵

	Single Use Plastic Policy	Dedicated Single Use Plastic Orders, Acts and Regulations							Economic Instruments to internalise costs					Recycling	National Campaigns targeting SUP	R&D Alternatives
		Plastic bags	Polystyrene plates	Straws	Styrofoam food Containers	Cups plates cutlery	PET	Plastic Ice blocks pouches nappies	Container Deposit Scheme	Levy Plastic Bags	Duty SUP	ARDC	Single Use Diapers			
Tonga																

Economic Instruments: The *Waste Management (Plastic Levy) Regulations 2013* under the *Waste Management Act 2005* introduced a 10 per cent customs levy on the importation of plastic bags. The regulation covers plastic bags (with no specification of biodegradability or reusability) and disposable plastic containers. There are exemptions for bags used for fish, meat and poultry, and for tourism. This levy funds the national Waste Authority Ltd and represents approximating 14 per cent of the authority's revenue for 2017. No information on the effectiveness of the levy is available, however annual reports indicate that revenue collected through this levy has decreased progressively since the levy's introduction .

Enforcement and compliance: Burning and illegal dumping appear to be a persistent issue.

Governance: Government has expressed commitment to bans on single use plastics but finance and capacity constraints are an issue.

Public Awareness- communities/villagers. There is much public awareness needed judging by the burning, dumping and littering of rubbish and as evidenced by the sheer numbers of single use plastics exposed from the foliage that hid it in the aftermath of the Tsunami of 2021. The *No Pelesitiki Campaign* launched in Tonga in 2018, engaging many stakeholders. Activities have included: awareness raising through outreach talanoa sessions, through to Lalanga 'oa; the making of local disposal bags, the production of reusable shopping bags, and monthly rubbish pickups which many groups have now joined.

³ <https://dfat.gov.au/about-us/publications/Documents/tonga-nuku-alofa-urban-development-sector-project-annual-report-2015.pdf>

⁴ World Bank Working June 2022

⁵ <https://www.environment.gov.to/2021/06/22/new-zealand-provides-funding-to-phase-out-single-use-plastics-in-> 22 Jun 2021 — A New Zealand grant of \$30,000 pa'anga to plan the phase out of single use plastics was provided to Tonga today, 22 June.tonga/#~:text=Besides%20organic%20waste%2C%20plastic%20is,ensure%20the%20phase%20out%20commences.

Public Awareness- tourism: Tourists to Tonga in 2015 numbered 53,752 representing an increase of 6.6% over the previous year (SPTO, 2015), and contributing 15% to the country's gross domestic product. There are a number of hotels on the main island of Tongatapu, and cruise ships regularly visit the northern island of Vava'u.

Research and Development into Single Use Plastic alternatives: Not found in literature review.

Development Partner Initiatives: Tonga receives significant assistance for the development of waste management policies and the improvement of waste management collection services and landfill infrastructure. Much of this originates from Australia's Department of Foreign Affairs and Trade, Japan International Cooperation Agency (Phase 1 of the Promotion of Regional Initiative Solid Waste Management project (J-PRISM I) Asian Development Bank (Nuku'alofa Urban Development Sector Project) with funding from Australia, has been investing in urban infrastructure in Nuku'alofa . Project activities include the extension of the landfill, procurement of equipment to manage the landfill, and expansion of waste collection services. The project began in 2011 and Australia recently provided top-up funding in 2019.

Under J-PRISM Phase II (2019-2022) activities focused on strengthening the capacity of WAL in the Outer Islands including the proper management of plastics. Tonga is a member of Commonwealth Clean Ocean Alliance (CCOA) and is eligible for assistance through the initiative Waste Audit (AMC) conducted for the World Bank, 2020. Waste data collection undertaken for IUCN, Plastic Waste Free Islands project 2020. GEF Islands Pacific Child project is looking climate proofing land fill sites and CDL for plastics. New Zealand provided 30K funding to phase out Single Use Plastics in Tonga.⁶The Department of Environment stated in the World Bank 2022 workshop that there was a need for regulations on plastics and take-away food; compliance code on tourist resorts; compliance protocols for cruise; shippings and fishing vessels; and promotion of the circular economy (3Rs).

Summary Overview

- Tonga has no laws to regulate single use plastics or policy in place although NZ did fund the development of a Single Use Plastics Policy.
- The July 2022 workshop convened by the World Bank to identify Tonga's priority single use plastic investment confirmed that although government in 2020 directed the Ministry of Environment to begin the process of developing single use plastic legislation, that this has not materialised in 2022. This is an activity that is ripe for development as is finalisation of the Policy funded by NZ.

⁶ <https://www.environment.gov.to/2021/06/22/new-zealand-provides-funding-to-phase-out-single-use-plastics-in->