Eswatini

Mbabane

The city of Mbabane is located in the north-west of the Kingdom of Eswatini (previously Swaziland) in the Hhohho Region, 26 kilometres from the nearest border gate with the Republic of South Africa (Ngwenya-Oshoek border gate), and 38 kilometres away from the country's hub city, Manzini. Mbabane is the capital and largest city in Eswatini and is made up of 12 wards. The municipality has an estimated 19,490 households.

Mbabane's population stands at about 61,940 people, which is about 6% of the country's total population, and 25% of the country's total urban population. About 54% of the city's population is under the age of 20, while 90% of the total population is under the age of 50, which shows a young population, typical of Sub-Saharan African countries. The north and north-east of the city is predominantly made up of market and residential areas whilst the eastern and southern part of the city is predominantly low cost/informal settlement housing which tend to be densely populated.

Information

Population*	61,940	
Population growth (annual %)	0.83	
Area (km²)*	150	
Climate**	Subtropical highland climate	
Main industries**	Tourism, sugar export, light industry	
Currency***	USD 1: SZL 14.38 (Swazi lilangeni) (March 2019)	
	USD 1: ZAR 14.38 (South African rand) (March 2019)	

Sources: * City Baseline Report 2015, accessed 19 March 2019, https://www.mbabane.org.sz/city/

» Hazardous Waste

Waste composition is not determined.

Current SWM Situation

Item	Outline			
nstitutional System				
Legal system	● The laws and regulations related to SWM in the Municipal Council of Mbabane are as follows: >> Litter Regulations, 2011. >> Swaziland Environmental Action Plan, 2007. >> Environment Management Act, 2002. >> Waste Regulation, 2000. >> National Solid Waste Management Strategy, 2000. >> Public Health Act, 1969. >> Urban Government Regulations, 1969.			
Policy/Plan	● The following are SWM policies, strategies, and initiatives undertaken by the city: >> Mbabane State of the Environment Report (SOER) 2016. >> Town Planning Scheme 2016. >> Integrated Development Plan (IDP) 2019-2023 (Strategic Theme: Environmental Sustainability). >> Waste Management Strategy 2012 (8 Pillars, priority on Waste Minimisation). >> HCRW Plan 2016-2019. >> Analysis and Determination of the Cost of Waste Collection and Disposal (Cost per Tonne) Study, 2016. >> School Health Standard 2018.			
Implementation system	 The Municipal Council of Mbabane (MCM) is responsible for SWM in the city, and is in charge of street sweeping, waste dump monitoring and clean-up, waste collection and transportation, final disposal of waste (landfilling), and landfill site operations. MCM is also responsible for civic environmental education, and for preparing and executing Municipal Waste Management Plans. The Council has 20 refuse collectors, including the supervisor and heavy duty drivers, and seven landfill operation staff Street sweeping and litter picking has been outsourced. The Ministry of Tourism and Environmental Affairs is in charge of environmental legislation and supervision. Supervision is done through the Eswatini Environmental Authority. 			
echnical System				
Waste generation amount & characteristics	● Landfill of incoming waste: 40.2 tons per day (measured through weighbridge, calibrated annually). ● Waste collection coverage is estimated at 81% (SOER, 2016). ● Waste generation is estimated at 0.7 kg/person/day (SOER, 2016). ● Waste are categorised as follow: > Household Waste > Commercial Waste > Industrial Waste > Construction Waste > Health Care Risk Waste > Garden/Yard Waste > Recyclable Waste > Street Litter Waste > Food Waste			

^{**} Wikipedia, Mbabane, accessed 18 February 2019, https://en.wikipedia.org/wiki/Mbabane

^{***} Oanda com

Item	Outline	
Storage and discharge/ Collection and transportation/ Road sweeping	 Road sweeping service, clandestine waste dumps clean-up and litter picking in main arterial roads leading in and out of the city is undertaken by MCM using service providers in the city centre. Waste is stored in standard size domestic bins (80L) and 6 m³ communal waste skips in household and commercial areas. Waste is collected through kerbside collection using three compactor trucks. Three skip master trucks provide a skip collection service in designated communal areas, and one LDV is used in inaccessible areas. Waste is collected twice a week in residential areas and six times a week in the central business district. Waste skips are collected at least once a week depending on demand. Currently, the Council has about 89 skips located in strategic points. Waste is transported for disposal at the landfill located 14 km (on average) away from the city centre. Waste collection coverage is estimated to be at 81%, but this rate is expected to drop over time as the urban population is increasing daily. 	
Intermediate treatment/ Recycling	 Waste collection for recycling is done in an ad hoc manner by private companies and individuals not contracted by MCM. There are two waste buy-back centres (operated by private companies) and two community recycling centres (the one in Msunduza is operational). There is one pilot facility for composting food and garden waste (established in October 2018). Health care risk waste is incinerated, and ashes are disposed of at the landfill. There is a lack of recycling industries/companies in the city and in the country. There are 37 drop-off points established to facilitate waste separation and recycling. There is no waste transfer station in the city. There is no Materials Recovery Facility (MRF) in the city. 	
Final disposal	Waste is finally disposed of by landfilling. The landfill is located about 14 km (on average) from the city centre. The landfill was constructed and commissioned for operation in 1998, with a capacity of 25 years. It is externally audited twice a year. It is a licensed facility. Landfill air space remaining is +/- 2 years (decommissioning). New landfill cell is at design stage.	
Financial system	 About USD 1,211 million was spent in 2013-2016 for waste collection, transportation and disposal. Of this, 70% was spent on collection and transportation, including vehicles' repair and fuel, and 30% was spent on disposal. Total estimated revenue for waste collection and disposal is USD 200,000 (2017). This is billed and collected through rates. MCM charges a waste collection fee (USD 1 per household per month), but no disposal fees are charged. 	
Environmental and social considerations	 The landfill is licensed and is audited four times per year (twice externally and twice internally). Surface and ground water monitoring is done monthly by a laboratory. There is a policy through the Local Economic Development (LED) programme for supporting the informal sector by providing job opportunities and training. There is ongoing training on climate smart gardening, waste reuse and recycling. The number of informal waste pickers and recyclers in the city is unknown because some of them come from outside the city. The community is informed on how to dispose of waste, such as collection days and waste separation, through a waste collection schedule, public consultation and community meetings, school visits, school environmental clubs and competitions, flyers and brochures. Information is disseminated through radio and print media as well as on the Council's website. There are also campaigns for cleaning the city with community participation. 	
Donor support	• European Union (EU): Funding of EUR 250,000 (approximately USD 284,000) in 2018 for "Waste Minimization Initiatives: Focusing on waste recycling and food waste composting practices in Mbabane" project. The project timeline is three years from 2018.	
Areas for improvement (in order of priority)	 Financial and technical support for the construction of new landfill cells. Technical assistance in planning, establishing and operationalising waste recycling programmes and/or plants to better support and strengthen already established waste recycling initiatives. Landfill leachate and trade effluent (abattoir waste water): pre-treatment or full treatment. Technical and financial support in planning, establishing and operationalising a waste recycling plant to support initiatives of waste minimisation through recycling and establishing markets for recycled products. Improve accessibility in all areas, especially in the informal settlements of the city (road infrastructure and waste collection resources) for waste collection improvement. Strengthen the waste minimisation programme through capacity building and roll-out of a citywide composting and recycling programme. 	

Waste Amount at Each Stage of Waste Flow*

Waste flow	Amount ** (ton/day)	Remarks
Waste generation	48.4	Waste generated at houses, offices, shops, restaurants, etc.
2 Discharge to collection	N/A	Waste discharged for collection services.
3 Self disposal	N/A	Disposal at generation sources, such as burning and burying.
4 Recycling at source	N/A	Reuse of materials, composting, sold to recyclers.
6 Collection and transport	40.2	Waste amount collected and transported.
Clandestine dumping	N/A	Waste illegally disposed of in unknown location.
	Incineration of HCRW: 0.02 ton, 8.4 tons recycled waste (2017)	Material recycling, composting, incineration, etc.
Recycling/Reduction	17.4%	Recycled and/or reduced waste amount by material recycling, composting, incineration, etc.
9 Residue	Incineration of HCRW: 0.02 ton ash	Residue from treatment facilities.
Tinal disposal site	40.2	Waste amount brought into disposal sites.
⊕ Recycling	N/A	Recycled at disposal sites.
P Final disposal	40.2	Waste amount finally disposed of at disposal sites.

^{*} Based on the waste flow chart on page.
** Figures include estimated value.