

FACTSHEET

Waste Wise Cities Tool in Byblos, Lebanon



In the rapidly urbanizing world, the crisis in waste management and plastic pollution is a reflection of current unsustainable lifestyles.

The availability of fact-based data on municipal solid waste can guide evidence-based planning and lead to increasingly effective and efficient solid waste collection systems, enhanced local resource recovery and controlled waste disposal, thereby improving the quality of life for urban residents.

UN-Habitat's Waste Wise Cities Tool (WaCT) assesses the parameters for Sustainable Development Goal indicator 11.6.1 - the proportion of municipal solid waste collected and managed in controlled facilities out of total municipal solid waste generated, by the city. It consists of seven steps and provides the necessary data to support evidence-based decision making by city managers.

Together we can achieve a sustainable future.

Have a look at the Waste Wise Cities website, learn about the WaCT and how its application created impact on the ground in other cities.



City **Byblos**
Country **Lebanon**

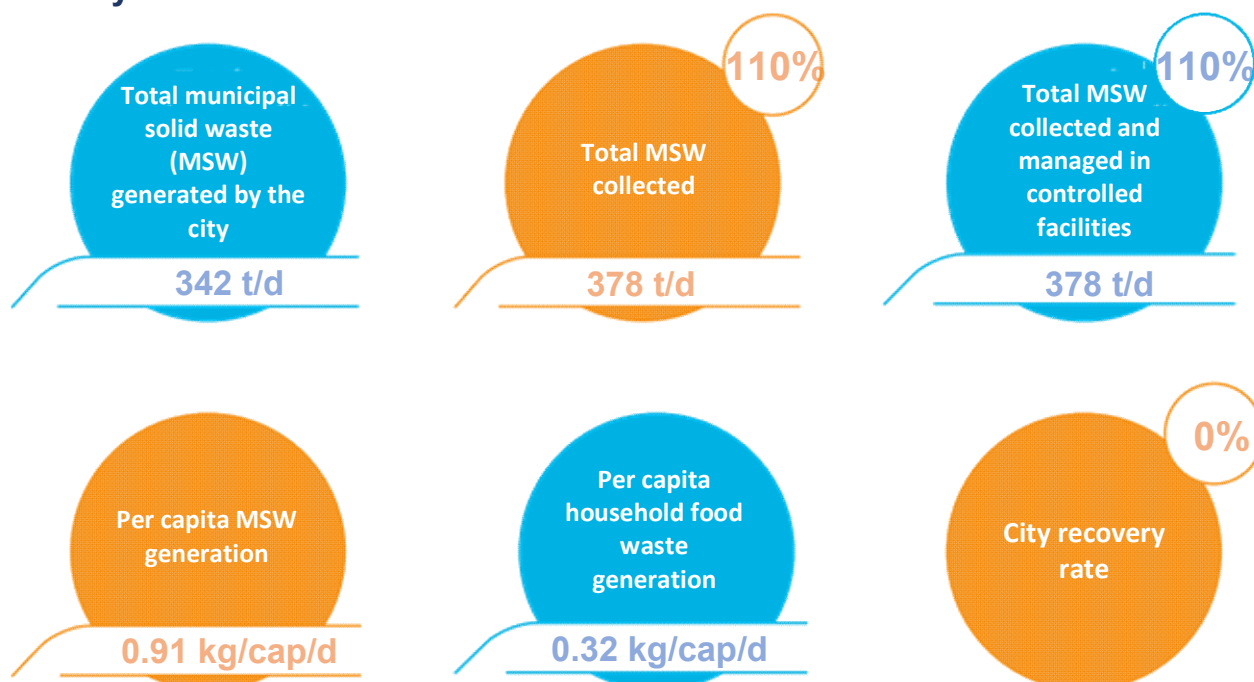


Population
375,733 (2025)



Year of WaCT survey
2025

Key Waste Data



Household and non-household waste generation



	Average household waste generation (kg/capita/day)	Total population	Total MSW generated by households (t/day)
Higher income	0.61	17,278	11
Middle income	0.70	205,610	144
Lower income	0.55	152,845	85
TOTAL	0.64	375,733	240

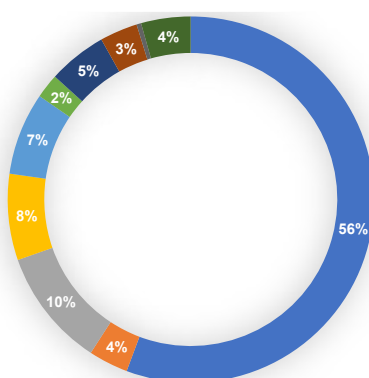


Total MSW generated from non-household sources (t/day)
calculated using proxy of 30% of total MSW

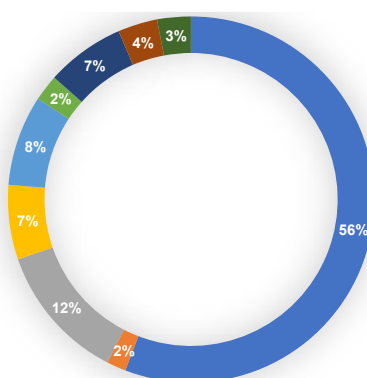
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Composition of waste at the households and at the disposal site

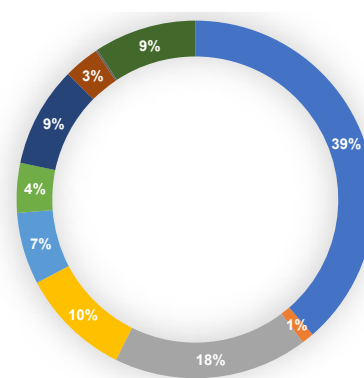
Household waste composition
higher income areas



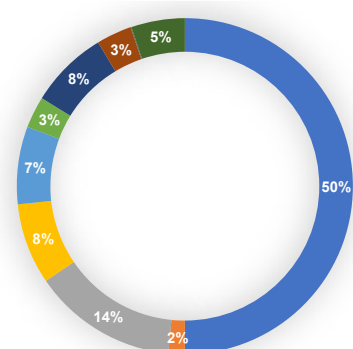
Household waste composition
middle income areas



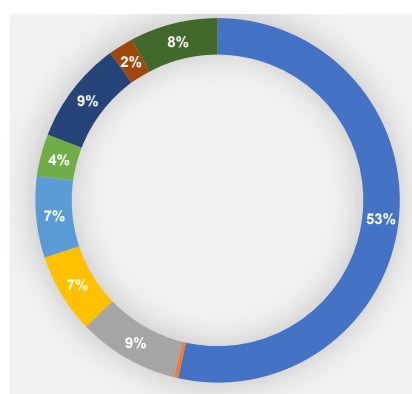
Household waste composition
lower income areas



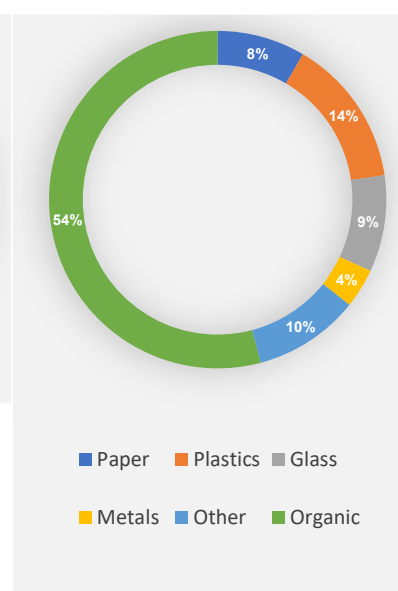
Average household waste
composition



Waste composition at disposal site



Overall MSW composition
Using WaCT -> WFD calculation



■ Kitchen/canteen
■ Plastic film
■ Glass
■ Special wastes

■ Garden/park
■ Plastics dense
■ Textiles/shoes
■ Composite products

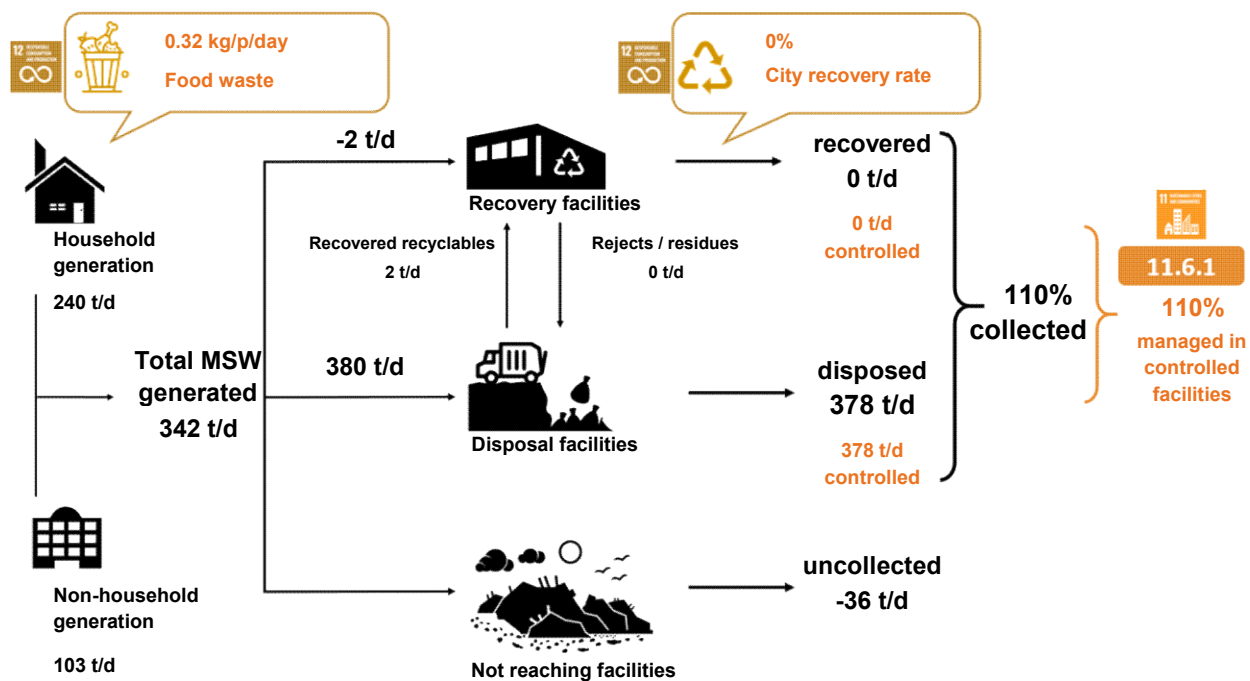
■ Paper/cardboard
■ Metals
■ Wood (processed)
■ Other

■ Paper
■ Plastics
■ Glass
■ Metals
■ Other
■ Organic

Potential recyclables from households

Types	Recyclable waste generation from households (t/day)
Food waste	120
Plastics dense	18
Plastic film	19
Paper and cardboard	33
Glass	18
Metal	7
Total	215

WaCT Flow Chart



For more info and if interested in WaCT application contact the Waste Wise Cities Team at WasteWiseCities@un.org



P.O. Box 30030, Nairobi 00100, Kenya
T: +254-20-76263120
E: unhabitat-info@un.org



Andre Dzikus,
Chief Urban Basic Services Section

WasteWiseCities@un.org
[#WasteWiseCities](https://twitter.com/WasteWiseCities)

