

WASTE WISE  
CITIES



UN  HABITAT  
FOR A BETTER URBAN FUTURE

*A better quality of life for all in  
an urbanizing world*



# UN-Habitat's Work on SDG 11.6.1

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Presentation by: Nao Takeuchi

# Waste SDG Indicators



## Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Targets		Indicator
11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.	Proportion of municipal solid waste collected and managed in controlled facilities with regards to the total waste generated by the city



## Goal 12: Ensure sustainable consumption and production patterns

Targets		Indicator
12.3	By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.	Food loss Index Food Waste Index
12.4	By 2030, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.	Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment
12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.	National recycling rate, tons of material recycled



## Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Targets		Indicator
14.1	Index of coastal eutrophication and floating plastic debris density	Tier 3. awaiting the development of internationally established methodology and standards



# Waste Wise Cities Tool (WaCT)

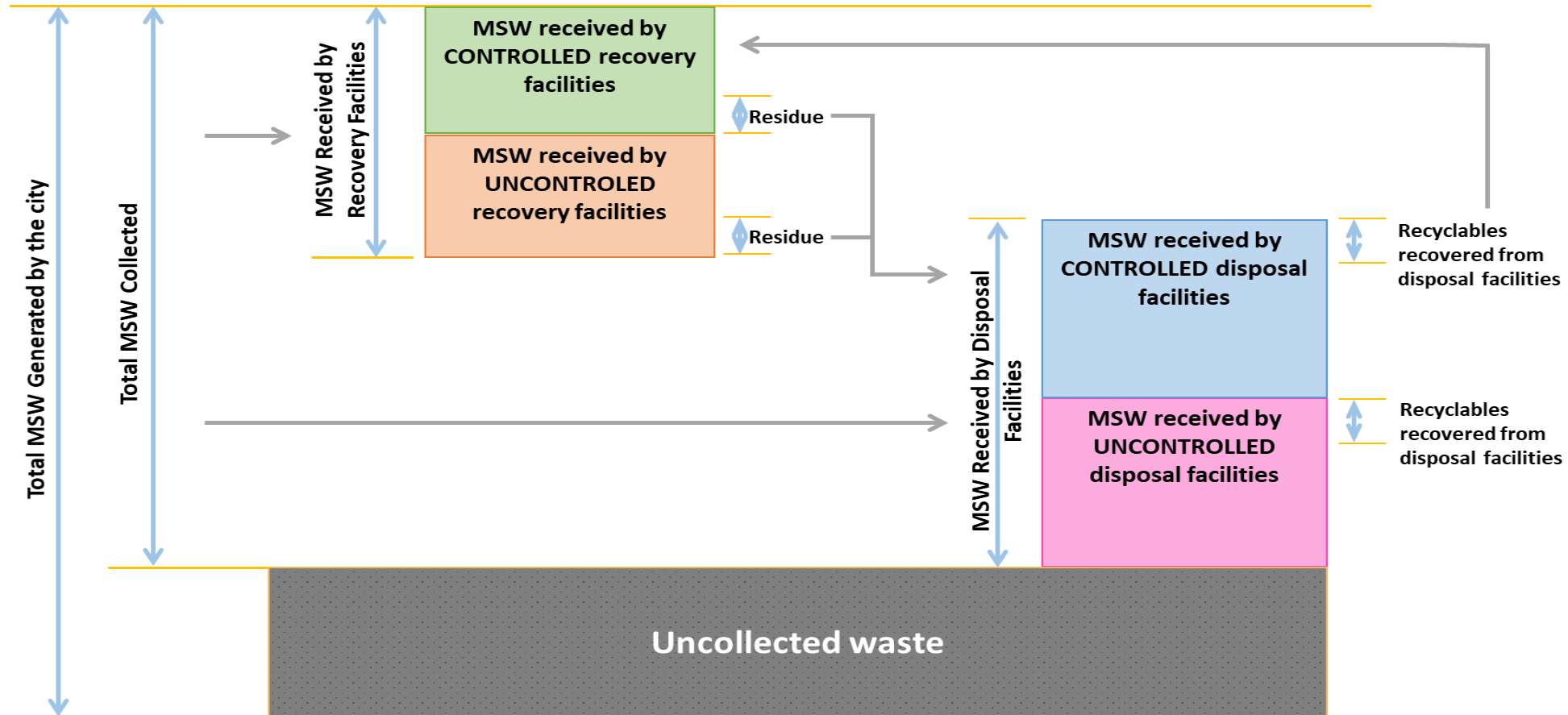


- Monitoring methodology of [SDG indicator 11.6.1 “Proportion of Municipal Solid Waste Collected and Managed in Controlled Facilities, out of Total Municipal Solid Waste Generated, by City”](#)
- Assess MSW generated, collected and treated in controlled facilities
- Identify the MSW recovery chain and its actors while engaging them in an inclusive and participatory way
- Check the environmental control level of waste management facilities
- Establish better waste and resource management strategies that create business and livelihood opportunities
- Provide data for large WM infrastructure investment cases to municipal corporation, waste stakeholders and investors
- Project development and funds mobilization



# What WaCT Measures

% of MSW collected & managed in controlled facilities out of total MSW generated by the city



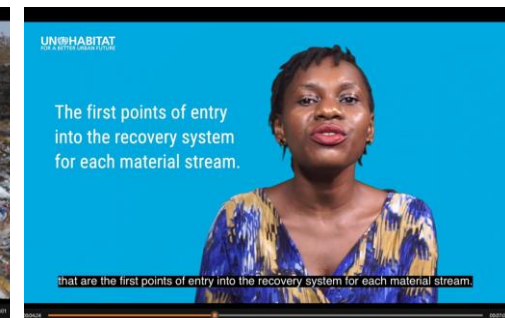
# Capacity Development Tools



## SDG indicator 11.6.1 monitoring methodology



## Online course - Data to Tangible Impacts: Achieving Waste SDGs by 2030



# WaCT Factsheet

## FACTSHEET

### Waste Wise Cities Tool in Mombasa County, Kenya

"Municipal solid waste management is one of the biggest challenges for Mombasa, especially as it is a major tourist hub and the largest port in East Africa. Uncollected and mismanaged waste are also contributing to marine litter pollution in the Indian Ocean."

The assessment through UN-Habitat's Waste Wise Cities Tool, supported by the African Clean Cities Platform and UNEP, was extremely useful for Mombasa County Government to have a clear picture of the current status and identify the key intervention areas. The tool application is also providing the scientific data that we are using to develop bankable project proposals, and mobilize funds and private sector investment.

**Dr Godfrey Nyongesa Nalo**  
Minister of Environment, waste management and energy, Mombasa County

City: Mombasa County  
Country: Kenya

Population:  
1,208,333 (2019)

Year of WaCT Survey:  
2020

### Key Waste Data

**Total municipal solid waste (MSW) generated by the city**

708 t/d

**Total MSW collected**

399 t/d 56%

**Total MSW collected and managed in controlled facilities**

36 t/d 5%

**Per capita MSW generation**

0.59 kg/cp/d

**Per capita household food waste generation**

0.22 kg/cap/d

**City Recovery Rate**

5%

### Household and non-household waste generation

	Average household waste generation (kg/capita/day)	Total population	Total MSW generated by households (t/day)
High income	0.44	423,343	188
Middle income	0.58	249,651	146
Low income	0.30	535,339	162
<b>TOTAL</b>	<b>0.41</b>	<b>1,208,333</b>	<b>496</b>

Total MSW generated from non-household sources (t/day): 212  
calculated using proxy of 30% of total MSW

### 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

- Kitchen / canteen
- Garden / park
- Paper / cardboard
- Plastic film
- Plastics dense
- Metals
- Glass
- Textiles / shoes
- Wood (processed)
- Special wastes
- Composite products
- Other

### Potential recyclables from households

Types	Recyclable waste generation from households (t/day)
Food waste	262
Plastic film	22
Plastics dense	20
Paper and cardboard	32
Glass	15
Metal	9
<b>Total</b>	<b>386</b>

### WaCT Flow Chart

Household generation: 496 t/d  
Non-household generation: 212 t/d  
Total MSW generated: 708 t/d

Recovered recyclables: 12 t/d  
Recovery facilities: 36 t/d (5% City recovery rate)  
Rejects / residues: 4 t/d

disposed: 363 t/d (0 t/d controlled)  
uncollected: 309 t/d  
Not reaching facilities

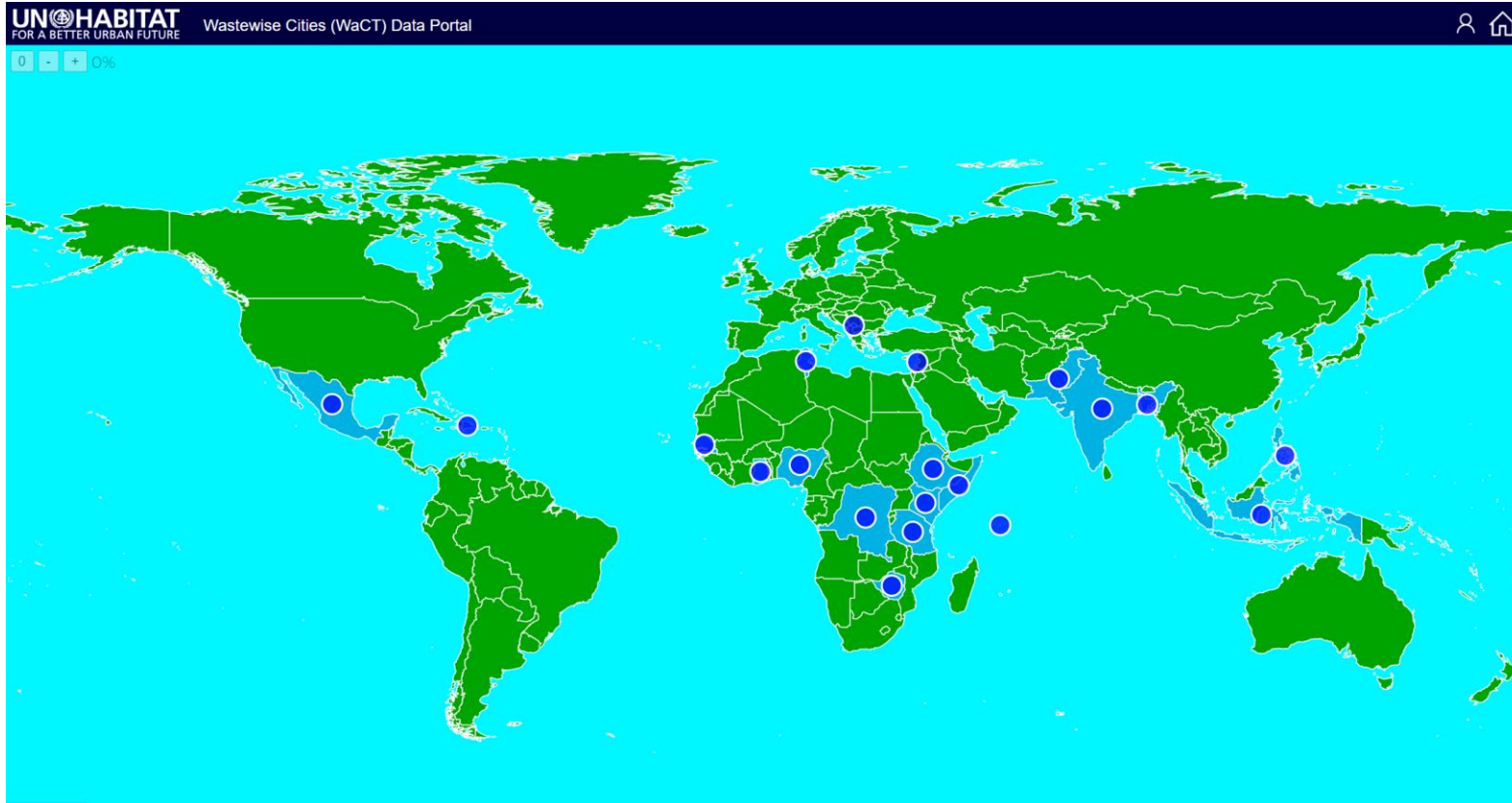
56% collected (11.6.1 managed in controlled facilities)

For more info and if interested in WaCT application contact the Waste Wise Cities Team at [WasteWiseCities@un.org](mailto:WasteWiseCities@un.org)

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# WaCT Data Portal

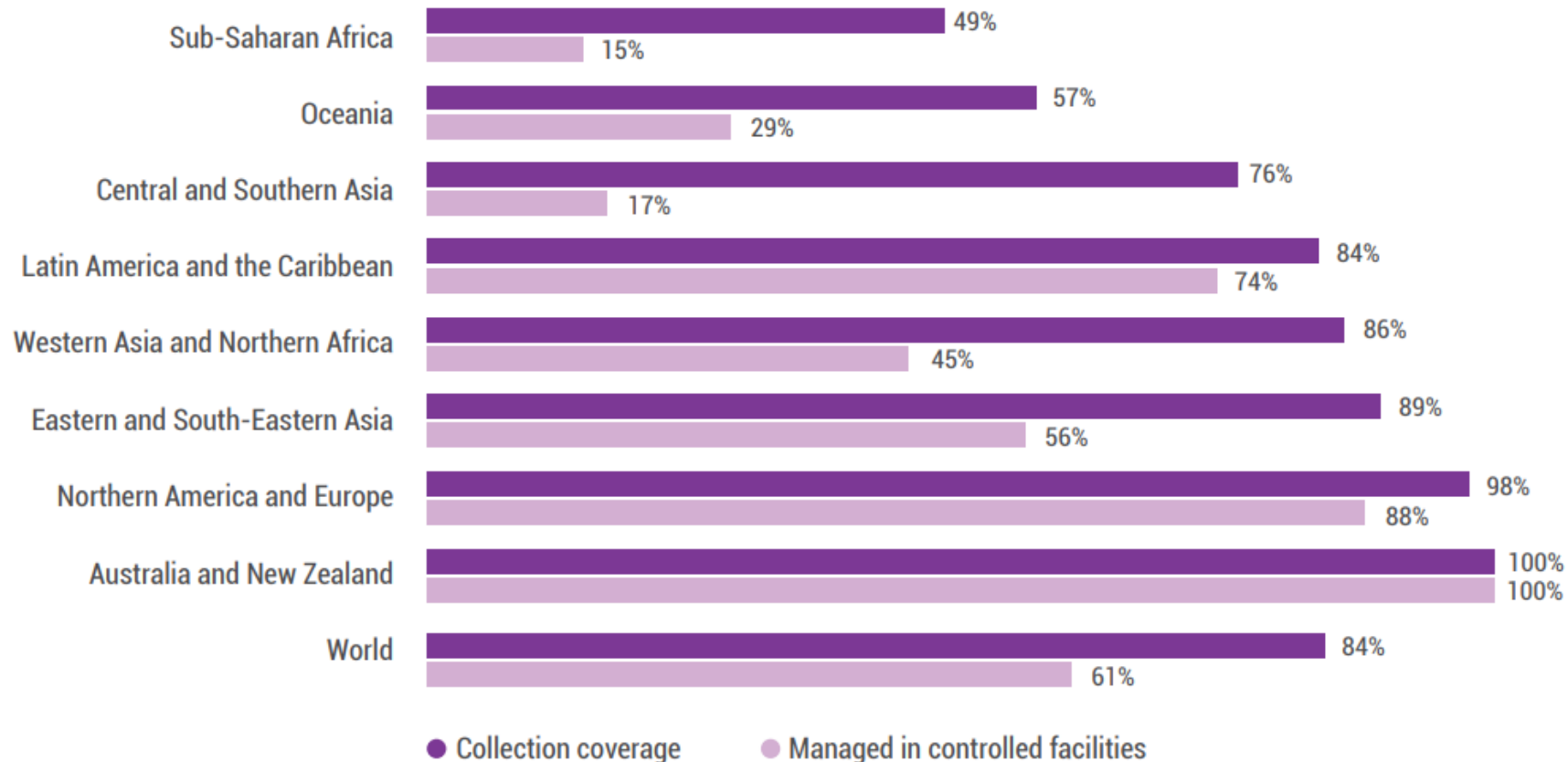


<https://unh.rwm.global/>



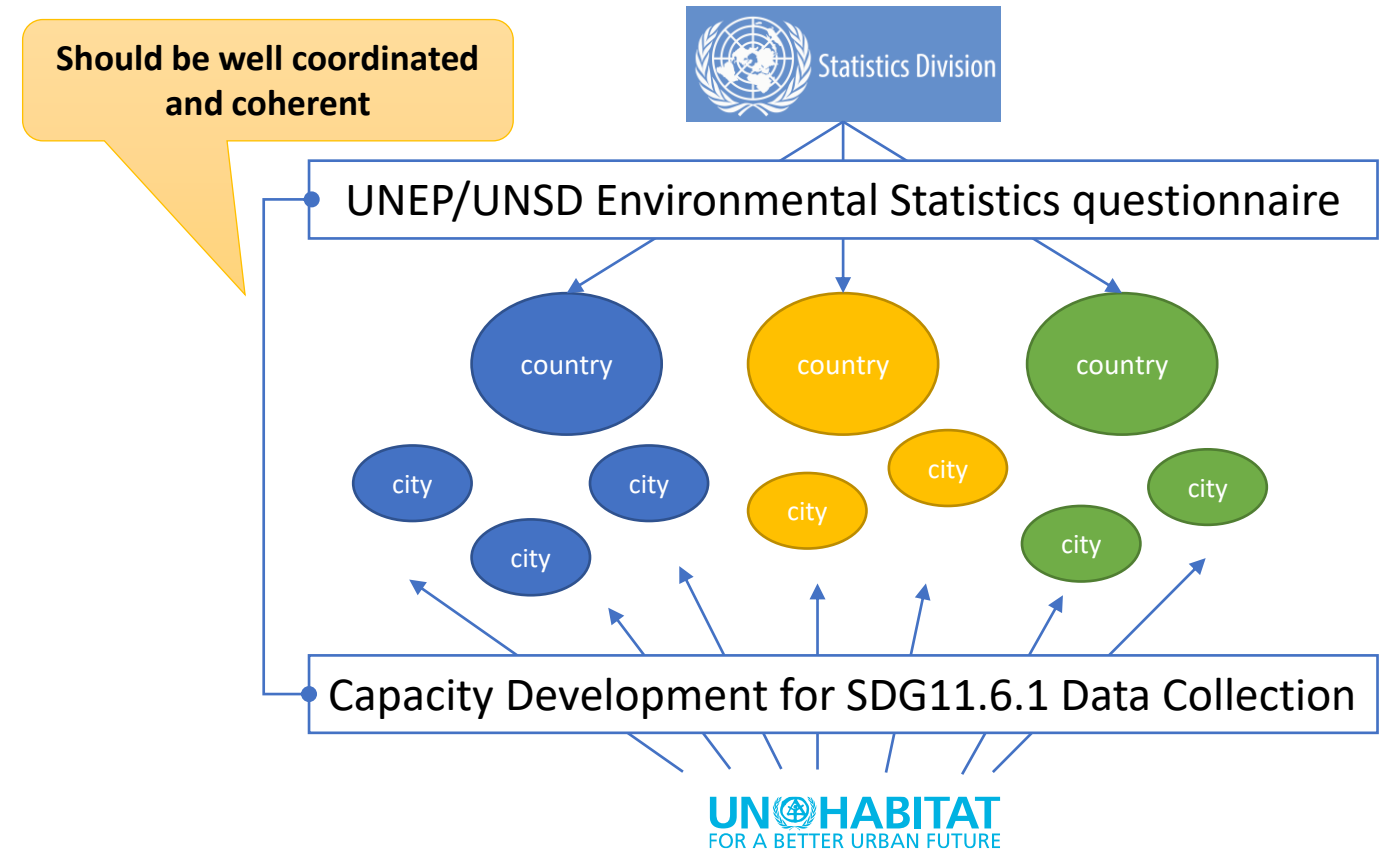
# SDG 11.6.1 Global Estimate

The world generated 2.3 billion tonnes of MSW of which 16% is uncollected and 39% is managed in uncontrolled facilities - UNEP/UNSD data input for modelling



# Collaborative Action Areas

1. Terminology alignment between UNSD/UNEP questionnaire for UNSD/UNEP to be the data reporting outlet for monitoring SDG 11.6.1
2. Release adjusted version of UNSD/UNEP Env Statistics for waste version



# Thank you

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