# School of Civil Engineering

FACULTY OF ENGINEERING

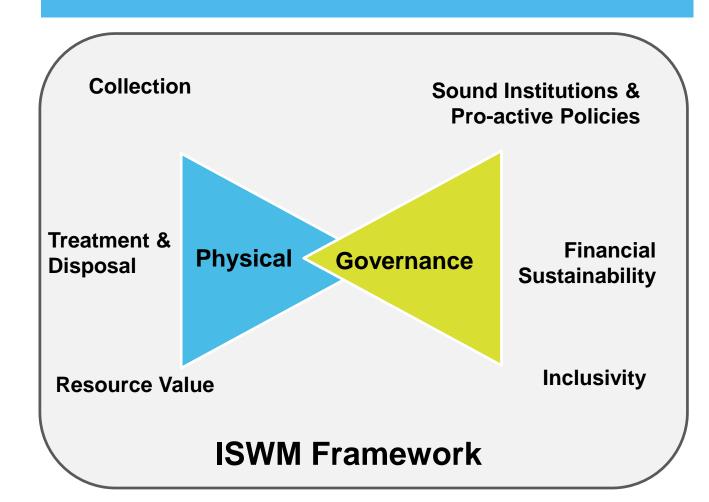


## Wasteaware Cities Indicators

Benchmarking for Integrated Sustainable Waste Management in Cities

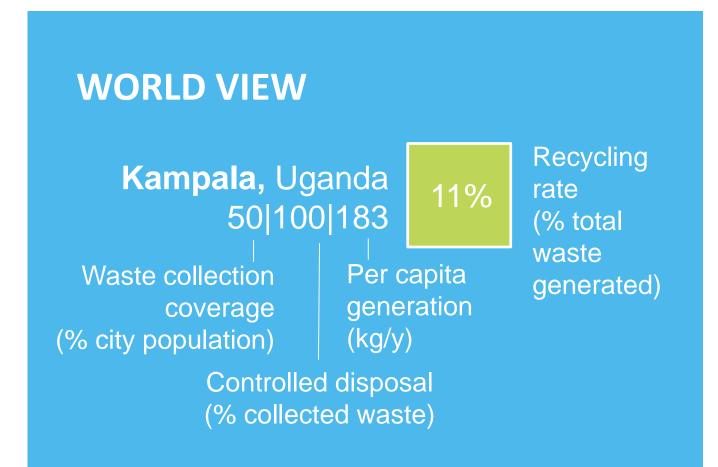
#### **CHALLENGE**

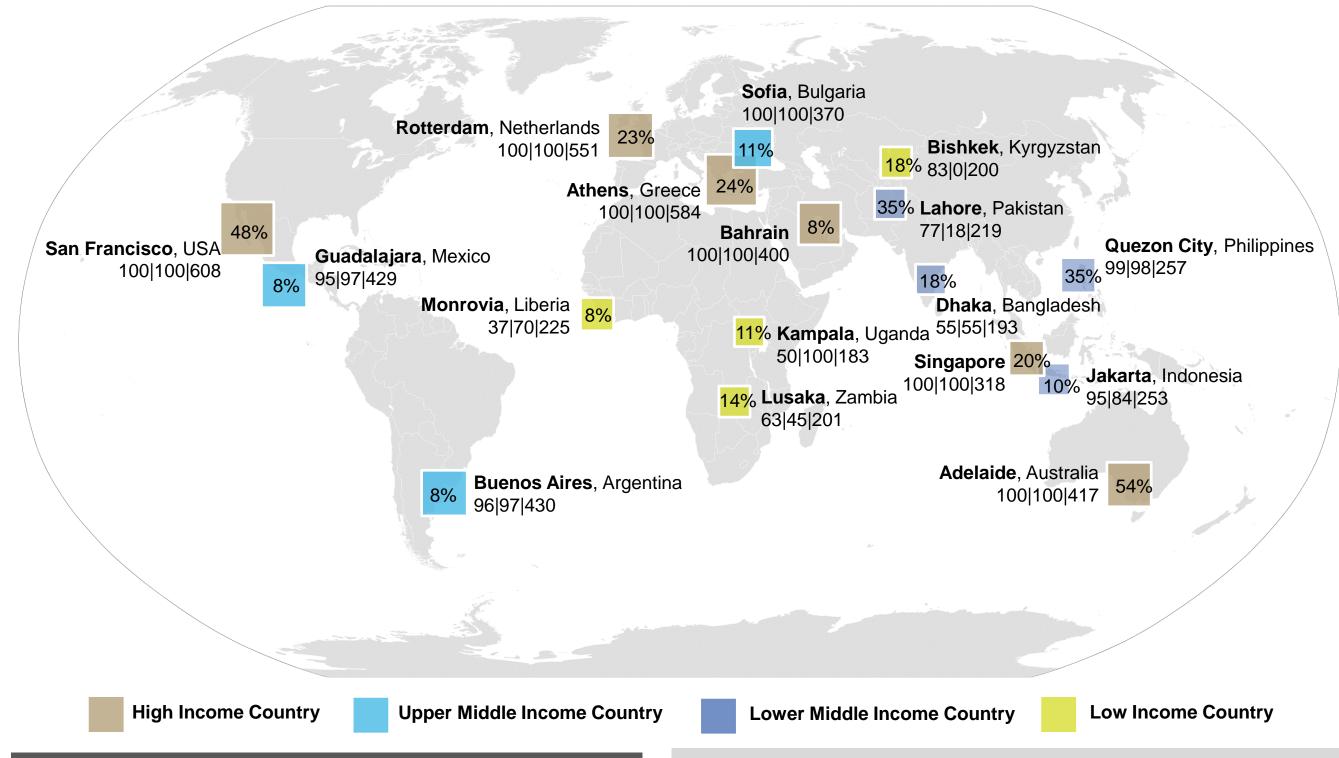
- Lack of data is major problem in international solid waste management and resource recovery.
- Challenge is compounded by inconsistency between existing data, making comparisons between cities difficult.
- Any internationally comparable benchmarking system should be applicable across full range of country income levels, cover both physical and governance systems, and be widely tested.



#### **AIMS**

- Develop and test indicator set for integrated sustainable waste management in cities both North and South to allow benchmarking, comparison, and monitoring of developments over time.
- Explicitly consider waste picker contribution to recycling.





#### **DELIVERABLES**

- Indicator set developed based on integrated sustainable waste management (ISWM) framework, and applied to 40 city case studies.
- Academic paper and supporting detailed user manual: 'Wasteaware' benchmark indicators to measure the performance of a city's SWM system DOI:10.1016/j.wasman.2014.10.006
- Online tool and database under construction: wasteawareindicators.net

#### **CASE STUDY RESULTS**

- Per capita volumes tend to rise with average income levels.
- Many cities in lower-income countries have expanded collection coverage, but lag in controlled disposal.
- Recycling rates reach relatively high levels in some lower-income countries, often exclusively due to informal recycling networks.

### **OUTCOMES**

- Adopted by Global Waste
   Management Outlook and World
   Population Bureau to give worldwide waste overview.
- Academic paper wins 2015 ISWA
   Publication Award and CIWM 2014 15 James Jackson Medal for major contributions to solid waste management.
- Most comprehensive and inclusive benchmarking system to date.



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