

SURABAYA (INDONESIA)

General information

Area:	290km ²
Population:	2.8 million
National GDP per capita:	USD 3,043
Total income:	IDR 980 billion (USD 110 million)

Solid waste generation

Total generation:	1,630 ton/day
Waste generation per capita:	0.58kg/person · day
Waste source:	68% household, 16% market, 11% commercial/industries, 5% street and open space
Waste composition:	56% organic, 4.4% paper, 39.6% other (dry season)

Solid waste management

Collection rate:	Collection is organised by neighbourhood units; City government is responsible for transport of waste to final disposal facilities.
Recycling:	Conducted by scavengers, estimated at 30%
Composting:	In practice
Final treatment:	Semi-sanitary landfill (2 sites, 40.5ha and 16ha), composting, mini-incinerator
Expenditure:	IDR 60 billion (USD 6.6 million) is appropriated for transportation and disposal, a rate of 6% of the total budget. Fees for collection are included in “community fees” (IDR 10,000-30,000/month (USD 1.1-3.2)). Transportation and disposal costs are paid to the city directly and vary from IDR 6,000-14,000/month (USD 0.55-1.5). Total income for the city from transportation and disposal fees is IDR 15 billion (USD 1.6 million).

Major challenges and strategies

One of the major challenges in Surabaya City is organising recycling. Recycling activities have been carried out by scavengers, which have often led to exposure of solid waste on streets and sanitation problems. Scavengers reduce solid waste volume by almost 30% in Surabaya, which greatly reduce costs for transportation and disposal downstream. A new approach is urgently required to manage an efficient recycling system involving the scavenger labour force.

The major challenge for Surabaya is the large gap between income and expenses in solid waste management. Expenses are subsidised from other sources such as tax and other city revenue.

Strategies to date have been to ensure participation and involvement of the community, which, in turn, promotes self-development of the community itself. Institutional aspects, especially law and regulations must be improved together with human resources. Participation of private investors in solid waste management is limited, especially due to a lack of institutional framework, rules and regulations.

One of the lessons other cities can learn from Surabaya is community participation in managing local issues including solid waste. Surabaya is at the centre of the well known "Kampung Improvement Programme (KIP)" and "Comprehensive Kampung Improvement Programme (C-KIP)", with the focus on empowering local communities to solve their own problems with support from the local government and professionals. Solid waste management is inside the scope of KIP. In this arrangement, local communities are responsible for solid waste management in their neighbourhood. User fees are charged to households based on collective decisions, and arrangements are made to collect and transport solid waste to transfer stations by these units. For practical reasons, household fees for solid waste management are embedded with other fees in the form of a “community fee”. Under this arrangement, households pay transport and disposal charges for solid waste management to the city government, either through water bills or at the sub-district level.