

**Accra**, the capital of Ghana, has over 2 million inhabitants, more than one-quarter of whom are living below the poverty line. Although Accra provides full waste collection services in parts of the city, waste is not collected from more than half of the city's households. Waste is collected by private companies that are regulated by the city. The city does not have a formal organic waste diversion program, but two private companies are currently operating composting and recycling facilities. Accra's dumps have all been closed and the city currently does not have its own solid waste disposal site. Collected waste is trucked to a landfill in a municipality approximately 37 kilometers away. The added strain on that landfill has shortened its expected lifetime by half. Accra recently signed a contract to build a new engineered landfill of its own, but the site has not been determined and financing has not yet been secured. It is also uncertain whether the new landfill will include leachate and landfill gas (LFG) collection systems.

## Accra Fast Facts

- Population: Approximately 2.3 million (4.3 million in Greater Accra region) (as of 2010)<sup>1</sup>
- Population density: More than 25,000 people per square kilometer<sup>1</sup>
- Annual growth rate: 3.5%<sup>1</sup>
- Per capita income: 274 USD (as of 2006)<sup>2</sup>
- Percentage below poverty line: 28.5%<sup>3</sup>
- Percentage of population living in informal settlements: 51%<sup>4</sup>



## Solid Waste Management in Accra

### Waste Generation

Accra generates nearly 900,000 metric tons of solid waste per year,<sup>1</sup> approximately 67% of which is organic matter.<sup>5</sup> The rate of waste generation is approximately 0.5 kilograms per person per day.<sup>1</sup>

### Waste Collection

Solid waste collection in Accra is mostly privatized. The city contracts with 10 waste collection firms that are responsible for all residential, commercial, and industrial waste generated in their respective collection districts. The firms recover their costs by collecting city-regulated fees from waste generators.

The city estimates that 88% of waste generated in areas where it provides collection services is collected. However, waste collection services are only provided in a limited area; only 40% of households in



the city have waste collection bins. Accra is working to increase its waste collection coverage, especially in low-income areas of the city.<sup>1</sup>

### **Waste Disposal**

Informal waste disposal occurs in areas of Accra where there are no waste collection services. Informal solid waste disposal sites include abandoned stone quarry sites, gouged natural depressions in the ground, old mining areas, or man-made holes in the ground. Open burning occurs at some of the open dumps, particularly during the dry season.

All of Accra's waste disposal sites are currently closed; the city has no waste disposal site of its own. Collected waste is currently transported from Accra to a landfill in Tema, approximately 37 kilometers outside Accra. The landfill was constructed to accept 700 tons per day, but currently receives more than double that amount (more than two-thirds comes from Accra). The city recently entered into a contract for the construction of a new landfill, but a site has not been determined and financing is not certain. It is unknown whether the new landfill will include leachate and LFG collection systems.

### **Organic Diversion and Recycling**

Accra generates a large amount of organic waste that is high in moisture content. There is no formal dedicated organics collection service provided by the city, but there are two innovative models currently in place in Accra: a community-based, small-scale composting project and a large-scale, open-windrow facility with a materials recovery unit.

The small-scale composting project involves collecting approximately 2-tons of organic waste per day from 60 companies, mainly hotels and restaurants in the tourist area of Osu. These companies receive a 5–10% collection discount depending on volume. The diverted organic waste is sent to neighborhood composting centers where it is converted to compost. The large-scale Accra Composting and Recycling Plant receives approximately 500 tons of municipal solid waste per day (organic and non-organic). The plant is owned and operated by a private company through a public-private partnership with the city. Since its commissioning in 2012, the facility has processed a total of 16,000 tons.



## **Climate and Clean Air Coalition Municipal Solid Waste Initiative**

The Climate and Clean Air Coalition (CCAC) is a voluntary partnership uniting governments, intergovernmental and nongovernmental organizations, and representatives of civil society and the private sector in the first global effort to address emissions of short-lived climate pollutants, including methane and black carbon, as a collective challenge. The CCAC Municipal Solid Waste Initiative is working with government officials, sanitation engineers, private entrepreneurs, and other stakeholders in pilot cities to help build capacity to improve waste management.

<sup>1</sup> EPA CCAC MSW Initiative Assessment

<sup>2</sup> Ghana Statistical Service, 2008 ([http://www.statsghana.gov.gh/docfiles/glss5\\_report.pdf](http://www.statsghana.gov.gh/docfiles/glss5_report.pdf))

<sup>3</sup> Accra Metropolitan Assembly, 2013 (<http://www.mofep.gov.gh/sites/default/files/budget/2013/GR/Accra.pdf>)

<sup>4</sup> UN-HABITAT, 2009 (<http://www.unhabitat.org/pmss/getElectronicVersion.asp?nr=2723&alt=1>)

<sup>5</sup> Millennium Cities Initiative, 2010. (<http://mci.ei.columbia.edu/files/2013/03/Accra-MCI-solid-waste-report-FINAL-DRAFT-2010.pdf>)