

## **City overview**

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2 million (2011)

Total	waste	generated	ner day	
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800-1,000 tonnes

0.4-0.5 kg

Waste generated per capita per day

Waste-to-resource facility established

2015

Capacity of waste-to-resource facility

3 tonnes

Operator

Dr Akhtar Hameed Khan Memorial Trust

## **Local partners**

Jammu and Kashmir Cooperative Housing Society, UN-Habitat Pakistan

Source: ESCAP and UN-Habitat Pakistan.

## Introduction

Islamabad is the capital of Pakistan, where national government, diplomatic services and a growing communications and information technologies sector are concentrated. The city is a planned capital, with its design and construction largely dating to the early 1960s. However, while providing a sound base, the city's master plan has been only partially implemented; the city suffers from unregulated development, a lack of appropriate housing, traffic congestion and detrimental solid waste and environmental issues.

An increasing amount of solid waste is generated in the city, rising from around 500–600 tonnes per day in 2004 to around 800–1,000 tonnes per day in 2011. Between 60 and 65 per cent of this waste is organic, and 20–30 per cent of it is recyclable. The Capital Development Authority (CDA) has overall responsibility for the provision of public health services in Islamabad, including adequate sanitation and solid waste management services within its territorial limits. The CDA collects solid waste from across the city, and oversees private initiatives operating in many neighbourhoods, or 'sectors' as they are called. While coverage is patchy, the majority (up to 80 per cent) of households in the city are willing to pay for improved waste collection. Similarly, around 80 per cent are willing to separate waste at source. With many of the city's neighbourhoods (sectors) developing rapidly, the need for improved sustainable solid waste management initiatives is also quickly growing.

The CDA does not yet have a comprehensive solid waste management plan for Islamabad, nor is there a local incinerator or sanitary landfill. Most waste is dumped at a local dumpsite. Islamabad benefits from the work of informal waste pickers, many of whom are Afghan settlers. There are also more organized and well-established supply chains involving waste pickers and junk dealers. Waste pickers usually collect paper, plastic, glass, ceramics and metal and earn around \$1.50 per day, with children waste pickers earning around \$1.

## **Promoting the IRRC model in Islamabad**

The high percentage of organic waste in Islamabad is an opportunity for composting. Chemical fertilizer is expensive in Pakistan, which makes composting an even more attractive option for sustainable, cost-effective solid waste management. This, in combination with high willingness from households to modify their waste management practice, means that a strengthened waste-to-resource approach should be pursued.

Following a review of viable sites to initiate a waste-to-resource facility, the largely residential (high-income neighbourhood) Sector G15 was chosen. A private, not-for-profit developer, the Jammu and Kashmir Cooperative Housing Society, was awarded responsibility to develop the sector, providing basic services, some infrastructure and housing.

In 2014, ESCAP, UN-Habitat Pakistan, the Jammu and Kashmir Cooperative Housing Society and the Dr Akhtar Hameed Khan Memorial Trust (AHKMT) initiated the waste-to-resource project in Sector G15. The project is designed to pilot the IRRC model and test its viability for replication in other sectors in Islamabad and other cities in Pakistan more generally. Uniquely, this waste-to-resource initiative has minimal government involvement. Rather, it is led by the two private sector organizations, the Jammu and Kashmir Cooperative Housing Society and AHKMT.

Construction of the IRRC began in early 2015. The facility will be operational by the third quarter of the year and will process waste generated by households, shops and markets in Sector G15. The Jammu and Kashmir Cooperative Housing Society provided land for the site of the IRRC. It also awarded waste collection and operation of the IRRC to the AHKMT, which is a local social enterprise. Waste collection will be undertaken by E-guard, a waste collection organization and model that the AHKMT has successfully developed and refined in other urban communities.

Based on its business plan, AHKMT expects to collect waste from 1,000 households over the first year of operations, expanding up to 2,520 households by the fifth year. Staff from AHKMT have been trained in the operation of an IRRC. Community outreach programmes, which began prior to the completion of the IRRC, have involved awareness-raising initiatives, training workshops and a range of other pilot initiatives. Households have responded well, and waste separation within households has begun.

Financing of the operations of the Islamabad waste-to-resource facility involves a flow of funds between the two main private sector actors. First, the AHKMT collects waste within Sector G15. For this service the Jammu and Kashmir Cooperative Housing Society pays them a collection fee. The Housing Society, in turn, charges all households and businesses in Sector G15 a basic services fee which covers a range of services including water provision, sanitation and waste management. The AHKMT revenue also includes funds generated through the sale of compost and recyclable materials. These three revenue sources are expected to more than cover operational expenditure. The AHKMT shares 25 per cent of its profit with the Jammu and Kashmir Cooperative Housing Society.

Even prior to the IRRC opening, other municipalities and organizations working in Pakistan expressed a high degree of interest in the model. Several city governments from other provinces are exploring options for the development of a pilot IRRC within their respective jurisdiction and are willing to commit budget, land and other resources. The IRRC model is expected to be replicated widely within the country. A range of development partners, including United Nations agencies and multilateral donors, also have expressed interest in replicating the model in the country.

