

## IRBID, Jordan

### City Information

**Population:** *The total population is 912,894 (2017), in addition to 165,843 Syrian refugees are being hosted in the Municipality and 78,923 of other nationalities*

**Area (km<sup>2</sup>):** *Total area of municipality is 359.4 km<sup>2</sup>. The zoned area is 295 km<sup>2</sup>.*

**Climate:** *Greater Irbid Municipality (GIM) is characterized by a mild climate due to the Mediterranean climate, which is characterized by moderate summer and warm winters. These natural conditions gave Irbid an important advantage in the growth and urbanization. The city provides a healthy environment suitable for various housing, which helps and stimulates investment in agriculture and tourism. The soil of the city of Irbid is composed of red clay. Hence, the name of the city of Irbid means fertile soil red dotted.*

**Main Economic Activities:** *are mainly in the agricultural, industrial, commercial, and educational sectors with mostly micro businesses*

**City website:** [www.irbid.gov.jo](http://www.irbid.gov.jo)



### Country Information

**Population:** 10,171,480

**Area (km<sup>2</sup>):** 89,342.0 Km<sup>2</sup>

**Economy and GNI/Capita:** *between \$3,896 and \$12,055. World Bank classification: Upper-middle income*

**Main Economic Activities:** *Jordan's economy is relatively well diversified. Trade and finance combined account for nearly one-third of GDP; transportation and communication, public utilities, and construction account for one-fifth, and mining and manufacturing constitute nearly another fifth.*

<https://en.wikipedia.org/wiki/Jordan#Economy> )

**Government Agencies responsible for guidance on waste legislation:** *Ministry of Municipal Affairs, Ministry of Environment*

## MSW Sector Overview: City Level

### Classification of MSW

The stream of MSW is mostly generated from households, the commercial (restaurants; hospitals, schools etc.) and industrial sectors, and workshop.

### MSW Generation

The total amount in 2017 is around 600 tonnes/daily

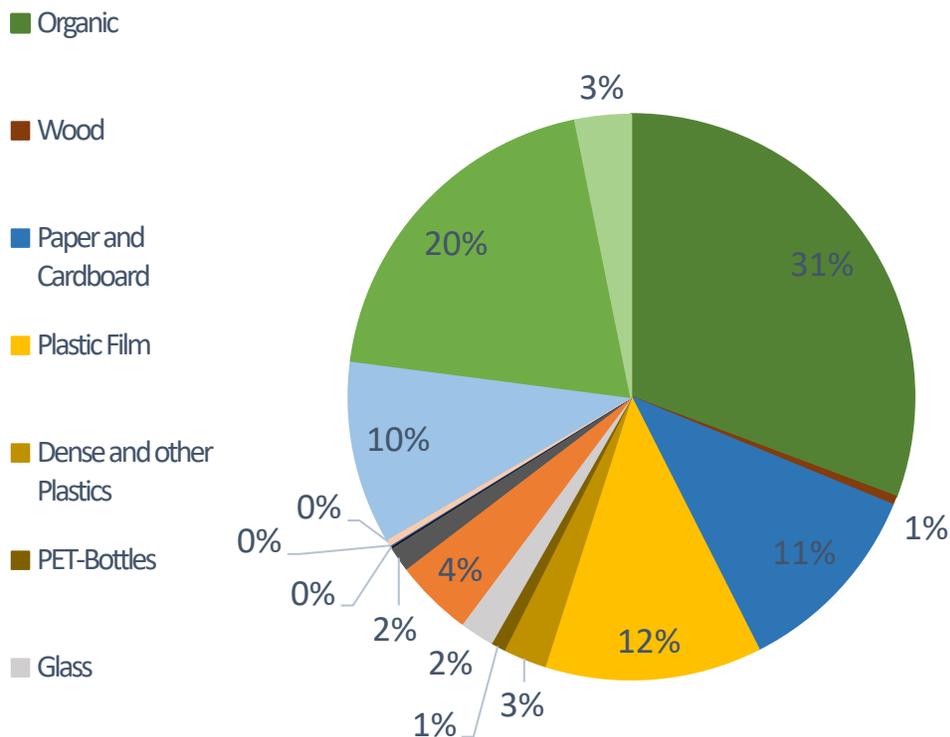
### Collection Coverage and Type

85% of the waste generated is formally collected and disposed. Recently, sorting and compost stations were established and soon the city will begin to recycle and recover recyclable materials, also within coming 6 months a recycling facility will be built.

### Waste Composition

The waste composition at the Sahab Municipality can be seen in the table below.

Component		Percentage %
Organic fractions	Food waste, bread, fines, vegetables & fruits, yard trimmings and plant residues	54
Non-organic fractions	Paper and cardboards	11
	Plastics	16
	Metals	2
	Glass	2
Others		15



### **Waste Management Practice**

Regular waste collection and disposal practices and recently the city has begun to collect paper, plastic and cardboard from commercial areas as a trial and soon will collect vegetable waste to produce manure.

### **Formal Waste Sector**

The current waste practices are mostly provided by the public sector. Very limited PPP contributions have been reported until the moment. The only practice for private sector is through operational agreement for the coming recycling facility.

### **Informal Waste Sector**

The informal sector is leading the recycling industry in Jordan. Both individuals and private companies pick up recyclable materials from the public bins dispatched over the streets. The private companies purchase recyclables from individual scavengers (mainly plastic, paper, cardboards, metals, etc.) and export it outside to big formal recyclers. Recently the municipality began to collect paper, plastic, and cardboard from commercial areas and hopes to succeed to reach to 20 tons daily.

### **Financing of MSW**

The municipality usually collects waste collection taxes every year from household and commercial groups, which are very few compared to the amounts paid by the municipality, (about 9.5 million JD per year). In addition, the municipality may receive permanent financial support from the public authorities (i.e. Ministry of Municipal Affairs) as needed to continue the delivery of services.

### **Waste Management Challenges**

Improving the waste collection efficiency (enhance M&E) using digital route mapping approaches and vehicle tracking systems. Calculation of the gas emission and carbon foot print of the waste collection fleet would be prioritized. Also activities to raise awareness to sort from the source.

### **Technical Assistance**

- On-job training and capacity building programs on solid waste management and recycling approaches
- Monitoring and evaluation of the solid waste projects and recycling facilities
  - (a) Primer on Monitoring and Evaluation
  - (b) Record keeping and Documentation
  - (c) Monitoring Tools
- Occupational and public safety training including:
  - (a) First Aid,
  - (b) handling of hazardous/dangerous items,
  - (c) Health risks and precautions.
- Technical assistance in developing operational plans and standardized SWM policies and procedures for solid waste management
- Elaboration of Key Performance Indicators (KPI) and performance assessment criteria
- Technical reporting and data presentation

### **General description and overview of common practice**

*According to the National Municipal Solid Management Strategy (2015), the national production of municipal solid waste stands at about 2.6 million tons annually (an increase of 23 percent compared to 2010) of which 7% is recycled and 93% is landfilled.*

*About 50% of MSW is food waste and 35% packaging waste that is potentially available for recycling. The rate of MSW generation ranges from 0.34 to 1.07 kg / capita / day; with an average value of 0.91 kg Jordan ranks similarly to other developing countries but significantly less than more developed countries. MSW collection coverage is estimated at 90% for urban areas and 70% for rural areas. Most of MSW daily deliveries are diverted to the closest unsanitary landfills and/or dumpsites.*

*Apart from current solid waste production, Jordan's prospect for continued population growth implies a doubling of the current population (estimated at about 9.5 million individuals, including about 1.3 million refugees hosted in communities and camps) by the year 2035, making innovative solutions in the municipal solid waste sector imperative and overdue.*

*The SW recycling industry in Jordan remains untapped and most of the different existing and running SW recycling and waste picking activities are informal and limited to the private corporates, CBOs and NGOs as well as the individuals. As an estimate, 5 – 10% of Jordan's SW is being recycled at the moment, as there is no large-scale and effective government-run MSW sorting practices or recycling system yet in place. However, the public awareness and willingness of the local community in Jordan for waste recycling and separation practices are also not reaching the required level.*

### **Waste Generation (per capita/year)**

*The rate of MSW generation ranges from 0.34 to 1.07 kg / capita / day; with an average value of 0.91 kg Jordan ranks similarly to other developing countries but significantly less than more developed countries.*

### **Collection Coverage**

*MSW collection coverage is estimated at 90% for urban areas and 70% for rural areas.*

### **Number of Landfills/MSW Disposal rate (tonnes/year)**

*19 official controlled dumpsite and one sanitary landfill site in Jordan. 2.6 million tons of waste per year are disposed.*

### **Recycling Rate**

*An estimate, 5 – 10% of Jordan's solid waste is being recycled at the moment, as there is no large-scale and effective government-run MSW sorting practices or recycling system yet in place.*

### **Waste management of Organic fraction (composting, anaerobic digestion)**

*Not available yet*

### **Energy Recovery Rate**

*Not available yet*

### **City Level**

#### **Aimed at improving Waste Management in General**

*No dedicated strategies or policies and national objectives are adopted for the municipal solid waste management.*

#### **Aimed at addressing Climate change and reducing SLCPs through waste related activities**

*N/A*

### **Country Level**

#### **Aimed at improving Waste Management in General**

*At National level, the Government of Jordan has adopted strategies, which relate to the management of municipal solid waste. These strategies include the following:*

- *The Jordan 2025 – A National Vision and Strategy*
- *The recent National MSW Management Strategy (NMSWMS);*
- *The National Environmental Strategy;*
- *The National Energy Strategy; and*
- *The National Strategy on Public-Private Partnerships (PPP).*

#### **Aimed at addressing climate change and reducing SLCPs through waste related activities**

## Legislation

### City Level

#### Legislation governing MSW management

*No specific instructions issued by the municipality to regulate the MSW management and the municipality is applying the provisions of the Municipal law and its regulations*

#### Guidance for MSW management (after legislation, before inspection activities)

*Not available yet*

#### Inspection activities/supervision and enforcement of legislation

*No dedicated instructions or regulations consider the inspection activities applied yet.*

### National Level

#### Legislation governing MSW management

*The MSW management is governed by the following laws:*

- *Municipalities Law No. 41 (2015)*
- *Anticipated draft Waste Management Framework Law (it recently approved by the Parliament (in April 2018)*
- *Environment Protection Law No. 6 (2017)*
- *The Joint Services Councils Regulation No.113 (2016)*
- *The Regulation for Nuisance Prevention & Waste Collection Fees within Municipal Borders No.68 (2016)*

#### Guidance for MSW management (after legislation, before inspection activities)

*The national strategy of Municipal waste management considered as a guidance for improving the MSW management in Jordan.*

#### Inspection activities/supervision and enforcement of legislation

*The ministry of Municipal Affairs take the responsibility to supervise the performance of the local municipalities in Jordan, inspect and enforce the legislation concerning the MSW management at national level.*

## Current Projects or Activities Aimed at Reducing SLCP Emissions

## Key Stakeholders

## Additional Useful Information

## Contacts

### **Waste Initiative City Contact**

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### **Waste Initiative Country Contact**

**Municipal Waste Representative (if different from the city contact for the Waste Initiative)**

**Other Municipal Representative**