



COUNTRY PROFILE on the solid waste management situation in JORDAN

April 2014

BACKGROUND INFORMATION

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|---|----------------------------------|
| Population: | 6,388,000 |
| Municipal Solid Waste (Msw) Generation: | 2,077,215 tons/year |
| Per Capita Msw Generation: | |
| - Urban Areas | 0.9 kg/day |
| - Rural Areas | 0.6 kg/day |
| Msw Generation Growth: | 3 % |
| Medical Waste Generation: | 4,000 tons/year |
| Industrial Waste: | 45,000 tons/year |
| Agricultural Waste: | > 4 million tons/year |
| C&D Waste: | 2.6 million m ³ /year |
| Waste Tyres: | 2.5 million no./year |
| E-Waste: | 30,000 piece/year |
| Packaging Waste: | 700,000 tons/year |

TECHNICAL PERFORMANCE

Municipal Waste

| | |
|---------------------------------|------|
| Msw Collection Coverage: | |
| - Rural Areas | 90 % |
| - Urban Areas | 70 % |
| Msw Final Destination: | |
| - Composted | 0 % |
| - Recycled | 7 % |
| - Landfilled | 48 % |
| - Openly Dumped | 45 % |
| Number of Dumpsites: | 20 |
| Number of Controlled Landfills: | |
| Number of Sanitary Landfills: | |
| - Planned | - |
| - Under Construction | - |
| - Constructed | - |
| - Operational | 1 |

Hazardous and industrial waste

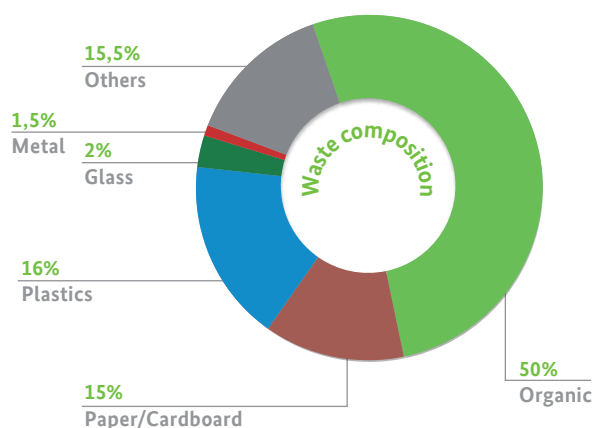
| | |
|---|--|
| Number Of Hazardous Landfills or Plants (Chemical and Physical Treatment): | |
| - Planned | 0 |
| - Under Construction | 0 |
| - Constructed | |
| - Operational | 1 |
| Types of Disposal and Treatments for Medical Waste: | Incineration & sterilization using shredding autoclaves |

Policy and planning environment

- Solid waste sector is among the target areas of the Government National Agenda for Sustainable Development;
- Designation of the Ministry of the Environment as the responsible agency for developing a solid waste management policy and laws and regulations;
- Encouraging Private Sector Participation in infrastructure;
- Adopting a National Energy Strategy, which calls for the development of renewable and sustainable energy; and
- Greater Amman municipality has developed a master plan, which provides a framework for infrastructure, planning and zoning, transportation, etc.

Legal framework

- Environment Protection Law No. 52 of 2006 and related regulations which sets the direct responsibilities for the Ministry of Environment and sets overarching principles for environmental protection;
- Solid waste management regulation No. 27 of 2005 which demands general requirements in terms of manpower, equipment, monitoring, container management, separation of hazardous wastes, documentation, and final treatment or disposal control;
- Waste oil handling and management instructions of 2003 which provides the licensing requirements and documentations for generators, transporters, and treatment and the technical requirements for generators, transporters, etc.;
- Hazardous waste handling and management instructions of 2003 which provides the licensing requirements and docu-



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mentation for generators, transporters, and treatment/disposal, etc.;

- Organic compost (animal and plant origin) storage, production, trading, and use instructions of 2009 which provides the licensing requirements for compost plants and trading and the technical requirements for siting, storage, processing, etc.;
- Municipalities Law No. 13 of 2011 and amendments (latest No. 7 of 2012) which sets municipal responsibilities including municipal cleaning, waste collection, and disposal;
- Nuisance prevention and waste collection fees for Greater Amman Municipality No. 83 of 2009 which determines the different types of nuisances and municipal control measurement, including the municipal responsibilities for waste collection, transport, treatment, and disposal, and the attached fee system;
- Buildings and zoning regulation in the City of Amman No. 67 of 1979 and amendments (latest No. 21 of 2005) which sets permit requirements for excavations and renovations, to control C&D waste illegal dumping;
- Renewable Energy and Energy Efficiency Law No. 13 of 2012.

Institutional framework

- Ministry of Environment:
 - Sets waste management policy;
 - Regulates waste management sector; and
 - Monitors and enforces compliance.
- Ministry of Municipal Affairs:
 - Supervises municipal functions and service delivery;
 - Regulates MSW management;
- Greater Amman Municipality:
 - Regulates and operates MSW management system in Amman;
 - Regulates C&D waste permits and final disposal;
- Municipalities:
 - Operate MSW management system in Amman;
 - Joint services councils:
 - Operates MSW final disposal sites;
- Ministry of Health:
 - Regulates medical waste management;
- Ministry of Agriculture:
 - Regulates agriculture waste management;
- Ministry of Energy and Mineral Resources:
 - Regulates renewable energy market;

Financial & cost recovery arrangements


- Residential
 - Only Greater Amman Municipality: Fixed JOD 20 per household per year plus JOD 0.005 per kWh (For >200 kWh per month);
 - All municipalities except Greater Amman Municipality: Fixed JOD 24, 15, and 8 per household per year depending on municipality class;
- Any professional license for commercial, institutional and industrial activities:
 - 20% of any professional license fees;
 - Professional license fee instructions (4 classes) (only for Greater Amman Municipality);
- Transport and tipping fees are charged for the use of transfer stations and landfills/dumpsites.

Private sector involvement

- BOT for commingled waste MRF in Ghabawi for 600 ton/day max. Greater Amman Municipality was the Contracting Authority. The project has been delayed;
- BOOT for hazardous waste treatment center in Ghabawi and Swaqa. The project has been terminated;
- Municipal cleaning contract for Aqaba City JOD M 2.5/Yr. Aqaba special economic zone authority is the Contracting Authority. The project is ongoing;
- Municipal cleaning contract for Petra region JOD K250/Yr. Petra Development and Tourism Region Authority is the Contracting Authority.

Options for improvement

- Sector policy and national strategy document; Comprehensive detailed legal framework with regulatory standards compatible with the local context;
- An effective institutional set-up and organization with clear roles and responsibilities on the local and regional levels, and the promotion of arm' length organizations or independent agencies with the proper PPP mix;
- Diverse Capacity building programs across all agencies and target groups;
- Effective operational planning and M&E framework; and
- Effective regulator role with monitoring and enforcement.

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