



مركز الإحصاء
STATISTICS CENTRE

Waste Statistics

Methodology

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Overview

Waste, in all of its solid and liquid forms, is regarded as a major environmental pollutant, it is generated in large quantities each year. As a result of rising population, urbanization, improved living standards and the rapid technological progress, these quantities are increasingly growing in size. These factors contribute to an increase in the quantity and variety of waste produced by various activities, which pollutes and depletes the natural environment resources, negatively impacting human life and other living organisms.

Importance

Waste management and treatment are given special attention in the Emirate of Abu Dhabi, reflecting the government's desire to reduce the adverse impact of waste on health and the Emirate's image.

Objectives

Due to the lack of comprehensive data on waste management at the UAE level on a regular basis, waste statistics seek to meet the need for accurate, comprehensive, and high-quality statistical data and information consistent with international standards in all emirates of the country on waste, in order to be available for use by decision makers and researchers at all levels, and to meet the continuous demand for this data from international and regional entities. There is also a need for international environmental benchmarkings. The survey seeks to achieve the following objectives:

- Provide information on the total amount of waste collected (hazardous and non-hazardous) based on the collecting entity.
- Provide data on the amount of nonhazardous waste collected by source (construction and demolition, industry, agriculture, municipal waste, solid waste from treatment plants, or any other waste) and treatment methods.
- Provide information on the contents of collected waste (non-hazardous and hazardous) (organic materials, cartons, glass, etc.) based on treatment methods.
- Provide data on the situation of the waste treatment plants (landfills, garbage dumps, or treatment units).

Concepts and Definitions

Waste: materials that are not of first quality (i.e. products for the market). Its entity of origin will not use it for any manufacturing, transformation, or consumption business, but will dispose of it, intends to dispose of it, or is required to dispose of it. This definition excludes waste materials that are directly recycled or reused at the point of generation (i.e. the establishment), as well as waste materials that are disposed of directly into water or the ambient air as wastewater or air pollution.

Non-hazardous waste collected: non-hazardous waste collected by municipalities or collected on behalf of these municipalities, as well as municipal waste collected by the private sector. It includes mixed waste and sorted waste collected separately for recovery operations (through stopping by the places of their generation or voluntarily brought to designated centers), and includes Waste collected from the following sectors:

1. **Construction (demolition and construction):** all waste collected from the construction sector.
2. **Industry:** all waste collected from manufacturing industries.
3. **Agricultural:** includes all waste generated by agricultural, forestry, and fishing activities, with the exception of waste used as fertilizer (ie, the definition applies only to excess waste that must be disposed of).
4. **Municipal waste:** Municipal waste collected by municipalities or collected on their behalf by public or private establishments includes all waste from the following: households, businesses and crafts, small businesses, office buildings, institutions (schools, hospitals, government buildings), bulky waste (e.g. household items, old furniture and mattresses), and waste from certain municipal services, such as waste from small and large garden maintenance, cleaning services (street sweeping and the contents of public waste bins, waste from market cleaning), if they are managed as waste. This definition excludes waste from the municipal sewerage system and its treatment, as well as waste from municipal construction and demolition works.
5. **Solid Waste from Wastewater Treatment:** Solid waste is what is disposed of in public landfills.
6. **Other waste:** It is all waste collected from other economic activities not specified before.

Hazardous waste collected: Hazardous waste refers to the categories of waste to be controlled according to the Basel Convention on the control of transboundary movements of hazardous waste and their disposal (Article 1 and Annex I). This term refers to the categories of waste to be controlled according to the Basel Convention on the control of transboundary movements of hazardous waste and their disposal (Article 1 and Annex I). Due to their toxic, infectious, radioactive, or flammable properties, these types of waste pose a significant real or potential risk to the health of humans and other living organisms, as well as the environment.

Waste landfill: Landfill is the final placement of waste into or onto the land. The definition covers both landfill in internal sites (i.e. where a generator of waste is carrying out its own waste disposal at the place of generation) and in external sites.

Controlled landfill: It is the process of disposing of waste in an orderly manner into or onto the land.

Recycling: Recycling is defined as any reprocessing of waste material in a production process that diverts it from the waste stream, except reuse as fuel. Both reprocessing as the same type of product, and for different purposes should be included. Recycling within industrial plants i.e. at the place of generation should be excluded.

Composting: Composting is a biological process that subjects biodegradable waste to anaerobic or aerobic decomposition. The resulting recovered product can be used to increase soil fertility.

Incineration: The controlled or uncontrolled combustion of waste with or without energy recovery.

Other: Any final waste treatment or disposal method that is not defined as recycling, incineration, or landfill. Physical/chemical treatment, biological treatment, waste release into bodies of water, and permanent waste storage are all included in the definition.

Landfill: The final location where waste is treated or disposed of.

Waste facilities: Waste treatment plants, for example (papermills, glass re-forming, metal re-forming, plastic shredding and shaping, etc.).

Coverage (Geographic– Statistical Units)

The three regions of the emirate of Abu Dhabi (Abu Dhabi, Al Ain, Al Dhafrah).

Frequency

Annual

Classifications

Waste Statistics Guide - A guide for gathering waste generation and treatment data.

Main Data Sources

Waste Management Center, Abu Dhabi National Oil Company and Environmental Survey.

Questionnaires

- Environment survey forms
- Tables of administrative records

Sample Design

Stratified sampling method

Data Collection

- Administrative records
- Environment

Data Editing

- All survey editing procedures are applied
- Desk editing is conducted and all compliance rules are followed.

Indicators Calculations

The data covers the three regions of the emirate of Abu Dhabi (Abu Dhabi, Al Ain, and Al Dhafrah):

- Amount of municipal waste collected
- Amount of municipal waste by disposal method
- Amount of non-hazardous waste collected
- Amount of non-hazardous waste collected by source
- Amount of non-hazardous waste by disposal methods
- Amount of hazardous waste collected
- Amount of hazardous waste collected by source
- Amount of hazardous waste by disposal methods

Timeliness

July

Dissemination

- Statistical Yearbook (SYB)
- Waste statistics bulletin
- Website



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رؤيتنا: الريادة والابتكار في الإحصاء
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