



Waste statistics

Ulrich Wieland
Environment Statistics Section
UNSD

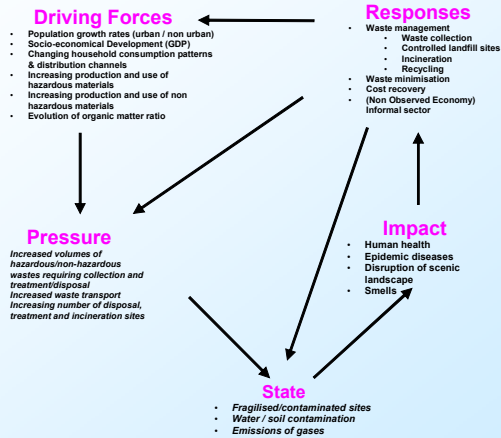


Waste statistics

1. Environmental impact of Waste
2. Waste Indicators
3. Waste
4. Municipal waste
5. Industrial waste
6. Hazardous waste



1. Environmental impact of Waste



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Driving Forces

- Population growth rates (urban / non urban)
- Socio-economical Development (GDP)
- Changing household consumption patterns & distribution channels
- Increasing production and use of hazardous materials
- Increasing production and use of non hazardous materials
- Evolution of organic matter ratio

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Pressure / State

- Increased volumes of hazardous/non-hazardous wastes requiring collection and treatment/disposal
- Increased waste transport
- Increasing number of disposal, treatment and incineration sites
- Fragilised/contaminated sites
- Water / soil contamination
- Emissions of gases

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Impacts

- Human health
- Epidemic diseases
- Disruption of scenic landscape
- Smells

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Responses

- Waste management
 - Waste collection
 - Controlled landfill sites
 - Incineration
 - Recycling
- Waste minimisation
- Cost recovery
- (Non Observed Economy) Informal sector

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2. Regional waste indicators

(From the West Asia Priority Environmental Indicators)

- % of solid waste that is safely disposed
- Percentage of population served by regular waste collection services
- Mass of solid waste disposed of by municipal waste management services
- Effectiveness of hazardous waste policies and regulations
- Average annual waste disposal in the sea (land based/sea based sources)

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3. Waste

- Waste refers here to materials that are not prime products (i.e. products produced for the market) for which the generator has no further use for his own purpose of production, transformation or consumption, and which he discards, or intends or is required to discard.
- It excludes residuals directly recycled or reused at the place of generation (i.e. establishment) and waste materials that are directly discharged into ambient water or air.

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Waste management

- Collection
- Transport
- Recovery or disposal
- Management of disposal sites

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Data sources

- Administrative sources
- Surveys (municipalities and industries, transport companies, disposal sites ...)
- Estimations
- Any combination of these means



ISIC

- International Standard Industrial Classification of all Economic Activities
- Allows to link ecological change to economic activities



ISIC - Examples

- A (01-02) - Agriculture, hunting and forestry
- C (10-14) - Mining and quarrying
- D (15-37) - Manufacturing
- E (40-41) - Electricity, gas and water supply
- F (45) - Construction
- O (90-94) - Other community, social and personal service activities

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ISIC - Examples

D - Manufacturing

- ...
- 36 - Manufacture of furniture; manufacturing n.e.c.
- 37 - Recycling

E - Electricity, gas and water supply

- 40 - Electricity, gas, steam and hot water supply
- 41 - Collection, purification and distribution of water

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ISIC

[http://unstats.un.org/unsd/cr/
registry/regcst.asp?Cl=17](http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17)

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4. Municipal Waste

Waste collected by or on behalf of
municipalities

Includes:

- bulky waste (e.g. white goods, old furniture, mattresses)
- yard waste, leaves, grass clippings,
- street sweepings, the content of litter containers, and market cleaning waste

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Municipal Waste

Includes waste originating from:

- households,
- commerce and trade, small businesses,
- office buildings and institutions (schools, hospitals, government buildings).
- waste from street cleaning services (street sweepings, the content of litter containers, market cleansing waste)

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Municipal Waste

Excludes waste from

- municipal sewage network and treatment,
- municipal construction and demolition waste.

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Table R2: Treatment and Disposal of Municipal Waste

- **Municipal waste collected**
- Municipal waste imported for treatment/disposal
- Municipal waste exported for treatment/disposal
- **Municipal waste managed in the country**
 - of which:* Recycled/composted
 - Incinerated
 - Landfilled
- Population served by municipal waste collection
- Urban population served by municipal waste collection

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Table R3: Composition of Municipal Waste

- Paper, paperboard
- Textiles
- Plastics
- Glass
- Metals
- Organic material
 - of which:* food and garden waste
- Other inorganic materia

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Table R6: Selected Waste Variables at City Level

- Share of city population served by municipal waste collection
- **Total amount of municipal waste generated**
- Municipal waste collected from households
- Municipal waste collected from other origins
- **Total amount of municipal waste collected**
of which: Recycled/ composted
Incinerated
Landfilled

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5. Hazardous Waste

- Wastes that, owing to their toxic, infectious radioactive or flammable properties pose a substantial actual or potential hazard to the health of humans and other living organisms and the environment.

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Hazardous Waste

- Basel Convention
- European Waste Regulation

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Basel Convention

- Basel Convention on the control of transboundary movements of hazardous wastes and their disposal
- Adopted in Basel in March 1989
- Entered in force May 5th, 1992
- Today 157 parties

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Basel convention - objectives

- control and reduction of transboundary movements of hazardous wastes
- prevention and minimization of their generation,
- environmentally sound management of such wastes and
- active promotion of the transfer and use of cleaner technologies.

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Basel convention

- <http://www.basel.int/text/con-a.htm>
(Arabic)
- <http://www.basel.int/text/con-e.pdf>
(English)

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Table R4: Treatment and Disposal of Hazardous Waste

- **Hazardous waste generated**
- Hazardous waste imported
- Hazardous waste exported
- **Hazardous waste managed in the country**
 - of which:* Recycled/ composted
 - Incinerated
 - Landfilled

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6. Waste treatment and disposal

- Waste disposal: Landfill, incineration, dumping at sea
- Waste treatment: Physical, thermal, chemical, or biological processing of waste, that change the characteristics of the waste in order to reduce its volume, or hazardous nature, facilitate its handling, or enhance recycling.

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Table R5: Waste Treatment and Disposal Facilities

- Landfill sites (controlled/uncontrolled)
- Incineration plants
- Treatment plants
- Other



Thank you
for your attention