



Waste Generation and Waste Treatment

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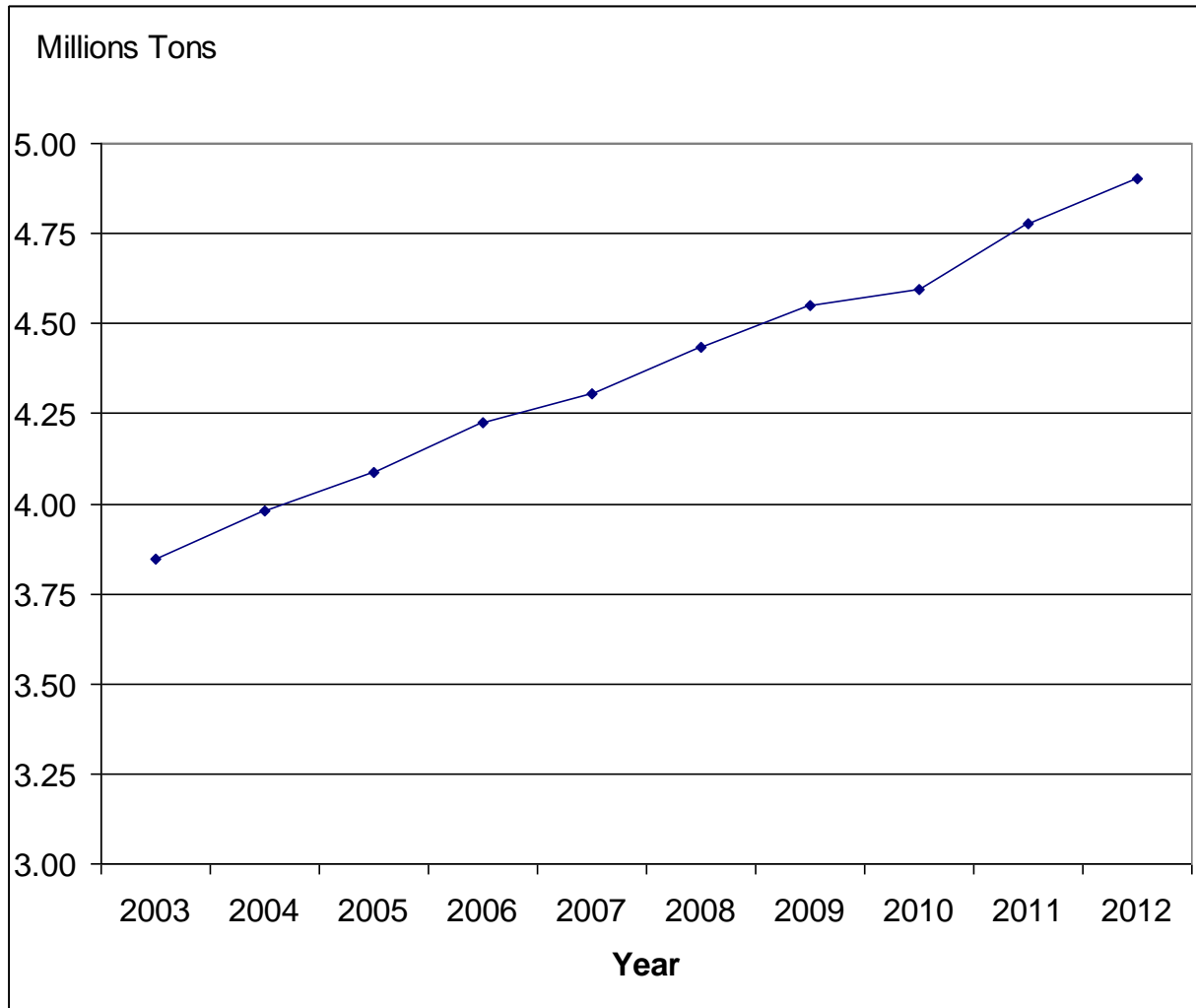
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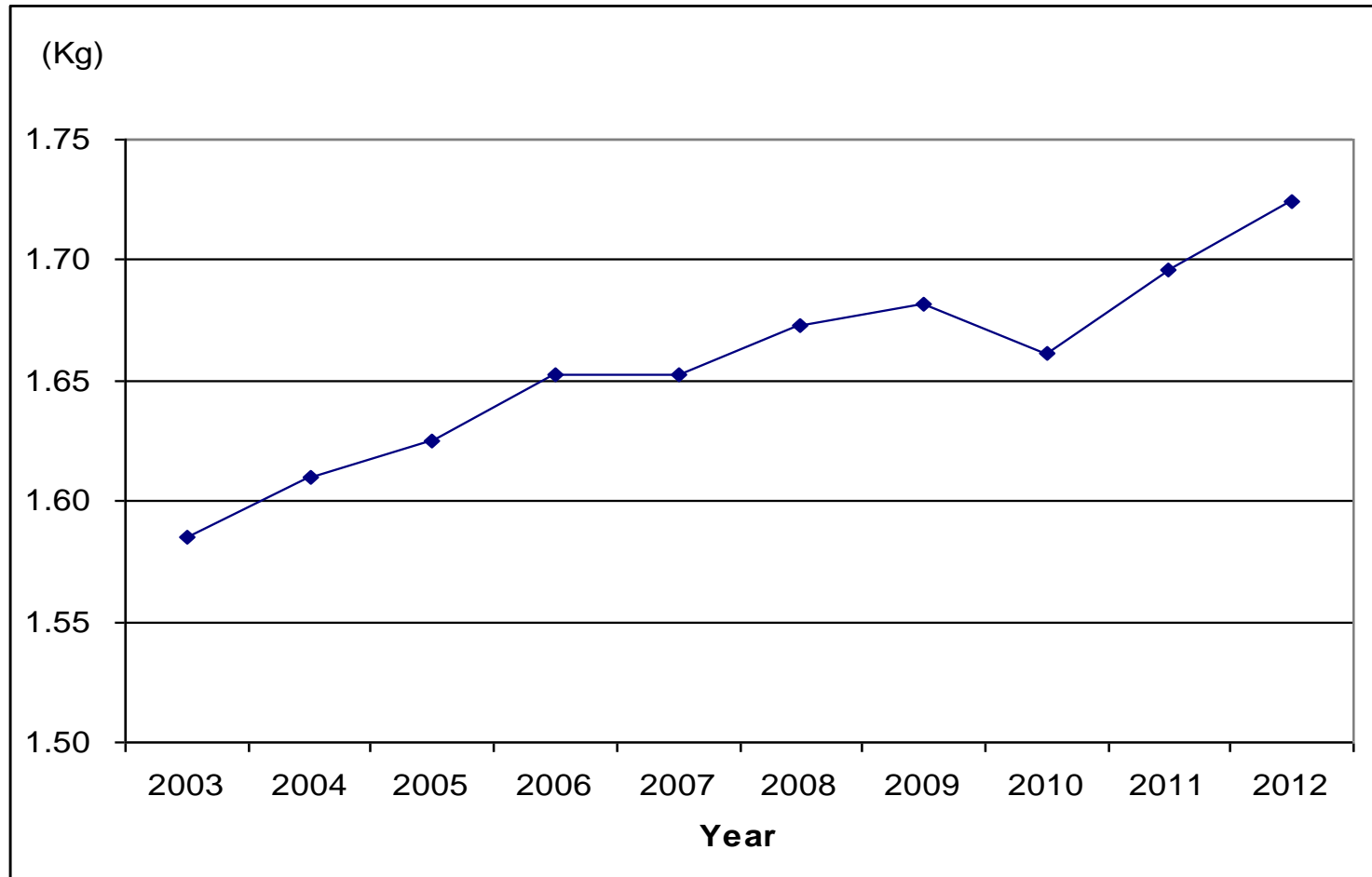
Municipal- Household and commercial waste

- Waste collected by the municipal authorities (Includes small amounts of industrial waste)
- types of treatments
 - Landilling – sent directly or via transit stations
 - Recycling - at source and at the transit station
- Coverage of 95% of the municipal authorities' population
- Data series since 2003

Municipal Waste collected per year



Municipal Waste collected per capita per day



Municipal waste - Data Sources

- ICBS Annual Survey of Local Authorities
- Complementary data from the MOEP
- Data refer to collection of waste and not generation

Municipal waste Distribution

- **Household waste and commercial** waste data cannot be separated
- **industrial waste** is deducted from the reported amounts of collected municipal waste (small amounts (

Municipal waste – Type of treatment

- Landfilling
- Recycling (in Process of improvement)
 - at source in the municipalities
 - at the transit station

Industrial waste

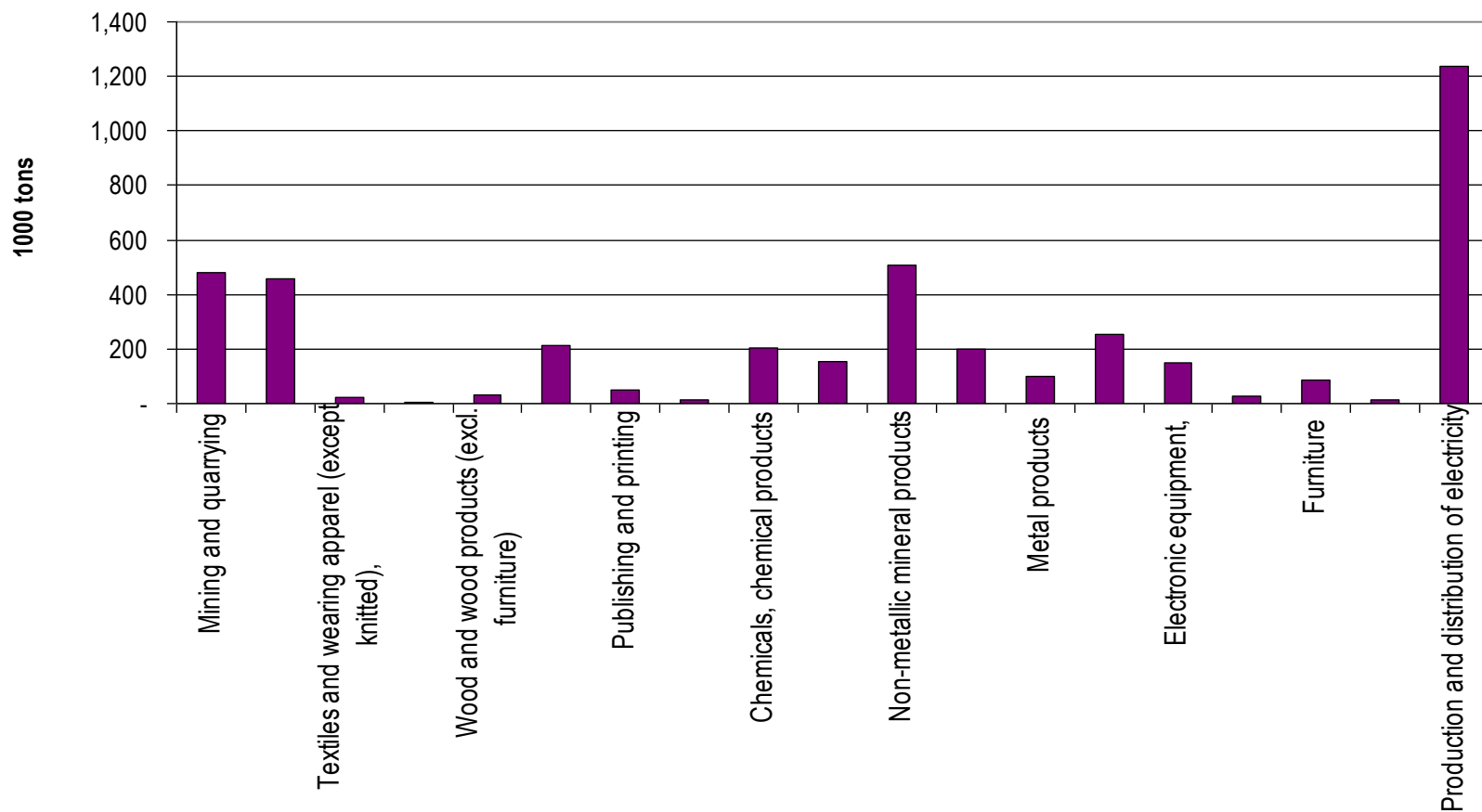
- ICBS Industrial Waste Surveys conducted in 2010 and 2012
- Covering the following activities (ISIC rev 3.1)
 - Section C – Mining and quarrying
 - Section D - Manufacturing
 - Section E (40) - Electricity
- Types of treatment
 - Landfilled – sent directly or by transit station
 - Recycling - at source

Industrial waste

Data sources and Distribution

- Data sources
 - ICBS Surveys
 - PRTR (MoEP)- only for the largest 700 plants
- Distribution
 - Breakdown into 19 divisions
 - Types of waste : hazardous waste, dry waste and mixed waste

Generation of industrial waste by branch (2010)



Agricultural waste

- Activity Data are available within the ICBS
- The issue will be further regulated in the near future by the MoEP
- Currently we are in a process of developing methodology with the Ministry of Agriculture to estimate the amounts and treatment types of agriculture waste

Construction Waste

- **Generated**

- Construction of Buildings
- Renovations
- Construction of Infrastructure
 - Soil waste

- **Treatment**

- Recycling
- Landfill
- Illegal dumping

Construction Waste - Data sources

- Generation data – in process of developing a methodology with the MoEP
- landfilling - from landfills- in the future (MoEP)
- Recycling data (MoEP)

Hazardous waste

- Data are available- unknown distribution
- Some of the waste is treated at a designated site in the south – The Environmental Services Company (ESC) “Ramat hovav” and the rest in other authorized sites
- Treatments
 - Landfilling
 - Recycling
 - Other physical/chemical treatments

Hazardous Waste- Data sources and Distribution

- Data sources
 - Annual data from “Ramat hovav”
 - Currently, we are in process of collecting data from the MoEP for years 2009-2012
- Distribution
 - Currently the Breakdown of the hazardeous waste generation by branch is unknown

Amount of Hazardous Waste Generated and Treated by Method of Treatment

[illegible]

The waste treatment process

Landfill site



Collecting



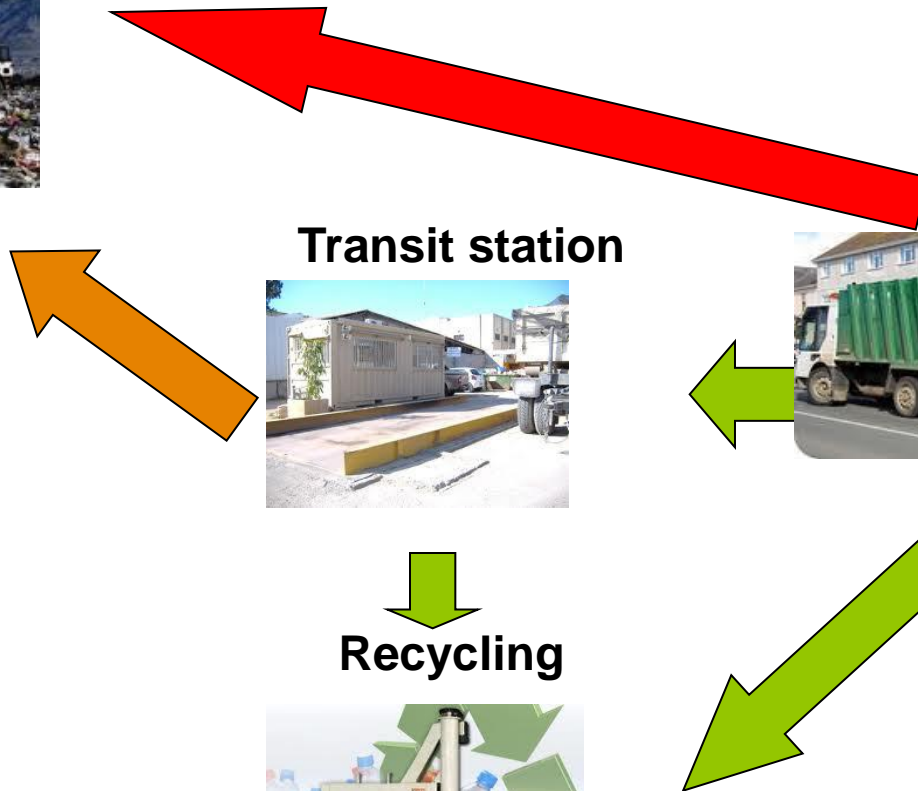
Transit station



Recycling



Reuse



Waste Treatment

Landfilling

- MoEP data on Landfilling
- Since 2007 a “landfill fee” Regulated and the data on landfilling is accurate

Landfills sites for mixed waste



Waste Treatment Recycling

- **ICBS annual recycling survey** of the recycling Industry
- material Types:
 - Construction waste, Coal ash, Metals , Organic material, Paper and newspaper , Yard waste and wood, Sludge, Plastics, tires, Oil, Other (Batteries, glass, textile and toners)
 - Not including hazardous waste - except batteries and oil
- **Industrial Waste Surveys** (2010, 2012)- data by economic industry

Waste Treatment Recycling

RECYCLED WASTE(1), BY TYPE

Tons

Type	*2012	R2011	R2010	R2009	R2008	R2005	2000
TOTAL	5,966,536	6,375,137	4,948,360	4,737,838	4,662,388
Construction waste	2,350,000	2,726,803	1,711,000	1,809,536	1,821,276
Coal ash	1,359,000	1,289,000	1,236,000	1,212,000	1,188,000	1,323,000	1,070,000
Metals	656,709	717,045	540,147	494,638	513,988	500,265	439,725
Organic material(2)	727,477	763,649	654,086	516,525	445,546	369,415	150,912
Paper and newspaper	353,829	397,200	354,205	307,117	290,589	224,423	215,669
Yard waste and wood	220,042	204,553	177,996	159,573	190,643	154,167	191,710
Sludge	69,311	64,582	63,028	54,500	54,463	45,812	..
Plastics	43,830	44,767	47,371	54,854	48,468	29,345	21,550
Tires	34,040	31,703	27,957	22,972	16,996	1,700	..
Oil(3)	44,362	42,273	35,381	25,898	26,160	20,123	..
Other(3)(4)	107,936	113,462	101,189	80,225	66,259	63,052	27,084

Source: The Central Bureau of Statistics and the Ministry of Environmental Protection, Solid Waste Section.

1. Not including hazardous waste - except batteries and oil.
2. Includes agriculture waste - (updated from 2005).
3. In 2000 recycled oil was included in "Other".
4. Batteries, glass, textile and toners.

Challenges

- Municipal waste data refer to collection (generation unknown)
- Separation of Household and commercial data is required
- Generation data of construction waste - missing
- Agriculture waste – in progress with the MoEP and Ministry of Agriculture.
- Hazardous waste - in process of updating data from for the other authorized sites from the Moep

**Thank
you!**

