

## 1. ENVIRONMENTAL TRENDS

### Municipal waste

Waste is generated at all stages of human activities. Its composition and amounts depend largely on consumption and production patterns.

Municipal waste is only part of total waste generated (about 10%), but its management and treatment often represents more than one-third of public sector financial efforts to abate and control pollution. The main concerns raised by municipal waste relate to the potential impact from inappropriate waste management on human health and the environment (soil and water contamination, air quality, climate, land use and landscape).

#### Definitions

The indicators presented here refer to total amounts of municipal waste generated as well as waste generation intensities expressed per capita. Treatment and disposal shares of municipal waste, along with private final consumption expenditure, are shown as complementary information.

Municipal waste is waste collected by or on behalf of municipalities. It includes household waste originating from households (i.e. waste generated by the domestic activity of households) and similar waste from small commercial activities, office buildings, institutions such as schools and government buildings, and small businesses that treat or dispose of waste at the same facilities used for municipally collected waste.

Waste generation intensities are first approximations of potential environmental pressure; more information is needed to describe the actual pressure. These indicators should be complemented with information on waste management practices and costs, and on consumption levels and patterns.

#### Overview

During the 1990s, municipal waste generated in the OECD area has risen (+19%) mostly in line with private consumption expenditure (+33%) and GDP (+31%). As of the early 2000s, this rise has been slowing down (+2%). Today, the quantity of municipal waste generated exceeds an estimated 650 million tonnes. A person living in the OECD area generates on average 520 kg of waste per year; this is 20 kg more than in 1990, but 30 kg less than in 2000.

The amount and composition of municipal waste vary widely among OECD countries, being related to levels and patterns of consumption, the rate of urbanisation, lifestyles, and national waste management practices. On average, Europeans generate around 130 kg less than people living in America but 80 kg more than people living in the OECD Asia-Oceania region.

Over the past two decades, OECD countries have put significant efforts into curbing municipal solid waste generation. More and more waste is being diverted from landfills and incinerators and fed back into the economy through recycling. Mechanical and biological pre-treatment is increasingly used to enhance recovery rates and incineration efficiency, and reduce the amounts being landfilled. Manufacturers are increasingly encouraged or required to accept responsibility for their products after the point of sale. The European Union has introduced recycling targets for all its member countries. Landfilling of municipal waste has been banned in a few countries. Landfill nonetheless remains the major disposal method in many OECD countries.

#### Comparability

The definition of municipal waste, the types of waste covered and the surveying methods used to collect information vary from country to country and over time.

The main problems in terms of data comparability relate to the coverage of household like waste from commerce and trade, and of separate waste collections that may include hazardous waste from households such as waste batteries or waste electric and electronic equipment (WEEE) and waste collected by the private sector in the framework of extended producer responsibility schemes.

In some cases, the reference year refers to the closest available year.

For additional notes, see the Annex.

#### Source

OECD (2015), "Municipal Waste", *OECD Environment Statistics* (database), <http://dx.doi.org/10.1787/data-00601-en>.

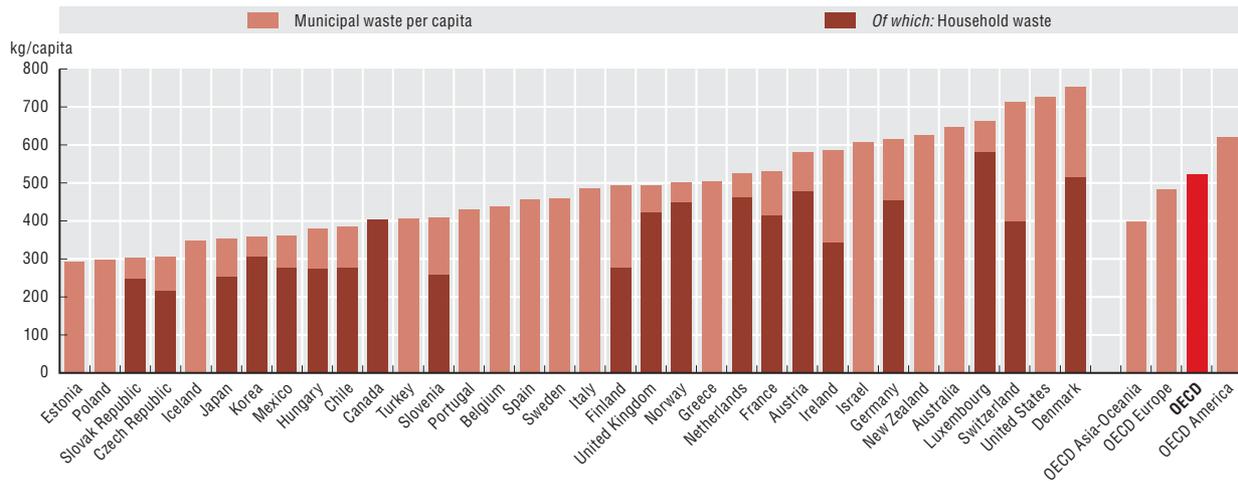
#### Further information

OECD (2015), "Material Resources, Productivity and the Environment", *OECD Green Growth Studies*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264190504-en>.

OECD, Resource Productivity and Waste, [www.oecd.org/env/waste](http://www.oecd.org/env/waste).

Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

Figure 1.30. Municipal waste generation intensities per capita, 2013



Source: OECD (2015), "Municipal Waste", OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888933261972>

Table 1.11. Municipal waste generation and private consumption

	Municipal waste generated per capita			Of which: From households	Private final consumption expenditure, per capita	
	Kg/cap	% change	% change	Kg/cap	1 000 USD/cap	% change
	2013 or latest	1990-2013	2000-13	2013 or latest	2013	2000-13
Australia	647	-6	-7	..	26	27
Austria	580	39	8	477	21	10
Belgium	438	27	-8	..	20	6
Canada	..	..	10	403	23	27
Chile	385	55	17	275	13	88
Czech Republic	307	..	-8	215	13	29
Denmark	751	..	10	515	18	11
Estonia	293	..	..	..	13	77
Finland	493	..	-2	276	19	25
France	530	15	3	414	19	10
Germany	614	-2	-4	454	22	12
Greece	504	56	13	..	16	-3
Hungary	378	..	-15	275	9	23
Iceland	347	..	-25	..	19	6
Ireland	587	..	-20	344	17	9
Israel	607	..	-4	..	19	23
Italy	484	18	-5	..	17	-9
Japan	354	-13	-18	253	19	13
Korea	358	-43	-1	304	17	42
Luxembourg	661	..	1	581	24	4
Mexico	360	17	18	277	11	23
Netherlands	525	6	-12	462	18	-4
New Zealand	626	-43	-27	..	15	36
Norway	501	..	37	448	28	42
Poland	297	..	..	..	13	55
Portugal	429	43	-3	..	15	-2
Slovak Republic	304	..	13	247	13	54
Slovenia	409	..	..	257	10	14
Spain	455	..	-26	..	17	1
Sweden	458	22	7	..	20	22
Switzerland	712	17	8	399	25	9
Turkey	407	..	..	..	1	47
United Kingdom	494	4	-14	422	27	17
United States	725	-4	-7	..	34	18
<b>OECD</b>	<b>522</b>	<b>4</b>	<b>-6</b>	<b>..</b>	<b>21</b>	<b>17</b>
OECD America	619	1	-4	..	27	19
OECD Asia-Oceania	399	-7	-12	..	19	21
OECD Europe	483	8	-7	..	17	10

Note: See the Annex for country notes.

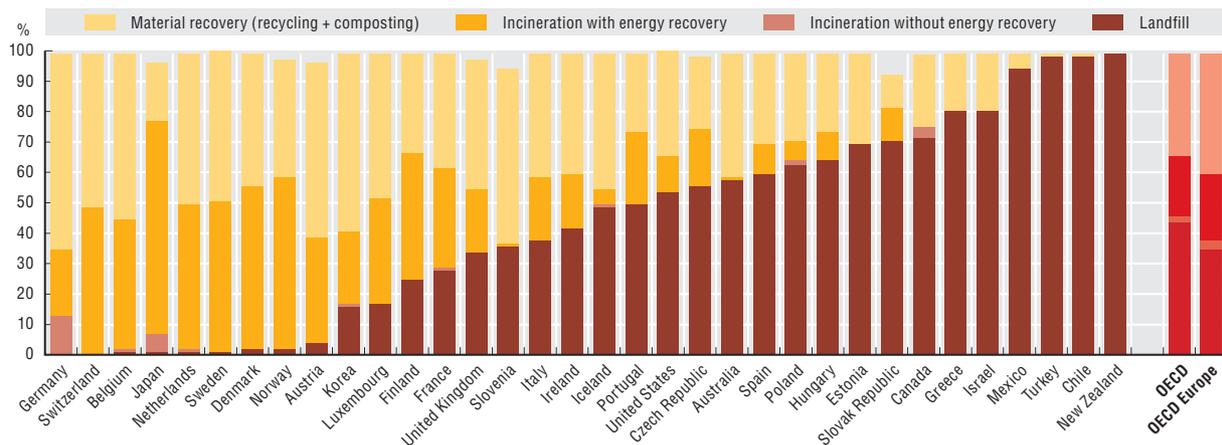
Source: OECD (2015), "Municipal Waste", OECD Environment Statistics (database).

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# 1. ENVIRONMENTAL TRENDS

## Municipal waste

Figure 1.31. **Municipal waste disposal and recovery shares, 2013 or latest**



Source: OECD (2015), "Municipal Waste", OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888933261986>

Table 1.12. **Municipal waste disposal and recovery shares, 2013 or latest**

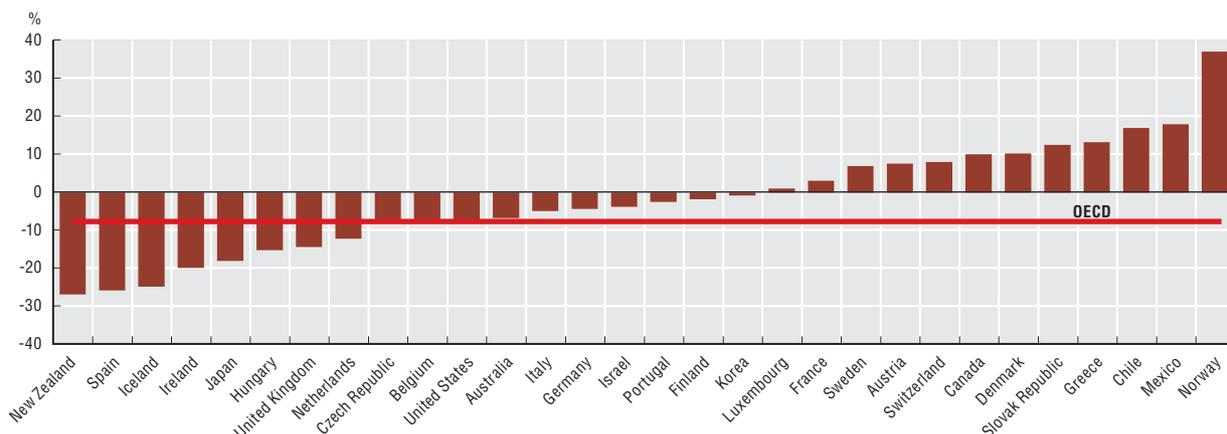
	% of amounts treated				% change since 2000	
	Recycling and composting	Incineration with energy recovery	Incineration without energy recovery	Landfill	Recycling and composting	Landfill
Australia	41	1	..	58	..	..
Austria	58	35	0	4	5	-87
Belgium	55	43	1	1	16	-95
Canada	24	..	4	72	21	3
Chile	1	0	0	99	-78	27
Czech Republic	24	19	0	56	..	..
Denmark	44	54	0	2	54	-63
Estonia	30	0	0	70	600	-41
Finland	33	42	0	25	0	-57
France	38	33	1	28	71	-26
Germany	65	22	13	0	16	-99
Greece	19	..	..	81	176	3
Hungary	26	9	..	65	..	..
Iceland	45	5	1	49	150	-44
Ireland	40	18	0	42	263	-51
Israel	19	..	..	81	95	13
Italy	41	21	0	38	..	..
Japan	19	71	6	1	20	-79
Korea	59	24	1	16	51	-64
Luxembourg	48	35	..	17	65	3
Mexico	5	..	..	95	190	33
Netherlands	50	48	1	1	..	..
New Zealand	..	..	..	100	..	..
Norway	39	57	0	2	37	-87
Poland	29	6	2	63	886	-50
Portugal	26	24	0	50	162	-26
Slovak Republic	11	11	0	71	..	..
Slovenia	58	1	0	36	497	-72
Spain	30	10	0	60	..	..
Sweden	50	50	0	1	50	-97
Switzerland	51	49	0	0	36	-100
Turkey	1	..	0	99	-33	6
United Kingdom	43	21	0	34	256	-62
United States	35	12	..	54	25	-91
<b>OECD</b>	<b>34</b>	<b>20</b>	<b>2</b>	<b>44</b>	<b>42</b>	<b>-18</b>
OECD Europe	40	22	3	35	56	-49

Note: See the Annex for country notes.

Source: OECD (2015), "Municipal Waste", OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888933262364>

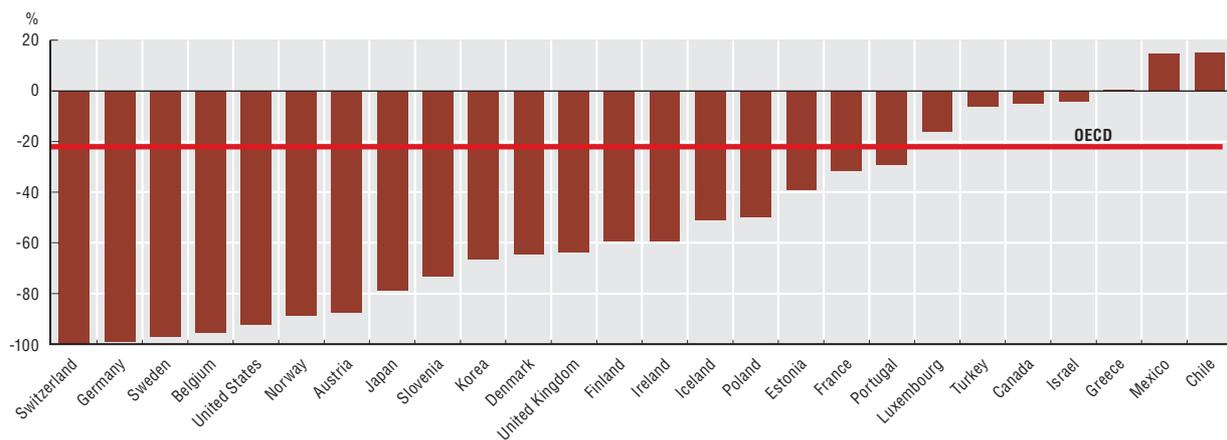
Figure 1.32. Change in the amounts of municipal waste generated per capita, since 2000



Source: OECD (2015), "Municipal Waste", OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888933261997>

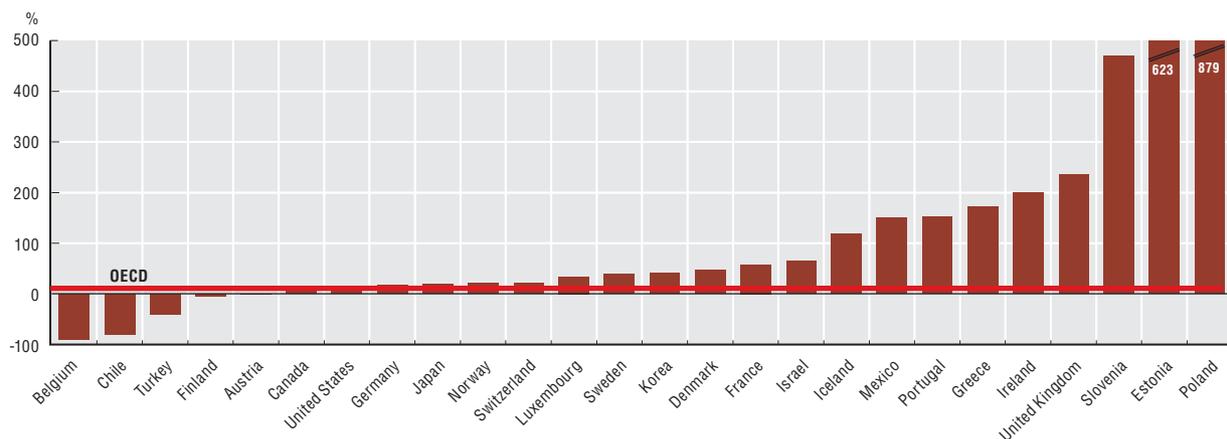
Figure 1.33. Change in the amounts of municipal waste landfilled per capita, since 2000



Source: OECD (2015), "Municipal Waste", OECD Environment Statistics (database).

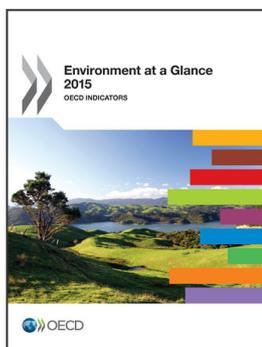
StatLink <http://dx.doi.org/10.1787/888933262006>

Figure 1.34. Change in the amounts of municipal waste recovered and composted per capita, since 2000



Source: OECD (2015), "Municipal Waste", OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888933262015>



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