

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%) along with a rise in private consumption expenditure (+33%) and GDP (+31%). As of the early 2000s this rise has been slowing down. Today, the quantity of municipal waste generated exceeds an estimated 660 million tonnes. A person living in the OECD area generates on average 530 kg of waste per year; this is 30 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.

Over the last 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. Landfill nonetheless remains the major disposal method in many OECD countries.

See Annex A for OECD trends in decoupling and treatment.

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 waste from commerce and trade, and of separate waste collections that may include hazardous waste from households such as waste batteries or electric and electronic equipments.

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

For additional notes, see Annex B.

Source

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

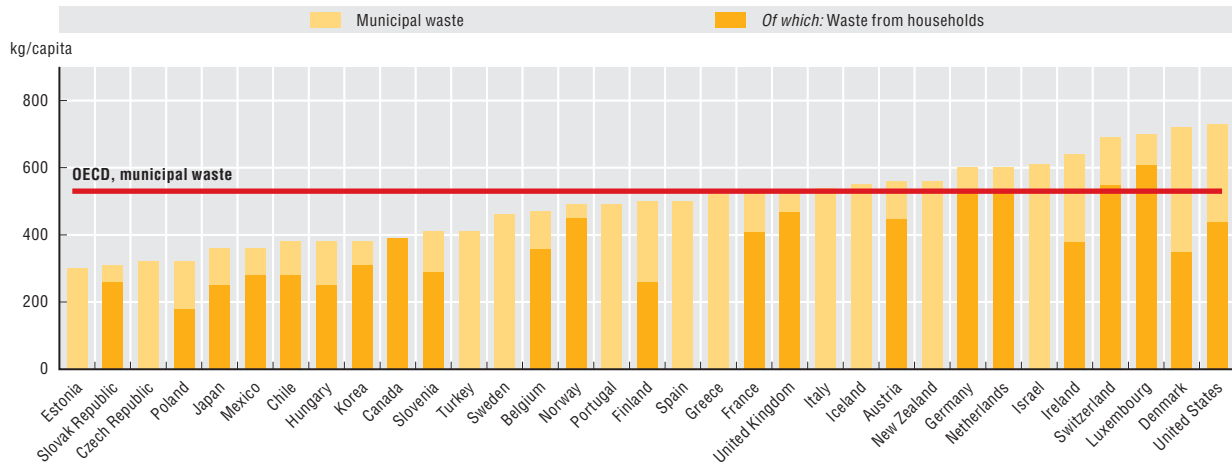
Further information

OECD Resource productivity and waste, www.oecd.org/env/waste.

OECD (2012), "Review of the OECD Environmental Strategy for the First Decade of the 21st Century", OECD, Paris, www.oecd.org/env/50032165.pdf.

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

Figure 1.25. **Municipal waste generation intensities per capita, 2011**



Source: OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888932977106>

Table 1.12. **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 |
| | 2011 | 1990-2011 | 2000-2011 | 2011 | 2011 | 1990-2011 |
| Australia | 640 | -7 | -7 | .. | 21 | 51 |
| Austria ¹ | 560 | 33 | 6 | 450 | 19 | 29 |
| Belgium ¹ | 470 | 38 | -2 | 360 | 17 | 25 |
| Canada ¹ | .. | .. | .. | 390 | 21 | 42 |
| Chile | 380 | 52 | 15 | 280 | 9 | 155 |
| Czech Republic | 320 | .. | -3 | .. | 11 | .. |
| Denmark | 720 | .. | .. | 350 | 16 | 28 |
| Estonia ¹ | 300 | .. | -20 | .. | 9 | .. |
| Finland | 500 | .. | 0 | 260 | 17 | 39 |
| France ¹ | 530 | 18 | 4 | 410 | 18 | 26 |
| Germany | 600 | .. | -6 | 530 | 19 | .. |
| Greece | 520 | 73 | 27 | .. | 17 | .. |
| Hungary ¹ | 380 | .. | -16 | 250 | 9 | 40 |
| Iceland ¹ | 550 | .. | 20 | .. | 17 | 20 |
| Ireland ¹ | 620 | .. | 7 | 380 | 17 | 68 |
| Israel | 610 | .. | -3 | .. | 15 | .. |
| Italy | 540 | .. | 6 | .. | 17 | 18 |
| Japan ¹ | 350 | -7 | -12 | 250 | 18 | 20 |
| Korea ¹ | 380 | .. | 6 | 310 | 14 | 117 |
| Luxembourg | 700 | .. | 8 | 610 | 26 | 32 |
| Mexico ¹ | 360 | .. | 16 | 280 | 9 | 35 |
| Netherlands | 600 | 20 | -2 | 530 | 17 | 26 |
| New Zealand | 560 | .. | -27 | .. | 15 | 35 |
| Norway ¹ | 490 | .. | 34 | 450 | 22 | 70 |
| Poland ¹ | 320 | -10 | -19 | 180 | 11 | 141 |
| Portugal ¹ | 490 | 63 | 11 | .. | 14 | 44 |
| Slovak Republic ¹ | 310 | .. | 15 | 260 | 11 | .. |
| Slovenia ¹ | 410 | .. | 1 | 290 | 14 | .. |
| Spain ¹ | 500 | .. | -18 | .. | 15 | 34 |
| Sweden | 460 | 24 | 7 | .. | 17 | 34 |
| Switzerland | 690 | 13 | 5 | 550 | 22 | 13 |
| Turkey ¹ | 410 | 14 | -15 | .. | 9 | 70 |
| United Kingdom ¹ | 530 | 13 | -9 | 470 | 21 | 45 |
| United States ¹ | 730 | -4 | -6 | 440 | 30 | 42 |
| OECD¹ | 530 | 6 | -5 | .. | 19 | .. |

1. See Annex B for country notes.

Source: OECD Environment Statistics (database).

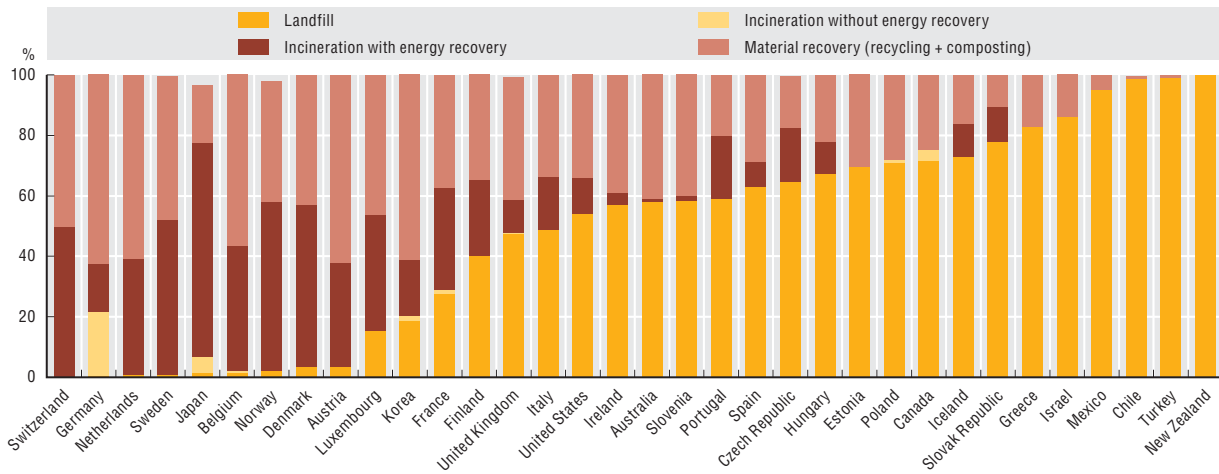
StatLink <http://dx.doi.org/10.1787/888932978303>

1. ENVIRONMENTAL TRENDS

Municipal waste

Figure 1.26. **Municipal waste disposal and recovery shares, 2011**

% of amounts treated



Source: OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888932977125>

Table 1.13. **Municipal waste disposal and recovery shares, 2011**

% of amounts treated

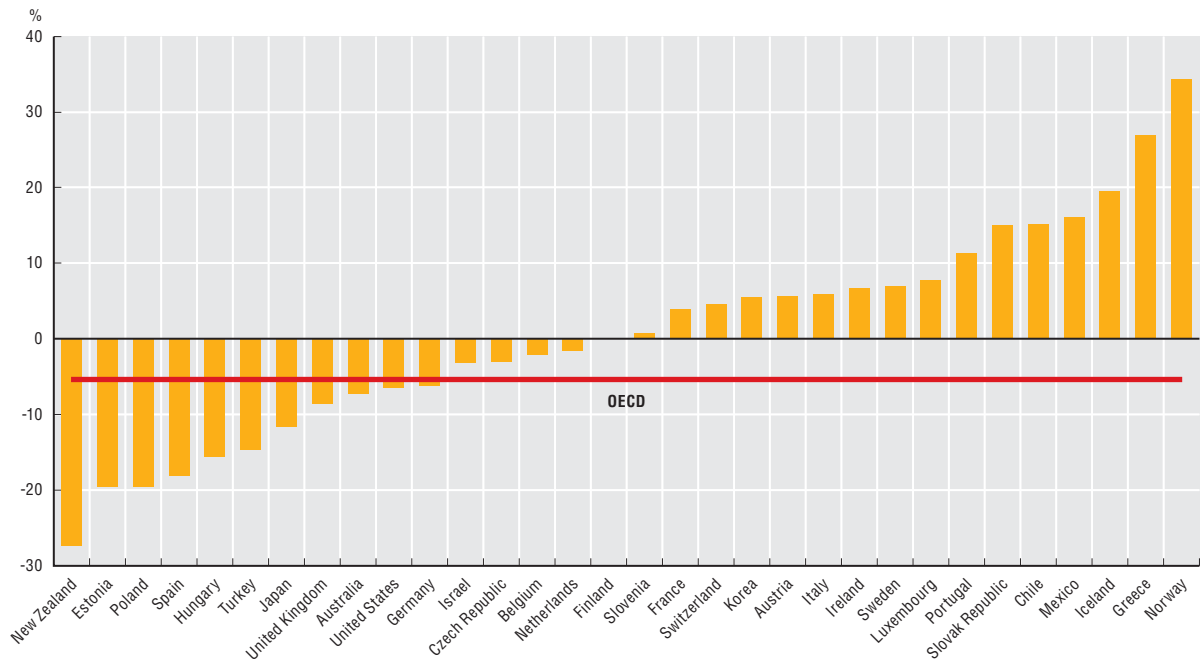
| | Recycling and composting | Incineration with energy recovery | Incineration without energy recovery | Landfill |
|------------------------------|--------------------------|-----------------------------------|--------------------------------------|-----------|
| Australia | 41 | 1 | - | 58 |
| Austria ¹ | 62 | 34 | - | 3 |
| Belgium ¹ | 57 | 41 | 1 | 1 |
| Canada ¹ | 25 | - | 4 | 72 |
| Chile | 1 | - | - | 99 |
| Czech Republic | 17 | 18 | - | 65 |
| Denmark | 43 | 54 | - | 3 |
| Estonia ¹ | 30 | - | - | 70 |
| Finland | 35 | 25 | - | 40 |
| France ¹ | 37 | 34 | 1 | 28 |
| Germany | 63 | 16 | 21 | - |
| Greece | 17 | - | - | 83 |
| Hungary ¹ | 22 | 11 | - | 67 |
| Iceland ¹ | 16 | 11 | - | 73 |
| Ireland ¹ | 39 | 4 | - | 57 |
| Israel | 14 | - | - | 86 |
| Italy | 34 | 17 | - | 49 |
| Japan ¹ | 19 | 70 | 6 | 2 |
| Korea ¹ | 61 | 19 | 2 | 19 |
| Luxembourg | 46 | 38 | - | 15 |
| Mexico ¹ | 5 | - | - | 95 |
| Netherlands | 61 | 38 | - | 1 |
| New Zealand | - | - | - | 100 |
| Norway ¹ | 40 | 56 | - | 2 |
| Poland ¹ | 28 | - | 1 | 71 |
| Portugal ¹ | 20 | 21 | - | 59 |
| Slovak Republic ¹ | 11 | 11 | - | 78 |
| Slovenia ¹ | 40 | 2 | - | 58 |
| Spain ¹ | 29 | 8 | - | 63 |
| Sweden | 47 | 51 | - | 1 |
| Switzerland | 50 | 50 | - | - |
| Turkey ¹ | 1 | - | - | 99 |
| United Kingdom ¹ | 40 | 11 | - | 48 |
| United States ¹ | 34 | 12 | - | 54 |
| OECD¹ | 33 | 19 | 3 | 46 |

1. See Annex B for country notes.

Source: OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888932978322>

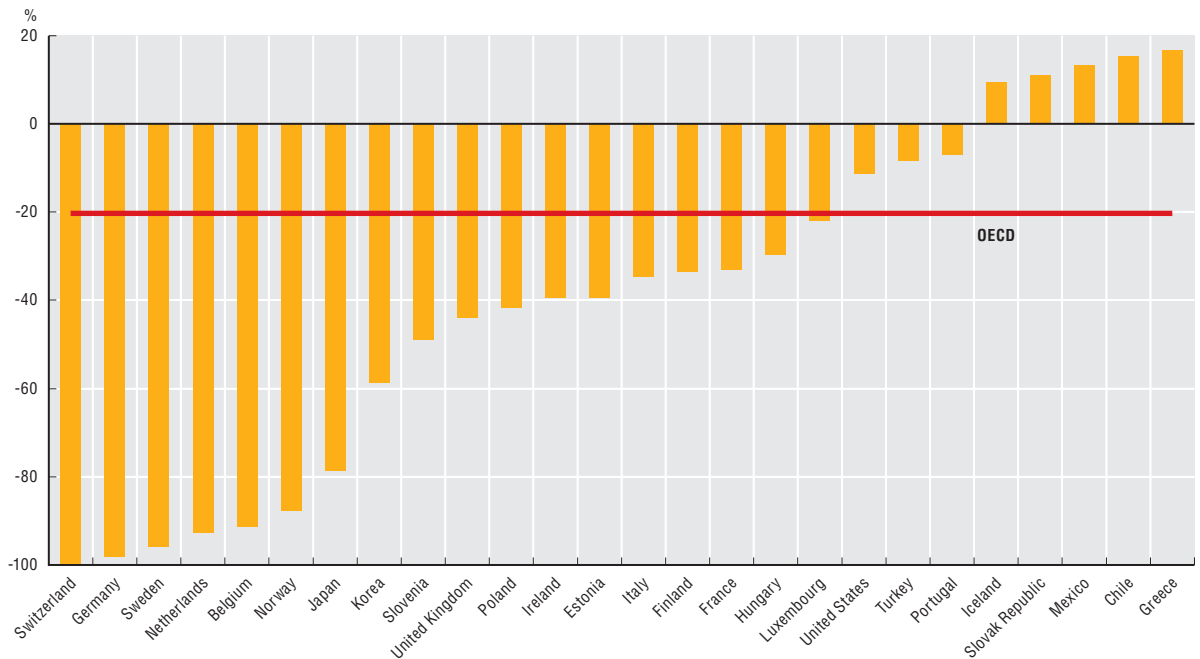
Figure 1.27. Change in the amounts of municipal waste generated per capita, since 2000



Source: OECD Environment Statistics (database);

StatLink <http://dx.doi.org/10.1787/888932977144>

Figure 1.28. Change in the amounts of municipal waste landfilled per capita, since 2000



Source: OECD Environment Statistics (database);

StatLink <http://dx.doi.org/10.1787/888932977163>



From:
Environment at a Glance 2013
OECD Indicators

Access the complete publication at:
<https://doi.org/10.1787/9789264185715-en>

Please cite this chapter as:

OECD (2013), "Municipal waste", in *Environment at a Glance 2013: OECD Indicators*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264185715-15-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.