

# Waste statistics - electrical and electronic equipment

Statistics Explained

*Data from: June 2021*

*Planned update: 15 December 2021*

This article gives an overview of developments relating to waste electrical and electronic equipment in the [European Union \(EU\)](#) and [EFTA countries](#). It is based on data collected within the framework of [Directive 2012/19/EU](#) on [waste electrical and electronic equipment \(WEEE\)](#).

The objective of the WEEE Directive is to promote reuse, collection, recycling and other forms of recovery of waste electrical and electronic equipment, in order to reduce the quantity of such waste to be disposed of. In 2018, the collection rate of WEEE was 47 % in the European Union (measured as the volume of WEEE collected in relation to the average amount of electronic equipment put on the market in the three preceding years, i.e. 2015-2017).

## Electronic equipment (EEE) put on the market and WEEE processed in the EU

Figure 1 shows trends in the amount of electrical and electronic equipment (EEE) put on the market and WEEE collected, treated, recovered, recycled and prepared for reuse in the EU in the years from 2011 to 2018. Missing data for some EU Member States have been estimated, in order to show the developments for the EU as a whole. Information on the time lag between the year in which the EEE is put on the market and the year when it becomes waste is currently not available in the data collected within the frame of the monitoring of the WEEE collection target. This collection target changed in connection with the revised monitoring introduced from the reference year 2016 onwards (see the Context section below for more details).

From year 2011 to year 2018, the amount of EEE put on the market in the EU evolved from 7.6 million tonnes in 2011 to 8.7 million tonnes in 2018, with a minimum peak of 7.3 million tonnes in 2013 and a maximum peak of 9.0 million tonnes in 2017 and a growth of 14.1 % in the whole period. In the same period, at EU level, the total WEEE collected improved from 3.0 to 4.0 million tonnes (+30.9 %), the total WEEE treated grew from 3.3 to 3.9 million tonnes (+19.5 %), total WEEE recovered developed from 2.7 to 3.6 million tonnes (+30.3 %) and total WEEE recycled and prepared for reuse evolved from 2.6 to 3.2 million tonnes (+26.2 %).

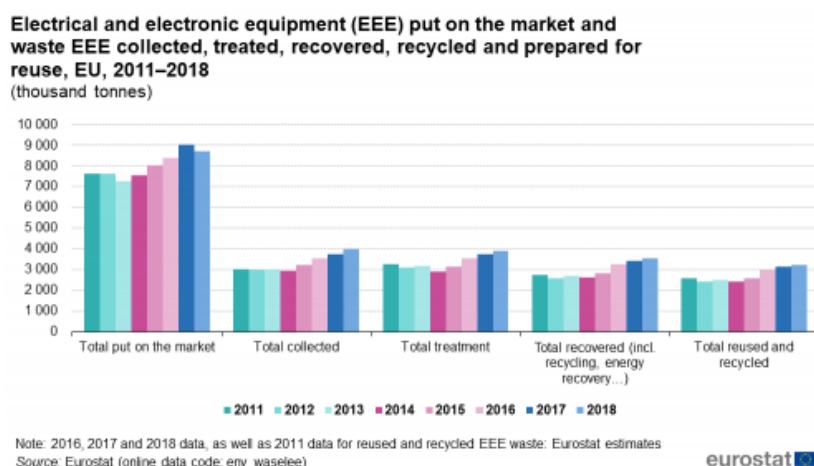


Figure 1: Electrical and electronic equipment (EEE) put on the market and waste EEE collected, treated, recovered, recycled and prepared for reuse, EU, 2011–2018 (thousand tonnes) Source: Eurostat (env\_waselee)

### Electronic equipment (EEE) put on the market and WEEE collected by country

Figure 2 shows the amount of WEEE collected in 2018 in comparison to the EEE put on the market in the three preceding years (2015-2017), both measured in kilograms (kg) per inhabitant. In the EU, the WEEE collected in year 2018 was estimated at 8.9 kg per inhabitant, while the average EEE put on the market over the period 2015-2017 was estimated at 19.1 kg per inhabitant. The variation in the collected amounts reflects differences in EEE consumption level between countries, as well as differences in the performance of their respective waste collection schemes.

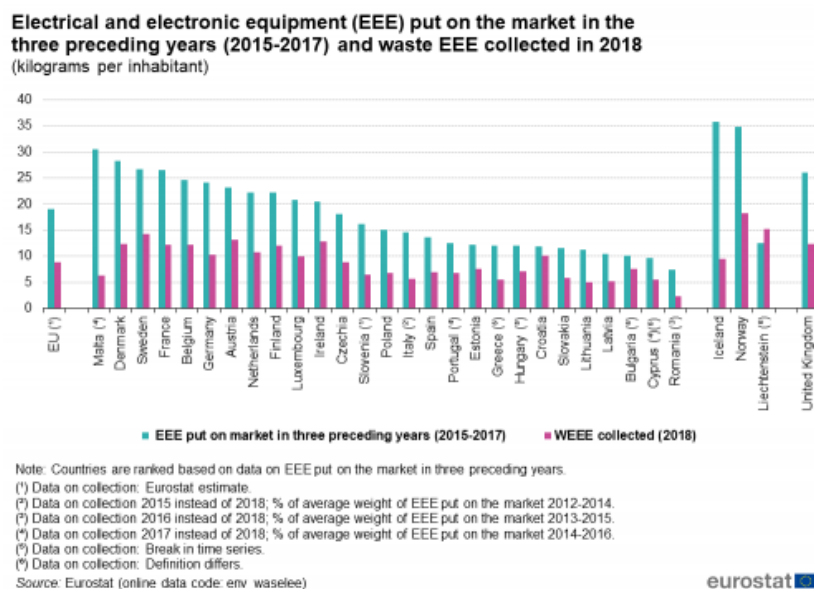


Figure 2: Electrical and electronic equipment (EEE) put on the market in the three preceding years (2015-2017) and waste EEE collected in 2018 (kilograms per inhabitant) Source: Eurostat (env\_waselee)

The recast of the [WEEE Directive \(2012/19/EU\)](#), which entered into force on 13 August 2012, introduced a stepped increase in the collection targets, taking effect for reference years 2016 and 2019 respectively. From reference year 2016 onwards, the annual collection target is defined as the ratio between the collected amount and the average weight of EEE put on the market in the three preceding years. The collection target is set at 45 % for reference year 2016 (as reported in 2018) and will rise to 65 % for reference year 2019 (to be reported

in 2021).<sup>1</sup>

In Figure 3, WEEE collected is shown as the share of the EEE put on the market. The share is calculated as the ratio of the amount of collected WEEE in 2018 in relation to the average amount of EEE put on the market in the three preceding years, i.e. 2015-2017. These ratios indicate how much more WEEE the EU Member States need to collect to achieve the collection targets of 45 % and 65 %, respectively.

In 2018, 18 EU Member States surpassed the 45 % WEEE collection target. Seven Member States reported rates falling in the range of 39.4 % to 44.7 % while two Member States were below 32 %.

Two Member States already met the new target of 65 % collection rate for WEEE in 2018, which comes into effect from reference year 2019 onwards and two Member States also came close to meeting the future 65 % target already in 2018.

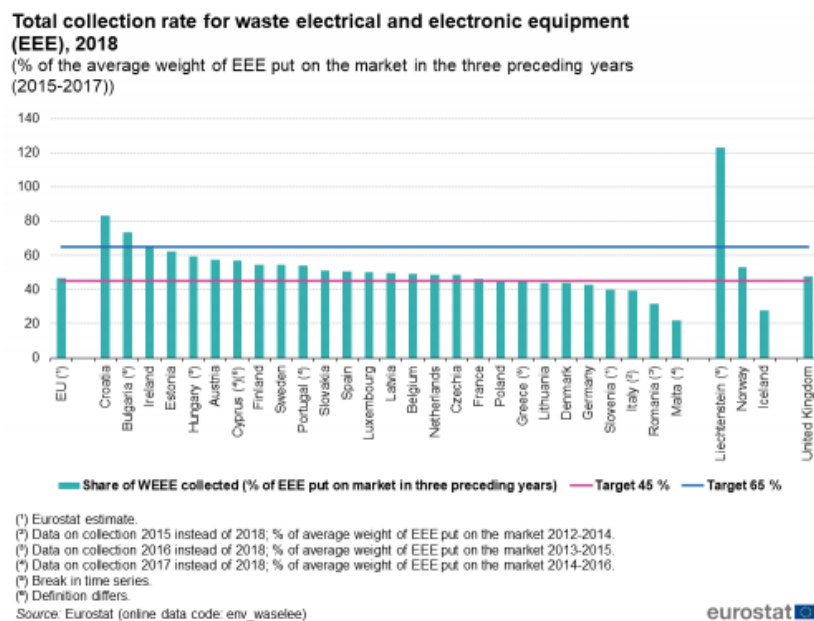


Figure 3: Total collection rate for waste electrical and electronic equipment (EEE), 2018 (% of the average weight of EEE put on the market in the three preceding years (2015-2017)) Source: Eurostat (env\_waselee)

### Source data for tables and graphs

- [Waste electrical and electronic equipment \(WEEE\) Excel file](#)

### Data sources

Data on WEEE are reported by the EU Member States according to [Decision 2005/396/EC](#) laying down rules for monitoring compliance of EU Member States and establishing data formats for the purposes of [Directive 2012/19/EU](#) of the European Parliament and of the Council on waste electrical and electronic equipment.

Member States have the obligation to report to the Commission within 18 months of the end of the reference year on the achievement of the targets for WEEE collection, re-use, recycling and / or recovery on the basis of [Decision 2005/369/EC](#) . This Commission decision remained valid after [Directive 2002/96/EC](#) was repealed and replaced by [Directive 2012/19/EU](#) (article 25).

<sup>1</sup>The collection rate for reference year 2019 may also be calculated on the basis of WEEE generated, instead of on the average weight of EEE put on the market in the three preceding years. Member States will be able to choose which of these two equivalent methods they use to report on their achievement towards the collection rate target.

The reported data become available in the Eurostat database approximately three months after the reporting deadline. Data are available from reference year 2005 onwards.

## Context

WEEE is a complex mixture of materials and components that — because of their hazardous content— can cause major environmental and health problems if not properly managed. Moreover, production of modern electrical and electronic equipment requires the use of rare and expensive resources. To improve the environmental management of WEEE, contribute to a circular economy and enhance resource efficiency, the advancement of collection, treatment and recycling of electronics at the end of their life is essential.

The management of WEEE is regulated by [Directive 2012/19/EU](#) of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE).

The first WEEE Directive ( [Directive 2002/96/EC](#) ) entered into force in February 2003. The Directive provided for the creation of collection schemes where consumers return their WEEE free of charge. These schemes aim to increase the recycling and / or re-use of WEEE.

Directive 2002/96/EC was repealed on 15 February 2014 and replaced by Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), which introduces a stepped increase in collection targets for years 2016 and 2019. Furthermore, from reference year 2018 onwards, the scope of the Directive is extended to all categories of EEE. Consequently, the definition and number of the categories will change.

Annex I to Directive 2012/19/EU defines 10 categories of electrical and electronic equipment covered by the Directive:

1. Large household appliances
2. Small household appliances
3. IT and telecommunications equipment
4. Consumer equipment and photovoltaic panels
5. Lighting equipment
6. Electrical and electronic tools (with the exception of large-scale stationary industrial tools)
7. Toys, leisure and sports equipment
8. Medical devices (with the exception of all implanted and infected products)
9. Monitoring and control instruments
10. Automatic dispensers

Annex II contains an indicative list of products falling under the categories in Annex I.

## Other articles

- [Waste statistics](#)
- [Waste management indicators](#)
- [Municipal waste statistics](#)
- [Waste statistics - recycling of batteries and accumulators](#)
- [End-of-life vehicle statistics](#)

- [Packaging waste statistics](#)
- [Recycling – secondary material price indicator](#)
- [Waste shipment statistics](#)
- [Waste shipment statistics based on the European list of waste codes](#)

## Publications

- [Energy, transport and environment indicators — 2019 edition](#)

## Main tables

- [Waste](#) , see:

Waste streams ( [t\\_env\\_waselee](#) )

## Database

- [Waste](#) , see:

Waste ( [env\\_was](#) )

Waste streams ( [env\\_wasst](#) )

Waste electrical and electronic equipment (WEEE) by waste management operations ( [env\\_waselee](#) )

## Dedicated section

- [Waste](#)

## Methodology

- [Waste electrical and electronic equipment \(WEEE\) by waste management operations \(ESMS metadata file — env\\_waselee\\_esms\)](#)
- [Country-specific notes on waste electrical and electronic equipment \(WEEE\)](#)

## Legislation

- [Directive 2012/19/EU on waste electrical and electronic equipment \(WEEE\)](#)
- [Amended by Directive \(EU\) 2018/849 of the European Parliament and of the Council of 30 May 2018 amending Directives 2000/53/EC on end-of-life vehicles, 2006/66/EC on batteries and accumulators and waste batteries and accumulators, and 2012/19/EU on waste electrical and electronic equipment](#)
- [Commission Decision 2005/369/EC](#)
- [Commission Implementing Decision \(EU\) 2019/2193 of 17 December 2019](#)
- [Corrigendum to Commission Implementing Decision \(EU\) 2019/2193](#)
- [Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment \(WEEE\) \(repealed\)](#)
- [Summaries of EU legislation: Making the most of waste electrical and electronic equipment](#)

## External links

- [European Commission — DG Environment — Waste Electrical & Electronic Equipment \(WEEE\)](#)