



# Update of WEEE Collection Rates, Targets, Flows, and Hoarding – 2021

in the EU-27, United Kingdom, Norway, Switzerland, and Iceland

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Study conducted by the United Nations Institute for Training and Research (UNITAR) Sustainable Cycles (SCYCLE) Programme

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# Executive Summary

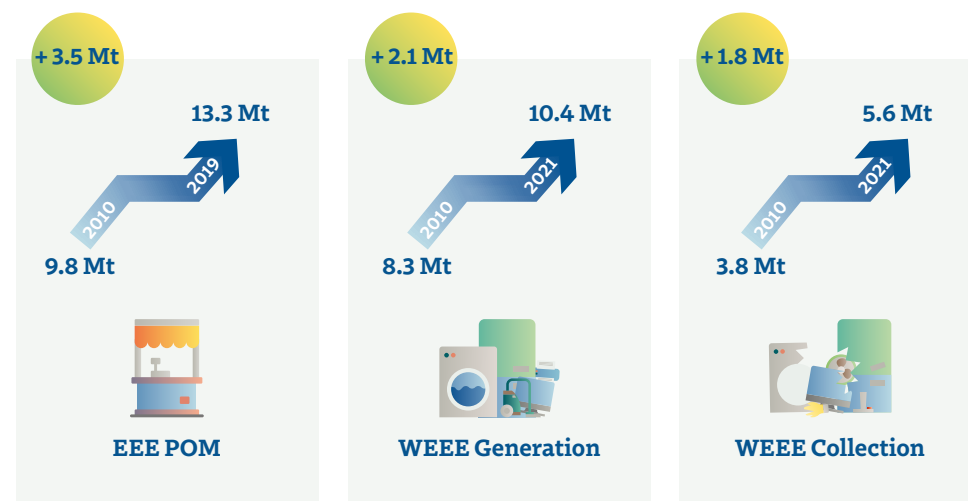
The European Union (EU) has legislated Waste Electrical and Electronic Equipment (WEEE) management since 2002, in the Directive 2002/96/EC and Directive 2012/19/EU, hereafter referred to as the WEEE Directives. This publication provides key statistics of WEEE flows, collection rates in the EU-27, Norway, United Kingdom, Switzerland, and Iceland from 2010 to 2021 by integrating several data sources. This is an update of the timeseries of the previous study “In-depth Review of the WEEE Collection Rates and Targets in the EU-28, Norway, Switzerland, and Iceland” by UNITAR [1]. Data on Electrical and Electronic Equipment (EEE) Placed on Market (POM) and WEEE collection managed by formal collection system Figures up to 2019 are based on the data collected within the framework of the WEEE Directives. For the years 2020 and 2021, EEE POM and WEEE collection data are based on the WEEE Forum Key Figures database. The WEEE flows that are not managed and documented by the formal WEEE management systems have been researched and estimated, thereby updating the previous UNITAR work [1] as supplemented with recent studies. Finally, the study includes statistics on household stocks that are based on detailed data from internal datasets of UNITAR combined with six nationally representative surveys coordinated by producer responsibility organizations (PROs) of the WEEE Forum among 8,775 households in total.

The study reveals that the amount of EEE POM in the 27 Member States of the EU, Norway, United Kingdom, Switzerland, and Iceland increased from 9.8 million metric tonnes, hereafter referred to as Mt,<sup>(1)</sup> in 2010 to 13.3 Mt in 2019 (25.2 kg/inhabitant).<sup>(2)</sup> The WEEE generated also shows an increase of 2.1 Mt, from 8.3 Mt in 2010 to 10.4 Mt (19.6 kg/inhabitant) in 2021. The documented formal collection of WEEE shows an increase of 1.8 Mt, from 3.8 Mt in 2010 to 5.6 Mt (10.5 kg/inhabitant) in 2021.

## The goal of this study is to update the WEEE flows from 2010 to 2021.

The main data sources used in this publication are:

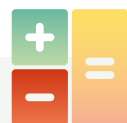
- Official EU WEEE Directive reporting
- WEEE Forum Key Figures database
- Recent studies on WEEE
- UNITAR’s internal datasets
- Household surveys



<sup>(1)</sup> 1 Mt equals 1 billion (1,000,000,000) kg. <sup>(2)</sup> Any estimates on official EEE POM data beginning in and since 2020 could not be reasonably estimated with the provided data. However, estimates for EEE POM for 2020 and 2021 were included for the WEEE generated calculations, but had minor impact on the outcomes of WEEE generated.

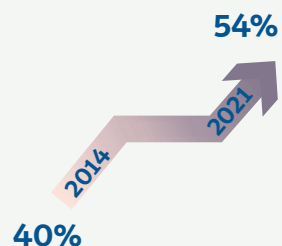
WEEE Directive describes two methods for calculating the collection rate in the EU Member States. The “WEEE Generated method” is calculated by mass of WEEE collected divided by the mass of WEEE Generated in the same year. The collection rate increased from 40% in 2014 to 54% in 2021 using this method. The increases are mainly driven by the significant increases of the WEEE collection compared to the WEEE Generation. The second method is the ‘EEE POM method’, which is calculated as the mass of WEEE collected divided by the average amount of EEE POM in the three preceding years. The collection rate using the EEE POM method increased from 39% to 50% from 2013 to 2016. From 2016 to 2020, the collection rate dropped to 44%. Despite the significant increases of WEEE collection, the decrease in the collection rate is caused by even larger increases of the EEE POM, causing the collection rate to decrease, using this method.

## COLLECTION RATE

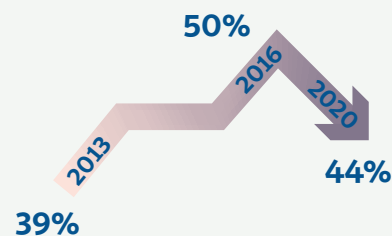


2 methods

WEEE Generated method  
(on average)



EEE POM method  
(on average)



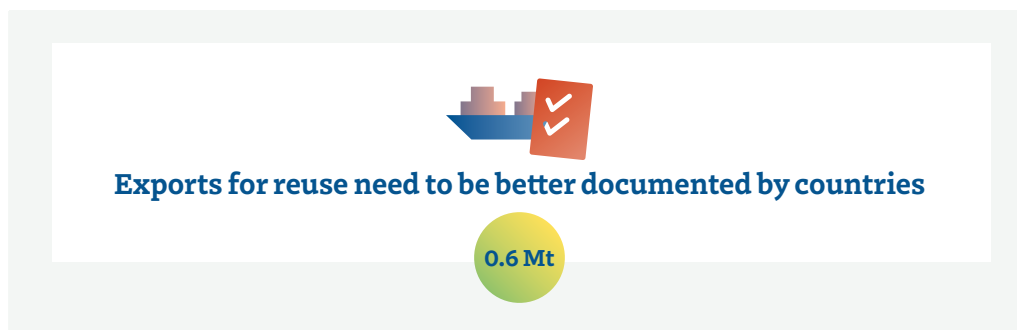
The Member States of the EU can annually choose either method for the calculation of the WEEE collection targets. For the WEEE Generated method, the target is 85%, and for EEE POM, the target has been 65% since 2019. In considering all individual countries, only three of the 27 EU Member States (Croatia, Bulgaria, and Poland) have reached the collection target of the WEEE Directive, according to the latest set of data available in this study. Switzerland does not have such targets in place, but would meet the EU target. The countries that reach the targets seem to contradict both the overall trend and the underlying factors observed across the rest of the EU. Besides official government statistics, there are no additional public reports or underlying information available that allow for a better understanding of the collection rates.

**3 out of 27 EU  
Member States**  
meet the targets  
set in the WEEE  
Directive

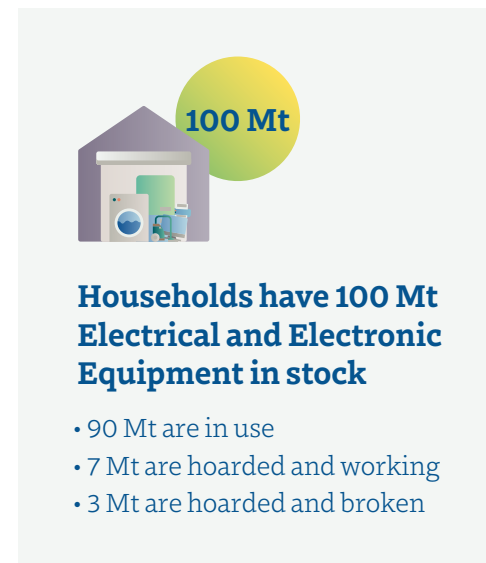


One of the obstacles in reaching collection targets is that considerable amounts of WEEE are diverted to other, undocumented WEEE flows. Unwanted WEEE flows need to be reduced and steered into the formal WEEE management regime. It is estimated that 1.4 Mt (2.7 kg/inhabitant) was collected with metal scrap to be recycled, but not with the same environmental and material efficiency standards as the formally managed WEEE. Approximately 0.8 Mt - 1.5 kg/inhabitant - of WEEE is estimated as being disposed of with mixed residual waste and ends up in incinerators and landfills. It is estimated that 0.5 Mt - 1 kg/inhabitant - is illegally exported outside the EU27. As well, 0.6 Mt - 1.1 kg/inhabitant - of EEE is estimated to be exported for reuse. The exports for reuse and illegal exports are

hardly monitored in most countries, also due to the lack of trade codes for used-EEE. Better monitoring of used-EEE exports is essential in order to distinguish legal used EEE exports from exports of illegal WEEE. WEEE illegally exported often ends up illegally dumped in countries with no formal management systems. The legal exports of used-EEE could be corrected in the collection target, as they do not typically become waste in the country where they have been placed on the market initially. In the previous study over reference year 2019, the whereabouts of 2.7 Mt of WEEE were unknown. In this study, the unknown has reduced to 1.5 Mt of WEEE – 1.9 kg/inhabitant – over 2021. The unknown WEEE can still be part of the previous mentioned flows or could be uncertainties in the calculations.



Novel statistics on hoarding – of used EEE and WEEE stored in households – show that households own an average of 74 EEE items (excluding lamps and luminaires), of which 61 items are in use, nine are hoarded but working, and four are hoarded and not working. The total mass of items in households is 90 Mt, of which 7 Mt is hoarded and working, and 3 Mt is hoarded and broken. The small items (including lamps and luminaires) dominate when counted as individual items, whereas large items dominate by weight. The types of EEE or WEEE that are mostly hoarded by comparing the stock in households of that equipment are smaller items, such as small IT equipment (17%) and small equipment (14%). Screens and monitors are third-highest at 14% and are comprised of obsolete cathode ray tube monitors, televisions, flat-panels monitors, and televisions replaced by laptops. The lowest hoarding rates are found for category large equipment (9%) and category temperature exchange equipment (8%), which are large in size and therefore often less hoarded when the use phase is over.



Overall, the latest data show that over the past decade, the WEEE generation increased by 2.1 Mt, and the collection of WEEE also increased by 1.8 Mt, leading to a collection rate of 54% when using the WEEE Generation calculation method. By contrast, other regions in the world show slower growth rates in WEEE collection, and the global average collection rate is at 17.4% [2]. However, there are still challenges with WEEE management in the investigated countries.

The latest data shows that only three EU member states reach the collection targets, despite the other observed trends in other countries. The consumption of electronics continued to increase by 3.5 Mt over the past decade. The growth of EEE POM makes it even harder to reach the EEE POM-based target in the future and continues to impact the environment in mining and production phases and in fueling future WEEE generation.

Likewise, there are some untapped potentials in WEEE through circular economy strategies. The 10 Mt of hoarded items could possibly be repaired or directly be brought back into use. This could substitute new electronic and electrical equipment being placed on the market and lower consumption, which lowers environmental impact in mining and production phases and prevents the generation of WEEE in the future. Additionally, through extending product lifespans, otherwise discarded items are not discarded and prevent the generation of WEEE in the same year. If lifespan extension is not possible, the broken hoarded items can be handed over to formal recyclers to turn them into secondary raw materials, thereby increasing collection rates and mitigating the environmental impact in mining and production.

The diversion of non-formal WEEE flows – which are to date 1.4 Mt of WEEE in metal scrap, 0.8 Mt found in waste bins, and 0.5 Mt of illegal exported WEEE – into formal management schemes is increasingly essential, as WEEE contains several critical raw materials that create a great opportunity to be collected and turned into secondary raw materials in EU recycling facilities. This has the potential to substitute metals that would

have otherwise been mined and put through that lower environmental pressure in mining phase. As well, better collection and recycling rates increase access to critical raw materials in the EU, which is essential for reaching the Sustainable Development Goals, such as on affordable and clean energy (SDG 7), responsible consumption and production (SDG 12), and climate action (SDG 13).

### Circular strategies of EEE and WEEE have the potential to:

- Reduce consumption
- Prevent WEEE generation
- Contribute to several Sustainable Development Goals
- Improve access to recycled critical raw materials



...of hoarded working appliances could potentially be brought back into use to lower consumption.



...of hoarded and broken WEEE can be handed over to formal operators to be repaired or recycled.



# WEEE Flows

## Method

The amount of electrical and electronic equipment (EEE) Placed on the Market (EEE POM) in the 27 Member States of the European Union (EU-27) and Norway, United Kingdom, Switzerland, and Iceland has been researched from 2010 to 2021. This is an extension of the in-depth review on collection rates carried out by UNITAR and published in 2020 [1]. Officially reported Eurostat data is used for 2019. For 2020 and 2021, WEEE Forum Key Figures data and estimates for missing data developed in previous projects [1,3,4] have been used. WEEE Generation has been calculated based on the common calculation methodology for the weight of EEE POM and WEEE Generated stipulated in the Commission Implementing Regulation (EU) 2017/699 of 18 April 2017, establishing a common methodology for the calculation of the weight of each Member State's EEE placed on the market and a common methodology for the calculation of the quantity of waste electrical and electronic equipment (WEEE) generated by weight in each Member State.<sup>(3)</sup> For the non-formal WEEE flows and exports for reuse, the data from the in-depth review on collection rates carried out by UNITAR [1] was updated with novel studies conducted in France [5], Luxembourg [6], Iceland [7], Norway [8], Ireland [9-11], the Czech Republic [12], and Sweden [13] and as published in the *Global Transboundary Flows Monitor* [14]. For 2016 through 2018, the United Kingdom data

was reported and obtained through Eurostat, which included substantiated estimates of large household appliances collected and recycled as part of the light iron waste stream. Since 2019, no data has been reported to Eurostat, and the only published data available is that reported by producer responsibility organisations and approved authorised treatment facilities to the authorities to demonstrate compliance with the United Kingdom WEEE Regulations 2013. It has not been possible to obtain publicly available data for substantiated estimates in the United Kingdom from 2019. In 2018, substantiated estimates equated to approximately 270 kt, which is no longer included in the data reported for collection rates [1]. These 270 kt were reallocated to the WEEE mixed in metal scrap from 2019 on. Other countries officially using substantiated estimates for the EU reporting are Austria and Ireland. In Ireland's case, substantiated estimates were added to the WEEE Forum Key Figures data for 2021. Portugal was also using substantiated estimates until 2018, but in this study, Eurostat data for 2019 was used, which does not include them.<sup>(4)</sup> Where necessary, the values were nowcasted to the reference year 2021, using the growth of the WEEE Generation. With the nowcasting and estimates of missing values, special attention has been attributed to the use of substantiated estimates<sup>(5)</sup> by countries and depending on whether countries continued or stopped using them in the recent years.



<sup>(3)</sup> EUR-Lex - 32019D2193 - EN - EUR-Lex (europa.eu), Implementation of the WEEE Directive. <sup>(4)</sup> Quality Report according to Commission Implementing Decision (EU) 2019/2193 (mandatory from reference year 2019). <sup>(5)</sup> Substantiated estimates are estimates that Member States can use to report to the EC and are based on reliable scientific research studies of WEEE. At the time of implementation of the WEEE Directive, it was already envisaged that the targets are ambitious for some countries, and as such, the use of substantiated estimates for reporting WEEE collection was considered appropriate.



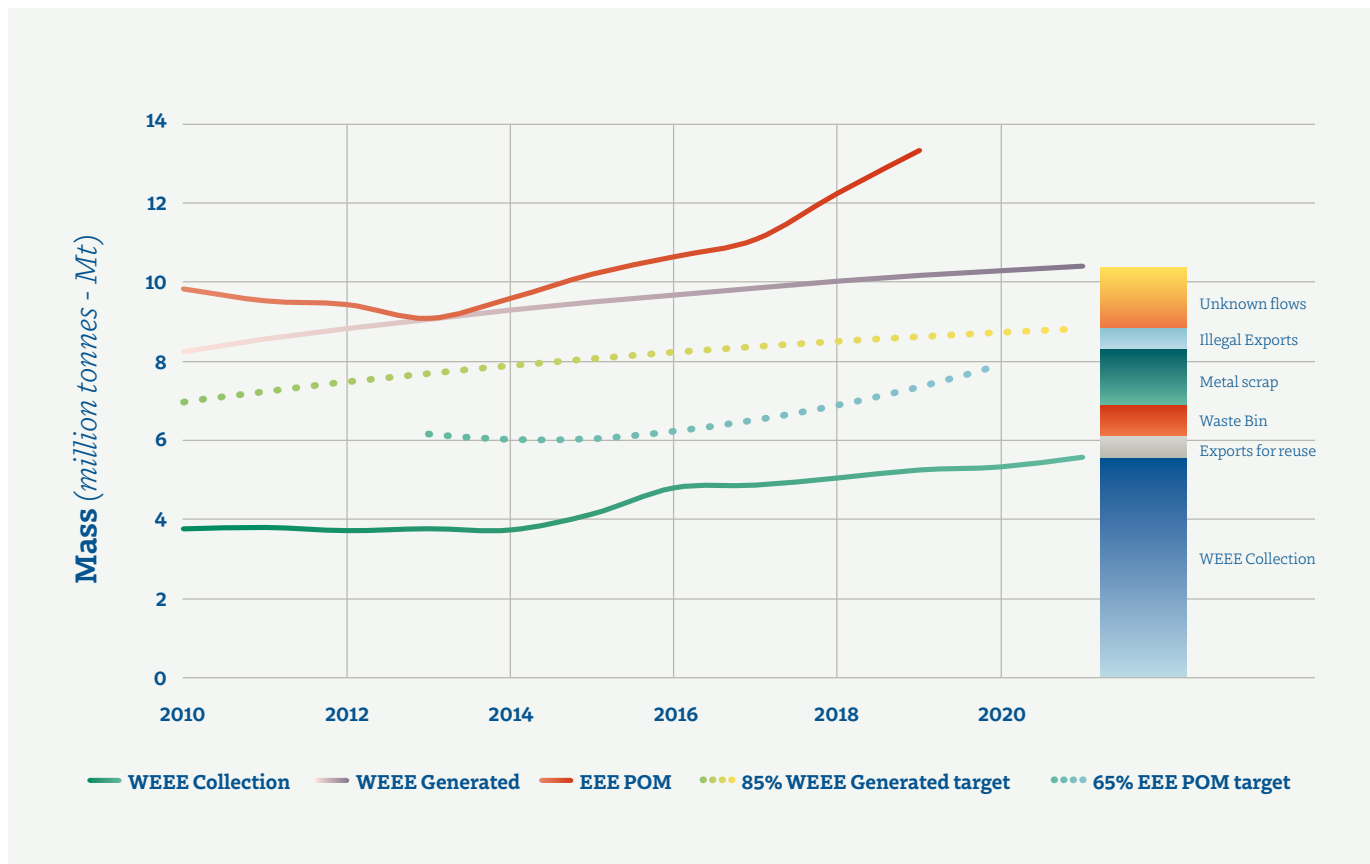
## Results

The main findings are shown in Figure 1 and reveal that EEE POM decreased from 9.8 Mt in 2010 to 9.1 Mt in 2013 and increased steadily to 13.3 Mt in 2019. The EEE POM data from 2020 and 2021 could not be reasonably estimated with the provided data. Due to

the overall increases in volumes of EEE POM in the past, the generated WEEE showed an increase of 1.8 Mt (from 8.3 Mt in 2010 to 10.4 Mt – 19.6 kg/inhabitant – in 2021). Alongside the growth of the generated WEEE, the formal collection of WEEE grew from 3.8 Mt to 5.6 Mt (10.5 kg/inhabitant) in 2021.

### Figure 1

*Development of the WEEE generated, WEEE collection, WEEE flows, and targets for the Member States of the EU-27, United Kingdom, Switzerland, Iceland, and Norway*



Data of WEEE that is not formally collected and recycled shows that:

- 1.4 Mt (2.7 kg/inhabitant) of WEEE is collected together with metal scrap and not declared as WEEE, and despite being recycled, this WEEE may be treated at sites that do not comply with the WEEE Directive requirements.
- 0.8 Mt (1.5 kg/inhabitant) of WEEE is estimated to be discarded as municipal waste and subsequently landfilled or incinerated.
- Illegal exports of WEEE outside of the EU are estimated to be 0.5 Mt (1 kg/inhabitant) [3], but are not largely documented and seized [3, 14].
- The amount exported for reuse is estimated at 0.6 Mt (1 kg/inhabitant), but these amounts are not widely registered or reported in the countries surveyed.



# WEEE

## Collection Rates

### Method

The amount of EEE POM in the EU-27 and Norway, United Kingdom, Switzerland, and Iceland from the previous section has been used to compute the collection rates. The recast of the [WEEE Directive \(2012/19/EU\)](#), which entered into force on 13 August 2012, introduced an incremental increase in the collection targets and two calculation methodologies. The first presented methodology calculates the collection rate as the mass of WEEE collected divided by average amount of EEE POM in the three preceding years and took effect starting in 2016. Since 2016, the annual collection target has been defined as the ratio between the collected amount and the average weight of EEE placed on the market in the three preceding years. The collection target was set at 45% for 2016 and has risen to 65% since 2019. However, according to the derogation set out in article 7 point 3 of the WEEE Directive, a number of countries may decide to postpone the achievement of the collection target until 14 August 2021. These countries are: Bulgaria, Czechia, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia, and Slovakia. It should be noted that before 2016, a flat target of 4 kg/inhabitant was in force for each EU Member State.

### Results

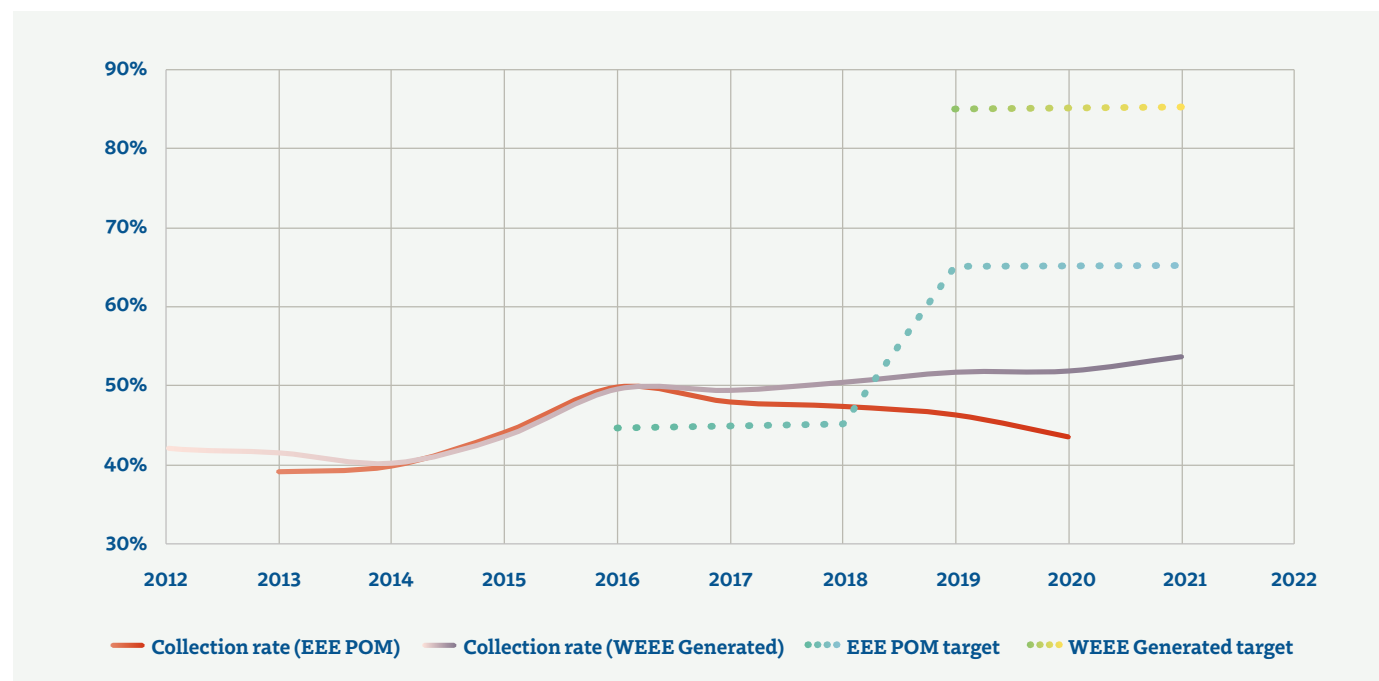
Figure 2 shows the development of the collection rates with the two calculation methods and respective targets. With the method measured as the mass of

WEEE collected in relation to the average amount of EEE POM in the three preceding years, the collection rate increased from 39% to 50% from 2013 to 2016. From 2016 to 2020, the collection rate decreased to 44%. The recent decrease is caused by the increase of the EEE POM over the three previous years (see Figure 1). With the method measured as the mass of WEEE collected in relation to

the average amount of WEEE Generated, the collection rate steadily increased from 40 percent in 2013 to 54% in 2021. This growth is driven by the growth of WEEE collection as observed in Figure 1. The current collection rates indicate that on the whole, the region being analysed (EU-27, United Kingdom, Norway, Switzerland, and Iceland) does not reach either collection target.

**Figure 2**

*Collection rates in the EU-27, United Kingdom, Norway, Switzerland, and Iceland using two methods (EEE POM and WEEE Generated) and their respective targets*

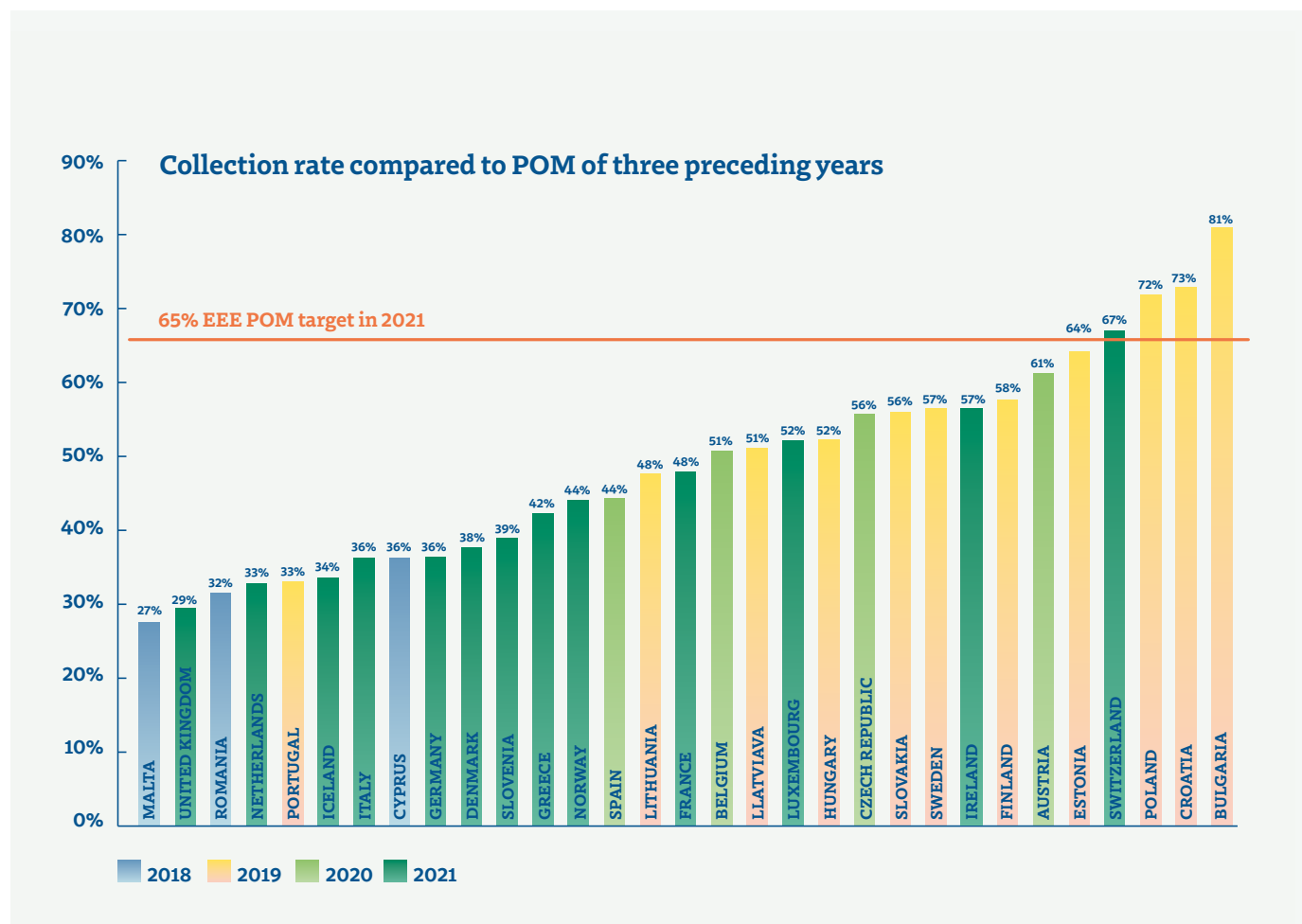


Each Member State must comply with one of the two collection targets. Their performance against the collection rates is displayed in Figure 3 for the EEE POM methodology and in Figure 4 for the WEEE Generated methodology, and further shown in the ANNEX. The analysis shows that there is a total of four countries that comply with one of the two targets, of which three are EU Member states (Poland, Bulgaria, and Croatia), with the fourth being Switzerland.

Figure 3 shows that 17 countries (including 16 EU Member States) surpassed the 45% collection rate. Three countries (including two EU Members) reported rates falling in the range of 40-45%, while 11 countries (including nine Member States) remained below 40%. Only four countries (including three Member States) met the new and more ambitious target of 65% for WEEE collection that entered into force in 2019.

**Figure 3**

*Overview of collection rate compared to EEE POM of three preceding years for Member States of the EU-27, United Kingdom<sup>(6)</sup>, Switzerland, Iceland, and Norway*



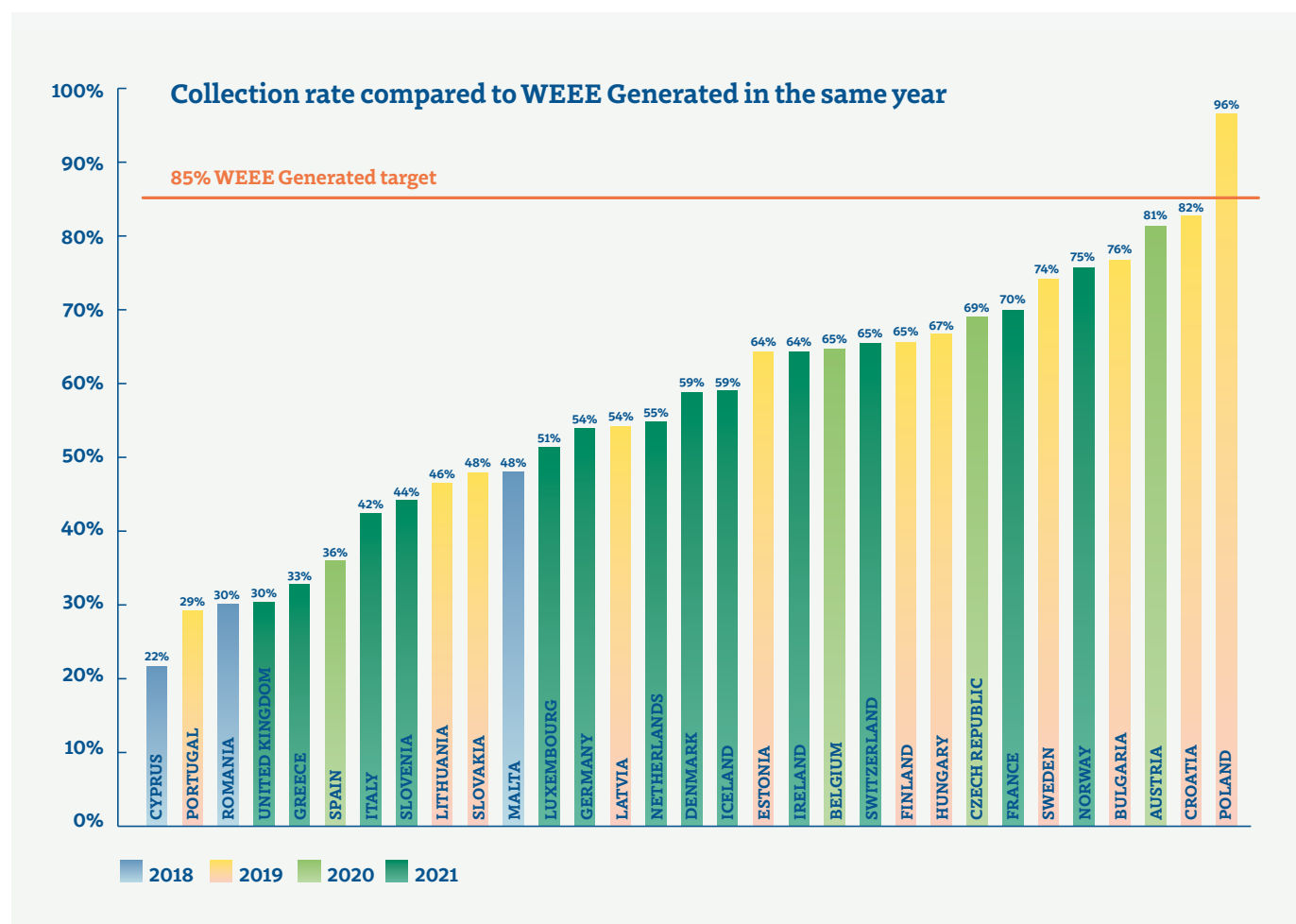
<sup>(6)</sup> For 2016 through 2018, the United Kingdom data was reported and obtained through Eurostat, which included substantiated estimates of large household appliances collected and recycled as part of the light iron waste stream (a reporting mechanism allowable under the WEEE Directive). Since 2019, no data has been reported to Eurostat, and the only published data available is that reported by producer responsibility organisations and approved authorised treatment facilities to the authorities to demonstrate compliance with the United Kingdom WEEE Regulations 2013. It has not been possible to obtain publicly available data for substantiated estimates in the UK since 2019, but in 2018 substantiated estimates equated to approximately 270 kt, which is no longer included in the data reported for collection rates - this added an additional 15.8% to the reported return rate. The data used for the assessment (WEEE Forum Key Figures) does not include the non-obligated WEEE (data reported by the treatment facilities), which equates to 40 kt for 2021 and would add an additional 2.4% to the collection rate figure.

Figure 4 shows the collection rate for the WEEE generated methodology. For this calculation method, the WEEE Directive sets a target collection rate of 85% from reference year 2019 on. Only one country (Poland, an EU Member State) surpassed the 85% collection rate and met the more ambitious target of 85% collection rate for WEEE collection. Nineteen (19) countries show rates falling in the range of 50% to 85%, while 11 countries remained below 50%.

The countries that reach the targets seem to contradict both the overall trend and the underlying factors observed across the rest of the EU. Besides official government statistics, there are no additional public reports or underlying information available that allow for a better understanding of the collection rates of the countries that met the targets.

**Figure 4**

*Overview of collection rate compared to WEEE Generation for Member States of the EU-27, United Kingdom<sup>(7)</sup>, Switzerland, Iceland, and Norway in the same year*



<sup>(7)</sup> For 2016 through 2018, the United Kingdom data was reported and obtained through Eurostat, which included substantiated estimates of large household appliances collected and recycled as part of the light iron waste stream (a reporting mechanism allowable under the WEEE Directive). Since 2019, no data has been reported to Eurostat, and the only published data available is that reported by producer responsibility organisations and approved authorised treatment facilities to the authorities to demonstrate compliance with the United Kingdom WEEE Regulations 2013. It has not been possible to obtain publicly available data for substantiated estimates in the UK since 2019, but in 2018, substantiated estimates equated to approximately 270 kt, which is no longer included in the data reported for collection rates - this added an additional 17.2% to the reported return rate. The data used for the assessment (WEEE Forum Key Figures) does not include the non-obligated WEEE (data reported by the treatment facilities), which equates to 40 kt for 2021 and would add an additional 2.3% to the collection rate figure.

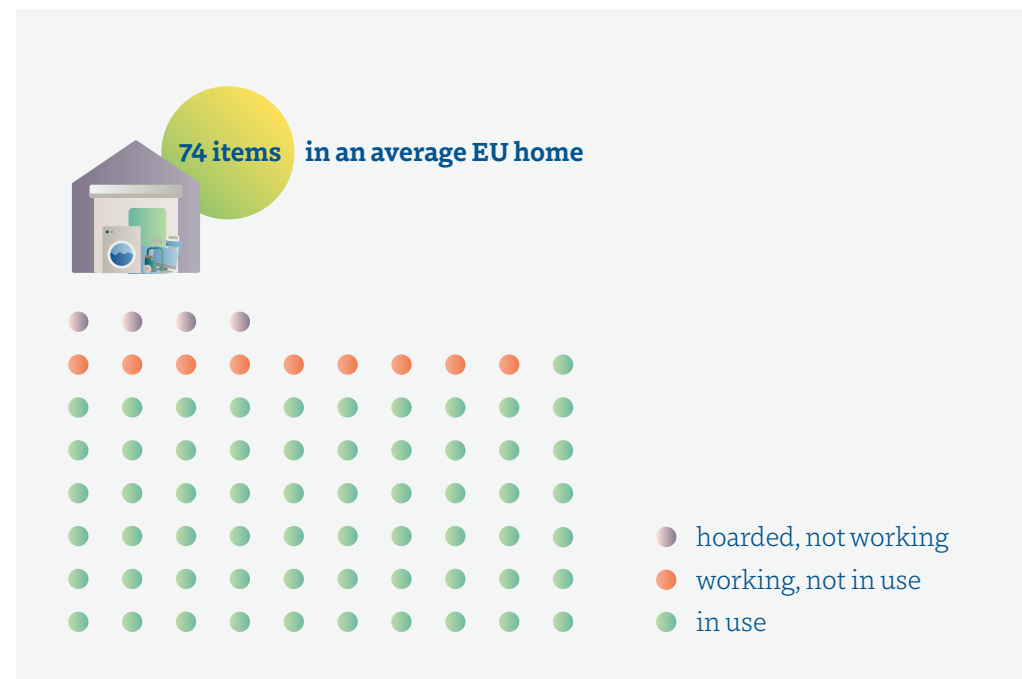
# Hoarding of EEE and WEEE

## Method

In 2022, in the context of the International E-waste Day, PROs in the WEEE Forum (ECOTIC, Electrão, Erion WEEE, REPIC, Stichting OPEN, ZEOS) with operations in Romania, Portugal, Italy, United Kingdom, Netherlands, and Slovenia performed a data collection exercise through nationally representative surveys to households. The results were compared with a recent study from UNITAR in Lebanon [15]. The study was produced through a standardised household survey protocol designed by UNITAR and carried out by companies specialised in executing representative surveys through the members of the WEEE Forum. In total, 8,775 households were surveyed. The results were aggregated to the UNU-KEYs (the global statistical standard product classification for WEEE statistics [16]), and average hoarding rates per UNU-KEY were computed. The micro data from the Global E-waste Monitor in stock in pieces and kg was used to calculate the countries' stock per UNU-KEY. A split was made between business and household stock per UNU-KEY by using the outcomes of the household surveys (which was the household stock) and the totals of the most recent dataset used for the latest [2] (forthcoming) Global E-waste Monitor. Then, the hoarding rates per UNU-KEY were computed, multiplying the household stock and the hoarding rates and aggregated to the six categories in the WEEE directive (1. Temperature Exchange Equipment, 2. Screens and Monitors, 3. Lamps, 4. Large Equipment, 5. Small Equipment, and 6, Small IT equipment. The correlation tables between the UNU-KEYs and the categories can be found in the global statistical guidelines [16].

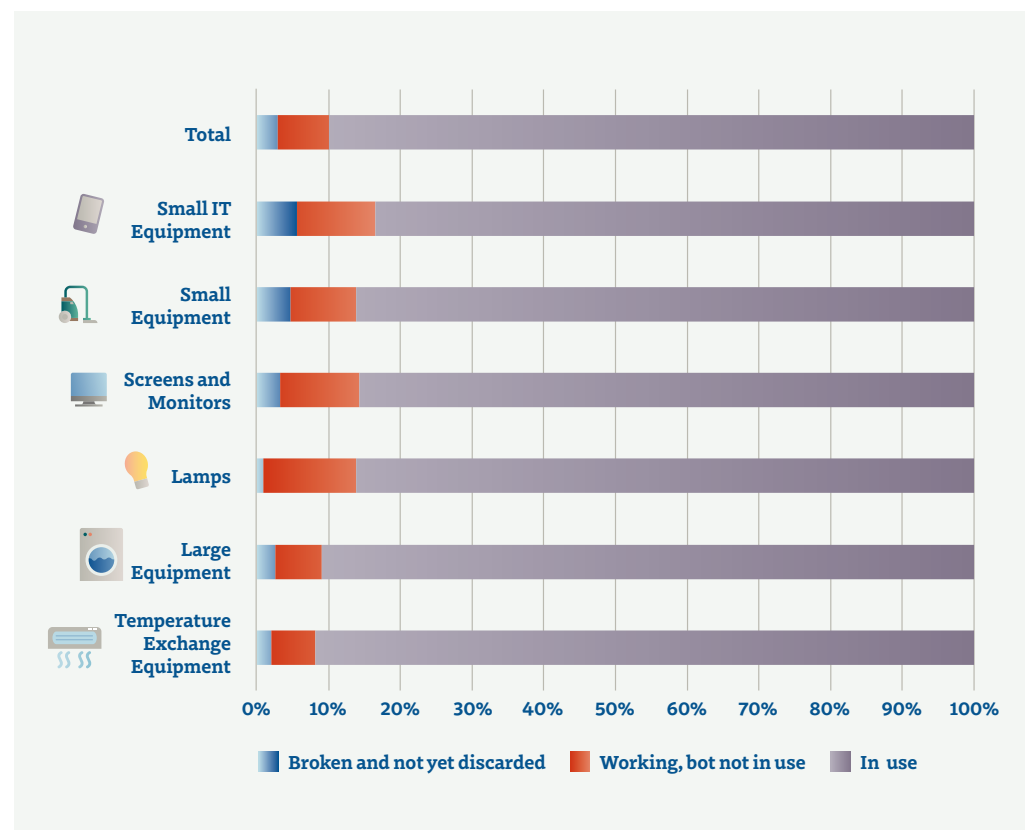
## Results

The main results are that in an average EU home, we can find 74 items (excluding lamps and luminaires), which represent a total mass of 90 Mt (including lamps and luminaires) in EU households. Of those 74 items, 61 are in use, while it was estimated that four items per household are hoarded and not working (and thus haven't yet been discarded). This equals to 3 Mt of broken appliances that could be repaired or handed over to WEEE collection schemes, increasing collection rates considerably. The outcomes also show that nine of the 74 items are working but not in use, which total 7 Mt in the EU. The 7 Mt of working appliances could be brought back into use, thereby lowering the number of electricals being placed on the market and their environmental impact, while also preventing the generation of WEEE in the future.



In considering the number of items, hoarded items are mostly small equipment. However, when looking at the weight, large equipment such as discarded washing machines and other white appliances by far outweigh all other types of WEEE. The types of EEE or WEEE that are mostly hoarded are smaller items by pieces, such as small IT equipment and small equipment (Figure 5). The screens and monitors are third-highest and are comprised mainly of obsolete cathode ray tube monitors, but also flat-panels replaced by laptops. Lamps are fourth, which are likely also including working (new) lamps that are spare lamps for when a bulb goes. The lowest hoarding rates are found for category large equipment and category temperature exchange equipment, which are large in size and less frequently hoarded.

**Figure 5**  
*Share of broken, working, and in-use products in the surveyed European households aggregated to WEEE category in 2022*



The main reason (46%) mentioned by respondents for hoarding working products was that they might use it again in the future, followed by 2) 'I plan on selling it / giving it away' (15%), 3) 'It has sentimental value' (13%), 4) 'It might have value in the future' (9%), and 5) 'I don't know how to dispose of it' (7%).

The general survey was designed by UNITAR, translated into local languages, and carried out by local companies that included different products in the survey. The inclusion of different products limited the cross-country comparison to hoarded small kitchen and household equipment, laptops, and tablets, which were surveyed in all countries. There is quite a variety between the different countries surveyed, as shown in the ranking below.

**Hoarded small kitchen and household equipment, laptops, and tablets as share of total stock of those products in households:**

1. Italy (29%)
2. Netherlands (17%)
3. United Kingdom (14%)
4. Slovenia (12%)
5. Romania (9%)
6. Portugal (8%)
7. Lebanon (4%)

The highest hoarding rate was observed in Italy (29%), and the lowest in Lebanon (4%). The significantly high hoarding rate of Italy is coherent with the relatively low return rate of 42% of WEEE in Italy (see Figure 4). In fact, it could be explained that the products are either hoarded or lost in parallel unreported collection flows. However, there seems to be a trend that richer countries in the survey (e.g., Netherlands and United Kingdom) hoard more than poorer countries in Europe (e.g., Slovenia, Romania, and Portugal). The lowest hoarding rate was observed in Lebanon (4%), which is explained by several consecutive crises, and respondents indicated that they favored repair of broken WEEE instead of discarding it [15].

# ANNEX

The tables report the WEEE collected in kg/inhabitant, the EU target, and the distance to target (in kg/inhabitant), respectively, for the European Union, and Norway, United Kingdom, Switzerland, and Iceland.

**Table 1**  
*Distance to Target – 85% WEEE Generated target*

Country	Year	Collection rate	WEEE Collected	Target	Distance To Target
Austria	2020	81%	15.7	16.5	0.8
Belgium	2020	65%	13.9	18.3	4.4
Bulgaria	2019	76%	8.8	9.8	1.0
Switzerland*	2021	65%	15.5	20.2	4.7
Cyprus	2018	22%	3.8	15.1	11.2
Czech Republic	2020	69%	11.1	13.7	2.6
Germany	2021	54%	11.4	18.0	6.6
Denmark	2021	59%	13.1	19.0	5.9
Spain	2020	36%	7.1	16.7	9.7
Estonia	2019	64%	8.3	11.0	2.7
Finland	2019	65%	13.3	17.3	4.0
France	2021	70%	14.7	17.9	3.2
United Kingdom**	2021	30%	7.4	20.8	13.3

\* Do not have the targets in place.

\*\* For 2016 through 2018, the United Kingdom data was reported and obtained through Eurostat, which included substantiated estimates of large household appliances collected and recycled as part of the light iron waste stream (a reporting mechanism allowable under the WEEE Directive). Since 2019, no data has been reported to Eurostat, and the only published data available is that reported by producer responsibility organisations and approved authorised treatment facilities to the authorities to demonstrate compliance with the United Kingdom WEEE Regulations 2013. It has not been possible to obtain publicly available data for substantiated estimates in the UK since 2019, but in 2018 substantiated estimates equated to approximately 270 kt, which is no longer included in the data reported for collection rates – this added an additional 17.2% to the reported return rate. The data used for the assessment (WEEE Forum Key Figures) does not include the non-obligated WEEE (data reported by the treatment facilities), which equates to 40 kt for 2021 and would add an additional 2.4% to the collection rate figure.

Country	Year	Collection rate	WEEE Collected	Target	Distance To Target
Greece	2021	33%	5.9	15.4	9.5
Croatia	2019	82%	9.9	10.2	0.3
Hungary	2019	67%	8.5	10.9	2.4
Ireland	2021	64%	13.0	17.1	4.1
Iceland*	2021	59%	12.7	18.3	5.6
Italy	2021	42%	8.0	16.0	8.0
Lithuania	2019	46%	5.8	10.6	4.8
Luxembourg	2021	51%	10.5	17.4	6.9
Latvia	2019	54%	5.9	9.2	3.4
Malta	2018	48%	6.7	11.9	5.2
Netherlands	2021	55%	11.8	18.4	6.6
Norway*	2021	75%	19.8	22.3	2.5
Poland	2019	96%	11.7	10.3	+1.3
Portugal	2019	29%	5.1	14.9	9.8
Romania	2018	30%	3.3	9.3	6.0
Slovakia	2019	48%	7.1	12.7	5.5
Slovenia	2021	44%	7.4	14.2	6.8
Sweden	2019	74%	15.2	17.5	2.3

**Table 2***Distance to Target - 65% EEE POM*

Country	Year	Collection rate	WEEE Collected	Target	Distance To Target
Austria	2020	61%	15.7	16.7	1.0
Belgium	2020	51%	13.9	17.8	3.9
Bulgaria	2019	81%	8.8	7.1	+1.7
Switzerland*	2021	67%	15.5	15.0	+0.5
Cyprus	2018	36%	3.8	6.9	3.0
Czech Republic	2020	56%	11.1	12.9	1.8
Germany	2021	36%	11.4	20.4	9.0
Denmark	2021	38%	13.1	22.7	9.5
Spain	2020	44%	7.1	10.3	3.3
Estonia	2019	64%	8.3	8.4	0.1
Finland	2019	58%	13.3	14.9	1.6
France	2021	48%	14.7	19.9	5.2
United Kingdom**	2021	29%	7.4	16.4	9.0
Greece	2021	42%	5.9	9.1	3.2
Croatia	2019	73%	9.9	8.8	+1.1
Hungary	2019	52%	8.5	10.6	2.1
Ireland	2021	57%	13.0	14.9	1.9
Iceland*	2021	34%	12.7	24.5	11.9

Country	Year	Collection rate	WEEE Collected	Target	Distance To Target
Italy	2021	36%	8.0	14.3	6.3
Lithuania	2019	48%	5.8	7.9	2.1
Luxembourg	2021	52%	10.5	13.1	2.6
Latvia	2019	51%	5.9	7.5	1.6
Malta	2018	27%	6.7	15.8	9.1
Netherlands	2021	33%	11.8	23.4	11.6
Norway*	2021	44%	19.8	29.2	9.4
Poland	2019	72%	11.7	10.6	+1.1
Portugal	2019	33%	5.1	10.0	4.9
Romania	2018	32%	3.3	6.7	3.5
Slovakia	2019	56%	7.1	8.3	1.2
Slovenia	2021	39%	7.4	12.3	4.9
Sweden	2019	57%	15.2	17.5	2.3

\* Do not have the targets in place.

\*\* For 2016 through 2018, the United Kingdom data was reported and obtained through Eurostat, which included substantiated estimates of large household appliances collected and recycled as part of the light iron waste stream (a reporting mechanism allowable under the WEEE Directive). Since 2019, no data has been reported to Eurostat, and the only published data available is that reported by producer responsibility organisations and approved authorised treatment facilities to the authorities to demonstrate compliance with the United Kingdom WEEE Regulations 2013. It has not been possible to obtain publicly available data for substantiated estimates in the UK since 2019, but in 2018 substantiated estimates equated to approximately 270 kt, which is no longer included in the data reported for collection rates - this added an additional 15.8% to the reported return rate. The data used for the assessment (WEEE Forum Key Figures) does not include the non-obligated WEEE (data reported by the treatment facilities), which equates to 40 kt for 2021 and would add an additional 2.3% to the collection rate figure.



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