

# ReWeee

## Development and Demonstration of Waste Electrical & Electronic Equipment (WEEE) Prevention and Reuse Paradigms

Action B.1 – Design and Development of Methodologies and Tools for Measuring Re-Use Preparation

### Deliverable B1.1 - Inventory of existing calculation methods of reuse and preparation for re-use of WEEE

LIFE Environment and Resource Efficiency – LIFE14 ENV/GR/000858



Ecological Recycling Society

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## Abstract

The Inventory of existing calculation methods of reuse and preparation for re-use of WEEE (deliverable B1.1) has been accomplished by collecting data from stakeholders in 13 EU Member States to determine how and what is measured.

Information includes calculation methods, categories of measured WEEE, input-output sources, measurement units used and other relevant information.

Data has been collected from existing EU re-use institutions that compile them for their own purposes or to provide information to the Collective Alternative Management Systems (CAMS) for WEEE they work with, or at local, regional or national authorities which are required to provide such information.

For the purpose of this deliverable, a questionnaire has been drafted by RREUSE and then improved and approved by ECYCLE, ECOREC and HUA. The questionnaire contained questions related to the amount of WEEE collected and re-used/prepared for re-use and the way it was calculated. To reach the initial target of responses representing at least 200 reuse actors, the project team sent out the questionnaires to different stakeholders groups working on re-use/preparing for re-use activities, including members from RREUSE, WEEE-Forum, ACR+, Municipal Waste Europe and the World Directory of Technology resellers & Service Providers. It was decided that in many of the cases the reuse actors delivered data to centralized networks that both compiled this data and that analysed it. Therefore, in some cases it would be much more complete to go directly to the central collecting body rather than to each individual reuse centre. The project team collected 31 responses 19 re-use/preparing for re-use centres or networks representing at least 339 re-use/preparing for re-use centres, 9 producer responsibility organisations and 3 local authorities/waste agencies answered the questionnaire. Therefore, the final responses are representative of 351 (preparation) for reuse actors.

The collection of the answers resulted in the creation of three Excel Spreadsheets which constitute the deliverable:

- B1.1\_Answers received: All the answers received are transferred here and sorted by alphabetic order
- B1.1\_Comparison study: In this spreadsheet, all the calculation methods are analysed to see the similarities and the differences: 27 different calculation methods have been identified
- B1.1\_Results of the answers: Put the answers in relation to each other in order to have a broader comparison of the data collected.

These Excel Spreadsheets are final, but they can be updated with new data since details from some respondents might have to be clarified when it comes to draft the comparative analysis report of existing measures used in the European Union (action B1.2). It is not possible to publish these spreadsheets since they contain information given under a confidentiality agreement.

RREUSE extracted some information to help for a better understanding of the information collected:

- 19 different collection methods have been identified among the 21 respondents who do collect (W)EEE and re-use or prepare for re-use them. The 8 other respondents (who

sometimes collect WEEE but do not do any preparing for re-use activities, or do not any collection activity at all) who work with re-use operators or plan to do so or start a re-use activity themselves all have different opinions on how re-use and preparing for re-use should be monitored.

- 16 structures consulted are collecting WEEE and 7 of them are collecting both EEE and WEEE while only one structure is collecting only EEE. It means that a vast majority of the re-use operators are dealing with waste and therefore already have to comply with waste legislation or with regulations.
- All the structures where a preparing for re-use or prevention target is in place, currently the case in Spain and in the Belgian region of Flanders, are considering that everything is waste, even though a part of the material is collected through donations. Only 3 out of 6 structures collecting EEE from donations are considering this source as being non-waste. Asking to the re-use centres to count all their collection as being WEEE in order to collect data for a preparing for re-use target would therefore be possible, at least for the purpose of Re-WEEE which is to make 10% of RREUSE members use this calculation method. The easiest way to implement the use of the calculation method would therefore be to ask to re-use centres to just give their overall re-use rate and not necessarily separate waste and non-waste. However, it implies that the re-use centres would potentially have to respect waste legislation if they are not doing so already, which would incur a cost.
- 16 out of 29 of the structures collect data on the weight of what they collect, and 8 are collecting data about both the weight and the number of items that they collect. None of them collect data exclusively on the number of items that they collect. For the calculation method, it means that the easiest solution would be to focus on the weight which is also likely to be the most accurate
- 21 out of 29 respondents do collect data separately on the different sources that they collect. At a first stage, we only wanted to know what was the percentage at the source, but we would ideally ask to also know what is the re-use rate per source and therefore know what are the safest and most appropriate collection methods.
- 9 out of 29 respondents collect data separately for different categories of material. However, given that the question was asked only at a later stage when most of the respondents already answered, we can expect that more than 9 of them actually collect data separately for the different categories of material. It would be also possible, and it was the case for one of the respondents, to have both the collection and the re-use rate for every EEE category to be able to assess which products are the most re-usable.
- 12 structures consider that the point of calculation should be when the product is made available on the market, 11 if we take into account the advice of only those who actually re-use products. 12 structures consider that the point of calculation should be when the product is sold/donated, 10 if we take into account the advice of only those who actually re-use products. The easiest would therefore be to consider that a product is prepared for re-use when it is made available on the market. However, for a reason of accuracy, it could be worth it to also ask for what is sold/donated, or maybe even to ask for both the stocking and



the selling. It would make possible an assessment of the actual re-use rate of the second-hand EEEs and see what is the status of the demand.

- 12 out of 21 respondents who do collect (W)EEE and re-use or prepare for re-use them use physical scales to assess the weight of what they re-use and then constitute the majority of the respondents. 2 out of the 9 respondents who do not have re-use activities think the same.