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# Consolidated overview on the 7 EEE "Learn to Repair Events" (EN)

### (Action B.6.2.8)

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Βο Πανεπιστήμ



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

Consolidated overview on the 7 EEE "Learn to Repair Events"

# Action B.6 – Dissemination and Support of WEEE Prevention Culture in Greece

Sub-action B6.2.8 – Organization of EEE "Learn to Repair Events".



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

Ecological Recycling Society

Athens

November 2020













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# Introduction

Seven (7) "Learn to repair" workshops were organized for the purposes of the LIFE REWEEE project, and specifically, the Action. 2.6 B.6 "Dissemination and Support of WEEE Prevention Culture in Greece". These events, organized in the style of Repair Café events, focused on public participation by allowing visitors to bring in damaged appliances and devices, consult with technicians or even to attempt to repair them themselves for free during a participatory workshop, whilst "enjoying a cup of coffee". Repair Cafés may focus on the repair of many different discarded objects, such as electric appliances, clothes, furniture, bicycles, dinnerware, homeware, toys etc. In this particular case, due to the nature and focus of the LIFE REWEEE project, the repair events targeted only electronic and electric equipment, mainly of domestic use. It should be noted that, although the initial design of the action concerned the organization of six (6) events, the high public participation and success of these events lead the project team to increase the number of events to seven (7).

The action's success may be measured both quantitively and qualitatively. In terms of the quantitative outcomes, more than 2720 visitors/participants attended the events, bringing in 313 electric and electronic appliances/devices in total, out of which 148 were repaired on the spot and 74 were diagnosed for repairs that could not be carried out due to the lack of spare parts availability. The qualitative outcomes mainly regard to the fact that while "enjoying a cup of coffee",

- Transfer of knowledge from volunteer technicians to the event visitors regarding EEE repairs was achieved.
- The volunteer technicians demonstrated how to diagnose and repair damages using the proper equipment.
- Participants took active part in repairing their appliance with the supervision of a skilled repair person.
- The participant learned to repair damages and malfunctions at home without the need to call a technician, thus starting a process of continual learning.
- Visitors that did not bring their own devices could enjoy a cup of coffee while assisting with the repair of a piece of equipment brought in by another visitor.

Nowadays, most people forget that various objects may be repaired or do not know how to repair them. Repair skills are easy to forget. Repair persons' expertise are often not used with people often opting to replace easily repairable appliances with new ones. Therefore, through these participatory events, beside the main objectives there are other benefits such as:

- People got to become reacquainted with their local repair technicians.
- Valuable practical skills are transferred.
- Objects are being used for a longer time and do not need to be thrown away.
- The raw materials and energy that is being used for the manufacturing of new products is reduced.













• CO<sub>2</sub> emissions are reduced.

The main goal of the "Learn to repair" events was public participation and repair skills development. This way people start to repair at home instead of delivering their appliances to technicians and waiting for repairs. Thus, the value of "repair" and "reuse" is recognized and EEE life cycle is expanded before EEE is recycled or disposed of.

# Organization of seven (7) "Learn to repair" events

As has already been mentioned as part of the LIFE REWEEE project, 7 "Learn to repair events" were successfully organized in various neighborhoods of Athens and Thessaloniki, achieving high public participation. In this section, we include a detailed review of each event. Specialized technicians offered their expertise and taught visitors to learn how to diagnose malfunctions before throwing out a damaged device, carry out easy repairs in order to restore the functionality of a damaged appliance and become informed on the cost and the spare parts needed to repair an appliance. During each event, visitors could drop EEE that could not be repaired in WEEE recycling bins. The information material that was used to disseminate and promote the events (poster, invitations, the project partners' posts on social media etc.) is presented in Annex 1. Photographic material from the events is presented in Annex 2 and examples of press releases are presented in Annex 4. The participation form for the events is presented in Annex 4 and examples of press coverage of the events are presented in Annex 5.

### 1<sup>st</sup> "Learn to repair" event

The 1<sup>st</sup> participatory event took place on Sunday November 19<sup>th</sup> 2017 at the Green Fund headquarters (Vila Kazouli, Kifisia) at the "1<sup>st</sup> Prevention and Recycling Festival" during the European Week for Waste Reduction (EWWR). Devices and appliances, such as toasters, coffee makers, air heaters and many other types of damaged electric appliances were among the most popular types of EEE brought in for repair. The total number of visitors exceeded 180 people. Out of the total 43 devices brought in for repair, damages were diagnosed and full repairs were carried out on 22 electric and electronic appliances/devices, 13 devices were partially repaired (due to the lack of spare parts), while 8 devices could not be repaired and were collected in WEEE recycling bins.

#### Table 1. Quantitative data of the 1<sup>st</sup> "Learn to repair event"

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D	Date	Location	Total repairs	Fully repaired	Partially repaired	Unrepairable, went for recycling	Number of visitors (estimate)
		Green Fund, Vila					
1	9/11/2017	Kazouli, Kifisia	43	22	13	8	180













### 2<sup>nd</sup> "Learn to repair" event

During the 4<sup>th</sup> Thessaloniki Recycling Festival, the 2<sup>nd</sup> "Learn to repair" event took place on May 5<sup>th</sup> and 6<sup>th</sup> 2018. 240 visitors stopped by the special stand where the repair event was hosted for three (3) hours/day to ask questions and receive information on damaged appliances and devices' repairs. A total of 73 electric and electronic appliances/devices were diagnosed and repaired by specialized technicians. Out of the 73 appliances/devices, 32 were fully repaired, 18 were partially repaired and 23 could not be repaired and were thus collected in WEEE recycle bins.

Date	Location	Total repairs	Fully repaired	Partially repaired	Unrepairable, went for recycling	Number of visitors (estimate)
05- 06/05/2018	Helexpo Thessaloniki (Recycling Festival)	73	32	18	23	240

#### Table 2. Quantitative data of the 2<sup>nd</sup> "Learn to repair event".

### 3<sup>rd</sup> "Learn to repair" event

The 2nd "Learn to repair" event took place during the 64<sup>th</sup> Kifisia Flower Show, on May 12<sup>th</sup> and 13<sup>th</sup> 2018. The event drew in 300 visitors in total. The visitors were informed on repairing EEE. During the two days of the event 34 appliances/devices were diagnosed and repaired, 14 were fully repaired, 15 where partially repaired by the specialized technicians and 5 could not be repaired and were instead collected in a WEEE recycle bin.

 Table 3. Quantitative data of the 3<sup>rd</sup> "Learn to repair event"

Date	Location	Total repairs	Fully repaired	Partially repaired	Unrepairable, went for recycling	Number of visitors (estimate)			
12- 13/5/2018	Kifisia Flower Show (Alsos of Kifisia)	34	14	15	5	300			

### 4<sup>th</sup> "Learn to repair" event

The 4<sup>th</sup> "Learn to repair" event took place the 13<sup>th</sup> of October 2018, during the "Athens Against Climate Change event", organized by connect Athens at the Kallimarmaro Panathenaic Stadium. The total number of visitors was 300 people. In total 43 appliances/devices were diagnosed and repaired by specialized technicians. Out of the appliances/devices, 21 were fully repaired, 7 were partially repaired and 15 could not be repaired (due to extensive damages) and were instead collected in a WEEE recycle bin.













#### Table 4. Quantitative data of the 3<sup>rd</sup> "Learn to repair event"

Date	Location	Total repairs	Fully repaired	Partially repaired	Unrepairable, went for recycling	Number of visitors (estimate)
13/10/2018	Kallimarmaro Panathenaic Stadium (Connect Athens Event)	43	21	7	15	300

### 5<sup>th</sup> "Learn to repair" event

The 5<sup>th</sup> "Learn to repair" event took place on December 13<sup>th</sup> 2018 at the Kipseli Municipal Market. During the event at least 800 people were informed on damaged appliances and devices' repairs. In total 58 appliances/devices were diagnosed and repaired by specialized technicians. Out of the appliances/devices, 30 were fully repaired, 5 were partially repaired and 23 could not be repaired (due to extensive damages) and were instead collected in a WEEE recycle bin.

Table 5. Quantitative data of the 5<sup>th</sup> "Learn to repair event"

Date	Location	Total repairs	Fully repaired	Partially repaired	Unrepairable, went for recycling	Number of visitors (estimate)
23/12/2018	Kipseli Municipal Market	58	30	5	23	800

### 6<sup>th</sup> "Learn to repair" event

The 6<sup>th</sup> "Learn to repair" event took place on May 12<sup>th</sup> 2019 at the Kipseli Municipal Market. During the event at least 500 people were informed on damaged appliances and devices' repairs. In total 31 appliances/devices were diagnosed and repaired by specialized technicians. Out of the appliances/devices, 14 were fully repaired, 7 were partially repaired and 10 could not be repaired (due to extensive damages) and were instead collected in a WEEE recycle bin.

#### Table 6. Quantitative data of the 6<sup>th</sup> "Learn to repair event"

Date	Location	Total repairs	Fully repaired	Partially repaired	Unrepairable, went for recycling	Number of visitors (estimate)
12/05/2019	Kipseli Municipal Market	31	14	7	10	500

### 7<sup>th</sup> "Learn to repair" event

The 7<sup>th</sup> "Learn to repair" event took place on September 13<sup>th</sup> and 14<sup>th</sup> 2019 at the Thessaloniki Greenwave Festival. During the event at least 4.500 people stopped by the Thessaloniki International Fair special stand where the repair event was hosted to ask questions and receive information on damaged appliances and devices' repairs. More than 400 people asked for detailed information on the project. In total 31



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appliances/devices were diagnosed and repaired by specialized technicians. Out of the appliances/devices, 15 were fully repaired, 9 were partially repaired and 7 could not be repaired (due to extensive damages) and were instead collected in a WEEE recycle bin.

Date	Location	Total repairs	Fully repaired	Partially repaired	Unrepairable, went for recycling	Number of visitors (estimate)
13- 14/09/2019	Thessaloniki Greenwave Festival	31	15	9	7	400

Table 7. Quantitative data of the 7<sup>th</sup> "Learn to repair event"

# Conclusions

In total, more than 2720 visitors attended the seven (7) "Learn to repair" events carried out within two (2) years. Three hundred thirteen (313) electric and electronic appliances/devices were diagnosed and repaired: 148 were fully repaired and 74 were partially repaired due to lack of spare parts (Figure 1).



Figure 1. Repair success rate

As can be seen in Figure 2, 33% of the devices that were brought in for repair were between 5 and 10 years old and 29% of the devices were 2-5 years old. It should be noted that devices that were older than 20 years concerned only the 4% of the total of the devices that were brought in, which indicates that devices that are that old have





either been already recycled or are more resilient and thus do not frequently need repairs.

#### Figure 2. Device's age

Figure 3 presents the success rate of the repairs in relation to the devices' age, with the highest success rate belonging to devices 0-2 years old (56%) and 10-20 years old (53%). It should be noted that in all the devices' age classes, the success rate exceeded 30%.



Figure 3. Repair success rate in relation to devices age

Figure 4 presents the ten most popular devices types, with mixers (including blenders and laptops representing the majority of the devices. Figure 5 presents the age of the most frequently brough in devices (when the manufacturing date was known). Figure 6 presents the repair succes rates for each of the most popular devices type. The

















highest rate (90%) was achieved in the repair of radios, however for each device type the success rate exceeded 30%.

Figure 4. Ten most popular devices brought for repair



Figure 5. Average age of the 10 most popular devices (for which the manufacturing date was known)















Figure 6. Ten most popular devices success rate

During each event discussion were held on the issue of the easy replacement of and appliance/device without exploring repair options, which leads a great number of EEE to becoming waste, while a simple repair could extend their life cycle by several years. The visitors had the chance to watch the repair process and receive guidance on EEE best use and maintenance, in a pleasant environment while enjoying a cup of coffee.

The events, as well as their results were published and disseminated in several electronic and social media by the LIFE REWEEE partners. It is estimated that posts by ECOREC in social media reached more than 28.000 people, thus disseminating the implementation of the action, as well as informational material and the results of the "Learn to repair" workshops.











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Examples of the dissemination and promotion material for the "Learn to repair" events (posters, invitations, partner's social media posts etc.)





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Photographic material from the "Learn to repair" events









































Examples of "Learn to repair" events press releases.

















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"Learn to repair" events participation form.

Examples of the events' press coverage.

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