

7TH INTERNATIONAL CONFERENCE ON SUSTAINABLE SOLID WASTE MANAGEMENT

Preliminary results from the operation of the first WEEE sorting centers in Greece

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ReWeee

LIFE14
ENV/GR/000858



With the LIFE
financial
instrument
contribution of
European Union for
the Environment



appliances
recycling s.a.



Ecological Recycling Society



Harokopio University of
Athens



Project Title

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

Implementation Duration
January 2016 - August 2020

Project Objective

WEEE reduction and reuse strategy implementation

Total Budget
2.161.405 €
EC contribution 60%
LIFE+ Environment

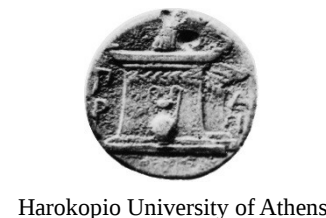
Action Areas

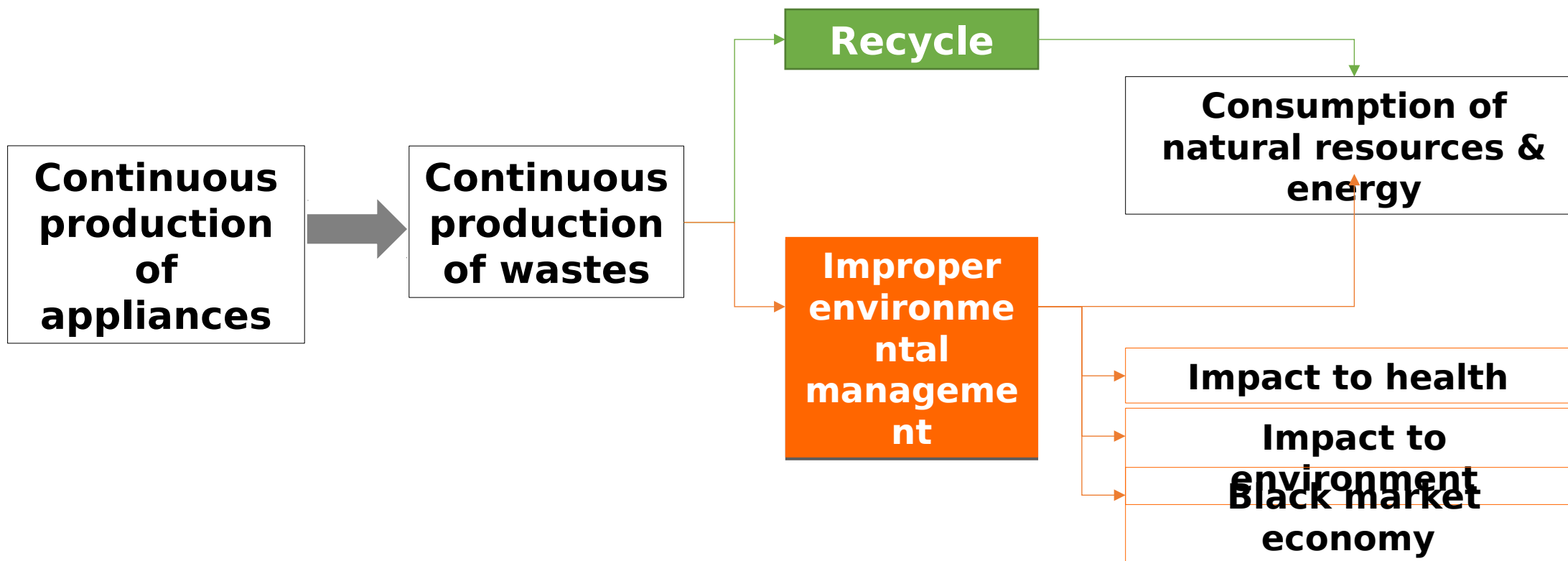
- **Greece**
- **Belgium**

Coordinator Beneficiary



Co-Beneficiaries





LIFE RE-WEEE Project Objectives



Prevention and reduction of WEEE production

- **Priority to re-use and ensuring of high quality management activities**

Compliance with legislation & policy targets

- **Standards development for infrastructure and transportation at national and EU level**

Natural resources and energy savings

- **Access to cheaper appliances for vulnerable groups**

A large version of the ReWeee logo, consisting of the word "Re" in green, a green wrench icon, and the word "Weee" in grey.

Specifications and technical requirements for WEEE SCs

Proposals to
competent
authorities for
incorporation of
specifications
into legislation

Research on existing standards (CENELEC, WEEELabex, OVAM, WRAP, PAS etc.)

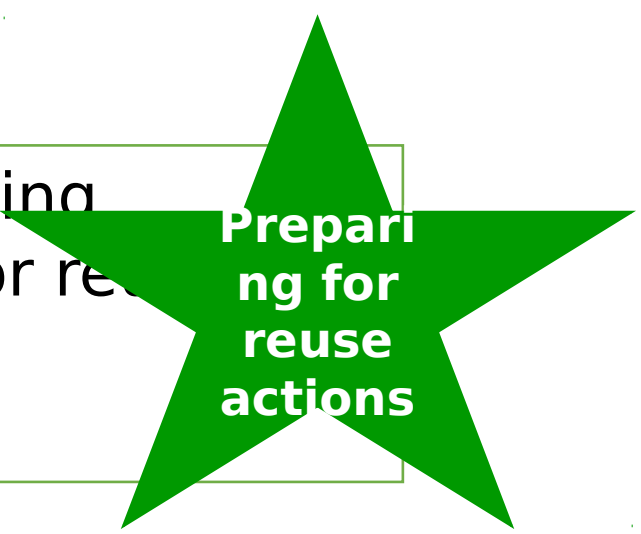
Development of specifications and technical requirements adjusted to the Greek situation

- * Specifications for the management plan of preparing for reuse (collection, transportation, sorting, storage)
- * General specifications for preparing for reuse
- * Specific issues for preparing for reuse for each WEEE category
- * WEEE good management practices guide (for public)

Development and operation of Sorting Centres

Environmental Impact

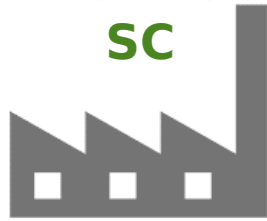
- ✓ Objective: Reduce WEEE driven to treatment/recycling
 - 300 tn of WEEE annually for preparing for reuse
 - Reduction of greenhouse gas production (5,470 tn CO₂ eq. annually)



Preparing for reuse actions

LIFE RE-WEEEE Project - Sorting Centres

2 new facilities for sorting and preparing for reuse activities – the first in Greece

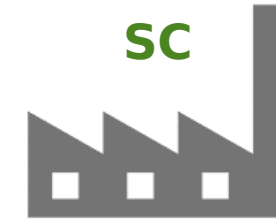


Attica region



Potential for preparing for reuse: all WEEE categories, except Lamps

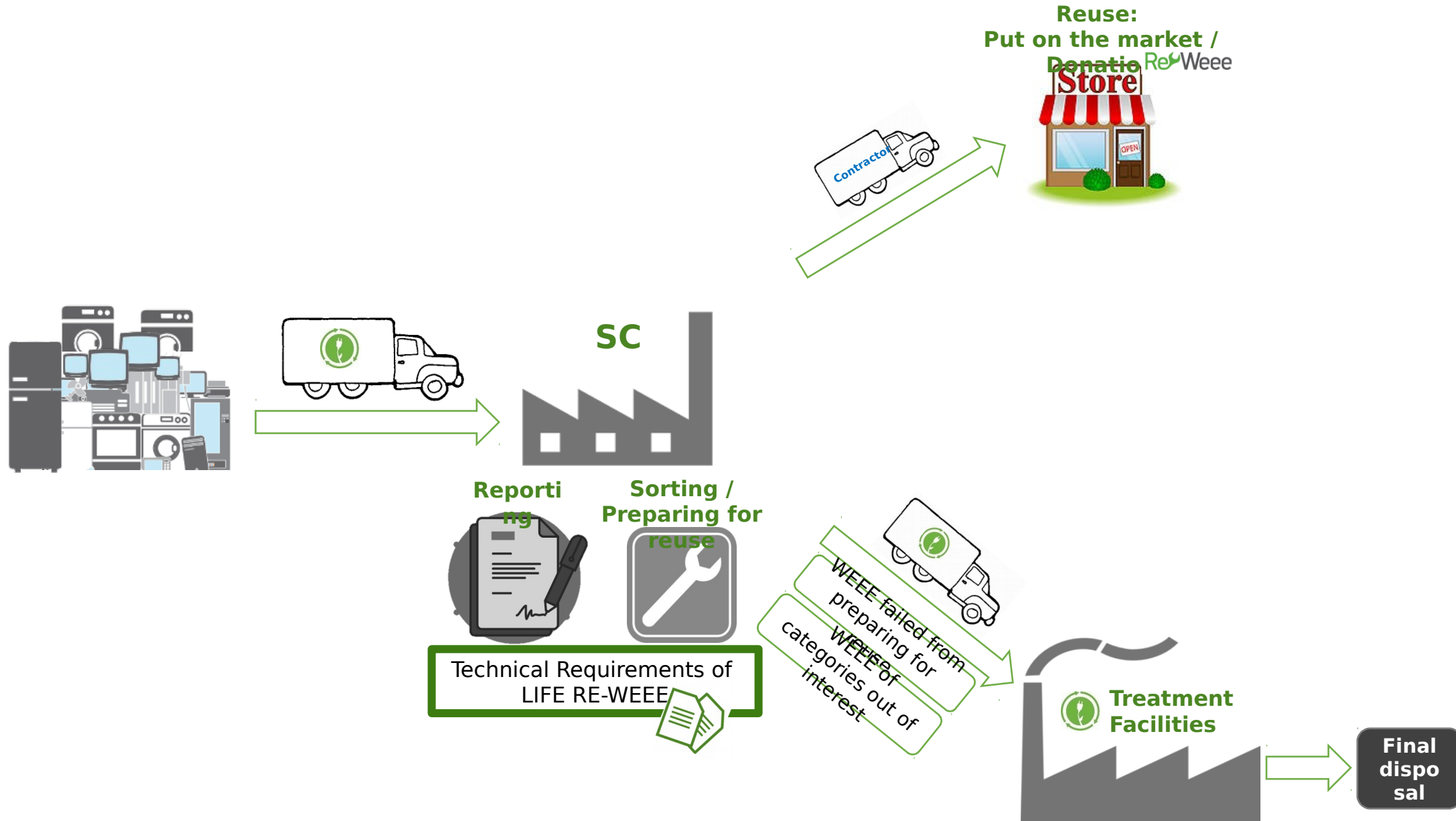
5 years operation of SCs



Central Macedonia region (CM)



Operational plan - 1



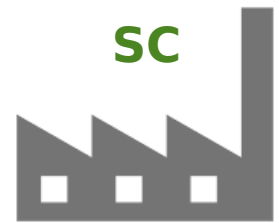
Operational plan - 2

Target

WEEE for preparing for reuse
activities
(Activities Group B, C)

Target

**2% of WEEE
addressed for
preparing for reuse
activities to be
finally reused.**

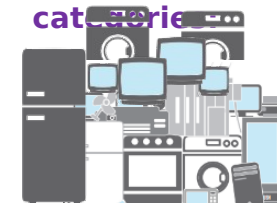


min 1.000 tn/y
(Attica)
~~min 500 tn/y~~
(CM)



**Input: ~ 4.000 tn/y
(Attica)
~ 2.000 tn/y
(CM)**

Sorting to
WEEE
categories



Sorting to WEEE
categories and initial
inspection:



Sorting Centres

activities

Activities Group	Activity
Activities Group A	Sorting: - WEEE Handling – Loading / Unloading - Load inspection - Classification to the WEEE categories (according to KYA - 23615/651/E.103/2014) - Visual inspection
Activities Group B	Initial Inspection Sorting of WEEE driven for treatment or preparing for reuse activities
Activities Group C	Preparing for reuse activities / put on the market (selling or donation)

Attica Sorting Centre

Operation since February 2019



Infrastructures:



Attica Sorting Centre

Activities:



Reception



Sorting for treatment



Sorting for initial inspection

Attica Sorting Centre

Activities:



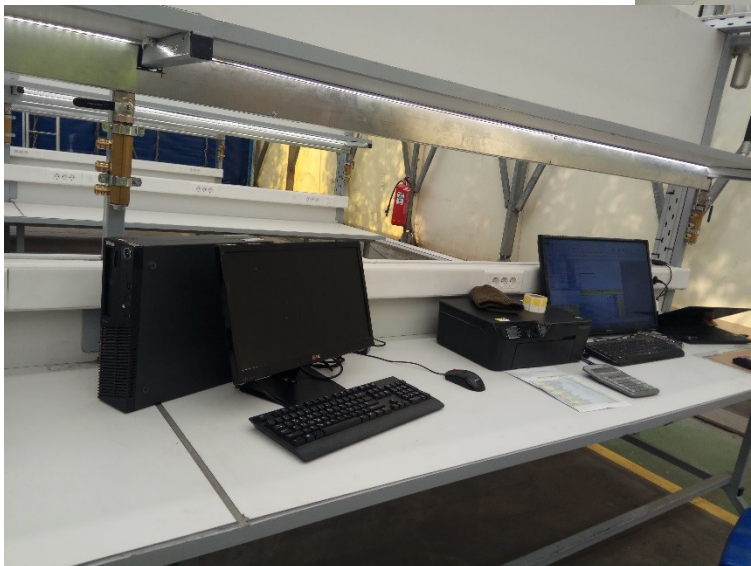
Sorting for initial inspection



Weighting

Attica Sorting Centre

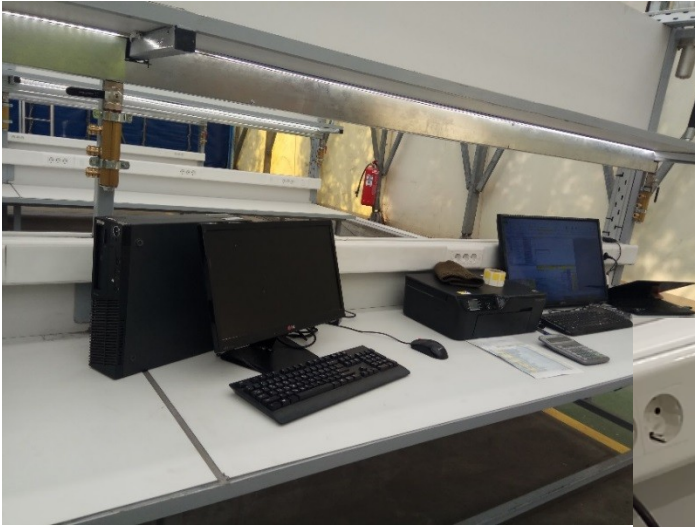
Activities:



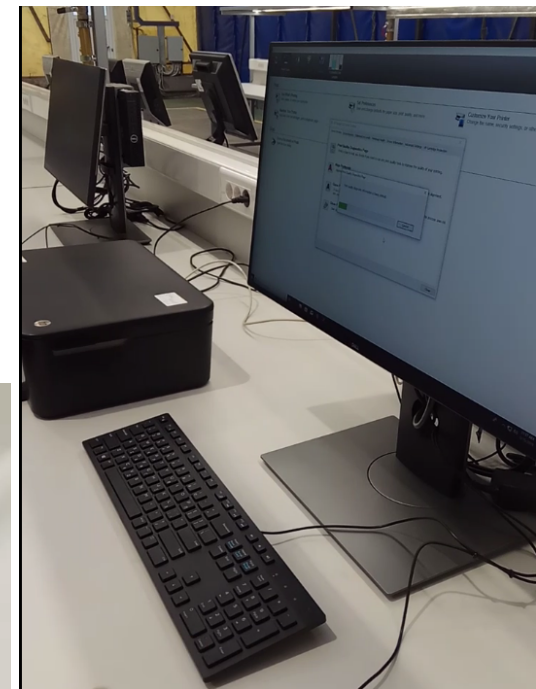
Initial inspection



WEEE pending for preparing for reuse



Screen check



Printer check



Mobile check



Data eradication



Hardware check

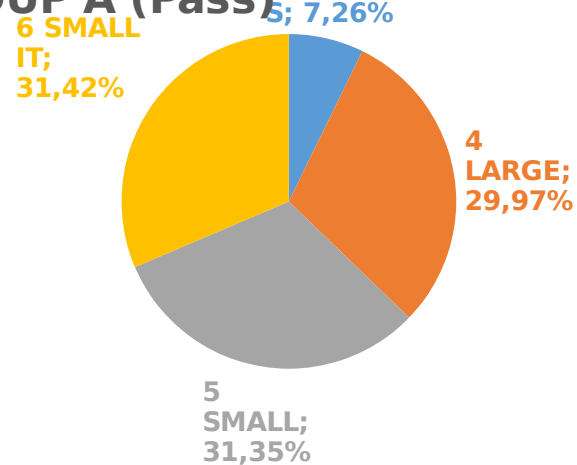
Educational activities



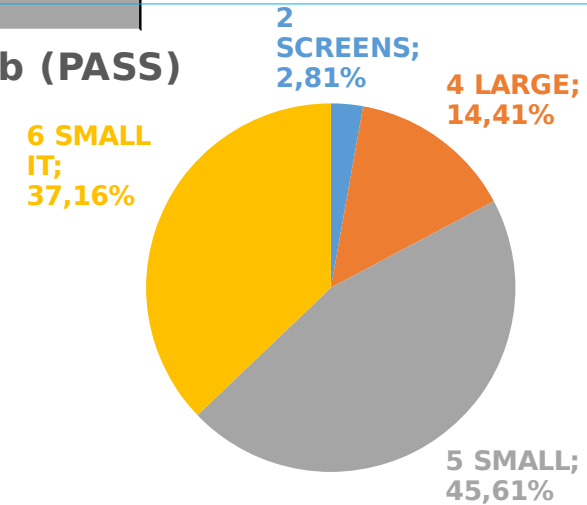
Feb - May 2019: Data analysis (4 months data)

	ACTIVITIES GROUP A (CATEGORISATION AND VISUAL INSPECTION)		ACTIVITIES GROUP B (INITIAL INSPECTION/CHECK AND FURTHER SORTING)	
	WEEE FOR TREATMENT	WEEE FOR INITIAL INSPECTION	WEEE FOR PREPARING FOR REUSE OR SPARE PARTS	WEEE FOR TREATMENT
(kg)	402.909	285.639	4.135	281.504
%	59%	41%	1,45%	98,55%
Total (kg)	688.548		285.639	

GROUP A (Pass)



Group b (PASS)



Indicative outputs - appliances for preparing for reuse

SUBCATEGORY / TYPE OF APPLIANCE	kg	pieces		846	439
2 SCREENS AND EQ. WITH SCREENS	16	120	6 SMALL IT		
LAPTOP	6	38	BACKUP SIM CARD	0	2
LCD	8	79	GHARGE USB CABLE	0	29
TABLET	1	3	HDD	0	5
	298	259	HDMI SPLITER	1	1
5 SMALL			MP3 PLAYER	0	73
DVD PLAYER	7	5	POWER BABK	1	12
GRILL	4	8	PRINTER	166	25
MIXER	1	1	SERVERS	494	139
UPS	28	1	ΑΣΥΡΜΑΤΟ ΤΗΛ	1	3
ΑΕΡΟΘΕΡΜΟ	23	11	ΕΚΤΥΠΩΤΗΣ	21	7
ΑΝΤΑΛΑΚΤΙΚΑ ΘΕΡΜΑΣΤΡΕΣ ΧΑΛΑΖΙΑ	5	1	ΘΥΡΟΤΗΛΕΦΩΝΟ	3	28
ΑΠΟΧΥΜΩΤΗΣ	8	5	ΚΑΛΩΔΙΟ ΔΙΑΦΟΡΑ	1	2
ΑΤΜΟ ΣΙΔΕΡΟ	4	1	ΚΑΡΤΑ ΓΡΑΦΙΚΩΝ	1	5
ΑΤΜΟΜΑΓΕΙΡΑΣ	7	1	ΚΙΝΗΤΟ	22	38
ΒΡΑΣΤΗΡΑΣ	2	5	ΜΕΛΑΝΙΑ	4	2
ΓΕΝΗΤΡΙΑ	17	2	ΠΛΗΚΤΡΟΛΟΓΙΟ	22	45
ΔΙΣΚΟΠΡΙΟΝΟ	4	1	ΡΑΜ	0	1
ΖΥΓΑΡΙΑ ΚΟΥΖΙΝΑΣ	1	1	ΦΟΡΤΙΣΤΗΣ ΜΠΑΤΑΡΙΩΝ	1	1
ΖΥΓΑΡΙΑ ΜΠΑΝΙΟΥ	4	5	DESKTOP	110	21
ΘΕΡΜΑΣΤΡΕΣ ΧΑΛΑΖΙΑ	127	177			
ΚΑΦΕΤΙΕΡΑ	-	1			
ΜΠΟΥΚΛΙΕΡΑ	1	1			
ΠΟΛΥΕΡΓΡΑΛΕΙΟ	2	1			
ΠΟΛΥΜΠΡΙΖΟ	0	2			
ΡΑΔΙΟ	17	10			
ΡΟΛΟΙ ΧΕΙΡΟΣ	31	14			
ΣΕΣΟΥΑΡ	2	3			
ΦΡΑΠΕ ΜΙΞΕΡ	1	1			
ΦΡΙΤΕΖΑ	3	1			

Central Macedonia (Oraiokastro)

Sorting Centre

Operation beginning: July 2019

Infrastructures:



***Thank you for your
attention!***

Website:

www.reweee.gr

Facebook: [reweeeGR](https://www.facebook.com/reweeeGR)

Twitter: [@LRewe](https://twitter.com/LReweee)



appliances
recycling s.a.



ΕΛΛΗΝΙΚΟΣ ΟΡΓΑΝΙΣΜΟΣ ΑΝΑΚΥΚΛΩΣΗΣ
Hellenic Recycling Agency (H.R.A.)



Ecological Recycling Society



GREEN FUND



Harokopio University of
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