

### Welcome!

Final Workshop for the Study on quality standards for WEEE treatment

### The meeting starts at 09:30

Please mute your microphone, no video is foreseen Please note that the audio and chat will be recorded

# BEFORE STARTING: BEST PRACTICES FOR THE WEBINAR

Please ensure:

- Mute your microphone when joining the call
- Add your name and organisation so we can easily identify you
- Send a message in the chatbox if you wish to speak, stating your name and organisation. Due to time constraints, please be concise during interventions.
- Unmute your mic only when the moderator has invited you to speak
- Be careful not to interrupt others when they're speaking
- Avoid background noises

**THANK YOU!** 

### AGENDA

9:30	Welcome and introduction to practical aspects of the workshop		
9:35	Opening and Policy context by the Commission		
9:45	Overview of the project and objectives of the final workshop		
9:55	Analysis of the European standards for the treatment of WEEE (CENELEC standards)		
10:05	Overview on implementation of the EU WEEE treatment requirements in the Member States		
10:25	Discussion		
	10:55 -11:05 BREAK		
11:05	Analysis of options for WEEE treatment requirements		
11:35	Discussion		
	12:25 -12:40 BREAK		
12:40	Proposed future approach to WEEE treatment requirements		
13:00	Discussion		
13:45	Closing and outlook		
	14:00 End of the workshop		

### OPENING AND POLICY CONTEXT BY THE COMMISSION

MR MATTIA PELLEGRINI HEAD OF UNIT B.3 WASTE MANAGEMENT AND SECONDARY MATERIALS DG ENVIRONMENT – EUROPEAN COMMISSION

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### STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – **OVERVIEW OF THE PROJECT AND OBJECTIVES** OF THE FINAL WORKSHOP



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### BACKGROUND – EU MINIMUM TREATMENT REQUIREMENTS FOR WEEE I

- EU minimum treatment requirements for WEEE (laid down in particular in Article 8 "Proper treatment" and Annexes VII "Selective treatment for materials and components of WEEE" and VIII ") remained unchanged in the 2012 recast of the Directive (since the original Directive 2002/96/EC)
- In 2013 the Commission mandated CENELEC (*European Committee for Electrotechnical Standardization*) to develop European standards for the treatment of WEEE to assist relevant operators in fulfilling the requirements of the WEEE Directive (Mandate M/518),
- EN-50625 series "Collection, logistics & treatment requirements for WEEE" and EN 50614 "Preparing for re-use" → "CENELEC standards"



### BACKGROUND – EU MINIMUM TREATMENT REQUIREMENTS FOR WEEE I

• Still evidence of inconsistent implementation of WEEE treatment requirements throughout the EU, documented e.g. by the *"WEEE compliance promotion initiative"* conducted by the Commission (2016).

 $\rightarrow$  Conclusion: a deeper look into the treatment of WEEE throughout the EU is needed.

• Article 8(5) of Directive 2012/19/EC provides the option for the Commission to adopt implementing acts laying down minimum quality standards for the treatment of WEEE based in particular on these European standards, in order to ensure uniform conditions for the implementation of the Directive in relation to WEEE treatment.

7 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP

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### BACKGROUND - EQUIVALENT CONDITIONS OF WEEE TREATED OUTSIDE THE EU

- Article 10(2) of the WEEE Directive: WEEE exported out of the Union shall only count towards the fulfilment of obligations and targets of the Directive, if the exporter can prove that the treatment took place in conditions that are equivalent to the requirements of the WEEE Directive.
- Article 10(3) of the WEEE Directive requires the Commission to adopt a Delegated Act, laying down the criteria for the assessment of such "equivalent conditions for the treatment of WEEE" by 2014.
- A "Study on equivalent conditions for WEEE recycling operations taking place outside the European Union" was prepared on behalf of the Commission in 2013 recommending a list of options to assess these conditions: Options for assessment of equivalent conditions included inter alia - proof of compliance with the "CENELEC standards"
- BUT: in 2013 CENELEC standards were under preparation → Draft Delegated Act postponed until publication of CENELEC standards

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### OVERALL OBJECTIVES OF THE STUDY

- To assist the European Commission in view of a possible preparation of an Implementing Act laying down requirements for the quality treatment of WEEE in the EU complementing those in the WEEE Directive, or any other policy option to be identified
- To assist the European Commission in the preparation of a Delegated Act laying down the criteria for the assessment of equivalent conditions for the treatment of WEEE outside the EU based on a re-assessment of the options identified in the 2013-study, considering:
  - any recent relevant developments at international level
  - experiences in EU Member States regarding assessment of equivalent treatment conditions of WEEE outside the EU

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### METHODOLOGICAL APPROACH

- Task 1 Analysis of the European Standards for the treatment of WEEE (CENELEC standards) in relation to the requirements of the WEEE Directive 2012/19/EU
- Task 2 Analysis of the situation and experience as regards the implementation of the WEEE treatment requirements in all Member States and the relevant practices applied
- Task 3 Analysis of different options for implementing the requirements for treatment of WEEE in economic, environmental and social terms
- Task 4 Analysis of the options for the assessment of equivalent conditions for WEEE recycling
  operations taking place outside the European Union
- Task 5 Organization of seminars in 6 Member States (GR, DE, NL, CZ, SE, ES) for a closer look into national practices, experiences and challenges related to WEEE treatment
- Task 6 Organization of a final workshop

Implementation of the project: End of 2018 – Mid of 2020

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### **OBJECTIVES AND OUTCOMES OF THIS WORKSHOP**

- To present the results of the study
- To inform about feedback on background documents
- To discuss the proposed approach to WEEE treatment requirements in the EU
- Workshop minutes
- $\rightarrow$  for final study report





## ANALYSIS OF THE EUROPEAN STANDARDS FOR THE TREATMENT OF WEEE (CENELEC STANDARDS)

12 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP



### I. OVERALL OBJECTIVES OF THE TASK

- To examine whether all relevant requirements of the WEEE Directive are addressed adequately in the CENELEC standardisation deliverables.
- To check, which requirements of the CENELEC standardisation deliverables are derived directly from the legal text of the WEEE Directive or other relevant EU law, and which may go beyond the requirements of the WEEE Directive or other relevant EU law.
- To check, if the CENELEC standards distinguish between requirements derived directly from the legal text of the WEEE and requirements that go beyond the requirements of the WEEE Directive, stipulated by the mandate M/518. In addition it was checked whether particular requirements were derived directly from other EU law.
- To check if particular issues (e.g. requirements for data protection and treatment of batteries), that should be addressed in the standardization deliverables according to mandate M/518 are appropriately covered.



### I. OVERVIEW STANDARDIZATION DELIVERABLES

	EN	TS
Collection and logistics	/	TS 50625 - 4
Preparing for re-use	EN 50614	/
General / depollution	EN 50625-1	TS 50625-3-1
Lamps	EN 50625-2-1	TS 50625-3-2
CRTS and flat panel displays	EN 50625-2-2	TS 50625-3-3
Temperature exchange equipment	EN 50625-2-3	TS 50625-3-4
Photovoltaic panels	EN 50625-2-4	TS 50625-3-5
Final treatment	/	TS 50625 - 5

14 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP



### COMPREHENSIVE ANALYSIS OF REQUIREMENTS IN CENELEC STANDARDS

- Requirements were sorted into hard /soft requirements and normative / informative requirements
  - hard requirements: shall/have to/need to/must are used.
  - soft requirements: should/can/may are used.
  - normative requirements: all requirements placed in the body of text and placed in Annexes that are declared normative
  - informative requirements: All requirements placed in a note or placed in Annexes declared informative
- It was assessed whether these signifiers were used to distinguish between requirements derived directly from the legal text of the WEEE Directive or other relevant EU law, and requirements that go beyond the requirements of the WEEE Directive or other relevant EU law.
- The Technical Report (CLC/FprTR 50625-6) was checked to determine whether it provides additional clarification concerning the above mentioned distinction

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### MAIN RESULTS OF ANALYSIS

- Overall comparative analysis shows that relevant issues related to collection, transport, storage and depollution are covered in the standards to great extent and are made obligatory.
- Comprehensive analysis showed that the vast majority of requirements in the EN 50625 series are specifications of the WEEE Directive/other EU law
- In some notable areas the standardisation deliverables go beyond the WEEE Directive / other EU law. These are:
  - Iimits for maximum amounts of WEEE to be stored at treatment facility in dependence of the type of equipment and treatment capacity of the facility
  - requirements for specific types of equipment or components, which are not explicitly laid down in the WEEE Directive / other EU law, in particular vapour-absorption refrigerators, batteries / accumulators, photovoltaic panels
  - > requirements concerning methodologies for sampling, sample preparation and analyses



### MAIN RESULTS OF ANALYSIS II

#### • Several requirements in EN 50614 (preparing for re-use) regarding

- procedures for quality assurance
- procedures regarding stolen goods
- selection of replacement components
- requirements concerning the REEE warranty
- requirements concerning the preparing for reuse label
- requirements concerning tracking and traceability system
- requirements concerning technical documentation
- Some requirements in TS 50625-5 (final treatment of WEEE fractions) that codify good business practices for end-processors
  - detailed requirements for a management system
  - information to be included in contracts
  - sampling and assaying
  - documentation of said practices

17 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP

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### MAIN RESULTS OF ANALYSIS III

• Topics covered by the standardization deliverables based on the Mandate M/518.

- products within the extended scope of the WEEE Directive
- collection of WEEE where it is crucial for subsequent proper treatment
- detailed process requirements
- treatment of batteries contained in WEEE
- data protection related to the treatment of WEEE
- it could not be observed that the standards distinguish between requirements derived directly from the legal text of the WEEE Directive or other relevant EU law, and requirements that go beyond the requirements of the WEEE Directive or other relevant EU law.



### FEEDBACK RECEIVED ON BACKGROUND DOCUMENT II

- Some commenters had the perception that "going beyond the WEEE-Directive/ other EU law" is seen as a "negative issue"
  - > The allocation of a requirement to the three categories is not a value judgement.

Requirements classified as "going beyond..." could also mean that the standard is more ambitious or ahead of current EU law. For the draft final report, a clarification has been added.

- Some commenters perceived references to existing law or standards in informative text according to standardization rules - as a "negative issue"
  - It was an objective of the study to check, whether the standards distinguish between requirements derived directly from the legal text of the WEEE Directive / other relevant EU law and requirements that go beyond the requirements of the WEEE Directive / other relevant EU.

It was assessed whether the signifier normative / informative requirement, was used to make this distinction.

Referencing existing laws in informative text of the standard is conventional and not seen as a "negative issue". For the final report, a clarification has been added.

19 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP

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### OVERVIEW ON IMPLEMENTATION OF THE EU WEEE TREATMENT REQUIREMENTS IN THE MEMBER STATES

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### **OBJECTIVES**

- To analyse, how the WEEE treatment\* requirements as laid down in the WEEE Directive are currently implemented in all EU Member States and to describe the respective experiences made
- 2) To investigate in-depth the situation and experiences made in six selected Member States as regards implementing the European WEEE treatment requirements

#### → to be used as <u>a basis for assessing the need of further EU minimum quality</u> <u>standards for the treatment of WEEE</u> and, if the case given, make proposals regarding such standards

\*including requirements for recycling, recovery and preparation for re-use as well as collection and handling

21 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP



### 1) ANALYSIS OF THE IMPLEMENTATION OF THE EU WEEE TREATMENT REQUIREMENTS IN ALL MEMBER STATES

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### **KEY ISSUES INVESTIGATED**

- Have specific further WEEE treatment requirements going beyond those of the WEEE Directive been adopted at the national level?
- Is compliance with WEEELABEX normative requirements or the CENELEC standards obligatory by law?
- Do producers/PROs operating in a particular Member State request compliance with the CENELEC/WEEELABEX standards?
- Which approaches are applied for cost coverage for compliance with WEEELABEX/CENELEC standards by producers/PROs
- Numbers of treatment facilities for particular WEEE categories and share of facilities working in compliance with the WEEELABEX/CENELEC standards
- Experiences/challenges/ongoing activities

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### MAIN OUTCOMES

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### MS WITH NATIONAL LEGISLATION CONTAINING <u>SPECIFIC</u> WEEE TREATMENT REQUIREMENTS IN ADDITION TO THOSE SPECIFIED IN THE WEEE DIRECTIVE I

• <u>9 Member States (AT, BE, FR, DE, LU, PT, SK, ES, IE)</u> have introduced specific WEEE treatment requirements in addition to those specified in the WEEE Directive.

In several cases these requirements contain elements of the EN-50625 series "Collection, logistics & treatment requirements for WEEE".

25 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP



### MS WITH NATIONAL LEGISLATION CONTAINING <u>SPECIFIC</u> WEEE TREATMENT REQUIREMENTS IN ADDITION TO THOSE SPECIFIED IN THE WEEE DIRECTIVE II

- <u>4 Member States</u> (FR, NL, IE, SI) made compliance with WEEELABEX normative requirements or the CENELEC standards\* as such obligatory by law:
  - Obligation to comply either for facilities (FR) or obligation in the context of extended producer responsibility system (NL, IE)
  - Compliance obligatory since: 2014 2019
  - In none of the MS certification of treatment facilities (by accredited bodies) is obligatory by law
  - Reference to the standards: "WEEELABEX standard" "WEEELABEX or equivalent CENELEC standards", "EN 50625-1 and EN 50574", or several pieces of EN 50625-series

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<sup>\*</sup> Compliance with TS 50625 – 4 "Collection and logistics" by logistics operators is not required

### PROS REQUESTING COMPLIANCE WITH WEEELABEX REQUIREMENTS / CENELEC STANDARDS

 7 Member States, where all PROs request compliance with WEEELABEX normative requirements / CENELEC standards:

Belgium, Ireland, Greece, Luxemburg, France, the Netherlands and Slovenia

 5 Member States, where some but not all PROs request compliance with WEEELABEX normative requirements / CENELEC standards:

Czech Republic, Denmark, Estonia, Sweden and Hungary



All PROs request compliance with WEEELABEX normative requirements / CENELEC standards
Some - but not all PROs - request compliance with WEEELABEX normative requirements / CENELEC standards

**Implementation by PROs:** step by step processes, duration of existing contracts have to be considered

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### APPROACHES OF COST COVERAGE FOR COMPLIANCE WITH WEEELABEX/CENELEC STANDARDS BY PROS

## PROs <u>take over particular costs</u> related to WEEELABEX/CENELEC certification/auditing

#### • Costs for the first audit

The Belgian PRO Recupel pays explicitly for the first audit to get the certification, under the condition that certification is achieved;

#### • Ongoing support of auditing costs including costs for batch tests

e.g. one Irish PROs pays all external costs for WEEELABEX audits in case these audits are commissioned by them;

• Financial support for the <u>first facilities</u> to stimulate early implementation of the standards Sweden, Netherlands, one Greek PRO

28 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP

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### WEEE EXPORTED OUT OF THE EU – STATISTICS 2016

- Amounts of officially reported WEEE exported out of the EU for recycling as a whole appliance are comparably low:
  - ~ 17,161 tonnes  $\rightarrow$  0.4% of the overall amounts of treated WEEE
- 15 Member States reported exports of WEEE
  - Largest amounts of exported WEEE were reported by Italy, France, Portugal and Estonia.
- WEEE categories significant in terms of volumes exported
  - Large household appliances
  - IT and telecommunications equipment
  - Small household appliances
  - Consumer equipment and photovoltaic panels
- Countries of destination
  - China, Hong-Kong, Pakistan, Norway, Switzerland and Turkey

29 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP



### APPROACHES CHOSEN BY MEMBER STATES AS REGARDS THE ASSESSMENT OF EQUIVALENT TREATMENT CONDITIONS OF WEEE

- Article 10(2): "WEEE exported out of the Union shall only count towards the fulfilment of obligations and targets of the Directive, if the exporter can prove that the treatment took place in conditions that are equivalent to the requirements of the WEEE Directive"
- The procedures established for <u>notification of shipments of "amber listed</u>" (hazardous waste) under the Waste Shipment Regulation are applied
- Quantities of WEEE exported out of the EU for recycling are <u>not considered in the calculation of</u> recycling/recovery rates
- Particular PROs have the policy not to export whole WEEE out of the EU for recycling
- No specific procedures were established (as the exported amounts of WEEE are very low)
- Several Member States consider the provision on equivalent conditions of Article 10(2) as <u>hardly</u> <u>enforceable</u>

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### 2) IN-DEPTH INVESTIGATION OF THE CURRENT SITUATION AS REGARDS THE NATIONAL IMPLEMENTATION OF THE EU WEEE TREATMENT REQUIREMENTS IN 6/7 SELECTED MEMBER STATES

31 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP



### GROUPS OF MEMBER STATES WITH COMPARABLE PRACTICES REGARDING TREATMENT STANDARDS

Member States where compliance with WEEELABEX/CENELEC standards is obligatory, respectively implemented nationwide, and a <u>large</u> <u>number of certified WEEE treatment plants</u> is operated

France, Netherlands, Belgium

Member States with comparably <u>small WEEE</u> <u>treatment markets</u>, where implementation of <u>WEEELABEX/CENELEC plays a role (some certified</u> plants exist, some PROs request compliance) but is not complete

Austria, Portugal, Czech Republic, Sweden

Member States with <u>large WEEE treatment markets</u>, while at the same time having <u>some facilities</u> working in compliance with the WEEELABEX/CENELEC standards and having also specific national WEEE treatment requirements

Germany, Italy, Spain

Member States being in the <u>initial phase of implementing</u> WEEELABEX/CENELEC standards

Greece, Lithuania, Slovenia

Others: small MS, exporting considerable percentages of their WEEE, MS with a strong focus on setting treatment requirements in environmental permits and Member States without specific national WEEE treatment requirements going beyond those specified in the WEEE Directive and/or having little or no experience in the implementation of WEEELABEX/CENELEC standards and/or where only a few WEEE treatment facilities are operated

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### SEMINARS IN MEMBER STATES

Greece	11.07.2019

- Germany 25.07.2019
- The Netherlands 09.09.2019 (with BE input)
- Spain 19.09.2019
- Sweden 26.09.2019
- Czech Republic 04.10.2019

#### Stakeholders participating

- 138 participants in total
- Representing **109** distinct organisations



### MAIN OBJECTIVES OF THE SEMINARS

- To gain further insight into how and which of the WEEELABEX/CENELEC requirements are currently implemented,
- To get a better understanding of economic, environmental and social impacts linked to implementing CENELEC/WEEELABEX standards,
- To learn about particular challenges as regards the implementation of environmentally sound WEEE treatment,
- To identify potential implications of possible future EU-wide binding minimum treatment requirements for WEEE for different actors in WEEE treatment in the respective Member State



### SUMMARY FEEDBACK – EU WIDE REQUIREMENT OF COMPLIANCE WITH CENELEC STANDARDS

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Member State	Type of participant			
	National authorities	Recyclers	PROs	Others
The Netherlands	In favour	In favour	In favour	Objections by re-use organisations
Germany	Upcoming German WEEE treatment regulation takes precedence	Both, in favour and opposition	-	Statement against from organisation for small sheltered workshops
Spain	Implementation of national legislation (incl. a system of pre- inspection of WEEE tr. Facilities to be authorized) takes precedence	Both, in favour and opposition	Partly in favour	Objections by re-use organisations
Sweden	In oppostion	Indefinite, not only positive experiences with implementing the standards		Objections by an auditor
Czech Republic	indefinite	Both, compliant/certified recyclers in favour, smaller recyclers in opposition	Partly in favour	-
Greece	Granting appropriate permits takes precedence	In favour (those participating)	In favour	Objections by re-use organisations

# FURTHER POINTS FREQUENTLY MADE

- Positions for/against mandatory certification of facilities against the CENELEC standards
- Uniform standards for awarding certificates of compliance with the CENELEC standards are needed
- Currently only one accredited certification organisation (WEEELABEX Organization)
- Costs for certification to the CENELEC standards can be a barrier for SMEs
- Certification against the CENELEC standards is an advantage in transfrontier waste shipments
- Auditors with know-how about CENELEC standards AND national legislation needed
- Participation in the development of the CENELEC standards / Access to standardization committees, access to standards, language issues

# FURTHER POINTS FREQUENTLY MADE

- Need to improve enforcement of provisions for WEEE collection (high damage rates, problems with high energy batteries), but questions remain as regards implementing of TS 50625-4 (Collection and logistics)
- Importance of monitoring the downstream treatment operators
- Technical issues related to the removal of plastics containing brominated flame retardants (availability of sorting facilities, possible pre-sorting of particular WEEE types)
- Lack of options for final treatment of particular (hazardous) fractions resulting from WEEE (in some countries), e.g. CRT-glass or glass from lamps
- Call for additional quality criteria for final fractions (e.g. WEEE plastics)

### FEEDBACK ON BACKGROUND DOCUMENT II

- Feedback from 6 Member States plus Norway, 13 industry stakeholders
- Up-to date information, additional information, corrections current practices in imlementing the CENELEC standards, treatment facilities, etc.
- Need for clarification / confusion about term "WEEELABEX":
  - WEEELABEX organization (private organization, certification body located in the Czech Republic)
  - WEEELABEX standards (series of standards developed in the so-called WEEELABEX project, Life project in 2009 -2012)
- Need for clarification as regards the current practice of certifying conformity against the CENELEC standards: certification is currently also done by non-accredited bodies



### DISCUSSION

- Any comments on the presentations?
- Any comments on the presentation of experiences of Member States in requiring compliance with the CENELEC standards?
- Any comments on the presentation of relevant aspects regarding practical implementation of the CENELEC standards at national level?
- Any comments on the presentation of national legislation laying down treatment requirements for WEEE not yet considered in the analysis?

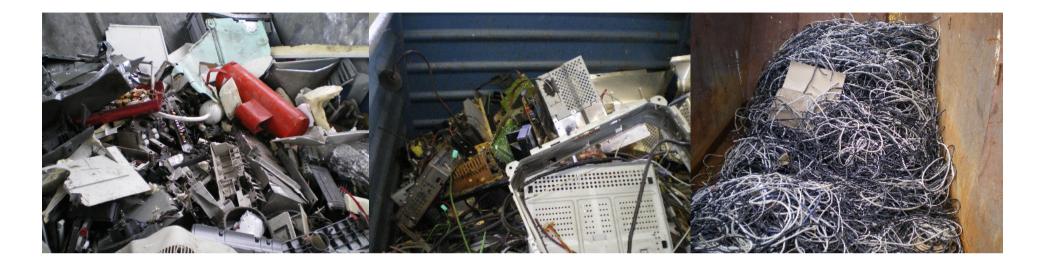


# **ENJOY THE BREAK!**

10 MINUTES



42 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP



### ANALYSIS OF OPTIONS FOR WEEE TREATMENT REQUIREMENTS

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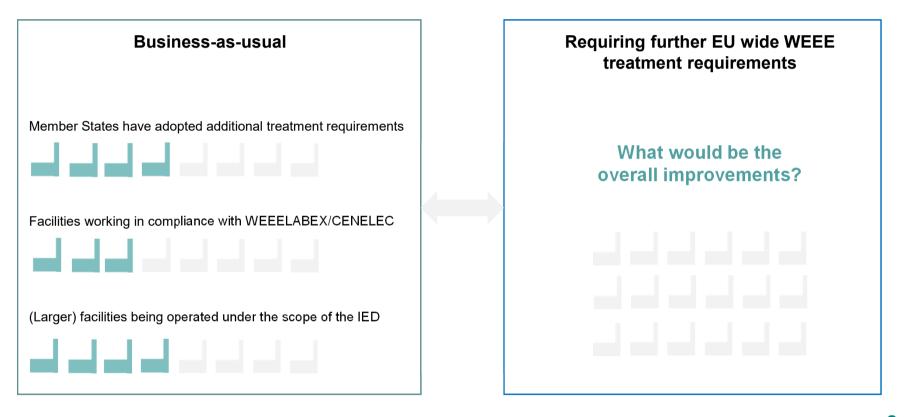
### **OBJECTIVES**

- To identify options for possible further EU minimum quality standards for the treatment of WEEE
- To analyse these options in environmental, economic and social terms
- To give policy recommendations with regard to setting minimum quality standards for the treatment of WEEE
- To present a proposal for further elements for WEEE treatment requirements, if identified appropriate, to be formulated in an Implementing Act

44 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP



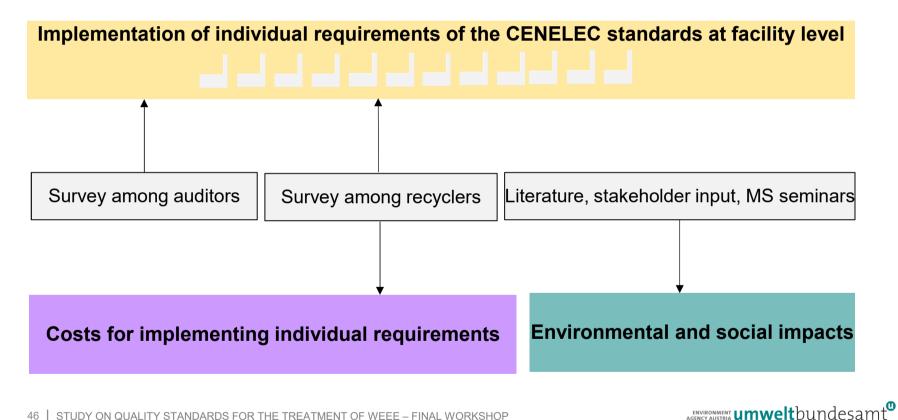
### APPROACH



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### **APPROACH**



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### IMPLEMENTATION OF INDIVIDUAL REQUIREMENTS OF THE CENELEC STANDARDS

### Survey among recyclers

- Implementing the CENELEC standards?
- Current practices at treatment facilities as regards specific technical and administrative requirements
- Changes that occurred / would occur in practice due to working in compliance with the CENELEC standards
- Costs associated to these changes

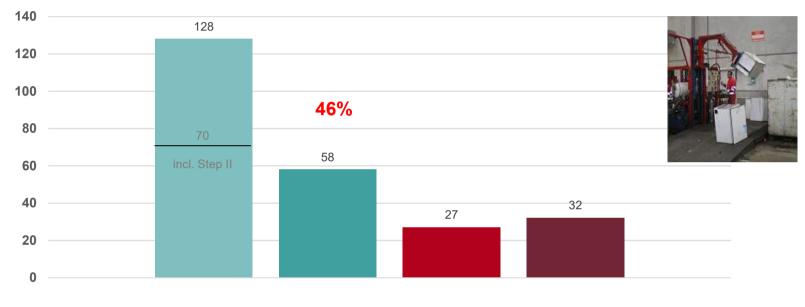
### Survey among selected auditors

• Observations regarding changes at treatment facilities induced by implementing the CENELEC standards

# SHARE OF WEEE TREATMENT FACILITIES WORKING IN COMPLIANCE WITH THE CENELEC STANDARDS

48 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP





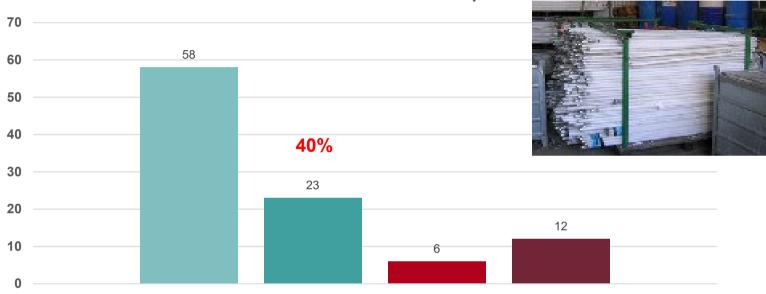
#### Treatment facilities for temperature exchange equipment

Number of facilities in EU

■ Number of facilities applying WEEELABEX/CENELEC standards

■ Number of facilities certified compliant with the CENELEC standards by the WEEELABEX organisation

■ Number of facilities falling under the scope of the Industrial Emissions Directive (min)



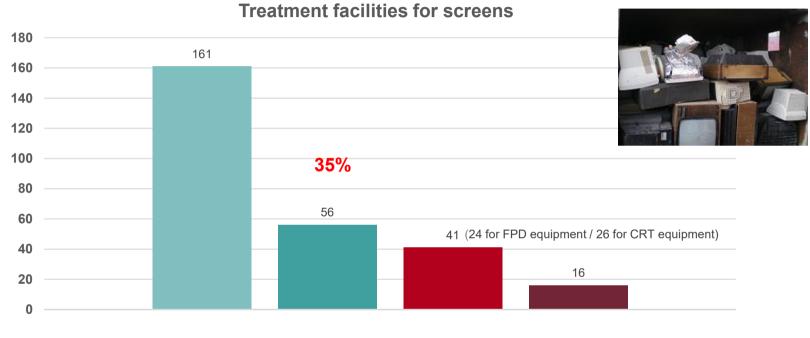
#### **Treatment facilities for lamps**

Number of facilities in EU

Number of facilities applying WEEELABEX/CENELEC standards

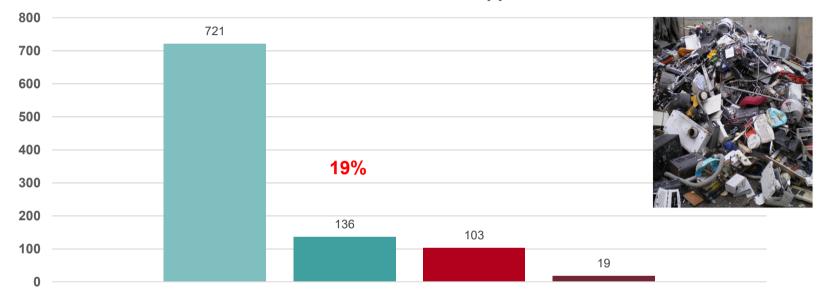
■ Number of facilities certified compliant with the CENELEC standards by the WEEELABEX organisation

Number of facilities falling under the scope of the Industrial Emissions Directive (min)



Number of facilities in EU

- Number of facilities applying WEEELABEX/CENELEC standards
- Number of facilities certified compliant with the CENELEC standards by the WEEELABEX organisation
- Number of facilities falling under the scope of the Industrial Emissions Directive (min)

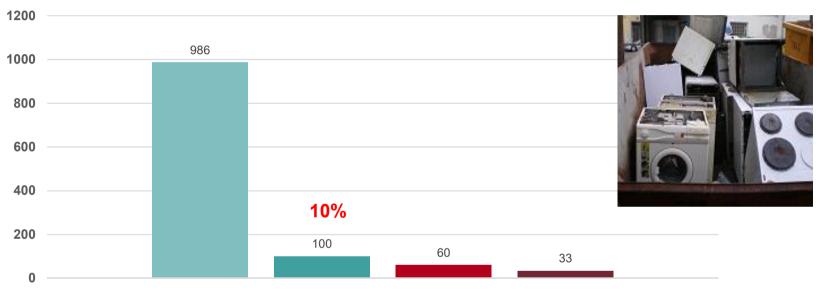


#### **Treatment facilities for small appliances**

Number of facilities in EU

Number of facilities applying WEEELABEX/CENELEC standards

- Number of facilities certified compliant with the CENELEC standards by the WEEELABEX organisation
- Number of facilities falling under the scope of the Industrial Emissions Directive (min)



#### Treatment facilities for large (household) appliances

Number of facilities in EU

■ Number of facilities applying WEEELABEX/CENELEC standards

Number of facilities certified compliant with the CENELEC standards by the WEEELABEX organisation

Number of facilities falling under the scope of the Industrial Emissions Directive (min)

# ANALYSIS OF ENVIRONMENTAL, HEALTH AND SOCIAL IMPACTS OF SETTING ADDITIONAL MINIMUM TREATMENT REQUIREMENTS FOR WEEE TREATMENT

#### Comparison of:

• Current situation of WEEE treatment in the EU



 Scenario, where all European WEEE treatment facilities would fulfil key requirements of the CENELEC standards



54 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP

# SUMMARY: IMPLEMENTATION OF THE SELECTED REQUIREMENTS OF THE CENELEC STANDARDS

Requirements	directly derived from the WEEE Directive*	considered a <b>specification</b> of the WEEE Directive/other EU law, or considered to <b>go</b> <b>beyond</b> the WEEE Directive/other EU law
where indication is given, that they are <u>widely implemented</u> at European WEEE treatment facilities (regardless of working in compliance with CENELEC standards or not)	<ul> <li>Weatherproof covering and impermeable surfaces at storage and treatment areas for lamps</li> <li>Impermeable surfaces at storage and treatment areas for temperature exchange equipment (TEE)</li> </ul>	<ul> <li>medical checks of plant workers at facilities for lamps and FPD equipment as specified by the standards</li> <li>Securing sites to prevent access for unauthorized persons (up-dates might be necessary)</li> </ul>
where indication is given, that they are in a <u>considerable</u> <u>number of facilities not</u> <u>implemented</u> prior to implementing the CENELEC standards – if not required by national law.	<ul> <li>Weatherproof covering at storage for screens, TEE and small equipment.</li> <li>Prevention of damage prior to treatment of screens, TEE and small equipment</li> </ul>	<ul> <li>decontamination of storage containers</li> <li>depollution and its monitoring,</li> <li>removal of BFR-plastics,</li> <li>monitoring of emissions,</li> <li>monitoring of ambient air at work places determination of recycling and recovery rates</li> </ul>

Benefits	Requirements related to			
	Collection and handling	De-pollution / Monitoring	Occupational health monitoring	Determination of recycling / recovery rates
Increased possibilities for preparing for re-use activities	All categories except lamps	-	-	-
Avoiding losses of ODP and GHG	Temperature exchange equipment	Temperature exchange equipment	-	-
Avoiding emissions of and cross-contamination with heavy metals and other hazardous substances	Screens, small/large equipment (Hg, Cd, others)	e.g. substances of concern in capacitors, beryllium, asbestos, arsenides, CrVI etc.).	Detection of possible leakages	-
Avoiding cross-contamination with and disposal of POPs	-	Screens and small equipment (POPs- BFR), large equipment (PCB-capacitors)	-	-
Reduced exposure of workers to Hg and dust	Screens, lamps	-	Facilities for lamps and screens	-
Decreased risk of injuries	e.g. broken glass	-	-	-
Increased material recycling	possibilities of manual dismantling	-	-	Plastics, glass concrete
Job opportunities	at preparing for re-use facilities	for sorting and recycling of WEEE plastics	-	for sorting and recvcling of plastics

# IMPACTS OF SELECTED REQUIREMENTS OF THE CENELEC STANDARDS

57 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP



## WEATHERPROOF COVERING AND IMPERMEABLE SURFACES FOR STORAGE AND TREATMENT AREAS

- Situation prior to implementing CENELEC standards
  - Impermeable surfaces are widely implemented
  - Deficits with weatherproof covering for temperature exchange equipment, screens and small equipment
- Benefits of EU wide implementation
  - Risk of leakage of hazardous substances (Hg, Cd, oil, etc.) to soil and water could be reduced in up to 750 facilities
  - Increased potential for preparing for re-use



### REMOVAL OF PLASTICS CONTAINING BROMINATED FLAME RETARDANTS (BFR)

- Situation prior to implementing CENELEC standards
  - BFR-plastics from screens and small appliances often insufficient,
  - Implementing the CENELEC standards often led to changing downstream operators and/or additional documentation at downstream operators and investments in new sorting lines/facilities

#### Impacts of EU wide implementation

- Reduced introduction of POP-BFRs into mechanical recycling of plastics and thus into recycled goods (and possibly landfills),
- Job creation potential: additional capacity demands for sorting facilities for WEEE plastics in Europe
- Impact on recycling potential of WEEE plastics



### MONITORING REMOVAL OF CAPACITORS

#### • Situation prior to implementing CENELEC standards

- Capacitors < 2.5 cm often not (sufficiently) removed from large appliances, small appliances and CRT equipment
- Benefits of EU wide implementation
  - Reduced cross-contamination of materials with POPs

Presence of PCB-containing capacitors in WEEE is declining, but still relevant in particular types of WEEE\*

• Reduced cross-contamination of materials with other substances of concern

19 substances of concern identified in different types of capacitors\*

• Reduced exposure of workers

\*Savi et al. (2019), 0.5 % of all capacitors in large household appliances, 55 % of all capacitors in luminaires

60 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP

## OCCUPATIONAL HEALTH MONITORING, MERCURY CONCENTRATIONS IN AMBIENT AIR OF FACILITIES FOR LAMPS AND FLAT SCREENS

- Implementing the CENELEC standards in several cases led to:
  - more frequent measurements
  - a larger number of checkpoints and
  - independent verification of the measurements
- Benefits of EU-wide implementation
  - Regular monitoring according to the specifications of the relevant technical specifications may lead to reduced exposure for workers in up to 100 treatment facilities for screens and 35 lamp treatment facilities, which are currently not compliant with these standards



### DETERMINATION OF RECYCLING AND RECOVERY RATES

- Implementing the CENELEC standards at facilities often led to introducing downstream documentation of WEEE (which did not exist before) = documentation of waste materials until they cease to be waste or enter the final recycling or disposal operation
- Implementing Decision EU 2019/2193 laying down rules for the calculation, verification and reporting of data and establishing data formats for the purposes of Directive 2012/19/EU: detailed rules for the calculation of the recycling/recovery rates for WEEE
- Benefits of EU wide implementation :
  - <u>Clear rules</u> for the documentation of downstream processes as specified by EN 50625-1 improve the reliability and comparability of recycling/recovery rates on the <u>facility level</u>, which allows calculating the achieved rates on higher levels (PROs, Member States).



### SCREENS: PREVENTION OF DAMAGE PRIOR TO TREATMENT

### Current situation

- Considerable share of screens arrives damaged at sorting treatment facilities
- In damaged flat panel display equipment (FPDs) up to 90% of the backlights can be damaged

### Benefits of EU wide implementation

- Reduced losses of the fluorescent coatings from CRT equipment, which can contain cadmium.
- Reduced releases of mercury from FPD backlights.
- Reduced exposure to heavy metals (and dust) of workers
- Improvements for manual dismantling and preparing for re-use
- Decreased risk of injuries for workers due to broken glass.



### TEMPERATURE EXCHANGE EQUIPMENT (TEE): MONITORING OF REMOVAL OF VFC/VHC

### Current situation

- CENELEC standards request removal of 90% of contained refrigerants and blowing agents of TEE
- Often only 70% or less actually removed during prior to implementing the CENELEC stands (if no corresponding national requirements)

### Benefits of EU wide implementation

- Reduced emissions of ozone depleting substances and green house gases.
  - Estimates for Step I treatment (removing refrigerants from cooling circuit): ~ 130 tonnes of CFC 12 per year
  - Estimates for Step II treatment (removing blowing agents from insulation foam): ~ 360 tonnes of CFC 11 per year
  - $\rightarrow$  ~ 490 t CFC 11 eq and 3.1 Mio t CO<sub>2</sub> eq per year

# POSSIBLE ADDITIONAL COSTS ASSOCIATED WITH EU-WIDE MINIMUM WEEE TREATMENT REQUIREMENTS

- Additional costs that may accrue for <u>individual facilities</u> when implementing selected requirements of the CENELEC standards → orders of magnitude
- These costs are <u>influenced by national circumstances</u> (waste legislation, labour costs, costs for disposal of final fractions etc.) and <u>current status of facility</u>
- Cost ranges for implementing a particular administrative or technical requirement "High": > 80,000 €.
  - "Medium": between 10,000 and 80,000 €
  - "Low": < 10,000 €

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# COSTS THAT CAN ARISE FOR SETTING ADDITIONAL EU-WIDE MINIMUM WEEE TREATMENT REQUIREMENTS – **HORIZONTAL REQUIREMENTS**

High	Implementing measures for securing sites to prevent access of unauthorized persons (one-off costs) Implementing (fixed) weatherproof covering (one-off costs)
	Implementing procedures for removal of BFR plastics (one-off costs)
Medium	Implementing a <b>management system</b> and <b>risk management</b> according to the specifications of EN 50625- 1 (running costs)
	Implementing <b>employee training</b> according to the specifications of the CENELEC standards (running and one-off costs)
	Implementing downstream monitoring (running costs)
	Implementing measures for securing sites to prevent access of unauthorized persons (running costs)
	Implementing procedures for <b>removal of BFR plastics</b> (running costs)
Low	Implementing the specifications <b>for determination of recycling and recovery rate</b> according to EN 50625-1

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### COSTS THAT CAN ARISE FOR SETTING ADDITIONAL EU-WIDE MINIMUM WEEE TREATMENT REQUIREMENTS – LAMPS

High	
Medium	Implementing <b>monitoring of mercury removal</b> according to the specifications of EN 50625-2-1 and TS 50625-3-1 (one-off costs)
	Implementing <b>occupational health monitoring</b> (regular measurements of mercury concentrations in ambient air) (one-off costs)
Low	Conducting <b>batch tests</b> if these are necessary for determination of recycling and recovery rates according to the specifications of EN 50625-1 (running costs)
	Implementing <b>occupational health monitoring</b> (regular measurements of mercury concentrations in ambient air) (running costs)

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# COSTS THAT CAN ARISE FOR SETTING ADDITIONAL EU-WIDE MINIMUM WEEE TREATMENT REQUIREMENTS – SCREENS

High	Implementing <b>removal and monitoring of fluorescent coatings from CRT</b> equipment according to the specifications of the CENELEC standards (one-off costs)
Medium	
Low	For implementing (sufficient) removal of <b>capacitors from CRT</b> equipment (one-off costs) Implementing <b>occupational health monitoring</b> (mercury concentrations in ambient air for FPD treatment) according to the specifications of the CENELEC standards (running costs) Implementing monitoring sufficient separation of front and funnel glass according to EN 50625-2-2 and TS 50625-3-3

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# COSTS THAT CAN ARISE FOR SETTING ADDITIONAL EU-WIDE MINIMUM WEEE TREATMENT REQUIREMENTS – **TEMPERATURE EXCHANGE EQUIPMENT**

High	Implementing the provisions related to treatment step 2 ( <b>removal of blowing agents)</b> (running and one-off costs)
Medium	Implementing the provisions related to treatment step 1 ( <b>removal of refrigerants from the cooling circuit</b> ) (one-off costs)
Low	

69 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP



# COSTS FOR (EXTERNAL) AUDITING OF COMPLIANCE WITH THE CENELEC STANDARDS

#### Auditing costs

- up to 5,000 € per waste stream (survey conducted within this study)
- audit costs associated for first audit < 10,000 € for half of the respondents, for the surveillance audit < 8,500 € (WEEE Forum, 2016)</li>
- average costs of ~23,400 €, including batch testing but setting aside any infrastructure costs, over the 2 year cycle of surveillance and certification according WEEELABEX criteria (certified by WEEELABEX organization) (EuRIC, 2019)
- < 10 €/t for all waste streams, typically between 5 and 7 €/t (UNU, 2017)

#### Indirect costs of auditing

- **Batch tests** (collecting and sorting WEEE for the batch test, cleaning out the production line, weighing and documenting separated fractions is also required)
- Operational production may be disrupted

# COSTS FOR (EXTERNAL) AUDITING OF COMPLIANCE WITH THE CENELEC STANDARDS

### • Possible additional costs of the certification bodies

### e.g. costs for initial application, for ongoing certification:

Example: WEEELABEX organization:

fees for initial application (declaration of intent): 500 € per waste stream and registration fee for publication on the WEEELABEX web: 500 € per waste stream

#### Compared to current treatment costs (100-500 €/t WEEE) audit costs are small but significant



### WEEE TREATMENT COSTS FOR RECYCLERS

• No indication that overall treatment costs for CRT, FPD and small equipment would increase significantly in case of implementing the CENELEC standards (for the other WEEE categories: too little information available)

Treatment costs	Certified recyclers	Not certified recyclers	Average treatment costs (UNU, 2017*)
CRT equipment	100-280 €/t (average 220, n=4)	100-300 €/t (average 226, n=19)	241€/t (n=11)
FPD equipment	200-350 €/t (average 300,n=3)	200-300 €/t (average 289, n=19)	144 €/t (n=11)
Small and IT equipment	150-400 €/t	200-300 €/t	240 €/t (n=18)
TEE	200-500 €/t (n=4)	-	177 €/t (n=12)
Lamps	400 €/t (n=1)	-	-
Large equipment	110 €/t (n=1)	120-300 €/t (average 183, n=10)	101 €/t (n=12)

\* UNU (2017): WEEE Recycling Economics, The shortcomings of the current business model

72 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP

#### CONCLUSION

- Setting EU-wide WEEE treatment requirements based on CENELEC standards would have significant positive impacts on the environment and human health. Some specific requirements have the potential to create new jobs.
- Improving <u>collection and handling of specific WEEE categories</u> (as screens and temperature exchange equipment) by applying the provisions of the standards could contribute substantially to avoiding releases of pollutants during waste management.
- Treatment not corresponding to CENELEC standards is currently found more often in treatment facilities processing <u>small and large equipment</u> than in treatment facilities processing lamps, temperature exchange equipment and screens. → Highest impacts, both as regards costs as well as environmental and social benefits.
- In particular for requirements that could be associated with "high" costs (removal of BFR plastics, removal of blowing agents from insulation foam of TEE), EU-wide requirements have to be as clear as possible to avoid divergent implementation/unfair competition.

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#### FEEDBACK ON BACKGROUND DOCUMENT III

- Additional information, studies etc. were provided
- The CENELEC standards themselves do not set down any methodology for how the verification may be achieved: it may be through certification by third-party auditors and by second-party auditors and self-declarations.
- There is no legal obligation that different WEEE treatment steps have to be performed by a particular treatment operator
- Costs given for auditing organization are based on information of the WEEELABEX organization.
- When high costs for weatherproof covering are mentioned, this is for fixed covering, temporary waterproof tarpaulins in contrast are low cost measures



#### DISCUSSION

- Any comments on the presentation / findings?
- Any comments on the presentation of impacts (costs/benefits) of possible additional EU- level WEEE treatment requirements?



### **ENJOY THE BREAK!**

15 MINUTES



76 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP



# PROPOSED FUTURE APPROACH TO WEEE TREATMENT REQUIREMENTS

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#### **OBJECTIVES**

- to identify options for possible further EU minimum quality standards for the treatment of WEEE,
- to analyse these options in environmental, economic and social terms
- to give policy recommendations with regard to setting minimum quality standards for the treatment of WEEE
- to present a proposal for further elements for WEEE treatment requirements, if identified appropriate, to be formulated in an Implementing Act



### WHY ADDITIONAL EU WIDE MINIMUM TREATMENT REQUIREMENTS FOR WEEE I

- Existing EU WEEE treatment requirements: Article 8 of the WEEE Directive, Annexes VII and VIII) are quite <u>generic</u> and have <u>not been adapted to scientific and technical progress since 18 years</u> (original WEEE Directive)
- Treatment of particular types of <u>WEEE</u>, which did not occur at relevant amounts 18 years ago (e.g. photovoltaic panels, air conditioning equipment, flat panel displays and WEEE containing Li-accumulators) is not specifically covered by the current EU WEEE treatment requirements
- New <u>evidence</u> is available as regards <u>hazardous components</u>, <u>materials and substances</u> in WEEE: e.g. substances of concern in capacitors or ongoing developments in the context of POPs
- Requirements concerning proper preparing for re-use and concerning recovery of critical materials are not part of the current EU WEEE treatment requirements.

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### WHY ADDITIONAL EU WIDE MINIMUM TREATMENT REQUIREMENTS FOR WEEE II

- <u>Best available techniques (BAT)</u> for waste treatment as adopted in 2018 (*Commission Implementing Decision 2018/1147*) is implemented by facilities with higher treatment capacities, which constitutes the <u>smaller part of WEEE treatment facilities in the EU</u>.
- Additional EU wide minimum treatment requirements will help to <u>avoid distortions of</u> <u>competition</u> within the EU and within Member States, provided that such requirements contain provisions that guarantee for enforcement of the requirements in a <u>harmonised way</u>.
- More detailed provisions will support the practical implementation and facilitate enforcement
- Specific requirements such as specifying depollution (e.g. a maximum bromine content for plastics intended for recycling) may have the potential to <u>create new jobs</u>. Increased demands for sorting of WEEE plastics are an example. Such requirements could lead to the WEEE plastics quantities needed to <u>promote investments</u> in such facilities by economical actors.



### GENERAL OPTIONS AS REGARDS POSSIBLE ADDITIONAL EU WEEE TREATMENT REQUIREMENTS

#### Option 0

Requiring **no further EU wide minimum treatment requirements** for WEEE (Business as usual)

#### **Option 1**

Requiring, in substance, **compliance with the entire CENELEC standards**, with the exact form of the obligation still left to be determined.

This at the **national level** could take the form of requiring that collected WEEE may only be handled/treated in facilities which are compliant with the CENELEC standards (e.g. laid down by Dutch legislation), or be linked to EPR obligations by requiring that the WEEE arising from EEE put on the market are collected/handled/treated by/in facilities that are compliant with the CENELEC standards (e.g. laid down by Irish legislation).

For the **EU level**, this would in principle correspond to the (full) content of the standards to be "taken over" in the EU WEEE legislation/derived act(s)

#### **Option 2**

Laying down **specific/selected additional minimum treatment requirements for WEEE in the EU** WEEE legislation/derived act(s)

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### GENERAL OPTIONS AS REGARDS POSSIBLE ADDITIONAL EU WEEE TREATMENT REQUIREMENTS

		Content of the requirements	
Option		(1) Requiring, in substance, compliance with the <u>entire CENELEC standards</u> , with the exact form of the obligation still left to be determined.	(2) Laying down <u>specific/selected additional</u> <u>minimum treatment</u> requirements for WEEE in the EU WEEE legislation/derived act(s)
Enforcement / Verification	Inspection/monitoring via competent authorities	Option 1a	Option 2
	Proof of compliance via certification of treatment facilities	Option 1b = Option 1a plus: <u>Obligatory certification</u> of WEEE treatment facilities according to certain rules	-

#### MAIN ADVANTAGES AND DISADVANTAGES OF THESE OPTIONS

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Option 1 a	Option 1 b	Option 2
	nay have the resources to participate in a time-consuming of not adequately taking into account the experience of	+ The approach allows for introducing additional elements, which are currently not part of the CENELEC standards
	not at the same level than for rule – making at EU level plementing decisions supported by Comitology).	+ Referring to the CENELEC standards only when it comes to specific technical issues allows for not overloading legislation with formulas etc.
	<ul> <li>Audit costs may be prohibitive for small companies as audit costs do not correlate directly with the amounts of waste processed</li> </ul>	- Language issues and issues of free access to law would remain for particular technical details specified in (additional) standards.
	+ Costs for compliance checking would have to be borne by the producers of EEE and not by the taxpayers (as in case of additional detailed provisions in EU WEEE legislation) (Costs for implementing administrative and technical requirements are considered equal in both options)	+ To lay down key requirements in the legislation in a condensed way, may be supportive for clarity for enforcement authorities and environmental inspections, and thus strengthen enforcement of the provisions and contribute to harmonized permitting conditions.
<ul> <li>Especially when a limited number treatment facilities are operated Member State, it might be a chale ensure that the necessary exper- provided at competent authorities</li> </ul>	in a lenge to tise is	- Especially when a limited number of treatment facilities are operated in a Member State, it might be a challenge to ensure that the necessary expertise is provided at competent authorities and inspectorates.

- May lead to less WEEE treatment facilities in some areas as implementing such requirements may not be feasible for all WEEE treatment facilities currently operating → longer transport distances possible

inspectorates.

#### PROPOSED APPROACH

#### Option 2

Laying down specific/selected additional minimum treatment requirements for WEEE in the European WEEE legislation/derived act(s)

(in an Implementing Act to the WEEE Directive)

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#### **ELEMENTS OF OPTION 2**

Key requirements in the legislation/derived acts (implementing or delegated act), including inter alia:

- basic process requirements
- target and limit values related to depollution and emission prevention
- basic obligations related to monitoring of WEEE materials until final recycling/disposal
- basic obligations related to determining the recycling/recovery rates.

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#### **ELEMENTS OF OPTION 2**

## Obligatory application of specific technical issues of the CENELEC standards including for example:

- Detailed procedures for <u>depollution monitoring</u> (eg the "Sampling protocol for the lamp treatment fractions" and the specifications for "analysis of mercury in the lamp treatment fractions" in Annexes AA and BB of TS 50625-3-2)
- Details how to conduct the annually requested <u>performance tests</u> for treatment of WEEE containing VFC/VOC (specified in Annexes AA and BB to EN 50625-2-3)
- Details about <u>determining recycling/recovery rates</u> (including batch tests) (as specified in detail by Annex C "Determination of recycling and recovery rates" and Annex D "Requirements concerning processing of a batch" to EN 50625-1)
- Details for <u>monitoring of emissions or sampling and analytical methods</u> (as e.g. specified by Annex HH "Determination of VFC and VHC concentration in gas streams" of TS 50625-3-4.)

With the exact form of the reference to the individual chapters of CENELEC standards still to be assessed

# Obligatory documentation of compliance with particular elements of the minimum treatment requirements for WEEE by an external body

87

### METHOD FOR IDENTIFICATION OF SPECIFIC ELEMENTS OF POSSIBLE FUTURE WEEE TREATMENT REQUIREMENTS

Compilation of existing requirements:

- Requirements of the CENELEC standards
- Requirements laid down in legislation of the Member States or requirements currently being under discussion on national level
- Elements describing best available technology (BAT) in WEEE treatment including BAT associated emission levels (BAT-AELs) as laid down in the *Commission Implementing Decision 2018/1147 establishing the BAT conclusions for waste treatment*



#### SELECTION OF SPECIFIC ELEMENTS OF POSSIBLE FUTURE WEEE TREATMENT REQUIREMENTS

#### Criteria for the selection of elements:

- Requirements that were identified in the CENELEC standards AND in Member State legislation/ requirements were selected in any case.
- Where more and less concrete wording for largely equal provisions was identified in the CENELEC standards and in national legislation, as a rule, the most concrete wording was selected as a basis for drafting the particular element.
- Requirements, identified either only in the CENELEC standards or in national legislation, were selected considering the expected environmental and health benefits.
- Where differing provisions were identified in the CENELEC standards and in Member States legislation case by case decisions were made, considering the expected environmental and health benefits. An example are differing target or limit values. The CENELEC standards specify a limit value for residual mercury in glass fractions from lamps of 10 mg/kg, while German and Austrian legislation specify 5 mg/kg.

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### HOW COULD THE POSSIBLE FUTURE EU WEEE TREATMENT REQUIREMENTS LOOK LIKE

#### Horizontal requirements

- Administrative and organisational requirements
- Technical requirements
- Requirements for documentation of compliance
- Requirements dedicated to particular WEEE categories, at least
  - Lamps / gas discharge lamps
  - Screens (CRT, FPD equipment)
  - Temperature exchange equipment
  - Photovoltaic panels

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### HORIZONTAL REQUIREMENTS

- Administrative and organisational requirements
  - Training of staff
  - Monitoring of the WEEE treatment chain
  - Determination of recycling and recovery rates
  - Documentation at recycling facilities





#### HORIZONTAL REQUIREMENTS

#### • Technical requirements

- Requirements for sites for storage and treatment of WEEE (in addition to Annex VIII, WEEE Directive)
- Provision related to collection, handling and transport of WEEE (in particular related to prevention of damage prior to treatment)
- Specific requirements for collection points
- Receiving of WEEE at a facility
- Depollution Process requirements
- Depollution monitoring
- Removal of plastics containing BFR
- Prevention of emissions
- Tracking of non-depolluted WEEE and fractions
- Handling and treatment of (final) fractions

92 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP



#### HORIZONTAL REQUIREMENTS

- Requirements related to documentation of compliance
  - Compliance of particular requirements to be documented at specified intervals by an external body either accredited as per EN 17020 or an external expert reviewer/auditor authorized to do such inspections according to national legislation
  - Possible candidates for such documentation are:
    - Requirements related to de-pollution / monitoring
    - Requirements related to the determination of recycling and recovery rates,
    - Technical requirements for sites for storage and treatment of WEEE
    - Requirements related to collection, handling and transport.



### EXAMPLES FOR PROVISIONS SELECTED FROM NATIONAL LEGISLATION/REQUIREMENTS PROPOSED FOR THE FUTURE EU WEEE TREATMENT REQUIREMENTS

- Obligation for treatment facilities to assess if WEEE contain materials, mixtures or components that are <u>hazardous other than the hazardous components listed in Annex VII (1)</u> of the WEEE Directive and to remove them (in future possibly supported by entries in the database for information on Substances of Concern In articles as such or in complex objects (Products) established under the Waste Framework Directive (SCIP database).
- Obligation to apply <u>air extraction and de-dusting</u> for mechanical treatment of any kind of WEEE, including e.g. depolluted small equipment, small IT equipment and large equipment and components resulting from WEEE treatment (De-polluted WEEE can still contain many substances of concern)
- <u>Obligatory separation</u> and material recycling of polymethyl methacrylate (PMMA) and polycarbonate (PC) <u>sheets</u> from flat panel displays equipment

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### OTHER POLICY RECOMMENDATIONS – ANNEX VII "SELECTIVE TREATMENT FOR MATERIALS AND COMPONENTS"

- Amend entries in the list of substances, mixtures and components that have to be removed from WEEE
  - PCB containing capacitors and electrolyte capacitors containing substances of concern (>2,5 cm) → capacitors containing <u>fluids</u> (height > 25 mm, diameter > 25 mm or proportionately similar volume)
  - Plastic containing brominated flame retardants → removal of plastics <u>containing restricted</u> <u>substances/substances subject to authorization (REACH)</u> and POPs
- Add entries in the list of substances, mixtures and components that have to be removed from WEEE
  - beryllium-oxide containing components
  - photo conducting drums containing Cd, Se



### OTHER POLICY RECOMMENDATIONS – ANNEX VII "SELECTIVE TREATMENT FOR MATERIALS AND COMPONENTS"

- Delete entries in the list of substances, mixtures and components that have to be removed from WEEE
  - External electric cables
- Differentiation of the entries in Annex VII into hazardous components, that have to be removed prior to size reduction and such that can be separated at a later stage during the WEEE treatment process



#### **OTHER POLICY RECOMMENDATIONS - INSPECTION**

- Introduce the option for Member States to consider a valid certificate of compliance with the CENELEC standards in their inspection plans for WEEE treatment facilities (as regards frequency and intensity of inspections)
- Require obligatory minimum inspection intervals for specific WEEE treatment operations in Article 23, WEEE Directive.

97 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP



#### FEEDBACK ON BACKGROUND DOCUMENT III

Three basic positions as regards the preferred option for additional EU-wide WEEE treatment requirements were expressed by stakeholders:

- **Option 2** (laying down specific/selected additional minimum treatment requirements for WEEE in the EU WEEE legislation/derived act(s))
- **Option 1** (requiring, in substance, compliance with the entire CENELEC standards)
- + obligatory rules for verification of compliance (e.g. obligatory certification of auditors by accredited organisations)
- **Option 1** (requiring, in substance, compliance with the entire CENELEC standards)
- + no rules for verification (certification, third party audit, self declaration possible)

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#### FEEDBACK ON BACKGROUND DOCUMENT III

- Access to standards: Agreements between national players (for example in France the PROs with the national standard organisation to make the standards available for free to the operators).
- Efforts for establishing the CENELEC standards (11 years of expert work) would have been of no use in case of option 2
- Enforcement: Know-How of auditors, low capacities of authorities
- Implementation of existing standards could possibly take place more or less immediately, option 2 would take time
- Clarification needed as regards intended way of enforcement/verification of the presented options



#### DISCUSSION

- What are your views on the presented options?
- Any comments on the approach to identify possible specific elements of additional EU treatment requirements for WEEE
- Any comments on particular types of WEEE, which should especially be considered when establishing such additional EU treatment requirements for WEEE

100 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP



#### FINAL STEPS OF THE STUDY

- If any questions could not be answered during this workshop: answered by end of next week.
- Minutes of this workshop to be shared with participants in the beginning of June
- End of the Study: 30 July 2020

101 STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE - FINAL WORKSHOP



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102 | STUDY ON QUALITY STANDARDS FOR THE TREATMENT OF WEEE – FINAL WORKSHOP

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