

European Standards for Waste Electrical and Electronic Equipment (WEEE)





Collection | Transport | Re-Use | Treatment

TC111x/WG6: update
2024-06-24

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1

Index of this presentation



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2




WEEE Standards


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3



About CENELEC




CENELEC is one of three European standardization Organisations.

TC111x "Environment" addresses generic environmental standardisation needs of the electrotechnical sector, especially in support of European legislation.

- 34 National Committees (NCs)
- 28 EU memberstates
- 3 EFTA countries, and Turkey and Macedonia.
- 29 affiliates

Standards for WEEE: NCs participated, with producers, take-back system operators, logistical operators, refurbishers, recyclers, consultants, scientists, auditors and NCs.

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4

Why European standards for WEEE



European standards are requested by the EC and broadly supported by stakeholders.

EC requested European Standard Organisations (ESOs) to develop European standards (Article 8.5 of WEEE Directive 2012/19/EU).

- Broadly supported by stakeholders:
- Experts from National Committees.
 - Producers federations.
 - Take-back systems.
 - NGO's and independent experts and scientists.
 - Recycling industry.

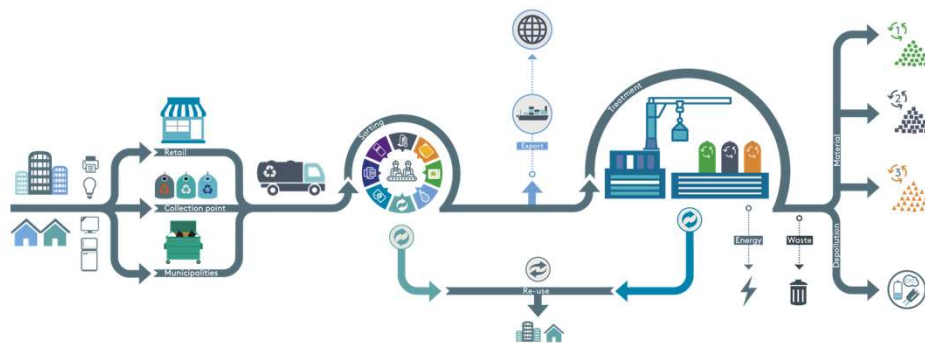


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6

An overview of European Standards for WEEE

▶ Situation
Complications
Message



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7


An overview of European Standards for WEEE

Situation


Complications

Message


Collection and Transport of WEEE












Treatment of WEEE



Re-use of WEEE



-  **TS 50625 - 4**
Collection and Logistics
-  **EN 50625-1; TS 50625-3-1**
General treatment and depollution requirements
-  **EN 50625-2-1; TS 50625-3-2**
Lamps
-  **EN 50625-2-2; TS 50625-3-3**
Displays (CRT FPD)
-  **EN 50625-2-3; TS 50625-3-4**
Temperature exchange equipment
-  **EN 50625-2-4; TS 50625-3-5**
Photovoltaic panels
-  **TS 50625-5 ***
Final treatment
-  **EN 50614**
Preparing for re-use



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8

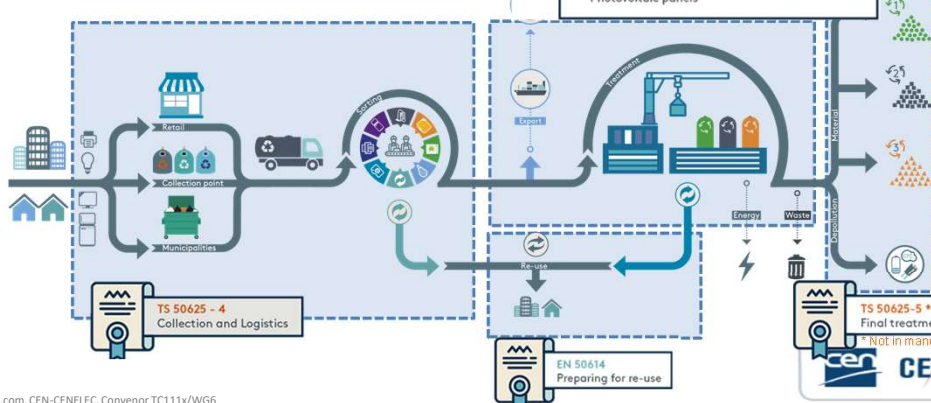
An overview of EU Standards for WEEE








Situation


Complications

Message

European standards cover the whole chain of
Collection | Transport | Re-use | Treatment



-  **EN 50625-1; TS 50625-3-1**
General treatment and depollution requirements
-  **EN 50625-2-1; TS 50625-3-2**
Lamps
-  **EN 50625-2-2; TS 50625-3-3**
Displays (CRT FPD)
-  **EN 50625-2-3; TS 50625-3-4**
Temperature exchange equipment
-  **EN 50625-2-4; TS 50625-3-5**
Photovoltaic panels
-  **TS 50625-5 ***
Final treatment
* Not in mandate
-  **EN 50614**
Preparing for re-use



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9

What are the standards about?

Recycling and recovery rates

Depolution

Management requirements

Monitoring and reporting

Indication of the links between subjects covered in the standards and the WEEE directive

Compliance with European Standards for WEEE

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10

Recycling and recovery rates

- WEEE directive sets recycling and recovery targets
- ENs and TSs contain a detailed calculation methodology, based on the Directive's requirements:
 - Creating a transparent level playing field for various European Stakeholders.
 - Benchmarking EU recycling and recovery rates.



European standards create EU-level playing field on recycling and recovery rate calculations

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11

Depollution

WEEE contains substances of concern which can be hazardous, for example:

- mercury,
- polychlorinated biphenyls,
- cadmium,
- volatile fluorocarbons and
- some brominated flame retardants
-

WEEE directive Annex VII requires dedicated handling and treatment.

European standards address compliance criteria for treatment operators on depollution:

- Target values for batteries and capacitors.
- Limit values for concentrations of hazardous substances.



European standards address compliance criteria for depollution of WEEE.



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12

Management requirements



European standards give documentation requirements

The European Standards give administrative and organisational requirements, concerning:

management principles

environmental

health and safety

- a system for management requirements
- demonstration of continuous improvement,
- legal compliance report,
- organisational plan,
- work instructions,
- hazards identification,
- training



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13


Monitoring and reporting

Treatment may consist of a cascade of treatment operations.

The standards require downstream monitoring (the first operator needs to monitor downstream fractions).


Verifiable and accurate basis for:

- calculation of recycling and recovery rates
- monitoring hazardous waste streams



Standards require downstream monitoring

European standards enable operators to demonstrate that WEEE is treated in a way that complies with legislation and that state-of-the-art technologies are being used.




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14

Indication of the links between subjects covered in the standards and the WEEE directive


Subject	WEEE Directive articles and annexes	Covered in standards*
Disposal and transport of collected WEEE for proper treatment and preparing for re-use	6.1 and 6.2	✓
Proper treatment	8.1, 8.2 and 8.3	✓
Permits	9.1 and 9.3	✓
Shipments of WEEE	10.2	✓
Recovery targets, calculation method and monitoring	11.1, 11.2, 11.4	✓
Registration, information and reporting	16.4	✓
Inspection and monitoring	23.1	✓
Categories of EEE covered	Annex I, Annex III	✓
Indicative list of EEE which falls within categories	Annex II, Annex IV	✓
Minimum recovery targets	Annex V	✓
Minimum requirements for shipments	Annex VI	✓
Selective treatment for materials and components of WEEE	Annex VII	✓
Technical requirements for proper treatment	Annex VIII	✓



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15

Compliance with European Standards for WEEE




- The standards for WEEE support the implementation of the WEEE directive
 - The use of standards is voluntary, there is no automatic legal obligation to apply them - However, law may refer to standards
 - Certification of the conformity with WEEE standards by third-party is voluntary - However, it could increase credibility

Standards are voluntary.

Laws and regulations may refer to standards


Certification of conformity can increase credibility.



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16


Compliance with European Standards for WEEE



- A certificate represents a third-party attestation that the collection, transport or treatment of WEEE meets the standards and thus requirements of the WEEE legislation.
- A certificate is issued by an accredited organisation (both growing numbers):
 - >350 certified WEEE treatment operators in 12 EU member states
 - > 60 independent accredited WEEE auditors.

Eight MS have incorporated the standards into their national legislation, making compliance against the EN 50625 mandatory by law (FR, NL, CZ, IE, LX, BE, SI, LT), other countries like RO, SE and DE reached agreements where PROs require compliance against the standards by their service providers.

The inclusion of the standards into these national regulations and business agreements are critical for increasing the number of compliant facilities.



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17



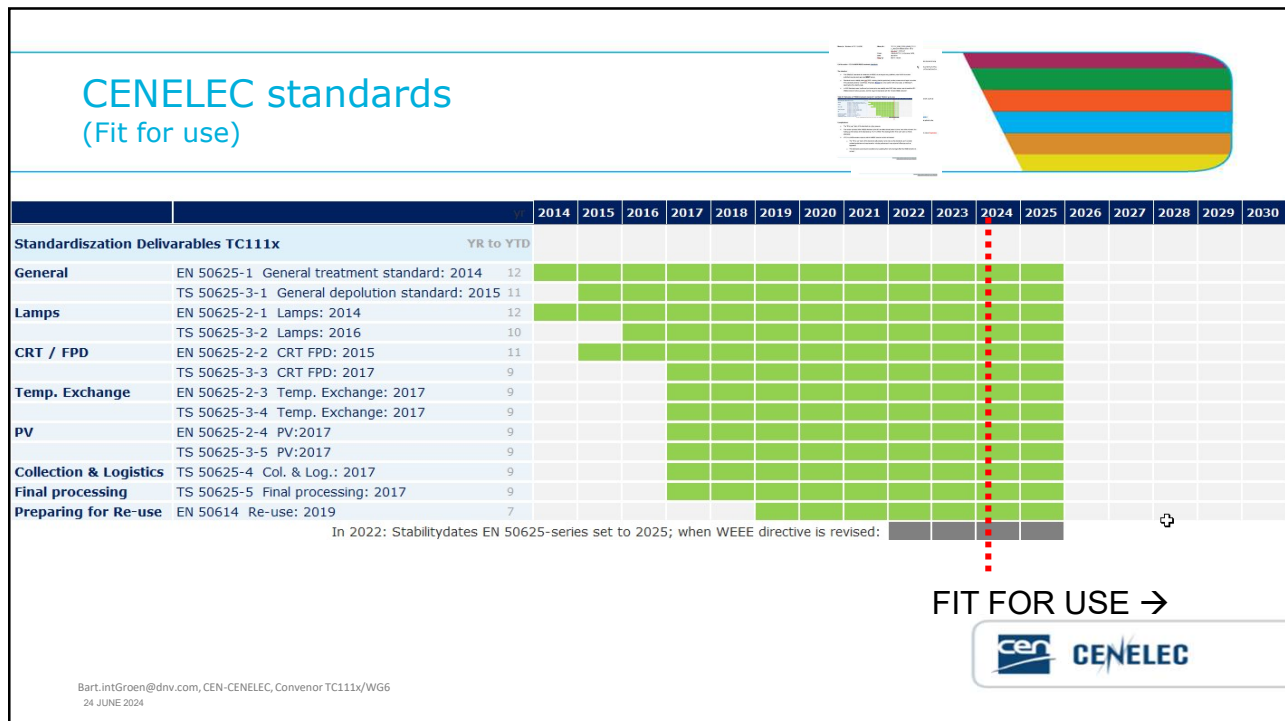
Fit-for-Use



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18


CENELEC standards (Fit for use)



		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Standardization Deliverables TC111x		YR to YTD																
General	EN 50625-1 General treatment standard: 2014	12																
	TS 50625-3-1 General depolution standard: 2015	11																
Lamps	EN 50625-2-1 Lamps: 2014	12																
	TS 50625-3-2 Lamps: 2016	10																
CRT / FPD	EN 50625-2-2 CRT FPD: 2015	11																
	TS 50625-3-3 CRT FPD: 2017	9																
Temp. Exchange	EN 50625-2-3 Temp. Exchange: 2017	9																
	TS 50625-3-4 Temp. Exchange: 2017	9																
PV	EN 50625-2-4 PV:2017	9																
	TS 50625-3-5 PV:2017	9																
Collection & Logistics	TS 50625-4 Col. & Log.: 2017	9																
Final processing	TS 50625-5 Final processing: 2017	9																
Preparing for Re-use	EN 50614 Re-use: 2019	7																

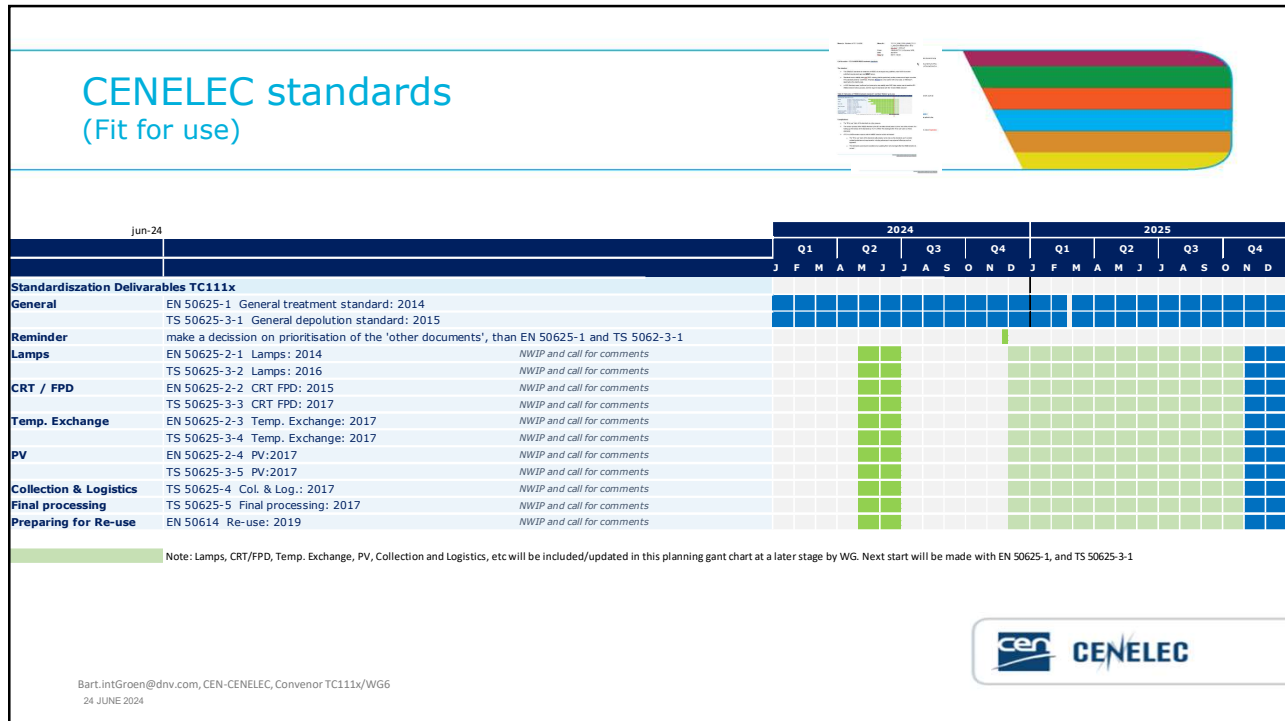
In 2022: Stabilitydates EN 50625-series set to 2025; when WEEE directive is revised:

FIT FOR USE →



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19



20

Scope of foreseen changes (NWIP-work in progress)

EN50625-1; TS 50625-3-1



Changes for clarification:

- Changes to wording to ensure **clarity for the user of the standard**, that do not modify the intent of the requirement.

Updates to outdated references:

- **Outdated references will be removed and updates to relevant legislation will be made**, ensuring that the standard remains aligned with current legislation.
- References to other EN 50625 documents, not ready at the time of preparing the EN 50625-1 will be replacing generic references to them.

Alignment with technological developments:


- Review and update of the standard to ensure fitness for use in **relation to existing product design feature and existing treatment technologies**.

Relationships and boundaries with 50625-series and EN 50614

- During the planned light revision of the standard the **relationships and boundaries with the other 50625-series documents and EN 50614** will be clarified, as agreed.

ToC

- **No changes to the table of contents are foreseen**, except where changes for clarifications to 'terms and definitions' are deemed necessary.



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21

Questions??



Learn more about the series of standards
https://ec.europa.eu/environment/topics/waste-and-recycling/waste-electrical-and-electronic-equipment-weee/implementation-weee_en



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