

E-Waste Management at UTeM

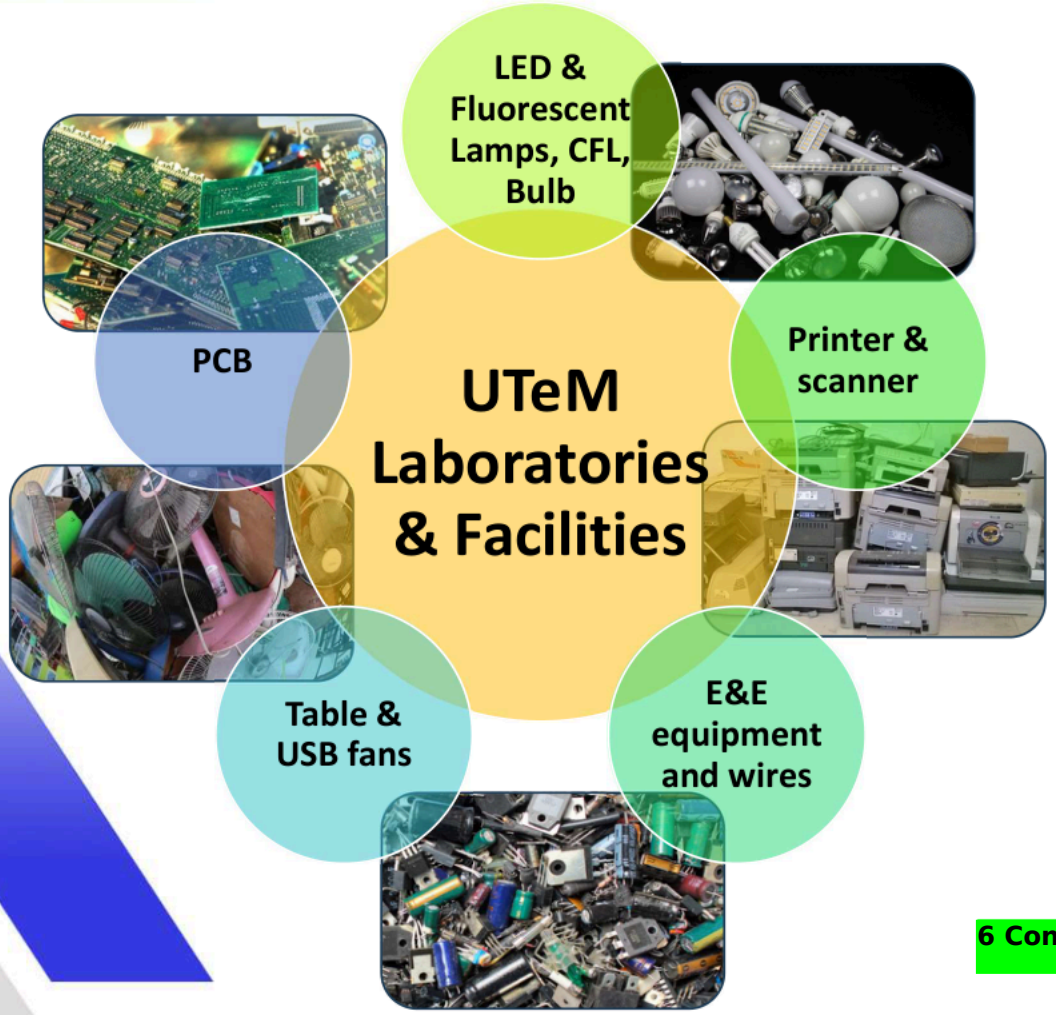
CENTRE FOR SMART ENVIRONMENT (CENSEi), UTeM

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CePSWaM

Type of E-Waste in UTeM





6 Controlled Items Identified by the Department of Environment (DoE)

DoE: Department of Environment, Ministry Of Natural Resources, Environment and Climate Change, Malaysia

E-Waste Specific Regulation, Policies and Guideline



1. Environmental Quality Act 1974 (Act 127), Environmental Quality (Scheduled Wastes) Regulations 2005. Department of Environment, Malaysia.

2. Policy on Solid Waste and Scheduled Waste Management at Universiti Teknikal Malaysia Melaka (UTeM), 2016.

3. Financial Circular No. 18 of 2021, Universiti Teknikal Malaysia Melaka:
Panel Companies for Asset Disposal through the Sale of Scrap and E-Waste.

4. E-Waste Management Mechanism in Malaysia. Department of Environment, Malaysia.

Objective of E-Waste Management in UTeM



From Linear Economy to Circular Economy



- ✓ Reduced and Efficient Use of Raw Materials
- ✓ Increase Economy and Landfill Lifespan
- ✓ Avoid Hazardous Impact to Environment

WASTE MANAGEMENT AT UTeM

Policy on Solid Waste and Scheduled Waste Management at Universiti Teknikal Malaysia Melaka (UTeM), 2016

Solid Waste

Identification & Segregation

Cleaning Contractor

Reuse

Recycling

Sorting of Recyclable Items

Scrap Sale



Personal items / items other than university inventory/assets

Scheduled Waste

77 Types of Scheduled Waste
Codes: SW1-SW5

SW404 Clinical Waste

Codes Other Than SW404 & SW110*

***SW110 E-Waste**

*E-Waste classified as UNIVERSITY ASSETS/INVENTORY
Refer to Financial Circular No. 18 of 2021: Panel Companies for Asset Disposal through the Sale of Scrap and E-Waste.

E-Waste Management: Sustainable Mechanisms



TYPE 1: Management Mechanisms for E-Waste of University Inventory-Asset

TYPE 2: Management Mechanisms for E-Waste Except University Inventory-Asset

TYPE 3: Management Mechanisms for Individual E-Waste

Workflow of E-Waste Management :
1) E-Waste of University Inventory-Asset

General Workflow

UTeM responsibility

Generation of E-Waste → **Faculty/ Department approval** → **Panel company assessment and payment** → **E-Waste Storage** → **E-Waste Collection & Transportation** → **E-Waste Partial Recovery & Full Recovery Facilities** (licensed by DoE)

- ❖ Typical types of E-Waste: PC equipment, laptop, printer, others E&E Inventory and Asset
- ❖ The identification and declaration processes of the E-Wastes.

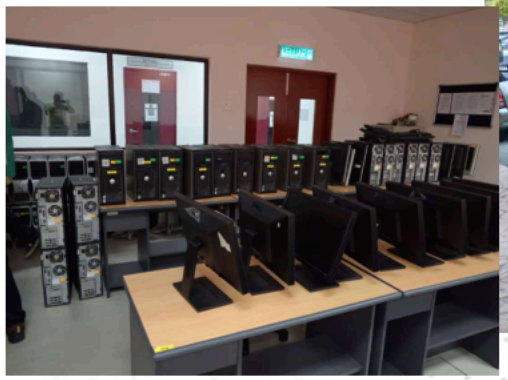
- ❖ The identified E-Wastes have to be approved by the faculty/department management for the E-Waste disposal process.

- ❖ All the E-Wastes have to store according to the safe practice and at the areas/rooms allocated by the office.
- ❖ The E-Waste have to striped off the university inventory/ asset labels and located the appropriate and secured area.

- ❖ Only the licensed contractor (licensed by DoE) can handle the packaging and transportation processes for recovery procedure.
- ❖ University will ensure only the non-expired licensed contractor is being appointed.







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Workflow of E-Waste Management:
2) E-Waste EXCEPT University Inventory-Asset

UTeM responsibility

Generation of E-Waste → **Sorting & Segregation** → **E-Waste Storage** → **E-Waste Packaging & Collection** → **E-Waste Transportation** → **E-Waste Partial Recovery & Full Recovery Facilities** (licensed by DoE)

- ❖ Typical types of E-Waste: LED & fluorescent lamps, CFL, bulb, PCB, wires
- ❖ All the E-Wastes need to register (declare) by following the Malaysia's Regulation under the Malaysia Department of Environment (DoE) and UTeM's policy
- ❖ The identification and classification of the E-Wastes wastes need to be done before storing process.

- ❖ All the E-Wastes have to store according to the safe practice of storage guidelines as referred to Regulation under the Department of Environment (DoE).

- ❖ Only the licensed contractor (licensed by DoE) can handle the packaging and transportation processes for recovery procedure.
- ❖ University will ensure only the non-expired licensed contractor is being appointed.

- ❖ Consignment note will be received by the licenced (by DoE) Treatment & Disposal Facility regarding the E-Wastes have been partial or full recovery according to the Malaysia's Regulation.









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Workflow of E-Waste Management:
3) Individual E-Waste

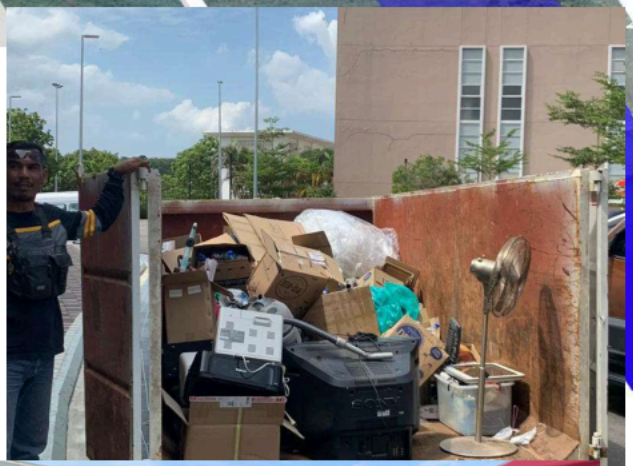
UTeM responsibility

Generation of E-Waste → **E-Waste Storage for Individual** → **E-Waste Transportation** → **E-Waste Partial Recovery & Full Recovery Facilities** (licensed by DoE)

- ❖ Typical types of E-Waste: Stand & table fans, PC equipment, laptop, mobile phone, personal printer
- ❖ The identification and classification of the E-Wastes wastes need to be done before storing process.
- ❖ E-Waste collection from university events/programs.

- ❖ All the E-Wastes have to store according to the safe practice of storage guidelines and at the dedicated E-Waste storage

- ❖ University will ensure only the authorised contractor is being appointed for collection.









DoE: Department of Environment, Ministry Of Natural Resources, Environment and Climate Change, Malaysia



Thank You

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