UN E-WASTE COALITION

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DEFINITION

Electrical or electronic equipment that is waste, including all components, sub-assemblies and consumables that are part of the equipment at the time the equipment becomes waste (Basel Convention Technical Guidelines).

Electrical and electronic products (e-products) are defined as any household or business item with circuitry, or electrical components with a power or battery supply.

Electrical and electronic waste (e-waste) is a term used for all types of e-products, and their parts, that have been discarded as waste.

Temperature Exchange Equipment

Screens

Lamps

Large Equipment

Small Equipment

Small IT
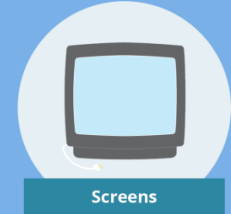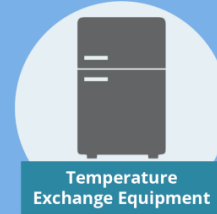
Around 50 million metric tons of e-waste is generated globally every year*

That is the equivalent of:

- **125,000 jumbo jets**
- **5,000 Eiffel Towers**
- **The area of Manhattan**

Million tonnes

- e-products
- e-waste

80
60
40
20
0

= 5.000 Eiffel Towers

1990   2000   2010   2015
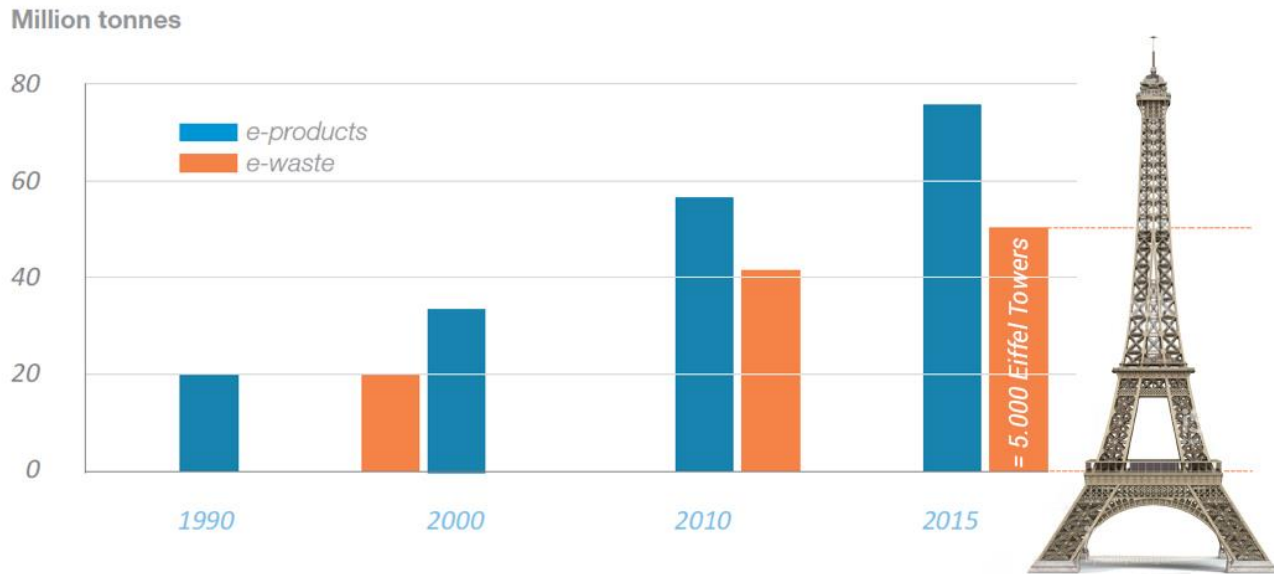
*Global E-waste monitor report, 2017, UNU/ISWA/ITU

Consumption

Linear Growth

Reactive Approach

Today

Proactive Pathway

Circular business practices
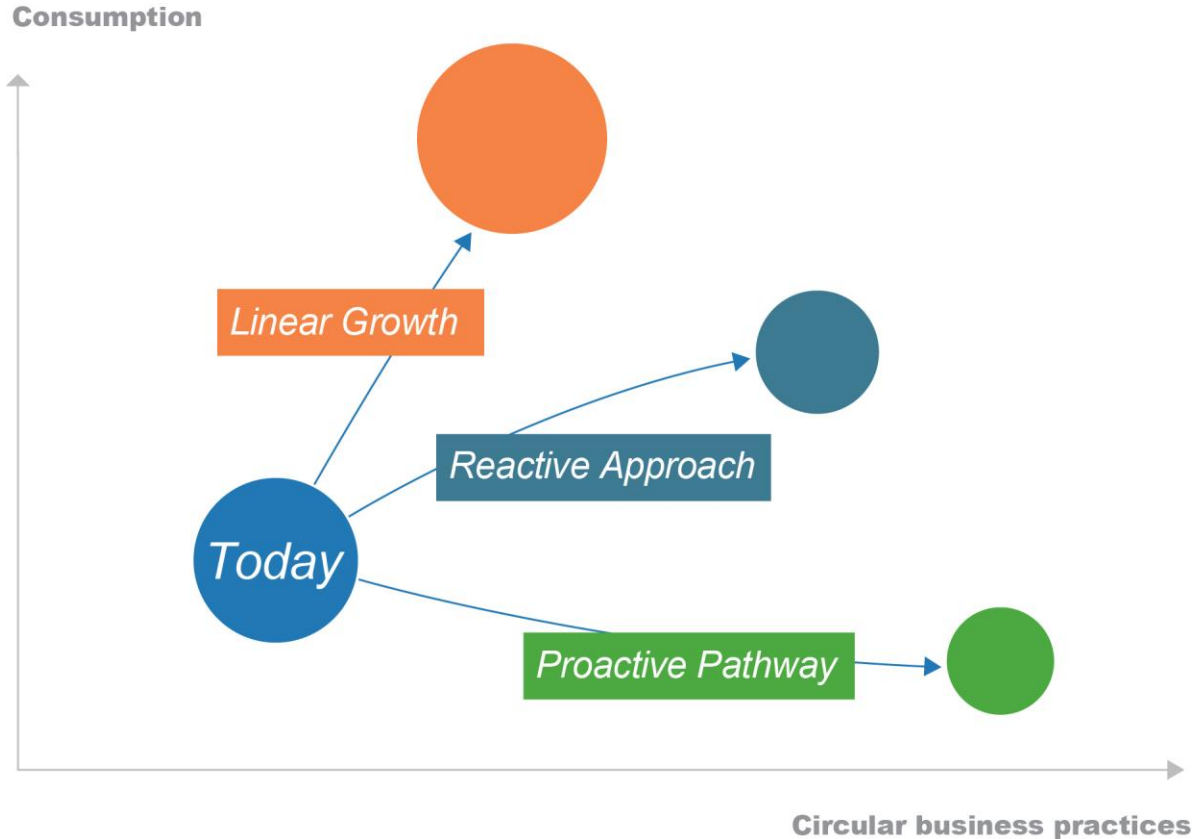
Projections indicate that e-waste generated could reach 120 million tons by 2050

- Almost 3 times higher than current levels

Need for a circular model

- Only 20% of global e-waste is formally recycled

- The remaining 80% is often incinerated or landfilled

RISKS TO HUMAN HEALTH

E-waste recycling has become a source of income in the informal sector.

Extracting valuable elements in e-waste (e.g. copper and gold) exposes adults and children to hazardous substances (e.g. lead, cadmium, chromium, PCBs).

RISKS TO THE ENVIRONMENT

Improper recycling techniques can lead to the accumulation of chemicals in soil, water and air.

UN Photo / Martine Perret

1. E-waste is a complex and fast-growing type of waste that severely impacts the environment and human health.

2. E-waste is often traded illegally.

3. Lack of awareness and proper e-waste management systems and infrastructure.

4. Low levels of collection, reuse, refurbishing and recycling.

5. Informal recycling of e-waste leading to health, labour & environmental challenges.

6. Loss of valuable resources: 55 billions euros are the estimated value of raw materials of e-waste.

VISION

From e-waste to e-value: transforming
e-waste for people, planet and prosperity.

MISSION

Raise awareness, increase knowledge and
provide integrated support to countries in
**preventing, reducing, collecting, recycling
and disposing** of e-waste sustainably through
enhanced coordination of the UN and its
partners at all levels.

1 To support countries to reduce and manage e-waste with the aim of creating jobs, while protecting workers, human health and the environment.

2 To strengthen the capacity of countries to formulate and implement integrated e-waste management policies and practical measures.

2 To create synergies and add value to existing programmes, partnerships and projects by avoiding duplication of resources and efforts. UN entities to "deliver as one".

4 To increase awareness and engagement of key e-waste stakeholders at the global, regional, national and municipal/local levels.

5 To support the development of a circular economy of e-products, using existing international expertise.

6 To prevent illegal trafficking of e-waste via transboundary movements, ensuring it is carried out in line with international requirements.

7 To promote opportunities for non-state actors (e.g. industry) to be part of the solution on e-waste challenges.

3 GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages

11 SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient, and sustainable

8 DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

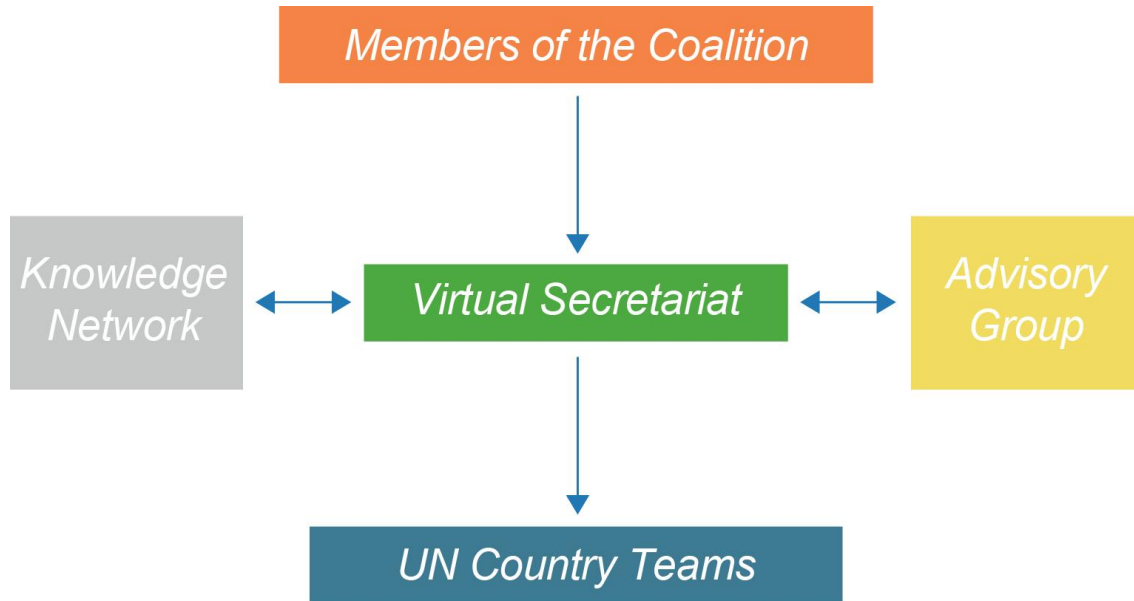**17 PARTNERSHIPS FOR THE GOALS**

Partnerships for the Goals

**TEN ORGANIZATIONS HAVE SIGNED
A LETTER OF INTENT TO PARTICIPATE
IN THE UN E-WASTE COALITION:**

UNU, UNIDO, UNEP, UNITAR, ILO, the Basel,
Rotterdam and Stockholm conventions (BRS),
ITC, ITU, WHO, UN-HABITAT

Coalition intends to collaborate with key actors
from governments, academia, NGOs and the
private sector (industry and business).

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                    Members of the Coalition

                              │
                              ▼
Knowledge                                              Advisory
Network      ◄──►   Virtual Secretariat   ◄──►          Group

                              │
                              ▼
                    UN Country Teams
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- All partners to the Coalition are subject to UN guidelines for cooperation with the private sector

- Coalition Members may add their own specific criteria

- Partnership with the Coalition is not equal to UN endorsement of the partnering entity

ADVOCACY

Flagship reports

Short videos and documentaries

Support awareness
raising initiatives

Joint webinars and workshops

Joint communication strategy

KNOWLEDGE

Collaboration with the Global
E-waste Statistics Partnership

Compilation and dissemination of
policy and implementation guidelines

Sharing of best practice
and lessons learned

Compilation of resources for
learning, including e-learning

JOINT IMPLEMENTATION

Assistance to countries
including with
e-waste inventories,
technology development,
technology transfer,
implementation
of international
standards, etc.

1 Supporting various awareness raising initiatives targeted at policy-makers, decision-makers and consumers

2 Including communication tools such as web-pages, short videos, documentaries, social media campaigns and participation at high-level events, conferences and seminars

3 Identifying global champions to advocate for better management of e-waste
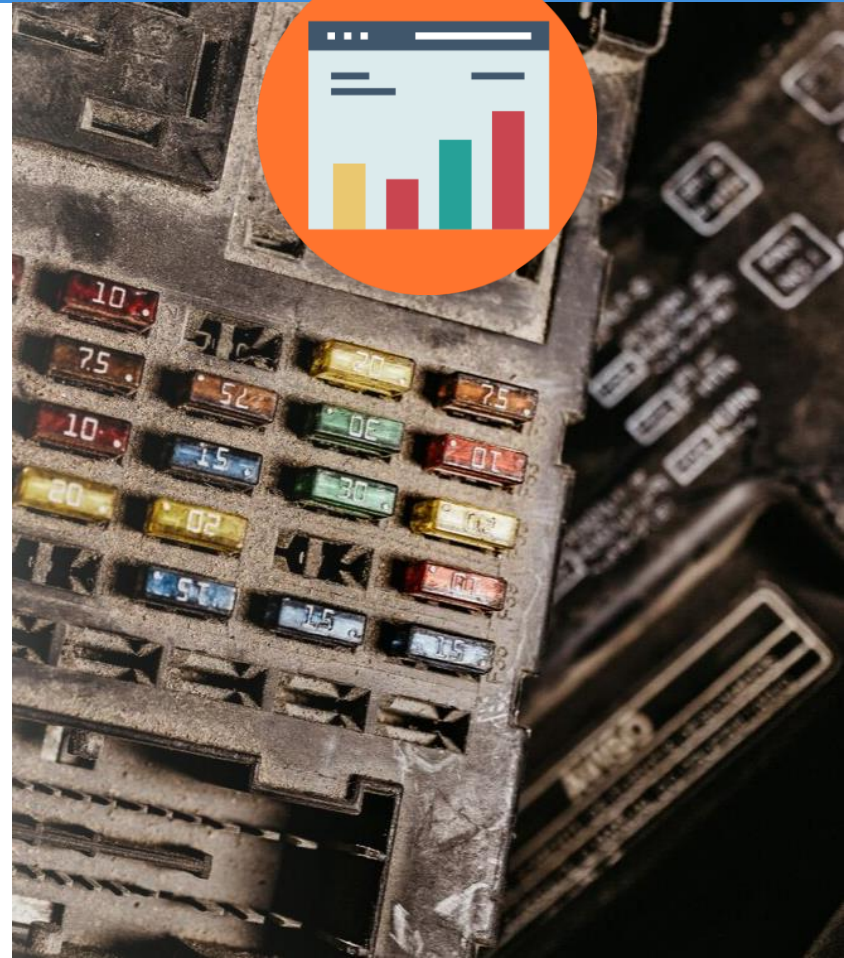
1 Collaborating with the Global E-waste Statistics Partnership to strengthen the ***globalewaste.org*** website, making it a hub for knowledge on e-waste

2 Knowledge sharing including the public availability of comparable and reliable e-waste statistics and data, learning tools, publications, information on country and regional e-waste projects, videos and online training courses
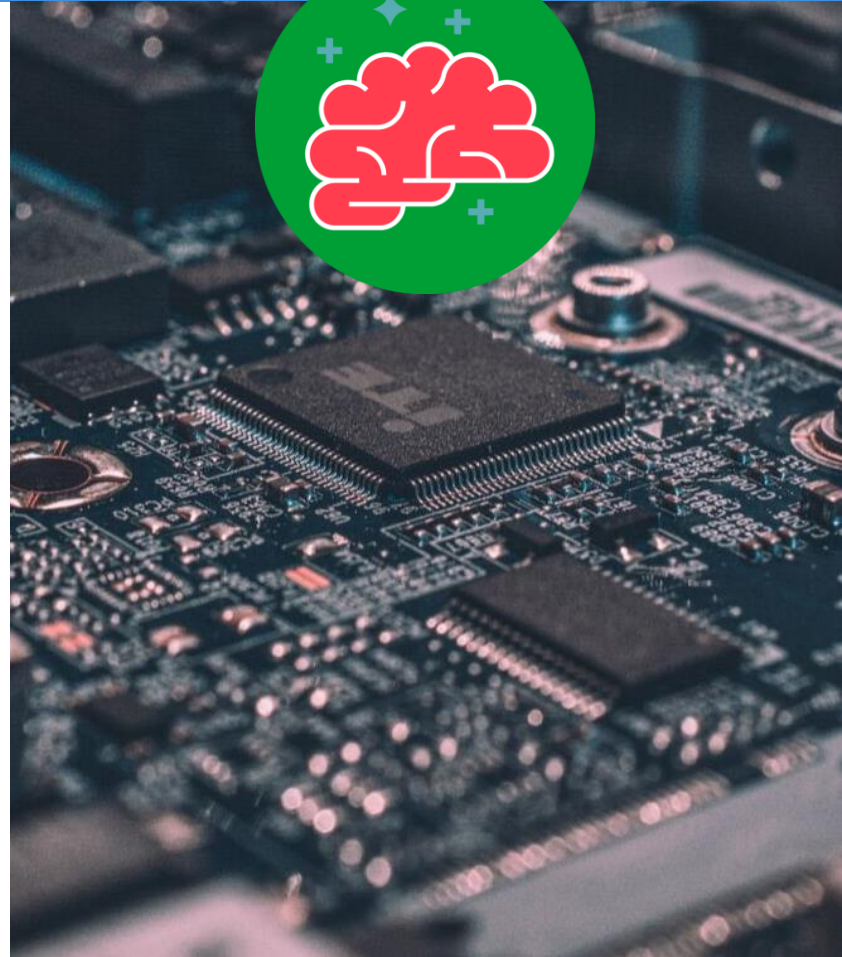
3 Sharing best practices and lessons learned and ultimately providing a one-stop shop for the online compilation and dissemination of information through the *globalewaste.org* website

4 Enhancing, through knowledge sharing, the visibility and the importance of tackling e-waste and the capacity in this area
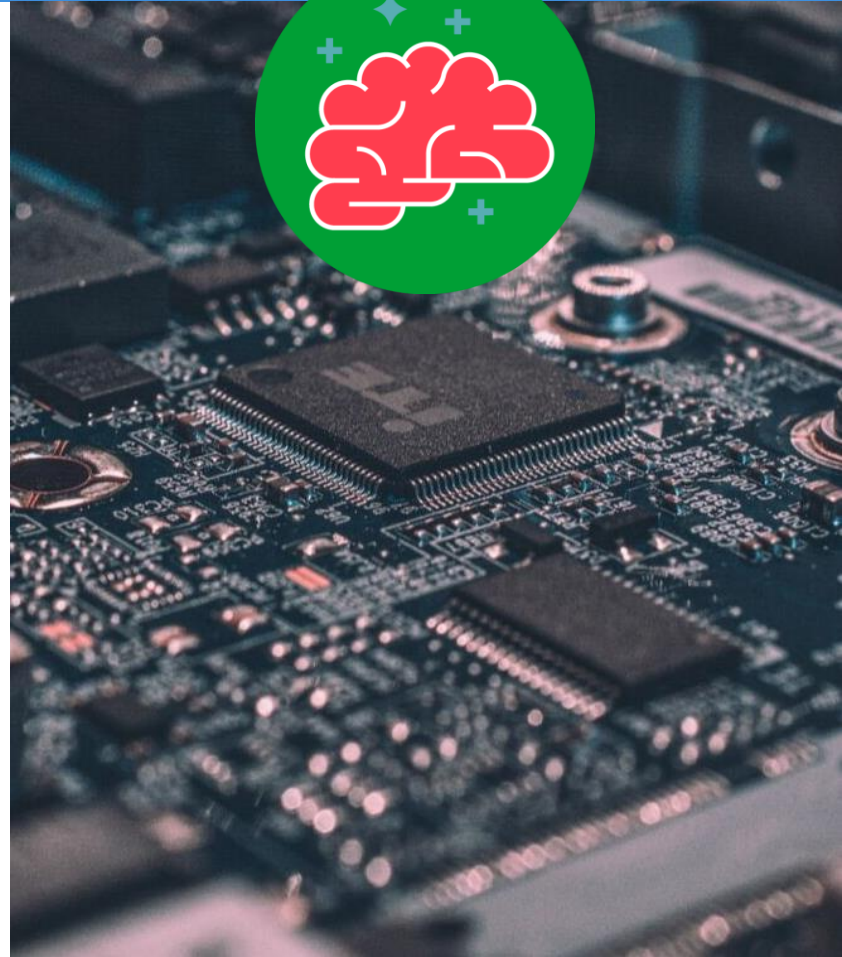
1

Engaging through the implementation of joint projects contributing to sustainable development at the national and regional level to provide technical assistance in required areas.

2

Projects may focus on e.g.:

- policy and legislation
- standardization
- research and capacity building

Concerted dialogue with key stakeholders, informed by e-waste value chain analyses in selected countries and regions, will be used to inform enhanced national e-waste strategies and more sustainable investments in e-waste management.

The mechanism will provide a logical framework for identifying challenges and opportunities along the e-waste value chain and finding suitable, integrated solutions to addressing these at national and regional level.
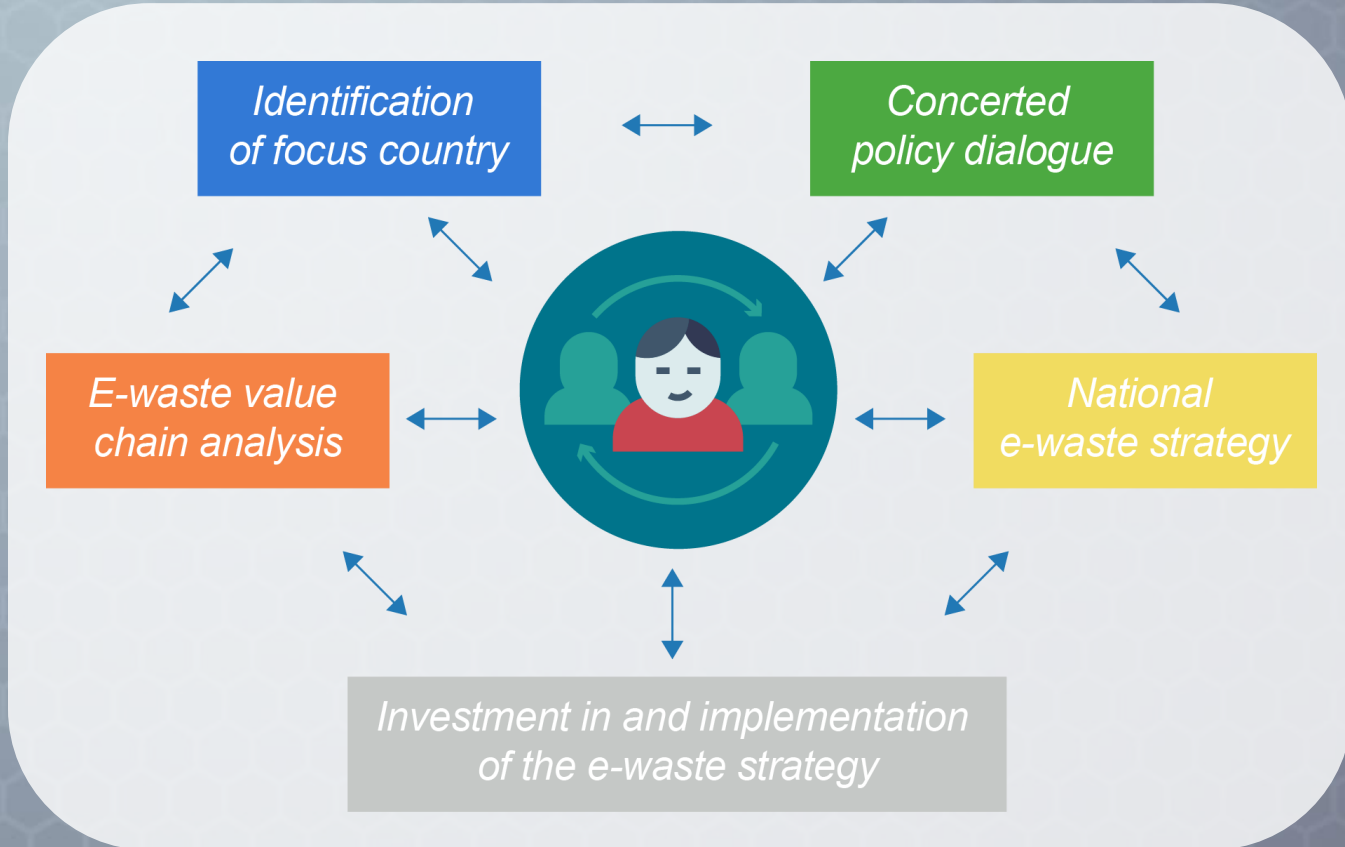
The mechanism will provide a logical framework for the identification of

(i) Challenges and opportunities along the e-waste value chain

(ii) Underlying assumptions and risks

(iii) Solutions to systematically address the root causes of e-waste challenges

(iv) Suitable approaches for the way forward.

1 Increasing country demand for support and guidance

2 Opportunity to avoid duplication and pool resources for coordinated support to countries

3 Joint action is needed by all key stakeholders to create a circular electrical and electronic system, address the full life-cycle of electrical and electronic equipment and to accomplish true progress using existing expertise

4 In an era of UN Reform, there is growing expectations for UN entities to "Deliver as One" to tackle one of the most complex issues of our time

5 Each member of the Coalition has the mandate to address e-waste and the responsibility to advance sustainable development for people, planet and prosperity

Legally binding frameworks and policies on e-waste exist at the national, regional and global level, covering different aspects of the e-waste challenge.

In addition there are a number of voluntary consensus-based standards, directives, partnerships and consortia standards.

Examples of global frameworks include the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the WHO Resolution WHA63.25 on Improvement of health through safe and environmentally sound waste management and the ILO Occupational Health Services Convention.

The UN, promoting sustainable development and human and labour rights, has a unique role and convening power to assist countries in joining and implementing these frameworks.
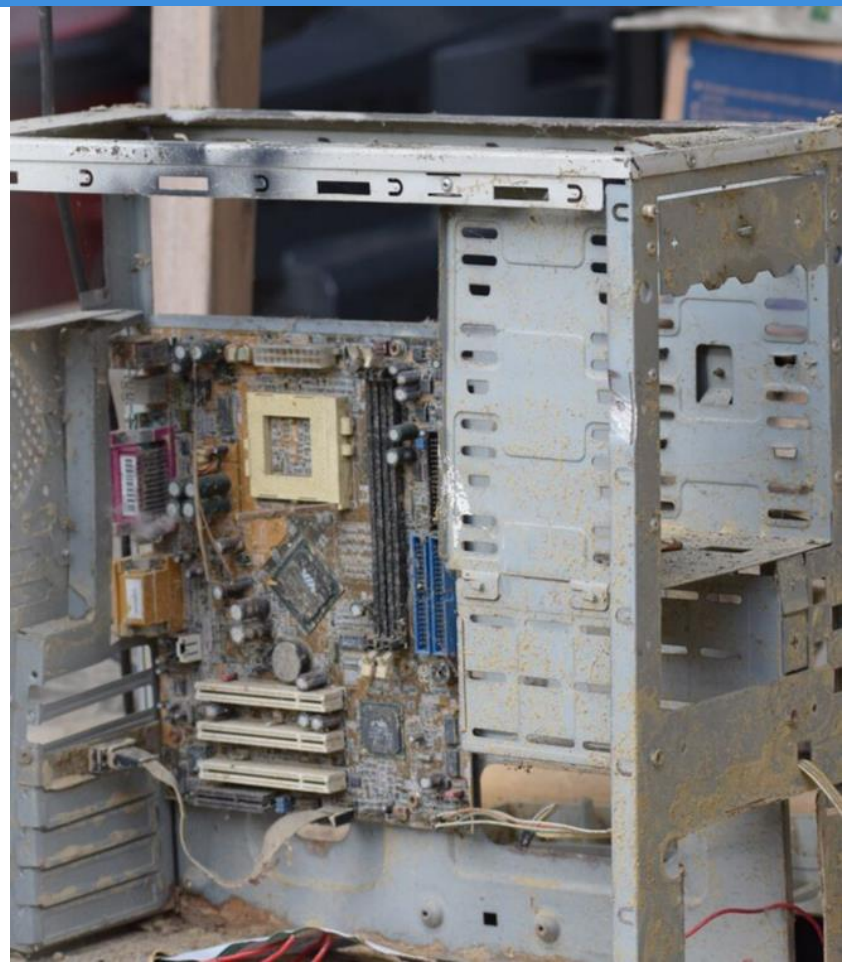
MEMBERS

ITU AND E-WASTE:

The highest policy making body of the ITU, the Plenipotentiary Conference, adopted the Connect 2030 Agenda which established targets in 2018 relating to e-waste:

✓ By 2023, increase the global e-waste recycling rate to 30%

✓ By 2023, raise the percentage of countries with an e-waste legislation to 50%

ITU's portfolio of activities includes for example:
- Conducting life-cycle analysis of ICT products and processes and the use of environmentally friendly materials in ICT equipment;

- Shifting the current "take-make-dispose" linear economic model to a green and circular economy for ICT equipment;

- Supporting national policy and regulatory development in the area of environmentally sound e-waste management, in collaboration with Study Group 2, Q6 on ICTs and the Environment;

- Producing international standards in the areas of safety and environmental performance of ICT equipment and facilities, in collaboration with Study Group 5 on Environment, Climate Change and Circular Economy;

- Improving and collecting worldwide e-waste data and publishing Global and Regional E-waste Monitors through the Global E-waste Statistics Partnership;

- Awareness raising activities at the global level with the objective to make governments, producers and individual consumers accountable;

- Development of e-learning products, such as a Massive Online Courses (MOOC) on e-waste together with the Secretariat of the Basel Convention and other partners;

- Partnering with industry and governments to achieve a circular economy;

- Organization of trainings and events at the global, regional and national levels.

- Organization of the annual Green Standards Week together with UNIDO, Secretariat of the Basel Convention, UNEP and other partners

http://www.itu.int/climate

UNEP works with producing and disseminating tools, guidelines and reports on e-waste management as well as engage with local and national governments to develop environmentally sound e-waste management strategies.

Technical contact: UNEP International Environmental Technology Centre (IETC), which is focused on sustainable waste management. The center is also highly involved in mercury and chemical waste management.

CURRENT ACTIVITIES INCLUDE:

1. Knowledge support
- Developing a foresight report on the future of e-waste
- Mapping and analyzing national legislations on e-waste for regional analyses

2. In-country support
- Developing a Extended Producer Responsibility strategy for electronic products in Sri Lanka
- Supporting the Nigerian government in implementing a circular economy approached e-waste project

3. Engaging with the private sector

https://www.unenvironment.org/ietc/resources

E-WASTE PUBLICATIONS

E-Waste Volume I: Inventory Assessment Manual

E-Waste Volume II: E-waste Management Manual

E-Waste Volume III: WEEE/E-waste "Take Back System"

Compendium of Technologies for the Recovery of Materials from WEEE/E-Waste

E-waste foresight report (summer 2019)

VISION

SCYCLE's vision is to enable societies to reduce the environmental load from production, use, and disposal of ubiquitous products to sustainable levels through independent and comprehensive, practical research and training that provides more thorough, fact-based policy development and decision-making.

MISSION

SCYCLE's mission is to promote sustainable societies. Its activities presently focus on the development of sustainable production, consumption, and disposal patterns for electrical and electronic equipment (EEE). SCYCLE leads the global e-waste discussion and advances sustainable e-waste management strategies based on life-cycle thinking.

OBJECTIVES

SCYCLE fosters solutions-oriented dialogue, cooperation, and consensus. Within this context, SCYCLE accomplishes the following:

- Conducts research on eco-structuring towards sustainable societies

- Develops interdisciplinary and multi-stakeholder public-private partnerships

- Assists governments in developing e-waste legislation and standards

- Responsible for education, training, and capacity development; and

- Facilitates and disseminates practical, science-based recommendations to the United Nations and its agencies, governments, scholars, industries, and the public.

KEY-RESOURCES
SCYCLE Website – http://scycle.vie.unu.edu
Global E-waste – https://globalewaste.org
E-waste Monitors – http://ewastemonitor.info
E-waste Academies – http://ewasteacademy.org

THE GLOBAL E-WASTE CHALLENGE

UNU-VIE SCYCLE
UNITED NATIONS UNIVERSITY

UNIDO AND E-WASTE:

UNIDO fosters the development of industries for the environmentally sound management and recycling of e-waste. It actively supports governments and national stakeholders through Regional SC/BC C enters, National Cleaner Production Centers, NGOs and private-sector partners, with a focus on:

- Promoting environmental services industries in developing countries

- Conducting national e-waste assessments and implementing e-waste management projects

- Facilitating the establishment of local and regional e-waste dismantling and recycling facilities

- Establishing public-private e-waste partnerships with national and international institutions

PROYECTO RESIDUOS ELECTRÓNICOS
AMÉRICA LATINA - **PREAL**
ONUDI - FMAM

UNIDO has conducted e-waste projects in Uganda, Tanzania and Ethiopia, and is currently operating in Cote d'Ivoire and the Philippines. A regional project is also currently being conducted in 13 Latin American countries in partnership with several E-waste Coalition members (ITU, UNU, ILO, and WHO).

THE BASEL CONVENTION

Addresses the control of transboundary movements, the environmentally sound management, and the minimization of the generation of hazardous and other wastes, including e-waste. It is the only global legally binding framework addressing these issues.

THE STOCKHOLM CONVENTION

Aims to eliminate the production and use of persistent organic pollutants (POPs), including POPs contained in e-waste.

THE ROTTERDAM CONVENTION

Promotes information sharing and regulates the import and export of certain hazardous industrial chemicals present in e-waste.

Mandates and processes related to e-waste

- Standard-setting and guidance development in areas such as definition of e-waste, transboundary movements of electrical and electronic waste and used electrical and electronic equipment, e-waste inventory, and preventing and combatting illegal traffic

- Collection and dissemination of information on the generation and transboundary movements of e-waste by Parties to the Convention as well as on their national legislation governing transboundary movements of e-waste

- Partnerships bringing together State and non-State actors (e.g. follow-up partnership to the Partnership for Action on Computing Equipment)

- International cooperation, e.g. with WCO on HS codes for e-waste

- Technical assistance, capacity building and a worldwide network of 23 regional centers

BASEL CONVENTION

ROTTERDAM CONVENTION

STOCKHOLM CONVENTION

UNITAR, as **dedicated training arm of the UN system,**
aims to develop the individual, institutional and organizational capacities of countries, and other UN stakeholders, through high-quality learning solutions and related knowledge products and services to enhance decision making and to support country-level action.

CORE FUNCTIONS

- Providing **high-quality learning solutions** covering topics in the broad areas of multilateralism, economic development and social inclusion, environmental sustainability
and green development, chemicals and waste, sustainable peace, research and technology applications;

- Design and deliver **innovative e-learning** services;

- Conducting **national e-waste value-chain analysis** and assess the national learning needs and develop attendant strategy;

- Advising and supporting governments, the UN and other partners with knowledge services, including those that are **technology-based;**

- Facilitating **knowledge and experience sharing** through networked and innovative processes;

- Research **on learning approaches, methods and tools** to be integrated in learning products and services.

ACHIEVEMENTS

✓ Delivered some 500 training and related events yearly

✓ Over 40,000 individuals benefitted from trainings

✓ Over 5,000 learners joined the virtual learning

✓ 72% activities delivered face-to-face

✓ 28% activities on e-Learning platforms

https://unitar.org/
https://unitar.org/sustainable-development-goals/planet
http://www.chemicalsandwaste.org/
http://cwm.unitar.org/publications//UNEP_UNITAR_NW
MS_English.pdf

ADVANCING DECENT WORK IN THE MANAGEMENT OF E-WASTE

by engaging our tripartite constituents – ministries of employment or labour, and workers' and employers' organizations

Actions to date

✓ Several publications on e-waste since 2012. Global study and two country level studies (India and Nigeria) published in 2019

✓ The first ever Global Dialogue Forum on Decent Work in the Management of E-waste (Geneva, 9-11 April 2019) – adopted points of consensus

✓ "Opportunities for green jobs in the waste sector" course offered at the ILO's International Training Center (Turin)

✓ Project "From waste to jobs: mobilizing the world of work to manage e-waste better in Latin America" in Argentina and Peru under UNIDO-GEF project (2018-2020)

✓ Work Improvement for Safe Home: Action manual for improving safety and health of E-waste workers (2019)
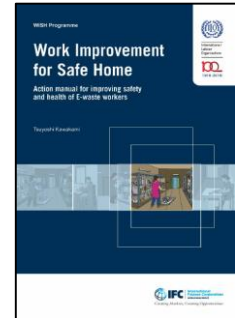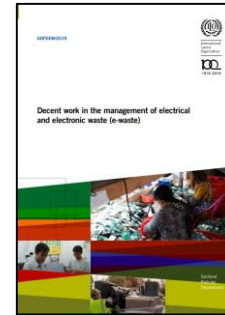
There are several decent work challenges in working with e-waste, for example, high levels of informality, poor, unsafe and unhealthy working conditions, child labour, discrimination. It also presents opportunities such as the creation of green jobs and sustainable enterprises in the emerging circular economy.

World Health Organization

WHAT THE HEALTH SECTOR CAN DO

Increasing the evidence and knowledge base

Raising awareness and communicating on health impacts, particularly in children

Building the capacity of the health sector to better protect children through exposure reduction

Promoting monitoring of exposures to e-waste

Working with other sectors to implement policies and actions that reduce harmful exposures

Specific research about e-waste and related health effects

NEXT STEP AT GLOBAL LEVEL:

Need to raise global awareness of e-waste impacts on health, including exposure scenarios and routes of exposure, environmental contamination, country studies as well as available policy, interventions and solutions for the health sector to promote.

AT REGIONAL AND LOCAL LEVEL:

WHO is working on developing the first country pilots in collaboration with UNIDO and other UN agencies to create a framework for protecting child health that can be used in other countries.

PROTECTING CHILD HEALTH FROM E-WASTE EXPOSURE

Recent World Health Assembly resolutions on the role of the health sector on chemicals and wastes and reducing air pollution request WHO and the health sector to report on and implement actions related to toxic wastes and waste burning to protect health.

A series of peer-reviewed publications including a systematic review on health impacts of e-waste have been developed by WHO in the past few years.

ABOUT ITC

ITC is the joint agency of the United Nations and the World Trade Organization.

Vision:
Good Trade.

Mission:
Enhance inclusive and sustainable economic growth and development in developing countries, especially least developed countries and countries with economies in transition, through improving the **international competitiveness of their MSMEs**.

ITC AND E-WASTE

The e-waste challenge is closely related to international trade and SMEs in developing countries, and hence to ITC's mandate:

• E-waste is often handled by small producers in developing countries facing challenges to set up (formal) businesses, to be competitive and sustainable, and to connect to market partners

• E-waste is often traded illegally or not in line with international requirements potentially leading to challenging border procedures.

ITC is engaging in:

• Raising the awareness of international and local stakeholders on the e-waste challenges

• Promoting circular production for SMEs in varying different sectors in developing countries, including waste and e-waste management

• Conducting research on the key challenges in the e-waste value chain that pertain to trade and SMEs

UN-HABITAT WORKS FOR A BETTER URBAN FUTURE.

SDG Monitoring on Municipal Solid Waste Management

- UN-Habitat is custodian agency of SDG Indicator 11.6.1 (% of MSW collected and managed in controlled facilities out of total MSW generated by the city) and working closely with UNEP for waste SDGs monitoring and capacity development.

- UN-Habitat is closely working with cities to get data on 11.6.1. Through this process we will have a good understanding of the e-waste flow in municipal solid waste streams.

Waste Wise Cities Campaign

- In 2018, UN-Habitat launched the Waste Wise Cities Campaign to call for action in waste management. https://unhabitat.org/waste-wise-cities-campaign/ The campaign provides good practices, facilitates city to city collaboration, provides technical assistance, supports monitoring and recognizes achievement and success of cities in their efforts.

African Clean Cities Platform

- UN-Habitat, with the Japan International Cooperation Agency, the Ministry of Environment of Japan, Yokohama City and UNEP, established a knowledge sharing and investment promotion platform called African Clean Cities Platform http://africancleancities.org/. The platform has a membership of more than 30 countries and 60 cities and promotes good practice and proposals for interventions on municipal solid waste management, including e-waste.

AFRICAN CLEAN
CITIES PLATFORM
PLATE-FORME AFRICAINE
DES VILLES PROPRES

3 Billion people
lack access to controlled
waste disposal facilities
The total municipal solid waste generated in the world will double from
2 billion tonnes in 2016 to nearly 4 billion tonnes by 2050

WASTE-WISE
CITIES

IN THE NAME OF THE
UN E-WASTE COALITION

THANK YOU