

# Overview of ITU Activities on E-Waste

**Cristina Bueti**

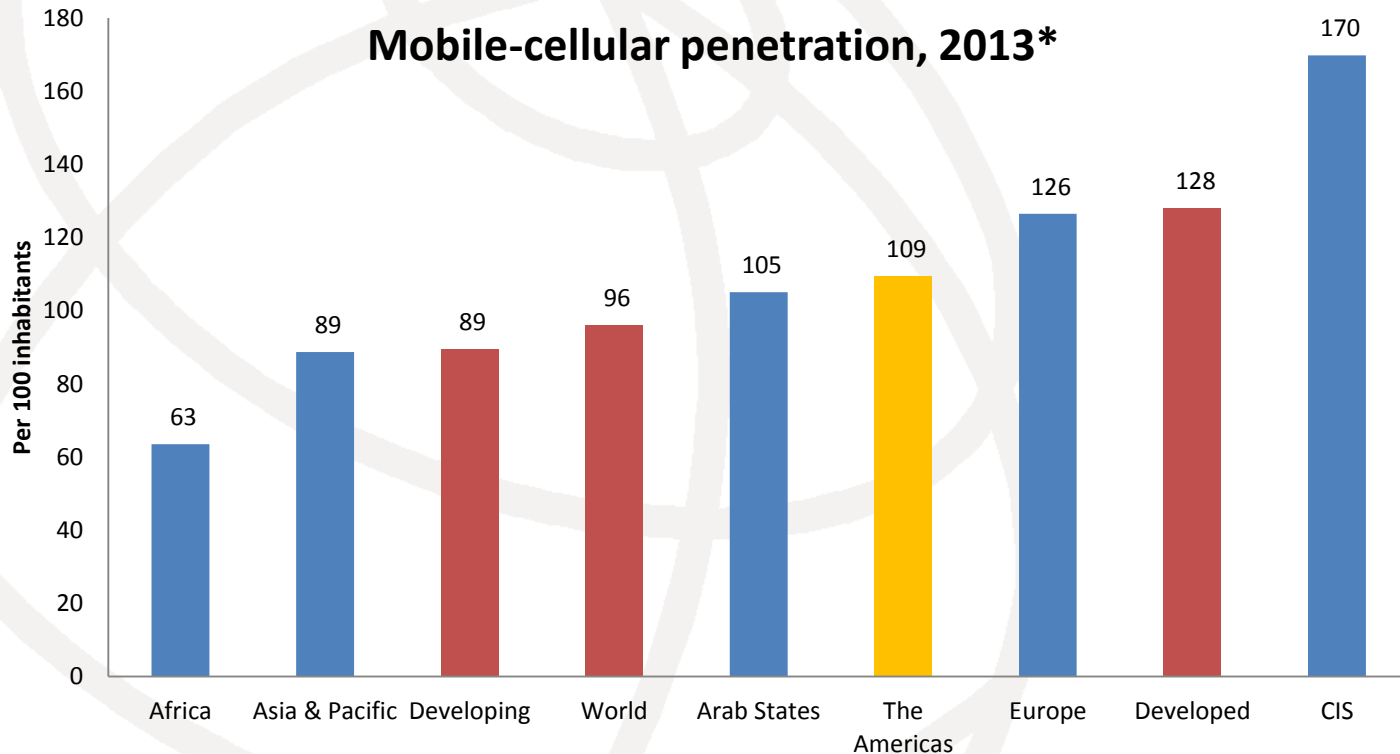
Adviser of ITU-T Study Group 5  
“Environment and Climate Change”



# The E-Waste Problem

# Statistics

ICTs are rapidly growing and expanding throughout the world, pervading all sectors of human activity and contributing to bridge the gap between developed and developing countries with regard to access to technology.

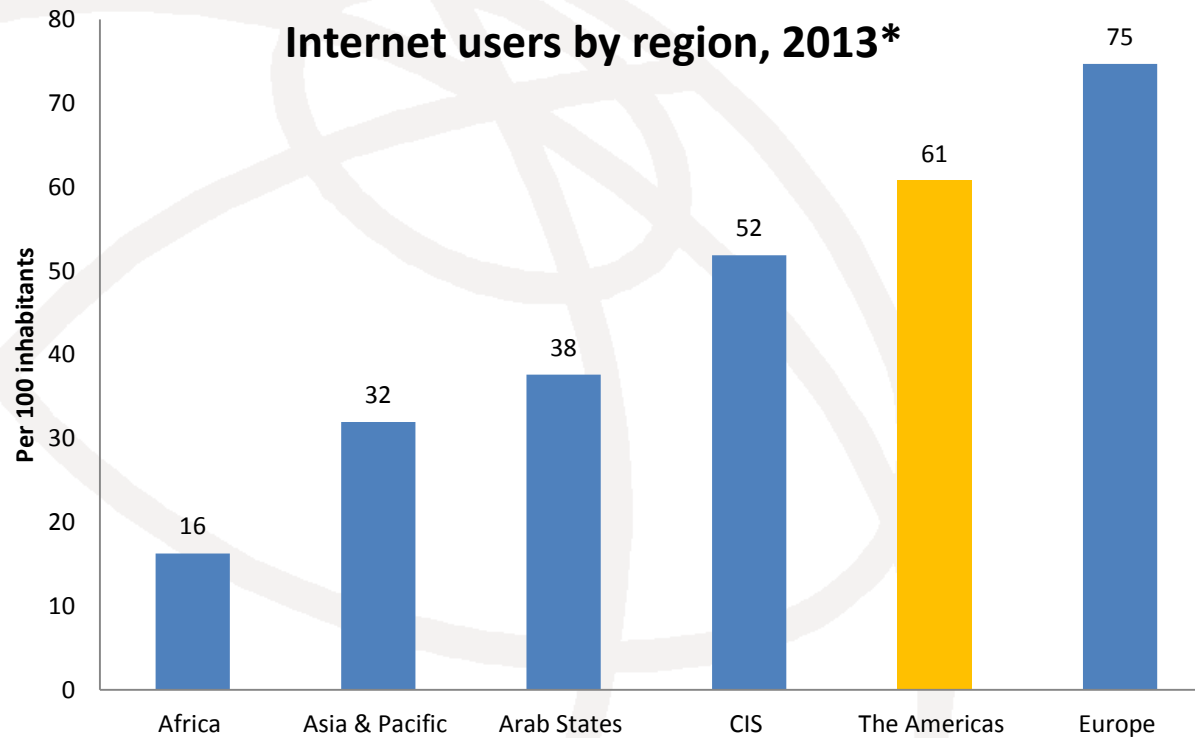


Source: ITU World Telecommunication /ICT Indicators database

Note: \* Estimate

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# Statistics (continued)



Source: ITU World Telecommunication /ICT Indicators database

Note: \* Estimate

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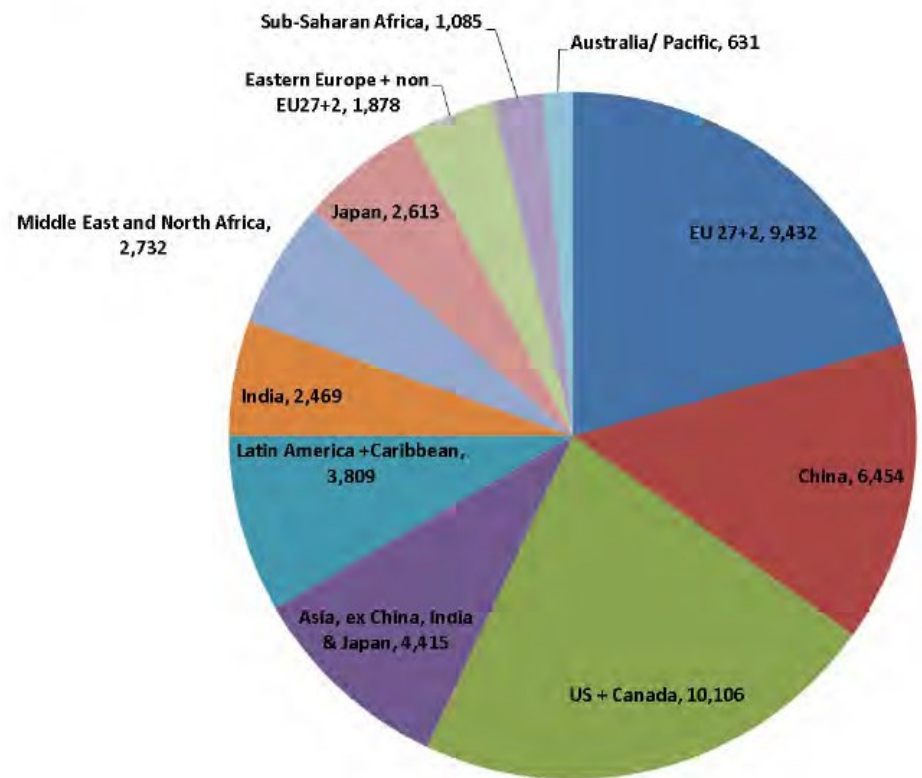
# E-waste is the fastest growing waste stream

Code  Sum of 2012

**coming from: 1992: +/- 14 million tonnes  
2002: +/- 24 million tonnes**

**WEEE generated, 2012**  
(per region, in ktons)

**2012 total:  
~45 mln tonnes**



- Country group
- EU 27+2
  - China
  - US + Canada
  - Asia, ex China, India & Japan
  - Latin America + Caribbean
  - India
  - Middle East and North Africa
  - Japan
  - Eastern Europe + non EU27+2
  - Sub-Saharan Africa
  - Australia/ Pacific

Source: Huisman 2012

# Impact on the Environment and on Human Health

- Each year between 20–50 million tons of e-waste is generated worldwide.
- Many developing countries face the specter of hazardous e-waste mountains with serious consequences for the environment and public health.
- Due to the crude recycling process, many pollutants, such as persistent organic pollutants and heavy metals, are released from e-waste, which can easily accumulate in the human body through the inhalation of contaminated air, causing diseases, such as cardiovascular diseases or even cancer.
- When these heavy metals are not properly treated, they can cause irreversible damage to the environment, such as water pollution.



# The best way to deal with e-waste is ... ... avoid (or at least minimize) it!

- From the manufacturing phase through:
  - Designing for easy disassembly and recycling
  - Avoiding use of heavy pollutants
  - Minimization on the use of resources
    - ✓ Regulations and standards
- During the life of equipment:
  - Prolonging its lifetime
  - Designing for reuse/multiple use
- At end of life:
  - E-waste conscious management



# Avoid/minimize through standardization

- Environmentally conscious companies have e-waste minimization programmes in place but:
  - Such programmes are difficult to set up and manage
  - The extra cost can discourage them
  - As individual companies they can have little impact
- Need to create critical mass and act soon
- Regulation is complex and takes long time



**Standardization can fill the gap  
and lead the market**





# Capacity Building

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# Upcoming Workshop and Meetings

- 3rd ITU Green Standards Week  
Madrid, Spain, 16-20 September 2013
- Greening the Future: Bridging the Standardization Gap on Environmental Sustainability  
Colombo, Sri Lanka, 3-4 October 2013
- ITU/CITEL Workshop on Environmentally sound management of E-waste  
Mendoza, Argentina, 9 October 2013
- ITU-T Study Group 5 meeting  
Lima, Peru, 2-13 December 2013



- To bring together leading specialists in the field, from top policy-makers to engineers, designers, planners, government officials, regulators, standards experts and others.
- To raise awareness of the importance and opportunities of using ICT standards to build a green economy.

Programme:

- **16/09: ITU, UNEP, UNU, CEDARE Workshop on E-waste**
- 17/09 (morning): Forum on Greening Mobile Devices: Building Eco-Rating Schemes
- 17/09 (afternoon): Meeting of the Focus Group on Smart Sustainable Cities
- 18/09: High Level Segment on Smart Sustainable Cities
- 19-20/09: 3rd Workshop on Submarine Communications Networks For Climate Monitoring and Disaster Warning
- 20/09: Meeting of the ITU/WMO/UNESCO -IOC Joint Task Force on Submarine Communications Networks For Climate Monitoring and Disaster Warning

**SEE YOU IN MADRID, on 16-20 September 2013**





# Tackling E-Waste... towards the solution!

## Key Actions:

- Need of an integrated waste management approach to generate decent employment, curb health problems, cut greenhouse gas emissions and recover a wide range of valuable metals including silver, gold, palladium, copper and indium – by turning an e-challenge into an e-opportunity.
- Raise awareness on the dangers of e-waste;
- Encourage the consideration of e-waste management in the design of ICT policy;
- Adopt strategic policies, international standards and regulatory approaches that are sensitive to local context;
- Encourage concerted cooperation in handling e-waste at the national, regional and international level.

## Links & Additional Information

- ITU-T/SG5 “Environment & Climate Change”  
<http://www.itu.int/ITU-T/studygroups/com05/index.asp>
- ITU-T and Climate Change  
<http://www.itu.int/ITU-T/climatechange>
- ITU Symposia & Events on ICTs and Climate Change  
<http://www.itu.int/ITU-T/worksem/climatechange>



# Thank YOU

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# Additional slides

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# E-WASTE ACADEMY

## Managers Edition (EWAM)



### EWAM 2014:

A global forum for stakeholders involved in the practical design and implementation of e-waste management solutions

Organized by



UNITED NATIONS  
UNIVERSITY

UNU-ISP

Institute for Sustainability and Peace

Supported by



Materials Science & Technology



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Federal Department of Economic Affairs FDEA  
State Secretariat for Economic Affairs SECO



NOKIA



GeSI  
GLOBAL SUSTAINABILITY  
INITIATIVE



The power to do more





# EWAM Overall Aims

## WHO

- Policy Makers
- Governmental Officials
- Recyclers
- Refurbishers
- Collectors
- ...

Form all over the world

## WHERE

El Salvador  
hosted by Basel Convention Regional Centre for the Central America Sub-region including Mexico

## WHY

- Platform for exchange of best practices
- Discuss & share policy development and approaches
- Foster interactive atmosphere of knowledge sharing
- Get feedback & advice from e-waste experts and policymakers

## WHEN

Timeline:

**1 August 2013**

Call for Applications Open

**15 October 2013**

Call for Applications Closed

**31 January 2014**

Confirmation participants

**31 March - 4 April 2014**

EWAM in El Salvador



# Contact Information

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