Waste Electronic & Electrical Equipment &
Countering WEEE Illegal Trade (CWIT) Project

Dr Thérèse Shryane
WEEE Forum
GMS Meeting
11 – 13 July 2012
WEEE Forum

41 Members
- Amb3E
- Appliances Recycling
- Asekol
- Asekol SK
- Ecodom
- Ecoasimelec
- Ecofimatica
- Ecolec
- Ecologic
- Ecoped
- Eco-RAEE's
- ecoR'it
- Eco-systèmes
- Ecotic (ES)
- EcoTic (RO)
- EEPA
- Electro-Coord
- ElektroEko
- Elektrowin
- El-Kretsen
- el retur (DK)
- elretur (NO)
- Envidom
- Fotokiklosi
- ICT Milieu
- Lightcycle
- Lumicom
- RAECycle
- Recicla Canarias
- Recupel
- Re.Media
- Repic
- Retela
- RoRec
- SENS
- SLRS
- SWICO
- UFH
- Wecycle
- WEEE Ireland
- Zeos

Member
Household e-waste

A: Landfill

Collection facility/retailer/2nd hand shop

B: Unclear - potential sub-standard treatment

C: Proper treatment, recycling, recovery

REDUCE

INCREASE
WEEE & Fractions

Why does an illegal trade exist?
Metal prices

**CU – price €/tonne**

**FE – price €/ton**
WEEE & fractions

Impact of illegal trade in WEEE

• Economic interest in certain fractions; loss of materials to legal traders, loss of taxation revenue
• Environmental and health & safety effects due to uncontrolled release of hazardous fractions
• Loss of Critical Raw Materials from European manufacturing
• Organised crime
• Damages the reputation of producers
CRT Display equipment

weight %

0 10 20 30 40 50 60 70

Metal  Plastic  Cables  Glass  Printed circuit boards  pollutants

- Metal
- Plastic
- Cables
- Glass
- Printed circuit boards
- Pollutants
Economic incentives in certain fractions
Hazardous fractions

Output fractions of lamps recycling:
88% Glass
5% metal
4% Plastic
3% fluorescent powders
0.005% mercury
Raw Materials Vs WEEE Recycling

Mining raw materials

≈5 g/t gold (Au)
≈5 g/t platinum group metals (Pt, Pd, Rh, ...)

Recycling of WEEE

In computer processors
≈ 200 g/t Au &
80 g/t Pd

Mobile Phones
≈300 g/t Au &
≈ 100 g/t Pd

Printed Circuit boards
(LCD monitor)
≈1,300 g/t Ag
≈490 g/t Au
≈99 g/t Pd
Organised Crime

Trafficking routes for Drugs and People

Current World Illicit Trafficking
CWIT project
Countering WEEE Illegal Trade
The aim of the Countering WEEE Illegal Trade (CWIT) project is through intensive data collection, stakeholder involvement, and an intelligence-based approach to

• quantify the volumes of WEEE in Europe,
• to develop detailed understanding of the destinations and routes used to carry illegal shipments, and to
• provide a set of recommendations to support the European Commission, law enforcement authorities, and customs organisations countering the illegal trade of WEEE in Europe.
Countering **WEEE Illegal Trade (CWIT) project**

**Countering WEEE Illegal Trade**
- 2 year project, 2013 – 2015
- European Commission FP7 project

**Consortium:**
- IB Consultancy, WEEE Forum, UNU, Compliance & Risk, Zanasi & partners, CBRA, UNICRI, INTERPOL

**Stakeholders**
- WEEE compliance schemes, producers, recyclers, metals recycling industry, construction industry, customs & border control organisations, law enforcement authorities, universities, networks for implementation and enforcement of environmental law, SMEs, European Institutions...
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### WP 2: WEEE Forum
- Identification of stakeholders and end-users
- Global distribution of WEEE
- Identification of existing initiatives

### WP 3: Compliance & Risk
- Literature review INT policies
- Literature review EU policies

### WP 4: UNU
- Typology of companies in export market
- Estimation of volume of WEEE generated
- Conceptual model of WEEE stream

### WP 5: Interpol/UNICRI / Z&P / CBRA / IBC
- Definition of organized crime
- Volume of WEEE generated shipped
- Analysing criminal activity

### WP 6: Recommendations
- European Legal framework
- Law Enforcement authorities
- WEEE industries
- Electronics Industries
- Roadmap for future research & technology development

### WP 7: IBC + All partner
- Preparation of Dissemination program
- Public website
- Dissemination activities
- Exploitation model
- Linking with on-going initiatives
WP1

Management of the project

• Project co-ordinator & Project manager
  Mr. Alexandre Custaud - IB Consultancy
  Project co-ordination
  Reporting to the Commission,
  Overall project management (reporting, financial, legal, etc...)

• Scientific co-ordinator & Project manager
  Thérèse Shryane – WEEE Forum
  Organisation of High Level Advisory Board
  Coordination of scientific & technical content of project
  Overall project management (reporting, etc...)

WP 2 State of the Art

WEEE Forum / UNU

- Identification of stakeholders and end-users
- Global distribution of WEEE
- Identification of existing initiatives

Deliverables

- List of stakeholders and end-users
- Stakeholders Platform
- Database and WEEE classification listing
- Inventory of WEEE related research
WP 3 Legal Framework

Compliance & Risk

• Literature review International policies
• Literature review European policies

Deliverables

• List of countries for comparative study
• Overview of selected country policy, requirement, implementation and enforcement
• Comparative overview
WP 4 Market Assessment

WEEE Forum, UNU

- Typology of companies (and brokers) involved in the export market
- Estimation of volume of WEEE generated
- Conceptual model of WEEE stream

Deliverables

- Database of stakeholders per member states
- Report on Volume of use EEE and WEEE generated
- Report on the dynamics of the WEEE stream
WP 5 Crime Analysis

Interpol, UNICRI, CBRA, Zanasi, & IB Consultancy,

- Definition of Organised Crime in the global distribution of WEEE
- Estimation of volume of WEEE illegally traded
- Analysing of criminal activity and crime types associated with illegal WEEE trading

Deliverables

- Definition of Organised Crime applied to WEEE
- Estimation of volume of WEEE illegally traded
- Evaluation matrix template to codify the crime types
- Gap Analysis
- Analyse criminal activity
- CONOPS & ROM
WP 6 Recommendations

Interpol, UNICRI, CBRA, Zanasi, & IB Consultancy,

Provide recommendations for the stakeholders network

Deliverables

Recommendations for:

• The European legal framework
• Improving law enforcement capabilities
• WEEE treatment and management industry
• Electronics industry
• Roadmap for future research & technology development
WP7 Dissemination

Dissemination of project results through:

- Communication strategy
- Communication materials
- Public website
- Dissemination Activities
- Exploitation model
- Final Conference (Dublin)
Thank you

For further information please contact:

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WEEE Forum

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