

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



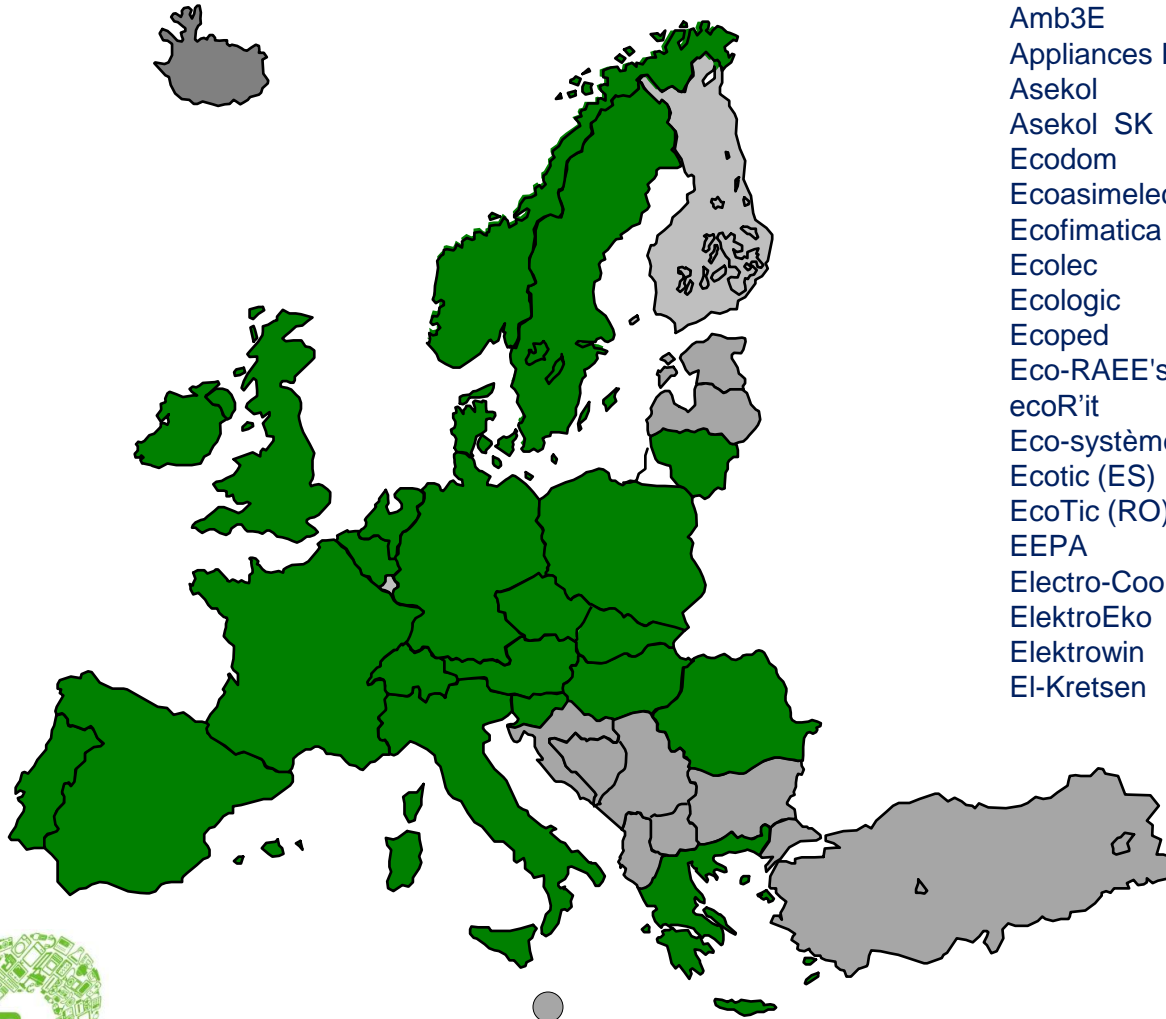
Dr Thérèse Shryane  
WEEE Forum

GMS Meeting  
11 – 13 July 2012

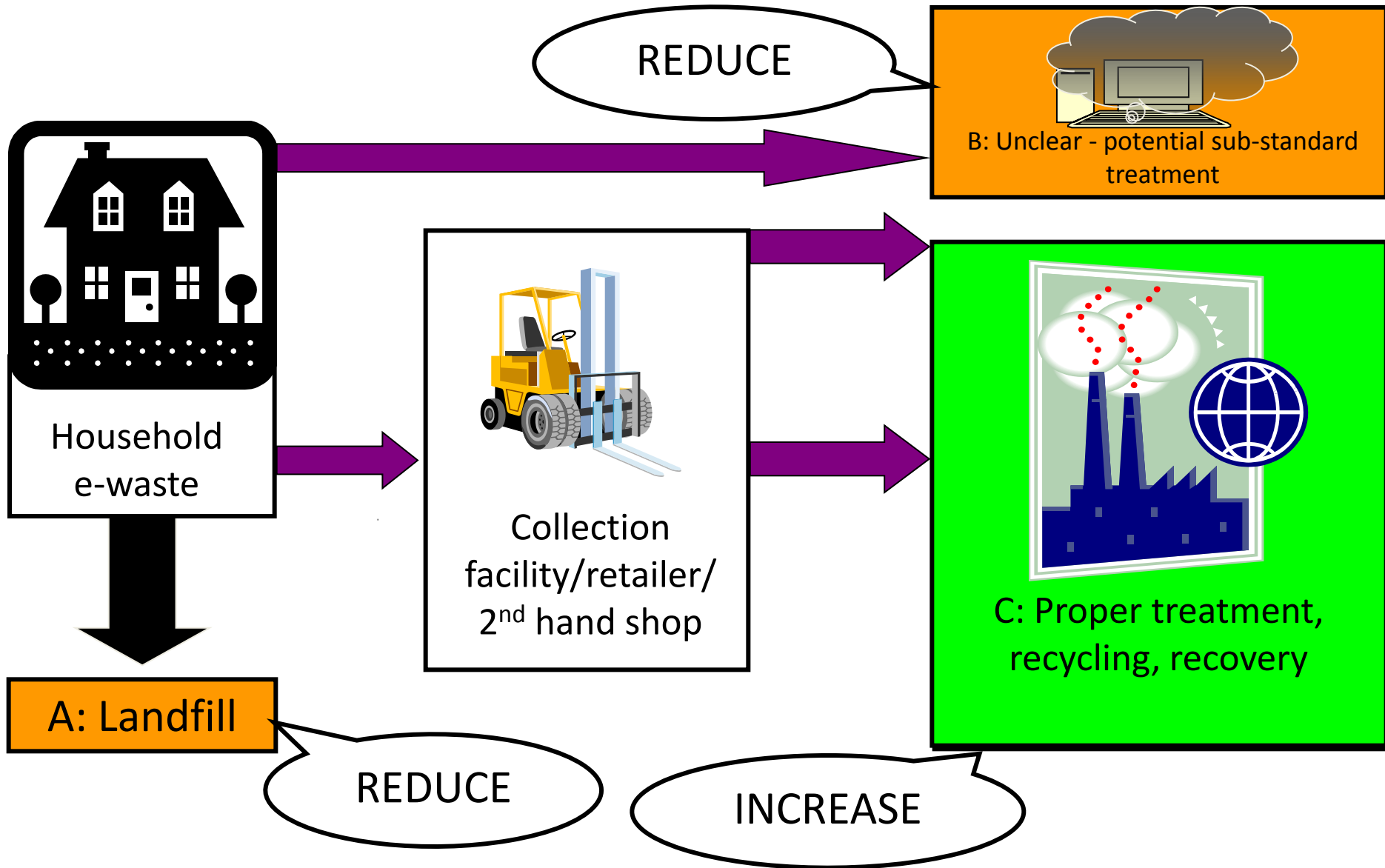
# WEEE Forum

## 41 Members

- Amb3E
- Appliances Recycling
- Asekol
- Asekol SK
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- Ecoasimelec
- Ecofimatca
- Ecolec
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- Recupel
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- Retela
- RoRec
- SENS
- SLRS
- SWICO
- UFH
- Wecycle
- WEEE Ireland
- Zeos



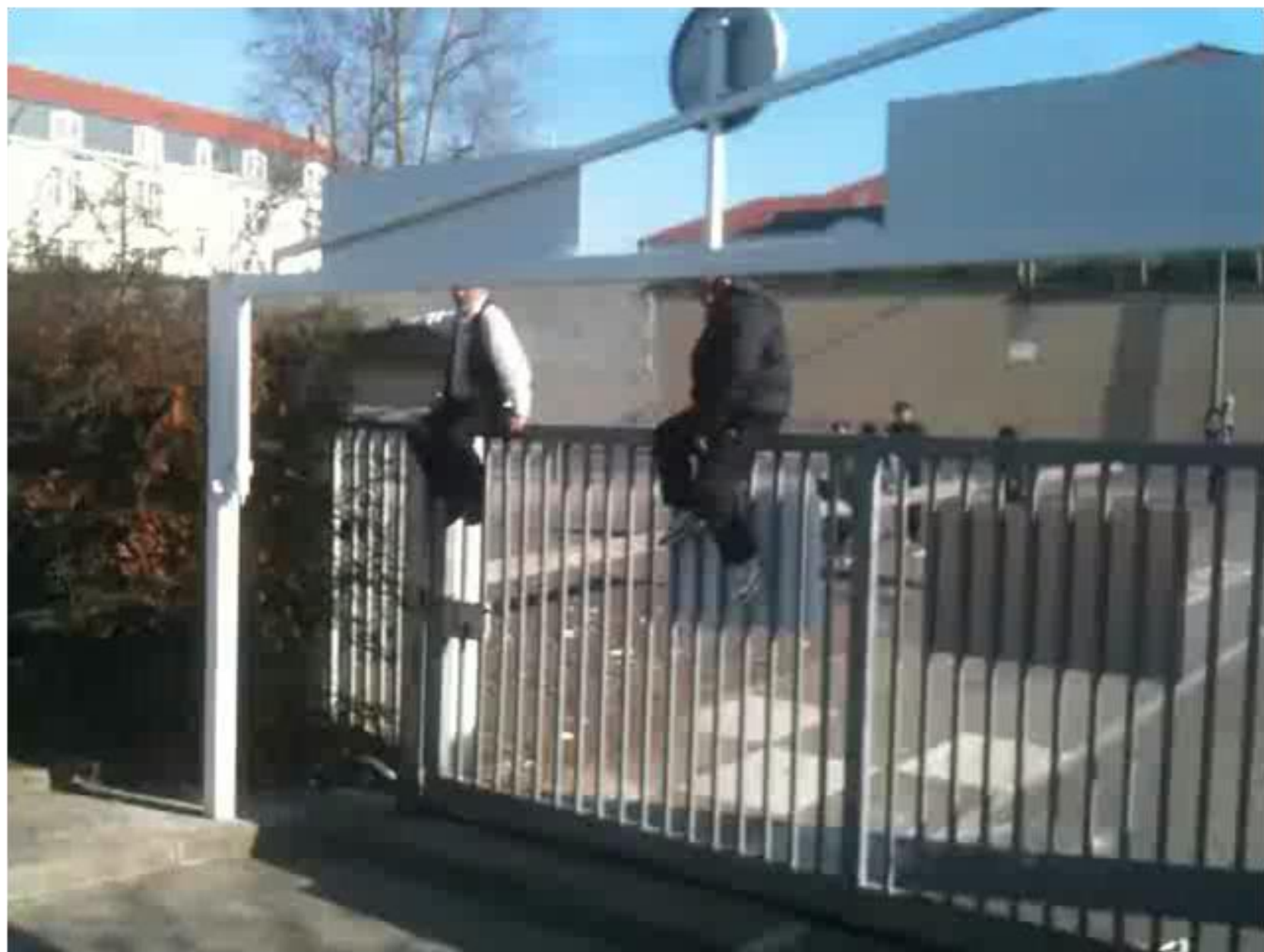
 Member



# WEEE & Fractions

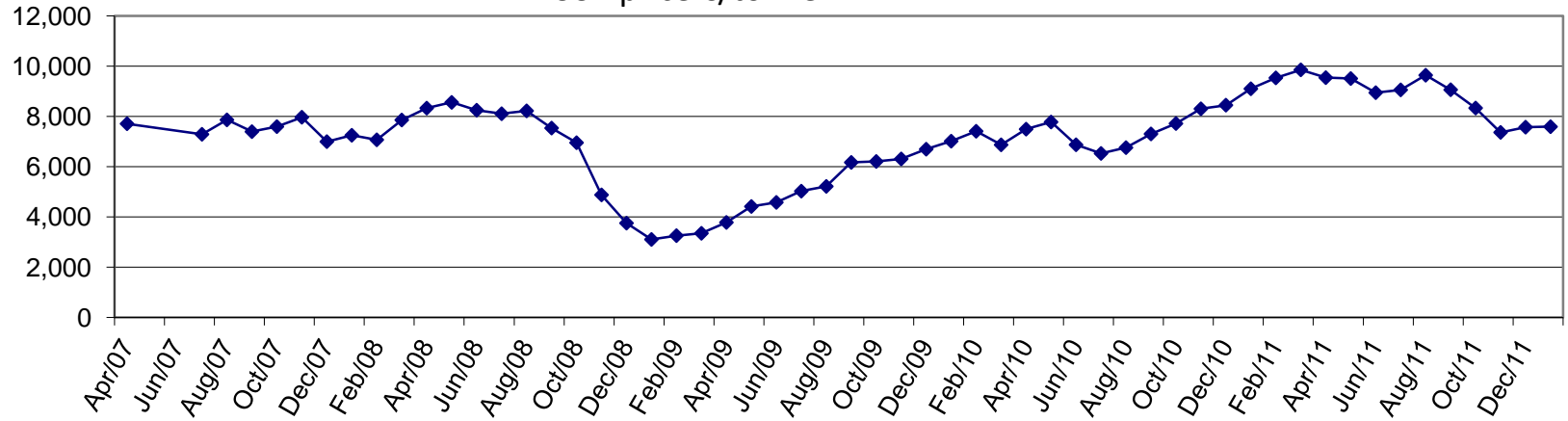
Why does an illegal trade exist?



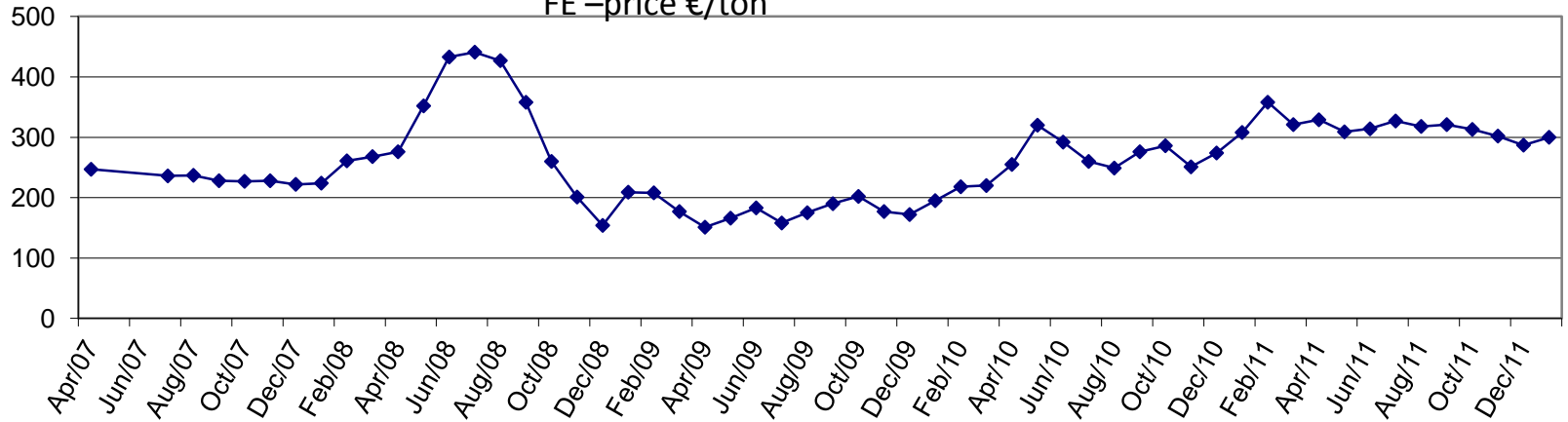


# Metal prices

CU –price €/tonne



FE –price €/ton

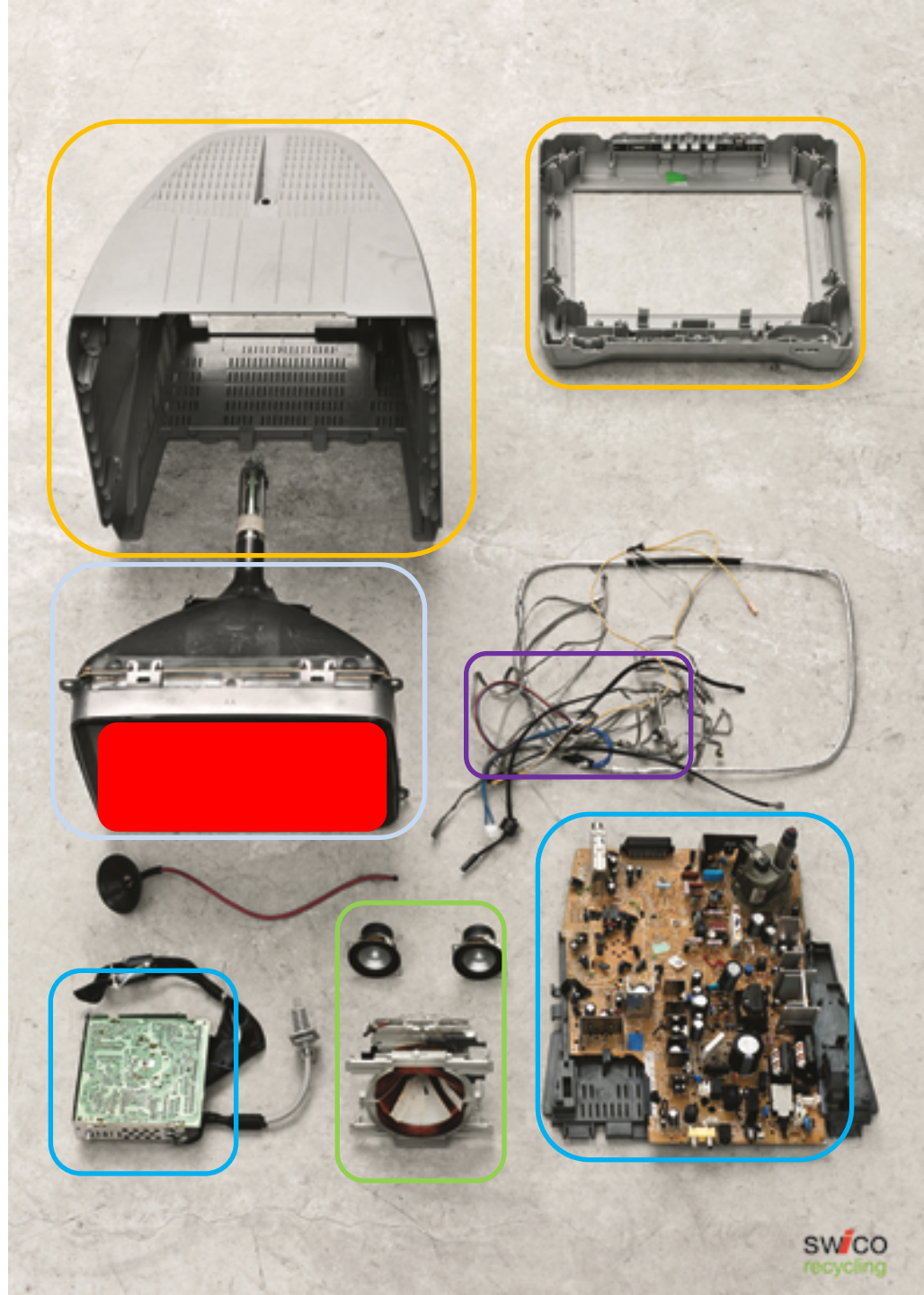
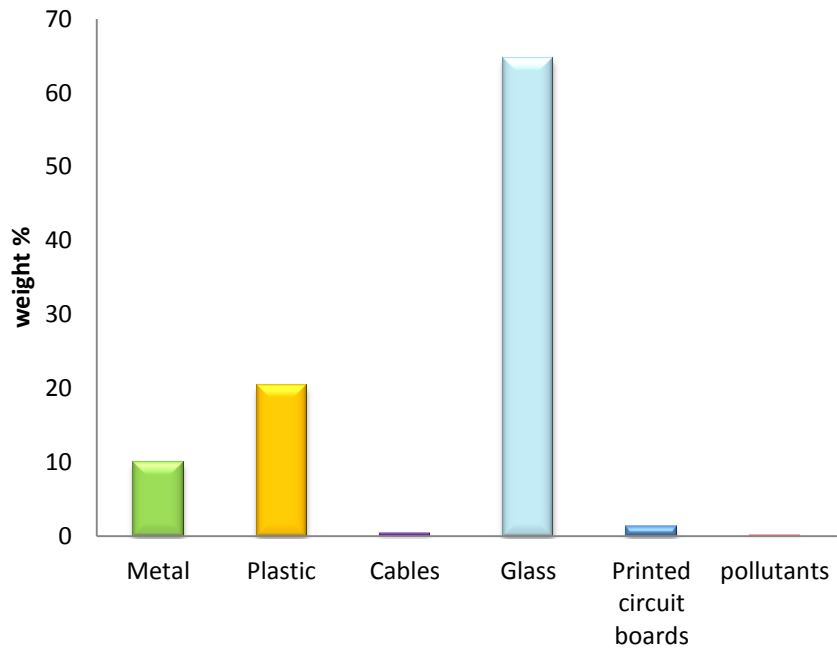


# WEEE & fractions

## Impact of illegal trade in WEEE

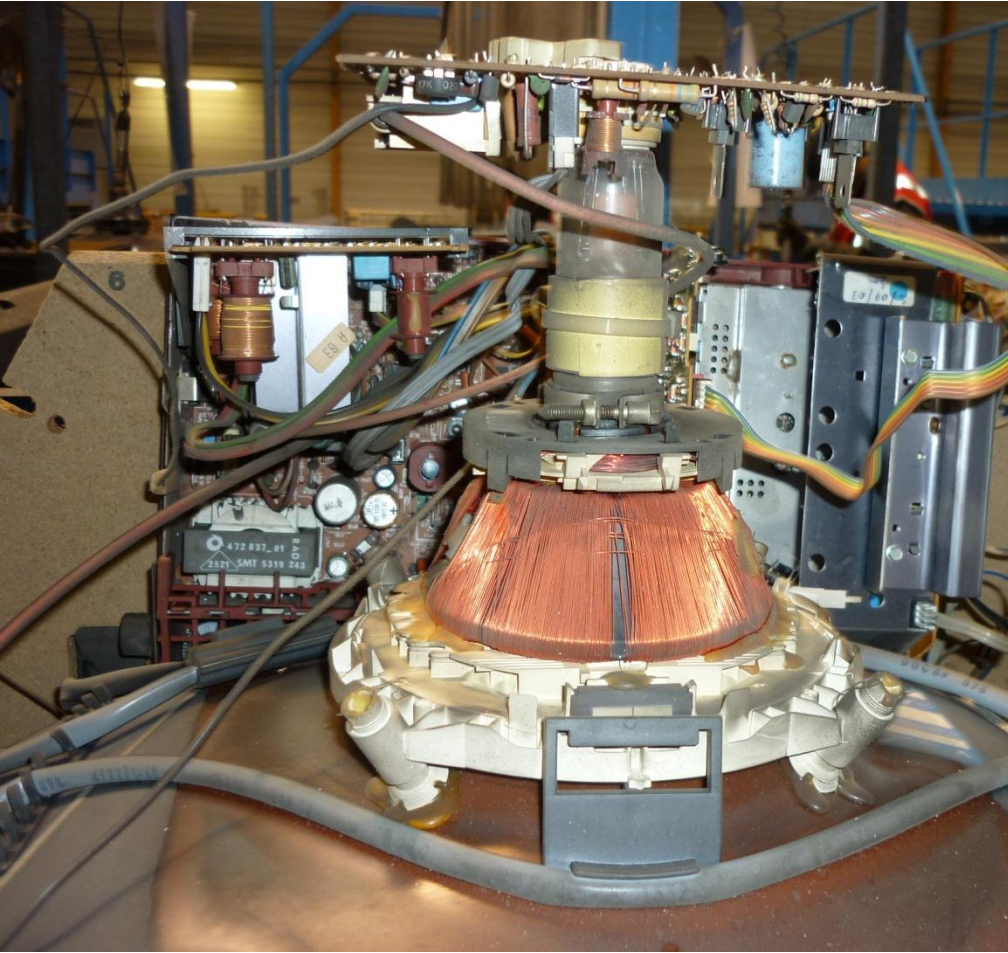
- Economic interest in certain fractions; loss of materials to legal traders, loss of taxation revenue
- Environmental and health & safety effects due to uncontrolled release of hazardous fractions
- Loss of Critical Raw Materials from European manufacturing
- Organised crime
- Damages the reputation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

# CRT Display equipment





# Economic incentives in certain fractions



# Hazardous fractions



Output fractions of lamps recycling:

88% Glass

5% metal

4% Plastic

3% fluorescent powders

0.005% mercury

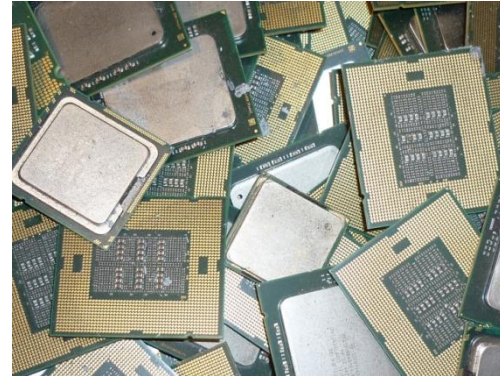
# Raw Materials Vs WEEE Recycling



## 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



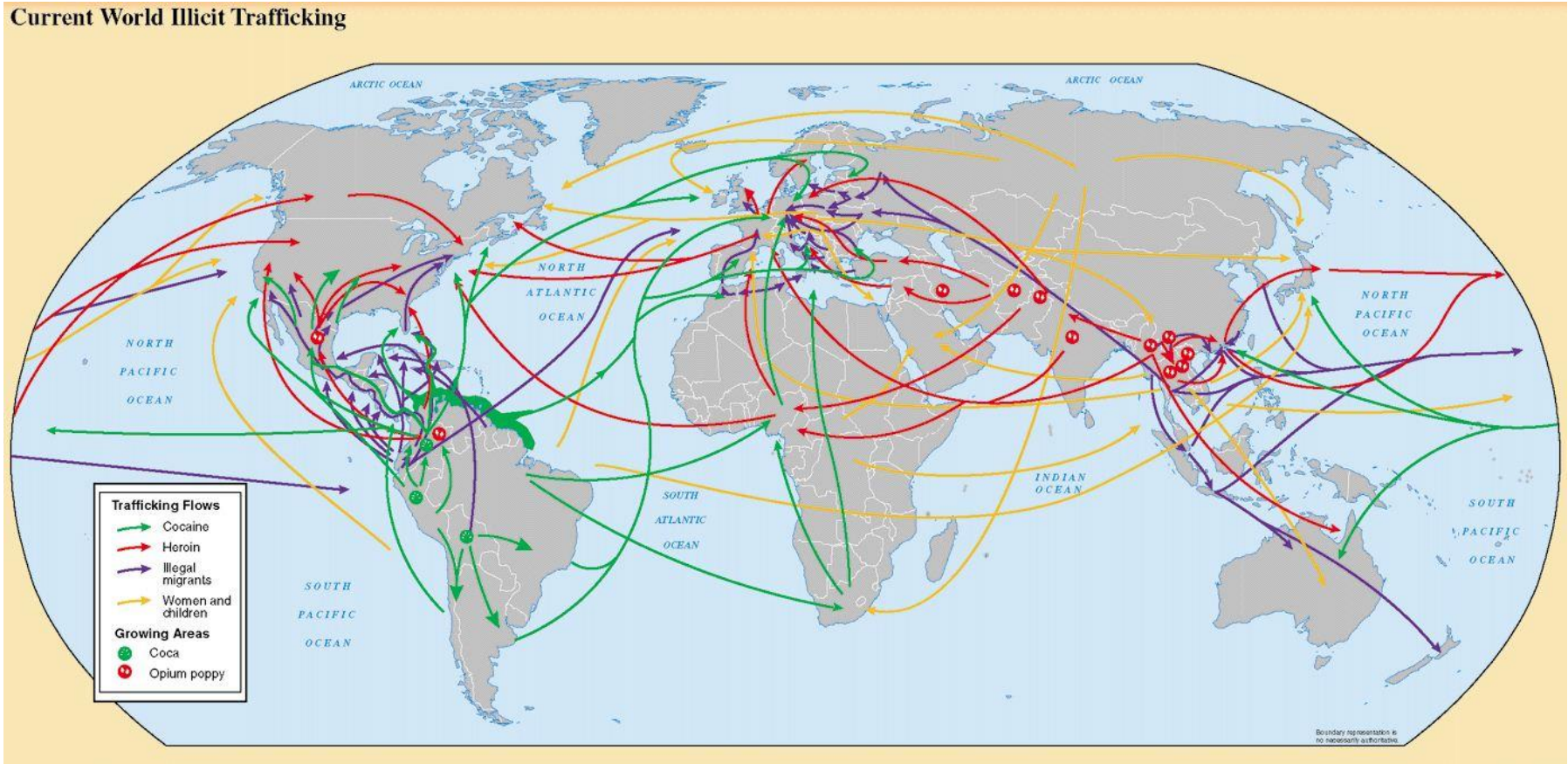
Printed Circuit boards  
(LCD monitor)

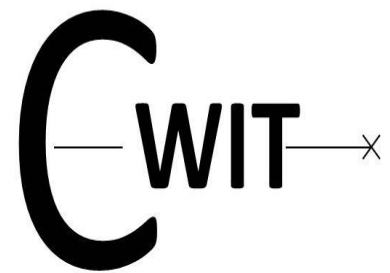
≈1,300 g/t Ag  
≈490 g/t Au  
≈99 g/t Pd

# Organised Crime

## Trafficking routes for Drugs and People

Current World Illicit Trafficking





## **CWIT project**

Countering WEEE Illegal Trade

# Countering WEEE Illegal Trade (CWIT) project

## Objectives

Quantify the volumes of WEEE in Europe

Analyse criminal behaviours associated with WEEE 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

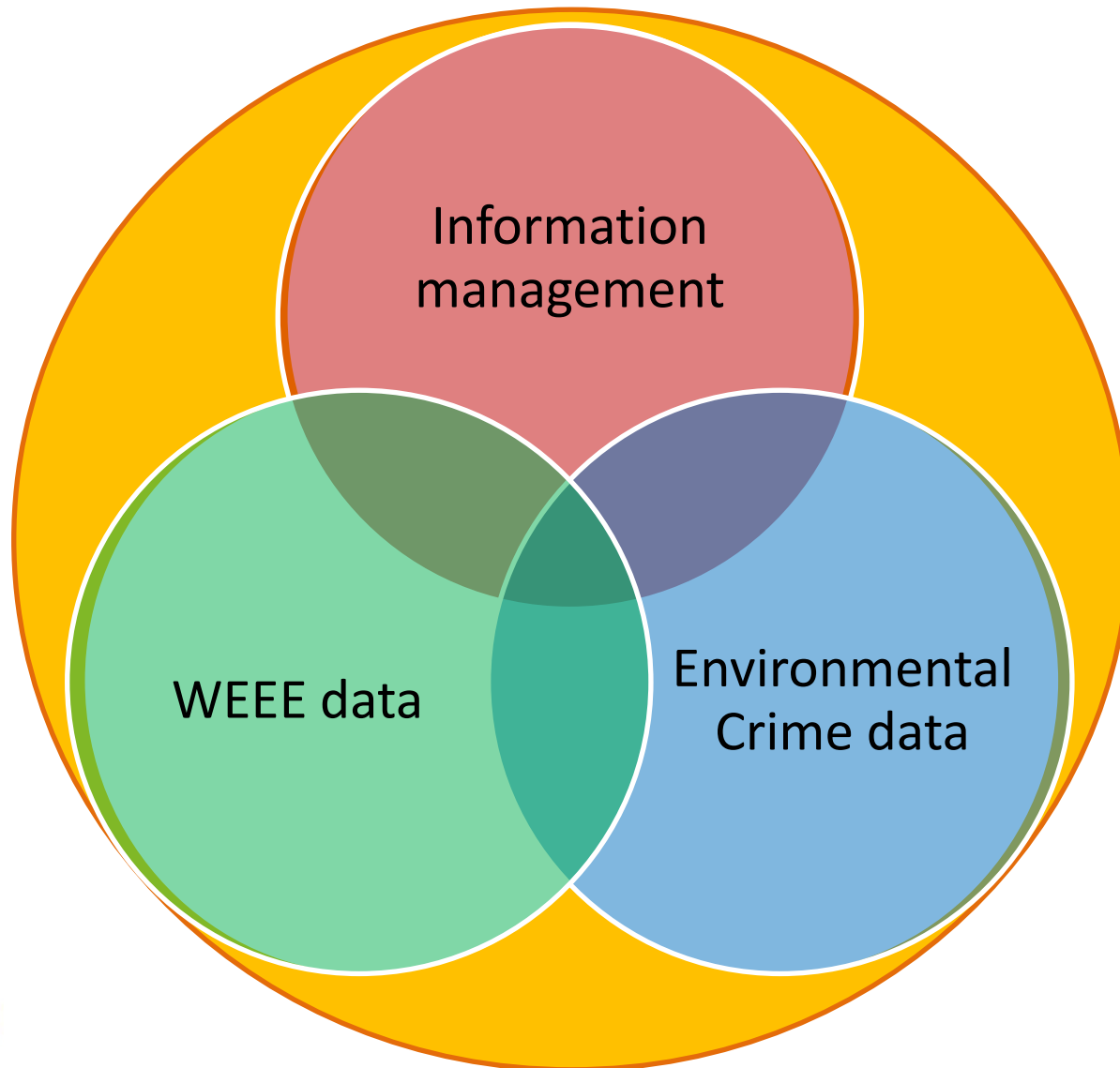
## Consortium:

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...

# Work packages





# WP1

IB Consultancy & WEEE Forum

## 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

Interpol/UNICRI / Z&P / CBRA / IBC

Recommendations for:

- \* 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,

Deliverables

Recommendations for:

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

Provide  
recommendations for the  
stakeholders network



# 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:

Dr. Thérèse Shryane

WEEE Forum

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