

WEEE Management Update from Colombia

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Outline

- Introduction
- Overview of E-Waste Situation
- Status of Policy Implementation or Development
- Current Status of WEEE Management
- Lessons Learned and Future Goals



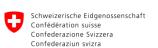
Introduction

- Introduction of CNPML (NCPC)
- Duties and responsibilities of CNPML
- Speaker's role and responsibilities
- Other agencies/organizations that have responsibilities for WEEE management

WEEE Project Colombia 2007-2012







Swiss Confederation

Federal Office for the Environment FOEN

























Sustainable Recycling Industries SRI Project 2013 - 2015



The sustainable integration and participation of small and medium enterprises from developing and transition countries in the global recycling of secondary non renewable resources.



SRI PROJECT



| WORK LINES | OUTPUTS |
|-------------------------------|--|
| Policy Implementation | The currently existing e-waste legislation (policies & standards) is implemented and in support of sustainable e-waste management |
| Conformity Assessment | A regional recycling standard is available and has been adopted by Colombia and Peru |
| Management Systems | Individual or collective management systems based on the principle of Extended Producer Responsibility (EPR) have been established and are operative |
| Training & Skills Development | The key stakeholders are trained to participate successfully in the programme and skills are developed to sustain projects results in the long term. |



Overview of E-Waste Situation



Trends and Statistics



| Indicator | | 2009 | 2010 | 2011 | 2012 |
|---|---------|------------------|------------------|------------------|------------------|
| WEEE National | Tonnes | 120'000 | 140'000 | 160'000 | 180'000 |
| generation (All categories) | kg/cap. | 2.7 | 3.1 | 3.5 | 3.9 |
| | Tonnes | 8'500 | 10'000 | 12'000 | 15'000 |
| PCs and peripherals waste | kg/cap | 0.18 | 0.22 | 0.26 | 0.33 |
| WEEE recycling formal companies | # | 5 | 8 | 11 | 18 |
| PC waste recycled by formal companies | Tonnes | 1'200 | 2'000 | 3'000 | 4'000 |
| Percentage of PC waste recycled by formal companies | % | 14% | 20% | 25% | 27% |
| Jobs associated with formal WEEE recycling and reconditioning | # | 300 (100+200) | 450 (250+200) | 600 (400+200) | 600 (400+200) |

Estimated Generation of PC waste Centro Nacional de Producción Más Limpia



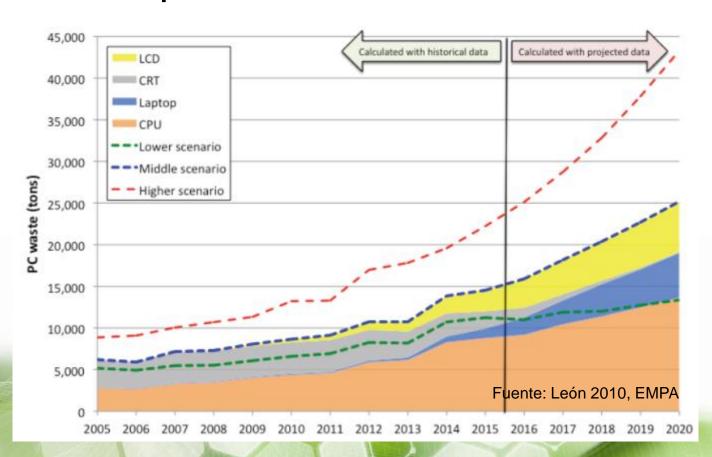
In 2012:

11.000-15.000 tonnes generated

(0.1 - 0.15 kg/capita)

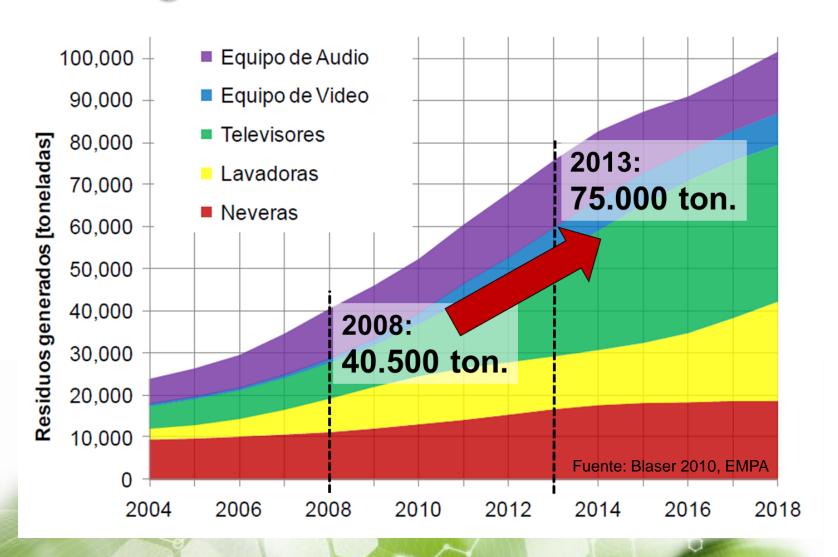
Up to 2011:

70.000-90.000 ton accumulated



Household appliances waste generation and others





Capacity for E-Waste Treatment



- 8 formal companies authorized for WEEE dismantling, 3
 of them with years of experience and joint ventures with
 international recyclers; growing interest of new
 companies entering the market.
- 10 formal companies authorized for collection and storage.
- Formal PCs recycling capacity of about 20% (of total generation)
- Migh collection efficiency by informal sector: more than 50% of computers.
- Companies mainly provide services B2B.

Capacity for E-Waste Treatment Centro Nacional de Producción Más Limpio

- Common practices": disassembly, plastics recycling, copper recycling, ferrous metal recycling, export of printed circuit boards, disposal of hazardous and non hazardous wastes.
- Since 2000, more than 120.000 PCs donated to the program "Computers for Schools", 68% of them being suitable for refurbishment.





Engagement from different sectors

- Public
- Private
- Academia
- NGOs
- Public Awareness

Status of Policy Implementation of Policy Implementation Development

- Ontro Nacional de Producción Más Limpia
- Summary of current rules/regulation on WEEE management
 - Overall goal and requirements of policies
 - Types of Items/Devices covered under policy
 - Types of activities regulated (collection, dismantling, refining, etc); types of activities not regulated
 - Roles/Responsibilities of manufacturers, recyclers, consumers
 - Agencies or Authorities Responsible for Implementation
 - Relationship to waste management policies for non-WEEE items



STATUS OF POLICY IMPLEMENTATION



Published Resolutions



- Establish Selective Collection Systems (SCS) and Waste Environmental Management
- Resolution 1512: computers and/or Peripherals
- Resolution 1511: luminaries (bulbs)
- Resolution 1297: Batteries and portable accumulators









Applies to:

Activity

- Manufacturers
- Importers
- Assemblers (for computers)
- Own brands distributors

Product

- Type of device
- Corresponding tariff record

Anual production quantity

- Lamps: 3.000 o more units per year
- Computers: 100 o more units per year



What is asked?

Strategy plan

- Document content is defined in the resolutions.
- Evaluated by National Licensing Authority

Collection targets

- Base unit the products sold in previous years
- Goals grow annually at a fixed rate defined in the norm
- Computers include a refurbishment goal

Compliance with obligations

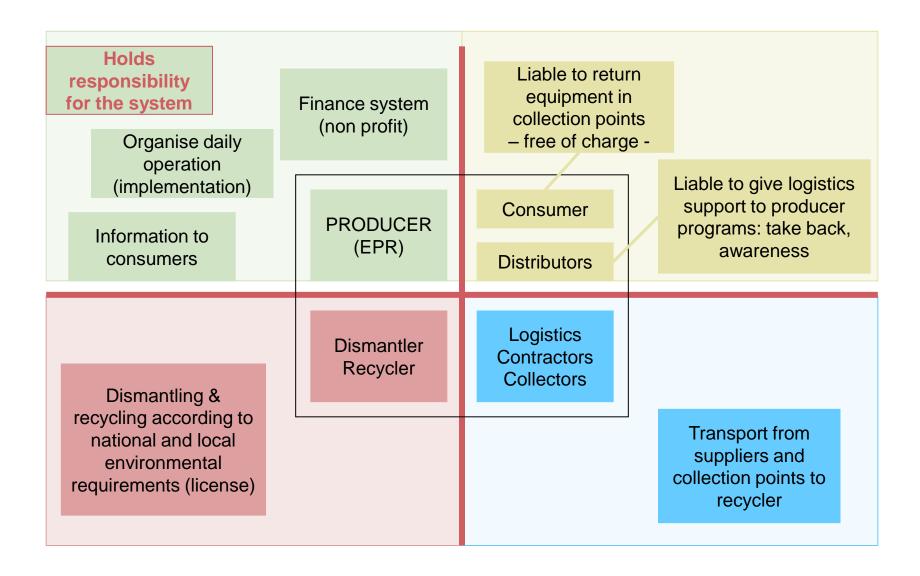
- Obligations defined by actor
- Including environmental authorities obligations

Compliance with management conditions

- Formal recycling enterprises require environmental license
- Pre-management activities do not require an environmental license

RESPONSABILITIES





Environmental Authorities Responsibility



MDAS: to issue specific regulation and public policies on WEEE management

National Authority for Environmental Licenses: Take back Systems Assessment and monitoring

Liberiaa y Olaeli

Local Environmental Authorities and Municipalities: to support producer programs diffusion and awareness. Surveillance and control of management activities.



Bill 17 de 2010

- Establishes guidelines for the adoption of a public policy on WEE management.
- Applies to all WEEE categories
- Residue Management differentiated (according to MADS directives)
- Principles: EPR, active participation, prevention, production and sustainable consumption, etc.
- Producer: Manufacturers, Importers, assemblers, remanufacturers with own.
- Obligations for the government, producers, marketer, final user, recyclers.

Compliance of regulated industries



| Product | Individual Systems | Collective Systems | %National market | Units per year | Goal 2012 (Units) |
|-----------|-----------------------|-----------------------|---------------------|-------------------|----------------------|
| Lamps | 2 | 1 | 80.5 | 25.000.000 | 1.200.000 |
| Computers | 13 | 1 | 75 | 3.000.000 | 150.000 |



How programs are evaluated

- National Licensing Authority follows up on the goals through annual reports submitted by producers.
- Administrative acts are generated to accept, approve or deny, and also to impose specific obligations to programs.

Colombia: Collective System ECOCOMPUTO





- ANDI led initiative supported by the project.
- Currently 47 companies including OEMs, importers, wholesalers and local assemblers.
- Market share of approx. 51% open to new members.
- Operational from January 1, 2012







ECOCOMPUTO's Goals



| | Unidades | Peso (Ton) |
|-----------------------------------|-----------|------------|
| Average Importations 2009-2010 | 1.303.576 | 9.228 |
| Goal 2012 (5%) 65.179 | | 461 |
| Goal 2021 (50%) | 651.788 | 4.614 |



ECOCOMPUTO - Collection

• 2013: 145.837 units – 949 tons

Hitherto (2013): 250 tons

• 2012: 190 tons

Total: 440 tons



Conclusions and challenges



- Law Implementation: all categories (implementation studies?)
- Institutional coherence and cross curricular subject (stakeholder consensus?)
- Recycling infrastructure: valuation, final disposal
- Technical standards for WEEE Recycling (technical requirements for permits)
- Recycling solutions for certain (problematic) fractions of WEEE: No local solution for CRT glass and plastics with BFR; technical feasibility studies are under way.
- Informal sector inclusion
- Increase end user awareness
- Auditing process (monitoring & control)
- "Regionalization" vs. Transboundary Movements (import & export of WEEE)

Suggested Web Sites





www.empa.ch



www.cnpml.org



www.raee.org.co



www.ewasteguide.info



www.residuoselectronicos.net



www.step-initiative.org



THANK YOU!

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