



MEXICO

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SEMARNAT



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SEMARNAT
SECRETARÍA DE
MEDIO AMBIENTE
Y RECURSOS NATURALES



Definitions and Background

- E-waste are defined by the waste law (LGPGIR) as *special handling* waste.
- In Article 19 of the waste law they are described as technological waste from the industries of computer manufacturers and other electronic products at the end of their lifespan.
- However, in Article 31 some specific components are defined as hazardous waste (e.g. CRTs and NiCd batteries)



Solid urban waste

Municipal government



Special waste

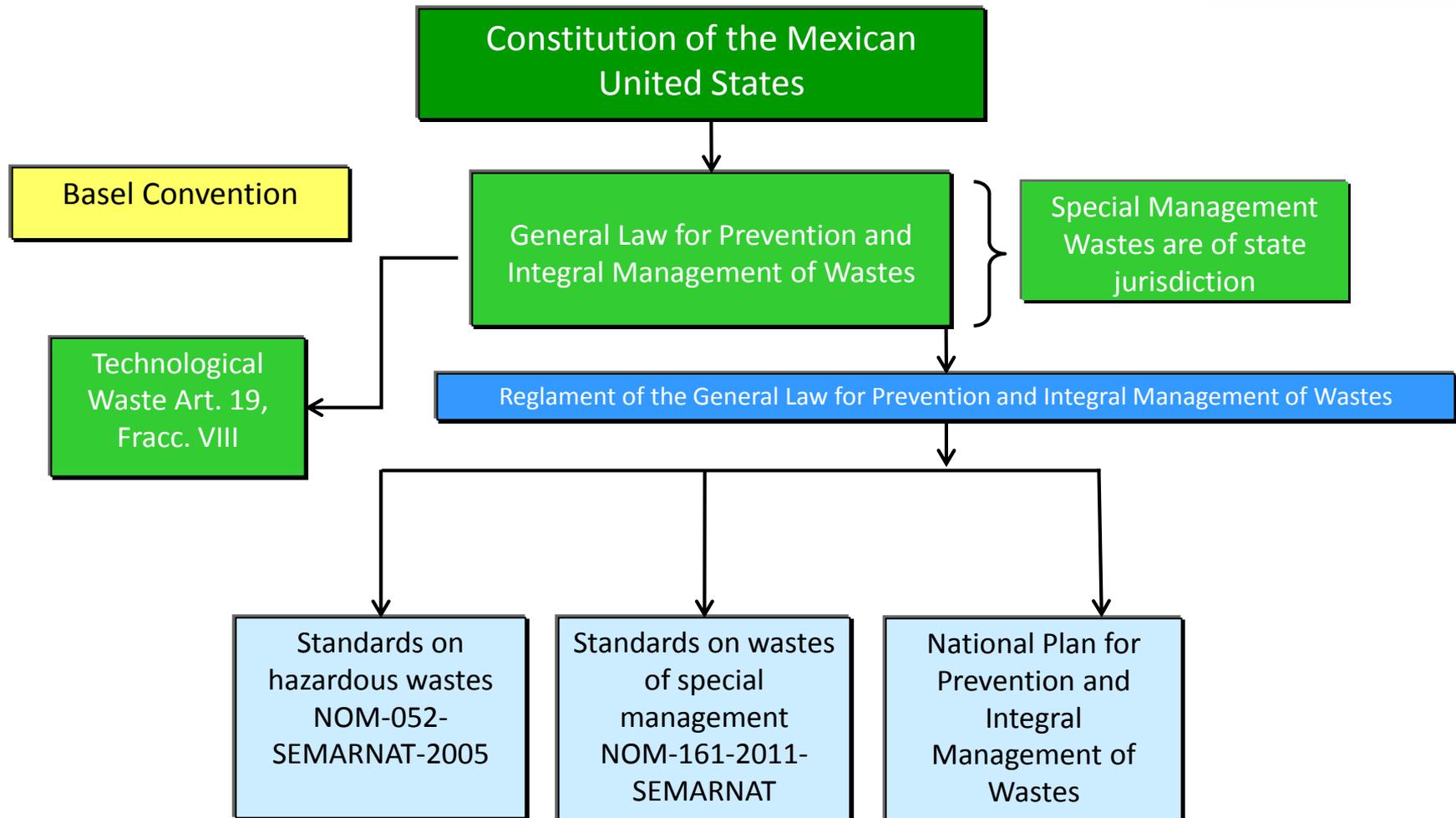
State government



Hazardous waste

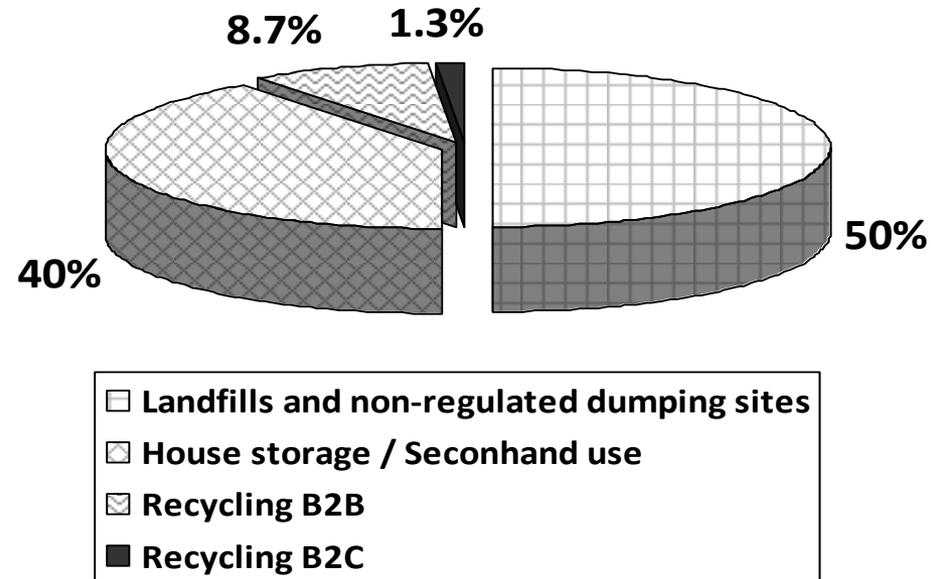
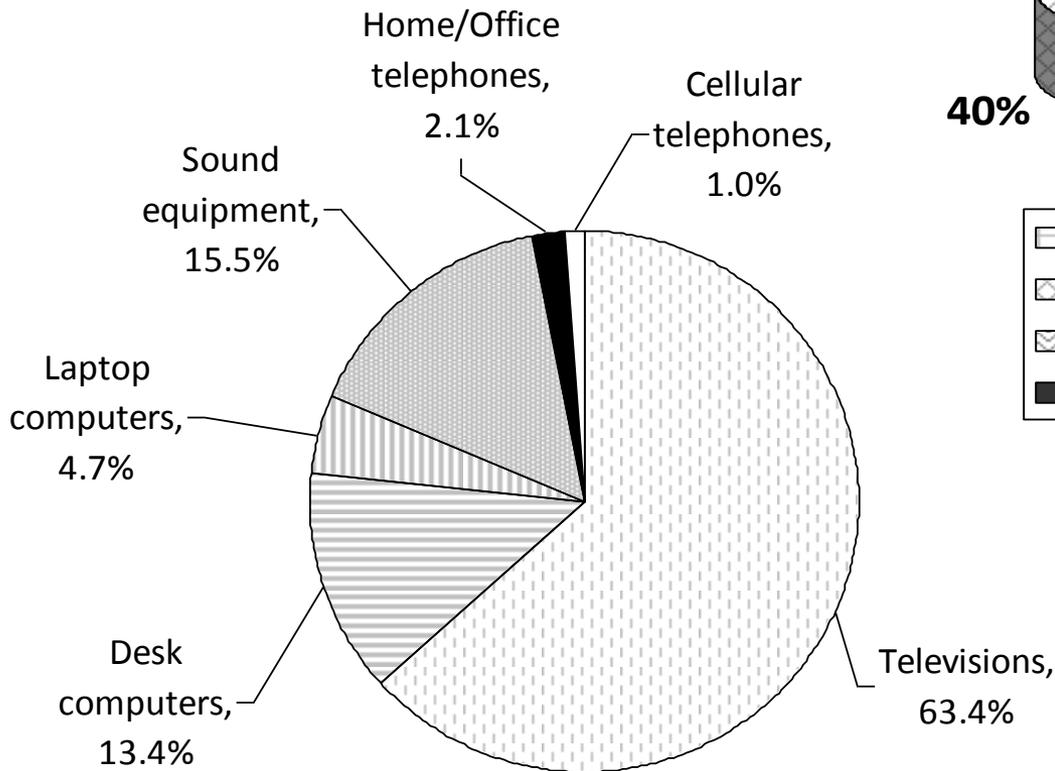
Federal government

Legal framework in Mexico



Statistics

In 2010 it was estimated a generation of 307,224 tons per year

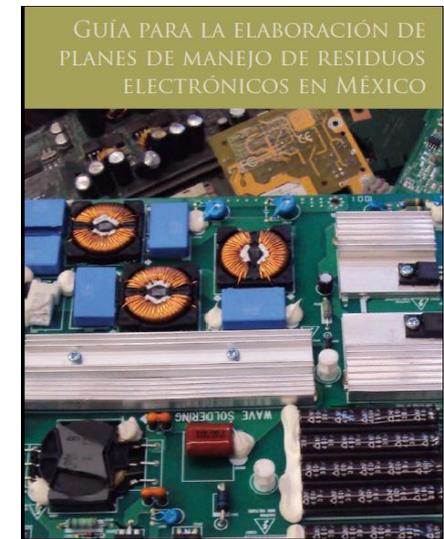
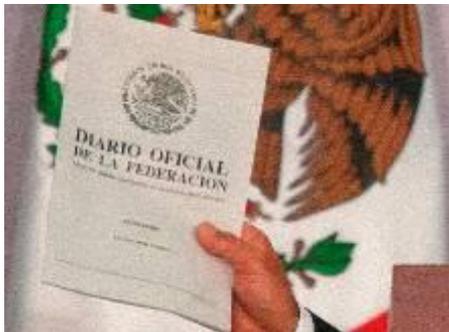


Current Status of E-Waste Regulation

- The Official Gazette published on February 1st, 2013 the standard NOM-161-SEMARNAT-2011, which establishes the criteria to define a special handling waste and determine which are subject to a management plan, as well as the elements and procedures for developing them.
- WEEE are included in the standard.
- State environmental offices have the specific procedure for registration of management plans on e-waste.

TABLA DE CLAVES DE RESIDUOS DE MANEJO ESPECIAL

CLAVE	NOMBRE	CLAVE	NOMBRE
ROC	Las rocas o los productos de su descomposición que solo pueden utilizarse para la fabricación de materiales de construcción o se destinen para este fin.		
DEM	Residuos de construcción, mantenimiento y demolición en general.	RES-24	Aplazados y derivados de la cal
		RES-25	Concreto y derivados de cemento
		RES-26	Lata y cerámico
		RES-27	Materiales de construcción
DES	Productos derivados de la descomposición de rocas.		
SSA	Residuos de servicios de salud generados por establecimientos que realicen actividades médico asistenciales, humanas o animales. Centros de Investigación con excepción de los Biológicos Interfazados.		
RAC	Residuos generados de actividades (incluye los residuos de los insumos utilizados en estas actividades)	RES-28	Pesquerías
		RES-29	Agrícolas
		RES-30	Silvícolas
		RES-31	Forestales
		RES-32	Avícolas
		RES-33	Sesilerías
		RES-34	Transporte
		RES-35	Puertos
		RES-36	Aeropuertos
		RES-37	Terminales ferroviarias
RES-38	Portuarias		
RES-39	Aguadas		
LOD	Lodos provenientes de tratamientos de aguas residuales		
RME	Residuos de Manejo departamentales o centros comerciales generados en grandes volúmenes		
RTE	Residuos tecnológicos		



Current Status of E-Waste Industries in Mexico



- Number of formal recycling enterprises: around 40 (including recyclers, dismantlers & refurbishes). The small ones appear and disappear rapidly.
- Around 5 of them work with state governments for public collection events.
- Services provided: disassembly, disposal of fixed assets, secure erase of information, recycle, export materials.
- 2 companies manage CRTs.
- 2 companies treat batteries (cell phones, laptops, etc.), but many more accept different hazardous waste.
- Most common process is manual dismantling, and for some materials shredding. Most materials are recycled by downstream processors (national (metals) and international (circuit boards))



Current Status of E-Waste Industries in Mexico



- There are different levels of advances between the companies. Some have R2, E-stewards, ISO:14000, and others just have local permits at most.
- Manufacturers have asked for a national registry or certification by the own government. Still a project.
- At the 2013 ESM training courses most of them talked about using guidelines of the Labour and Environmental Ministry and personnel for EHS procedures.
- Main concern of the industries: fulfillment of the Management Plan (recent legislation).
- Future developments in processes and environmentally sound management include refining of precious metals locally; replicate the ESM training; new standard for secondary lead smelters.

Other Relevant Projects



- Life Cycle Assessment for end-of-life computers with GIZ / IFEU
 - Environmental impact challenge for transportation of e-waste
 - Promote a National Management Plan for E-waste
- Cooperation agreement with the National Chamber of Electronic and Telecommunications Industry
- Commission of Environmental Cooperation of North America
 - Environmental Sound Management Guidelines and Training
 - Spent Lead Acid Batteries Projects (2014-2015)
- Cooperation fund between Mexico and Chile (2014-2015)
 - Enhancement of infrastructure for e-waste management, green purchases, update the national diagnosis, training.



Thank you

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