

# BRAZIL

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# INTRODUCTION TO BRAZIL



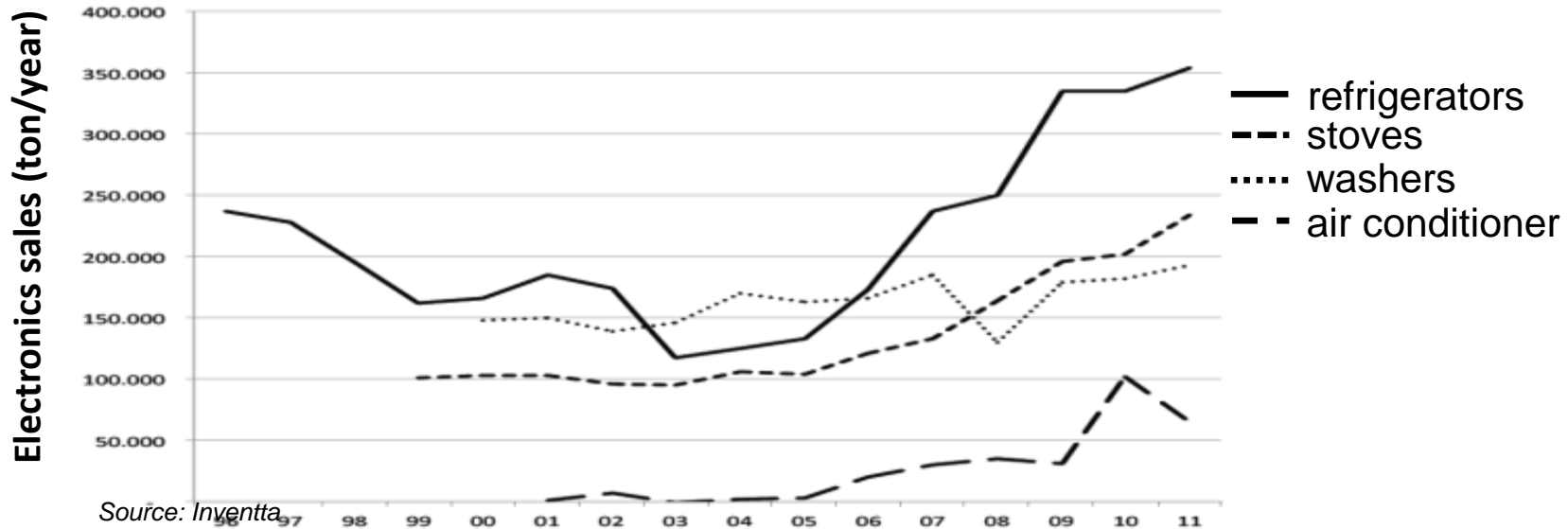
- 192 million of inhabitants
- 5,565 municipalities
- Area: 8,502,728.27 Km<sup>2</sup>

- The country is independent in Oil
- ~15% of Global Drinking Water
- Largest biodiversity in the world
- 46% renewable energy
- Great ethnic and cultural diversity

# DEFINITIONS

- **E-waste:** waste from household electronics products and components which are dependent on electrical currents with voltage not exceeding 220 volts.
- Residues of electronics products does not include those of origin, use and/or application in health services, capital goods and WEEE from major generators (they need to have their own solid waste management plan).
- **Hazardous waste:** those who, due to its characteristics of ignitability, corrosivity, reactivity, toxicity, pathogenicity, carcinogenicity, teratogenicity, mutagenicity, impose significant risk to public health or the environment, in accordance with law, regulations or technical standards. Classified according to NBR 10.004/04.
- **Hazardous e-waste:** it depends on their components. We've being trying to adopt the criteria that if the product is intact, it's not hazardous. This interpretation is not unanimous yet.
- **Government ministries/agencies in charge of e-waste/WEEE management:** the Ministry of Environment is responsible for the implementation of the National Policy on Solid Waste as a whole, Brazilian Environmental Agency – IBAMA and the State and Municipal environmental agencies are in charge of regulate, licensing procedures and enforcement.

# STATISTICS ON GENERATION OF WEEE

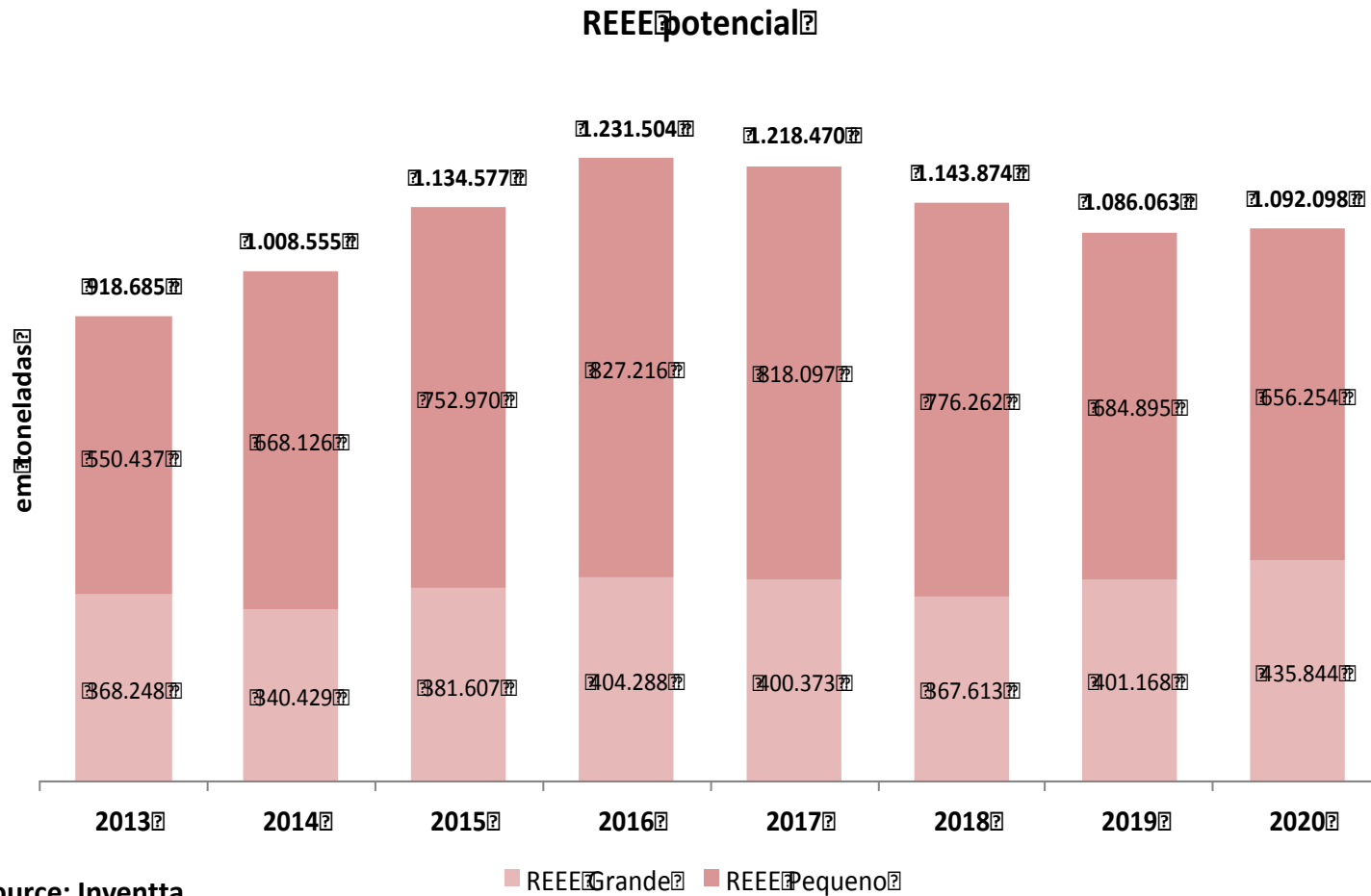


**2002**  
38% of the population was middle class.

**2013**  
54% of the population is the middle class (104 million people).

- 6th largest economy in the world
- 3rd biggest market for computers
- The waste generation in Brazil is currently growing about 7-10% per year
- Biggest generator of computer waste (per capita) in BRICS
- 272.7 million cell phone (lines operating February 2014)
- Sales of 22 million PC (2013)

# STATISTICS ON GENERATION OF WEEE



➤ Estimated volume based on sales and imports information.

# CURRENT STATUS OF E-WASTE/WEEE REGULATION

**National Solid Waste Policy** - Law # 12.305/2010 / Decree # 7.404/2010

aiming the integrated and environmentally sound management of solid waste.

## ➤ Principles

- **Joint responsibility** for the life cycle of products (manufacturers, importers, retailers, consumers, public authorities)
- **Actions:** No generation > Reduction > Reuse > Recycling > Treatment > Appropriate final disposal in landfill
- **Sectorial Agreement:** Contract to be signed by the government and manufacturers, importers, distributors aiming to implement the common responsibility for the life cycle of products
- **Take back System** for some products, including WEEE

# CURRENT STATUS OF E-WASTE/WEEE REGULATION

## ➤ Sectors with take-back systems:

- Pesticides and their packages: Law n° 7.802/89
- Batteries: CONAMA Resolution n° 401/2008
- Tires: CONAMA Resolution n° 416/2009
- Lubricant oil and their packages: sectorial agreement signed in December 2012

## ➤ Proposals for a sectoral agreement are being reviewed by the Ministry of Environment:

- Lamps
- Electrical and Electronic Equipment - WEEE
- Medicines
- Packages (steel, aluminum, glass, plastic, paper, etc.)

# CURRENT STATUS OF E-WASTE/WEEE REGULATION

- National Solid Waste Policy requires that manufacturers, importers, distributors and retailers design and implement take-back systems with return of products after their use by consumers.
- The country has about 5,500 municipalities that shall establish the final disposition of the waste in an environmentally and proper way. Landfills should replace all inappropriate waste disposal sites by 2014.
- It has emerged a big market for machinery and equipment used in the recycling process, take-back systems and landfills.
- That includes industrial design for waste reduction and non-generation, anaerobic digestion and plasma arc gasification technologies, mechanical sorting facilities for recyclables, and integrated municipal waste management strategies.



# CURRENT STATUS OF E-WASTE/WEEE REGULATION



**ABNT CATÁLOGO**

Segurança, Qualidade, Padrão e Confiança



ASSOCIAÇÃO  
BRASILEIRA  
DE NORMAS  
TÉCNICAS



Início



Meu  
cadastro



Meus  
pedidos



Meu  
carrinho



Perguntas  
Frequentes



Instalação



Norma Técnica

**Código**

ABNT NBR 16156:2013

**Data de Publicação:** 18/03/2013

**Válida a partir de:** 18/04/2013

**Título:** Resíduos de equipamentos eletroeletrônicos — Requisitos para atividade de manufatura reversa

**Título Idioma Sec.:** Waste electrical and electronic equipment — Requirements for the activity of reverse manufacturing

**Comitê:** ABNT/CB-03 Eletricidade

**Nº de Páginas:** 26

**Status:** Em Vigor

**Idioma:** Português

**Organismo:** ABNT - Associação Brasileira de Normas Técnicas

**Preço (R\$):** 91,10

**Objetivo:** Esta Norma estabelece requisitos para proteção ao meio ambiente e para o controle dos riscos de segurança e saúde no trabalho na atividade de manufatura reversa de resíduos eletroeletrônicos.



COMPRAR



CONTINUAR  
PESQUISANDO

# CURRENT STATUS OF E-WASTE/WEEE REGULATION

## Standards for WEEE recycling



**Environmental  
Protection**

ISO 14001:2004



**Occupational Health  
and Safety**

OHSAS 18001:1999



**Traceability**



**Data Safety**

# CURRENT STATUS OF E-WASTE INDUSTRIES

- Summary of technologies/processes used and level of environmentally sound management (ESM): Are some companies more advanced than others? Are some licensed for specific activities by the government? Do any companies follow a known set of standards for electronics recycling or for ESM? Are any companies giving EHS training to their employees?
- Additional bullets to explain developments in industry from the past year: Was there an increase in the number of companies? In the capacity of companies? In their adoption of ESM standards?
- Anticipated future developments in processes and environmentally sound management: Are there any plans for worker training, companies adding processes or starting new types of processes, or other future plans that relate to environmentally sound management?

# CURRENT STATUS OF E-WASTE INDUSTRIES

- Recycling companies = 94 located in 13 states (out of 27), but concentrated in the south and southeastern regions. This number is increasing.
- WEEE processed in 2013 = 918 000 tons.
- R2 certified company - Arrow Electronics, Inc., (NYSE:ARW) in São Paulo, Brazil, facility to several quality and environmental industry standards for electronics asset disposition. It is the first South American location certified to the R2 Responsible Recycling standard.

# PROJECTS

## COOPERATION WITH JICA

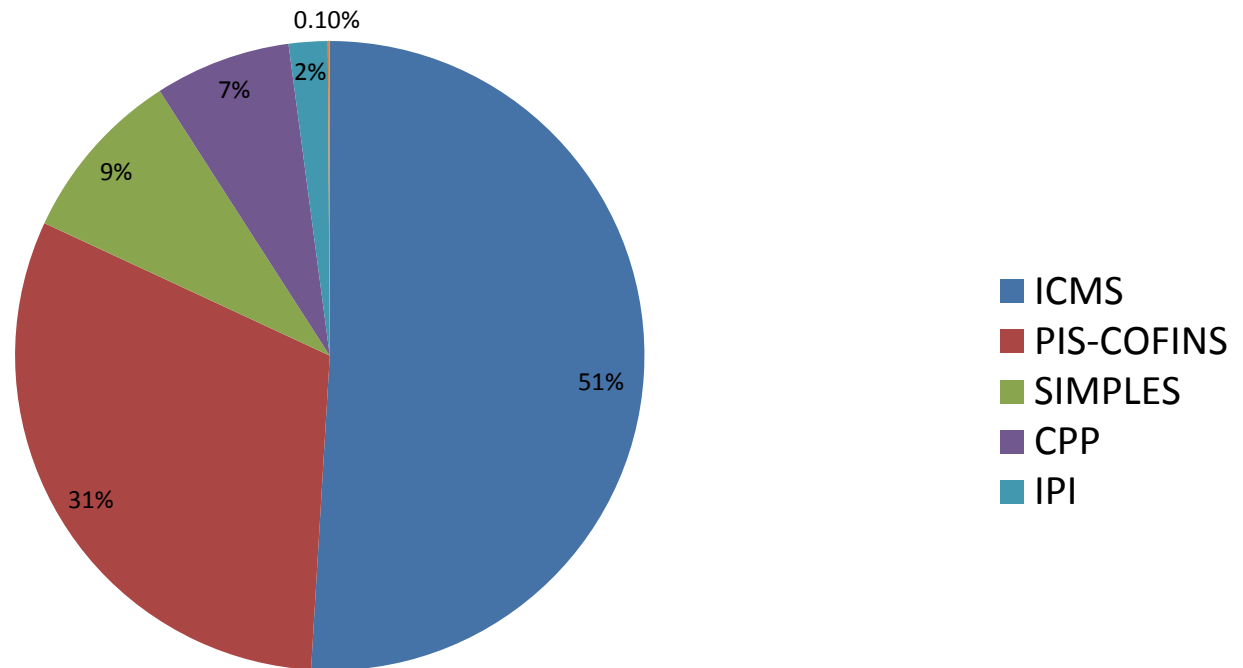
- Starting July/14 - duration 3 years
- Pilot project in São Paulo to establish the amount of e-waste generated and to apply best practices in recycling

# PROJECTS

- The Federal and State Governments launched during the Environment Week, June 2 to 6, the campaign to collect electronic waste called “Collective Electro - not everything is garbage.”
- ***Metarreciclagem* Stations** to dissemination and promote of digital culture. It provides technical IT training for youth and adults, the reuse of computers and computer equipment and recycling and proper disposal of weee.

# TAX AND FINANCIAL INCENTIVES

WORKING GROUP COORDINATED BY MDIC TO DEVELOP  
TAX AND FINANCIAL INCENTIVES



# CONTACT INFORMATION

Thank You!

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