Policy Update from Brazil

Beatriz Martins Carneiro, General Manager
Department of Industrial Competitiveness
Ministry of Development, Industry and Trade (MDIC)
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Ministry of Development, Industry and Foreign Trade

BRAZILIAN GOVERNMENT BRASIL

Outline

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

Introduction

- Self Introduction
- Introduction to Brazil
- The Policy of Waste Treatment and Recycling
- Current Status of Waste Treatment and Recycling
- Current Issues of Recycling in Brazil
- Ambientronic Program
- Brazilian Standard
- Investment

Self-Introduction

- General Manager of Competitiveness and Sustainable Development at Ministry of Development, Industry and Trade
- In charge of the sustainable development agenda, including climate change, solid waste, eco-labeling and eco-design policy
- Our Department is in charge of the sectorial implementation of the National Solid Waste Management Policy, establishing a system of WEEE recycling, take-back and development of financial instruments for implementation of the National Policy
- Master in Environmental Law - Paris I University – *Panthéon Sorbonne* – Paris/France
- *LL.M.* in Comparative Law – University of Florida – Levin College of Law– Florida/US

Introduction to Brazil

- 192 million of inhabitants
- 5,565 municipalities
- Area: 8,502,728.27 Km²

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

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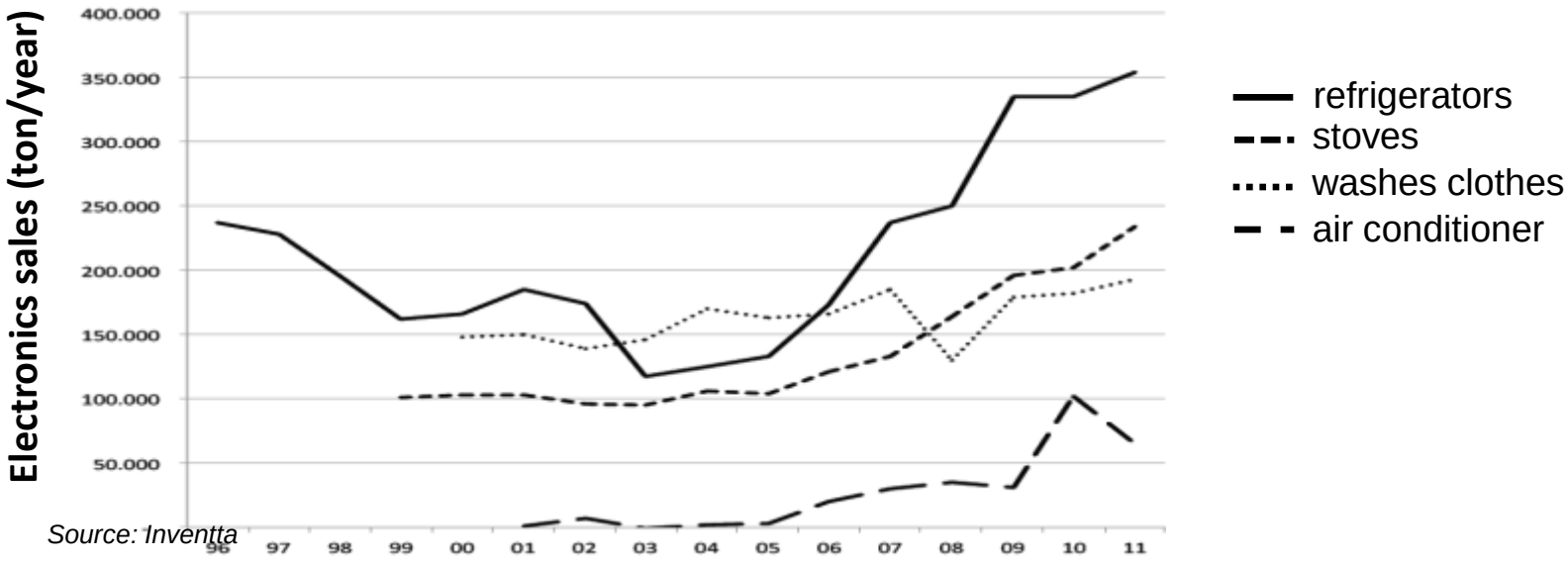
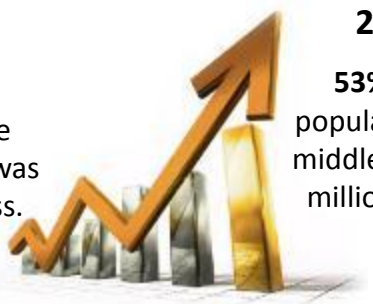
Overview of E-Waste Situation



Source: Inventta



38% of the population was middle class.

2002

2012

53% of the population is the middle class (104 million people)

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- 6th largest economy in the world
- 3rd biggest market for computers
- 256.4 million cell phone (lines operating)
- Production of 14 million computer (year)
- Production of 61 million cell phone (year)

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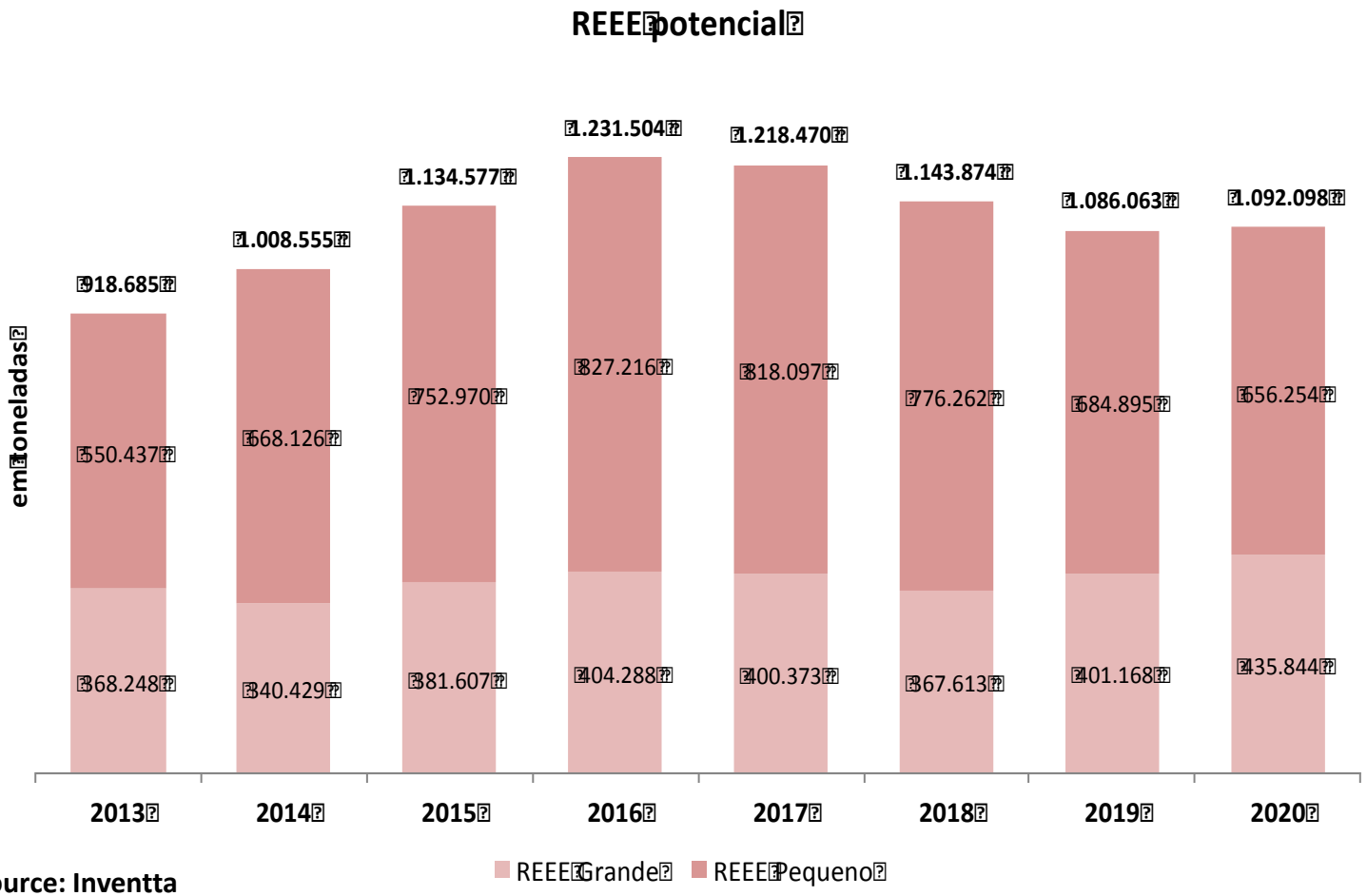
Overview of E-Waste Situation



Source: Inventta

PREMISSAS

- Volume potencial calculado a partir de informações de vendas e importações.
- Estimativa de peso médio e vida útil dos equipamentos sem variações ao longo do tempo
- Considera o potencial do mercado cinza.
- Não inclui potencial estoque de REEE em mãos dos consumidores.

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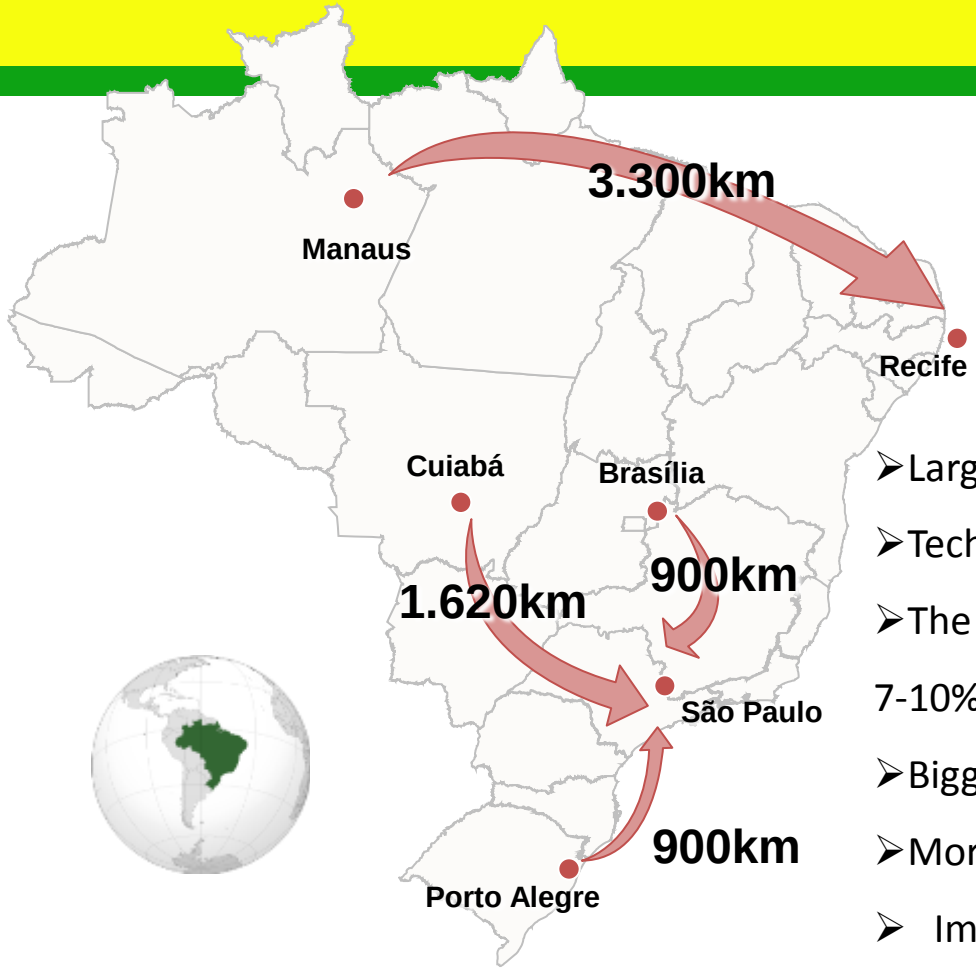

- 192 million of inhabitants
- 5,565 municipalities
- Area: 8,502,728.27 Km²

- Large distances between cities
- Technologies for recycling
- The waste generation in Brazil is currently growing about 7-10% per year
- Biggest generator of computer waste (per capita) in BRICS
- More than 900.000 ton/year WEEE
- Improve the system of collection, sorting, recycling and treatment of solid waste
- Appropriate final disposal (increase the number of controlled landfills by 2014)

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Overview of E-Waste Situation

- Brazil is a global leader in aluminium cans recycling

	2004	2005	2006	2007	2008	2009	2010
Argentina	78	88,1	89,6	90,5	90,8	92	91,1
Brazil	95,7	96,2	94,4	96,5	91,5	98,2	98
Europe	48	52	57,7	N/D	62	n.d	64,3
USA	51,2	52	51,6	53,8	54,2	57,4	58,1
Japan	86,1	91,7	90,9	92,7	87,3	93,4	92,6

- Recycling rate of other materials (CEMPRE, 2010)

Glass	40%
Paperboard	70%
PET	56%
Plastic	19%
Steel cans	49%
Tires	92%

Status of Policy Implementation or Development

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

- **Basel Convention**
- Member since 1993

Status of Policy Implementation or Development

- **National Solid Waste Policy**

- Set of Principles, Objectives, Instruments, Guidelines, Goals and Actions to be adopted by National Government itself or by partnership with states, municipalities and private actors of the society aiming the integrated and environmentally sound management of solid waste

- **Principles**
  - **Joint responsibility** for the life cycle of products (manufactures, 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, distributers aiming to implement the common responsibility for the life cycle of products
  - **Take back System** for some products, including WEEE

Status of Policy Implementation or Development

- 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 a environmentally and properly 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 WEEE management

- **Sectors with take-back systems**:
  - Pesticides and their packages
  - Batteries
  - Tires
  - Lubricant oil and their packages
  - Lamps
  - Electrical and Electronic Equipment - WEEE
  - Medicines
  - Packages (steel, aluminum, glass, plastic, paper, etc.)

Status of Policy Implementation

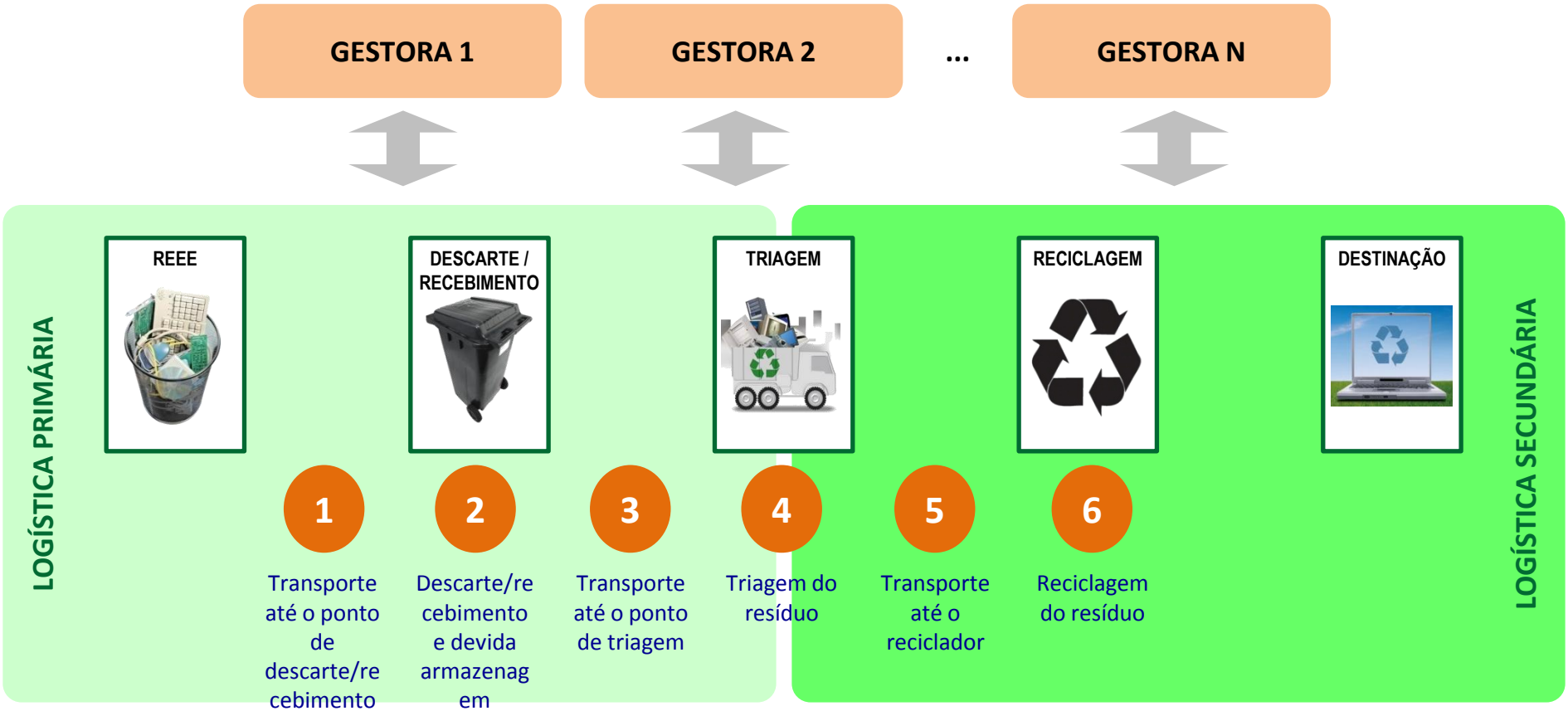
- **Status sectorial agreements for take-back systems**:
  - Packages for lubricant oil: signed in December 2012
  - Lamps: proposals are being reviewed by the Ministry of Environment
  - Packages: proposals are being reviewed by the Ministry of Environment
  - Electrical and Electronic Equipment: public calling announcement published in February 2013 - waiting for proposals from the sectors
  - Medicines: feasibility study and public calling are being prepared

WEEE Take-Back System: Operation

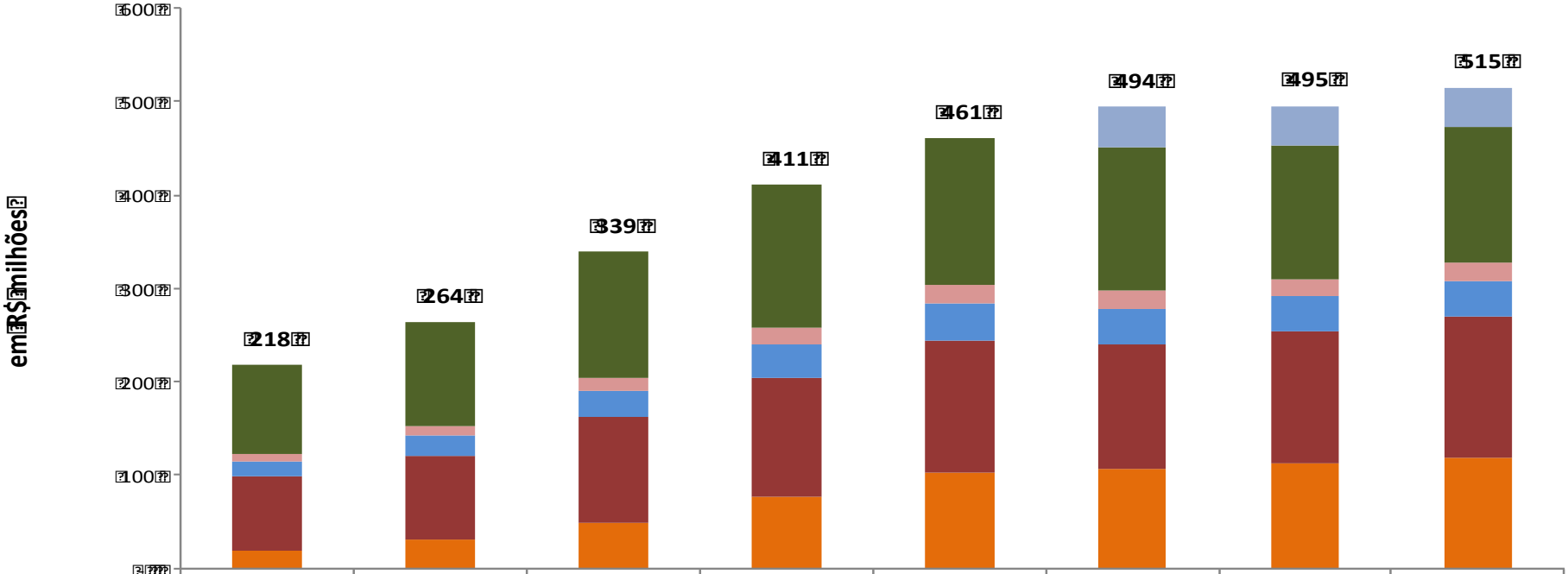
- **WEEE take-back system**

  - Consumers – give the products back to distributors or retailers
  - Distributors and Retailers – receive the products from consumers and give them back to producers and importers
  - Producers and importers – give proper and environmentally sound destination to the products

WEEE Take-Back System: Logistics



WEEE Take-Back System: Costs



	2013	2014	2015	2016	2017	2018	2019	2020
Campanhas						42.454.625	41.985.814	43.326.442
Processamento	94.905.108	111.004.829	133.967.253	152.756.623	156.635.161	153.545.288	142.795.035	143.560.003
Frete Secundário	7.786.784	10.456.513	14.474.019	18.117.489	20.095.215	19.161.535	19.732.797	21.070.515
Triagem	16.377.504	20.814.816	27.691.277	34.517.472	39.117.091	38.247.581	37.681.987	37.959.504
Frete Primário	79.319.879	90.065.900	112.676.943	129.174.038	141.536.327	133.016.917	140.707.530	151.209.681
Ponto de Receb.	19.278.000	31.428.000	49.932.000	76.032.000	103.140.000	107.406.000	112.410.000	118.188.000
TOTAL	217.667.275	263.770.058	338.741.491	410.597.622	460.523.794	493.831.947	495.313.162	515.314.145

Fonte:Análise Inventta

WEEE Public Calling Announcement: Scope

- All kinds of domestic WEEE

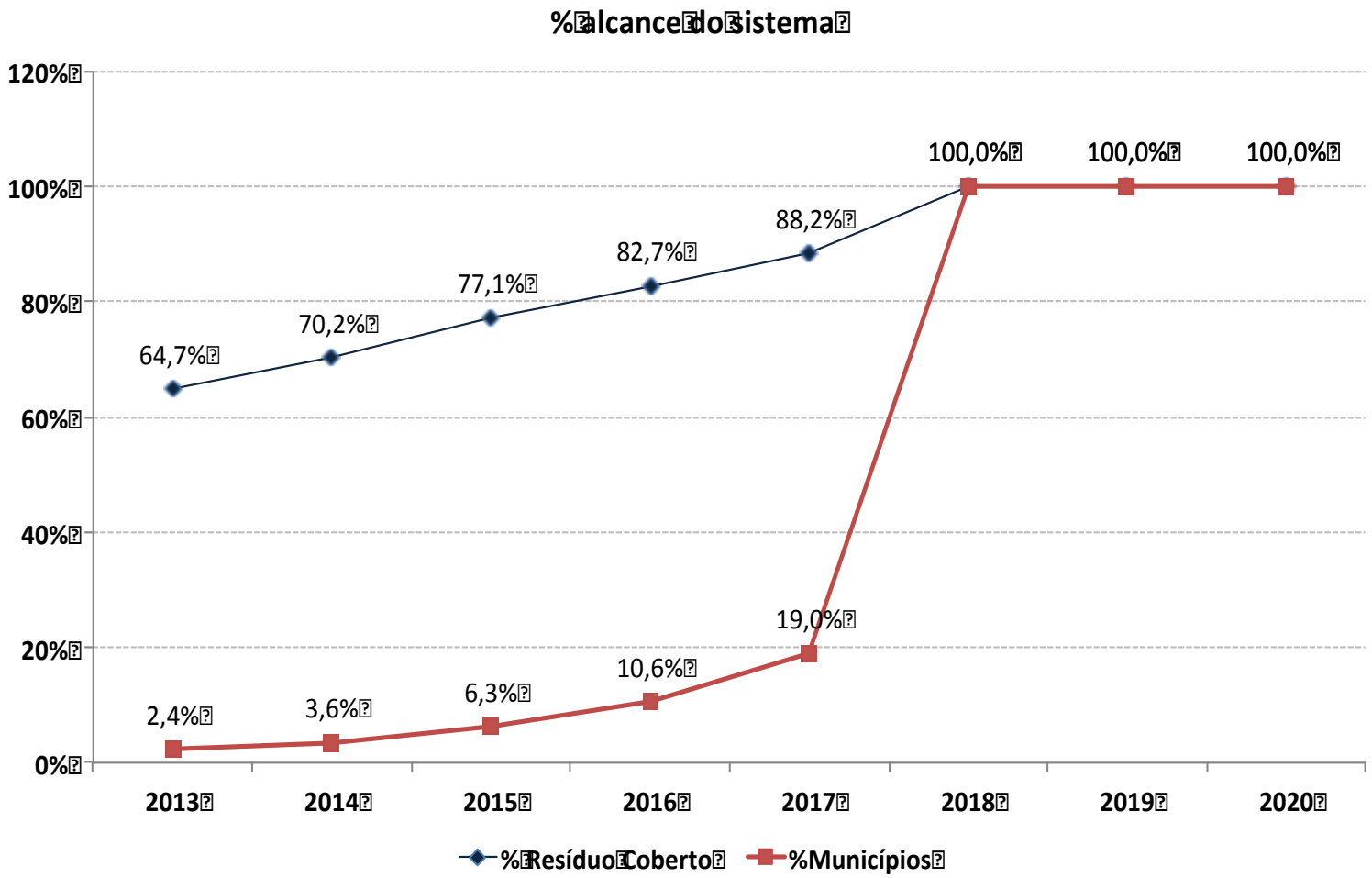
- Excludes:

  - capital goods
  - WEEE from major generators (they need to have their own solid waste management plan)
  - Medical appliances

WEEE Public Calling Announcement: Goals for the 5th Year After the Sectorial Agreement Signature

- Implement a permanent take back system in 100% of the municipalities with a population of over **80,000** people.
- In the municipalities with a permanent take back system, there will be a collecting point for each **25,000** people.
- Collection and proper destination of **17% in weight**, of what was sold in the internal market the year before the sectorial agreement signature.
- To be revised in 5 years.

WEEE Public Calling Announcement: Geographic



PREMISSAS

- In 2018 - 77,1% of total WEEE generation ~350 municipalities.
- From 2018, periodical campaigns in every municipality under 80.000 hab.

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Lessons Learned and Future Goals

- Sectors presented proposals on June 12th (10)
- Analysis period – 40 days
- Public Consultation
- Sectorial Agreement Signed – 2nd Semester 2013

WEEE Take-Back System - Challenges

- ! Responsibility and funding to treat “orphan” waste
- ! Hazardous waste
- ! Joint reponsibility – cooperation, governance and costs
- ! Promote the consumer action
- ! Promote reuse
- ! Innovation and recycling/technology transfer and development

WEEE Take-Back System - Opportunities

- Job creations
- Reduce incorrect disposal of WEEE
- Reduce energy consumption

Ambientronic System

Goals

Eco-friendly electronic products

- Contribute to integrate government, universities/research centers and industry in order **to support the sustainability of electronics sector**;
- Support the **adequacy of the Brazilian electronics industry** to national and international environmental legislation, standards and other relevant requirements (ecodesign, cleaner production and recycling);
- Create the necessary infrastructure for **developing environmentally conscious technologies** in order to fulfill the Brazilian's needs for sustainable technologies (innovation, qualification and management);
- Support the **development of social enterprises**, job creation, income and social inclusion, associated with the life cycle of electronics.

Ambientronic Program

- Development of electronic sustainable technologies for Brazilian electronics industry PNRS adequation
- Create infrastructure to support the technology development
- Develop national and international environmental standards
- Support to Brazilian policy implementation trough integrated actions of Ministries (MDIC, MMA, MCTI)
- AMBIENTRONIC is open to national and international collaborative projects

Brazilian Standard For WEEE Recycling

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Brazilian Standard For WEEE Recycling

Standarts for WEEE recycling

Environmental Protection

ISO 14001:2004

Occupational Health and Safety

OHSAS 18001:1999

Traceability

Data Safety

Contact Information

Thank You!

Beatriz.carneiro@mdic.gov.br

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