THE NEW WASTE LAW AND THE RECYCLING SECTOR IN BRAZIL

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ABRELPE
• National Solid Waste Policy – Federal Law 12.305/10

• Panorama of Solid Waste in Brazil

• Recycling in Brazil: General Data

• Recycling in Brazil: Stakeholders

• Recycling in Brazil: Business Chain

• Barriers to Recycling in Brazil

• Steps to Increase Recycling in Brazil
National Solid Waste Policy (PNRS)
Federal Law n. 12.305/2010
Compliance with the Law - art. 1st, § 1st

“Shall be subject to compliance with this Law the persons or entities, public or private, responsible, directly or indirectly by the generation of solid waste and the ones that develop actions related to solid waste management.”
Definitions – art. 3rd

XV - reject: solid waste that, after being exhausted all possibilities for treatment and recovery by technological processes available and economically viable, show no other possibility than the final disposal environmentally adequate;

XVI - solid waste: material, substance, object or discharged good, resulting from human activities in society, which final destination is undertaken, it is proposed to be undertaken or it is mandatory to be undertaken, in solid or semisolid states, as well as gases in containers and liquids which characteristics make unfeasible its launch in public sewers or water bodies, or that requires solutions technically or economically unviable in accordance with the best available technology;
VII - **final destination** environmentally adequate: waste destination which includes reuse, recycling, composting, energetic recovery and utilization or other destinations accepted by the competent bodies from Sisnama, SNVS and Suasa, including the final disposal, observing the specific operating standards and requirements in order to avoid damage or hazards to public health and safety and minimize adverse environmental impacts;

VIII - **final disposal** environmentally adequate: ordinate distribution of reject in landfills, observing the specific operating standards and requirements in order to avoid damage or hazards to public health and safety and minimize adverse environmental impacts;
Definições – art. 3rd

XVII - Shared Responsibility for the lifecycle of products: a set of individualized and enchained assignments from manufacturers, importers, distributors and traders, consumers and the authorities responsible for the urban sanitation and solid waste management services, in order to minimize the volume of solid waste and reject generated, as well as to reduce the impacts to human health and the environment resulting from the life cycle of products, under the terms of this Act;

XII - Reverse Logistics: instrument for economic and social development characterized by a set of actions, procedures and means driven to implement collection and returning of the solid waste to the business sector, in order to reuse and recover it in their own or third parties productive cycles, or any other environmentally sound destination;
Waste Hierarchy

“Art. 9th - In the management of solid wastes, it shall be observed the following order of priority: non-generation, reduction, reuse, recycling, treatment and the environmentally adequate final disposal of the reject.”
The waste hierarchy indicate the priority order of actions that must be followed under the PNRS – Federal Waste Law.
Panorama of Solid Waste in Brazil
MSW Generation - 2010

Generation of MSW
(ton/year)

2009: 57,011,136
2010: 60,868,080
Increase: 6.8%

Generation of MSW per capita
(Kg/inhab/year)

2009: 359.4
2010: 378.4
Increase: 5.3%
MSW Collection - 2010

Collection of MSW (ton/year)

- 2009: 50,258,208
- 2010: 54,157,896

Collection of MSW per capita (Kg/inhab/year)

- 2009: 316.7
- 2010: 336.6

Change:

- Collection of MSW: 7.7%
- Collection of MSW per capita: 6.3%
Final Disposal in 2010 (ton/year)

- Inadequate: 42.4% (22,962,948 tons)
- Adequate: 57.6% (31,194,948 tons)
Recycling in Brazil: General Data
Evolution of Aluminum Cans Recycling

Source: ABAL – Brazilian Aluminum Association
Evolution of Paper And Cardboard Recycling

Source: BRACELPA – Brazilian Association of Cellulose and Paper
Evolution of PET Recycling

<table>
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<th>Year</th>
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<td>2008</td>
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<td>2009</td>
<td>55,6</td>
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</tbody>
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Fonte: ABIPET – Associação Brasileira da Indústria de PET
Evolution of Glass Recycling

Source: ABIVIDRO – Brazilian Association of the Glass Industry
Recycling in Brazil:
Proposal for a Business Chain
Recycling Business Chain

- MSW Regular Collection
- Separate Collection
- Recyclable Collection Programs
- Voluntary Drop-off Schemes
- Separation Plants
- Waste Pickers / Cooperatives
- MRFs
- Storage Units
- Recycling Industry
Barriers to Recycling in Brazil
Barriers to Recycling

Simplified Business Chain

- MSW Regular Collection
- Separate Collection
- Collection Programs
- Drop off schemes
- Separation Plants
- MRFs
- Storage Units
- Recycling Industry

High costs/ Logistics

Material Demand / Unbalanced costs

Unbalanced Demand / Lack of economic instruments
Other Barriers

- Developing countries in general do not have an established consciousness regarding the benefits of recycling;

- Absence of separation culture;

- Cheap and Easy Disposal;

- Predominance of informal actions;

- Absence of organization and management;

- High cost for separate collection services;

- Lack of specific legislation and enforcement;

- Lack of incentives and economic instruments.
Steps to Increase Recycling in Brazil
OBJECTIVES:

• Avoid Inadequate Destination

• Avoid waste flows into the Municipal stream

• Maximize the return cycle
* Intersectoral Strategic Planning – Integrated Solutions:

• Reduction on the waste generation
  +

• Rational use of resources/products
  +

• Adoption of intermediate activities to allow the separation between solid waste and reject > Recycling
  +

• Choose the best affordable practices for the attended people
  +

• Adequate Final Disposal

Change of Paradigm: Waste > Resource
Gracias!
Thank you!
Obrigado!