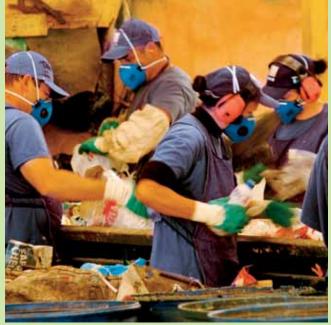
National Solid Waste Policy







Now it's the award

New challenges for public authorities, companies, waste pickers and the public in general



A landmark in environmental management in Brazil, the law establishing the National Solid Waste Policy gives rise to a modern vision of the fight against one of the planet's biggest problems: urban waste. Based on the principle of shared responsibility between the government, companies and the public, the new legislation provides for the post-consumption return of products to companies and obliges public authorities to implement waste management programs. Among other factors, the law consolidates a social dimension in the question of recycling by mandating the formal participation of waste waste pickers organized in cooperatives. Passed on August 2, 2010, after a wideranging debate involving the government, universities, the production sector and civil bodies, this National Policy is set to introduce changes in the waste area.

"The public authorities, the business sector and society as a whole are responsible for the effectiveness of the actions aimed at enforcing the National Solid Waste Policy (...)"

(Chapter III, Section I, art. 25)

More selective collection and fewer garbage dumps



From now on, municipal districts are obliged to handle waste within a specific framework. And the public needs to be attentive to what the new law says in order to demand measures from governments

ccording to the Federal Constitution, it is up to municipal authorities to manage urban cleaning and the collection and final disposal of garbage. With the National Solid Waste Law, the municipal governments are armed with a more solid framework of principles and guidelines within a set of responsibilities that has the potential to change the waste issue in Brazil.

The days of open air garbage dumps replete with hovering vultures, presenting a risk to the environment and health, are numbered. Municipal governments are now legally obliged to eradicate these public health threats within four years (by August 2014).

According to the law, dejects must be disposed of in landfills that comply with environmental standards and in which scavenging, the breeding of animals and the installation of homes is forbidden.

Municipal governments will have to implant the selective collection of recyclable garbage for homes, in addition to composting systems for organic waste, such as food leftovers. This will reduce the waste sent to landfills, producing environmental and economic benefits. The use of compost as fertilizer, for example, will be defined by the social and business sectors.

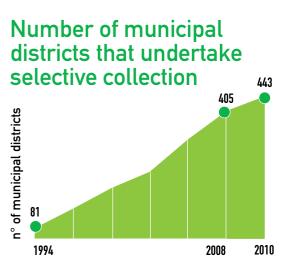
"Within the sphere of shared responsibility for product life cycles, it is up to the organization responsible for public urban cleaning services (...) to adopt procedures to reutilize recyclable solid waste (...), establish selective collection systems, (...) provide for the environmentally adequate disposal of dejects (...)". (Chapter III, Section II, art. 33)

The measures adopted by municipal districts are part of a new concept: integrated waste management, which entails different solutions, such as the recycling and disposal of dejects in landfills in compliance with environmental criteria.

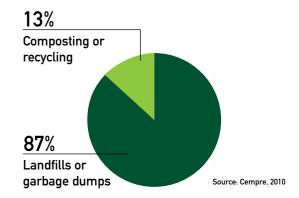
Under the new law, the municipal and state governments have two years to **prepare a solid waste plan**, with a diagnosis of the waste situation and reduction and recycling targets. They also have to eradicate garbage dumps and join forces with other districts to develop solutions. Additionally, they must identify the main generators of waste, effect better cost calculations and create indicators to measure public service performance in this area.

The existence of this plan, which will be simplified for cities with fewer than 20 thousand inhabitants, will be a pre-condition for access to federal funds. Municipal governments that implant selective collection systems using waste pickers cooperatives will have priority in access to federal funding.

The law obliges the federal government, to prepare a national plan with a timescale of twenty years, updated every four years, under the coordination of the Environment Ministry. The work, which will be carried out by means of mobilization through public hearings, includes targets such as improving the waste situation in the country, criteria for access to federal funding and inspection criteria.



Final disposal of waste



What changes with the law

Before

- No prioritization of urban waste
- Existence of garbage dumps in most municipal districts
- No utilization of organic waste
- Selective collection expensive and inefficient

- Municipal districts will prepare plans and set targets with participation of waste pickers cooperatives
- Garbage dumps must be eradicated within 4 years
- Local governments start composting
- Cost control and measurement of service quality are mandatory

"The integration of waste pickers of reusable and recyclable materials in actions involving shared responsibility for the product life cycle is a principle of the National Solid Waste Policy" (Chapter II, art. 6°, XII)

Recycling with social inclusion

Organized in cooperatives, the waste pickers are valued as formal agents in urban waste management, leading to increased income generation and greater quality in the sorting of waste

A pproximates one million people are involved in sorting recyclable materials in Brazil, including waste pickers who retrieve materials from the streets in handcarts.

Essential for the recycling effort, they are split into different categories according to the degree of organization, ranging from small centers that operate with minimal safety and hygiene standards to large cooperatives run as businesses with sophisticated machinery, vehicles and production control.

At the bottom of the pyramid are the informal freelance waste pickers subject to exploitation by middlemen who resell the recyclable materials to larger scrap dealers or to industry. At the end of this chain, the price paid may be four times that paid to the low-level waste pickers.

Only 10% of the waste pickers are reasonably well organized, not depending on middlemen. These work in recycling depots with some degree of infrastructure and are normally organized as cooperatives. They join forces to improve quality, increase quantity and add value to the materials sorted from the waste. This enables them to obtain better prices in the market, resulting in higher incomes and social gains.



"(...) the provider of public urban cleaning and solid waste management services will prioritize the organization, operation and contracting of cooperatives or other waste pickers associations (...) formed by private low-income individuals" (Chapter III, art. 36, VI)

The National Solid Waste Policy law reinforces the social bias of recycling with the participation of waste pickers organized in cooperatives or associations – a model which Brazil is exporting to other developing countries.

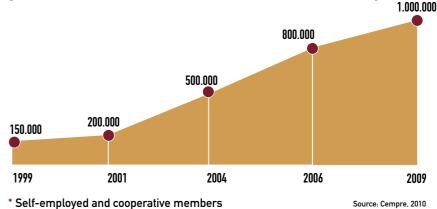
According to the law, partnering with this low-income work force, which may be contracted by the municipal districts without public tender, gives the municipal governments priority in access to federal funding. Currently, cooperatives process only a small part of the materials recycled in Brazil. With the guidelines set

forth in the law, this situation will change.

The challenge now is to mobilize the waste pickers and prepare and equip the cooperatives to exercise the important role outlined by the new law. By sorting waste into different categories and pressing it into bales, the cooperatives serve as sources of material for the diverse areas of the recycling machine.

In partnership with companies, they will be key elements in returning packaging and other postconsumption materials to the production process.

Waste pickers on the increase in the country *



What changes with the law

Before

- Exploitation by middlemen and health risks
- Informality
- Problems with quality and quantity of materials
- Lack of qualification and market vision

- Reduced risks and increased income for waste pickers through cooperatives
- Cooperatives contracted by municipal districts for collection and recycling
- Increase in quantity and quality of material recycled
- Workers trained and qualified to expand production

"(...) the responsibility of manufacturers, importers, distributors and retailers extends from the collection of post consumption products and waste to environmentally adequate final disposal, in the case of products subject to reverse logistics (...)" (Chapter III, Section II, Art. 31, IV)

Transforming everything



Reverse logistics is the process by which packaging and electronic products are retrieved after use and return to the product process as raw materials

Within the concept of shared responsibility, the National Solid Waste law is laying down the basis of a practice that promises to transform business activities and waste management in Brazil: reverse logistics. Use of the term is growing steadily in the recycling area. It entails the post consumption retrieval of materials so their life cycle is extended as inputs in the manufacture of new products.

Manufacturers, stores, supermarkets, distributors, importers and the retail trade are obliged to **implement reverse logistics systems** – initially for products such as crop defense agents, batter-

ies, tires, lubricants, bulbs, packaging in general and electronic products, such as refrigerators, televisions, mobile telephones, computers and printers, and their components.

The measures for returning products to the production process via recycling will be implemented progressively. Economic and financial mechanisms will also be created to fuel the process and to ensure implementation of the law.

These instruments will strengthen and stabilize the market, attracting new technologies and private investment. Under the terms of the law: "Packaging will be manufactured with materials that permit reutilization or recycling" (Chapter III, Section II, art. 32) This is valid for the entire country and acts as a guarantee for companies that reverse logistics will be adopted more rapidly.

As a result, it is expected that more materials sorted from garbage will be absorbed into the recycling process, reducing the pressure on landfills and generating more employment and income.

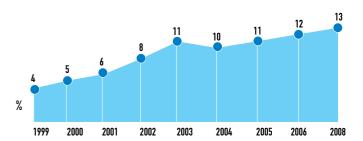
Currently, 13% of urban waste is recycled. But the potential for recycling is much greater. A recent study by the federal government's IPEA (Institute for Economic and Applied Research) showed that currently the country loses some US\$ 5 billion annually by burying materials that could be returned to the production process. In addition to the economic aspect, recycling helps economize natural resources such as water and promotes more rational use of energy, as well as reducing greenhouse gas emissions.

In view of these environmental and social questions, the new legislation makes companies responsible for producing packaging and products that are more readily recyclable or that generate fewer environmental impacts.

The measures aimed at reducing waste begin in the product design phase and incorporate the entire product life cycle, including transportation and final disposal. The producer is obliged to inform consumers how to avoid, recycle and eliminate waste, in addition to introducing reverse logistics for electrical and electronic goods and the other measures set forth in Article 33 of the law.

With this, there will be major new challenges, such as increasing consumer awareness about the correct disposal of computers, mobile phones, domestic appliances and others, with support from retailers and manufacturers.

Growth of recycling in Brazil*



* Percentage of waste generated in the country Source: Cempre, 2010

What changes with the law

Before

- No national law to guide company investments
- Lack of financial incentives
- Low post-consumption return of electrical / electronic products
- Economic wastage through lack of recycling

- Legal framework will orientate business actions
- New financial instruments to drive recycling
- More recycling of post-consumption of products
- Recycling will boost some businesses and generate new ones, impacting income generation

"Whenever a selective collection system is established as part of a municipal plan (...), consumers are obliged (...) to sort and dispose their waste properly (...) the municipal authority may provide economic incentives for consumers who participate (...)"

(Chapter III, Section II, art. 35)

Changing habits

Consumers must also do their part to reduce the problem of waste, adopting new attitudes and habits that improve urban living conditions

Separating the waste generated at home and at work is a routine which is gaining ground as environmental awareness increases. When this is done properly, it increases the quantity and quality of recyclable material returned to industry and also reduces threats to public health and nature, as well as generating more income for waste pickers.

To ensure that the law is effective, one important habit is the return of electronic products no longer in use based on information provided by manufacturers. Additionally, condominiums, schools, associations, stores and companies are increasingly adopting different colored containers for recyclable materials.

In homes, it is important to separate dry materials (plastics, paper, cans and glass) from wet ones (food leftovers and organic waste in general). The dry waste is collected by waste pickers or by the municipal selective collection services. The wet waste is normally transported by garbage truck to landfills. However, under the new legislation, from now on municipal



governments will be obliged to transform this waste into fertilizer via composting.

In terms of shared responsibility for urban waste, the consumer's role includes exercising citizens' rights, being well informed and demanding enforcement of the new law by local authorities, including the implementation of consistent and extensive selective collection systems, among others.

What changes with the law

Before

- No-sorting of recyclable waste in homes
- Lack of information
- Deficient municipal collection services
- Few demands on authorities

- Consumer will sort waste more effectively at home
- Educational campaigns to mobilize public
- Improved selective collection will result in more waste collected
- Exercise of citizens' rights to pressure local governments

