

# GLOBAL INFORMATION SOCIETY WATCH 2010

*Focus on ICTs and environmental sustainability*



ASSOCIATION FOR PROGRESSIVE COMMUNICATIONS (APC)  
AND HUMANIST INSTITUTE FOR COOPERATION WITH DEVELOPING COUNTRIES (Hivos)

# Global Information Society Watch

## 2010



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## Introduction

Updated data on the Brazilian information and communications technology (ICT) market point to its strong growth: in 2010, the milestone of 180 million mobile phones was reached, with the expectation of the number of phones exceeding 200 million in 2011, according to data from the Brazilian telecommunications agency Anatel.<sup>1</sup> The sale of PCs increased 23% in the first quarter of 2010 when compared to the first quarter of 2009. In absolute numbers, almost three million PCs were sold in the last three months (as of August 2010), according to data from the Brazilian Electrical and Electronics Industry Association (ABINEE).<sup>2</sup>

On one hand, Brazilian economic growth leads to strong sales, but on the other, estimates on electronic waste (e-waste) disposal point to a decrease in the useful life of these products, due to fast technological evolution and consumerism. Mobile phones are changed at an average of every two years or less, and computers last an average of four years in companies and five in homes.<sup>3</sup>

This scenario in Brazil is confirmed by a recent United Nations Environment Programme (UNEP) study on the management of e-waste in emerging countries. Brazil was presented as one of the countries with a high per capita production of e-waste. And the lack of data on production and recycling resulted in the following criticism: "E-waste seems not to be a high priority for the federal industry association representing the majority of the ICT producing and assembling industries."<sup>4</sup>

## Policy and legislative context

It seems that this criticism, among other factors, might have motivated the signing, in May 2010, of an agreement between the Brazilian Environmental Ministry and the NGO Brazilian Business Commitment for Recycling (Cempre) for the creation of the first inventory on production, collection and recycling of e-waste in Brazil. According to Environment Minister Izabella Teixeira,<sup>5</sup> the aim of the agreement is to measure the generation and destination of e-waste in

the country. The ministry predicts that the inventory will be finished in four months, and that all companies that are members of Cempre's electrical and electronics committee<sup>6</sup> will take part in it, as well as other associations representing the electrical and electronics sector in Brazil. The study is expected to help further develop public policies for recycling e-waste, and identify the main bottlenecks in the recycling value chain.

Undoubtedly, the great highlight of 2010 in relation to Brazilian environmental legislation was the approval in July of a bill to establish a National Policy on Solid Waste in the Brazilian Senate, after taking 21 years to get through the Chamber of Deputies,<sup>7</sup> and its subsequent approval by President Luiz Inácio Lula da Silva in August, with regulations expected to follow.

The delay of more than two decades can be explained by the pressure of several sectors in society on a subject with numerous implications. More specifically, in relation to e-waste, the industry lobby managed to withdraw the reference to e-waste from the part of the legislation that regulates the mandatory recycling of special products. However, pressure from civil society<sup>8</sup> was able to reinstate the reference, and the legislation now obliges manufacturers, importers, distributors and vendors to collect both used products and packaging. This system also includes batteries, tires and oils.<sup>9</sup>

Moreover, the concept of shared responsibility is introduced in the legislation, involving society, companies, municipalities, and both state and federal governments in the management of solid waste. The legislation establishes that people must adequately pack their waste for collection, and are also responsible for separation in areas where selective collection is made.

The legislation establishes that the national and state governments can grant incentives to the recycling industry. Cities will only receive money from the federal government for projects in public cleaning and handling of solid waste after they approve their management plans. Cooperatives dealing with recycled material were included in the shared responsibility, and will also be eligible for government incentives.

It is expected that the new legislation will finally enforce social responsibility from electrical and electronics

1 Anatel (2010) Data from the mobile telephony sector. sistemas.anatel.gov.br/SMP/Administracao/Consulta/AcessosPrePosUF/tela.asp?SISQSMODULO=18267

2 ABINEE (2010) Mercado de PCs cresce 23% no primeiro trimestre de 2010. www.abinee.org.br/noticias/com05.htm

3 Secretaria do Meio Ambiente do Estado de São Paulo – Mutirão Lixo Eletrônico. www.ambiente.sp.gov.br/mutiraodolixoeltronico/oque\_e\_lixo.htm

4 United Nations Environment Programme (2009) *Recycling – From E-waste to Resources*, p. 65. www.unep.org/PDF/PressReleases/E-Waste\_publication\_screen\_FINALVERSION-sml.pdf

5 Ministério do Meio Ambiente do Brasil (2010) MMA e Cempre firmam convênio para diagnóstico de reciclagem de eletroeletrônicos. www.mma.gov.br/sitio/index.php?ido=ascom.noticiaMMA&idEstrutura=8&codigo=5770

6 www.cempre.org.br/eletroeletronicos

7 Senado Federal do Brasil (2010) Vai a sanção a Política Nacional de Resíduos Sólidos. www.senado.gov.br/noticias/verNoticia.aspx?codNoticia=103389&codAplicativo=2&codEditoria=2

8 Blog Lixo Eletrônico (2010) *Manifesto Lixo Eletrônico*. www.lixoeletronico.org/manifesto

9 www.camara.gov.br/sileg/integras/501911.pdf

manufacturers, and ensure that society understands the economic potential of e-waste, but also its environmental impact. It is very important to highlight that the stage following the presidential approval of the legislation, the regulation of the law, is a crucial phase in finalising outstanding issues, and creating the kind of framework that was intended by the law.

At the state government level, data from 2009<sup>10</sup> show that eight of Brazil's 26 states have a policy on solid waste. However, e-waste is only mentioned in the policy developed by the State of Pernambuco, while the State of São Paulo has enforced specific legislation dealing with e-waste since 2008. It is expected that from now on, discussions dealing with e-waste will become more and more evident in assemblies, chambers and councils at all legislative levels.

## Recovery of e-waste

Isolated initiatives seek to minimise the problem of e-waste. One of the solutions has emerged from the Electronic Computing Center at the University of São Paulo (CCE-USP). In December 2009, an e-waste recovery and processing centre (CEDIR) was opened at the university,<sup>11</sup> following the adaptation of a 400-square-metre warehouse with areas for loading and unloading and a depot for categorising, screening and dismantling.

The Massachusetts Institute of Technology (MIT) Sustainability Lab is one of USP's partners in this project. Besides collecting e-waste, the initiative has resulted in the acquisition of eco-friendly computers manufactured without lead or other heavy metals, and the creation of a green seal of approval, with its own certification, identifying equipment using eco-friendly materials and manufactured in environmentally safe conditions.

## Recycling and social inclusion

The federal government has been running another initiative for recycling e-waste since 2004. The Computers for Inclusion Project (Projeto CI)<sup>12</sup> consists of a national network for recycling IT equipment, training and digital inclusion. Equipment discarded by government institutions, companies and households is recovered in collection centres, refurbished, and later donated to telecentres, schools and libraries throughout the country.

The project is coordinated by the Logistics and Information Technology Secretariat of the Ministry of Planning, which establishes local partnerships for the maintenance and recovery of the equipment. Centres have already been set up in the cities of Porto Alegre, Guarulhos, Belo Horizonte, Gama and Recife.

The Science and Technology for Social Inclusion Secretariat has invested in a project that involves the training of approximately 400 people, including students and unemployed people, in the city of Planaltina, located 38 kilometres from Brasília. The group took part in a computer maintenance and assembly course and went on to recover equipment donated by public institutions and universities.<sup>13</sup>

## Environmental project for the electrical and electronics sector

The Renato Archer Information Technology Centre, which is connected to the Science and Technology Ministry, is now working on a new environmental project for the electrical and electronics sector.

The project, called *Ambientronic*,<sup>14</sup> is expected to work on four fronts: supporting manufacturers in adapting products, promoting ecodesign, analysing the life cycle of technology, and stimulating the recycling industry's ability to adapt to international practices.

The development of the project proposal started two years ago with the collection of information and workshops with several sectors related to electrical and electronic equipment. One of the practical results was an agreement signed with the Association of Medical and Dental Equipment Manufacturers (Abimo). The pilot project will help companies from this sector secure the appropriate environmental certifications. The intention is to extend this process to the entire electrical and electronics sector.

## Action steps

It is the responsibility of society as a whole to deal with e-waste. It may be important to mobilise public opinion in order to ensure that the new legislation on solid waste is regulated, and that proper inspection of e-waste recycling plants is conducted.

Some points that are fundamental to promoting the good management of solid waste in Brazil still need to be discussed:

- The definition of government responsibilities and the responsibilities of consumers.
- The management of orphan equipment acquired on the black market or from manufacturers that are no longer operating.
- Gradual targets: the amount (percentage) over time of e-waste that must be collected and recycled is not defined in the legislation.
- Periodic studies on progress in the management of e-waste and periodic analysis of the efficiency of the law. ■

10 Andueza, F. (2009) *Legislação Brasileira Comparada de Lixo Eletrônico e Resíduos Sólidos*. [www.lixoeltronico.org/blog/legislacao-brasileira-comparada-de-lixo-eletronico-e-residuos-solidos](http://www.lixoeltronico.org/blog/legislacao-brasileira-comparada-de-lixo-eletronico-e-residuos-solidos)

11 Centro de Descarte e Reúso de Resíduos de Informática (CEDIR) [www.cedir.usp.br](http://www.cedir.usp.br)

12 [www.computadoresparainclusao.gov.br/index.php](http://www.computadoresparainclusao.gov.br/index.php)

13 Ministério da Ciência e Tecnologia (2010) *Brasil busca projetos para redução dos resíduos eletrônicos*. [www.mct.gov.br/index.php/content/view/316667.html](http://www.mct.gov.br/index.php/content/view/316667.html)

14 [www.cti.gov.br/index.php?option=com\\_content&view=article&id=49&Itemid=25](http://www.cti.gov.br/index.php?option=com_content&view=article&id=49&Itemid=25)

**GLOBAL INFORMATION SOCIETY WATCH 2010** investigates the impact that information and communications technologies (ICTs) have on the environment – both good and bad.

Written from a civil society perspective, **GISWatch 2010** covers some 50 countries and six regions, with the key issues of ICTs and environmental sustainability, including climate change response and electronic waste (e-waste), explored in seven expert thematic reports. It also contains an institutional overview and a consideration of green indicators, as well as a mapping section offering a comparative analysis of “green” media spheres on the web.

While supporting the positive role that technology can play in sustaining the environment, many of these reports challenge the perception that ICTs will automatically be a panacea for critical issues such as climate change – and argue that for technology to really benefit everyone, consumption and production patterns have to change. In order to build a sustainable future, it cannot be “business as usual”.

**GISWatch 2010** is a rallying cry to electronics producers and consumers, policy makers and development organisations to pay urgent attention to the sustainability of the environment. It spells out the impact that the production, consumption and disposal of computers, mobile phones and other technology are having on the earth’s natural resources, on political conflict and social rights, and the massive global carbon footprint produced.

**GISWatch 2010** is the fourth in a series of yearly reports critically covering the state of the information society from the perspectives of civil society organisations across the world.

**GISWatch** is a joint initiative of the Association for Progressive Communications (APC) and the Humanist Institute for Cooperation with Developing Countries (Hivos).

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2010 Report  
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