GLOBAL INFORMATION SOCIETY WATCH 2010

Focus on ICTs and environmental sustainability

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ARGENTINA

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Introduction

In keeping with the global trend, electronic waste (e-waste) in Argentina is a growing problem that is keeping pace with an increase in consumption of technology. In turn, and following the regional trend, the treatment of e-waste hardly appears in public policy and legislation.

In Argentina, 2.5 kg of e-waste per inhabitant is generated per year. When multiplied by the country's 40 million inhabitants, this represents 100,000 tonnes of e-waste annually. Of this, 35% comes from computers and telecommunications.[1] In 2009 a major increase was felt in mobile phone volumes:[2] almost 10 million mobile phones were discarded annually over the last two years. This figure quadrupled between 2005 and 2009.[3]

In this context, the following can be said about the recycling and recovery of e-waste:

- One of the few private operators processes between 1,700 and 1,900 tonnes annually, less than 2% of the total amount generated in the country and between 4% and 6% of the e-waste from information and communications technologies (ICTs) alone.[4]

- Participation by the state is rare: less than 5% of the total e-waste processed comes from collection in municipalities or public e-waste disposal companies.[5]

- Social marginalisation and unemployment have created the so-called "waste culture" in which informal recyclers are an important part of the recycling system.

- In their efforts to promote social inclusion, some social organisations have initiated recycling and reuse of technology projects.

Policy and legislative context

Legislation

The constitution establishes in Article 41 that "all inhabitants have the right to a healthy, balanced environment, suitable for human development" and that "the authorities will provide protection of this right and of environmental information and education." That same article resolves that "the entry of actual or potentially hazardous waste into the country" is prohibited.

Argentina does not have a specific law that regulates e-waste. The current legal framework for this is Law 24.051 on Hazardous Wastes,[6] regulating the creation, handling, transport, treatment and final disposal of the hazardous wastes listed in Appendix I of the Law. The appendix is identical to Appendix I of the Basel Convention on Transboundary Movements of Hazardous Wastes and their Disposal, ratified by Argentina through Law 23.922,[7] and applied when waste undergoes cross-border movements for disposal or recovery.

These regulations present a paradox: while keeping Argentina from becoming a depository of electronic scrap, they also hinder the possibility of expanding local enterprises, and include regulations that prevent the disposal of e-waste, for instance, out of state institution storerooms. Two e-waste bills pending in the legislature lost parliamentary status.[8] Recently a bill that specifically deals with treatment of e-waste was presented in the Senate and awaits consideration.

Public policies

Argentina has signed international and regional commitments regarding the treatment of waste, under which e-waste falls. These are the Basel Convention and a Mercosur (Southern Common Market) agreement.[9] However, concrete initiatives of the federal government are very specific:

- *Campaigns and seminars:* The Department of Hazardous Wastes carried out campaigns to collect obsolete electronic devices in 2008 and 2009 in the nation's capital. It also organised two seminars in 2008, which drew broad institutional participation.[10]

1   Etchenique Gabrielli, M. B. (2010) Basura electrónica, *Eco Site*, February. www.eco2site.com/informes/raee.asp

2   Greenpeace Argentina (2010) *Basura Electrónica: El lado tóxico de la Telefonía Móvil*. www.greenpeace.org/raw/content/argentina/contaminaci-n/basta-de-basura/un-nuevo-flujo-de-residuos-pel/basura-electronica-el-lado-toxico-de-la-telefonia-movil.pdf

3   Cámara Argentina de Máquinas de Oficinas, Comerciales y Afines (CAMOCA) www.camoca.com.ar

4   Greenpeace Argentina (2010) op. cit.

5   Ibid.

6   infoleg.mecon.gov.ar/infolegInternet/anexos/0-4999/450/texact.htm

7   infoleg.mecon.gov.ar/infolegInternet/verNorma.do?id=322

8   www.rezagos.com/descargas/Proyecto-Ley-RAEE.pdf and www.rezagos.com/descargas/ProyectoLeyRAEE-UTN.pdf

9   Mercosur (2006) Agreement on an environmental management policy for universally generated special wastes and post-consumption responsibility, First Extraordinary Meeting of Environmental Ministers, 29 March, Curitiba, Brazil. www.ambiente.gov.ar/archivos/web/MERCOSUR/File/I%20Reunion%20Extraordinaria%20de%20Ministros%20-POSTA/ANEXO_4_POST_CONSUMO.pdf

10 Seminars on WEEE: www.ambiente.gov.ar/default.asp?IdArticulo=5267 and www.ambiente.gov.ar/default.asp?IdArticulo=5330

- *Classroom Recycling Project:*[11] This is the Ministry of Education's computer recycling programme to benefit public schools. The project has a training workshop for repair and recycling in order to create job opportunities.

- *National Electric and Electronic Waste Management Programme:* Designed by the National Institute of Industrial Technology (INTI), this is the most comprehensive initiative within the public realm. The programme involves local and national governments working with grassroots organisations to create an e-waste plant managed by a cooperative.

Responsibilities: Government, private sector and civil society

One important aspect in analysing the recycling of e-waste in Argentina is the interrelation between actors, and the definition of responsibilities in the e-waste chain (including storage in businesses or homes, reuse and commercial recovery, social recovery, recycling and treatment).

In the private sector we find the technology industry (equipment vendors and generators of their own e-waste/scrap) and the recycling industry (repair, recycling and final disposal). There are also organisations advocating for the recovery and social appropriation of these technologies (based on environmental rights, social inclusion, and educational and digital inclusion). Here civil society also takes on an important role, with millions of citizens/consumers that need to take responsibility for their electronic refuse. Finally, there is the government as provider of norms and regulations.

The following e-waste landscape emerges in Argentina:

Private sector

Technology industry: Companies can employ policies such as clean-up and eco-design policies to reduce the toxicity of the components and/or facilitate recycling. As a country that imports or assembles most of its ICTs, industrial policies such as the restriction of contaminants do not have a significant environmental impact in Argentina. Of greater significance is the impact on final disposal of the e-waste. Along these lines, the concept of extended producer responsibility (EPR) linked to individual producer responsibility (IPR), where the producer is responsible for its product, is important.[12]

Recycling industry: There are enterprises that take on this task as a business, and are committed to sustainable development and protection of the environment. Some of them are:

- E-scrap: A network of operators working in the refuse market. It advises businesses, governments, organisations and private individuals on reducing final disposal quantities in landfills.

- EcoGestionar: A company formed by specialists in environmental policy and management. They provide consultancy, management and treatment of wastes.

- Scrap y Rezagos: A company engaged in recycling, reuse and final disposal of e-waste. They offer collection and purchase of discarded technology, and even exchange it for other items the owner might need.

- Silkers: A company that provides e-waste collection, separation, assessment and recycling services.

- Ecotech: A company that certifies final disposal of e-waste, trains people, donates recovered equipment and disposes of the rest in an ecologically sound way.

We must underline that current management of e-waste is carried out in a setting that lacks sufficient information, despite the data that do exist. This prevents producers from making appropriate decisions for their companies, from both an economic as well as environmental standpoint, because they are unaware of the possibilities for reuse and disposal of their e-waste, the available operators, and the market transaction prices for each type of waste material.

Informal economy

"Informal recycling of material found in computer equipment by cardboard and scrap collectors is much more significant from the quantitative perspective than that carried out by private or government refuse collection companies," one report indicates.[13]

In this arena, some groups have organised into cooperatives, which allows them greater sustainability and better working conditions.[14] However, the above-mentioned report points out that treatment of hazardous wastes in the informal economy is rare or non-existent. "The risk exists that processes such as open-air burning of wires containing PVC and acid baths to recover gold and other metals are propagated, causing environmental risks and endangering the health of people in the sector and neighbouring communities."

Citizens

Much of the electronic scrap remains in Argentine homes and little information circulates advising what to do with it. A few collection campaigns have been held, but with minimal effect. In addition, the country's largest municipalities, such as Buenos Aires and Rosario, have committed to the Zero Garbage initiatives but have made little progress in recovering e-waste.

11 portal.educ.ar/reciclado

12 Lindhqvist, T., Manomaivibool, P. and Tojo, N. (2008) *La responsabilidad extendida del productor en el contexto latinoamericano. La gestión de residuos de aparatos eléctricos y electrónicos en Argentina,* Lund University, Sweden. www.greenpeace.org/raw/content/argentina/contaminaci-n/basta-de-basura/la-responsabilidad-extendida-d.pdf

13 Prince, A. (2006) Recupero y reciclado de PC's en LAC, paper presented at the Third International Workshop: From PC refurbishing to PC recycling, an opportunity for Latin America and the Caribbean, San José, Costa Rica, 13-15 November. www.residuoselectronicos.net/archivos/plataforma/tall_III_cr_1106/ppt/021_aprince_pincecooke_1106RESUMENMERCADO.PRINCE.pdf

14 Cooperativa Toma del Sur cooplatomadelsur.com.ar

Civil society organisations

Although social recovery through donations is minimal (0.1% by businesses, close to 0% by homes),[15] there are organisations in Argentina that have been able to create enterprises that reuse and recycle e-waste, incorporating labour and educational inclusion objectives and philosophies that promote care for the environment. According to experts,[16] the significance of these initiatives is mainly due to the absence of government actors. Some of them are:

- Equity Foundation:[17] Engaged in refurbishing computers donated by businesses, which are then given to schools and civil society organisations.

- Environment and Society Foundation:[18] Promotes training programmes for urban recyclers to improve management quality and specialisation.

- Federal Investment Council:[19] The Computers for Schools Programme involves the creation of Computer Refurbishment Centres in order to strengthen job skills for youth in vulnerable situations. They hold dissemination drives with the goal of sensitising communities.

- E-waste: Recycling for Social Benefit project:[20] University extension initiative of the New Computer Technologies Research Lab (LINTI) at the National University of La Plata.

- María de las Cárceles Second Chance:[21] Offers rehabilitation opportunities for those who are serving a prison sentence by recycling computers received from companies for donation to schools.

- Nodo TAU:[22] Works for digital inclusion of social organisations. Has a Machine Bank which has recovered over 100 computers that were used to equip ten Community Computer Telecentres. Provides technical assistance and training in the use and maintenance of the machines. Holds a workshop on computer recycling and refurbishing in the Santa Mónica Special School for differently abled children in the city of San Lorenzo.[23]

Organisations like these are demanding a national plan to promote growth in the recycling industry. Doing so would require measures such as declassifying technology as a hazardous waste, which restricts new business opportunities, and funding for the sustainability of the projects that take on all the phases of e-waste management.

Environmental organisations act as spokespersons on the dangers associated with e-waste. Greenpeace Argentina is implementing strategies for disseminating information, including reports on different technologies, giving visibility to best practices in refuse management,[24] as well as informational videos[25] and social pressure campaigns.[26]

Government

Public policies are in short supply and disorganised. Legislation is scant and not specific. As a result, there is no national system in Argentina that assures appropriate environmental handling of e-waste. At the same time, the lack of regulatory frameworks limits the potential and reduces the impact of efforts by other actors due to the absence of institutional spaces that can serve as clear points of reference for their management.

A shining example, however, is an entity such as the INTI, which has solid initiatives, as well as the National Electric and Electronic Waste Management Programme, an organisational experiment with municipalities that have the obligation to collect e-waste, and with civil society organisations that have successful experiences in the field.

The first phase of the programme will take place in the city of Rosario in mid-2010. INTI, in conjunction with the relevant undersecretary and Nodo TAU, has designed a project to create a recycling and refurbishing plant for e-waste which will be managed by a cooperative. Nodo TAU will be in charge of the training and technical supervision of the plant.

Also participating in the project is the Ecology Workshop, representing Greenpeace, which will be developing social awareness policies within the community and supervising the environmental aspects of the plant. The Ministry of Labour is contributing funds to implement the project (for job posts, internships and professional capacity building). The Institute to Mobilise Cooperative Funds will provide training in running cooperatives, and the Ministry of Education of the Province of Santa Fe will purchase the refurbished computers.

The project narrative underscores that in order to have an impact, a project must have, as central elements, citizen awareness raising, support by private and public institutions, and adequate collection logistics. In order to ensure that the initiative is economically viable, it envisions charging a disposal tax to e-waste generators (commercial or institutional), selling dismantled raw materials, and eventually, selling recovered equipment and spare parts, amongst other sources of financing.

15 Prince (2006) op. cit.

16 Fascendini, F. (2009) Basura electrónica: ¿debajo de la alfombra? *Boletín enREDando*, October. www.enredando.org.ar/noticias_desarrollo.shtml?x=52811

17 www.equidad.org

18 www.ambienteysociedad.org

19 www.cfired.org.ar

20 e-basura.linti.unlp.edu.ar/index.php/Proyecto_E-Basura

21 www.mariadelascarceles.org.ar/suenios.html

22 www.tau.org.ar

23 www.enredando.org.ar/noticias_desarrollo.shtml?x=52817

24 Ranking verde (Green Ranking) www.greenpeace.org/argentina/contaminaci-n/basta-de-basura/un-nuevo-flujo-de-residuos-pel/ranking-verde-de-electr-nicos3/ranking-electronicos-dic-2009

25 Greenpeace Argentina video on e-waste www.greenpeace.org.ar/blog/nuevo-video-de-greenpeace-sobre-el-problema-de-la-basura-electronica/377

26 Greenpeace Argentina blog Call the Senators Campaign www.greenpeace.org.ar/blog/llama-a-los-senadores-y-exigiles-que-traten-la-ley-de-gestion-de-residuos-electricos-y-electronicos-antes-de-fin-de-ano/375

New trends

In April 2010 a new draft Law for Electrical and Electronic Waste Management was presented for the second time in Congress by Senator Daniel Filmus.[27] The law is based on the concept of EPR, encompassing production, use and final disposal, for products such as batteries, mobile phones, computers, low-energy light bulbs and televisions. It also establishes a prohibition on contaminating substances, develops eco-design and recovery goals, and promotes the reuse of materials such as gold, copper and platinum, which today are buried in landfills or thrown in open-air garbage dumps.

Highlighted in the body of the law are the declassification of e-waste as hazardous waste and the creation of a National Management Organisation, whose governing board is to be made up of producers, the Federal Council on the Environment, and the INTI. It also proposes the creation of a national fund for the management of e-waste, composed of mandatory contributions by manufacturers and importers to finance the handling of the waste.

After the bill was first presented in 2008, the Senate Committee on Environment and Sustainable Development called on social organisations and private enterprises to contribute to the draft. This effort not only allowed legislators to learn of the organisations' perspective but also for these organisations to come together and establish relationships and collaborative actions. This was how they jointly designed a document with proposals for implementation of the law. Among the changes proposed, they are requesting that the law prioritise the social and educational reuse of old equipment.

Action steps

The management of e-waste in our country presents two challenges: linking the different actors involved and extending and broadening the impact of e-waste initiatives.

- *Public policy:* The national government should organise a comprehensive system for e-waste management, which strengthens the various initiatives and makes funding available for the less profitable efforts.

- *Legislation:* Legislative measures should be adopted which establish the responsibility of manufacturers of electronic devices for their products until the end of their useful life. While this is a voluntary decision by the companies, the existence of regulations would boost this policy.

- *Information:* Both the private sector as well as citizens/consumers lack accurate information for making environmentally sound decisions regarding e-waste. In the case of companies, this information should emphasise the profitability of environmentally sustainable decisions.

- *Regional policy:* The extension of these policies into the region would be very beneficial. Some initiatives in this regard are the virtual Regional Platform on Electronic Waste for Latin America and the Caribbean (RELAC Platform)[28] and the proposal for the creation of the Latin American WEEE (Waste Electrical and Electronic Equipment) Market.[29] ∎

28 www.residuoselectronicos.net

29 Protomastro, G. (2007) *Study on formal and informal circuits for management of Waste Electrical and Electronic Equipment in South America.* www.basel.int/centers/proj_activ/tctf_projects/001-2.pdf

27 www.rezagos.com/descargas/Ley-RAEE-Filmus.pdf

GLOBAL INFORMATION SOCIETY WATCH 2010

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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