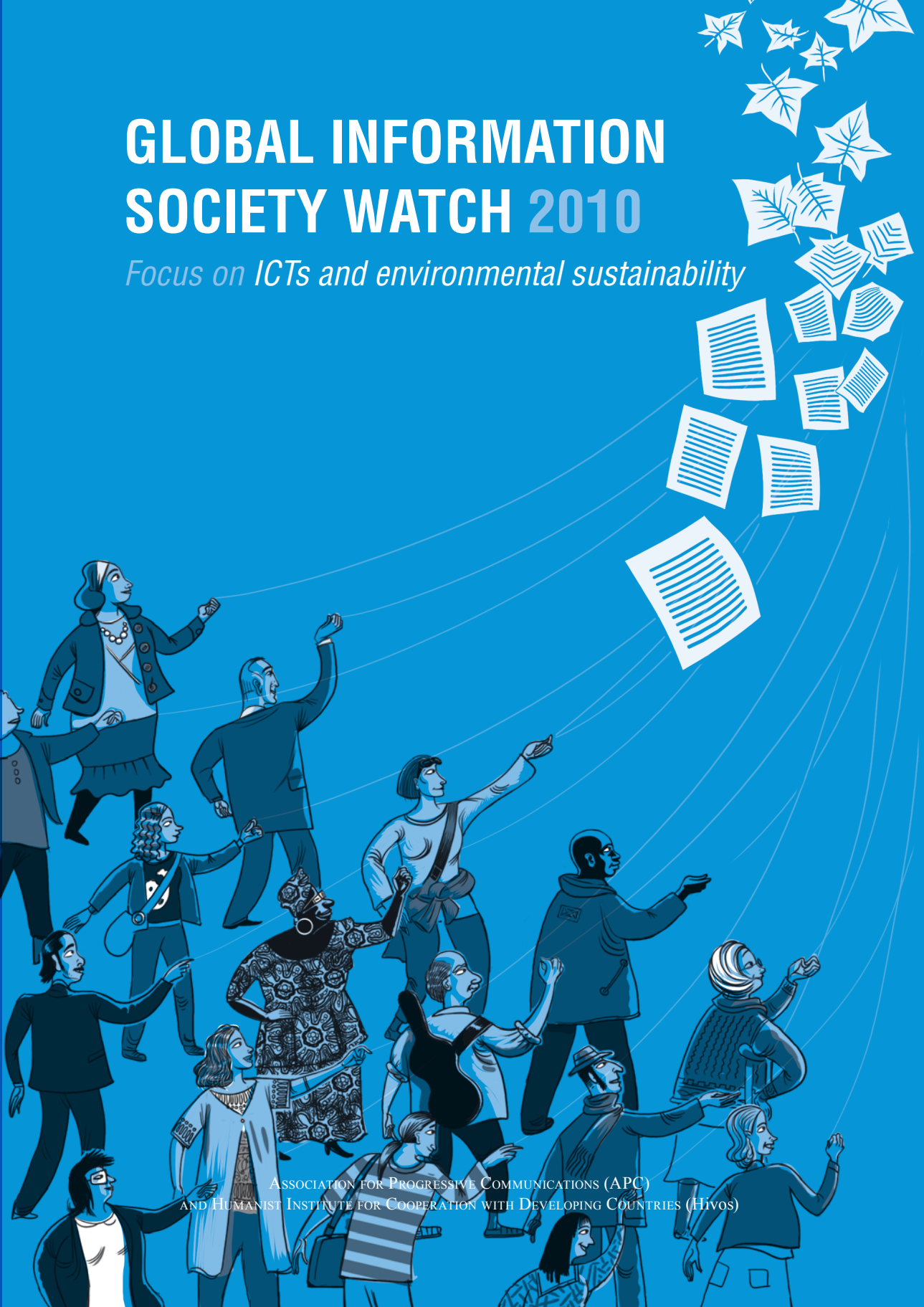
GLOBAL INFORMATION SOCIETY WATCH 2010

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

Steering committee
Marjan Besuijen (Hivos)
Anriette Esterhuysen (APC)
Loe Schout (Hivos)

Coordinating committee
Karen Banks (APC)
Monique Doppert (Hivos)
Karen Higgs (APC)

Project coordinator
Karen Banks

Editor
Alan Finlay

Assistant editor
Lori Nordstrom

Publication production
Karen Higgs

Graphic design
MONOCROMO
info@monocromo.com.uy
Phone: +598 2 400 1685

Cover illustration
Matías Bervejillo

Proofreading
Stephanie Biscomb, Lori Nordstrom, Álvaro Queiruga

Financial partners
Humanist Institute for Cooperation with Developing Countries (Hivos)
Swedish International Cooperation Agency (Sida)
Swiss Agency for Development and Cooperation (SDC)

Global Information Society Watch
Published by APC and Hivos
2010

ISBN 92-95049-96-9
APC-201011-CIPP-R-EN-PDF-0087

APC and Hivos would like to thank the Swedish International Cooperation Agency (Sida) and the Swiss Agency for Development and Cooperation (SDC) for their support for Global Information Society Watch 2010. SDC is contributing to building participation in Latin America and the Caribbean and Sida in Africa.

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of Foreign Affairs FDFA
Swiss Agency for Development and Cooperation SDC

COLOMBIA

Colnodo
Julián Casasbuenas G. and Plácido Silva D.
www.colnodo.apc.org

Introduction

According to an electronic waste (e-waste) assessment in Colombia[1] conducted recently by the National Centre for Cleaner Production[2] and the Swiss Federal Laboratories for Materials Testing and Research (Empa),[3] it is estimated that Colombia could accumulate between 80,000 and 140,000 tonnes of e-waste between 2010 and 2013 – waste that will be dumped in the country's landfills. For Colombia's current population of 44 million people, it would mean around 3.18 kg of e-waste per capita by 2013. According to the same study, it is estimated that in Europe, e-waste generated amounts to 15 kg per capita and in China 1 kg per capita.

It is a matter of urgency for the country to regulate its e-waste management, even more so given that the recycling of old technology could save the country large amounts of resources such as copper (the same study estimates that each tonne of waste contains 6.6% copper by weight). Moreover, regulations must differentiate between the handling of non-hazardous solid waste and hazardous waste,[4] which Colombia does not do now.

It is the right moment in Colombia to implement a system of e-waste management, taking into account that the amount accumulated to date is relatively small compared with the waste expected to be accumulated in the years ahead.

In May 2009, three bills[5] were presented to the Congress related to e-waste management, which have as objectives:

- To establish guidelines for the development of public policy aimed at regulating the management of e-waste, and to establish the extended responsibilities of importers, producers, distributors and final users within a comprehensive e-waste management system in Colombia.
- To implement the collection of e-waste, including batteries, by manufacturers.
- To establish guidelines and policies for the implementation of comprehensive solid waste management plans, including seeing recycling as a resource tool for all.

It is important to note that presently e-waste recycling is carried out informally, and in several of the legislative proposals informal recyclers are excluded. Despite this, the Colombian Supreme Court halted a tender for the management of solid waste in Bogota because it did not include a significant number of informal waste recyclers in the process. This decision shows how important it is to involve them as recognised actors in the production chain.[6]

General environmental policy and legislative context

Colombia has been setting up and strengthening legislation for the protection of the environment and has established governance policies and instruments in order to control the use of the country's natural resources. The principles of the Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration) of 1972 are embodied in Colombia by Decree Law 2811 (1974) on the National Code of Renewable Natural Resources and Environmental Protection. The new Constitution of Colombia adopted in 1991, in Title II, Chapter 3, clearly sets out collective rights and environmental rights.

Every four years since 1974, the National Council on Economic and Social Policy (CONPES) has been updating its environmental policies, which are included in the national development plans. This is the highest national planning authority and works as an advisory body to the government on all aspects of economic and social development in the country.

Climate change policy

Climate change policy is focused on the study and protection of vulnerable areas already known to be rapidly deteriorating, such as the glaciers, volcanoes, wetlands, high mountain plains, the Amazon jungle, and so on. These projects and processes are focused on the objectives of United Nations (UN) climate change initiatives, but also include components specific to Colombia.

In 1994, Law 164 approved the UN Framework Convention on Climate Change (UNFCCC), and the issue was included in the country's development policies in order to attract foreign investment in the area of climate change and carbon dioxide capture.

Colombia has defined the issue of adaptation to climate change as a national priority, and the Integrated National Adaptation Plan for High Mountain Ecosystems, Caribbean Insular Areas and Human Health (INAP) was the first climate change adaptation project submitted to the Global Environmental Facility (GEF) in 2005. INAP aims to fund projects that will serve as examples of the transition between the

1 www.cnpml.org/html/archivos/GuiasDocumentos/GuiasDocumentos-ID22.pdf

2 www.cnpml.org

3 www.empa.ch

4 www.andesco.org.co/site/assets/media/Lineamietos%20tecnicos%20para%20RAEE.pdf

5 raee.org.co/proyectos-de-ley

6 Informal recyclers, who have joined together in the National Association of Recyclers, are demanding to be taken into account in the legislative proposals. www.anr.org.co

stage of climate change impact assessment to the stage of formulating and implementing adaptation measures. INAP funds three specific activities:

- Formulation of adaptation programmes
- Implementation of priority measures for adaptation
- Monitoring and evaluation systems.

INAP is implemented by the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM),[7] with the participation of autonomous regional environmental agencies. Other entities involved in INAP are the Ministry of Environment, Housing and Territorial Development,[8] the Ministry for Social Protection,[9] the National Institute of Health,[10] the Ministry of Mines and Energy,[11] the Ministry of Foreign Affairs,[12] the Alexander von Humboldt Biological Resources Research Institute,[13] and representatives of the country's academic and scientific communities.

E-waste in Colombia

Policy context

According to an analysis of potential e-waste legislation: "Colombia is a country prolific in terms of regulations. The Comptroller General's Office has identified more than 3,000 existing rules on environmental issues."[14] However, the country does not yet have specific legislation dealing with e-waste.

Since 2001 Colombia has provided a tax exemption (Decree 2532 of the Ministry of Finance and Public Credit, 27 November 2001) to encourage the use of technology that benefits the environment and health.

In 2005 the Ministry of Environment, Housing and Territorial Development submitted a policy paper entitled "Environmental Policy for Waste Management and Hazardous Waste". This policy paper contains several objectives and long-term goals, as well as an initial action plan. However, here too, the paper does not take e-waste into account. The paper refers to the concept of "common but differentiated responsibility", which was already considered in Law 430 of 1998 regarding hazardous substances. Law 1252 of 2008 extends the concept of the issue of liability, including dangerous substances, and these concepts can be applied to the issue of e-waste or general waste.

In Colombia there is an institutional programme for educational and technological achievement in electronic waste management called *Computadores para Educar* (Computers for Education),[15] whose founding members are the Communications Fund of the Ministry of Information and Communication Technologies, the Ministry of Education, and the National Learning Service (SENA).[16] The purpose of the programme is to provide access to information and communications technologies (ICTs) to public educational institutions through the refurbishment of computer equipment donated by private companies, government agencies and individuals, and to promote their meaningful use in educational processes.

E-waste in practice

Colombia has been implementing several initiatives to recover e-waste, led mainly by the Ministry of Environment, Housing and Territorial Development. These initiatives include the recovery of mobile phones and their accessories, as well as lithium-ion batteries, used computers and peripherals, and toner and printer cartridges; the recycling of refrigerators (including recovery of refrigerant gas to prevent damage to the ozone layer); and encouraging consumers to switch to energy-saving light bulbs, among others.

The initiatives by the ministry started around 2000 with the recycling of mobile phones with the support of operators and manufacturers. However, the most important campaigns for recycling e-waste started in 2007.

Between June 2007 and November 2009, the ministry recovered 3,290,006 units of used mobile equipment: mobile phones themselves, assorted accessories and lithium-ion batteries (378,632 units).

Two campaigns related to the recovery of computers and peripherals were able to recycle 5,822 units in 2008, with the support of supermarkets, private recyclers and other governmental organisations; 41% of the units were recovered in the capital, Bogota.

A major one-month campaign took place during 2009 to recover all kinds of e-waste in four major cities (Bogota, Cali, Barranquilla and Medellin), leading to the recovery of a total of 465 tonnes of waste.

As mentioned, other campaigns include the recycling of toner and printer cartridges and a drive to switch to energy-saving lightbulbs.

The recovered e-waste is recycled mainly by private companies: Lito,[17] Gaia Vitare[18] and Recycables.[19]

Future campaigns should be aimed at ensuring the active participation of civil society in the recycling of electronic materials. These campaigns should raise community awareness on the importance of recycling. It is also important that these campaigns promote companies that produce electronic products that are environmentally friendly such as green phones (i.e. phones that use solar energy to recharge).

7 www.ideam.gov.co

8 www.minambiente.gov.co

9 www.minproteccionsocial.gov.co

10 www.ins.gov.co

11 www.minminas.gov.co

12 www.minrelext.gov.co

13 www.humboldt.org.co

14 Ott, D. (2008) *Gestión de Residuos Electrónicos en Colombia*, p. 30. www.cnpml.org/html/archivos/GuiasDocumentos/GuiasDocumentos-ID22.pdf

15 www.computadoresparaeducar.gov.co

16 www.sena.edu.co

17 www.litoltda.com

18 www.gaiavitare.com

19 www.recycables.com.co

New trends

There are concerns in the region regarding e-waste. For instance, in Mexico, it is reported that the country is drowning in e-waste, generating between 200,000 and 300,000 tonnes of e-waste per year, enough to fill up 100 Olympic swimming pools. It is estimated that by 2013 the consumption of electronic devices in Mexico will increase by 20% per person,[20] leading to even larger amounts of e-waste.

No country in Latin America will escape this trend, largely due to the reduction in price of electronic equipment, and the shortening of its useful life.

Action steps

There is very little information available regarding the situation of informal recyclers in connection with e-waste. It is important that the country consider the experiences of countries such as India in tackling the problem of recycling by providing technical assistance and transfer of knowledge to informal recyclers in order to improve their living conditions.

Equally important is the mandatory availability of producer information on the internet regarding their recycling processes, so that formal and informal recyclers know the best way to recycle.

Although the Ministry of Environment, Housing and Territorial Development and private companies have joined the e-waste management campaigns, it is necessary to put in place mechanisms in order to ensure that these campaigns become permanent – and not just once-off – so that citizens and companies all over the country (not only in the major cities) who are interested in recycling e-waste can do so at public collection centres and other places.

Colombia has efficiently implemented reuse models for computer equipment through its *Computadores para Educar* programme. It is very important to strengthen these kind of initiatives, not only to encourage the reuse of equipment, but also to ensure that the final disposal of the same equipment is the most appropriate.

It is important to be up to date on how e-waste recycling is carried out in developing countries that generate high volumes of waste, in order to adopt the best practices for recycling.

We must insist on the involvement of all stakeholders (producers, vendors, informal and formal recyclers and end-users) involved in the process of managing, handling and disposal of e-waste.

The phenomenon of climate change is being felt in the three mountain chains of the Andes in Colombia. The permanently snow-covered mountains that in the 1970s allowed Colombian tourists to plan ski trips are rapidly disappearing.

Colombia produces only 0.35% of global CO_2 emissions, but we are already suffering the effects of global warming. The country supplies 66% of the hydroelectric power produced to its neighbours. This does not directly generate greenhouse gases but has caused untold damage to the environment and biodiversity loss, and in many cases the extinction of unclassified species.

Colombia will increase its energy production by 50% in the next eight years, in order to sell to neighbouring countries. These projects are affecting the environment and forcing the displacement of poor people by multinationals. The cost related to adapting to the changes resulting from power generation will not be compensated by the royalties paid to the owners of the projects. ■

20 www.bbc.co.uk/mundo/ciencia_tecnologia/2010/06/100603_basura_electronica_mexico_mr.shtml

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).

GLOBAL INFORMATION SOCIETY WATCH
2010 Report
www.GISWatch.org

ISBN 92-95049-95-0
9 789295 049956

APC

HIVOS