

e-WASTE

1. *Is there anything in Trinidad and Tobago for the disposal or conversion (re-cycle) of e-waste?*

1.1 Electronic waste includes computers, entertainment electronics, mobile phones and other items that have been discarded by their original users. In most cases electronic waste consists of electronic products that were used for data processing, telecommunications, or entertainment in private households and businesses that are now considered obsolete, broken, or irreparable.

1.2 At present, there is no legislation which directly speaks to e-waste. However, there is the Draft Waste Management Rules 2008 ("the Rules") which is in accordance with The Environmental Act, 2000. A copy of the Rules is hereto attached for ease of reference.

1.3 The Rules give some level of guidance in respect of disposal of e-waste. 'Dispose' as defined under the Rules means to discharge, deposit, inject, dump, release, spill, leak or place hazardous or other waste so that such waste or any constituent thereof may enter the environment, directly or indirectly. 'Disposal Operations' in accordance with the Rules includes the:

- (a) deposition of wastes into or on to land, including
 - (i) land treatment;
 - (ii) surface impoundment;
 - (iii) landfilling; and
 - (iv) deep injection

- (b) incineration of wastes on land or at sea;

- (c) release of wastes into watercourses, water bodies or the sea;

- (d) biological or physico-chemical treatment of wastes which results in final compounds or mixtures which are discarded by means of evaporation, drying, calcinations, neutralization or precipitation; and
- (e) permanent storage of wastes.

1.4 As a means of quick overview of the Rules which deal with the disposal or conversion (re-cycle) of e-waste please see:

- (a) Part III - Waste Permits and Licenses;
- (b) Part IV - Waste Handling and Disposal Operations;
- (c) Part V - Import, Export and Transit of Wastes.

1.5 In accordance with the Water and Sewerage Act (WASA), a copy which is hereto attached for ease of reference, S. 50-54 speaks to the following:

- S. 50 – Bye-Laws for preventing waste, misuse or contamination of water
- S. 51 – Bye-laws for preventing pollution of water of Authority, etc.
- S. 52 – General provision as to Bye-Laws
- S.53 – Penalty for polluting water used for human consumption
- S.54 – execution of works for protection of water.

1.6 Finally, the Litter Act Chapter 30:52, a copy of which is hereto attached for ease of reference, deals with the disposal of litter in accordance with the following clauses:

- S.3 – Depositing litter in a public place
- S. 3A – Disposal of litter from a motor vehicle or trailer
- S. 4 - Offence and penalty for littering premises
- S. 5A – Increased penalty for subsequent offence

2. *Harmful Effects of e-Waste*

Arsenic

Arsenic is a poisonous metallic element which is present in dust and soluble substances. Chronic exposure to arsenic can lead to various diseases of the skin and decrease nerve conduction velocity. Chronic exposure to arsenic can also cause lung cancer and can often be fatal.

Barium

Barium is a metallic element that is used in sparkplugs, fluorescent lamps and "getters" in vacuum tubes. Being highly unstable in the pure form, it forms poisonous oxides when in contact with air. Short-term exposure to barium could lead to brain swelling, muscle weakness, damage to the heart, liver and spleen. Animal studies reveal increased blood pressure and changes in the heart from ingesting barium over a long period of time. The long-term effects of chronic barium exposure to human beings are still not known due to lack of data on the effects.

Beryllium

Beryllium has recently been classified as a human carcinogen because exposure to it can cause lung cancer. The primary health concern is inhalation of beryllium dust, fume or mist. Workers who are constantly exposed to beryllium, even in small amounts, and who become sensitised to it can develop what is known as Chronic Beryllium Disease (berylliosis), a disease which primarily affects the lungs. Exposure to beryllium also causes a form of skin disease that is characterised by poor wound healing and wart-like bumps. Studies have shown that people can still develop beryllium diseases even many years following the last exposure.

Brominated flame retardants (BFR's)

The 3 main types of BFRS used in electronic and electrical appliances are Polybrominated biphenyl (PBB), Polybrominated diphenyl ether (PBDE) and Tetrabromobisphenol - A (TBBPA). Flame retardants make materials, especially plastics and textiles, more flame resistant. They have been found in indoor dust and air through migration and evaporation from plastics. Combustion of halogenated case material and printed wiring boards at lower temperatures releases toxic emissions including dioxins which can lead to severe hormonal disorders. Major

electronic manufacturers have begun to phase out brominated flame retardants because of their toxicity.

Cadmium

Cadmium components may have serious impacts on the kidneys. Cadmium is adsorbed through respiration but is also taken up with food. Due to the long half-life in the body, cadmium can easily be accumulated in amounts that cause symptoms of poisoning. Cadmium shows a danger of cumulative effects in the environment due to its acute and chronic toxicity. Acute exposure to cadmium fumes causes flu-like symptoms of weakness, fever, headache, chills, sweating and muscular pain. The primary health risks of long term exposure are lung cancer and kidney damage. Cadmium also is believed to cause pulmonary emphysema and bone disease (osteomalacia and osteoporosis). For more information on go to: <http://www.intox.org/databank/documents/chemical/cadmium/ehc135.htm>

CFCs (Chlorofluorocarbons)

Chlorofluorocarbons are compounds composed of carbon, fluorine, chlorine, and sometimes hydrogen. Used mainly in cooling units and insulation foam, they have been phased out because when released into the atmosphere, they accumulate in the stratosphere and have a deleterious effect on the ozone layer. This results in increased incidence of skin cancer in humans and in genetic damage in many organisms. For more information go to <http://www.c-f-c.com/supportdocs/cfcs.htm>

Chromium

Chromium and its oxides are widely used because of their high conductivity and anti corrosive properties. While some forms of chromium are non toxic, Chromium (VI) is easily absorbed in the human body and can produce various toxic effects within cells. Most chromium (VI) compounds are irritating to eyes, skin and mucous membranes. Chronic exposure to chromium (VI) compounds can cause permanent eye injury, unless properly treated. Chromium VI may also cause DNA damage. For more information, go to <http://www.intox.org/databank/documents/chemical/chromium/ehc61.htm>

Dioxins Dioxins and furans are a family of chemicals comprising 75 different types of dioxin

compounds and 135 related compounds known as furans. "dioxins" is taken to mean the family of compounds comprising polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs). Dioxins have never been intentionally manufactured, but form as unwanted by-products in the manufacture of substances like some pesticides as well as during combustion. Dioxins are known to be highly toxic to animals and humans because they bioaccumulate in the body and can lead to malformations of the foetus, decreased reproduction and growth rates and cause impairment of the immune system among other things. The best-known and most toxic dioxin is 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). For further information go to <http://www.deh.gov.au/industry/chemicals/dioxins/pubs/incinfinal.pdf>

Lead

Lead is the fifth most widely used metal after iron, aluminium, copper and zinc. It is commonly used in the electrical and electronics industry in solder, lead-acid batteries, electronic components, cable sheathing, in the glass of CRTs etc. Short-term exposure to high levels of lead can cause vomiting, diarrhea, convulsions, coma or even death. Other symptoms are appetite loss, abdominal pain, constipation, fatigue, sleeplessness, irritability and headache. Continued excessive exposure, as in an industrial setting, can affect the kidneys. It is particularly dangerous for young children because it can damage nervous connections and cause blood and brain disorders. For more information go to <http://www.hc-sc.gc.ca/english/iyh/environment/lead.html> and <http://www.intox.org/databank/documents/chemical/lead/ukpid25.htm>

Mercury

Mercury is one of the most toxic yet widely used metals in the production of electrical and electronic applications. It is a toxic heavy metal that bioaccumulates causing brain and liver damage if ingested or inhaled. In electronics and electrical appliances, mercury is highly concentrated in batteries, some switches and thermostats, and fluorescent lamps. For more information go to <http://www.intox.org/databank/documents/chemical/mercury/cie322.htm>

Polychlorinated biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are a class of organic compounds use in a variety of applications, including dielectric fluids for capacitors and transformers, heat transfer fluids and

as additives in adhesives and plastics. PCBs have been shown to cause cancer in animals. PCBs have also been shown to cause a number of serious non-cancer health effects in animals, including effects on the immune system, reproductive system, nervous system, endocrine system and other health effects. PCBs are persistent contaminants in the environment. Due to the high lipid solubility and slow metabolism rate of these chemicals, PCBs accumulate in the fat-rich tissues of almost all organisms (bioaccumulation). The use of PCBs is prohibited in OECD countries, however, due to its wide use in the past, it still can be found in waste electrical and electronic equipment as well as in some other wastes.

Polyvinyl chloride (PVC)

Polyvinyl chloride (PVC) is the most widely-used plastic, used in everyday electronics and appliances, household items, pipes, upholstery etc. PVC is hazardous because it contains up to 56 percent chlorine which when burned produces large quantities of hydrogen chloride gas, which combines with water to form hydrochloric acid and is dangerous because when inhaled, leads to respiratory problems.

Selenium

Exposure to high concentrations of selenium compounds cause selenosis. The major signs of selenosis are hair loss, nail brittleness, and neurological abnormalities (such as numbness and other odd sensations in the extremities).

3. Basel Convention and Electronic Waste Disposal

UN system collaborates on electronic waste disposal



ITU and Secretariat of the Basel Convention to protect environment from hazardous e-Waste

Geneva, 12 March 2012 - International collaboration to promote environmentally sound management of e-waste was strengthened with the signing of an agreement between the Secretariat of the Basel Convention (SBC) and ITU aimed at protecting the environment from the adverse effects of e-Waste.

The rapid spread of electrical and electronic equipment (EEE) has raised public attention on the negative effects arising from inadequate disposal and waste management. Electronic waste, which contains toxic materials used in the manufacturing process, can cause widespread damage to the environment and human health. The ITU-SBC collaboration seeks to collect and recycle the hazardous materials by introducing safeguards in the management of the waste of electrical and electronic equipment (WEEE), or e-Waste.

Developing countries are expecting a surge in e-Waste, with mobile phone waste expected to grow exponentially. Sharp increases of e-Waste have until now not been matched with policy and regulatory mechanisms nor with infrastructure to cope with the influx in developing countries. Currently, only 13 per cent of e-Waste is reported to be recycled with or without safety procedures.

The issue of e-Waste as an emerging telecommunications policy and regulatory issue has received recognition at the highest level in ITU. Key examples of ITU's activities in this area include:

- The adoption of Recommendation ITU-T L.1000, "Universal power adapter and charger solution for mobile terminals and other ICT devices", which dramatically reduces production and cuts the waste produced by mobile chargers.
- The adoption of Recommendation ITU-T L.1100, which details the procedures to be employed when recycling rare metal components included in ICT equipment.
- Designing e-Waste management strategies for environmental protection; publishing and disseminating best practices; and assisting countries in the drafting, adoption and implementation of policies, laws, and regulations related to e-Waste management.

At the level of global environmental policy, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, which came into force in 1992, is the most comprehensive environmental agreement on the management of hazardous and other waste. But many countries have not yet successfully translated its provisions into their national legislation. Now, with the signing of the ITU-SBC Administrative Agreement, efforts between both UN mechanisms will be leveraged, maximizing value at the global level and strengthening collaboration between telecommunication/ICT and environmental policy makers for the global good.

“The ICT sector is already making significant progress in improving its environmental performance and reducing e-Waste through improved best practices and standards,” stated ITU Secretary-General Hamadoun Touré. “The collaboration with the Secretariat of the Basel Convention will allow the global community to address this ever-increasing problem through a holistic approach, involving the recycling industry as well as environmental policy makers.”

“The positive impact of ICT on development, particularly in developing countries and countries with economies in transition is well recognized and acknowledged,” said Mr Jim Willis, Executive Secretary of the Basel, Rotterdam and Stockholm Conventions. “However, ICT equipment has to be dealt with in view of its entire life-cycle, and this includes the time when the equipment comes to its end-of-life and becomes e-Waste. Collaboration between ITU and SBC will further our shared objectives in support of sustainable development that essentially includes environmentally sound management of waste.”

ITU and SBC have agreed to cooperate through regular dialogues and meetings; exchange of information, practices, experiences and materials; coordination of activities in areas of mutual interest, including development of green ICT standards, international cooperation and capacity building; and execution of supplementary activities, projects and programmes.

About ITU

ITU is the leading United Nations agency for information and communication technology. For over 145 years, ITU has coordinated the shared global use of the radio spectrum, promoted international cooperation in assigning satellite orbits, worked to improve communication

infrastructure in the developing world, and established the worldwide standards that foster seamless interconnection of a vast range of communications systems. From broadband networks to new-generation wireless technologies, aeronautical and maritime navigation, radio astronomy, satellite-based meteorology and converging fixed-mobile phone, Internet and broadcasting technologies, ITU is committed to connecting the world.

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About Basel Convention

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted in 1989 and entered into force in 1992. It protects human health and the environment against the adverse effects resulting from the generation, management, transboundary movements and disposal of hazardous and other wastes. The Convention currently has 178 member countries (Parties).

4. E-Waste Solutions

E-waste solutions featured at WSIS Forum 2012



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In recent years, significant international movement has evolved in personal computers and associated hardware, used electronic equipment and used cellular telephones for the removal of usable parts, for refurbishment and reuse and for processing for the recovery of raw materials. While offering some economic benefits, massive import of electrical and electronic wastes (e-wastes) coupled with the same wastes being generated locally is placing a heavy health and environmental burden, in particular to developing countries. Huge amounts of wastes, both hazardous and solid, is burned or dumped in fields, irrigation canals and along waterways. The open burning and toxic dumping pollute the land, air and water and exposes men, women and children to poisonous emissions and effluent.

During the WSIS Forum 2012, the Partnership on Measuring ICT for Development will organize an interactive session to address the economic opportunities as well as the health and environmental issues related to the increasing transboundary movements of e-wastes from the information and communications technology (ICT) sector.

5. e-Stewards: background and history

e-Stewards Initiative

The e-Stewards Initiative is a project of the [Basel Action Network](#) (BAN), which is a 501(c)3 non-profit, charitable organization of the United States, based in Seattle, Washington. It is against the backdrop of the growing e-waste crisis that the e-Stewards Initiative was born. Without appropriate national and international legislation or enforcement in place in many regions, it is unfortunately left up to individual citizens, corporations, universities, cities – all of us – to figure out how to prevent the toxic materials in electronics from continuing to cause long term harm to human health and the environment, particularly in countries with developing economies.

Basel Action Network

The Basel Action Network (BAN) was founded in 1997 and named after the Basel Convention, the United Nations treaty that restricts trade in hazardous wastes and was intended to stop the

dumping of toxic waste on developing nations. In the last decade, BAN has exposed the toxic trade issue to the world via investigations, reports and documentary films on two of the largest illegal hazardous waste streams traded internationally today: electronic waste and toxic ships destined for 'recycling' in developing countries. Today, BAN is not only the leading global source of information and advocacy on toxic trade and international hazardous waste treaties, but it has also developed market-based solutions that rely on the highest standards for globally responsible recycling and rigorous independent certification to those standards.

Tens of millions have witnessed BAN's images of children handling poisonous electronic waste in sweatshop conditions in Asia and Africa. Despite BAN's success targeting the e-waste problem, our surging consumption and disposal of technology means more electronic waste than ever is drowning poor communities in toxins around the globe. Laws and regulations aren't enough, and regulatory solutions in the United States and elsewhere continue to be opposed by powerful industry groups and others seeking to maintain today's cheap and dirty status quo. See the BAN website for a full listing of BAN's activities to stop the tide of toxic waste around the world.

6. E-Waste Crisis

The e-waste crisis introduction

Electronic equipment and gadgets are the fastest growing waste stream in many countries. For many, electronics are part of modern life – cell phones, laptops, TVs and a growing number of gadgets. Every year we buy new, updated equipment to support our needs -there are upwards of 300 million computers and one billion cell phones produced every year. All of these electronics become obsolete or unwanted, often within 2-3 years of purchase. This global mountain of waste is expected to continue growing 8% per year, indefinitely (BCC Research).

e-Stewardship: Taking Responsibility in the Digital Age:

12 minute film on the e-waste crisis and the e-Stewards solution

<http://www.vimeo.com/10383952>

Why should we be concerned about old electronics?



Boy hired to haul electronic scrap from Alaba market in Lagos, Nigeria to this nearby informal dump sitting on a swamp. Imported scrap televisions and computers that could not be repaired get deposited and burned. ©2005 Basel Action Network (BAN)

Electronic waste isn't just waste, it contains some very toxic substances, such as mercury, lead, cadmium, arsenic, beryllium and brominated flame retardants. When the latter are burned at low temperatures they create additional toxins, such as halogenated dioxins and furans – some of the most toxic substances known to humankind. The toxic materials in electronics can cause cancer, reproductive disorders, endocrine disruption, and many other health problems if this waste stream is not properly managed. Many of the toxic constituents are elements, which means they never disappear, even though they may change form. Other toxic chemicals in electronics do not break down over time and instead, accumulate in the food chain and biosphere. Not only do these toxins present risks to communities and the global ecosystem, but also to electronics recycling workers, even in developed countries.

But what happens to the e-waste?

Unfortunately, an incredibly small percentage of e-waste is recycled. Even when we take it to a recycling center it's usually not actually recycled – not in the way most of us think of that term. A small percentage of e-waste is estimated to be sent to recyclers. In the U.S., as little as 11%-14%. The remainder is most often dumped or burned – either in formal landfills and incinerators, or informally dumped or burned. These inappropriate disposal methods for electronic waste fail to reclaim valuable materials or manage the toxic materials safely. In effect, our soil, water and air are easily contaminated.

There is a solution!

E-waste has been a problem for years, but the explosive growth in our use of technology makes it a crisis *today*.

It doesn't have to be like this – we can do better.

We're not going to stop making and using high tech equipment but we can stop dumping e-waste on others and harming them and our shared environment. Find out about the [e-Stewards solution](#).

What's driving the e-waste crisis?

Huge volumes: The rapid obsolescence of gadgets combined with the astronomically high demand for new technology has created mountains of e-waste. In fact, e-waste is the fastest growing waste stream our society produces.

Toxic design: Electronic equipment contains known toxins, including mercury, lead, cadmium, arsenic, beryllium and brominated flame retardants. These substances can cause cancer and birth-defects. Thus, when this equipment becomes waste, it is toxic waste. When burned, even worse toxins can form such as dioxins and polycyclic aromatic hydrocarbons, some of the most toxic substances known to humankind. Until recently, manufacturers gave little attention to the idea of eliminating toxic materials in their products.

Poor design and complexity: E-waste is full of many different materials (such as multiple kinds of metals, plastics and chemicals) that are mixed, bolted, screwed, snapped, glued or soldered together. Toxic materials are attached to non-toxic materials, which makes separation of materials for reclamation difficult. Little attention has been paid to designing equipment for recycling or for protecting human health and the environment. Therefore, responsible recycling requires intensive labor and/or sophisticated and costly technologies that safely separate materials.

No financial incentive to recycle: There's usually not enough value in most electronic waste to cover the costs of responsibly managing it in developed countries, unless laws require such management as a service industry. For this reason it is exported to countries where workers are paid low wages and the infrastructure and legal framework is too weak to protect the environment, workers and communities.

Reuse abuse: Sending equipment and parts for reuse – an important solution – can easily be abused by falsely labeling scrap as reusable or exporting “refurbishable” equipment. Often importing countries are left to clean up the mess of bad batteries, mercury lamps and CRTs. The resulting hazardous waste is dumped in countries lacking any infrastructure to properly manage it. This is usually a violation of the Basel Convention and laws in the importing countries.

Policy of “free trade in toxic waste”: Some countries persist in freely trading in hazardous wastes despite the global norms. The U.S. is the only developed country in the world that has failed to ratify the 1989 Basel Convention, an international treaty controlling trade in hazardous waste from richer to poorer countries. In 1995, that treaty adopted a full ban on exports from rich to poorer countries. Although this ban is not yet in full legal force globally, all European Union nations have fully enforced it. On the other hand, the U.S., Canada, Japan and some other developed countries, actively oppose this prohibition of toxics going from developed to developing countries. In Canada, the Basel Convention is not properly implemented, with unique definitions of hazardous e-waste resulting in export practices out of step with other Basel Parties. In these countries, it is perfectly legal for businesses to maximize profit by exporting toxic electronics to developing countries, even when this export is a violation of the laws of importing countries. The export of toxic electronic waste to developing countries disproportionately burdens them with a toxic legacy and allows for externalization of real costs.

Prison laborers employed to process e-waste: Unlike other countries in the world, the U.S. sends much of its hazardous e-waste to U.S. prisons to process in less-regulated environments without the same worker protections and rights afforded in the private sector. Moreover, such operations amount to government subsidies, undermining the development of responsible private-sector recycling infrastructure and distorting the economics of recycling.

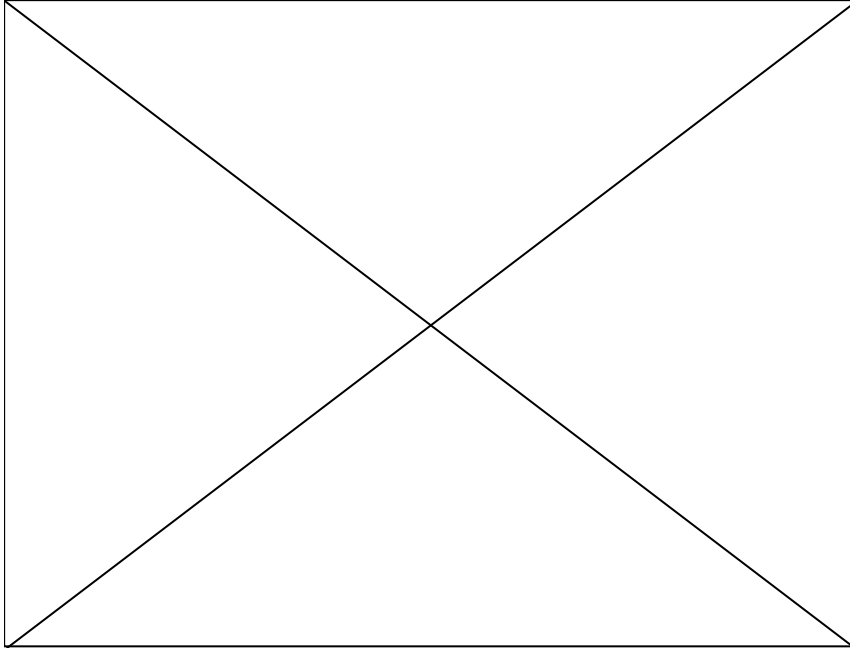
Lack of regulation requiring proper management: Many nations either lack adequate regulations for this relatively new waste stream, or lack effective enforcement of new e-waste regulations. In the U.S., federal regulations exempt large volumes of electronic waste from environmental laws. Occupational health and safety agencies are not actively overseeing the exposures occurring in the e-recycling industry. In many jurisdictions, it is still perfectly legal to dispose of toxic e-waste in non-hazardous waste landfills and incinerators, depositing lead, cadmium, mercury, arsenic, etc. into inappropriate disposal facilities, and failing to reclaim valuable materials

Exposing the crisis

In 2002, the Basel Action Network (BAN) and the Silicon Valley Toxics Coalition released the groundbreaking report and film *Exporting Harm: The High Tech Trashing of Asia*, that exposed the toxic “recycling” of discarded electronics in China. Images of men, women and children burning tons of toxic circuit boards, wires and plastic parts exposed the fast-cheap-and-dirty side of our consumption of computers, televisions, faxes, printers, etc.

A second report and film by BAN, released in 2005, *The Digital Dump: Exporting Reuse and Abuse to Africa*, showed similar tragic results in Lagos, Africa, this time in the name of ‘reuse’ and ‘bridging the digital divide.’ Communities in Africa seeking working equipment instead received shipments that were 50%-75% unusable. To dispose of them, people dumped and burned the majority of the 500 contaminated loads per months that arrived in Lagos. While in Lagos, BAN also bought hard drives from computers imported into Africa and found massive amounts of private data freely available for criminal exploitation.

In 2008, CBS 60 minutes ran this award winning documentary on the e-waste crisis that has been seen by 25 million viewers.



[Watch CBS News Videos Online](#)

Use of prisoners to process e-waste generates [its own set of problems](#). In 2006, the Center for Environmental Health and others released [a report](#) documenting toxic exposure in e-waste processing prisons to inmates, prison personnel and families. Meanwhile, the system was undercutting U.S. recyclers trying to do business the right way. In 2008, the Federal Occupational Health Service released a report documenting substantial problems in the protection of prisoners and prison personnel from e-waste toxics.

Jim Puckett, executive director of the Basel Action Network, is interviewed by Frontline regarding the Basel Convention.

Why laws aren't enough

Government failure: burdening other nations with toxics

To date, unlike the 27 member countries of the European Union, a significant number of developed countries have failed to create legislation to finance and responsibly recycle toxic e-

waste. In the absence of legislation, recyclers can exploit the 'solutions' that 'externalize' (or pass on) the real toxic impacts and costs to others – usually poor communities in developing countries, disempowered prisoners in the U.S., and/or local municipalities and taxpayers who suffer in the long run when toxic materials end up in solid waste landfills or incinerators, eventually polluting soil, air and water.

Furthermore, a handful of developed nations are still not respecting the United Nations treaty created to stop the free trade in hazardous waste that was rampant in the 1980's. The U.S. is the only developed country that has not ratified the Basel Convention, and countries like Canada, Japan and Australia have not ratified the Amendment to the Basel Convention, which calls for keeping toxic waste out of developing countries.

GAO Report on Exports of Electronic Waste from US

In August of 2008, the U.S. Congress watchdog agency, the Government Accountability Office (GAO) published a report entitled, "Electronic Waste: EPA Needs to Better Control Harmful U.S. Exports through Stronger Enforcement and More Comprehensive Regulation". The GAO report describes the inadequacy of legislation to control e-waste exports and the lack of EPA enforcement at that time of the minimal regulations that do exist, resulting in a flood of toxins to the developing world.

U.S. state and local efforts cannot solve the problem

Meanwhile, in lieu of an appropriate federal response, states and municipalities must cope with the national failure by passing a variety of local and state laws. The U.S. Constitution forbids state governments from legislating international trade, so states and municipalities are helpless to prohibit the flood of e-waste from U.S. shores, States and local governments often offer e-waste collection contracts based upon the lowest bid.

As it is cheaper to process toxic e-waste in a completely unregulated environment with virtually no worker or environmental protection, many brokers and exporters who deceptively call themselves recyclers, are in a position to accept toxic e-waste for free or even purchase it.

These bad actors simply load up seagoing containers and ship U.S. hazardous electronics to the highest bidders globally. Almost always, this results in the wastes being shipped to developing countries to be 'recycled' using primitive and toxic technologies, by a cheap labor force toiling without adequate occupational protections or pay, in order to retrieve a few valuable materials while the rest is dumped. These "low road" exporters thrive while the responsible companies who invest in equipment, worker protections, and safe facilities, struggle to compete.

7. How the Legislation affects you (UK)

As of July 2005, businesses, organisations and/or institutions have been required by law to register with the Environment Agency when they produce 200KG or more of Waste Electrical and Electronic Equipment (WEEE) containing Hazardous Waste. Any electrical item purchased prior to 13th August 2005 is your responsibility (you must dispose of it in the proper manner).

*How the Legislation affects you post UK 1st January 2007

After the introduction of UK WEEE legislation, all organisations and/or institutions will be classed as B2B (business to business) end users of non household WEEE will be responsible for the environmentally sound disposal of historic WEEE and in many cases the environmentally sound disposal of recently purchased WEEE where the seller is operating under 9.2.

Consequences

There are potentially serious consequences for you if you do not comply including fines, bans on your products and even imprisonment. It is estimated that the UK economy will have to pay between £217 and £455 million per annum to comply with the WEEE Directive.

Producers: (e.g. manufacturers, importers, re branding distributors). You have legal obligations under the UK WEEE Regulations and must either arrange for the collection, treatment, recycling and environmentally sound disposal of WEEE, or pay a Producer Compliance Scheme (PCS) to do this on your behalf. If you do not comply you will be committing a criminal offence and will be subject to enforcement action. Weeeco is a delivery

partner for 'Northern Compliance' a Limited by Guarantee not for profit B2B Producer Compliance Scheme and WEEE Lite a B2C and/or Both producer Compliance Scheme.

Businesses: non-household end-users of WEEE must arrange and finance the treatment and environmentally sound disposal of WEEE purchased prior to 13th August 2005 and in many cases recently purchased EEE. The introduction of sound company WEEE policies is also necessary to meet certain standards, for example, ISO 14001; ensuring cost effective, environmentally sustainable, and socially responsible WEEE Disposal.

Public Sector: You have the same responsibilities as businesses (see above). However, Local Authorities also need to demonstrate leadership in what is major environmental legislation. Those in the public sector must ensure that the introduction of their WEEE policy meets all the requirements of Government and provides fully auditable systems.

The real issue however, is one of **Corporate Social Responsibility**. Leading companies have policies already in place and there is immense pressure to follow suit or else run the risk of poor PR and falling behind the entire market place. WEEE Policy is a standard question in many Public Sector and Blue Chip Company PQQs (Pre Tender Qualifying Questionnaires) and if you don't have a policy, this will reduce your chances of winning contracts with the public sector and blue chip organisations.
