Appendix

Summary table of Washington State Recyclers implicated in Export to China:

Washington State Recycler	Claim no export on website	Listed on King County Take it Back Network ¹	Listed on King County website ²	e-Cycle State Program ³	Listed on Washington State List for Consumers ⁴	Certification
1 Green Planet	✓		✓			None
EWC Group (eWaste Center)	√		✓	√ (preferred processor)		None (R2 in 2014)
IMS Electronics Recycling	√			√ (preferred processor)	✓	R2
Interconnecti on	✓	✓	✓	✓ (collector)	✓	R2
Total Reclaim	✓	(removed)	(removed)	√ (preferred processor)	✓	e-Stewards (suspended)

Short summary of all of the newly reported exports:

Interconnection:

Our tracker data indicated that a non-functional mercury CCFL type LCD flat-screen monitor was dropped at Interconnection, a company that is certified to the R2 standard and is a registered collector for the E-Cycle program. This device was sent to a notorious city — Chino, California, where numerous electronics brokers are located. Very soon after arrival, the device was shipped overseas to the New Territories region of Hong Kong via the Port of Los Angeles. Hong Kong forbids importation of mercury CCFL LCDs (see Legal section of Disconnect report at www.ban.org/trash-transparency).

1 Green Planet → EWC Group Inc (Washington location):

Our tracker data indicated that a non-functional Cathode Ray Tube (CRT) monitor was dropped at 1 Green Planet (an uncertified recycler, listed as a recycling destination on King County's website). The device was then sent on to nearby EWC Group Inc, a company currently uncertified (having last held an R2 certification in 2014), and is a registered preferred processor in the E-Cycle Washington program.

¹ King County's TakeltBack Network requires no export to developing countries. See export restrictions: http://your.kingcounty.gov/solidwaste/takeitback/apply-tibn.asp. The Network list can be found here: http://your.kingcounty.gov/solidwaste/takeitback/electronics/index.asp

² http://your.kingcounty.gov/solidwaste/wdidw/index.asp

³ All of the official processors in the state program are "preferred". To achieve this designation they must agree only to export to countries where it is legal to import such waste. This is not the case in China.

⁴ https://fortress.wa.gov/ecy/recycle/UISearch/ServiceSearch.aspx

From EWC the device was sent onward to the New Territories region of Hong Kong via the port of Vancouver, BC. Hong Kong forbids importation of mercury bearing CRTs. Canada requires notification of imports of waste CRTs from the US. (see Legal section of Disconnect report at www.ban.org/trash-transparency).

EWC Group Inc. (California location):

Our tracker data indicated that a non-functional printer was dropped at EWC Group's California location in Commerce, California. From EWC the device was sent onward to the New Territories region of Hong Kong via the Port of Long Beach, CA. Hong Kong forbids importation of printers to unpermitted sites (see Legal section of Disconnect report at www.ban.org/trash-transparency). BAN and PBS investigators were able to visit and document one of the locations in New Territories where this device went and found troubling environmental and human health concerns there. Printers were being broken open allowing workers to breathe the toner powders, and broken mercury laden CCFL tubes were found cast about the workplace and even outside the fenceline of the facility (see images below).

IMS Electronics Recycling (California location):

Our tracker data indicated that a non-functional printer was dropped at IMS Electronics Recycling's California location in Poway, California. They are R2 certified, and their WA location is a registered preferred processor for the E-Cycle Washington program. Two days after being dropped off, the printer appeared at the Port of Long Beach and was directly exported to China. It was last reported in transit through the Nanjingzhen area... likely on route to the infamous Guiyu electronics processing yards nearby. Hong Kong forbids importation of printers to unpermitted sites (see Legal section of Disconnect report at www.ban.org/trash-transparency).

Summary of fraudulent comments on the recycler's webpages:

In addition to running counter to certifications, and county/state electronic recycling program rules, the exports are contrary to each company's own stated policies and advertising to customers. Here are some examples taken from their websites, (additional quotes and images can be found later in the Appendix):

1 Green Planet: "All recycled items are processed right here in the Pacific North West [sic]. We do not send anything to the developing nations for processing!"

EWC Group: "Beware of unrecognized recyclers who make false promises and illegally export e-waste"

IMS Recycling: "E-Waste being exported to developing countries for disposal also poses concerns. While this method removes the problem from American soil, it does not eradicate the environmental and humanistic distresses"

Interconnection: "...we don't export electronic waste, we only ship fully-refurbished computers, and we meet the highest standards for electronics recycling and reuse."

Analysis Of Tracker Movements & Websites:

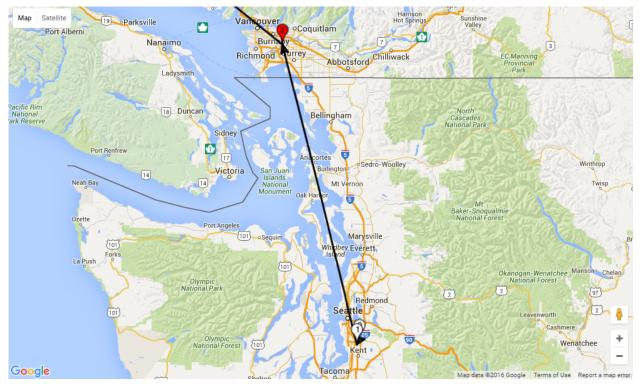
1 Green Planet & EWC Group Inc. (Washington location)

Device: CRT Monitor Model: IBM CRT 2113-001 Location: Renton & Tukwila, WA Tracking device ID: wa546164

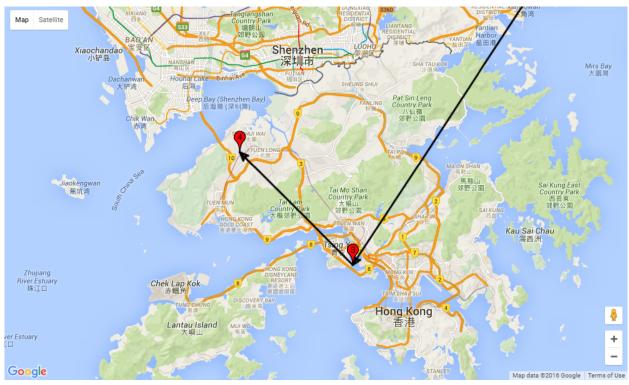
A non-functional CRT was dropped at 1 Green Plant in Renton, WA on February 2nd, 2016. The device was then sent on to nearby EWC Group Inc, who sent the device onward to the New Territories region of Hong Kong via the port of Vancouver, Canada.

Summary table of 1 Green Planet & EWC Group (Washington location) tracker movements:

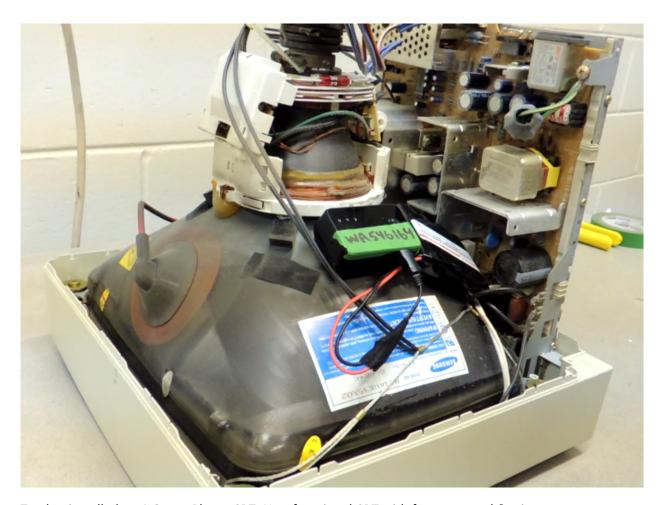
Location	Date	Time	Coordinates
0 - 1 Green Planet	2/2/16	18:43:50	47.474285, -122.228425
	2/17/16	18:40:23	47.473503, -122.227536
1 - EWC Group	2/18/16	18:40:04	47.451982, -122.250146
Recyclers			
	3/2/16	18:49:35	47.45853, -122.24741
2 - Port in Vancouver, Canada	3/13/16	20:01:18	49.19118, -122.90229
	3/25/16	20:12:40	49.02716, -123.12876
3 - Port of Hong Kong	4/15/16	20:36:02	22.33086, 114.11851
	4/20/16	20:41:08	22.33508, 114.11414
4 - New Territories,	4/21/16	20:42:11	22.44518, 113.99445
Hong Kong			
	5/3/16	21:03:41	22.49716, 114.01659



0 - Dropoff at 1 Green Planet, 1 - EWC Group Recyclers, 2 - Port in Vancouver, Canada



3 - Port of Hong Kong, 4 - New Territories, Hong Kong



Tracker installed on 1 Green Planet CRT. Non-functional CRT with fuse removed & wires cut.

EWC Group Inc. (California location)

Device: Printer

Model: Canon H12425 Location: Commerce, CA Tracking device ID: **ca543948**

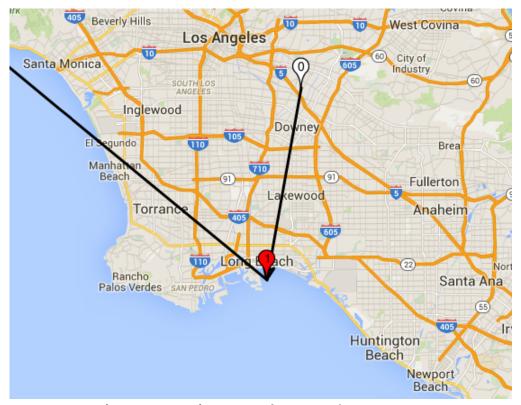
On June 24th, 2015, a non-functional printer was dropped off at EWC Group's facility in Commerce, CA. About a month later it arrived at the Port of Long Beach, where it was then shipped to the Port of Hong Kong, arrived on August 26th. It next moved to a location on Deep Bay Road in the New Territories area of Hong Kong where it stayed for over two months before moving southward to a location on Ping Ha Road.

Due to the presence of precise GPS coordinates, BAN was able to visit the first of the New Territories sites in December of 2015, and again with a PBS film crew in March of 2016. BAN and PBS investigators were able to visit and document one of the locations in New Territories where this device went and found troubling environmental and human health concerns there. Printers were being broken open

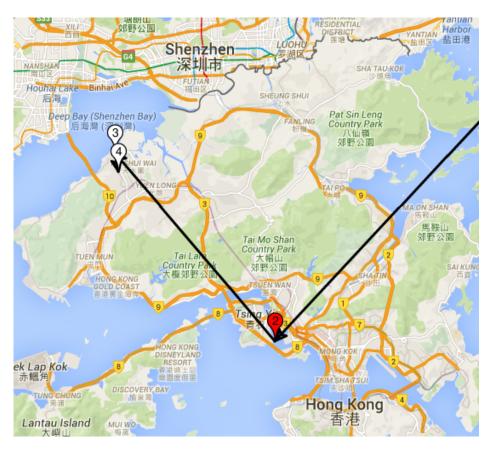
allowing workers to breathe the toner powders, and broken mercury laden CCFL tubes were found cast about the workplace and even outside the fence line of the facility (see images below).

Summary table of EWC Group (California location) tracker movements:

Location	Date	Time	Coordinates
0 – EWC Group (eWaste Center)	6/24/15	13:55:59	33.98916, -118.12673
	7/15/15	14:16:10	33.98644, -118.12404
1 – Port of Long Beach	7/22/15	14:23:31	33.7465, -118.17896
	7/26/15	14:27:43	33.7465, -118.17896
2 – Port of Hong Kong	8/26/15	15:00:22	22.33118, 114.1187
	8/28/15	15:02:19	22.33502, 114.11387
3 – Deep Bay Road,	8/29/15	15:03:22	22.50912, 113.9448
New Territories, Hong Kong			
	9/1/15 (First GPS confirmation of location)	15:05:23	22.47162, 113.989392
	11/12/15	14:01:35	22.47166, 113.989596
4 – Ping Ha Road, New Territories, Hong Kong	11/17/15	23:23:26	22.457417, 113.992414



0 – EWC Group (eWaste Center), 1 – Port of Long Beach



2 – Port of Hong Kong, 3 – Deep Bay Road, New Territories, Hong Kong, 4 – Ping Ha Road, New Territories, Hong Kong



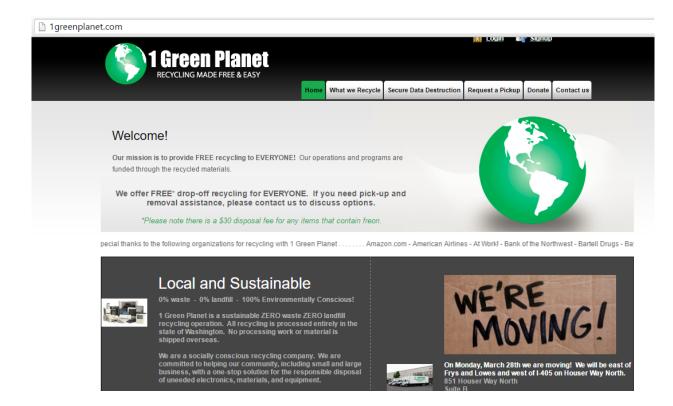
Investigator Dongxia Su pictured here interviewing a worker in outdoor storage area. Image from December 2015 BAN visit to Deep Bay Road location in New Territories, Hong Kong. Copyright BAN 2015.



Broken CCFL tubes from LCD monitors near workstation where equipment was being dismantled by hand. Image from December 2015 BAN visit to Deep Bay Road location in New Territories, Hong Kong. Copyright BAN 2016.

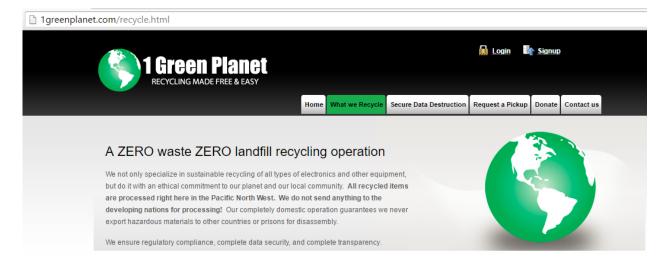


Broken CCFLs littering the ground outside the fence line. Image from December 2015 BAN visit to Deep Bay Road location in New Territories, Hong Kong. Copyright BAN 2015.



1 Green Planet home page:

"1 Green Planet is a sustainable ZERO waste ZERO landfill recycling operation. All recycling is processed entirely in the state of Washington. No processing work or material is shipped overseas" - www.1greenplanet.com

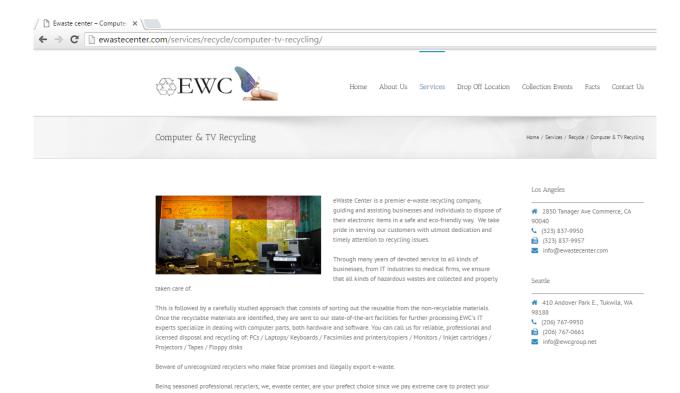


The e-Waste Disposal Process

- 1. The items received are manually dismantled as the first step to recovering all of the basic components or materials. Items that cannot be dismantled in an efficient manner are put through a shredding process.
- 2. Whole e-scrap or dismantled parts are shredded down to pieces that are less than 2 inches in diameter. They are then separated through a series of conveyor belt connected equipment by a process that is 95% automated.
- 3. All electronic products are recycled and processed locally here in Washington. Leveraging our own processing center helps the local economy by keeping the work here. We also help local business to be more environmentally responsible by making sustainable recycling services available to them for FREE (drop off), or for a flat \$100 fuel surcharge for any volume of material.

1 Green Planet webpage describing their disposal process:

"All recycled items are processed right here in the Pacific North West. We do not send anything to the developing nations for processing! Our completely domestic operation guarantees we never export hazardous materials to other countries or prisons for disassembly. We ensure regulatory compliance, complete data security, and complete transparency." - www.lgreenplanet.com/recycle.html



EWC Group webpage discussing their recycling process:

"Through many years of devoted service to all kinds of businesses, from IT industries to medical firms, we ensure that all kinds of hazardous wastes are collected and properly taken care of."

"Once the recyclable materials are identified, they are sent to our state-of-the-art facilities for further processing."

"Beware of unrecognized recyclers who make false promises and illegally export e-waste" http://ewastecenter.com/services/recycle/computer-tv-recycling/

ewastecenter.com/services/recycle/down-stream-due-diligence/

Call Us Today! (888) E-WASTE-8 / (888) 392-7838 | info@ewastecenter.com



Home About Us Services Drop Off Location

Down Stream Due Diligence

Many "recyclers" export obsolete electronics to underdeveloped countries (where there are little or no regulations) directly, or through third-parties. Underdeveloped countries use primitive methods of "recycling" such as cooking circuit boards or using acid baths and do not have health/labor/environmental laws to protect their citizens.

EWC partners only with vendors that practice down-stream due-diligence!

EWC Group webpage discussing their downstream:

"Many "recyclers" export obsolete electronics to underdeveloped countries (where there are little or no regulations) directly, or through third-parties. Underdeveloped countries use primitive methods of "recycling" such as cooking circuit boards or using acid baths and do not have health/labor/environmental laws to protect their citizens. EWC partners only with vendors that practice down-stream due-diligence!"

http://ewastecenter.com/services/recycle/down-stream-due-diligence/



Environmental Health and Safety Management System Policy

e-Waste Center (EWC) provides quality e-waste recycling service and our mission is to:

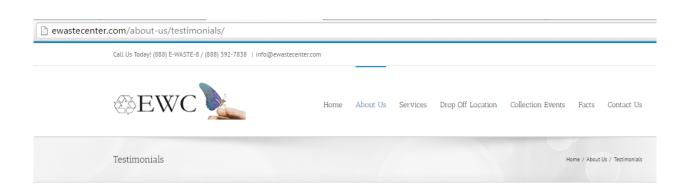
- preserve the environment, prevent pollution and minimize health and safety aspects and hazards by,
 - (a) diverting electronic waste from entering our landfills, and
 - (b) through recycling electronics in a safe, socially ethical and environmentally friendly process on-site and off-site through implementation of downstream vendor due diligence program,
- 2) adhere to Responsible Recycling (R2) recycling hierarchy of "reuse, recover, dispose",
- comply with and inform communities of the laws and regulations regarding e-waste as well as its potential hazards, and
- 4) philanthropic outreach.

EWC is committed to continual improvement and informing public and all persons working for or on behalf of EWC of our policy and objectives to ensure excellence in performance in all arenas.

EWC Health and Safety Management System Policy:

Note that despite mentioning R2, they do not currently have an R2 certification, and have not had one since the second half of 2014.

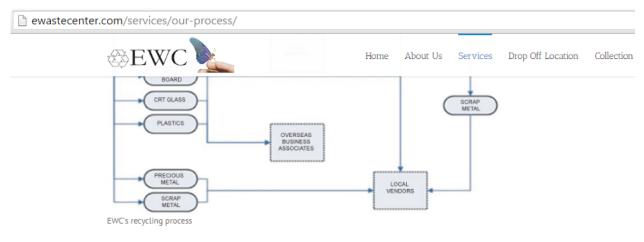
http://ewastecenter.com/about-us/compliance-and-certifications/



"All of our schools, teachers and students that work with eWaste Center are so excited to be partnering with a great company that does not export electronic waste to third world countries!"

EWC webpage with featured testimonials, some of which are also displayed on the home page:

"All of our schools, teachers and students that work with eWaste Center are so excited to be partnering with a great company that does not export electronic waste to third world countries!" http://ewastecenter.com/about-us/testimonials/



- 1. Starts by thoroughly sorting and weighing all materials received.
- 2. End-of-life electronic devices are disassembled to its essential components (glass, wood, plastic, circuit boards, etc.)
- 3. Separated, sorted and categorized to be transferred to our downstream recyclers.

EWC does not allow the export hazardous e-waste to developing countries where strict health that the entire recycling chain is meeting the right environmental and health standard, and provides visible tracking records of e-waste throughout the product recycling chain.

EWC Group website discussing their recycling process:

"End-of-life electronic devices are disassembled to its essential components (glass, wood, plastic, circuit boards, etc.)"

"EWC does not allow the export hazardous e-waste to developing countries where strict health that the entire recycling chain is meeting the right environmental and health standard, and provides visible tracking records of e-waste throughout the product recycling chain."

http://ewastecenter.com/services/our-process/

Interconnection

Device: LCD Monitor Model: HP LCD VS17 Location: Seattle

Tracking device ID: wa545570

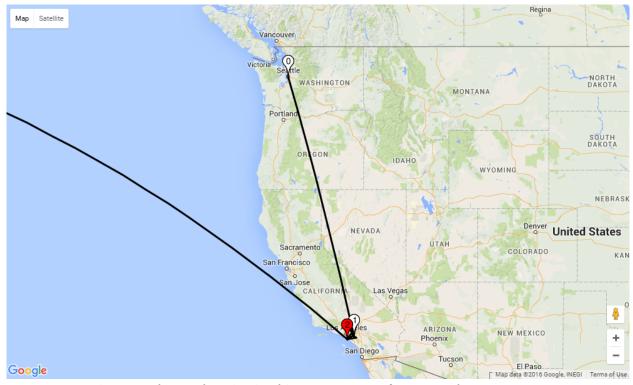
A completely non-functional and economically unrepairable waste LCD monitor containing mercury bearing CCFL backlights was dropped off at Interconnection's Seattle location on January 30th, 2016 and

the deployment was filmed by a PBS news crew. About a week later the waste LCD was sent to Chino, CA which BAN has found to be a notorious hub for eventual overseas export with numerous traders located there. On March 30th the device arrived at the Port of Hong Kong via Long Beach harbor and eventually moved north up into the New Territories region.

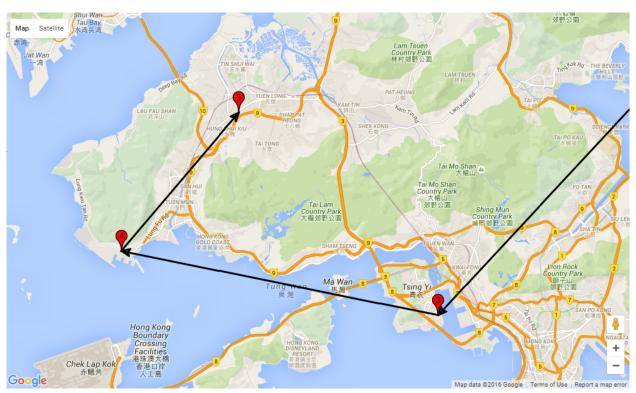
Of particular note here is that Interconnection very openly advertises the fact that they export devices around the world but insist they <u>only</u> ship fully-functional refurbished units for purported charitable reasons, and that their electronic waste, or non-functional product does not get exported. This LCD device was broken beyond all reasonable repair with a large tracking device obviously visible to anyone who actually opened the device for refurbishing reasons (see picture below), and the device was ultimately sent to the well-documented e-waste breaking yards of New Territories Hong Kong.

Summary table of Interconnection tracker movements:

Location	Date	Time	Coordinates
0. Interconnection	1/30/16	13:03:09	47.64102, -122.34099
	2/5/16	13:07:38	47.641, -122.34098
1. Unknown location in	2/8/16	13:10:39	33.98331, -117.71516
Chino, CA			
	2/25/16	13:27:58	33.98334, -117.71519
2. Port of Long Beach	3/1/16	14:13:03	33.74225, -118.17965
3. Port of Hong Kong	3/30/16	16:53:09	22.33506, 114.11414
	4/1/16	16:55:15	22.32684, 114.11562
4. Pillar Point region,	4/2/16	16:56:18	22.36763, 113.94072
New Territories, Hong Kong			
	4/6/16	17:00:30	22.36619, 113.94575
5. Yuen Long region, New Territories, Hong	4/7/16	17:01:33	22.4376, 114.00499
Kong			
	4/12/16	18:53:03	22.44352, 114.00735



0. Interconnection, 1. Unknown location in Chino, CA, 2. Port of Long Beach



3. Port of Hong Kong, 4. Pillar Point region, New Territories, Hong Kong, 5. Yuen Long region, New

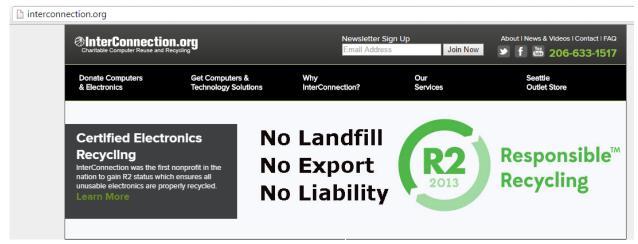
Territories, Hong Kong



LCD with tracking device. Deployed at Interconnection facility in Seattle, WA on 1/29/16. Note numerous wires and parts have been cut, and large chunks of circuit board removed, making this completely non-functional and with an obvious tracker installed in the back.

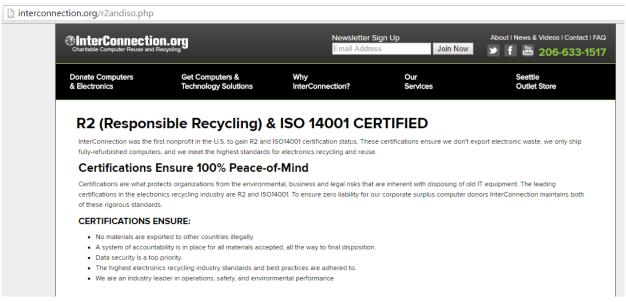


LCD being dropped off at Interconnection. Image courtesy of Ken Christensen & Katie Campbell of KCTS/Earthfix.



Interconnection home page loudly proclaiming No Export.

www.interconnection.org



Interconnection webpage describing their certifications:

"... we don't export electronic waste, we only ship fully-refurbished computers, and we meet the highest standards for electronics recycling and reuse."

http://interconnection.org/r2andiso.php

IMS Electronics Recycling (California location)

Device: Printer

Model: Printer Brother DCP-7040

Location: Poway, CA

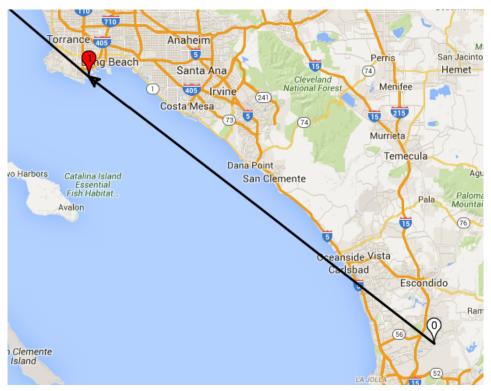
Tracking device ID: CA545349

On June 25th, 2015 a non-functional printer was dropped off at IMS Recycling's facility in Poway, California. A few days later it arrived at the Port of Long Beach to be exported, eventually ending up moving near the infamous scrapping yards of Guiyu before the tracker stopped communicating.

There is currently no confirmed instance of export occurring from the Vancouver, Washington state IMS location. However BAN believes that electronic waste trade is a corporate issue defined by corporate policy. The IMS corporation is implicated in exportation to China, regardless of where their facilities are located.

Summary table of IMS Recycling tracker movements:

Location	Date	Time	Coordinates
0 - IMS Electronics Recycling	6/25/15	16:06:31	32.94006, -117.04894
1 - Port of Long Beach	6/27/15	16:08:38	33.72669, -118.26678
2 - Port of Hong Kong	7/25/15	16:48:00	22.3251, 114.13109
	7/26/15	16:49:03	22.32509, 114.1311
3 - Guangzhou, Guangdong, China	7/27/16	16:50:06	22.97885, 113.50498
Guanguong, cinna			
	8/3/16	16:57:19	22.93423, 113.49807
4 - Shenzen,	8/4/15	16:58:22	22.70032, 114.09114
Guangdong, China	8/5/15	16:59:15	22.69625, 114.09633
5 – Nanjingzhen / Guiyuzhen area,	8/6/15	17:00:19	23.34465, 116.30378
Jieyang, Guangdong, China	8/7/15	17:01:21	23.34465, 116.30378



0 - IMS Electronics Recycling, 1 - Port of Long Beach, 2 - Port of Hong Kong



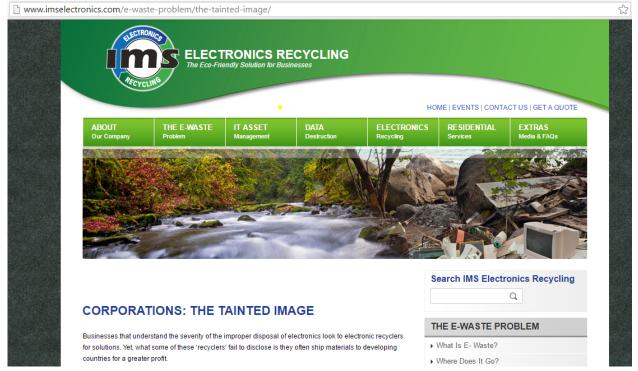
3 - Guangzhou, Guangdong, China, 4 - Shenzen, Guangdong, China, 5 – Nanjingzhen / Guiyuzhen area, Jieyang, Guangdong, China



From IMS website explaining the harms of e-waste exporting:

"E-Waste being exported to developing countries for disposal also poses concerns. While this method removes the problem from American soil, it does not eradicate the environmental and humanistic distresses"

http://www.imselectronics.com/e-waste-problem/landfills-and-exporting-the-problem/



IMS webpage highlighting how bad exporting e-waste can be for business:

"Businesses that understand the severity of the improper disposal of electronics look to electronic recyclers for solutions. Yet, what some of these 'recyclers' fail to disclose is they often ship materials to developing countries for a greater profit.

With the continual rise in public awareness regarding environmental issues, businesses that send their electronics to companies who export, intentionally or not, may face embarrassment when media exposure depicts their equipment being dismantled overseas.

Not only do these businesses face security breaches as their unsecured data travels unknowingly, but they may also encounter a stained corporate image, blemished with the stigma of being environmentally unfriendly. By dealing with non-certified companies, corporations are constricting the future profitability of their company; as public appeal and customer satisfaction dwindle down, so will the revenue stream."

http://www.imselectronics.com/e-waste-problem/the-tainted-image/