GREENTEC

GREENTEC SUSTAINABILITY REPORT 2018

About our report

Welcome to Greentec's inaugural sustainability report. The goal of this report is to provide open and transparent communication regarding Greentec's impact on our community and the world. Sustainability doesn't end in our backyard. We need to be accountable both locally and globally.

This report serves to highlight our initiatives for environmental improvement, while also fostering growth and improvement in new areas.

At Greentec, our priority is to protect your business and the environment. Included in this report you will find documented measures we have set in place, ensuring every effort is made to uphold our end of the bargain.

Reporting period

This report will explore Greentec's history as a company, including historical data and activities throughout the company's existence. For the purposes of this report, measurements were taken from the 2017-2018 reporting period. Future sustainability reports will be released biennially.

Reporting standard

The material presented in this report references GRI standards (Global Reporting Initiative). References to specific GRI disclosures are given on each page where a reference was used.

In keeping with our commitment to transparency, further information regarding our sustainability initiatives and processes are available upon request at any time, outside of our stated biennial reporting period.

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Special thanks to Carl Tutton for preparation of data used in the report
Special thanks to Durrell Communications for collaborative efforts in this report

This material references Disclosure 102-50 and 102-52 from GRI 102: General Disclosures

GREENTEC

Contents

Letter From the President

When I started Greentec in 1995, it was with the vision of helping businesses recycle waste printer cartridges in a safe and secure manner. I soon realized there was a greater opportunity to help, so we expanded our services to recycle old cell phones, computers and IT equipment.

Over the years, Greentec has continued to grow. Today, we process over 15 million pounds of electronics annually through IT asset disposition, refurb, and end-of-life processing and recover valuable commodities that would otherwise end up in a landfill.

At Greentec, we believe every product has value, even at end of life. We support a circular economy, one where our customers' information is secure and our planet is free of waste. Whenever permitted, we re-purpose products and re-introduce them into the secondary markets. But when that isn't possible, we break them down to recover base commodities. These recovered materials will move to trusted downstream partners, where they can be incorporated into new products and begin the cycle again.

Our mission is "we protect your business and the environment." Not only do we protect the environment, but we secure your data. When those electronic devices you discard are no longer valuable to you, they still contain valuable information. We make sure that information doesn't get into the wrong hands.

We have developed industry leading processes for secure data destruction. We follow best practices for electronic waste recycling, continuously updating our standards and adhering to all governing legislation and regulations. As such, we hold the top certifications for responsible recycling of electronics, information destruction and refurbishment of materials.

We take great pride in the many strides we have made together as a company. We have grown from a team of 5 employees to a team of over 80 dedicated staff all focused on the same goal: support the circular economy in responsible recycling. We've come a long way from printer cartridge recycling to recovering IT assets and processing millions of pounds of e-waste each year. We are grateful for the support of our local community and the global support we have seen over the years in our cause to improve the way electronics are handled in the recycling process.

This report highlights some of the key areas we have focused our efforts on to become the leader we are today in the electronics recycling industry. It will also outline our future goals: goals to see changes in the way we can improve on our processes, goals for the industry and goals to do even more to protect our precious environment.

Greentec is motivated to help push the industry to make important changes for the better of the environment, to further our efforts in reaching our goals and to take necessary steps towards hitting our goals for future sustainability.

Tony Perrotta

President & CEO

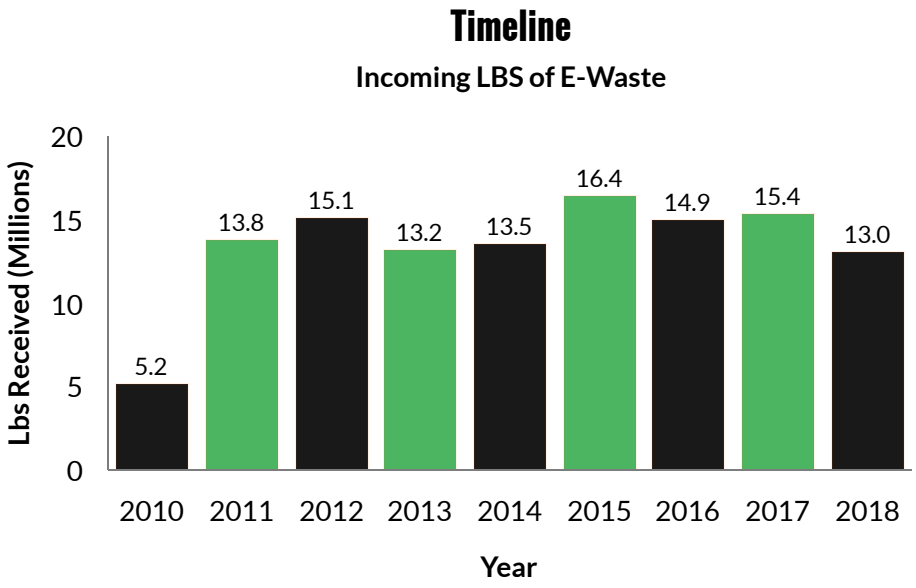
This material references Disclosure 102-14 from GRI 102: General Disclosures

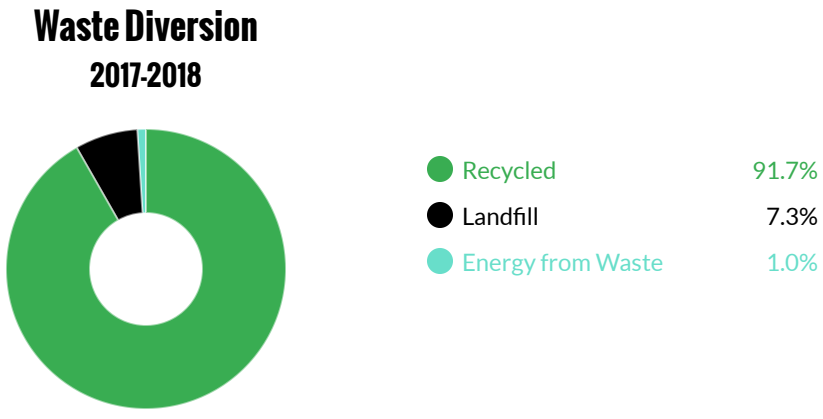
Timeline

Greentec was established in 1995 as a printer cartridge sorting and resale business. In 2010, the company expanded operations to include processing electronics for material recovery. Since then, we have evolved into a multi-faceted company for electronics recycling, data destruction and refurbished electronics.

Every day, Greentec receives many streams of e-waste for recycling, IT equipment for decommissioning, as well as material for data sanitization and destruction processing.

As noted in the chart below, between 2010 and 2018, Greentec received more than 120 million pounds of electronics for recycling. By processing these materials in our facility, we have diverted as much of these materials as possible from ending up in landfills.





This material references Disclosure 102-2 and 102-6 from GRI 102: General Disclosures

Company Overview

<u>Physical Details</u>

Full Company Name: Greentec International Inc.

Facility Location: 95 Struck Court, Cambridge, ON Canada

Size of Facility: 83,000 sq ft facility, 4.5 acre property

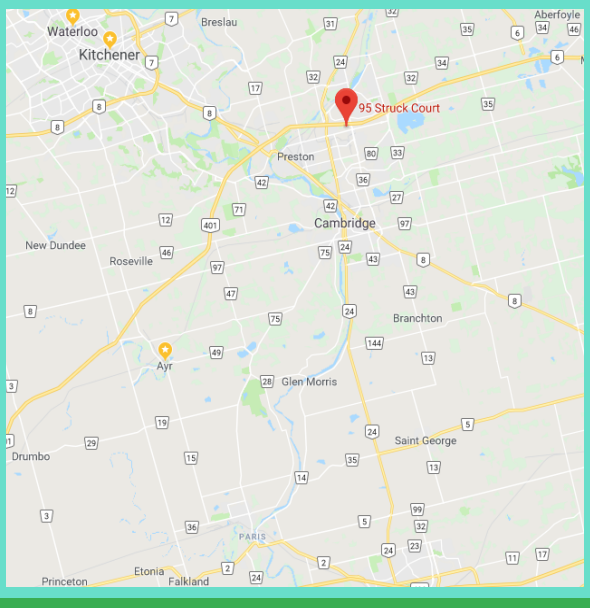
Incorporated Since: 1995

<u>Employees</u>

Total Employees: 85

Office Staff/Managers Employees: 19

Warehouse Staff: 66



Our Operations

Electronics Recycling

Dismantling and separating electronic components for material recovery

Electronics Refurbishing

Extending the life of electronics by repairing broken components and preparing devices to re-enter the consumer market

Secure Destruction

Physical destruction of data-containing devices and sanitization of data from devices (IT Asset Disposal)

Our Customers

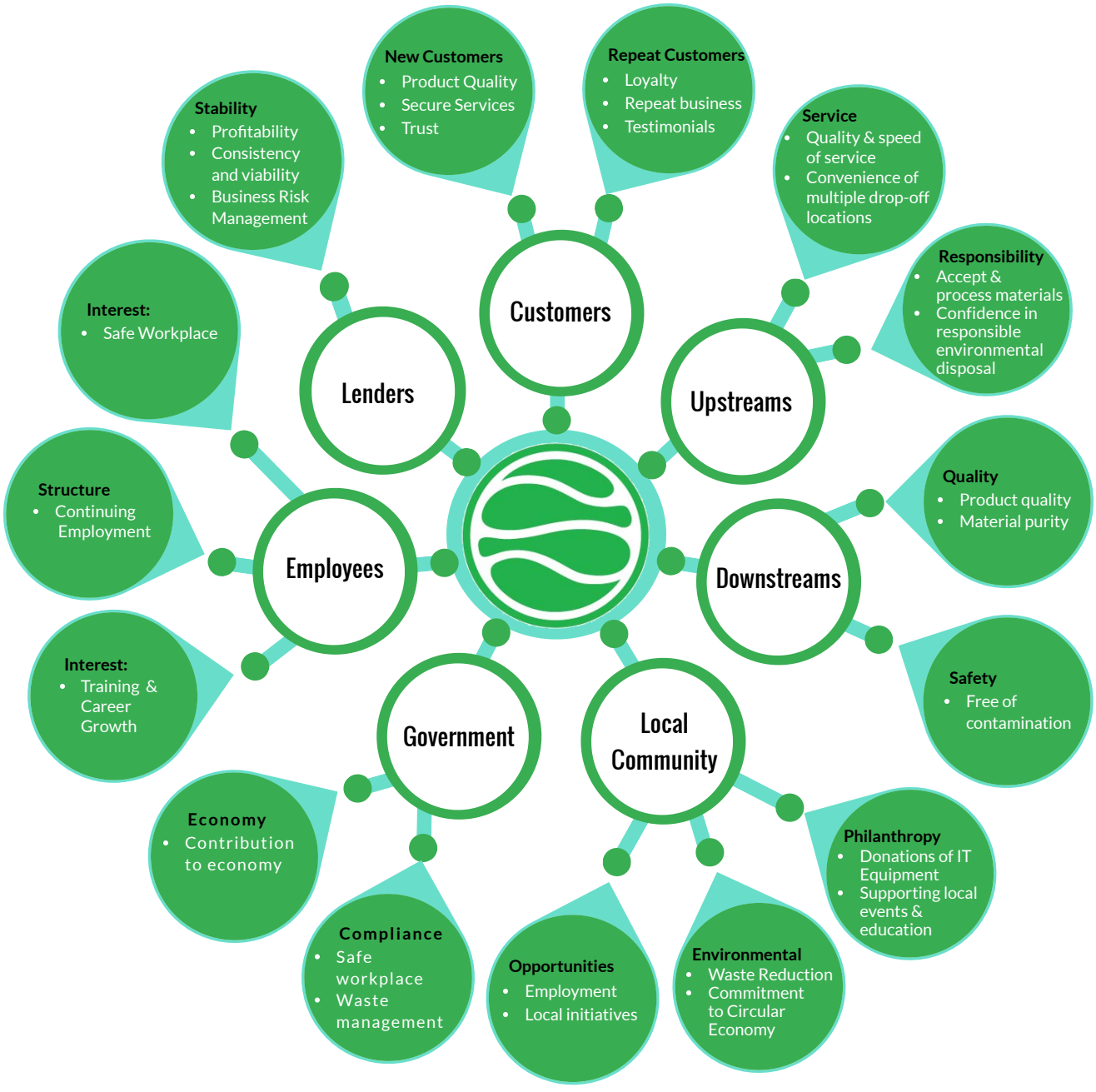
Greentec serves organizations in both the public and private sectors. A large portion of our clients are organizations, businesses, and institutions, and we also serve the general public by providing free electronic drop-off locations throughout the province.

Our clientele ranges from individual consumers purchasing refurbished products to large corporations in the resource recycling industry. Our core client base is in Ontario, however, we work with many companies across the globe.

We also host an e-commerce store open to the general public at our Cambridge facility, as well as online at shop.greentec.com

This material references Disclosure 102-1-102-3, and 102-5-102-6 from GRI 102: General Disclosures

Our Stakeholders



Memberships

- Ontario Waste Management Association
- National Association for Information Destruction
- Industrial Research Chair with Conestoga College
- Recycling Council of Ontario
- Canadian Association of Recycling Industries

This material references Disclosure 102-13 and 102-40 from GRI 102: General Disclosures

Materiality Analysis

Our analysis of key topics was based on the current status of our business operations, initiatives, and projects, as well as stakeholder input and feedback. We first developed two lists of material issues based on what we felt were most important to us as a company, as well as what our stakeholders value. Department leaders across Greentec were asked for input. We prioritized the identified issues based on their impact (real or potential) on us and our identified stakeholders, as outlined below:

1

Create a list of Greentec priorities and list of stakeholder priorities

2

Compare Greentec and stakeholder lists

3

Review lists of priorities with executive management for final approval

Economy

1. Circular Economy
2. Profitability

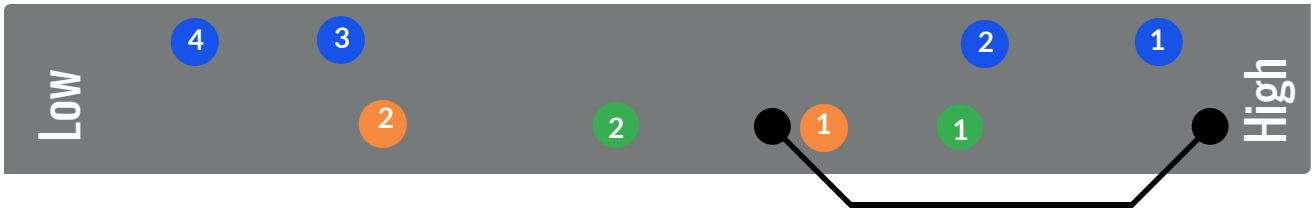
Society

1. Workplace Health & Safety
2. Data Security
3. Community Outreach
4. Global Ethics

Environment

1. Waste Diversion and sequestration of hazardous wastes/materials
2. Refurbished materials

Scale of Impact



Material (Key) Topics

Health & Safety

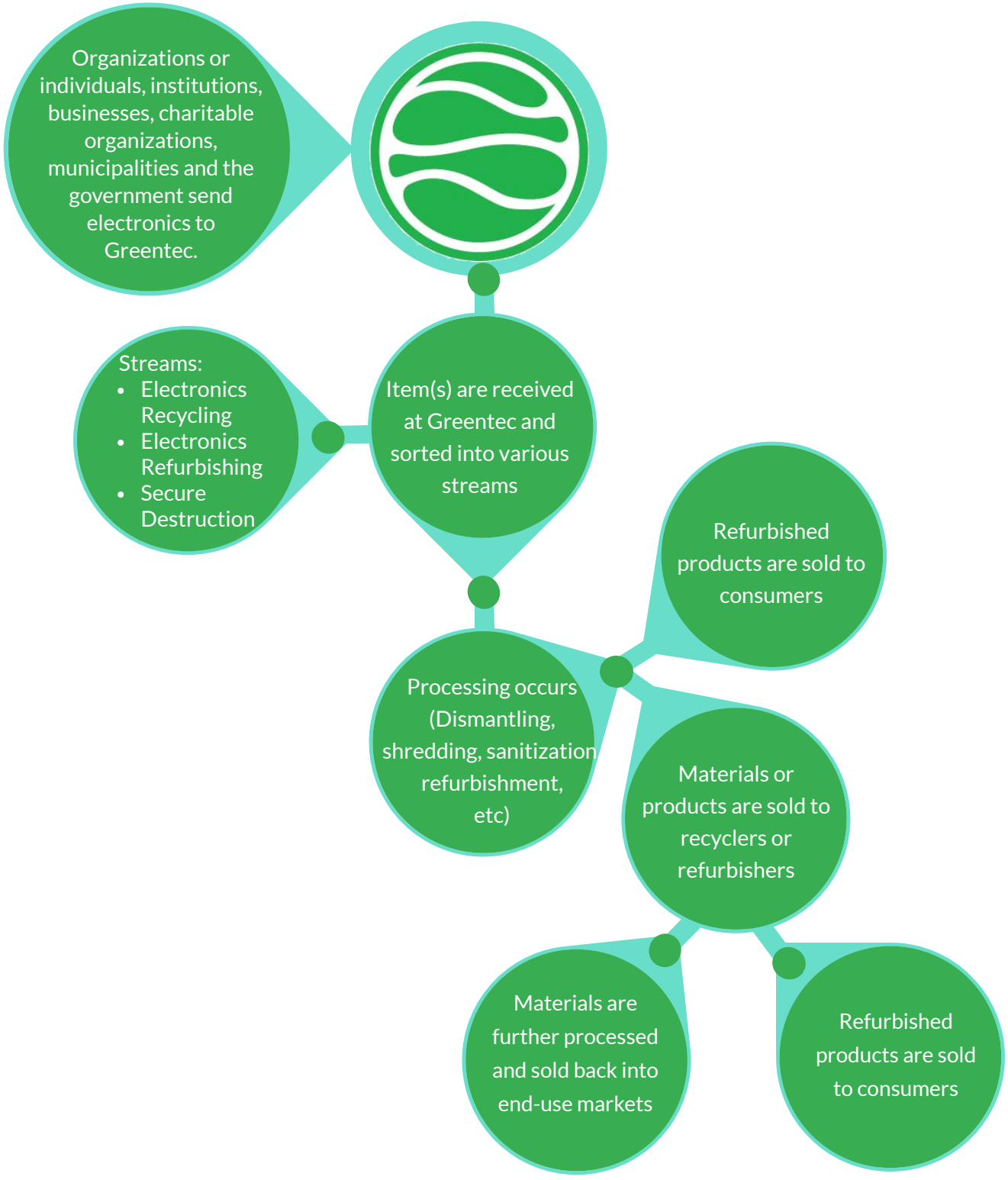
Data Security

Waste Diversion

Circular Economy

This material references Disclosure 102-46 and 102-46 from GRI 102: General Disclosures

Material Throughput



This material references Disclosure 102-9 from GRI 102: General Disclosures

Core Values

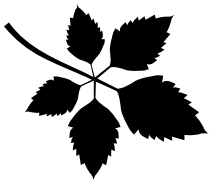
Our core values are the things that we keep at the heart of our operations. Our values drive us to maintain high standards for our performance in all aspects of our business.

People

Health and safety is an integral part of our operations. Whether it's our own staff or contractors coming onsite, we are committed to maintaining a safe work environment for all. In 2017 and 2018, Greentec had zero lost time accidents: a testament to our goal and commitment to keeping our staff safe at work.

Customers

We are dedicated to keeping our clients safe, their data secure, and responsibly recycling electronics. The end result is happy clients. We understand that it's crucial to protect privacy. We strive to prevent data leaks, theft, breaches or loss, and continue to improve on our processes for client privacy and security.



Environment

One of our main goals is to keep electronics out of landfills. We strive to recover the majority of materials we receive and send as little as possible to landfills. We are always in the process of looking for the best end-use of the materials we generate here. Greentec has never received a fine or sanction for non-compliance with environmental laws or regulations.

Circular Economy

We are supporters of a circular economy: where resources are circulated for as long as possible, and materials or products are recovered at the end of a product's life. We believe that electronics should be designed with this in mind, and that all corporations should incorporate circular economy in their design process. As recyclers, we see the need for this every day.

This material references Disclosure 102-16 from GRI 102: General Disclosures and Disclosure 307-1 from GRI 307: Environmental Compliance

Standards/Compliance

Greentec is voluntarily certified to R2, ISO 14001, OHSAS 18001, and NAID, and we are also an RQP approved processor under the provincial ERS standard.

Data Security

Greentec's NAID certification means that we take data security seriously. The NAID standard sets out requirements for security at our facility as well as for the process of physical destruction and data sanitization. We are audited by a third party annually to ensure that we continue to destroy our customer data in ways that do not create a risk for data breaches.

Recycling

R2 Certification means that not only are Greentec's operations assessed for compliance with high standards, we are also required to demonstrate that our downstreams are recycling or disposing of materials appropriately.

Environment

In order to maintain an ISO 14001 certification, Greentec has to demonstrate our continued efforts to improve our environmental performance.

Health & Safety

In order to maintain an OHSAS 18001 certification, Greentec must demonstrate our continued efforts to improve our health & safety standards and monitor our health and safety performance.

This material references Disclosure 102-12 from GRI 102: General Disclosures

Sustainability Strategy

U.N. Sustainable Development Goals.

Greentec's operations may be based in North America, but we believe in contributing to global sustainability. In an effort to address our overall sustainability, we are following the UN's Sustainable Development Goals. This collection of 17 global goals, set by the United Nations General Assembly in 2015, strives to transform the world by reaching these targets by 2030. Greentec's contributions so far are highlighted in white below.

1. End poverty in all its forms everywhere
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3. Good health and well-being
4. **Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**
5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of water and sanitation for all
7. **Ensure access to affordable, reliable, sustainable and modern energy for all**
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10. Reduce inequality within and among countries
11. Make cities and human settlements inclusive, safe, resilient and sustainable
12. **Ensure sustainable consumption and production patterns**
13. Take urgent action to combat climate change and its impacts
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

How does Greentec contribute?

4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Indirect:

By providing refurbished electronics at reduced prices to the public, Greentec enables people of all economic backgrounds to access technology that is so often a part of modern learning and education.

In 2018, Greentec donated 14 MacBooks to Oak Bridge Academy in Cambridge, ON, a newly opened school for special needs children. Our goal is to continue this relationship and support other institutions in need of electronics for education. See the full Cambridge Times article at the link below:
https://www.cambridgetimes.ca/community-story/8772912-cambridge-company-fulfils-item-on-not-for-profit-school-s-wish-list/

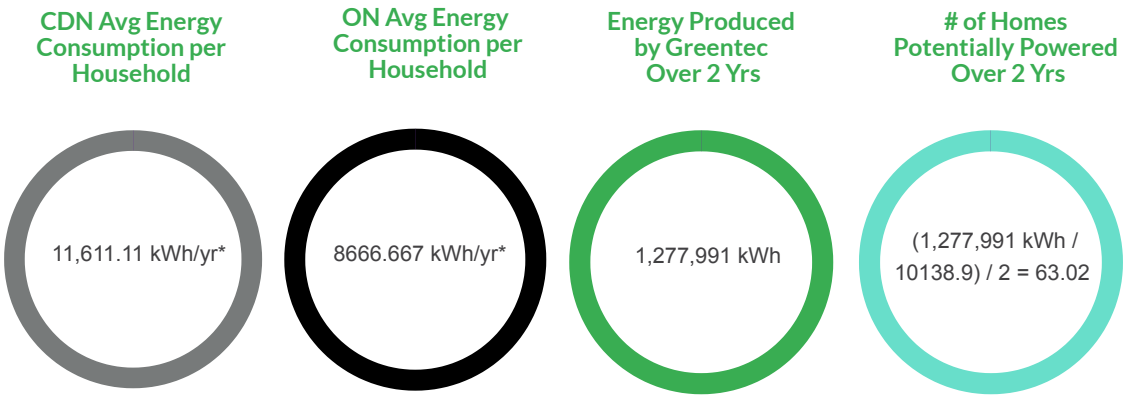
In 2017, Greentec helped to fund a dedicated research chair at Conestoga College for the research of technology in processing electronic waste. Between 2017 and 2018, Greentec provided three research projects for engineering students at the college. Through the research projects, the students were able to gain experience in their field and apply their engineering skills in a hands-on fashion.

7 Ensure access to affordable, reliable, sustainable and modern energy for all

Direct:

In 2016, Paid4Power installed 2354 solar panels on the roof of our Cambridge facility. The energy generated from these panels is sent back into the grid, where it is used to power neighbouring homes and businesses.

In 2017 and 2018, the panels produced a combined total of 1,227,991 kWh. Producing this amount of energy by solar panels saved 289, 676 lbs of CO^2 based on a comparison to the average carbon intensity of power sources in Ontario.



Total energy consumption within the organization

= 1,432,353 kWh (hydro) + 833,525 kWh (natural gas converted from GJ)-1,277,991 kWh (solar sold)

987,887 kWh

*https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=2510006001#timeframe

This material references Disclosure 302-1 from GRI 302: Energy

How does Greentec contribute?

12 Ensure sustainable consumption and production patterns

Direct:

By the nature of our business, Greentec helps to ensure the sustainable use of resources on a global level. Not only do we recover materials that will be used again in the production of new products, we also enable the direct reuse of devices through our refurbishment operations.

Pallets and boxes are essential to our process. We ensure that when they become worn out, we recycle them. Between 2017 and 2018, we sent 21,142 skids to be recycled and over 200 tonnes of cardboard.

Collaboration with the University of Waterloo

In early 2018, Greentec was approached by the University of Waterloo to collaborate on an ongoing research project on the analysis of mass flow information of materials flowing in and out of an electronics recycling facility. Gathered data relates to two separate days of operation as well as 3 years of mass flow information from Greentec's operations. The data displays the recorded materials and products that entered the facility and were processed on site, and which products were sold or shipped out. This information is vital in the ongoing study as well as policy development, and critical materials research in the field of municipal solid waste management, specifically addressing electronic waste (e-waste).

Greentec's administrative and executive team have been instrumental in giving industry information and perspective regarding the function of e-waste processors in Ontario, and the interaction they have with the rest of the waste processing corporate/governance ecosystem. The information gathered at Greentec will help inform two articles and multiple theses to be published by the University of Waterloo Industrial Ecology Group.

Collaboration with the University of Waterloo

Material Flow Analysis (Mass Flow Analysis)

Material Flow Analysis (MFA) is a systematic, scientific method of tracking the stocks and flows (in this case measured in kg), of any items, products, or physical entities through a defined system. In this analysis, the inputs, internal processes, products, and output materials are displayed in charts and tables indicating annual flows through Greentec's facility. These findings are invaluable in assessing efficiencies, throughputs, changes in flows and flow rates, and determining the nature of what materials are produced through the processing of e-waste. This can then inform policy makers in addressing issues of waste management, diversion, and the categories of e-waste that need special consideration.

Diagrams Representing Yearly Operation

The two years of data assessed are displayed as total throughputs of recorded weights from both the Greentec sales system and the warehousing system. The data was compiled, compared, refined for duplicates, and exported into the graphs and tables shown on pages 16 and 17.

The categories for “Facility Sales" and "Finished Goods” were selected by Greentec as the most relevant to supported environmental efforts. The categories of "Refurbished Goods", "Circuit Boards" and "Precious Metal Target Goods", "Copper", and "Aluminum" are therefore groupings of e-waste. The categories of “Other”, “Refurbished Goods”, “Circuit Boards" and Precious Metal Target Goods” are further broken down to provide insights into what the composition of such materials are.

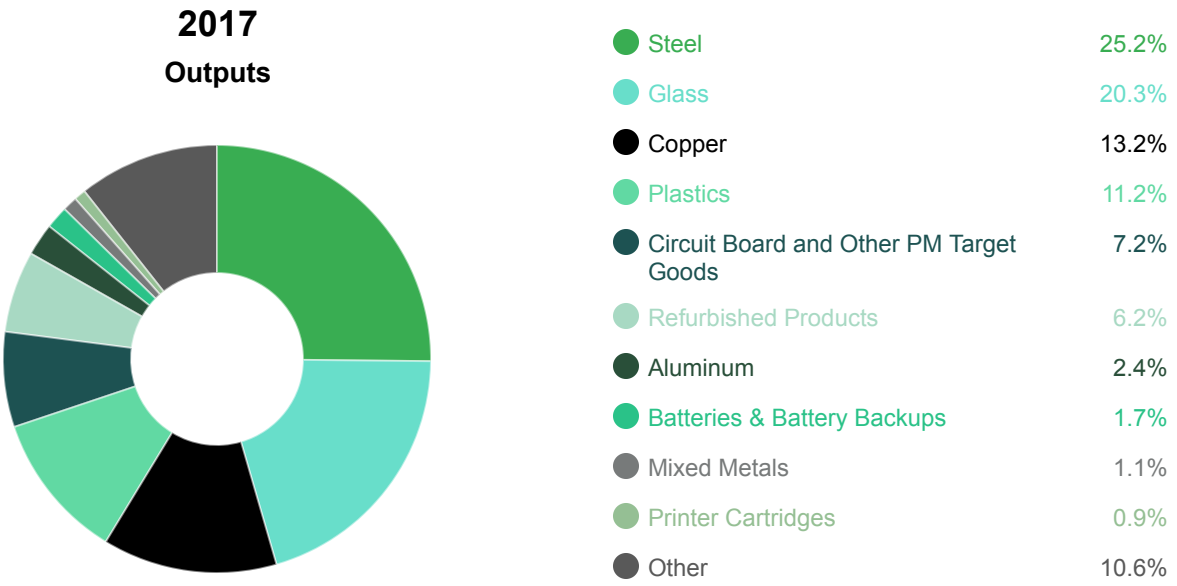
Trends Indicated Through Data

The trends represented in the data are in line with ongoing e-waste industry transitions. Trends noted include the transition from CRT to flat screen, resulting in a large drop in incoming CRT displays, and a fall in glass from the outputs. The increase in flat screens received, as well as an increase in plastics and steel as percentages of the outputs is also part of this transition. Overall, steel has replaced glass as the largest mass of outputs in 2018.

A shift in focus towards refurbished goods, notably from laptops, desktops, servers, and UPS battery and battery packs, has significantly increased the mass of those items being sold. A decrease in the quantity of refurbished printer cartridges has tempered the growth of the refurbished section as a category. Inputs, demanufactured goods, and outputs rose from 2016 to 2017, and fell sharply 2017 to 2018, and as such, the overall quantity of goods received, processed, and sold was lower. The charts and information presented should be reviewed with consideration in mind.

Overall, the data reviewed indicates that Greentec is paying closer attention to refurbishment and is moving away from low-profit and diminishing mass-input items such as printer cartridges and CRT displays. The implementation of the BluBox flat screen and fluorescent bulb demanufacturing system at Greentec’s facility has led to increased profitability and throughput regarding flat screen displays. A discussion of this transition can be found on page 20.

Material Outputs - 2017



Additional Breakdown

"Other" Sub-Categories

Sales and Finished Goods "Other" Category	2017 kg of Category	% of 2017 Sales and Finished goods "Other" Category Mass (kg)
Other Non-Program Waste	113598.58	10.12%
Other	335961.80	29.92%
CRT Display		
Portable Computers	39270.21	3.50%
Printers and Peripheral Devices	7885.70	0.70%
Small Appliances	3961.22	0.35%
Computer Peripherals	2002.16	0.18%
Hazardous Materials	3220.51	0.29%
Flatscreen Display	1854.74	0.17%
Desktop/Server Computers	704.43	0.06%
Computer Components	93219.58	8.30%
Waste	504555	44.93%
Cellular Devices		
Non-Cellular Telephones	15846.70	1.41%
Desktop Computers	863.64	0.08%
TOTALS	1122944.28	100.00%

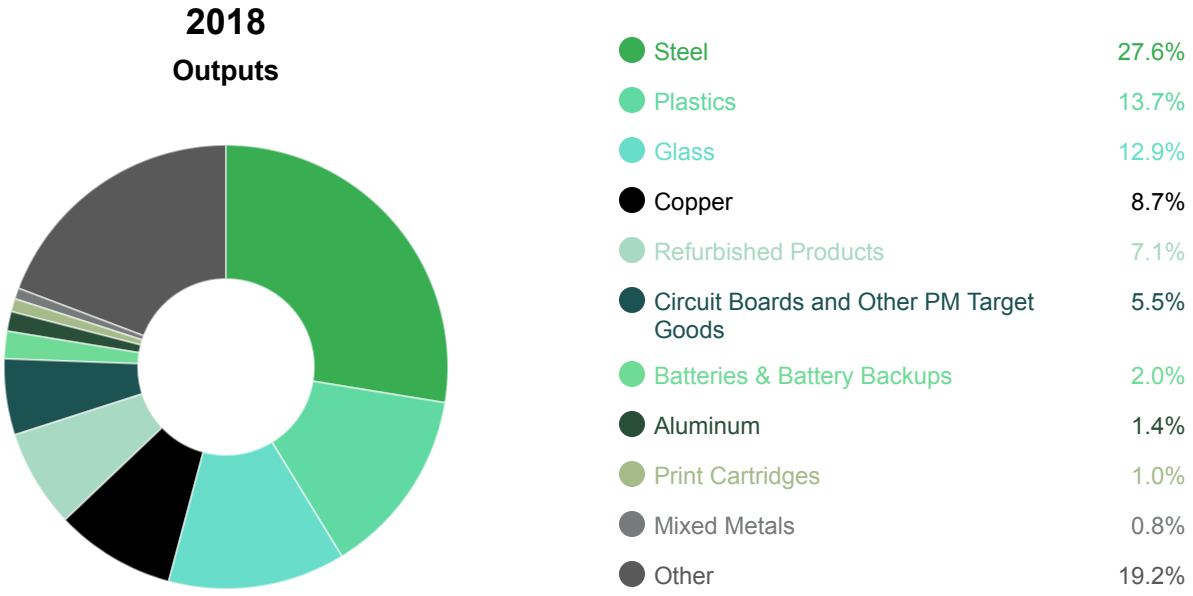
"Refurbished Goods" Sub-Categories

Sales and Finished Goods "Refurbished Goods" Category	2017 kg of Category	% of 2017 Sales and Finished goods "Refurbished Goods" Category Mass (kg)
Printer Cartridges	467503.37	71.93%
WIP Refurb Stock	39183.12	6.03%
Portable Computers	76693.85	11.80%
Desktop/Server Computers	17890.14	2.75%
Computer Peripherals	291.21	0.04%
Refurbished Goods	272.16	0.04%
Cellular Devices	181.91	0.03%
Networking Devices	47320.12	7.28%
Batteries and Battery Backup Systems	614.62	0.09%
Computer Components		
TOTALS	649950.48	100.00%

"Circuit Boards and Precious Metal Target Goods" Sub Categories

Circuit Boards and Precious Metal Target Goods" Category (%)	2017 kg of Category	% of 2017 Circuit Boards and Precious Metal Target Goods" Category (%) Mass (kg)
Circuit Boards	592865.18	78.16%
Computer Components	87443.54	11.53%
Networking Devices	33961.37	4.48%
Shredded Circuit Boards	38560.79	5.08%
Processors	5688.50	0.75%
Other	1.36	
TOTALS	758520.74	100.00%

Material Outputs - 2018



Additional Breakdown

"Other" Sub-Categories

Sales and Finished Goods "Other" Category	2018 kg of Category	% of 2018 Sales and Finished goods "Other" Category Mass (kg)
Other Non-Program Waste	23547.34	1.71%
Other	142152.68	10.30%
CRT Display	91263.69	6.61%
Portable Computers	118558.16	8.59%
Printers and Peripheral Devices	35784.81	2.59%
Small Appliances		
Computer Peripherals	9680.11	1%
Hazardous Materials	19479.07	1%
Flatscreen Display	78031.95	6%
Desktop/Server Computers	1445.15	0.10%
Computer Components	53494.42	3.87%
Waste	778350	56.38%
Cellular Devices	15397.65	1.12%
Non-Cellular Telephones	12832.58	0.93%
Desktop Computers	91.17	0.01%
Printer Cartridges	526.62	0.04%
TOTALS	1380635.04	100.00%

"Refurbished Goods" Sub-Categories

Sales and Finished Goods "Refurbished Goods" Category	2018 kg of Category	% of 2018 Sales and Finished Goods "Refurbished Goods" Category Mass (kg)
Printer Cartridges	336075.89	65.46%
WIP Refurb Stock	5507.97	1.07%
Portable Computers	132428.56	25.80%
Desktop/Server Computers	34169.57	6.66%
Computer Peripherals		
Refurbished Goods		
Cellular Devices	590.63	0.12%
Networking Devices	1263.25	0.025%
Batteries and Battery Backup Systems	2560.08	0.5%
Computer Components	781.99	0.15%
TOTALS	513377.94	100.00%

"Circuit Boards and Precious Metal Target Goods" Sub Categories

Circuit Boards and Precious Metal Target Goods" Category (%)	2018 kg of Category	% of 2018 Circuit Boards and Precious Metal Target Goods" Category (%) Mass (kg)
Circuit Boards	374335.26	94.14%
Computer Components	253.10	0.06%
Networking Devices	16336.13	4.11%
Shredded Circuit Boards	2039.35	0.51%
Processors	3084.88	0.78%
Other	1579.86	0.4%
TOTALS	397628.59	100.00%

Recovered Materials

Highlighted materials

Aluminum

Aluminum ore is chemically extracted from bauxite. Through the refining process, impurities are removed. This element is the third most plentiful element in the earth's crust. Since there is an abundance of existing aluminum, extracting and treating new metal is wasteful and harmful to the environment.

It takes 95% less energy to recycle aluminum than to make it using raw materials(1). An estimated 75% of produced aluminum is still being used today thanks to recycling (2).

Precious Metals

Precious Metals are rare, naturally occurring metallic chemical elements of high value. Reusing metals that have already been refined is less harmful to the environment and produces less waste. Recycling is more efficient than extracting and refining new metal, reducing the need to mine new resources and sparing the environment from CO^2 production and the release of chemicals and production waste.

Scrap from precious metals is highly valued, and recovery has increased steadily from end-of-life electronics products (3). Recycling of platinum, one precious metal, counts for more than 28% of the global supply (4).

Steel

Carbon steel accounts for 90% of steel production. Low alloy steel is combined with other elements to further harden the metal and increase thickness. Steel is one of the world's most recycled materials, and one of the easiest to reproduce, as it can be separated magnetically from the waste stream. With its profusion and ease of reproduction, there is no need for additional mining and refining of this metal.

Steel is 100% recyclable, saving both energy and raw materials. Compared to virgin ore, using scrap metal generates 97% less mining waste and uses 40% less water. It also saves 60% on production energy (5). Almost 40% of the world's steel production is made from scrap (6).

Copper

Copper is extracted from open pits. It must be crushed as part of the process between extraction and production. Then it is roasted to convert sulfides to oxides. Copper doesn't degrade as it is recycled, making it a valuable commodity among metals. It can be removed from the millions of pounds of e-waste we receive each year and sent downstream for re-purposing.

Recycled copper represents more than 30% of the world's consumption, according to National Resources Canada. An estimated savings of 75% is possible by recycling copper (7).

Why does this matter?

- A large percent of the materials used in the production of electronics can be recycled
- Ores and other products taken from the earth are finite resources, and the mining of these products has significant impacts on the earth including energy and water usage, deforestation, and habitat destruction.
- Recycling materials impacts on resource savings. For example, recycling of aluminium uses just 5% (8) of the energy compared to raw aluminium smelting, and for copper recycling, energy use is 15% of that required for raw production (9).
- Recycling helps to fill the global need for materials and helps to reduce the dependency on mining operations.
- Non-ferrous metals can be recycled without losing quality in the material which means they can be consistently recycled and reused in new products.

1. National Institute of Health
2. Bureau of International Recycling
3,4. National Resources Canada
5. National Institute of Health
6. Bureau of International Recycling
7. Institute of Scrap Recycling Industries, Inc.
8. European Commission (Ecorys)
9. The Canary Research Institute for Mining, Environment and Health

Recovered Materials

Critical Raw Materials

The EU defines critical raw materials (CRMs) based on two main criteria:
1. There are "risks of supply shortage" and;
2. "Their impacts on the economy are higher than those of most of the other raw materials."

In 2018, the EU Commission released the "Report on critical raw materials and the circular economy." This report identified the electronics industry as a key sector in the use and recycling of critical raw materials. In the table below, the EU CRMs are listed and materials commonly found in electronics (including batteries) have been highlighted.

ANTIMONY	FLUORSPAR	**NATURAL GRAPHITE**	TANTALUM
BARYTE	**GALLIUM**	NATURAL RUBBER	**TUNGSTEN**
BERYLLIUM	**GERMANIUM**	NIOBIUM	VANDIUM
BISMUTH	HAFNIUM	PHOSPHATE ROCK	**PLATINUM GROUP METALS**
BORATE	HELIUM	PHOSPHORUS	**HEAVY RARE EARTH ELEMENTS**
COBALT	**INDIUM**	SCANDIUM	**LIGHT RARE EARTH ELEMENTS**
COKING COAL	MAGNESIUM	**SILICON METAL**	

CRMs and Greentec

Rare Earth Elements

Rare Earth Elements (REEs) Rare earth elements are used in a wide variety of electronics, such as display devices. A challenge with recycling REEs is that they are typically found in low concentrations in electronics, and can be extremely difficult and costly to separate from other materials. China is currently the largest producer of rare earth elements and the demand is set to grow with the increase of electric vehicles and electronic components that depend on rare earth magnets for their function. Since 2017, Greentec has been working with Conestoga College to develop a solution for the recovery of rare earth elements that we hope to put into production by mid-2019.

Cobalt

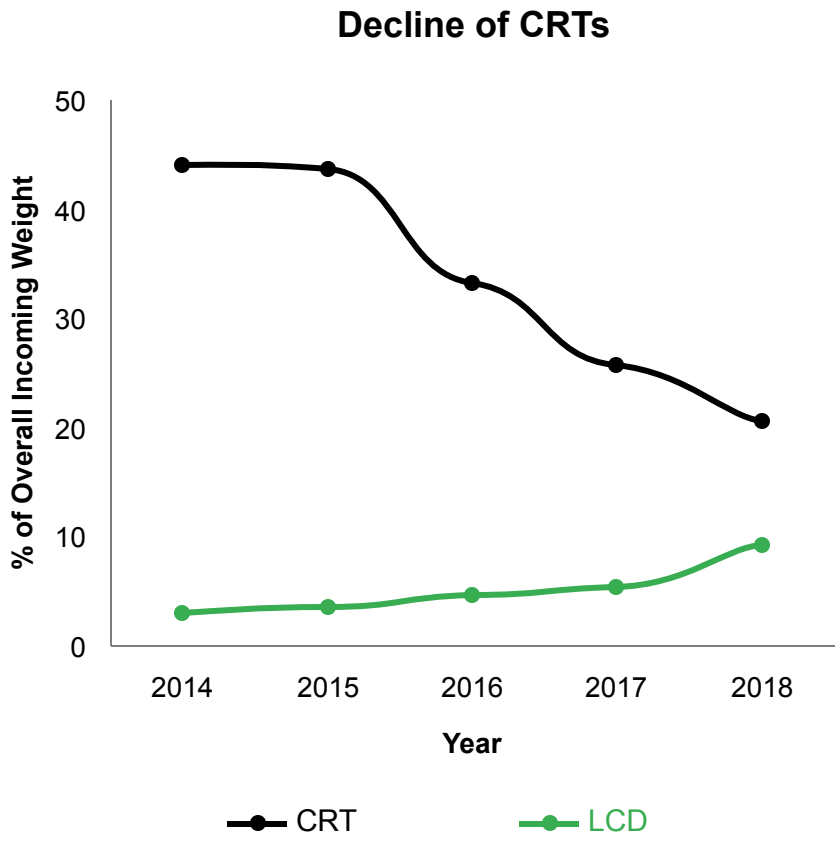
Cobalt is an integral part of rechargeable lithium ion batteries. With an increasing demand on rechargeable items and worldwide growth in the use of portable devices, Cobalt is in high demand. Cobalt is mainly mined in the Democratic Republic of Congo, where political instability and poor working standards are unfortunately very common. Therefore it is vital that lithium ion batteries are directed toward appropriate recycling facilities where material recovery is possible.

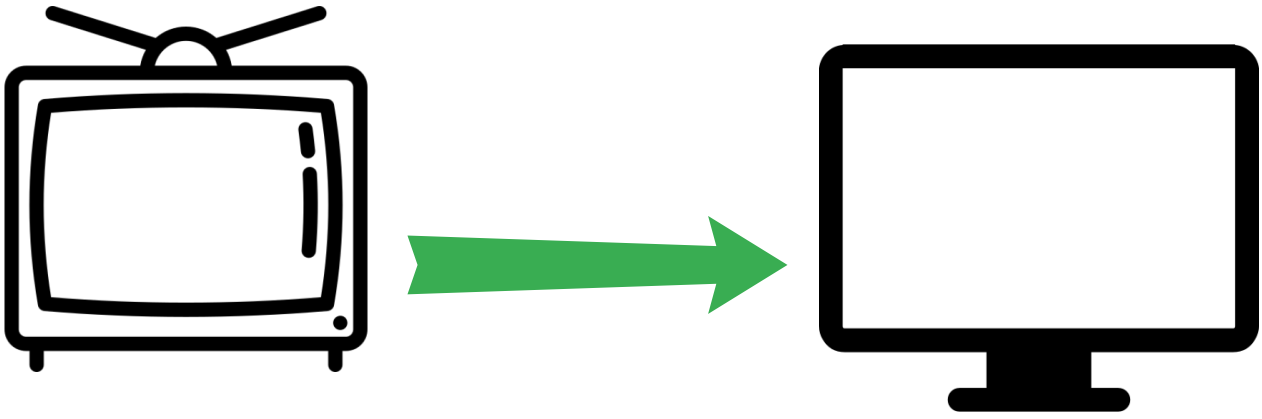
Greentec has an important role to play in ensuring that valuable resources are not wasted or thrown away when recovery of these materials can both add another input stream for manufacturing, and can alleviate the pressure on the extraction industry. Reducing extraction is important, especially in countries where the labour standards are much lower and workers are not as protected as they are in North America. Material recovery is about much more than preserving the environment. We recognize that for electronics, recovery starts here at the point of separation and this is why we are committed to doing a good job. The work we do here does impact lives elsewhere.

Adapting to Change

The decline of the CRT

Cathode-ray tube televisions (CRTs) have historically been a large percentage of the incoming weight at Greentec. CRTs were first manufactured for consumers in the 1930s, and were the main type of television available to consumers (along with rear projections) until the 2000s, when flat screen televisions became more widely available. Millions of CRT televisions have been recycled, and slowly but surely, the number of incoming CRTs is declining. LCD, plasma, and LED televisions are becoming a larger stream of electronics destined for recycling. Part of being a dynamic company is recognizing and reacting to these types of changes in the industry. Our efforts to provide a solution to these industry changes resulted in the installation of our BluBox (see page 21).





Our BluBox Technology

Mercury-Containing Lamps

One of the challenges with recycling flat screen televisions and monitors is that many of the devices manufactured before 2008 contain mercury vapour backlighting. This means that the televisions and monitors cannot simply be shredded using a conventional shredding process.

The BluBox shreds flat screen televisions, and also processes lightbulbs and captures mercury vapour to produce non-toxic outputs of plastics, glass, metals, and circuit board.

We are proud to be the only company in North America working with this technology and to be offering a solution for a stream of electronic waste that will, without a doubt, continue to grow in the coming years.

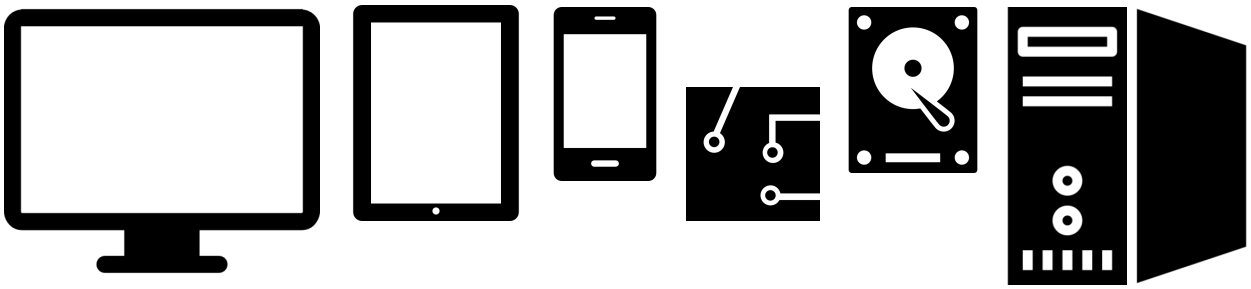
National Legislation

In 2017, the *National Strategy for Safe and Environmentally Sound Disposal of Lamps Containing Mercury Act* received royal assent. This law requires the national government to release guidelines and reports surrounding the management of mercury-containing lamps within the country. Environment and Climate Change Canada's *Management of Lamps Containing Mercury in Canada 2019* report states that availability and convenience of drop-off locations were listed as potential key factors determining whether mercury-containing lamps are disposed of properly. The BluBox enables Greentec to provide an outlet for individuals and businesses within our community to dispose of their lamps at a facility with the appropriate equipment for processing.

Data Security

As technology rapidly advances, data security is of the utmost importance. Identity theft, data breaches and data loss are only considered critical once it is too late.

Data security is a service we take very seriously. At Greentec, we use advanced technology to securely wipe or physically destroy data, hard drives and electronics to ensure customer safety. We also offer on premises destruction for hard drives and smaller hand held devices.



OUR GUARANTEE

Being transparent is extremely significant to us. As part of our commitment to transparency we offer chain-of-custody documentation. This service allows you to see our process from the moment we pick up your materials to the moment it arrives at our secure facility for refurbishment, destruction or recycling. Chain-of-custody safeguards against alteration, tampering and/or loss of materials.

From the moment a client's materials reach Greentec, we want them to know exactly how their data was handled. We offer a video of the data destruction process and a Certificate of Destruction as proof the materials are destroyed.

CERTIFICATIONS

Greentec holds numerous certifications (see page 11). By adhering to the strict standards and regulations required, we ensure that your data is protected at all times. We've worked hard to achieve the industry's most significant certifications. Our goal is to ensure that all our processes protect the environment and the safety of our clients' data and e-waste.

Our secure, state-of-the-art facility enables us to carry out safe and secure processes for wiping or physically destroying media and electronic devices. We are dedicated to secure data destruction to guarantee your protection.

Challenges, Improvements & Future Directions

Challenges

One of the biggest challenges currently faced by recyclers is the availability of viable markets for high-volume outputs like glass and plastics.

Some plastics used in electronics contain brominated flame retardants, making them non-recyclable. This reduces its value as a commodity, as the plastic must be sorted to remove the non-recyclables.

This is not a challenge that should be addressed at the point of recycling or disposal. Manufacturers and producers must put more effort into creating products that can be recycled.

Glass is another challenge. Glass is not a rare commodity and it is therefore difficult to find manufacturers that need glass supply. If there were an overall push from the government to reduce the use of plastics in packaging and elsewhere, glass would be in higher demand and more recycling loops could be closed (e.g. take-back programs, glass-to-glass, etc.). Greentec is always excited to learn of new opportunities for our processed materials and we are happiest when we know they are being put to good use. Greater communication between manufacturers using our types of commodities would help us to find the best end-uses for our materials.

Future Directions

- Continue to investigate ways that our processes can be optimized through the use of tehcnology
- Grow our IT asset disposition, secure destruction and refurb components of the business
- Investigate additional methods of community outreach and further our efforts in overall sustainability

GREENTEC GOALS

No Lost Time Accidents in 2019-2020

- Continue to uphold and improve the integrity of our health and safety training and monitor current trends

Grow secure disposition customer base by 8%

- Promote the availability of secure destruction services to a wider audience

Reduce percentage of waste output to 5%

- Investigate a recycling outlet for packaging materials that might be diverted from landfill

Glossary of Terms

NAME	DESCRIPTION
STEEL	Steel Shreddings, large pieces of steel, housings of electronics
GLASS	Primarily leaded and non-leaded glass from CRT displays
COPPER	Copper from heatsinks, cables, wiring and yokes from CRT displays
PLASTICS	Assorted plastics that are recycled or burned for energy
CIRCUIT BOARD AND OTHER PM TARGET GOODS	Assorted circuit boards, processors, fingerboards, server motherboards and small integrated circuits refined for copper, gold, platinum and palladium
REFURBISHED TECHNOLOGY	Assorted products refurbished for reuse or shipped for this reason
ALUMINUM	Heatsinks, housings and various components made of pure aluminum
BATTERIES AND BATTERY BACKUPS	Batteries of all makes and models, predominantly battery backup systems cells, or uninterruptible power supply (UPS) backup cells
MIXED METALS	Copper, aluminum, steel and tin metals mixed by fastener or welding and smelted as "mixed" materials
PRINTER CARTRIDGES	Various types of printer cartridges and ink tanks that are broken and unable to be reused are generally scrap plastic
OTHER	Assorted goods, either unlabeled or in very small quantities of specific materials (smoke detectors, single peripherals etc.)

Questions?

Have questions about this report?
Contact us at: compliance @greentec.com

This material references Disclosure 102-53 from GRI 102: General Disclosures