



## Solutions for a Sustainable Supply Chain



### Sustainable IT Accessories

A computer peripheral is any external device that provides input or output for a computer. While there's a lot of information on how to buy a sustainable laptop or monitor, there's little guidance available on making sure that smaller IT hardware items are environmentally sound. With the exception of headsets, there are no standards and certification yet available for small IT peripherals. Look for high quality, durable items from reputable brands with a take-back program and ensure products are shipped backed to the manufacturer at end of life.

#### IT Peripherals and Accessories

- Computer mice
- Keyboards
- Headsets and microphones
- Webcams
- Speakers
- External harddrives
- Cables, chargers and adapters
- Powerbars

#### The Challenge of Electronic Waste

Innovation in digital devices (i.e. computers, laptops, tablets and phones) has driven product development very quickly. This has resulted in amazing new technology, along with many obsolete products that should not be in the landfill!

Electronics carry heavy metals like mercury, lead, lithium, and other hazardous materials that can pollute the air when incinerated or contaminate the ecosystem if thrown into the garbage. Mining of these metals has a major impact on the environmental as well.

Recycling electronics is essential, but it's very important to choose a reputable electronics recycling program to ensure that recycled product is ethically handled.

#### E-waste: a global problem

The majority of electronic products end up in landfills and just 12.5% of e-waste is recycled.

Currently, 50%–80% of e-waste that recyclers collect is exported overseas, including illegally exported e-scrap, which is of particular concern.

[Source](#)

Over the past decade, many used electronics have been sent to developing countries and/or have ended up being processed in prison or by slave or child labor operations. Many of these operations lack adequate environmental controls, posing serious health hazards for workers. Responsible recyclers send materials to certified facilities and minimize toxic exposure to employees—look for [E-Steward certification](#), which was established to stop the export of illegal hazardous e-waste to developing nations, in accordance with the [Basel Convention](#) (there is currently only one certified recycler listed in Canada: [Global Ewaste Solutions Ltd.](#)).

Industry standards have been created for electronic product design, repair and end-of-life management. As of yet, certification is only available for one type of small peripheral: headsets. In the years to come, there will likely be a greater number of small peripherals certified.



[TCO standards](#) now certify headsets. TCO is a global sustainability certification for IT products with comprehensive criteria on social and environmental responsibility

throughout the product life cycle. Compliance is independently verified, both pre and post certification.

### Look for Products from Reputable Brands


There are many, many manufacturers of small computer peripherals and accessories offering lower price but often lower quality and less responsible alternatives. Consider buying your accessories from reputable brands that have made corporate commitments to:

- Designing durable and high quality products
- Designing products so that they are easily repairable, reusable and recyclable
- Providing information on the repair of products and/or offering programs to authorize companies to repair and refurbish them
- Offering free and convenient take-back and recycling programs for consumers.

A list of manufacturer take back programs is maintained online at:

<http://www.electronicstakeback.com/how-to-recycle-electronics/manufacture-takeback-programs/>

See below for an overview of repair and take-back options for peripherals and larger devices offered by some reputable brands:

Brand	Overview of Repair and Take-back Options
	<p>Apple has a broad network of certified repair locations in Canada and a <a href="#">trade in program</a> by mail or store drop-off. All Apple products are eligible for recycling, and some larger devices are also eligible for credit.</p>





### Social & Environmental Benefits of Electronics Recycling

Electronics are full of valuable materials such as copper, tin, iron, aluminum, fossil fuels, titanium, gold, and silver.

Apple reported recovery of 2,204 pounds of gold —worth \$40 million—from recycled iPhones, Macs, and iPads in 2015 ([Source](#)).

In fact, many of these materials—as well as plastics, metals, and glass—can be recovered.

Recycling saves natural resources and energy, reduces pollution, conserves landfill space, and creates jobs.

Brand	Overview of Repair and Take-back Options
	<p>Dell offers a <a href="#">phone service</a> to handle repair inquiries. Dell takes back anything with Dell's name on it for free through its mailback program, with free shipping. In the USA, Dell also offers collection sites through its Dell Reconnect program, a partnership with Goodwill. The program creates employment opportunities and offers consumers a tax receipt for donated items. In Canada, Dell has partnered with Purolater to provide an <a href="#">At-Home Pickup program</a> for free in most areas.</p>
	<p>HP maintains an <a href="#">online directory</a> of service center locations in Canada. HP offers a take-back program for specific devices, which include keyboard, mouse, remote-control and audio speakers. The web interface for recycling is not as easy to use as other manufacturers. HP offers consumers a free recycling service for any brand of computer equipment, for up to five items per household. Customers are responsible for shipping their products to HP return locations and must package products themselves and pay the shipping costs.</p>
	<p>Samsung is striving to extend the lifespan of products by providing quick product diagnostics and fixes by repair experts at authorized Care Repair Centers to provide more accurate and faster diagnostics and repair services. They maintain a <a href="#">web platform</a> to enable consumers to find a Repair Centre in their area. Samsung works exclusively with recyclers certified to the e-Stewards standard. In Canada, Samsung asks consumers to return Samsung products to general electronics recycling facilities. In the USA, the company offers a <a href="#">mail-in take back program</a>.</p>
	<p>LeNovo maintains an <a href="#">online directory</a> of service center locations in Canada. Lenovo participates in the <a href="#">Call2Recycle</a> program in Canada. In BC, Lenovo has a fee-based recycling service for LeNovo branded products and information is available on request by emailing <a href="mailto:environment@lenovo.com">environment@lenovo.com</a>.</p>

## Recycle your E-waste in 3 easy steps:

1. Destroy your private data (where applicable)
2. Donate working items for reuse if applicable
3. Take items to TRU's two metal electronic recycling boxes in front of the Bookstore and in Student Street. For larger electronics, email a work order and [form](#) to [facilities@tru.ca](mailto:facilities@tru.ca) and Facilities will arrange for pick up.

If you are off campus, look for electronics recycling bins at Best Buy, London Drugs or Staples, or search for the closest electronics recycling depot in your area on the [Recycle my Electronics](#) website.

