

## Electronic Waste (E-waste) Recycling Services

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### *Did you know?*

*Electronic Products Recycling Association of Manitoba provides a stewardship program for commercial and residential end-of-life (EOL) electrical and electronic equipment in the province of Manitoba?*

### Minimum Sustainable Recommendations

To manage end-of-life electronics regulated under the Electrical and Electronic Equipment Stewardship Regulation, use the services provided by EPRA Manitoba. <http://www.recyclemyelectronics.ca/>

To manage electronics not regulated under provincial legislation (no electronic handling fee paid at time of purchase), request the following:

- The vendor that accepts end-of-life electronics for recycling must:
  - Be in compliance with all applicable legislation and permitted to accept and process e-waste and conform with the requirements set out by the Basel Convention.
  - "Guarantee" 100% proper and safe electronic waste recycling.
  - Certify equipment destruction.
  - Provide a summary report outlining the total weight of the electronics sent for recycling and the weight of the resources collected from the equipment.
  - Provide the name and address of companies that receive the resources extracted from the e-waste.

### What are the issues?

Electronics, such as computers, TVs and surveillance equipment consist of a number of valuable resources such as gold, steel and nickel, as well as oil (plastics) and glass. These materials require vast amounts of energy and water to mine and manufacture. Electronics also contain toxic materials such as fire retardants and heavy metals including lead, mercury, cadmium and chromium.

In the early 90's, companies began to recycle end-of-life electronics. Some of the electronics were sent to developing countries for "informal" processing. In some instances, workers were put at risk using dangerous recovery processes to extract valuable materials such as gold, steel, lead and mercury. Exposure to materials such as lead and mercury can cause damage to the brain, the nervous system and all functioning organs in both humans and wildlife.

Shipping e-waste to developing countries lead to significant social and environmental issues. In addition, when electronics are processed inappropriately, toxic materials found in electronics can leach into soil and groundwater.

Worldwide concern about the transboundary movement and disposal of hazardous wastes, including electronic waste, was first heightened in the late 1970s and early 1980s. As a result of these concerns an international treaty, known as the Basel Convention. This treaty was developed to reduce the movements of hazardous waste between nations, and specifically to prevent transfer of hazardous waste from developed to less developed countries. Canada ratified the Basel Treaty in 1992.

## What are the options?

Today, electronic waste recycling services are available throughout the developed world and is a rapidly growing business.

The Manitoba government has legislative requirements for electronic waste recycling, The Electrical and Electronic Equipment Stewardship Regulation within the Waste Reduction and Prevention Act. The Electronic Products Recycling Association of Manitoba (EPRA Manitoba) is authorized to operate the End-of-Life Electrical and Electronics Equipment Stewardship Program in the province. EPRA Manitoba provides safe collection and recycling of electronics and electrical equipment under the regulation for both residential and commercial entities.

The cost associated with recycling the regulated electronics (e.g. collection and processing) is funded through an Environmental Handling Fee (EHF) which is included in the purchase price of new electronic products. All residents and businesses in Manitoba can recycle these end-of-life electronics free of charge through EPRA Manitoba's programs. For more information, visit [www.recyclemyelectronics.ca/mb](http://www.recyclemyelectronics.ca/mb).

### Other things to consider

Sustainable delivery strategies are encouraged during the transportation of electronic waste including:

- Product delivery consolidations
- Efficient transportation logistics
- Proper route planning
- No idling of vehicles during product delivery
- Use of fuel efficient delivery vehicles

### References

Electronic Products Recycling Association Manitoba (2013). <http://recyclemyelectronics.ca/mb>

