

The 2010 Statistics for the International Movements of Hazardous Waste and Hazardous Recyclable Material

Waste Reduction and Management Division Environment Canada



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General Information

In Canada, the management of hazardous waste and hazardous recyclable material is a shared responsibility between all levels of government. The Government of Canada is responsible for regulating the international movements of hazardous waste and hazardous recyclable material.

International agreements play a key role in responding to environmental issues in Canada and abroad. Canada is party to three international agreements on the transboundary movements of hazardous waste, which are the United Nations Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Organisation for Economic Co-operation and Development (OECD) Decision of Council on the Control of Transfrontier Movements of Wastes Destined for Recovery Operations, and the Canada–US Agreement Concerning the Transboundary Movement of Hazardous Waste.

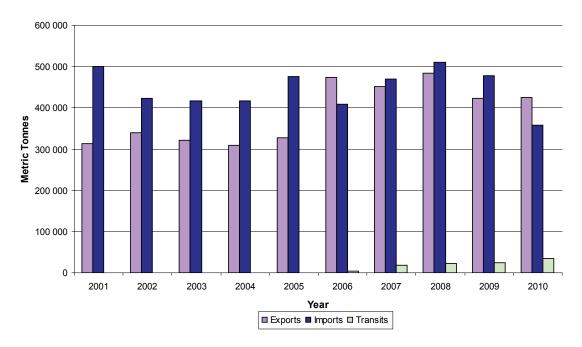
In order to implement the terms of these international agreements, Canada relies on regulations made under the authority of the *Canadian Environmental Protection Act, 1999.* In 1992, regulations were introduced to control and track movements of hazardous waste. In 2005, Canada improved and reinforced its former control regime by adopting the *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations* (EIHWHRMR).

The EIHWHRMR regulate international movements of hazardous waste and hazardous recyclable material out of, into, and through Canada. The statistics presented below show the status of imports, exports and transits for the year 2010. They also present information on the type of operation to be conducted on the hazardous waste or hazardous recyclable material following the import, export or transit. The disposal and recycling operations described in this document are listed in Schedules 1 and 2 of the EIHWHRMR.

The 2010 Statistics on the International Movements of Hazardous Waste and Hazardous Recyclable Material

In 2010, the total quantity of hazardous waste and hazardous recyclable material imported into Canada decreased while the material exported from Canada increased slightly from the previous year (Figure 1). The total quantity of hazardous waste and hazardous recyclable material transiting through Canada has been increasing since 2006 (Figure 1), likely due to compliance promotion activities since the coming into force of the EIHWHRMR in 2005.

Figure 1
Exports, Imports and Transits of Hazardous Waste and Hazardous Recyclable Material 2001–2010



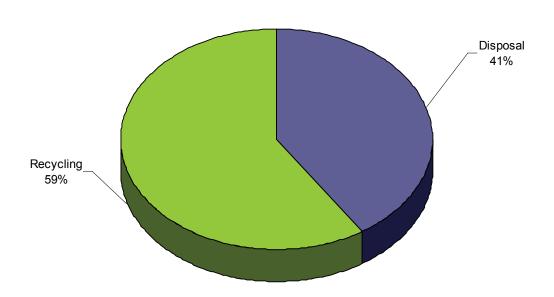
1. Imports

The total imported quantity of hazardous waste and hazardous recyclable material decreased by 25%, from approximately 477 088 metric tonnes in 2009 to 358 007 metric tonnes in 2010 (Figure 1). Of the total imported quantity, 59% was hazardous recyclable material destined for recycling, while the remaining 41% was hazardous waste destined for disposal (Figure 2).

Figure 2

Type of Operation for 2010 Canadian Imports of Hazardous Waste and

Hazardous Recyclable Material



More than 99% of the imported quantity of hazardous waste and hazardous recyclable material came from the United States. The remaining imports came from countries such as New Zealand, Great Britain and Germany, which were mostly hazardous recyclable material destined for metal recovery operations.

Spent or used lead acid batteries, lubricating oils, and metal and mineral wastes made up the majority of the hazardous recyclable material imported in 2010. Other types of hazardous waste and hazardous recyclable material imported in 2010 include corrosive liquids and organic solvents.

The majority of imports of hazardous waste destined for disposal either underwent physical or chemical treatment (38%), were incinerated on land (28%), or were sent to specially engineered landfills (24%) (Figure 3). As for the hazardous recyclable materials imported in 2010, the majority was destined for recovery of metals and metal compounds (61%) and re-refining or reuse of used oil (24%) (Figure 4).

Figure 3 2010 Canadian Imports of Hazardous Waste by Disposal Operation

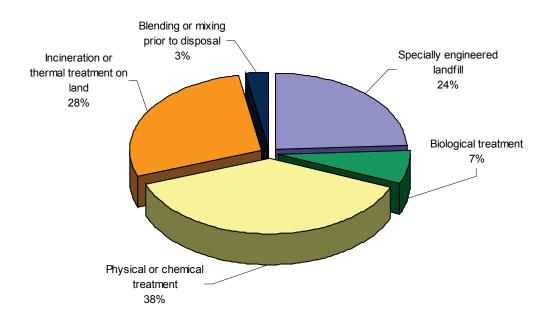
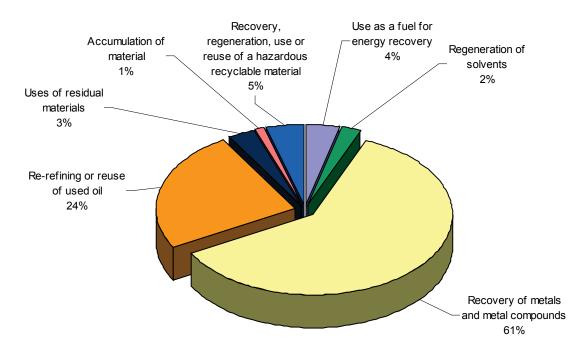
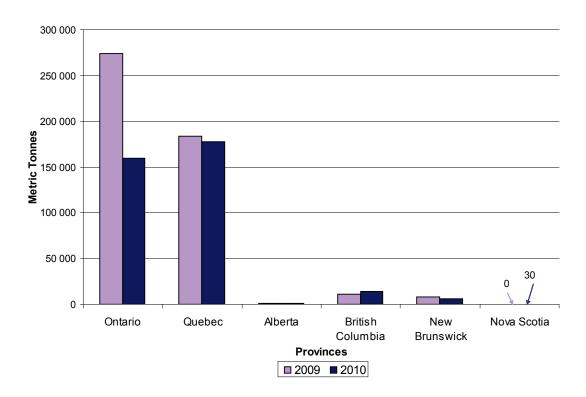


Figure 4
2010 Canadian Imports of Hazardous Recyclable Material by Recycling
Operation



In 2010, imports of hazardous waste and hazardous recyclable material were destined to six Canadian provinces, with Ontario and Quebec receiving nearly 95% of all imports into Canada. The other four provinces that received imports of hazardous waste and hazardous recyclable material were Alberta, British Columbia, New Brunswick and Nova Scotia. No imports of hazardous waste or hazardous recyclable material were made into any of the territories or other provinces (Figure 5).

Figure 5
Comparison of 2009/2010 Canadian Imports of Hazardous Waste and Hazardous Recyclable Material by Province

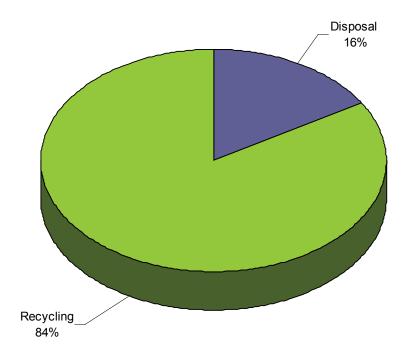


2. Exports

The quantity of hazardous waste and hazardous recyclable material exported increased by 0.5%, from 423 254 tonnes in 2009 to 425 379 tonnes in 2010 (Figure 1). Approximately 96% of all exports of hazardous waste and hazardous recyclable materials were destined to the United States. The bulk of these shipments were managed by facilities in the northeastern and central United States. Of the total quantity exported in 2010, 84% was destined for recycling while the remaining 16% was destined for disposal (Figure 6). In 2010, exports destined for recycling increased 9% from 2009, while those destined for disposal decreased by 9%.

Figure 6

Type of Operation for 2010 Canadian Exports of Hazardous Waste and Hazardous Recyclable Material



Spent sulfuric acid, metal and mineral wastes, and wastes from wood preserving chemicals made up the majority of the exports in 2010. Other types of hazardous waste and hazardous recyclable material exports included used oil and its byproducts, as well as spent or used lead acid batteries.

The majority of exports of hazardous waste destined for disposal underwent physical or chemical treatment (62%) or blending or mixing prior to their final disposal (15%) (Figure 7). As for the hazardous recyclable materials exported in 2010, the majority was sent in order to regenerate acids or bases (37%), to be used as fuel in an energy recovery system (25%), or to recover metals and metal compounds (24%) (Figure 8).

Figure 7
2010 Canadian Exports of Hazardous Waste by Disposal Operation

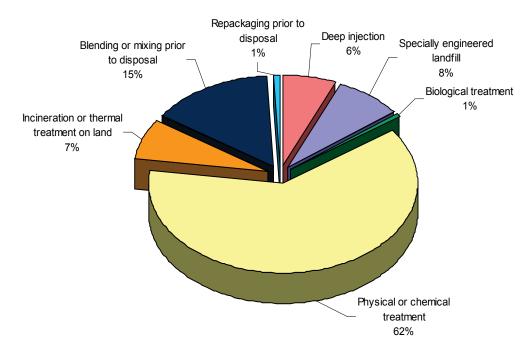
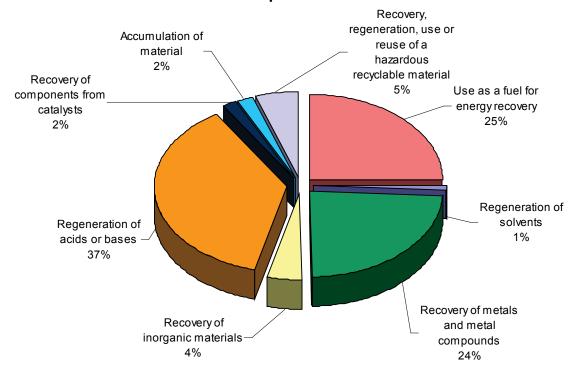
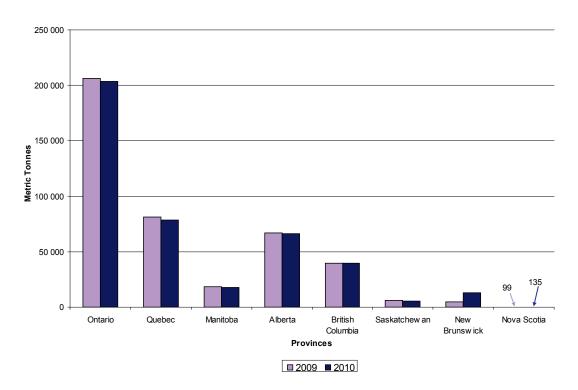


Figure 8
2010 Canadian Exports of Hazardous Recyclable Material by Recycling
Operation



In 2010, exports of hazardous waste and hazardous recyclable material originated from eight provinces, with Ontario and Quebec accounting for 66% of the total quantity (Figure 9). The quantity of hazardous waste and hazardous recyclable material exported remained relatively the same from the previous year for each province. Newfoundland and Labrador, Prince Edward Island and the three territories did not export any hazardous waste or hazardous recyclable material.

Figure 9
Comparison of 2009/2010 Canadian Exports of Hazardous Waste and Hazardous Recyclable Material by Province



3. Transits

In 2010, the quantity of hazardous waste and hazardous recyclable material that transited through Canada was 33 701 metric tonnes. Of this quantity, more than 99% (33 692 metric tonnes) was destined for disposal, and 0.03% (8.5 metric tonnes) destined for recycling (Figure 10). The majority of the transits of hazardous waste that was conveyed in transit through Canada was corrosive liquids destined for disposal by incineration on land (Figure 11). The majority of hazardous recyclable material that was conveyed in transit through Canada was destined to be used as fuel in an energy recovery system (Figure 12). Most transits through Canada were shipments between U.S. states.

Figure 10

Type of Operation for 2010 Transits of Hazardous Waste and Hazardous Recyclable Material

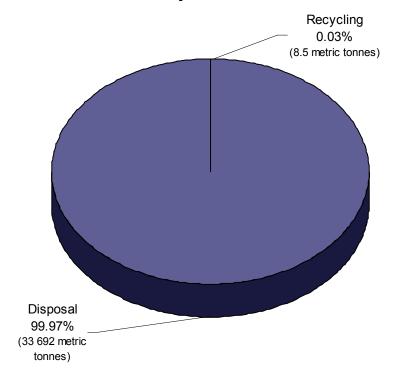


Figure 11 2010 Transits of Hazardous Waste by Disposal Operation

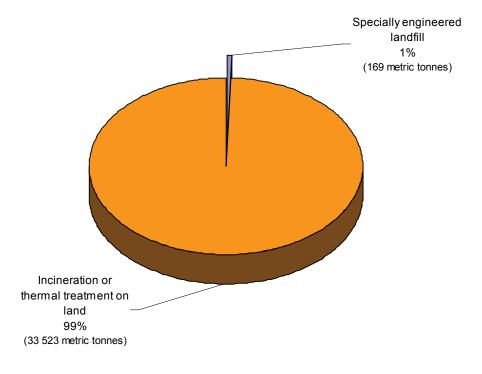
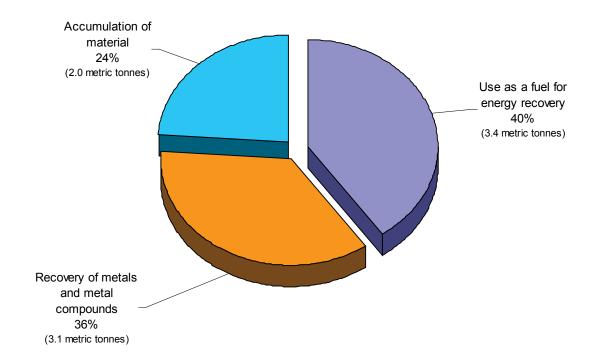


Figure 12 2010 Transits of Hazardous Recyclable Material by Recycling Operation



For more information, please visit Environment Canada's Pollution and Waste website at www.ec.gc.ca/gdd-mw or contact:

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