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# **The 2007 Statistics on the International Movements of Hazardous Waste and Hazardous Recyclable Material**

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Waste Reduction and Management Division  
Environment Canada

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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. Implementing the terms of these agreements demonstrates the intention to protect Canada's environment and the health of Canadians from risk posed by the unregulated traffic of hazardous waste and hazardous recyclable material. 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 Organization for Cooperation and Economic Development (OECD) *Decision of Council on the Control of Transfrontier Movements of Wastes Destined for Recovery Operations*, and the *Canada - USA Agreement on 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* (EIHWRMR).

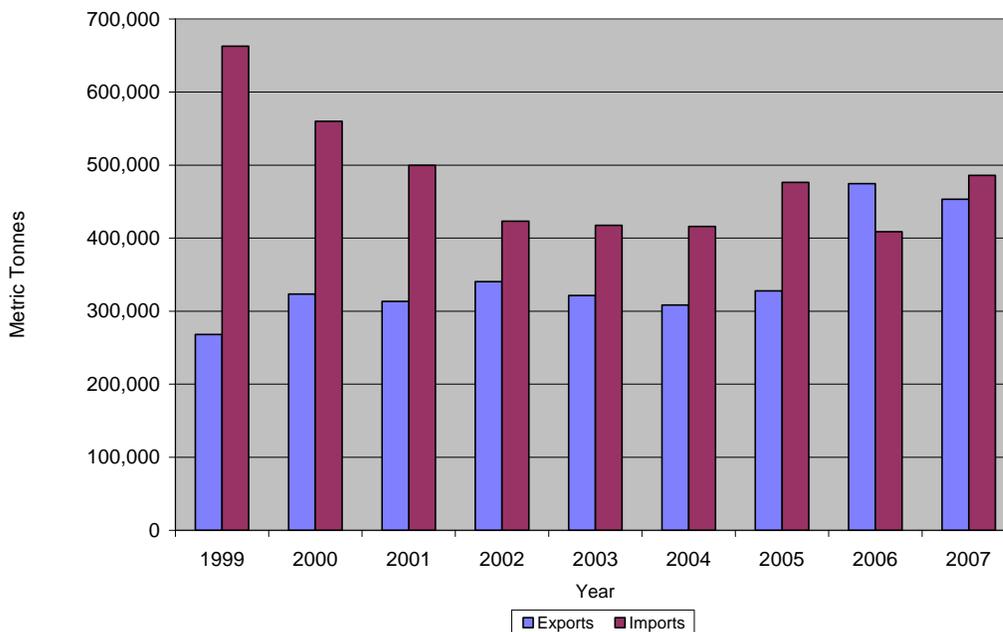
The EIHWRMR regulate international movements of hazardous waste and hazardous recyclable material out of, into, and through Canada. The statistics presented below show the status of imports, exports and transits for the year 2007. They also present information on the type of operation to be conducted on the hazardous waste or hazardous recyclable material following the import, export or transit. The disposal and recycling operations used in this document are listed in Schedules 1 and 2 of the EIHWRMR.

# The 2007 Statistics on the International Movements of Hazardous Waste and Hazardous Recyclable Material

In 2007, the total quantities of hazardous waste and hazardous recyclable material imported into Canada increased from the previous year, while the exports from Canada decreased (Figure 1).

Figure 1:

## Exports and Imports of Hazardous Waste and Hazardous Recyclable Material 1999-2007

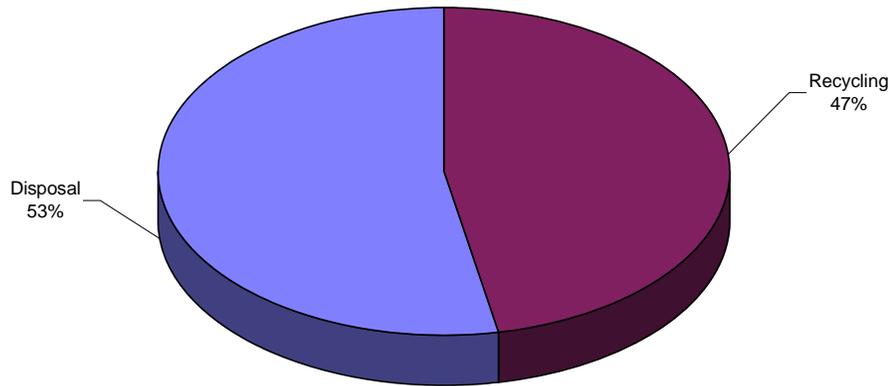


## 1. Imports

The total imported quantity of hazardous waste and hazardous recyclable material increased by almost 19%, from approximately 408,839 metric tonnes in 2006 to 485,923 metric tonnes in 2007 (Figure 1). Of the total imported quantity, 53% was hazardous waste imported destined for disposal, while the remaining 47% was hazardous recyclable material destined for recycling (Figure 2).

Figure 2:

### **Type of Operation for 2007 Canadian Imports of Hazardous Waste and Hazardous Recyclable Material**



More than 99% of the quantity imported of hazardous waste and hazardous recyclable material came from the United States. A significant fraction of the remaining imports came from Great Britain, France, Norway, Switzerland, and Denmark as hazardous recyclable material destined for metal recovery operations. Other Canadian imports were also received from non-European countries, such as Mexico and the United Arab Emirates.

Import shipments from other countries destined for recycling may contribute to reducing our reliance on primary resources and may benefit the Canadian industry. Spent or used lead acid batteries, hydraulic residues and wastewaters from manufacturing processes accounted for the majority of the imports in 2007. Other types of hazardous waste and hazardous recyclable material imported included waste liquors from metallurgical processes, tarry residues from the refining and treatment of organic material and wastewater treatment sludge from the production of creosote.

The majority of imports of hazardous waste destined for disposal were sent to specially engineered landfills (49%), underwent physical or chemical treatment (20%), or were incinerated on land (26%) (Figure 3). As for the hazardous recyclable material imported in 2007, the majority were destined to the recovery of metals and metal compounds (47%) or the refining or other uses for used oil (26%) (Figure 4).

Figure 3:

### 2007 Canadian Imports of Hazardous Waste by Disposal Operations

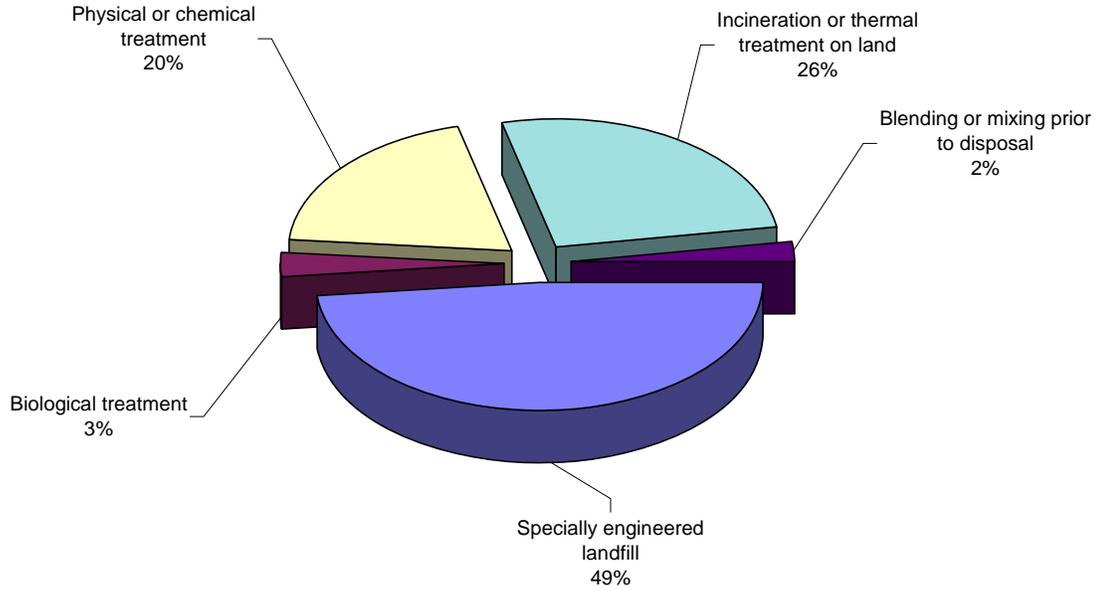
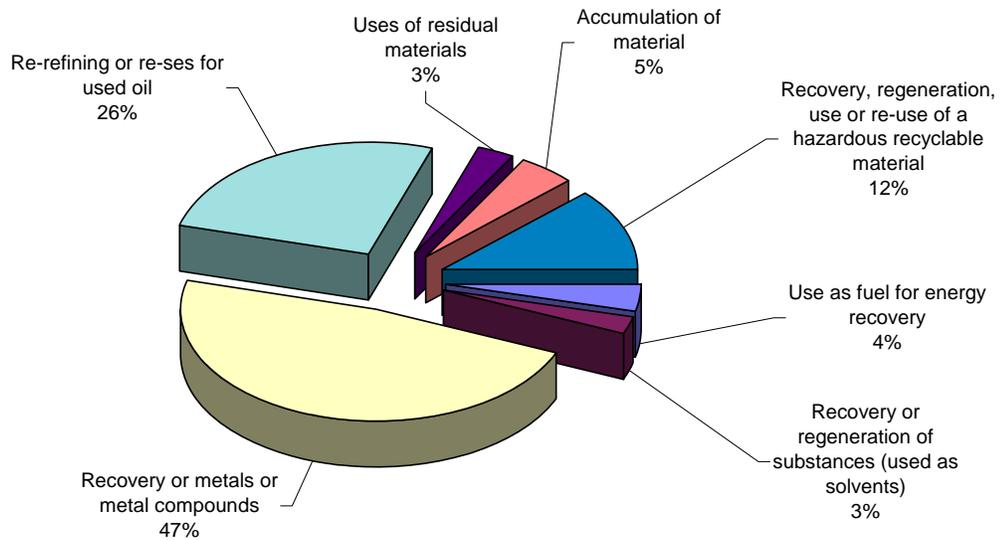


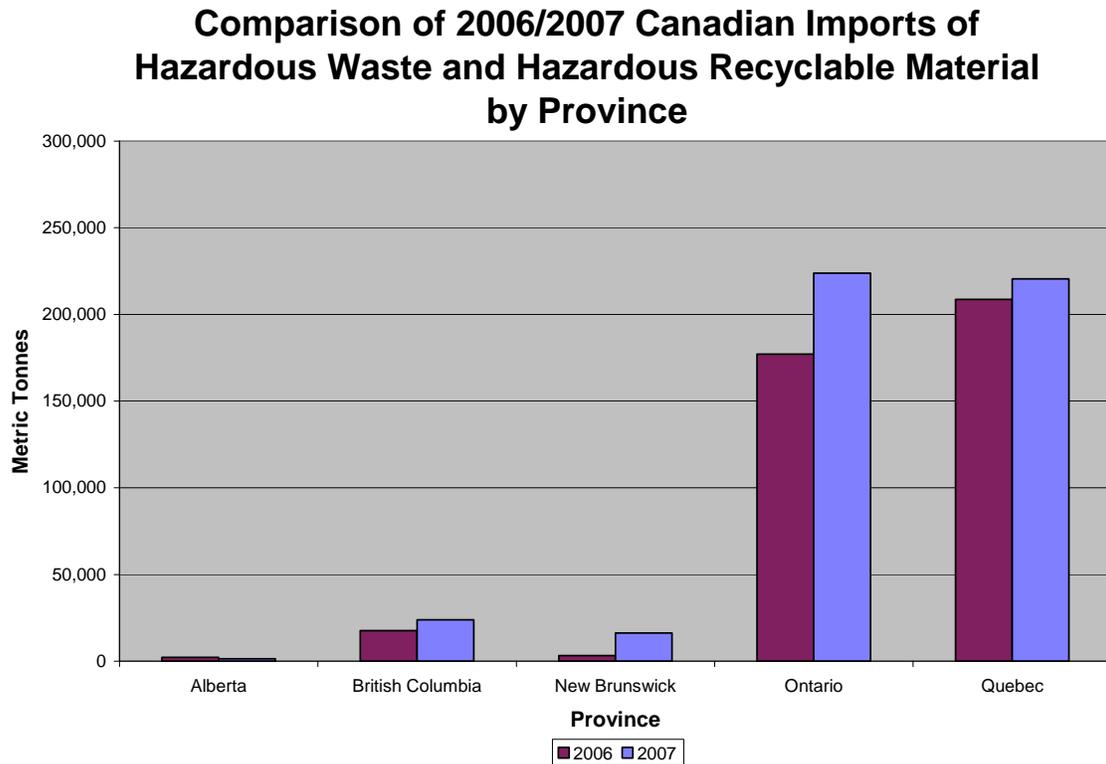
Figure 4:

### 2007 Canadian Imports of Hazardous Recyclable Material by Recycling Operations



In 2007, Canadians imports of hazardous waste and hazardous recyclable material were destined to five provinces, with Ontario and Quebec receiving 91% of the quantity imported into Canada. The other three provinces that received imports of hazardous waste and hazardous recyclable materials were Alberta, British Columbia and New Brunswick. No international imports of hazardous waste and hazardous recyclable material were made into any of the other provinces or the territories (Figure 5).

Figure 5:

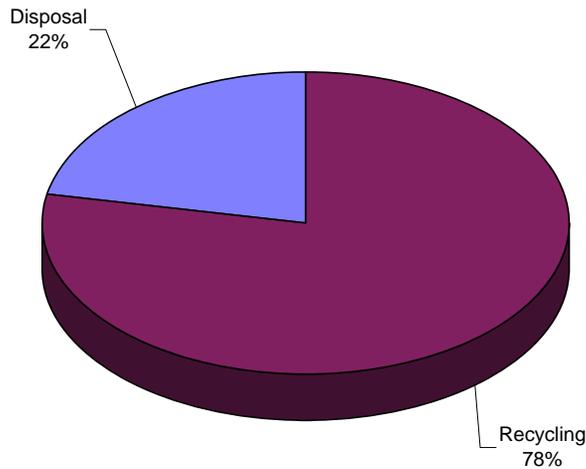


## 2. Exports

The quantity of hazardous waste and hazardous recyclable material exported from Canada decreased by almost 5%, from 474,538 tonnes in 2006 to 453,202 tonnes in 2007. Of the total quantity exported, 78% was hazardous recyclable material destined for recycling or recovery operations, while 22% was hazardous waste destined for disposal (Figure 6).

Figure 6:

**Type of Operation for 2007 Canadian Exports  
of Hazardous Waste and Hazardous  
Recyclable Material**



Spent or used lead acid batteries, metal and mineral waste, and acidic or basic corrosive liquids made up the majority of the exports in 2007. Other types of hazardous waste and hazardous recyclable material exported included used oil and its by-products, as well as organic solvents.

The majority of exports of hazardous waste destined for disposal underwent physical or chemical treatment at destination (70%) or were blended or mixed prior to their final disposal (12%) (Figure 7). The majority of hazardous recyclable material exported in 2007 were sent abroad in order to regenerate acids or bases (42%), to re-use as fuel (22%), or to recover metals and metal compounds (21%) (Figure 8).

Figure 7:

### 2007 Canadian Exports of Hazardous Waste by Disposal Operation

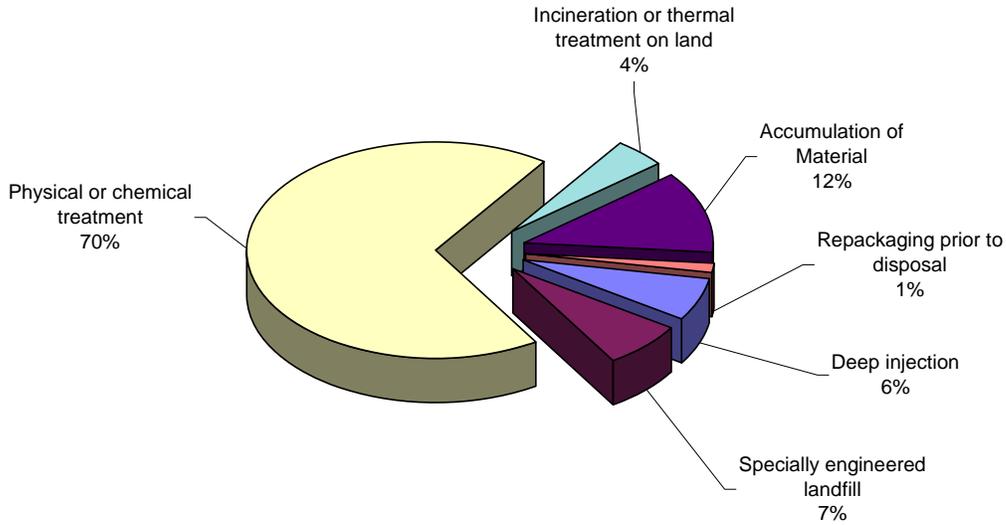
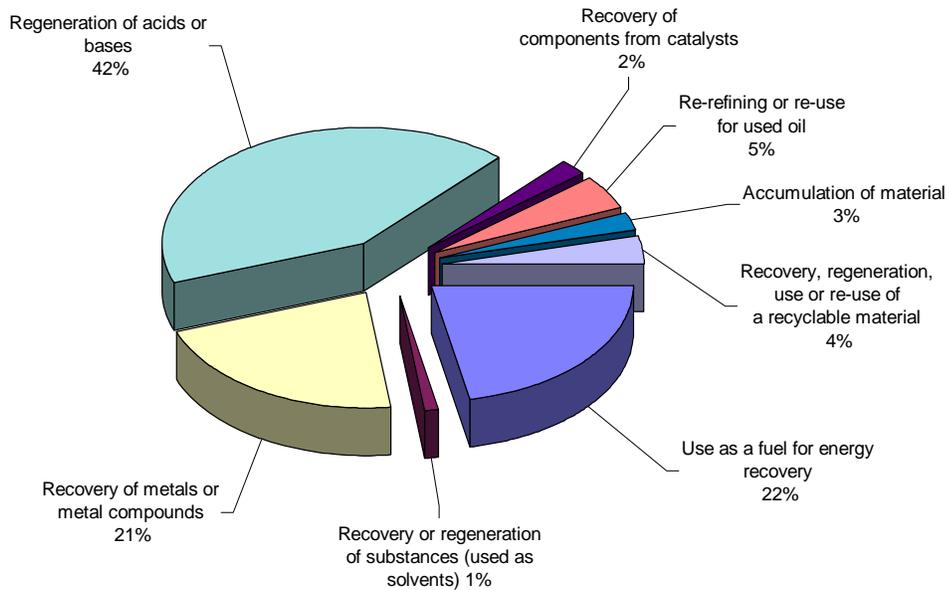


Figure 8:

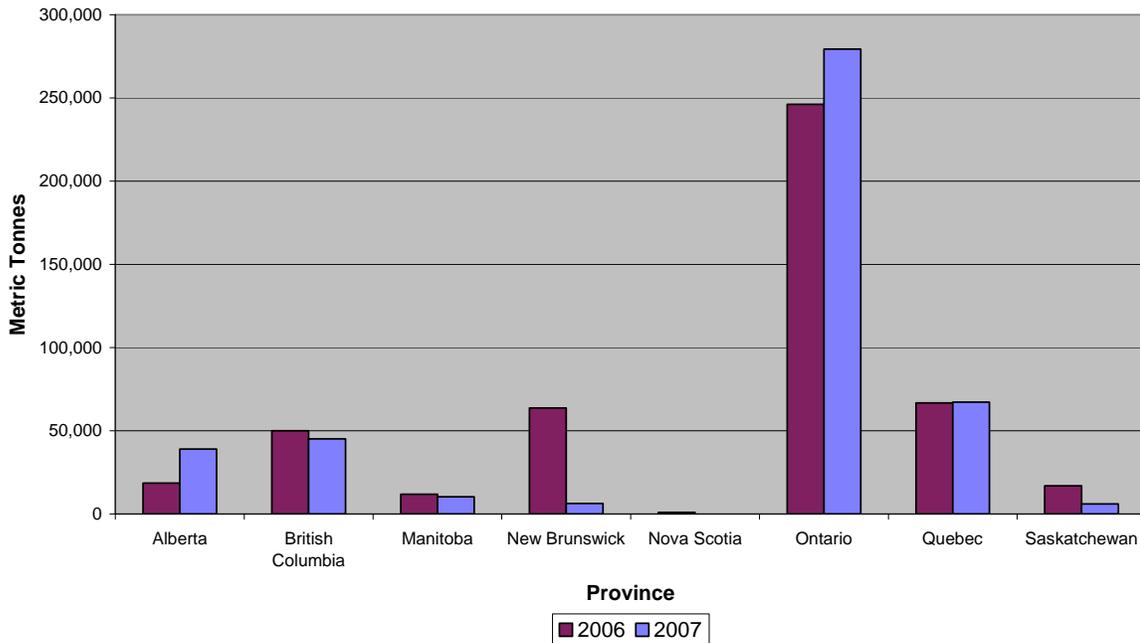
### 2007 Canadian Exports of Hazardous Recyclable Material by Recycling Operation



In 2007, exports of hazardous recyclable material and hazardous waste originated from eight provinces, with Ontario and Quebec accounting for 77% of the total quantity exported. Newfoundland, Prince Edward Island and the three territories did not export any hazardous waste or hazardous recyclable material at an international level (Figure 9).

Figure 9:

**Comparison of 2006/2007 Canadian Exports of Hazardous Waste and Hazardous Recyclable Material by Province**



### 3. Transits

In 2007, the quantity of hazardous waste and hazardous recyclable material that transited through Canada was 13,723 metric tonnes. Of the total quantity transited, over 99% was destined for disposal operations, while the remaining 0.26% was destined for recycling operations (Figure 10). The majority of the hazardous waste that was conveyed in transit through Canada was destined for disposal by incineration on land (Figure 11). The majority of the transits of hazardous recyclable material through Canada were destined to be re-used as fuel (Figure 12). Most transits though Canada occurred between US states that needed or wanted to travel through the country.

Figure 10:

**Type of Operation for 2007 Transits of Hazardous Waste and Hazardous Recyclable Material**

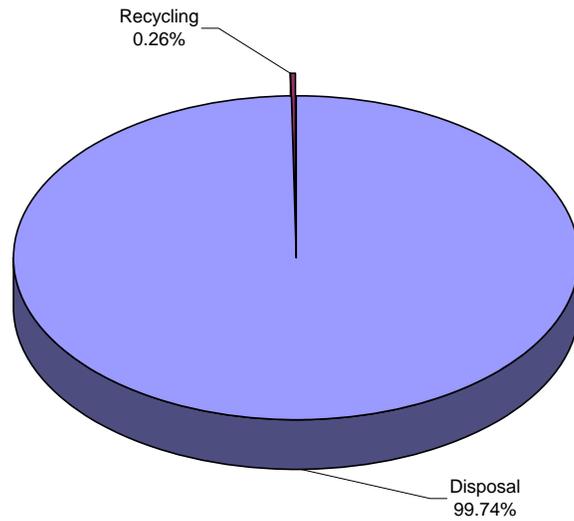


Figure 11:

**2007 Transits of Hazardous Waste by Disposal Operation**

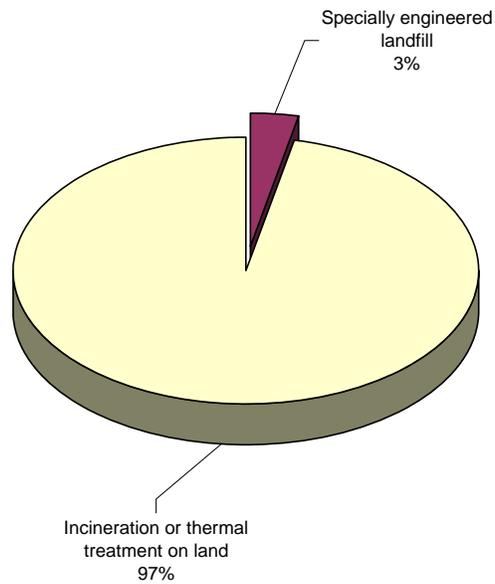
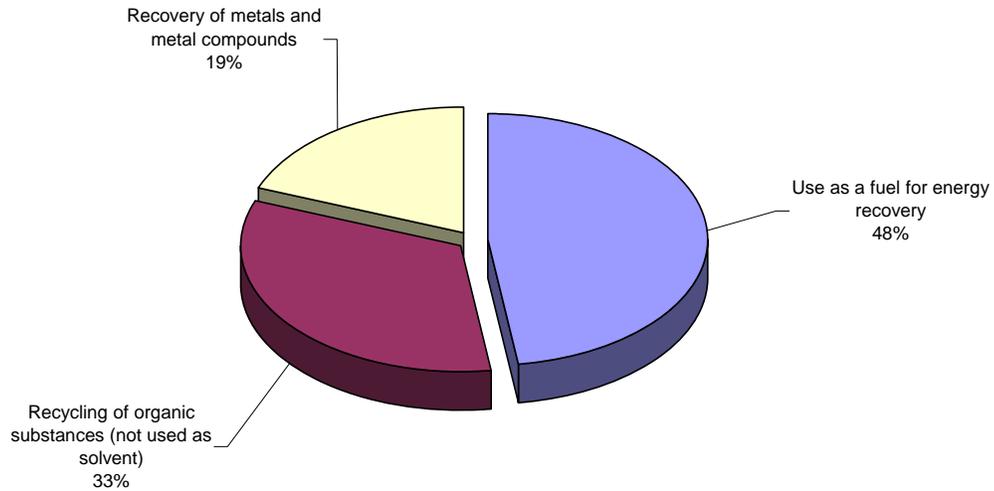


Figure 12:

### 2007 Transits of Hazardous Recyclable Material by Recycling Operation



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

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