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2012 Statistics on the International Movements of Hazardous Waste and Hazardous Recyclable Material

Waste Reduction and Management Division
Environment Canada

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Environment and Climate Change Canada
Public Inquiries Centre
7th Floor, Fontaine Building
200 Sacré-Coeur Boulevard
Gatineau QC K1A 0H3
Telephone: 819-997-2800
Toll Free: 1-800-668-6767 (in Canada only)
Email: ec.enviroinfo.ec@canada.ca

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Table of contents

GENERAL INFORMATION.....	1
2012 STATISTICS ON THE INTERNATIONAL MOVEMENTS OF HAZARDOUS WASTE AND HAZARDOUS RECYCLABLE MATERIAL.....	2
1. IMPORTS	2
2. EXPORTS.....	5
3. TRANSITS.....	9

Table of figures

FIGURE 1: EXPORTS, IMPORTS AND TRANSITS OF HAZARDOUS WASTE AND HAZARDOUS RECYCLABLE MATERIAL 2003–2012.....	2
FIGURE 2: TYPE OF OPERATION FOR 2012 CANADIAN IMPORTS OF HAZARDOUS WASTE AND HAZARDOUS RECYCLABLE MATERIAL	3
FIGURE 3: 2012 CANADIAN IMPORTS OF HAZARDOUS WASTE BY DISPOSAL OPERATION	4
FIGURE 4: 2012 CANADIAN IMPORTS OF HAZARDOUS RECYCLABLE MATERIAL BY RECYCLING OPERATION	4
FIGURE 5: COMPARISON OF 2011-2012 CANADIAN IMPORTS OF HAZARDOUS WASTE AND HAZARDOUS RECYCLABLE MATERIAL BY PROVINCE.....	5
FIGURE 6: TYPE OF OPERATION FOR 2012 CANADIAN EXPORTS OF HAZARDOUS WASTE AND HAZARDOUS RECYCLABLE MATERIAL	6
FIGURE 7: 2012 CANADIAN EXPORTS OF HAZARDOUS WASTE BY DISPOSAL OPERATION	7
FIGURE 8: 2012 CANADIAN EXPORTS OF HAZARDOUS RECYCLABLE MATERIAL BY RECYCLING OPERATION	8
FIGURE 9: COMPARISON OF 2011-2012 CANADIAN EXPORTS OF HAZARDOUS WASTE AND HAZARDOUS RECYCLABLE MATERIAL BY PROVINCE.....	9

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 Transboundary Movements of Wastes Destined for Recovery Operations, and the Canada–US Agreement Concerning the Transboundary Movement of Hazardous Waste.

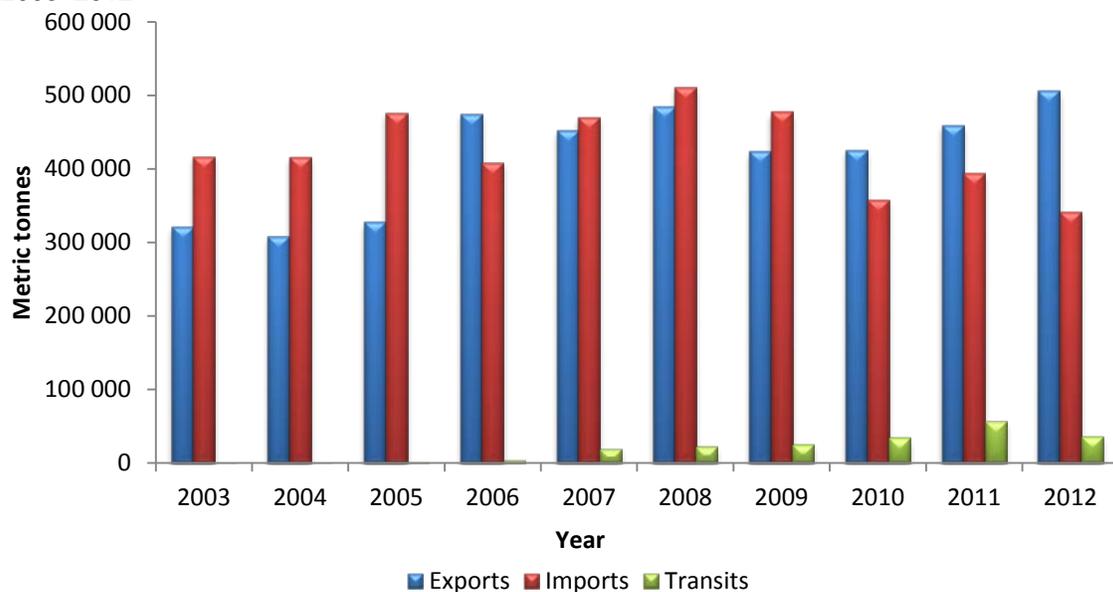
In order to implement the terms of these international agreements, Canada relies on regulations made under the authority of the *Canadian Environmental Protection Act, 1999*. In 1992, regulations were introduced to control and track movements of hazardous waste. In 2005, Canada improved and reinforced its former control regime by adopting the *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations* (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 2012. 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 EIHWRMR.

2012 Statistics on the International Movements of Hazardous Waste and Hazardous Recyclable Material

The total quantity of hazardous waste and hazardous recyclable material exported from Canada has been increasing since 2009 (Figure 1). In general, imports of hazardous waste and hazardous recyclable material have been decreasing since 2008. The total quantity of hazardous waste and hazardous recyclable material transiting through Canada decreased for the first time since 2006.

Figure 1: Exports, Imports and Transits of Hazardous Waste and Hazardous Recyclable Material 2003–2012

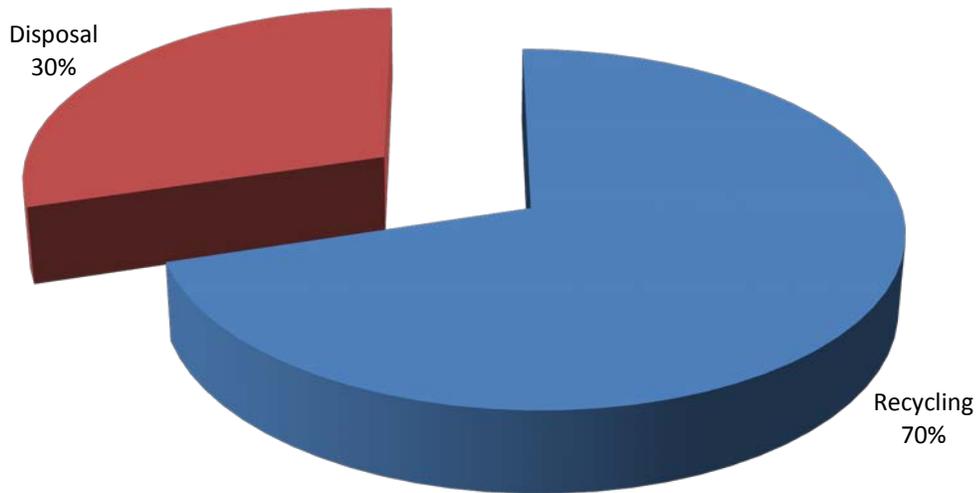


1. Imports

The total imported quantity of hazardous waste and hazardous recyclable material decreased by 13%, from approximately 394 000 metric tonnes in 2011 to 342 000 metric tonnes in 2012 (Figure 1). In 2012, the quantity of hazardous material destined for recycling was relatively stable compared to 2011, while the quantity of hazardous waste intended for disposal decreased by 33% from 2011 to 2012.

Of the total quantity of hazardous waste and hazardous recyclable material imported in 2012, 70% was hazardous material destined for recycling and 30% was hazardous waste destined for disposal (Figure 2). In 2011, the proportions were 62% and 38% respectively.

Figure 2: Type of Operation for 2012 Canadian Imports of Hazardous Waste and Hazardous Recyclable Material

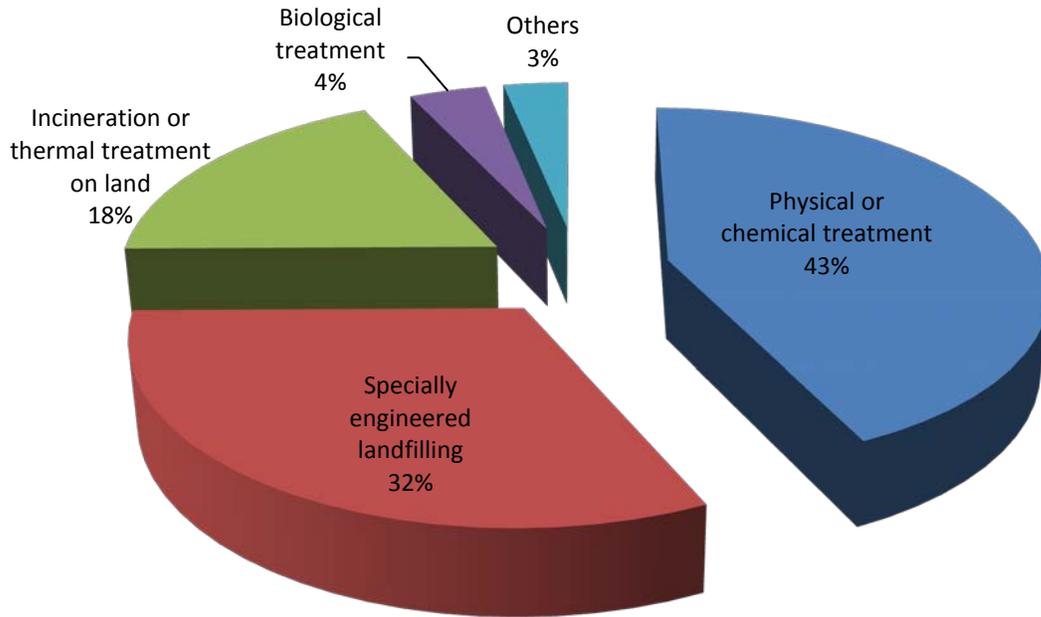


As in 2011, more than 99% of the imported quantity of hazardous waste and hazardous recyclable material originated from the United States. The majority of the remaining imports came from Nigeria, Russia and United Kingdom.

The hazardous waste imported for disposal in 2012 included: halogenated organic solvents, non-halogenated organic solvents, hexavalent chromium compounds and lead and its compounds. The hazardous recyclable material imported for recycling included: lead batteries, hydraulic fluids, waste liquor from the pickling of metals and non-halogenated organic solvents.

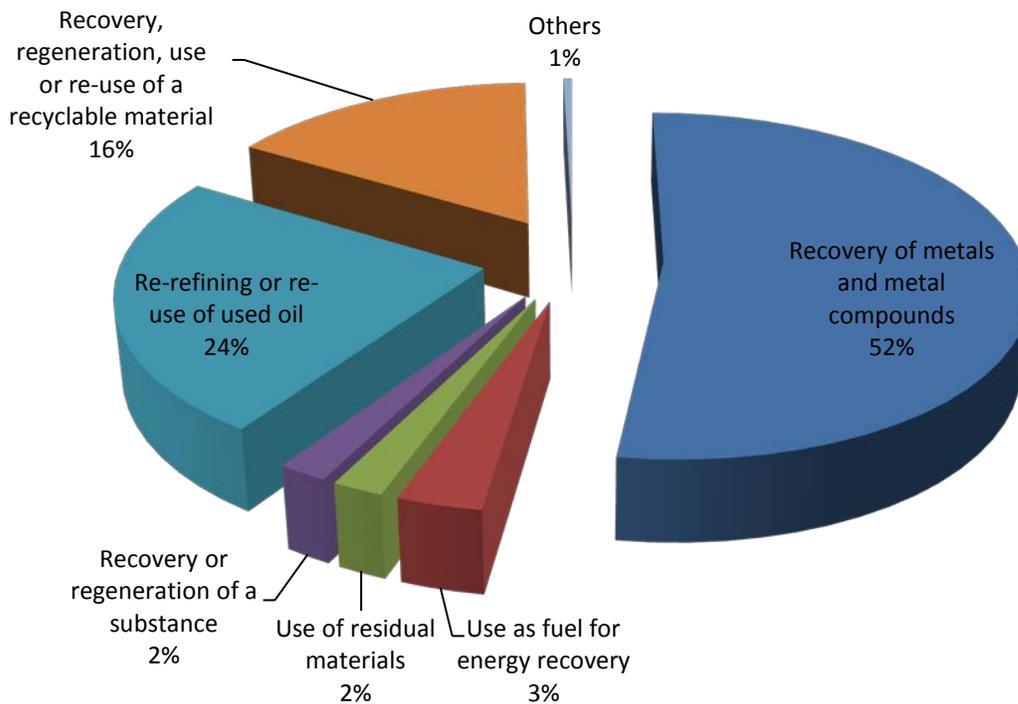
The hazardous waste imported for disposal either underwent physical or chemical treatment (43%), were incinerated or thermally treated (18%), were sent to specially engineered landfills (32%) or underwent biological treatment (4%) (Figure 3). The remaining 3% underwent interim operations such as interim storage or blending or mixing prior to disposal.

Figure 3: 2012 Canadian Imports of Hazardous Waste by Disposal Operation



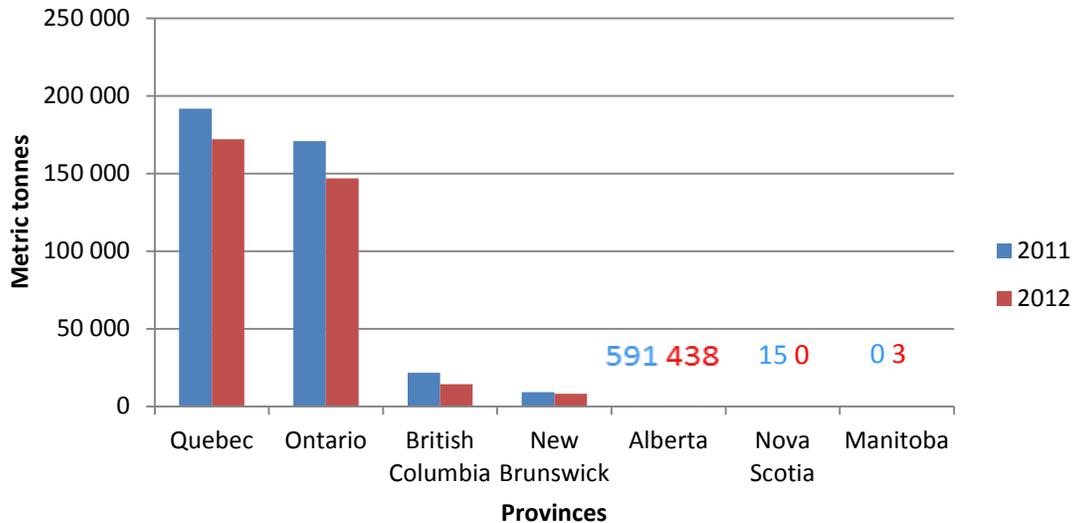
As for the hazardous recyclable material imported in 2012, the majority was destined for various recovery operations such as recovery of metals and metal compounds (52%), re-refining of used oil (24%) and recovery of a recyclable material (16%) (Figure 4).

Figure 4: 2012 Canadian Imports of Hazardous Recyclable Material by Recycling Operation



In 2012, imports of hazardous waste and hazardous recyclable material were destined to six Canadian provinces, with Quebec and Ontario receiving 93% of all imports into Canada. The other four provinces were British Columbia, New Brunswick and, to a lesser extent Alberta and Manitoba. No imports of hazardous waste or hazardous recyclable material were made into any of the territories or other provinces (Figure 5).

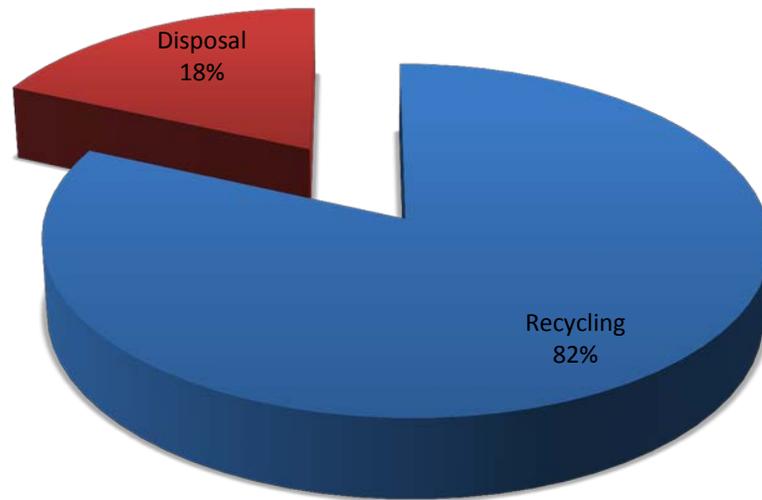
Figure 5: Comparison of 2011-2012 Canadian Imports of Hazardous Waste and Hazardous Recyclable Material by Province



2. Exports

In 2012, exports of hazardous waste and hazardous recyclable material increased by 10%, from approximately 460 000 metric tonnes in 2011 to approximately 506 000 metric tonnes (Figure 1). Of the total quantity exported in 2012, about 82% was destined for recycling and 18% was destined for disposal (Figure 6). In 2011, the proportions were similar with respectively 81% and 19%. In 2012, the quantity exported for recycling increased by 10% from 2011, while the quantity exported for disposal increased by 8%.

Figure 6: Type of Operation for 2012 Canadian Exports of Hazardous Waste and Hazardous Recyclable Material



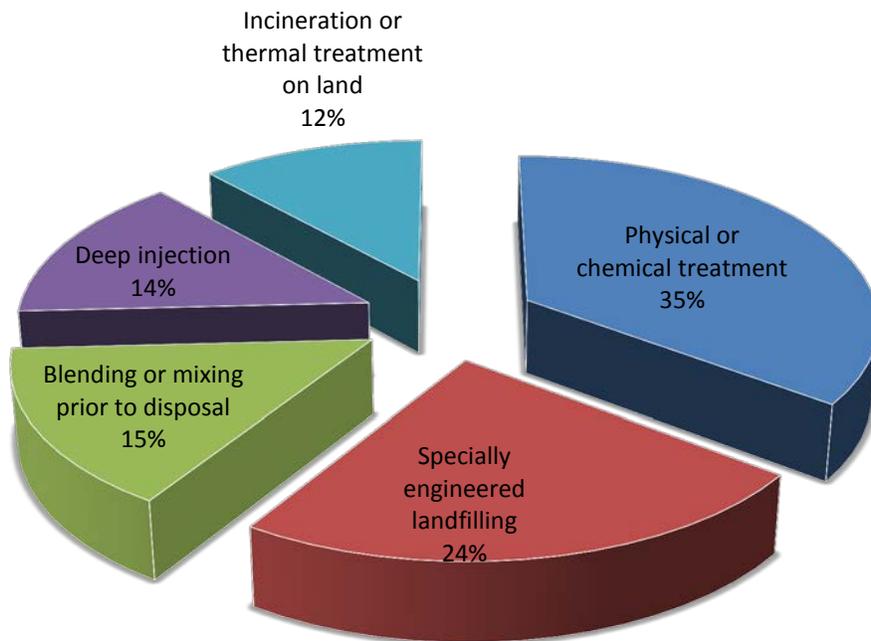
As in 2011, the majority of all exports of hazardous waste and hazardous recyclable materials, 98%, was destined to the United States. The remaining 2% was exported to Germany, Belgium and Republic of Korea.

Hazardous waste exported for disposal in 2012 included waste acidic or basic solutions, waste oil/water, waste from industrial pollution control devices and waste contaminated with inorganic cyanides.

Hazardous recyclable materials exported in 2012 included waste acidic or basic solutions, materials from the manufacture, formulation and use of wood preserving chemicals, and lead-acid batteries.

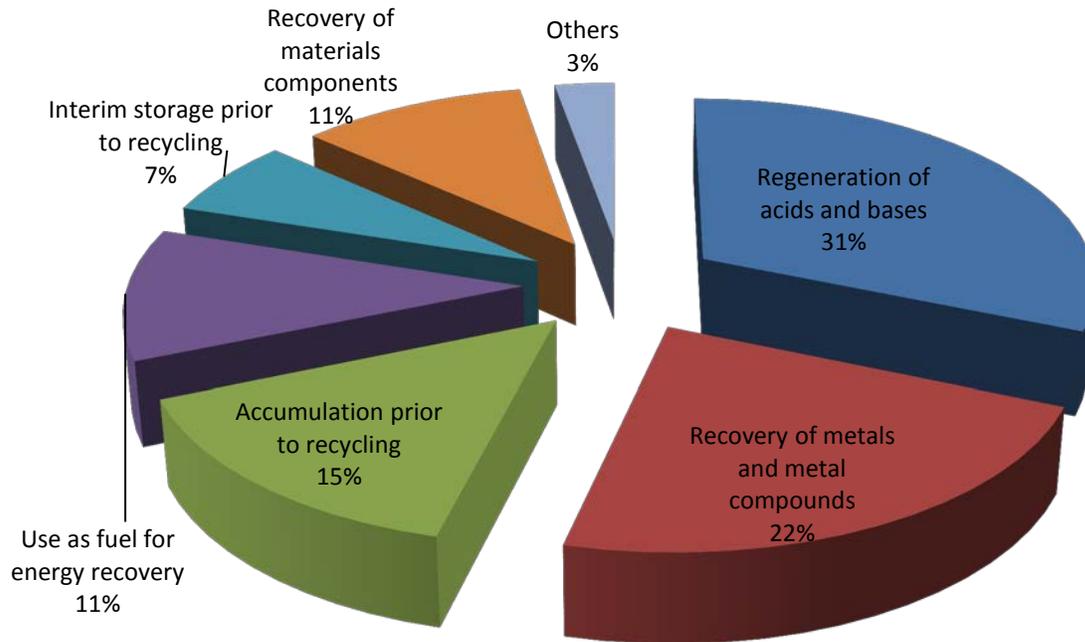
The majority of exports of hazardous waste destined for disposal underwent physical or chemical treatment (35%), were disposed of in specially engineered landfill (24%), were permanently injected in soil (14%), were incinerated or followed a thermal treatment (12%), or were mixed or blended prior to their final disposal (15%) (Figure 7). In this case, the final disposal was typically incineration or physical or chemical treatment.

Figure 7: 2012 Canadian Exports of Hazardous Waste by Disposal Operation



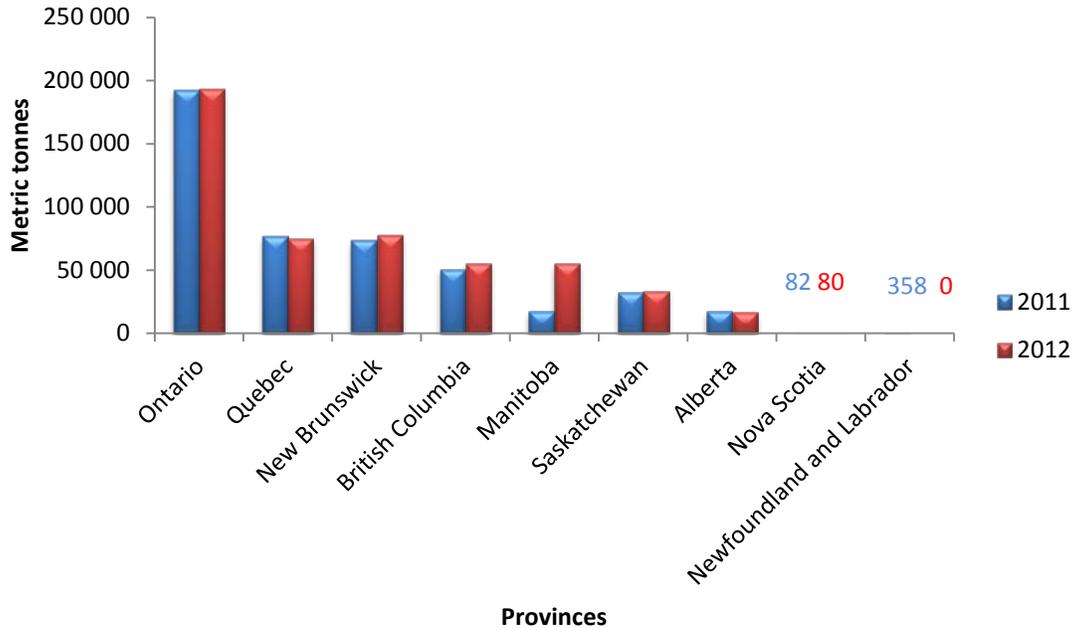
As for the hazardous recyclable materials exported in 2012, the majority was sent in order to regenerate acids or bases (31%), to recover metals and metal compounds (22%), for interim storage before recycling (15%), to be used as fuel for energy recovery (11%) (Figure 8).

Figure 8: 2012 Canadian Exports of Hazardous Recyclable Material by Recycling Operation



In 2012, exports of hazardous waste and hazardous recyclable material originated from eight provinces, with Ontario accounting for 38% of the total quantity (Figure 9). Manitoba more than doubled its exports of hazardous wastes and hazardous recyclable materials compared to 2011. Newfoundland and Labrador did not export any hazardous waste or hazardous recyclable material in 2012 as opposed to 2011. No export was made from Prince Edward Island and the three territories.

Figure 9: Comparison of 2011-2012 Canadian Exports of Hazardous Waste and Hazardous Recyclable Material by Province



3. Transits

In 2012, the quantity of hazardous waste and hazardous recyclable material that transited through Canada was about 35 800 metric tonnes. This is a decrease of 40% or about 22 000 metric tonnes compared to 2011 ([Figure 1](#)). As in the previous year, the majority of the transits through Canada were shipments between U.S. states.

Of the total quantity of hazardous waste and hazardous recyclable material transiting in Canada in 2012, almost all (about 35 600 metric tonnes) was destined for disposal while the rest was destined for recycling. About 94% of the hazardous wastes that were conveyed in transit through Canada were wastes from the production, formulation and use of biocides and phytopharmaceuticals, which were destined for disposal by incineration or thermal treatment.

For more information, please visit [Environment Canada's Pollution and Waste website](#) or contact:

Waste Reduction and Management Division
 Environment Canada
notification@ec.gc.ca
 1-844-524-5295

Additional information can be obtained at:

Environment and Climate Change Canada

Public Inquiries Centre

7th floor, Fontaine Building

200 Sacré-Coeur Boulevard

Gatineau QC K1A 0H3

Telephone: 819-997-2800

Toll free: 1-800-668-6767 (in Canada only)

Email: ec.enviroinfo.ec@canada.ca