Canada is richly endowed with water. Possessing one of the largest renewable supplies of freshwater in the world, it has access to upwards of 20% of the world's surface freshwater and 7% of the world's renewable water flow.

Although our resources are large, from 1971 to 2004 the freshwater supply decreased in southern Canada, where 98% of the population lives. Over the same period, water yield, or the average annual renewable freshwater supply, fell by 9%. Annually, this represents an average loss of 3.5 billion cubic metres, the equivalent of 1.4 million Olympic-sized swimming pools—almost as much water as was supplied to Canada's entire residential population in 2005.

Water yield is the result of precipitation and melted ice that flow over and under the ground, eventually reaching rivers and lakes. For most of the country, water yield peaks in the spring as snow and ice melt and precipitation increases, whereas demand for water increases in the summer.

## Canada's water yield

Canada has an average annual water yield of 3,472 billion cubic metres. This almost equals the amount of water in Lake Huron, giving Canada one of the largest renewable water supplies in the world. Brazil has the largest total water yield, followed by Russia.

Canada, however, has the most renewable freshwater per person each year: 109,837 cubic metres per person compared with Brazil, at 43,756 cubic metres per person. While total water yield is comparable between the United States (3,051 billion cubic metres) and Canada (3,472 billion cubic metres), the renewable freshwater per person in the United States is just 9.1% of that in Canada because the United States has a much larger population.

Canada's average annual water yield per unit area is 348 litres of renewable freshwater for every square metre of the country, higher than the yield in drier countries such as Australia and South Africa but three times less than a tropical rainy country like Brazil. The Pacific Coastal drainage region has the highest water yield, followed by Newfoundland and Labrador. Drainage regions both in and north of the Prairies produce the least water.

Four drainage regions comprise most of the Prairies and stretch across the southern parts of Alberta, Saskatchewan and Manitoba. This collection of drainage regions yields just 12% of what the Great Lakes drainage region yields, 6% of what the Maritime Coastal drainage region yields and only 3% of what the Pacific Coastal drainage region yields.

## Industrial water use

In 2005, an estimated 42.1 billion cubic metres of water were withdrawn from the environment and used in household and economic activities in Canada.

In 2007, three industry groups (that cover most industrial water use) used a total of 33.6 billion cubic metres of water: thermal-electric power producers (fossil-fuel and nuclear) withdrew 83% of this total, manufacturers used 16% and mining, 2%. In 2007, the three groups' water costs totalled $1,624.2 million.

These three groups discharge almost as much waste water into the environment

To learn more about

**climate, drinking water plants, ecoregion, environmental protection, environmental sustainability indicators, envirostats, expenditures on pollution, freshwater supply and demand, households and the environment, human activity and the environment, minerals, natural resources, pollution, recycling, waste disposal**

visit **www.statcan.gc.ca**

as they withdraw: 32.8 billion cubic metres in 2007. Thermal-electric power producers accounted for 83% of this total, manufacturers, 14% and mining, 2%.

Virtually all the water (99.8%) the thermal-electric power producers take in is used for cooling. Most of this water (75%) is not treated before discharge.

Manufacturing industries discharged 4,725.0 million cubic metres of water in 2007; 38% was not treated before being released. Most was discharged to surface freshwater bodies (79%) and to public and municipal sewers (10%).

Of the 755.0 million cubic metres of water discharged by mining operations, 58% was not treated before discharge. Most of the total discharged (66%) was returned to surface freshwater, 16% was discharged to groundwater and 11% to tailing ponds.

## Residential water use

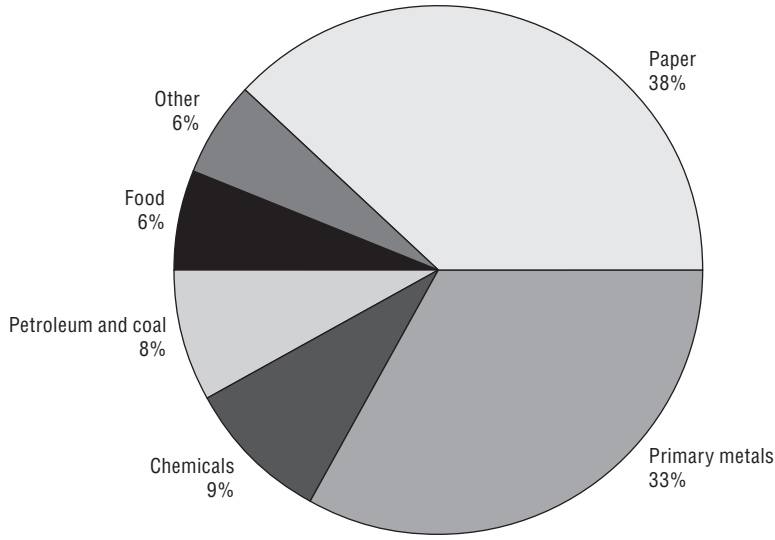
In 2007, 86% of households received their water from a municipal water supply and 12% had a private well. That year, $807 million was spent on operation and maintenance for the acquisition and treatment of water at drinking water plants. The largest components of this cost being labour ($302 million), energy ($199 million) and materials ($198 million).

**Table 12.a**
**Environmental protection expenditures, by province and territory, 2008**

| | Capital expenditures | Operating expenditures |
|---|---|---|
| | $ millions | |
| **Canada** | **3,828.6** | **5,241.4** |
| Atlantic provinces[1] | 155.2 | 452.9 |
| Quebec | 439.0 | 1,002.9 |
| Ontario | 579.5 | 1,580.5 |
| Manitoba | 364.3 | 83.3 |
| Saskatchewan | 347.5 | 231.8 |
| Alberta | 1,677.4 | 1,430.1 |
| British Columbia and the territories[2] | 265.6 | 459.9 |

**Note:** Capital expenditures are not collected for fees, fines and licences and (where not elsewhere classified) other types of environmental protection.
1. Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick.
2. British Columbia, Yukon, Northwest Territories and Nunavut.
**Source:** Statistics Canada, CANSIM table 153-0053.

**Chart 12.1**
**Water intake of manufacturing industries, 2007**




**Note:** % of total water intake.
**Source:** Statistics Canada, Catalogue no. 16-401-X.

## Our shrinking glaciers

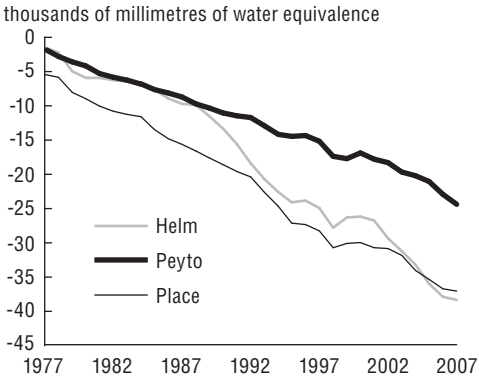
Canada's glaciers cover roughly 200,000 square kilometres, about 75% located on the Arctic Islands. Six glaciers in two regions of Canada—the Western Cordillera and the High Arctic—have been shrinking since standardized measurements of their mass began at various times during the 1960s and 1970s.

The Western Cordillera region includes the Helm Glacier and the Place Glacier in the southern Coast Mountains of British Columbia and the Peyto Glacier located in Banff National Park, Alberta. The Devon Ice Cap, the Meighen Ice Cap and the White Glacier, all in Nunavut, are located in the High Arctic region.

Although the mass of all six of these glaciers has declined, there are regional differences, with the three glaciers located in the High Arctic showing a less pronounced and slower loss of mass than those in the Western Cordillera. The Helm and Place Glaciers have shown the most significant shrinkage.

Because glacial mass integrates the long-term variability of precipitation, mean temperature and cloud cover, its changes are considered among the most robust indicators of climate change.

**Chart 12.2**
**Cordillera glaciers, cumulative net loss**




**Sources:** Natural Resources Canada and Statistics Canada, Catalogue no. 16-002-X.

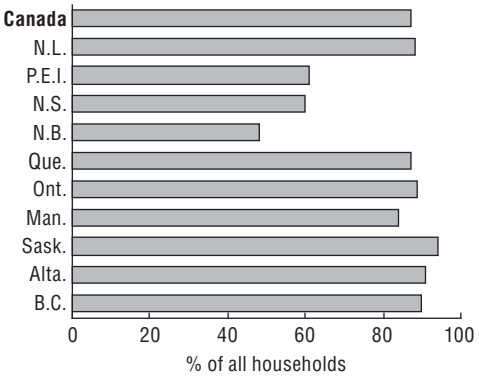
## Household water supply

In 2009, 87% of Canadian households were connected to a municipal water supply, with fewer households in Atlantic Canada connected. New Brunswick had the lowest proportion receiving municipal water (48%), followed by Nova Scotia (60%). At 88%, Newfoundland and Labrador was slightly higher than Canada and Quebec (both 87%).

In Manitoba, 84% of households had municipal water services; in Ontario, 89% did. In British Columbia, 90% of households were connected to a municipal water supply, with Alberta (91%) and Saskatchewan (94%) reporting the highest proportions.

Most households have the option of drinking the water coming out of their taps—either from their municipality or from a private source—or they can drink bottled water. Of households that had a municipal water supply in 2009, 66% reported they drank primarily tap water, 24% drank primarily bottled water and 10% drank tap and bottled water equally.

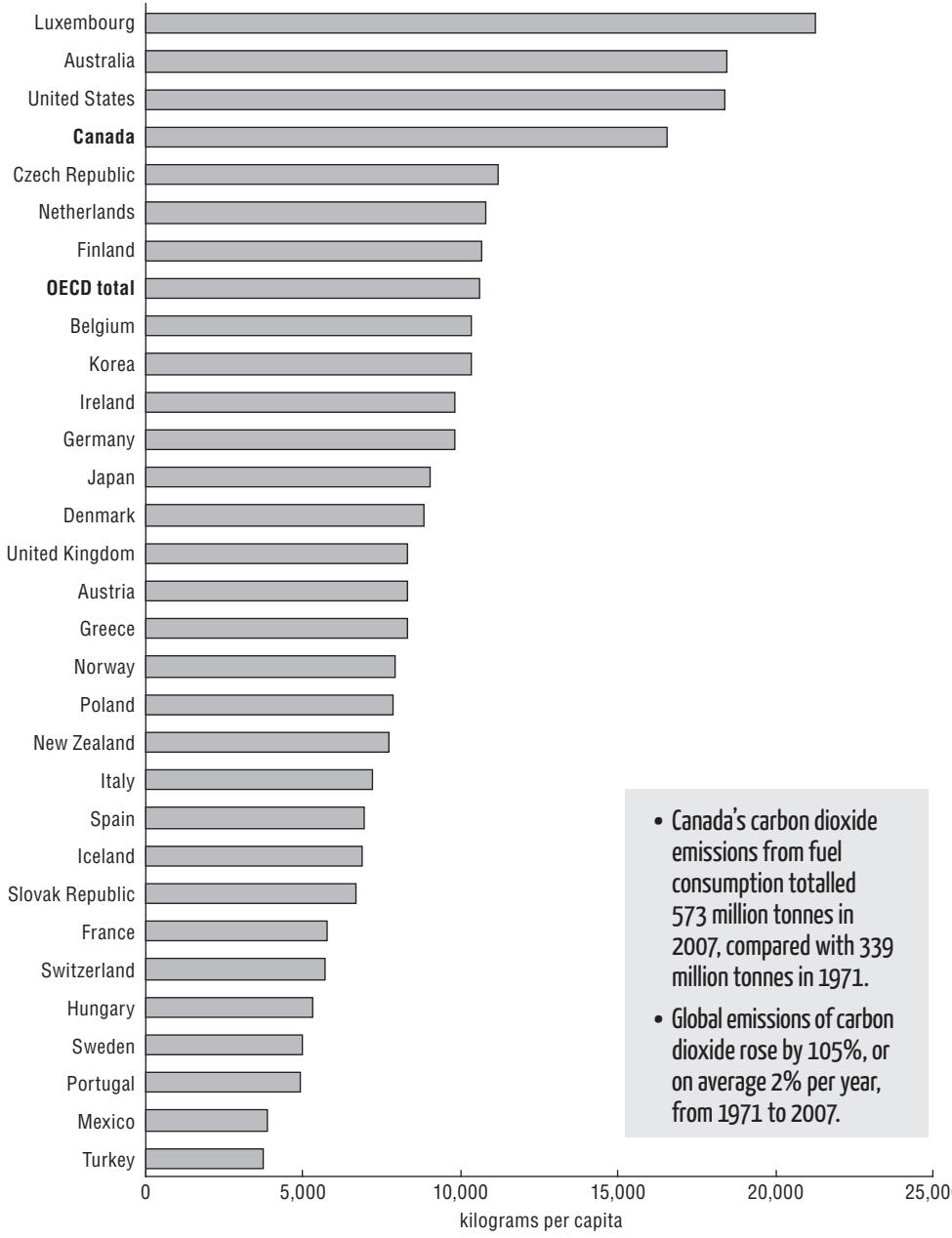
**Chart 12.3**
**Municipal drinking water supply, by province, 2009**




**Source:** Statistics Canada, Catalogue no. 11-526-X.

# INTERNATIONAL perspective

**Chart 12.4**
**Carbon dioxide emissions from fuel combustion, 2008**




**Source:** Data based on OECD/International Energy Agency (2010), *$CO_2$ emissions from fuel combustion – 2010 Highlights.*

## Table 12.1 Greenhouse gas (GHG) emissions, by source, 1990 and 2008

| | Carbon dioxide ($CO_2$) | | Methane ($CH_4$) | | Nitrous oxide ($N_2O$) | |
|---|---|---|---|---|---|---|
| | 1990 | 2008 | 1990 | 2008 | 1990 | 2008 |
| | kilotonnes | | kilotonnes $CO_2$ equivalent[1] | | | |
| **Total[2]** | **456,000** | **574,000** | **74,000** | **99,000** | **50,000** | **52,000** |
| Energy | 424,000 | 535,000 | 37,000 | 53,000 | 8,000 | 10,000 |
| Stationary combustion sources | 276,000 | 328,000 | 4,000 | 4,000 | 2,000 | 3,000 |
| Electricity and heat generation | 94,900 | 118,000 | 39 | 96 | 500 | 700 |
| Fossil fuel industries | 49,400 | 65,300 | 2,000 | 2,000 | 300 | 400 |
| Petroleum refining and upgrading | 16,000 | 16,000 | – | – | 100 | 100 |
| Fossil fuel production | 33,800 | 49,100 | 2,000 | 2,000 | 200 | 300 |
| Mining and oil and gas extraction | 6,150 | 23,700 | 3 | 10 | 40 | 200 |
| Manufacturing industries | 54,500 | 42,900 | 60 | 60 | 500 | 500 |
| Iron and steel | 6,420 | 6,100 | 5 | 5 | 60 | 60 |
| Non-ferrous metals | 3,170 | 3,470 | 1 | 2 | 10 | 20 |
| Chemical | 7,100 | 6,650 | 3.0 | 2.9 | 40 | 40 |
| Pulp and paper | 13,500 | 4,280 | 40 | 40 | 200 | 200 |
| Cement | 3,820 | 4,270 | 1 | 2 | 10 | 10 |
| Other manufacturing | 20,500 | 18,100 | 9 | 7 | 100 | 100 |
| Construction | 1,850 | 1,250 | 0.7 | 0.5 | 20 | 10 |
| Commercial and institutional | 25,500 | 34,600 | 10 | 10 | 200 | 200 |
| Residential | 40,900 | 40,400 | 2,000 | 2,000 | 500 | 500 |
| Agriculture and forestry | 2,370 | 2,150 | 0.8 | 0.8 | 20 | 20 |
| Transport[3] | 138,000 | 190,000 | 700 | 600 | 6,000 | 8,000 |
| Civil aviation (domestic aviation) | 6,180 | 8,300 | 10 | 9 | 200 | 200 |
| Road transportation | 94,900 | 132,000 | 310 | 190 | 3,200 | 3,100 |
| Light-duty gasoline vehicles | 43,800 | 39,600 | 160 | 61 | 1,900 | 1,000 |
| Light-duty gasoline trucks | 19,600 | 43,200 | 66 | 68 | 1,000 | 1,500 |
| Heavy-duty gasoline vehicles | 7,720 | 6,500 | 27 | 7.2 | 69 | 150 |
| Motorcycles | 143 | 259 | 3.0 | 3.6 | 0.93 | 1.6 |
| Light-duty diesel vehicles | 347 | 435 | 0.2 | 0.2 | 8 | 10 |
| Light-duty diesel trucks | 691 | 2,310 | 0.4 | 1 | 20 | 60 |
| Heavy-duty diesel vehicles | 20,500 | 39,000 | 20 | 40 | 200 | 400 |
| Propane and natural gas vehicles | 2,170 | 857 | 30 | 20 | 10 | 5 |
| Railways | 6,160 | 6,290 | 7 | 7 | 800 | 800 |
| Navigation (domestic marine) | 4,690 | 5,500 | 7 | 9 | 300 | 300 |
| Other transportation | 26,000 | 38,000 | 300 | 300 | 2,000 | 3,000 |
| Off-road gasoline | 6,500 | 6,100 | 200 | 200 | 40 | 40 |
| Off-road diesel | 13,000 | 25,000 | 20 | 30 | 2,000 | 3,000 |
| Pipelines | 6,650 | 7,240 | 140 | 150 | 60 | 60 |
| Fugitive sources | 11,000 | 16,000 | 32,000 | 48,000 | 30 | 40 |
| Coal mining | . | . | 2,000 | 800 | . | . |
| Oil and natural gas | 10,600 | 16,200 | 30,100 | 46,800 | 30 | 40 |
| Oil | 95 | 210 | 4,060 | 5,280 | 30 | 30 |
| Natural gas | 22.6 | 67.8 | 12,900 | 21,200 | – | – |
| Venting | 6,090 | 10,600 | 13,200 | 20,200 | – | 4 |
| Flaring | 4,400 | 5,400 | 54 | 78 | 0.4 | 4 |

## Table 12.1 (continued)

| | Carbon dioxide ($CO_2$) | | Methane ($CH_4$) | | Nitrous oxide ($N_2O$) | |
|---|---|---|---|---|---|---|
| | 1990 | 2008 | 1990 | 2008 | 1990 | 2008 |
| | kilotonnes | | kilotonnes $CO_2$ equivalent[1] | | | |
| Industrial processes | 31,000 | 39,000 | . | . | 11,700 | 3,640 |
| Mineral products | 8,300 | 8,500 | . | . | . | . |
| Cement production | 5,400 | 6,600 | . | . | . | . |
| Lime production | 1,800 | 1,500 | . | . | . | . |
| Mineral product use[4] | 1,090 | 365 | . | . | . | . |
| Chemical industry | 5,000 | 6,700 | . | . | 11,700 | 3,640 |
| Ammonia production | 5,000 | 6,700 | . | . | . | . |
| Nitric acid production | . | . | . | . | 1,010 | 1,230 |
| Adipic acid production | . | . | . | . | 11,000 | 2,400 |
| Metal production | 9,770 | 12,600 | . | . | . | . |
| Iron and steel production | 7,060 | 7,440 | . | . | . | . |
| Aluminum production | 2,700 | 5,200 | . | . | . | . |
| Sulfur hexafluoride used in magnesium smelters and casters | . | . | . | . | . | . |
| Production and consumption of halocarbons and sulfur hexafluoride | . | . | . | . | . | . |
| Other and undifferentiated production | 8,000 | 11,000 | . | . | . | . |
| Solvent and other product use | . | . | . | . | 170 | 330 |
| Agriculture | . | . | 19,000 | 25,000 | 29,000 | 37,000 |
| Enteric fermentation | . | . | 17,000 | 22,000 | . | . |
| Manure management | . | . | 2,400 | 2,800 | 3,500 | 4,700 |
| Agriculture soils | . | . | . | . | 26,000 | 32,000 |
| Direct sources | . | . | . | . | 14,000 | 17,000 |
| Pasture, range and paddock manure | . | . | . | . | 2,600 | 3,800 |
| Indirect sources | . | . | . | . | 9,000 | 10,000 |
| Waste | 270 | 200 | 18,000 | 21,000 | 600 | 700 |
| Solid waste disposal on land | . | . | 18,000 | 20,000 | – | – |
| Wastewater handling | . | . | 220 | 260 | 500 | 700 |
| Waste incineration | 270 | 200 | 9 | 2 | 100 | 50 |
| Land use, land-use change and forestry | -58,000 | -19,000 | 3,700 | 4,100 | 2,300 | 2,500 |
| Forest land | -84,000 | -25,000 | 3,400 | 3,900 | 2,100 | 2,400 |
| Cropland | 12,000 | -4,700 | 300 | 100 | 200 | 100 |
| Grassland | – | – | – | – | – | – |
| Wetlands | 5,000 | 2,000 | 6 | – | 4 | – |
| Settlements | 9,000 | 7,000 | 100 | 90 | 50 | 50 |

**Note:** "–" indicates no emissions.

1. Carbon dioxide equivalent emissions are the weighted sum of all GHGs. The following global warming potentials are used as the weights: carbon dioxide = 1; methane = 21; nitrous oxide = 310.
2. National totals exclude all GHGs from the "Land use, land-use change and forestry" sector.
3. Emissions from fuel ethanol are reported within the gasoline transportation subcategories.
4. Includes carbon dioxide emissions coming from the use of limestone and dolomite, soda ash and magnesite.

**Source:** Environment Canada, Greenhouse Gas Division, 2010, *National Inventory Report 1990-2008: Greenhouse Gas Sources and Sinks in Canada.*

## Table 12.2 Capital expenditures on pollution abatement and control, by environmental milieu and by industry, 2008

| | All environmental milieux | Air | Surface water | On-site contained solid and liquid waste | Noise, radiation and vibration |
|---|---|---|---|---|---|
| | $ millions | | | | |
| **All industries** | **1,682.2** | **1,361.0** | **114.7** | **190.2** | **16.2** |
| Logging | **F** | F | F | 0.0 | F |
| Oil and gas extraction | **790.0** | 711.4 | 18.3 | 58.5 | 1.7 |
| Mining and quarrying | **119.1** | F | x | 67.5 | F |
| Electric power generation, transmission and distribution | **197.6** | 149.7 | 20.9 | x | F |
| Natural gas distribution | **x** | x | 0.0 | 0.0 | 0.0 |
| Food manufacturing | **19.2** | 9.9 | 3.6 | F | F |
| Beverage and tobacco product manufacturing | **x** | 0.7 | x | x | x |
| Wood product manufacturing | **3.4** | 3.0 | F | 0.2 | 0.0 |
| Paper manufacturing | **13.0** | 8.0 | 4.4 | x | x |
| Petroleum and coal product manufacturing | **122.9** | 96.9 | x | x | F |
| Chemical manufacturing | **27.8** | 11.7 | 4.6 | 10.1 | 1.4 |
| Non-metallic mineral product manufacturing | **39.2** | 37.9 | 0.5 | F | 0.7 |
| Primary metal manufacturing | **290.5** | 272.9 | 8.3 | x | F |
| Fabricated metal product manufacturing | **F** | F | 0.1 | 0.1 | F |
| Transportation equipment manufacturing | **26.3** | 15.3 | x | x | x |
| Other manufacturing industries | **19.5** | 16.8 | F | F | x |
| Pipeline transportation | **..** | .. | .. | .. | .. |

**Source:** Statistics Canada, CANSIM table 153-0054.

## Table 12.3 Capital expenditures on pollution prevention, by environmental milieu and by industry, 2008

| | All environmental milieux | Air | Surface water | On-site contained solid and liquid waste | Noise, radiation and vibration | Other |
|---|---|---|---|---|---|---|
| | $ millions | | | | | |
| **All industries** | **959.1** | **422.2** | **178.8** | **232.8** | **F** | **100.6** |
| Logging | **F** | F | F | F | F | F |
| Oil and gas extraction | **118.1** | F | F | 19.4 | F | 0.9 |
| Mining and quarrying | **134.2** | 18.9 | 83.6 | 30.7 | x | x |
| Electric power generation, transmission and distribution | **276.3** | 81.3 | 21.3 | 142.3 | F | F |
| Natural gas distribution | **x** | x | 0.1 | 1.1 | 0.0 | 0.0 |
| Food manufacturing | **42.3** | 10.8 | 8.3 | F | F | 16.2 |
| Beverage and tobacco product manufacturing | **x** | 1.4 | 1.4 | 0.0 | F | 1.5 |
| Wood product manufacturing | **6.8** | 3.1 | 0.6 | 1.6 | 0.0 | 1.6 |
| Paper manufacturing | **30.5** | 20.9 | x | 2.9 | x | 3.9 |
| Petroleum and coal product manufacturing | **42.5** | 26.8 | x | 4.6 | x | x |
| Chemical manufacturing | **47.4** | 23.9 | 4.0 | 8.3 | F | F |
| Non-metallic mineral product manufacturing | **38.2** | 30.9 | 2.7 | x | F | 4.2 |
| Primary metal manufacturing | **72.6** | 60.5 | 5.7 | 5.4 | x | x |
| Fabricated metal product manufacturing | **14.3** | 7.5 | 1.7 | 2.0 | 0.2 | 2.9 |
| Transportation equipment manufacturing | **14.6** | x | F | x | 0.0 | 4.6 |
| Other manufacturing industries | **F** | F | F | F | 0.2 | 12.0 |
| Pipeline transportation | **..** | .. | .. | .. | .. | .. |

**Source:** Statistics Canada, CANSIM table 153-0054.

## Table 12.4 Waste disposal, by province and territory, 2004, 2006 and 2008

| | Total waste disposed[1] | | | Waste disposed per capita[1] | | |
|---|---|---|---|---|---|---|
| | 2004 | 2006 | 2008 | 2004 | 2006 | 2008 |
| | tonnes | | | kilograms | | |
| **Canada** | **25,226,766[r]** | **25,925,964[r]** | **25,871,310** | **789.8[r]** | **795.9[r]** | **776.5** |
| Newfoundland and Labrador | 400,048 | 428,809[r] | 410,590 | 773.1 | 840.3[r] | 811.1 |
| Prince Edward Island | x | x | x | x | x | x |
| Nova Scotia | 399,967 | 359,105[r] | 354,231 | 425.8 | 382.8[r] | 378.2 |
| New Brunswick | 442,173 | 511,706[r] | 479,461 | 590.1 | 686.2[r] | 641.9 |
| Quebec[2] | 6,454,000[r] | 6,317,393[r] | 6,158,152 | 856.4[r] | 827.8[r] | 794.5 |
| Ontario | 9,809,264[r] | 9,710,459[r] | 9,631,559 | 791.7[r] | 766.7[r] | 744.8 |
| Manitoba | 928,117[r] | 904,272[r] | 966,199 | 790.9[r] | 763.7[r] | 801.5 |
| Saskatchewan | 794,933[r] | 833,753 | 902,943 | 797.0[r] | 840.4 | 890.7 |
| Alberta | 3,077,311 | 3,819,872 | 4,029,435 | 949.9 | 1,116.5 | 1,122.0 |
| British Columbia | 2,767,657[r] | 2,917,080 | 2,811,568 | 666.1[r] | 687.4 | 641.3 |
| Yukon, Northwest Territories and Nunavut | x | x | x | x | x | x |

1. Includes waste exported out of the source province or out of the country for disposal. Excludes waste disposed of in hazardous waste disposal facilities or managed by the waste generator on site.
2. Waste diversion data are derived from a survey administered by Recyc-Québec.
**Source:** Statistics Canada, CANSIM tables 153-0041 and 051-0001 and Catalogue no. 16F0023X.

## Table 12.5 Diversion of waste, by province and territory, 2004, 2006 and 2008

| | Total materials diverted[1] | | | Materials diverted per capita[1] | | |
|---|---|---|---|---|---|---|
| | 2004 | 2006 | 2008 | 2004 | 2006 | 2008 |
| | tonnes | | | kilograms | | |
| **Canada** | **7,112,735** | **7,727,030** | **8,473,257** | **223** | **237** | **254** |
| Newfoundland and Labrador | 35,308 | x | x | 68 | x | x |
| Prince Edward Island | x | x | x | x | x | x |
| Nova Scotia | 239,845 | 275,983 | 289,950 | 255 | 294 | 310 |
| New Brunswick | 139,262 | 252,174 | 267,467 | 186 | 338 | 358 |
| Quebec[2] | 2,130,100 | 2,434,300 | 2,463,600 | 283 | 319 | 318 |
| Ontario | 2,414,552 | 2,396,856 | 2,810,900 | 195 | 189 | 217 |
| Manitoba | 157,490 | 152,799 | 170,377 | 134 | 129 | 141 |
| Saskatchewan | 114,182 | 106,868 | 149,619 | 114 | 108 | 148 |
| Alberta | 620,080 | 652,637 | 728,536 | 191 | 191 | 203 |
| British Columbia | 1,209,216 | 1,366,191 | 1,505,112 | 291 | 322 | 343 |
| Yukon, Northwest Territories and Nunavut | x | x | x | x | x | x |

1. Includes only those companies and local waste management organizations that reported non-hazardous recyclable material preparation activities and refers only to the material that enters the waste stream and does not cover any waste that may be managed on-site by a company or household. Does not include materials transported by the generator directly to secondary processors, (e.g., pulp and paper mills) while bypassing entirely any firm or local government involved in waste management activities.
2. Waste diversion data are derived from a survey administered by Recyc-Québec.
**Source:** Statistics Canada, CANSIM tables 153-0043 and 051-0001 and Catalogue no. 16F0023X.

## Table 12.6 Production of leading minerals, 2009

| | Production | | Value | |
|---|---|---|---|---|
| | kilotonnes except where noted | % change from 2008 | $ millions | % change from 2008 |
| **Metallic minerals** | **...** | **...** | **16,151.5** | **-28.5** |
| Gold (kg) | 95,697.5 | 0.8 | 3,364.9 | 18.7 |
| Iron ore | 31,698.8 | -1.3 | 3,174.2 | -21.9 |
| Copper | 480.4 | -17.7 | 2,774.7 | -35.9 |
| Nickel | 131.6 | -46.5 | 2,238.6 | -60.8 |
| Uranium[1] | 10.1 | 15.8 | 1,392.1 | 45.9 |
| Zinc | 672.4 | -4.6 | 1,242.6 | -11.8 |
| Other metals | ... | ... | 1,964.4 | -40.3 |
| **Non-metallic minerals** | **...** | **...** | **11,455.6** | **-40.9** |
| Potash ($K_2O$)[2] | 4,318.4 | -58.4 | 3,380.3 | -55.9 |
| Diamonds (000 ct) | 10,946.1 | -24.6 | 1,684.3 | -28.9 |
| Sand and gravel[3] | 216,169.7 | -10.5 | 1,487.4 | -12.0 |
| Cement[4] | 10,950.8 | -19.5 | 1,440.5 | -16.9 |
| Stone[3] | 135,894.6 | -11.5 | 1,324.0 | -11.0 |
| Salt | 14,565.7 | 2.4 | 664.1 | 23.6 |
| Other non-metals | ... | ... | 1,475.0 | -62.1 |
| **Fuels** | | | | |
| Coal | 62,615.0 | -7.6 | 4,544.4 | -8.9 |

**Note:** Preliminary data.
1. Uranium value is calculated using spot market prices.
2. Excludes shipments to potassium sulphate plants.
3. Excludes shipments of sand and gravel and stone to Canadian cement, lime and clay plants.
4. Includes exported clinker minus imported clinker.
**Source:** Natural Resources Canada, *Mineral Production Information Bulletin,* March 2010.

## Table 12.7 Mineral production, by province and territory, 2009

| | Total | Metallics | Non-metallics | Coal | Share of production |
|---|---|---|---|---|---|
| | $ thousands | | | | % |
| **Canada** | **32,151,501.8** | **16,151,492.5** | **11,455,586.3** | **4,544,423.0** | **100.0** |
| Newfoundland and Labrador | **2,289,796.1** | 2,244,081.5 | 45,714.6 | 0 | 7.1 |
| Prince Edward Island | **3,386.0** | 0 | 3,386.0 | 0 | 0.0 |
| Nova Scotia | **380,082.0** | 0 | 380,082.0 | 0 | 1.2 |
| New Brunswick | **1,090,375.2** | 749,602.7 | x | x | 3.4 |
| Quebec | **6,217,070.6** | 4,624,393.9 | 1,592,676.7 | 0 | 19.3 |
| Ontario | **6,330,146.6** | 3,789,984.1 | 2,540,162.5 | 0 | 19.7 |
| Manitoba | **1,320,504.2** | 1,176,770.9 | 143,733.3 | 0 | 4.1 |
| Saskatchewan | **5,010,467.2** | 1,441,199.2 | x | x | 15.6 |
| Alberta | **2,015,518.5** | 1,968.6 | 951,889.9 | 1,061,690.0 | 6.3 |
| British Columbia | **5,733,567.1** | 1,828,374.9 | 588,682.1 | 3,316,510.0 | 17.8 |
| Yukon | **250,960.1** | 245,016.7 | 5,943.4 | 0 | 0.8 |
| Northwest Territories | **1,509,628.1** | 50,100.0 | 1,459,528.1 | 0 | 4.7 |
| Nunavut[1] | **0** | 0 | 0 | 0 | 0.0 |

**Notes:** Preliminary data..
Production is based on shipments.
1. Mineral production of sand and gravel for Nunavut is included in the Northwest Territories.
**Source:** Natural Resources Canada, *Mineral Production Information Bulletin,* March 2010.

## Table 12.8 Household treatment of drinking water, by type of water supply, 2009

| | Municipal and non-municipal water supply | Municipal water supply | Non-municipal water supply |
|---|---|---|---|
| | % | | |
| Treated water prior to consumption[1] | 51 | 51 | 49 |
| Used a filter[2] | 59 | 50 | 46 |
| Used a filter or purifier on the main supply pipe[2] | 10 | 5 | 29 |
| Activated charcoal filter | 3 | 2 | 8 |
| Ultraviolet | 1 | F | 6 |
| Reverse osmosis system | 1 | 1 | 3 |
| Other | 1 | F | 4 |
| Don't know | 14 | 14 | 13 |
| Used an on-tap filter or purifier[2] | 20 | 17 | 14 |
| Activated charcoal filter | 9 | 9 | 6 |
| Ceramic filter | 1 | 1 | F |
| Ultraviolet | F | F | F |
| Reverse osmosis system | 1 | 1 | 1[E] |
| Other | 0[E] | 0[E] | F |
| Don't know | 19 | 19 | 19[E] |
| Used a jug filter[2] | 38 | 35 | 15 |
| Boiled water in order to make it safe to drink in the last 12 months[2] | 15 | 11 | 5 |
| To improve appearance, taste or odour[2] | 54 | 55 | 44 |
| To remove water treatment chemicals such as chlorine[2] | 44 | 48 | 11 |
| To remove metals or minerals[2] | 41 | 40 | 51 |
| To remove possible bacterial contamination[2] | 35 | 36 | 33 |
| For another reason[2] | 11 | 11 | 9 |

1. As a percentage of all households.
2. Information relates only to households that reported primarily consuming tap water or tap water and bottled water.
**Source:** Statistics Canada, CANSIM table 153-0066.

## Table 12.9 Population served by drinking water plants, by type of source and by province and territory, 2007

| | Total | Surface water | Groundwater | Groundwater under the direct influence of surface water |
|---|---|---|---|---|
| | number | | | |
| **Canada**[1] | **27,856,304** | **23,998,655** | **3,388,934** | **456,017** |
| Newfoundland and Labrador | **406,364** | 379,389 | x | x |
| Prince Edward Island | **60,827** | 0 | 60,827 | 0 |
| Nova Scotia | **455,390** | 394,879 | 60,511 | 0 |
| New Brunswick | **352,640** | 211,379 | 112,996 | 28,265 |
| Quebec | **7,016,273** | 5,949,804 | 867,892 | 186,798 |
| Ontario | **10,805,048** | 9,317,774 | 1,360,863 | 125,493 |
| Manitoba | **926,429** | 829,138 | 89,808 | 7,483 |
| Saskatchewan | **736,265** | 595,078 | 132,394 | 8,793 |
| Alberta | **2,901,434** | 2,751,250 | 130,034 | 20,151 |
| British Columbia | **4,126,403** | 3,526,439 | 538,906 | 61,058 |
| Yukon and Northwest Territories | **69,230** | 43,525 | x | x |

1. Excludes Nunavut because of low response.
**Source:** Statistics Canada, Catalogue no. 16-403-X.

## Table 12.10 Water use of manufacturing industries, by industry, 2007

| | Intake | Recirculation | Gross water use | Discharge | Consumption |
|---|---|---|---|---|---|
| | millions of cubic metres | | | | |
| **All industries** | **5,219.0** | **2,884.8** | **8,103.8** | **4,725.0** | **494.0** |
| Food manufacturing | 302.1 | 77.6 | 379.7 | 265.2 | 36.9 |
| Beverage and tobacco product manufacturing | 65.2 | 3.1 | 68.3 | 48.8 | 16.4 |
| Textile mills | 5.0[E] | F | F | 4.5[E] | 0.5[E] |
| Textile product mills | 2.8 | x | x | 2.3 | 0.5 |
| Wood product manufacturing | 88.7 | F | F | 74.7 | 14.0 |
| Paper manufacturing | 1,966.7 | 910.6 | 2,877.3 | 1,877.1 | 89.6 |
| Petroleum and coal product manufacturing | 416.0 | 430.4 | 846.4 | 372.6 | 43.4 |
| Chemical manufacturing | 481.5 | 54.0 | 535.5 | 382.8 | 98.7 |
| Plastics and rubber products manufacturing | 24.2[E] | 9.1[E] | 33.3[E] | 20.5[E] | 3.7[E] |
| Non-metallic mineral product manufacturing | 39.8 | F | F | 26.3 | 13.5 |
| Primary metal manufacturing | 1,731.8 | 1,343.0 | 3,074.8 | 1,567.3 | 164.5 |
| Fabricated metal product manufacturing | 27.0[E] | 5.3[E] | 32.3[E] | 24.5[E] | 2.5[E] |
| Machinery manufacturing | 5.0 | F | F | 4.2 | 0.8 |
| Computer and electronic product manufacturing | 6.6 | 0.2 | 6.8 | 6.2 | 0.4 |
| Electrical equipment, appliance and component manufacturing | 4.8 | x | x | 2.4 | 2.4 |
| Transportation equipment manufacturing | 23.2 | 0.6[E] | 23.8[E] | 21.2 | 2.0 |
| Miscellaneous manufacturing | 5.5 | 0.5 | 6.0 | 5.1 | 0.4 |
| Other manufacturing industries[1] | 23.1[E] | F | F | 19.2[E] | 3.9[E] |

1. Includes clothing manufacturing, leather and allied product manufacturing, printing and related support activities and furniture and related product manufacturing.
**Source:** Statistics Canada, CANSIM table 153-0047.