# **EnviroStats**



# Summer 2012

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# **Ecoregion profile: South-Central Nova Scotia Uplands**

The South-Central Nova Scotia Uplands ecoregion profile is the eighth in a series of ecoregion profiles. The information presented includes a brief description of the physical setting, a snapshot of land cover and use as well as statistics on selected socio-economic characteristics of the region. This is Canada's eighth most densely populated ecoregion.

# Selected Canadian environment, economic and social indicators

This table highlights a few environment, economic and social indicators. Setting them side-by-side starts to illuminate the relationships that exist among them. More indicators can be found in the section "Canadian environment, economic and social indicators."

Table 1
Selected Canadian environment, economic and social indicators

	Period	Percentage change	
		percent	
Population Gross domestic product, monthly Greenhouse gas emissions Particulate matter (PM <sub>2.5</sub> ) <sup>1</sup> Ground-level ozone (median percentage change per year) Natural resource wealth	2010 to 2011 March 2012 2009 to 2010 2000 to 2009 1990 to 2009 2009 to 2010	1.0 0.1 0.3  0.5 23.4	

<sup>1.</sup> Trend not statistically significant.

Source(s): Statistics Canada, CANSIM tables 051-0001 and 378-0005 (accessed May 22, 2012). Statistics Canada, 2012, Gross Domestic Product by Industry, Catalogue no. 15-001-X. Environment Canada, 2012, National Inventory Report 1990-2010: Greenhouse Gas Sources and Sinks in Canada - Executive Summary, www.ec.gc.ca/ges-ghg/default.asp?lang=En&n=8BAF9C6D-1 (accessed May 22, 2012). Environment Canada, 2012, Environmental Indicators, www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=B1385495-1#air1\_en (accessed May 22, 2012).

## **Ecoregion profile: South-Central Nova Scotia Uplands ecoregion**

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The South-Central Nova Scotia Uplands ecoregion is part of the larger Atlantic Maritime ecozone that covers all of New Brunswick, Nova Scotia and Prince Edward Island and part of Quebec (Map 1). The ecoregion is characterized by warm summers and mild, snowy winters. The average annual precipitation ranges from 1,300 to 1,600 mm, approximately double the amount that southern Ontario receives. The ecoregion is characterized by large sections of exposed rock, wetlands and glacial landforms and covers an area of more than 6,600 km², which is smaller than the average Canadian ecoregion of 45,000 km².

Coniferous forests are the dominant land cover, making up 64.4% of the surface area of the ecoregion, mixed forests cover 9.1% and deciduous forests cover 3.5% (Chart 1, Map 2 and Table 2). The region's coniferous forests include black, red and white spruce, balsam fir, eastern hemlock, and eastern white pine, while the deciduous forests are composed of beech, red and sugar maple, and yellow birch. Exposed land covers 6.9% of the ecoregion, followed by water (6.1%), developed land (3.8%) and shrubland (2.1%). In 2010, the protected area in this ecoregion was 641 km², or 9.7% of the total area (Table 2).

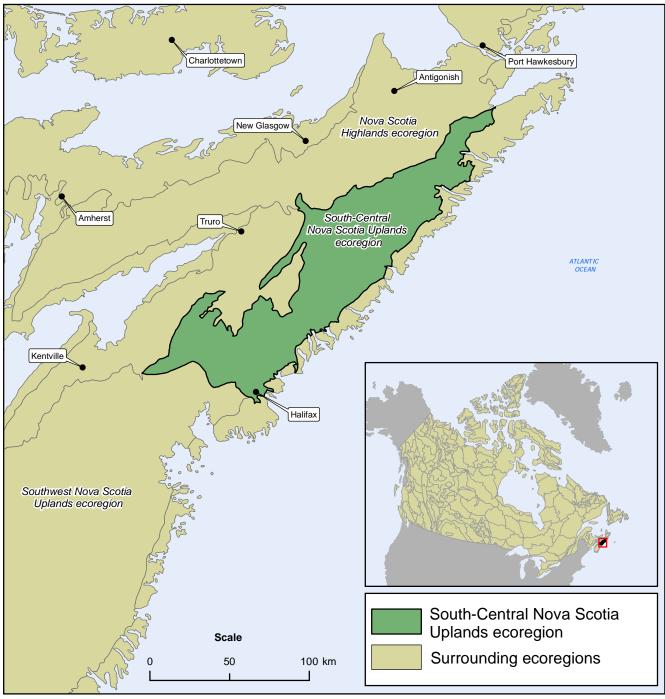
The South-Central Nova Scotia Uplands ecoregion was the eighth most densely populated ecoregion in Canada in 2011, with 46 persons per km<sup>2</sup>. In 2011, the population was 302,408 people, a 32% increase from 1971 (Table 2). The major communities in the ecoregion include Halifax and Dartmouth.<sup>1</sup>

The labour force for the ecoregion was made up of just under 163,500 people in 2006, a 1.5% rise from 2001. The growth rate for the Canada-wide labour force over the same period was 8.0% (Table 2). The fastest growing employment category was finance, scientific and real estate services with a 21.8% rise over 2001. Public administration, management and other services was the largest category in 2006, making up 20.8% of the total labour force (Chart 2). This was followed by educational and health care services (19.2%) and retail and wholesale trade (15.5%).

The labour force in primary industries in this ecoregion (agriculture, forestry, fishing, hunting, mining and oil and gas extraction) decreased by 17.3% between 2001 and 2006. At the provincial level, labour force in agriculture declined 33.7%, forestry and logging and associated support activities declined 44.7%, and mining, quarrying, and oil and gas extraction declined 5.3% from 2001 to 2006. On the other hand, labour force in fishing, hunting and trapping increased by 25.7% during the same period (Table 3).

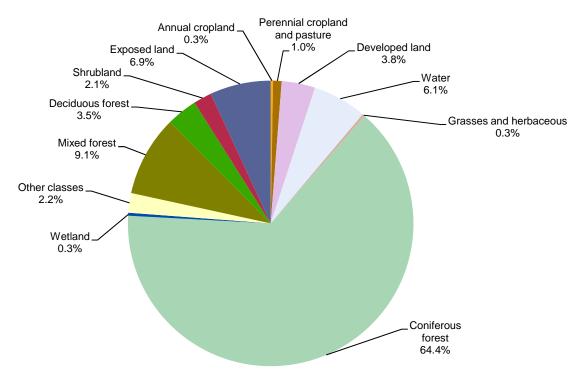
<sup>1.</sup> Only a portion of Halifax lies within this ecoregion. Therefore, the statistics compiled for the ecoregion do not contain all of the information for Halifax.

Map 1 South-Central Nova Scotia Uplands ecoregion



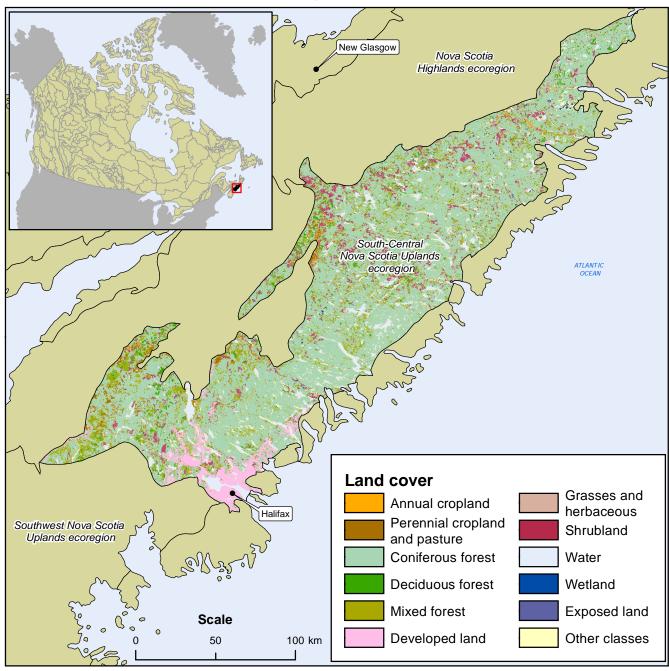
Source(s): Agriculture and Agri-Food Canada, 2008, A National Ecological Framework for Canada, http://sis.agr.gc.ca/cansis/nsdb/ecostrat/intro.html (accessed February 19, 2010).





**Note(s):** "Developed land" includes built-up areas, lawns, road surfaces, industrial sites and farmsteads. "Other" refers to unclassified land types due to shadow and clouds in the satellite imagery. "Exposed land" refers to exposed soils, beaches, moraines, gravel pits and other non-vegetated surfaces. Land cover is based on LANDSAT satellite data from 1996 to 2003.

**Source(s):** Natural Resources Canada, 2009, *Land cover, Circa 2000 - Vector*, Earth Sciences Sector, www.geobase.ca/geobase/en/data/landcover/index.html (accessed October 8, 2009).



Map 2
Land cover, South-Central Nova Scotia Uplands ecoregion, circa 2000

**Note(s):** Some land cover classes are aggregated. 'Developed land' includes built-up areas, lawns, road surfaces, industrial sites and farmsteads. 'Other' refers to unclassified land types due to shadow and clouds in the satellite imagery. 'Exposed land' refers to exposed soils, beaches, moraines, gravel pits and other non-vegetated surfaces. Land cover is based on LANDSAT satellite data from 1996 to 2003.

Source(s): Natural Resources Canada, 2009, Land Cover, Circa 2000-Vector (LCC2000-v), Earth Sciences Sector, www.geobase.ca (accessed October 8, 2009). Agriculture and Agri-Food Canada, 2008, A National Ecological Framework for Canada, http://sis.agr.gc.ca/cansis/nsdb/ecostrat/intro.html (accessed February 19, 2010).

Table 2
South-Central Nova Scotia Uplands ecoregion

	South-Central Nova Scotia Uplands ecoregion	Canada	Percentage share of Canada total
Total area (km²)	6,601	9,976,182	0.1
Land cover circa 2000 <sup>1</sup> , <sup>2</sup> Annual cropland (km²) Perennial cropland and pasture (km²) Coniferous forest (km²) Deciduous forest (km²) Mixed forest (km²) Developed land (km²) Water (km²) Grasses and herbaceous (km²) Shrubland (km²) Wetland (km²) Exposed land (km²)	17 64 4,253 231 603 251 403 20 135 22 455	    	   
Other classes (km²)	147		
Protected area <sup>3</sup> Protected area in 2010 (km <sup>2</sup> ) Proportion of area protected (percent)	641 9.7	975,816 9.8	0.1
Population Population in 1971 (number) Population in 1981 (number) Population in 1991 (number) Population in 1996 (number) Population in 2001 (number) Population in 2006 (number) Population in 2011 (number) Population density in 2011 (people/km²) Change in population 1971 to 2011 (percent)	228,719 252,328 272,802 277,543 291,201 298,723 302,408 45.8 32.2	21,568,310 24,343,181 27,296,859 28,846,761 30,007,094 31,612,895 33,476,688 3.4 55.2	1.1 1.0 1.0 1.0 1.0 0.9 0.9
Labour force by industry 2001 and 2006 <sup>4</sup> Primary industries <sup>5</sup> in 2001 Primary industries <sup>5</sup> in 2006 Change in primary industries <sup>5</sup> (percent)	2,050	737,630	0.3
	1,695	762,460	0.2
	-17.3	3.4	
Construction and utilities in 2001	8,935	998,040	0.9
Construction and utilities in 2006	8,935	1,202,045	0.7
Change in construction and utilities (percent)	0.0	20.4	
Manufacturing in 2001	8,400	2,174,285	0.4
Manufacturing in 2006	8,100	2,005,980	0.4
Change in manufacturing (percent)	-3.6	-7.7	
Retail and wholesale trade in 2001	25,185	2,441,410	1.0
Retail and wholesale trade in 2006	25,360	2,656,475	1.0
Change in retail and wholesale trade (percent)	0.7	8.8	
Transportation and warehousing in 2001 Transportation and warehousing in 2006 Change in transportation and warehousing (percent)	8,040	774,220	1.0
	7,480	820,195	0.9
	-7.0	5.9	
Information, culture and recreation in 2001 Information, culture and recreation in 2006 Change in information, culture and recreation (percent)	8,855	721,150	1.2
	8,955	763,640	1.2
	1.1	5.9	
Finance, scientific and real estate services in 2001	16,975	1,877,290	0.9
Finance, scientific and real estate services in 2006	20,675	2,115,165	1.0
Change in finance, scientific and real estate services (percent)	21.8	12.7	
Educational and health care services in 2001	29,345	2,532,380	1.2
Educational and health care services in 2006	31,355	2,866,790	1.1
Change in educational and health care services (percent)	6.8	13.2	

See notes at the end of the table.

Table 2 - continued **South-Central Nova Scotia Uplands ecoregion** 

	South-Central Nova Scotia Uplands ecoregion	Canada	Percentage share of Canada total
Accommodation and food services in 2001	12,165	1,046,045	1.2
Accommodation and food services in 2006	11,885	1,126,695	1.1
Change in accommodation and food services (percent)	-2.3	7.7	
Public administration, management and other services <sup>6</sup> in 2001 Public administration, management and other services <sup>6</sup> in 2006 Change in public administration, management and other services <sup>6</sup> (percent)	34,835 34,020 -2.3	2,274,115 2,541,725 11.8	1.5 1.3
Total labour force in 2001 <sup>7</sup> , <sup>8</sup> Total labour force in 2006 <sup>7</sup> , <sup>8</sup> Change in total labour force <sup>7</sup> (percent)	161,035	15,872,070	1.0
	163,490	17,146,135	1.0
	1.5	8.0	

<sup>1.</sup> Some land cover classes are aggregated. "Developed land" includes built-up areas, lawns, road surfaces, industrial sites and farmsteads. "Other" refers to unclassified land types due to shadow and clouds in the satellite imagery. "Exposed land" refers to exposed soils, beaches, moraines, gravel pits and other non-vegetated surfaces. Land cover is based on LANDSAT satellite data from 1996 to 2003.

Source(s): Statistics Canada, CANSIM table 153-0057 (accessed October 8, 2009). Statistics Canada, Census of Population. Statistics Canada, Environment Statistics Canada, CANSIM table 153-0057 (accessed October 8, 2009). Statistics Canada, Census of Population. Statistics Canada, Environment Accounts and Statistics Division, Spatial Environmental Information System. Natural Resources Canada, 2008, Canada Land Inventory—Land Capability for Agriculture, Earth Sciences Sector, www.geogratis.ca/geogratis/en/collection/cli.html (accessed October 8, 2009). Natural Resources Canada, 2009, Land Cover, Circa 2000-Vector, Earth Sciences Sector, www.geobase.ca/geobase/en/data/landcover/index.html (accessed October 8, 2009). Agriculture and Agri-Food Canada, 2008, A National Ecological Framework for Canada, http://sis.agr.gc.ca/cansis/nsdb/ecostrat/intro.html (accessed February 19, 2010). Canadian Council on Ecological Areas, 2010, Conservation Areas Reporting and Tracking System (CARTS), www.ccea.org/en\_carts.html (accessed April 21, 2010).

Land cover statistics have not been compiled nationally from this source.

Includes wilderness areas and nature reserves.

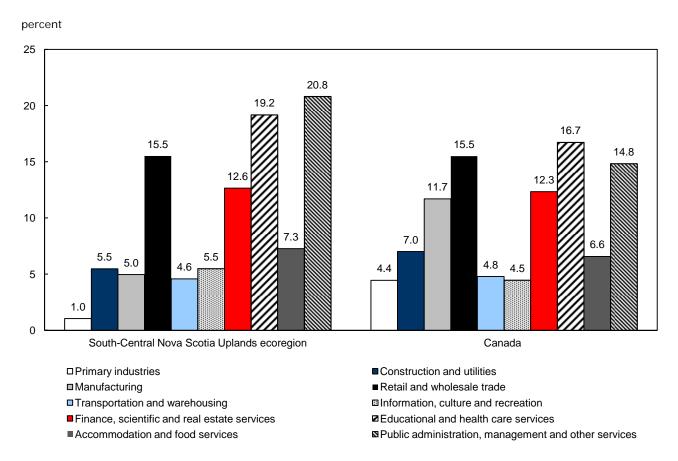
Refers to persons who were either employed or unemployed during the reference week (Sunday to Saturday) prior to Census Day (May 15, 2001 and May 16, 2006).

Includes agriculture, forestry, fishing and hunting; and mining and oil and gas extraction.

Includes management of companies and enterprises; administrative and support, waste management and remediation services; other services (except public administration); and public administration.

Includes the category "Industry - Not applicable."

Chart 2 Labour force by industry, 2006



**Note(s):** "Primary industries" includes agriculture, forestry, fishing and hunting; and mining and oil and gas extraction. "Public administration, management and other services" includes management of companies and enterprises; administrative and support, waste management and remediation services; other services (except public administration); and public administration. Percentages do not add up to 100% due to suppression and random rounding.

**Source(s):** Statistics Canada, Environment Accounts and Statistics Division, 2010, special tabulation of data from the 2006 Census of Population.

Table 3
Labour force estimates for primary industries in Nova Scotia

	Agriculture	Forestry and logging with support activities	Fishing, hunting and trapping	Mining, quarrying and oil and gas extraction
		thousands of pers	sons	
1990	8.5	3.3	10.4	6.7
1995	7.8	4.5	8.5	4.6 3.8
2000	7.6	4.9	7.6	3.8
2001	8.3	4.7	7.0	3.8
2002	7.6	4.3	7.4	4.5
2003	7.6	4.8	8.6	3.0
2004	6.4	4.2	9.7	2.8
2005	7.0	4.7	10.0	3.2
2006	5.5	2.6	8.8	3.6
2007	6.6	2.6	8.3	3.9
2008	7.0	3.9	7.3	4.0
2009	7.6	2.5	8.4	5.1
2010	6.9	3.0	8.9	3.3
2011	6.0	3.0	8.5	2.8
Change 2001 to 2006 (percent)	-33.7	-44.7	25.7	-5.3

Source(s): Statistics Canada, CANSIM table 282-0008 (accessed July 20, 2011).

## Canadian environment, economic and social indicators

Table 4
Population indicators

	2006	2007	2008	2009	2010	2011
Population <sup>1</sup>						
Persons	32,576,074	32,929,733	33,319,098	33,729,690	34,126,181	34,482,779
Percent change from previous year	1.0	1.1	1.2	1.2	1.2	1.0
Aged 65 and over (percent of total)	13.3	13.5	13.7	13.9	14.1	14.4
Density (per square kilometre)	3.6	3.7	3.7	3.8	3.8	3.8

<sup>1.</sup> Population data is based on the Estimates of Population program.

Source(s): Statistics Canada, CANSIM table 051-0001 (accessed May 22, 2012). Statistics Canada, 2012, Population and Dwelling Count Highlight Tables, 2011 Census, Catalogue no. 98-310-X2011002.

Table 5 Economy indicators

	2006	2007	2008	2009	2010	2011
Gross Domestic Product (GDP) GDP (millions of chained 2002 dollars) Percent change from previous year Per capita (chained 2002 dollars)	1,283,033 2.8 39,386	1,311,260 2.2 39,820	1,320,291 0.7 39,626	1,283,722 -2.8 38,059	1,324,993 3.2 38,826	1,356,867 2.4 39,349
Consumer Price Index (2002 = 100)	109.1	111.5	114.1	114.4	116.5	119.9
Unemployment rate (percent)	6.3	6.0	6.1	8.3	8.0	7.4

Source(s): Statistics Canada, CANSIM tables 380-0017, 051-0001, 326-0021 and 282-0002 (accessed May 31, 2012).

Table 6
Social indicators

	2006	2007	2008	2009	2010	2011
Average household spending <sup>1</sup>						
Total (current dollars)	67,736	69,946	71,364	71,117		
Water and sewage (current dollars)	221	253	251	259		
Electricity (current dollars)	1,111	1,147	1,162	1,183		
Food (current dollars)	7,046	7,305	7,435	7,262		
Gasoline and other motor fuels (current dollars)	2,079	2,223	2,233	2,218		
Personal expenditure on consumer goods and services						
(millions of chained 2002 dollars)	753,263	787,765	811,157	814,215	841,466	861,807
Residential waste						
Production 2 (tonnes)	12,616,337		12,897,396			
Production per capita (kilograms)	387		387			
Disposal (tonnes)	8,893,494		8,536,891			
Disposal per capita (kilograms)	273		256			
Diversion (tonnes)	3,722,843		4,360,505			
Diversion per capita (kilograms)	114		131			
Diversion rate (percent of waste production)	30		34			
Distance driven by light vehicles 3 (millions of kilometres)	296,871	300,203	294,361	303,576		

<sup>1.</sup> Data on average household spending is based on the Survey of Household Spending (SHS). For information on the difference between the SHS and personal expenditure data please see: Statistics Canada, 2008, *Guide to the Income and Expenditure Accounts*, Catalogue no. 13-017-X.

Source(s): Statistics Canada, CANSIM tables 203-0001, 203-0003, 203-0002, 203-0007, 380-0017, 153-0041, 153-0042, 051-0001 and 405-0063 (accessed May 31, 2012).

<sup>2.</sup> The estimates presented in this table refer only to material entering the waste stream and do not cover any waste that may be managed on-site by a household. In addition, these data do not include materials that were processed for reuse and resale, (for example, whole sale of scrap metal or used clothing), nor those materials that are collected through deposit-return systems and therefore not processed at a material recovery facility.

<sup>3.</sup> Distance driven for vehicles weighing less than 4.5 tonnes, excluding the territories.

Table 7 **Energy indicators** 

	2006	2007	2008	2009	2010	2011
Primary energy availability (terajoules)	11,176,879	11,969,050	11,179,124	10,962,914		
Primary and secondary energy Exports (terajoules) Residential consumption (terajoules)	9,833,549 1,243,425	10,308,635 1,336,452	10,265,704 1,356,259	8,816,828 1,316,207	 	
Established reserve Crude bitumen (closing stock, 1 millions of cubic metres) Crude oil (closing stock, 1 millions of cubic metres) Natural gas (closing stock, 1 billions of cubic metres)	3,340 712.6 1,577.7	3,500 721.8 1,534.3	4,300 688.8 1,671.2	4,216 622.5 1,700.9	4,130  	 
Recoverable reserves Coal (closing stock, ¹ millions of tonnes) Uranium (closing stock, ¹ tonnes)	4,468.8 423,400	4,395.2 482,000	4,322.0 447,000	4,347.1 383,000		
Electricity generation Total (megawatt hours) Hydro-electric (percent of total) Nuclear (percent of total) Fossil fuel and other fuel combustion (percent of total)	585,097,531 60.0 15.8 24.2	603,572,420 60.6 14.6 24.8	601,278,688 62.0 14.7 23.3	577,500,519 62.8 14.8 22.4	566,759,687 61.3 15.0 23.7	585,450,812 63.7 15.4 20.9

<sup>1.</sup> The size of the reserve at year-end.

Source(s): Statistics Canada, CANSIM tables 128-0009, 153-0012, 153-0013, 153-0014, 153-0017, 153-0018, 153-0019, 127-0001 and 127-0002 (accessed May 31, 2012).

Table 8 **Environment and natural resources indicators** 

	2006	2007	2008	2009	2010	2011
Greenhouse gas (GHG) emissions (megatonnes of carbon dioxide equivalent (CO <sub>2</sub> eq))	726	751	731	690	692	
GHG emissions per capita (tonnes of CO <sub>2</sub> eq)	22.3	22.8	21.9	20.5	20.3	
GHG emissions by final demand						
Total household <sup>1</sup> (megatonnes of CO <sub>2</sub> eq)	410	430	415			
Total household per capita (tonnes of CO <sub>2</sub> eq)	12.6	13.1	12.5			
Direct household 2 (megatonnes of CO <sub>2</sub> eq)	110	116	114			
ndirect household 3 (megatonnes of CO <sub>2</sub> eq)	300	314	301			
Exports (megatonnes of CO <sub>2</sub> eq)	263	271	271			
Value of selected natural resources						
Land (millions of current dollars)	1,532,193	1,708,196	1,832,780	1,905,946	2,004,683	
Timber (millions of current dollars)	265,747	245,187	232,562	191,317	170,892	
Subsoil resource stocks (millions of current dollars)	931,530	944,379	1,551,785	747,185	987,342	
Average farm pesticide expenditures (current dollars)	8,268	9,147	11,361	11,647	11,232	
Air quality <sup>4</sup>						
Ozone (population weighted, parts per billion)	38	39	38	37		
PM <sub>2.5</sub> (population weighted, micrograms per cubic metre)	8	8	8	7		

Total household greenhouse gas emissions are the sum of direct plus indirect household greenhouse gas emissions.

Statistics Canada, CANSIM tables 051-0001, 153-0046, 378-0005 and 002-0044 (accessed May 22, 2012). Environment Canada, 2012, National Inventory Report 1990-2010: Greenhouse Gas Sources and Sinks in Canada - Executive Summary, www.ec.gc.ca/ge-ghg/default.asp?lang=En&n=8BAF9C6D-1 (accessed May 22, 2012). Environment Canada, 2012, Environmental Indicators, www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=B1385495-1#air1\_en (accessed May 22, 2012). Statistics Canada, Environment Accounts and Statistics Division, Material and Energy Flow Accounts.

Direct household greenhouse gas emissions include all greenhouse gas emissions due to energy use in the home and for private motor vehicles.

Indirect household greenhouse gas emissions are those business-sector emissions due to the production of the goods and services purchased by households. An estimate of the greenhouse gas emissions from foreign companies due to the production of the imported goods purchased by Canadian households is included.

Ground level ozone and fine particulate matter (PM2,5) are two key components of smog that have been linked to health impacts ranging from minor respiratory problems to hospitalizations and premature death. Exposure studies indicate that adverse health effects can occur even with low concentrations of these pollutants in the air. Annual data are revised, based on the latest release of the Canadian Environmental Sustainability Indicators report.

# **Updates**

## **New releases**

## Human Activity and the Environment 2012: Waste management in Canada

Human Activity and the Environment 2012: Waste management in Canada gathers together a variety of statistics describing the generation and management of different types of waste. The report starts with an overview of waste generation in Canada. The remaining sections cover solid waste, wastewater discharges and air emissions in greater detail.

Released June 5, 2012 (Statistics Canada Catalogue no. 16-201-X).

## **CANSIM** tables and updates

CANSIM is Statistics Canada's key socio-economic database.

Updates have been made to the following CANSIM tables:

CANSIM table 153-0031, Direct plus indirect energy intensity, by industry, annual

CANSIM table 153-0032, Energy use, by sector, annual

CANSIM table 153-0033, Direct plus indirect greenhouse gas emissions intensity, by industry, annual

CANSIM table 153-0034, Greenhouse gas emissions, by sector, annual

CANSIM table 153-0046, Direct and indirect household energy use and household greenhouse gas emissions, annual

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