

## Energy

In Canada, there are diverse and reliable sources of energy: oil, natural gas, hydroelectricity, coal, nuclear (uranium), solar, wind, tidal and biomass. Canada is the fifth largest energy producer in the world, after Russia, China, United States and Saudi Arabia, and the eighth largest consumer of energy. Energy consumption sustains economic growth and our standard of living. Canadians are the fourth largest users of energy per person in the world. The energy sector in 2007 contributed 5.6% to the gross domestic product (GDP) and \$90 billion in exports.

Given our vast energy resources Canada has both renewable and nonrenewable energy sources. Renewable energy is generated from natural resources that are renewable (naturally replenished), for example, hydroelectricity. Nonrenewable energy is generated from finite resources that will eventually deplete or become too expensive or too environmentally damaging to retrieve, for example, crude oil.

Petroleum, mainly crude oil, has been the largest source of energy production since 2003, with natural gas a close second. Renewable energy sources (excluding hydroelectricity) represent only 4% of domestic energy production in 2007, a modest increase of 0.3% since 2003 (see Table 1).

**Table 1.** Production by Energy Source (in petajoules<sup>1</sup>)

	2003	2004	2005	2006	2007 <sup>2</sup>
Petroleum <sup>3</sup>	6 479	6 667	6 545	6 862	7 235
Natural gas	6 462	6 524	6 373	6 585	6 484
Hydroelectricity	1 198	1 206	1 291	1 271	1 302
Nuclear	820	989	1 007	1 072	1 020
Coal	1 326	1 476	1 494	1 554	1 586
Renewable and other <sup>4</sup>	633	657	681	709	733
Total	16 918	17 519	17 391	18 053	18 360

**Source :** National Energy Board. Canadian Energy Overview, 2007

<sup>1</sup>A unit of energy (1 petajoule=10<sup>15</sup> joules)

<sup>2</sup>Estimates

<sup>3</sup>Includes crude oil and natural gas liquids, bitumen and condensate

<sup>4</sup>Includes wind, solar, and solid wood waste

The industrial sector was the largest consumer of energy in 2007, followed by the transportation, residential and commercial sectors (see Table 2). Throughout the period 2003 to 2006, the largest consumers of energy were the industrial and transportation sectors.

**Table 2.** Domestic Consumption of Energy (in petajoules<sup>1</sup>)

	2003	2004	2005	2006 <sup>2</sup>	2007 <sup>2</sup>
Residential	1 448	1 425	1 410	1 369	1 442
Commercial	1 444	1 459	1 363	1 300	1 347
Industrial	4 704	4 853	5 203	5 252	5 323
Transportation	2 577	2 679	2 777	2 758	2 864
Total	10 173	10 416	10 753	10 680	10 976

**Source :** National Energy Board. Canadian Energy Overview, 2007

<sup>1</sup>A unit of energy (1 petajoule=10<sup>15</sup> joules)

<sup>2</sup>Estimates

Jurisdiction over energy is divided between the federal government and provincial and territorial governments. Provincial and territorial governments have jurisdiction over the exploration, development, conservation and management of nonrenewable resources, including the generation of electricity. The federal government is concerned with the regulation of interprovincial and international trade, and the management of nonrenewable resources on federal lands.

