

Environmental and Clean Technology Products Economic Account, 2018

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The gross domestic product (GDP) generated by the environmental and clean technology (ECT) products sector grew 0.8% in real (volume) terms from 2017 to 2018. By comparison, the total Canadian economy grew 2.2% over the same period. The clean technology products component of GDP from this sector declined 1.0% from 2017 to 2018—an increase in the growth of manufactured goods (+4.1%) did not offset a decrease in construction services (-5.2%) as large-scale projects were completed in 2018.

The Environmental and Clean Technology Products Economic Account measures the contribution to the Canadian economy of goods and services that reduce environmental impacts. Two broad categories of goods and services are recognized: environmental goods and services (including clean electricity, biofuels and primary goods, and waste management and remediation services), and clean technology goods and services (including manufactured goods, scientific and research and development services, construction services, and support services). Examples of clean technology goods and services include solar panels or the design and construction of energy-efficient buildings.

The overall growth of the ECT sector was moderated by a downturn related to the completion of the hydroelectric dam at Muskrat Falls in Newfoundland and Labrador.

British Columbia had the highest growth among the provinces in 2018, advancing 4.7% from the previous year, mainly as a result of growth in clean technology services. Alberta had the second-highest growth (+4.2%), led by increased production of clean energy. Newfoundland and Labrador and Nova Scotia both reported large decreases after construction on ECT-related hydroelectric projects ended in 2018.

In nominal terms, the value of the total ECT products sector in Canada was \$66.3 billion in 2018, accounting for 3.2% of Canadian GDP. This share has remained relatively stable since the start of the time series in 2007. Three provinces were the main contributors in 2018: Ontario (33.3%), Quebec (30.5%) and British Columbia (13.6%).

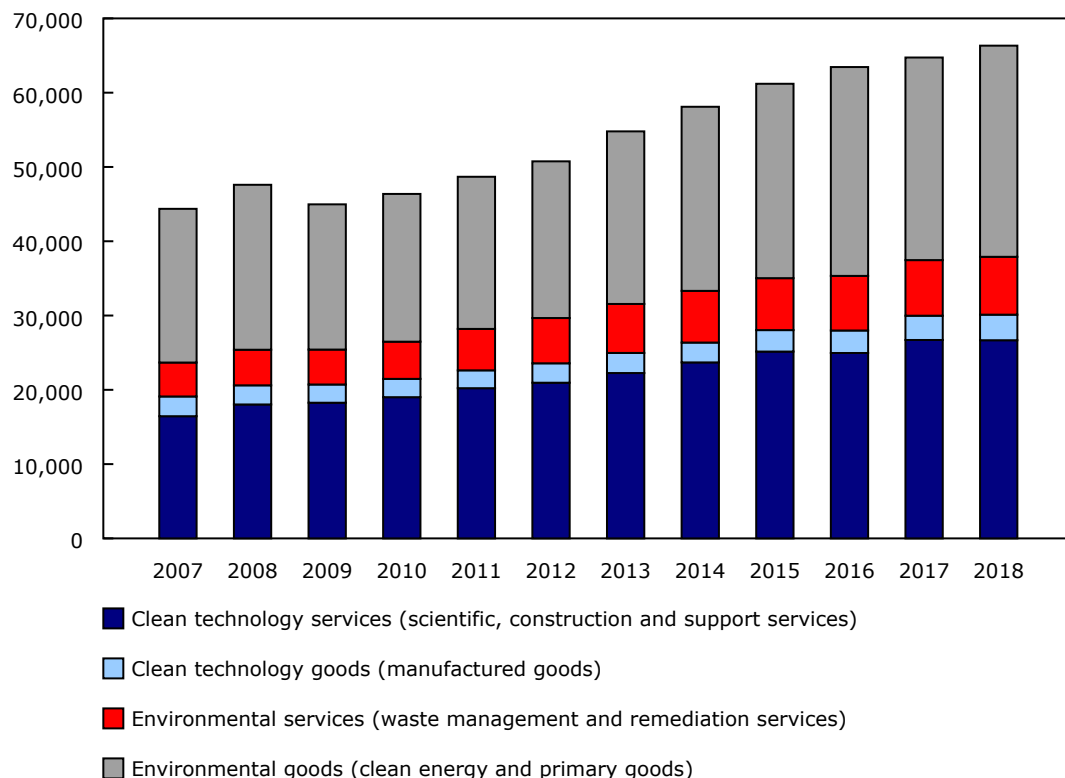
Gross domestic product from the environmental and clean technology products sector is driven by clean electricity production

In 2018, over half (54.6%) of the national GDP from ECT products was attributable to the value of environmental goods and services. Clean electricity was a large component of this category, accounting for 41.3% of GDP from ECT products. The remaining 45.4% of national GDP from ECT products was attributable to the production of clean technology goods and services.



Chart 1
Composition of national gross domestic product from environmental and clean technology products

millions of current dollars



Source(s): Table 36-10-0627-01.

Note(s): Primary goods: goods that do not require any further manufacturing after extraction or growth.

Of the GDP from ECT products that was attributable to the generation of clean electricity in 2018, almost three-quarters was driven by the provinces of Quebec (43.6%) and Ontario (28.3%). Alberta, British Columbia and Ontario contributed the largest shares of the GDP from ECT that were attributable to biofuels and primary products (38.2%, 23.2% and 22.1%, respectively). The GDP from ECT products generated by manufactured goods was predominately driven by Ontario (43.9%), followed by Quebec (27.9%). More than half (57.6%) of the national contribution to the GDP from ECT that came from clean technology services was generated in Ontario (36.6%) and Quebec (21.1%).

International trade expands

Volumes of ECT product exports increased 1.1% from 2017 to 2018. In nominal terms, the value of Canadian ECT product exports totalled \$13.6 billion in 2018, accounting for 1.9% of total Canadian exports. In 2018, 77.6% of all ECT product exports were clean technology products (mostly manufactured goods). Clean electricity exports accounted for 16.4% of ECT product exports. Ontario accounted for 48.8% of national ECT product exports, while Quebec accounted for 21.9%.

National import volumes of ECT products grew 20.1% in 2018, after decreasing 0.6% in 2017. The total value of Canadian ECT product imports (in nominal terms) was \$19.5 billion in 2018, accounting for 2.6% of total Canadian imports. Clean technology products (mostly complex manufactured products) accounted for 77.4% of ECT product imports, followed by biofuels and primary goods, at 19.6%.

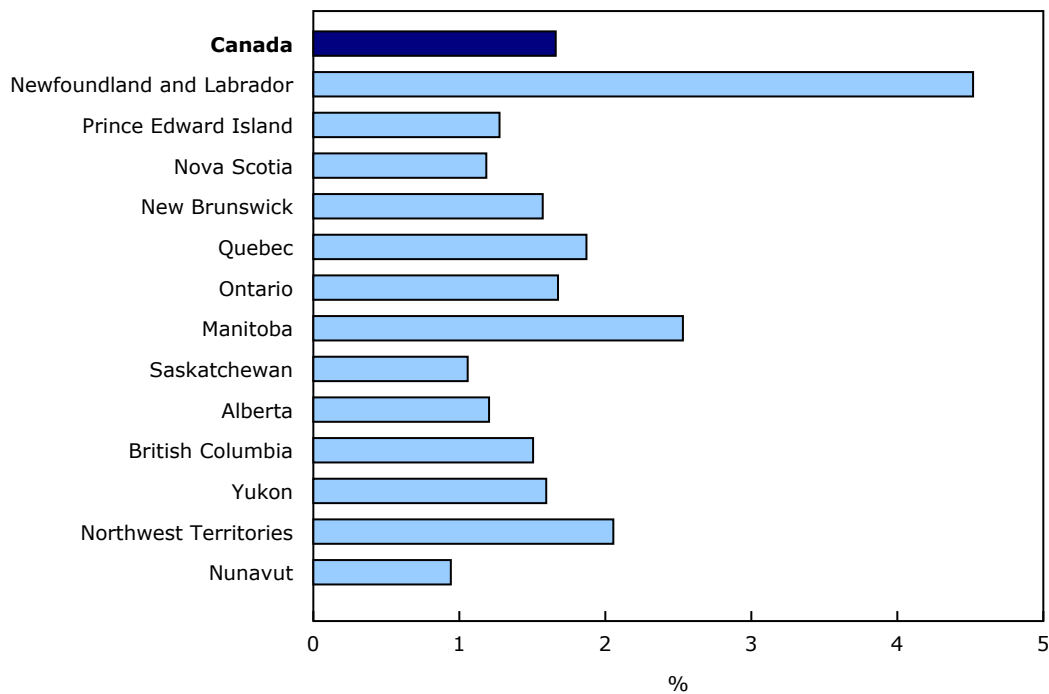
Employment increases

An estimated 317,000 jobs were attributable to total ECT activity in 2018, comprising 1.7% of all jobs in Canada. This represented a 1.6% increase from 2017. Just over 80,400 jobs were in the engineering construction industry (25.5% of all ECT jobs), followed by 69,900 jobs in the utilities industry.

Ontario, Quebec and British Columbia employed 76.1% of ECT sector workers in 2018.

In 2018, the national average annual compensation per ECT job, including benefits, was \$84,700 (up 0.1% from 2017), compared with an economy-wide average of \$61,700 (up 3.2% from 2017).

Chart 2 Jobs attributed to environmental and clean technology products sector, 2018



Source(s): Tables 36-10-0632-01 and 36-10-0489-01.

Note to readers

The Environmental and Clean Technology Products Economic Account (ECTPEA) measures the economic contribution of environmental and clean technology (ECT) products in terms of output, gross domestic product (GDP), employment (number of jobs) and other economic variables. Estimates are directly comparable with national results for the Canadian economy. Estimates of GDP referred to in this release are measured at basic prices.

Estimates for 2017 and 2018 are preliminary and will be revised when updated data become available, including the supply and use tables for those reference years. National estimates were revised to reflect new methodologies and new data sources used; estimates are reported in new tables.

ECT is defined as any process, product or service that reduces environmental impacts through any of the following three strategies: environmental protection activities that prevent, reduce or eliminate pollution or any other degradation of the environment; resource management activities that result in the more efficient use of natural resources, thus safeguarding against their depletion; or the use of goods that have been adapted to be significantly less energy or resource intensive than the industry standard. ECT products are reported in two broad categories: environmental goods and services (including clean electricity, biofuels and primary goods, and waste management and remediation services), and clean technology goods and services (including manufactured goods, scientific and research and development services, construction services, and support services). The products follow the Supply and Use Product Classification used in the Canadian System of Macroeconomic Accounts.

As part of the Government of Canada's initiative to develop the Clean Technology Data Strategy, the ECTPEA provides comprehensive measures of the supply and use of ECT products in the Canadian economy. The ECTPEA has a broader scope than the Survey of Environmental Goods and Services (SEGS) because it captures all economy-wide transactions in the ECT sector, including elements such as clean energy and scrap goods. The government and non-profit sectors are also fully covered in the ECTPEA.

The compilation of the ECTPEA draws on a variety of data sources, including Statistics Canada's supply and use tables, detailed import and export statistics released in Canada's balance of international payments, and SEGS.

Examples of environmental goods and services and clean technologies are available in the publication *Clean technologies and the Survey of Environmental Goods and Services: A technical reference guide* (16-511-X).

The data tables 36-10-0627-01 to 36-10-0632-01, released on February 28, are also available.

Definitions, data sources and methods: survey number 1901.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; STATCAN.infostats-infostats.STATCAN@canada.ca) or Media Relations (613-951-4636; STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca).