

Environmental and Clean Technology Products Economic Account: Human resource module, 2009 to 2017

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Approximately 297,000 jobs were attributable to environmental and clean technology (ECT) activity in 2017, accounting for 1.6% of all jobs in Canada. Of these, 282,045 (95.0%) were employee jobs, while the remainder were self-employment jobs. ECT employee jobs increased 1.9% from 2016.

Characteristics of ECT workers: Gender, education, age, and immigration status

Women held 28.2% of ECT jobs in 2017, with almost seven jobs out of ten (68.0%) being in the ECT services (except waste management and remediation services) and ECT manufactured products sub-sector. These shares have remained relatively stable since 2009. In 2017, men (36.2%) were more likely to work in the clean electricity and waste management and remediation services ECT sub-sector, than women (32.0%).

Two-thirds (66.1%) of ECT workers had more than a high school education in 2017. This proportion remained stable since 2009. From 2009 to 2017, female ECT workers (71.0% in 2017) were more likely than male ECT workers (64.1% in 2017) to have more than a high school education.

The workforce in the ECT sector has been aging over time. In 2017, the proportion of employees aged 55 and older in this sector was 20.4%, up from 16.3% in 2009. The representation of Indigenous employees was highest in the 15 to 24 age group (6.5% of this group), while they accounted for 4.6% of total ECT workers in 2017.

Immigrant workers represented 19.1% of ECT employees in 2017, a slight increase from 18.1% in 2009.

Characteristics of ECT jobs: Wages and salaries and occupations

Wages and salaries in the ECT sector were typically higher than the average in the Canadian economy, with the average wages and salaries for ECT jobs standing at \$74,895 in 2017, compared with the national average of just over \$53,600. ECT jobs held by workers with a university degree had the highest compensation, averaging \$94,150 in 2017. But all ECT jobs, regardless of educational attainment, had average wages and salaries that were higher than the national average.

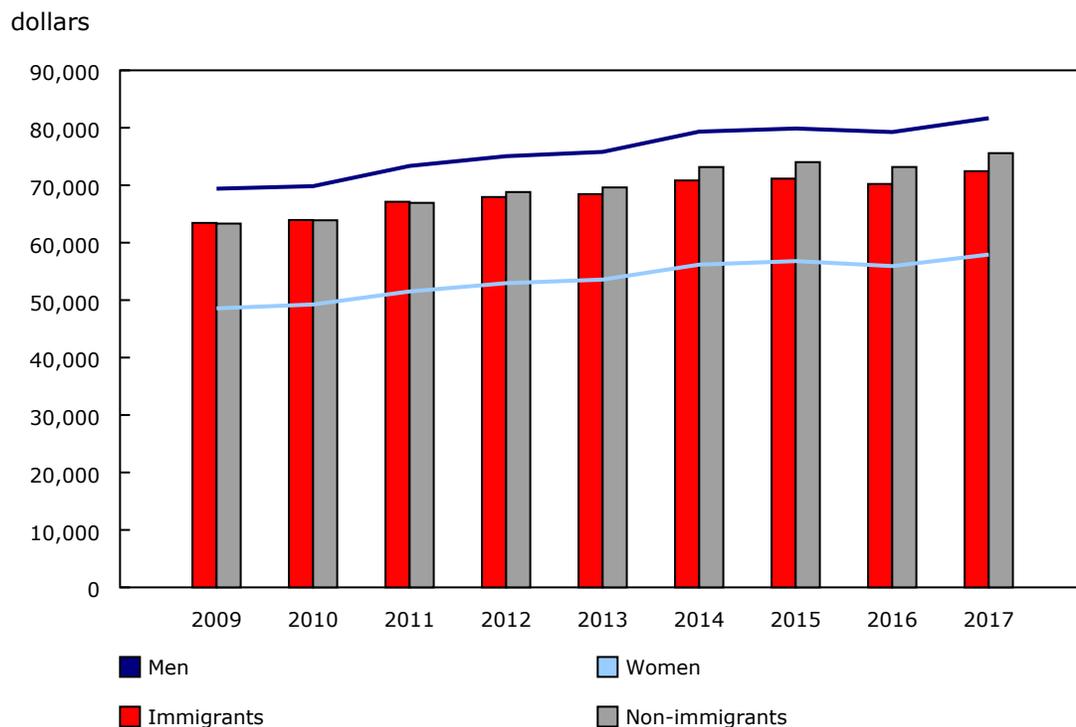
Women working in the ECT sector earned an average salary of \$57,932 in 2017, while men earned an average of \$81,670. This means that women earned, on average, 70.9% of men's average salary. This percentage has remained stable since 2009. Women's average hourly wage (\$34.11 in 2017) has increased steadily since 2009 (+17.5%). During this period, the men's average hourly wage (\$40.29 in 2017) has also increased, but at a slower rate (+15.7%).

Non-immigrant employees in the ECT sector had higher salaries (\$75,586) than immigrant employees (\$72,447) in 2017. By contrast, the difference in salaries between these two groups was much smaller in 2009 (\$63,325 for non-immigrant employees, versus \$63,440 for immigrant employees).

The top five occupation types linked to ECT activities for 2017 were: heavy equipment operators (18,300); general office workers (12,800); trades helpers and labourers (12,600); electrical trades and electrical power line and telecommunications workers (10,500); and office administrative assistants - general, legal and medical (9,800). These categories represented 22.7% of all ECT jobs. Civil, mechanical, electrical and chemical engineers came in 6th position, with an estimated 9,600 jobs linked to the ECT sector in 2017.



Chart 1
Annual average salaries, environmental and clean technology products sector



Source(s): Special tabulation based on the Environmental and Clean Technology Products Economic Account, table 36-10-0411-01.

Note to readers

The aim of the Human resource module (HRM) is to provide timely and reliable statistics on the human resource dimension of environmental and clean technology production in Canada.

The HRM complements and enhances the analytical capacity provided by the [Environmental and Clean Technology Products Economic Account](#) and allows for a broader insight into the sector's role in the economy by providing more detailed human resource information (gender, age, education, immigration status, indigenous identity, wages, and occupation types, among others).

The special tabulations produced by this module are accessible on request. This article provides a sample of the information that can be derived from the HRM special tabulations.

The HRM provides annual estimates for 2009 to 2017, and covers employee jobs only. These estimates are based on national data from the Canadian Productivity Accounts, which are a key input to the HRM, as well as Labour Force Survey data. Census of Population data for 2006 and 2016 as well as the 2011 National Household Survey are also incorporated.

Environmental and clean technologies are defined as any process, product, or service that reduces environmental impacts: through 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.

Definitions, data sources and methods: survey number 1901.

The Infographic "[Portrait of environmental and clean technology jobs in Canada, 2017](#)" is now available as part of the series *Statistics Canada — Infographics (11-627-M)*. The special tabulations produced by the Human resource module are available upon request.

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).