



Environmental Job Market Trends in 2018

June 2019

Canada 

Funded by the Government of Canada's
Sectoral Initiatives Program



About ECO Canada

Environmental Careers Organization of Canada (ECO Canada) is a not-for-profit organization established in 1992 to help nurture Canada's growing environmental sector and its workforce. ECO Canada offers programs to help individuals build meaningful environmental careers, provides employers with resources to attract and retain the best environmental practitioners and informs educators and governments of current and future workforce trends, challenges and opportunities.

Labour Market Intelligence

ECO Canada gathers and analyzes skill and labour market trends within the environmental profession and provides up-to-date, timely and relevant data and insights that can be applied in policy, business, and educational contexts. The complete collection of reports is available at eco.ca.

ECO Canada is moving away from large multifaceted surveys as its primary source of labour market information (LMI) and is examining new ways of measuring environmental employment:

- Job posting analysis or real-time LMI to identify hiring trends and skills in demand.
- Estimating labour demand and supply using secondary statistics, such as employment data from Statistics Canada. Economic drivers are also factored in to create a demand forecast for environmental employment.
- Sector profiling such as our [Energy Efficiency Employment in Canada](#) report (April 2019) with in-depth research on trends and issues driving growth or decline.

ECO Canada welcomes comments and discussion of all its LMI reports. Contact research@eco.ca

Acknowledgements

This study was funded by the Government of Canada's Sectoral Initiatives Program, whose continuous support is much appreciated.

We also acknowledge the research and analytical expertise provided by Field Guide Consulting and Indigo Dog Consulting and data from Statistics Canada and other sources.

Table of Contents

1 Synopsis	4
2 Introduction	7
2.1 ECO Canada Labour Market Information (LMI)	7
2.2 ECO Canada Job Ad Data	8
2.3 Scope and Limitations of this Report	8
3 Canada's Job Market in 2018	9
3.1 Employment in Canada Continued to Grow in 2018	9
3.2 A Deeper Look at Employment Gains in Canada	10
3.3 The Number of Job Vacancies in Canada Increased in 2018	11
3.4 Online Job Ad Data Indicative of Job Market Trends	12
4 Online Environmental Job Ad Data and Trends in Canada	13
4.1 Environmental Job Ads Increased 17% from 2016 to 2018, Compared to 7% for Total Job Ads	13
4.2 Job Ad Numbers Increased in 11 of 13 Environmental Sectors in 2018	15
4.3 Three Provinces Account for 75% of Environmental Job Ads	16
4.4 Four Provinces with the Highest Growth Rates in Environmental Job Ads in 2018	17
4.5 Ten Occupations Accounted for Over 55% of Environmental Online Job Ads in 2018	18
5 Appendix: Additional Tables	20

1 Synopsis

Real-time job ad data is based on the analysis of millions of job ads posted online every day by employers. Bots scan the Internet to collect online job ads, and software then extracts top-line information about each one, identifying “environmental jobs” as those requiring specialized environmental skills and training. The environmental job ads are then classified according to [environmental sectors or areas of practice](#). Environmental job ads are also mapped to the National Occupational Classifications used by Statistics Canada, and to job location. The scope consists of English-language job ads posted online for employment opportunities across Canada in 2018¹.

The analysis of job ad data has many uses. The real-time nature of job ad data allows for the early detection of labour demand trends, such as hiring sectors, and skills in demand.

The analysis of job ad data revealed:

Environmental Job Ad Numbers Increased by 17% from 2016 to 2018

Canada’s environmental job market expanded in 2018 with 24,500 job ads online, reflecting an 8% increase from 2017 levels. Overall, environmental job ads increased by 17% from 2016 to 2018, compared to only 7% for the universe of scraped job ads.

Although the incidence rate of environmental to total job ads was little changed from 2.16% in 2017 to 2.14% in 2018, it is an improvement from the 1.95% incidence rate in 2016.

Table 1: Number of Job Ads in Canada, Total vs Environmental, 2016-2018

Job Ad Type	2016	2017	2018	Change from 2016
Total online job ads	1,070,700	1,050,100	1,147,200	+76,500 (7% growth)
Environmental job online ads	20,900	22,700	24,500	+3,600 (17% growth)
Environmental job incidence rate (% of environmental to total job ads)	1.95%	2.16%	2.14%	

These increases were likely the result of:

- Continued growth in Canada’s economy, including employment in 2018
- Growth in industries that employ environmental workers, such as Manufacturing, Professional, scientific and technical services, Public administration and Construction²
- Provincial governments implementing climate change plans

¹ Caution is warranted when analyzing provincial job ad numbers since French-language only job ads were not scraped which may understate numbers for Quebec and New Brunswick. Jobs in territories were also not captured.

² M. Patterson, M. Hazel and D. Saunders. [Annual review of the labour market, 2018](#). Statistics Canada catalogue no. 75-004-M, April 16, 2019.

Number of Environmental Job Ads in Saskatchewan, Nova Scotia, Prince Edward Island and Alberta Gains Steam

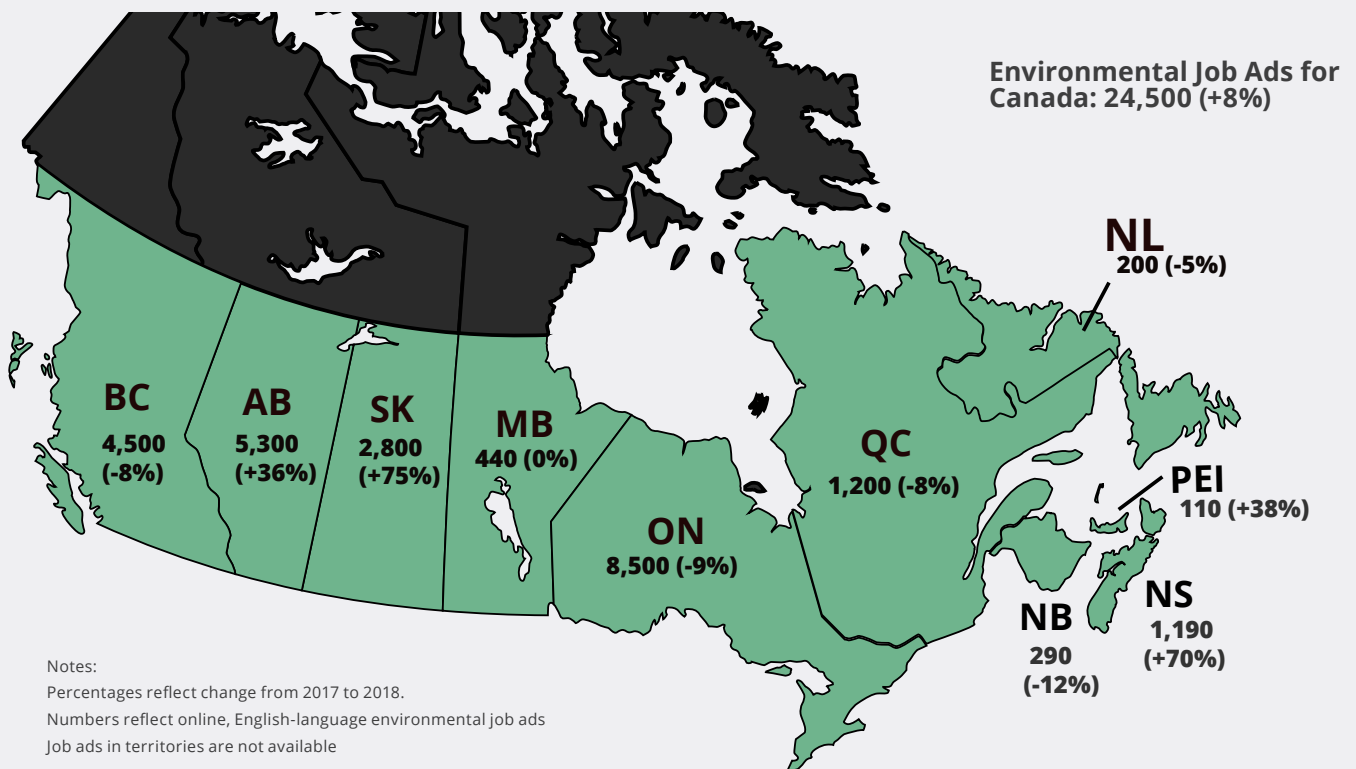
Ontario, Alberta and British Columbia continued to register the most environmental job ad numbers in 2018, accounting for 75% of all environmental job ads in Canada.

- Ontario continued to hold the highest share of Canadian environmental job ads at 35% in 2018, a decline however from its 41% share in 2017
- Alberta's share of environmental job ads increased from 17% in 2017 to 22% in 2018, boosting the province from third to second largest recruiter of environmental workers
- British Columbia's share of environmental job ads decreased from 22% in 2017 to 18% in 2018, moving the province to third place

Across the three provinces, Alberta is the only province that registered growth in environmental job ad numbers in 2018 with 1,400 more job ads, or a 36% increase. The other two provinces showed a decline in environmental job ads at -9% for Ontario and -8% for British Columbia.

Saskatchewan, Nova Scotia and Prince Edward Island saw the highest growth rates in the number of environmental job ads in 2018 at 75%, 70% and 38% respectively.

Figure 1: Environmental Job Ad Numbers and Growth Rates by Province, 2018



Three Occupations Continue to Account for a Third of Environmental Job Ads in 2018

Agricultural and horticultural workers, Regulatory officers and other technical inspectors and Civil, mechanical, electrical and chemical engineers remained the positions with the most environmental job ads in 2018 at 3,350, 3,210 and 2,050 respectively. The three occupations accounted for 35% of all environmental job ads in Canada in 2018.

The Majority of Environmental Sectors Showed Increases in Online Job Ads in 2018

Among the 13 environmental sectors, 11 saw an increase in the number of environmental online job ads in 2018. The five environmental sectors with the most job ads³ in 2018 were:



Natural Resource Management
8,300 (+15% from 2017)



Environmental Health & Safety
5,000 (+4%)



Waste Management
4,500 (+15%)



Energy
3,800 (+12%)



Water Quality
3,100 (+3%)

³ A job ad may be classified in one or more environmental sectors. The sum of the environmental sector job ad numbers will therefore exceed the total number of environmental job ads in any given period.

2 Introduction

2.1 ECO Canada Labour Market Information (LMI)

ECO Canada has long classified environmental work into three key areas: **Environmental Protection, Resource Management and Environmental Sustainability**. Within each area ECO Canada identifies sub-sectors such as Water Quality, Fisheries & Wildlife, and Education & Training, which relate to specific functions or disciplines of environmental work. This framework is referred to as the ECO Canada Sector Model (see **Figure 2**).

The sectors are distinguished by a set of competencies identified by ECO Canada in consultation with subject matter experts. The competencies collectively make up the [National Occupational Standards \(NOS\)](#) for environmental work.

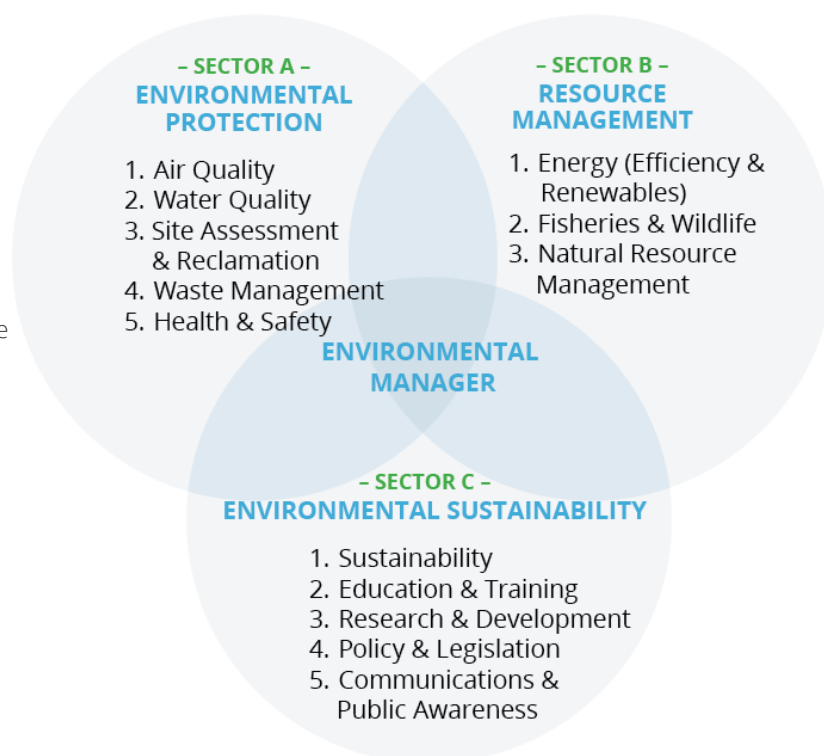
As the environmental sector has evolved over the years, so too have definitions of the environmental workforce. Currently, ECO Canada defines environmental workers as those who work in occupations requiring specialized environmental skills and training, wherein the skills directly relate to ECO Canada's NOS.

Statistics Canada defines occupations using the [National Occupational Classification \(NOC\)](#) system. The NOC system classifies jobs according to the scope of work performed by workers who typically share similar job duties, competencies, skills, knowledge, training and education. This framework serves to standardize labour force data to make it consistent, comprehensive and comparable.

Environmental employment based on the NOS classifications does not align precisely with employment based on the [NOC codes](#)⁴. As an example, environmental geologists, hydrologists, and mineralogists are grouped under NOC 2113 along with geoscientists and oceanographers, petroleum geologists, paleontologists and many more.

ECO Canada conducts labour market research using survey data, secondary statistics from large government databases and job ad data. Recent developments in job ad scraping methods allow us to link NOS and NOC employment data.

Figure 2: ECO Canada's Sector Model



⁴ There are 500 occupational unit groups at the four-digit NOC code. See [NOC Structure](#).

2.2 ECO Canada Job Ad Data

ECO Canada began performing job ad data collection and analysis in 2013. During that pilot year, algorithms based on job titles, keywords, key phrases and more advanced artificial intelligence techniques were developed to identify and classify environmental job ads online. Starting in 2014, new online job ad sources were added to the “scraped” universe. While job sources are being added on a daily basis, they may not necessarily impact the total number of unique online job ads. For purposes of comparison over time, we assume that the job ads included in new sources are already captured within existing “scraped” sources.

2.3 Scope and Limitations of this Report

The total and environmental job ad numbers in this report focus on job ads posted online in 2018⁵. The job scraping algorithms and methodology currently used by ECO Canada capture only English-language online job ads in Canada. This likely impacts some of the provincial numbers and understates the number of job ads in certain jurisdictions (e.g., Quebec). Job ads in Territories were also not captured.

Because jobs may be advertised and not filled, or some jobs may never be advertised at all, or the turnover rates in some occupations are higher than others, ECO Canada’s job ad data and reports are supplemented by primary and secondary research to more fully explain trends in employment.

Environmental jobs ad numbers are compared to total job ad numbers and classified according to environmental sectors or areas of practice, NOC, and job location. Year-over-year analysis is provided to indicate trends.

Except for the table in the Appendix, all numbers presented in this report have been rounded for readability.



Who Should Use ECO Canada Job Ad Data

Job ad data provide insights around hiring needs and recruitment trends which are useful to:

- Job seekers
- Employers
- Governments
- Education and training institutions
- Researchers

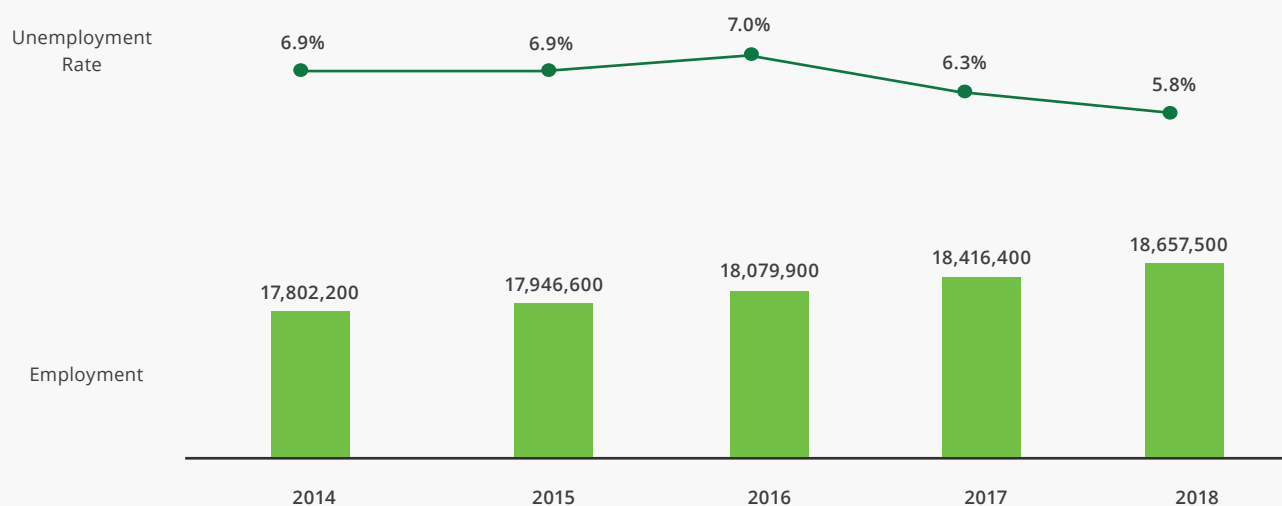
⁵ ECO Canada’s previous reports include: [Canadian Environmental Employment: Job Posting Analysis \(September 2017\)](#); [Canadian Environmental Job Posting Trends \(February 2018\)](#); [Environmental Job Market Trends in Canada 2014-2017 \(August 2018\)](#); [Environmental Job Market Trends Mid-2018: A review of job market and recruitment trends \(December 2018\)](#); [Environmental Job Postings Within Industries \(December 2018\)](#).

3 Canada's Job Market in 2018

3.1 Employment in Canada Continued to Grow in 2018

According to Statistics Canada, the national unemployment rate fell from an average of 6.3% in 2017 to 5.8% in 2018, the lowest annual rate since 1976. Total employment in Canada increased by 241,100 (+1.3%) in 2018, although this was slightly lower than the +1.9% growth in employment observed in 2017. Other labour market indicators also exhibited favourable trends in 2018. For example, the rate of long-term unemployment decreased from 19.8% in 2017 to 17.3% in 2018 and the average duration of unemployment declined by -1.4 weeks (to 18.3 weeks) in 2018⁶.

Figure 3: Annual Labour Force Estimates in Canada



Source: Statistics Canada. Labour Force Survey (LFS); Labour force characteristics by sex and detailed age group, annual ([14-10-0327-01](#))

⁶ M. Patterson, M. Hazel and D. Saunders. [Annual review of the labour market, 2018](#). Statistics Canada catalogue no. 75-004-M, April 16, 2018.

3.2 A Deeper Look at Employment Gains in Canada

Employment growth in 2018 was distributed widely across regions, industries and occupations:



Top 3 Regions with the Highest Employment Gains in 2018

- Ontario: 114,400 new jobs (+1.6% from 2017)
- Alberta: 43,800 new jobs (+1.9%)
- Quebec: 38,900 new jobs (+0.9%)

Although employment numbers are smaller in Prince Edward Island, the province had the highest employment growth rate at 3.1% or 2,300 new jobs.

Source: Statistics Canada. Labour Force Survey (LFS); Labour force characteristics by sex and detailed age group, annual ([14-10-0327-01](#))



Top 3 Industries with the Highest Employment Gains in 2018

- Health care and social assistance: 54,400 new jobs (+2.8% from 2017)
- Manufacturing: 43,100 new jobs (+2.9%)
- Professional, scientific and technical services: 39,900 new jobs (+4.5%)

Although employment numbers are smaller in Management of companies and enterprises, this industry had the highest employment growth rate with 6.7% or 6,500 new jobs in 2018.

Source: Statistics Canada. Survey of Employment, Payrolls and Hours (SEPH); Employment by industry, annual ([14-10-0202-01](#))



Top 3 Occupational Groupings with the Highest Employment Gains in 2018

- Trades, transport and equipment operators and related occupations: 62,400 new jobs (+2.4% from 2017 levels)
- Business, finance and administration occupations: 49,400 new jobs (+1.7%)
- Natural and applied sciences and related occupations: 48,200 new jobs (+3.4%)

Source: Statistics Canada. Labour Force Survey (LFS); Labour force characteristics by occupation, annual ([14-10-0335-01](#))

3.3 The Number of Job Vacancies in Canada Increased in 2018

Job vacancies can be used as a proxy measure for labour demand, which tends to increase during economic expansion and decrease during economic contraction. Higher job vacancy rates tend to be associated with stronger economic activity and generally indicates more intense labour and/or skill shortages.

Based on Statistics Canada's Job Vacancy and Wage Survey (JVWS) data, in the fourth quarter of 2018 job vacancies reached 547,800, up 16.6% from the same quarter in 2017. The job vacancy rate was 3.3% in the fourth quarter of 2018, up from 2.9% in the fourth quarter of 2017, but down slightly from the 3.4% vacancy rate in the second quarter of 2018⁷.

This job vacancy data is consistent with the results of the Bank of Canada's Winter 2018 Business Outlook Survey. And although survey results suggest labour shortages had eased relative to Fall 2018, firms still reported experiencing difficulties finding workers compared to the previous year. Furthermore, two-thirds of firms surveyed were increasing their recruitment efforts to grow staff numbers⁸.



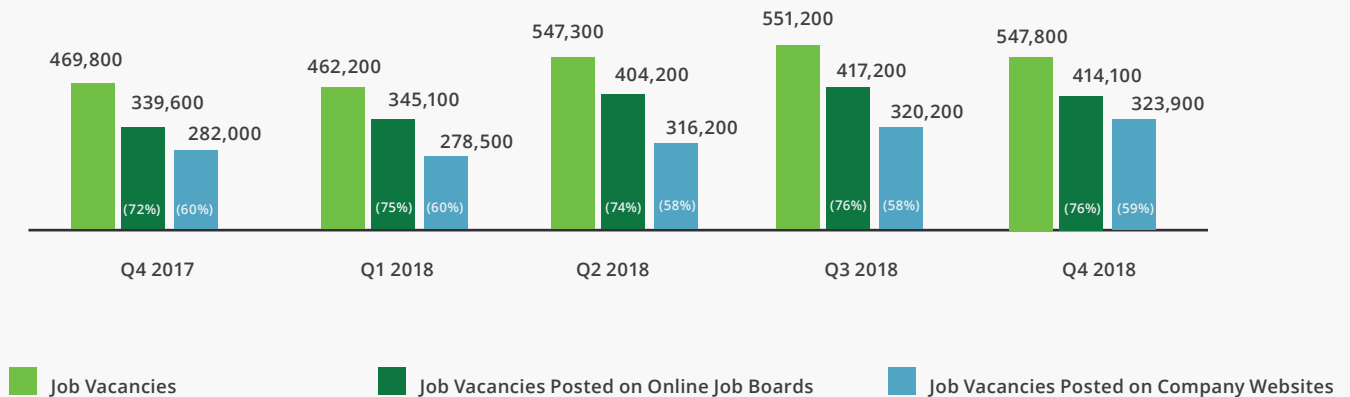
⁷ Statistics Canada. Job Vacancy and Wage Survey (JVWS); Job vacancies, payroll employees, job vacancy rate, and average offered hourly wage by provinces and territories, quarterly, unadjusted for seasonality ([14-10-0325-01](#)).

⁸ Bank of Canada. [Business Outlook Survey Winter 2018](#).

3.4 Online Job Ad Data Indicative of Job Market Trends

ECO Canada has adopted online job ad data analysis as one method for gathering information about labour demand in the environmental sector. While not all job vacancies are posted on an online platform (such as an online job board or company website), data from JWVS indicates that roughly three-quarters of all job vacancies in 2018 were posted on an online job board and nearly 60% of job vacancies were posted on company websites⁹. What this tells us is that online job ad data provides a reasonable snapshot of recruitment trends within Canada, including within the environmental sector¹⁰.

Figure 4: Job Vacancies and Job Vacancies Posted Online in Canada (Quarterly)



Source: Statistics Canada. Job Vacancy and Wage Survey (JWVS): Job vacancies and proportion of job vacancies by occupation and recruitment strategies, quarterly, unadjusted for seasonality (14-10-0328-08). JWVS respondents may report multiple recruitment strategies for each job vacancy, so there will be some overlap between job vacancies posted on online job boards and job vacancies posted on company websites.

⁹ JWVS respondents may report multiple recruitment methods, so there will be some overlap between job vacancies posted on online job boards and job vacancies posted on company websites.

¹⁰ Online job posting numbers and rates could vary significantly within education, industry, and occupational clusters (A. Carnevale, T. Jayasundera and D. Repnikov. [Understanding Online Job Ads Data: A Technical Report](#). Georgetown University McCourt School of Public Policy, April 2014).

4 Environmental Job Ad Data and Trends in Canada

4.1 Environmental Job Ads Increased 17% from 2016 to 2018, Compared to 7% for Total Job Ads

Although the proportion of online English-language job ads classified as environmental remained steady from 2.16% in 2017 to 2.14% in 2018, it reflects an increase from the 1.95% proportion seen in 2016.

Detailed findings for 2018 indicate that:

- While total job ads declined by 2% from 2016 to 2017, environmental job ads increased 9% in 2017. In 2018, both total and environmental job ads increased, by 9% and 8% respectively.
 - The number of online environmental job ads increased from 22,700 in 2017 to 24,500 in 2018.
 - The total number of job ads increased from 1.05 million in 2017 to 1.15 million in 2018.
- The number of environmental job ads increased 9% in 2017 and a further 8% in 2018, for a combined growth of 17%. In comparison, total job ads only grew by 7% from 2016 to 2018.
- The proportion of total job ads that were environmental rose from 1.95% in 2016 to 2.16% in 2017 and remained steady at 2.14% in 2018.

In this section, numbers reflect English-language job ads posted.

Figure 5: Number of Job Ads in Canada, Total vs Environmental 2016-2018



As **Figure 3** shows, the number of jobs in the Canadian economy increased by 336,500 in 2017 and a further 241,100 in 2018. The number of job vacancies and job vacancy rate in Canada also increased from 2016 to 2018, reflecting a tightening of the labour market. Wages were also higher in 2018 compared to 2016 and 2017¹¹. These indicators all reflect improvement in economic conditions from 2016 to 2018, which not only helped total employment in Canada, but also had an impact on environmental jobs.

Apart from the general growth in Canadian employment described in Section 3, the increase in the number of environmental job online postings in some provinces was potentially driven by specific regulatory changes. For example, both the Government of Saskatchewan and the Government of Nova Scotia have recently implemented new regulations designed to reduce greenhouse gas emissions and combat the effects of climate change. These types of initiatives induce firms to seek out environmental professionals to assess new legislative requirements and implement plans to meet those requirements.

Additionally, in 2018, both employment and job vacancies grew in key sectors that hire environmental workers such as Manufacturing, Construction, Public administration and Professional, scientific and technical services¹². The increase in environmental online job ads in 2018 may also be attributed to the increasing focus on diversifying the energy sector and investing in more sustainable and environmental technologies. For example, Canadian energy efficiency jobs within Construction, Manufacturing, Wholesale trade, Professional, scientific and technical services, Utilities and Other services grew close to 3% in 2018¹³.



¹¹ ["Job vacancies, fourth quarter 2018."](#) The Daily. Statistics Canada catalogue no. 11-001-X (March 25, 2019).

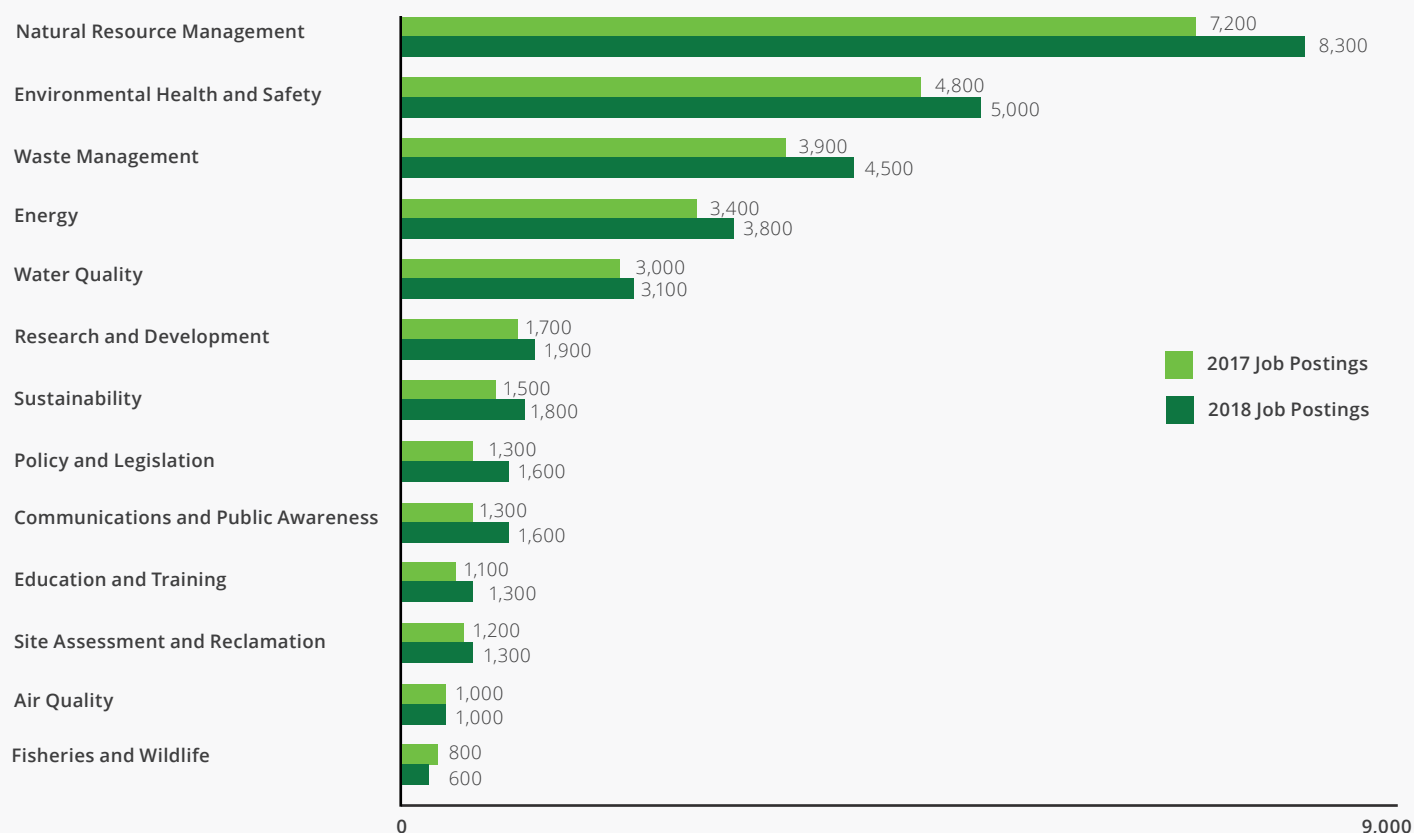
¹² "Job vacancies, fourth quarter 2018." The Daily. Statistics Canada catalogue no. 11-001-X (March 25, 2019), p. 5; and Patterson, M., M. Hazel and D. Saunders. Annual review of the labour market, 2018. [Statistics Canada catalogue no. 75-004-M – 2019002](#), April 16, 2018, p. 18.

¹³ [Energy Efficiency Employment in Canada](#). ECO Canada, April 2019.

4.2 Job Ad Numbers Increased in 11 of 13 Environmental Sectors in 2018

Figure 6 shows the number of English-language environmental job ads posted online in 2017 and 2018 for each of the 13 environmental sectors or areas of practice. The number of environmental job ads increased in 11 out of the 13 sectors.

Figure 6: Number of Environmental Job Ads, by Environmental Sector, 2017 and 2018



The sectors that have the highest number of environmental job ads in 2018 were:

- Natural Resource Management: 8,300 job ads
- Environmental Health and Safety: 5,000 job ads
- Waste Management: 4,500 job ads
- Energy: 3,800 job ads
- Water Quality: 3,100 job ads

Increases in environmental job ads in each sector were distributed differently across provinces in 2018. For example, large increases in Natural Resource Management job ads were observed in Alberta (+1,650) and Saskatchewan (+610) in 2018; job ads associated with Environmental Health and Safety increased by the largest numbers in Quebec (+190) and Nova Scotia (+170); and Waste Management job ads increased the most in Ontario (+360) and British Columbia (+120).

4.3 Three Provinces Account for 75% of Environmental Job Ads

The three provinces with the most English-language environmental online job ads in 2018 were:

- Ontario: 8,500 (35% of total environmental online job ads in Canada)
- Alberta: 5,300 (22% of total)
- British Columbia: 4,500 (18% of total)

The fact that these three rank among the top provinces for environmental job ads is not surprising given the gross domestic product (GDP), population, labour force size, and total land area of each province.

Figure 7: Number of Environmental Job Ads by Environmental Sector, Top 3 Provinces, 2018

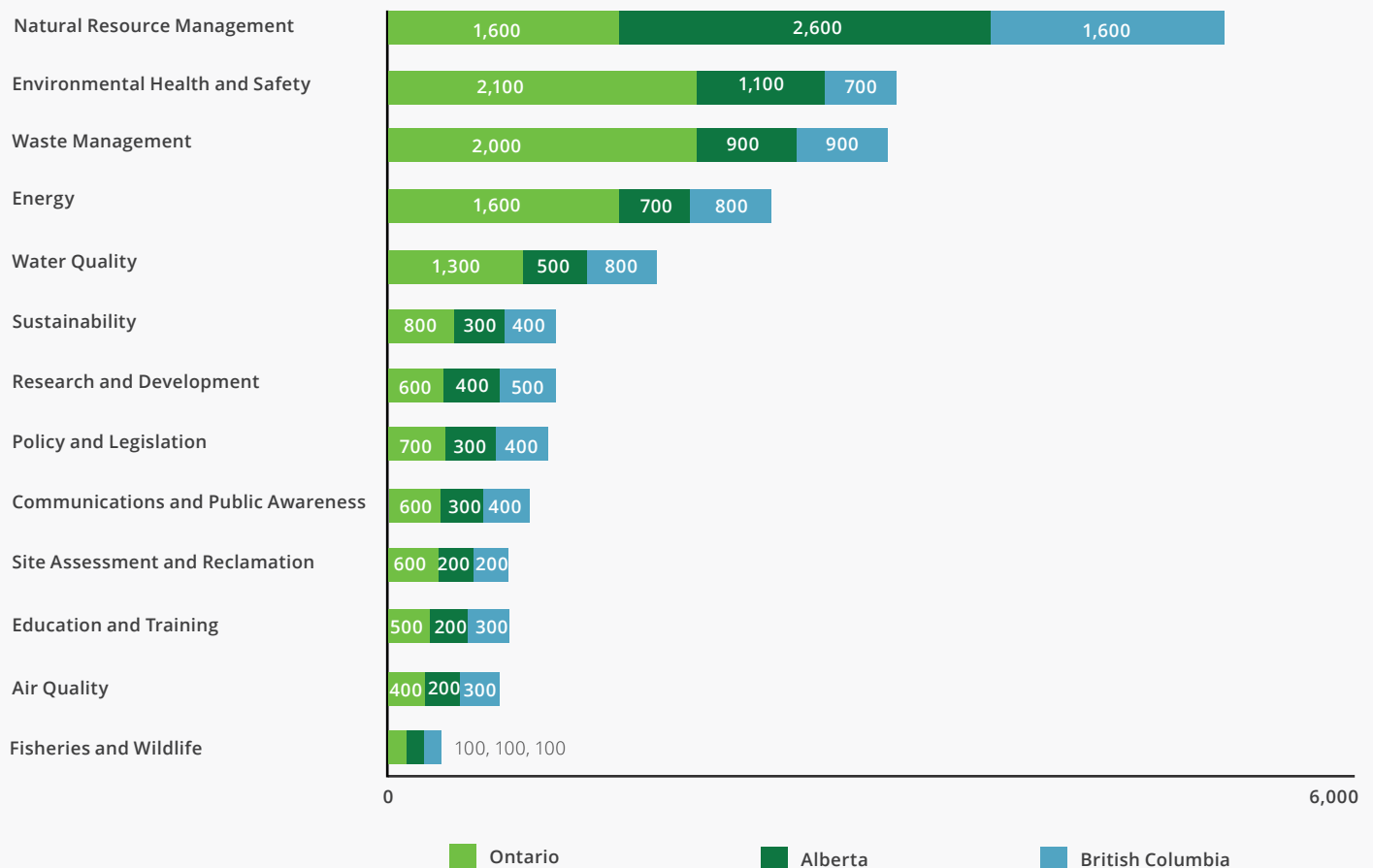


Figure 7 shows that the greatest number of environmental job ads in both Alberta and British Columbia were associated with Natural Resource Management, while Ontario had the most environmental job ads in Waste Management and Environmental Health and Safety.

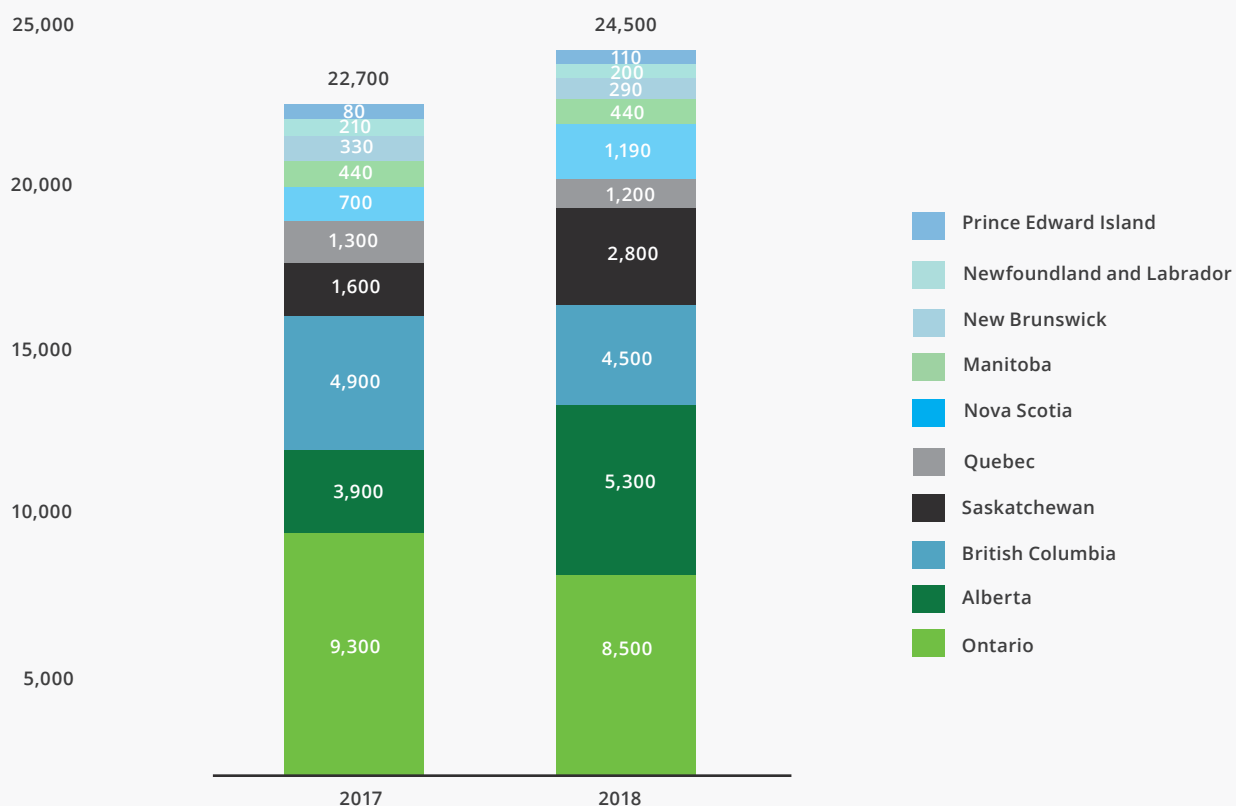
4.4 Four Provinces with the Highest Growth Rates in Environmental Job Ads in 2018

Four provinces registered high growth rates in the number of environmental job ads from 2017 to 2018:

- Alberta: 5,300 (+36% growth)
- Saskatchewan: 2,800 job ads (+75% growth)
- Nova Scotia: 1,190 job ads (+70% growth)
- Prince Edward Island: 110 job ads (+38% growth)

The number of environmental job ads remained steady in Manitoba in 2018, and decreased in Ontario, British Columbia, Quebec, New Brunswick and Newfoundland and Labrador.

Figure 8: Number of Environmental Job Ads by Province, 2017 and 2018



Since December 2017, the Government of Saskatchewan has been pursuing objectives outlined in its Prairie Resilience climate change strategy¹⁴, including the implementation of new regulations to reduce greenhouse gas emissions across a number of industry sectors¹⁵. Nova Scotia's government implemented a new cap-and-trade program for greenhouse gas emissions effective January 1, 2019¹⁶. Throughout 2018, the Government of Alberta continued to pursue the objectives of its Climate Leadership Plan¹⁷, and Prince Edward Island released its five-year Climate Change Action Plan in May 2018¹⁸. All of these initiatives induce firms to seek out environmental professionals to assess legislative requirements and implement plans to meet those requirements.

4.5 Ten Occupations Accounted for Over 55% of Environmental Online Job Ads in 2018

The top 10 occupations, which are grouped and mapped to three-digit National Occupation Classification (NOC) titles and codes, remained consistent from 2014 to 2017; in 2018 this list changed slightly, with Motor vehicle and transit drivers (NOC 751) moving up onto the top 10 list and Legislators and senior management (NOC 001) falling off the top 10 list. Together, the occupations on the top 10 list account for 57% of environmental job ads posted online.

Within the top 10 environmental-related occupations, four occupations experienced increases in environmental job ads between 2017 and 2018:

- Agricultural and horticultural workers (+480 job ads or +17%)
- Regulatory officers and other technical inspectors (+190 job ads or +6%)
- Motor vehicle and transit drivers (+130 job ads or +27%)
- Managers in financial and business services (+20 job ads or +1%)

¹⁴ Government of Saskatchewan. [Prairie Resilience: A Made-in-Saskatchewan Climate Change Strategy \(December 2017\)](#).

¹⁵ The Management and Reduction of Greenhouse Gases (General and Electricity Producer) Regulations (in force January 1, 2018); The Management and Reduction of Greenhouse Gases (General and Reporting) Regulations (in force September 1, 2018); The Oil and Gas Emissions Management Regulations (in force January 1, 2019).

¹⁶ Climate Change Nova Scotia. Nova Scotia's Cap-and-Trade Program (<https://climatechange.novascotia.ca/nova-scotias-cap-trade-program>).

¹⁷ Government of Alberta. [Climate Leadership Plan: Implementation Plan 2018-19 \(June 2018\)](#).

¹⁸ Government of Prince Edward Island. [Taking Action: A Climate Change Action Plan for Prince Edward Island, 2018-2023 \(May 2018\)](#).

Table 2: Top 10 Occupations with the Greatest Number of Environmental Job Ads in Canada, 2017-2018

Occupation (3-digit NOC)	Number (and % share) of environmental-related job ads		Change from 2017 to 2018
	2017	2018	
Total Environmental Job Ads	22,700 (100%)	24,500 (100%)	+1,800 (+8%)
Agriculture and horticultural workers (NOC 843)	2,870 (13%)	3,350 (14%)	+480 (+17%)
Regulatory officers and other technical inspectors (NOC 226)	3,020 (13%)	3,210 (13%)	+190 (+6%)
Civil, mechanical, electrical and chemical engineers (NOC 213)	2,110 (9%)	2,050 (8%)	-60 (-3%)
Managers in financial and business services (NOC 012)	1,410 (6%)	1,430 (6%)	+20 (+1%)
Life science professionals (NOC 212)	950 (4%)	920 (4%)	-30 (-3%)
Other engineers (NOC 214)	750 (3%)	740 (3%)	-10 (-1%)
Computer and information systems professionals (NOC 217)	750 (3%)	620 (3%)	-130 (-17%)
Motor vehicle and transit drivers (NOC 751)	480 (2%)	610 (2%)	+130 (+27%)
Cleaners (NOC 673)	670 (3%)	580 (2%)	-90 (-13%)
Managers in engineering, architecture, science and information systems (NOC 021)	500 (2%)	490 (2%)	-10 (-2%)

5 Appendix: Additional Tables

Table 3: Number of Environmental Job Ads
by Environmental Sector or Area of Practice, 2014-2018

Environmental Sector or Area of Practice	2014	2015	2016	2017	2018
Total Environmental Job Ads	29,100	23,300	20,900	22,700	24,500
Air Quality	994	753	839	1,025	1,021
Communications and Public Awareness	1,763	1,303	1,266	1,296	1,560
Education and Training	1,396	1,315	966	1,091	1,299
Energy	4,318	3,215	3,053	3,376	3,766
Environmental Health and Safety	6,881	4,811	4,517	4,802	5,003
Fisheries and Wildlife	1,077	782	747	814	563
Natural Resource Management	8,138	7,587	7,046	7,160	8,337
Policy and Legislation	1,632	1,202	1,263	1,258	1,582
Research and Development	1,806	1,484	1,313	1,728	1,879
Site Assessment and Reclamation	1,437	1,089	967	1,152	1,259
Sustainability	1,942	1,708	1,497	1,465	1,849
Waste Management	4,107	3,440	3,461	3,907	4,472
Water Quality	4,059	3,196	2,792	2,977	3,148

Numbers reflect English-language job ads posted online.

The sum of the parts will not equal to the total job ads due to overlaps throughout all sub-sectors.



This project was funded by the Government of Canada's Sectoral Initiatives Program.

The opinions and interpretations in this publication are the author's and do not necessarily reflect those held by the Government of Canada.

Copyright © 2019 ECO Canada

All rights reserved. The use of any part of this publication, whether it is reproduced, stored in a retrieval system, or transmitted in any form or means (including electronic, mechanical, photographic, photocopying or recording), without the prior written permission of ECO Canada is an infringement of copyright law.

ECO Canada (2019)

Environmental Job Market Trends in 2018 – May 2019

Labour Market Research

Environmental Careers Organization of Canada



CONTACT US

...

ECO Canada
Suite 400, 105 12 Avenue SE
Calgary, Alberta, Canada
T2G 1A1

P : (403) 233-0748
F : (403) 269-9544
E : info@eco.ca
W : eco.ca



@ecocanada