



2021 HR Survey of Environmental Employers

Scope, Methodology and Respondent Profile

Scope and Methodology

Surveying work included online and telephone surveying in both official languages (English and French). A long-form version of the survey was conducted online (refer to Appendix A for the Long Form Survey Questionnaire); an abbreviated or short form was conducted for telephone surveys.

Respondents shared data about their environmental workers, prompted by questions centred around diversity and HR trends.

Data sources include ECO Canada's database and communications as well as existing partner and other willing organizations' community and databases, paid advertising, LegerOpinion.com (LEO) panel of online research respondents, along with industry lists pulled from D&B Hoovers.

This survey focused on approaches that were successful in the previous survey, as well as alternatives not used due to time limitations last year and was given a longer timeframe for planning and data collection this year.

Timelines

- Survey design, programming and testing: January 6 to 20, 2021
- Survey rollout: January 21 to March 19, 2021

ECO Canada requires sufficient survey response to obtain results with a margin of error of 5% at the 95% confidence interval for demographic and HR insights data at the national level. For large or unknown population sizes, a sample size of 400 respondents is required to achieve this 5% margin of error. Our 2021 survey received 600 employer responses (refer to Appendix B for the Employer Respondent Profile).

This point in time research offers fresh insights and perspectives of green talent distribution, and it outlines opportunities and challenges faced by a number of environmental employers a year into the COVID-19 pandemic. Data may not represent the broader environmental workforce in Canada; it only reflects environmental workforce distribution and trends within the 600 employer respondents.

Respondent and Workforce Distribution Summary

This document outlines the number of respondents and the environmental workers represented within the national survey of employers conducted from January thru March 2021. Exactly 600 employers from various industries responded to our survey, representing over 987,500 employees across Canada of which nearly 86,000 (or 8.1%) were in environmental roles.

Distribution by Industry

With 49 respondents, the Manufacturing industry reported the largest number of environmental workers with close to 21,200. Although Professional, scientific and technical services saw more than three times the number of survey responses, the total number of environmental workers was approximately 11,450, indicative of a greater number of small firms within this industry group.

INDUSTRY	NUMBER OF RESPONDENTS	NUMBER OF ENVIRONMENTAL WORKERS ¹	PERCENTAGE WHO ARE CORE ENVIRONMENTAL WORKERS ²
All industries	600	85,980	58.1%
Manufacturing	49	21,180	53.2%
Public administration	23	12,270	50.2%
Health care and social assistance	28	12,090	54.0%
Professional, scientific and technical services	175	11,450	77.4%
Environmental consulting	92	5,840	90.5%
Mining, quarrying and oil and gas extraction	35	3,720	74.1%
Construction	40	3,560	67.4%
Wholesale trade and Retail trade	24	2,120	43.0%
Educational services	26	1,680	50.2%
Utilities	25	1,680	54.8%
Administrative and support, waste management and remediation services	35	1,470	38.8%
Agriculture, forestry, fishing and hunting	43	1,250	27.5%
Other services (except public administration)	20	729	68.6%
Other industries	71	12,393	61.5%

[1] An environmental worker is an individual whose work positively contributes to environmental protection, resource management, or environmental sustainability.

[2] Core environmental workers are those in roles requiring environmental-specific knowledge, skills or training. These workers are employed across various industries (e.g., an Environmental Engineer in a mining company or an Energy Policy Analyst working for the federal government) and may specialize in one or more environmental areas (e.g., Air Quality, Natural Resource Management, etc.)

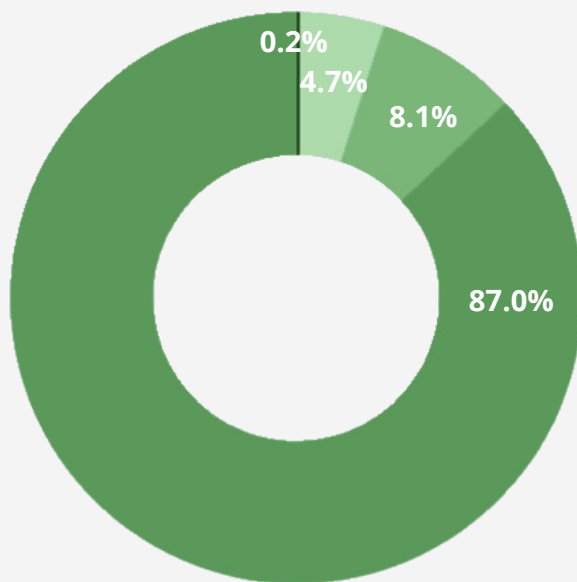
Distribution by Organization Type

Private sector organizations accounted for 51% of the total environmental workers identified, followed by Public sector organizations at 47%. Although three times as many Private sector firms participated in the survey, the total number of environmental workers is close between the two sectors.

Distribution by Organization Size

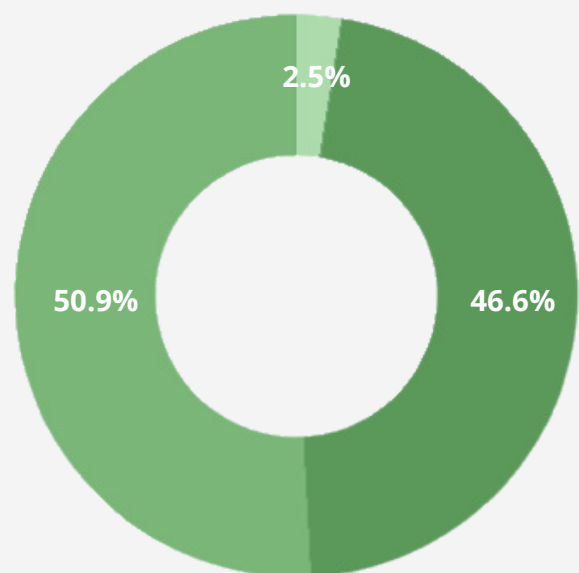
Large firms accounted for the majority of environmental workers represented through the survey—at 87% or close to 75,000 environmental workers.

Workforce distribution by organization size



- Micro (1-4 employees)
- Small (5-99 employees)
- Medium (100 - 499 employees)
- Large (500+ employees)

Workforce distribution by organization type

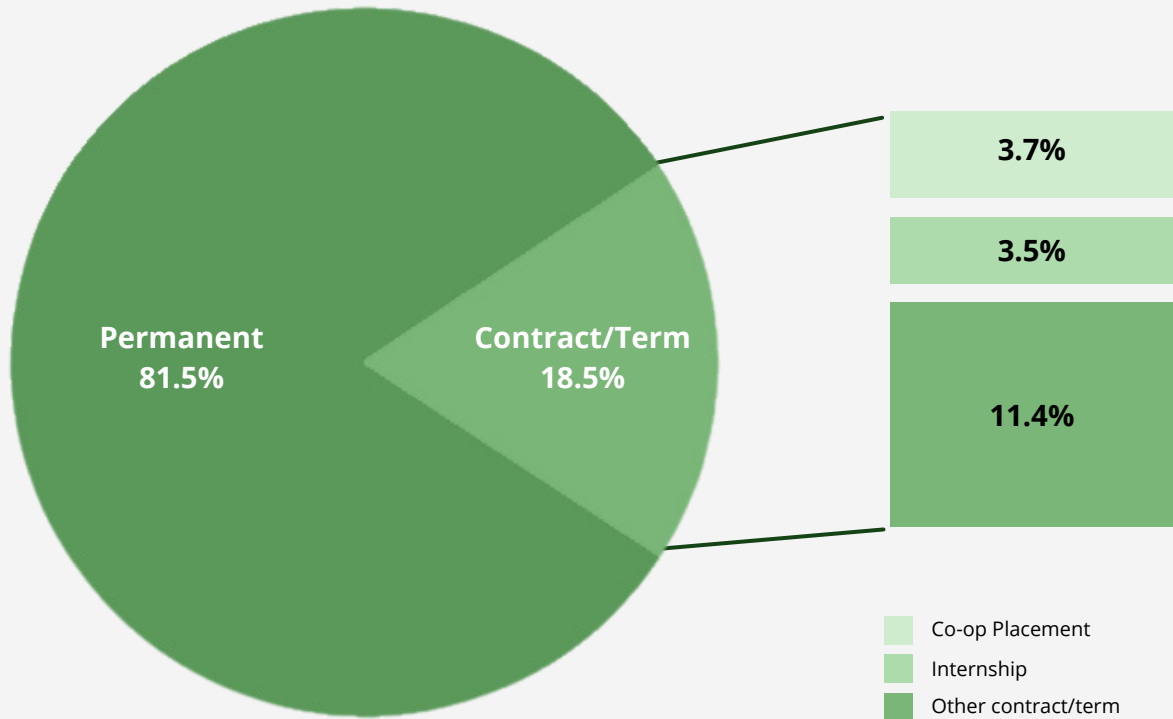


- Private Sector Organization
- Public Sector Organization
- Not-for-profit or charitable sector organization

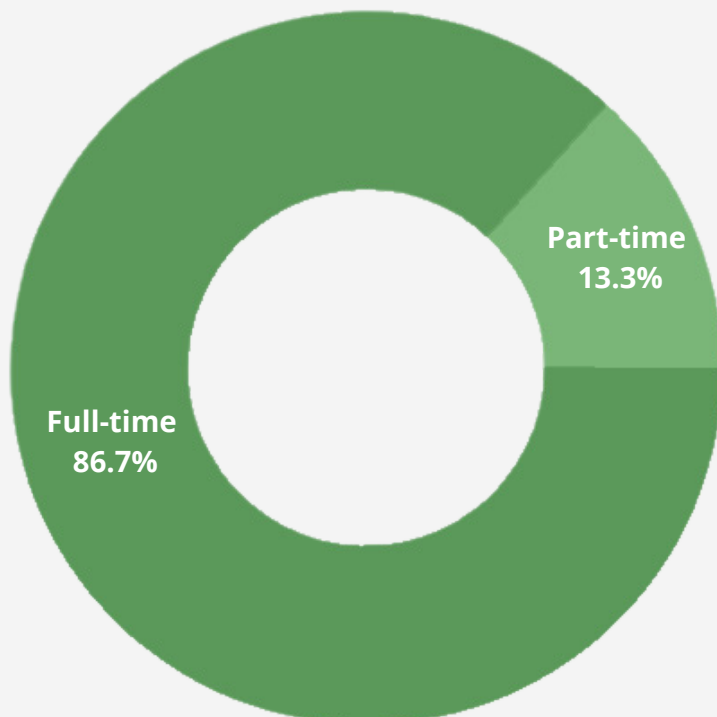
Distribution by Contract Type

The majority of environmental workers employed by survey respondents were in permanent roles. Employment programs targeting youth in green jobs may have contributed to over 7% of workers employed in co-op or internship positions.

Workforce distribution by contract type



Workforce distribution by hours worked



Distribution by Hours Worked (Full-time vs. Part-time)

The vast majority of environmental workforce employed by company respondents were in full-time positions.

APPENDIX A: Employer Survey Questionnaire

Q1 What organization do you work for?

Q2 Does your organization employ environmental workers*?

Note: Sole proprietors, business owners and operators are also included in this definition.

***Environmental workers include:**

- **Core environmental workers:** those in occupations requiring environmental-specific knowledge, skills or training, regardless of industry (e.g., an Environmental Engineer in a mining company or an Energy Policy Analyst working for the federal government)
- **Environmental goods and services workers:** those employed in the environmental goods and services sector and are directly supporting their organization's environmental business activities, regardless of occupation or competencies (e.g., an Accountant and a Sustainability Specialist working in a solar panel manufacturing company).

The definition covers part-time and full-time workers in permanent and contract-term positions (e.g., casual, temporary, seasonal, internships and co-op). Individuals who work for pay or profit, or perform unpaid family work, including anyone on leave due to illness or disability, personal or family responsibilities, labour dispute, vacation, or other reasons are included in this definition.

Exclusions: anyone of layoff, service contractors and volunteer workers, unless they are unpaid family members.

Q3 What type of organization* do you work in?

- A private sector organization
- A public sector organization
- A not-for-profit or charitable organization
- Don't know
- I prefer not to answer

*The **private sector** constitutes the segment of the economy owned, managed and controlled by organizations and individuals seeking to generate profit. It encompasses all for-profit businesses that are not owned or operated by the government.

The **public sector** includes the sectors of education, health, general government and government business enterprise sectors at the federal, provincial, territorial, municipal, First Nations and other Indigenous levels as well as in Crown corporations, liquor control boards, and other government institutions such as schools (including universities), hospitals and public libraries.

A **non-profit organization** is an association, club, or society that is operated exclusively for social welfare, civic improvement, pleasure, recreation, or any other purpose except profit.

A **charitable organization** (1) is established as a corporation, a trust, or under a constitution, (2) has exclusively charitable purposes, (3) primarily carries on its own charitable activities, but may also gift funds to other qualified donees, (e.g., registered charities), (4) more than 50% of its governing officials must be at arm's length with each other, (5) generally receives its funding from a variety of arm's length donors, and (6) its income cannot be used for the personal benefit of any of its members, shareholders, or governing officials.

Q4 Which industry group best describes your organization's main business activities?

1 Agriculture, forestry, fishing and hunting

- Crop production
- Animal production and aquaculture
- Forestry and logging
- Fishing, hunting and trapping
- Support activities for agriculture and forestry
- Other
- Don't know
- I prefer not to answer

2 Mining, quarrying, and oil and gas extraction

- Oil and gas extraction
- Mining and quarrying (except oil and gas)
- Support activities for mining, and oil and gas extraction
- Other
- Don't know
- I prefer not to answer

3 Construction

- Construction of buildings
- Heavy and civil engineering construction
- Specialty trade contractors
- Other
- Don't know
- I prefer not to answer

4 Manufacturing

- Food, beverage and tobacco
- Textiles, clothing, leather and allied products
- Wood product, paper, printing and related support activities
- Petroleum and coal products
- Chemical manufacturing
- Plastics and rubber products manufacturing
- Machinery manufacturing

Computer and electronic product manufacturing
Other
Don't know
I prefer not to answer

5 Utilities

Hydro-electric power generation
Nuclear electric power generation
Other electric power generation
Water, sewage and other systems
Natural gas distribution
Other
Don't know
I prefer not to answer

6 Transportation and warehousing

Air transportation
Rail transportation
Water transportation
Truck transportation
Transit and ground passenger transportation
Pipeline transportation
Scenic and sightseeing transportation
Support activities for transportation
Other
Don't know
I prefer not to answer

7 Professional, scientific and technical services

Environmental consulting services
Legal services
Accounting, tax preparation, bookkeeping and payroll services
Architectural services (including landscape)
Engineering and drafting services
Building inspection services
Surveying and mapping services (including geophysical)
Scientific research and development services
Advertising, public relations, and related services
Other
Don't know
I prefer not to answer

9 Administrative and support, waste management and remediation services

Administrative and support services
Waste collection
Waste treatment and disposal
Remediation and other waste management services
Other
Don't know
I prefer not to answer

10 Educational services

Elementary and secondary schools
Community colleges and C.E.G.E.P.s
Universities
Technical and trade schools
Other
Don't know
I prefer not to answer

18 Arts, entertainment and recreation

Nature parks and other similar institutions
Zoos and botanical gardens
Historic and heritage sites
Other
Don't know
I prefer not to answer

16 Other Services (except Public Administration)

Professional organizations
Grant-making and giving services
Social advocacy organizations
Other membership organizations
Other
Don't know
I prefer not to answer

17 Public Administration

Federal government public administration
Provincial and territorial public administration
Local, municipal and regional public administration
Aboriginal public administration
Other
Don't know
I prefer not to answer

Q5 What provinces or territories do you have operations, business locations or employees in? Select all that apply

- All of Canada
- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- Newfoundland and Labrador
- Nova Scotia
- New Brunswick
- Prince Edward Island
- Yukon Territory
- Northwest Territories
- Nunavut
- Don't know
- I prefer not to answer

Q6 Is your organization an environmental goods and services firm*?

- Yes
- No
- Don't know
- I prefer not to answer

**The environmental goods and services sector includes green technology, clean tech, renewable energy, low carbon activities, and any product or services related to lowering greenhouse gas emissions.*

**Q7 How many employees* are there in your organization in Canada?
Please provide your best estimate.**

** Employees include individuals who work for pay or profit, or perform unpaid family work, including anyone on leave due to illness or disability, personal or family responsibilities, labour disputes, vacation, or other reasons.*

Covers all self-employed and full-time and part-time employees, permanent, temporary, seasonal, intern and co-op positions; excludes volunteers (except unpaid family workers), service contractors, or anyone on layoff.

Q8 Of your employees in Canada, how many are *environmental workers*?* Approximations and estimations are fine.

**An environmental worker is an individual whose work positively contributes to (i) environmental protection; (ii) management of natural resources; and/or (iii) environmental sustainability.*

Note: Sole proprietors, business owners and operators are also included in this definition.

Q9 Of your environmental employees in Canada, how many are *core environmental workers*?* Approximations and estimation are fine.

**Core environmental workers: those in occupations requiring environmental-specific knowledge, skills or training, regardless of industry (e.g., an Environmental Engineer in a mining company or an Energy Policy Analyst working for the federal government).*

The following are some more questions about your environmental employees in Canada (includes core environmental workers and environmental goods and services workers). If you don't know the answers for your environmental employees, please estimate as best you can, or answer for your organization's employees overall.

Some of the questions collect information in accordance with the Employment Equity Act and its Regulations and Guidelines to support programs that promote equal opportunity for everyone to share in the social, cultural, and economic life of Canada.

Q10 Thinking of your ENVIRONMENTAL employees in Canada, how many are:

- a) 15 to 24 years:
- b) 25 to 54 years:
- c) 55 to 64 years:
- d) 65 years and over:
- e) Refused

Q11 Thinking of your ENVIRONMENTAL employees in Canada, how many identify as:

- a) Male:
- b) Female:
- c) Other:
- d) Refused

Q12 Thinking of your ENVIRONMENTAL employees, how many identify as:

- a) Indigenous peoples (i.e., First Nations*, Métis or Inuk (Inuit)):
- b) Visible minorities:
- c) Persons with disabilities**:
- d) Refused

**First Nations (North American Indian) includes Status and Non-Status Indians.*

*** Persons with disabilities are those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.*

Q13 How many of your ENVIRONMENTAL employees in Canada are...

- a) Full-time?
- b) Part-time?

Q14 How many of your ENVIRONMENTAL employees in Canada are...

- a) Permanent?
- b) Contract term, excluding interns and co-op positions?
- c) Interns?
- d) In co-op positions?

Q15 For the year 2020, did your organization...

- Decrease the number of environmental employees
- Maintain the number of environmental employees
- Increase the number of environmental employees
- Don't know
- I prefer not to answer

Please explain/comment [OPEN-ENDED]

Q19 For the year 2021, do you anticipate your organization will...

- Decrease the number of environmental employees
- Maintain the present number of environmental employees
- Increase the number of environmental employees
- Don't know
- I prefer not to answer

LABEL	Value
Decrease the number of environmental employees	1
Maintain the present number of environmental employees	2
Increase the number of environmental employees	3
Don't know	8
I prefer not to answer	9

Please explain/comment [OPEN-ENDED]

APPENDIX B: RESPONDENT PROFILE

Overall = 600 employers

By Region (n = 600)

Region	Number of Respondents who Reported Environmental Employees Worked in the Region
Alberta	223
Atlantic Canada	174
British Columbia	200
Canadian Territories	125
Ontario	327
Quebec	221
Saskatchewan + Manitoba	172

By Industry (n=600)

Industry	Number of Respondents	Percentage of Respondents
Professional, scientific and technical services	175	29.2%
> Environmental consulting	92	15.3%
Manufacturing	49	8.2%
Agriculture, forestry, fishing and hunting	43	7.2%

Construction	40	6.7%
Administrative and support, waste management and remediation services	35	5.8%
Mining, quarrying and oil and gas extraction	35	5.8%
Health care and social assistance	28	4.7%
Educational services	26	4.3%
Utilities	25	4.2%
Wholesale trade and Retail trade	24	4.0%
Public administration	23	3.8%
Other services (except public administration)	20	3.3%
Transportation and warehousing	19	3.2%
Accommodation and food services and Arts, entertainment and recreation	16	2.7%
Finance and insurance, and Real estate and rental and leasing	15	2.5%
Information and cultural industries	13	2.2%
Management of companies and enterprises	8	1.3%

By Type of Organization (n=600)

Type of Organization	Number of Respondents	Percentage of Respondents
Private sector	392	65.3%
Public sector	118	19.7%
Not-for-Profit or charitable organization	77	12.8%

By Size of Organization (n=600)

Size of Organization	Number of Respondents	Percentage of Respondents
Micro (1-4 employees)	78	13.0%
Small (5-99 employees)	278	46.3%
Medium (100 -499 employees)	95	15.8%
Large (500+ employees)	139	23.2%

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