



ECO CANADA

Environmental Careers Organization



HUMAN RESOURCE

Insights for Employers

2009



ELM

ENVIRONMENTAL LABOUR MARKET RESEARCH

ECO CANADA

ECO Canada develops programs that help individuals build meaningful environmental careers, provides employers with resources to find and keep the best environmental practitioners, and informs educators and governments of employment trends to ensure the ongoing prosperity of this growing sector.



ELM RESEARCH

ELM (Environmental Labour Market) Research investigates current environmental skill and labour trends within the environmental profession and provides up-to-date, timely and relevant insights that can be applied in policy, business, and educational contexts. The complete collection of ELM reports is available at www.eco.ca.

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Acknowledgements

This report would not have been possible without the participation of over 1,100 employers from across Canada who completed our national survey in the spring of 2008. We sincerely thank each participant for taking part in this important study.

We also thank the 58 individuals who participated in our focus groups held across Canada for sharing their thoughts and experiences about working in the environmental sector.

ECO Canada also extends gratitude to MarketQuest Research and m5i for providing the expertise and the resources necessary for conducting the survey, including survey programming, data collection, and focus group facilitation.

We would also like to show our deepest appreciation to the members of the National Steering Committee (NSC) for their support of our initiative.

Finally, this work would not have been possible without the financial support of Human Resources and Skills Development Canada's Sector Council Program. ECO Canada thanks HRSDC for their continued support of our labour market research.

NATIONAL STEERING COMMITTEE MEMBERS



ECO CANADA

ECO Canada's Labour Market Information (LMI) project is guided by a National Steering Committee (NSC) composed of industry representatives, government officials, academic representatives, and other stakeholders. The role of the NSC is to make suggestions on project development and provide support for the initiative. The NSC met in October 2007 to discuss the needs and challenges of the sector, and has provided feedback throughout the project.

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Human Resource Insights for Employers 2009 is a collection of condensed reports that address the issues environmental employers identify as affecting their operations. Topics include:

- Recruitment & Selection
- Compensation & Benefits
- Lack of Environmental Skills
- Lack of Essential Skills
- Workforce Turnover
- Not-for-Profit Operation Challenges

These report summaries help shed light on the real problems and opportunities that exist in the environmental sector, and further provide some new HR approaches for consideration. The Human Resource Insights for Employers survey formed the basis for this publication, along with supplementary information sources including ECO Canada's most recent compensation study, previous organizational case studies, and labour market reports executed by ECO Canada.

The final output of this study was drastically reconsidered after some of the findings were rendered irrelevant by the change in economic climate experienced in late 2008 into 2009. Moving forward, ECO Canada chose to highlight findings based on critical broader issues that persist in this dynamic field despite any economic conditions, such as challenges with recruitment, employee development, and turnover.

The result is a report that supports ECO Canada's mandate to ensure an adequate supply of people with the demonstrated skills and knowledge required to meet the environmental human resource needs of the public and private sectors. In working with employers to help determine optimal practices, ECO Canada aims at ensuring that necessary supply of workers, with a focus on maximum retention and highest productivity. This set of summaries is a tool to support that objective.

The Cost of Employee Disengagement

Employee engagement is measured by the ability and willingness of individuals to exert effort for the benefit of the company, their tendency to speak highly of the organization, and their intent to remain at the company. While complex in composition, engagement can be said to be comprised of:

- 1) Personal Value – feeling of importance to end cause; contributing and empowered
- 2) Focused Work – clear direction on where and how to focus efforts
- 3) Interpersonal Support – in a cooperative, collaborative and trusting environment

A study conducted in June 2009 by a US market research firm, Quantum Workplace, confirmed the critical nature of engagement to the success of businesses and the overall economy. It found that the Employment Engagement Index generated by Gallup Incorporated is capable of predicting directional movements of the Dow Jones Industrial Average four months ahead of time at an 83% probability rate¹.

¹ Engagement Index Predicts Dow Jones, Greg Harris, Quantum Workplace, 2009

Conversely, employee disengagement costs organizations in a variety of ways including lost productivity, accidents, theft, and turnover. Gallup Incorporated's global research of employment engagement studying over 6.1 million employees in 163 countries, states that the ratio of engaged to actively disengaged employees is 1.5 to 1, as compared to 8 to 1 in truly world-class organizations².

For example, if less engaged and disengaged employees contribute 50% of their full capacity, the average environmental company loses \$31,500 per year for each of these employees. In an average-sized company of 30, Gallup's ratio would indicate that 12 employees are disengaged. Total cost of disengagement is \$378,000 per year.

The Cost of Employee Turnover

Recruiting and retaining employees is costly and complex. An assessment of the total cost of losing a strong-performing employee provides us with the following formula:

$$\frac{\text{Recruitment Costs} + \text{Training Costs} + \text{New Hire Costs} + \text{Lost Sales Costs}}{\text{Total Employee Turnover Cost}}$$

In the 2003 business reference book *Managing Employee Retention: A Strategic Accountability Approach* the authors seek to place strategic accountability to the employee turnover³. Their research found the following turnover rates (based on annual salary) to be universal:

Employee Type	Cost of Replaced Position (% of Annual Salary)
Skilled Worker	60-85%
Clerical / Administrative	50-80%
Professional	75-125%*
Technical	80-125%
Specialists	100-250%
Supervisors	70-140%
Managers	70-150%*

* figures can exceed stated range

The average size of an environmental organization completing the Human Resource Insights for Employers survey is 30 employees. The same study estimates the average turnover rate for an environmental organization to be 22.4% per year. This means that the average environmental operation in Canada turns over 6.5 employees per year.

² Q12 Employee Engagement Study, Gallup Incorporated, 2005

³ *Managing Employee Retention: A Strategic Accountability Approach (Series - Improving Human Performance Series)*, Phillips, O. Connell & O. Connell, 2003

Going a step further, ECO Canada's *Environmental Careers Compensation Report 2008* states the average salary for an environmental worker as \$63,000. If the majority of staff at an environmental organization is composed of Professional, Technical and Manager workers, the low range average cost per replaced employee would be 75% of the average annual salary. Given these conservative hypotheses, turnover costs for the average environmental company would be \$307,125 per year.

Using This Report

Proactive organizations learn from the insights and information provided by their peers. Human Resource Insights for Employers 2009 is the first step to helping environmental employers and managers understand some of the unique circumstances that cause lower engagement and higher turnover in the environmental sector. This report, compiled as a series of summaries, is intended to provide lessons in exploration that encourage organizations to consider some cautionary questions and take a deeper look at their own operations.

ECO Canada is dedicated to assisting organizations with this next step of deeper understanding and offers numerous products and services to aid in improving engagement and retention of top talent.

Insights in Future Years

As opportunities and challenges in the environmental sector evolve, so will the structure and topics that are brought forth in this report. ECO Canada welcomes feedback from the use of our labour market reports as well as suggestions for improvements and topics to be covered in future environmental labour market studies. All input should be directed via email to elm@eco.ca.



RECRUITING FOR A GREEN FUTURE

Recruiting Statistics

➔ **A Growing Trend**
23% of environmental organizations employ recent immigrants. 13% employ Aboriginal people.

➔ **Promote Integration**
Immigrants who have been in Canada less than five years have an unemployment rate more than twice that of a Canadian-born citizen⁵.

➔ **Think Long-term**
According to Statistics Canada, net migration will be the country's only source of population growth by around 2030⁶.



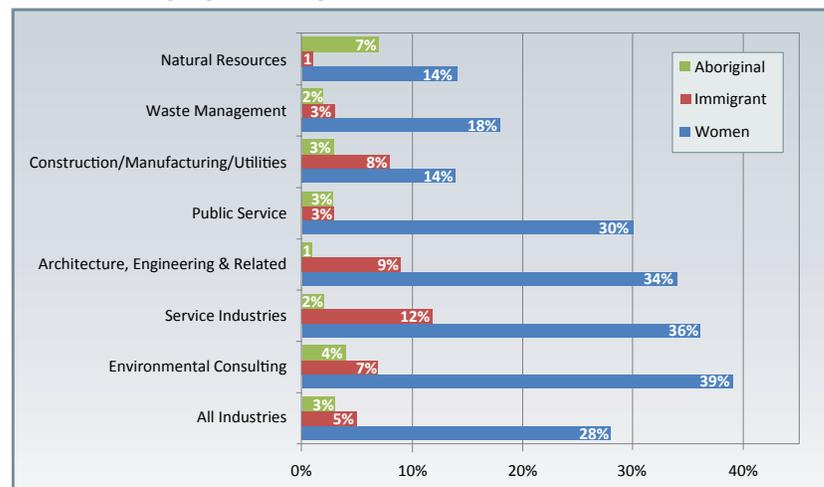
A Need for New Recruitment Strategies

The environmental sector in Canada is reaching a pivotal period where a large number of qualified workers are approaching retirement. One-third of all environmental workers are over the age of 45. Organizations must explore innovative recruitment strategies in order to ensure that they remain efficient in the coming years.

Plan for the Future: Diversify your Workforce

Female Workers Females are a significantly underutilized talent pool within the environmental sector. Despite the fact that they make up 47% of the Canadian workforce⁴, female workers fill only 27% of environmental positions. Over a third of environmental companies do not have any female environmental employees on staff.

Demographic Proportions in Environmental Sectors



Immigrant Workers Immigrants are a major source of highly qualified workers. In fact, recent immigrants are more likely to have a university education than Canadian-born individuals⁷. Strategies used by employers to successfully target immigrant workers include⁸:

- Online/website recruiting with international outreach
- Advertising (e.g., targeting overseas offices, immigrant centers, areas with high concentration of immigrants)
- Referrals/word of mouth
- Explicitly targeting immigrants (e.g., indicating in job posting a preference for immigrants or the promotion of employment equity)
- Partnerships with foreign governments or universities

⁴ Statistics Canada, 2006 Census

⁵ Statistics Canada, The Immigrant Labour Force Analysis Series: The Canadian Immigrant Labour Market in 2007, Catalogue no. 71-606-X2008003, 2008

⁶ HR Insights for Employers 2009, ECO Canada, comments collected from 95 organizations

⁷ HR Insights for Employers 2009, ECO Canada, comments collected from 17 organizations

CASE STUDY: EnCana Corporation

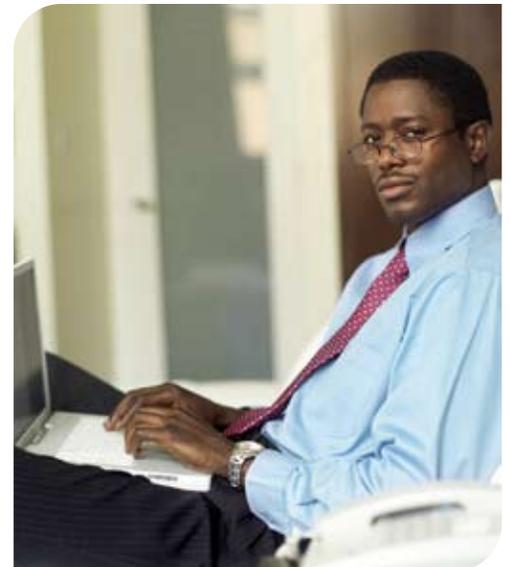
Establishing long-term relationships with Aboriginal groups and their leaders is critical for companies like EnCana whose Canadian operations occur mainly near Aboriginal territories and communities. They recognize that their projects have a significant impact on surrounding communities since many of them last up to 15 years.

EnCana developed a lucrative partnership with many Aboriginal communities by establishing an Aboriginal Relations Department that understood the intricacies of Aboriginal culture and communications, and by discussing all decisions that could affect the land or people with Chiefs. The company made policies to hire locally whenever possible, provide communities with ownership opportunities, and even set up scholarships and bursaries to give back to the youth of the communities.

Immigrant Workers Continued While most employers comment that their experience with immigrants has been very positive, certain challenges have been identified, including language difficulties, the need for training on local technologies, and the need for familiarity with Canadian workplace practices (including work ethics, work expectations, and relationship with authority)⁸. Organizations willing to undertake these initial hurdles have been rewarded with tremendous return on their human resource investment.

Aboriginal Workers The Aboriginal population is increasing rapidly in Canada - at more than double the national population growth rate - and is becoming an important segment to consider for the environment sector⁹. Aboriginal people are a great asset for any environmental business, as they possess knowledge of local environments and non-traditional land use studies, and are particularly valuable for their traditional ecological knowledge (TEK). Some examples of successful strategies for hiring Aboriginal people include¹⁰:

- Targeted advertising
- Arrangement with band
- Employment Equity or other government programs
- Preference to Aboriginal candidate
- Liaison with Aboriginal groups
- Working with an Aboriginal headhunter
- Requirement in a contract
- Hiring locally



While 83% of employers comment that their experience with Aboriginal workers has been positive, some have identified reliability and availability for work as challenges¹¹.

Recruitment Strategies & Programs

A strong workforce sets an organization apart from its competition, and recruiting from a deep talent pool ensures the most skilled and diverse workforce. If you would like further information about strengthening your recruiting efforts through diversification, ECO Canada has several products and services at your disposal. From Aboriginal recruitment strategy assistance to a new immigrant candidate matching program, ECO Canada is your resource center for fortifying your organization's talent.

⁸ HR Insights for Employers 2009, ECO Canada, comments collected from 95 organizations

⁹ HR Insights for Employers 2009, ECO Canada, comments collected from 17 organizations

¹⁰ HR Insights for Employers 2009, ECO Canada, comments collected from 80 organizations

¹¹ HR Insights for Employers 2009, ECO Canada, comments collected from 62 organizations



COMPENSATING FOR SUCCESS

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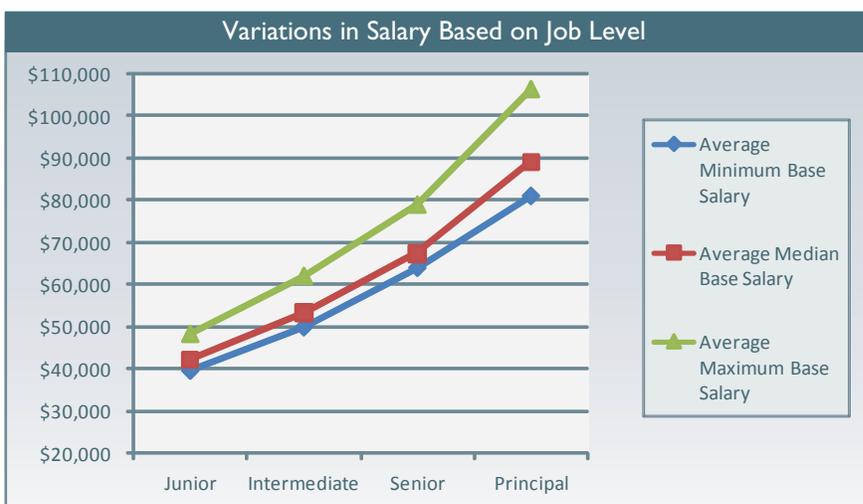


In 2006, ECO Canada undertook a study of environmental practitioners and their perspectives on employment in the sector. Analysis from the report entitled Characteristics of Canadian Environmental Practitioners 2006 showed that the probability of an individual leaving his or her current organization in the next five years who is dissatisfied with his or her salary is 41.6%¹².

Additionally, ECO Canada's 2008 study of environmental employers in Canada revealed that 38% of environmental organizations identify compensation and benefits as a key human resource issue.

Understanding the Salary Equation

The first step to strengthening an organization's compensation systems is to understand what the sector as a whole is doing to compensate workers and how that varies between industry groups, regions of Canada, occupations, and job levels. The example graph provided below shows the variations in salary with increased job level in the environmental sector for all environmental occupations surveyed in the ECO Canada Compensation Report 2009¹³.



The Perfect Recipe

Beyond gaining a deeper understanding of salary considerations for employees, savvy employers also consider the other elements of compensation and their importance to the overall compensation package offered. These other compensation components include bonuses, benefits, and pension / RRSP contributions. The following table outlines the frequency at which environmental companies offer various benefits:

Most Affected by Compensation

→ % of Organizations, by Region of Canada

- 1) Alberta – 50%
- 2) North – 50%
- 3) Atlantic – 41%

→ % of Organizations, by Industry Group

- 1) Environmental Consulting – 47%
- 2) Public Service – 42%
- 3) Service Industries – 41%

Least Affected by Compensation

→ % of Organizations, by Region of Canada

- 1) Ontario – 29%
- 2) Quebec – 33%
- 3) British Columbia – 35%

→ % of Organizations, by Industry Group

- 1) Architecture, Engineering & Related – 30%
- 2) Construction, Manufacturing & Utilities – 31%
- 3) Natural Resources – 33%



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Standard Benefits	% of Orgs
Compensatory time (in lieu of overtime)	69%
Closing during Christmas break	67%
Flex-time	60%
Vacation time (in excess of legislated requirements)	49%
Overtime pay	47%
Employee Assistance Programs (e.g. financial planning, counseling)	37%
RRSP contributions	31%
Pension Plan	27%
Maternity / parental leave (in excess of legislated requirement)	27%
Health / Wellness Account	25%
Profit sharing	22%
Telecommuting	13%
Paid time off for volunteering / charity work	10%
Work / job sharing	7%
Sabbatical leave	7%
Signing bonus	6%
On-site fitness centre	5%

Various other 'perks' have been introduced by organizations as incentive benefits in order to sweeten compensation packages on an individual level. Many of these incentives and the reported frequency of payment (partially or fully) by organizations is as follows:

Additional Employee Incentives	Partially Paid	Fully Paid
Paid benefits during parental leave	81%	19%
Coverage for continuing ed. or training (incl. conferences / courses)	22%	48%
Dental plan	31%	37%
Health plan	26%	41%
Long term disability insurance	24%	38%
Life insurance	22%	38%
Vision care plan	25%	27%
Coverage for professional designation	10%	40%
Company car / vehicle allowance	22%	26%
Short term disability insurance	15%	23%
Tuition reimbursement	14%	24%
Paid parking	3%	22%
Fitness membership	9%	4%
Stock purchase plan (offer purchase at current price at future time)	3%	7%
Paid commuter passes	3%	2%
Child care	1%	1%

CASE STUDY: GlobalTox

GlobalTox is a toxicology consulting service that has found a way to incorporate benefits that may not be as expensive as those that larger corporations offer, but still have the same, if not greater, value to their employees.

GlobalTox recognizes that each employee has different needs and that personalizing benefits packages – matching benefits and incentives to the type of lifestyle that employees lead – is a recipe for long-term satisfaction. The company's creativity in benefit offerings is a secret to their success. Emphasis on personal and professional development as well as active and healthy living, pays dividends not only in employee energy levels and productivity, but also in their overall outlook and work-life balance.

GlobalTox has found that the key to evolving a competitive and enticing benefits package is the feedback from their staff. The employees themselves deem what benefits may be more valuable than a large salary increase.

Protecting Your Talent

Anyone with experience in human resources operations knows the value of talented workers – both in productivity and efficiency and in the potential costs associated with replacing them. No company can afford to lose their star performers because they did not pay attention to the compensation patterns of their competition and the environmental industry as a whole.

If you require more information on compensation statistics and effective compensation practices in the environmental sector, contact ECO Canada.





ENVIRONMENTAL SKILLS

Fast Fact

Funding <\$1,000 a year per employee on Professional Development **27.6%**

TURNOVER RATE

Funding >\$1,000 a year per employee on Professional Development **13.1%**

TURNOVER RATE

% of Organizations Funding >\$2000/year for Professional Development

- 1) Construction/Manufacturing/Utilities – 33%
- 2) Public Service – 25%
- 3) Architecture, Engineering and Related – 24%
- 4) Service Industries – 24%



The Challenge of Building a Skilled Workforce

One of the major hurdles that the environmental sector faces is the lack of a highly skilled workforce in both environmental skill-sets and essential skill-sets. Approximately one-third of environmental organizations report experiencing challenges in HR related to environmental and/or essential skills deficits.

Skills Audit

ECO Canada’s description of environmental employment organizes all of the diverse fields of work into three areas:

- a) Environmental Protection
- b) Conservation and Preservation of Natural Resources
- c) Environmental Sustainability

From the three major categories, eleven consistent environmental skill-sets emerge which are critical to operations at varying degrees depending on the industry group. At least one-quarter of organizations in every industry group are finding that the lack of skills are impacting operations on a visible level.

Industry Groups Most Affected by Lack of Environmental Skill	
Environmental Consulting	41%
Public Service	30%
Waste Management	29%
Service Industries	29%
Natural Resources	28%
Construction/Manufacturing/Utilities	27%
Architecture, Engineering and Related	25%
Overall Environmental Sector	31%

Organizations with a Lack of Environmentally-Skilled Employees
TURNOVER RATE = 38%

Organizations with Adequate Environmentally-Skilled Employees
TURNOVER RATE = 17%

What Environmental Skills Do Professionals Need?

Skill-set Desired by Employers	Total	Industry Group						
		WM	EC	A/E/R	SI	PS	NR	C/M/U
Env. Management Systems & Operations/Risk Assess.	62%	71%	57%	65%	46%	69%	52%	76%
Env. Assessment & Restoration, Remediation, Reclam.	55%	57%	67%	69%	46%	54%	48%	33%
Env. Education & Training	55%	64%	40%	54%	59%	65%	52%	58%
Policy Legislation & Regulation	52%	57%	46%	50%	49%	59%	48%	58%
Sampling & Analytical Work related to Env. Activities	51%	54%	60%	54%	36%	52%	52%	47%
Env. Communications & Public Awareness	47%	57%	33%	40%	47%	63%	32%	47%
Pollution Prevention, Abatement and Control	44%	61%	38%	38%	31%	54%	52%	51%
Waste Management Systems, Processes, Procedures	43%	82%	29%	42%	29%	55%	52%	51%
Env. Research and Technology Development	43%	39%	31%	44%	53%	43%	40%	55%
Strategic Partnering, Planning, Monitoring, Reporting	41%	39%	28%	44%	42%	54%	20%	49%
Natural Resources Planning & Management	29%	4%	21%	31%	29%	39%	36%	29%
Other	9%	7%	10%	12%	6%	9%	0%	16%

NOTE: Top 3 results for each category are shaded

What can be done?

Professional development that is subsidized or paid in full by employers is a great way to supplement the advancement of employees' environmental skill-sets. It is no coincidence that Construction/Manufacturing/Utilities industry contains the largest amount of organizations that fund more than \$2,000 per employee per year and is the industry least affected by a lack of environmental skills among its staff.

ECO Canada's Characteristics of Canadian Environmental Practitioners 2006 Report also supports this concept. Statistics show that 32% of practitioners surveyed stated that more employer-funded training and development would be a motivating factor to stay with their current employer.

Specific formats for professional development include in-class education, distance education and in-house or private institute training. The same 2006 study of environmental practitioners shows that employees prefer distance or in-class university education or in-house training over other formats of professional development.

The Canadian Centre for Environmental Education (CCEE), a program supported by ECO Canada and Royal Roads University, offers distance education for each of the specific 11 environmental skill-sets to employees working full-time or seasonally. To learn more about the CCEE, visit www.ccee.ca.



CASE STUDY: Golder Associates

Golder Associates are a ground engineering, environmental consulting, and contracting business who found their HR weakness when they realized junior employees were floundering amidst rapid company growth.

By establishing Golder University, or Golder U, the organization built an internal training capacity that provides alternative career path options and allows employees to pass along their expertise in specific skills. Using their own facilities and employees' talents, Golder U has constructed itself as a cost-effective professional development machine.



ESSENTIAL SKILLS

Industry Statistics

➔ Highest Essential Skilled Workforces (by Industry)

- 1) Natural Resources 67%
- 2) Waste Management 64%
- 3) Public Service 62%

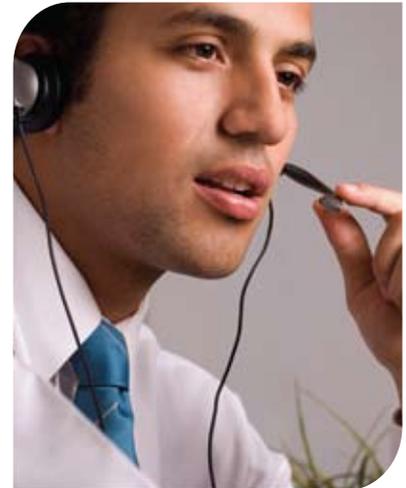
➔ Highest Essential Skilled Workforces (by Region)

- 1) British Columbia 67%
- 2) Quebec 64%
- 3) Atlantic 62%



Skills Audit

Essential skills (also known as soft or transferable skills) are skills required to support the application of environmental competencies. There are twelve core essential skill-sets that support the application of the environmental skills mentioned in the previous section. Various industry groups note that deficits in essential skills are having a negative impact on their operations.



Industry Groups Most Affected by Lack of Essential Skills	
Waste Management (WC)	40%
Environmental Consulting (EC)	40%
Natural Resources (NR)	30%
Public Service (PS)	28%
Construction / Manufacturing / Utilities (C/M/U)	28%
Service Industries (SI)	26%
Architecture, Engineering and Related (A,E,R)	20%
Overall Environmental Sector	31%

What Can Be Done?

Many employers consider soft skills to be a more steadfast qualification for employment than environmental skills since the presence of soft skills generally indicates a greater ability to learn any supplemental training required. Whenever possible, organizations should consider recruitment practices that are more critical of a candidate's essential skills inventory versus direct on-the-job technical abilities.

Targeting employees in other industry groups and other geographic areas that possess stronger essentially-skilled labour forces is another way to augment the environmental workforce.



It is often difficult to provide professional development for essential skill-sets because they are typically fundamental to personality or are developed secondarily through formalized education and work experience. To bridge education and experience gaps, courses are offered specifically in the areas of Project Management, Business Writing and Communications, Leadership, Computers and Public Relations. Depending on the level of expertise required, many of these skills can be cultivated to acceptable levels via online and distance courses. For greater depth of knowledge, check local community colleges for course directories.

What Essential Skills Do Professionals Need?

Desired Skill-set by Employers	Total	Industry Group						
		WM	EC	A/E/R	SI	PS	NR	C/M/U
Project Management	76%	59%	86%	82%	77%	68%	60%	80%
Planning & Organizing Work & Projects	74%	65%	75%	82%	74%	74%	67%	76%
Written Communication	72%	73%	77%	63%	64%	74%	69%	76%
Verbal Communication	69%	78%	63%	60%	59%	76%	80%	82%
Leading / Influencing Others	64%	81%	59%	67%	53%	73%	58%	64%
Critical Thinking / Judgement	57%	68%	50%	46%	47%	72%	62%	64%
Business	50%	51%	59%	72%	48%	33%	29%	58%
Computer Proficiency	49%	62%	41%	56%	36%	61%	47%	53%
Public Relations / Consultations	46%	54%	37%	44%	47%	57%	38%	49%
Learning & Creativity	36%	49%	30%	35%	30%	43%	29%	42%
Work Ethic	33%	51%	24%	26%	28%	33%	47%	40%
Research & Analytical	33%	35%	33%	30%	33%	35%	27%	33%
Other	9%	11%	10%	9%	6%	9%	0%	16%

NOTE: Top 3 results for each category are shaded.



BATTLING ENVIRONMENTAL TURNOVER

Turnover Statistics

➔ Replacement Costs

A Carleton University study indicates that it costs an organization the equivalent of 2- 3 months of an employee’s salary to replace them.

➔ Turnover Rates

Companies stating “increased salary/benefits” as the top reason for employees leaving their company have an average of 30% turnover rate.



A recent article published by online job website Monster.ca¹⁴ explains that there is an ideal level of turnover for organizations that ensures the optimal flow of talent through the organization. This means that the best turnover decreases the flow of top performers out of the organization and increases the flow of top performers in.

Employee turnover is a dynamic measurement that is affected by many different elements including prevalent economic conditions in specific regional areas, individual industry dynamics, and socio-economic climate. According to ECO Canada’s 2008 study of employers, the average annual turnover rate for environmental sector organizations is 22.4%. From understanding the main reasons for turnover to learning what preventative measures can be taken, ECO Canada helps you explore the dynamics of environmental turnover.

Reasons for Employee Turnover

While many reasons for employee turnover are unavoidable constraints, such as a need to relocate for family, a temporary position ending, maternity/paternity or retirement, other reasons for employee turnover can raise red flags about operations or organizational policies.



Note: Multiple responses allowed (N=567)

In the highly competitive environmental sector, nearly one half (45%) of turnover is caused by reasons that deserve greater inspection. Turnover due to leaving for another job/better opportunity (30.5%), increased salary/benefits (11.1%) and due to the employee being unhappy with the position (3.4%) are all factors that could require an organization to reflect closer upon their corporate environment. While a less occurring cause, companies that stated turnover due to employees being unhappy

Interestingly, organizations that note the top reasons for employee turnover are extraneous factors such as retirement, relocation, returning to school, or personal reasons, have a combined average turnover rate of 14.4%, a rate well under the sector average (22.4%) further showing that some forms of turnover are inevitable while others are far from it.

The Right Recruitment Source

While turnover rates vary only incrementally, some recruitment methods offer a stronger retention of employees. With these methods however, some trade-offs may be experienced, such as higher expenses or an inability to obtain candidates at the experience level required.

Recruitment Method	Turnover Rate
On-campus recruitment	18.6%
Internal recruiters	20.3%
Recruitment agency	20.4%
Co-op programs	20.8%
Corporate website	21.5%
Newspapers	21.8%
Online job banks	23.2%
Personal contacts (referrals)	23.4%

Maximizing Employee Engagement

The recipe for successful employee engagement is a well-kept secret for those companies that have mastered it. For others, it remains elusive, complex, and expensive. Strong engagement can save a company millions in both higher employee retention and productivity, and thus is a factor that requires great attention – from the very first steps of recruitment, to company public relations and professional development.

Employees that are empowered to continuously learn feel more fulfilled in their occupations. If they can see that they are developing professionally toward a higher goal, employees often have more patience during difficult periods with their employers and are less likely to consider financial compensation as their primary motivation.

ECO Canada’s HR Insights study of environmental employers conducted in mid-2008 brings about some astonishing statistics regarding the retention benefits of providing professional development to staff. Turnover rates of companies that offer less than \$1,000 per year to employees for professional development is 27.5% -nearly 15% higher than those that offer more than \$1,000 per year and more than 5% above the sector average.

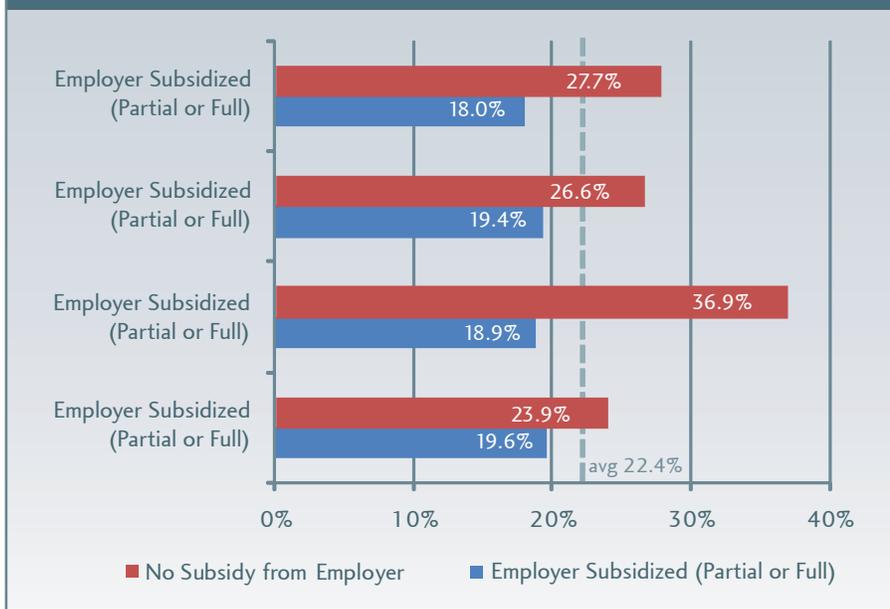
Further analysis of the correlation between subsidized skills development and retention shows that turnover rates are lower in every case where employers offer funding. The greatest gains are recognized when classroom courses are sponsored, dropping the turnover rate by 17%.

CASE STUDY: ADI Group Incorporated

ADI Group Inc. is an engineering/architecture consulting service firm that has implemented various tactics in order to foster engagement, and in doing so, reduce turnover and increase productivity.

Hiring practices reflect a focus on engagement as ADI recruits with a focus on whether a particular position’s path matches the goals and current path of an individual, as well as variables such as whether the employee would enjoy their work environment or a distant geographic move from their home. ADI utilizes strong communication with employees about how they see their careers progressing, and offers an “ownership” component where 2+ year tenure employees can begin to buy into the company with share purchases. They also get involved in the community to help foster pride within employees and create incentives and compensation that reflects long-term partnerships.

Professional Development Type by Turnover Rate



Retirement of Employees

In general, the Canadian population is aging and it is reflected in the national workforce. Regardless of knowledge transfer planning, retirement creates a loss of corporate knowledge and expertise. The Canadian environmental sector is experiencing these general trends.

Close to 4% of the environmental workforce was beyond the retirement age (60 years old) and 3 out of 10 environmental workers will reach this retirement age in the next

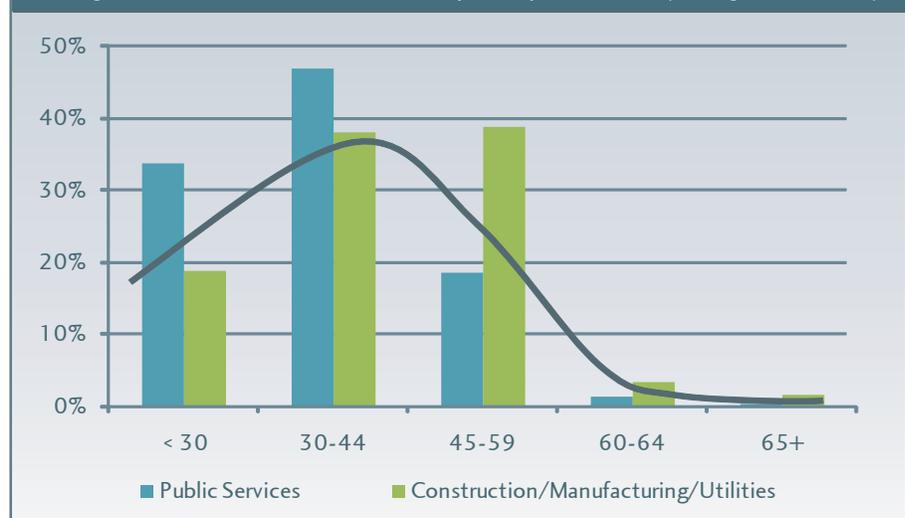
10 years. According to HR Insights 2009, the effect of retirement was felt most heavily by Service Industries as it was cited to have caused 14% of employee loss. Least affected was Environmental Consulting which only remarked losing 3% of employees to retirement during that same period. Each industry, depending on their individual workforce composition, will see retirement become a factor in the coming years.

Construction/Manufacturing/Utilities is one industry group within the environmental sector that shows a considerably higher age distribution with a large chunk of employees situated in the 45-59 age category. Businesses in Construction/Manufacturing/Utilities as well as those in Service Industries need to begin to adjust human resource practices to prepare for this, starting by addressing succession planning.

Succession Planning

Succession planning is the course of action a company takes to prepare for the departure of key individuals. Through this ongoing process, candidates are selected and groomed to take on senior roles through a variety of HR activities including mentoring, career pathing, professional development courses, stretch assignments, job shadowing, networking, and job rotation. The ultimate goal of this strategy is to ensure that the knowledge and skill-sets of important senior employees is passed on to identified candidates.

Youngest & Oldest Environmental Industry Groups in Canada (incl. age distribution)



HR Insights 2009 states that only 42.4% of environmental organizations conduct succession planning, despite the considerably lower turnover rate yielded through the use of this proactive HR tool.

CASE STUDY: EBA Engineering

National consultant company, EBA Engineering, identified a dire need to implement succession planning when a top young talent in the organization resigned because he was unsure of his future with EBA and whether or not the organization valued his skills and abilities enough to help chart his future.

EBA began a process of pinpointing which positions and career paths were limiting within the company, auditing the core strengths of the company, formulating and communicating how each employee's growth fit into the long-term picture, and adjusting performance reviews and other policies to properly reflect the company's objectives. Through this process, EBA successfully lowered the turnover of top talents that was caused by their unclear vision of a career path and feeling of lack of appreciation.



Fighting the Turnover Battle

Finding the secret formula for reducing an organization's turnover is a very elusive task. The basic steps to establishing a ground attack on damaging turnover should be:

- 1) **Investigate the symptoms of current "bad" turnover** Pay the largest attention to turnover for reasons that are within the company's control such as employees leaving due to salary/benefits or being unhappy with the position.
- 2) **Determine the most effective recruitment strategies for the organization** Consider the technical skill/experience/education required for the position(s) being filled. Each recruitment method has its own related cost, talent and retention implications.
- 3) **Establish the optimal professional development and talent management required to keep star performers happy and productive** Top talent will always want to continue to learn and grow. Finding the appropriate methods of professional development for a specific workforce will be integral in keeping them positive and productive.
- 4) **Determine how the workforce age distribution may affect future retention** With retirement becoming more of a concern for many industry groups, targeted recruitment and well-built professional development policies can only go so far. Succession planning must be a mainstay for organizations.

For more information on protecting any organization's most important investment – its employees –ECO Canada's Employer Services can assist with each of these steps to improving employee retention.

A DEEPER LOOK AT NOT-FOR-PROFIT OPERATIONS



ECO CANADA

Biggest Challenges Facing Organizations

Each organization faces a wealth of challenges to remain competitive. Not-for-profit organizations are no exception, and they typically face the additional challenge of smaller budgets. Nevertheless, progressive human resource practices and policies can create a competitive advantage to allow not-for-profits to compete with their revenue-driven counterparts.



More than one half of environmental not-for-profit organizations claim that capital/finance is their largest impediment to growth. This starkly contrasts with the for-profit sector, where less than 10% claimed it to be their greatest concern. The only other challenge that was stated at a higher frequency among not-for-profits was economic issues. Human Resources, the top concern in for-profit operations, is the second leading concern in the not-for-profit world.

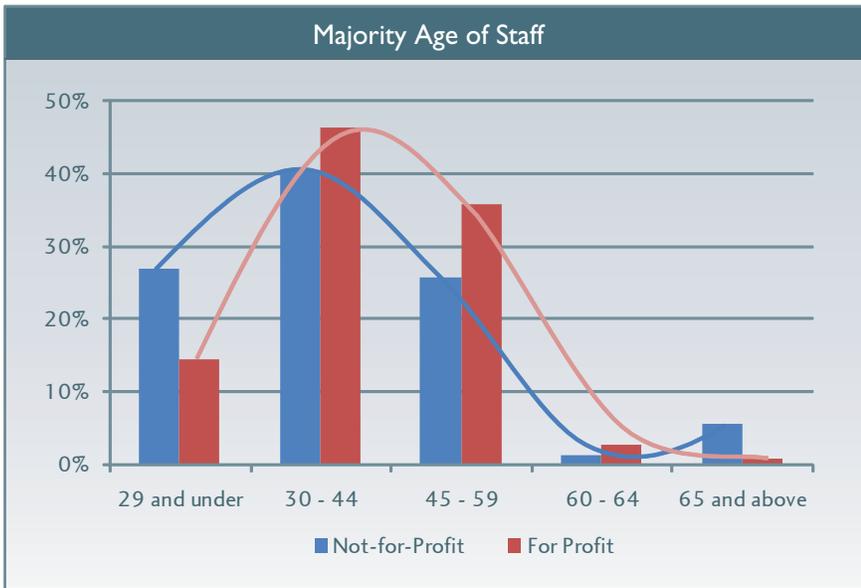
Majority Age of Staff

Environmental not-for-profit operations have more of an even age distribution among its workforce with a noticeable increase in the 'under 29' age category combined with a significant decrease in the '45-59' age category. This information is best used to determine recruitment methods and messages, as well as understanding what life factors might affect employees' longevity at an organization. Age is often a strong determinant of an employee's likelihood to seek aggressive advancement, uproot and relocate, require maternity leave for an expecting child, or seek retirement.

Recruitment Sources & Strategies

The skills, experience, and expertise required for a specific position often determines the most appropriate recruitment sources to use. If cost is a consideration it can often force operations to search for talent in smaller pools. While there is minimal variation in how not-for-profit and for-profit operations search for and attract talent, the variations that do occur are seen in the type of talent sought as well as differences in budget. Not-for-profits tend to use online job banks, their corporate website, on-campus recruitment and co-op programs slightly more than profit-driven firms. For-profit organizations tend to use the more costly methods such as newspapers, internal recruiters and external recruitment agencies that yield them lower turnover rates.





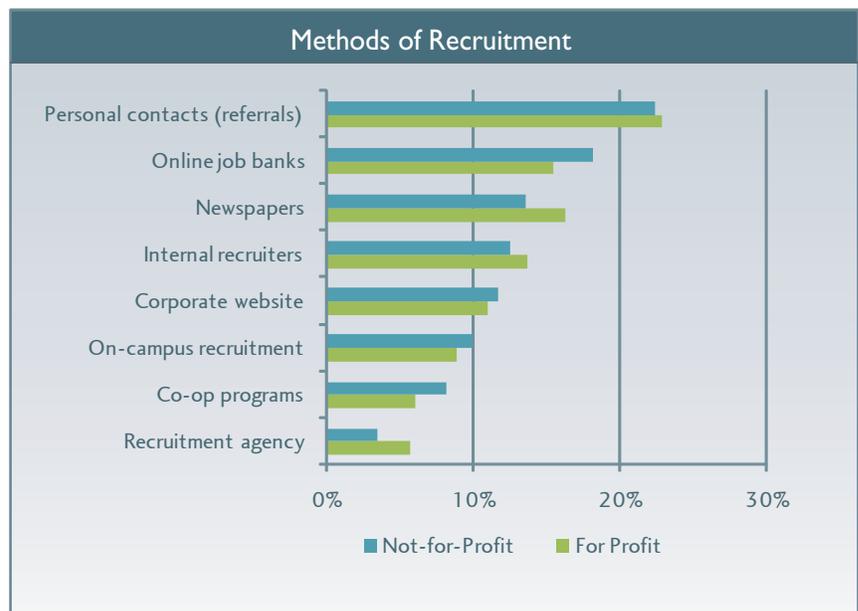
Not-for-profits have the greatest retention success hiring using an internal recruiter, with moderate success yielded from posting on their corporate website and in newspapers. They experience the least success when recruiting using recruitment agencies and online job boards. This data contrasts with for-profit enterprises which garner the best retention from online job boards and co-op programs, and the lowest employee retention from personal referrals and newspaper postings.

Special Interest Group Recruitment

It is clear that not-for-profit operations have become more creative in their recruitment efforts to vie for talent in a field that may have lower compensation opportunity. Over one-quarter of not-for-profit organizations have made efforts to recruit and hire immigrants, and while more not-for-profits have hired Aboriginal workers than companies from the for-profit sector, fewer make special effort to recruit them. This is likely due in part to many large for-profit organizations in Canada having equitable hiring practices and a public relations initiative to work closely with Canadian Aboriginal peoples.

Not-for-profit operations that have hired recent immigrants record an 86% satisfaction rating with 40% saying that the hiring experience was “excellent”¹⁵. Only 14% of organizations remark that some challenges occur when hiring recent immigrants, such as language barriers.

Hiring Aboriginals has been an equally rewarding experience for not-for-profits, with recruiting companies stating a 93% positive rating with their experience¹⁶.



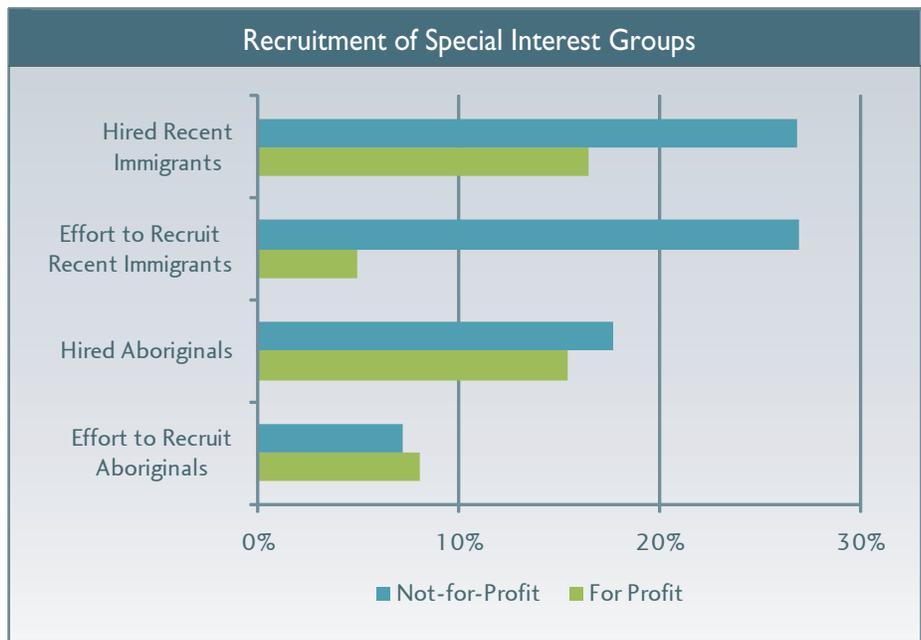
Professional Development

When it comes to farming internal talent, it is nearly four times more likely for profit-driven organizations to provide no funding for professional development than for not-for-profits. However, with tight margins comes tight employee spending budgets. Not-for-profits tend to max out their professional development spending at under \$1,000 per employee whereas for profit organizations are able to extend larger spending power to cultivate staff skills.

¹⁵ HR Insights for Employers 2009, ECO Canada, comments collected from 50 organizations

¹⁶ HR Insights for Employers 2009, ECO Canada, comments collected from 14 organizations

HR Insights 2009 data show that the most effective way to spend professional development dollars in a not-for-profit operation is on classroom courses for employees. This method of employee growth lowers turnover rates in not-for-profits by 29%. Other strong approaches include paying for distance education courses and fees for professional designations, yet neither approach is shown to lower turnover rates to the same extent as classroom courses when paid either partially or in full. While subsidizing attendance at conferences has been shown to largely assist for-profit operations in lowering turnover rates, the same effect is not experienced in the not-for-profit community, as it only lowers turnover rates by 0.3%.



Environmental Skills

Employers in not-for-profit operations identify that their environmental skills needs differ slightly from those skills needed in the for-profit sector. For instance, over 80% of organizations required their staff to be more qualified in ‘environmental education and training’ whereas only 59% of for-profit operations indicate the same requirement. Not-for-profits also strongly demand ‘environmental communications & public awareness’ which happens to be one of stronger skill-sets of the for-profit organizations. This may create an opportunity to target specific industry groups to find qualified not-for-profit candidates (see Insights Summary 3 for industry group breakdown).



Environmental Skills Required	Non-profit	For Profit
Environmental Education & Training	81.3%	58.7%
Environmental Communications & Public Awareness	74.5%	45.6%
Policy Legislation & Regulation	55.3%	57.8%
Strategic Partnering, Planning, Monitoring & Reporting for Sustainable Dev.	50.7%	44.1%
Environmental Assessments & Restoration, Remediation & Reclamation	42.1%	49.3%
Environmental Mgmt Systems & Operations/Risk Assessment/Health & Safety	36.7%	58.8%
Pollution Prevention, Abatement & Control	34.2%	45.3%
Environmental Research & Technology Development	33.3%	56.0%
Natural Resources Planning & Management	31.5%	29.2%
Sampling and Analytical Work related to Environmental Activities	18.7%	49.5%

Essential Skills

While some essential skill-sets seem core to operations of both the for-profit and not-for-profit organizations, the not-for-profit counterparts seem to be less concerned about the essential skills of their workforce. For the most part, the essential skills needed in the not-for-profit sector mirror those required by the for profit sector including ‘written communications’, ‘project management’ and ‘planning and organizing work and projects’. Not-for-profit operations do however designate a larger need for ‘public relations/consultations’ expertise, which may indicate an opportunity to harvest some of that skill-set from for-profit operations.

Essential Skills Required	Non-profit	For Profit
Project Management	79.2%	67.8%
Planning and Organizing Work and Projects	70.5%	71.9%
Written Communication	63.8%	69.2%
Verbal Communication	51.3%	75.9%
Leading/Influencing Others	45.6%	65.5%
Public Relations/Consultations	60.4%	43.2%
Critical Thinking/Judgement	37.2%	59.1%
Computer Proficiency	43.6%	50.2%
Business Skills	31.5%	48.6%
Learning and Creativity	32.0%	35.2%
Work Ethic	20.8%	40.7%
Research and Analytical	23.5%	32.6%

Turnover Explored

Employee turnover in the environmental sector is 22.4% overall. Further breakdown between not-for-profit and for-profit operations shows that not-for-profits have a significantly higher turnover rate than for-profit organizations. Some reasons that are explored in greater detail in the next section include the inability to compete on salary and benefits as well as considerably more females entering into the not-for-profit field mean more maternity leaves.

Reasons for Employee Turnover

An obvious challenge of the not-for-profit community is being able to compete with private enterprise on salary and other financial incentives. While HR Insights data suggest that 'increased salary/benefits' was the second leading reason for employees leaving their not-for-profit employers, there are likely many more that were classified instead in the category 'for another job/better opportunity'. An overwhelming 29% more not-for-profits stated that they feel negative effects of compensation and benefits issues in their HR operations as compared to their for-profit counterparts (12% stated a 'large effect').

According to HR Insights 2009, the environmental workforce sampled was 22% female. This further broke down to 16% for-profit and 41% not-for-profit organizations. With nearly three times the females in not-for-profits, it's no surprise that employee loss due to maternity leave was roughly five times more prevalent than in for-profit enterprises.

Retirement affects both not-for-profits and for-profit sectors with approximately 4% of organizations in each sector confirming a large negative effect on HR operations due to employee retirement.



Succession Planning

Just over 42% of not-for-profit organizations conduct succession planning, while only 33.5% of not-for-profit operations participate in the HR strategy. Those not-for-profits that are committed to succession planning are rewarded with turnover rates that are close to one half that of operations without succession plans (24% with plan; 44.1% without plan).

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ECO CANADA

Human Resource Success in Not-for-Profits

When tight margins are an inevitability of business and attracting sub-standard employees is not an option, creative and innovative human resource strategies must be dispatched. The first step to ensuring that an HR team is on the leading edge is an investigation into the current workforce demographics, their behaviors and perceptions, the skills required to do the most competitive work, and the methods and strategies available to replace the workers with equally talented employees.

Special interest group recruitment is a very successful method for not-for-profit organizations. With high satisfaction ratings from employees



and a wealth of strong talent becoming more available all the time, not-for-profit operations should look to ECO Canada for further information about strategies and considerations for this type of recruitment.

With some essential and environmental skills more readily honed in

the for-profit sector, not-for-profits would be well advised to target searches in specific industry groups where these skills are required. Since not-for-profits are usually unable to compete dollar for dollar with for-profit organizations, the benefits and incentives of working for a not-for-profit must be highlighted with an emphasis on quality of life and work-life balance.

The ideal starting point for not-for-profits must take into account succession planning. Statistics show that succession planning drastically decreasing turnover rates, and a strong HR team will consider the professional developmental growth of employees as a two-tiered benefit – to ensure the employee feels happy and productive, and to proactively plan for openings in key management roles.

Contact ECO Canada today for further information on these and many more initiatives catering to not-for-profit organizations in the environmental sector.



This study involved two components:

- A national employer survey and,
- Ten focus group sessions with environmental employers and employees.

Questionnaire Development

The survey instrument was designed to examine the characteristics of the environmental sector (e.g. size and composition) and to capture the perception of employers on current and future labour demands and human resource issues, such as recruitment, retention, and professional development of environmental employees. The survey instrument was developed by ECO Canada in consultation with a National Steering Committee taskforce and the research contractor.

The survey instrument of the 2004 Environmental Labour Market (ELM) Report¹⁷ was used as a template and each question was examined for its value and consistency. Some questions were dropped or rephrased, and new ones were added.

The questionnaire was pre-tested via telephone with a random sample of 25 to 30 employers from across the country to check for question wording (e.g., clarity, bias, understandability, ambiguity, length), answer wording (e.g., relevant alternatives, non-overlapping categories), logical flow of questions, skip patterns, screening questions and overall length.

The questionnaire was programmed in Computer-Assisted Telephone Interviewing (CATI) for the telephone data capture, and was also programmed into an online survey accessible via internet.

Sampling Design

For the sampling frame, a contact database was created using the following sources:

- Canadian Environmental Directory
- Dunn and Bradstreet database of companies
- Available provincial environmental industry association's online directories
- ECO Canada's list of employers

The unit of analysis was the establishment at a specific location. When an organization had more than one location, participants were instructed to provide information for the specific location, unless indicated otherwise.

After elimination of duplications and incomplete information, the initial sample included over 25,700 contacts.

Limitations of the sampling

As mentioned earlier, we have made reasonable efforts to ensure this study includes companies from a variety of industries. However, the sampling frame remained skewed toward those employers most likely to employ an environmental employee.

¹⁷ The report can be downloaded free of charge from www.eco.ca.

Data Collection

The survey was administered via telephone and online. The questionnaires were available in both French and English. The data collection period was between February 15, 2008 and May 16, 2008. Telephone interviews began on February 15, 2008, while the online questionnaire was launched on April 24, 2008.

At the end of data collection and data transformation, a total of **1,128 surveys** were valid for data analysis.

Responses by Region and Margin of Error

Region	Valid surveys	Sample %	Employer Population	Margin of Error
BC	182	16.1%	22,237	± 7.23%
AB	207	18.4%	21,269	± 6.78%
MB/SK	153	13.6%	11,550	± 7.87%
ON	246	21.8%	35,918	± 6.23%
QC	125	11.1%	7,325	± 8.69%
Atlantic	193	17.1%	6,198	± 6.94%
North	22	2.0%	724	± 20.59%
Total	1128	100.0%	105,221	± 2.9%

NOTE: The employer population was based on ECO Canada (2007) *Profile of Canadian Environmental Employment 2007*.

In total, 1,158 surveys were completed – 979 via telephone and 179 via the web. In cases where multiple surveys were completed for a single location of a business, one survey was selected to remain in the sample. Selection was based on the completeness of the survey (i.e. number of questions answered) and the respondent's position (if number of questions answered was the same). Thirty duplicate cases were removed as a result of this process, leaving a total of **1,128 valid surveys**.

Response rate

The response rate for the telephone survey was estimated at 24%. There were about 4,076 responses among 16,991 valid contacts.¹⁸ These responses did not translate into completed surveys because some were not eligible to participate (1,800 respondents had no environmental employees nor staff in Canada) and some contacts requested the online link (1,289). At the end of the telephone survey period, only 979 surveys were completed by eligible employers. This number of eligible employers was higher than during the last sector study completed in 2004 by ECO Canada, where only 711 employers hired an environmental employee.

In addition, the response rate for the online survey was estimated to be 5.4%. There were 5,689 emails sent out and 179 online surveys completed. Due to some challenges in tracking down emails, this response rate includes emails that were undeliverable, sent to a spam folder, or other circumstances that would prevent it from being open by the targeted individuals.

¹⁸ The original sample for the phone interview was 20,599, of which 3,608 contacts were invalid because they were not in service, not a business, a fax number, etc.

APPENDIX A: METHODOLOGY



Data Analysis

Unless otherwise indicated, data found in the report were weighted by industry group, except when the analysis was done for each industry category. The following table provides population estimates by industry group, as well as the unweighted and weighted sample distributions.

Industry Group	Employer Population		Unweighted Sample		Weighted Sample	
	N	%	N	%	N	%
Public Administration	2,523	2.4	239	21.3	26	2.3
Mining Oil & Gas Extraction	1,911	1.8	84	7.5	20	1.8
Administration and Support, Waste Management and Remediation	10,698	10.2	125	11.1	114	10.2
Agriculture, Forestry, Fishing and Hunting	11,819	11.2	52	4.6	126	11.2
Manufacturing	8,034	7.6	101	9.0	86	7.7
Arts, Recreation, Accommodation and Food Services	9,019	8.6	1	0.1	96	8.6
Education/Health Care and Social Assistance	9,202	8.8	12	1.1	98	8.8
Construction	10,472	10.0	15	1.3	112	10.0
Professional, Scientific, and Technical Services	10,488	10.0	411	36.6	111	9.9
Utilities, Transportation and Warehousing	4,211	4.0	19	1.7	45	4.0
Wholesale/Retail Trade	15,366	14.6	36	3.2	164	14.6
Other Services (except Public Administration)	6,520	6.2	20	1.8	70	6.2
Information, Finance, Insurance Real Estate, and Management of Companies	4,957	4.7	7	0.6	53	4.7
TOTAL	105,221	100.0	1,122	100.0	1,120	100.0

Notes:
Weighting based on estimated number of establishments with environmental employees according to ECO Canada's Profile of Canadian Environmental Employment 2007. Industry information was not known for 6 cases; these cases were not weighted (assigned a weight value of 1).

Focus Groups

During March and April 2008, focus groups with environmental employers and employees were held across Canada. The primary objective of these discussion meetings was to validate and further explore the findings of the employer survey.

A total of 10 focus group sessions were held, five with employers and five with employees in each of the following locations: St. John's, Montreal, Toronto, Alberta (online) and British Columbia (online). The groups in St. John's, Montreal and Toronto took place in-person, while those in Alberta and British Columbia were carried out over the Internet. The online focus groups were conducted using Itracks, an online data collection software platform. Participation numbers for the focus groups were as follows:

Number of Participants in Focus Groups

Location	# of employer participants	# of employee participants
St. John's, Newfoundland & Labrador	4	2
Montréal, Québec	2	8
Toronto, Ontario	5	8
Alberta (online)	8	5
British Columbia (online)	8	8
Total	27	31

Each session lasted approximately 90 minutes. Prior to moderating the focus groups, discussion guides were developed. The in-person groups were audio and video recorded for the purpose of analysis, while transcripts were developed for the online groups.

Some comments from the focus groups were included in the report when appropriate.

Final Report

This final output of this study was drastically reconsidered after the change in economic climate experienced in late 2008 into 2009 made some of the findings of the irrelevant. ECO Canada chose to highlight findings based on critical broader issues that persist in this dynamic field despite any economic conditions such as challenges with recruitment, employee development and turnover.

This final report presents issues on an individual basis, exploring the current situation and offering some insight into what lies ahead and how proactive organizations can take best advantage of a persisting or impending situation.

As opportunities and challenges in the environmental sector evolve, so will the structure and topics that are brought forth in summary format of this report. ECO Canada welcomes all feedback from the use of our labour market reports as well as suggestions for improvements and topics to be covered in future studies. All input should be directed via email to research@eco.ca.

ECO Canada labour market information¹⁸ indicates that all environmental organizations in Canada can be classified within seven industry groups. Their national breakdown is:

Breakdown of Environmental Organizations	
Public Service	22%
Environmental Consulting	18%
Service Industries	15%
Natural Resources	12%
Architecture, Engineering and Related Services	12%
Construction/Manufacturing/Utilities	12%
Waste Management	9%

Public Service

Public Services are occupations provided by government to its citizens, either directly (through the public sector) or by financing private provision of services. Public service intersects with the environmental industry in areas such as public administration, education, health care and social assistance.

Labor data suggest that only 28% of Public Service organizations are small-to medium sized (<50 employees), whereas 65% are large organizations that have over 50 employees on staff. One-fifth of organizations in this industry group operate as not-for profits.

Environmental Consulting

The Environmental Consulting industry group includes establishments primarily engaged in providing advice and assistance to businesses and other organizations on environmental issues, such as the control of environmental contamination from pollutants, toxic substances, and hazardous materials. These establishments identify problems (e.g., inspect buildings for hazardous materials), measure and evaluate risks, and recommend solutions.

They employ a multi-disciplined staff of scientists, engineers, and other technicians with expertise in areas such as air and water quality, asbestos contamination, remediation, and environmental law. Establishments providing sanitation or site remediation consulting services are included in this industry.

Over 60% of environmental consulting operations are small-to-medium sized (<50 employees) and roughly 6% are not-for-profit organizations.

Service Industries

Service Industries is a broad industry group that can include:

- Administration & Support Services
- Arts, Entertainment & Recreation
- Accommodations & Food Services
- Wholesale & Retail Trade
- Other Services (except Public Administration)
- Information, Finance, Insurance, Real Estate & Management



It can also include select occupations from the fields of 'Professional, Scientific & Technical Services' and 'Utilities, Transportation & Warehousing'.

Approximately 70% of organizations in this group are small-to-medium sized (<50 employees) and over one-quarter of them are not-for-profit operations.

Natural Resources

Organizations operating within the group of Natural Resources include those intimately involved with agriculture, forestry, fishing, hunting, mining, and oil and gas extraction. This group encompasses energy-related operations not associated with the delivery of energy. Many of these operations must follow strict government regulations to ensure responsible and sustainable processes when utilizing Canada's natural resources.

More than two-thirds (68%) of organizations operating in the Natural Resource industry group are small-to-medium sized (<50 employees) and 9% of organizations are classified as not-for-profit.



Architecture, Engineering & Related Industries

This industry group encompasses organizations that provide professional, scientific and technical services in an environmental capacity. Practitioners in Architecture, Engineering & Related Industries operate under highly regulated policies and offer many services that must be provided by designated and/or certified professionals in order to pass strict government requirements.

Over 50% of these organizations are categorized as small-to medium sized operations (<50 employees) and around 10% are not-for-profit.

Construction/Manufacturing/Utilities

This industry group includes those organizations that would normally be categorized under traditional industries but they intersect with the environment because they use environmental processes such as 'cleantech manufacturing' or they are evolving new fields such as 'green building/construction' or 'low-impact renewable electricity'.

Approximately 57% of companies operating in this field are small-to medium in size (<50 employees). Current labour market data show that 8% are not-for-profit organizations.

Waste Management

Inclusive of remediation activities, waste management is the collection, transport, processing, recycling, or disposal of solid, liquid, and gaseous wastes in ways that reduce their effect on human health and the environment. Organizations involved in this industry use thermal, chemical, biological, physical and other processes to reduce its waste volume, to recover materials for recycling or to produce energy.

Close to two-thirds (63%) of waste management organizations are small-to medium sized (<50 employees) and 17% are not-for-profit operations.

APPENDIX C:

GLOSSARY OF TERMS



Aboriginal People

Aboriginal people (or Aboriginals) are individuals that are First Nations, Inuit or Métis.

Environmental Employees or Practitioners

In this report, an environmental employee or practitioner refers to someone working in any activity associated with:

- Environmental protection (e.g., air, water and land quality, waste management, restoration and reclamation, human and environmental health and safety, and environmental protection management);
- Conservation and preservation of Natural Resources including the prevention and control of pollution (e.g., fishery, wildlife, forestry, agriculture, mining, energy, parks and natural reserves, and natural resource management); and
- Environmental sustainability (e.g., education, research and development, policy and legislation, communications and public awareness, and sustainable development).

Labour Force and Workforce

Statistics Canada defines labour force as any population 15 years of age and over. They can be either employed or unemployed. The words 'labour force' and 'workforce' are used interchangeably in this report.

Immigrant

In this report, immigrants (or recent immigrants) refer to individuals who have immigrated in Canada within the last five years.

Industry Groups

The classification of industry groups found in this report was developed from the North American Industry Classification Systems (NAICS) used by Statistics Canada and other government agencies. The following table shows the equivalency between the industry groups and NAICS codes.

APPENDIX C: GLOSSARY OF TERMS



ECO CANADA

Industry Groups	Equivalent NAICS name and Code	
1 - Environmental Consulting Services	Environmental Consulting Services	54162
2 - Waste Management and Remediation Services	Waste Management and Remediation Services	562
3 - Architectural, Engineering and Related Services	Architectural, Engineering and Related Services	5413
4 - Service Industries	Professional, Scientific and Technical Services	54 (excluding 54162 & 5413)
	Administrative and Support Services	561
	Management of Companies and Enterprises	55
	Transportation and Warehousing	48-49
	Information and Cultural Industries	51
	Arts, Entertainment and Recreation	71
	Accommodation and Food Services	72
	Wholesale Trade	41
	Retail Trade	44-45
	Finance and Insurance	52
5 - Public Services	Real Estate and Rental and Leasing	53
	Other Services (except Public Administration)	81
	Public Administration	91
6 - Natural Resources	Educational Services	61
	Health Care and Social Assistance	62
	Agriculture, Forestry, Fishing and Hunting	11
7 - Utility/Manufacturing/Construction	Mining and Oil and Gas Extraction	21
	Utilities	22
	Manufacturing	31-33
	Construction	23

Not-for-profit Sector

Organizations in the not-for-profit sector are those who are a charity organization or a not-for-profit organization. These organizations were found in all industry groups.

of Not-for-profit Organizations by Industry Group

	All Organizations	All Not-for-profit
Environmental Consulting Services	135	8
Waste Management (incl. remediation services)	83	14
Architectural, Engineering and Related Services	90	10
Service Industries	100	28
Public Services	225	38
Natural Resources	106	10
Utility/Manufacturing/Construction	102	8
Total	841	116

Public Sector

The public sector includes public administration from federal, provincial, and municipal government, as well as Aboriginal administrations and educational and health institutions.



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This project was funded by the Government of Canada's Sector Council Program.
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Funded by the Government of Canada's Sector Council Program