



Green Futures: **Harnessing Survey Insights to Power Talent Strategies**

March 2024

About ECO Canada

Environmental Careers Organization of Canada (ECO Canada) is a not-for-profit corporation established in 1992 as part of Canada's Sector Council Initiative. ECO Canada is focused on identifying, communicating, and meeting the needs of environmental practitioners, employers, educators, and students. Its vision is to build the world's leading environmental workforce.

ECO Canada has supported Canada's environmental workforce by establishing professional development resources, training programs, and educational partnerships, conducting in-depth labour market research and providing the largest industry-specific job board.

ECO Canada's programs and services are developed through strong national partnerships, consultative strategic planning, and ongoing labour market research. Its labour market research provides valuable insights into environmental career trends, which can be used by governments, educators, youth, and industry partners to make decisions and formulate strategies. To learn more, please visit www.eco.ca.

Acknowledgments

We would like to thank the individuals who responded to our survey. We are also grateful for the services provided by Leger and Leger DGTL.

This report was funded by the Government of Canada's Sectoral Workforce Solutions Program. We are greatly appreciative of the support.

Funded by the Government of Canada's
Sectoral Workforce Solutions Program.

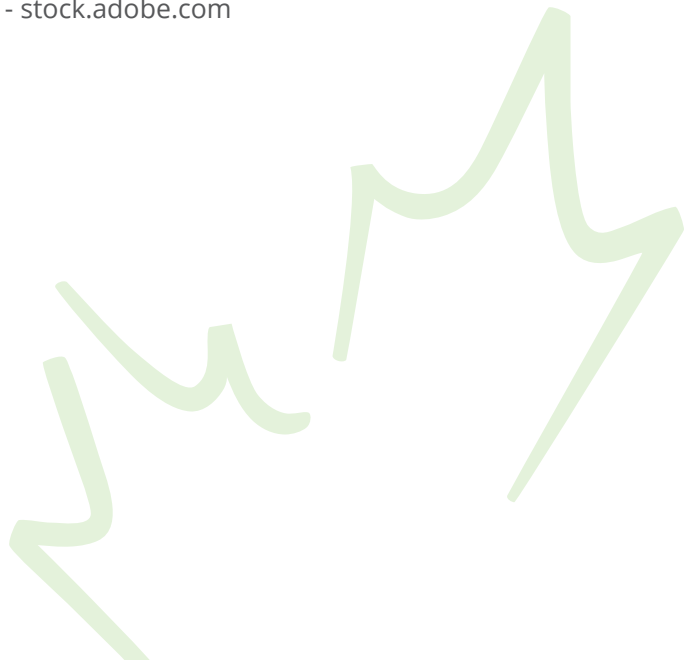


The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of the Government of Canada.

Photo credits:

Page 1, 5, 6, 10, 11, 15, 24, 29, 30 by Adobe Stock - stock.adobe.com

Page 10 by Tatiana Syrikova on Pexels



Disclaimer

© 2024 ECO Canada

All rights reserved. The information and projections contained herein have been prepared with data sources ECO Canada has deemed to be reliable. ECO Canada makes no representations or warranties that their labour market estimates are error-free and therefore shall not be liable for any financial or other losses or damages of any nature whatsoever arising from or otherwise relating to any use of its information. The use of any part of this publication is subject to the Canadian Copyright Act. The content may be referenced for general, educational, research, or media purposes with the following citation: Source (or “adapted from”): ECO Canada (2024). www.eco.ca

To help others benefit from the information presented in this report, individuals or organizations are encouraged to download a copy directly from ECO Canada’s website.

For comments or questions, contact: Research@eco.ca



Table of Contents

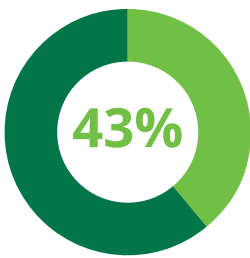
Executive Summary	5
Introduction	9
A Portrait of Environmental Career Perceptions and Aspirations	10
Overall Career Interest	11
Diverse Motivations, Barriers, and Other Common Threads	12
Decoding Factors Affecting Disinterest in Environmental Work	12
Seeking Clarity for Informed Career Choices	13
SPOTLIGHT - The Role of Experience and Networks in Career Aspirations	15
Finding #1: Linking Work Experience and Duration with Career Aspirations	15
Finding #2: Fostering Career Interest Through Environmental Training and Education	16
Finding #3: Social Connections: Influence of Family and Friends	16
Diving Deeper: Demographics, Motivations, and Barriers in Environmental Career Aspirations	17
Generational Insights: Age-based Shifts in Career Interest	17
Career Information Preferences by Age Group	18
Impact of Employment Status on Green Career Interest	19
Career Information Preferences by Employment Status	20
Unpacking Interest in Environmental Careers Among Equity-Deserving Groups	20
Career Information Preferences Across Diverse Demographic Groups	22
SPOTLIGHT - Perceptions of Representation in the Environmental Sector	22
SPOTLIGHT - Immigrant Enthusiasm for Environmental Careers	23
SPOTLIGHT - Urban vs. Rural: The Geographic Divide in Career Interest	25
Promoting Careers and Boosting Engagement: Key Recommendations	26
SPOTLIGHT - Unveiling Turnover: Understanding Why Some Departed the Environmental Sector	29
Future Implications of this Report	30
References	31
Appendix A: Survey Methodology	32
Appendix B: Respondent Profile	37

Executive Summary

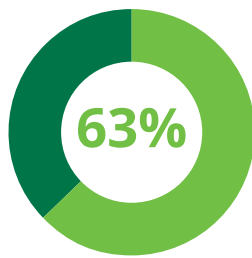
The shift towards a sustainable, net-zero Canadian economy heralds a transformation in the workforce landscape. The demand for environmental expertise surges across sectors, challenging us to fill approximately half a million roles over the next decade due to growth and attrition. Against this backdrop of potential labour and skill shortages, our report investigates perceptions and interests in green careers to forge a robust path forward.

Survey Insights: A New Environmental Consciousness

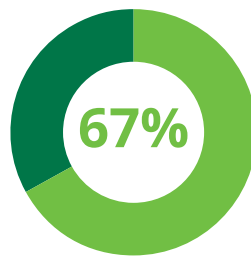
Our *Environmental Career Awareness and Perception Survey* reached 2,562 individuals, providing a cross-section of views from students to professionals. We discovered a commendable interest in environmental careers, although uncertainty persists, revealing the need for nuanced attraction strategies and robust informational resources.



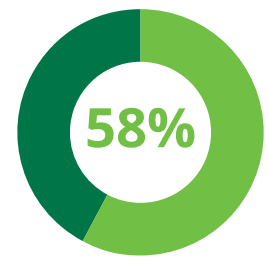
43% of respondents are interested in pursuing an environmental career.



63% of respondents agree that the environmental sector presents a wide range of Career opportunities for Canadians.



67% of respondents agree that there are many opportunities to work in the environmental sector across Canada.



58% of respondents agree that the environmental sector provides good opportunities for career advancement.

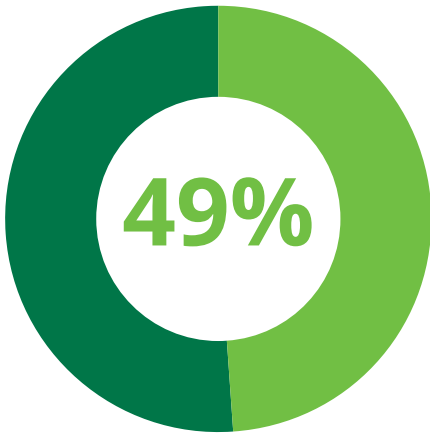
Environmental Career Aspirations: A Diverse Mosaic

Career alignment with personal interests and outdoor work significantly attracts respondents to the environmental sector, alongside favourable industry perceptions and professional growth opportunities. Yet, barriers exist—misalignment with personal interests, skills mismatch, and lack of clarity about career pathways deter engagement. Competitive compensation and job security emerged as potential remedies.



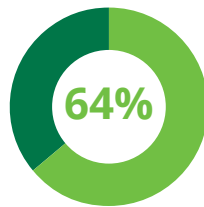
Navigating the Information Gap

A surprising number of respondents hadn't sought career information, signifying a pivotal chance for expansive education and communication strategies to increase sector interest and understanding.

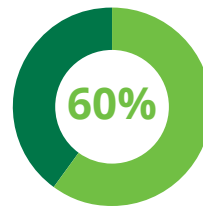


49% of respondents interested in environmental career opportunities have obtained related career information.

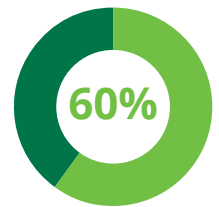
Top information respondents sought out:



Skill requirements



Certification, education, or training requirements



Number of available jobs



Experiential Influence on Career Aspirations

Work and volunteer experiences in the environmental sector are correlated with continued interest, underscoring the value of engagement and exposure. Education and training also play a critical role, with those invested in environmental learning showing a stronger inclination towards such careers.

	Students	Recent graduates (graduated less than a year ago)	Job seekers, who are not students or recent graduates	Currently working, but open to a transitioning to a new industry
Interested in environmental careers:	50%	47%	45%	36%
Top 3 motivators:	74% say it lines up with their interests	73% say it lines up with their interests	53% say it lines up with their interests	50% say it lines up with their interests
	56% want to work outdoors	53% want to work outdoors	47% want to work outdoors	39% want to work outdoors
	50% lines up with their education	56% lines up with their education	57% want change careers or do something different	49% want change careers or do something different

Demographic Dynamics and Career Interests

Age, employment status, and diverse backgrounds—including those of visible minorities, Indigenous peoples, and persons with disabilities—influence environmental career interests. For younger demographics, environmental careers resonate with their aspirations and education, while older individuals seek flexibility and career transitions.

	Youth aged 15 to 24 years old	Women	Members of a visible minority	Indigenous Peoples	Persons with disabilities	Newcomers living in Canada for 5 years or less
Interested in environmental careers:	57%	42%	50%	47%	54%	65%
Top 3 motivators:	76% say it lines up with their interests	68% say it lines up with their interests	56% say it lines up with their interests	51% say it lines up with their interests	73% say it lines up with their interests	65% Lines up with their interests
	60% want to work outdoors	48% want to work outdoors	42% want to work outdoors	49% want to work outdoors	50% want to work outdoors	52% Want to work outdoors
	54% hold a positive perception of the industry	44% hold a positive perception of the industry	44% hold a positive perception of the industry	43% hold a positive perception of the industry	47% hold a positive perception of the industry	42% hold a positive perception of the industry

	Large urban centers	Rural communities
Interested in environmental careers:	46%	32%
Top 3 motivators:	61% say it lines up with their interests	50% say it lines up with their interests
	45% want to work outdoors	57% want to work outdoors
	44% hold a positive perception of the industry	47% hold a positive perception of the industry

Elevating Equity: Advancing IDEA Initiatives

Our findings stress the imperative of Inclusion, Diversity, Equity and Accessibility (IDEA) in cultivating a competent, diverse workforce. Tailored recruitment, mentorship, and educational pathways for equity-deserving groups are critical for fostering an inclusive workforce that mirrors the diversity of the communities served.

Community Engagement: A Grassroots Approach

Deep community engagement can spark interest in environmental professions, suggesting the effectiveness of introducing programs at educational and communal levels.

Conclusion: Forging the Future

The report delineates a need for strategic workforce development, IDEA initiatives, and broad-based and tailored attraction and recruitment strategies to shape the environmental sector’s future. By addressing information and educational gaps, fostering community involvement, and propelling research, we set the stage for an adaptable, knowledgeable, and diverse green workforce ready to tackle the environmental challenges ahead.

Introduction

The Canadian economy is experiencing significant change in an era focused on sustainability and the move toward a net-zero economy. As organizations increasingly prioritize sustainability, there is a growing demand for a workforce well-versed in environmental areas across various industry sectors.¹ Our latest outlook reveal close to half a million new workers will need to be hired in the next decade to address job growth and age-related attrition—and yet labour and skill shortages are anticipated for several occupations.² LinkedIn’s Global Green Skills Report 2023 also warned of an “imminent green skill shortage,” as the rising demand for green skills outpaces supply growth.³

Understanding how current and prospective workers perceive environmental careers becomes increasingly critical. So, we asked: *How do individuals view and approach career opportunities in Canada’s green economy?*

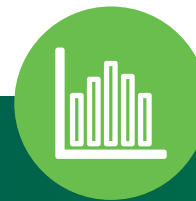
In 2023, we embarked on a comprehensive *Environmental Career Awareness and Perception Survey*⁴, engaging a diverse group of 2,562 participants that included students, recent graduates, job seekers, and those open to a career shift, including some who were in an environmental role at the time of survey. The survey had three specific objectives:



ASSESS
awareness and
interest of our target
demographics in an
environmental career.



IDENTIFY
barriers and motivational
factors influencing the
decisions to pursue an
environmental career.



EVALUATE
existing types of
information
accessed related to
environmental careers.

In this report, we will explore how different groups of people view and are interested in environmental careers. We’ll look at what motivates them and what holds them back from pursuing these paths, focusing on their work experience, education, influence from family and friends, and how a sector’s Inclusion, Diversity, Equity and Accessibility (IDEA) practices affects their career goals.

These insights form the basis for developing strategies to draw in and engage a talented workforce, which is vital as the demand for environmental expertise grows. By exploring these nuanced attitudes and preferences, organizations and initiatives promoting environmental careers can tailor strategies to better resonate with different mindsets. This deeper understanding could pave the way for effective and targeted approaches in promoting, advocating, and attracting individuals towards environmentally focused career paths.

¹ Recent reports such as Deloitte’s (2022) Work toward Net Zero, Microsoft’s (2022) Closing the Sustainability Skills Gap, and RBC’s (2022) Green Collar Jobs highlight the demand for a proficient, environmentally conscious workforce adept at navigating and implementing sustainable practices across diverse sectors.

² ECO Canada’s (2024) National Labour Market Outlook: Environmental Workforce Trends 2023-2033.

³ LinkedIn’s (2024) Global Green Skills Report 2023.

⁴ Detailed methodologies and respondent profile can be found in Appendix A and B, respectively.

A Portrait of Environmental Career Perceptions and Aspirations

Misconceptions about green jobs often arise from the mistaken belief that the breadth and depth of “green jobs” are universally understood. It’s essential to challenge this notion by emphasizing that environmental careers encompass a variety of disciplines and skills, a commitment to continual learning, and a deep understanding of the interconnectedness of environmental issues.

To counteract some of these misconceptions, we offered survey participants the following definition:

The environmental sector and its workforce are broad, spanning workers across industries and occupations that drive or support the goals of environmental protection, resource management, and sustainability. Most environmental workers operate in more than one subsector. For example, an environmental manager could operate across all three areas.



Environmental Protection

involves activities aimed at protecting the health of humans and the ecosystem. Examples of this could be work related to water quality, site assessment & remediation, and waste management. This also includes human health and safety when it is dependent on the quality of the environment.



Resource Management

involves activities aimed at integrating environmental and economic decisions with principles of stewardship in the use and management of natural resources. This sector deals with integrating biological and ecological aspects of the environment with the social and economic needs of society. This includes work in energy, natural resource management, or fisheries and wildlife management.



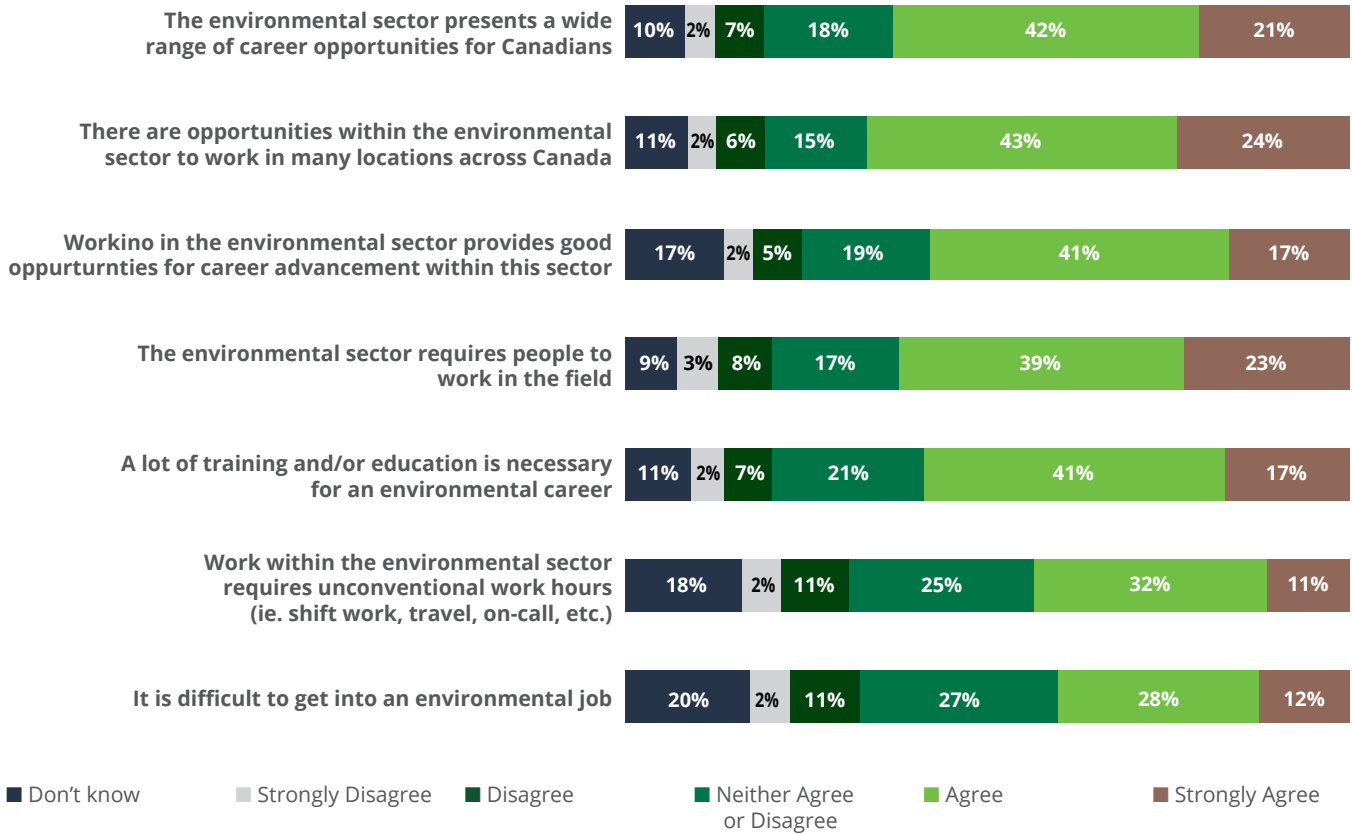
Environmental Sustainability

involves activities aimed at promoting a healthy environment, for the benefit of society. These activities center on developing, disseminating, and applying knowledge in support of the environmental protection and resource management sectors. This can include work with policy & legislation, sustainability initiatives, research & development, education & training, and public awareness.

From this definition, we asked all participants to rate their agreement on statements regarding environmental careers. The data in Figure 1 reflects an overall positive sentiment toward environmental careers. Most agree that this sector offers long-term career prospects across Canada.

While the outlook is positive, the survey findings also highlight a need for better understanding among respondents about the complexities of environmental work. Sixty two percent recognize the need for fieldwork, and 43% acknowledge unconventional working hours. Moreover, 59% believe significant training or education is necessary for an environmental career. There is a perception among 40% of respondents that entering this sector is challenging, with 20% expressing uncertainty about its difficulty. This lack of clarity underlines a substantial gap in understanding the accessibility and diversity of opportunities within the environmental sector.

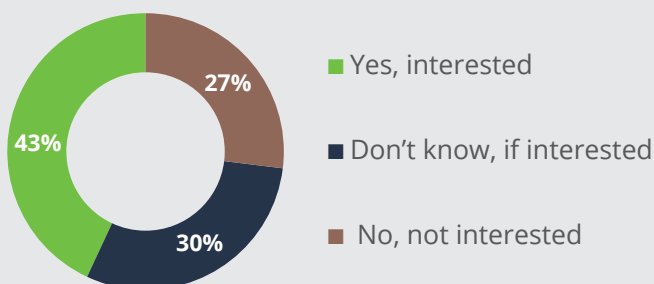
Figure 1
Responses to Statements about Environmental Careers



Overall Career Interest

Encouragingly, nearly 43% of survey participants who were not in a green role at the time of survey expressed a keen interest in exploring careers within the environmental sector. An additional 30% remain uncertain or undecided, and a further 27% indicated a lack of interest; however, both groups could potentially be swayed with access to the appropriate information resources and improved attraction strategies.

Figure 2
Overall Interest in Environmental Career Opportunities

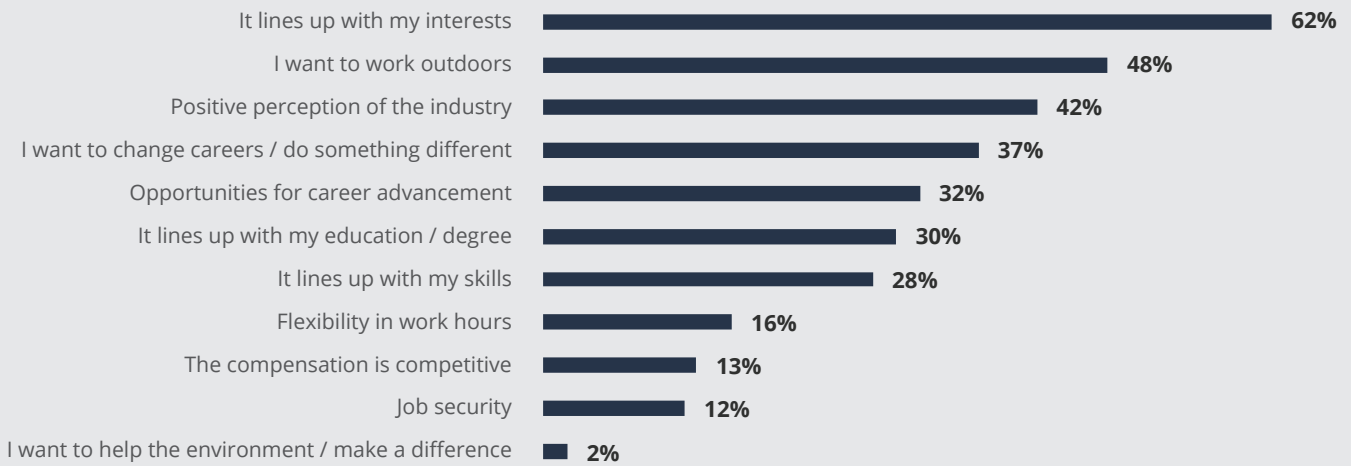


Diverse Motivations, Barriers, and Other Common Threads

Respondents drawn to environmental roles overwhelmingly pointed to alignment with personal interests as a key motivation for their career choice. The allure of working outdoors and being close to nature, engaging directly in field-based activities, was a significant attraction for many, underscoring the sector’s unique appeal.

Overall, the perception of the environmental sector was notably positive, recognized for its meaningful contributions to society and the planet. Approximately 37% of participants considered it a viable option for career transition, while 32% perceived it as offering substantial opportunities for career growth and professional development.

Figure 3
Key Motivations for Interest in Pursuing an Environmental Career

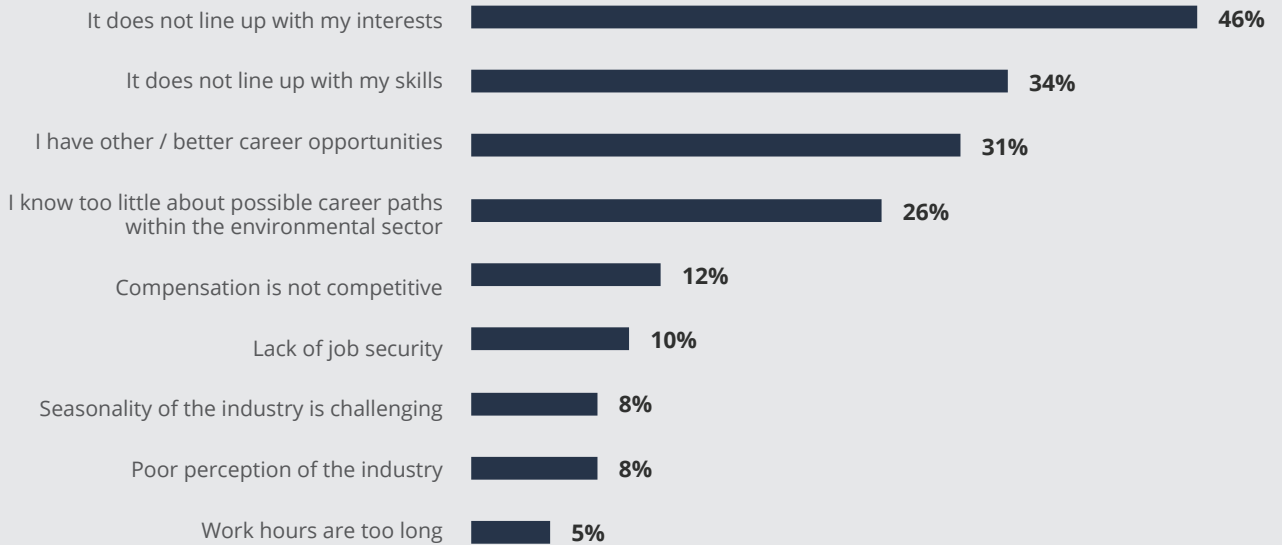


These insights reveal a complex mosaic of factors driving interest in environmental careers, including personal interest alignment, the allure of outdoor work, favourable views of the sector, and opportunities for professional growth. Such findings highlight the sector’s potential to appeal to a broad spectrum of individuals, each with unique ambitions and aspirations.

Decoding Factors Affecting Disinterest in Environmental Work

Respondents identified several deterrents to pursuing environmental careers. Notably, 46% stated that these roles did not align with their personal interests. Additionally, concerns about a mismatch in skills, limited clarity on career progression and growth opportunities, or more attractive alternatives in other sectors were highlighted.

Figure 4
Overall Primary Factors for Disinterest in Pursuing an Environmental Career



Addressing these challenges is crucial for attracting talent to the environmental sector. Strategies to enhance its attractiveness and mitigate entry barriers could include:

- Enhancing compensation packages to be more competitive,
- Strengthening job security to alleviate concerns,
- Providing clearer and more diverse career pathways to showcase potential growth, and
- Highlighting the relevance of environmental roles to elevate their perceived value.

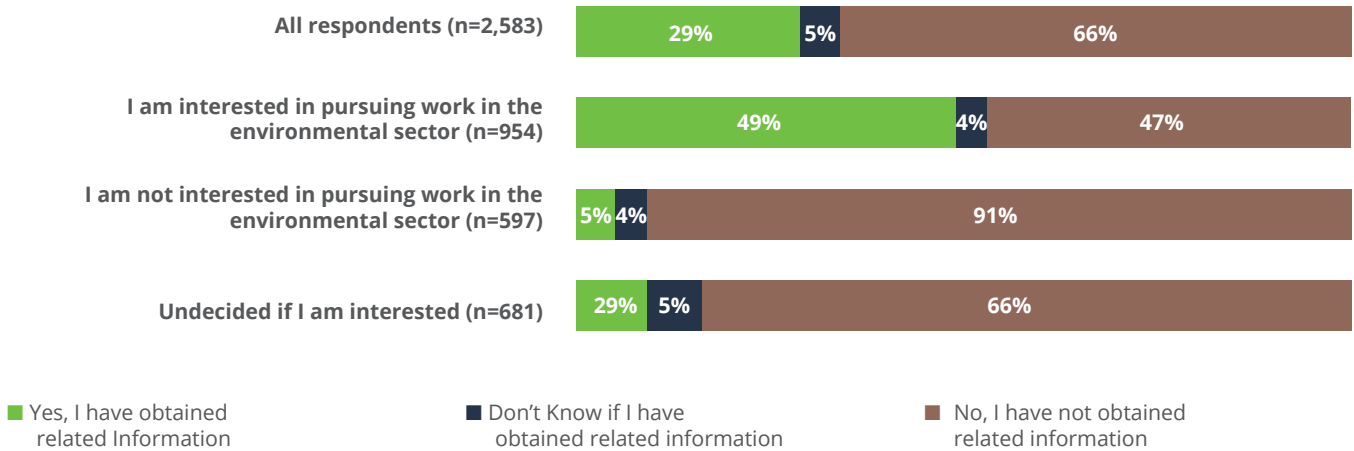
Seeking Clarity for Informed Career Choices

Understanding the environmental career landscape requires clear guidance. Notably, only 34% of respondents sought information about environmental careers while 66% did not, signalling an opportunity for broad-based and targeted dissemination strategies.

Interestingly, almost half of those who sought environmental career information showed a strong interest in pursuing a career in this sector (refer to Figure 5). In contrast, only 5% of respondents not interested in environmental work sought or obtained related career information while 91% have not.

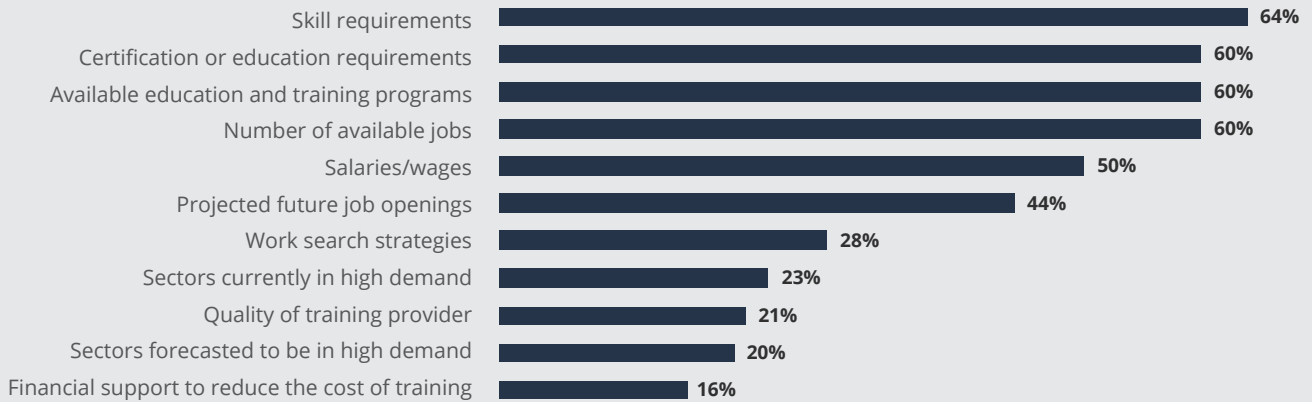
Our analysis shows a notable trend—people seeking information about environmental careers are more likely to be interested in working in this sector than those who have not explored this information. This emphasizes the crucial role information plays in shaping career aspirations. Enhancing the reach of information about environmental careers could increase interest in this sector among prospective workers.

Figure 5
Responses to Statements about Environmental Careers



As illustrated in Figure 6, more than 60% of respondents expressed a keen interest in information concerning skill requirements, certifications, education and training programs, and job vacancies. These preferences in information could significantly influence career decisions, varying based on demographic groups or employment status.

Figure 6
Information Preferences of Aspiring Environmental Career Enthusiasts



Overall, it is evident that those interested in environmental careers are not solely motivated by commitment to sustainability. They also approach their career paths strategically, seeking crucial information to make informed decisions and excel in the evolving environmental sector.

Our survey data indicates a significant potential for fostering interest in environmental careers through heightened awareness about the sector. A substantial portion of respondents had not delved into this sector. The connection between information access and the inclination to pursue environmental work suggests that targeted education and outreach efforts could significantly inspire more people to explore and pursue careers in this area.

SPOTLIGHT - The Role of Experience and Networks in Career Aspirations

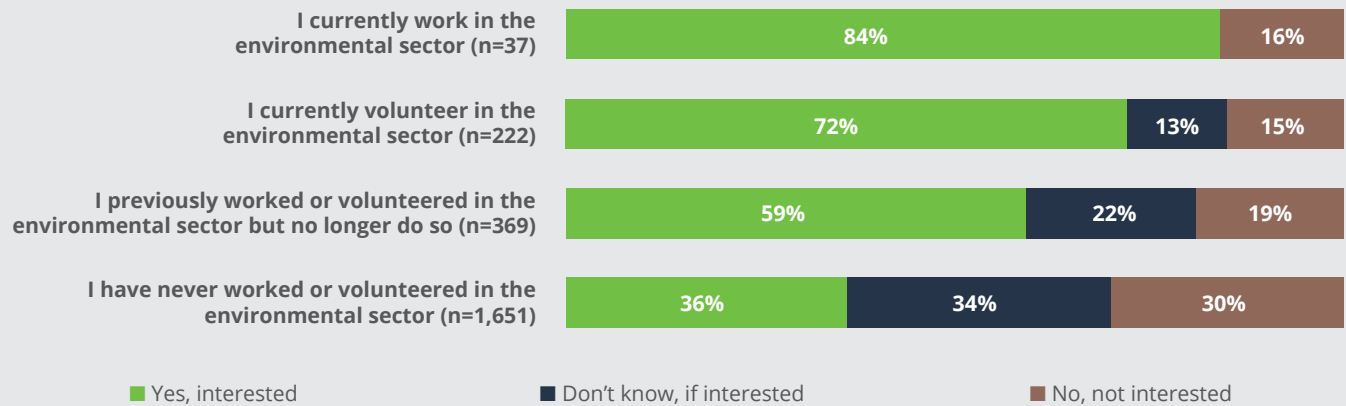
Our analysis also underscores the impact of participation, experiences, and exposure on respondents' aspirations in this sector. An underlying theme emerged: **increased engagement correlates with a more substantial interest in environmental careers.**

Finding #1: Linking Work Experience and Duration with Career Aspirations

The survey results reveal that respondents with prior work or volunteer experience in the environmental sector are more likely to express interest in working in this field (see Figure 7). Specifically, 84% of respondents employed and 72% of respondents who volunteered in the environmental sector expressed continuous interest in working in this field.

Among those who had previously worked or volunteered in the environmental sector, 59% exhibited interest in continuing to work there. However, only 36% of respondents with no prior work or volunteer experience in the environmental sector expressed interest in working in this field. These results highlight the importance of current and prior experience, whether work or volunteering, in shaping interest in environmental careers.

Figure 7
Interest Level in Environmental Careers, Across Work Experience



Finding #2: Fostering Career Interest Through Environmental Training and Education

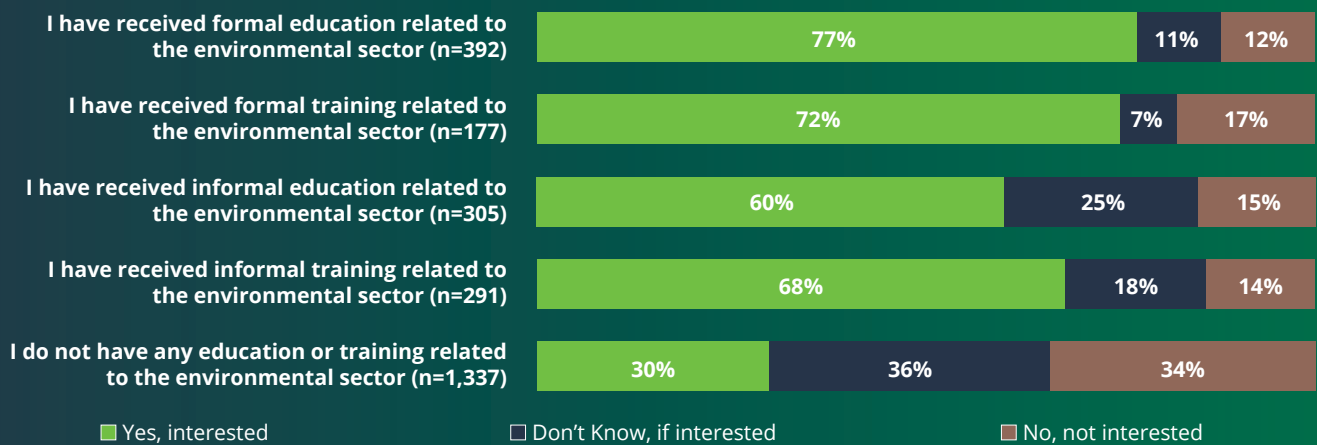
The insights from Figure 8 shed light on the crucial role of environmental education and training in shaping career interest. Those investing time and resources in environmental education, formal or informal, show a markedly stronger inclination toward pursuing environmental work.

Formal education stands out prominently, with 77% engaged in formal education programs and 72% in formal training expressing a desire for environmental careers.

The impact of informal education and training is also evident, with 60% expressing interest after informal education and 68% after informal training related to the environmental sector.

Conversely, respondents who did not have environmental training or education demonstrated a notably lower likelihood of interest in environmental careers. Their responses are evenly distributed among “interested” (30%), “undecided” (36%), and “not interested” (34%).

Figure 8
Interest Level in Environmental Careers, Across Educational and Training Background

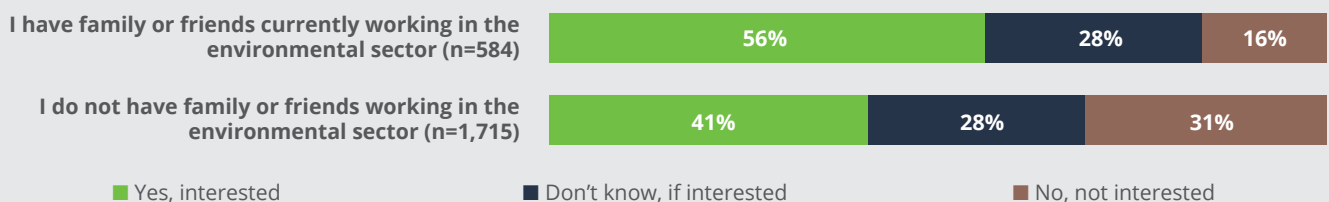


Finding #3: Social Connections: Influence of Family and Friends

The support and experiences shared within one’s social circles can be pivotal in nurturing a person’s interest and commitment to a career, showcasing the influence of familial and friendship ties in shaping professional aspirations.

An intriguing trend emerges as 56% of respondents with family or friends employed in the environmental sector are more inclined toward environmental career pursuits (see Figure 9). Leveraging these existing ties can offer guidance, support, and valuable career advice that could nurture interest and involvement in environmental careers.

Figure 9
Interest Level in Environmental Careers, Influence of Family and Friends



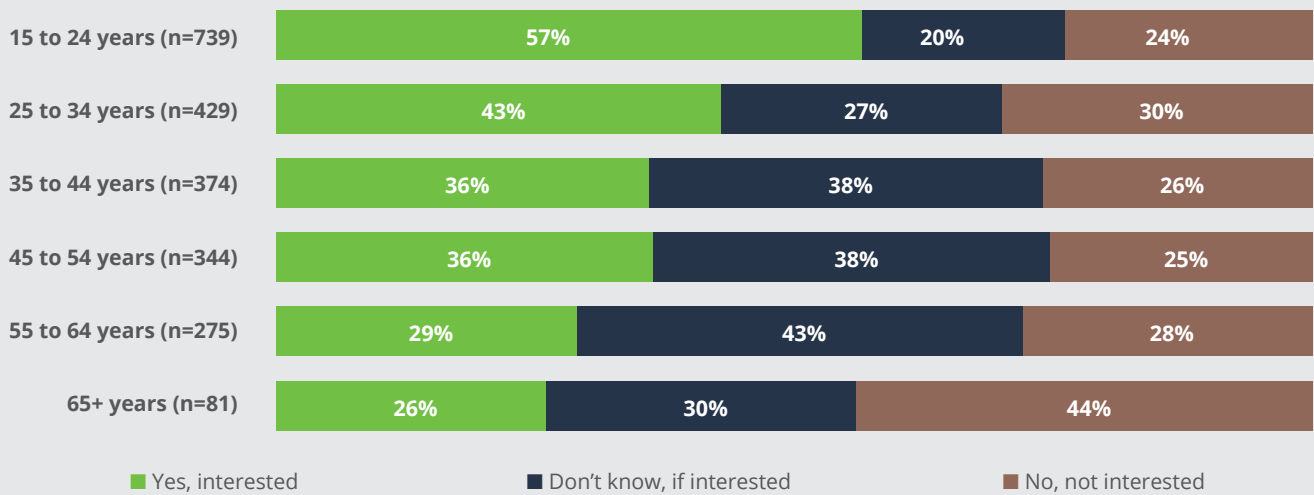
Diving Deeper: Demographics, Motivations, and Barriers in Environmental Career Aspirations

In this section, we delve into the variation of career aspirations across several dimensions: age, career stage or employment status, gender, ethnicity, culture, abilities, immigrant status, and place of residence. Our analysis aims to uncover how each factor contributes to shaping the career interests of individuals.

Generational Insights: Age-based Shifts in Career Interest

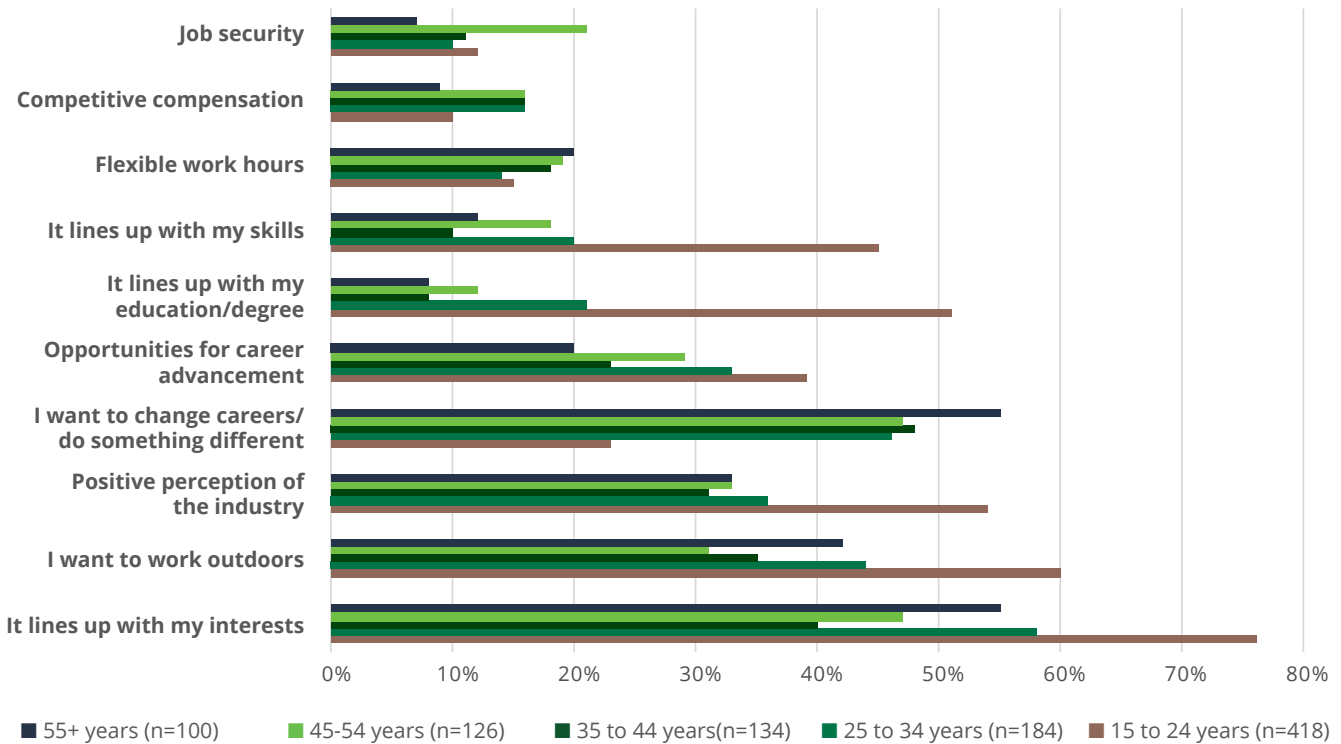
Figure 10 reveals a notable negative correlation between age and interest in environmental careers. While 57% of the youngest respondents, aged 15 to 24, were interested in environmental work, interest levels drops as respondents advance in age, with less than a third of respondents aged 55 and above expressing interest in an environmental career.

Figure 10
Interest Level in Environmental Careers, Across Age Groups



Younger respondents aged 15-24 displayed a heightened interest in environmental careers, largely driven by factors such as a strong alignment with their personal interests, education, and skillsets, the attractiveness of working outdoors, and a positive view of the environmental sector that includes opportunities for career advancement. As individuals age, however, their motivations evolve; for those aged 35 and older, the primary incentives for considering environmental careers may shift towards the desire for a career change and the pursuit of flexible work schedules.

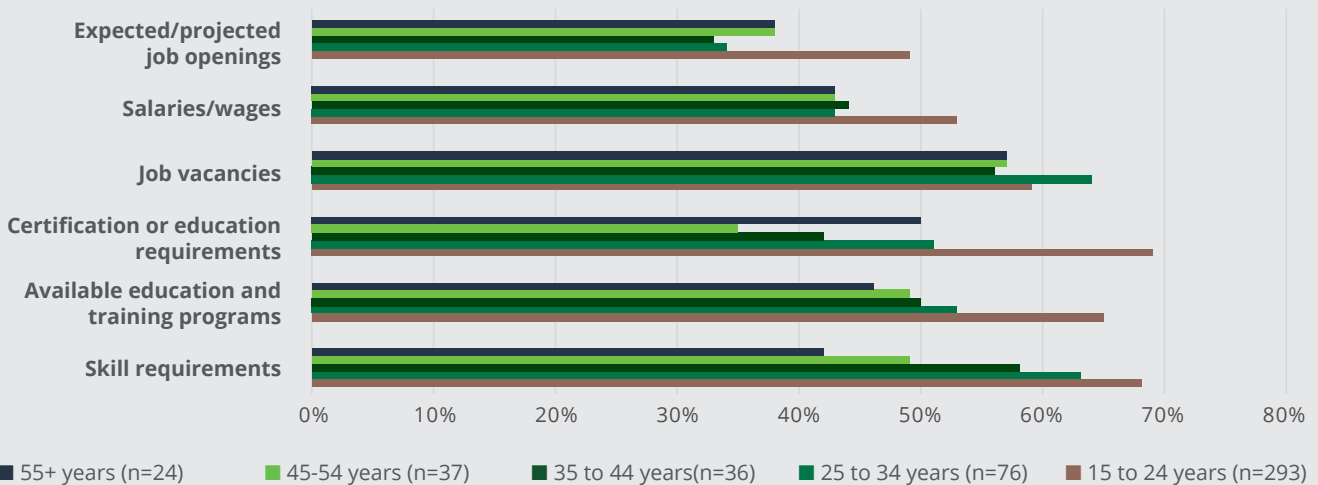
Figure 11
Drivers of Environmental Career Interest, by Age Group



Career Information Preferences by Age Group

Information preferences varied significantly among age groups, as indicated in Figure 12. Those aged 15 to 24 years sought details about certification, education and skill requirements while those 55 years and older were interested in available jobs. Notably, the interest in expected or future job openings within the sector was below 50% across all age groups.

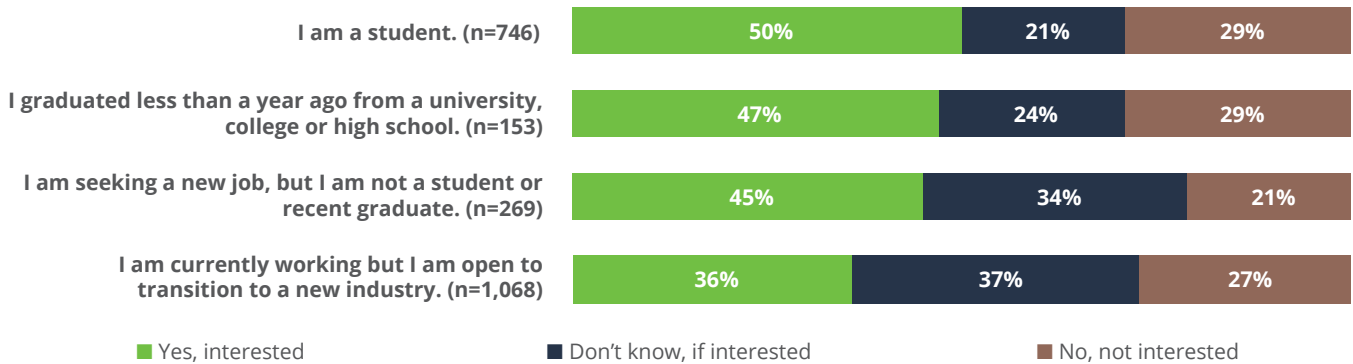
Figure 12
Career Information Preferences, by Age Group



Impact of Employment Status on Green Career Interest

As shown in Figure 13, we observed a greater inclination toward environmental career paths among those newer to the job market (students and recent graduates) and current job seekers.

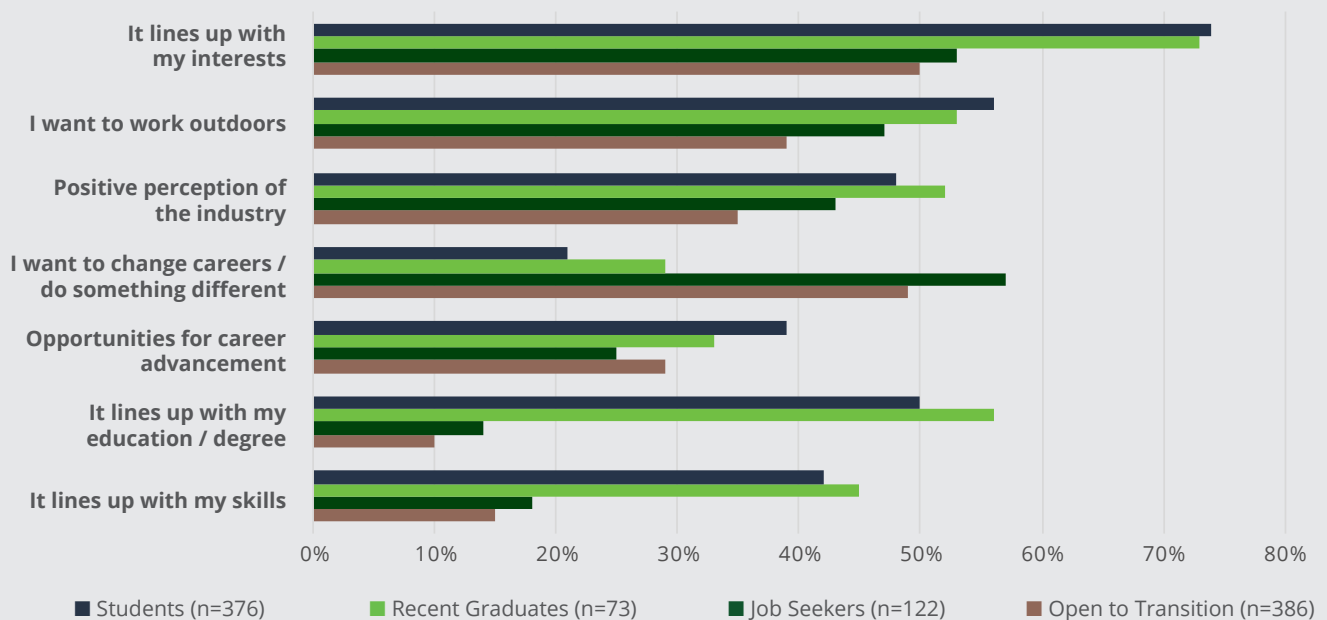
Figure 13
Interest Level in Pursuing an Environmental Career, Across Employment Status



The results also uncovered diverse motivations driving green career interest among different employment statuses. Students and recent graduates are strongly drawn to environmental careers due to their alignment with personal interests (refer to Figure 14). Apart from this primary motivator, this group also mentions other reasons like the appeal of outdoor work, a positive view of the industry, and how these careers align with their education and skills.

Conversely, job seekers and those open to transition have a different motivation for their interest in the environmental sector. The data suggests that job seekers see potential in this sector for a fresh start or redirection of their careers.

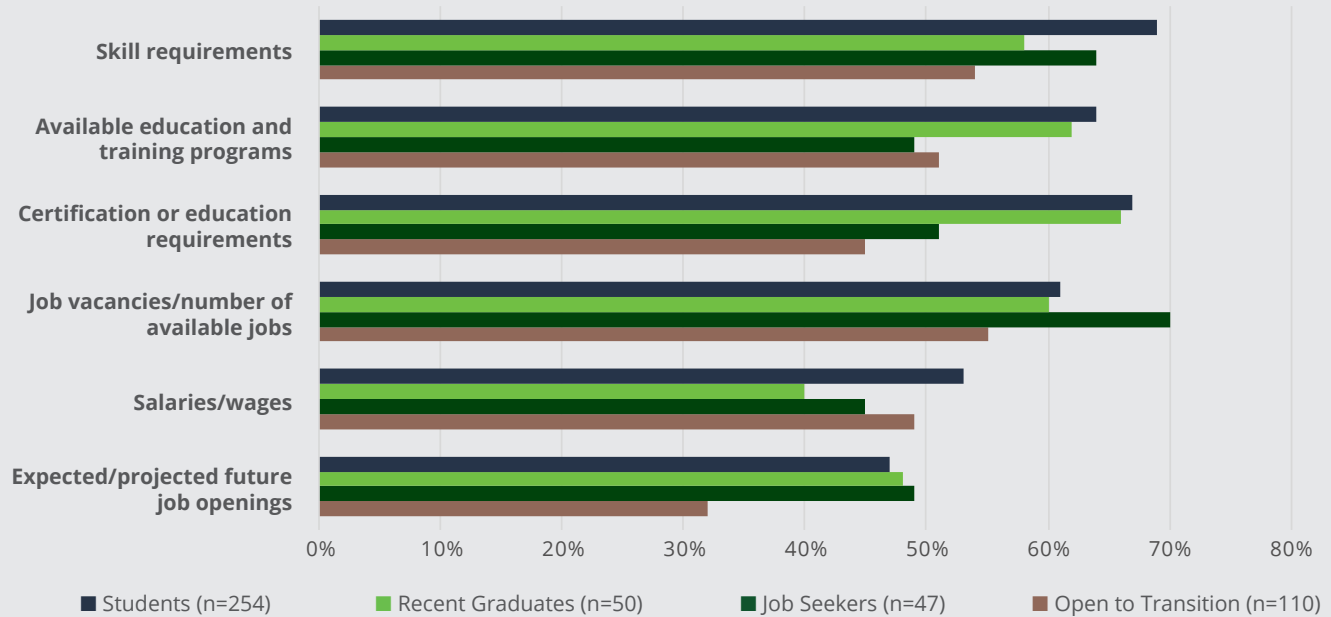
Figure 14
Drivers of Environmental Career Interest, by Employment Status



Career Information Preferences by Employment Status

Information preferences varied based on employment status, as depicted in Figure 15. Job seekers and those open to transitioning showed the most interest in available job vacancies. Meanwhile, 69% of students prioritized information about skill requirements for environmental work. At 67%, recent graduates were mainly focused on certification or education requirements within the sector.

Figure 15
Career Information Preferences, by Employment Status



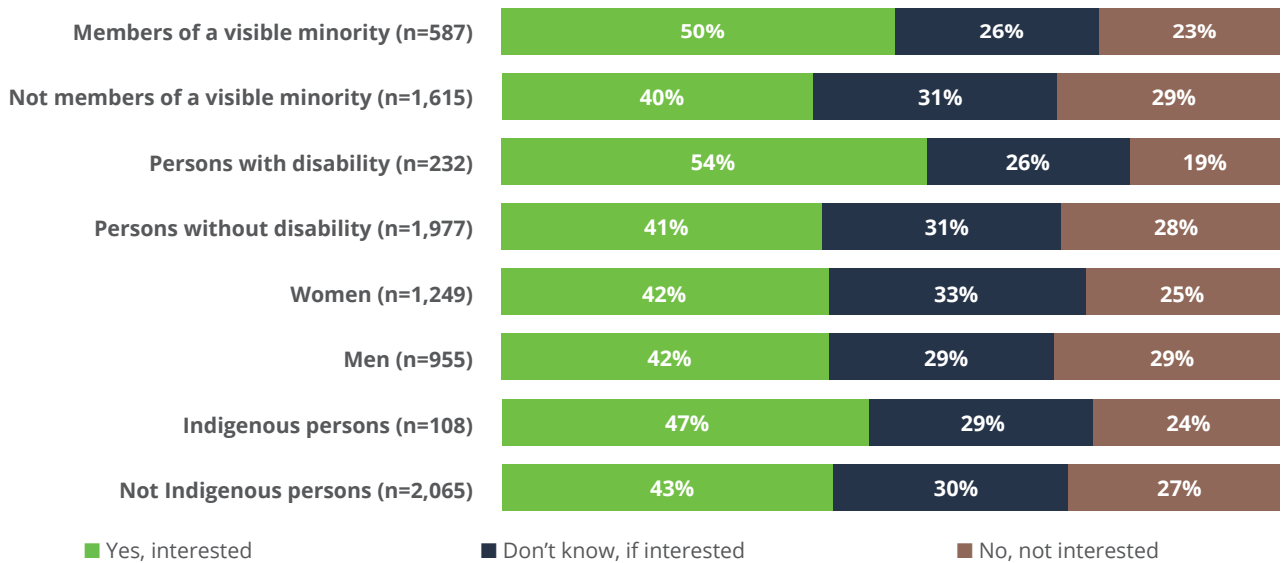
Unpacking Interest in Environmental Careers Among Equity-Deserving Groups

This section delves into the variations in perceptions of and interest in environmental careers among diverse demographic groups, such as visible minorities, people with disabilities, Indigenous peoples, and women. Our analysis aims to illuminate the crucial role diversity plays in fostering innovation and enhancing the effectiveness of the environmental sector.

Overall, we observed a notably higher interest in environmental careers among these groups compared to others. This discovery emphasizes the need for the environmental sector to adopt inclusive recruitment strategies and develop supportive systems. Our most recent research on the composition of the environmental workforce shows that both women and visible minorities are less engaged within the environmental workforce than Canada’s overall labour force.⁵ Such measures are essential to tap into this underutilized pool of talent and ensure that the environmental workforce mirrors the varied makeup of the communities it intends to benefit.

⁵ Refer to ECO Canada’s (2024) A Demographic Profile of the Canadian Environmental Workforce for a full discussion on the demographic make-up of Canada’s environmental workforce.

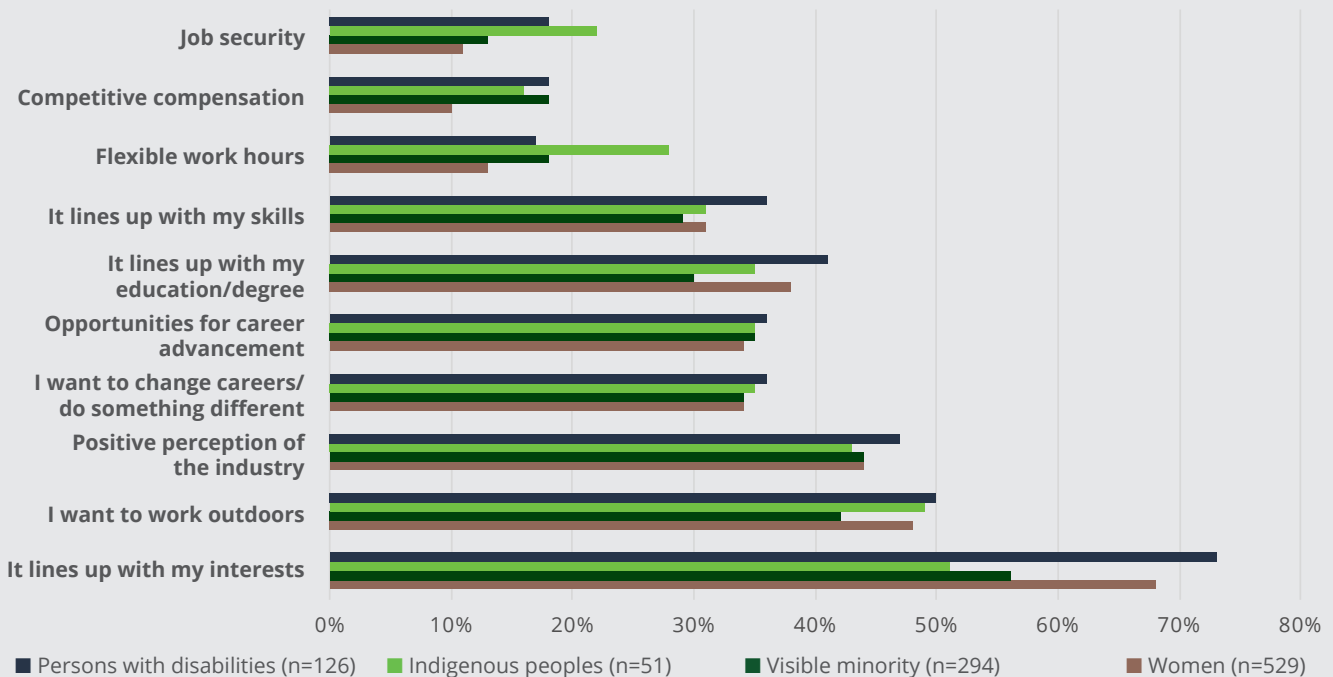
Figure 16
Interest Level in Environmental Careers, Across Diverse Demographic Groups



For the demographic groups outlined in Figure 17—women, Indigenous persons, visible minorities, Indigenous peoples, and persons with disabilities—the primary pull towards the environmental sector is its alignment with their interests. Beyond this, their reasons also involve the appeal of outdoor work and a positive view of the industry.

These motivations resonate with the broader reasons for pursuing environmental careers. Engaging this underrepresented group could significantly contribute to strengthening the environmental workforce in the future.

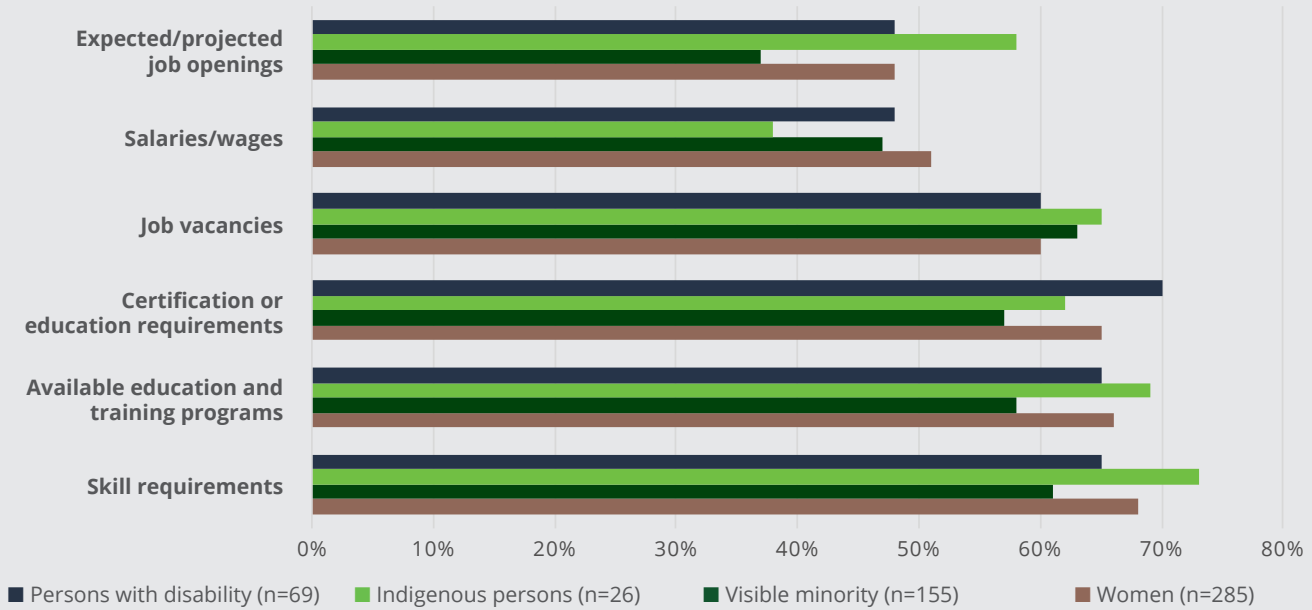
Figure 17
Drivers of Environmental Career Interest, Across Diverse Demographic Groups



Career Information Preferences Across Diverse Demographic Groups

Information preferences varied significantly among demographic groups, as indicated in Figure 18. For Indigenous persons, 73%, and for women, 68%, the primary interest lay in information about skill requirements in the environmental sector.

Figure 18
Career Information Preferences, Across Demographic Group



SPOTLIGHT - Perceptions of Representation in the Environmental Sector

As the environmental work landscape evolves, there is an amplified call for an inclusive environment that values and incorporates diverse viewpoints. Appreciating the distinct preferences and challenges encountered by various groups is vital in sculpting pathways that are inclusive and fair within the environmental sector.

We explored how respondents perceive representation⁶ in the sector for youth (aged 15 to 24), women, men, Indigenous persons, visible minorities, newcomers,⁷ and persons with disabilities.

The survey findings revealed distinct perceptions concerning gender representation in the environmental sector (Figure 19). Men were widely perceived as overrepresented, with a representation score⁸ of 33. This view was held by 39% of respondents. Conversely, women were perceived as significantly underrepresented, scoring -28, with a third of respondents holding this perspective.

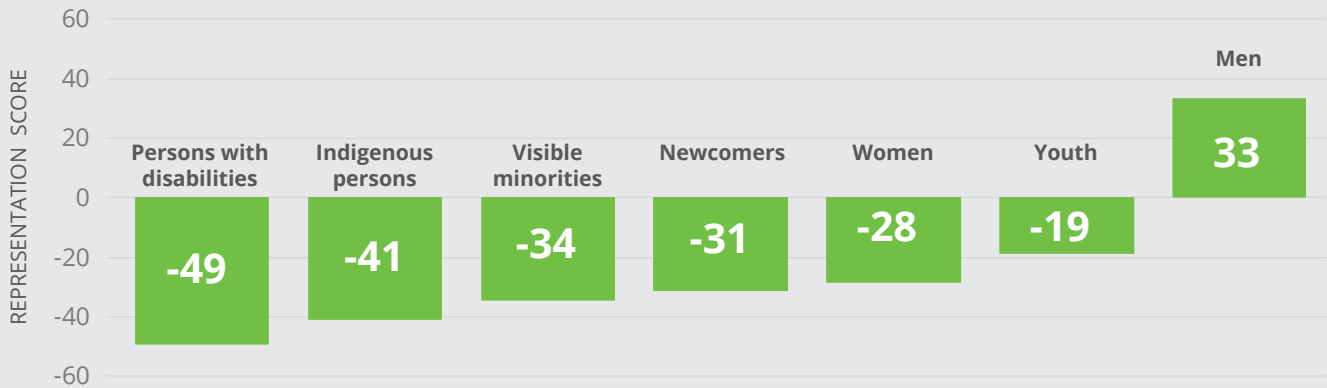
Persons with disabilities were overwhelmingly considered the most underrepresented group. Over half of respondents perceive that person with disabilities lacked representation in the environmental workforce, while only 18% believed them as being equitably represented or overrepresented.

⁶ Representation involves seeing individuals from diverse backgrounds making impactful contributions across all levels and departments within an industry.

⁷ We define a newcomer as a respondent who was not born in Canada and has resided there for less than five years. The term newcomer is used purely for analytical purposes and does not infer any information about immigration status or citizenship.

⁸ Refer to Appendix A: Survey Methodology for how we calculated representation scores.

Figure 19
Perception of Representation in the Environmental Sector, by Demographic Group



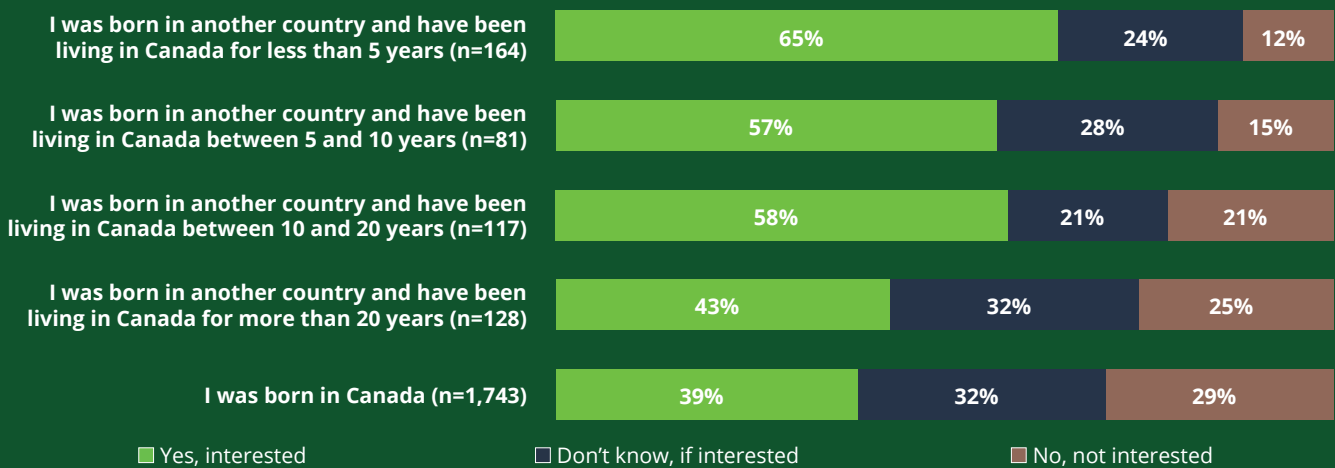
SPOTLIGHT - Immigrant Enthusiasm for Environmental Careers

The data from Figure 20 also illustrates varying levels of interest in environmental careers between respondents who are immigrants⁹ and those born in Canada. Notably, 65% of recent immigrants show interest, compared to 39% of respondents born in Canada. This heightened interest among immigrants suggests a strong enthusiasm for exploring environmental career paths in Canada, irrespective of the duration of their stay.

This finding underscores the potential importance of providing information and support to immigrants as they transition into and develop their careers. Access to sector-specific information and resources could aid their adaptation and skill development for environmental work.¹⁰ Tailored initiatives aimed at providing such support have the potential to boost immigrants' interest and success in this sector.

Focusing on these needs by offering relevant information and skill development opportunities can foster engagement in environmental careers. Recognizing and addressing these requirements is critical to cultivating a more diverse and vibrant environmental workforce in Canada.

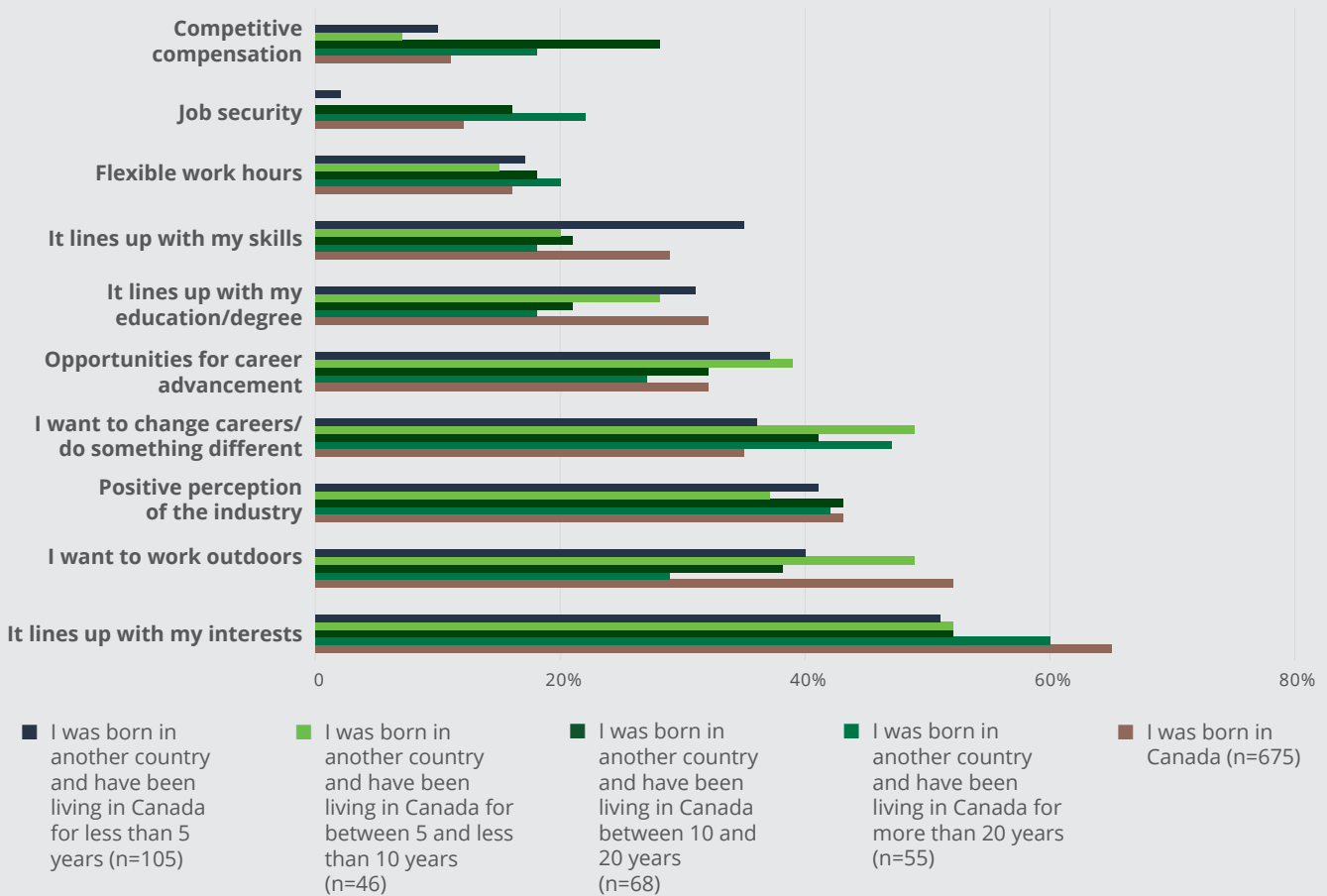
Figure 20
Interest in Environmental Careers, by Immigrant Status and Period of Immigration



⁹ For this report, we use Statistics Canada's Classification of immigrant status as a framework to define immigrants as an inclusive term encompassing respondents who are newcomers (living in Canada less than five years) and long-term residents who were not born in Canada.

¹⁰ Sultana, R.G. 2022. The labour market integration of migrants and refugees: career guidance and the newly arrived. *International Journal of Educational Vocational Guidance*. 22, 491-510. <https://doi.org/10.1007/s10775-022-09529-z>

Figure 21
Perception of Representation in the Environmental Sector, by Demographic Group



SPOTLIGHT - Urban vs. Rural: The Geographic Divide in Career Interest

The survey data reveals individuals in larger population centres are more inclined to pursue an environmental career than those in smaller population centres or rural areas (Figure 22). Within rural communities, there is a near-even split among respondents interested in pursuing environmental careers (32%), those uncertain about it (35%), and those expressing disinterest (33%). These results suggest that employers will have relatively greater challenges recruiting environmental workers in less populated areas. Finding environmental workers in larger urban settings, on the other hand, will be less difficult, given both the larger number of potential workers and the greater level of interest in environmental work expressed by individuals in those communities.

Figure 22
Interest Level in Environmental Careers, by Size of Community

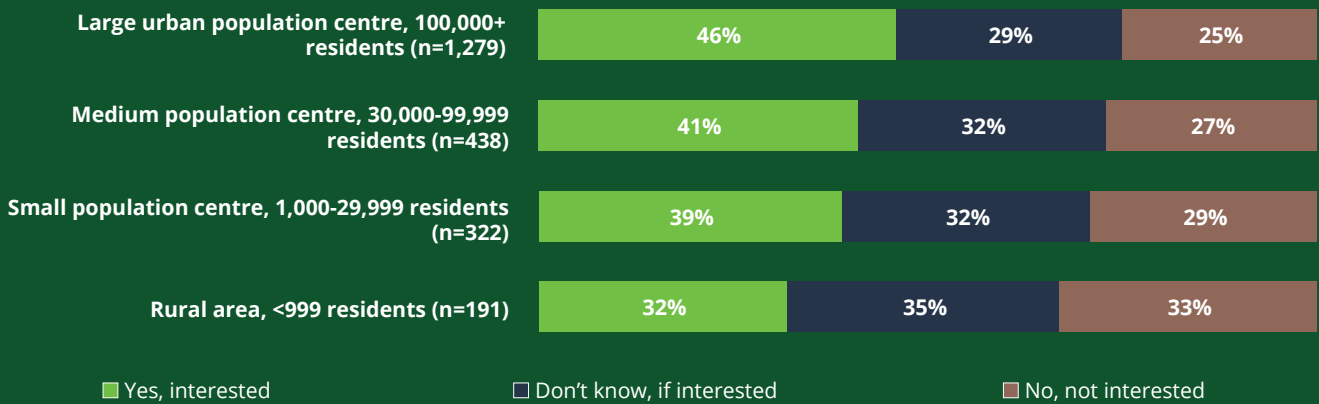
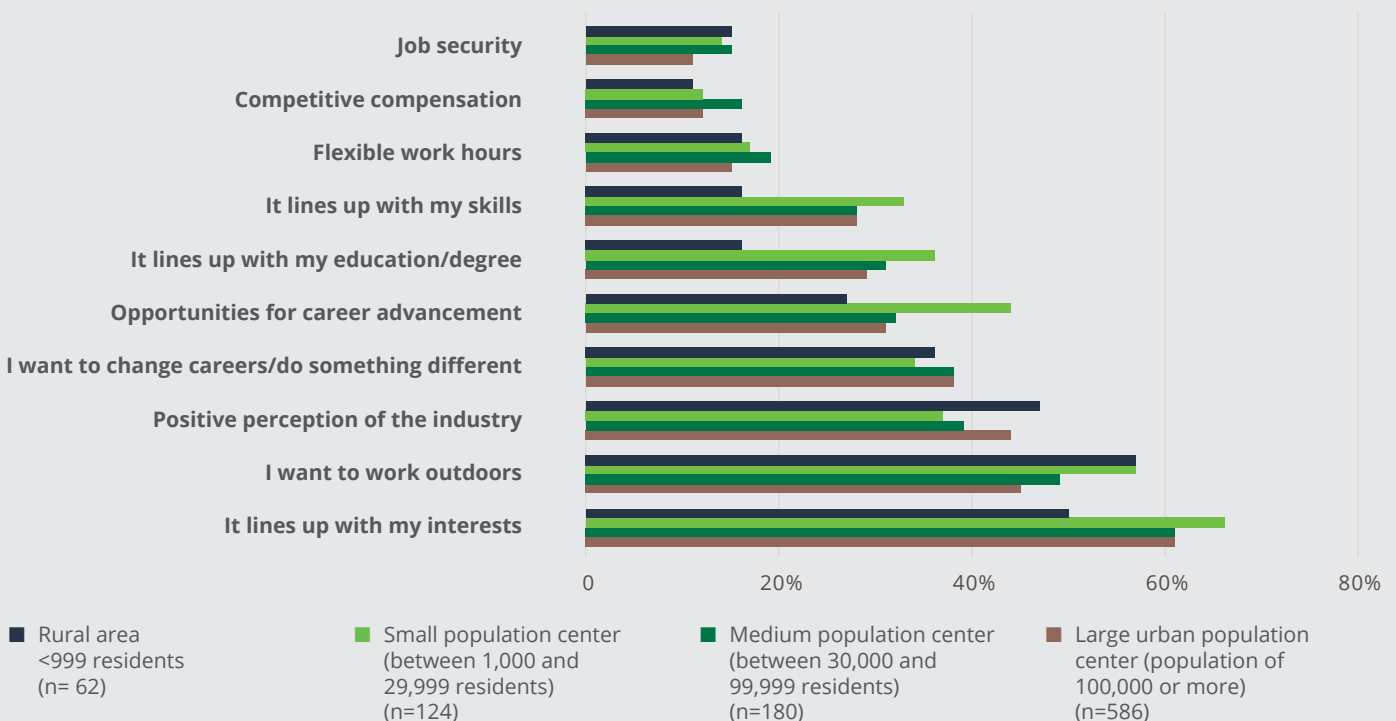


Figure 23
Perception of Representation in the Environmental Sector, by Demographic Group



Promoting Careers and Boosting Engagement: Key Recommendations

Misconceptions about environmental careers persist, particularly concerning the need for training, job accessibility, and long-term prospects. These insights emphasize the need for targeted educational campaigns, tailored transitional support, and inclusive initiatives to address misconceptions and uncertainties across diverse demographic and experiential groups within the environmental career landscape.

Perceptions and Misconceptions in Environmental Career Prospects

Recommendation: Develop educational initiatives to debunk myths and enhance understanding of the multifaceted nature of environmental work.

Key Points: Many acknowledge the long-term prospects of environmental careers, but misconceptions prevail around the necessity of fieldwork, training requirements, and job accessibility.

Across Diverse Work Experiences

Recommendation: To bridge knowledge gaps, create targeted awareness programs for those without environmental work experience.

Key Points: Those currently engaged in environmental roles exhibit nuanced understanding, while those without experience hold more positive yet uncertain views, possibly due to limited exposure.

Across Diverse Employment Status

Recommendation: Develop transitional support programs, acknowledging shifts in perception from student to professional roles.

Key Points: Students hold optimistic views, job seekers express caution, and recent graduates exhibit notable perception shifts, indicating the impact of transitioning into the workforce.

Across Demographic Groups

Recommendation: Develop tailored mentorship schemes and educational initiatives to engage underrepresented groups, such as Indigenous persons, women, persons with disabilities, and newcomers in environmental careers.

Key Points: Addressing varying confidence levels and knowledge gaps across demographics is crucial, emphasizing the importance of educational campaigns and personalized support programs to enhance understanding of environmental work.

Understanding diverse sentiments about environmental careers is crucial for customized promotion strategies aiming to attract individuals to these paths.

Overall

- Develop broad-based and targeted attraction and recruitment programs catering to diverse talent pools.
- Showcase the value and opportunities of environmental work.
- Where viable, offer competitive compensation, job security, and diverse career options and growth to counter barriers.
- Forge inclusive paths into the sector by promoting the value of diversity.
- Design accessible education programs accommodating various backgrounds and emphasize the impact of diverse perspectives.
- Create mentorship and education initiatives aligned with interests and skills.

Career Entry Points and Pathways

- Tailor recruitment strategies across age groups and career stages to optimize talent acquisition and retention, accommodating varied preferences.
- Target efforts toward enthusiastic younger demographics like students and recent graduates who display heightened interest in environmental careers, leveraging increased environmental education and awareness.
- Provide career transition support for those exploring environmental careers. Highlight adaptability for career redirection and offer workshops, internships, and accessible information to facilitate smooth transitions.

Dynamic Career Trajectories in Sector Engagement

- **Dynamic Engagement:** Understand shifting interests across career phases to customize engagement strategies.
- **Varied Career Paths:** Environmental career interest fluctuates, not just linearly with experience. Adapt recruitment and retention approaches accordingly.
- **Long-Term Strategy:** Engaging entry-level workers, retaining mid-career professionals, and re-engaging seasoned experts may require tailored strategies. Potential approaches include mentorship programs, skill development opportunities, or initiatives specifically designed to rejuvenate enthusiasm among those in the mid-career phase.

Linking Experience to Environmental Career Interest

- Prior engagement boosts interest in environmental careers.
- Designing inclusive strategies to include those without experience is crucial for diversity.
- Encouraging an environmental career path could enrich the workforce.

Environmental Careers: The Impact of Education and Training

- **Prioritize Inclusive Education:** Support accessible formal and informal environmental education, fostering diverse learning opportunities through collaborations among academia, industry, and government bodies.
 - **Invest in Practical Training:** Develop structured programs emphasizing practical application within the environmental sector, integrating hands-on experiences, internships, and mentorship for career readiness.
 - **Expand Accessible Outreach:** Target underrepresented communities by offering scholarships, online courses, and community workshops to ensure inclusivity and diversity in environmental education and training.
-

Social Networks: Catalyzing Environmental Careers

- **Establish Mentorship Programs:** Pair aspiring environmental professionals with experienced mentors from their social circles, leveraging mentorship for guidance and inspiration in the sector.
- **Organize Networking Events:** Host sector-specific workshops or gatherings to foster connections among individuals of diverse experience levels, facilitating career opportunities and guidance.
- **Conduct Skill Workshops:** Offer skill-building sessions led by professionals from existing social networks, providing crucial insights and training for success in environmental careers.

Enhancing Diversity and Inclusivity in Environmental Careers

- **Indigenous Engagement:** Promote Indigenous participation in the environmental sector through tailored strategies like mentorship programs and community engagement, amplifying their influence and broadening perspectives.
- **Gender Inclusivity:** Cultivate inclusive spaces and initiatives that recognize the significant interest of women in environmental careers, driving innovation, and comprehensive problem-solving.
- **Empower Persons with Disabilities:** Support persons with disabilities by ensuring accessibility, offering customized resources, and transparently communicating inclusivity efforts to integrate their unique skills into the environmental sector.
- **Minority Recognition:** Champion the aspirations of visible minority groups in environmental careers, nurturing an inclusive space for diverse perspectives and fair decision-making.

Immigrants’ Interest in Environmental Careers: Bridging Gaps and Cultivating Engagement

- **Tailored Immigrant Support:** Provide immigrants with targeted sector information, guidance on Canadian environmental opportunities, and pathways for skill development, aiding their transition into environmental work.
- **Transition Mentorship:** Offer mentorship and specialized support for community stakeholders navigating career shifts, including language-specific resources and networking within the environmental sector to enhance integration and success.
- **Diversity-focused Programs:** Develop initiatives that celebrate and use immigrants’ diverse perspectives, fostering cross-cultural exchanges and diversity-focused programs to enrich the environmental workforce.

Universal and Community-based Strategies

- Recognizing universal interest in environmental careers across population centers, regardless of community size, suggests broad-reaching strategies are needed.
 - Understanding rural sentiments and catering to varied generational perspectives is pivotal in engaging diverse populations in environmental career paths.
-

SPOTLIGHT - Unveiling Turnover: Understanding Why Some Departed the Environmental Sector

Understanding why professionals leave the environmental sector is crucial for identifying systemic issues and developing strategies to improve job satisfaction and retention. The data presented in this section offers invaluable insights into the primary factors contributing to workforce turnover, ranging from the transient nature of roles to concerns about job security and remuneration. By examining these reasons, we can address the underlying challenges within the sector and create a more stable and attractive working environment for current and prospective environmental professionals. This analysis not only helps in reducing attrition but also in fostering a robust, dedicated, and long-term workforce to meet the environmental challenges of the future.

The predominant reason cited by 43% of respondents for leaving the environmental sector was the temporary nature of their positions, including job contracts and volunteering roles. Additionally, nearly a fifth (19%) of these individuals departed for other career opportunities they perceived as better. Personal reasons unrelated to the sector, challenges with the industry's seasonality, job security concerns, and non-competitive compensation were other factors influencing their decision to leave, highlighting areas where the environmental sector could improve to retain its workforce.

Figure 24
Primary Drivers for No Longer Working in the Environmental Sector



Future Implications of this Report

As we conclude this report, we cast an eye toward the future implications of our findings and their potential to shape the environmental sector. The report underscores an urgent need for workforce development that keeps pace with the sector's evolving requirements, advocating for education and training programs finely tuned to the varied ambitions and needs of individuals seeking environmental careers. The integration of sustainability into academic curricula emerges as essential for equipping future professionals.

The importance of advancing Inclusion, Diversity, Equity and Accessibility (IDEA) initiatives is also brought to the forefront, signalling a move towards strategies that bridge the gap for underrepresented groups and enrich the workforce with a multitude of perspectives, fostering innovation.

From a policy standpoint, the survey offers actionable recommendations poised to influence the creation and advocacy of policies that underpin the growth and sustainability of environmental professions. It's a call for comprehensive support systems that not only encourage fair compensation and career diversity but also incentivize organizations to adopt eco-friendly practices.

Moreover, public engagement and heightened awareness are pivotal. Utilizing the insights garnered, we can engage communities more deeply, instilling an interest in environmental vocations from the grassroots level, thereby expanding the reservoir of talent ready to step into this dynamic field.

Lastly, this report should act as a catalyst for further research and innovation within the environmental sector. Investment in understanding emerging trends and technologies will open doors to novel roles and pathways, ensuring that the environmental sector remains at the cutting edge of change and progress.



References

Canadian Net-Zero Emissions Accountability Act. S.C. 2021, c. 22 (2021).

<https://laws-lois.justice.gc.ca/PDF/C-19.3.pdf>

Deloitte (2022, November). Work toward Net Zero: The rise of the Green Collar workforce in a just transition.

<https://www2.deloitte.com/content/dam/Deloitte/global/Documents/gx-deloitte-work-toward-net-zero-Nov22.pdf>

ECO Canada. (2024, March). Green Goals and Great Opportunities: Canada's Environmental Workforce Forecast to 2033.

ECO Canada. (2024, March) A Demographic Profile of the Canadian Environmental Workforce.

LinkedIn. (2023). Global Green Skills Report 2023. LinkedIn Economic Graph.

<https://economicgraph.linkedin.com/content/dam/me/economicgraph/en-us/global-green-skills-report/green-skills-report-2023.pdf>

Microsoft. (2022, November 2). Closing the Sustainability Skills Gap: Helping businesses move from pledges to progress.

<https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE5bhuf>

Morales, N., & Jacobson, S. (2020). Student Perceptions of Environmental and Conservation (EC) Careers: Exploring Perspectives of Diverse University Students. *Environmental Management*, 66, 450-459.

<https://doi.org/10.1007/s00267-020-01304-6>

RBC (2022, February 16) Green Collar Jobs: The skills revolution Canada needs to reach Net Zero.

<https://thoughtleadership.rbc.com/green-collar-jobs-the-skills-revolution-canada-needs-to-reach-net-zero/>

Statistics Canada. (2021, September 21).

Classification of immigrant status Retrieved December 13, 2023, from

<https://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=1324474&CVD=1324474&CLV=0&MLV=1&D=1>

Statistics Canada. (2022a, February 2).

Population and dwelling counts: Canada, provinces and territories.

2021 and 2016 Censuses. Table 98-10-0001-01. Retrieved December 16, 2023, from

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=981000101>

Statistics Canada. (2022b, February 2).

Table 1.7, Distribution of population by size of population centre, 2016 and 2021 censuses.

Dictionary, Census of Population, 2021. Retrieved December 16, 2023, from

https://census.gc.ca/census-recensement/2021/ref/dict/tab/index-eng.cfm?ID=T1_7

Sustainable Development Goals. (n.d.)

United Nations. <https://www.un.org/sustainabledevelopment/>

Appendix A: Survey Methodology

This project involved surveying 2,562 Canadians aged 15 and over who were:

- A university, college, or high school student,
- Recent graduate (less than a year) from a university, college, or high school,
- Job seeker or
- Open to transitioning to a new industry.

ECO Canada contracted Leger to conduct the research, including questionnaire design assistance, recruitment of participants, data collection, and report writing.

Survey Design and Planning

Questionnaire Design

ECO Canada provided Leger with the initial questionnaire. Leger worked collaboratively with ECO Canada to ensure that the questionnaire met the research objectives, had an acceptable length (less than 8 minutes), and flowed naturally for respondents.

The questionnaire included two trap questions to identify inattentive or untruthful respondents. The trap questions' purpose is to detect respondents who may need to read the questions carefully or are providing inaccurate or inconsistent responses—the first trap question was after D11, and the second after Q12B.

The survey was administered in both English and French.

Programming

Leger's programmers programmed the survey in Decipher. Programming was tested in detail (by Leger's internal quality check team, the Leger project management team, and the ECO Canada project team) before the pre-test/soft launch. Leger also ran several computer-based simulations, which insert thousands of randomly selected numbers into the data fields, essentially filling the questionnaire with random responses. The simulations ensured skip patterns were working correctly and to check for any out-of-range or invalid data.

Test link

Before data collection, Leger completed a pre-test/soft launch with a random sample (n=33). Leger reviewed the pre-test results; revisions were not required before the full launch. The survey was then finalized with another full quality check to ensure the survey worked correctly prior to complete distribution. The survey was pre-tested from March 2nd to March 3rd, 2023, proceeding to a full launch on March 3rd and remaining open until April 7th, 2023.

Data Collection

The survey was conducted using online data collection, mixed with a traditional approach, through the Leger Opinion (LEO) panel and a paid social media advertising approach. Leger also used a new recruitment process to reach young people and job seekers with their newly acquired internal digital agency team, Leger DGTL. The mean survey completion time was approximately 6:20 minutes.

Table A1
Data Collection Methods showing Sample Size of Respondents, Across Employment Status

	Total Completion	Students	Recent Graduates	Job Seekers	Open to Transition
TOTAL	2,583	864	203	290	1,205
Open link, Facebook™	43	23	8	4	8
Open link, Instagram™	475	322	66	33	54
Open link, ECO Canada	49	3	2	5	18
LEO Leger Panel	2,016	516	157	248	1,125

Leger Opinion Panel

Most respondents (78%) were recruited through Leger Opinion (LEO) panel of online research respondents.

LEO is one of the largest in Canada, with over 450,000 active members. Leger profiles LEO members to draw samples for surveys targeting specific groups and include Canadians in all provinces and territories.

This panellist recruitment method dramatically influences the quality of the panel. For this reason, LEO uses a hybrid **recruitment approach**. With LEO, Leger’s call centre recruited 7 out of 10 panellists. These recruitment numbers mean that 70% of the panellists come from a unique, probability-based source that most other panels cannot access. Though the panel is primarily built through probability-based methods, the multifaceted approach includes word of mouth, social media, and refer-a-friend programs. To maintain quality standards, LEO does not use river sampling or marketplaces. That way, it is possible to maintain control over the circulation of surveys.

Validation techniques used at the beginning of the registration process included username and strict password restrictions, de-duplication with the existing panel, and simultaneous recruitment campaigns based on various criteria. LEO panellists also fill out a detailed profiling questionnaire. All these are necessary to increase quality by decreasing multiple entries and fraudulent panellists. Along with other criteria to ensure quality, data protection and security measures conformed with the highest industry standards. Such measures included strict protocols dealing with confidential Government of Canada information. Security protocols are in place to protect both panellists and clients.

LEO has **recruitment and quality control** checks in place, which include:

- Double opt-in process to verify and confirm a panellist’s consent to receive communication or join a mailing list.
- Profiles are updated, and sleepers are woken or removed every six months.
- Multi-pronged de-duping system to identify and eliminate duplicate records or entries from a dataset.
- Invalid email addresses are tested and removed from our panel to ensure quality and accuracy in all data and feasibility requests.
- Cheaters and speeders are identified and closely monitored with digital fingerprinting, quality checks, and illogical response detection. Repeat offenders are removed.

Paid Advertising

Leger DGTL is Leger's in-house digital marketing agency specializing in strategy and media. They created a customized digital campaign both in English and French to reach a younger audience and engage them to participate in the survey.

A total of 518 respondents were recruited through targeted advertisements and online posts on Instagram™ and Facebook™. These ads and posts directed the respondents to a landing page providing more study information. Once the respondents clicked the participation button, they were redirected to the survey.

The campaigns ran between March 9th to April 7th, 2023.

ECO Canada website

In addition to Leger's recruitment efforts, ECO Canada advertised the survey directly on its website and through newsletters. Through this method, 49 respondents took the survey using the ECO Canada open link. All respondents were allowed to take the survey regardless of whether they belonged to any of the four target audiences (students, recent graduates, job seekers, or those open to transitioning).

Data Analysis

Data Cleaning

To ensure the survey was completed correctly, Leger soft launched the survey and examined the results. Following the project manager's approval, complete data collection began. After data collection, Leger's data analysts and data processing department thoroughly cleaned the data.

All closed-ended questions were within the allowable or logical ranges. Skip patterns were followed correctly. The data was complete, except where it was intentional and within client expectations. Information was consistent and logical across questions, with no contradictions in the data.

Additionally, controls were built into the surveys to alert respondents when they entered outlier responses and disallow invalid out-of-range responses.

Data Weighting

Data for this research was not weighted.

Representation Score Calculation

A summary variable—“representation score”—was calculated using cleaned data from question (Q2) of the survey questionnaire to portray respondent’s perceptions regarding representation within the environmental sector. The score was calculated by following the steps below:

1. The count of responses for each response option (“underrepresented,” “equitably represented,” and “overrepresented”) was taken from the cleaned data for each respondent segment.
2. Each response option was assigned a point: -1 (negative one) for “underrepresented,” 0 (zero) for “equitably represent,” +1 (positive one) for “overrepresented.”
3. The number of responses for each response option was multiplied by the point value described in Step 2.
4. The points for each response option were then added together, resulting in a single number.
5. This resulting single number was divided by the sample size of the respondent segment being examined (n = 2,562 respondents).
6. To convert the resulting decimal to a whole number, it was multiplied by 100.

The approach used in this study considers a representation score of 0 (zero) as indicative of perceived “equitable representation.” Negative scores indicate perceived “underrepresentation,” whereas positive scores suggest perceived “overrepresentation” within the respondent segment. The minimum score assigned is -100, while the maximum score is +100.

Responses categorized as “Don’t know” were not considered when calculating the representation score and were analyzed separately.

Sample calculation

The sample calculation example involves analyzing the Youth group’s representation levels while considering the overall respondent base as the respondent segment. Essentially, we are asking all survey respondents about their perceptions regarding how well they believe Youth are represented in the environmental sector.

Steps 1 – 4:

Survey Question (Q2): *When thinking about jobs in the environmental sector, how well do you think each of the following groups are represented in the industry?*

		Step 1	Step 2	Step 3	Step 4
Response option		Number of responses (n = 2,562)	Point value	(# of responses) * (Point value)	Sum of point values
Youth	Underrepresented	677	-1	-677	(-677) + (0) + (192) = -485
	Equitably represented	1019	0	0	
	Overrepresented	192	+1	+192	

Steps 5-6:

Survey Question (Q2): *When thinking about jobs in the environmental sector, how well do you think each of the following groups are represented in the industry?*

		Step 4 result	Step 5	Step 6	Final value
Response option		Sum of point values	(sum of point values) / (sample size)	[(sum of point values) / (sample size)] * 100	Representation Score
Youth	Underrepresented	-485	$(-485) / (2562) = -0.19$	$(-0.19) * 100 = -19\%$	-19

Result: The overall respondent base (n=2,562) perceives Youth as underrepresented, with a representation score of -19%.

Incentives

A random draw prize incentive was added for those who completed the survey. At the end of the survey, respondents could enter a draw for one (1) of ten (10) \$250 electronic Visa gift cards.

Appendix B: Respondent Profile

Figure B1 illustrates the geographical distribution of respondents' residences compared to the broader Canadian population across provinces and territories. It provides a visual breakdown showcasing the concentration or dispersion of respondents (n = 2,652) in each region relative to the demographic distribution of the entire Canadian population (Statistics Canada, 2022a).

Figure B1
Geographical Distribution of Respondents vs. Population of Canada, Across Provinces and Territories

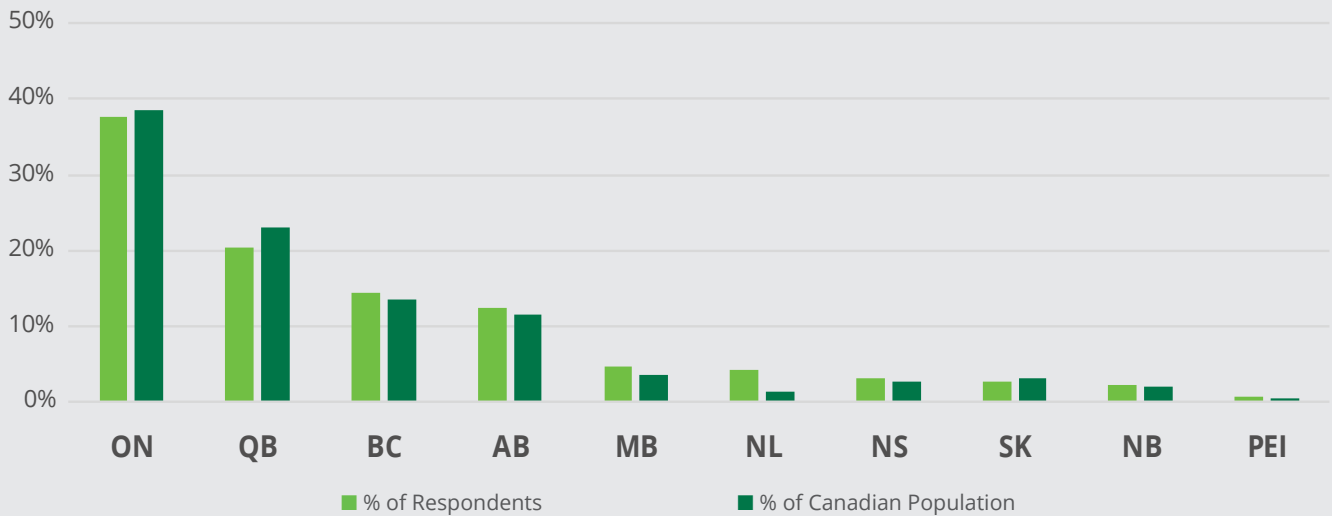


Figure B2 presents the distribution of respondents (n = 2,652) residing in population centres, offering a comparison to the overall population of Canada. It visually portrays the concentration or dispersion of respondents within large urban, medium, small, and rural population centres in contrast to the demographic distribution of the entire Canadian population (Statistics Canada, 2022b), highlighting potential differences or similarities in representation between respondents and the broader population.

Figure B2
Comparative Distribution of Respondents vs. Population of Canada, Across in Population Centres

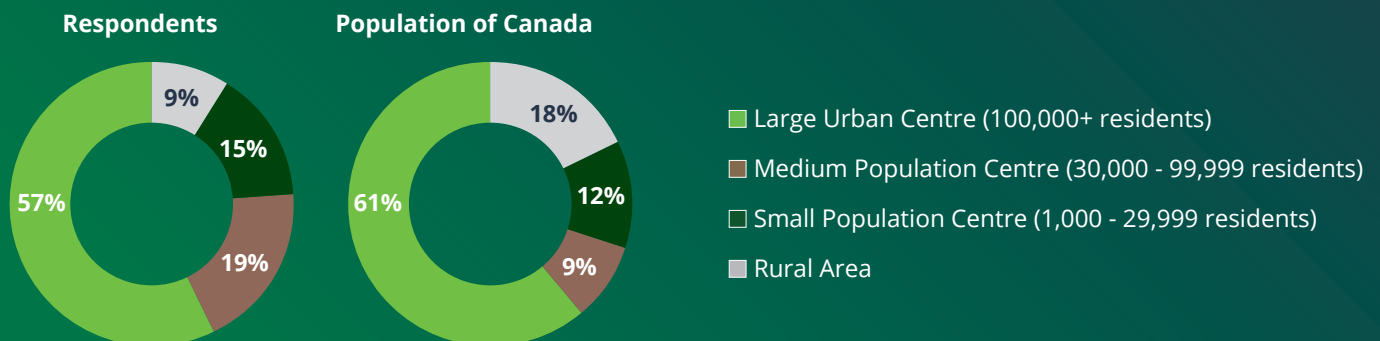


Figure B3 delineates the distribution of respondents across various age groups. It provides a visual representation showcasing the proportion of respondents within each age bracket, allowing for an understanding of the demographic composition of the surveyed population.

Figure B3
Age Group

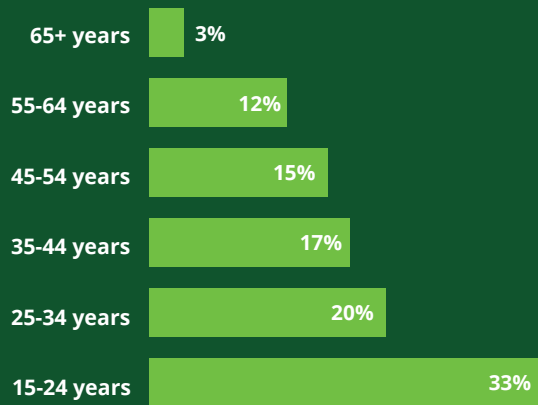


Figure B4
Gender

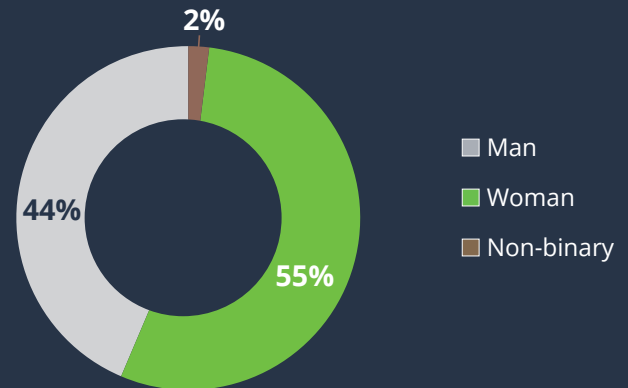
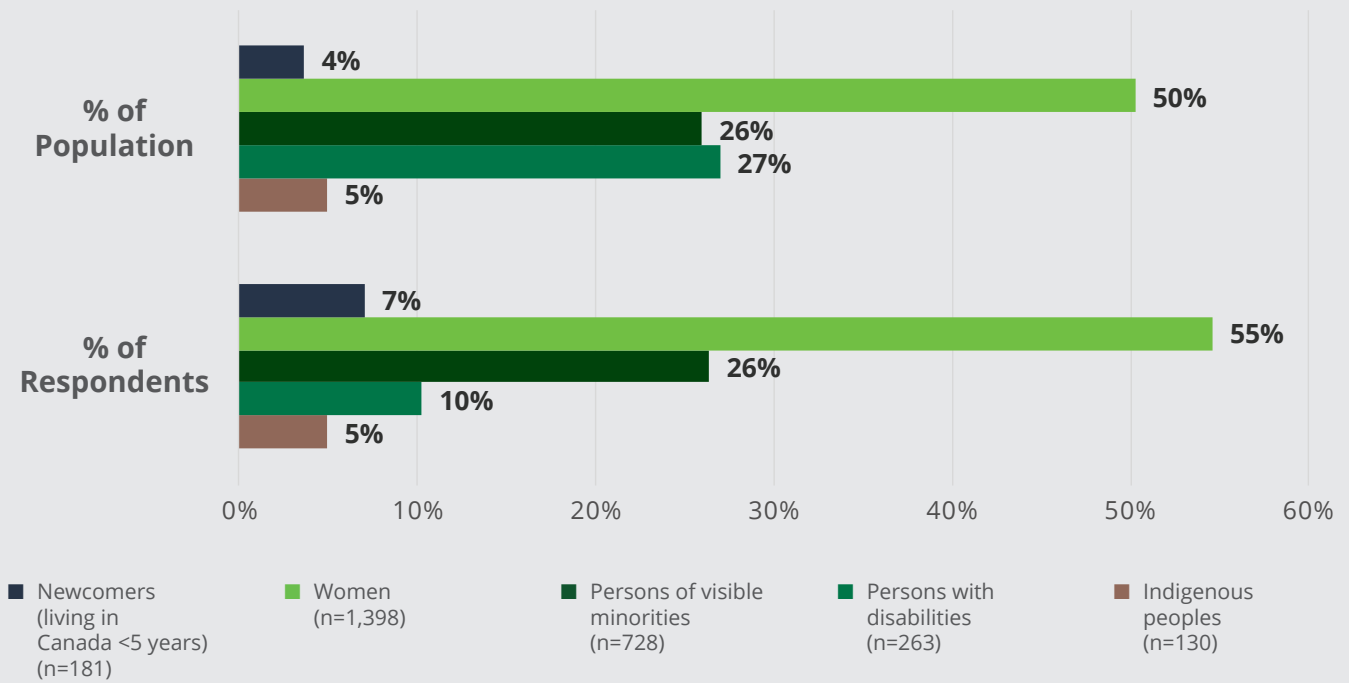


Figure B5
Respondents by demographic group^{11 12}



¹¹ Adapted from Statistics Canada. 2023. (table). Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023. <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E> (accessed December 16, 2023).

¹² Statistics Canada, Canadian Survey on Disability, 2022. <https://www150.statcan.gc.ca/n1/en/daily-quotidien/231201/dq231201b-eng.pdf?st=vGc6zL2l>

Figure B6 illustrates the educational paths of respondents from the survey.

Figure B6
Educational Pathways of Respondents

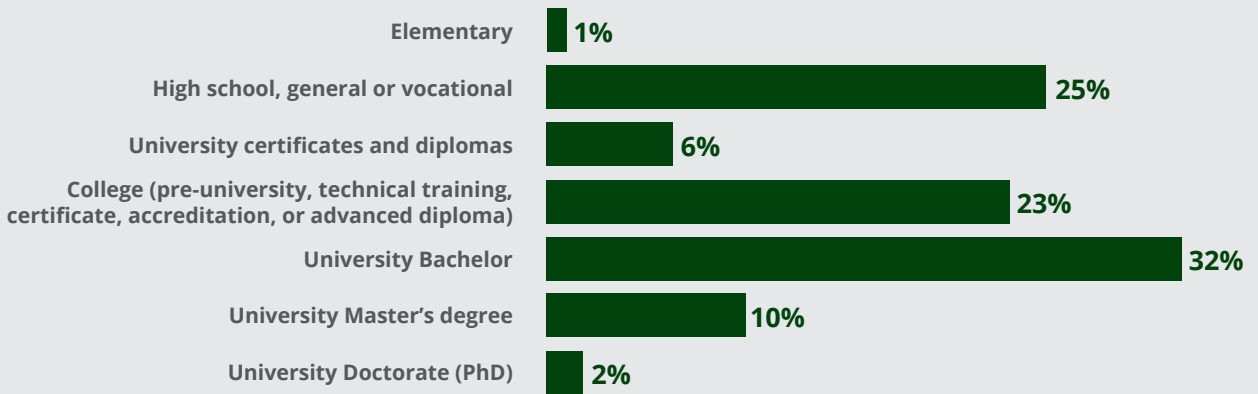
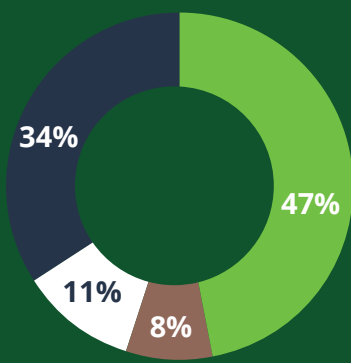


Figure B7 displays the employment status of the survey respondents. It represents a breakdown of whether participants were students, recent graduates, job seekers, or open to transition to a new career.

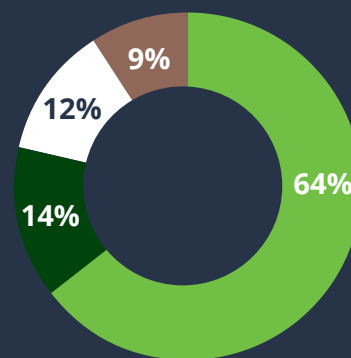
Figure B7
Employment Status of Respondents



- Open to transition
- Student
- Job seeker
- Recent graduate

Figure B8 illustrates the work experience of respondents within the environmental sector, categorizing them into four groups: those working or volunteering, those who used to work or volunteer, and those who have never worked or volunteered in this field.

Figure B8
Work Experience of Respondents



- I volunteer in the environmental sector
- I used to work or volunteer within the environmental sector
- I work in the environmental sector
- I have never worked or volunteered within the environmental sector

Figure B9 depicts the duration of work experience in the environmental sector among respondents, showcasing the time individuals have spent working in environmental roles.

Figure B9
Duration of Work Experience in the Environmental Sector

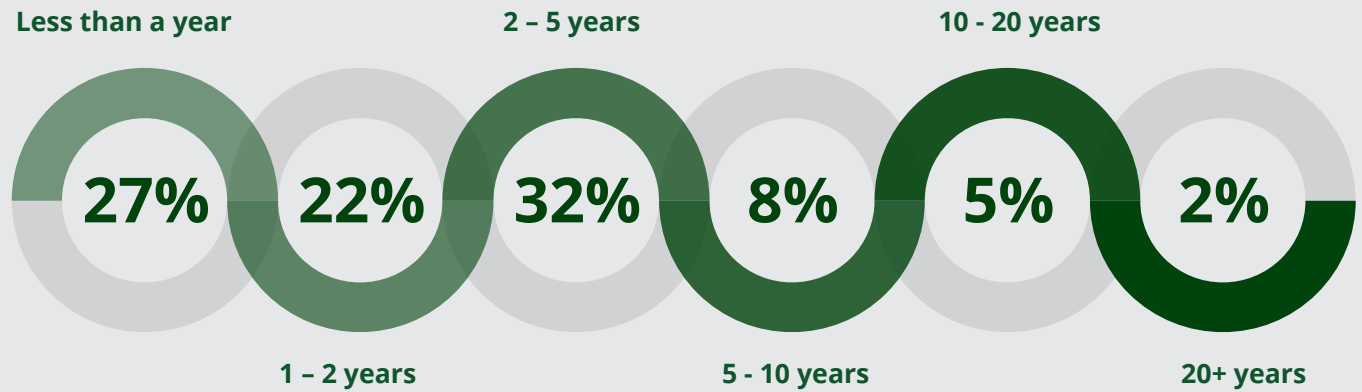
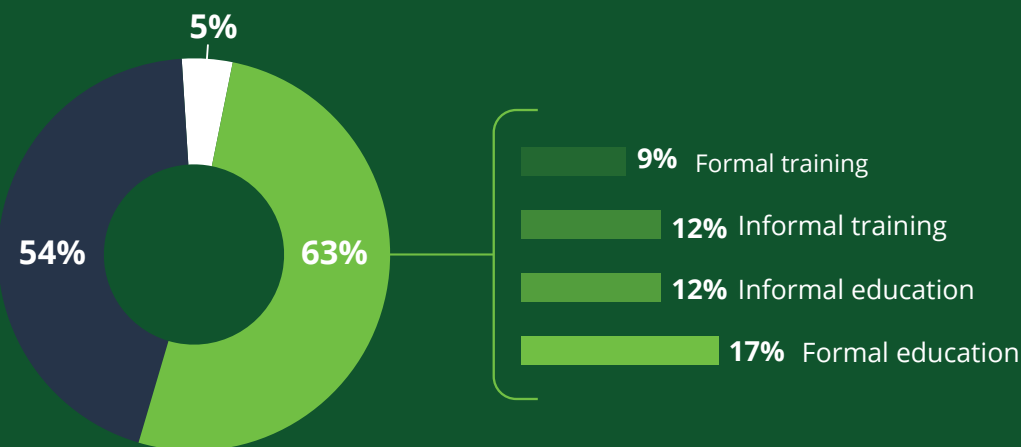


Figure B10 illustrates the training and education of respondents related to the environmental sector, detailing both informal and formal education received by individuals.

Figure B10
Respondents Training and Education related to the Environmental Sector



- Yes
- No
- Don't know

Figure B11 outlines the specific type of environmental sector-related education received by respondents, highlighting distinct categories such as formal degrees, online courses, certifications, or on-the-job training focused on environmental studies.

Figure B11
Type of Environmental Sector-related Education

