Improving labour force participation and labour market outcomes of the under-represented groups in the Newfoundland and Labrador natural resources sector.

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Improving Labour Market Outcomes of Under-Represented Groups in Newfoundland and Labrador's Natural Resource Sector

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Executive Summary

Newfoundland and Labrador's natural resource industries are critical to provincial economic development and employment. As the province leans more heavily on immigration as an alternative means to employment and population growth considering a declining natural birth rate[1], the important natural resource sector must also focus attention on attracting workers from traditionally under-utilized demographic groups in the province, including women, immigrants, and visible minorities. Improving the ability of these underrepresented groups to provide valuable skills in the provincial natural resource labour market is of utmost importance in a province whose natural resource dependence will continue in both the short-term (through sustained oil and gas and mining) and the long-term (through the growth of green hydrogen and wind energy industries on the west coast of the province).[2]

This report provides a snapshot of the current outcomes, challenges, and best practices concerning the employment of underrepresented groups in Newfoundland and Labrador's natural resource sector, and suggests essential steps towards clearing pathways for women and visible minorities to increase their presence in the provincial labour market. Interviews with employers and employees revealed essential new insights into the domestic politics of women's labour force participation; the significant benefits of coaching, mentoring, and apprenticeships for underrepresented groups; the effects of poor workplace communication on perceived workplace experiences for underrepresented groups; and more.

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[1] The birth rate is the number of births per thousand of population per year.
[2] Energy Minister Andrew Parsons recently announced four successful bids for prospective wind hydrogen development projects (*CBC*, 2023).

Key Findings

- Men's household responsibilities significantly affect women's labour market participation and career development
- Many statistics reported in Newfoundland and Labrador are inconsistent with official Canadian statistics; for example, workforce composition and compensation outcomes by demographic and subsector
- Some natural resources employers are limited in their ability to improve diversity and equity outcomes because of their reliance on contracting companies
- Industry-level associations are important enforcers of equity and diversity outcomes but are currently underutilized
- Most companies are developing apprenticeships, internships, and mentoring programs to foster training and development, especially for underrepresented groups
- Cross-cultural training programs are not consistently offered for underrepresented groups, affecting workplace socialization and the onboarding process
- Partnerships between private sector organizations and not-for-profit labour associations are effective when formal programs are established
- Coaching and mentoring are important pillars of labour market development, job-specific learning, and socialization for underrepresented groups
- The natural resource sector is heavily contract-dependent, and the outcomes of underrepresented groups are therefore contingent on contract stipulations such as impact benefit agreements or a contractor's workforce composition
- The cyclical nature of the industry can discourage underrepresented groups that are not attracted to temporary employment
- Many visible minorities suffer from a lack of exposure to Canadian workplace opportunities and often feel alienated, anxious, and stereotyped in the workplace
- Poor communication from colleagues and management sometimes leaves underrepresented groups feeling isolated, underappreciated, and frustrated, especially in remote areas

Implications and Policy Recommendations

1. **Develop and implement consistent reporting standards on an industry-by-industry basis.** Important statistics on labour market outcomes by demographic subgroups are often missing in Newfoundland and Labrador, making the labour market experiences of underrepresented groups less visible and therefore difficult to improve. Reporting measures need to be consistently implemented not only in statistical surveys but also in constructing/implementing contracts, agreements, and reporting frameworks. Impact and benefit plans for contract-based projects, for example, should be standardized and consistent.

2. **Improve on-the-job training programs, increase apprenticeships and internships, and link related programs to financial incentives.** Many employers described mentorships, apprenticeships, and internships as essential on-the-job training methods that boost the social confidence and technical skills of underrepresented groups. Industry-level associations and the provincial government should explore the development of a wage or tax subsidy program to incentivize such on-the-job training programs for underrepresented groups.

3. **Improve communications between underrepresented groups and managers/supervisors.** Many new hires, whether women, visible minorities, or newcomers, feel alienated and anxious in a new workplace. Ideally, managers and supervisors should be trained to address specific case-by-case situations involving underrepresented workers, and should develop communication skills to help these groups acclimate to a new work environment without alienating them from their colleagues.

4. **Create formal partnerships between community groups and private sector firms to establish case-by-case diversity targets and related financial**

incentives. Partnerships between private sector organizations and local not-for-profit organizations such as the Association for New Canadians (ANC) or Trades NL are effective when information and resources are shared on a consistent and formal basis. However, this type of working relationship is often disjointed, informal, and inconsistent.

5. **Incorporate work-life balance considerations into cross-cultural training programs.** Women's domestic and parental commitments are often cited when discussing their relatively lower labour market participation in the natural resource sector, but men's domestic and parenting roles are seldom mentioned. Cross-cultural training programs and similar workplace learning programs need to explore further explorations of domestic labour to truly improve women's representation and participation in the natural resource sector's workforce.

1.0 Introduction & Background

1.1 **Project Background**

Newfoundland and Labrador (NL) has significant natural resources. The extraction and processing of oil, minerals, fish, and forest resources contributed to 33% of the province's GDP in 2022, and will maintain an important role in the province's output, employment, and investment in the future (Government of Newfoundland and Labrador, 2023a). Agriculture, forestry, fishing, and mining employment grew at 3.5% annually between 2018 and 2023, and the "Advance 2030: Plan for Growth in the Newfoundland and Labrador Oil and Gas Industry" envisions 7,500 jobs in the subsector by 2030, or an expansion of 2,180 jobs from 2021 (IBIS World, 2023; Oil and Gas Industry Development Council, 2021; Statistics Canada, 2023a).

However, Newfoundland and Labrador's natural resource sector experiences hiring difficulties due to a lack of applicants and a lack of candidates with necessary skills and experience, according to a previous study conducted by the Stephen Jarislowsky Chair at Memorial University (Fang et al., 2021). This evidence demonstrates the growing importance of fostering labour market participation among traditionally underutilized human resources (e.g. women, visible minorities, newcomers, Indigenous peoples, and disabled persons) who are currently under-represented in the NL natural resource sector.

There is ample evidence that these under-represented groups face significant challenges when entering the labour market (Aragón et al., 2018; Wagner, 2011; Adamuti-Trache, 2011; Bourdieu, 2018; Hou et al., 2019; Williams et al., 2013), leading to less desirable employment outcomes (Li, 2008). This study analyzes Newfoundland and Labrador's current workforce characteristics and develops a strategy to increase the participation of under-represented groups in the provincial natural resource sector.

Our research identifies any current incompatibility between Newfoundland and

Labrador's natural resource employment opportunities and the skills, motivations, and capabilities for the under-represented groups to develop successful careers in these natural resources industries. The results of this study will be translated into an action-oriented strategy to boost the quality and quantity of the labour supply in the province and to increase the equity, diversity, and consequent productivity enhancement within Newfoundland and Labrador's natural resource sector.

1.2 **Research Objectives**

The main objectives of this study are to:

1. Identify best practices to improve labour market participation and outcomes of under-represented groups in the natural resources sector in Newfoundland and Labrador

2. Help stakeholders better understand and define both the labour force characteristics of the NL natural resource sector and the employment outcomes of under-represented groups in the sector

3. Help stakeholders better understand legislative employment equity and pay equity requirements for employers to hire, compensate, and treat under-represented groups equitably

4. Help stakeholders better understand the economic value and contributions of under-represented groups

5. Elevate the private sector's ability to accommodate the needs of under-represented groups in targeted recruitment and hiring practices

6. Explore how employers, policy makers, and researchers can work together to identify both opportunities and challenges to grow the pool of available skilled workers from under-represented groups for the NL natural resource sector

1.3 **Research Methodology**

This study examines the labour market opportunities, challenges, and outcomes for two of the "designated" groups referred to in the Employment Equity Act — women and members of visible minorities (*EEA*, 2023) — and adds another group, recent immigrants, to align with the Stephen Jarislowsky Chair's areas of expertise.

The research involves focus groups and interviews with participants from these major categories:

1. **Women and visible minorities currently employed in the NL natural resource sector** to understand experiences and challenges within the sector
2. **Policy makers and non-governmental organizations at federal, provincial, and municipal levels** to understand what policies or programs have been introduced or are being considered
3. **Employers and business associations in the natural resource subsectors** to understand their hiring practices, needs, and perceived challenges of growing the pool of qualified workers from under-represented groups.

Every effort was taken to ensure that employers interviewed were representative by geographic concentrations and organizational size (excluding firms with fewer than five employees). Overall, we conducted in-depth interviews with nine employers and three employees in the NL natural resource sector.

2.0 Literature Review

2.1 Importance of natural resource industries in Newfoundland and Labrador

Natural resource endowments and their spin-off sectors[3] are the backbone of Newfoundland and Labrador's economy and labour market. The natural resource

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[3] Spin-off sectors refers to upstream industries which produce goods/services that are used as inputs, or downstream industries which use natural resources from a specified sector in their production processes

sector.[4] accounted for approximately 33% of the province's gross domestic product (Government of NL, 2023b) and 8.8% of employment in 2022 (Government of NL 2023a).

Figure 1: Newfoundland and Labrador gross domestic product (GDP) at basic prices, by natural resource subsector (%)
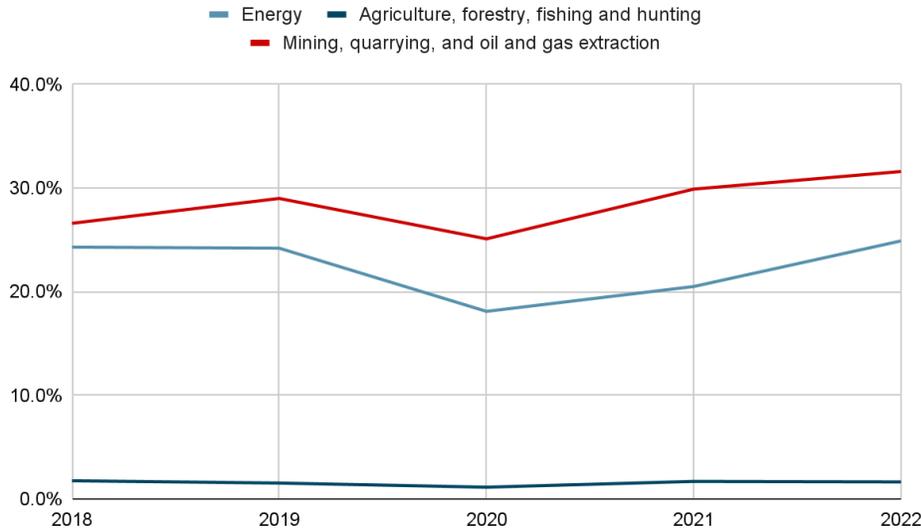
Employment in natural resource sectors is a significant staple of Newfoundland and Labrador's labour market. There are an expected 8,128 job openings forecasted for natural resource industries between 2023-2032, representing 9.6% of all projected job openings in the province (Government of NL, 2023c). The majority (66.3%) of these positions represent significant replacement needs due to retirements of older workers,[5] but expansion demand also propels employment gains in natural resource sectors in Newfoundland and Labrador, as evidenced in the steady increases of sectoral employment in the past five years.

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[4] The extraction and processing of crude oil, minerals, fish, and forest resources in 2022
[5] Over the three-year period of 2022-2024, nearly 70% of all new job openings in the Newfoundland and Labrador labour market will result from attrition (retirements and deaths) (Government of NL, 2023c)

Figure 2: Newfoundland and Labrador employment, all natural resource subsectors
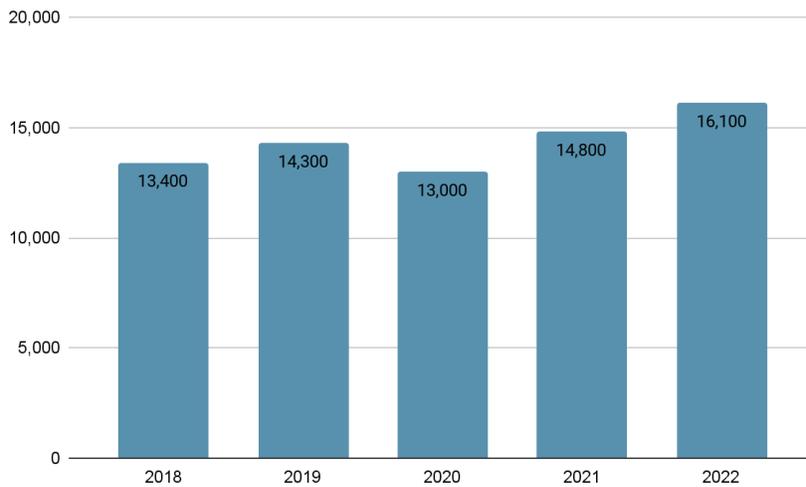
Ultimately, as the province's natural resource sectoral expansion continues and vacancies steadily increase, the job market is tightening: the projected increase in job openings will require increased labour supply responses (Government of NL, 2023c).

2.1.1 Mining, quarrying, and oil and gas extraction

The mining industry also has considerable influence on the provincial economy and job market. Employment in the mining, quarrying, and oil and gas extraction industry in Newfoundland and Labrador has grown from 8,800 persons in 2018 to 11,900 persons in 2022, despite total Canadian employment in the subsector remaining approximately constant (Statistics Canada, 2023a).
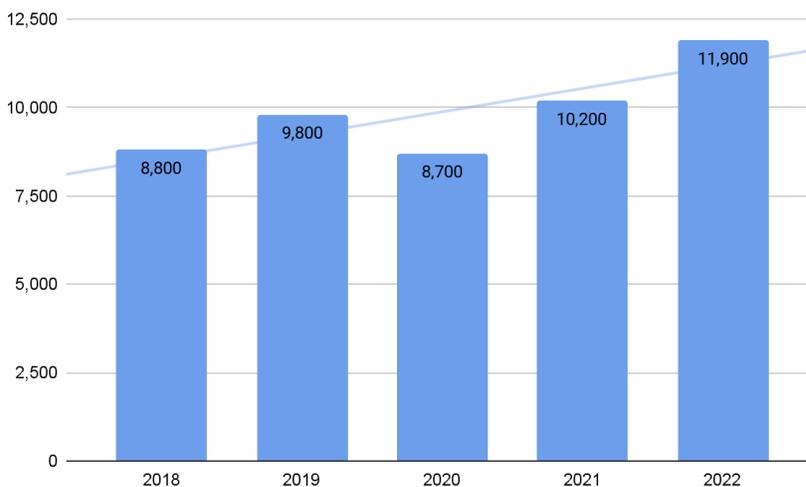
Figure 3: Newfoundland and Labrador employment in mining, quarrying, and oil and gas extraction

Employment growth in mining and quarrying is not only significant but also diversified across several sites, lessening the year-over-year volatility of mining output and productivity (Government of NL, 2023a). This subsector's upward trend is expected

to continue in the province. Newfoundland and Labrador ranked fourth in the world in the Fraser Institute's new Investment Attractiveness Index, confirming the abundance of economic potential and employment growth to come in mining and related occupations (*Fraser Institute*, 2023).

In the oil and gas subsector, Hebron still has 490 million barrels (MMbls) of recoverable reserves remaining; Terra Nova is completing an extension to add 10 years of productive life to its project, and resumed operations in November 2023; capital spending between $600 and $700 million will propel the West White Rose project to production in 2026; and several discoveries have improved the potential for recoverable oil resources from the newly-approved Bay du Nord project (Government of NL, 2023a).

Table 1: **Employment of Newfoundland and Labrador residents in the oil and gas industry, by active project**[6]

Project	Employment[3]	%
Hibernia	1,170	30.4%
White Rose	1,075	28.0%
Hebron	942	24.5%
Terra Nova	658	17.1%
Total	3,845	100%

While direct employment in the oil and gas industry may measure less than in mining and quarrying, its indirect economic contribution is significant; for every job created in the oil industry, about four other jobs are created elsewhere in the economy (Premier's Economic Recovery Team [PERT], 2021).

2.1.2 Fishing, hunting, and trapping

Historically high prices of snow crab created a noticeable increase in the value of fish landings in 2022, sustaining 16,634 jobs in fisheries and related industries (Government of NL, 2023a). There is a forecasted total of 2,288 job openings for fishing vessel masters and crew members between 2023 and 2032 (largely due to attrition), which is welcome news to a provincial unemployment rate in the fishing, hunting, and trapping

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[6] Employment of Newfoundland and Labrador residents as of December 2022 (Government of NL, 2023a).

industry that rose from 28.3% in 2018 to 31.5% in 2022 (Government of NL, 2023a; Statistics Canada, 2023a). Direct employment in aquaculture[7] hatchery and grow-out activities decreased in 2022 due to lower salmonid production volumes, but the demand is expected to tighten over the next several years, meaning new labour supply will be required to meet anticipated job openings, and will be an important source of rural employment growth (Government of NL, 2023c; PERT, 2021).

2.1.3 Forestry, logging, and support activities

Total employment in Newfoundland and Labrador's forestry, logging, and support activities subsector was not reported in 2022, but the provincial labour force in the subsector declined from 1,200 in 2018 to 600 in 2022 (Statistics Canada, 2023a). The principal determinants of this decline are in the decreasing Annual Allowable Cut (AAC), and an expanding spruce budworm infestation (Government of NL, 2023a). Still, despite its relatively small size, forestry is an important source of rural employment, and should not be disregarded in assessing the future of Newfoundland and Labrador's natural resource industries.

2.1.4 Moving forward in natural resources

The newly approved Bay du Nord project, the province's strong attractiveness to mining investments, and the increasing value of fish landings are all examples of Newfoundland and Labrador's promising natural resource industries primed for employment growth in the next decade. The prospect of green hydrogen development, legitimized by German Chancellor Olaf Scholz's visit to Stephenville, is also a promising and exciting development that will further contribute to the natural resource industry's importance.

But while these sectors are primed for new investment and forthcoming employment opportunities, an employer survey conducted by the Stephen Jarislowsky Chair research team at Memorial University found that employers from the natural resource

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[7] Aquaculture and marine harvest labourers are divided roughly evenly between the Agriculture (NAICS 111, 112, 1151, 1152) and Fishing, Hunting, and Trapping (NAICS 114) subsectors (*GC Job Bank*, 2023).

sector experience hiring difficulties in several occupations due to a lack of candidates or a lack of skills (Fang et al., 2021). This evidence demonstrates the growing need to foster labour market participation among traditionally underutilized human resources — such as women, visible minorities, and recent immigrants—currently under-represented in the Newfoundland and Labrador natural resource sector.

2.2 Labour outcomes of under-represented groups in the NL natural resource sector

2.2.1 Women

The integration of women into the labour force is a significant contributor to the Newfoundland and Labrador economy in recent decades. Over the last 10 years, women have accounted for 78.2% of all employment growth in the province (Khattab, 2020). Women's presence in Newfoundland and Labrador's natural resource industry also matches the Canadian average: women comprise 21.94% of the natural resource workforce in all of Canada, compared with an almost identical 21.97% in Newfoundland and Labrador (Statistics Canada, 2023a).

Figure 4: Newfoundland and Labrador employment in natural resource industries, 2010-2022, by sex

Similarly, Newfoundland and Labrador matches national averages of women's employment share. Women in Newfoundland and Labrador are more likely to work in fishing, hunting, and trapping than the Canadian average, and are almost as likely to work in mining, quarrying, and oil and gas extraction (see **Figure 5**).

Figure 5: Women's employment share in natural resource subsectors[8] in Canada and Newfoundland and Labrador, by subsector (%)
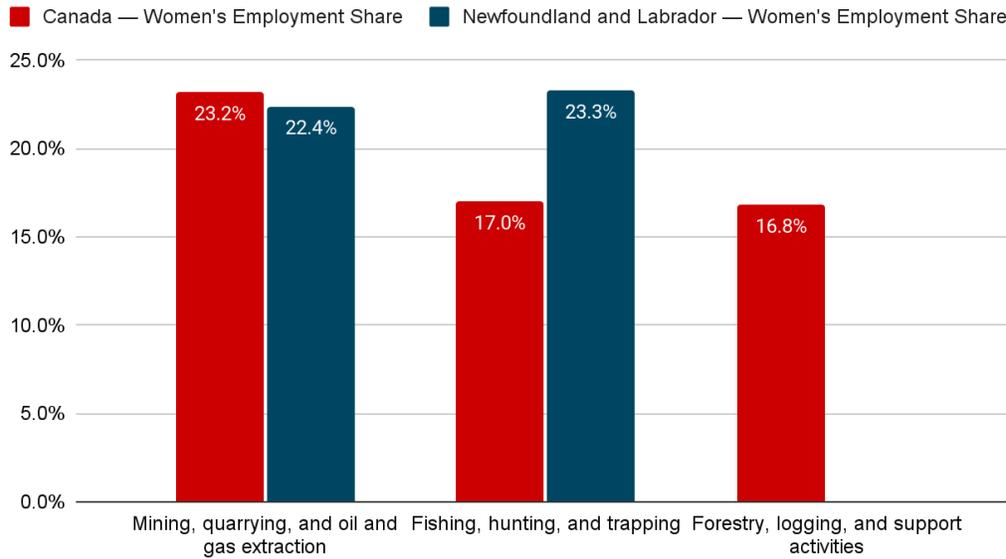
Source: Statistics Canada. (January 2023). Table 14-10-0023-01 Labour force characteristics by industry, annual (x 1,000). https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1410002301. DOI: https://doi.org/10.25318/1410002301-eng

Figure 6: Female and male average annual salaries in all natural resource sectors and downstream activities in Newfoundland and Labrador, 2010-2021
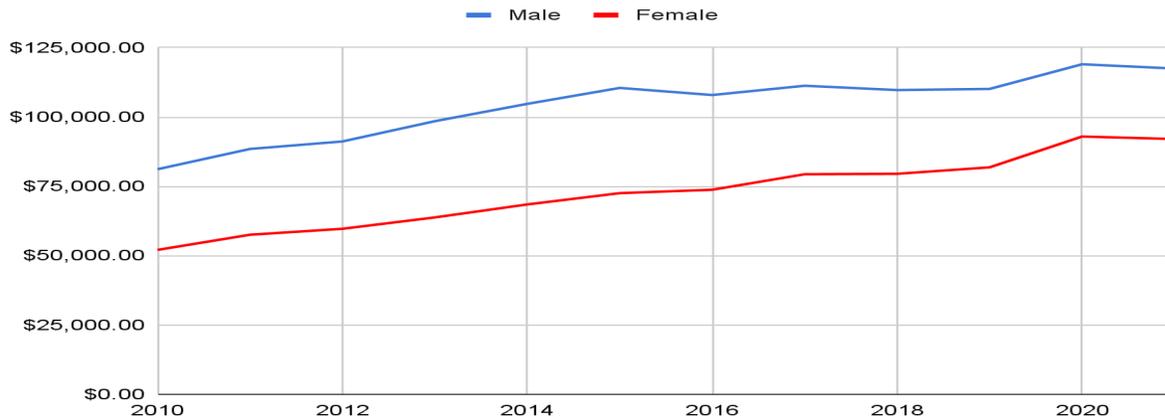
Source: Statistics Canada. (2023b). *Table 36-10-0653-01 Employment in the natural resource sector by demographic characteristic.*https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610065301&pickMembers%5B0%5D=1.1&cubeTimeFrame.startYear=2010&cubeTimeFrame.endYear=2021&referencePeriods=20100101%2C20210101. **DOI:** https://doi.org/10.25318/3610065301-eng

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[8] Women's employment in the forestry, logging, and support activities subsector is not measured in Newfoundland and Labrador.

However, a gap does exist between male and female average annual salaries in the natural resource sector in Newfoundland and Labrador. In 2021, a male employee would, on average, make $25,431 or 27.6% more than a female employee in the sector (**Figure 6**). Males across Canada earn a slightly lower wage-gap premium at $22,379 or 23.7% (Statistics Canada, 2023a).

2.2.2 Visible minorities

Employment indicators of visible minorities in the natural resource sector are relatively low in both Canada and in Newfoundland and Labrador. However, the trend is particularly pronounced in NL; 21.2% of natural resource employees in Canada identified as visible minorities in 2021, compared to 11% in Newfoundland and Labrador (Statistics Canada, 2023b). This is a reasonable representation as only 3.4% of the people in Newfoundland and Labrador belong to visible minorities, while the national average is 26.5% in 2021. Their representation across subsectors is described in **Table 2.**

Figure 7: Employment share of visible minorities in all natural resource subsectors and downstream activities, Canada vs. Newfoundland and Labrador (%)
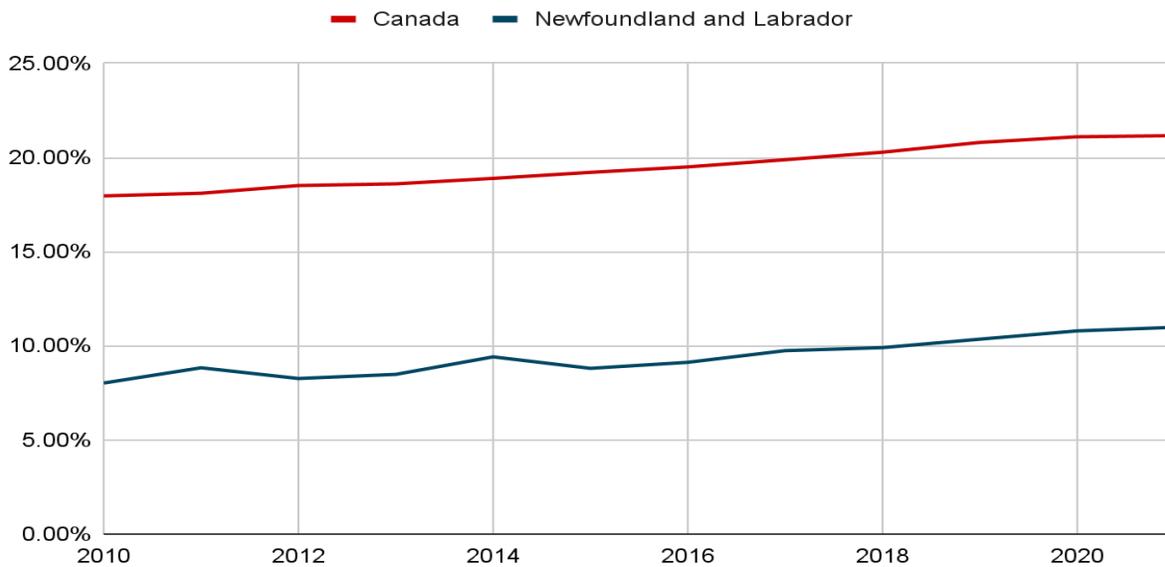
Source: Statistics Canada. (2023b). *Table 36-10-0653-01 Employment in the natural resource sector by demographic characteristic.* https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610065301&pickMembers%5B0%5D=1.1&cubeTimeFrame.startYear=2010&cubeTimeFrame.endYear=2021&referencePeriods=20100101%2C20210101. DOI: https://doi.org/10.25318/3610065301-eng

In Newfoundland and Labrador's important energy industry, where the majority (43.1%) of natural resource jobs lay in 2021, 10.2% of jobs belong to self-identified visible minorities (Statistics Canada, 2023b), compared with the Canadian average of 20.6%. (**Table 2**).

Table 2: Employment of women and visible minorities in Canada and Newfoundland and Labrador, by natural resource subsector (%)

	Canada		Newfoundland and Labrador	
	Women	**Visible Minorities**	**Women**	**Visible Minorities**
Energy	24.4%	20.6%	21.8%	10.2%
Forestry	17.6%	16.3%	12.6%	NA
Mineral and mining	16.1%	17.6%	16.8%	NA
Fishing, hunting, water	35.9%	22.2%	35.5%	11.5%
Total natural resources	20.7%	18.8%	20.3%	11.3%

Source: Statistics Canada. (2023b). *Table 36-10-0653-01 Employment in the natural resource sector by demographic characteristic.* https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610065301&pickMembers%5B0%5D=1.1&cubeTimeFrame.startYear=2010&cubeTimeFrame.endYear=2021&referencePeriods=20100101%2C20210101. DOI: https://doi.org/10.25318/3610065301-eng

2.3 Obstacles to employment in natural resource sectors

To attract more under-represented groups to successful and meaningful employment in the natural resource industry, the distinct obstacles for these groups in these sectors must be clarified.

2.3.1 Family-work balance

Evidence links women's relative labour market outcomes to a host of factors related to work-life balance, including intra-household bargaining power, fertility, and children's well-being (Aragón et al., 2018). Improving labour market outcomes for women and

achieving gender equity in the natural resource sector is therefore directly influenced by work-life balance policies.

Women are often assumed to be responsible for domestic work such as childcare and grocery shopping, among many other tasks (Yingling, 2017). However, college-educated women rarely drop out of the labour force "for the family" due to higher opportunity costs and reservation wages (Damaske, 2011); most continue to grapple with the conflicting demands of work and family in the face of insufficient support from partners or employers (Wagner, 2011).

Providing equal labour market opportunities for women is therefore in large part a matter of fostering support from partners and employers. Scholars have stated that improving labour market outcomes for women is directly influenced by work-life balance policies, adding that work-life balance policies must focus on men as well as women; they must incorporate family-work policies that maintain the role of men and other partners as parental guardians (Lewis, 2009). It is the role of partners to first embrace this responsibility, and then the role of employers to provide support and accommodations to allow proper up-take of these familial responsibilities. Family-friendly accommodations have recently appeared in the form of part-time and flexible scheduling, paid leave, subsidized or on-site childcare, and telecommuting opportunities (Blair-Loy, 2003; Fang et al., 2019).

To reach gender equality in the labour market, these accommodations must extend broadly from employers to both women and men. Many natural resource occupations require long commutes or temporary relocation (e.g., rotational work), but evidence suggests that women are less likely to commute long distances than men. Homeowners and women are less likely to commute more than 100km for employment, and men are more likely to commute for longer distances than women (Khattab, 2020; Yaropud et al., 2019). Results specific to Newfoundland and Labrador show similar trends. In March 2010, mobile workers in the province numbered 23,507 and women represented only 10% of that total (Government of NL, 2020). Structural familial commitments are likely

contributors to an inability or unwillingness on the part of women to commute long-distance.

2.3.2 Educational barriers

Educational attainment is an important variable in determining employment quality and satisfaction. Increasing education (especially Canadian post-secondary education) is positively related to upward mobility in career choice and income.

However, many immigrants who seek post-secondary training have already completed a degree in their home country and are therefore older than traditional post-secondary students (the 18-24 age cohort) at the time of immigration; they are being considered adult learners (Adamuti-Trache, 2011). The result is age-related, race-related, and culture-related misidentification within educational settings.

To further accentuate the disparity, Bourdieu (2018) argues that educational settings reinforce the existing power relations in society by privileging the cultural background of students of the dominant class. The most prominent example of educational privilege for the dominant cultural background pertains to English as a Second Language (ESL) teaching. Research shows that ESL students feel alienated by the social stigma attached to ESL student status (Kanno & Varghese, 2010). Bourdieu's work recognizes how ESL students undergo educational pursuits with severely limited stocks of cultural capital, which is intimately related to other forms of capital such as economic (money and property), symbolic (status and legitimacy), and social l (networks and connections) (Bourdieu, 1991). Students with low-level resources in these forms of capital, such as many ESL students, are likely to start their education with considerable disadvantages and exit from the educational system with smaller gains in cultural capital than their English-speaking, middle- or upper-class counterparts.

Research into successful language training and employment acquisition for temporary workers finds that the processes whereby individuals learn new languages are

contingent on factors outside the control of the individual worker, namely age, background, and learning environment (Piller & Lising, 2014). In an environment of misidentification and alienation, a subsequently successful employment search matched with a successful educational attainment for recent immigrants is less probable. Improving the representation of immigrants and visible minorities in the NL energy sector, where educational attainment is highest amongst natural resource sector (Statistics Canada, 2021), requires socially inclusive educational environments where recent immigrants can better acquire language training and Canadian educational credentials.

Table 3: Average educational attainment by natural resource subsector, Newfoundland and Labrador (%)

	High School Diploma and Less	Trade Certificate	College Diploma	University Degree and Higher
Energy	15.7%	19.7%	33.7%	30.9%
Forestry	46.8%	—	25.0%	—
Mineral and mining	26.9%	—	32.2%	—
Fishing, hunting, and water	62.4%	10.3%	21.0%	6.3%
All natural resources	25.9%	21.8%	31.5%	20.8%

Source: Statistics Canada Table 36-10-0653-01

2.3.3 Non-recognition of foreign credentials

The potential value of human capital acquired outside of Canada by immigrants is often not fully recognized due to features of the Canadian market that reward credentials differentially based on gender, race, and foreign status of potential workers (Li, 2008). The result for recent immigrants is too often downward social mobility, unemployment and/or underemployment, vulnerability and commodification, and reduced earnings (Li, 2008).

A 2019 study titled "The Recent Trends in Over-Education by Immigrant Status" demonstrated that about one-half of the growth in university-educated workers over the 2004-2018 period was matched with jobs requiring a university education. Recent immigrants were usually the marginalized labour market participants in this job-demand squeeze; university-educated recent immigrants became more concentrated in jobs that require less than a university education, while Canadian-born youth with a university degree became less likely to work in jobs requiring less than a university education (Hou et al., 2019). Recent immigrants experienced a clear occupational downgrading, observed as a substantial decline in the educational and occupational match rates and corresponding increases in the rates of over-education and over-qualification. Canadian-born youth, on the other hand, experienced an increase in educational and occupation match over the same period (Hou et al., 2019).

2.3.4 Workplace social exclusion

Career obstacles do not end in the job search. Under-represented groups also experience limited upward career mobility after entering the workforce. Women are shown to be perceptually inhibited by the 'ideal worker norm', a term describing the social standing of a consistent full-time, ideally educated, and socially capable worker (Whittington, 2011). Mothers commonly face discrimination when they work part-time (Williams et al., 2014) and feel that they must find ways to negotiate competing work-life obligations without drawing attention to their plight (Williams et al., 2013).

All under-represented groups are potential targets of prejudice and discrimination in the workplace, especially in the face of limited information or information asymmetry. Employers generally rely on employee signals and other observable characteristics to make rational inferences about underlying intangible traits and productivity (Altonji & Pierret, 2001). Research indicates that educational credentials are considered less than membership in social groups when employers are forming these inferences (Altonji & Pierret, 2001). Unfortunately, employer categorization into social groups is often defined by ethno-national identity: an easily recognizable criterion for social categorization

based on observable traits like skin colour (Jenkins, 1994). These observable characteristics and presumptive information of group-level traits can be significant influences on employer perceptions of individual employees' trustworthiness, and they in turn differentiate presumed levels of capability and competency. Visible minorities are generally the victims of such workplace classifications (van Hoorn, 2018).

2.4 Review of current initiatives for under-represented groups

To improve the labour market outcomes of under-represented groups in the natural resource sectors, it is essential to first understand the existing initiatives and practices that support under-represented groups in the labour market.

2.4.1 Natural Resources Canada "Equal by 30"

The "Equal by 30" Campaign is a global initiative in the clean energy workforce to close the gender gap and enhance inclusion of women and under-represented groups. This initiative, and its first survey published in March 2021, is using consistent reporting frameworks, metrics, and standards as a critical first step in helping governments measure gender equality commitments in their respective energy industries. The initiative's surveys generate individual scores using an evidence-backed inclusion framework and evaluate energy companies based on inclusive culture, fair management, career development, workplace flexibility, and workplace safety (Natural Resources Canada, 2021).

The project is under the wider umbrella of the international Clean Energy Education and Empowerment (C3E) Initiative headed by the U.S. Department of Energy, the MIT Energy Initiative, Stanford Energy, and the Texas A&M Energy Institute (*C3E,* 2023).

2.4.1 Cenovus Energy Process Targets

Cenovus Energy is a principal operator of important oil fields in the province, including the current West White Rose project and the imminent Bay du Nord project. It acquired

Husky Energy in 2021. In 2020, Cenovus released its diversity plan, which highlights short-term deliverables for achieving greater diversity. The process targets in the report serve as valuable, actionable templates for all Newfoundland and Labrador natural resource companies. The report mentions recent accomplishments and forward-looking initiatives, describing action items such as registering eight female employees as members of WISE NL (Women in Science and Engineering Newfoundland and Labrador), and the WinSETT (The Canadian Centre for Women in Science, Engineering, Trades and Technology (WinSETT Centre) leadership program, offering scholarship opportunities for Indigenous persons at partnering educational institutions, and launching a career path module to facilitate better employee knowledge and experience for upwards career mobility (Cenovus, 2023).

2.4.2 Public Procurement Strategies

Public procurement has been advocated by business leaders as a way of advancing equality and diversity through partnerships created between the public and private sectors (Confederation of British Industry, 2009). Governments improve equity outcomes through two distinct channels of public procurement: vendor diversity, investing in companies that are led or owned by people of diverse backgrounds; or by designing contracts to improve equitability in service outcomes (Harvard Kennedy School Government Performance Lab, 2022).

2.4.3 Diversity Plans and Affirmative Action

Diversity plans are generally voluntary publications and are at risk of being undermined (Williams et al., 2014). Critics argue that diversity plans evolve into public relations efforts to promote a positive image, and some studies demonstrate that the existence of diversity programs creates "illusions of fairness" amongst elite groups despite strong evidence of discrimination (Kaiser et al., 2013). Others argue that diversity plans are ineffective because the definition of diversity has become diluted (Kirton & Greene, 2010). This argument holds that differences like gender and race are two of many differences, all of which require celebration; this line of reasoning, however, undermines the importance of gender and racial variety. Likewise, scholars suggest that while diversity training has become the most popular method of improving social and racial

consciousness within workforces, it has also become the least effective (Bielby et al., 2013).

Affirmative action, as implemented in the US, encompasses a wide range of policies that generally redistribute resources and opportunities to under-represented groups on the basis of eliminating the effects of past or present discrimination (Sabbagh, 2004; Williams et al., 2014). However, affirmative action is becoming increasingly contentious, and it is often argued that preferential treatment programs victimize and stigmatize minorities, leading some minority groups to oppose racial quotas and affirmative action (Bailey et al., 2015; Geilman et al., 1992; Fleming & Girma, 2021).

2.4.4 Mentoring Programs and Affinity Groups

Mentoring programs have shown positive results both in increasing women's representation in leadership roles and in enhancing upward career mobility for minority men and women (Dobbin et al., 2007). Affinity groups are similar methods that provide employees with an opportunity to meet and interact with other people who share a common interest or demographic. Larger companies have instituted affinity groups for women with the assumption that they can provide social support and collegial networks to combat feelings of isolation. Affinity groups may be company-wide or function-specific, and they may include informal gatherings for socializing as well as more formal professional development events (Williams et al., 2014).

3.0 Detailed Summary — Data Analysis & Main Findings

3.1 Findings — **Large Oil and Gas Company**

Goals

- The company aims to hire the best candidate based on competency and skills, and also wants to break biases and empower women
- The company has a public statement on diversity and inclusion measures
- One executive described two overarching goals for immigrant workers: developing a clear pathway for newcomers with transferable skills, and providing sufficient mentorship for a welcoming transition

Challenges

- The company described experiencing structural difficulties when trying to hire underrepresented groups in technical disciplines, e.g. a lack of women pursuing engineering degrees
- One executive noted that self-selection vs. employer selection, work-life balance, and family commitments relative from male workers are all important considerations that have inhibited women's labour market participation and career development
- Lacking communication in remote areas leaves workers feeling isolated; one employer stressed the importance of ensuring that communication practices demonstrate the employer's commitment in diversity management and career success of women, racial minorities, and recent immigrants

Outcomes

- One large oil and gas employer has roughly 30% female and 70% male employees, with most employees being Canadian-born
- There are no official policies in place to increase the representation of women, visible minorities, or recent immigrants in the workplace

- The company supports investments in STEM scholarships for daughters of employees and invests in leadership training programs for co-op students
- There are no mentoring programs offered, but employee resource groups[9] are maintained to foster diversity based on gender, race, sexual orientation, and other differences
- The company declares that they consider every applicant equally, regardless of their demographics
- The company provides cultural awareness training to those who are unfamiliar with Canadian cultures and values
- Canadian and local work experience are more valued in hiring decisions

3.2 Findings — **Medium and Small-Sized Local Mining Companies**

Goals

- One small firm's diversity plan aims to achieve 25% women's employment in their workforce
- One executive mentioned that implementing outreach programs and new educational channels in geology and prospecting can help improve the representation of Indigenous people and women in these fields

Challenges

- One company described challenges in hiring minorities due to their concern over the recognition of their rights
- The same employer expressed that these minority employees had suffered from a lack of exposure to outside work opportunities and were anxious about stereotypes they may face
- One small company noted challenges in hiring visible minorities due to the province's low immigration levels

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[9] Internal communities of workers with shared identities and interests.

- One executive described the mismatch between their company's goals and their contractors' outcomes: women represent about 4% of tradespeople nationally, and these skilled trade subcontractors are an important part of mining operations

Outcomes and Practices

- 50% of one small, local mining company's workforce is composed of women
- One company described good representation of Indigenous prospectors in Labrador
- The cyclical nature of the industry makes temporary and seasonal employment pervasive
- One company is actively developing apprenticeship programs for underrepresented groups and is working with a local non-profit supporting people with disabilities as well as Indigenous groups to identify potential participants

3.3 Findings — **Medium-Sized Local Fishing, Hunting, and Water Company**

Goals

- This company focuses on local employment, but searches for candidates outside of the province for specific positions
- This company had a strategic mandate to improve equity and diversity from the beginning of its commercial operations to improve creativity and entrepreneurial values

Challenges

- No challenges reported

Outcomes and Practices

- This company has a policy to promote from within, but they don't like to target specific groups for promotions in lieu of others

- This company does not have formal plans for reasonable accommodations, but caters to case-by-case accommodations and offers a full benefits package

3.4 Findings — **Large Local Construction (Related Activities to the Natural Resource Sector) Company**

Goals

- This organization focuses on improving outcomes for indigenous people and women in their workforce

Challenges

- Onboarding practices have been recognized as lacking; the company is planning to improve onboarding processes and to institute an automated system for onboarding new hires

Outcomes and Practices

- The percentage of women employed in construction activities is estimated to be 15% to 20%, while the percentage of women working as office staff and in corporate offices is higher
- The percentage of Indigenous people employed in construction activities is estimated at between 5% to 6%
- One executive described their best practices as:
    - Inclusive hiring practices
    - Partnerships with immigrant-serving organizations
    - Partnerships with Indigenous initiatives related to the skilled trades
- Monthly meetings with partner organizations increase the candidate pool and provide networking opportunities for candidates
- Recently, the company signed an impact benefit agreement as part of a large project in Labrador
- This company pays for safety courses and actively refers candidates to job sites, removing barriers for entry into the workforce

3.5 Findings — **Human Resources and Staffing (Related Activities to the Natural Resource Sector) Companies**

Goals

- One company wants to double the percentage of employed women and target improved Indigenous and immigrant representation in the mining sector
- Coaching and mentoring are important pillars of labour market development according to these companies
- One employer suggests that governments should be providing regulations and benefit plans in plain, consistent formats, and should help establish targets and quotas

Challenges

- One firm cites the lack of underrepresented workers in skilled trade occupations and the inadequacy of training as the main challenges to improving outcomes for underrepresented groups
- One company described that the main barriers to hiring include weak resumes and a fear of political backlash from industry-level organizations
- An executive emphasized that the biggest issue to workforce integration is the language barrier
- One organization explained that many employers often struggle to find government agencies to help remove barriers for employees and employers

Outcomes and Practices

- One executive described that their most productive practice for improving labour market outcomes of underrepresented groups was to connect them with job opportunities in their university and community group settings
- One organization is developing advanced language training programs and a thorough, formalized onboarding process
- It is essential for companies to provide cross-cultural training to new Canadians, according to some employers interviewed

- One firm emphasized that providing a mentorship program to firms in Newfoundland and Labrador should include making programs available at educational institutions, providing funding for newcomers, and leveraging Canadian work experiences
- One executive interviewed said that companies should be encouraged to integrate more interns into their workforce

3.6 Findings — **Two Public Natural Resource Employees**

Goals

- Both public employers of these natural resource are 'equal-opportunity' employers
- One company had a yearly target set of 30% representation of underrepresented groups in corporate positions
- Another company separated employment ratio targets of underrepresented groups between women and visible minorities

Challenges

- One natural resource employee found it difficult to land job interviews in Newfoundland and Labrador despite her fit in terms of position requirements and skills, and therefore moved to British Columbia
- The main challenge, one employee said, is that "in Newfoundland they don't give you a chance, as if your profile isn't even looked at"
- One employee described that those from rural Newfoundland simply don't have sufficient exposure to underrepresented groups, especially visible minorities, and are susceptible to negative biases
- Working in a government organization with large resources provides more flexibility to address these issues than working with a private sector firm, one employee indicated
- Another employee explained that as a member of an underrepresented group, moving up in an organization requires more networking

Outcomes and Practices

- Promotion at one company is based on merits and skills
- At one ecosystem management company there is sufficient representation of women, but minimal representation of recent immigrants or visible minorities
- One employee described a positive program designed to address social complexities in the workplace
- One employee stressed that students and youth in underrepresented groups should engage with co-op programs at Memorial University, therefore addressing bias against those lacking Canadian experience

4.0 Integrated Summary — Data Analysis and Main Findings

4.1 Women in the Natural Resource Sector

Over 60% of employers reported that there is a consistently declining interest for women to work in the natural resource sector and STEM fields in Newfoundland and Labrador. Half of employers listed the intense job demands and the little flexibility in working hours as another significant barrier for women. Many employers (25%) also believe that insufficient communication, understanding and expectation-setting surrounding job requirements are barriers for women's entry, and are often the primary reason for their exit from the sector.

Figure 8: Employer-described barriers to women's employment, interview data (%)
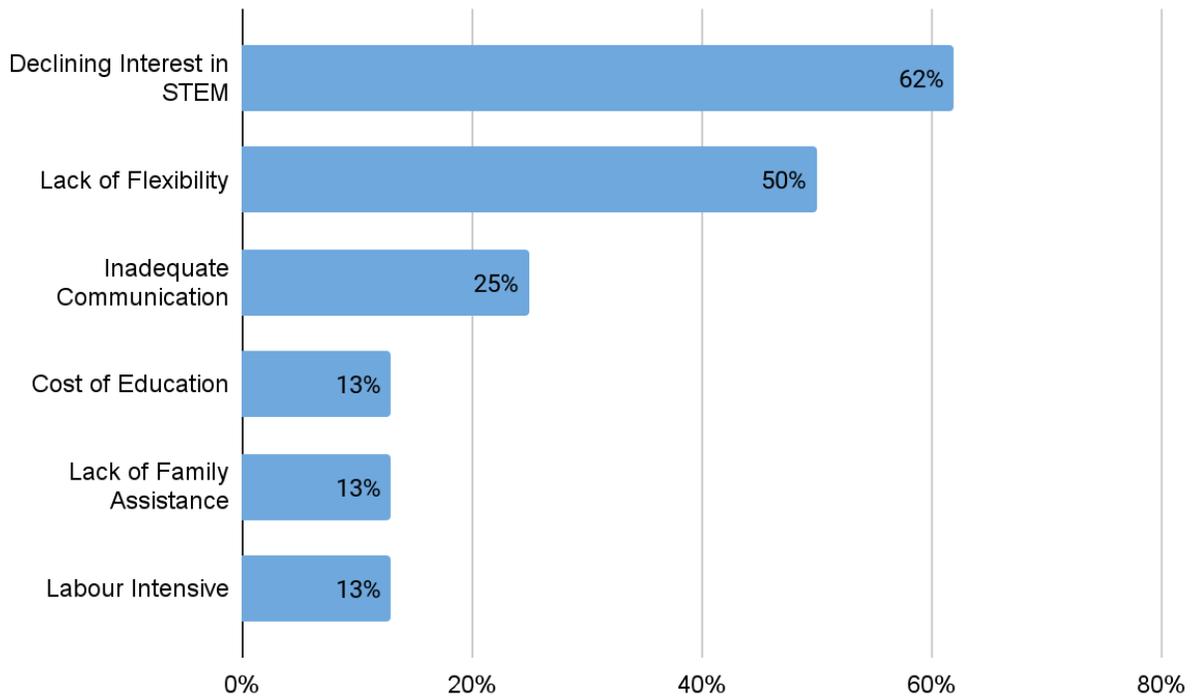
Half of employers believe that the best practice for attracting women to the natural resource sector is to collaborate with educational institutions in order to provide a clear and practical understanding of job requirements and expectations before women enter the sector. Half of employers also believe that the best practice to retain these women in the workforce is to provide extensive job-specific mentoring to address ongoing challenges. Four in ten employers think that hiring policies should be formally mandated for increasing women's representation and that firms should provide more family assistance programs. Other initiatives mentioned include improved sensitivity training for the male workforce.

Figure 9: Employer-recommended accommodations for women, interview findings (%)
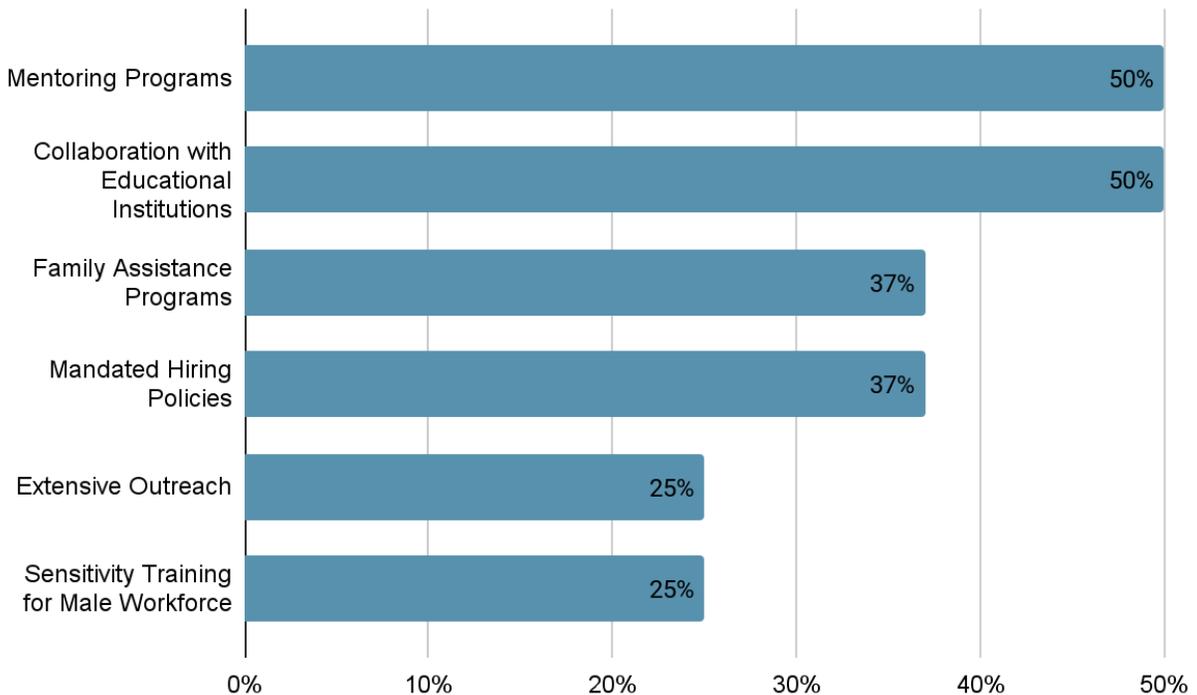

4.2 Recent Immigrants in the Natural Resource Sector

Natural resource employers consistently describe barriers for new immigrants to be particularly pervasive and representative. Just under 40% of employers believe that the biggest barrier to new immigrants in the sector is the intensive nature of the work, noting work that commonly exceeds 40-hour weeks and fails to provide the flexibility that most immigrants need. While all employers in the province are legally bound to be equal opportunity employers, 25% of respondents believe that there is an unconscious bias in the sector that limits opportunity for immigrants. A quarter of interviewed employers also described language barriers, ineffective communication on job expectations and requirements, and not recognizing foreign credentials as significant barriers. Interestingly, another 13% added that agreements with the provincial government to hire locals limit their efforts to hire a more diverse pool of workers. Other impediments include a lack of immigration to rural areas, lack of cultural awareness in the workforce, a lack of family assistance programs, and a lack of outreach from employers.

Figure 10: Employer-described barriers to employment for recent immigrants, interview data (%)
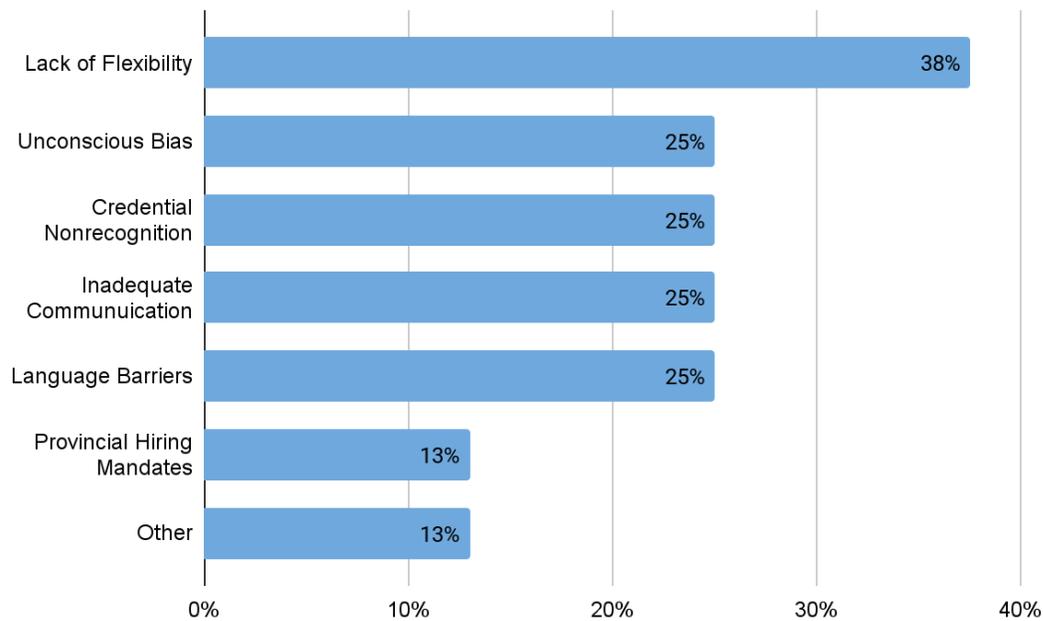
Most employers (75%) responded that the best practice for retaining recent immigrants is to provide extensive mentoring and training programs. More specifically, 60% of employers think that internal networks should be established within companies to connect current immigrants in the workforce to those who are interested in entering the sector. The majority of employers (60%) also say that the process of validating an immigrant's credentials such as diplomas, certifications, and degrees should be significantly streamlined. Additional workplace practices to accommodate recent immigrants include cultural sensitivity training for the existing workforce (50%), collaboration with educational institutions (50%), and mandated immigrant hiring policies (40%). Other accommodations include subsidized education for newcomers, investment in outreach activities, and coordination with newcomer settlement service providers.
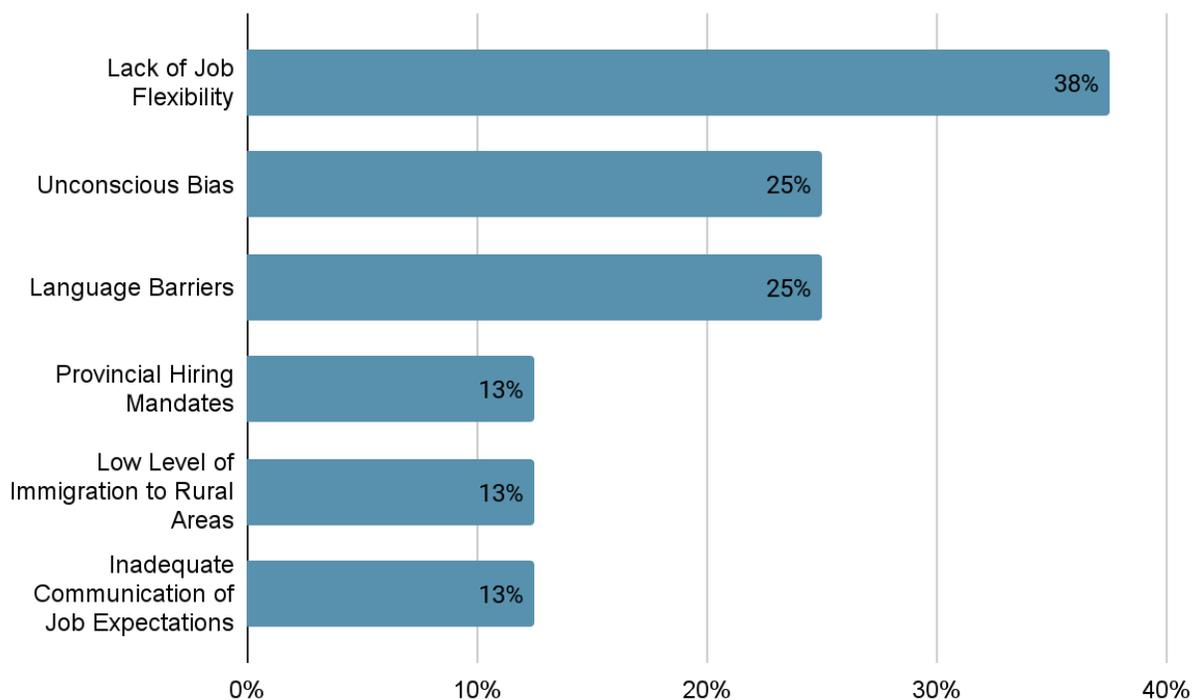
Figure 11: Employer-recommended accommodations for recent immigrants, interview data (%)
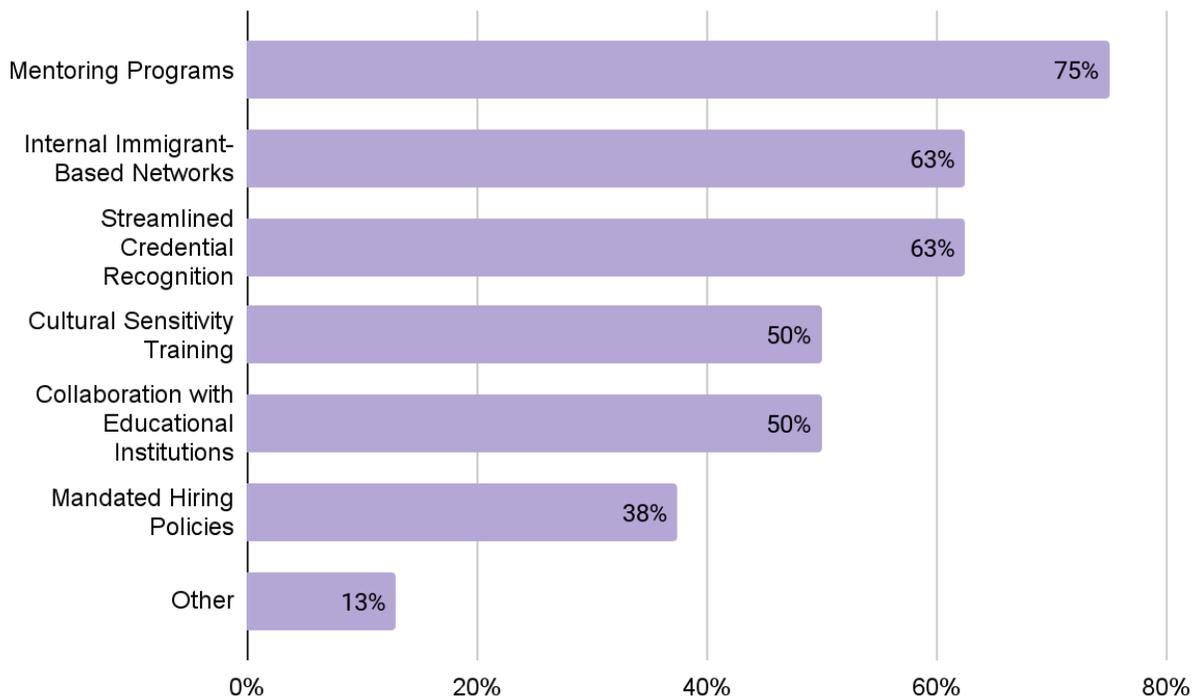
4.3 Visible minorities in the natural resources sector

Like other underrepresented groups described in this report, the lack of flexibility in job arrangements appears to be a significant limiting factor to visible minorities in the natural resource sector; 37.5% of employers believe that the lack of flexibility is the largest barrier to their successful participation. Twenty-five percent of employers interviewed said that unconscious biases and language barriers also negatively impacted visible minorities, while 13% suggested that low levels of newcomer migration to rural areas and provincial hiring contracts mandating local hires, limit visible minorities' integration into the workforce. Visible minorities also experience acute challenges once they find employment; one such workplace challenge was described as inadequate communication with employees on the nature and intensity of job requirements, leading many visible minorities to exit the sector.

Figure 12: Employer-described barriers to employment for visible minorities, interview data (%)

As recommended by employers (Figure 13), the most effective accommodation to improve the participation of visible minorities would be an extensive mentoring program for current and prospective visible minorities in the sector (62%). Half of employers suggested that there should be mandated hiring policies to compel employers to overcome unconscious bias against visible minorities, and one quarter described cultural sensitivity training and collaboration with educational institutions as important considerations (25%). Similarly to what was suggested concerning policies for improved recent immigrant retention and accommodation, 13% of employers also propose establishing a formal network linking visible minorities inside and outside the natural resources sector. Subsidized education for visible minorities entering the sector is another employer recommendation.

Figure 13: Employer-recommended accommodations for visible minorities, interview data (%)
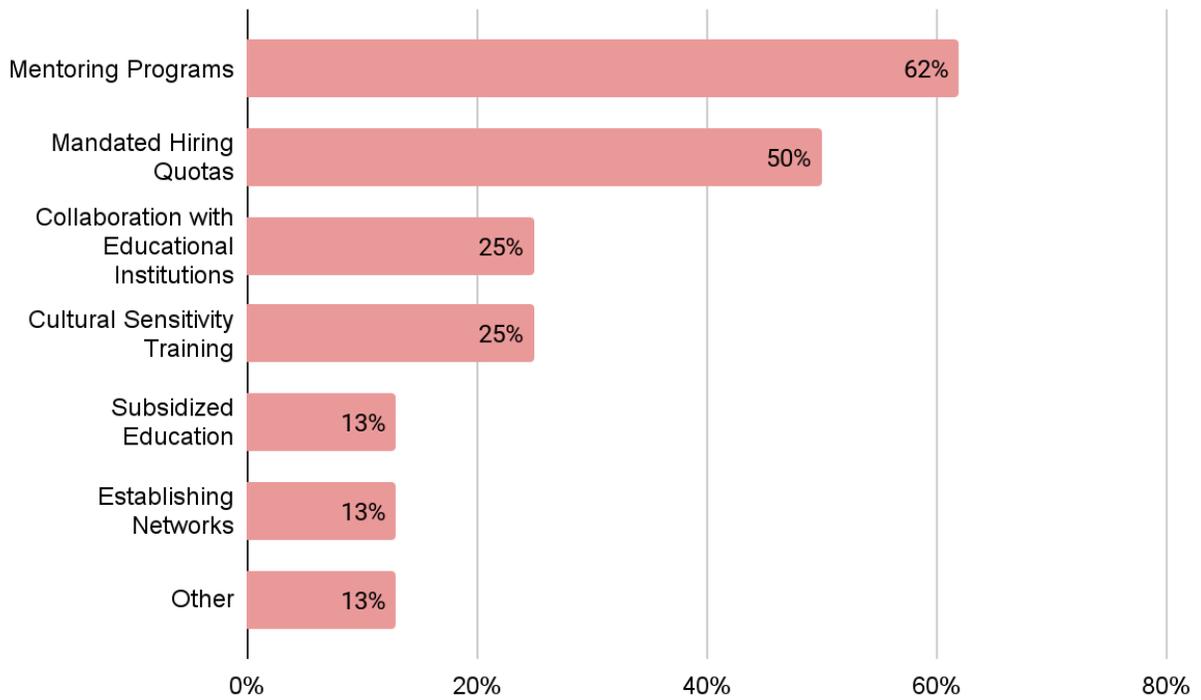
5.0 Conclusion and Policy Implications

1. Develop and implement consistent reporting standards on a per-industry basis. What gets measured gets managed, and some key statistics are not tracked in Newfoundland and Labrador. Data on the forestry workforce, for example, is not differentiated between demographic groups such as immigrants, visible minorities, and women. Policymakers need to ensure that consistent reporting standards are implemented to improve the labour market outcomes of diverse underrepresented groups.

Consistent reporting measures need to be implemented not only in statistical data collection but also in writing and enforcing contracts, agreements, and reporting frameworks. Impact and benefit plans for contract-based projects, for example, must be standardized and consistent.

2. Improve on-the-job training programs and enhance apprenticeships and internship opportunities. Many employers suggested mentorships, apprenticeships, and internships as essential on-the-job training methods that boost the social confidence and technical skills of underrepresented groups in the workplace. Industrial associations and the provincial government should seek to develop wage subsidies, tax incentives, or similar programs to incentivize using such on-the-job training programs for underrepresented groups.

3. Improve communication between underrepresented groups and managers/supervisors in the workplace. Many new hires, whether women, visible minorities, or newcomers, feel alienated and anxious in the workplace. Managers and supervisors should ideally be trained to address specific case-by-case situations involving underrepresented workers, and ultimately develop communication skills to help members of these groups acclimate to new work environments without alienating them from colleagues.

4. Create formal partnerships between community groups and private sector firms to establish case-by-case diversity targets and financial incentives. Partnerships between private sector organizations and local not-for-profit organizations such as the Association for New Canadians (ANC) or Trades NL, are effective when networks and resources are shared on a consistent and formalized basis. However, this type of working relationship is often disjointed, informal, and inconsistent.

5. Incorporate work-life balance considerations into cross-cultural training programs and other EDI learning modules and frameworks. Women's domestic commitments are often cited when discussing their relatively lower labour force participation, but the equally important contribution of men's domestic work is seldom mentioned. Cross-cultural training programs and similar workplace learning programs need to incorporate these extended considerations of household politics and familial obligations to truly promote improved women's labour force participation.

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