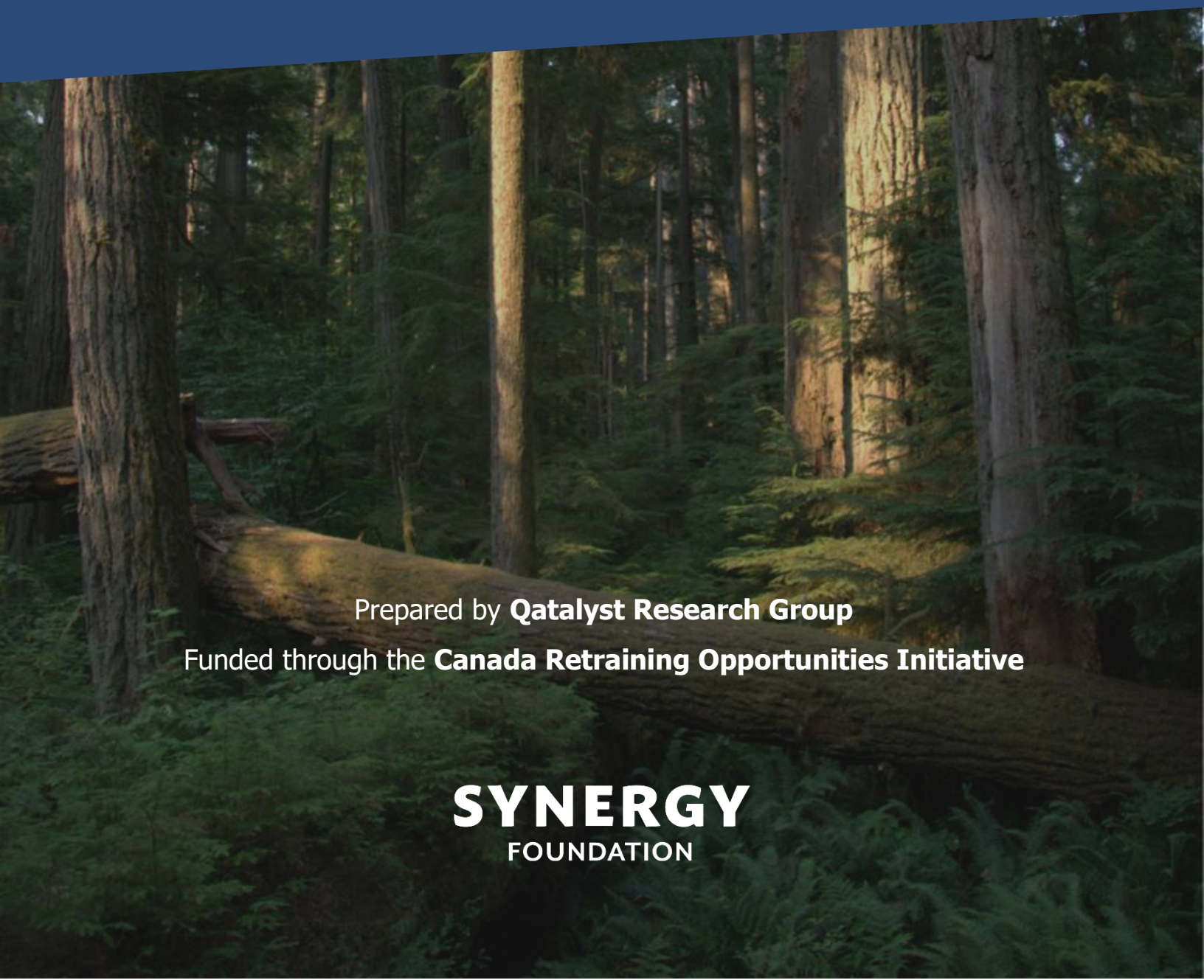
Port Alberni Circular Economy Labour Market Study

Building Workforce Pathways for a Resilient, Regenerative Local Economy

December 2025



Prepared by **Qatalyst Research Group**

Funded through the **Canada Retraining Opportunities Initiative**

SYNERGY
FOUNDATION

Executive Summary

Port Alberni is entering a period of profound economic transition. The recent closure of its largest forestry mills—longstanding anchors of employment and community identity—has accelerated the need for diversification and the development of a more resilient, future-oriented workforce. At the same time, the region's environmental assets, technical capacity, Indigenous leadership, and emerging circular economy initiatives position the community for new opportunities in green construction, marine restoration, regenerative practices, sustainable manufacturing, and resource recovery.

With support from the Canada Retraining Opportunities Initiative (CROI), the Synergy Foundation undertook this Labour Market Study to better understand Port Alberni's workforce landscape, identify key opportunities in circular economy–related sectors, and determine the training and employment pathways needed to support workers—especially those navigating displacement from legacy industries.

The study integrates quantitative labour market analysis with extensive engagement across employers, Indigenous partners, training providers, industry representatives, and community organizations. It provides a detailed picture of local labour force conditions, circular sector opportunities, workforce barriers, and the prioritized training pathways that can serve as catalysts for a stronger, more resilient economy.

Labour Market Conditions

Port Alberni's labour market reflects both longstanding structural challenges and emerging opportunities for economic renewal.

Key findings include:

- Labour force participation is below provincial levels, with higher rates of unemployment and underemployment, especially among displaced forestry workers, youth, and those facing multiple barriers.
- Educational attainment lags the provincial average. Only 11% of residents hold a bachelor's degree or higher (compared to 29% across BC), while 22% have no certificate or diploma.
- Income levels remain below provincial averages, contributing to financial precarity and limiting the ability of workers to access extended training programs.
- Workforce shortages persist in construction, trades, manufacturing, marine operations, and restoration roles—sectors that align strongly with circular economy opportunities.
- Demographic trends show an aging workforce and ongoing challenges attracting and retaining young workers.

These conditions highlight a clear need for accessible, place-based training that supports both immediate employment and long-term economic diversification.

Circular Economy Opportunities

The study explored circular economy opportunities across five sectors central to Port Alberni's future: the blue economy, green building and manufacturing, regenerative agriculture, energy efficiency, and eco-tourism. Across these sectors, circular practices hold strong potential to:

- Reduce waste and landfill volumes by keeping materials in productive use for longer.
- Repurpose and re-manufacture materials and products, creating new economic value through local processing, secondary manufacturing, and value-added production (e.g., converting salvaged or under-utilized timber into higher-value products such as Timber Tiles or engineered wood components).
- Enhance environmental restoration, including land, forest, and marine ecosystem regeneration.
- Create local, high-quality jobs across the value chain, from materials recovery and processing to manufacturing, installation, and maintenance.
- Strengthen economic resilience by diversifying the local economy, reducing reliance on primary extraction, and anchoring production and value creation within the community.

Examples of promising opportunities include:

- Marine biomass and bioplastics production, building on the region's seaweed cultivation capacity.
- Integrated Multi-Trophic Aquaculture and fish waste recovery, leveraging existing seafood processing infrastructure.
- Anaerobic digestion systems and advanced water management to strengthen local agriculture.
- Industry symbiosis, design for disassembly, and material recovery in green construction and manufacturing.
- Unified eco-tourism offerings, repair-based tourism, and regenerative visitor experiences.
- Distributed renewables, especially solar, supported by strong seasonal solar yields.

These opportunities provide both environmental and economic benefits and offer strong alignment with Port Alberni's natural assets and industrial strengths.

Engagement Findings: Workforce Needs, Barriers, and Training Preferences

Engagement activities—including 21 key informant interviews, employer input, and committee consultation—revealed themes that are consistent across sectors:

Workforce Needs and Skill Gaps

Respondents emphasized needs in:

- waste reduction, recycling, and material recovery

- trades and technical skills
- construction and deconstruction
- marine operations and vessel handling
- habitat restoration and environmental remediation
- digital literacy and manufacturing technologies
- first aid, safety, and basic education (math, literacy, workplace readiness)

Overall, circular economy practice is still nascent, with an average self-rating of 2.3 out of 5, indicating early-stage adoption and significant room for development.

Workforce Barriers

Employers and partners identified:

- funding constraints and limited training infrastructure
- shortages in skilled labour
- insufficient public awareness of circular opportunities
- unclear regulatory pathways, especially for recycling and repurposing activities
- limited transportation, childcare, and wrap-around supports
- low levels of basic workplace literacy among some jobseekers

These barriers reinforce the need for local, practical, supported training programs that integrate hands-on learning.

Training Delivery Preferences

Stakeholders consistently prioritized:

- In-person, on-site, hands-on training
- Paid practicums or co-op placements
- Short (2–4 week) modular courses
- Inclusion of Indigenous knowledge and land-based learning
- Supportive measures such as equipment, transportation, and stipends
- Micro-credentials to recognize skills in targeted, industry-aligned areas

These preferences shaped the design of the final training pathways.

Training Priorities and Final Training Package

Using findings from the labour market analysis and engagement process, an initial set of training concepts was developed. These were then reviewed and ranked by the Workforce Development Committee, resulting in the following preferred pathways:

Committee-Ranked Priorities

1. Maritime Industry Training (Deck Crew & Marine Mechanics)
2. Green Building – Construction Focus (hands-on deconstruction, material recovery, sustainable construction)
3. Environmental Restoration & Remediation
4. Green Building – Manufacturing Focus (green building, manufacturing, IT, direct employment pathway)
5. Urban Forestry & Arborist Certification

Based on committee input, feasibility, and available funding, Synergy finalized a training package that includes:

1. Maritime Industry Training with Integrated Environmental Restoration & Remediation

- Small vessel operations, marine mechanics, and marine safety
- Shoreline cleanup, derelict vessel removal, and habitat restoration
- Indigenous knowledge integration and land- and water-based training
- Strong employment pathways in the blue economy and restoration sectors

2. Integrated Green Building Training Program

Core Program – Green Construction Skills

- Foundational trades and construction competencies
- Low-waste building methods and energy-efficient practices

Specialization 1 – Deconstruction & Salvage

- Selective dismantling, material recovery, and waste diversion

Specialization 2 – Manufacturing & IT

- Manufacturing processes, digital literacy, and material handling
- Direct job connections to IGV Housing and other manufacturers

These programs reflect the highest-value opportunities for Port Alberni's emerging circular workforce and the strongest alignment with employer needs.

Implications and Pathways for a Future Workforce Development Plan

This Labour Market Study provides the foundation for a full Workforce Development Plan for Port Alberni. The findings highlight next steps for building a coordinated, future-ready workforce system:

Strategic Imperatives

- Create a long-term circular workforce strategy jointly led by employers, Indigenous partners, North Island College (NIC), and community organizations.
- Expand training infrastructure to support hands-on learning and short-term programs.
- Strengthen wrap-around supports such as transportation, childcare, and paid placements.
- Align policy and regulatory frameworks to support recycling, restoration, and material recovery industries.
- Establish ongoing employer engagement mechanisms to inform training design and workforce supports.
- Build pathways from introductory training into apprenticeships, certifications, and career progression in the circular economy.

An Integrated Workforce Pipeline

A full Workforce Development Plan would build on this study by:

- mapping occupation-specific training ladders
- establishing cross-sector career pathways
- developing shared facilities for training and innovation
- transitioning pilot programs into sustained training streams
- aligning economic development efforts with workforce and training strategies

This report provides the evidence base, sector insights, and training priorities needed to begin work.

Conclusion

Port Alberni is at a pivotal moment. While economic disruption has created challenges, it has also unlocked an opportunity to build a more resilient, sustainable, and inclusive local economy. The insights presented in this report—grounded in labour market data, community experience, and employer needs—provide a clear direction for the development of a circular economy workforce that can drive the region's next chapter of economic renewal. The training priorities identified, and the programs now moving forward, represent the first step toward a coordinated, long-term strategy that supports workers, strengthens industry, and builds a greener, prosperous future for Port Alberni.

Table of Contents

1. INTRODUCTION

Port Alberni is undergoing a period of significant economic transition. The closure of the region's largest forestry mills—long-standing anchors of employment and economic activity—has had deep and far-reaching impacts on workers, families, and the broader community. At the same time, this disruption has accelerated the urgency to diversify the local economy and identify new pathways for long-term resilience and growth.

In this context, Synergy Foundation, with support from the Canada Retraining Opportunities Initiative (CROI), undertook a comprehensive Labour Market Study to assess Port Alberni's evolving workforce landscape and explore emerging opportunities across circular economy–related sectors. With strong natural resource assets, a skilled trades workforce, deep marine expertise, and a culture of innovation and stewardship, Port Alberni holds significant potential to transition toward a more sustainable, circular, and diversified economy. Unlocking this potential requires a clear understanding of current labour force conditions, employer needs, skills gaps, and the training and employment barriers that residents face.

This study provides that foundation. It delivers an evidence-based analysis of demographic and labour market trends, sector opportunities, skills requirements, and the conditions necessary to support a more inclusive and future-focused workforce. The findings draw on a combination of quantitative labour market data, extensive key informant interviews, employer feedback, and insights from Indigenous partners, training providers, community organizations, and industry stakeholders.

The project was delivered in three phases:

1. **Project Initiation & Research Design** – Establishing the analytical framework, identifying priority circular sectors, compiling background research, and developing engagement tools.
2. **Key Contributor Engagement & Demand Analysis** – Conducting interviews, a supplementary employer survey, focus groups, and sector research to identify high-potential occupational pathways and local training needs.
3. **Synthesis & Reporting** – Consolidating findings, validating themes with partners, and producing a comprehensive portrait of labour market conditions and circular opportunities in Port Alberni.

This report presents the results of that work. It is intended to support local employers, Indigenous and community partners, training institutions, and decision-makers by providing a clear and independent assessment of Port Alberni's labour market realities, opportunities, and challenges. While the insights in this study have directly informed the identification and prioritization of training pathways, the primary purpose of this report is to serve as a stand-alone labour market analysis that lays essential groundwork for future workforce and economic development planning.

1.1. Circular Economy

The Circular Economy (CE) is an economic model designed to keep materials, products, and natural resources in use for as long as possible while minimizing waste, emissions, and environmental harm. Rather than following the traditional linear pattern of *"take–make–dispose,"* a circular economy emphasizes designing out waste, extending product and material lifecycles, and regenerating natural systems. Its core strategies include:

- Extending product life through reuse, repair, refurbishment, and remanufacturing.
- Designing for longevity and disassembly so that products and structures can be easily repaired, upgraded, or broken down into reusable components.
- Closing material loops through high-value recycling, resource recovery, and reduced dependence on virgin materials.
- Driving innovation across product, process, and material cycles to increase efficiency, lower environmental impact, and support sustainable resource management.

While circular economy concepts are often discussed at national or global levels, their application at the local and regional level is equally important—especially in communities undergoing economic restructuring. For Port Alberni, circular practices offer practical pathways to diversify local industries, create new forms of employment, reduce waste, and strengthen long-term economic resilience.

1.1.1. Port Alberni's Circular Opportunity

Port Alberni is well positioned to adopt and expand circular economy practices that reflect its natural strengths, cultural assets, and long-standing industrial expertise. The community's history in forestry, marine industries, agriculture, and the trades has created a deep reservoir of technical skills and local knowledge that can be leveraged in new and emerging circular sectors.

The recent closure of the region's largest forestry mills has accelerated the need for economic diversification. While the impacts have been deeply felt—especially among displaced workers and families—the transition has also opened space for new forms of innovation, entrepreneurship, and sustainable development. Many of the community's existing strengths align naturally with circular principles, providing a strong platform for growth.

Circular activity is already emerging across several sectors, including:

- Salvage, deconstruction, and materials reuse in the construction and renovation industries.
- Regenerative agriculture, composting, and soil-building practices.
- Seaweed cultivation, marine restoration, and other blue economy initiatives.
- Energy efficiency retrofits, home performance upgrades, and renewable energy installations.

- Eco-tourism and stewardship-based visitor experiences rooted in environmental protection and cultural heritage.

These examples demonstrate that the circular economy is not a single industry, but a set of interconnected practices that can strengthen multiple sectors simultaneously. For Port Alberni, these opportunities represent pathways toward a greener, more resilient, and more diversified local economy.

1.1.2. Why Circular Economy Matters for for Port Alberni's Workforce

As circular practices expand, so do the skills and occupations required to support them. Growth in deconstruction, regenerative agriculture, resource recovery, aquaculture, energy management, and nature-based tourism will increasingly rely on workers who are adaptable, multi-skilled, and comfortable operating in emerging or rapidly evolving sectors.

For Port Alberni, the circular economy offers:

- Pathways to new employment for workers affected by mill closures.
- Opportunities for mid-career transition, especially for residents with experience in trades, natural resource industries, and marine sectors.
- Expanded roles for youth, Indigenous community members, and others seeking meaningful, future-oriented work.
- Local entrepreneurship and small business opportunities, particularly in materials recovery, food systems, green construction, and eco-tourism.

Understanding how these opportunities align with local skills, employer needs, and workforce barriers is therefore essential. The circular economy framework provides the lens through which this Labour Market Study examined sector trends, local readiness, and the types of occupations likely to emerge or expand in Port Alberni over the coming years.

1.2. Purpose of the Project

This Labour Market Study was undertaken to provide a clear, evidence-based understanding of Port Alberni's workforce at a time of significant economic transition. The closure of major forestry mills, ongoing demographic shifts, and the emergence of new circular economy opportunities created the need for a comprehensive, locally grounded analysis of the community's current labour force conditions, employer needs, and future workforce potential.

The purpose of this study was to generate a robust foundation of data and community insight that can guide informed decision-making by employers, training institutions, Indigenous partners, community organizations, and local leadership. Specifically, the study aimed to:

- Profile Port Alberni's labour force, including demographic trends, labour force participation, educational attainment, income patterns, and employment characteristics.

- Identify emerging sector opportunities—particularly those aligned with circular economy principles—in areas such as green construction, environmental restoration, sustainable manufacturing, regenerative agriculture, marine and blue economy innovation, energy management, and eco-tourism.
- Assess employer needs and workforce demand, including both current skills shortages and the new competencies required as industries adopt more sustainable and circular practices.
- Understand worker experiences and workforce readiness, including the perspectives of displaced forestry workers, early-career job seekers, Indigenous community members, women in trades, and others navigating employment transitions.
- Diagnose systemic barriers limiting access to training and employment—such as transportation, childcare, financial constraints, credential requirements, and the limited availability of local training options.
- Map existing training assets, identify gaps, and explore opportunities for short-format, applied, and community-based training that align with local labour market needs.

Together, these components provide a comprehensive portrait of Port Alberni's labour market—highlighting key challenges, untapped strengths, and the opportunities emerging as the community shifts toward more sustainable and diversified economic pathways. While this analysis directly informed the identification of priority training pathways, its primary purpose is to serve as a stand-alone labour market study that supports community partners, employers, and decision-makers in navigating Port Alberni's evolving economic landscape with clarity and confidence.

1.3. Scope of the Study

The scope of this Labour Market Study was to develop a comprehensive and evidence-based understanding of Port Alberni's current workforce landscape and the emerging opportunities associated with circular economy–related sectors. The study examined the structure and characteristics of the local labour force, sectoral trends, employer needs, workforce readiness, and the availability and accessibility of training pathways. It also explored the systemic and practical barriers that shape residents' ability to secure employment or participate in skills development.

The study focused on five core areas:

- **Labour Market Profiling**: Developing a detailed portrait of Port Alberni's workforce through analysis of demographics, labour force participation, employment and unemployment patterns, income levels, and educational attainment.
- **Identification of Circular Economy Opportunities**: Assessing the potential for circular practices within key local sectors—including blue economy and marine activities, green building and manufacturing, regenerative agriculture, materials recovery, energy management, and eco-tourism.

- **Employer and Industry Engagement**: Engaging employers, industry partners, and sector experts to understand current and emerging skills needs, hiring challenges, occupational pathways, and the readiness of local industries to transition toward more circular practices.
- **Workforce Experience and Barrier Analysis**: Identifying the experiences, needs, and challenges of workers—including displaced forestry workers, early-career job seekers, Indigenous community members, women in trades, and others navigating employment transitions.
- **Training Infrastructure and Capacity Assessment**: Reviewing existing post-secondary programs, community-based training initiatives, and modular or short-format offerings to identify strengths, gaps, accessibility issues, and opportunities for future program development.

While the findings will inevitably support future strategic and workforce planning efforts, the primary intent of this report is to serve as a rigorous, stand-alone labour market assessment. It provides a clear and objective foundation for understanding Port Alberni's current workforce realities and the opportunities that circular economy development presents for the region's economic renewal.

1.4. Methodology

The study used a mixed-methods research approach that integrated quantitative labour market analysis with qualitative insights from employers, community partners, and sector experts. This ensured a balanced understanding of both structural labour market trends and lived local experience.

1.4.1. Research Design

The research framework was co-developed with Synergy Foundation and local partners to ensure alignment with Port Alberni's economic context and the project's focus on circular economy–related opportunities. The design emphasized practical relevance, local specificity, and the ability to draw clear connections between labour market realities, emerging circular sectors, and actionable training pathways.

1.4.2. Labour Market and Secondary Data Analysis

A comprehensive review of secondary data was undertaken to establish a detailed evidence base on the region's labour force. Sources included:

- Statistics Canada
- WorkBC labour market outlooks and occupational profiles
- Regional economic development data

- Industry and sector-specific reports
- Provincial and national circular economy research

This analysis examined demographic trends, labour force participation, employment and unemployment patterns, sector composition, occupational demand, income levels, educational attainment, and projected growth in circular-related sectors.

1.4.3. Key Contributor Engagement

To supplement quantitative analysis with local insight, the study engaged a wide range of contributors, including:

- Local employers and business owners
- First Nations and Indigenous-led organizations
- Post-secondary institutions and training providers
- Workforce development and employment service organizations
- Sector specialists and industry associations
- Municipal and regional economic development and sustainability representatives

Engagement activities included semi-structured interviews, a targeted employer survey, and focus group discussions. Collectively, these methods provided rich qualitative insight into hiring needs, skill gaps, training preferences, workforce barriers, and the readiness of local industries to transition toward circular practices.

1.4.4. Circular Sector and Occupational Pathway Analysis

Building on both labour market data and engagement findings, detailed analyses were conducted across priority circular economy sectors. For each sector, the study examined:

- Current trends and future growth potential
- Skills and competencies required for emerging roles
- Transferable skills from legacy industries such as forestry
- Barriers and enabling conditions for workforce participation
- Short-, medium-, and long-term occupational pathways

This analysis helped identify where Port Alberni has the strongest opportunities for circular innovation and where targeted training could have the greatest economic and employment impact.

1.4.5. Synthesis and Validation

Insights from all research activities were synthesized to identify cross-cutting themes, workforce challenges, and the most promising circular economy opportunities. Preliminary findings were validated through follow-up discussions with key partners to ensure accuracy, contextual alignment, and resonance with community and employer experience. This iterative process helped refine the final recommendations and the prioritized training pathways presented later in the report.

2. LABOUR MARKET AND SECONDARY DATA ANALYSIS

Port Alberni's labour market conditions provide essential insight into the community's capacity to navigate economic transition and support emerging circular economy activities. A detailed understanding of demographic trends, educational attainment, employment patterns, and sectoral shifts helps clarify where local strengths exist, where vulnerabilities are emerging, and where the greatest opportunities lie for future economic and workforce development.

The region's labour market reflects a blend of long-standing resource-based industries—such as forestry, trades, marine activities, transportation, and manufacturing—and growing service-oriented sectors, including health care, social services, retail, and accommodation. These traditional and emerging sectors shape the skills, experience, and pathways available to local workers, while also influencing the types of occupations likely to evolve or expand as circular practices gain traction.

Labour market data is particularly important in a circular economy context. Circular models rely on a workforce that supports:

- Resource recovery and materials management, including sorting, processing, and remanufacturing.
- Repair, maintenance, and technical trades, which extend the life of products, infrastructure, and equipment.
- Value-added manufacturing, especially innovations that repurpose or upcycle local materials.
- Sustainable food systems, regenerative agriculture, and waste-to-resource initiatives.
- Energy efficiency and building performance, including retrofits and high-efficiency construction.
- Service-based and knowledge-based roles, such as design, logistics, environmental monitoring, and stewardship.

Understanding Port Alberni's existing labour force, skills profile, and training readiness therefore provides the foundation for identifying where circular sectors can realistically grow and where targeted support or capacity-building may be required. The following subsections summarize the key demographic, employment, and education trends shaping the community's workforce and its readiness for circular economy opportunity.

2.1. Demographic and Workforce Readiness

Understanding Port Alberni's demographic profile is essential for assessing the community's workforce readiness and its ability to support emerging opportunities in circular economy–related sectors. Key demographic characteristics—including population growth, age structure, Indigenous representation, immigration patterns, and mobility—shape the availability of workers, the depth of local skills, and the strategies needed to attract or retain talent.

2.1.1. Population Growth and Community Size

Port Alberni's population grew modestly between 2016 and 2021, increasing by 5% from 24,669 to 25,786 residents. This growth rate was slower than the provincial average (8%), reflecting broader trends observed across smaller, resource-dependent communities. While the population is stable and gradually increasing, growth remains modest, reinforcing the importance of retaining younger residents and attracting new workers to sustain the labour force over time.

Table 1: Population of Port Alberni and British Columbia, 2016 and 2021

	Port Alberni, BC	British Columbia
Population, 2021	25,786	5,000,879
Population, 2016	24,669	4,648,055
Population percentage change, 2016 to 2021	5%	8%

2.1.2. Age Structure and Implications for Labour Supply

Port Alberni has an older age profile compared to British Columbia overall. In 2021, 27% of residents were aged 65 or older, significantly higher than the provincial share of 20%. The community's median age (50) also exceeded the provincial median (43), indicating a maturing population with a high proportion of older adults.

This demographic pattern has several workforce implications:

- Increasing retirement-driven replacement needs, particularly in trades, health care, manufacturing, and public service roles.
- A pressing need to expand the younger labour force through local retention, regional attraction, or new training pathways.
- Growing demand for health and social service workers, driven by an aging population.

Table 2: Distribution of Age Groups, 2021

Age Group	Port Alberni, BC		British Columbia	
	#	%	#	%
Total	25,785	100%	5,000,880	100
0 to 14 years	3,595	14%	716,900	14%
15 to 19 years	1,245	5%	253,690	5%
20 to 24 years	1,045	4%	294,650	6%
25 to 29 years	1,245	5%	337,090	7%

30 to 34 years	1,415	6%	358,585	7%
35 to 39 years	1,445	6%	353,350	7%
40 to 44 years	1,400	5%	319,740	6%
45 to 49 years	1,425	6%	310,035	6%
50 to 54 years	1,605	6%	329,005	7%
55 to 59 years	2,070	8%	356,345	7%
60 to 64 years	2,305	9%	355,130	7%
65 years and over	7,000	27%	1,016,365	20%
Average age of the population	47		43	
Median age of the population	50		43	

Workforce Implication: *An aging population underscores the urgency of developing accessible training, succession strategies, and pathways for younger workers to enter occupations experiencing high turnover or retirement pressures.*

2.1.3. Indigenous Population and Opportunities for Local Leadership

Indigenous people make up 17% of Port Alberni's population, nearly three times the provincial share (6%). The majority identify as First Nations, with a smaller proportion identifying as Métis. This represents a significant cultural and economic strength for the region.

Table 3: Indigenous Identity, 2021

	Port Alberni, BC		British Columbia	
	#	%	#	%
Total	**25,375**	**100%**	**4,915,945**	**100%**
Indigenous identity	4,260	17%	290,210	6%
Single Indigenous responses	4,175	17%	279,670	6%
First Nations (North American Indian)	2,980	12%	180,085	4%
Métis	1,180	5%	97,860	2%
Inuk (Inuit)	15	<1%	1,720	<1%
Multiple Indigenous responses	50	<1%	5,980	<1%
Indigenous responses not included elsewhere	30	<1%	4,560	<1%

Non-Indigenous identity	21,120	83%	4,625,735	94%

Workforce Implication: *Indigenous youth and adults represent a crucial talent pipeline for both established industries and emerging circular sectors, especially those connected to land, water, and resource stewardship.*

2.1.4. Immigration and Newcomer Attraction

Only 9% of Port Alberni residents are immigrants, far below the provincial average of 29%. In addition, most immigrants arrived before 1980, indicating limited recent newcomer settlement.

Table 4: Immigrant status and period of immigration

Characteristic	Port Alberni, BC		British Columbia	
	#	%	#	%
Total	25,380	100%	4,915,940	100%
Non-immigrants	22,905	90%	3,319,230	68%
Immigrants	2,365	9%	1,425,710	29%
Before 1980	1,490	6%	280,160	6%
1980 to 1990	235	1%	164,445	3%
1991 to 2000	145	1%	299,115	6%
2001 to 2010	200	1%	316,915	6%
2011 to 2021	300	1%	365,075	7%
2011 to 2015	125	1%	167,650	3%
2016 to 2021	170	1%	197,425	4%
Non-permanent residents	105	<1%	171,000	4%

Lower immigration levels may affect the region's ability to fill labour shortages—particularly in sectors experiencing high demand across B.C., such as construction, health care, and food systems.

Workforce Implication: *Strategies focused on newcomer attraction and retention may be required to help mitigate long-term labour shortages and support sector growth.*

2.1.5. Mobility and Population Stability

Port Alberni exhibits a relatively stable population, with 87% of residents having lived in the same home one year prior to the census, comparable to the provincial average of 86%. This stability suggests strong community attachment and a relatively settled local workforce.

Table 5: Mobility status 1 year ago

Characteristic	Port Alberni, BC		British Columbia	
	#	%	#	%
Total	25,190	100	4,875,955	100
Non-movers	21,855	87%	4,169,710	86%
Movers	3,330	13%	706,245	15%
Non-migrants	1,880	8%	395,215	8%
Migrants	1,450	6%	311,030	6%
Internal migrants	1,385	6%	251,245	5%
Intraprovincial migrants	1,160	5%	187,990	4%
Interprovincial migrants	225	1%	63,250	1%
External migrants	65	<1%	59,785	1%

However, five-year mobility patterns reveal important shifts:

- 43% of residents moved within the previous five years, slightly below the provincial pattern (44%).
- Most movers relocated from within British Columbia rather than outside the province or country.

Table 6: Mobility status 5 years ago

Characteristic	Port Alberni, BC		British Columbia	
			#	%
Total	24,405	100	4,699,740	100
Non-movers	13,955	57%	2639500	56%

Movers	10,460	43%	2060245	44%
Non-migrants	3,785	16%	757040	16%
Migrants	6,675	27%	1303200	28%
Internal migrants	6,430	26%	1016025	22%
Intraprovincial migrants	5,590	23%	799,455	17%
Interprovincial migrants	840	3%	216,565	5%
External migrants	245	1%	287,175	6%

This indicates a moderate level of internal mobility and a steady inflow of residents from other parts of the province—many of whom may bring relevant skills or be seeking new economic opportunities.

Workforce Implication: *Moderate intraprovincial migration offers potential for targeted attraction strategies, especially for workers with transferable skills from other regions.*

2.1.6. Overall Interpretation

Port Alberni's demographic context presents both strengths and challenges:

- **Strengths:** A strong Indigenous population base, community stability, and deep local knowledge and experience across resource-based and service sectors.
- **Challenges:** An aging workforce, limited newcomer attraction, and slower population growth relative to the province.

For circular economy opportunities to scale, Port Alberni will need to build on community assets while addressing labour supply constraints through youth retention, targeted workforce attraction, Indigenous-led capacity building, and accessible skills development pathways.

2.2 Education and Training Profile

Educational attainment is a key indicator of workforce readiness, adaptability, and access to emerging economic opportunities. In Port Alberni, overall attainment levels are lower than the provincial average, which has implications for both the types of jobs residents can readily access and the design of future training and upskilling efforts.

In 2021, only 11% of adults in Port Alberni held a bachelor's degree or higher, compared with 29% across British Columbia. At the same time, 22% of residents reported having no certificate, diploma, or degree, notably higher than the provincial average of 14%. These patterns suggest a

workforce that relies heavily on trades, applied skills, and hands-on experience—consistent with the region's industrial and resource-oriented economic history.

Table 7: Highest certificate, diploma or degree, 2021

Educational Attainment	Port Alberni, BC		British Columbia	
	#	%	#	%
Total	21,790	100%	4,200,425	100%
No certificate, diploma or degree	4,805	22%	565,665	14%
High (secondary) school diploma or equivalency certificate	6,990	32%	1,238,000	30%
Postsecondary certificate or diploma below bachelor level	7,580	35%	1,197,050	29%
Bachelor's degree or higher	2,420	11%	1,199,710	29%

The community also has a strong representation of residents with postsecondary certificates and diplomas below the bachelor level (35%), reflecting the prominence of trades and technical fields in the local economy. This aligns well with many circular economy roles that require practical, applied skills rather than university degrees.

However, lower levels of formal educational attainment also highlight important challenges:

- Residents may face barriers accessing higher-skilled or emerging circular roles requiring advanced technical knowledge, digital skills, or supervisory capabilities.
- Local employers may experience difficulty finding workers with specialized credentials, regulatory certifications, or advanced training.
- Training pathways need to be accessible, modular, hands-on, and designed for adult learners, especially those returning to education after time in the workforce.

Workforce Implication: *The relatively low rate of degree attainment in Port Alberni underscores the need for short-format, applied, and flexible training programs that build skills quickly and accommodate diverse learners, including displaced workers, mid-career adults, and people with limited prior education.*

2.2.1. Relevance to Circular Economy Growth

Many circular economy job pathways—such as deconstruction, materials recovery, regenerative agriculture, aquaculture, repair and maintenance trades, and energy efficiency work—do not require advanced degrees but do require targeted skills training, safety certifications, and hands-on technical competencies. Port Alberni's education profile suggests the community is well positioned for roles that emphasize:

- Practical technical skills
- Trades and semi-skilled occupations
- On-the-job learning
- Microcredentials and short technology courses
- Applied environmental and land/water stewardship roles

At the same time, emerging circular sectors (e.g., renewable energy systems, environmental monitoring, advanced manufacturing, circular design) may require higher-level technical training, suggesting opportunities to strengthen partnerships with colleges, Indigenous training providers, and regional institutions.

Workforce Implication: *Strengthening local access to postsecondary training—particularly through modular, stackable credentials, microtraining opportunities, and community-delivered programs—will be critical to enabling residents to participate in emerging circular sectors and adapt to evolving industry demands.*

2.3. Industry and Occupational Structure

Port Alberni's occupational and industry profile reflects its history as a resource-based community, its strong trades and service-sector foundation, and its gradual transition toward a more diversified employment landscape. Understanding the distribution of occupations and industries is essential for identifying the community's skill base, workforce strengths, and the sectors most likely to drive future employment.

2.3.1. Occupational Composition

Port Alberni's labour force is heavily concentrated in sales and service occupations (26%) and trades, transport, and equipment operation (22%). These two categories account for nearly half of all local employment and underscore the community's strong orientation toward hands-on, applied, and customer-facing work.

Table 8: Labour Force Distribution by Occupational Group

Occupation Group	Port Alberni, BC		British Columbia	
	#	%	#	%
Total	11,480	100%	2,657,275	100%
Occupation - not applicable	325	3%	54,165	2%
0 Legislative and senior management occupations	95	1%	32,255	1%
1 Business, finance and administration occupations	1,235	11%	446,160	17%
2 Natural and applied sciences and related occupations	440	4%	209,185	8%
3 Health occupations	1,180	10%	199,185	8%
4 Occupations in education, law and social, community and government services	1,400	12%	309,360	12%
5 Occupations in art, culture, recreation and sport	230	2%	110,585	4%
6 Sales and service occupations	2,965	26%	666,705	25%
7 Trades, transport and equipment operators and related occupations	2,515	22%	469,450	18%
8 Natural resources, agriculture and related production occupations	500	4%	72,075	3%
9 Occupations in manufacturing and utilities	595	5%	88,155	3%

Compared to the provincial average, Port Alberni has:

- Higher shares of trades, transport, equipment operation, and natural resources occupations, reflecting its industrial and forestry-related heritage.
- Lower shares of business, finance, administration, and professional/technical occupations, which typically require higher levels of formal education.
- A slightly higher share of health occupations, consistent with an older population and greater local demand for health and social services.

This occupational profile suggests a labour force with significant practical and technical skills—particularly suited to roles involving machinery, construction, maintenance, resource operations, and customer service. These strengths align with many circular economy job pathways, including deconstruction, materials recovery, recycling operations, fabrication, renewable energy installation, aquaculture, and land/water restoration.

Workforce Implication: *Port Alberni's strong base of trades and applied-skill occupations creates an advantageous starting point for scaling circular economy activities that depend on hands-on technical competencies.*

2.3.2. Industry Structure

Employment by industry further reinforces Port Alberni's blend of longstanding resource-linked sectors and growing service-oriented fields. Health care and social assistance is the community's largest industry, employing 18% of the workforce—well above the provincial average of 12%. This reflects both population aging and the concentration of regional health services within the community.

Forestry-linked trades, construction, manufacturing, and resource extraction continue to play important roles in the local economy. At the same time, retail trade, accommodation, food services, and public administration contribute significantly to employment and economic stability.

Table 9: Labour Force Distribution by Industry

Industry Group	Port Alberni, BC		British Columbia	
	#	%	#	%
Total	11,480	100	2,657,275	100
Industry - not applicable	325	3	54,165	2
11 Agriculture, forestry, fishing and hunting	740	6	60,320	2
21 Mining, quarrying, and oil and gas extraction	70	1	24,955	1
22 Utilities	55	1	14,820	1
23 Construction	1,165	10	234,345	9
31-33 Manufacturing	840	7	152,790	6
41 Wholesale trade	110	1	80,165	3
44-45 Retail trade	1,500	13	301,060	11
48-49 Transportation and warehousing	410	4	142,230	5
51 Information and cultural industries	90	1	71,295	3
52 Finance and insurance	220	2	95,560	4

53 Real estate and rental and leasing	120	1	59,155	2
54 Professional, scientific and technical services	395	3	238,650	9
55 Management of companies and enterprises	0	0	5,785	0
56 Administrative and support, waste management and remediation services	445	4	110,215	4
61 Educational services	640	6	192,855	7
62 Health care and social assistance	2,070	18	319,525	12
71 Arts, entertainment and recreation	225	2	60,775	2
72 Accommodation and food services	865	8	182,105	7
81 Other services (except public administration)	490	4	113,780	4
91 Public administration	710	6	142,730	5

Key observations include:

- Health care and social assistance (18%) is a dominant sector, driven by demographic trends and regional service needs.
- Agriculture, forestry, fishing, and hunting (6%) remains important, especially in areas connected to wood products, marine resources, and land stewardship.
- Construction (10%) and manufacturing (7%) constitute substantial employment, offering strong skill alignment with circular opportunities such as green building, fabrication, and materials recovery.
- Retail trade (13%) and accommodation/food services (8%) represent large service-sector employers that support local economic activity.
- Professional, scientific, and technical services (3%) make up a smaller share than the provincial average, suggesting limited availability of specialized knowledge-based roles.

These patterns demonstrate that Port Alberni's workforce is anchored by health care, trades, construction, manufacturing, forestry-related activities, and service sectors—all of which have potential linkages to circular practices.

Workforce Implication: *Sectors with existing employment strength—construction, manufacturing, land-based production sectors (forestry and agriculture), and marine industries—offer the strongest near-term opportunities for circular economy expansion. In the Port Alberni context, forestry and agriculture are linked through shared land-use systems, equipment, and workforce skills, and through circular activities such as forest stewardship, biomass utilization, value-added wood processing, regenerative agriculture, and reuse of organic and wood residuals. These sectors already have established infrastructure, experienced workers, and foundational skills that can be adapted to circular practices.*

2.3.3. Relevance to Circular Economy Transition

Port Alberni's industry and occupational structure provides important insights into its readiness to adopt and scale circular economy activities:

- Trades and equipment operators are well positioned for roles in deconstruction, repair and maintenance, renewable energy installations, and materials recovery.
- Manufacturing and fabrication experience supports value-added circular activities such as remanufacturing, upcycling, and wood fibre innovation.
- Forestry and natural resource knowledge aligns with sustainable forestry practices, biomass utilization, blue economy restoration, and regenerative land stewardship.
- Health and social service roles will grow as the population ages and as circular initiatives intersect with community wellness and environmental health.
- Service-sector employment provides a foundation for circular business models linked to repair services, rental/shared-use businesses, eco-tourism, and local food systems.

Overall, Port Alberni has a workforce with hands-on technical strengths, sector diversity, and lived experience across resource-based industries—all of which are highly relevant to circular economy development.

2.4. Labour Force and Income Trends

Labour force participation, employment patterns, and income levels provide important insight into Port Alberni's overall economic health and its readiness to support new and emerging industry opportunities. The community's labour market profile reflects a mix of structural challenges—characteristic of regions undergoing economic transition—and opportunities to strengthen workforce engagement.

2.4.1. Labour Force Participation and Employment

In 2021, Port Alberni had a labour force participation rate of 53%, ten percentage points below the provincial average (63%). Similarly, the local employment rate (48%) lagged behind the provincial level (58%). The unemployment rate was higher than the B.C. average (9% vs. 8%).

Table 10: Labour force status

	Port Alberni, BC	British Columbia
Total	21,790	4,200,425
Participation rate	53%	63%
Employment rate	48%	58%
Unemployment rate	9%	8%

Lower participation and employment rates are influenced by several factors:

- **Aging population:** A higher proportion of older residents reduces overall labour force participation.
- **Economic disruption:** The decline of the forestry sector and related industries has affected job availability and labour market confidence.
- **Skills mismatch:** Some residents may lack the training, credentials, or experience necessary to transition into emerging occupations.
- **Participation barriers:** Childcare, transportation, health challenges, and limited access to training can reduce labour force attachment.

Workforce Implication: *Raising labour force participation—particularly among working-age adults not currently engaged in employment—will be essential for meeting anticipated labour shortages and supporting economic diversification.*

2.4.2. Income Levels and Sources

Port Alberni residents have lower median incomes than the provincial average. Based on Statistics Canada income data reported for the 2020 tax year, the median total income among local income recipients was $36,800, compared to $40,800 across British Columbia. While 2020 income data reflect the first year of the COVID-19 pandemic, median income levels are derived from annual tax filings and largely reflect pre-pandemic employment patterns, supplemented by temporary income supports. As such, the observed income gap is consistent with longer-standing structural differences rather than a short-term pandemic anomaly.

Income sources also differ meaningfully:

- Employment income accounts for 55% of total income in Port Alberni, well below the provincial share of 66%.

- Government transfers represent 27% of income, notably higher than the provincial level of 17%.
- Investment income is comparable to the provincial average (18% vs. 17%).

Table 11: Income Distribution by Source, 2020

	Port Alberni, BC	British Columbia
Total	21,790	4,200,500
Median total income in 2020 among recipients ($)	$36,800	$40,800
Employment income (%)	55%	66%
Investment income (%)	18%	17%
Government transfers (%)	27%	17%

These patterns reflect:

- Lower labour force attachment, due to displacement and low employment opportunities.
- A higher proportion of older adults receiving CPP, OAS, and related benefits.
- Lower wages in many of the industries that remain strong locally, particularly service-sector occupations.

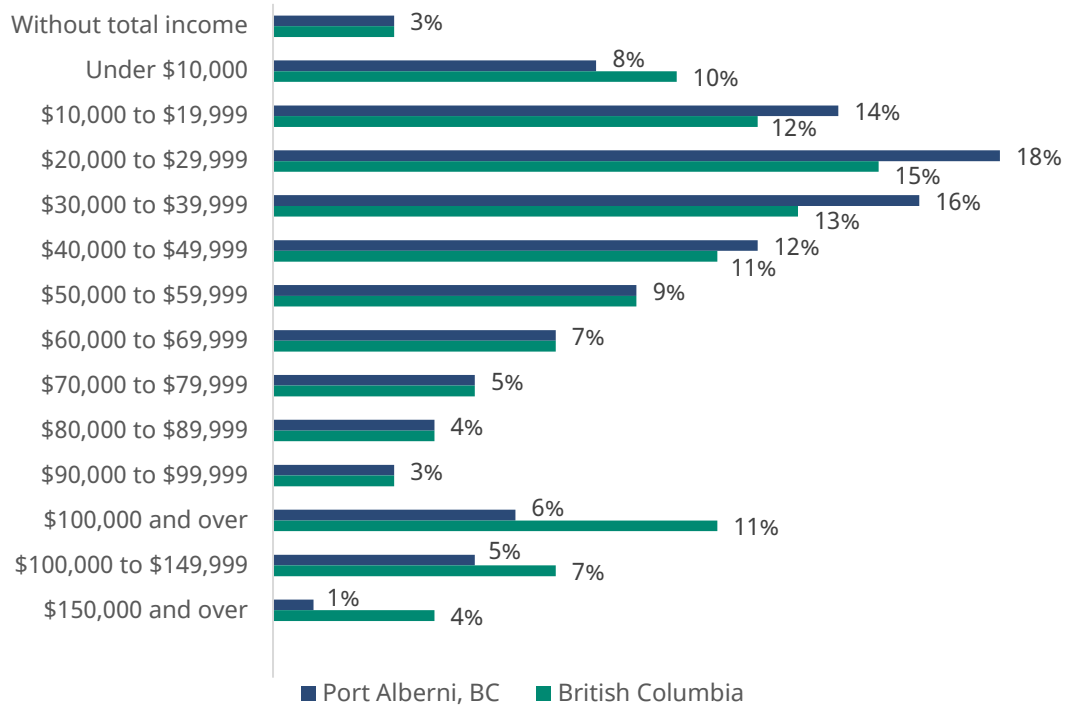
Workforce Implication: *Lower earnings and higher reliance on government transfers point to the importance of expanding access to steady, well-paying jobs, particularly through sectors aligned with circular economy growth.*

2.4.3. Distribution of Income Levels

The distribution of income in Port Alberni is more concentrated in lower and mid-income brackets than in the province overall. A larger share of residents earn less than $40,000 annually, and the proportion of high-income earners is significantly smaller.

- Only 6% of Port Alberni residents earn $100,000 or more, compared with 11% provincially.
- Mid-income earners ($40,000–$79,999) make up a larger share locally than in B.C.
- Lower-income groups represent a disproportionate share of the population compared to provincial benchmarks.

Figure 1: Distribution of Income Groups, 2020



These patterns indicate a labour market dominated by service-sector and trades-based employment, with fewer opportunities in higher-wage professional and technical occupations.

Workforce Implication: *Expanding access to higher-wage pathways—including technical trades, clean energy installation, advanced manufacturing, and supervisory roles—will be important for improving economic stability and supporting household resilience.*

2.4.4. Overall Interpretation

Labour force and income trends suggest that Port Alberni's workforce faces several structural constraints—lower participation, lower median income, higher reliance on government transfers, and fewer high-wage occupations—while also holding significant potential for growth in emerging sectors.

These conditions reinforce the importance of:

- Strengthening workforce engagement through targeted employment supports and training
- Expanding access to higher-paying roles
- Building training pathways that align with local skills and new sector opportunities
- Reducing participation barriers for workers facing economic or logistical challenges

Taken together, these trends underscore both the urgency and the opportunity associated with Port Alberni's ongoing economic transition.

3. WORKFORCE TRANSITION AND DEMAND DYNAMICS

3.1. Provincial Overview

British Columbia's labour market continues to expand and evolve, shaped by demographic shifts, technological change, and the ongoing transition toward cleaner, more sustainable forms of economic activity. In 2024, approximately 2.8 million British Columbians were employed across the province. Over the next decade, total employment is projected to reach 3.3 million jobs, driven by both economic growth and significant replacement needs in an aging labour force.

Between 2024 and 2034, the province is expected to see 1.12 million job openings. Of these:

- 449,000 positions (40%) will come from new job growth
- 671,000 positions (60%) will stem from retirements and natural turnover

This means that retirement-driven replacement needs will be the dominant source of labour demand across all regions, sector types, and occupational groups. For communities like Port Alberni—with a higher-than-average share of older residents—these provincial trends will be felt even more acutely.

3.1.1. Rising Skill Requirements

The provincial labour market is also undergoing a steady shift toward more complex skill demands. By 2034, approximately 76% of job openings are expected to require:

- Post-secondary education (college diploma, trade certificate, or university degree), or
- Significant supervisory or management experience

This reflects broader structural changes in the economy, including:

- Growing technological sophistication in trades, manufacturing, and resource industries
- Expansion of knowledge-based and service-oriented sectors
- Increasing integration of digital tools, automation, and clean technologies
- New regulatory and sustainability requirements across industries

These trends underscore the importance of accessible, modular, and applied training pathways—particularly in regions navigating economic transition.

3.1.2. Sectors Driving Provincial Growth

Across British Columbia, several sectors are projected to generate the strongest employment demand over the next decade. These include:

- Health care and social assistance – driven by population aging and increasing service needs
- Professional, scientific, and technical services – reflecting digitalization, innovation, and the clean economy
- Construction – supported by ongoing housing, infrastructure, and energy-efficiency investments
- Educational services – driven by population growth and workforce upskilling needs

Other sectors linked to the clean and circular economy—including renewable energy, waste management, sustainable forestry, and value-added manufacturing—are also expected to see notable growth as the province advances its climate and sustainability commitments.

3.1.3. Implications for Local Labour Markets

Provincial labour market trends have important implications for Port Alberni:

- Competition for workers will intensify, especially for tradespeople, technical roles, and health and social service professionals.
- Replacement needs will continue to rise, given the community's aging workforce and high retirement exposure.
- Skill requirements will increase, making access to flexible, community-based training increasingly important.
- Growth in clean and circular economy sectors will create opportunities for communities with strengths in trades, natural resources, marine sectors, and applied technical work.

Taken together, these provincial dynamics provide important context for understanding Port Alberni's workforce challenges and opportunities. Local strategies will need to consider both regional labour supply conditions and the broader competitive pressures shaping labour demand across B.C.

3.2. Vancouver Island/Coast Dynamics

The Vancouver Island/Coast region—which includes Port Alberni—has a labour market shaped by its older population structure, service-oriented economy, and slower pace of population growth relative to the Mainland/Southwest. These characteristics influence the region's labour supply, occupational composition, and long-term workforce needs.

Between 2024 and 2034, the region is projected to see 166,700 job openings, representing approximately 15% of all openings in British Columbia. Employment is expected to grow at an

average annual rate of 1.1%, slightly below the provincial average of 1.4%. This slower growth closely mirrors regional demographic trends, especially the high share of older adults and retirees.

Table 12: Employment and Job Openings by Development Region, 2024 - 2034

	Annual Employment		Job Openings 2024-2034		
Region	Employment 2024	Growth Rate (%) 2024-2034	Expansion	Replacement	Total
Vancouver Island/Coast	**445,800**	**1.1**	**49,600**	**117,100**	**166,700**
Mainland/Southwest	1,819,100	1.7	347,200	407,500	754,700
Thompson-Okanagan	305,600	1.2	37,700	84,200	121,900
Kootenay	79,800	0.5	4,300	22,000	26,300
Cariboo	86,500	0.4	2,800	20,600	23,500
North Coast and Nechako	44,200	1.0	4,800	10,900	15,700
Northeast	36,300	0.6	2,400	8,800	11,200
British Columbia	2,817,300	1.4	449,000	671,000	1,120,000

Source: BC Labour Market Outlook, 2024

3.2.1. Replacement Demand Dominates Regional Labour Needs

Unlike high-growth metropolitan areas, labour market expansion on Vancouver Island is driven primarily by retirement-related replacement needs rather than new job growth.

- Approximately 70% of projected job openings between 2024 and 2034 will come from retirements and natural turnover.
- In comparison, 60% of openings province-wide are replacement-driven.

This reflects the region's demographic profile. By 2034, the Vancouver Island/Coast region's elderly dependency ratio—residents aged 65+ relative to the working-age population—will be among the highest in the province, exceeding two seniors for every five working-age adults. This creates sustained demand for both replacement hiring and expanded health and social services.

Workforce Implication: *Communities like Port Alberni will experience persistent pressure to replace retiring workers, particularly in trades, health care, transportation, manufacturing, and public services—sectors already facing shortages.*

3.2.2. Sectoral Drivers of Employment

The sectoral composition of the Vancouver Island/Coast region reflects its demographic realities and geographic strengths, with several industries expected to drive the majority of job openings over the next decade. Health care and social assistance remains the region's primary growth engine, propelled by an aging population and increasing demand for medical and social-support services. Hospitals and ambulatory care services alone are projected to generate nearly 25,000 job openings, supported by strong annual growth rates of 2.3% and 2.7%, respectively. This sustained demand underscores the critical importance of expanding local training pathways, improving workforce attraction, and retaining skilled health professionals across the region.

Education services also represent a significant source of job creation, driven by continued demand for early childhood educators, school-based support roles, and adult-learning and reskilling programs. This reflects both demographic pressures and the broader provincial push for upskilling and workforce renewal.

In contrast, retail trade, while still the region's largest employer, is expected to see minimal net growth. Most job openings in retail will arise from turnover and retirement rather than expansion. Accommodation and food services remain a key employer for younger workers and individuals entering the labour market, though growth in this sector is modest and highly sensitive to housing affordability and ongoing labour shortages—challenges that are especially pronounced in smaller communities.

The construction sector continues to play a major role in regional employment, supported by sustained housing demand, the renewal of public and private infrastructure, and increasing investments in energy-efficient and climate-resilient buildings. However, persistent shortages of skilled tradespeople remain a significant constraint, limiting the sector's capacity to meet ongoing and future labour needs.

Workforce Implication: *Health, education, social services, construction, and tourism-related industries will remain central to Vancouver Island's workforce needs, with most openings emerging from workforce churn rather than new development.*

3.2.3. Relevance for Port Alberni

The Vancouver Island/Coast labour market context has direct implications for Port Alberni's economic trajectory:

- High replacement needs region-wide mean communities will compete for workers with similar skill sets, particularly in trades and health care.
- Aging demographics amplify local pressures on health services, social supports, and succession planning across industries.
- Limited regional population growth underscores the need for worker retention strategies and selective attraction initiatives.

- Strong alignment exists between regional strengths and Port Alberni's emerging circular economy sectors, particularly in construction, natural resources, manufacturing, and community-based services.

Overall, the region's labour market dynamics present both challenges and opportunities for Port Alberni. Understanding these broader trends helps contextualize local labour supply pressures and highlights where the community's circular economy opportunities may align with—or diverge from—regional workforce realities.

3.3. Key Industries – Vancouver Island/Coast

The Vancouver Island/Coast region's labour market is shaped by a mix of public-sector service industries and foundational private-sector employers, with health care emerging as the most significant driver of employment growth over the coming decade. The region's demographic structure, aging workforce, and service-dependent communities all contribute to the distribution of job openings and the types of roles most in demand.

Health care is projected to be the single largest source of new employment. Hospitals are expected to generate approximately 15,800 job openings between 2024 and 2034, supported by a strong annual growth rate of 2.3%. Ambulatory health care services—including clinics, community health programs, diagnostic services, and allied health professions—are projected to add 9,000 jobs, with the region's highest annual growth rate of 2.7%. This rapid expansion reflects not only population aging but also the increasing shift toward community-based care, preventative health, rehabilitation, and the broader adoption of telehealth services across Vancouver Island.

The retail sector remains one of the region's largest employers, accounting for 10,300 projected job openings over the decade. However, growth in retail will be minimal at 0.2% annually, with the vast majority of opportunities arising from turnover and retirements. While retail continues to serve as an important entry-level employment pathway—particularly for youth and individuals re-entering the workforce—it is evolving toward roles requiring stronger digital literacy, inventory analytics, and customer service skills due to the growing integration of e-commerce and point-of-sale technologies.

Education services and food services also rank among the leading contributors to regional employment demand. Elementary and secondary schools are expected to provide around 8,000 job openings, reflecting steady replacement needs and population-driven demand for instructional and support roles. Meanwhile, food services and drinking places will account for 7,600 openings, supporting the hospitality and tourism sectors that underpin many Island communities. Together, these industries form essential components of the public-service and hospitality infrastructure that sustain local economies.

Table 13: Top Five Industries by Total Job Openings, 2024 - 2034 - Vancouver Island/Coast

Industry	Employment 2024	Annual employment growth rate % 2024-2034	Expansion	Replacement	Total
All industries	445,800	1.1	49,600	117,100	166,700
Hospitals	30,800	2.3	8,000	7,800	15,800
Other retail trade (excluding cars, online shopping and personal care)	43,300	0.2	600	9,700	10,300
Ambulatory health care services	15,300	2.7	4,700	4,300	9,000
Elementary and secondary schools	20,600	0.9	2,000	6,000	8,000
Food services and drinking places	26,100	1.1	3,100	4,500	7,600

Source: BC Labour Market Outlook, 2024

Although construction does not appear among the region's top five industries by total job openings, it remains a critical contributor to employment stability. Continued residential development, infrastructure renewal, and the accelerating shift toward energy efficiency and climate-resilient retrofits are expected to sustain strong demand for skilled trades across the region. For Port Alberni specifically, the construction sector—and its associated trades—will be central to emerging opportunities in green building, high-efficiency retrofits, deconstruction, and circular renovation practices. These pathways offer accessible, well-aligned options for workers transitioning from declining or disrupted sectors.

3.4. Regional Opportunities

The transition toward a more circular and sustainable economy is creating a range of new employment pathways across the Vancouver Island/Coast region. For Port Alberni in particular, these opportunities intersect directly with ongoing industrial restructuring, community revitalization efforts, and the need to diversify beyond traditional resource extraction. Many of the region's existing strengths—especially in trades, manufacturing, marine sectors, and natural resource stewardship—provide a strong foundation for circular economy growth. The following emerging opportunity areas illustrate where local workers and industries are well positioned to adapt and expand.

Forestry to Circular Manufacturing. As traditional logging and pulp operations continue to contract, Port Alberni's skilled forestry and industrial workforce is increasingly well suited to circular manufacturing activities. Workers with experience in mechanical maintenance, millwrighting, fabrication, quality control, and process operations can transition into roles such as engineered wood production, remanufacturing, fibre optimization, and biomass energy systems. These activities repurpose wood residuals, extend product lifecycles, and support low-carbon manufacturing—aligning closely with the region's existing technical expertise while enabling value-added innovation.

Construction to Green Building and Deconstruction. The region's strong construction and trades base offers natural alignment with green building, high-efficiency retrofits, and building deconstruction—core circular economy practices that minimize waste and preserve building materials for reuse. Carpenters, electricians, plumbers, heavy equipment operators, and general tradespeople possess many of the foundational competencies needed for energy retrofits, blower door testing, heat pump installation, salvage operations, and materials recovery. These activities support both environmental goals and economic diversification, positioning construction-related occupations as a major driver of circular transition.

Marine Economy to Blue Circular Economy. Port Alberni's coastal geography and long-standing marine industries present opportunities in emerging blue circular sectors. Activities such as aquaculture byproduct recovery, kelp and shellfish resource utilization, habitat restoration, marine debris removal, and eco-tourism integrate traditional marine knowledge with environmental science, conservation technology, and sustainable harvesting practices. These areas offer employment potential for workers with backgrounds in deck operations, marine maintenance, fish processing, small-vessel operation, and coastal stewardship.

Energy Transition and Renewable Systems. Growth in renewable energy—including solar, wind, micro-hydro, geothermal, and biomass systems—is expanding demand for electricians, welders, instrumentation technicians, equipment operators, and general trades. Many of these roles require technical upskilling but are closely aligned with existing industrial skill sets in the region. As communities advance energy-efficiency targets and adopt distributed energy systems, local demand for installation, maintenance, and performance-testing roles is expected to rise.

Together, these opportunity areas reflect a broader shift from resource extraction to resource regeneration. They demonstrate how Port Alberni's existing workforce strengths—particularly in trades, manufacturing, marine activities, and natural resource stewardship—can be leveraged to support new economic activities that reduce waste, extend material lifecycles, restore ecosystems, and lower environmental impact. Realizing this potential will require continued collaboration across local industry, training providers, and Indigenous organizations, along with an emphasis on accessible and locally relevant skills development.

3.5. Required Skills

The BC Labour Market Outlook projects that 76% of job openings (847,200 positions) over the coming decade will require post-secondary credentials, apprenticeship training, or management-level experience. This trend reflects the increasing technological sophistication of work across nearly all sectors—particularly within the trades, health care, manufacturing, logistics, and environmental services. For regions like Port Alberni, where many workers possess strong hands-on experience but lower levels of formal credentialing, this shift underscores the importance of accessible training pathways and opportunities for upskilling.

Provincially, several skill areas are expected to see accelerated demand as the economy transitions toward low-carbon and circular practices:

Technical and Applied Skills in Renewable and Low-Carbon Industries. Growth in renewable energy systems, high-efficiency buildings, advanced materials recovery, and clean manufacturing requires workers who can operate, maintain, and troubleshoot emerging

technologies. Electricians, welders, millwrights, and heavy equipment operators are particularly well positioned to transition into these roles with targeted upskilling.

Micro-Credentials and Short-Duration Training. Rapidly evolving environmental standards—such as carbon accounting, lifecycle analysis, and circular supply chain management—are driving demand for short, modular training and micro-credentials. These programs enable workers to adapt quickly while remaining active in the labour market.

Modernized Apprenticeship and Red Seal Pathways. Trades certifications increasingly incorporate sustainability principles: energy efficiency, deconstruction, materials reclamation, and waste-minimization practices. Embedding circular competencies into existing trades strengthens alignment with provincial labour market trends and supports the region's transition toward green construction and circular renovation.

Health and Community Care Capacity. With hospitals and ambulatory care services representing the region's fastest-growing sectors, expanding training pathways in nursing, allied health, mental health care, rehabilitation, and community support roles remains a critical regional priority.

3.5.1. Skill Transferability in a Changing Economy

Port Alberni's workforce has deep expertise in mechanical repair, equipment operation, fabrication, logistics, and heavy industry—skills that translate directly into many emerging circular occupations. Several clear transfer pathways are already visible:

- Millwrights and industrial mechanics bring precision repair, system maintenance, and safety competencies that align with deconstruction, green building performance testing, and salvage operations. Targeted training in deconstruction best practices, occupational health and safety, and materials handling would support this transition.
- Heavy equipment operators are well positioned for roles in materials recovery and recycling operations, where equipment handling, site coordination, and logistics skills remain essential. Training in sorting technologies, recycling systems, and digital tracking tools would expand employability.
- Forestry workers possess strong outdoor labour capacity, machinery skills, and environmental familiarity that align with renewable energy installation, ecological restoration, and blue-economy stewardship. Additional training in solar/wind installation or restoration techniques can support this shift.
- Truck drivers experienced in routing, fleet management, and supply chain operations are naturally suited to reverse logistics and circular distribution systems, especially as carbon-tracking and emissions-reporting tools become standard. Training in sustainability reporting and logistics software enhances this pathway.
- Welders and fabricators can transition into circular manufacturing and remanufacturing roles, applying metalwork, fabrication, and repair skills to new materials and low-carbon industrial processes. Additional training in sustainable manufacturing and industrial design helps bridge the transition.

These examples illustrate how Port Alberni's existing skill base can align with new forms of employment without requiring wholesale career changes.

3.5.2. Implications for Regional Labour Market Development

Although this report is focused on providing a labour market evidence base rather than prescribing program design, several themes emerge from provincial and regional demand patterns:

- **Skill Requirements Are Rising:** With three-quarters of future openings requiring post-secondary training or supervisory experience, access to local credentialing opportunities will be increasingly important for labour market participation.
- **Upskilling for Mid-Career Workers:** Because Vancouver Island/Coast has one of the oldest workforces in the province, retraining will be needed not only for new entrants but also for mid-career workers affected by industrial restructuring.
- **Leveraging Regional Strengths:** Port Alberni's comparative advantages—in trades, manufacturing, natural resources, the marine economy, and community care—align well with the emerging skill sets needed in clean energy, green building, circular manufacturing, and health services.
- **Positioning Within Provincial Demand:** As higher-growth regions absorb investment and talent, ensuring that Port Alberni's workforce has access to relevant training pathways will be key to maintaining competitiveness and supporting economic recovery.

Taken together, these trends highlight the importance of accessible, modular, and practical skills development that allows local workers to adapt to evolving labour market demands while building on the region's existing strengths.

4. CIRCULAR ECONOMY LANDSCAPE AND EVIDENCE REVIEW

This landscape and evidence review provides an overview of circular economy practices relevant to Port Alberni and highlights opportunities to strengthen key local sectors including aquaculture and the blue economy, regenerative agriculture, green building and manufacturing, eco-tourism, and renewable energy. For each sector, we summarize its relevance to Port Alberni, outline the circular practices with highest potential, and highlight implementation considerations.

4.1.1. Aquaculture and the Blue Economy

Port Alberni has a notably large aquaculture and blue economy footprint, with approximately 1,000 contributors across marine tourism, commercial fishing, aquaculture, and seafood processing—remarkable for a city of 19,000. Existing circular practices include the shared Dock+ processing facility (which enables resource efficiency through shared infrastructure) and the presence of large-scale seaweed farms supporting regenerative marine practices.

High-Potential Circular Opportunities

Marine Biomass and Bioplastics Production

Port Alberni hosts one of North America's largest seaweed cultivation operations (Cascadia Seaweed), providing a strong local feedstock base and technical expertise that positions the community to explore future seaweed-based bioplastics manufacturing. While this represents an emerging opportunity rather than an existing activity, seaweed-based bioplastics offer reduced emissions, biodegradability, and growing market demand driven by federal and provincial restrictions on traditional single-use plastics.

Benefits:

- Renewable marine biomass source
- Expanding national/regional bioplastics demand
- Lower long-term environmental footprint

Challenges:

- High capital costs for start-up facilities ($1M small-scale to $21M commercial)
- Higher production costs than conventional plastics (may improve with technology advancements)

Integrated Multi-Trophic Aquaculture (IMTA)

IMTA farms species from multiple trophic levels (e.g., salmon, shellfish, seaweed) so that waste from one becomes nutrients for another. This reduces ecological impacts, improves water quality, and increases productivity per unit area.

Benefits:

- Significant reduction in organic waste and ocean pollution
- Greater resilience and diversified production
- Higher total value per hectare

Challenges:

- More complex licensing and regulatory pathways
- Operational complexity requiring specialized training
- Need to align growth cycles of multiple species

Fish Waste Recovery

Fish waste recovery converts processing by-products—bones, trimmings, skin—into high-value products such as collagen, fish oils, and protein hydrolysates. This approach reduces disposal costs and creates new revenue streams.

Port Alberni advantages:

- The Dock+ has 17,000 sq. ft. of processing infrastructure across multiple certified fisheries
- Strong alignment with existing skill sets and supply chains

Estimated capital needs:

- Protein hydrolysate reactor: $60,000
- Centrifuge separator: $35,000
- Fish oil extraction unit: $30,000
- Collagen extraction system: $20,000
  → Total approx. $225,000

4.1.2. Regenerative Agriculture

Agriculture is a smaller but emerging sector in Port Alberni. The Alberni Valley contains 7,702 hectares of agricultural land, with only 41% actively farmed. Current circular activities include farm-level composting, household organic waste diversion, and pockets of organic production.

High-Potential Circular Opportunities

Regional Organics and Biomass Processing Systems

Port Alberni currently processes approximately 1,800 tonnes of organics annually, which are composted off-site. A range of circular processing pathways could retain greater value locally and reduce landfill pressures.

Anaerobic digestion (AD) systems can convert organic materials into renewable energy and nutrient-dense digestate, while composting and biochar production offer complementary soil-health and materials-recovery benefits.

Potential benefits include:

- Renewable heat and electricity generation (via AD).
- Improved soil fertility, carbon sequestration, and moisture retention through digestate, compost, and biochar application.
- Value-added reuse of waste biomass, including wood residuals from construction, demolition, forestry, and land-clearing activities.
- Reduced landfill volumes and extended landfill lifespan through diversion of organic and wood-based wastes.
- Local job creation in biomass collection, processing, and soil-amendment production.

Key challenges include:

- High capital costs for regional AD or large-scale biochar infrastructure.
- Need for sufficient and consistent feedstock volumes, potentially requiring citywide and regional aggregation.
- Operational expertise and market development for soil-amendment products.

Biochar was identified during the Construction and Demolition (C&D) workshop as a promising option for converting waste wood and biomass into a value-added soil amendment. While large-scale biochar systems require significant investment, smaller or modular approaches could offer a phased entry point, particularly where waste wood diversion and soil-health benefits are priorities.

Advanced Drainage and Water Management Systems

Port Alberni's sandy soils and climate (wet winters, dry summers) limit crop diversity. Controlled drainage and irrigation systems can significantly expand agricultural viability.

Benefits:

- 10–36% increases in crop productivity
- 50–70% reductions in water usage
- Enables diversification (e.g., berries, specialty crops)

Challenges:

- System costs ($10K–$50K for small systems; $75K–$100K for large pivot irrigation)
- Farmer hesitation due to high upfront investment

- Need for training on system operation and maintenance

4.2.2. Green Building and Manufacturing

Manufacturing is Port Alberni's third-largest sector (12.6% of local employment), dominated by forestry and wood products, food manufacturing, and seafood processing. Circular activity is growing but still limited, with 14,769 tonnes of construction and manufacturing waste (16% of all disposal) landfilled in 2024.

High-Potential Circular Opportunities

Industrial Symbiosis

Industrial symbiosis creates resource loops between industries, where one organization's by-products, surplus materials, or waste streams become inputs for another, supporting reuse, refurbishment, and value-added manufacturing.

Existing and emerging examples in Port Alberni include:

- Material salvage and reuse where building materials and fixtures recovered through deconstruction are sold *as-is* or refurbished for resale, extending product life and reducing landfill disposal.
- Value-added wood manufacturing, including opportunities to convert locally sourced or recovered wood into higher-value products such as Timber Tiles, wood fibre insulation, mass timber components, and other green building materials.
- Plastic recovery and remanufacturing, supported by the Alberni Valley Makerspace, which enables recycling of waste plastics into new products through small-scale manufacturing and prototyping.
- Biomass utilization, where industrial wood residues are redirected for productive use rather than disposal, including energy generation and other secondary applications.

Additional opportunities:

- Reprocessing concrete waste for new construction materials, building on existing local practices (e.g., concrete recycling currently undertaken by Dolan's Concrete in Port Alberni) to further expand diversion and reuse.
- Capturing excess thermal energy from Paper Excellence to support localized district or campus-scale heating, subject to feasibility. This opportunity would require new distribution infrastructure to connect nearby buildings and would be dependent on the long-term continuity of mill operations, suggesting it is best suited to pilot or phased applications focused on clusters of proximate municipal or institutional facilities.

Benefits:

- Reduced landfill waste and lower emissions

- New revenue streams and lower operational costs
- Strong alignment with Port Alberni's industrial diversity

Design for Disassembly (DfD)

DfD ensures buildings/products can be dismantled easily for reuse or recycling. It enables material recovery, lower life-cycle costs, and reduced demolition waste.

Benefits:

- Higher salvage rates and material quality
- Lower long-term maintenance and deconstruction costs
- New job opportunities in modular construction and building recovery

Challenges:

- Requires a shift from conventional building norms
- Higher upfront construction costs (~6%)
- Workforce must be trained in modular, reversible construction techniques

4.2.3. Eco-Tourism and Destination Integration

Tourism remains a strategic diversification pillar for Port Alberni, encompassing heritage tourism, nature-based experiences, agritourism, and Indigenous cultural tourism as an emerging and priority opportunity. Existing circular practices include outdoor equipment rental models, organics diversion at accommodations, and sustainability awareness through guided tours. Indigenous-led eco-tourism was identified through engagement as an area of interest and future potential, rather than a currently established sector at scale.

High Potential Circular Opportunity

Unifying the Tourism System

Unifying Port Alberni's tourism experiences into a more coordinated umbrella program (e.g., Tourism Whistler or Toronto CityPASS–style models) could build on and formalize coordination already underway through Alberni Valley Tourism (4VI). Strengthening this approach would:

- Improve visitor navigation and packaging of experiences across accommodations, attractions, cultural sites, and eco-tourism offerings.
- Increase cross-promotion and length of stay.
- Support consistent sustainability and circular-tourism messaging across operators.

Coordination efforts led by Alberni Valley Tourism (4VI), including destination development initiatives supported by a Tourism Development Specialist, were identified as important foundations for further system integration.

- Increase visitation and extend tourist stays
- Improve operational efficiency through shared marketing
- Create a platform for standardized circular practices (e.g., refill stations, waste reduction, shared equipment)

Economic impact:

- Destination Canada estimates a 23.85:1 return on marketing investments
- Coordinated branding can significantly boost visitor spending and local business participation

Environmental impact:

- Aligns conservation messaging across operators
- Simplifies waste diversion and resource-sharing practices
- Encourages low-impact tourism behaviours

Successful implementation requires clear leadership, governance, and stakeholder alignment.

4.2.4. Renewable Energy and Distributed Solar

Port Alberni consumes over 2.2 million GJ of energy annually. While ~90% of electricity comes from hydro, it requires long-distance transmission through submarine cables, causing 5–7% energy loss and EMF impacts on marine life.

High Potential Circular Opportunity

Distributed Solar

Port Alberni has excellent solar conditions—producing up to 6.86 kWh per kW installed on summer peak days. A typical 7 kW system could generate ~48 kWh/day, covering most household needs.

Current adoption:

- <5% of households have solar
- Existing major systems include:

- West Coast General Hospital (400 panels)
- Maitland Street Village (48 panels)

Economic benefits:

- 4–5-year payback period
- Long-term cost stability
- Strengthens local renewable energy jobs (BC's clean energy workforce >14,000 workers)

Environmental benefits:

- Reduced reliance on long-distance transmission
- Eliminates EMF impacts from submarine cables
- Shrinks GHG footprint of local energy use

Challenges and solutions:

- High upfront costs ($10,000–$15,000 per system) → addressed through awareness of provincial and federal rebate programs (up to ~$10,000).
- Capital barriers for businesses → addressed through solar leasing and third-party ownership models, which remove upfront costs and shift installation and maintenance to the provider.

For example, Island Community Solar Co-op offers leased solar panel systems for commercial buildings, including no-cost installation on suitable rooftops and long-term lease arrangements with electricity rates guaranteed to be below applicable BC Hydro grid rates.

- Limited public awareness → Requires targeted education campaigns
- Battery storage costs → Address through circular reuse of retired EV batteries (up to 85% cheaper than new batteries)

5. ENGAGEMENT AND KEY WORKFORCE INSIGHTS

A central component of this Labour Market Study involved engaging employers, community partners, sector specialists, and individuals with on-the-ground experience in circular and sustainability-related activities. These conversations were essential for grounding the labour market analysis in local realities, validating emerging trends, and identifying the skills, roles, and occupational pathways most relevant to Port Alberni's evolving economy.

To support this work, the project team conducted 21 key informant interviews between September and October 2025. Participants represented a diverse range of perspectives, including:

- Local employers in construction, manufacturing, marine industries, and resource recovery
- Indigenous partners and community-serving organizations
- Environmental practitioners, sustainability advocates, and circular economy operators
- Workforce development experts, trainers, and educators
- Municipal and regional economic development representatives

Interviewees were invited through direct outreach and followed by a coordinated reminder process, including automated weekly reminders and personalized follow-ups from the research team. This approach was particularly important given the number of contacts with demanding schedules or limited availability.

The interviews explored several core themes:

- Current and emerging circular economy activities taking place in Port Alberni and surrounding areas
- Labour and skills needs across sectors most relevant to circular or sustainability-focused work
- Challenges employers face in recruiting, retaining, and training workers
- Transferable skill sets that could support transitions from traditional industries into circular roles
- Local barriers to participation, including transportation, childcare, credentialing, and equipment needs
- Recommended approaches for skills development, workplace learning, and community-based delivery

Insights from this engagement enrich the secondary labour market data by adding practitioner experience, employer expectations, and community context. The themes that emerged provide

a nuanced understanding of where labour demand is growing, what competencies are required, and where workers may face barriers in accessing new opportunities.

5.1. Profile of Respondents

The key informant interviews conducted for this study captured a diverse cross-section of perspectives from organizations and individuals engaged in environmental stewardship, workforce development, training delivery, manufacturing, construction, agriculture, public administration, and community services across Port Alberni and the wider region. Among respondents who chose to share personal characteristics, the sample was relatively balanced by gender—56% men and 44% women—and highly educated, with 84% holding at least an undergraduate degree. Nearly 80% were employed full time, most commonly in public administration (25%), educational services (17%), and health care and social assistance (8%). Interviewees represented a mix of organizational roles. Several individuals were owners or founders (5 of 21), including leaders of employment counselling organizations, farms, and construction companies. Others held management positions (5), director-level roles (4), or specialist roles (3) such as sustainability planners or program officers. This diversity provided a balanced blend of strategic, operational, and technical insights into the region's emerging circular economy landscape.

5.1.1. Organizational Representation

Respondents came from a range of sectors and organizations, including environmental non-profits, local government, First Nations, education and training providers, housing, employment services, and private enterprises. In addition, a Workforce Development Plan Committee provided guidance throughout the study, helping shape priorities, validate findings, and ensure alignment with local workforce needs. Table 14 summarizes organizational participation.

Table 14: Organizational Representation Among Interview Respondents

Organization Type/Name	#	%
Coastal Restoration Society	3	16%
Alberni Clayoquot Regional District	2	11%
4 Ever strategies	1	5%
Ucluelet First Nation	1	5%
Port Alberni Port Authority	1	5%
Director of Community Services	1	5%
North Island College in the Continuing Education Department	1	5%
Indigenous Fishers First	1	5%
BC Housing	1	5%
INEO Employment Services	1	5%

Coast Waste Management Association	1	5%
Alberni Valley Makerspace	1	5%
WorkBC Centre Port Alberni (Island Work Transitions Inc.)	1	5%
MorningStar Woollen	1	5%
West Coast Wild Zipline	1	5%
Coleman Meadows Farm	1	5%
Total Responding	**21**	**100%**

This spread of organizations reflects a strong level of engagement across the sectors most likely to be affected by, or influential in, Port Alberni's economic transition—particularly resource recovery, construction, training, marine and environmental services, and community-based organizations.

5.1.2. Familiarity with Circular Economy Concepts

Respondents reported generally high levels of familiarity with circular economy concepts. On a five-point scale (1 = not familiar, 5 = very familiar), 70% rated their organizational familiarity as 4 or 5, indicating substantial awareness of circular practices and principles. An additional 15% reported moderate familiarity (3), while 15% indicated limited familiarity (1 or 2). The average rating of 3.8 suggests that most organizations are already engaging with circular themes in some capacity.

Table 15: Organizational Familiarity with Circular Economy Concepts

Organization's Circular Economy Familiarity	#	%
Very familiar - 5	7	35%
Familiar - 4	7	35%
Somewhat familiar - 3	3	15%
Unfamiliar - 2	1	5%
Not at all familiar - 1	2	10%
Total Responding	**20**	**100%**
Average Rating		**3.8**

The high degree of familiarity is notable given Port Alberni's current economic transition. It suggests that many local organizations are already experimenting with or adapting circular

models—such as material reuse, regenerative practices, environmental monitoring, or resource recovery—which provides a strong foundation for future circular economy expansion.

5.2. Circular Economy Ecosystem

Respondents also described a wide array of circular economy–related programs currently operating in the region, including plastics recycling programs, building deconstruction training, regenerative agriculture initiatives, HVAC and solar installation programs, marine cleanup and restoration courses, wildfire recovery training, Indigenous marine career advancement programs, and advanced manufacturing skill development. Technical training opportunities were also highlighted, spanning 3D printing, laser cutting, CNC machining, electronics prototyping, injection molding, plastics remanufacturing, e-waste upcycling, saw safety, swift water rescue, WHMIS training, and repair café workshops. These offerings illustrate the breadth of skills being cultivated locally and help demonstrate the region's readiness for expanded circular employment opportunities.

Taken together, the engagement results reveal a circular ecosystem that is both well-established and rich with potential. Organizations across the region are actively reducing waste, repurposing materials, restoring ecosystems, and supporting inclusive community development. Indigenous leadership, practical skills training, and early adoption of green technologies provide strong foundations on which to build. For Port Alberni, these dynamics suggest substantial opportunities to expand circular employment pathways—particularly in green trades, resource recovery, environmental restoration, and manufacturing—while leveraging partnerships between employers, Indigenous organizations, and training providers to develop a resilient, place-based circular workforce.

Engagement findings indicate that Port Alberni's circular economy ecosystem is active, diversified, and evolving, with many organizations integrating circular principles into their mandates. Across interviews, waste management, environmental restoration, community and economic development, Indigenous leadership, and education and training emerged as the most consistent areas of focus. These activities collectively demonstrate a strong foundation upon which Port Alberni can continue developing a resilient and place-based circular economy.

Community and Economic Development (7/21)

Community and economic development is a central focus for many organizations, reflecting a shared commitment to strengthening local well-being and economic resilience. Respondents described work in port operations, food system development, regional economic diversification, and employment services that support dignified work and income stability. Local governments also contribute essential services and regulatory frameworks that enable sustainable community growth. Together, these efforts help build the socioeconomic infrastructure needed to support circular innovation.

Waste Management and Recycling (6/21)

Waste management and recycling were among the strongest themes identified. Organizations reported involvement in a wide range of initiatives, including recycling programs, sector forums, partnerships to improve waste diversion, and specialized recycling streams such as plastics recovery. Many of these initiatives are community-driven and operationally grounded, reflecting a practical and well-established commitment to reducing landfill dependency and increasing material recovery across the region.

Indigenous Community Involvement (6/21)

Indigenous leadership is an integral part of the circular economy ecosystem. Several organizations emphasized Indigenous-first hiring and partnership models, Indigenous-led restoration and monitoring projects, and active integration of Indigenous voices in governance and decision-making. These approaches create meaningful pathways for collaboration, strengthen stewardship of local lands and waters, and reinforce the cultural foundations of a circular and regenerative economy.

Education and Training (6/21)

A significant number of organizations provide education, skills training, and mentorship to support employment and innovation. These offerings include access to tools and maker spaces, barrier-free employment training programs, and continuing education delivered through the regional college. Training programs are practical in nature—often hands-on—and aim to enhance employability while supporting local capacity-building. Collectively, they demonstrate the region's strong commitment to skills development as a driver of circular growth.

Environmental and Restoration Efforts (6/21)

Environmental and ecological restoration were also frequently identified as core components of organizational missions. Activities include ocean cleanup, derelict vessel removal, habitat restoration, and community-led sustainability projects. These initiatives play a critical role in protecting ecosystems, regenerating natural assets, and creating employment pathways that align closely with circular economy principles.

5.2.1. Designing Out Waste and Sustainability Practices

Organizations across the region are actively implementing practices that "design out waste" and advance sustainability. These efforts span recycling and materials recovery, waste reduction and diversion, community education, low-carbon technologies, and training programs that integrate circular practices into day-to-day work.

Recycling and Material Reuse (9/21)

Recycling and material reuse initiatives are the most common waste-related activities identified. Organizations are processing construction and demolition materials, operating mattress recycling facilities, partnering with recyclers to manage waste streams, and converting recycled plastics into new products. Reuse stores also play a key role by extending product lifespans and reducing the volume of discarded materials.

Waste Reduction and Diversion (5/21)

Several organizations are engaged in efforts that reduce overall waste generation and divert materials away from landfills. These include organics diversion programs, composting initiatives, and targeted waste-reduction campaigns. Such programs reflect a strategic and systematic approach to sustainable waste management.

Community Engagement and Education (5/21)

Community engagement is another critical lever for waste reduction. Organizations host educational events, round tables, and public workshops aimed at raising awareness and encouraging behavioural change. These efforts help build a community culture of sustainability and shared responsibility.

Energy Efficiency and Low-Carbon Technologies (3/21)

Some organizations are integrating low-carbon technologies such as heat pumps and energy-efficient building systems. These actions demonstrate early adoption of clean-energy practices and highlight opportunities to link circular goals with climate-focused strategies at the organizational level.

Employment and Training (2/21)

A smaller but important group of organizations incorporate employment and training into their sustainability practices. Hands-on training in waste processing, repair, and restoration provides participants with foundational skills while supporting community capacity-building in circular practices.

5.2.2. Circular Economy–Related Training Programs and Skill Development

Key informants identified a diverse array of programs, courses, and workshops that directly support circular economy skill development in the region. These offerings demonstrate significant local capacity to expand circular employment pathways.

Program Name	Description
Recycling Plastics Program	This program involves using various equipment to recycle plastics, turning them into new products, which supports waste reduction and material reuse.
Building Deconstruction Program	Participants learn how to deconstruct and salvage buildings, allowing materials to be reused or recycled, reducing landfill waste.
Greenhouse Program	Focuses on promoting local and organic soil use, which supports sustainable agriculture and reduces the carbon footprint associated with food transportation.
HVAC and Solar Panel Programs	These programs teach installation of energy-efficient systems, contributing to reduced energy consumption and promoting renewable energy use.
Marine Training Program	Provides skills for cleaning up marine environments, including removing derelict ships, which helps restore ecosystems and repurpose materials.
Wildfire Training Program	Offers training for active and post-fire recovery, emphasizing sustainable forest management and ecosystem restoration.
Indigenous Marine Career Advancement Program	Focuses on transitioning individuals to marine-specific industries, promoting sustainable practices and economic opportunities in thriving sectors.
Value-Added Manufacturing Skills Exploration and Acquisition Project	Aims to develop skills in manufacturing technologies that support innovation and sustainability, such as 3D printing and electronics prototyping.
Skills and Topics	**Description**
3D Printing Proficiency:	Involves using 3D printing for rapid prototyping, which can reduce material waste and support sustainable manufacturing practices.
Laser Cutting / Engraving:	Teaches efficient material use and design for minimal waste, aligning with sustainable production methods.
Electronics Prototyping and Programming	Focuses on creating efficient electronic systems, which can reduce e-waste and improve product longevity.
Plastic Manufacturing	Covers processes like extrusion and sheet pressing, emphasizing recycling and reuse of plastics to minimize environmental impact.
CNC Manufacturing	Involves precise material cutting, reducing waste and supporting efficient production processes.
E-Waste Upcycling	Teaches disassembly and repurposing of electronic components, reducing e-waste and promoting resource recovery.
Injection Molding Basics	Focuses on efficient material use and scaled manufacturing processes, supporting sustainable production.
Small Vessel Operator Proficiency (SVOP)	Provides skills for operating vessels sustainably, supporting marine conservation efforts.
WHMIS Training	Educates on safe handling of materials, reducing environmental hazards and promoting workplace safety.
Safe Saw Operations	Teaches safe and efficient use of saws, minimizing waste and supporting sustainable forestry practices.
Swift Water Rescue	Provides skills for safely managing water-related emergencies, supporting environmental and community safety.
Power Saw Safety	Focuses on safe and efficient use of power saws, reducing waste and promoting sustainable forestry.

Repair Cafe Workshops	Encourages repairing and reusing items instead of discarding them, reducing waste and fostering community engagement in sustainability.

Workforce Implication: *In Port Alberni, organizations are increasingly aligning their mandates with circular economy principles, focusing on waste management, recycling, environmental restoration, and Indigenous involvement. Local initiatives integrate skills training and employment in areas such as deconstruction, plastics recycling, renewable energy, and marine restoration. These efforts reflect a strong basis of circular economy practices to build on and continue to develop. Port Alberni's transition requires targeted upskilling in green trades, resource recovery, and restoration work, supported by partnerships with Indigenous organizations and local training providers to build a resilient, place-based circular workforce.*

5.3. Training Delivery Preferences

Engagement findings reveal strong interest in expanding the range and depth of circular economy–related training available in Port Alberni. Informants consistently emphasized the importance of a layered training ecosystem—one that combines community education and capacity-building with industry-facing workforce development pathways.

Building on existing programs, respondents identified the following priority areas for development over the next three years.

1. Community Education and Enabling Programs

Participants highlighted several education-focused initiatives that support community-wide sustainability literacy and behaviour change. These programs were viewed as foundational, enabling broader participation in circular practices and complementing more technical workforce training. Many informants noted that these initiatives could be led or supported by local government departments, community organizations, or utilities.

Commonly identified priorities included:

- **Recycling Champion Program** — A community-wide initiative to promote recycling practices, increase household participation, and build literacy around waste reduction and resource recovery.
- **Community Garden Utilizing "Sort n Go" Compost** — A food systems and gardening program using locally generated compost to enhance soil quality and support circular organics management.
- **Water Conservation Training** — Education focused on efficient water management and conservation practices across residential, commercial, and industrial settings.

2. Workforce and Industry-Focused Circular Training Pathways

In parallel, respondents emphasized the need for applied, skills-based training that supports employment pathways in priority circular economy sectors. These offerings align directly with the

final recommended training streams identified through the study, particularly green building (manufacturing and deconstruction) and maritime industry and restoration.

Priority workforce training areas included:

- **Green Building – Deconstruction and Manufacturing Training**, including materials recovery, salvage operations, and value-added manufacturing.
- **Boatyard and Vessel Recycling Facility Training**, encompassing maintenance, material recovery, travel lift operation, and closed-containment recycling processes.
- **Fiberglass Recycling Research and Development**, focused on applied innovation to reduce landfill disposal and expand local recycling capacity.
- **Micro Skill Training Program Expansion**, extending short-duration, stackable micro-credentials across technical and hands-on circular skills.
- **Microplastics Training**, addressing monitoring, management, and mitigation of microplastics through applied and technical learning.

Alignment with Final Training Offerings

Taken together, these findings suggest that community education initiatives and workforce training should be developed in parallel, with education programs building awareness and participation, and industry-facing pathways providing clear routes into employment in green building and maritime circular sectors.

This layered approach reflects stakeholder input and ensures that final training investments are both labour-market responsive and community-supported.

Preferred Partners for Training Delivery

Key informants identified a range of potential delivery partners who they believe are well-positioned to co-develop or co-lead future circular economy training efforts. Their preferences reflect a desire for regionally aligned, culturally grounded, and sector-relevant partnerships that strengthen regional capacity and ensure training is accessible and community-led.

- **Tla-o-qui-aht First Nation** — Identified as an important partner for collaborative training rooted in Indigenous leadership, sustainable practices, and regional stewardship.
- **Tourism Tofino** — Seen as a key player in sustainable tourism, with strong potential to help integrate circular principles into tourism-related training and economic development.
- **Alberni Valley Tourism** — Identified as a regional destination organization well positioned to support coordinated, sustainability-focused tourism training and workforce development.
- **Tofino Chamber of Commerce** — Highlighted for its ability to mobilize local businesses, promote resource-efficient practices, and support circular initiatives across the private sector.

- **Alberni-Clayoquot Regional District (ACRD)** — Recognized as a central regional partner capable of advancing community planning, waste management strategies, and sustainability programming.
- **District of Ucluelet** — Identified as a partner for cross-community collaboration and shared training opportunities that support regional alignment and mutual benefit.
- **House of Heshquip & Sushant** — Viewed as key Indigenous-led partners whose involvement ensures training programs remain culturally relevant and aligned with community priorities.
- **T'Sou-ke First Nation** — Recognized for its leadership in sustainable community development and seen as a model partner for training in renewable energy, conservation, and circular practices.
- **North Island College (NIC)** — Considered a foundational training partner with strong capacity to deliver accredited programs, micro-skills training, and community-based education aligned with circular workforce needs.
- **Nuu-chah-nulth Employment and Training Program (NETP)** — Valued for its ability to deliver foundational skills training and entry-level certifications, particularly for Indigenous job seekers and individuals requiring accelerated workforce entry.
- **Coastal Restoration Society** — Identified as a key partner for marine and coastal restoration training, habitat rehabilitation skills development, and land–sea stewardship initiatives.

5.4. Circular Economy Frontrunners

Engagement findings identified several organizations and businesses viewed as *frontrunners* in circular economy development across Port Alberni and the surrounding region. These organizations are already implementing innovative waste diversion, resource recovery, sustainable production, and skills training initiatives that form the backbone of a growing circular ecosystem.

Circular Economy Frontrunners Identified by Key Informants

Organization / Business	Why They Are Considered Frontrunners
INEO Employment Services	Innovative mattress recycling program and strong integration of basic skills training with circular practices.
AMIX	Expertise in dismantling and recycling large vessels (tankers, ferries), with potential to expand activity in Port Alberni.
Grassroots Restaurant	Sustainable food practices: sources only local and in-season produce, collaborates with other businesses, and promotes low-impact culinary tourism.

Local Agritourism Farms	Integrate environmental stewardship with ecotourism by growing and promoting local, seasonal produce.
Nova Harvest	Reuses aquaculture fish waste for agriculture, advancing waste-to-value circular solutions.
Eat Canadian Seafood	Develops fish waste recycling solutions tied to agriculture.
Ocean Legacy Foundation	Operates marine plastics recycling facilities, reducing ocean waste and developing circular infrastructure.
Canadian Maritime Engineering (CME)	Handles large vessel repair and recycling, with plans for expanded recycling facilities in Port Alberni.
North Island College	Provides adaptable training programs that can be tailored to circular economy workforce needs.
Alberni Valley Makerspace	Supports innovation and local capacity-building for reuse, repair, and creative circular projects.
Clayoquot Biosphere Trust	Promotes community-based sustainability initiatives aligned with circular economy principles.
Surfrider	Advocates for marine conservation and plastic waste reduction through grassroots campaigns.

Key informants were asked what features would make circular economy training most effective in their community or organizational context. Themes reflect a strong preference for practical, accessible, and culturally grounded training models.

In-Person / On-Site Training (6/13)

A majority of respondents emphasized the importance of in-person, hands-on training—particularly for trades and operational roles where practical experience is essential. Several interviewees highlighted the cultural and relational value of on-site learning, especially where Indigenous knowledge, land-based practices, or intergenerational teaching are involved.

Paid Practicum / Co-op Opportunities (6/13)

Respondents strongly preferred training models that include paid practicums or co-op placements. Financial compensation was viewed as essential for participant retention, supporting low-income learners, and ensuring that training does not create additional hardship. Paid placements were also seen as a key mechanism for building job readiness and employer connections.

Short Courses (2–4 Weeks) (5/13)

Many interviewees favored shorter-duration training programs that are intensive, focused, and manageable for participants who may have employment, childcare, or transportation constraints. Two-to-four-week courses were seen as particularly effective for skill acquisition without requiring long-term commitments.

Indigenous Knowledge Integration (4/13)

Respondents identified the integration of Indigenous knowledge, teachings, and cultural practices as an important training feature. Doing so was seen as essential to ensuring relevance for Indigenous learners, strengthening local partnerships, and grounding training in place-based sustainability principles.

Hybrid / Blended Learning Options (3/13)

While some respondents supported hybrid learning models that combine virtual and in-person components, feedback was mixed. Several noted varying levels of digital access across communities and emphasized that trades-heavy training is generally better delivered in person.

Supportive Measures (Stipends, Transportation, Equipment) (2/13)

Respondents stressed that supports such as stipends, transportation assistance, and access to tools or personal protective equipment significantly improve training accessibility. These measures help remove barriers and increase participation, particularly for displaced workers and individuals facing financial constraints.

Micro-Credentials (2/13)

A subset of respondents highlighted interest in micro-credentials that provide targeted, industry-relevant skills. Micro-credentials were seen as a fast and flexible way to help workers upskill or transition into new circular roles without requiring lengthy or costly programs.

Workforce Implication: *Taken together, these findings indicate that Port Alberni is well-positioned to expand circular workforce development through training models that are localized, hands-on, and culturally grounded. Organizations are building on strong foundations in waste management, environmental restoration, regenerative food systems, and circular innovation—with emerging interest in areas such as fiberglass recycling R&D, vessel recycling, microplastics management, and community-based composting. The region's preferred training model is clear: short-duration, in-person, paid programs that integrate Indigenous knowledge, remove participation barriers, and provide practical experience with local employers. Partnerships with First Nations, North Island College, and regional employment and training agencies will be essential to advancing these initiatives. These trends point toward the emergence of a locally trained, place-based green workforce capable of supporting new circular industries while strengthening economic resilience. Deepened collaboration between training institutions, Indigenous organizations, and employers will be critical for scaling circular employment pathways, supporting inclusive workforce participation, and positioning Port Alberni as a regional leader in circular economy innovation.*

5.5. Skill Gaps and Workforce Readiness

Engagement findings indicate that, while Port Alberni has strong emerging momentum in waste reduction, recycling, and environmental restoration, circular economy practices remain in the early stages of development across most industries. Respondents consistently reported limited adoption, significant structural barriers, and clear gaps in skills, knowledge, and supporting infrastructure. These insights reveal both the challenges and opportunities for workforce development as Port Alberni transitions toward a more circular economic model.

5.5.1. Perceived Advancement of Circular Practices

When asked to rate how advanced circular economy practices were in their industry—from 1 (Nascent) to 5 (Established)—most respondents indicated that circularity is still in its infancy locally. Seventy-five percent rated their sector as either *nascent (1)* or *early-stage (2)*. One-third viewed their industry as *developing (3)*, while only 8% rated practices as somewhat advanced (4). No respondent selected the highest level (5). The average rating of 2.3 underscores that circular practices are not yet widespread or embedded within local industry operations.

Table 16: Perceived Advancement of Circular Economy Practices by Industry
(On a scale of 1–5, 1 = Nascent, 5 = Established)

Rating	#	%
Established - 5	0	0%
4	1	8%
Developing - 3	4	33%
2	5	42%

Nascent – 1	2	17%
Total Responding	**12**	**100%**
Average Rating	**2.3**	

This suggests that, although there are strong pockets of innovation and leadership in Port Alberni, the broader advancement of circular technologies, processes, and business models remains in the early stages—reinforcing the need for a targeted workforce strategy.

5.5.2. Opportunities to Strengthen Circular Practices

Respondents identified several opportunities that could accelerate circular economy development at an industry level. These focus on policy frameworks, technological advancement, community initiatives, and integration of Indigenous stewardship.

Policy and Legislative Support (4/10)

Four respondents highlighted that enabling policies—particularly those that remove barriers to reuse and recycling—are essential. Legislative reform expanded producer responsibility requirements, and clearer government standards for waste recovery were seen as key enablers for future circular growth.

Fiberglass Recycling and Marine Restoration (3/10)

Respondents emphasized emerging opportunities in fiberglass recycling and marine restoration, including boat deconstruction. The disposal of fiberglass, especially from derelict vessels, is a significant environmental challenge. New infrastructure and R&D capacity could help transform these waste streams into valuable materials while strengthening the marine economy.

Technological Innovations in Waste Management (3/10)

Three respondents pointed to the role of new technology—such as advanced material sorting systems, recycling equipment, and digital monitoring tools—to unlock efficiencies in waste management and resource recovery.

Integration of Indigenous Stewardship Models (2/10)

Indigenous-led stewardship models were recognized as a powerful framework for sustainable resource management. Respondents highlighted opportunities to embed traditional ecological knowledge into circular practices, strengthening both environmental outcomes and community partnerships.

Community-Driven Circular Initiatives (2/10)

Reuse centres, repair cafés, community swaps, and volunteer-led restoration efforts were highlighted as important contributors to local circularity. These initiatives help extend product life, build community ownership, and reduce waste through collective action.

Educational Initiatives for Sustainability (2/10)

Two respondents emphasized the need for more education and sustainability workshops for businesses, families, and schools. Increased knowledge of circular principles was viewed as essential to shifting local norms and business practices.

5.5.3. Barriers to Circular Workforce Development

Despite these opportunities, respondents identified several significant barriers limiting the expansion of circular economy practices in Port Alberni. These challenges reveal areas where targeted workforce development, funding partnerships, and policy support are critically needed.

Funding Constraints (6/9)

Funding was the most frequently cited barrier. Organizations noted difficulty securing grants, meeting funder matching requirements, and covering the high costs associated with proper recycling and materials handling. Limited, inconsistent funding is a major constraint on both program delivery and infrastructure development.

Facilities and Equipment (3/9)

Several respondents described inadequate physical space and equipment as major bottlenecks. For example, one organization noted that its 3,500-square-foot facility was insufficient for expanding recycling or training activities. Circular operations require specialized machinery and adequate floor space—both currently lacking.

Customer Awareness (3/9)

Low public awareness, especially around vessel recycling, was cited as a barrier. Without consumer education and incentives, circular options may be underutilized or misunderstood, limiting their effectiveness and financial viability.

Skilled Labour Shortages (3/9)

A lack of specialized skills—such as technical operators, restoration workers, and recycling technicians—limits the pace at which organizations can adopt circular processes. Respondents stressed the need for sustained training pipelines to overcome shortages.

Regulatory and Policy Fragmentation (2/9)

Respondents pointed to unclear, inconsistent, or outdated regulations that hinder innovation. Issues such as ambiguous definitions of "waste," uneven enforcement, and limited guidance for compliance undermine circular growth and create uncertainty for businesses.

Market Resistance to Change (1/9)

One respondent noted resistance from certain sectors, including a lack of recognition of the financial benefits of circular practices. Market inertia and limited incentives contribute to slow adoption of sustainable practices.

Technological and Implementation Challenges (1/9)

One respondent noted gaps in North American recycling technology—particularly for complex materials such as fiberglass—which slow progress and limit the feasibility of some circular initiatives.

Regulatory and Compliance Issues (1/9)

In some cases, particularly in institutional sectors like healthcare, one respondent highlighted the absence of structured enforcement, fines, or education to support better recycling compliance.

Lack of Knowledge (1/7)

One respondent explicitly acknowledged that limited understanding of circular economy concepts prevented them from expanding programs—reinforcing the importance of training and capacity-building.

Workforce Implication: *These findings indicate that circular economy practices in Port Alberni are emerging but remain nascent across most industries. While the region has strong momentum in waste management, restoration, and materials recovery, systemic barriers—including inadequate funding, limited facilities, workforce shortages, and regulatory uncertainty—are slowing progress. At the same time, respondents identified clear opportunities to advance circularity through supportive policies, new recycling technologies (including fiberglass recovery), community-led initiatives, and the integration of Indigenous stewardship models. For Port Alberni to accelerate its circular transition, a coordinated workforce strategy is needed—one that expands technical training pipelines, strengthens training infrastructure, embeds sustainability education, and improves access to capital for circular operators. Deepened collaboration with Indigenous organizations, strengthened regulatory clarity, and targeted investment in skills development will be essential to scaling circular industries and supporting long-term regional resilience.*

5.6. Emerging Opportunities and Innovation Capacity

Engagement findings highlight that Port Alberni possesses significant potential to accelerate circular economy innovation—but doing so will require coordinated action across government, industry, Indigenous partners, and the broader community. Interviewees emphasized that the *next wave of circular growth* will depend on three key drivers: government intervention, public engagement and education, and industry collaboration. These drivers form the structural conditions necessary to shift Port Alberni from early-stage circular practices toward a more advanced, scalable, and resilient circular ecosystem.

5.6.1. Government Intervention

Investment in Infrastructure

Respondents consistently stressed that new and expanded infrastructure is critical for advancing circular activities. This includes developing regional facilities such as:

- Reuse and repair hubs to extend the lifespan of products
- Organics and composting facilities to strengthen local food systems
- Construction and demolition (C&D) materials recovery sites
- Dedicated material recovery and recycling centres capable of handling complex waste streams (e.g., marine debris, fiberglass)

Interviewees also highlighted the need for space, equipment, and capital investment to help local remanufacturing and upcycling businesses scale their operations.

Policy and Regulatory Frameworks

Strengthened policy tools were identified as essential enablers of circular innovation. Respondents recommended:

- Local circular economy strategies aligned with provincial/federal climate and waste mandates
- Zoning reforms that prioritize deconstruction over demolition
- Procurement policies that favour recycled-content, repairable, and low-impact materials
- Clearer definitions and regulatory pathways for reuse, repair, and by-product materials

These reforms would reduce uncertainty for businesses and encourage greater industry participation.

Extended Producer Responsibility (EPR) Expansion

Respondents identified expanded EPR programs as a high-potential lever for change. Key ideas included:

- Broadening EPR categories to cover textiles, furniture, C&D materials, and marine-related products
- Requiring producers to design products that are durable, repairable, and recyclable
- Ensuring adequate funding flows from EPR systems back into local recovery and processing

These shifts were seen as critical for scaling circular operations and increasing upstream responsibility.

5.6.2. Public Engagement and Education

Interviewees emphasized that circular adoption requires parallel investment in public understanding and behavioural change. Effective strategies include:

- Community-wide education campaigns explaining circular principles
- School-based sustainability programs
- Youth-focused initiatives like repair cafés and maker spaces
- Workshops for households and businesses addressing recycling, waste reduction, and sustainable purchasing

These activities help normalize circular practices and increase local participation in reuse, repair, and recovery programs.

5.6.3. Industry Collaboration and Innovation Networks

Respondents identified collaboration—particularly cross-industry data sharing—as essential to unlocking new circular opportunities. This includes:

- Regional networks for sharing material flow data, innovation opportunities, and best practices
- Digital platforms that match waste streams with potential recovery or reuse markets
- Collaborative pilots among port businesses, forestry operations, aquaculture operators, and manufacturers
- Strengthened partnerships with Indigenous communities to embed stewardship and regenerative practices

Together, these efforts can accelerate innovation, reduce duplication, and catalyze new circular business models.

5.6.4. Skills Needed to Recruit and Retain Circular Workers

Key informants identified several specific skill areas that would strengthen recruitment and retention within circular roles. These skills range from waste management competencies to trades, safety, and foundational education.

Waste Reduction Training

Respondents identified the need for structured waste management competencies based on established frameworks such as the Zero Waste Hierarchy 8.0, which prioritizes rethink/redesign, reuse, and high-value recycling before disposal. These frameworks help standardize training and ensure consistent practices.

Recycling Education

Formal certification—such as the Master Recycler Program, widely recognized in Vancouver—was seen as highly valuable for hiring and retaining qualified recycling workers. Certifications ensure workers understand complex sorting, contamination control, and recycling processes.

Trades and Technical Skills

Several respondents noted shortages in trades expertise essential for circular industries, including:

- Carpentry, metalworking, fabrication
- Electrical and mechanical repair

- Marine operations, vessel handling, and materials transport
- Materials engineering and design

Interviewees noted that once trades expertise is in place, sustainable practices can be layered on as the next step.

First Aid and Safety Training

Respondents highlighted wilderness first aid and general safety training as valuable for supporting field-based restoration, deconstruction, and waste-handling activities.

Basic Education and Literacy

A small number of respondents noted gaps in foundational literacy, numeracy, and basic high-school competencies among local labour, which limits job readiness and progression. Addressing these gaps would improve employability and retention.

5.6.5. Priority Sectors and Opportunity Clusters

Interviewees identified several sectors with the greatest potential for circular innovation and workforce growth.

Forestry and Wood Products

Respondents saw strong potential to reimagine Port Alberni's forestry legacy through:

- Wood waste recovery and remanufacturing
- Biomaterials and engineered wood innovation
- Bioenergy production
- Industrial resource sharing across forestry firms

However, they emphasized that past attempts to commercialize low-grade or waste wood products have struggled, underscoring the need for *new, innovative approaches*.

Marine and Port Activities

Given Port Alberni's geographic advantage, respondents highlighted opportunities in:

- Marine plastics collection and processing
- Circular fishing gear programs

- Vessel recycling and repair
- Port-based industrial symbiosis

New marine businesses entering the region were seen as particularly promising for advancing circular activity.

Local Manufacturing and Makerspaces

Respondents emphasized the potential of small-scale manufacturing and makerspaces to drive circular innovation. Opportunities include:

- Upcycling and repair services
- Circular product design
- Prototyping, small-batch manufacturing, and remanufacturing
- Community access to tools for reuse and fabrication

The rise of new local manufacturing enterprises supports this growth area.

Education and Youth Engagement

Interviewees stressed the importance of engaging young people to foster long-term sustainability. Opportunities include:

- Circular education embedded in school curricula
- Youth-led repair cafés and makerspaces
- Entry-level training for high school graduates
- Supports to help young workers live and work independently in the region

Tourism and Hospitality

One respondent emphasized circular opportunities in tourism, such as:

- Zero-waste visitor experiences
- Refill stations and reduced packaging
- Circular procurement for hotels and restaurants
- Behaviour-change programs for visitors
- This sector offers strong potential for visible, community-facing innovation.

Indigenous-Led Sustainability Initiatives

Indigenous stewardship was highlighted as foundational to circular progress. Respondents pointed to:

- Land-based teaching and ecological restoration
- Sustainable resource management guided by Indigenous values
- Collaborative models of governance and decision-making

Indigenous-led initiatives were viewed as essential to culturally grounded, regenerative circular development.

Workforce Implication: *Port Alberni's transition toward a circular economy will require coordinated investment in infrastructure, policy reform, education, and workforce development. Stakeholders emphasized that while the region has strong foundations in waste management, restoration, and sustainable innovation, progress is constrained by skills shortages, limited infrastructure, regulatory gaps, and financing challenges.*

A successful workforce strategy will depend on:

- *Expanding technical and trades training pipelines*
- *Strengthening foundational literacy and job readiness supports*
- *Integrating Indigenous stewardship and knowledge systems*
- *Enhancing collaboration among governments, training institutions, Indigenous partners, and employers*
- *Building training tied directly to sector needs in forestry innovation, marine recycling, advanced manufacturing, and zero-waste tourism*

The broader implication is clear: Port Alberni must move from isolated circular initiatives to a cohesive, regional, and sector-aligned workforce development system. With strategic investment and partnership, the region can build a skilled, adaptable, and inclusive green workforce capable of supporting both short-term recovery and long-term economic resilience.

6. TRAINING PRIORITIES AND IMPLEMENTATION PATHWAYS

6.1. How Training Priorities Were Developed

The training priorities for Port Alberni's circular economy workforce were developed through a structured, evidence-driven process that integrated labour market analysis, community engagement, and strategic review by the Workforce Development Committee. This process ensured that the final training investments were both community-informed and tightly aligned with real employment opportunities.

The research stage combined multiple data sources—including key informant interviews, employer engagement, sector-wide labour market trends, and analysis of Port Alberni's emerging circular economy sectors—to produce an initial longlist of viable training concepts. Each concept reflected the community's existing strengths (e.g., marine and forestry expertise), future economic opportunities (e.g., deconstruction, renewable energy installation), and the expressed need for hands-on, accessible programming that addresses local workforce realities.

These options were then presented to the Workforce Development Committee, who played a critical role in refining and prioritizing the list. Committee members ranked each option using a shared set of criteria that reflected the goals of the Workforce Development Plan:

- Strength and clarity of local employment pathways
- Alignment with circular economy principles and Port Alberni's transition priorities
- Ability to deliver training locally and in a hands-on format
- Opportunities to embed Indigenous knowledge, participation, and co-leadership
- Feasibility of providing paid practicums and wrap-around supports
- Readiness of employers and training providers to engage

This ranking process created a clear hierarchy of training priorities. The Synergy team then assessed each priority against delivery feasibility, available funding, and partnership capacity. This combination of community insight, labour market evidence, and practical feasibility ultimately shaped the final training package to be delivered in Port Alberni.

6.2. Prioritized Training Pathways

The committee's final ranked list reflected both local labour market demand and Port Alberni's emerging circular strengths. Maritime training emerged as the top priority, followed closely by green construction, restoration, and manufacturing pathways.

Final Ranked Order of Training Priorities

1. Maritime Industry Training (Deck Crew & Marine Mechanics)
2. Green Building – Construction Focus (hands-on deconstruction, material recovery, sustainable construction)
3. Environmental Restoration & Remediation
4. Green Building – Manufacturing Focus (green building, manufacturing, IT, direct employment pathway)
5. Urban Forestry & Arborist Certification

All training concepts originated directly from engagement data and the labour market study. The committee's role was refinement—ensuring the final priorities were those most capable of providing strong employment outcomes and advancing Port Alberni's circular transition.

6.3. Final Training Package Selected by Synergy Foundation

After reviewing committee rankings and assessing feasibility within available grant resources, Synergy finalized a training package that captures the top priorities while ensuring high-quality delivery and strong job pathways.

1. Maritime Industry Training with Integrated Environmental Restoration & Remediation

Because Maritime Industry Training ranked first—and Environmental Restoration & Remediation ranked highly—Synergy selected a proponent capable of delivering both priorities within one integrated program. This combined approach will offer:

- Small vessel operations, marine safety, deck crew skills
- Introduction to marine mechanics and vessel maintenance
- Shoreline cleanup, derelict vessel removal, invasive species management
- Habitat restoration and land-based remediation practices
- Embedded Indigenous knowledge and stewardship approaches
- Clear employment pathways in Port Alberni's blue economy and coastal restoration sectors

This model maximizes impact by merging the top-ranked priorities and strengthening both marine and restoration workforce pipelines.

2. Integrated Green Building Program With Two Specializations

To address the remaining top priorities, Synergy issued an RFQ for a single Green Building core program with two targeted specialization streams.

Core Program – Green Construction Skills

- Basic construction competencies and safety certifications
- Introduction to energy-efficient, low-waste building practices
- Employability supports and job readiness training

Specialization 1: Deconstruction & Salvage

- Techniques for selective dismantling and material recovery
- Waste diversion practices aligned with local redevelopment
- Hands-on training in real project environments

Specialization 2: Manufacturing & IT

- Manufacturing processes and material handling
- Digital literacy and IT skills required for modern facilities
- A direct employment pipeline into local manufacturing
- Transferable skills relevant to other manufacturers in the region

By consolidating multiple priorities into one integrated program, this structure provides flexibility for trainees while meeting diverse employer needs across construction, green building, and manufacturing.

6.4. Supporting Initiatives

To broaden the circular economy knowledge base and spark interest in future training pathways, Synergy will also offer two free webinars in the new year:

- Tourism and Hospitality Circular Practices
- Regenerative Agriculture and Land Stewardship

These sessions will expand public understanding of circular opportunities and help prepare the ground for future training investments.

6.5. Implications for Workforce Development

The final training package represents a strategic, evidence-informed starting point for building Port Alberni's circular workforce. It balances:

- Community and employer priorities
- Labour market needs
- Indigenous inclusion and leadership

- Hands-on, place-based training approaches
- Feasible delivery models and available funding

Together, the integrated Maritime/Restoration program and the two-stream Green Building program form a strong "Phase One" for circular workforce development. They directly respond to the community's top priorities, link to clear employment pathways, and build the foundational skills required for Port Alberni's economic transition.

This first phase establishes a platform on which future programs—such as urban forestry, regenerative agriculture, renewable energy installation, or advanced material recovery—can be added as the circular economy continues to grow.

7. CONCLUSION AND PATHWAY TO A WORKFORCE DEVELOPMENT PLAN

Port Alberni is navigating a pivotal economic transition. The closure of long-standing forestry operations, coupled with demographic pressures and shifting regional employment patterns, has created both challenges and opportunities. This Labour Market Study demonstrates that while traditional employment anchors have weakened, Port Alberni possesses a remarkable foundation of skills, community organizations, Indigenous leadership, and industry assets capable of supporting a thriving circular economy.

The analysis shows that the region's labour force is deeply experienced in trades, manufacturing, marine work, and resource-based industries—competencies that are highly transferable to circular practices such as deconstruction, restoration, materials recovery, and sustainable manufacturing. Demographic and economic data highlight an urgent need to attract and retain younger workers, increase post-secondary and technical skills training, and build clearer pathways for labour force participation. These realities reinforce the importance of strategic, locally grounded workforce development.

Community engagement further strengthened this evidence base. Interviews with employers, community organizations, Indigenous partners, and sector experts revealed an ecosystem that is already experimenting with circular practices—from marine plastics recovery to innovative recycling programs, community-based repair initiatives, restoration projects, and sustainable agriculture. Engagement results also pointed to clear gaps: limited facilities and equipment, a shortage of specialized labour, inconsistent policy supports, and a need for more culturally grounded training opportunities. Stakeholders consistently emphasized the value of hands-on, paid, short-format training delivered in partnership with Indigenous organizations and local employers.

Taken together, the labour market evidence and engagement insights informed the development and prioritization of Port Alberni's highest-value training pathways. The resulting training package—focused on Maritime Industry Training with Restoration, and an Integrated Green Building program with specialization options—reflects both the realities of employer demand and the community's readiness to embrace circular opportunities. These programs form an essential first step in building a more resilient, inclusive, and future-focused workforce.

7.1. Using This Study to Build a Full Workforce Development Plan

This study does more than identify immediate training priorities—it establishes the analytical and community-informed foundation on which a comprehensive Workforce Development Plan (WDP) can be built. The findings point to several strategic directions that should guide the next phase of workforce planning:

1. A Clear Starting Set of Industry Pathways

The study identifies high-potential circular sectors—including green construction, environmental restoration, sustainable manufacturing, and the blue economy—that can serve as the core pathways for workforce development. These sectors provide immediate employment potential while positioning Port Alberni for long-term economic resilience.

2. Evidence-Based Training Priorities

The ranked training priorities reflect a strong alignment between labour market demand, community readiness, and circular economy opportunities. These priorities can serve as the first wave of programming, with future phases expanding into urban forestry, regenerative agriculture, renewable energy, and advanced material recovery.

3. A Framework for Indigenous-Led Workforce Development

Engagement results underscore the importance of Indigenous knowledge, stewardship, and leadership in circular sectors—particularly in restoration, marine work, and land-based programming. A full WDP should incorporate co-designed training models, Indigenous-led mentorship, and culturally grounded pathways to employment.

4. System-Level Barriers and Enablers

This study identifies systemic challenges—funding gaps, facility limitations, regulatory inconsistencies, labour shortages—that must be addressed in a full Workforce Development Plan. These findings provide a roadmap for structural interventions such as capital investment, policy advocacy, facility development, and long-term program funding.

5. Implementation Partnerships

The study documents a strong ecosystem of partners—employers, First Nations, educational institutions, community organizations—already contributing to circular practices. These relationships form the backbone of a coordinated workforce strategy that can scale training, create employment pipelines, and support wrap-around services.

6. A Scalable Model for Future Training

The training programs selected for initial delivery provide a replicable template for future programming:

- Hands-on, applied learning
- Short-duration training blocks
- Paid practicums and work placements

- Integration of Indigenous knowledge
- Clear employer partnerships and job pathways

This model can be expanded and adapted to additional circular sectors as the economy evolves.

7.2. Positioning Port Alberni for Long-Term Circular Workforce Growth

This Labour Market Study provides Port Alberni with a strategic, community-informed, evidence-based foundation for workforce development. It identifies the sectors with the greatest potential, the skills most in demand, the barriers that must be addressed, and the training pathways that will deliver meaningful, sustainable employment.

The next stage—a comprehensive Workforce Development Plan—should build on this foundation to create a coordinated, multi-year strategy that includes:

- Long-term training and employment pipelines
- Facility and infrastructure planning
- Policy and regulatory recommendations
- Employer engagement and retention strategies
- Indigenous partnership frameworks
- Metrics for tracking workforce outcomes
- Funding and sustainability strategies

By aligning these pieces, Port Alberni can transition from a resource-dependent economy to a resilient, place-based circular economy that creates lasting employment and strengthens community well-being.