

Fastest Growing Industries: Green Economy

A guide for newcomers to British Columbia



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1. Overview of the Green Economy

Introduction

The green elements of BC's economy are growing faster than the province's economy as a whole and are expected to continue to do so over the next decade.

The GLOBE Foundation

The majority of green jobs in BC are not new occupations but are, for the most part, created from existing occupations. They are jobs that are being re-designed to help reduce the impact of humans on the environment, to promote sustainability, and to encourage the efficient use of energy and resources. An example would be an automotive technician whose skills are shifting to include more work with hybrid and electric vehicles.

Six key sectors are responsible for supplying the bulk of the green products and services in BC:

- **Clean & Alternative Energy:** including renewable energy, bioenergy, and fuel cells
- **Energy Management & Efficiency:** including energy storage & transmission, energy efficient lighting and heating, ventilating, and air conditioning (HVAC), and public transportation

- **Green Building and Community Design:** including construction and building materials, architecture & green infrastructure, sustainable development, transportation and planning
- **Environmental Protection:** including elements of agriculture and silviculture, pollution control, land and water remediation, environmental consulting and engineering, materials management and recycling
- **Carbon Finance & Investment:** including carbon management, offset markets, and venture capital
- **Green Knowledge & Support:** including research and development, advanced education and training, law, information technology, nongovernmental organizations (NGOs), and the public sector

The Figures on the Green Economy Development in Vancouver:

- one in 15 Vancouverites works in the green economy
- increase of 23% in green jobs since 2013
- 26% increase in local food Jobs since 2013
- green and local food jobs in Vancouver increased from 16,700 jobs in 2010 to 24,700 jobs in 2016, an increase of 47% increase since 2010
- green and local food jobs represent roughly 6 per cent of all jobs in Vancouver, increasing from 4.2 per cent of jobs in 2010
- 25% of Canada's 'Cleantech' companies are based in Vancouver
- in 2016, 2,544 total jobs in 'Cleantech', 7.1% increase since 2010
- since 2010, 52% increase in construction employment in green buildings
- in 2016, 7,689 total jobs in green buildings construction

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Estimated growth potential for green jobs in BC to 2020

Source: GLOBE Foundation

Sector	Sub-Sector	Long-Term Job Potential in BC
Clean & Alternative Energy	Renewable Energy	Good to Excellent
	Bioenergy	Excellent
	Hydrogen & Fuel Cells	Good
Energy Management & Efficiency	Energy Management & Power Electronics	Excellent
	Energy Saving Lighting & HVAC	Excellent
	Advanced Batteries, Energy Storage & Charging Systems	Good
	Engines, Power Saving Automotive Equipment & Hybrid Technologies	Good
Green Building	Architecture, Community Design & Green Infrastructure	Excellent
	Construction & Building Materials	Good to Excellent
	Sustainable Development, Property Management & Real Estate	Good to Excellent
Environmental Protection	Pollution Mitigation, Control & Remediation	Good to Excellent
	Waste Management, Reduction & Recycling	Excellent
	Water Conservation Technologies	Excellent
	Carbon Capture, Storage & Sequestration	Unknown
	Environmental Consulting	Good to Excellent
Carbon Finance & Investment	Carbon Finance & Offsets	Unknown
	Investment & Venture Capital	Good
Knowledge	Education & Training	Good to Excellent
	Research & Development	Good to Excellent
	Information & Communications Technology	Excellent
	Legal & Accounting	Good
	Public Administration & Support Organizations	Good

Table from: http://globe.ca/wp-content/uploads/2012/10/bcge_report_feb_2010.pdf

For more information on BC's green economy see:

- **Vancouver Economic Commission: Green Economy**
<http://www.vancouvereconomic.com/focus/green-economy/>
- **Vancouver Economic Commission: State of Vancouver's Green Economy | An Early Preview of the 2018 Report**

<http://www.vancouvereconomic.com/wp-content/uploads/2018/03/State-of-Vancouver-Green-Economy-A-2018-Preview-WEB.compressed.pdf>

- **British Columbia's Green Economy. Globe Advisors**
http://globe.ca/wp-content/uploads/2012/10/bcge_report_feb_2010.pdf
- **WorkBC: Green Economy**
<https://www.workbc.ca/Labour-Market-Industry/B-C-s-Economy/Green-Economy.aspx>
- **Careers for a Sustainable Future. Globe Foundation**
http://globe.ca/wp-content/uploads/2012/11/Reference-Guide_Green-Jobs.pdf
- **Green Jobs BC**
<http://www.columbiainstitute.ca/what-we-do/greenjobsbc>

2. Occupations in the Green Economy

All occupational sectors contribute to BC's green economy to varying degrees.

Green jobs in agriculture (which include farmers and farm managers, aquaculture operators, nursery and greenhouse operators, and landscaping and ground maintenance supervisors) employ the most people in BC's green economy.

A variety of new employment opportunities are emerging in the green economy.

These include a wide range of occupations such as:

- tidal power electrical engineers
- wind and solar power technicians
- wood pellet equipment operators
- energy managers
- waste reduction consultants
- Greenhouse gas emissions verifiers
- hydrogen fuel cell researchers
- sustainability managers

and many others...

The chart below shows employment numbers by broad occupational group:

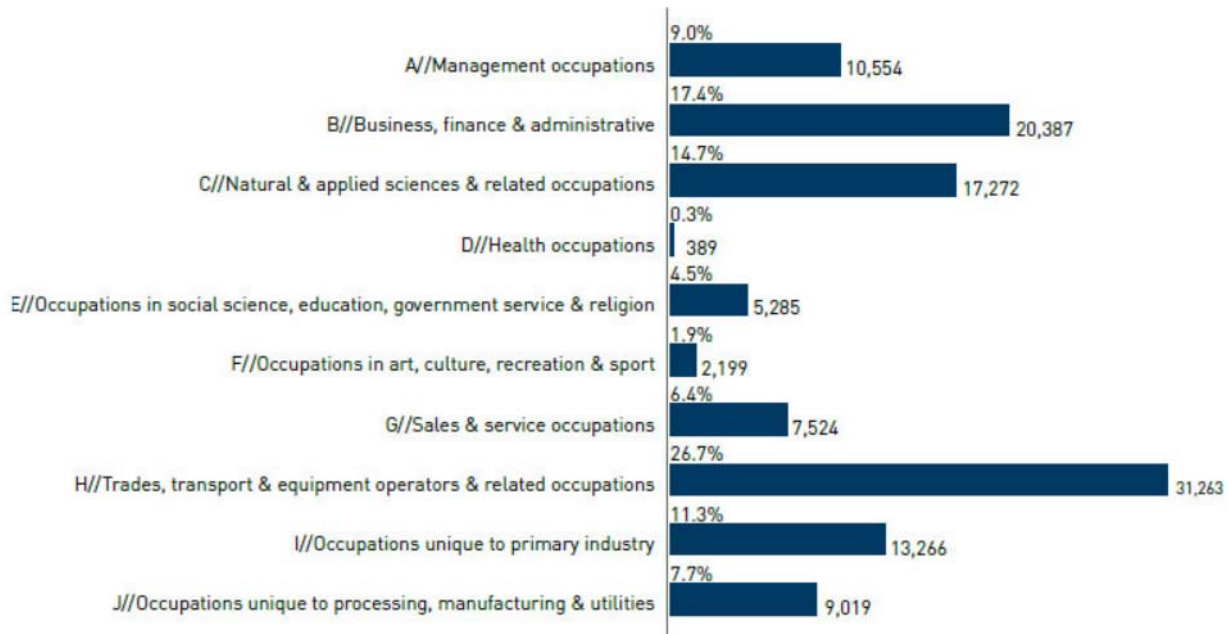


Chart from Globe Foundation http://globe.ca/wp-content/uploads/2012/11/Reference-Guide_Green-Jobs.pdf

More information on specific careers in the green economy can be found at:

- **ECO Canada. Environmental Career Profiles**
<http://www.eco.ca/training/career-profiles/>
- **Careers for a Sustainable Future. A Reference Guide to Green Jobs in British Columbia**
http://globe.ca/wp-content/uploads/2012/11/Reference-Guide_Green-Jobs.pdf
- **WorkBC Career Profiles**
<http://www.workbc.ca/> [search by job title]

3. Hiring Forecast by Region

The majority of jobs in the green economy are found in Metro Vancouver, the Lower Mainland and Vancouver Island.

The table below shows job numbers and key sectors by BC's regions:

Region	Jobs (full-time equivalent)	Key Sectors
Vancouver Island/Coast	15,877	Clean & alternative energy Energy management Green Building Environmental Protection Carbon Finance Green knowledge
Mainland/Southwest	75,703	Clean & alternative energy Energy management Green building Environmental protection Carbon finance Green knowledge
Thompson/Okanagan	10,730	Clean & alternative energy Energy management Green building Environmental protection Green knowledge
Kootenay	5,188	Clean & alternative energy Environmental protection Green knowledge e
Cariboo	3,778	Clean & alternative energy Environmental protection Green knowledge
North Coast/Nechako	1,869	Clean & alternative energy Environmental protection Green knowledge
Northeast	4,004	Clean & alternative energy Environmental protection Green knowledge

Source: British Columbia's Green Economy. Building a Strong Low-Carbon Future. Globe Foundation

For more information see:

- **British Columbia's Green Economy. Building a Strong Low-Carbon Future. Globe Foundation**
http://globe.ca/wp-content/uploads/2012/10/bcge_report_feb_2010.pdf
- **Vancouver Economic Development Commission. Green Economy**
<http://www.vancouvereconomic.com/focus/green-economy/>

4. Finding Jobs

Online Job Postings

- **ECO Canada**
<http://www.eco.ca/viewjobs/>
- **Indeed.com**
<http://ca.indeed.com/>
- **BC Sustainable Energy Association Job Board**
<https://www.bcsea.org/job-board-members-only> *note: for members only*
- **GoodWork.ca**
<http://www.goodwork.ca/jobs.php?theme=gbusiness>
- **Canadian Environmental Network**
<http://jobs.rcen.ca/>
- **BioTalent Canada**
<https://www.biotalent.ca/en/job-board>

Creating a List of Potential Employers

You can use directories to produce lists of employers in the green industry in British Columbia. Contact them directly to find out if they're hiring.

- **BC Environmental Industry Association. Membership Directory**
<http://www.bceia.com/members.html>
- **BC Sustainable Energy Association Membership Directory**
<http://www.bcsea.org/sed>
- **Green Business Canada**
<https://businessofgreen.ca/gbc-member-directory/>
 - **Canadian Environmental Resource Guide**
Available at the Central Library, Level 4, 363.70025 C21

5. Additional Resources

Still looking for more information? Try looking at the following resources:

- **ECO Canada**
<http://www.eco.ca>
- **Canadian Environmental Network**
<http://recen.ca/home>
- **British Columbia Environmental Industry Association**
<http://www.bceia.com>
- **British Columbia Sustainable Energy Association**
<http://www.bcsea.org>
- **Career Paths for Skilled Immigrants Program**
<https://www.welcomebc.ca/Work-or-Study-in-B-C/Work-in-B-C/Employment-Language-Programs>
- **Welcome BC. Job Profiles for Immigrants**
<https://www.welcomebc.ca/Work-or-Study-in-B-C/Your-Career-in-B-C>

Questions? Please ask the Information Staff at the Central Library or telephone 604-331-3603.

Please note that the information in this guide is also available online through the Skilled Immigrant InfoCentre website at <http://skilledimmigrants.vpl.ca/>.