



## Vice-President Manufacturing

### Bio-economy Skills Profile Summary

Canadian **Vice-Presidents of Manufacturing** oversee the overall operations and manufacturing functions in technology companies. They develop, direct and implement strategic manufacturing/operational plans, policies and procedures that align with the company's vision, mission, values, and scientific direction. Vice-Presidents of Manufacturing provide leadership and work closely with personnel from product development (research and development group, analytical development, clinical development, etc.), quality control, quality assurance, production control, engineering and logistics, supply chain management, regulatory affairs, and intellectual property. They promote health and safety and monitor budgets and leverage diverse resources to meet financial targets.

**Learn more about the role of Vice-President of Manufacturing by downloading the full skills profile for free at [www.biotalent.ca/profiles](http://www.biotalent.ca/profiles).**



# Vice-President Manufacturing



## BioTalent Canada's Bio-economy Skills Profiles

Biotechnology's fusion of science and business creates unique requirements for jobs in the sector. Candidates often need skills suited both to the lab and the boardroom. As a result, occupational descriptions from other sources or sectors don't always fit the bio-economy exactly. That's why, in partnership with industry stakeholders, BioTalent Canada has developed skills profiles specific to the bio-economy—a project that will continue with the ongoing addition of other functions over time.

Each profile includes a definition of the occupation, a list of competencies and associated tasks, a summary situational analysis, language benchmarks, and essential skills.

## Who can use these profiles?

**Easy to use and interpret, our *Bio-economy Skills Profiles* were created to meet the needs of a wide range of audiences. Here's how you might use them if you're an:**

**Employer:** Develop job descriptions, performance evaluation criteria, professional development programs, succession plans, team building initiatives and recruitment plans.

**Job seeker:** Identify your professional development needs, tailor your resume for a specific position, prepare for interviews and interpret job descriptions.

**Educator:** Build industry-oriented curricula to help produce job-ready graduates.

**Student:** Grow your understanding of employers' expectations and choose the right educational programs to equip yourself with the skills for success.

## Validated by industry

BioTalent Canada created its *Bio-economy Skills Profiles* in consultation with industry to accurately capture the needs of biotechnology companies and produce truly practical, relevant resources. These profiles summarize the high-level skills required for each occupational profile and itemize in detail the common tasks associated with each function. Because the profiles are comprehensive, not every skill may be required for a single position: instead, the profiles present the full sets of skills that could be expected of a person in a given role within companies at various stages of development.

## Information you can trust

BioTalent Canada is the country's source for reliable, objective and accurate information on skills development and human resources in the bio-economy. Our aim as Canada's biotechnology sector council is to deliver the human resources tools, information and skills development resources industry needs to ensure an adequate supply of job-ready people.

## Understanding the bio-economy

Canada's bio-economy is engaged in the research, development, commercialization and manufacturing of biotechnology products. The bio-economy is constantly expanding as new technologies and techniques are applied to an ever-broader range of industries and sectors including:

Agriculture	Genomics
Aquaculture	Human Health
Bioenergy	Industrial
Bioinformatics	Life Sciences
Bioproducts	Medical Devices
Biosciences	Nanotechnology
Environment	Natural Resources
Food Processing	Nutraceuticals
Forestry	Pharmaceuticals

## Get started today

Even before you download the full Vice-President of Manufacturing Skills Profile, get a sense of the information it contains and how you might use it in your work. Attached here is a quick-reference checklist that summarizes the core skills required for the position and the common tasks associated.



**Go to [www.biotalent.ca/profiles](http://www.biotalent.ca/profiles) and download the complete skills profile.**

Entry into the position of a Vice-President of Manufacturing is almost universally based on a combined background in scientifically oriented academics and extensive experience in business and management.

## A Vice-President of Manufacturing must be able to:

### A. Develop manufacturing strategy

- 1. Analyze in-house manufacturing capabilities
- 2. Analyze outsourcing manufacturing opportunities
- 3. Stay current with manufacturing trends
- 4. Develop long-term plan in line with company objectives
- 5. Develop manufacturing investment strategy
- 6. Conduct scientifically sound risk assessment
- 7. Lead development of contingency plans based on scientifically sound judgements
- 8. Set key performance indicators
- 9. Advocate manufacturing strategy
- 10. Transfer technology based on current opinion in industry, as required
- 11. Oversee Chemistry Manufacturing Control program, as required
- 12. Oversee manufacturing controls and optimization

### B. Implement manufacturing strategy

- 1. Develop operational plan
- 2. Communicate operational plan
- 3. Secure human resources
- 4. Secure capital resources
- 5. Lead strategy implementation
- 6. Align key performance indicators among sub-functions
- 7. Evaluate progress and performance
- 8. Formulate recommendations
- 9. Report to executive team

### C. Demonstrate leadership

- 1. Lead manufacturing team toward a common goal
- 2. Share vision
- 3. Listen
- 4. Demonstrate business acumen
- 5. Motivate team members
- 6. Empower team members
- 7. Delegate
- 8. Recognize contributions of team members
- 9. Develop others

### D. Develop and manage budgets

- 1. Analyze sales forecasts
- 2. Analyze variable and fixed costs

- 3. Analyze asset utilization, based on current opinion in industry
- 4. Define capital investment needs
- 5. Define working capital requirement
- 6. Optimize cost of goods
- 7. Develop operational budget
- 8. Control actual results versus budget

### E. Manage organizational structure

- 1. Define organizational chart
- 2. Develop succession plan
- 3. Outsource non-core competencies, as required
- 4. Identify development needs
- 5. Provide opportunities for continuous learning
- 6. Evaluate performance
- 7. Negotiate collective bargaining agreements

### F. Oversee production

- 1. Review monthly rolling sales forecast
- 2. Oversee production planning
- 3. Adapt production plan to monthly rolling sales forecast
- 4. Manage engineering
- 5. Ensure compliance with procedures
- 6. Support development of product specifications
- 7. Validate processes
- 8. Oversee inventory management
- 9. Champion Environmental, Health, and Safety programs
- 10. Monitor key performance indicators
- 11. Assess the impact of production plan changes on the operational plan
- 12. Oversee contract manufacturing operation

### G. Comply with legislation

- 1. Ensure compliance with relevant regulations
- 2. Analyze risk exposure
- 3. Develop legislative awareness programs, as required
- 4. Develop and follow company guidelines to ensure compliance in conjunction with quality assurance
- 5. Oversee implementation of guidelines
- 6. Monitor compliance with guidelines
- 7. Review procedures, monitoring trends and variances
- 8. Review reports to or from authorities

### H. Promote continuous improvement

- 1. Define continuous improvement framework
- 2. Develop a continuous improvement culture
- 3. Analyze inefficiencies
- 4. Establish improvement priorities
- 5. Coach continuous improvement teams

### I. Support CEO in driving the organization

- 1. Participate in defining company vision and mission
- 2. Influence overall business decision making
- 3. Represent manufacturing interests on the executive team
- 4. Propose business improvement projects
- 5. Provide status reports on activities
- 6. Provide information on market and manufacturing industry trends
- 7. Communicate corporate directions to manufacturing division



### J. Oversee purchasing functions

- 1. Maintain awareness of commodity trends
- 2. Assess the impact of international exchange rates
- 3. Exploit global sourcing opportunities
- 4. Negotiate key contractual agreements
- 5. Oversee logistics

### K. Demonstrate personal competencies

- 1. Influence decisions
- 2. Communicate effectively and clearly
- 3. Demonstrate interpersonal skills
- 4. Demonstrate analytical skills
- 5. Interpret and analyze data
- 6. Demonstrate professionalism
- 7. Adapt to changing technology environment
- 8. Promote teamwork
- 9. Demonstrate innovative thinking and entrepreneurship
- 10. Keep current with market developments, as required
- 11. Solve problems
- 12. Integrate cultural diversity
- 13. Demonstrate clarity of purpose, as required