



# Sectoral Profile:

## Chemical Manufacturing

NAICS 325

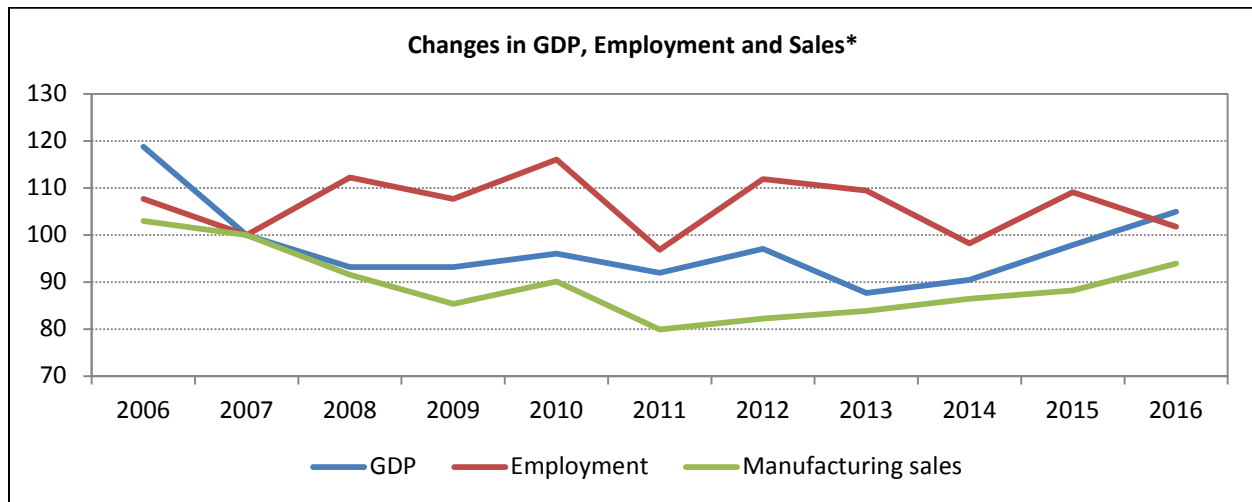
Quebec

2018–2020\*



- Half of the labour force is concentrated in pharmaceutical and medicine manufacturing, and soap, cleaning compound and toilet preparation manufacturing
- Four segments are showing strong growth workforce increases over the past few years: pharmaceutical and medicine manufacturing, paint, coating and adhesive manufacturing, soap, cleaning compound and toilet preparation manufacturing, and other chemical manufacturing

The chemical manufacturing industry is made up of seven segments, all very different from each other. More than half of the workforce is concentrated within two groups: pharmaceutical and medicine manufacturing (36%) and soap, cleaning compound and toilet preparation manufacturing (18%).



Data are expressed as indices with 2007 = 100

Sources: Statistics Canada, GDP – CANSIM 379-0030, Employment – LFS, Sales – CANSIM 304-0015

### Pharmaceuticals and medicines

In the second half of the 2000s, companies went through a difficult period: important patents expired, new products did not receive required approval for sale, and competition with manufacturers of generic products has intensified.

\* This document is the result of analyses performed using information available as at April 5, 2018.

In order to offset a drop in revenues, large pharmaceutical companies restructured and merged. Research and development (R&D) was massed in fewer units located near production establishments. Research partnerships with SMEs and universities were developed. This resulted in many closures and layoffs in Quebec.

By commissioning a portion of R&D to SMEs and universities, the process of product development has changed. Rather than working in large multidisciplinary teams on all aspects, a specific component of research is assigned to a small group, which focuses, for example, on a molecule, an active ingredient, the method by which a drug is introduced or released into the human body, and so forth. When the objectives have been met, the pharmaceutical company can terminate its relationship with the research team or offer a new mandate. Moreover, companies are trying to leverage the knowledge acquired during R&D in order to help improve diagnostic method for health professionals, and even turn this into a publicly available product.

To support the life sciences industry, a number of research funds were created over the past few years. Some of them are private; others involve governments, university institutions and the private sector. Due to the investments that were generated, research staff has grown. However, some of the jobs created are included in the Professional, scientific and technical services industry, where the SMEs offering scientific R&D services are classified.

We are confident that the environment around research and the investments announced recently will allow the recent growth in the segment to continue.

### **Other segments**

The recent growth in soap and cleaning compound manufacturing has been driven both by domestic demand and by the North American integration of production in some businesses. The outlook remains positive for the next few years.

The paint and adhesive manufacturing sector has seen a 17% increase in its workforce since 2014. The momentum is fuelled by domestic demand and by the increase in U.S. automobile production and growth will occur, although at a slower rate in the next few years.

The other chemical products segment (13% of jobs in chemical manufacturing) is rather heterogeneous. It includes printing ink manufacturing, explosives manufacturing, the custom mixing and blending of plastics resins, manufacturing products for photocopiers, laser printers and electrostatic printing devices, and so forth. Since 2010, this segment has seen strong growth. Although some markets have matured, mainly those for printing products, recent announcements are suggesting the possibility for employment gains for the 2018-2020 horizon.

The basic chemical sector (11% of jobs in chemical manufacturing) includes the manufacture of petrochemicals, industrial gases, dyes, and so forth. Despite frequent yearly variations, the workforce level has been rather stable over the last 10 years, despite investments in biofuels.

## Sectoral Dynamics for Regions

Québec 2018-2020	In the Economic Regions	AAGR
Annual average growth: 1.7%  Loss/Gain of approx.: 1,675 positions  Yearly dynamics: 2018 : ↗ 2019 : ↗ 2020 : ↗	Capitale-Nationale	3.8%
	Montréal	1.8%
	<b>QUÉBEC</b>	1.7%
	Laurentides	1.6%
	Estrie	1.6%
	Mauricie	1.3%
	Montréal CMA	1.0%
	Chaudière-Appalaches	0.8%
	Lanaudière	0.5%
	Centre-du-Québec	0.3%
	Bas-Saint-Laurent	0.0%
	Abitibi-Témiscamingue	0.0%
	Saguenay-Lac-Saint-Jean	0.0%
	Outaouais	0.0%
	Côte-Nord / Nord-du-Québec	0.0%
Gaspésie-Les-Îles	0.0%	

n/a: not applicable

Source: 2018–2020 Sectoral Outlook annual exercise

Labour Market Analysis Directorate, Service Canada – Quebec Region, April 5, 2018.

The following occupations in the chemical manufacturing industry are the most likely to be affected by the expected dynamics of the labour market (according to the occupation by industry matrix):

- 9421 Chemical plant machine operators
- 2211 Chemical technologists and technicians
- 9613 Labourers in chemical products processing and utilities
- 2112 Chemists
- 6221 Technical sales specialists - wholesale trade
- 9212 Supervisors, petroleum, gas and chemical processing and utilities
- 0911 Manufacturing managers
- 9232 Petroleum, gas and chemical process operators
- 7452 Material handlers
- 9619 Other labourers in processing, manufacturing and utilities
- 1521 Shippers and receivers
- 7311 Construction millwrights and industrial mechanics
- 0601 Corporate sales managers
- 6552 Other customer and information services representatives
- 2121 Biologists and related scientists
- 7333 Electrical mechanics
- 2221 Biological technologists and technicians.

## SIZE AND DISTRIBUTION OF AND CHANGES IN THE INDUSTRY IN QUEBEC

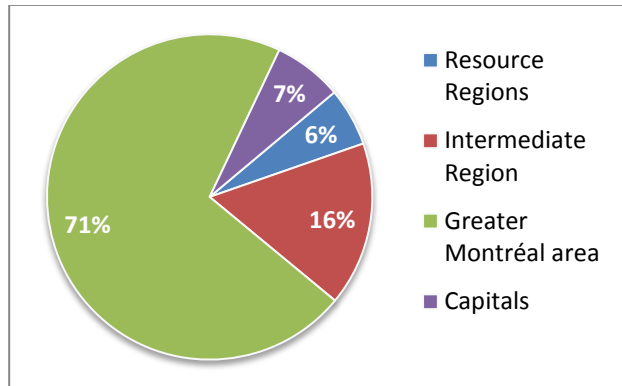
	Employment 2015–2017 Average			10-year Change in Employment	
	Employment In thousands	Provincial distribution	Regional employment share	In thousands	as a %
<b>All of Quebec</b>	<b>31.0</b>	<b>100.0%</b>	<b>0.7%</b>	<b>0.6</b>	<b>2.0%</b>
<b>Resource Regions</b>					
Abitibi-Témiscamingue	x	x	x	x	x
Bas-Saint-Laurent	x	x	x	x	x
Côte-Nord / Nord-du-Québec	x	x	x	x	x
Gaspésie-Îles-de-la-Madeleine	x	x	x	x	x
Saguenay-Lac-Saint-Jean	x	x	x	x	x
<b>Intermediate Regions</b>					
Centre-du-Québec	x	x	x	x	x
Chaudière-Appalaches	x	x	x	x	x
Estrie	x	x	x	x	x
Mauricie	x	x	x	x	x
<b>Greater Montréal area</b>					
Lanaudière	x	x	x	x	x
Laurentides	2.2	7.2%	0.7%	-0.4	-16.3%
Laval	2.2	7.2%	1.0%	-1.1	-33.7%
Montérégie	9.4	30.3%	1.2%	1.1	13.7%
Montréal	9.5	30.8%	1.0%	0.4	4.4%
<b>Capitals</b>					
Capitale-Nationale	x	x	x	x	x
Outaouais	x	x	x	x	x

x: confidential data, fewer than 1,500 people employed in this region

Source: Historical estimates based on Statistics Canada's Labour Force Survey

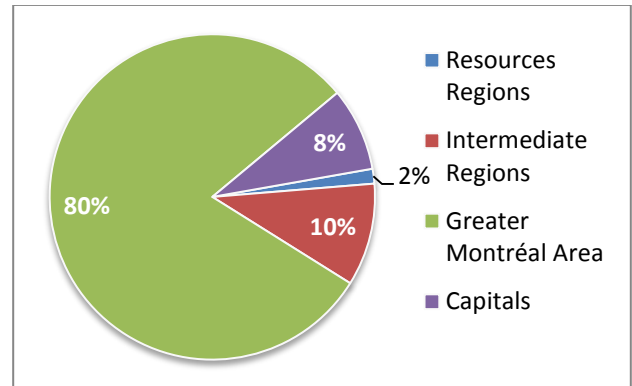
**SOME CHARACTERISTICS OF THE INDUSTRY IN QUÉBEC**

**Establishment distribution by Region**



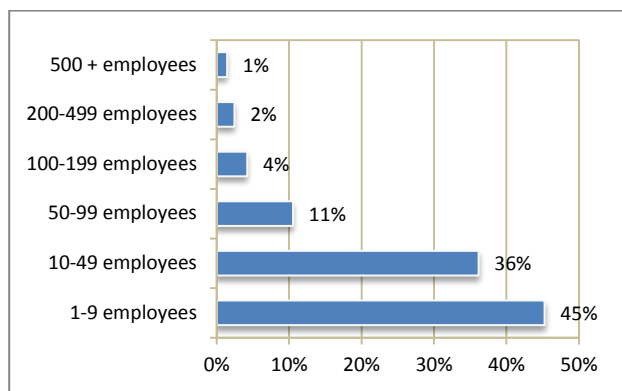
Source: Statistics Canada, Establishment Counts by Economic Region, industry, and Employee Size Ranges, December 2015

**Employment distribution by Region**



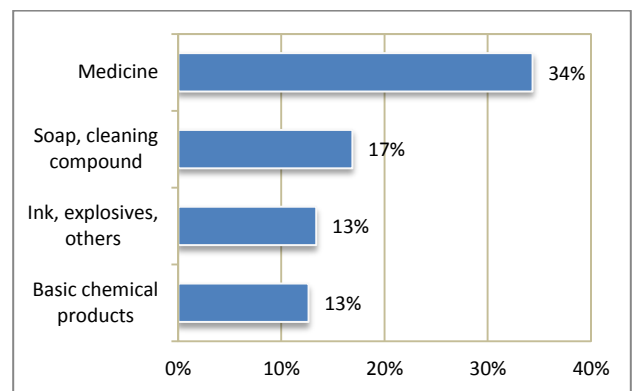
Source: Statistics Canada, Labour Force Survey; based on average employment in 2014-2016

**Size of establishment**



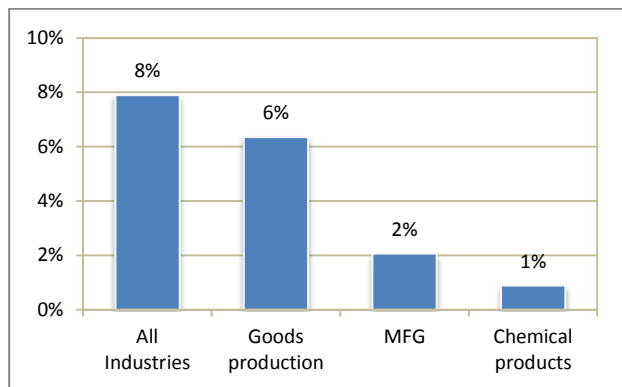
Source: Statistics Canada, Establishment Counts by Economic Region, industry, and Employee Size Ranges, December 2015

**Employment by industry subsectors**



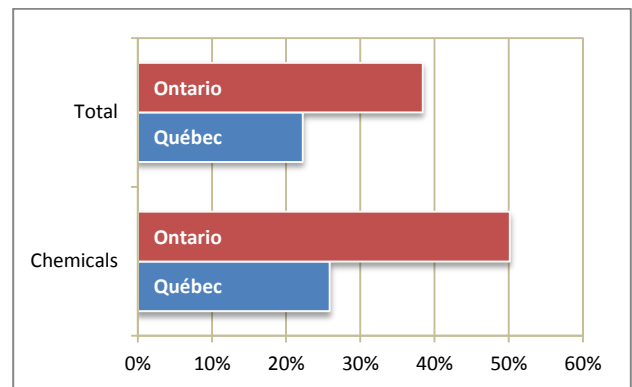
Source: Statistics Canada, Survey of Employment, Payrolls and Hours; based on average employment in 2014-2016

**Self-employed jobs compared to Total employment**



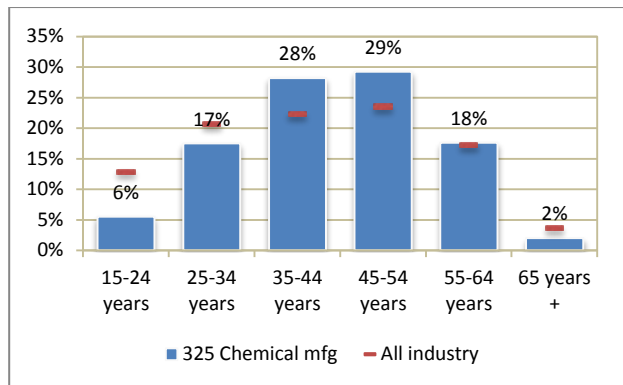
Source: Statistics Canada, CANSIM 383-0031 Labour statistics, based on average employment in 2014-2016

**Share of total employment and industry in Canada**



Source: Statistics Canada, Survey of Employment, Payrolls and Hours; based on average employment in 2014-2016

**Employed Labour Force Aged 15 Years and Over**



Source: Statistics Canada, 2016 Census, special tabulation for ESDC

**Employment distribution by skill type**

National Occupational Classification	
0 Management	14%
1 Business, finance and administration	15%
2 Natural and applied sciences and related	18%
3 Health	2%
4 Education, law and social, community and government services	2%
5 Art, culture, recreation and sport	1%
6 Sales and service	10%
7 Trades, transport and equipment operators	9%
8 Natural resources, agriculture and related production	1%
9 Manufacturing and utilities	28%

Source: Statistics Canada, 2016 Census, special tabulation for ESDC

**FOR MORE INFORMATION**

- E Job Bank (Canada) – [Job Market Trends and News](#): information on jobs, skills and local labour market trends is important when making career decisions. In addition, information on wages, labour supply, labour demand and other factors helps employers recruit, train and retain workers and make business and investment decisions.
- North American Industry Classification System (NAICS) Canada 2012: Chemical manufacturing [NAICS 325](#)

**Note:** In preparing this document, the authors took care to provide clients with labour market information that is timely and accurate at the time of publication. Since labour market conditions are dynamic, some of the information presented here may have changed since this document was published. Users are encouraged to also refer to other sources for additional information on the local economy and labour market. Information contained in this document does not necessarily reflect official policies of Employment and Social Development Canada.

**Prepared by:** Labour Market Analysis Directorate, Service Canada, Quebec

**For further information,** please contact the LMI team at:

[http://www.esdc.gc.ca/cqi-bin/contact/edsc-esdc/eng/contact\\_us.aspx?section=lmi](http://www.esdc.gc.ca/cqi-bin/contact/edsc-esdc/eng/contact_us.aspx?section=lmi)

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