



Sectoral Profile

Primary metal manufacturing

NAICS 331

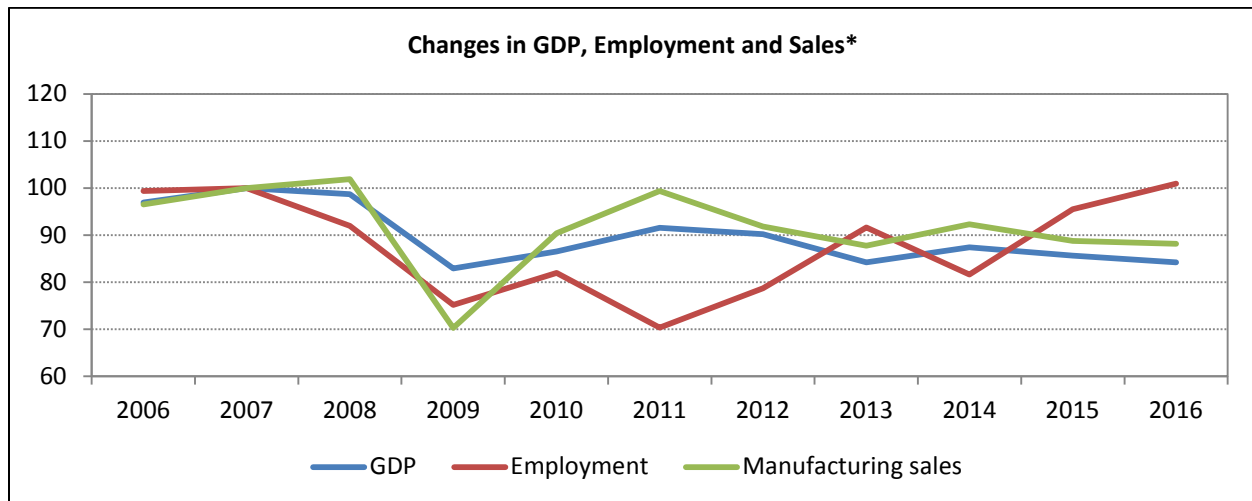
Quebec

2018-2020*



- Global overcapacity in steel and aluminum production continues to be an issue, but recent improvement might bring about a better business climate in the next few years
- Prices remain below the level where companies would increase their production capacity
- The industry in Quebec is shaped by aluminum production, accounting for 90% of Canadian shipments of primary alumina and aluminum production

With more than a third of the workforce, alumina and aluminum production and processing is the main segment of the primary metal manufacturing industry in terms of employment in Quebec. However, it is not ranked first in terms of manufacturing shipments, owing to declining sales and prices since the 2008-2009 recession. The production and processing of non-ferrous materials such as copper and nickel now dominates, with half of sales in the industry.



* Data are expressed as indices with 2007 = 100

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

With two thirds of Quebec shipments leaving the country, the primary metal manufacturing industry is highly vulnerable to the global economic situation. In the case of aluminum, exports account for more than 90% of shipments. The industry was shaken by the 2008-2009 recession: the workforce fell by 25% in comparison to the peak reached in 2007. The impact was significant for all segments. Although many years have gone by, the

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

industry has not yet recovered all of the jobs lost. Taking into account the slow pace of the global economic recovery, it was expected.

However, the fact that the global production capacity has risen significantly after the recession is an added difficulty. In steel production for example, the surplus of production capacity has tripled since 2006. According to the *Organization for Economic Cooperation and Development* (OECD), several governments supported these industries by offering subsidies and contributions, and implementing measures to protect the domestic market. The industry was thus sheltered from imports. Many governments also launched large infrastructure projects to stimulate their economies, which led to the addition of more production capacity to meet demand.

Since the end of the recession, the increase in offer caused a drop in metal prices, putting a strain on profit margins. Without government support, many establishments would not be able to continue. Although worldwide inventories were already high, some kept boosting production capacity. Now, an OECD committee regularly monitors capacities and developments. Data shows that China has more than doubled its production capacity between 2006 and 2016. In ten years, nearly 75% of capacity gains in the world were made on Chinese territory. In its latest report, the OECD has noted however that the current level should remain steady over the next few years.

Aluminum production was also affected by global overcapacity. At the G-20 meeting in spring 2017, three global aluminum producer organizations came together to call for action, also asking for a monitoring of some sort, to bring overcapacity building to a halt.

Ten years ago, aluminum production accounted for half of employment and shipments of the primary metal manufacturing industry in Quebec. The province still has a strong link with aluminum, and 90% of Canadian shipments of primary alumina and aluminum products come from Quebec. According to *AluQuébec*, the eight Quebec aluminum smelters of primary producers such as Alcoa, Rio Tinto and Alouette together hold 60% of the North American capacity. But the importance of this segment doesn't end here: there are also the processors, manufacturers and specialized suppliers associated with production.

The Quebec government, aware of this significance, launched the *Stratégie québécoise de développement de l'aluminium 2015-2025* [Quebec strategy for the development of aluminum for 2015-2025]. One of its objectives is to double the capacity for aluminum processing in Quebec over the next ten years. There is a desire to expand the ways aluminum is used, support private investment to enhance the value chain of processing and strengthen the position of the industry in export markets. The main aluminum markets are linked to construction, machinery manufacturing, and transportation material manufacturing (motor vehicles, aeronautics, rail, maritime). Aluminum is also used for manufacturing several consumer goods and for product packaging.

The Quebec aluminum sector is having difficulty recovering from the 2008-2009 economic crisis. The high demand and prices that prevailed until 2007, owing to, amongst other things, the growth of emerging countries, collapsed with the recession. Certain plants had to slow production and several development projects were postponed. Since then, the industry has lived through rise and fall in production and shipments, and has experienced many job losses.

The significant increase of global capacity over the past few years has led to intensified global competition and falling prices. Aluminum plants were built in the Middle East, South America and China. Quebec has lost ground in this environment. The province comparative advantage, low-cost hydroelectricity, is losing ground due the low price of natural gas all over the world.

On the other hand, there is hope that a better business environment in aluminum is at hand when, in August 2017, the Chinese authorities ordered the closure of the most polluting factories and illegal workshops, and

demanded a reduction in aluminum production from November to March to reduce pollution. This immediately propelled the price of aluminum upward, and now companies are thinking again of investing in their facilities. In addition, demand for aluminum product is strong due to the auto market.

Looking at the primary metal manufacturing overall industry, shipments stabilized recently and workforce levels are slowly recovering. This reflects both rising domestic demand and significant gains made in export markets. We believe that the downward cycle of the demand for primary metals and aluminum is over, and that a return to growth, although at a very slow pace will take place during the 2018-2020 forecast period.

On the other hand, this scenario will be impacted and could become negative if the United States levies tariffs on Canadian aluminum and steel products. According to U.S. communiqués, the charge could be 25% on steel products, and 10% on aluminum products. These tariffs could make Canadian products too costly for the US market and cause a significant drop in production here.

Sectoral Dynamics for Regions

Québec 2018-2020	In the Economic Regions	AAGR
Annual average growth: 0.2% Gain of approx.: 200 positions Yearly dynamics: 2018 : ↗ 2019 : ↗ 2020 : ↗	Chaudière-Appalaches	0.6%
	Estrie	0.4%
	Montérégie	0.3%
	QUÉBEC	0.2%
	Côte-Nord / Nord-du-Québec	0.2%
	Saguenay-Lac-Saint-Jean	0.2%
	Montréal CMA	0.2%
	Mauricie	0.1%
	Capitale-Nationale	0.0%
	Lanaudière	0.0%
	Bas-Saint-Laurent	0.0%
	Abitibi-Témiscamingue	0.0%
	Gaspésie-Les-Îles	0.0%
	Outaouais	0.0%
Centre-du-Québec	-0.1%	
Laurentides	-0.4%	

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 primary metal manufacturing industry are the ones most likely to be affected by the anticipated dynamics (according to the occupation by industry matrix):

- 9411 Machine operators, mineral and metal processing
- 7311 Construction millwrights and industrial mechanics
- 9412 Foundry workers
- 9211 Supervisors, mineral and metal processing
- 9611 Labourers in mineral and metal processing
- 7237 Welders and related machine operators
- 7452 Material handlers
- 7371 Crane operators
- 0911 Manufacturing managers
- 9416 Metalworking and forging machine operators
- 7242 Industrial electricians
- 2241 Electrical and electronics engineering technologists and technicians
- 7231 Machinists and machining and tooling inspectors
- 9612 Labourers in metal fabrication
- 6733 Janitors, caretakers and building superintendents
- 7521 Heavy equipment operators (except crane)
- 1521 Shippers and receivers
- 2233 Industrial engineering and manufacturing technologists and technicians
- 9231 Central control and process operators, mineral and metal processing
- 9418 Other metal products machine operators.

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

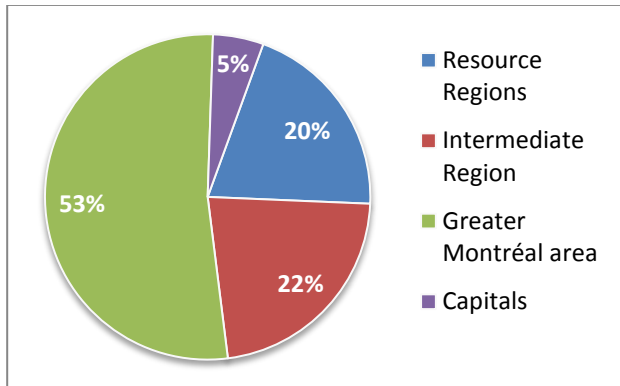
	Employment 2015–2017 Average			10-year Change in Employment	
	Employment In thousands	Provincial distribution	Regional employment share	In thousands	as a %
All of Quebec	30.5	100.0%	0.7%	-1.8	-5.6%
Resource Regions					
Abitibi-Témiscamingue	x	x	x	x	x
Bas-Saint-Laurent	x	x	x	x	x
Côte-Nord / Nord-du-Québec	2.7	8.9%	5.1%	-0.5	-15.6%
Gaspésie-Îles-de-la-Madeleine	x	x	x	x	x
Saguenay-Lac-Saint-Jean	5.3	17.4%	4.1%	-2.1	-28.4%
Intermediate Regions					
Centre-du-Québec	1.7	5.5%	1.4%	0.2	11.1%
Chaudière-Appalaches	x	x	x	x	x
Estrie	x	x	x	x	x
Mauricie	1.5	4.9%	1.3%	-1.6	-51.6%
Greater Montréal area					
Lanaudière	x	x	x	x	x
Laurentides	x	x	x	x	x
Laval	x	x	x	x	x
Montérégie	8.4	27.6%	1.1%	1.8	27.9%
Montréal	3.5	11.5%	0.3%	-0.7	-16.7%
Capitals					
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

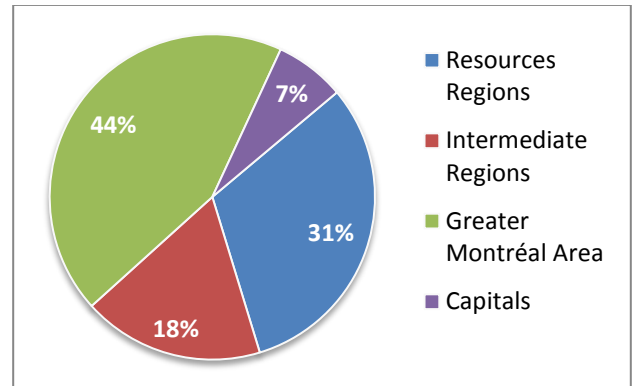
SOME CHARACTERISTICS OF THE INDUSTRY IN QUÉBEC

Establishment distribution by Region



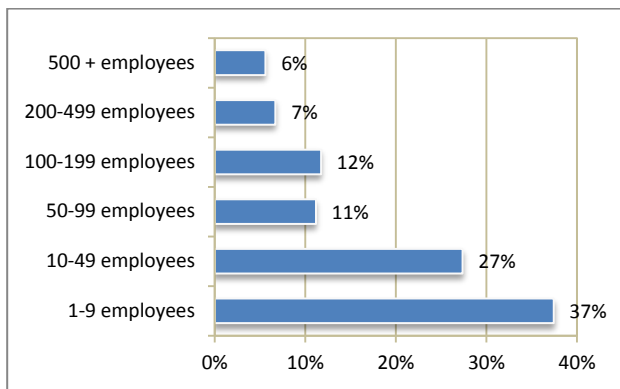
Source: Statistics Canada, Establishment Counts by Economic Region, industry, and Employee Size Ranges, December 2015

Employment distribution by Region



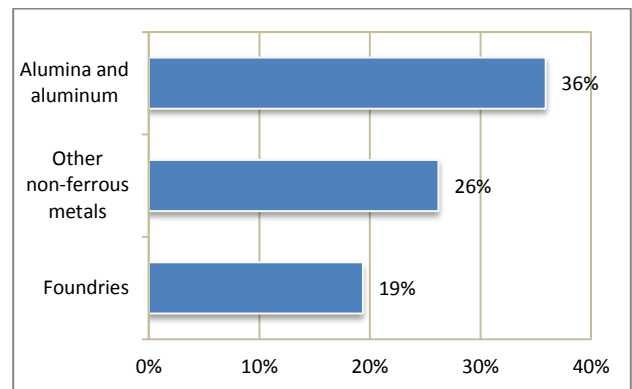
Source: Statistics Canada, Labour Force Survey; based on average employment in 2014-2016

Size of establishment



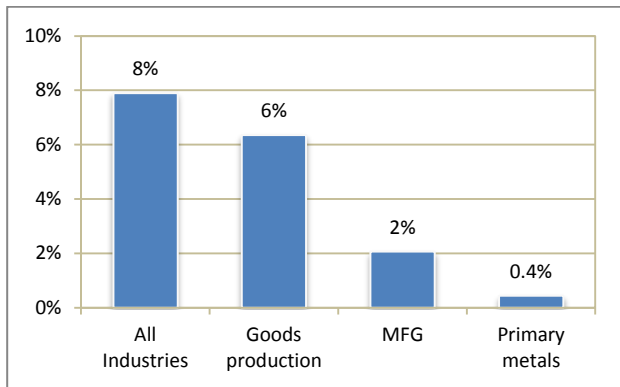
Source: Statistics Canada, Establishment Counts by Economic Region, industry, and Employee Size Ranges, December 2015

Employment by industry subsectors



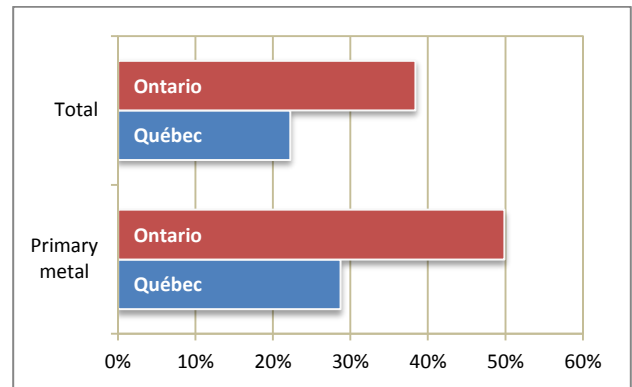
Source: Statistics Canada, Survey of Employment, Payrolls and Hours; based on average employment in 2014-2016

Self-employed jobs compared to Total employment



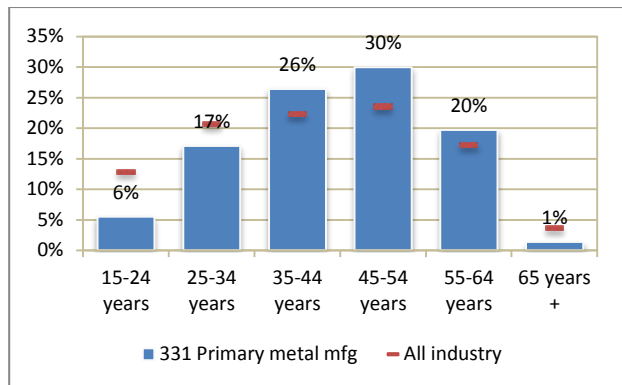
Source: Statistics Canada, CANSIM 383-0031 Labour statistics, based on average employment in 2014-2016

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	7%
1. Business, finance and administration	8%
2. Natural and applied sciences and related	11%
3. Health	0%
4. Education, law and social, community and government services	1%
5. Art, culture, recreation and sport	0%
6. Sales and service	4%
7. Trades, transport and equipment operators	26%
8. Natural resources, agriculture and related production	0%
9. Manufacturing and utilities	43%

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

FOR MORE INFORMATION

- Job Bank (Canada) – [Job Market Trends and News](#): Information on job, skills and local labour market trends is important for 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: Primary metal manufacturing [NAICS 331](#)

Note: In preparing this document, the authors have taken 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.

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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

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