2018

YEAR-END SURVEY OF BUSINESS CONDITIONS

INDUSTRIAL CHEMICALS

CHEMISTRY INDUSTRY ASSOCIATION OF CANADA

Responsible Care®
Our commitment to sustainability.

YEAR-END SURVEY OF BUSINESS CONDITIONS
INDUSTRIAL CHEMICALS HIGHLIGHTS 2018

6% INCREASE
IN PROJECTED SALES OF INDUSTRIAL CHEMICALS REACHING
$25.4 BILLION

10% INCREASE
IN EXPORTS TO
$20.5 BILLION

OPERATING PROFITS WILL RISE 15%
TO AN ALL-TIME HIGH OF **$4.3 BILLION**

[CAPITAL EXPENDITURES IN 2018 WILL BE DOWN BY 7% COMPARED TO 2017, AT **$1.2 BILLION**]

LOOKING AHEAD TO 2019

3% ESTIMATED VOLUME GROWTH
WITH THE DOLLAR VALUE DECLINING 1%

EXPORTS ARE FORECAST TO DECLINE BY 4%.

OPERATING PROFITS ARE ANTICIPATED TO FALL BY 3%
STILL THE SECOND-MOST PROFITABLE YEAR IN THE HISTORY OF THE INDUSTRY

65% **JUMP IN CAPITAL EXPENDITURES**
This reflects a strong optimism that the combination of existing business conditions and government incentives will lead to a rebound in investment activity in Canada.

The Chemistry Industry Association of Canada (CIAC) conducts a survey of its member-companies to obtain views on their economic forecast as reflected by sales, trade and employment indicators. This report is prepared by CIAC's Business and Economics Team and is based on aggregated results from the survey. The responses by CIAC members are based primarily on the performance of their operations in Canada.

INDUSTRIAL CHEMICALS PERFORMANCE IN 2018

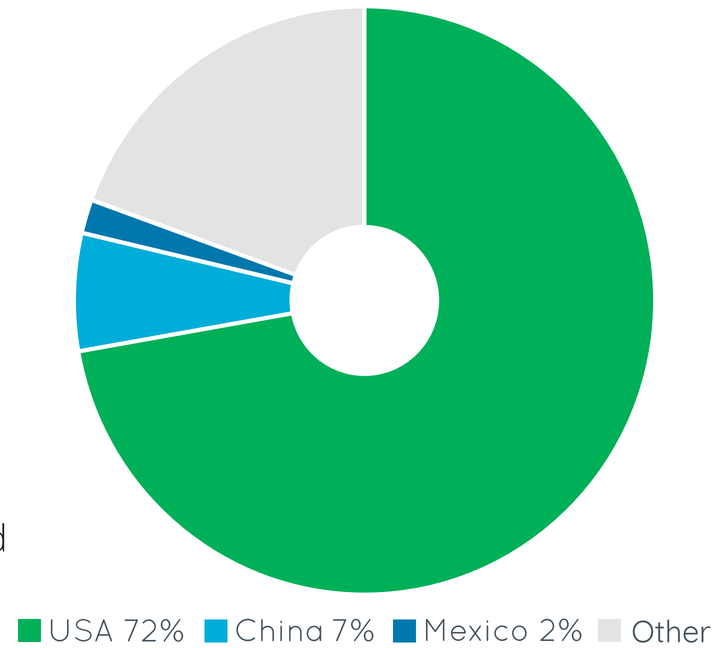
For 2018, it is estimated that year-end sales of industrial chemicals will increase 6% compared to 2017, reaching $25.4 billion. Using constant-dollar shipments as a proxy for volume, production volumes will rise by about 1% for the year. This indicates that on an aggregate basis, selling prices increased over the year, leading to a revenue gain that outpaced the volume gain.

Exports in 2018 are projected to be 10% higher than in 2017 at $20.5 billion. The Canadian industrial chemical industry is export-intensive, with 81% of production exported in 2018. The United States received 78% of those exports, followed by China (7%), and Mexico (2%).

Operating profits remained strong in 2018 and are projected to equate to an all-time high of $4.3 billion by year-end.

Capital expenditures for 2018 are projected to be $1.2 billion, down 7% from 2017, and down almost 50% from the recent peak observed in 2014.

INDUSTRIAL CHEMICAL EXPORTS 2018



KEY OPPORTUNITIES

NEW INVESTMENT

North America, and especially Canada, continue to have advantaged feedstock costs for petrochemical production. In its Fall Economic Statement, the federal government announced enhancements to the Accelerated Capital Cost Allowance (ACCA) that allows for 100% immediate deductibility for eligible machinery and equipment in the year that it is put into use. Further, the Alberta government has offered a total of $1.1 billion in investment supports for chemistry investments through the Petrochemicals Diversification Program and a further $1 billion in incentives for Petrochemical Feedstock Infrastructure Program to support investments that increase the feedstock supply. Ontario has announced a major regulatory burden reduction initiative to streamline and modernize regulatory requirements to improve opportunities to attract major capital investments. Taken together, these factors improve the business case for attracting investment capital to Canada.

TRADE POLICY

The completion of the re-negotiated NAFTA agreement, now named the United States – Mexico – Canada Agreement (USMCA) removes a significant cloud of uncertainty for Canada's chemistry sector. Indeed, the finalized text, while still subject to ratification, contained many of the elements that CIAC, the American Chemistry Council (ACC) and Asociación Nacional de la Industria Química (ANIQ, Mexico's national industrial chemistry association) advocated for in our tripartite statements released in early 2017 – particularly in the areas of Rules of Origin and Regulatory Cooperation.

The ongoing U.S.-China trade tensions have raised concerns about overall global economic health. However, the imposition of Chinese tariffs on U.S. chemical products earlier this year has rendered some Canadian exports more competitive in the Chinese market, showing the complexity and adaptability of the global chemistry market once goods reach tidewater.

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership will come into force on January 1, 2019 for the six countries that have completed ratification, including Canada. Although the U.S. initiated the former Trans-Pacific Partnership, they have since withdrawn from this group. Canada and China have also had preliminary discussions on working towards a free trade agreement between the two countries. These initiatives are both aimed at improving access for Canadian goods into rapidly-growing Asian markets.

Additionally, Canada continues negotiations with numerous Latin American countries via the Pacific Alliance and MERCOSUR (an economic and political bloc comprising Argentina, Brazil, Paraguay, Uruguay, and Venezuela) trade blocs.

KEY CHALLENGES

ECONOMIC UNCERTAINTY

The health of the Canadian economy is directly affected by what happens in the U.S., and to a lesser extent the global economy. There continues to be concern that the rise of protectionism in parts of the world could limit the ability of export-intensive economies like Canada to access those foreign markets. Trade tensions between the the U.S. and China could trigger a global economic downturn.

RAIL TRANSPORTATION

Effective, efficient, competitive rail service is critical to the success of the Canadian chemistry industry. In winter and spring of 2018, weather events and labour issues impacted service delivery. These disruptions impaired the ability of industrial chemical facilities to get their goods to market. As Canada begins attracting global scale investments in the chemistry sector, it is critical that investments in rail infrastructure keep pace, especially in western Canada where disruptions have been particularly acute in 2018. Looking forward to 2019, increasing demand for rail by other sectors, and generally declining levels of rail service due to congestion, weather or labour issues can negatively impact the competitiveness of industrial chemical companies.

CLIMATE CHANGE

The overall policy landscape for climate change policy is less clear today than it was 12 months ago. In June, the federal government established a backstop pricing system with the passage of the Greenhouse Gas Pollution Pricing Act. However, the Pan-Canadian Framework on Climate Change left the option open for each province to implement its own carbon pricing framework if it was deemed equivalent by the federal government. At the beginning of 2018, all the key industrial chemical-producing provinces of Alberta, British Columbia, Ontario and Quebec had policies in place that would have put a price on emissions. Ontario has since cancelled its cap and trade program after the change in provincial government earlier this year. As a result, the federal backstop (which includes two pricings schemes: a carbon levy on motor and heating fuels and an output-based system for industrial emitters) will apply in Ontario, New Brunswick, Saskatchewan and Manitoba in 2019.

Alberta has given notice that its carbon prices will not rise beyond $30/tonne until pipeline access issues have been resolved. With the federal carbon price not reaching the $30/tonne threshold until 2021, the federal backstop will not apply to Alberta until then.

The federal government continues to move forward with other climate change-related polices including the Clean Fuel Standard which aims to reduce the carbon intensity of fuels used in Canada. The inclusion of industrial fuels in this regulation will be a first in the world and it is critical that the federal government moves carefully with an eye to the best available scientific and economic evidence as this policy is finalized to avoid unintended consequences.

Canada's chemistry industry supports action to mitigate climate change but strongly recommends that these policies be developed transparently, with input from affected stakeholders, while avoiding costly duplication between regulations and jurisdictions. It is imperative that policy makers consider Canada's competitiveness, especially in relation to the U.S., when developing climate change policy. Canada is a world-class destination for investment in the chemistry sector and large-scale investments will drive improvement in environmental performance over time.

TRADE POLICY

Since the Canadian industrial chemical industry is highly export oriented, it is a strong supporter of free trade, particularly with the U.S. As mentioned, the newly completed USMCA has been signed by all three countries' leaders and is awaiting ratification in all three national legislatures. Ensuring that NAFTA, or its successor the USMCA, remains in force is a key competitiveness concern. U.S. tariffs on Canadian steel and aluminum products as well as Canada's retaliatory tariffs remain in place and are an ongoing competitiveness concern.

ELECTRICITY COSTS

For CIAC members, the cost, availability and reliability of electricity continues to be a competitiveness concern in all provinces, even those that have historically enjoyed a cost advantage such as Manitoba, Quebec and British Columbia. While electricity costs are of concern to all producers, the impact is particularly acute for those firms producing inorganic chemicals. The Ontario government recently announced its intention to review industrial electricity rates in that province with an objective to seek options for lowering those prices.

MARKET VOLATILITY

The markets for chemistry products may enter a period of heightened volatility from a pricing and demand perspective as new capacity additions come online and global economic growth decelerates in 2019. However, the effects will not be uniform across all industrial chemical classes, reflecting normal market processes after a period of significant capital investments were made in North America, primarily in the U.S. Gulf Coast, over the last few years.

ECONOMIC OUTLOOK FOR 2019

In its October 2018 Monetary Policy Report, the Bank of Canada projected that full-year GDP growth in Canada will be 2.1% in both 2018 and 2019, slipping to 1.9% in 2020. It is projected that GDP growth in the U.S. will be 2.9% in 2018 before falling to 2.4% in 2019 and 1.6% in 2020.

Europe will finish 2018 with 2.1% growth, and then slow to 1.5% in both 2019 and 2020. Growth in China is projected to remain comparatively high but declining slowly over the next few years, reaching 6.6% in 2018, 6.1% in 2019, and 5.8% in 2020.

The major Canadian banks are forecasting that the Canadian-to-U.S. dollar exchange rate will be in the range of $0.77-0.81 for 2019. The banks are projecting the average price for WTI crude oil will be in the range of US$65-72 in 2019, and Henry Hub natural gas will be in the range of US$2.80-3.10 per million BTU.

As both a major customer of and supplier to the chemistry sector the oil and gas sector can be a tailwind or a headwind for Canada's chemistry sector. Weakness in Canada's oil and gas sector, stemming from market access constraints will likely weigh on Canada's chemistry sector in 2019. Increased movement of crude oil by rail will also complicate transportation issues in Western Canada.

OUTLOOK FOR CANADIAN INDUSTRIAL CHEMICALS IN 2019

- CIAC respondents are forecasting a 1% decrease in sales next year, while production volumes are expected to increase by 3%.
- Exports are forecast to decline by 4%.
- Operating profits are expected to fall 3% but will remain strong by historical standards.
- The level of capital investment is expected to show a large jump (65%). This is a reflection of an improved investment climate driven by a combination of current business conditions and recently announced government incentives aimed at spurring investment by the chemical industry.
- Total employment by the industry is projected to grow by 4%.

INDUSTRIAL CHEMICAL INDUSTRY

(millions of current dollars except where noted)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019[1]	% chg 19/18
Sales	22,000	25,262	24,664	25,527	26,113	25,406	23,787	23,919	25,350	25,140	-1
Sales (constant 2010 $)	21,998	22,703	22,143	22,502	21,982	24,455	23,852	22,513	22,670	23,280	3
Exports	15,703	18,594	17,184	18,671	19,811	19,246	18,692	18,679	20,480	19,740	-4
Operating profit	2,333	3,351	2,723	3,546	3,830	3,740	3,613	3,737	4,280	4,150	-3
Capital expenditures	692	1,829	1,680	2,176	2,201	442	954	1,272	1,180	1,950	65
Employment	17,158	17,184	17,211	17,359	17,511	17,668	16,284	16,986	17,030	17,670	4

1 Forecast is based on the Chemistry Industry Association of Canada’s annual year-end survey of business conditions. All other data is based on Statistics Canada sources.