Year-End Survey of Business Conditions Industrial Chemicals

2017

CHEMISTRY INDUSTRY ASSOCIATION OF CANADA

Responsible Care®
Our commitment to sustainability.

2017 Year-End Survey of Business Conditions[1]

Industrial Chemicals

Highlights

In 2017:

- It is projected that sales of industrial chemicals will increase 7% in 2017 to reach $27.1 billion. Using constant dollar shipments as a proxy for output, volumes will increase 1%. This indicates that on an aggregate basis, selling prices increased over the year, leading to a revenue gain that outpaced the volume gain.
- Exports will be almost the same as in 2016, at $18.6 billion.
- Operating profits will remain strong, rising 2% to $3.4 billion for 2017.
- Capital expenditures in 2017 were up about 7% compared to 2016, at just under $1 billion. This is well below the peak observed in 2014 reflecting the absence of major new investment projects initiated during the past three years.

Looking ahead to 2018:

- It is projected that shipments will grow a further 7% in dollar terms, and volumes will grow by 9%. Exports are projected to decline by 1%, operating profits will fall by 2%, and capital expenditures will increase slightly (1%).
- Opportunities still exist for major new petrochemical investments in Canada provided the right combination of investment conditions and government cooperation can be achieved.
- A strengthening oil and gas sector is a positive sign for chemical companies supplying that industry.

[1] 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.

CHEMISTRY INDUSTRY ASSOCIATION OF CANADA

The Chemistry Industry Association of Canada (CIAC) is the voice of Canada's $53 billion chemistry industry and represents leading companies engaged in the manufacture of industrial chemicals in Canada. The products that we produce are critical inputs to almost all other manufacturing industries. Fully 95% of all manufacturing products are touched by chemistry.

Members of CIAC are signatories to Responsible Care® – the association's U.N.-recognized sustainability initiative. Responsible Care® inspires its members to take actions that improve the sustainability of their operations and reduces harm throughout the entire life cycle of their products.

INDUSTRIAL CHEMICALS PERFORMANCE IN 2017

For 2017, it is estimated that year-end sales of industrial chemicals will increase 7% compared to 2016, reaching $27.1 billion. Using constant-dollar shipments as a proxy for volume, production volumes will rise by only about 1% for the year, suggesting that on average, commodity selling prices rose during 2017.

Exports in 2017 are projected to remain the same as in 2016 at $18.6 billion. The Canadian industrial chemical industry is export-intensive, with 70% of production exported in 2017. The United States received 80% of those exports, followed by China (7%), and Mexico (3%).

Operating profits for Canadian operations remained strong in 2017, growing 1% to $3.4 billion.

Capital expenditures grew by 7% to just under $1 billion. The major investment projects that had been underway were completed in 2017, and while no new large-scale investments were initiated during the year, NOVA Chemicals recently announced a $2 billion expansion in Sarnia-Lambton. Showing that Canada remains high on the list of world class destinations for chemical sector investment.

KEY OPPORTUNITIES

New Investment

The transformative impact that shale gas has had on the North American chemical industry continues to grow. Even as many new projects are under construction, and some have been completed, companies believe there are more investment opportunities to come. Canada is in the running for some of these projects, but faces stiff competition from jurisdictions in the United States, mainly along the U.S. Gulf Coast and increasingly in the north-eastern U.S. in Pennsylvania.

Oil Price Recovery

The price of West Texas Intermediate (WTI) bottomed out in July below $45/barrel. It has since recovered and toward the end of November reached a 12-month high in the range of $57. It is expected that oil prices will remain in the mid-$50 range next year since OPEC has agreed to extend its production cuts until at least the end of 2018. As the Canadian oil and gas sector strengthens, chemical companies that sell into this market will benefit directly.

KEY CHALLENGES

Economic Uncertainty

The health of the Canadian economy is directly affected by what happens in the United States. Even after one year in office, there is still uncertainty about how the policies of the Trump administration will impact the U.S. economy. The most noticeable impact to-date has been a continual rise in the U.S. stock markets, driven by the solid prospects for proposed tax reforms.

Separately, uncertainty over Canada's trading relations with the U.S., by far our largest export customer is a concern.

Market Oversupply

As new petrochemical production comes on stream, there are likely to be temporary oversupply situations, leading to lower selling prices and profit margins. These imbalances will correct over time as global economic growth increases demand, and as North American producers expand their export markets. Access to international markets is very important for Canada as it seeks to attract new investments to ensure we are not captive to continental product prices.

Treatment of capital expenditures

Canada offers an Accelerated Capital Cost Allowance (ACCA) that is intended to match rates in the U.S. But the new U.S. tax reform proposals being finalized offers a 100% immediate ACCA. Canadian program support and tax policies need to be weighed against what is available in the United States on an ongoing basis to ensure that we remain a world class destination for investment. Timely response on our part will be especially important after the United States passes its tax reform legislation.

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. A number of jurisdictions across Canada have seen a series of rate increases in excess of inflation and GDP growth rates. This is likely to continue as Alberta moves to phase out coal power in the medium term.

Trade policy

Since the Canadian industrial chemical industry is highly export oriented it is a strong supporter of free trade. However, in other parts of the world there are rising signs of protectionism. This is particularly of concern in the United States because the Canadian and U.S. economies are so tightly interwoven. It is therefore important that governments listen to the unified support for free trade coming from our sector and in turn continue to support trade within North America. Although much less important, failure to advance the Trans-Pacific Partnership is another but secondary concern. On the positive side, Canada and the European Union did finalize the Comprehensive Economic and Trade Agreement in 2017.

Rail Transportation

Effective, efficient, competitively-priced rail service is critical to the success of the Canadian chemistry industry. The industries' reliance on rail was clearly seen when a potential work stoppage and complete shutdown of the Canadian network for a Class 1 carrier was narrowly avoided this year. Issues related to availability and reliability for rail car shipments continue to pose a challenge in getting product to market, leading to higher transportation costs and negatively impacting on competitiveness. All of this is happening as transportation rates continue to climb.

CIAC participated in actively informing the proposed amendments to freight rail legislation outlined in Bill C-49 the *Transportation Modernization Act*. These included measures related to: increased transparency, establishing the ability to apply reciprocal penalties in service level agreements; better defining “adequate and suitable service”; improving access and timelines for Canadian Transportation Agency decisions; and addressing the future of the Maximum Revenue Entitlement and extended interswitching.

Climate change

The Federal Government has now established a price on carbon emissions, leaving each province to decide on how to implement the policy in their jurisdiction. All the key industrial chemical-producing provinces, Alberta, British Columbia, Ontario and Quebec, have policies that place a price on carbon emissions. CIAC members are obliged through their Responsible Care® ethic to continually seek ways to lower their environmental impact, and have a history of over 20 years in documenting progress to voluntarily reduce emissions. Through these efforts, and because of access to low carbon feedstocks such as natural gas and a largely decarbonized electricity grid, Canada’s industrial chemical and synthetic resin producers are globally best in class in their carbon dioxide emissions intensity. On a life-cycle assessment basis chemistry sector goods produced in Canada are responsible for net carbon emissions reductions as we offset higher emissions products from other jurisdictions. Net reductions are best achieved when the investment climate is conducive to attracting new corporate investment, as the latest technologies that are embodied in these investments almost always result in lower environmental impacts than those they replace. This is especially true when Canadian chemistry producers are compared to jurisdictions elsewhere around the world where oil and coal are used as raw materials rather than natural gas and non-emitting electricity.

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 jurisdictions. It is imperative that policy makers consider Canada’s competitiveness, especially in relation to the United States, 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.

ECONOMIC OUTLOOK FOR 2018

In its October Monetary Policy Report, the Bank of Canada projected that full-year GDP growth in Canada for 2017 will be a robust 3.1%. This is forecast to slow to 2.1% in 2018 and 1.5% in 2019. Growth in the United States is projected to come in at 2.2% in 2017, remain at that level in 2018 and drop slightly to 2.0% in 2019. It is projected that growth in Europe will finish 2017 at 1.9%, then fall to 1.7% in 2018 and 1.5% in 2019. The projection for growth in China is for 6.6% in 2017, 6.4% in 2018 and 6.3% in 2019.

The major Canadian banks are forecasting that the Canadian to U.S. dollar exchange rate will be in the range of $0.77-0.83 for 2018. The banks are projecting the average price for WTI crude oil will be in the range of US$50-55 in 2018, and Henry Hub natural gas will be in the range of US$2.80-3.25 per million BTU.

OUTLOOK FOR CANADIAN INDUSTRIAL CHEMICALS IN 2018

- CIAC respondents are forecasting a 7% increase in overall sales next year, while production volumes are expected to increase by 9%.
- Exports are forecast to decline by 1%.
- Operating profits are expected to fall slightly (2%), but remain strong by historical standards.
- The level of capital investment in expected to increase slightly (1%). One or more major projects need to be initiated in order to boost this measure back to the levels seen several years ago.
- These projections may be impacted by proposed U.S. tax reform and other fiscal and trade policies. It is imperative that Canada monitor these developments closely and respond in a swift and effective manner should our competitive advantages erode.

INDUSTRIAL CHEMICAL INDUSTRY
(millions of current dollars except where noted)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018[1]	% chg 18/17
Sales	27,122	18,262	22,000	25,262	24,664	25,527	26,113	25,430	25,326	27,100	28,910	6.7
Sales (constant 2010 $)	26,227	19,804	21,998	22,703	22,143	22,502	21,982	24,474	25,454	25,650	28,010	9.2
Exports	18,391	13,215	15,703	18,594	17,184	18,671	19,811	19,246	18,674	18,640	18,490	-0.8
Operating profit	755	1,055	2,333	3,351	2,723	3,546	3,830	3,529	3,335	3,390	3,340	-1.5
Capital expenditures	880	1,279	692	1,829	1,680	2,176	2,201	984	912	980	990	1.4
Employment Salaries	18,125	16,138	17,158	17,184	17,211	17,359	17,511	17,659	17,535	18,070	18,140	0.4

1 2018 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.

CHEMISTRY INDUSTRY
ASSOCIATION OF CANADA

805 - 350 Sparks Street, Ottawa, ON K1R 7S8 | 613-237-6215

canadianchemistry.ca | @ChemistryCanada

info@canadianchemistry.ca

Responsible Care®
Our commitment to sustainability.