2016 Year-End Survey of Business Conditions

Industrial Chemicals

Prepared by the Chemistry Industry Association of Canada
December 2016

CHEMISTRY INDUSTRY ASSOCIATION OF CANADA

Responsible Care®
Our commitment to sustainability.

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Highlights

In 2016:

- The word sluggish was repeated over and over in 2016 and may characterize the year – from customers, to level of rail service, from government engagement in the economy, to prospects for growth.
- Sales of industrial chemicals will be approximately $23 billion, a decline of 2% compared to 2015. Using constant dollar shipments as a proxy for output, volumes increased 3% compared to 2015. This indicates that on an aggregate basis, selling prices declined over the year, leading to the lower revenue estimate.
- Exports in dollar terms will decrease by about 4% compared to 2015, coming in at $18.5 billion and reflecting a challenging trade environment.
- Operating profits will fall about 9% for the year, dropping under $3 billion for the first time since 2012. However we are experiencing the ninth consecutive year of high profits since the last recession.
- Capital expenditures in 2016 will be just over $1 billion, a decline of 7% compared to 2015. The large capital projects that were undertaken in the industry were essentially completed in 2016, and no new major projects were commenced.

Looking ahead to 2017:

- Little overall change is anticipated compared to 2016. It is projected that shipments will grow 1% in dollar terms, and volumes will fall 2%. Exports will rise by 1%, operating profits are projected to fall by 4%, and capital expenditures will remain at the same level.
- There is a strong need to see recovery – customer demand is not showing strong for 2017.
- We are hearing a call to governments to react to the continuing sluggishness in the economy.
- There is some evidence that activity in the oil and gas sector may be signaling some renewed growth in 2017 and this will be welcome by the chemistry sector that contributes to those industries.

[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.

INDUSTRIAL CHEMICALS PERFORMANCE IN 2016

For 2016, it is estimated that year-end sales of industrial chemicals will fall 2% compared to 2015, coming in at $22.9 billion. Using constant-dollar shipments as a proxy for volume, production volumes will rise by about 3% for the year, hence the decline observed in shipment value was due to lower commodity selling prices rather than decreased production.

Exports in 2016 will fall 4% to $18.5 billion. The Canadian industrial chemical industry is very export-intensive, with 81% of production exported in 2016. The United States received 77% of exports, followed by China (7%), and Mexico (3%). Trade and emerging trade protectionism sentiment is a growing concern. As new production ramps up in the U.S. there is also concern over anticipated increased competition from our traditional largest market, fast becoming our biggest competitor.

Operating profits for Canadian operations declined 9% to $2.9 billion, the lowest level since 2012.

Capital expenditures fell 7% to $1.1 billion. The major investment projects that had been underway were essentially completed in 2016, and no new large-scale investments were initiated during the year.

KEY OPPORTUNITIES

New Investment

Industrial chemicals in North America continue to experience significant new investment, due largely to the impact of shale gas. There were no new major investment announcements confirmed in Canada during 2016, but just at year-end it was announced that the Province of Alberta announced through the Petrochemical Diversification Program that it will support two major projects should they decide to proceed in that province. The provinces of Ontario and British Columbia are also exploring ways to facilitate investment within those jurisdictions.

Oil Price Recovery

Recent announcements related to OPEC production cuts and Canadian pipeline approvals could stimulate investment and growth in oil exploration and production in Canada. Chemical companies supplying the oil industry would benefit directly. Also, if the price of oil rises it is likely that the selling price for key Canadian petrochemicals would follow suit (global petrochemical prices are set based on global oil pricing, a reflection of the fact that most chemical production uses oil as a key input cost).

KEY CHALLENGES

Economic Uncertainty

There is uncertainty about what impact the incoming U.S. Administration will have on the U.S. economy, and on Canadian operations doing business in the United States. Elsewhere in the world, economic performance continues to advance at a slow pace (world GDP in 2016 was 2.4%). Canadian economic performance has been and continues to be "sluggish". Major chemical customers continue to struggle and export markets and prices remain in a tepid growth range, showing only moderate prospects for growth in 2017.

Treatment of capital expenditures

Canada offers an Accelerated Capital Cost Allowance (ACCA) that is intended to match rates in the U.S. The Chemistry Industry Association of Canada (CIAC) is advocating for a temporary 100% ACCA to provide a cash-flow advantage for new investments in manufacturing machinery and equipment, and specifically to stimulate resource upgrading and value add manufacturing. The federal government is being urged to introduce a 100% ACCA for one full business cycle. This will be important for improving the business case in Canada for companies like those in industrial chemicals looking at making significant new investments.

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. Rates continued to rise in 2016 and are projected to continue at rates well above inflation and there is a concern in Ontario that rates are pushing out our key customer industries and hurting chances for future new investments.

Labour

Concerns about labour costs continued to moderate in 2016 as Alberta demand for workers in the energy sector stayed at significantly reduced levels for the second year. The strong pull from the oil sector was placing upward pressure on chemical company wages in order to retain workers; that appears to be gone. The prospects for some moderate oil price improvement in 2017 is not expected to result in a return to the overheated activities experienced prior to the oil price collapse in 2014. In addition, the extended and very strong growth on the US Gulf Coast (USGC) has resulted in reports of significant project cost overruns and timing delays which are helping to somewhat improve net comparisons between Alberta and the U.S. in the areas of construction costs. In other provinces, labour issues are related primarily to the limited supply of skilled new workers that will be needed as an aging workforce begins to retire in larger numbers.

Canadian dollar

The exchange rate between the Canadian and U.S. dollars averaged $0.75 for 2016, compared to $0.78 for 2015, and well down from $0.90 in 2014. This currency change mitigated the decline that was observed in the industry during 2015, and to a lesser extent in 2016. While Canadian producers benefit from the lower dollar because most chemicals are sold in U.S. dollars, the sluggish economy and lower domestic demand undermines this benefit, and the higher prices for foreign inputs to production compounds the problem.

Rail

Issues related to availability, reliability and liability 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 will be participating in actively informing the Canada Transportation Act Review, particularly focusing on potential freight rail legislation outlined in Minister Garneau's "Transportation 2030" speech. This included measures related to: 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. Effective, efficient, competitively-priced rail service is critical to the success of the Canadian chemistry industry and over and over in 2016 we heard of declining level of service and increasing rates, a bad combination when exploring investment growth prospects for the future in our sector.

Climate change

All the key industrial chemical-producing provinces, Alberta, British Columbia, Ontario and Quebec, have or will soon 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 as a result of access to low carbon feedstock such as natural gas and a decarbonized electricity grid, Canada's industrial chemical and synthetic resin producers are globally best in class in its carbon dioxide emissions intensity. As we produce goods for the global economy, many of those goods in turn are responsible for major net carbon dioxide emission reductions as the life cycle of these goods are assessed. Therefore, we support efforts to minimize greenhouse gas emissions when these are done in a manner that allows companies in Canada to remain competitive with those in other jurisdictions, particularly the United States. 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 impact than those they replace. The unfortunate reality is that these carbon policies hurt existing operations and could act as a disincentive to attracting new investment, which will unintentionally frustrate the goal of reducing greenhouse gas emissions within Canada as well as globally.

ECONOMIC OUTLOOK FOR 2017

In its October Monetary Policy Report, the Bank of Canada projected that full-year GDP growth in Canada for 2016 will be 1.4%, and will strengthen to 2.2% in both 2017 and 2018. Growth in the United States for 2016 is projected to come in at 1.5%, rising to 2.1% in 2017 and 2.0% in 2018. It is projected that Europe will finish 2016 with growth of 1.6%, then fall to 1.3% in 2017 and 1.5% in 2018. The projection for China is for 6.5% growth in 2016, 6.4% in 2017 and 6.3% in 2018.

The major Canadian banks are forecasting that the Canadian to U.S. dollar exchange rate will be in the range of $0.74-0.79 for 2017. The banks are projecting a range of US $50-60 for West Texas Intermediate (WTI) crude oil prices in 2017, and Henry Hub natural gas to be in the range of US $2.90-3.30 per million Btu.

OUTLOOK FOR CANADIAN INDUSTRIAL CHEMICALS IN 2017

CIAC respondents are forecasting a 1% increase in overall sales next year, while production volumes are expected to fall by 2%.

A 1% increase in exports is also forecast, suggesting some improvements to recent weakness in key export markets.

Operating profits are expected to continue their recent downward trend, falling by 4%. This would translate into profits of just under $3 billion for the industry, a strong performance by historical standards nonetheless. It would also represent the ninth straight year of strong economic performance since the last recession.

The level of capital investment in expected to remain flat. One or more major projects need to be initiated in order to send this measure up to where it was a few years ago. Recent announcements by the Province of Alberta may trigger just these types of projects.

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

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017[1]	% chg 17/16
Sales	26,236	27,122	18,262	22,000	25,262	24,664	25,527	25,909	23,493	22,940	23,170	1
Sales (constant 2010 $)	27,160	26,227	19,804	21,998	22,703	22,143	22,502	21,818	22,592	23,380	22,910	-2
Exports	19,736	18,391	13,215	15,703	18,594	17,184	18,671	19,811	19,244	18,500	18,690	1
Imports	17,096	17,541	13,844	15.893	17,144	17.308	17,977	19,328	19,728	18,607	N/A[2]	N/A
Operating profit	1,640	755	1,055	2,333	3,351	2,723	3,546	3,767	3,276	2,980	2,860	-4
Capital expenditures	606	880	1,279	692	1,829	1,680	2,176	2,382	1,169	1,080	1,080	0
Employment	17,827	18,125	16,138	17,158	17,184	17,211	16,559	15,076	15,030	15,020	14,870	-1

1 2017 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.

2 Imports projections are not surveyed