2015 Year-end Survey of Business Conditions

Industrial Chemicals

DECEMBER 2015

CHEMISTRY INDUSTRY ASSOCIATION OF CANADA

Responsible Care®
Our commitment to sustainability.

2015 Year-End Survey of Business Conditions[1]

Industrial Chemicals

HIGHLIGHTS

In 2015:

- Sales of industrial chemicals will be approximately $26 billion, a decline of 10% compared to 2014. Using constant dollar shipments as a proxy for output, volumes remained relatively constant compared to 2014. This indicates that the decline in shipment value is attributable to lower selling prices rather than declines in production levels. Even larger declines would have occurred if the value of the Canadian dollar had not weakened vs. the U.S. dollar during the year.
- Exports in dollar terms will show slight growth, reaching a new all-time high of $20 billion. Given that selling prices dropped significantly compared to 2014, exports in tonnage terms therefore experienced strong growth.
- Operating profits remained high in historical terms at $4 billion, the 2nd-best year ever, after only 2014.
- The jump that was forecast for capital expenditures one year ago did not occur, and in fact capex fell by 58% compared to 2014.

Looking ahead to 2016:

- All indicators are expected to remain flat, or show small declines.
- Profits are forecast to show a modest decline but will remain strong.
- Capital investment rates will be about the same as in 2015, although this could change if any of the large projects currently under evaluation receive final go-aheads next year.

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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 2015

For 2015, it is estimated that year-end sales of industrial chemicals will fall 10% compared to 2014, to $25.8 billion. The industry price index fell 12% during the year. Using constant-dollar shipments as a proxy for volume, production volumes remained fairly flat or grew slightly. Hence most of the decline observed in shipment value was due to lower commodity selling prices rather than decreased production.

Exports in 2015 will increase 0.6% to $20 billion – an all-time record. The Canadian industrial chemical industry is very export-intensive, with 75% of production exported in 2015. The United States received 78% of exports, followed by China (7%), and Mexico (3%).

Operating profits for Canadian operations declined 3% but still posted the 2nd-best year on record at $4 billion. Despite lower selling prices for chemicals, input costs must have fallen by similar measure in order to retain strong margins.

A large jump in capital investment had been forecast one year ago. This failed to materialize and in fact investment fell 58% compared to 2014. This sharp change reflects a rise in investor uncertainty driven by several factors including emerging signs of weakness in certain global economies, an increase in the Alberta provincial corporate tax rate, and the potential for increased costs related to government climate change policies.

KEY OPPORTUNITIES

New Investment

While industrial chemicals in North America continue to experience significant investment growth, due largely to the impact of shale gas, there appears to be some slowing in the rate of new expenditures in both Canada and the United States, driven by increased uncertainty about global economic health compared to this time last year.

All of the new, large-scale investments in Canada are either completed, or will be completed during 2016. There are a number of other projects currently being assessed for possible location in Canada. Should one or more of these occur, the investment rate will show an upward bump. However, CIAC respondents do not factor this into their outlook until a project receives final approval to proceed.

KEY CHALLENGES

Economic Uncertainty

Economic performance in most parts of the world continues to advance at a slow pace. There remain risks that some regions could return to recessionary conditions, leading to increased uncertainty that acts as a drag on new investment decisions. The U.S. economy continues to show signs of stronger growth than many other parts of the world, which would be positive for Canadian producers given that so much of our exports go there.

Consumer markets such as oil and gas production, and pulp and paper are soft, having an impact on chemical demand, particularly for inorganic chemicals.

Feedstock Availability

There is now sufficient volume of ethane available in both Alberta and Ontario to support the existing petrochemical base. In order to attract major new investments, additional supplies of feedstock will be needed, which could be met through increased pipeline imports or expanded production in the Western Canadian Sedimentary Basin. For the latter to occur, it is likely that new, off-shore markets for natural gas would need to be developed, and this in turn will be dependent on investment decisions to build LNG export capacity.

Treatment of Capital Expenditures

Canada offers an Accelerated Capital Cost Allowance (ACCA) that provides a cash-flow advantage for new investments in manufacturing machinery and equipment. In Budget 2015, the federal government extended the ACCA for 10 years. This is important for companies like those in industrial chemicals looking at making significant new investments in Canada.

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 Quebec and British Columbia. While electricity costs are of concern to all producers, the impact is particularly acute for those firms producing inorganic chemicals.

Labour

Concerns about labour costs were most evident in Alberta due to robust demand for workers in the energy sector, especially the oil sands. The strong pull from the oil sector was placing upward pressure on chemical company wages in order to retain workers. The sustained drop in oil prices has taken the pressure off these issues at this time. 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 fell from about $0.90 for most of 2014 to around $0.80 and lower during 2015. This change mitigated the decline that was observed in the industry during 2015. Canadian producers benefit from the lower dollar because most chemicals are sold in U.S. dollars which then yield more in Canadian dollars when the exchange rate is lower.

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. CIAC continues to be vigilant in monitoring the status the Canada Transportation Act Review, due for public release in early 2016. Effective, efficient, competitively-priced rail service is critical to the success of the Canadian chemistry industry.

Climate Change

All of 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. 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 could act as a disincentive to attracting that investment, which will unintentionally frustrate the goal of reducing greenhouse gas emissions.

ECONOMIC OUTLOOK FOR 2016

In its October Monetary Policy Report, the Bank of Canada projects that full-year GDP growth in Canada will be just over 1%, before strengthening to 2% in 2016. Growth in the United States for 2015 is projected to be 2.4%, improving slightly to 2.5% in 2016. It is projected that Europe will realize very minimal growth of 0.9% in 2015, improving to 1.5% in 2016. The projection for China is for 7.3% growth in 2015, declining to 6.8% in 2016.

The major Canadian banks are forecasting that the Canadian to U.S. dollar exchange rate will be in the range of $0.74-0.77 for 2016. The banks are also projecting a range of US$50-58 for WTI crude oil prices in 2016, and the Henry Hub natural gas price in the range of US$2.80-3.60 per million Btu.

OUTLOOK FOR CANADIAN INDUSTRIAL CHEMICALS IN 2016

CIAC respondents are forecasting a 2% drop in overall sales next year. As with 2015, this is based on an expectation of further weakening in commodity prices rather than declines in volume.

A 5% decline in exports is being forecast, likely reflecting heightened uncertainty about the health of major global markets.

Respondents are forecasting a 5% decline in profits which would still translate into a very good year from a profit perspective.

No rebound in capital investment in forecast. One or more major new project announcements could dramatically alter this outlook, however respondents will not factor these into their outlook forecast until final authorization is received.

INDUSTRIAL CHEMICAL INDUSTRY[1]

(millions of current dollars except where noted)

	2006	2007	2008	2009	2010	2011	2012	2013	2014[2]	2015[3]	2016[4]	%chg 16/15
Sales	26,882	26,236	27,122	18,262	22,000	25,262	24,635	26,721	28,710	25,750	25,270	-2
Sales (constant 2010 $)[5]	28,770	27,160	26,227	19,804	21,998	22,703	22,124	23,580	24,175	24,640	24,890	1
Price index (2010=100)	93.4	96.6	103.4	92.2	100.0	111.3	111.3	113.3	118.8	104.5	101.5	-3
Exports	17,865	19,736	18,391	13,215	15,703	18,594	17,184	18,815	19,864	19,990	18,970	-5
Operating profit	1,362	1,640	755	1,055	2,333	3,351	2,723	3,580	4,079	3,970	3,750	-6
Capital expenditures	600	606	880	1,279	692	1,829	1,680	2,178	2,524	1,060	1,040	-2
Employment	18,739	17,827	18,125	16,138	17,158	17,184	17,211	16,559	15,076	15,160	15,160	0

1 Basic chemical manufacturing (NAICS 3251) and resin, synthetic rubber, and artificial and synthetic fibres and filaments manufacturing (NAICS 3252) closely matching the output of member companies of the Chemistry Industry Association of Canada.

2 2014 estimates are based on the monthly 2014 vs. 2013 % change applied to data from Statistics Canada's Annual Survey of Manufactures and Logging.

3 2015 forecast is based on January to September monthly data for 2015 vs. 2014 % change applied to the 2014 estimate.

4 2016 forecast is based on the Chemistry Industry Association of Canada's annual year-end survey of business conditions. Responses were received from members representing about 95% of all CIAC member sales.

5 Calculated using a chemical price index from Statistics Canada.