2022 • INDUSTRIAL CHEMICAL INDUSTRY

PERFORMANCE SNAPSHOT

YEAR END 2022

HIGHLIGHTS:

- 2022 is on track to be a record year for Industrial Chemical shipments. CIAC estimates that 2022 shipments will exceed $29.5 billion, 7.5% ahead of 2021 levels, and 14.5% ahead of 2018 levels. All sub-sectors except Resins will see record totals in 2022 as the economy continued to recover from the turbulence of COVID-19.
- CIAC estimates the Exports of Industrial Chemicals will exceed $24 billion in 2022, an increase of 10% from 2021 levels and a new annual record.
- Through the first nine months of 2022 Industrial chemical GDP is 2.4% lower than 2021 levels.
- Through the first nine months of 2022 railcar shipments of Industrial Chemicals are down 1.2%, to $12.5 million tonnes.

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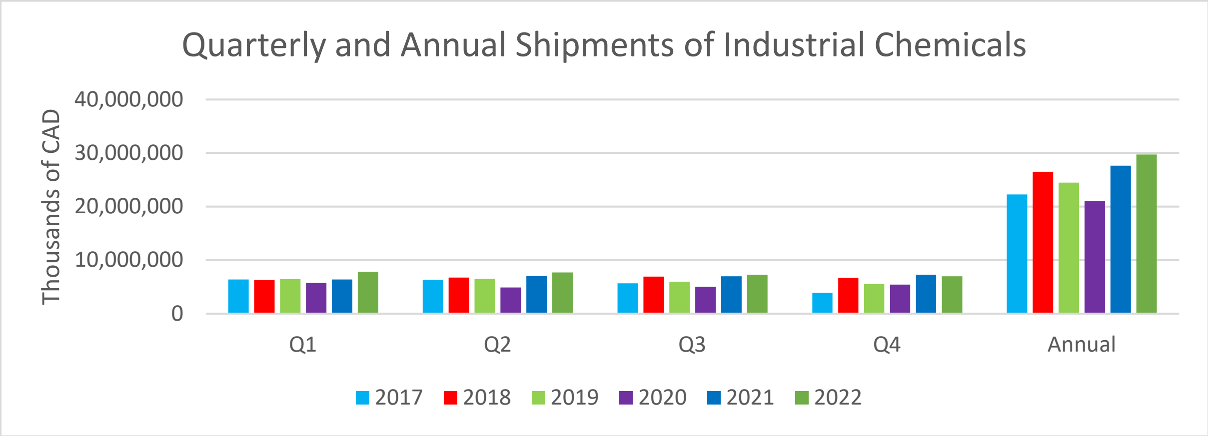
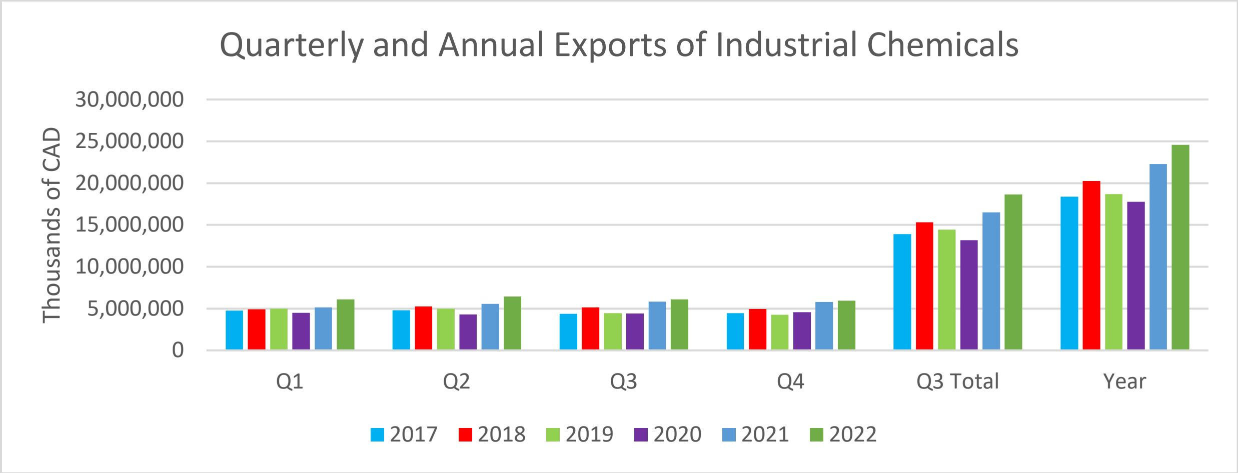
INDUSTRIAL CHEMICALS PERFORMANCE IN 2022

2022 was a year of strong performance and price moderation for the Industrial Chemicals industry in Canada. Several sub-sectors saw record shipment levels in 2022 as their downstream markets recovered from COVID induced impacts. It is estimated that year-end sales of industrial chemicals will grow by 7.5% compared to 2021 levels to an annual record of $29.5 billion led by a strong year in Basic Chemical production.[1] Organic Chemical shipments have seen a step change higher due to several major investments entering production and have reached record levels. Inorganic Chemicals and Industrial Gases have seen strong downstream recovery as the economy more fully exits COVID-19. Petrochemical demand has been robust as the economy has recovered and production tailwinds gather for Canadian operations. Resin and Synthetic Fibres saw product prices moderate significantly from record highs seen in 2021 but production has remained stable. CIAC anticipates that Industrial chemical volumes will exit 2022 near pre-COVID-19 levels.



Canada's Industrial Chemical exports in 2022 are projected to be 10% higher than 2021 and are set to end the year around $24 billion a new single year record.



[1] Shipment and Export Data are sourced from Statistics Canada Tables 16-10-0047-01 and 12-10-0136-01 respectively and is modified by CIAC.

CHEMISTRY INDUSTRY ASSOCIATION OF CANADA

YEAR IN REVIEW FOR CANADIAN INDUSTRIAL CHEMICALS IN 2022

- Canada's chemical sector exits 2022 in a strong position with record levels of shipments and exports, but domestic and global economic headwinds are growing.
- CIAC estimates that 2022 shipments will increase by 7.5% from 2021 levels to a record of $29.5 billion.
- Canadian Exports of Industrial Chemicals are forecast to increase by 10% in 2022 to a record $24 billion, on high demand and strong pricing.
- In 2022 Canadian Industrial Chemical producers have benefited from high global product prices, relatively low input and energy costs, a favorable CAD/USD exchange rate and a strong economic recovery in downstream sectors.
- Prices for many industrial chemicals have retreated from pandemic era highs with significant differences between subsectors. Energy costs have moderated from spring and summer highs but remain extremely volatile.
- 2022 capital investment is expected to increase marginally from 2021 as two major projects completed substantial construction this year.
- Total employment by the industry is projected to grow by 2% along long-term trends as new investments come online.

ECONOMIC CONDITIONS AT THE END OF 2022

In its October 2022 Monetary Policy Report, the Bank of Canada projected that full-year GDP growth in Canada will be 3.25% in 2022, which is a 0.75% decrease from its estimate in January 2022. The BoC forecasts the Canadian economy growing by 0.2% in 2023 and will return to trend growth of 2% in 2024. These estimates are in line with private sector forecasts where the median estimate from 2023 growth is 0.4% in 2023.[2] The Bank also offered a few key messages on the economy as we approach the end of 2022:[3]

- While inflation in Canada has declined from its peak, largely due to lower gasoline prices, it is still too high, and underlying inflationary pressures remain elevated. Inflation is projected to ease as the economy responds to higher interest rates and as the effects of elevated commodity prices and supply disruptions fade. The Bank expects inflation to decline to around 3% in late 2023 and return to 2% by the end of 2024.

[2] Average range of estimates from RBC, TD, BMO and Scotiabank.

[3] Bank of Canada, October 2022 Monetary Policy Report.

- Monetary policy is beginning to help rebalance supply and demand in the economy. Financial conditions have become more restrictive following a series of interest rate hikes. Firms' investment and hiring plans are softening. Higher mortgage rates have led to significant declines in housing activity. Household spending on goods is slowing, and, as the effects of higher interest rates continue to work through the economy, spending on services is also expected to moderate.

- The Canadian economy continues to operate with significant excess demand. Businesses are facing widespread labour shortages and continuing tight labour markets. The pace of economic growth in Canada is slowing and is expected to moderate further. Growth is projected to essentially stall later this year and through the first half of 2023. Reducing demand growth in the economy allows supply to catch up, bringing inflation down.

In the United States, the Federal Reserve Board projected U.S. GDP growth will be 0.2% in 2022 rising to 1.2% in 2023 and 1.7% in 2024. A significant downgrade from projections in early 2022 which were estimating 2.2% growth in 2022. The U.S. economy is facing several economic crosscurrents. A very strong recovery from COVID-19 led inflation levels to hit a multi-decade high of 8.2% in June 2022. Strong consumer spending, supply chain disruptions, commodity price inflation, fiscal and monetary stimulus to counteract the impacts of COVID-19 and an exceptionally tight labor market have been factors in pushing inflation to multi-decade highs. all rose over the last two and a half years. Consumer spending is currently normalizing from COVID-19 trends with spending shifting to services and demand for goods returning to trend. However, consumer spending remains robust and is . To address very high inflation the Federal Reserve has been aggressively raising interest rates and tightening monetary policy since June. Interest rates are at their highest level since 2008, at 4.25% and this has been achieved at the fastest pace in decades.

There remains significant uncertainty how consumers will respond to high inflation levels and higher interest rates. Demand for goods and services remains strong by historical standards and the underlying job market is exceptionally strong. Consumers also have nearly $1 trillion USD in excess savings and the growth in housing prices over the last three years means many households are somewhat insulated from these headwinds. However, leading indicators such as housing activity and electronic goods orders have declined significantly since peaking in the spring. Commodity price deflation and the return of retailer discounts for goods (including durable goods like used vehicles and appliances) are countering higher inflationary trends.