

Chemistry and Plastic Investment: Supporting a sustainable future and driving Canada's modern economy.

Canada's chemistry sector is proposing tens of billions in investment that will help **Canada's economy reach its climate change and emissions reduction goals.** Planning is only the first step – governments and industry must continue to work together to ensure these ideas become a reality. CIAC is working with governments to develop a competitive regulatory and policy landscape that will enable clean chemistry investment for years to come.



Essential for a Circular Economy and Net-Zero Future

Chemistry and plastics are essential for a modern, clean, thriving society. CIAC supports the development of a circular economy for plastics and the federal government's goal of **net-zero carbon emissions for all of Canada by 2050.**

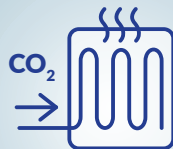
With the right investment's in infrastructure and advanced technologies, chemistry and plastics will play a crucial role in helping Canada reach these commitments.

Investing in a modern, sustainable society



Hydrogen

Hydrogen is a flexible energy carrier that can be used in a wide variety of chemistries to lower emissions intensity and diversify feedstock streams. New hydrogen investments will be both greenfield facilities and modifications to existing chemistry production to meet the expanding array of demand a low-carbon future will require.



Carbon Capture Utilisation and Storage

Deploying Carbon Capture Utilization and Storage (CCUS) at existing and new facilities is a pathway to carbon neutrality for our sector. The world's leading chemical companies, including members of CIAC, are exploring emerging new technologies to decarbonize production, including the use of hydrogen for heat and electrification of steam crackers.



Batteries and Electric Vehicles

Battery technology and electric vehicles are being developed at a rapid rate. Canada is embracing a once-in-a-lifetime opportunity to help Canadians adopt these crucial, sustainable technologies. Investment in R&D is already happening, especially in Quebec where many CIAC members are investing significant money and resources into developing new battery storage and electric vehicle technologies.

Investment activity by the numbers:

Tens of billions worth of investment in the sector is planned for Canada

75%

Approximately 75% of investment is for Canadian services

50%

Approximately 50% of spending occurs in the local economy (within 100 km of the site)

35+

Will result in 35+ years of operation and maintenance jobs

20%

Annual GDP impact approximately 20% of capital cost

#chemistrysolutions

To learn more, visit: canadianchemistry.ca



**CHEMISTRY INDUSTRY
ASSOCIATION OF CANADA**

Nationwide Investment:

There are tens of billion of new investment currently proposed. CIAC members are leading the way in decarbonization and clean energy projects.



ALBERTA

> INTER PIPELINE

IPL is partnering with Itochu Corporation and Petronas Energy Canada Ltd. to evaluate the development of world-scale integrated blue ammonia and blue methanol production facilities. This allows Canada to play a key role in global efforts to establish a low-carbon economy through the production of thousands of metric tonnes per day of blue ammonia and blue methanol.

> DOW CHEMICAL CANADA

First of its kind Net Carbon Zero Circular Hydrogen Cracker and CCUS Project at Alberta Industrial Heartland.

> SHELL CANADA

In the initial phase of Polaris, CO₂ captured from the refinery's hydrogen plants would produce blue hydrogen for use in the refining process, with the potential for large-scale blue hydrogen production in future phases. Shell is also exploring the development of additional volumes of blue and green hydrogen at Scotford that leverage Alberta's abundance of natural gas and availability of renewable sources of power.

Shell Canada is installing a 58 MW solar farm in proximity to its complex near Fort Saskatchewan, Alberta. This project will produce zero emission electricity to meet the facility's chemical production and power needs.

QUEBEC

> BASF

BASF is a leading global cathode active materials (CAM) provider. This investment will begin with CAM production followed by precursor cathode materials, recycling and metals refining capacities. These materials will be used in electric vehicles and other electrification efforts.

ONTARIO

> NOVA CHEMICALS

Major expansion of ethylene and polyethylene units in Corunna, ON. Switching to lower carbon NGL feedstock achieves up to 30 per cent lower CO₂ emissions than global average.

> IMPERIAL OIL

Is building the largest private storage battery in North America — a 20-megawatt system at Imperial Oil Ltd.'s petrochemical complex in Sarnia, Ontario. This investment will allow Imperial to meet electricity demand with low emission wind/solar/nuclear power stored during off-peak periods.