



### Recommendations:

- 1. Reform the SR&ED program to help foster R&D in Canada by:
  - raising the investment tax credit to 20% from the current 15%;
  - eliminating or substantially raising the upper limit for taxable capital phase-out range from the current \$50 million; and
  - reinstating capital expenditure eligibility that was phased out beginning January 1, 2013;
  - Eliminate the 20% disallowance on arm's-length consulting payments.
- 2. Establish the Plastic Technology Innovation Fund (PTIF) with an initial allocation of \$200 million and operated by Natural Resources Canada to further research and development of groundbreaking plastic technology applications in Canada.
- 3. Re-authorize the existing funding for the Chemicals Management Plan (CMP) and specifically develop and expand all aspects related to international development to share Canada's expertise.

## Chemistry is Essential to a Low Carbon Economy

Addressing the challenge of climate change in Canada and globally depends on chemistry-based solutions. Chemistry is an important part of Canada's energy sector and Canada is recognized as having abundant, low carbon resources, such as natural gas and natural gas liquids, hydroelectricity and biomass, that can play an import role as chemical feedstocks. More than 95% of all manufactured products rely on chemistry. Advances in key sectors such as green buildings, sustainable transportation, clean energy and sustainable agriculture would be impossible without chemistry.

Today Canada's chemistry sector produces \$58 billion worth of products annually. It is Canada's 4<sup>th</sup> largest manufacturing sub-sector with exports worth nearly \$40 billion, and it employs nearly 87,900 Canadians in high-skilled, high-paying jobs. Chemistry's ability to deliver effective, timely solutions today makes it an obvious choice to help lead Canada's transition to a low-carbon economy. It is within this context, and with an eye to the future, that the Chemistry Industry Association of Canada (CIAC) presents its recommendations for Budget 2020.

## 1. Building a Competitive Chemistry Sector

Over the last few years the Chemistry Industry Association of Canada (CIAC) has worked diligently to highlight the investment potential that exists in the chemistry sector and recently the Government has responded. The introduction of the technology agnostic Strategic Innovation Fund (SIF) in 2017 was a welcome shift from a focus on a limited number of priority sectors. The chemistry projects that SIF has funded will create high-paying jobs and contribute positively to Canada's gross domestic product for decades to come. Similarly, the introduction of the 100% Accelerated Capital Cost Allowance for major capital projects in the 2018 Fall Economic Statement was a welcome response to the Tax Cuts and Jobs Act in the United States. Canada should strongly consider making the 100% ACCA permanent before the current sunset period approaches, this would provide certainty to companies whose investment cycles did not align with the current period of this measure. Additionally, it is important that the government remain vigilant. CIAC and many other major business groups such as the Canadian Manufacturers and Exporters, the Business Council of Canada and the Canadian Chamber of Commerce, agree that the time has come for a comprehensive review of Canada's business taxation environment. As we move further away from the last federal review conducted in 1996-1997, it is important that the government of Canada conduct a review following the federal election.

# 2. Building a World Class Ecosystem for Chemistry Research and Development

The chemistry sector is one of the most research-intensive sectors in the global economy. Chemistry consistently ranks as the world's 2<sup>nd</sup> most patented sector after Information Technology and, in Canada, it employs the second highest rate of university graduates behind electronic and computer manufacturing. However, Canada is lagging other jurisdictions in attracting private chemistry Research and Development (R&D) mandates. Similarly, Canada is also behind on the commercial deployment of groundbreaking technologies and processes that can help resolve the pressing issues of our time such as climate change and plastic waste. CIAC believes that Budget 2020 can address some of these

deficiencies and put Canada on the path to developing a world class ecosystem for chemistry R&D.

#### Reforming the Federal Scientific Research and Development (SR&ED) Tax Incentive

The Federal SR&ED tax incentive is the government of Canada's largest and most widely available tax credit program that fosters research and development. The program provides more than \$3 billion annually to over 20,000 claimants and is administered by the Canadian Revenue Agency (CRA). Given the SR&ED program's longstanding position in the federal taxation architecture, many provincial programs use the SR&ED as a model (or a co-qualifying program) for their own R&D tax credit regimes. CIAC believes that changes to the SR&ED program are required to ensure that Canada remains a destination for global research mandates. As it stands today, the SR&ED program is difficult to access and onerous to companies, with the CRA performing the dual role of judging and auditing SR&ED compliance. SR&ED has also seen its eligibility criteria tightened since the early 2000s while seeing the investment tax credit itself decrease from 20% to 15%. Reforming some of these aspects will help re-invigorate private sector research and development in Canada.

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  - c. reinstating capital expenditure eligibility that was phased out beginning January 1, 2013;
  - d. eliminate the 20% disallowance on arm's-length consulting payments

## **Establishing the Plastic Technology Innovation Fund (PTIF)**

As noted previously, more than 95% of all manufactured products rely on chemistry and many of these include plastic resins. From wind turbines and solar panels, to vehicles and building materials, to the food packaging that allows us to feed the world, plastics chemistry is vital to our low-carbon economy.

These products enable our modern way of life, but they do not belong in our waterways or in the environment. Today in Canada, as a result of inadequate sorting, contamination, limited end markets and not employing all the technologies available, nearly 80% of all post-consumer plastics end up in landfills – three million tonnes annually. The current approach to producing, using and disposing of plastics poses a real threat to the environment and results in a significant loss of value, resources and energy.

In the last 18 months, images of mismanaged plastic waste in our environment have left many Canadians frustrated and angry about the amount of plastic in their lives and the lack of visible and understandable solutions to address plastic waste. Our members are committed to working with all levels of government and other stakeholders to develop a more sustainable approach for waste management.

Similar to the problems faced by the forest products and energy sectors in a changing and climate conscious world there is no "one-size fits all" solution to managing plastic waste. A variety of technologies and approaches will be needed to keep plastic waste out of the environment and in the

economy. The innovation and ingenuity of the chemistry sector will be key in solving this problem and our industry is already stepping up to do our part and reach our goal of a zero plastic waste future. In pursuit of this goal, CIAC is proposing that the Federal government build on successful models such as the Energy Innovation Program and the Expanding Market Opportunities Program for wood products to nurture and expand Canada's technological capacity to address the problem of plastic waste.

CIAC recommends that the Federal government establish the **Plastic Technology Innovation Fund** (**PTIF**) with initial funding of \$200 million. The fund would be managed by Natural Resources Canada (NRCan) and would be a game-changing program for plastic technology research and development in Canada. NRCan would be responsible for assessing applications brought forward by the private sector and research communities that will accelerate innovation in areas of product design, and advanced plastics recycling and recovery technologies such as chemical recycling, pyrolysis, gasification and energy recovery. Additionally, the fund would support demonstration projects to help normalize the use of products made with recycled plastic for consumers and businesses, and test new technologies in pre-commercial applications.

CIAC and its member companies are already engaged in these efforts. Recently, CIAC member INEOS Styrolution announced a <u>joint development agreement</u> with GreenMantra to advance polystyrene chemical recycling in Canada. In June, <u>CIAC welcomed Pyrowave as a member</u>; a Canadian firm that has developed the technology to convert post-consumer plastic products back into feedstock. These are examples of how Canada's chemistry sector is responding to a changing world.

#### **Recommendations:**

2. Establish the Plastic Technology Innovation Fund (PTIF) with an initial allocation of \$200 million and operated by Natural Resources Canada to further research and development of groundbreaking plastic technology applications in Canada.

# **3**. Commit Funding to Canada's World-Leading Chemicals Management Plan

Canada's chemistry industry has been and remains a strong partner to the Chemicals Management Plan (CMP). CIAC applauds the CMP for achieving its objectives of reducing risks posed by chemicals to Canadians and their environment and building a strong collective capacity for chemicals management. Over the past two decades, the CMP has been a tremendous Canadian success story, having collected information on the chemicals in Canada, categorizing 23,000 substances and completing comprehensive risk assessments for 3,600 substances. To this day, the CMP is seen as a world-leading program and has successfully influenced chemicals management policy and approaches across the world from the U.S. and Australia, to Mexico and Brazil. Despite the growing number of achievements, we believe that there are always opportunities for chemicals management to improve.

The government itself has recognized that the global demand for chemicals is growing exponentially and will continue to expand as the world population grows, and markets develop. In fact, the rate of global chemical sales is expected to double from 2017 to 2030 with Asia expected to account for

nearly 70% of sales.¹ Chemicals and products are traded through increasingly complex international supply chains, often spanning many countries and regions with varying regulatory frameworks. New substances and manufactured products from global markets are entering Canada in greater volumes, often from jurisdictions where chemical management, process safety, and product standards are lacking.

Given that Canada is an import economy and that global chemical supply chains are becoming increasingly complex, the CMP must adapt to address these growing changes. Canada can share what it has learned on the effective management of chemicals and better protect its citizens simultaneously. A modest investment in international development can pay significant dividends to the future of chemicals management in Canada. CIAC remains strongly committed to ensuring that Canadians remain confident that health, safety and the protection of the environment are always top of mind in the products they use.

It remains vitally important that re-investment occurs in the CMP. It is essential that this investment focus on the global aspects of chemical management and ensure that imported products have the same rigour in protecting the health and safety of Canadians and the Canadian environment. New international engagement and the transfer of knowledge of the important lessons that Canada has learned in its pursuit of responsible chemical management will be paramount in the next phase of the Chemicals Management Plan. We would encourage Global Affairs Canada to promote international development in chemicals management policies and frameworks. Sharing Canada's risk-based approach to chemicals management will benefit Canadians who purchase products that come from jurisdictions where chemicals management policy is currently underdeveloped.

#### Recommendation:

3. Re-Authorize the existing funding for the Chemicals Management Plan and specifically develop and expand all aspects related to international development to share Canada's expertise.

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<sup>&</sup>lt;sup>1</sup> UNEP, "Global Chemicals Outlook II: From Legacies to Innovative Solutions," p. 28



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