



## CLEAN INDUSTRY

Canada's industrial sectors – such as manufacturing, iron and steel, chemicals, mining, cement, and oil and gas – play a key role in our economy, directly accounting for 18% of nominal GDP in 2017 and over two million jobs in 2019. These sectors also accounted for 37% of Canada's greenhouse gas (GHG) emissions in 2018. Important progress has been made in reducing emissions across industry, including by putting a price on carbon pollution, investing in clean technology research and development, reducing methane emissions from oil and gas activities, and phasing down the use of hydrofluorocarbons (HFCs). Decarbonization can be achieved either through electrification or by switching from traditional fuels to low carbon and clean fuels, such as renewable natural gas, clean hydrogen, advanced biofuels, and liquid synthetic fuels. In order to move beyond incremental reductions, a key focus will be on supporting the rapid scale-up of existing and new, strategic clean technologies and supporting the market for clean fuels in Canada. By reducing pollution from natural resource development and heavy industry, Canada will position itself as a global provider of choice for many of the world's essential goods.

### KEY MEASURES TO DATE

- Put a price on carbon pollution from heavy industry: reducing emissions and incenting innovation through a mix of federal, provincial and territorial pricing systems.
- Established regulations to reduce methane emissions from the upstream oil and gas sector by 40-45% below 2012 levels by 2025. The federal government has also concluded equivalency agreements with implicated provinces, given the existence of equivalent provincial measures, resulting in the standing down of the federal regulations in British Columbia, Alberta and Saskatchewan.
- Investing \$750 million through the Emissions Reduction Fund to help businesses in the oil and gas sector reduce GHGs, in particular methane.
- Investing \$1.72 billion in Alberta, British Columbia and Saskatchewan and Alberta's Orphan Well Association to clean up orphan and inactive oil and gas wells and result in up to 10,000 jobs in the oil field service sector.
- Developed the proposed Clean Fuel Standard regulations, to reduce carbon intensity of liquid fuels by 12% by 2030.
- Invested over \$3 billion to support clean technology research, development, demonstration, and adoption to accelerate the development and deployment of low-carbon solutions across Canadian industry, through programs such as the Low Carbon Economy Fund, Strategic Innovation Fund and Sustainable Development Technology Canada's Tech Fund.

- Invested \$100 million in the Clean Resource Innovation Network, through the Strategic Innovation Fund, to accelerate technology and process development and adoption to lower the oil and gas industry's environmental impact by 100 million tonnes by 2030.
- Investing in research, development and demonstration, and innovation to advance low carbon fuel technologies through initiatives such as the Clean Growth Program.
- Established regulations to phase-down the consumption of HFCs by 85% by 2036.
- Introduced proposed air pollutant regulations for off-road diesel engines, including stationary engines (generators, pumps) used in mining and industrial sectors. These regulations will also result in reductions in black carbon emissions, which contribute to climate change.
- Since 2017, investing approximately \$446 million through the Low Carbon Economy Fund to help industrial facilities reduce GHGs and save costs.

## KEY FACTS

- More than 170 Canadian companies are working to reduce oil and gas methane emissions and capitalize on its value as a commodity across the economy.
- HFCs are potent greenhouse gases that can be hundreds to thousands of times more potent than carbon dioxide. They are found in refrigerators, air conditioners, foam insulation and aerosols. Canada is phasing down these emissions through the Montreal Protocol, and more recently, the Kigali amendment.

## A HEALTHY ENVIRONMENT AND A HEALTHY ECONOMY CONTAINS NEW MEASURES FOR THE INDUSTRIAL SECTOR

- Launching a Net-Zero Challenge for large industrial emitters to encourage and help them develop and implement plans to transition their facilities to net-zero emissions by 2050.
- Making significant investments to support adoption and deployment of decarbonization solutions in Canadian industry, to complement the Challenge. In particular, launching the Strategic Innovation Fund – Net Zero Accelerator – \$3 billion over five years to rapidly expedite decarbonization projects with large emitters, scale-up clean technology and accelerate Canada's industrial transformation across all sectors. This will drive investment into large emissions reducing and job-creating projects across every region of Canada.

The Net Zero Accelerator will include three areas of focus:

- Supporting clean technology development in Canada's automobile and aerospace manufacturing sectors and supply chains;
- Supporting the development of a Canadian battery innovation and industrial ecosystem; and,
- Supporting the adoption and development of clean technology in all industrial sectors, including oil and gas.

- Investing \$1.5 billion in a Low-carbon and Zero-emissions Fuels Fund to increase the production and use of low-carbon fuels (e.g., hydrogen, biocrude, renewable natural gas and diesel, cellulosic ethanol) in a manner that complements federal carbon pollution pricing, regulatory efforts and other federal programming.
- Providing Sustainable Development Technology Canada with an additional \$750 million over five years, to support startups, and to scale-up companies to enable pre-commercial clean technologies to successfully demonstrate feasibility as well as to support early commercialization efforts.
- Strengthening Canada's approach to reducing methane emissions from the oil and gas sector by establishing new targets for 2030 and 2035, based on international best practices (e.g., 60-75% by 2030 as promoted by the International Energy Agency). The design of the amended federal regulations to achieve additional reductions in 2030 and 2035 will be determined through consultations with provinces, territories, the oil and gas industry and civil society.
- Introducing Canada's Hydrogen Strategy, which will set out a path for integrating low emitting hydrogen across the Canadian economy.
- Working with stakeholders, regulators, and technology innovators to launch efforts to align legislation, codes and standards to support a flourishing market for low-carbon and clean fuels. For example, this could include examining the necessary standards to ensure that hydrogen would be transported, measured, sold and consumed in a consistent way across the country.
- Maintaining the federal government's commitment to cut the corporate tax rate in half for companies making zero-emissions products.
- Working with small businesses across the country and in all sectors to get their feedback on all potential ways to further support them in taking actions to reduce emissions, including through rebates, targeted investments, and other supports.
- Using proceeds collected from the Output-Based Pricing System (OBPS) for industry to further support industrial projects to cut emissions and use new cleaner technologies and processes, as part of the plan to decarbonize industrial sectors. These proceeds will start to be collected in the spring of 2021, after which the Government of Canada plans to launch a call for proposals to find the most promising projects across industries.
- Completing the Federal Greenhouse Gas Offset System to provide additional flexibility in terms of compliance with the federal OBPS. Offsets create a further incentive to reduce emissions across Canada, and will generate additional economic opportunities in sectors such as agriculture, forestry and waste.
- Delivering on Canada's G20 commitment to phase-out all inefficient fossil fuel subsidies by 2025.
- Developing a comprehensive CCUS strategy and exploring other opportunities to help keep Canada globally competitive in this growing industry.

- Consulting with investors and other stakeholders in developing tax measures to ensure Canada has a competitive investment environment for the commercialization of technologies to help meet and exceed Canada's Paris Agreement target.
- Continuing to implement the new Impact Assessment process, to provide project proponents with more timely decisions while improving consultations and considering climate risks and opportunities, including achieving net-zero emissions by 2050.