

# Intentions Paper

# **A CLEAN GROWTH PROGRAM FOR INDUSTRY**

Building a clean growth future for B.C.



# 1. TOWARDS A CLEAN GROWTH FUTURE

B.C. is developing a long-term clean growth strategy for release in the fall and inviting British Columbians to share their ideas.

It's part of the government's commitment to stimulating sustainable growth and jobs using our clean energy to power our economy while driving down greenhouse gas (GHG) emissions. The same innovations that reduce our emissions and improve our quality of life can help us capture a larger share of the global market for clean energy, technologies, products and expertise.

The strategy will be a living document, continually updated and expanded as new opportunities arise. The document released this fall will lay out a framework for clean growth and a pathway to meeting our GHG emission reduction targets.

As we begin to implement the strategy in the coming years, we will continue to seek public input on priority areas as outlined in *Towards a clean growth future for B.C. – Introduction*. This will help us update and expand the strategy as new ideas are presented and more opportunities arise.

We will also continue to collaborate with the federal government through the Pan Canadian Framework on Clean Growth and Climate Change. We will work in full partnership with Indigenous communities. And we will continue to receive advice from the Climate Solutions and Clean Growth Advisory Council.

We are seeking public input as we move towards a clean growth future for B.C., with the release of intentions papers for transportation, buildings and industry.

In this paper, we're looking for your thoughts and feedback on a Clean Growth Program for Industry.

## What is B.C.'s strategy for a clean growth future?

It will bring together our action on climate change and work underway on our energy roadmap to drive sustainable economic growth with cleaner energy and fewer emissions.

It will be integrated with the province's:

- ▶ Economic Development Strategy
- ▶ #BCTech Strategy
- ▶ Emerging Economy Task Force

It will set out our vision for a clean growth future and a pathway to our GHG targets.

***We encourage everyone to take part in these and upcoming engagement opportunities. Visit [EngageBC](#) to learn more.***

## 2. A CLEAN GROWTH PROGRAM FOR INDUSTRY

B.C.'s industrial sector is deepening its commitment to reducing the sector's environmental and carbon footprint, recognizing that being the cleanest is its best competitive advantage. We can grow our traditional industries and position them for greater success by building on our strengths, including B.C.'s:

- ▶ legacy hydropower infrastructure,
- ▶ wealth of other renewable energy options,
- ▶ stringent regulatory frameworks,
- ▶ partnerships with Indigenous peoples and communities, and
- ▶ commitment to climate leadership.

Opportunities today are extraordinary. The world economy continues to expand, people need more modern energy solutions and a growing list of countries is committing to cleaner air and lower GHG emissions. This is the time to help our industries grow and make them even cleaner, positioning our energy and products as engines of sustainable prosperity.

The clean growth strategy will include a range of tools to help make this vision a reality, from increased access to clean energy to new market opportunities; from our own government development programs to partnering with Canada; from our domestic vision to global leadership.

The first step is this paper, seeking feedback on the Clean Growth Program for Industry announced in Budget 2018. The program partially addresses the competitive impacts of increasing the carbon tax with new incentives and a new fund to offset the cost of making operations cleaner.

The province is also developing plans to reduce methane emissions in the oil and gas sector and promote the further electrification of industries.

Additional actions could be proposed in later consultations as the clean growth strategy continues to evolve. For example, future topics include technology, clean innovation, global energy opportunities and low carbon energy, all of which can play important roles in making our industries cleaner.

## 2.1 Clean Growth Program for Industry

The Clean Growth Program for Industry directs a portion of B.C.'s carbon tax paid by industry into incentives that encourage them to transition to cleaner operations and reduce emissions. It is designed for regulated large industrial operations, such as:

- ▶ pulp and paper mills,
- ▶ natural gas operations and refineries, and
- ▶ large mines

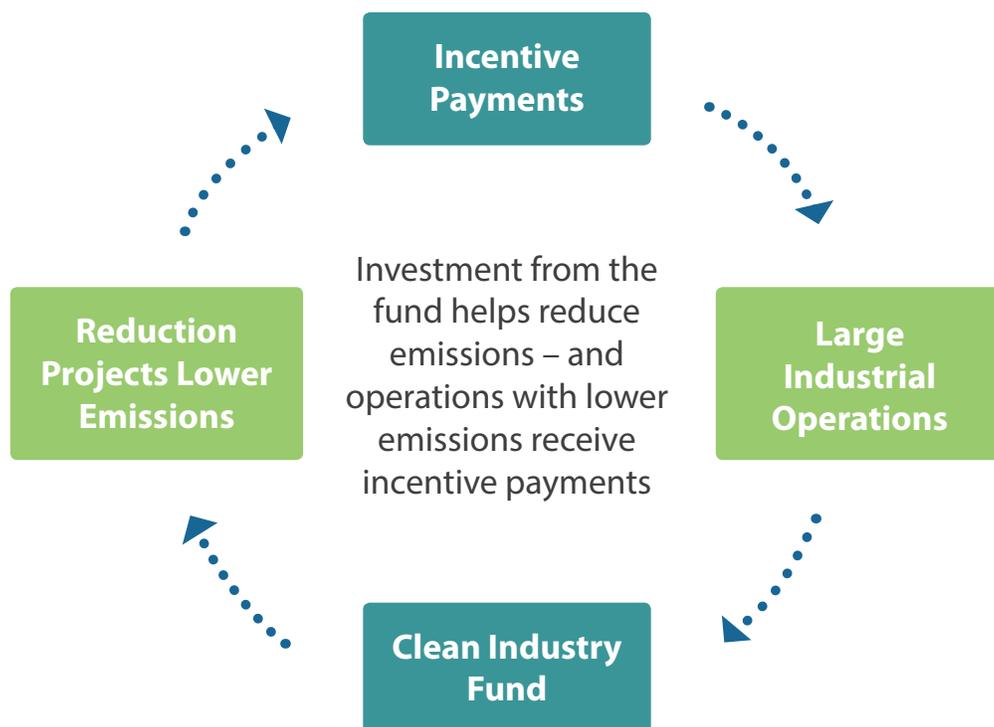
that emit over 10,000 tonnes of GHG emissions per year.

The program is funded by the incremental carbon tax above \$30 per tonne as paid by industry. In 2018, B.C.'s \$30 carbon tax rate was raised to \$35 per tonne, and it is set to increase by \$5 every year until 2021. As the price of carbon rises, the Clean Growth Program will allow industries to receive incentives based on some or all of the carbon tax they pay above \$30 a tonne, depending on their emission levels and reductions.

The program includes two initiatives:

- ▶ an **Industrial Incentive** that reduces carbon-tax costs for industrial operations that meet world-leading emissions benchmarks, and
- ▶ a **Clean Industry Fund** that invests some revenue from industrial carbon taxes directly into emission reduction projects, making traditional industries cleaner and stronger.

These initiatives are closely linked and work together. Each is described in further detail in the sections that follow.



## 2.2 Industrial Incentive

The Industrial Incentive will help B.C. industries thrive in the global market while becoming world leaders in clean growth and emission reduction technologies. It will also help to prevent *carbon leakage* – the movement of industry that competes internationally to places where there’s little or no price on carbon pollution.

It is structured so that the cleaner the industrial operation<sup>1</sup>, the larger their incentive.

Applicants for the incentive will be assessed using two evidence-based benchmarks:

- ▶ An **eligibility benchmark** will determine if the facility or industrial operation receives an incentive. It will be based on reported emissions associated with each operation’s unit of production – referred to as their emissions intensity. For example, a lumber mill might have an eligibility benchmark based on emissions per board foot produced.
- ▶ A **performance benchmark** will determine the amount of incentive an industrial operation receives. This benchmark is based on the emissions intensity of similar products made at the cleanest facilities around the world. The closer a B.C. operation gets to matching that performance benchmark, the larger their incentive will be – potentially reducing their carbon tax costs to the minimum of \$30/tonne.

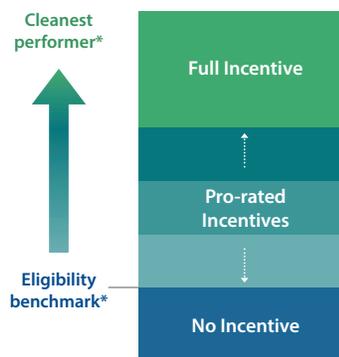
## Leading Climate Action

- ▶ In 2015, independent research estimated that B.C.’s carbon price had helped reduce our fuel consumption and emissions by up to 15%, compared to what they would have been without it.<sup>2</sup>
- ▶ Over 40 national and 25 sub-national jurisdictions have put a price on carbon as of 2017. This number has doubled in the past decade.
- ▶ The federal government has announced a national carbon price that will start at \$10/tonne in 2018, rising to \$50 by 2022.
- ▶ China has taken its first step towards launching an emission trading system (ETS), expected to be the largest carbon pricing initiative in the world.
- ▶ The UK and Sweden as well as Alberta have implemented actions to phase out their coal-fired generation plants.

### B.C.’s Industrial Incentive and How it Works

B.C.’s carbon tax will increase each year by \$5 per tonne of carbon pollution until it reaches \$50 in 2021. To encourage emission reductions, industrial operations in B.C. will have the opportunity to receive an incentive tied to carbon tax revenue. For example, an eligible operation that meets the highest emissions performance benchmark by 2021 would receive the full incentive. This would be equal to \$20 of the \$50 per tonne paid in 2021.

Industrial Incentive Based on Emissions Intensity



\*Benchmark to be revised and updated periodically

1 “Industrial operation” means one or more facilities with activities that generate greenhouse gas emissions under B.C.’s *Greenhouse Gas Industrial Reporting and Control Act*.

2 British Columbia’s Revenue-Neutral Carbon Tax: A Review of the Latest “Grand Experiment” in *Environmental Policy*, Murray and Rivers, 2015.

## 2.3 Clean Industry Fund

The Clean Industry Fund will support investments that reduce greenhouse gas emissions from large industrial operations.

The Fund is designed to work alongside the Industrial Incentive to help B.C.'s industrial operations, such as oil and gas, forestry, mining and smelting, transition to a low-carbon economy. Industrial operations that report their emissions under the Industrial Incentive program will be eligible to apply to the Clean Industry Fund.

Initial investments from the Fund will help facilities implement emissions reduction projects where additional funding is needed to justify the business case. The focus will be on implementing readily-available technology, but the Fund may look to diversify over time, supporting the continued growth of emerging technologies from B.C.'s clean tech sector.

The Fund will be established using the incremental carbon tax revenue from industry that remains after the Industrial Incentives have been provided. It will also be designed to leverage additional investments from facilities and partners, such as industry associations and other government funding programs.

The Fund is expected to issue an Expression of Interest in 2018 and a call for applications in 2019. Initial application requirements will include:

- ▶ a detailed project plan that outlines the technologies or improved processes the facility wants to implement and the amount of emissions they expect to reduce, and
- ▶ a business case for the project with financial details that outline the need for funding support and justify the request for funding.

Government is also considering other Fund parameters, such as:

- ▶ whether multiple facilities or groups of companies can apply for funding of a single project that could reduce emissions across locations,
- ▶ how the Fund can best promote the use of B.C. technology solutions, and the clean tech sector, or
- ▶ whether the Fund is open to all project types or should be subject to specific criteria.

## B.C. Scores High in Clean Tech

The Global Cleantech 100 is a list of companies with the highest potential to make the most significant market impact within a 5-10 year timeframe – according to players in the market. Thirteen Canadian companies made the list in 2018. Seven were from B.C.

That's no surprise as B.C. is home to over 35% of Canada's cleantech firms, employing nearly 14,000 people – including more than 8,500 in B.C. – and generating revenue of \$1.8 billion in 2016.

Along with creating jobs and new innovations, the sector is supporting B.C. industries to become increasingly competitive in the growing clean economy.

## 2.4 Expected Outcomes

The Clean Growth Program for Industry will help our economy thrive, create a clean industry brand for B.C. and help our traditional industries compete in a global market where consumers are demanding cleaner solutions.

The program also provides new opportunities and a larger market for cleantech companies in B.C., as they work alongside industry to increase efficiency and demonstrate cleantech advantages to global markets.

Reimbursing a portion of the carbon tax to industry based on emissions levels will encourage resource efficiency and clean innovation, reducing energy costs and GHG emissions. As our economy diversifies, so will our workforce, ensuring British Columbians continue to have good jobs well into the future.

Ultimately, the Clean Growth for Industry Program will encourage innovation, help our clean technology sector deliver climate solutions to the world and drive clean growth.

### Digitizing Mining – A Made-in-B.C. Solution

MineSense is a B.C.-based company providing real-time, sensor-based ore data and sorting solutions for large-scale mines. These allow users to easily and accurately identify ore in designated waste and waste in designated good ore – improving productivity, saving time and reducing GHG emissions by making overall operations more efficient.

Mitsubishi Corporation recently invested \$4 million US in the company, citing its unique technology and its potential to add significant value to the global mining industry. MineSense continues to expand its reach into key mining regions worldwide.

## Key Considerations

As the Clean Growth Program for Industry is being designed, we are seeking public input on the best ways to implement it. Key areas under consideration include:

- ▶ Ensuring that all industrial operations are able to take advantage of the incentives to help become the cleanest in the world. This could be achieved by allowing facilities that emit less than 10,000 tonnes of emissions annually to opt in, as long as they meet the same emission reporting requirements as larger industries.
- ▶ Ensuring the Industrial Incentive does not weaken the signal from our carbon price to reduce emissions. This could be achieved by continuing to update the performance benchmark – for example, every five years – as the cleanest facilities in the world become even cleaner.
- ▶ Finding the right balance for Clean Industry Fund investments between low-cost projects that reduce emissions now, and long-term clean growth solutions that could have a larger impact in the future.
- ▶ Identifying strategic industrial investments for the Fund to complement those made by existing technology funds. This will provide greater opportunities for the clean technology market in B.C.

## 3. PROVIDING INPUT

### What do you think?

We are seeking your input regarding the Clean Growth Program for Industry.

- ▶ Email written submissions to: [clean.growth@gov.bc.ca](mailto:clean.growth@gov.bc.ca)
- ▶ This intentions paper will be available for comment until August 24, 2018.
- ▶ Written submissions will be posted publicly.

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