

B.C. Low Carbon Fuel Standard Amendments

Discussion Paper

January 13, 2022

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1 Introduction

The *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act* (Act) and the *Renewable and Low Carbon Fuel Requirements Regulation* (Regulation) are known collectively as the Low Carbon Fuel Standard (LCFS). The Ministry of Energy, Mines and Low Carbon Innovation (Ministry) is considering repealing the Act and replacing it with a New Act.

The purpose of this paper is to identify potential changes and the possible impacts to Indigenous peoples. These potential changes would enhance the LCFS by closing compliance and enforcement gaps, improving the overall clarity and structure for regulated industry, and incorporating policy changes announced in the [CleanBC Roadmap to 2030](#) (Roadmap). The Ministry believes that two of the potential amendments would be of particular interest to Indigenous peoples:

- 1) The New Act could enable remote communities and other persons to generate LCFS compliance units for the generation of low carbon electricity to replace the use of diesel generators.
- 2) The New Act could expand eligibility for people to enter into Initiative Agreements (currently referred to as Part 3 Agreements), which supply credits for actions that support a transition away from fossil fuels.

The *Declaration on the Rights of Indigenous Peoples Act* (Declaration Act) commits the Province to engage with Indigenous peoples when proposed initiatives may impact or be of interest to them. The Ministry has identified that advanced climate action, environmental protection, and new socioeconomic opportunities, related to several Articles of the Declaration Act may arise as a result of the proposed New Act. The Ministry is seeking feedback on these potential changes and areas of interest for Indigenous peoples.

The Ministry is requesting responses to the discussion paper to be submitted in writing; however, accommodations may be made if this is not feasible. For convenience, respondents may use the associated response form, but may also submit written materials in their preferred format. Any portion of the associated response form may be submitted, it does not need to be completed in full. Bulleted lists or paragraphs may be used.

Responses are being requested before 4 p.m. on February 15, 2022, to one of the following addresses:

Email: lcfs@gov.bc.ca

Mail: Low Carbon Fuels Branch
B.C. Ministry of Energy, Mines, and Low Carbon Innovation
P.O. Box 9314 Stn Prov Govt
Victoria, B.C. V8W 9N1

Information regarding future opportunities for engagement on the LCFS can be found in Section 6 of this discussion paper.

2 LCFS Background

Under the LCFS, fuel suppliers must progressively decrease the average carbon intensity of their fuels to achieve a 9.1% reduction in carbon intensity in 2020 and 20% reduction in 2030. The carbon intensity of a fuel represents the greenhouse gas (GHG) emissions associated with its production and use as determined by a lifecycle assessment, presented in terms of grams of carbon dioxide equivalent per megajoule (gCO₂eq/MJ) of the produced fuel. A lifecycle assessment considers the emissions associated with each stage of a fuel product's life and all materials and energy used from feedstock production or acquisition through to fuel use.

A fuel supplier generates credits by supplying fuel with a carbon intensity below the prescribed target, and they incur debits by supplying fuel with a carbon intensity above the target (e.g., fossil-based gasoline and diesel). To remain compliant with the LCFS, a fuel supplier must ensure that debits incurred from supplying higher carbon fuels are offset by credits generated from supplying lower carbon fuels. A fuel supplier can bank surplus credits if they over-comply with the carbon intensity target in a given year; they can also purchase credits from other fuel suppliers.

For further information on the credit market system, visit:

<https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/renewable-low-carbon-fuels/credits-market>

The Ministry has identified several areas of the LCFS that would benefit from clarification, updates, and expansion, and is considering replacing the Act to address these changes. If implemented, the primary purpose of the New Act would continue to be the same as the existing Act – to reduce the carbon intensity of fuels. Reducing the carbon intensity of fuels results in an increased availability of low-carbon fuels, stronger climate

action, and reduced pollution of air, water, and land. New socioeconomic development opportunities for Indigenous, rural, and remote communities, and a variety of other proponents may be available as a result of the proposed New Act, discussed in further detail below.

3 Proposed Changes

The New Act would make changes related to the administration and determination of compliance with the carbon intensity reduction requirements, intended to strengthen the LCFS and make it simpler to administer.

If approved, the New Act would also implement several additions announced in the Roadmap, which would broaden the scope of the Act and further advance climate action. The Roadmap identified the intention to increase the strength of the targets to 30% carbon intensity reductions by 2030. This is under careful consideration, and if approved would be implemented when targets are set as part of the development of the Regulations for the New Act.

The proposed New Act would also:

- 1) Incorporate new classes of fuel to include all fuel supplied for aviation and marine use. This would ensure that over time, all fossil fuels supplied in B.C. (mainly for transportation) are subject to the Act. This would provide an incentive to further develop fuels that are not yet commercially available, while introducing new sources of credits needed for overall compliance with the Act.
- 2) Enable any person to apply to trade compliance credits. This would allow persons who are not currently fuel suppliers to hold credits and engage in credit trading. This would improve the functionality of the credit market and address existing concerns from stakeholders.
- 3) Enable regulations to authorize a compliance pathway for negative emissions technologies such as Direct Air Capture, which would grant compliance units for each net tonne of carbon dioxide that is removed from the air under

ambient open-air conditions. This would support development of this technology as it matures by enabling businesses to access the market value of LCFS credits.

- 4) Provide authority to require some utilities to use revenues from the sale of compliance credits to support increased use of their low carbon products (e.g., electricity, renewable natural gas), further contributing to the supply of low carbon fuels.
- 5) Expand the potential pool of proponents who may enter into Initiative Agreements (currently known as Part 3 Agreements) to include anyone who could play a role in reducing the use of fossil-based gasoline or fossil-based diesel fuel. This would enable support for innovators who are commercializing new fuel production methods, and for infrastructure and marketing innovators, including communities and suppliers at the retail level, regardless of whether they import or produce fuel.

Expanded eligibility for Initiative Agreements would also enable support for community level energy projects, particularly in small, rural, remote, and Indigenous communities, contributing to economic diversification, growing jobs locally while also supporting a shift to lower carbon fuels. See section 4.1, below for more information.

- 6) Provide authority for the Act to consider all uses of base fossil fuels (e.g., gasoline, diesel fuel, jet fuel) and any energy source that is used in substitution for a base fuel. This would enable the New Act to provide compliance credits for those shifting away from fossil fuel use, supporting an accelerated transition to low-carbon energy sources. See section 4.2, below for more information.

4 Anticipated Outcomes

The Ministry is seeking feedback on the impacts, interests, and opportunities associated with the proposed New Act, particularly as they may impact Indigenous peoples.

The Ministry believes that the proposed New Act is in alignment with the goals of Indigenous nations shared in recent CleanBC, Roadmap, and Ministry engagements, including supporting community-based energy projects, reducing diesel dependence, and advancing provincial decarbonization commitments [3]. The Ministry believes these outcomes to be in alignment with rights asserted through Articles 20, 21, 23, and 29 under the Declaration Act.

The expanded scope of the New Act may lead to enhanced community benefits, such as air, land, and water pollution reduction, local noise reduction, climate action, and an increased supply and affordability of low-carbon fuels in the province. The Ministry believes these outcomes to be in alignment with rights asserted through Articles 25, 26, 27, 28, 29, and 32 under the Declaration Act.

4.1 Initiative Agreements

The Ministry believes that increasing access to Initiative Agreements may present climate action and socioeconomic opportunities of interest to Indigenous communities and businesses. Initiative Agreements would award compliance credits for completing projects that increase the supply and use of low carbon fuels sooner than would occur without the agreement.

In 2020, the current Part 3 Agreement program led to 22 new agreements, stimulating over \$2.19 billion dollars of investment in low carbon fuels production and distribution over the next five years. The current market price of a compliance credit is approximately \$450 per credit.

Initiative Agreements under the New Act would provide many of the various benefits of the current Part 3 Agreement program, by increasing the supply of low-carbon fuels, and by supporting a switch from fossil fuels to electricity, biofuels, hydrogen, and other low-carbon energy sources. The projects supported by Initiative Agreements would provide socioeconomic benefits through job creation, economic diversification, and innovation across B.C., including at the community level.

If the New Act is approved, Initiative Agreements could be combined with other provincial funding sources and programs.

Currently, Part 3 Agreements are limited to fuel suppliers, but the proposed changes could enable the Ministry to enter into Initiative Agreements with:

- a producer or supplier,
- a person who the director considers to be part of the fuel supply chain, including retail store operators,
- a person who will become a producer of “intermediate refinery products”, or
- a person who will implement a project that will reduce the use of a base fuel in B.C. when that use is not transportation.

For additional information on the current Part 3 Agreement program, visit the LCFS website at:

<https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/renewable-low-carbon-fuels/part-3-agreements>

4.2 Remote Community Electricity Generation

The Ministry anticipates that the addition of credit generation for reducing the use of fossil-based gasoline and fossil-based diesel for electricity generation may present socioeconomic and climate action opportunities for Indigenous communities.

The revenue from the sale of credits could support communities and industries to shift from fossil fuels for generating electricity, by financially incentivizing the supply of low carbon fuels, including renewable diesel and gasoline, electricity, and clean hydrogen, or supporting alternative electricity generation methods.

By supplying compliance credits for the production of low carbon fuel, the initial high costs of establishing infrastructure and operations can be reduced, alleviating barriers to energy improvements, and accelerating the ability to transition away from fossil fuels. If the New Act

is approved, LCFS compliance credits for the supply of low carbon fuels could be combined with other provincial funding sources and programs.

Credits could also be generated by communities or retailers in other circumstances, such as:

- Shore power for vessels
- Mine operations without grid interconnection
- Remote oil and gas or other resource extraction operations
- Industrial operations using diesel, where the end use may not be considered transport

5 What We Heard

Indigenous communities have identified that Indigenous peoples in rural and remote communities are at greater risk because climate change is having a larger impact on housing, transportation, food security, access to traditional foods and land, physical and mental health [2]. Recent research on B.C. communities at a greater risk due to climate change aligns with these concerns [1]. Adopting low-carbon alternatives to fossil fuel would improve local air quality and reduce negative health impacts, increase affordability over time, in addition to addressing GHG emissions that contribute to climate change vulnerabilities, supporting actions that align with the Declaration Act.

The Ministry believes that these changes are in alignment with the goals shared during recent CleanBC, Roadmap, and Ministry engagements with Indigenous nations, by supporting community-based energy projects, reducing diesel dependence, and contributing to decarbonization commitments.

Following recent Indigenous engagement sessions as a part of the Roadmap, Indigenous communities identified several areas of interest related to the LCFS. These include an interest in reducing community reliance on diesel as well as developing biofuel production enterprises that utilize forest biomass and harvest waste, and waste oil [2].

Indigenous communities also identified a strong interest in clean fuel production. Entrepreneurial and job creation opportunities may grow through emerging technologies that produce fuels from forest biomass, agricultural products, and other raw materials in rural, remote, and Indigenous communities [3].

Through the proposed changes to the existing Act discussed in this paper, there may be emergent socioeconomic and environmental opportunities for Indigenous peoples. These opportunities may support Indigenous, rural, and remote communities in local job growth, economic diversification, and self-determination, along with effective GHG emission reductions that advance climate action.

6 Next Steps

B.C. is committed to combating climate change and advancing reconciliation with Indigenous peoples. We are committed to upholding the Declaration Act, and to working with Indigenous

nations on an ongoing basis, to protect and conserve the environment by transitioning to a low carbon economy to create a healthy environment for our shared future.

Following this initial period for feedback regarding the proposed New Act, the Ministry will seek feedback during Spring 2022 to inform development of the Regulations. The New Act and Regulations are planned to come into effect on January 1, 2023. Additional information will be distributed once it becomes available.

For feedback, questions, or requests for further discussion, please contact:

Email: lcfs@gov.bc.ca

Mail: Low Carbon Fuels Branch
B.C. Ministry of Energy, Mines, and Low Carbon Innovation
P.O. Box 9314 Stn Prov Govt
Victoria, B.C. V8W 9N1

7 Appendix A – References

- [1] Hoogeveen, Dawn., et al. (2021). Climate Change, Intersectionality, and GBA+ in British Columbia: Summary Report. Simon Fraser University.
www2.gov.bc.ca/assets/gov/environment/climate-change/adaptation/resources/climate_change__gba_in_bc_summary_report.pdf

- [2] Government of British Columbia (2021). *CleanBC Roadmap to 2030*.
www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/cleanbc_roadmap_2030.pdf

- [3] Indigenuity Consulting Group (2018). *CleanBC Indigenous Engagement Sessions: What We Heard*. Government of British Columbia.