

Canada's new clean fuel standard – obligations for liquid fuel suppliers and opportunities for low-carbon energy producers

JULY 6, 2022 10 MIN READ

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On June 20, 2022, the final *Clean Fuel Regulations*^[1] under the *Canadian Environmental Protection Act, 1999*^[2] were registered, bringing a Canadian Clean Fuel Standard (CFS) into law. A draft version of the CFS (Proposed CFS) was published for public comment in December 2020, which was discussed in a [previous post on our Canada Energy Transition Blog](#). The [final version of the CFS](#) was published in the *Canada Gazette* on July 6, 2022; however, it came into force upon registration, with the exception of two sections repealing the pre-existing *Renewable Fuels Regulations* (RFRs), which will come into force on September 30, 2024.^[3]

The CFS targets carbon emission reductions from carbon content in liquid fossil fuels, primarily those used in transportation, and aims to spur innovation and economic growth in the low-carbon fuels sector. The federal government expects that the CFS will drive consumer choice towards low-carbon energy sources for transportation fuel (such as biofuel and electricity) by decreasing their price while increasing the price of liquid fossil fuels.^[4]

This Update sets out the obligations that the CFS imposes on “primary suppliers” that domestically produce or import at least 400 cubic metres (m³) of gasoline or diesel during a “compliance period” (6-month periods in 2023, when the obligations take effect, and calendar years thereafter),^[5] and highlights opportunities for low-carbon energy producers to generate compliance credits under this new regime.

CFS fuel-specific carbon intensity limits

The CFS will replace the RFRs,^[6] established in August 2010. The RFRs require primary suppliers to have an average renewable content of at least 5% for gasoline that they produce in Canada and/or import, and 2% for diesel fuel (and heating distillate oil).^[7] The CFS maintains these volumetric requirements in addition to the obligations discussed below, meaning primary suppliers must continue to achieve a renewable fuel content of at least 5% in gasoline and 2% in diesel that they produce in Canada and/or import during a compliance period.^[8]

Unlike the RFRs, the CFS requires greenhouse gas (GHG) reductions on a lifecycle basis, accounting for emissions from the production to the end use of the fuel. The CFS establishes lifecycle carbon intensity (CI) limits for each fuel type (gasoline and diesel), expressed in grams of carbon dioxide equivalent per megajoule (gCO₂e/MJ).^[9] Primary suppliers must

lower the CI of the gasoline and diesel that they produce in Canada and/or import in accordance with these limits. Rather than requiring each primary supplier to calculate the current CI of their unique gasoline and diesel pools, the CFS establishes a baseline CI for each fuel.^[10] Primary suppliers must lower the CI of their unique gasoline and diesel pools by an amount equal to the difference between the baseline CI for that fuel and the CI limit for the corresponding compliance period.^[11] We note that the Proposed CFS would have applied to kerosene, light fuel oil, heavy fuel oil and jet fuel in addition to gasoline and diesel, but these fuels were removed in the final CFS. Fuel produced in Canada that is ultimately exported for use in another country is also exempt from the CFS.^[12]

The first annual CI limits are 91.5 gCO₂e/MJ for gasoline and 89.5 gCO₂e/MJ for diesel, which are for the 2023 calendar year.^[13] Based on the baseline CIs of 95 gCO₂e/MJ for gasoline and 93 gCO₂e/MJ for diesel,^[14] primary suppliers will have to reduce the CI of the gasoline and diesel that they produce in Canada and/or import by 3.5 gCO₂e/MJ in 2023. Reduction requirements will increase by 1.5 gCO₂e/MJ per year until 2030,^[15] which is a higher rate of increase than was initially outlined in the Proposed CFS.^[16]

Primary suppliers will be required to meet their reduction requirement on a company-wide basis, based on the total volume of gasoline and/or diesel that they produce in Canada and/or import during a given compliance period.^[17] In other words, the CFS imposes a burden on primary suppliers to oversee the total volume (m³) of their pools of gasoline and/or diesel to calculate their reduction requirement. These pools include fuel that was (i) dispatched from their fuel production facilities; (ii) used to fuel equipment at their fuel production facilities; and (iii) imported. Primary suppliers can subtract fuel sold or delivered for certain uses from this pool (e.g., space heating and generating electricity in underserviced areas);^[18] therefore, primary suppliers should keep track of the intended end use of the fuel they sell.

The CFS allows primary suppliers to defer satisfaction of a small portion of their reduction requirements for a compliance period for up to five years, subject to certain conditions.^[19]

Compliance credits and credit market

Primary suppliers must lower the CI of their fuel using “compliance credits.”^[20] Each compliance credit is equivalent to a one-tonne reduction of life cycle CO₂e emissions for the applicable compliance period. During each compliance period, primary suppliers must use the number of credits necessary to meet their reduction requirement. Compliance credits can either be created by primary suppliers or transferred to them by other “registered creators.”^[21] We note that compliance credits are the only mechanism for primary suppliers to achieve compliance with their reduction requirement. Lowering the actual CI of the fuel that a primary supplier produces has no effect on their reduction requirement, which is based on a set baseline CI.

Creating compliance credits

Any registered creator — including primary suppliers — can generate compliance credits through activities in the following three main categories:^[22]

1. Compliance Category 1: CO₂ emissions reduction projects, including carbon capture and storage projects^[23]
2. Compliance Category 2: producing or importing low-CI fuel (i.e., fuel with a CI below the applicable CI limit)^[24]
3. Compliance Category 3: end-use fuel switching in transportation (i.e., an end user of fuel changes or retrofits their vehicle to be powered by a low-carbon fuel or energy source)^[25]

For Category 3, an electric vehicle (EV) charging-network operator^[26] is one of the entities that can create compliance credits through end-use fuel switching in transportation. However, it can only do so during a compliance period if all of the revenue it receives from the transfer of previously created compliance credits is reinvested in expanding EV charging infrastructure or reducing the cost of EV ownership (through financial incentives to purchase or operate an EV). Revenue from credit transfers must also be reinvested within two years of the end of the compliance period in which the credits are transferred.^[27]

Registered creators can also generate compliance credits by reducing the CI of gaseous fuels (as opposed to liquid fuels), through the same kinds of activities listed in Categories 1 and 2 above. This includes projects that reduce the lifecycle emissions of gaseous fuels and promote low-CI gaseous fuels (e.g., renewable natural gas, biogas, hydrogen, renewable propane).^[28] However, a primary supplier cannot satisfy more than 10% of their reduction requirement with compliance credits derived from gaseous fuel CI reduction.^[29]

Only compliance credits created before the end of a compliance period can satisfy a primary supplier's reduction requirement for that compliance period. Credits can be used for the compliance period in which they were created, or for any subsequent compliance period, but newly created provisional credits cannot be used for any prior compliance periods.^[30]

Compliance-credit market

The CFS contains provisions that establish a market for compliance credits, in which both primary suppliers and other registered creators can participate. As well as providing primary suppliers with alternative compliance options, this credit market will enable low-carbon energy producers to generate revenue by voluntarily generating credits and selling them into this new carbon market.

Primary suppliers can enter into credit-creation agreements with other registered creators — including biofuel producers, EV charging site hosts, fuel station owners/operators and upstream and downstream operations — whereby primary suppliers compensate registered creators for the compliance credits they produce during a compliance period.^[31] Primary suppliers and other registered creators can also transfer compliance credits that they have already created to other participants for "fair market value."^[32]

Another option for registered creators with excess compliance credits is to pledge to transfer these credits through the "clearance mechanism", whereby primary suppliers who cannot otherwise satisfy their CI reduction requirements must acquire compliance credits through the clearance mechanism at a price that cannot exceed the maximum amount set out in the CFS (\$300 per credit, adjusted for inflation), up to the amount necessary to satisfy their reduction requirement.^[33]

Unlike other carbon credit markets, such as the Technology Innovation and Emissions

Reduction (TIER) regime in Alberta, the CFS regime allows emission reduction activities in one jurisdiction to be used to create compliance credits for primary suppliers in another jurisdiction. In fact, upon application by a credit creator, the Minister may recognize CO₂e-emission-reduction projects in other countries for CFS compliance credits if there is an agreement in place with that country.^[34] This feature of the CFS will remove one of the key obstacles to a liquid market that we have seen in other carbon credit regimes, where the supply of carbon credits is limited to emissions-reduction activities in a single jurisdiction (i.e., province). The CFS regime may therefore provide more optionality for parties relative to other compliance carbon credit markets currently operating in Canada.

On the other hand, the CFS regime may attract potential generators of carbon credits to create credits for the CFS regime as opposed to others (e.g., TIER) and thereby reduce availability of carbon credits under other regimes. The CFS may also increase the administrative burden on generators of carbon credits because these parties will now have another carbon credit market to understand and comply with, potentially increasing the fragmentation of carbon markets in Canada today.

Compliance funds

As an additional interim compliance option, primary suppliers may meet up to 10% of their annual CI reduction obligation through payments into a registered “compliance fund” at a set price per tCO₂ (equivalent to one compliance credit).^[35] This price will start at \$350/tCO₂.^[36] Credits secured by making a payment into a compliance fund cannot be traded and must be used for compliance in the same compliance period.^[37]

Canada will maintain a list of approved compliance funds. Eligible funds must use the contributions to finance projects and activities in Canada “that support the deployment or commercialization of technologies or processes that will reduce CO₂e emissions” in the short term. Other eligibility criteria are designed to ensure the funds’ transparency, sound management and independence.^[38]

Though just one of several compliance options available to primary suppliers under the CFS, the compliance fund mechanism will likely increase financing for emissions-reducing technologies in Canada.

Concluding comments

The details set out in the long-anticipated CFS will assist fuel suppliers across Canada understand their obligations under this new regime, and parties will now have six months to do so before the compliance obligations become effective in 2023. The obligations for fuel suppliers under the CFS are significant, and these companies will need to carefully manage their obligations going forward to ensure compliance under the regime and competitiveness with other fuel suppliers. The new CFS regime will create a new carbon credit market in Canada that will be key to compliance for fuel suppliers, and could become the most liquid carbon credit market in Canada. This regime will likely spur investments in alternative low-carbon fuels and other emissions reductions projects that are eligible to create compliance credits under the CFS.

[1] SOR/2022-140 [CFS].

[2] SC 1999, c. 33.

[3] CFS, s. 176.

[4] Proposed CFS, *Regulatory Impact Analysis Statement, Market-based approach – Increasing the carbon price and Costs and benefits*, published on December 19, 2020: *Canada Gazette*, Part 1, Vol. 154, No. 51: Clean Fuel Regulations (19 December 2020) online:
<https://canadagazette.gc.ca/rp-pr/p1/2020/2020-12-19/html/reg2-eng.html> [Proposed CFS].

[5] CFS, ss. 1(1) and 4(1). In 2023, there will be two 6-month-long compliance periods (January 1 to June 30 and July 1 to December 31). Starting in 2024, each compliance period will be a full calendar year.

[6] SOR 2010-189 [RFRs].

[7] RFRs, ss. 5(1), 6(1) and 6(2).

[8] CFS, ss. 6(1) and 7(1). Note that these requirements do not apply to fuels produced in, or imported into, the province of Newfoundland and Labrador for use in that province.

[9] CFS, s. 5(1).

[10] CFS, s. 5(3).

[11] CFS, s. 5(2). The formula used to calculate a primary supplier's reduction requirement can be found in s. 9.

[12] CFS, s. 4(2).

[13] CFS, s. 5(1).

[14] CFS, s. 5(3)

[15] CFS, s. 5(1).

[16] Proposed CFS, s. 4(1).

[17] CFS, s. 8(1).

[18] CFS, s. 8(2).

[19] CFS, s. 16.

[20] CFS, s. 5(2).

[21] CFS, s. 11(1) and 11(2).

[22] CFS, ss. 19(1) and 25(1).

[23] CFS, ss. 30-40.

[24] See CFS, ss. 94-97 for compliance credit quantification methods for activities in this Compliance Category. Note that for the purpose of calculating the number of compliance credits produced in this category, the CI for different low-CI fuels is established in Schedule 1 of the CFS.

[25] See CFS, ss. 98-104 for compliance credit quantification methods for activities in this Compliance Category.

[26] Defined as “a person who operates a communication platform that collects data on the electricity supplied by a charging station and who is the owner of that data”: CFS, s. 1(1).

[27] CFS, ss. 102-103.

[28] CFS, s. 20.

[29] CFS, ss. 15(2) and 28(b).

[30] CFS, s. 11(3).

[31] CFS, ss. 21 and 22.

[32] CFS, ss. 105-109

[33] CFS, ss. 110-112.

[34] CFS, ss. 38 and 39.

[35] CFS, ss. 15(1), 19(2) and 118.

[36] CFS, ss. 118(3) and 118(4).

[37] CFS, ss. 19(2), 118, 119(1) and 119(2).

[38] CFS, ss. 115(1) and 115(2).