

The Federal Clean Fuel Standard:
**Risks to economic recovery and barriers
to environmental innovation**

August, 2020

HOW THE CFS WORKS

The objective of the Clean Fuel Standard (CFS), as presented in the 2019 Environment and Climate Change Canada (ECCC) proposed regulatory approach, is to achieve 30 million tonnes of annual reductions in greenhouse gas emissions (GHGs) by 2030.

The CFS requires primary hydrocarbon fuel suppliers (e.g. refiners, diesel importers, etc.) to reduce the overall lifecycle Carbon Intensity of those fuels. These obligated parties have three options to comply with the CFS:

- Self-generate CFS credits based on ECCC approved GHG emission reduction protocols;
- Blend low carbon fuels into existing fuel feedstocks (e.g. ethanol blending in gasoline);
- Switch to lower carbon intensity (CI) energy sources, like switching to a self-generated renewable natural gas for their operations as opposed to drawing natural gas from a pipeline.

The CFS is separated into three fuel streams (liquids, gaseous and solids). The CFS will assign individual annual reduction requirements to each stream that obligated parties must meet. If an obligated party is not able to achieve the mandated reductions through the options listed above, they will need to:

- (1) purchase credits from other parties or contribute to the compliance fund (10 per cent limit on fund) to cover the difference;
- (2) cease their activities (e.g. halt supply of fuel);
- (3) face criminal penalties.

KEY CONSIDERATIONS ON THE CLEAN FUEL STANDARD (CFS)

1. Feasibility

The CFS is advancing without an adequate level of data or modelling which would demonstrate a smooth implementation; multiple stakeholders have suggested a number of significant policy recommendations that have neither been incorporated nor sufficiently addressed. Notable areas of uncertainty include availability of credits, availability of biofuels, and the credit market development and function. All these issues could have significant ramifications on the availability of credits and how successful the CFS may be and could amplify the implications the CFS could have on both our sector and the economy during a very difficult time for Canada.

2. Impact Uncertainty

The CFS is being designed in a way that will drive significant cost increases for energy across the economy. Current demand for diesel, gasoline and natural gas accounts for over 50 per cent of energy demand in every province for consumer, commercial, industrial and agricultural activities. According to a 2019 study by the Canadian Energy Research Institute, the compliance cost per tonne of CO₂ reduced will be between \$163 and \$170¹, over five times higher than current carbon pricing. The Government of Canada, however, has not shared their cost-benefit analysis, nor has a regional impact analysis been developed in consultation with the provinces and territories. Given different regional infrastructure, economies and geographic conditions, substantial differences in compliance cost are expected across the country. To date, no measures to mitigate these impacts for citizens or businesses, as was done with the much lower cost federal carbon pricing, have been put forward by the federal government. These additional costs will harm consumers, businesses and ultimately economic recovery through higher and more volatile energy prices.

3. Provincial Jurisdiction

Many provinces already have renewable fuel blending requirements in place, including Alberta, British Columbia, Saskatchewan, Manitoba and Ontario. It appears, however, that once adopted, the CFS will apply across Canada without recognizing provincial efforts within the 30Mt target. In fact, the more these provinces achieve, the more costly the regulation will become as it will have to achieve 30Mt of reductions above actions taken by provinces. This represents further federal government expansion into provincial jurisdiction over energy and climate policy and will result in duplication of efforts. According to ECCC public sources, current federal fuel regulations are made under Section 140 of Canadian Environmental Protection Act (CEPA) which does not enable the authorization of equivalency agreements². Current renewable fuels requirements, both provincially and federally, must be met even if they are duplicative.

4. Solid and Gaseous CFS are Unprecedented

Other jurisdictions (e.g. British Columbia, California, and the European Union etc.) with a Low Carbon Fuel Standard (LCFS) or renewable blending requirements apply requirements exclusively to transportation fuels; none include low carbon standards to solid or gaseous fuels. The application of a CFS for gaseous and solid fuels will have significant downstream impacts that will have significant regional impacts. For example, a large portion of the Canadian electricity grid is using natural gas as a replacement to coal. The inclusion of gaseous and solid fuels will place a significant economic burden on industries and consumers during a time of unprecedented economic uncertainty.

This economic burden, coupled with the implementation complexity of introducing a gaseous and solid CFS, explains why no other jurisdiction that currently has a LCFS on transportation fuels has included industrial uses within the scope. As such, the proposed gaseous and solid CFS will place Canadian products at a disadvantage against our global competitors and could lead to carbon leakage.

5. Significant Compliance Costs

The CFS is proceeding to implementation in a manner that does not provide Emissions Intensive Trade Exposed (EITE) protection to Canada's trade exposed industries. The introduction of the CFS will increase costs to EITE industries including oil and gas, agriculture, manufacturing (aluminum, chemicals, cement etc.) and others, through increased energy prices or compliance obligations. In 2019, the Canadian Energy Research Institute (CERI) released a report titled Economic and Emissions Impacts of Fuel Decarbonization, which explores the impacts of CFS. The study concludes that CFS will impact consumers by making all fuels more expensive. For example, assuming a \$200/t credit price and between 10 and 20 per cent reduction in carbon intensity:

- Gasoline and diesel: an estimated increase of 5-11 cents per litre by 2030.
- Natural gas: an estimated increase of \$0.94 - \$1.88 per gigajoule (GJ) by 2030.
- The total cost impacts for the Canadian economy are estimated to range from \$7.6 billion annually to \$15.3 billion annually by 2030.
- The upstream oil and gas industry estimated costs of approximately \$1-2 billion per year for the sector³.

The CFS will make fuels more expensive and these costs will be transferred to Canadian businesses and consumers in the form of higher prices. Businesses unable to absorb these cost increases will fail or will move to other jurisdictions. This will harm economic recovery and lead to increased job losses. These impacts will be compounded by the current post-COVID economic crisis – the liquids stream of the policy is expected to come into force in 2022, still in the midst of Canada's stabilization and recovery efforts.

6. Availability of Biofuels

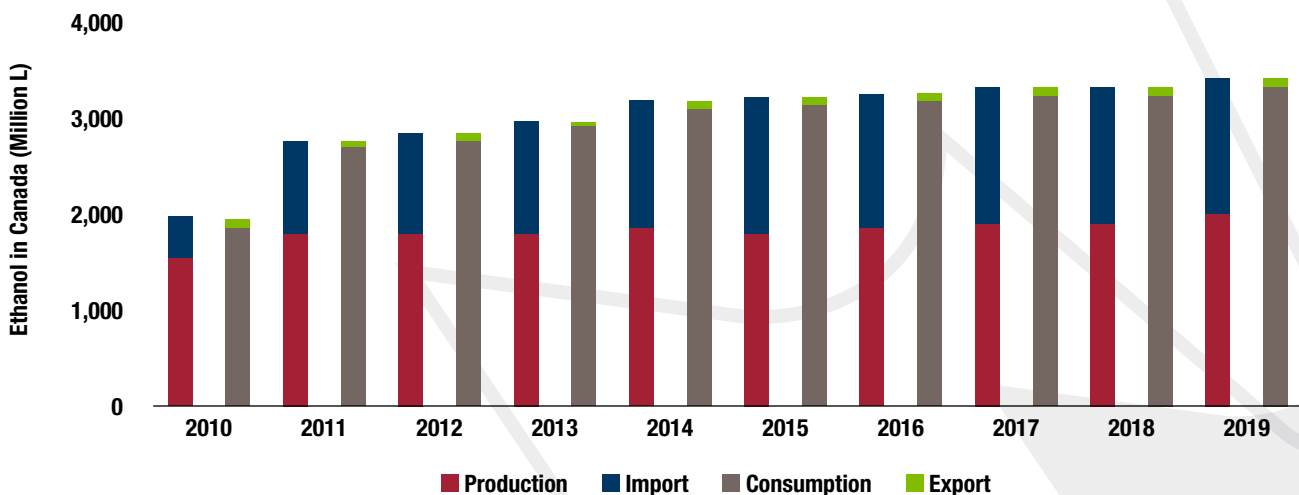
One of the key compliance options and credit generators under the CFS will be the blending of biofuels, both in the liquids and in the gaseous stream. Biofuel availability is a significant concern under the CFS.

It is unclear whether there will be enough supply to meet the created compliance demand and from where the supply will originate. Today, much of the biofuel supply to meet current blending requirements is imported. From 2010 to 2019, Canada's low carbon fuel demand more than doubled, with about half the demand met by imports rather than domestic production⁴.

It is likely that additional demand for biofuels will need to be met by imports from other countries. For example, almost 70 per cent of the growth in Canadian ethanol demand since 2011 has been met through imports from the US⁵. The US is expected to continue to benefit from cost and other advantages that position them to meet much of the incremental ethanol demand that will come from CFS. The CFS will result in the displacement of Canadian-produced fuel products with imported biofuels which will lead to higher fuel costs for Canadians. The need to purchase these fuels internationally will drive financial resources out of Canada.

ETHANOL IN CANADA, 2010 - 2019 (MILLION L)

Source: ICF Canada, Clean Fuel Standard Supply & Demand Implications (2020)



7. Arbitrary Barriers to Innovation and Cost Minimization

The CFS should be designed in a way that allows for industry compliance and emissions reduction through innovation. It should not act as a barrier to the investment needed to enable compliance and the continued growth and transformation of the industry. Regrettably, the proposed design of the CFS includes numerous constraints that:

- (1) needlessly inflate cost of compliance;
- (2) harm the business case for innovation that support compliance; and
- (3) are punitive and harm industry competitiveness:

PROCESS TO DEVELOP PROTOCOLS:

If a GHG-reducing project type falls outside of the seven project types already listed in the Proposed Regulatory Approach for Category 1, it cannot be a source of credit generation for CFS compliance until a new protocol is finalized. This is “picking winners” from a technology standpoint, instead of focusing on environmental performance and allowing industry to innovate. The current process to develop methodologies for new project types (new protocols) is cumbersome and expected to be lengthy due to the large number of members on the review groups and the overall complex approval process. The goal should be a technology neutral approach to enable as many different solutions as possible to reduce the carbon intensity of the fuels.

CREDIT GENERATION AND EXPIRY PROVISIONS:

Currently, the CFS proposes guaranteed credit period limits of 5-years for non-Carbon Capture and Sequestration (CCS) projects and 10-years for CCS projects. These credit generation limits for the CFS are shorter than other jurisdictions' credit markets; for example, the voluntary Alberta Carbon Offset program guarantees an 8-year crediting period for non-CCS projects and a 20-year crediting period for CCS projects. A longer crediting period for the mandatory CFS system is needed because many of the available emissions reduction projects are expensive (e.g. electrification) resulting in long payback periods. This means longer guaranteed credit generation periods are needed to attract investment for these innovations. The goal of the CFS should be to encourage emission reductions in a cost effective manner. By limiting the guaranteed crediting periods, government is harming the economics of transformative emission reducing measures – the opposite of the policy's intent.

COMPLIANCE FUND COST:

Government has suggested the use of a compliance fund from which companies can purchase credits if they are unable to meet their CI reduction requirements. The government has stated that they intend to limit the available payment to 10 per cent of the total compliance obligation. It is unclear why any limit would be put on this compliance mechanism, particularly as the proposed cost (\$350/tonne) is much higher than current carbon pricing and provides a strong incentive to motivate action. This approach is needlessly punitive and does not support flexibility or compliance certainty for businesses.

CREDIT TRADING:

Some of Canada's largest upstream oil and natural gas companies are supplying energy today, but are also laying groundwork for future diversification. Such companies often have extraction and refining activities, creating opportunities to generate credits between their upstream and downstream activities based on cost.

The CFS proposes to limit the trading between liquid, gaseous and solid streams to 10 per cent. This approach does not support getting the lowest cost emissions. CAPP expects this will drive up the cost per tonne of CO₂ reduction which will lead to billions in annual costs for some individual companies. This harms Canadian industry, jobs and innovation, and can act as another driver of carbon leakage.

LIMITING ADDITIONALITY DEFINITIONS:

The CFS requires that measures for Category 1 compliance meet rules of Additionality – meaning that a project would not otherwise have occurred in absence of the policy. Proposed CFS additionality rules will include both a technology penetration rate and a financial barrier test. As proposed, these rules are not reflective of economic realities, consistent with other jurisdictions or other ECCC policies and will further impede emission reduction projects under the CFS. Under current proposals, if technology or a practice is utilized at a rate 5 per cent or more across a sector, it would need to pass a technology and financial barrier test before the protocol would be approved. The financial barrier test proposes to use an internal rate of return (IRR) of 10 per cent to determine if the project could advance without the need for credits. A 10 per cent return does not reflect what industry believes to be an appropriate rate of return that is reflective of how companies conduct business. Further, needing to demonstrate that a project must financially need credits as a revenue source does not recognize the compliance credit requirement that obligated parties must meet.

RECOMMENDATIONS FOR THE CFS

Industry supports the Government of Canada in creating a path to meet its international climate change objectives. Achieving this will require innovation, major investment, a healthy industry and good public policy. As currently proposed, however, the CFS will not support the innovation and investment Canada requires to realize the desired environmental objectives.

CAPP Recommends the Following:

1. Respect provincial jurisdiction on energy and climate policy by engaging provinces and territories in assessing the cost and benefits of the CFS, including regionally, to more accurately assess impacts and how to mitigate them.
2. Take time to fully evaluate the impact of the CFS on Canada's economic recovery from COVID-19 and consult on the 2020 reference case that is meant to capture COVID-19 impacts. Canada continues to manage the pandemic and recovery is expected to begin just as the liquids stream of the CFS come into force in 2022.
3. Exclude gaseous and solid fuels from the CFS carbon intensity reduction obligation, but enable credit generation from these streams within the liquid fuel stream.
4. Implement EITE competitiveness protection mechanisms that have been suggested by the CFS EITE working group created by government.
5. Enable innovation by removing CFS barriers to low cost solutions and investment, recognizing credits are required for compliance:
 - Ensure the process for the development of new quantification methodologies can be advanced in a practical manner.
 - Increase the proposed initial credit generation periods.
 - Expand the 10 per cent of the compliance fund limit to allow for more access so it can provide some market stability and offer a plausible additional compliance pathway.
 - Remove the 10 per cent limit to cross-stream trading.
 - Revisit the penetration rate of 5 per cent on emission reduction projects.
 - Increase the IRR (currently 10 per cent) of the financial barrier test.

APPENDIX

1. CERI, Economic and Emissions Impacts of Fuel Decarbonization (2019)
2. Revised Questions & Answers on the Federal Renewable Fuels Regulations, <http://ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=052B3FDB-1&xml=052B3FDB-C560-4383-A792-902E186D970E&printfullpage=true&wbdisable=true>
3. CERI, Economic and Emissions Impacts of Fuel Decarbonization (2019)
4. ICF Canada, Clean Fuel Standard Supply & Demand Implications (2020)
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THE CANADIAN ASSOCIATION OF PETROLEUM PRODUCERS (CAPP)

represents companies, large and small, that explore for, develop and produce natural gas and oil throughout Canada. CAPP's member companies produce about 80 per cent of Canada's natural gas and oil. CAPP's associate members provide a wide range of services that support the upstream oil and natural gas industry. Together CAPP's members and associate members are an important part of a national industry with revenues from oil and natural gas production of about \$109 billion a year.



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