USDA Foreign Agricultural Service
GAIN Report
Global Agricultural Information Network



Voluntary _ Public

**Date:** 12/21/2017
**GAIN Report Number:** CA17047

# Canada

**Post:** Ottawa

# Canada's Regulatory Framework on Clean Fuel Standard Announced

**Report Categories:**
Biofuels
Climate Change/Global Warming/Food Security

**Approved By:**
Evan Mangino, Agricultural Attaché

**Prepared By:**
Erin Danielson, Agricultural Specialist

**Report Highlights:**
On December 13, 2017, Canada announced a new federal Regulatory Framework on the Clean Fuel Standard. The new framework would move Canadian biofuels policy towards a carbon intensity approach, ending the current volumetric requirements approach. A public consultation on the new framework is expected to begin in January 2018.

Keywords: Canada, CA17047, Biofuels

**Summary**
The federal government's Regulatory Framework on the Clean Fuel Standard (CFS), announced December 13, 2017, would drive Canadian biofuels regulations towards evaluation of carbon intensity. Under the proposed CFS, Candaa would establish separate carbon intensity requirements for fuel subsets in the following sectors: transportation, building requirements, and industry. In addition, the impact of indirect land use change (ILUC) on greenhouse gas (GHG) emissions would be excluded when estimating carbon intensity values. The proposed CFS does not differentiate between crude oil types that are produced domestically or imported.

The regulatory framework is expected to be published in Canada Gazette Part I on Dec 23, 2017, and the draft regulations would be published in 2018. The final regulations are expected to be published in Canada Gazette Part II in mid-2019.

The transition period between current volumetric requirements and the eventual carbon intensity-based regulations has not yet been announced. Volumetric requirements are expected to expire when carbon intensity requirements for liquid, gaseous and solid fuel streams enter into force.

**Background**
Canada maintains clean fuel standard regulations under the Canadian Environmental Protection Act, 1999 to reduce Canada's GHG emissions. The proposed framework aims to reduce annual GHG emissions by 30 megatonnes by 2030, contributing to Canada's effort to reduce overall GHG emissions to 30 percent below 2005 levels by 2030.

The recently announced framework leaves many details to be determined, such as when the current volumetric requirements would expire, whether new volumetric requirements would be introduced, and the rate at which fuel suppliers would be obliged to reduce GHG emissions under the new carbon intensity approach. The major elements of regulatory framework announced on December 13 are described below.

**Carbon Intensity Approach**
Carbon intensity values would be expressed in grams of carbon dioxide equivalents per unit of energy in megajoules, and wwould account for GHG emissions over the lifecycle of a fuel. Baseline carbon intensity values and carbon intensity requirements would be set for either each fuel in a stream (liquid, gaseous, solid) or for groupings that include some or all fuels in a stream.

Under the current Renewable Fuels Regulations, volumetric requirements require petroleum fuel producers and importers to have an average ethanol content of at least five percent, based on the volume of gasoline, and an average renewable content of at least two percent, based on the volume of diesel fuel and heating distillate oil. These requirements will remain in force in "the short term." The future role of volumetric requirements will be determined through consultations with a multi-stakeholder committee of senior industry representatives established by Environment and Climate Change Canada (ECCC)[1].

[1] ECCC is the department of the Government of Canada responsible for coordinating environmental policies and programs as well as preserving and enhancing the natural environment and renewable resources.

The committee will meet periodically and provide a forum for ECCC to inform key stakeholders of progress and to receive feedback on key issues. The committee will hold its inaugural meeting in January 2018 and will eventually establish a technical working group, which will consist of a smaller group of experts (including individuals familiar with GHG emissions forecasting) that will meet regularly and engage in development of the regulatory text.

ECCC intends to set natural gas carbon intensity requirements as noted above, but further consideration will be given to setting volumetric requirements for renewable content or a hybrid approach, such as volumetric requirements with GHG performance standards.

At this time, it is difficult to determine the potential impact of a carbon intensity approach on biofuel consumption, as several factors are yet to be determined including the rate at which fuel suppliers are obliged to reduce overall GHG emissions. In setting carbon intensity target levels, the Government will attempt to link national emissions reduction commitments to economic aspirations.

Stakeholders have been quick to draw a comparison between Canada's new framework and the experience of Germany, which transitioned from an energy-based use mandate to a minimum GHG reduction mandate in 2015. Fuel suppliers were obliged to reduce overall GHG emissions by three percent, which resulted in a decrease in biodiesel consumption the following year. Germany's experience highlighted the importance of setting emission reduction target levels. Industry sources have expressed confidence that Canada can successfully transition to the carbon intensity approach, in part because of the proposed partitioning described below. Sources also believe that Canada collects sufficient national-level data.

**Partitioning**

Through partitioning, the proposed CFS would set separate carbon reduction targets for transportation, building and industry sectors as well as separate carbon intensity requirements for subsets of fuels. Industry sources believe that partitioning would add predictability to the lifecycle approach of setting carbon intensity values and requirements.

Approximately 80 percent of liquid fuels are used for transportation. Setting a separate carbon intensity target for liquid fuels should, in theory, improve the efficacy of carbon emission reduction targets to achieve the intended GHG reductions from the transportation sector. Consideration may be given to further groupings of fuel types within fuel streams (for example, grouping transportation fuels together in the liquid fuel stream). Trading of credits between the fuel streams could offer compliance flexibility across fuel types within separate fuel streams.

**Exclusion of Indirect Land Use Change Impact**

Under the proposed CFS framework, carbon intensity values (expressed in grams of carbon dioxide equivalents per unit of energy in megajoules) would not include an estimate of the impact of indirect land use change (ILUC) on GHG emissions.

ILUC incorporates measurements of carbon released when land that was used for agriculture or pasture is transitioned to land used for biofuel feedstock production. When biofuel feedstock crops replace food and feed crops, additional land may be needed to for agriculture or pasture. The cultivation of or production on this new land could result in higher GHG emissions if the land had previously held captured carbon stocks, such as in the case of forested land. Some stakeholders estimate that emissions from ILUC could outweigh emissions savings from biofuel utilization.[2]

As with partitioning, excluding ILUC would improve predictability and aid in aligning GHG reduction targets with deliberate outcomes. While the exclusion of ILUC impact can be a contentious issue, opposition to the proposed CFS framework appears limited.[3]

[2] http://www.biofuelsforeurope.eu/ghg-emissions/

[3] http://business.financialpost.com/opinion/ontarians-will-pay-hundreds-of-millions-of-dollars-for-pointless-new-fuel-standards