Alternative fuels set for explosive growth under Clean Fuel Standard

November 20, 2020

Canada's federal government does not lack ambition for its Clean Fuel Standard (CFS). First, the CFS will apply to transportation, industrial and building fuels, which is a significant regulatory expansion from principally provincial transportation fuel additives programs. Secondly, the CFS aims to achieve 30 million tonnes of annual reductions in greenhouse gas emissions by 2030.

While fossil fuel lifecycle carbon intensity improvements will form part of a compliance strategy, many of the gains will come from offset credits, including through the supply of low carbon alternatives, in part or in whole, to conventional fuels. This is where much of the action will be, both for the "Primary Suppliers" (producers/importers) and the broader alternative fuels industries.

What is eligible?

The list of eligible alternative fuels to create offset credits in the liquid fuels class are not limited to liquids. In fact, there is some allowance for credit generation under the liquid fuel regulations from gaseous fuels supply. The currently creditable fuels are:

Liquid (non-exhaustive list):

- Ethanol;
- Renewable diesel;
- Biodiesel;
- Hydro-treated vegetable oil;
- Low-carbon-intensity jet fuel;
- Synthetic fuels; and
- Renewable methanol.

It is notable that this list consists of low carbon liquid fuels (as determined by CFS methodology), and not necessarily bio-based fuels.

Gaseous (currently a restricted group):

- Hydrogen;

- Biogas;
- Renewable natural gas; and
- Renewable propane.

The gaseous and the liquid fuels lists are both notable in their heavy reliance upon "renewable" fuels, which can include feedstocks that are not necessarily naturally reoccurring. In other words, low carbon fuel supply is not synonymous with biofuel generation, thereby opening up opportunities for a broad range of industries and technology companies to pursue creditable activities in alternative fuels.

Ensuring the right incentives under 2-part process

For the alternative fuels industries, maximizing opportunities under the CFS may be conceptualized as a 2-part process:

Part 1: obtaining the right life-cycle assessment value

Obtaining a low carbon intensity value is critical for alternative fuels credit generators. One means to do so will be using Environment and Climate Change Canada's (ECCC) new Fuel Lifecycle Assessment Modelling Tool, which is promoted as a:

> "robust, user friendly and transparent modelling tool to calculate carbon intensities of fuels used in Canada."

This tool is not yet readily available, and many generators will not want to wait.

For those with 1 year of operation, the other proactive option is to obtain third party verification of asserted carbon intensity values, adopting ISO methodology. Of course, there will be some art mixed in with this science – and negotiation with ECCC may be the result, but this process is worthwhile for early market entrants. The CFS "disaggregated default values", absent technology-specific verified assessments, are to be avoided.

Part 2: determining offsets against the "credit reference"

Obtaining a favourable low carbon intensity assessment for an alternative fuel is only as valuable as the differential between the value and the baseline assessment for the fossil fuel comparator or "credit reference" assigned by the ECCC. This includes,

- Regulated liquid fuels will have a credit reference based upon the average carbon intensity- fossil and renewable combined – of all liquid fuels used in Canada;
- Biogas used for heating or in "high efficiency equipment" that produces electricity, renewable natural gas or hydrogen, the credit reference is natural gas;
- Renewable propane, the comparator is propane itself; and
- Biogas used in low efficiency equipment that produces electricity, might be based upon the difference between the lifecycle carbon intensity of the electricity produced from biogas and the default carbon intensity that will:

> "Be representative of the provincial grid mix in which the production of electricity from biogas took place."

This will surely create complications in cross-country credit creation strategies and the ECCC will need to set these values (artificially) for the initial eight-year CFS compliance period to give price certainty to stakeholders.

The CFS credit reference values for fossil fuels will be relevant, if not existential, for all stakeholders. Once finalized in the draft regulation process, these values will be immutable until 2030 to create more market certainty and allow for transparent carbon intensity reductions. The last opportunity to provide input on these vital numbers will come during the liquid regulations consultation period.

Need for dramatic growth in alternative fuel production

The Canadian Association of Petroleum Producers (CAPP) has expressed concerns over a number of program elements under the CFS. Included within their August 2020 position paper on the CFS, concerns over credit availability derived specifically from biofuel alternatives:

> "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."

It is true that the coming offset credit needs of the energy industries substantially exceeds current generation of creditable biofuels within Canada. However, this may underestimate both the burgeoning commercial interest in new alternative fuels production in Canada and the myriad of ways in which qualifying fuels is produced.

Final words

The CFS has had a long and winding road towards the draft liquid fuels regulations, which is due for release before the end of 2020. For the alternative fuels industries, set to unleash new innovation and market dynamism, the CFS could not have come too soon.

Expertise

Environmental, Climate Change, Alternative Fuels, Renewable Energy

BLG | Canada's Law Firm

As the largest, truly full-service Canadian law firm, Borden Ladner Gervais LLP (BLG) delivers practical legal advice for domestic and international clients across more practices and industries than any Canadian firm. With over 725 lawyers, intellectual property agents and other professionals, BLG serves the legal needs of businesses and institutions across Canada and beyond – from M&A and capital markets, to disputes, financing, and trademark & patent registration.

blg.com

BLG Offices

Calgary

Centennial Place, East Tower
520 3rd Avenue S.W.
Calgary, AB, Canada
T2P 0R3

T 403.232.9500
F 403.266.1395

Ottawa

World Exchange Plaza
100 Queen Street
Ottawa, ON, Canada
K1P 1J9

T 613.237.5160
F 613.230.8842

Vancouver

1200 Waterfront Centre
200 Burrard Street
Vancouver, BC, Canada
V7X 1T2

T 604.687.5744
F 604.687.1415

Montréal

1000 De La Gauchetière Street West
Suite 900
Montréal, QC, Canada
H3B 5H4

T 514.954.2555
F 514.879.9015

Toronto

Bay Adelaide Centre, East Tower
22 Adelaide Street West
Toronto, ON, Canada
M5H 4E3

T 416.367.6000
F 416.367.6749