

The Honourable Catherine McKenna, P.C., M.P.
Minister of Environment and Climate Change
House of Commons
Ottawa, Ontario K1A 0A6
via email: ec.ministre-minister.ec@canada.ca

June 6, 2018

Dear Minister,

We write in support of your government's ongoing commitment to develop a new, low-carbon, cross-sectoral regulatory approach to fuels sold and supplied for energy in Canada. The forthcoming federal Clean Fuel Standard (CFS) aims to reduce domestic greenhouse gas (GHG) emissions by 30 megatonnes annually by 2030, and so amounts to 15% of the emissions reductions necessary for Canada to reach its climate target that year under the Paris Agreement.ⁱ

Accordingly, we urge you to ensure that the design of this regulation upholds the government's stated abatement target—and that the GHGs reduced via the CFS reflect not only direct reductions achieved through the use of cleaner fuels, but also the indirect emissions resulting from biofuel-related changes in land use. ***We therefore urge Environment and Climate Change Canada (ECCC) to include indirect land use change (ILUC) values when the CFS is implemented.*** Doing so will be of fundamental importance if we are to:

- Meet the 30 MtCO₂eq target;
- Stimulate investment in the cleanest fuels; and
- Strengthen the domestic and international credibility of the standard.

ILUC is a real phenomenon, amply demonstrated in the peer-reviewed scientific literature, with a non-zero value in the emissions profiles of many biofuels. It has significant implications for both the relative GHG performance of biofuels and the overall mitigation outcome of intensity-based fuel standards. Its inclusion within the CFS is also essential if this policy is to be truly performance-based. Fortunately, there are strong precedents for ILUC's inclusion in the CFS. While we acknowledge that timelines are tight for policy implementation across the Pan-Canadian Framework on Clean Growth and Climate Change (PCF), there is still a window of opportunity in ECCC's regulatory development timeline to incorporate this key element of lifecycle analysis into the regulation.

Meet the 30 MtCO₂eq target

The CFS Regulatory Frameworkⁱⁱ states that ILUC will not be considered until an unknown later date. Excluding ILUC risks underestimating the GHG emissions from biofuel production by 30% to 75% depending on the biofuel.ⁱⁱⁱ This could significantly undermine the 30 MtCO₂eq target because biofuels are likely to play an important role in meeting the standard, and the standard would disregard significant biofuels-related GHG emissions. There is wide, international consensus amongst scientists and lifecycle analysts that ILUC should be accounted for in low-carbon fuel policies. For example, more than 200 scientists and economists with expertise in climate, energy, and land use signed a letter urging the European Commission to recognize and account for ILUC impacts in its biofuels policy.^{iv}

Incorporating ILUC at a later date would also be more economically and politically challenging, because some firms will have already invested in long-lived biofuel facilities whose feedstocks and fuels may be less competitive when ILUC accounting goes online. The experience of the European Union should be instructive: in the wake of scientific criticism and public outcry, the EU recognized the need for ILUC accounting, but was unable to overcome staunch opposition to retroactively incorporating it into its biofuel policies. Today, there is general agreement that this curtailed reform effort has jeopardized the EU's climate goals.^v

Stimulate investment in the cleanest fuels

Including ILUC means that providers of the lowest-carbon fuels (e.g. next-generation biofuels, electricity, and synthetic fuels from atmospheric CO₂, as well as other fuels that can have lower indirect impacts, such as hydrogen and ammonia) will receive a higher number of credits and so greater remuneration and policy support for their products. In turn, this signal directs investment toward greater production of cleaner fuels, and better captures their relative carbon advantages in the credit market. Conversely, failure to include ILUC from the outset could lock Canadian investment into higher-emissions biofuel pathways that are potentially inconsistent with Canada's Paris targets and deep decarbonization goals.^{vi} In the long term, the omission of ILUC from the CFS would also create a structural difference between Canada's clean fuels regulatory system and those of potential partner jurisdictions, thereby threatening the possibility of credit market linkage and the efficiencies such a link may offer.

Strengthen the domestic and international credibility of the standard

Given the policy history of fuel standards in other jurisdictions, we are concerned that excluding ILUC exposes the CFS to a risk of public backlash as the policy approaches finalization and implementation. Other jurisdictions, including California and Oregon, have already recognized the importance of accounting for ILUC in their low-carbon fuel standards (in 2010 and 2015, respectively). As global leaders in this policy domain, these states have been decisive in affirming ILUC's status as best practice. The US federal government also included ILUC accounting in its Renewable Fuel Standard, and the International Civil Aviation Organization (ICAO), which regulates the global aviation industry, is in the process of incorporating ILUC into its biofuel incentive and alternative fuels program. Should Canada choose to exclude ILUC, it risks undermining domestic and international belief in the efficacy of the standard (from a mitigation standpoint) and may forego recognition for its global leadership in instituting what would otherwise be one of the world's most comprehensive and ambitious clean fuel programs.

We strongly support the Canadian government's efforts to develop and implement a national CFS. However, as a critical component of the Pan-Canadian Framework, this policy's emissions savings must be both incremental relative to other mitigation activities and scientifically credible relative to the global carbon budget. A policy that omits ILUC while incorporating no other sustainability measures may be of limited value in the effort to reduce impacts from climate change. We therefore urge you to ensure that ILUC estimates are built into the design of this regulation and are operational once it takes force.

Sincerely,

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ⁱ Given current emissions of 722 megatonnes (Mt) in 2015, there are 205 Mt of emissions abatement necessary to meet our target (517 Mt). Canada's Nationally Determined Contribution (NDC) under the Paris Agreement is to reduce greenhouse gas emissions by 30% compared to 2005 levels by 2030. The absolute level of this commitment varies according to the 2005 baseline but equals 517 Mt of carbon dioxide equivalent when based on Canada's latest National Inventory Report (NIR 2017). Preliminary data from NIR 2018 suggest the target will shrink to 512 Mt, making every megatonne of abatement that much more important.

ⁱⁱ Department of the Environment, "CFS Regulatory Framework," *Canada Gazette, Part I*, Vol. 151, No. 51 (Dec. 23, 2017). <http://gazette.gc.ca/rp-pr/p1/2017/2017-12-23/html/notice-avis-eng.html#ne1>

ⁱⁱⁱ This range is calculated on the basis of comparison between California's ILUC values (for corn ethanol, soy biodiesel, canola biodiesel, and palm biodiesel) and Canadian estimates of lifecycle carbon intensity values for these fuels, excluding ILUC. We note that this calculation is illustrative and may not account for differences in the Canadian agricultural sector.

^{iv} "International Scientists' and Economists' Statement on Biofuels and Land Use," letter to the European Commission (2011). https://www.ucsusa.org/sites/default/files/legacy/assets/documents/global_warming/International-Scientists-and-Economists-Statement-on-Biofuels-and-Land-Use.pdf

^v The European Commission reports that, under the EU Renewable Energy Directive, the net GHG savings calculated from the use of biofuels in transport shrinks by roughly two-thirds after ILUC accounting. See: European Commission, "Report to the European Parliament and The Council in accordance with Article 9 of Directive 98/70/EC relating to the quality of petrol and diesel fuels," (May 31, 2017), 2-3. <https://ec.europa.eu/transport/sites/transport/files/com20170284-evaluationreportfuelqualitydirective.pdf>

^{vi} H. Valin, D. Peters, M. van den Berg et al., "The land use change impact of biofuels consumed in the EU: Quantification of area and greenhouse gas impacts," EcoFys, International Institute for Applied System Analysis, and E4tech study commissioned by the European Commission (August 2015). https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report_GLOBIOM_publication.pdf