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Renewable & Low Carbon
Fuel Requirement Regulation
Email: lcfr@gov.bc.ca

RE: BC Low Carbon Fuels Compliance Pathway Assessment

Husky Energy is one of Canada's largest integrated energy companies, with operations in Canada, the United States and the Asia Pacific region. In Canada, we directly employ more than 4,400 people across British Columbia (BC), Alberta, Saskatchewan, Manitoba, the Northwest Territories, Ontario, and Newfoundland and Labrador.

In BC, we produce oil and gas, operate a 12,000 bbl/day refinery in Prince George and distribute fuel through a retail network of 167 service stations and industrial card locks. Feedstock for our Prince George refinery is primarily light sweet crude oil produced in northeastern BC. The refinery produces low-sulphur gasoline and ultra-low sulphur diesel fuel, mixed propane and butane, and heavy fuel oil. Husky is the largest provider of refined fuels in the central and northern regions of the province.

We support jobs regionally (108 Husky employees at Prince George Refinery) and provincially with more than 750 British Columbians indirectly employed through our fuel retail network.

Husky is one of Canada's largest producers of renewable ethanol fuel, producing approximately 300 million litres of ethanol per year. Husky's ethanol plant in Lloydminster produces some of the lowest carbon ethanol in Canada. As a company, we understand the value of advancing the use of renewable fuels in the overall fuel mix, and have many years of experience producing, transporting and marketing renewable fuels and renewable fuel blends.

We participated in and support the submission provided by the Canadian Fuels Association, specifically their views related to:

- Current lack of biofuel availability and significant challenges with blend potential.
- The importance of incorporating achievable targets and allowing for compliance flexibility.
- Consideration of market-based approaches that minimize compliance costs across sectors.

We also appreciate the opportunity to provide our own perspective on the BC Low Carbon Fuels Compliance Pathway Assessment. We look forward to more detailed discussion during upcoming workshops organized by the Ministry of Energy, Mines and Petroleum Resources.

Husky believes the economy and the environment can go hand in hand provided policy makers maintain focus on key environmental and economic principles that incentivize greenhouse gas (GHG) reductions

while ensuring Canadian companies can compete both nationally and internationally, continue to attract investment, and maintain and create jobs.

At this point it remains unclear how the BC Renewable and Low Carbon Fuel Requirements Regulation (LCFRR) will interact with the federal Clean Fuel Standard (CFS) regulation under development. Though Husky supports the role of the province in developing domestic approaches to energy and environmental policy, there is significant complexity and costs associated with a national patchwork of provincial Renewable Fuel Standards/CFS mandates.

The consumer market predominantly served by Husky's Prince George refinery is unique (two thirds of diesel sales are to large industrial clients—mining, forestry, oil and gas, etc.) and its cold weather operating environment presents significantly greater challenges to blending bio and renewable fuel products than markets further south in BC and in other parts of North America.

Though some studies in the U.S. claim the ability to blend a higher biodiesel percentage in cold weather, the lowest temperatures considered in these studies were warmer than what we face in northern BC on a consistent basis in winter months. There are also differences between the cold weather operability requirements in the fuel standards (Canadian General Standards Board versus the American Society for Testing and Materials) that make supplying bio-diesel blends more challenging in northern BC in winter. Husky now owns a refinery in Superior, Wisconsin that supplies bio-diesel blends into Minnesota where some biodiesel studies occurred and will use this experience when considering similar blending and temperature applications in BC. However, there are significant differences between the fuel quality requirements in these two jurisdictions, and the operating temperatures.

There is currently no significant renewable diesel production in BC. This fuel must be sourced outside the jurisdiction at significant expense and increased GHG emissions associated with fuel transportation. With increasing renewable blending mandates across North America, and limited supplies of higher quality renewable fuels like hydrogenation-derived renewable diesel (HDRD), it is becoming more challenging and more expensive to source low carbon intensive renewable fuels to meet BC's requirements.

Husky is aware of co-processing applications for renewable feedstocks. The technologies are only beginning to be developed and there is limited operational experience in the industry. The quality of biocrudes and other renewable feedstocks present challenges for processing them in conventional refinery units. Significant refinery modifications may be required to allow for co-processing of renewable feedstocks, particularly in refineries designed to process light sweet crude.

Given the preceding context, and challenges facing Husky and other fuel providers in central and northern BC, we have several recommendations to support the advancement of a BC LCFRR that is achievable, sustainable, and strikes the right balance between jobs and fuel supply needs in the region, and reducing GHG emissions:

- 1) *Within the BC LCFRR regulation, define a Northern Region that reflects the actual operating environment and market requirements, not unlike Ontario's approach to Green Diesel in the northern part of that province.***
- 2) *Recognize that local fuel production supports local employment and tax-base by incenting the use of BC-produced fuels or providing a pathway to determine the actual carbon intensities for petroleum-based fuels when considering the GHG benefits of local production, not unlike the***

proposed approach for the diesel fuel to be produced at the Northwest Redwater Sturgeon Refinery in Alberta.

- 3) Work with car manufacturers to understand the full implications of car fueling with higher biofuel blends.*
- 4) Pause the advancement of current BC LCFRR regulation to allow the federal CFS to be developed and to allow fuel producers to complete Part 3 Agreement work that will be helpful in defining achievable policy and unanticipated compliance levers for producers.*

Husky currently has two Part 3 Agreements in place and is looking at other opportunities to diversify its compliance options. An overview of Husky's current agreements can be found appended to this letter. We understand that demonstration of challenges as well as the effort to overcome them is critical to the development of achievable policy.

We look forward to further engagement to provide more detailed perspectives on the BC Low Carbon Fuels Compliance Pathway Assessment and discuss viable policy options that allow Husky to remain competitive in BC while improving our GHG emission performance. Please don't hesitate to contact me directly should you have questions or concerns about this submission. I am available by email at

████████████████████ or by phone at ██████████.

Sincerely,

████████████████████

Lois Garrett
Vice President Corporate Responsibility

