Shell Canada comments on Clean Fuel Regulations Implementation
August 18, 2023
Response by e-mail to: cfsncp@ec.gc.ca

Shell Canada Limited ("Shell[1]") appreciates the significant work over many years by Environment and Climate Change Canada (ECCC) on the Clean Fuel Regulations (CFR), and the implementation update shared June 2023. Shell appreciates the opportunity to comment on implementation, future guidance and reporting.

As a primary supplier under the CFR, and an organization with strong emissions reductions ambitions, Shell shares the Government of Canada's interest in developing policies and regulations that provide signals to decarbonize, while ensuring continued supply of essential products to Canadians.

Implementation Feedback

Shell recognizes the significant effort required by ECCC to implement the CFR and appreciates the timely and helpful responses provided by ECCC staff when questions are submitted to the generic mailbox. Broad distribution lists being used to share clarifying information are also helpful (e.g., feedstock GPS coordinates, approved verification bodies) and the google drive is a useful repository of information.

Stakeholder Engagement Considerations

We appreciate the stakeholder engagement sessions held by ECCC and willingness to share materials via email and on the google drive. There is likely value moving forward in more frequent stakeholder sessions and creating a mechanism to share clarifications on CFR implementation where ECCC is seeing frequent errors, misunderstandings or questions. The broad stakeholder engagement list could benefit from these more frequent sessions.

There is likely also value in sessions with targeted groups, including primary suppliers, to walk through specific items either verbally or face-to-face. This information could be then shared with the broader stakeholder list for comment and/or information sharing. These targeted sessions could help to prioritize upcoming guidance and work through issues in real-time to ensure final guidance will meet the needs of the stakeholders requesting the information.

Life Cycle Analysis (LCA) Model Considerations

Shell appreciates the formation of the Stakeholder Technical Advisory Committee (STAC), recognizing it is an important technical forum to provide input into the LCA model updates and priorities. Given the importance of the STAC and the LCA model in CFR implementation, but also possibly other federal regulations in future, we recommend that STAC updates and opportunities for comment be circulated

[1] The Shell definition: The companies in which Shell plc directly and indirectly owns investments are separate legal entities. In this submission "Shell", "Shell Group" and "Group" are sometimes used for convenience where references are made to Shell plc and its subsidiaries in general. Likewise, the words "we", "us" and "our" are also used to refer to Shell plc and its subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. Please read the full Legal Disclaimer at: https://www.shell.com/energy-and-innovation/the-energy-future/our-climate-target.html.

widely to provide all stakeholders with an opportunity to provide input.

Shell also understands the need to update LCA model, including electricity grid emission factors, at regular frequency but notes that these inputs can have significant impacts on project credit calculations. Shell recommends that these updates be predictable and science-based, with opportunities for input from stakeholders.

Publication of Credit Market Data

With regards to reporting of data in future, we appreciate ECCC's recognition of the importance of protecting confidential business information under the *Canadian Environmental Protection and Enhancement Act*.

Shell recommends that ECCC strive to publish broad CFR metrics at a minimum annually starting in late 2023, with key data on a quarterly or monthly basis. Recognizing that datasets may be incomplete or unavailable in the early years of the CFR, timely information on how the regulations are functioning, including the volumes of fuels sold, categories being used to generate credits, types and carbon intensity (CI) of low-CI fuels used to create credits, and the total amount of credits created per compliance period will be important. As a one-time reporting item, we suggest that the Renewable Fuel Regulations transitional credits be included. Credit pricing will be an important indicator of compliance costs. We recommend that ECCC strive for monthly reporting of credit pricing. Publication of all information in excel format for ease of use would be ideal.

We encourage ECCC to model the reporting system after British Columbia's Low Carbon Fuel Standard[2] reporting, which includes summaries of the credit market and approved carbon intensities. For approved pathways, details such as feedstock used, carbon intensity, a general description of fuel, and location of facility could be helpful and would be similar to how California, Oregon and Washington publish their data.

Shell notes that ECCC indicated in the June 2023 engagement that projects approved under compliance category 1 will be public once they are approved. As noted above, it will be important to ensure that competitively sensitive and confidential business information is protected.

Prioritization of Future Guidance & Documentation

Shell looks forward to the finalization of the Low Carbon Intensity Hydrogen Integration Quantification Method, which is critical for proponents contemplating these category 1 projects.

In addition to frequently asked questions as noted above, templates for applications could be helpful in the future if ECCC is finding that applicants are not providing information in a format that facilitates timely review by ECCC. Service standards for review & approval (assuming complete applications are submitted) will also be helpful to help applicants understand what approval timelines can be expected and factor this into project planning.

[2] Available at https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/renewable-low-carbon-fuels/credits-market.

We also support ECCC's intention to provide additional guidance on Land Use and Biodiversity criteria implementation, the treatment of denaturant blended within ethanol, methods and verification, guidance on export volumes (including commingled tanks), and clarification on requirements for renewable natural gas (RNG), hydrogen and renewable electricity (specific to eligibility of indirect accounting or power purchase agreements). Shell notes that Washington and Oregon have instituted mandatory third-party environmental attribute training using the M-RETS tracking platform[3], which may provide a useful template for ECCC. Ontario is also using M-RETS for the Clean Energy Credit Program[4].

Shell appreciates ECCC's intention to provide pathways for carbon capture and storage (CCS) within the LCA model for compliance category 2 fuels. With the development of these pathways, clarity around how CCS will be accounted for would be helpful, specifically as it pertains to coproduct displacement.

As fuel use cases evolve, it will be important for ECCC to ensure that there is a mechanism available to apply for new credit generation pathways. An example of this is hydrogen use in rail and marine shipping, and the associated energy efficiency ratios (EERs). There has been some work completed on this in the United States[5].

Renewable Natural Gas Considerations

It will be important to be mindful of the different carbon intensities from the ECCC LCA model relative to carbon intensities assigned in the United States (e.g., RNG as modelled in California using the GREET model). Shell recommends that ECCC continue with science-based carbon intensity calculations within the LCA model, and where discrepancies occur, ensure these are well-understood.

While noting the requirement for additionality, Shell recommends that ECCC consider including methane avoidance for the following pathways:

- Organic waste diverted from a landfill.
- Digestate emissions reductions compared to synthetic fertilizers.
- Composting, which currently assumes relatively small methane emissions for conversation of organic waste to compost; this emission assumption could be revisited in light of recent publications[6].

[3] Additional information at https://www.mrets.org/.
[4] Additional information at https://ieso.ca/en/Sector-Participants/Clean-Energy-Credits/Ontario-Program.
[5] Additional information at https://www.hydrogen.energy.gov/pdfs/review20/ta034_ahluwalia_2020_o.pdf.
[6] Additional information at https://pubs.acs.org/doi/10.1021/acs.est.2c05846.