CLEAN FUEL REGULATIONS

Verification and Certification

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CANADA'S *CLEAN FUEL REGULATIONS* (CFR)

- Aims at creating incentives for the development and adoption of clean fuels, technologies, and processes to significantly reduce pollution by making the fuels we use everyday cleaner over time.
- Require liquid fossil fuel (gasoline and diesel) suppliers to gradually reduce the lifecycle **carbon intensity** (**CI**) from the fuels they produce, import, and sell for use in Canada over time†, leading to a decrease of approximately 15% (below 2016 levels) in the CI of gasoline and diesel used in Canada by 2030.
- By moving to regulations that focus on <u>emissions throughout the lifecycle of fuels</u>, the Government of Canada is following similar approaches used in British Columbia, California, Oregon, and other jurisdictions.

† Limit for Each Compliance Period (gCO_2e/MJ)

Item	Liquid Fossil Fuel	2023	2024	2025	2026	2027	2028	2029	2030 and after
1	Gasoline	91.5	90.0	88.5	87.0	85.5	84.0	82.5	81.0
2	Diesel	89.5	88.0	86.5	85.0	83.5	82.0	80.5	79.0

CANADA'S *CLEAN FUEL REGULATIONS* (CFR)

- The Regulations establish a credit market. Regulated parties (producers and importers of gasoline and diesel) must create or acquire credits to comply with the annual reduction requirements. Each credit represents a lifecycle emission reduction of one (1) tonne of CO_2e.
  - For the 2023 compliance year, the CI reduction requirement was 3.5 gCO_2e/MJ.

- Compliance credits can be created in three ways:
  - **Compliance Category 1**: Undertaking projects that reduce the lifecycle carbon intensity of liquid fossil fuels (e.g., carbon capture and storage, on-site renewable electricity, co-processing);
  - **Compliance Category 2**: Supplying low carbon intensity fuels (e.g., ethanol, biodiesel); and
  - **Compliance Category 3**: Supplying fuel or energy to advanced vehicle technology (e.g., electricity or hydrogen in vehicles).

COMPLIANCE REPORTING

- Fulfillment of the CI reduction requirement by the regulated primary suppliers is to be demonstrated annually through the submission of an annual **Compliance Report** to the Minister.
- Creation of compliance credits by primary suppliers or voluntary registered creators requires the submission of Quarterly or Annual **Credit-Creation Reports** to the Minister.
- Registered creators, foreign suppliers, and CI contributors use ECCC's *Fuel LCA Model* to calculate specific CI values of fuels, energy sources, and material input for the purpose of creating credits under the CFR. The approval, by the Minister, of a specific CI value requires the entity to submit a **CI Application**.
- Compliance Reports, Annual Credit-Creation Reports, and CI Applications are submissions that need to be verified by an accredited third-party Verification Body and are submitted to the Minister with the associated eligible Verification Report.

VERIFICATION

- Environment and Climate Change Canada (ECCC) looks for a certain **degree of confidence** (*level of assurance*) in the statements being made in a submission to the Minister (e.g., compliance report, credit creation report, or CI application).
- The **third-party verification** of statements is a key quality assurance (QA) control to assess whether the information provided by the person making an application or submitting a report:
  - ✓ is **complete**, **reliable**, and **accurate**,
  - ✓ does not contain any ***material*** **misstatements**, and
  - ✓ is **compliant** with the requirements of the Regulations.

- The verification process results in the issuance of the **VB's opinion** as to:

A. whether the information was presented fairly in all material respects and;
B. whether the information adheres to the requirements in the Regulations.

At a **reasonable** (not absolute) level of assurance

CFR VERIFICATION REQUIREMENTS

- Applicable reports and CI applications must be verified by an independent **accredited** **third-party verification body** in accordance with the regulatory verification requirements set out in s. 129 to 154 of the Regulations and parts 1 & 2 of the *Methods for Verification and Certification* (MVC) published by ECCC.
  - The MVC is a document incorporated by reference in the *Clean Fuel Regulations* that provides information on the regulatory requirements and guidance in their implementation for verification and certification bodies, certification schemes owners, and other interested parties to ensure uniformity and conformity in the implementation of the verification or certification requirements of the CFR.

VERIFICATION BODIES

- Are accredited by an ECCC-designated body.
- Meet the requirements set out in ISO Standards 17029 & 14065.
- Employ verifiers that meet the competence requirements set out in ISO 14066.
- Conduct verification activities in accordance with: (148(1))
  - ISO Standard 14064-3:2019, at a reasonable level of assurance;
  - The CFR's *Methods for Verification and Certification*.
- Provide all the information from Schedule 20 from the CFR in any verification report they prepare[1].

ACCREDITATION

- Two (2) **Accreditation Bodies** have been designated by ECCC to accredit Verification Bodies for the CFR: the ANSI National Accreditation Board (**ANAB**) and the Standards Council of Canada (**SCC**).
- Accreditation demonstrates that the VB has the necessary infrastructure, procedures, and personnel in place to conduct verification.
- The Accreditation Bodies monitor accredited VBs on an ongoing basis to make sure that they are maintaining competent personnel and operate with transparency and impartiality.
- Accreditation is granted based on four (4) distinct technical areas: Fossil fuels, Low-CI fuels, Electricity & Hydrogen (from renewable sources).

VERIFICATION TEAM

- Verification must be conducted by a team that includes, when applicable:
  - A specialist in forestry/agriculture or in biodiversity
    - Application or report that relates to low-carbon-intensity fuel that is produced using an eligible high risk feedstock[1]
  - A specialist in geological carbon storage (a geologist)
    - Application or report that relates to the sequestration of CO_2e emissions in geological land formations
  - A specialist life-cycle assessment critical reviewer
    - CI application or carbon-intensity pathway report
  - A specialist in financial accounting
    - Report that involves the generation or use of revenue, expenses, funds, or tax treatments

VERIFICATION BODY INDEPENDANCE

- Conflicts of interest (S. 145)
  - Verifiers and Independent Reviewers must be independent of the employees of the Canadian government and the reporting entities
- Five consecutive verifications (Ss. 147(1))
  - For a same reporting entity with respect to the same type of application or report
  - 3-year waiting period
- Verification of reports related to applications (Ss. 147(5))
  - A verification team cannot verify a Credit-Creation Report or CI-Pathway Report if already verified a CI application for the approval of a carbon intensity value that is referred to in the report.

VERIFICATION MATERIALITY, SITE VISITS AND CONCLUSIONS

- Materiality quantitative threshold (S. 150)
  - For the purposes of subclause 5.1.7 of ISO Standard 14064-3:2019, the quantitative materiality thresholds are equal to,
    - (a) in the case of a carbon intensity,
      - (i) **1 gCO_2e/MJ**, if the absolute value of the carbon intensity is less than 20 gCO_2e/MJ,
      - (ii**) 5%**, if the absolute value of the carbon intensity is between 20 and 100 gCO_2e/MJ, and
      - (iii) **5 gCO_2e/MJ**, if the absolute value of the carbon intensity is greater than 100 gCO_2e/MJ; and
    - (b) in any other case, **5%**.
- Site visits (Ss. 152(1))
  - Rule depends on the number of sites (more or less than 5 sites)
    - On-site presence of the verification team is required when there is a high risk of misreporting, and the likely cause of any misreporting is at the site and if remote evidence-gathering activities would not reduce the risk to a reasonable level.
- Possible verification conclusions (including opinion types): (S. 154)
  - Unqualified (no misstatements and full compliance with Regulations)
  - Qualified (misstatements that do not have a material effect on the application/report)
  - Adverse (material misstatements or noncompliance with the Regulations)
  - Disclaimer of the verification (no sufficient information/evidence to reach a conclusion).

LAND-USE & BIODIVERSITY CRITERIA

- The CFR allows the creation of compliance credits from the production of low-CI fuels produced from biomass-based feedstocks.
- To prevent adverse impacts on land use and biodiversity stemming from the increased harvest and cultivation of these feedstocks, the Regulations establish **land-use and biodiversity** (**LUB**) **criteria**.
- Only low-CI fuels made from biomass feedstock (biofuels) that adhere to the LUB criteria are eligible for compliance credit creation.
- These criteria apply to feedstock regardless of geographic origin.
- The criteria do not apply to feedstock that is not biomass (e.g. fuel made from direct air capture) or a biomass feedstock that has a lower risk on land use and biodiversity (e.g. municipal solid waste).

LAND-USE & BIODIVERSITY CRITERIA

- For both forest and agriculture feedstock:
  - Wildlife Habitat
  - Damaging Agents (such as pests and invasive species)
- For agriculture feedstock only:
  - Excluded Lands (such as high canopy forest, wetland, or grassland)
  - Indirect Changes to Land Use (ILUC)
- For forest feedstock* only:
  - Timely forest regeneration promotion
  - Protection of naturally regenerated stands containing multi-layered canopies and fallen and dead trees and forest debris
  - Protection of the quantity and quality of the soil, surface and ground water resources, and biodiversity
  - Maintenance of watercourse connectivity

*The harvesting of forest-based feedstock must be carried out in accordance with a forest management plan

LAND-USE & BIODIVERSITY CRITERIA VERIFICATION TEAM

- A specialist in forestry/agriculture or in biodiversity is required on the verification team
  - To participate in the verification of applications or reports related to low-CI fuel produced using an eligible feedstock derived from agricultural or forest biomass for which the harvesting is at high risk of deleterious environmental impacts (feedstock referred to in (46(1)(**c**))).
  - Their role, when contracted to verify the activity of creating compliance credits from the production or importation of low-CI fuels, is to help assess the compliance of the feedstock with the **LUB criteria**.

LAND-USE & BIODIVERSITY CRITERIA AGRICULTURE FEEDSTOCK

- Excluded Lands:
  - The CFR recognizes the **US EPA Renewable Fuel Standard 2** Aggregate Compliance Program, as well as an application to the Minister for recognition of no net expansion as **deemed compliance** mechanisms.
  - These enable a jurisdiction's crop to be deemed compliant with the excluded lands criterion.
  - If a country is approved under the US EPA RFS2 Aggregate Compliance Program, feedstock produced from that country may be **deemed compliant** with the excluded lands provision, and harvesters can demonstrate compliance by attesting to the verification team that their harvesting site was in a recognized country under this program during feedstock cultivation and harvest.

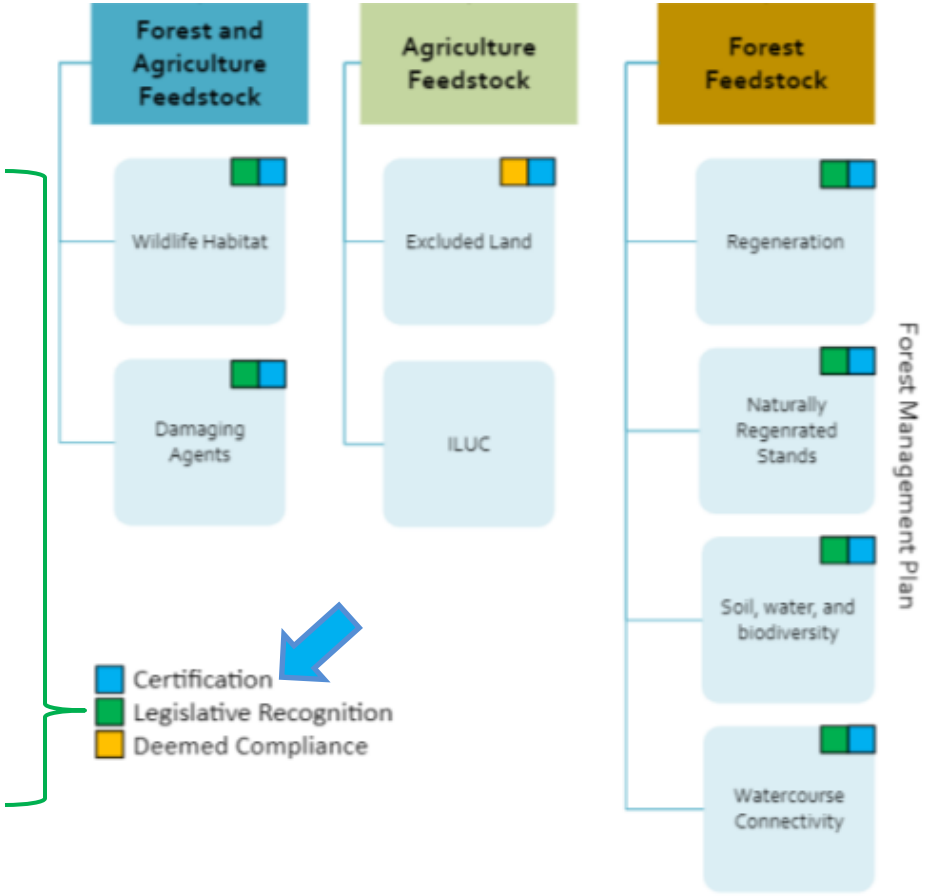
LAND-USE & BIODIVERSITY CRITERIA
LEGISLATIVE RECOGNITION

- For forest and agriculture feedstock, **legislative recognition** serves as a mechanism to demonstrate compliance with certain LUB Criteria.
- National and subnational jurisdictions have the option to submit an application to the Minister, demonstrating the legislation they enforce achieves the same outcomes as one or more of the LUB criteria.
- **Legislative recognition** does not exempt feedstock producers from being subject to third-party verification (including site visits).

LAND-USE & BIODIVERSITY CRITERIA APPROVED LEGISLATIVE RECOGNITION

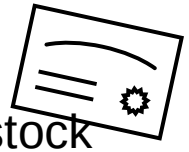
Table 1: List of approved jurisdictions that received Legislative Recognition with respect to specific Land Use and Biodiversity Criteria.

Jurisdiction	LUB Criteria	Feedstock	Date of Approval
Canada	Wildlife Habitat - Ss. 48(1)	Agricultural and Forestry Feedstock	09-11-2023
Canada	Damaging Agents - S. 49	Agricultural and Forestry Feedstock	09-11-2023
Canada	Forest Management Plan - Watercourse Connectivity - Ss. 52(c)(iv)	Forestry Feedstock	09-11-2023
United States of America	Wildlife Habitat - Ss. 48(1)	Agricultural and Forestry Feedstock	09-11-2023
United States of America	Damaging Agents - S. 49	Agricultural and Forestry Feedstock	09-11-2023
Ontario, Canada (Crown Forests)	Forest Management Plan - Forest Regeneration - Ss. 52(c)(i) and Ss. 55(1)(c)	Forestry Feedstock	14-12-2023
Ontario, Canada (Crown Forests)	Forest Management Plan - Naturally Regenerated Stands - Ss. 52(c)(ii) and Ss. 55(1)(d)	Forestry Feedstock	14-12-2023
Ontario, Canada (Crown Forests)	Forest Management Plan - Quantity and Quality of Soil - Ss. 52(c)(iii) and Ss. 55(1)(e)	Forestry Feedstock	14-12-2023
Ontario, Canada (Crown Forests)	Forest Management Plan - Quantity and Quality of Surface and Ground Water Resources - Ss. 52(c)(iii) and Ss. 55(1)(f)	Forestry Feedstock	14-12-2023



LAND-USE & BIODIVERSITY CRITERIA - CERTIFICATION

- Both forest and agriculture feedstock producers can rely on a CFR-recognized third-party certification scheme and certification body to demonstrate compliance with applicable LUB criteria.
- When a feedstock is recognized under a **CFR-recognized certification scheme**, for an applicable criterion, harvesters must retain documentation illustrating that they were certified under the scheme throughout feedstock cultivation and harvest and attest to it in declarations that will be subject to third-party verification.
- The declaration must be accompanied by a copy of the certificate that contains the following information:
  - A list identifying which LUB criteria were certified through the certification scheme
  - The name of the CFR-recognized certification scheme
  - The name of the certification body that certified the feedstock
  - The date on which the certification scheme is valid until



CFR APPROVAL FRAMEWORK FOR CERTIFICATION SCHEMES

- ECCC's approval framework for certification schemes considers the following requirements
  - The technical scope (i.e., the applicable LUB criteria);
  - The rules and procedures for the operations and management of the scheme;
  - The accreditation and competency requirements for certification bodies (CBs) authorized to operate under an approved CS, and
  - The audit requirements (i.e., the requirements for CBs operating under the scheme as well as the requirements for the audit process itself).
- To date, no certification scheme owner has received ECCC approval. However, at least one application has been received and is still under review.

CONTACT INFORMATION

For more information or to receive email notifications about the *Clean Fuel Regulations*, please contact us at: cfsncp@ec.gc.ca.