September 2025

CANADA CLEAN FUEL REGULATION (CFR) AT A GLANCE

	Compliance mechanism
Years in operation	The CFR took effect on July 1, 2023. Administered by Environment and Climate Change Canada (ECCC). Compliance managed via the Credit and Tracking System (CATS), a digital platform handling credit issuance, trading, and reporting.
Carbon intensity trajectory and targets	The baseline year is 2016. The program mandates a 15% reduction in the carbon intensity of gasoline and diesel by 2030 relative to 2016 levels.
Regulated fuels	The Clean Fuel Regulations (CFR) require producers and importers of gasoline and diesel (i.e. primary suppliers) to reduce the life cycle carbon intensity of gasoline and diesel used in Canada.
Compliance category	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 (CC2): This category pertains to the supply of low-carbon-intensity fuels. Compliance Category 3 (CC3): This category involves end-use fuel switching, such as supplying electricity or hydrogen to advanced vehicle technologies like EVs and hydrogen fuel cell vehicles.
Exempt fuel	The regulations do not apply to aviation gasoline, gasoline or diesel exported from Canada, fuels used for scientific research (excluding market or consumer preference research), or supplied exclusively to engines of vehicles or marine vessels used solely for competition.
Covered entities (2024)	A primary supplier who, during a compliance period, produces in Canada or imports into Canada a volume of 400 m^3 or more of gasoline or diesel must record the volume of fuel that is produced or imported during that compliance period and must include that information in the compliance report submitted to the Minister under section 127. As of May 31, 2024, a total of 202 organizations have registered under various roles, including 8 primary suppliers, 97 registered creators, 54 foreign suppliers, 26 Primary Supplier/Registered Creator and 9 verification bodies.
Annual report deadline	The Annual Compliance Report under Section 127 is due by July 31 of the year following the end of the compliance period (1st Jan to 31st Dec)
Penalties and program funding	Administrative penalties are imposed under Environmental Violations Administrative Monetary Penalties Act Regulatory costs are funded through program fees
Credits, deficits and bank	In 2024, the CFR market generated 7.9 million t CO_2e in credits (excluding CC1 credits and electricity credits), while incurring 12.3 million t CO_2e in deficits.
Credit clearance market	The Credit Clearance Mechanism (CCM) allows deficit holders to purchase credits at a legislated ceiling price (currently CAD $300, indexed for inflation). A Compliance Fund

	provides a backstop permitting purchase of up to 10% of total obligations at CAD $350 per credit.

MAJOR DEVELOPMENTS

The Canada Clean Fuel Regulations (CFR) became fully operational July 1, 2023. The program integrates a compliance framework featuring the Credit and Tracking System (CATS) for monitoring and trading, mandatory emissions reporting, third-party verification, and enforcement via penalties.

Since the Clean Fuel Regulations (CFR) came into force in July 2023, Environment and Climate Change Canada has steadily enhanced both the technical model and compliance guidelines to streamline administration and improve emissions accuracy. In December 2024, Version 3.1 of the Fuel LCA Model introduced conservative feedstock aggregation rules—requiring separate data for each bio-feedstock (e.g., used cooking oil, yellow grease, animal fats) and mandating the highest Carbon Intensity (CI) value when blends are used—as well as formal integration of avoided methane emissions from landfill gas and livestock manure into biogas and RNG CI calculations. It also standardized fugitive-emissions metering for CNG, LNG, and renewable gas variants, and enabled precise electricity CI accounting via North American grid-mix processes.

Building on those refinements, the Jan 2025 release of Version 4.0 Fuel LCA Model, which includes restricted pathway resubmissions to only substantive technological changes, while establishing a dedicated approval stream for novel processes such as fuel liquefaction plants. It standardized Higher Heating Values (HHVs) across all biofuel co-products, mandated distinct CI values for manure and landfill gas, and simplified manure aggregation to ease administrative burdens for RNG producers. Version 4.0 also clarified hydrogen modelling with two approved methods for Steam Methane Reforming and Autothermal Reforming, recognized rail electrification as an eligible credit-generating activity beginning in 2025, and applied uniform fugitive-emissions factors for CNG/LNG infrastructure, underscoring a policy focus on both precision and market accessibility.

MARKET PERFORMANCE AND PRICING

Metric	**2024 Reporting Period**
Credits Generated	7.9 million t CO_2e (excluding CC1 credits and electricity credits)
Deficits Generated	12.3 million t CO_2e
Historic Price Range	The average credit price for 2024 – CA $157

MARKET COMMENTARY

In 2023, Canada's Clean Fuel Regulations (CFR) credit market was in its initial stages, with Environment and Climate Change Canada (ECCC) reporting 163 credit transactions transferring 1.78 million tonnes of CO_2 equivalent (t CO_2e) at an average price of CAD 127 per credit. Total credit creation reached 11.3 million t CO_2e across all categories, with Compliance Category 2 (low-carbon fuel supply) dominating at 6.8 million t CO_2e, followed by historical RFR rollover credits at 2.77 million t CO_2e and Category 3 credits at 625,930 t CO_2e.

Ethanol volumes totalled over 4 million cubic meters, hydrogenation-derived renewable diesel (HDRD) imports reached 1.24 million cubic meters, and renewable natural gas (RNG) production was 26.5 million cubic meters. The average carbon intensity (CI) for ethanol was 51.6 g CO_2e/MJ, HDRD at 65.3 g CO_2e/MJ, and RNG at 70.1 g CO_2e/MJ.

In 2024, the market expanded with 347 credit transactions transferring 3.33 million t CO_2e, and an average credit price of CAD 157. Prices reached CAD 166 in Q2 but decreased to CAD 149.24 by Q4 as credit supply increased. Approximately 5 million credits were exchanged in bundled fuel-supply agreements at near-zero prices.

Ethanol generated 4.63 million t CO_2e credits from 4.24 million cubic meters, with average CI decreasing by 20% to 41 g CO_2e/MJ. HDRD produced 2.11 million t CO_2e credits with a CI drop of 37% to 41 g CO_2e/MJ. RNG volumes rose 417% to 137 million cubic meters.

Overall, the market generated 7.95 million t CO_2e in credits against an estimated 12.3 million t CO_2e in deficits.

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AUTHORS

Joey Hoekstra
Analyst, IETA

Point of contact

Lilly Flawn
Policy Assistant, IETA
flawn@ieta.org

Sai Rohit
Associate, cKinetics
srohit@ckinetics.com

Nikhil Agarwal
Director, cKinetics
nagarwal@ckinetics.com