Renewable and Low Carbon Fuel Requirements: 2010-2025 Compliance Summary

British Columbia's (BC) renewable and low carbon fuel requirements are designed to reduce greenhouse gas emissions associated with transportation fuels supplied in the province by establishing renewable content requirements and carbon intensity reduction targets. Collectively known as BC's Low Carbon Fuel Standard (LCFS), these requirements continue to deliver significant emission reductions. In 2025, reported compliance actions under these requirements resulted in over 5 million tonnes of avoided lifecycle greenhouse gas emissions globally, bringing cumulative avoided emissions from 2010 to 2025 to over 32.7 million tonnes.

The requirements were introduced in 2010 under the former *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act* and its regulation. On January 1, 2024, that framework was replaced by the *Low Carbon Fuels Act*, the Low Carbon Fuels (General) Regulation, and the Low Carbon Fuels (Technical) Regulation. Reporting under the current framework began in 2025 for fuel supplied during the 2024 calendar compliance period. This bulletin therefore presents a continuous program summary for 2010 to 2025, while recognizing that 2010 to 2023 data were reported under the former legislative framework and 2024 onward under the current framework.

This Bulletin compiles supply data submitted to the Ministry of Energy and Climate Solutions (Ministry) by fuel suppliers as part of their compliance reporting obligations. It presents annual data for 2016 to 2025, with 2010 included as a baseline where applicable. The data are current as of the date of publication but may be subject to change due to amended reporting, compliance reviews, audits, verification activities, or other Ministry review processes.

Renewable Fuel Requirements

Fuel suppliers must include renewable content in the gasoline, diesel and jet fuel supplied in B.C. Since 2010, fuel suppliers have been required to include 5% renewable content in the gasoline category. In the diesel category, the renewable requirement was 3% in 2010, 4% in 2011 through 2024, and 8% in 2025 and subsequent years. The renewable fuel requirement in the jet fuel category is 0% until the end of 2027, increasing to 1% in 2028, 2% in 2029 and 3% in 2030 and subsequent years.

Beginning April 1, 2025, eligible renewable fuels used to meet the diesel renewable fuel requirement must be produced in Canada. Beginning January 1, 2026, eligible renewable fuels used to meet the gasoline renewable fuel requirement must also be produced in Canada.

Observations for 2025

- The supply of renewable fuels in BC continues to grow year over year, with total supply across gasoline, diesel and jet fuel categories exceeding 1.8 billion litres in 2025.
- The share of renewable diesel in the diesel category decreased in 2025. This occurred even though renewable diesel volumes declined only modestly following strong growth in 2023 and 2024. The decrease in share was driven by an increase in the reported supply of fossil diesel fuel. Based on available information, the Ministry believes most of this quantity was previously unreported, and does not represent an increase in fossil fuel use.
- The Canadian production requirement for the renewable fuel requirement in the diesel category came into effect April 1, 2025. In 2025, 1,130 million litres of renewable diesel were supplied in BC, of which 461 million litres were either produced in Canada or supplied before the Canadian production requirement came into effect. This represents about 13% of the roughly 3.5 billion litres of diesel subject to the 2025 renewable fuel requirement.
- The supply of renewable content in jet fuel reached 3.9% of total jet fuel supply in 2025, exceeding the renewable fuel requirements for jet fuel in 2030.

Table 1 - Annual fuel volumes and percentages relevant to the renewable fuel requirement (million litres)

**The format of this reporting table has been updated to improve clarity and provide increased detail. Exemption volumes are now listed below.*

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2010 (Baseline)
Total Gasoline Category	5246.5	5241.8	5117.6	5177.6	4527.8	4809.5	4758.1	4811.6	4929.0	4879.1	**4975.8**
Non-Exempt Gasoline	5092.8	5153.5	5008.9	4947.1	4224.5	4549.9	4757.4	4810.7	4928.1	4878.2	**4693.9**
Fossil Gasoline	4717.6	4777.5	4638.5	4601.1	3890.5	4140.2	4252.8	4272.3	4368.4	4278.9	**4459.2**
Renewable Gasoline [A]	375.1	376.0	370.4	346.0	334.0	409.7	504.5	538.4	559.7	599.3	**234.7**
Renewable Gasoline (%)	7.4%	7.3%	7.4%	7.0%	7.9%	9.0%	10.6%	11.2%	11.4%	12.3%	**5.0%**
Total Diesel Category	3570.1	3905.1	4041.9	4053.2	3718.3	3913.2	3960.4	3913.1	3787.1	4291.3	**3396.7**
Non-Exempt Diesel	3417.2	3757.2	3895.8	3758.4	3402.0	3706.9	3959.9	3913.1	3786.9	4291.1	**3068.8**
Fossil Diesel	3239.8	3544.2	3665.6	3426.3	2941.2	3215.3	3434.0	3068.7	2604.8	3161.2	**2977.2**
Renewable Diesel [B]	177.3	213.0	230.2	332.1	460.8	491.6	525.9	844.4	1182.1	1129.9	**91.7**
Produced in Canada	8.3	13.2	1.9	1.4	3.2E-02	9.0E-03	21.7	11.9	172.9	279.4	**-**
Renewable Diesel (%)	5.2%	5.7%	5.9%	8.8%	13.5%	13.3%	13.3%	21.6%	31.2%	26.3%	**3.0%**
Produced in Canada (%)	0.23%	0.34%	0.05%	0.03%	0.00%	0.00%	0.55%	0.30%	4.56%	6.51%	**-**
Total Jet Fuel Category	-	-	-	-	-	-	-	-	1861.3	2059.0	**-**
Non-Exempt Jet	-	-	-	-	-	-	-	-	1861.3	2052.3	**-**
Fossil Jet	-	-	-	-	-	-	-	-	1844.8	1971.3	**-**
Alternative Jet	-	-	-	-	-	-	-	-	16.5	81.0	**-**
Alternative Jet (%)	-	-	-	-	-	-	-	-	0.9%	3.9%	**-**
Total Exempt	306.6	236.2	254.9	525.3	619.6	465.8	1.3	1.0	1.1	7.8	**609.8**
Exempt Gasoline	153.7	88.3	108.7	230.5	303.3	259.6	0.7	0.9	0.9	0.9	**281.9**
Exempt Diesel	152.9	147.9	146.2	294.9	316.3	206.3	0.5	0.1	0.2	0.2	**327.9**
Exempt Jet	-	-	-	-	-	-	-	-	-	6.7	**-**

A – Includes ethanol, co-processed renewable gasoline, and renewable naphtha.
B – Includes biodiesel, hydrogenation-derived renewable diesel (HDRD), and co-processed renewable diesel.

Low Carbon Fuel Requirements

Fuel suppliers must comply with low carbon fuel requirements that are designed to reduce the carbon intensity (also known as lifecycle greenhouse gas emission intensity) of the transportation fuel mix they supply in B.C. Since 2024, these requirements have expanded to include fuel used for other purposes, including ground support equipment, cargo handling equipment and forklifts, although these volumes remain relatively small. The requirements are based on annual carbon intensity reduction targets, which become more stringent over time. By 2030, the targets call for a 30% reduction in carbon intensity for diesel and gasoline, and a 10% reduction target for jet fuel.

Suppliers generate credits (also known as positive compliance units) when they supply fuels with carbon intensities below the applicable target and incur debits (negative compliance units) when they supply fuels with carbon intensities above the target.

Observations for 2025

- The supply of low carbon renewable fuels continued to grow in 2025 across several fuel types, including alternative jet fuel, ethanol, renewable gasoline, renewable natural gas and electricity.
- Hydrogenation-derived renewable diesel (HDRD) remains the largest contributor of low carbon fuel supply, with reported volumes stabilizing after two years of rapid growth.
- The decrease in propane reported supplied in 2024 and 2025 can be partially attributed to changes in reporting responsibility, which may be contributing to underreporting. The Ministry is reviewing the reported supply data.

Table 2 – Annual fuel volumes (million units) subject to the low carbon fuel requirement

	Category	Units	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2010 (Baseline)
Diesel	**Diesel**	**L**	3239.8	3544.2	3665.6	3404.8	2920.4	3196.0	3418.3	3050.5	2586.7	3146.5	**2977.2**
Gasoline	**Gasoline**	**L**	4717.6	4777.5	4638.5	4601.1	3890.5	4140.2	4252.8	4272.3	4368.4	4278.9	**4459.2**
Jet	**Jet**	**L**	-	-	-	-	-	-	-	-	1844.8	1971.3	**-**
Alternative Jet	**Jet**	**L**	-	-	-	-	-	-	-	-	16.5	81.0	**-**
Biodiesel	**Diesel**	**L**	104.0	107.3	115.6	113.4	106.4	124.3	134.2	131.9	131.5	132.1	**61.1**
CNG	**Diesel**	**m^3**	15.9	20.9	24.8	29.5	32.1	34.1	37.8	36.6	35.2	31.5	**-**
	Gasoline	**m^3**	1.2	0.9	0.8	0.8	0.8	0.7	0.8	0.8	0.8	1.4	**0.3**
CRNG	**Diesel**	**m^3**	-	-	-	0.8	1.6	3.2	1.8	4.4	6.8	9.9	**-**
	Gasoline	**m^3**	-	-	-	-	-	-	-	-	-	0.5	**-**
Electricity	**Diesel**	**kWh**	180.5	204.2	205.3	204.1	197.9	201.3	213.0	216.2	210.2	222.1	**184.3**
	Gasoline	**kWh**	9.4	15.4	31.8	57.9	88.0	130.5	146.9	212.9	292.3	381.6	**-**
Ethanol	**Gasoline**	**L**	375.1	376.0	370.4	334.6	307.4	359.8	430.3	468.6	464.9	496.2	**234.7**
HDRD	**Diesel**	**L**	73.3	105.8	114.6	214.8	344.4	343.9	368.9	694.9	1040.2	997.6	**30.6**
Hydrogen	**Diesel**	**kg**	-	-	9.0E-04	8.5E-04	1.8E-04	4.0E-04	1.8E-04	-	-	5.5E-03	**1.8E-01**
	Gasoline	**kg**	1.3E-03	1.2E-03	5.3E-04	1.7E-03	2.9E-03	1.1E-02	2.7E-02	2.6E-02	3.1E-02	2.9E-02	**-**
LNG	**Diesel**	**kg**	9.0	12.1	19.6	24.6	26.2	25.5	29.7	29.2	30.9	28.9	**-**
Propane	**Diesel**	**L**	-	-	-	-	-	-	-	0.3	0.3	0.6	**-**
	Gasoline	**L**	70.3	68.3	66.3	65.5	57.4	55.3	52.3	45.7	13.3	12.1	**1.6**
Renewable Diesel [A]	**Diesel**	**L**	-	-	-	3.1	9.0	21.0	22.0	17.0	-	-	**-**
Renewable Gasoline	**Gasoline**	**L**	-	-	-	11.4	26.6	49.9	71.8	59.1	71.1	92.0	**-**
Renewable Naphtha	**Gasoline**	**L**	-	-	-	-	-	-	2.4	10.7	23.7	11.1	**-**

A – Since 2024, renewable diesel has been reported under HDRD.

Transportation Energy Use

Since 2010, an increasing proportion of energy demand is being met by fuels with lower carbon intensities than the fossil fuels they replace.

Table 3 – Annual energy in Petajoules [A]

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2010 (Baseline)
Diesel	131.1	142.7	147.3	143.0	125.1	131.5	132.1	117.9	100.0	121.6	**127.7**
Gasoline	169.0	168.8	164.7	167.6	145.5	152.6	147.6	148.2	151.6	148.5	**164.5**
Jet [B]	-	-	-	-	-	-	-	-	69.0	73.7	**-**
Alternative Jet [B]	-	-	-	-	-	-	-	-	0.6	2.9	**-**
Biodiesel	3.8	3.8	4.1	4.0	3.8	4.4	4.8	4.7	4.7	4.7	**2.3**
CNG	0.7	0.8	1.0	1.1	1.2	1.3	1.5	1.4	1.4	1.3	**9.7E-03**
CRNG	-	-	-	2.93E-02	0.1	0.1	0.1	0.2	0.3	0.4	**-**
Electricity	0.7	0.8	0.9	0.9	1.0	1.2	1.3	1.5	1.8	2.2	**0.7**
Ethanol	8.8	8.9	8.7	7.9	7.2	8.5	10.1	11.1	11.0	11.7	**5.5**
HDRD	2.7	3.9	4.2	7.8	12.6	12.6	13.5	25.4	39.4	37.8	**1.1**
Hydrogen	1.6E-04	1.6E-04	2.0E-04	3.7E-04	4.3E-04	1.7E-03	3.9E-03	3.7E-03	4.3E-03	4.9E-03	**2.1E-02**
LNG	0.5	0.6	1.0	1.3	1.4	1.3	1.6	1.5	1.7	1.5	**-**
Propane	1.8	1.7	1.7	1.7	1.5	1.4	1.3	1.2	0.3	0.3	**4.0E-02**
Renewable Diesel	-	-	-	0.1	0.3	0.8	0.8	0.7	-	-	**-**
Renewable Gasoline	-	-	-	0.4	0.9	1.7	2.5	2.0	2.5	3.2	**-**
Renewable Naphtha	-	-	-	-	-	-	0.1	0.4	0.8	0.4	**-**
Total	**319.1**	**332.0**	**333.6**	**335.9**	**300.6**	**317.5**	**317.2**	**316.1**	**384.9**	**410.2**	**301.9**

A - Annual energy in petajoules since 2024 includes defined applicable purposes other than transportation, although the associated volumes remain relatively small.
B - Jet fuel was first reported under the LCFS in 2024 and is not reflected in the total volumes for 2023 and earlier.

Carbon Intensity

Fuel producers may apply for a unique carbon intensity based on the specific lifecycle parameters of the fuel they produce. Once the carbon intensity is approved, anyone who supplies that fuel must use the approved carbon intensity and corresponding B.C. low carbon fuel code. For the current list of approved carbon intensities and fuel codes, see: RLCF-012: Approved Carbon Intensities - Current.

Default carbon intensities are used where a specific approved carbon intensity is not available. Default values support consistent reporting and encourage producers to apply for specific carbon intensities where appropriate.

Table 4 – Annual weighted average carbon intensity (gCO_2e/MJ) of fuels reported [A]

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2010 (Baseline)
Alternative Jet	-	-	-	-	-	-	-	-	32.56	27.54	**-**
Biodiesel	15.37	4.51	2.48	-1.62	-3.39	-3.06	-2.54	-2.82	0.30	2.70	**15.23**
CNG	62.14	63.64	63.64	63.64	63.64	63.64	63.64	63.64	63.91	63.91	**59.74**
CRNG	-	-	-	14.08	5.97	3.84	1.73	-9.26	-6.79	-5.12	**-**
Electricity	11.00	19.73	19.73	19.73	19.73	19.73	19.73	19.73	12.14	12.14	**11.94**
Ethanol	41.00	32.43	30.43	29.18	31.73	30.86	28.39	23.68	12.68	10.79	**55.51**
HDRD	16.40	20.08	20.27	17.87	15.12	16.10	16.83	23.21	23.05	24.78	**48.04**
Hydrogen	95.51	96.82	96.82	91.26	96.82	46.66	55.36	58.35	81.79	59.48	**92.06**
LNG	63.26	63.08	63.04	64.70	63.99	62.95	63.42	63.30	66.85	68.17	**-**
Propane	68.02	67.97	67.84	67.52	67.58	67.64	67.34	67.25	76.34	76.72	**78.29**
Renewable Diesel [B]	-	-	-	-0.21	3.81	7.40	5.57	5.01	-	-	**-**
Renewable Gasoline	-	-	-	-5.94	3.86	-5.92	-4.02	-3.19	-2.55	7.55	**-**
Renewable Naphtha	-	-	-	-	-	-	30.98	29.35	26.18	25.55	**-**

A - The calculation of average carbon intensity for ethanol, biodiesel and HDRD excludes the small volumes of biofuels reported with a default carbon intensity
B – Since 2024, renewable diesel has been reported under HDRD.

Table 5 – Gasoline category renewable content (Ethanol + Renewable Gasoline + Renewable Naphtha) supplied (million litres) by carbon intensity range (gCO_2e/MJ)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2010 (Baseline)
< 0	-	-	-	11.4	15.7	49.9	69.4	56.4	61.6	31.3	**-**
0 to 10	-	-	-	94.1	47.0	33.6	1.0	1.8	275.7	291.7	**-**
10 to 20	64.3	105.0	124.1	2.9	11.2	0.1	54.9	171.0	112.3	187.3	**-**
20 to 30	-	0.3	3.0E-02	11.0	22.7	130.5	194.1	191.3	68.7	12.6	**-**
30 to 40	93.0	219.6	211.2	196.9	203.7	151.2	141.2	97.5	28.3	60.1	**15.1**
40 to 50	102.8	19.8	14.9	14.9	23.7	20.3	26.6	13.4	10.5	12.4	**0.5**
50 to 60	108.2	31.3	20.1	14.7	9.1	18.6	14.0	7.0	1.6	1.4	**132.1**
60 to 70	6.8	3.8E-02	-	-	1.0	5.3	2.3	-	-	-	**54.2**
CI > 70	-	-	-	-	-	-	-	0.1	-	-	**-**
Default [A]	-	-	-	1.7E-03	8.2E-03	0.3	1.0	-	1.0	2.5	**32.8**

A – Ethanol, renewable gasoline and renewable naphtha reported with a default carbon intensity generated debits.

Table 6 – Diesel category renewable content (Biodiesel + HDRD + Renewable Diesel) supplied (million litres) by carbon intensity range (gCO_2e/MJ)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2010 (Baseline)
< 0	1.7	10.0	35.0	48.2	61.8	69.1	83.7	93.0	44.6	26.1	**-**
0 to 10	25.3	90.3	97.6	148.4	170.0	65.1	64.9	50.0	153.5	156.4	**-**
10 to 20	118.5	76.6	56.9	65.7	208.8	305.2	289.9	25.7	123.5	224.8	**39.0**
20 to 30	30.7	35.4	39.4	63.9	19.8	51.0	86.8	673.7	836.7	586.8	**6.6**
30 to 40	1.2	0.4	1.3	5.4	-	-	0.2	1.7	17.9	127.7	**-**
40 to 50	-	-	-	-	-	-	-	-	0.8	-	**30.6**
50 to 60	-	-	-	-	-	-	-	-	-	-	**-**
CI > 60	-	0.3	-	-	-	-	-	-	-	-	**-**
Default [B]	-	-	-	-	1.0E-03	-	-	-	2.4E-03	7.9	**15.5**

B - Biodiesel, HDRD and renewable diesel reported with a default carbon intensity generated debits.

Table 7 – Jet category renewable content supplied (million litres) by carbon intensity range (gCO_2e/MJ)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2010 (Baseline)
< 0	-	-	-	-	-	-	-	-	-	-	**-**
0 to 10	-	-	-	-	-	-	-	-	-	0.5	**-**
10 to 20	-	-	-	-	-	-	-	-	3.3	14.8	**-**
20 to 30	-	-	-	-	-	-	-	-	0.2	33.2	**-**
30 to 40	-	-	-	-	-	-	-	-	13.0	32.4	**-**
40 to 50	-	-	-	-	-	-	-	-	-	-	**-**
50 to 60	-	-	-	-	-	-	-	-	-	-	**-**
CI > 60	-	-	-	-	-	-	-	-	-	-	**-**
Default	-	-	-	-	-	-	-	-	-	3.8E-02	**-**

Biofuel Feedstocks

As part of the approval process for the carbon intensity of a fuel, the producers are required to identify the feedstock being used to manufacture the fuel. This allows the Ministry to quantify the fuels that were supplied in each year by feedstock.

Table 8 – Annual renewable fuel volume by feedstock supplied (million litres)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2010 (Baseline)
Barley & Wheat	1.0	-	-	-	-	-	-	-	-	-	**-**
Biodiesel Bottoms	-	-	-	-	6.2	1.6	2.1	-	-	-	**-**
Camelina	-	-	-	-	-	-	-	-	0.8	2.3E-04	**-**
Canola	95.5	92.9	79.0	64.8	65.6	69.3	76.9	288.0	427.3	514.0	**38.6**
Corn	269.2	236.0	244.8	190.2	170.4	254.7	323.4	324.3	362.6	342.5	**66.5**
Corn Oil	1.3	-	-	-	-	-	-	4.2	43.0	7.7	**-**
Fatty Acid Distillate	-	-	-	-	-	6.5	4.4	0.9	3.0	2.6	**-**
Food Waste and Manure	-	-	-	-	-	-	-	-	-	3.7	**-**
Organic Waste	-	-	-	-	-	-	-	1.1	2.5	4.5	**-**
Palm Oil	-	0.3	-	-	-	-	-	-	-	-	**-**
Palm Sludge Oil	43.7	42.3	3.3	3.1	1.3	3.3	3.96E-02	-	-	-	**-**
Pea Starch	-	-	-	0.1	0.1	2.1E-02	-	-	-	-	**-**
Renewable Natural Gas [A]	-	-	-	0.8	1.6	3.0	1.4	3.3	4.3	2.2	**-**
Sorghum	-	-	-	-	-	-	-	11.6	2.4	56.9	**-**
Soy	9.5	14.4	36.5	54.3	55.3	60.9	101.1	56.3	126.8	95.1	**14.8**
Spent Bleaching Earth Oil	-	34.6	27.6	33.8	-	-	-	-	-	-	**-**
Sugarbeet & Potato Waste	-	-	-	-	-	0.6	-	-	-	-	**-**
Tall Oil	-	-	-	-	-	-	-	-	2.3	3.5	**-**
Tallow	0.4	0.5	3.7	30.1	4.5	35.1	38.7	56.5	432.8	580.6	**-**
Water	-	-	-	-	-	9.7E-03	1.8E-02	1.6E-02	1.3E-02	2.3E-02	**-**
Wheat	104.9	139.9	133.1	144.4	136.9	104.2	93.4	132.7	98.9	94.5	**25.2**
Yellow Grease (UCO)	26.9	27.9	72.5	142.4	318.3	288.9	275.8	423.3	252.1	102.3	**-**

A - The volume of renewable natural gas feedstock is represented in millions of m^3.

Credit and Debit Generation

Fuel suppliers generate credits for supplying fuels with a carbon intensity below the applicable carbon intensity target and incur debits for supplying fuels with a carbon intensity above the target. Credits and debits are proportional to the quantity of fuel supplied, the fuel's carbon intensity, and the applicable energy effectiveness ratio. For 2024 and subsequent compliance periods, credits or debits are calculated using the following formula:

$$\text{Number} = (\text{TCI} \times \text{EER} - (\text{RCI} + \text{UCI})) \times \text{EC} / 1{,}000{,}000 \text{ Grams}$$

Where:

TCI = the target carbon intensity for the fuel.
EER = the energy effectiveness ratio of the fuel, as determined in accordance with the regulations of the minister;
RCI = the recorded carbon intensity of the fuel;
UCI = the additional carbon intensity attributed to the use of the fuel, as determined in accordance with the regulations of the minister;
EC = the energy content of the fuel in megajoules, as determined in accordance with the regulations of the minister.
TCI = BCI × (1 − R)
BCI = the carbon intensity specified in section 19 (a) of the Act for the base fuel for the category to which the fuel belongs;
R = the prescribed reduction for that category, expressed as a percentage.

Values for the Credit or Debit formula for 2023 and earlier, including CI fuel category, EER and prescribed energy densities are published in the Renewable and Low Carbon Fuel Requirements Regulation.

Table 9 – Net credits (debits) generated by fuel

	Class	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Diesel	Diesel	(409,470)	(649,294)	(872,719)	(997,493)	(971,831)	(1,192,028)	(1,411,008)	(1,520,913)	(1,509,742)	(2,100,463)
Gasoline	Gasoline	(500,784)	(729,216)	(922,015)	(1,125,260)	(1,081,031)	(1,288,310)	(1,466,459)	(1,778,471)	(2,271,170)	(2,544,391)
Jet [B]	Jet	0	0	0	0	0	0	0	0	0	0
Alternative Jet [B]	Jet	0	0	0	0	0	0	0	0	33,425	178,720
Biodiesel	Diesel	287,812	324,741	352,323	357,746	338,939	389,414	412,853	396,252	368,292	347,830
CNG	Diesel	11,659	13,744	15,097	16,588	16,964	16,747	17,219	13,916	10,033	6,614
	Gasoline	986	674	559	543	485	422	413	385	199	261
CRNG	Diesel	0	0	0	1,885	4,365	8,720	4,965	13,917	20,222	28,334
	Gasoline	0	0	0	0	0	0	0	0	0	1,295
Electricity	Diesel	151,206	164,162	162,211	158,457	151,640	152,206	158,973	156,686	160,553	165,048
	Gasoline	9,342	14,688	29,772	53,348	80,091	117,151	130,136	183,290	276,980	351,306
Ethanol	Gasoline	382,431	454,953	453,956	409,634	350,803	409,406	505,327	579,667	723,503	769,215
HDRD	Diesel	197,776	270,095	285,936	543,505	893,038	866,476	905,646	1,487,900	2,226,580	1,978,101
Hydrogen	Diesel	0	0	9	8	2	4	2	0	0	71
	Gasoline	18	18	8	28	42	247	537	484	464	507
LNG	Diesel	12,870	17,150	26,211	29,062	30,508	29,670	32,217	28,389	2,902	(2,219)
Propane	Diesel	0	0	0	0	0	0	0	138	9	(27)
	Gasoline	29,169	27,413	24,625	22,659	18,356	16,226	14,461	10,335	(1,932)	(2,516)
Ren. Diesel [A]	Diesel	0	0	0	10,349	28,615	65,250	66,702	50,559	0	0
Ren. Gasoline	Gasoline	0	0	0	34,320	70,400	147,240	201,623	162,604	200,348	220,066
Ren. Naphtha	Gasoline	0	0	0	0	0	0	3,757	16,418	42,973	19,550
Total Net Credits (Debits)		173,015	(90,871)	(444,026)	(484,620)	(68,615)	(261,159)	(422,637)	(198,445)	283,639	(582,698)

A – Since 2024, renewable diesel has been reported under HDRD.
B – All jet fuel must be reported; however, debits (negative compliance units) will not be incurred until 2026.

Lifecycle Greenhouse Gas Emissions Avoided

"Emissions avoided" for a given compliance period means the avoided lifecycle emissions calculated according to the following formula. Most fuels have lifecycle emissions that occur in several jurisdictions. The values below therefore include emission reductions that occur in British Columbia and elsewhere.

Emissions Avoided (Tonnes of CO_2e) = (Baseline CI x EER – (RCI+UCI)) x Energy Content / 1,000,000

Where:

Baseline CI = the carbon intensity specified in section 19 (a) of the Act for the base fuel for the category to which the fuel belongs;

EER = the energy effectiveness ratio of the fuel, as determined in accordance with the regulations of the minister;

RCI = the recorded carbon intensity of the fuel;

UCI = the additional carbon intensity attributed to the use of the fuel, as determined in accordance with the regulations of the minister;

EC = the energy content of the fuel in megajoules, as determined in accordance with the regulations of the minister.

Table 10 – Lifecycle emissions avoided (tonnes CO_2e) by fuel [A]

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2010 (Baseline)
Alternative Jet	-	-	-	-	-	-	-	-	33,425	178,718	**-**
Biodiesel	300,376	342,741	377,524	388,282	371,532	432,035	463,759	456,614	438,707	428,572	**176,238**
CNG	14,576	17,939	21,025	24,979	27,112	28,637	31,670	30,772	28,946	26,423	**294**
CRNG	-	-	-	2,085	4,837	9,761	5,610	15,865	23,739	35,808	**-**
Electricity	166,637	189,087	206,501	231,838	256,922	302,559	329,092	398,359	525,054	637,918	**159,245**
Ethanol	409,500	493,967	503,998	465,265	408,865	485,510	606,177	712,276	887,798	969,780	**192,072**
HDRD	206,529	288,400	311,712	602,947	1,001,285	987,642	1,049,473	1,815,181	2,824,588	2,630,971	**50,564**
Hydrogen	20	20	20	42	53	288	634	594	620	773	**1,821**
LNG	14,428	20,168	32,529	38,863	42,360	42,592	48,868	48,125	27,889	24,500	**-**
Propane	34,676	35,062	34,306	34,426	30,074	28,850	27,696	24,556	2,787	2,474	**478**
Renewable Diesel	-	-	-	11,247	31,607	73,353	75,776	59,045	-	-	**-**
Renewable Gasoline	-	-	-	37,100	77,793	162,761	226,384	187,200	237,314	274,758	**-**
Renewable Naphtha	-	-	-	-	-	-	4,548	20,629	55,239	26,125	**-**
Total	**1,146,740**	**1,387,386**	**1,487,616**	**1,837,074**	**2,252,440**	**2,553,987**	**2,869,686**	**3,769,213**	**5,086,105**	**5,236,819**	**580,711**

A - The calculations in this table do not account for the difference in efficiency between compression ignition engines (i.e. diesel) and spark ignition engines (i.e. gasoline). They represent conservative estimates of emissions avoided for those fuels that were consumed in a compression ignition engine.

Credit Market Scope

Fuel suppliers generate credits by supplying a fuel with a carbon intensity below the prescribed carbon intensity limit and incur debits when supplying a fuel with a carbon intensity above the limit (e.g., fossil-derived gasoline and diesel). In addition, fuel suppliers may also enter into Initiative Agreements with the director to earn credits for actions that reduce the carbon intensity of fuel, or increase the supply of low carbon fuel in B.C. The table below shows the quantity of debits incurred and credits generated each year.

Table 11 – Credit Market Summary

Compliance Period	Debits Incurred from Fuel Supply	Credits Generated from Fuel Supply	Credits Awarded from Initiative Agreements [B]	Surplus Credits (Debits)
2013 [A]	(161,091)	518,308	0	357,217
2014 [A]	(322,182)	1,036,616	0	714,434
2015	(639,704)	1,111,162	66,380	537,839
2016	(910,254)	1,083,270	166,618	339,633
2017	(1,378,557)	1,287,687	97,833	6,962
2018	(1,794,734)	1,350,708	200,592	(243,434)
2019	(2,122,753)	1,638,133	231,774	(252,846)
2020	(2,052,864)	1,984,248	188,948	120,333
2021	(2,480,410)	2,219,251	475,561	214,402
2022	(2,877,812)	2,455,175	279,660	(142,977)
2023	(3,299,404)	3,100,959	500,706	302,261
2024	(3,785,624)	4,069,263	440,224	723,863
2025	(4,658,961)	4,076,263	313,492	(269,206)
Total	**(26,484,349)**	**25,931,041**	**2,961,788**	**2,408,480**

A - For the 2013 and 2014 time periods, the quantities of debits and credits represent 1/3 and 2/3, respectively of the 18-month compliance period ending December 31, 2014.

B - The credits awarded from Initiative Agreements are for the completion of project milestones during a given compliance period.

Need more information?
Please visit the Low Carbon Fuels website at www.gov.bc.ca/lowcarbonfuels or email us at lcfs@gov.bc.ca.

This information is for your convenience and guidance only and does not replace or constitute legal advice. It is recommended that parties who may be fuel suppliers review the *Low Carbon Fuels Act* and supporting regulations, and seek independent legal advice to confirm their status, legal obligations and opportunities.

Current and past legislation and supporting regulations can be found at: http://www.bclaws.ca.