



Renewable and Low Carbon Fuel Requirements Regulation Summary: 2010-2022

British Columbia’s Renewable and Low Carbon Fuel Requirements Regulation (Regulation) resulted in the avoidance of over 2.8 million tonnes of greenhouse gas emissions globally in 2022, and a total of over 18.8 million tonnes between 2010 and 2022.

This Bulletin presents summary compliance data for the *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act (Act)* and the Regulation. Part 2 and Part 3 of the Act are designed to reduce greenhouse gas emissions associated with the use of transportation fuels in British Columbia: Part 2 establishes requirements for renewable content; and Part 3 sets out requirements for greenhouse gas emission intensity reductions.

Data in this report is collected from supply data submitted to the Ministry of Energy, Mines and Low Carbon Innovation (Ministry) by fuel suppliers as part of their compliance reporting obligations. This report includes data for 2010 to 2022 that is current at the date of issue but may be subject to change. All previous versions of this report have been superseded.

Information provided is subject to revisions as a result of enhanced reporting, and compliance, and verification activities.

Part 2: Renewable Fuel Requirements

Part 2 of the Act requires fuel suppliers to include renewable content in the gasoline and diesel fuels supplied in B.C. Since 2010, fuel suppliers have been required to include five percent renewable content in the gasoline pool. In the diesel pool, the renewable requirement was three percent in 2010 and four percent thereafter. Between 2015 and 2020, companies that supplied less than a total of 75 million litres of gasoline and diesel class fuels in a year were eligible to apply to be exempted from the renewable and low carbon requirements under the Act. The exemption threshold was reduced to 25 million litres for the 2021 compliance period and further reduced to 200,000 litres in 2022 and subsequent compliance periods.



Table 1 – Annual Part 2 fuel volumes (million litres) and percentages

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Gasoline	4,741.1	4,469.9	4,286.8	4,346.0	4,522.5	4,629.2	4,871.3	4,865.8	4,747.2	4,831.5	4,193.8	4,399.3	4,253.6
Non-exempt Gasoline	4,459.2	4,311.0	4,079.1	4,199.7	4,320.4	4,500.5	4,717.6	4,777.5	4,638.5	4,601.1	3,890.5	4,140.2	4,252.8
Exempt Gasoline	281.9	159.0	207.6	146.3	202.1	128.7	153.7	88.3	108.7	230.5	303.3	259.1	0.7
Renewable Gasoline^A	234.7	262.7	250.8	274.9	299.0	342.9	375.1	376.0	370.4	346.0	334.0	407.1	504.5
% Renewable Content	5.0%	5.7%	5.8%	6.1%	6.5%	7.1%	7.4%	7.3%	7.4%	7.0%	7.9%	9.0%	10.6%
Total Diesel	3,305.1	3,654.3	3,682.4	3,649.2	3,704.7	3,443.5	3,392.7	3,692.1	3,811.8	3,721.6	3,258.0	3,422.7	3,434.5
Non-exempt Diesel	2,977.2	3,459.2	3,530.8	3,521.2	3,511.7	3,310.0	3,239.8	3,544.2	3,665.6	3,404.8	2,920.4	3,196.0	3,417.9
Exempt Diesel	327.9	195.1	151.6	128.0	193.0	133.5	152.9	147.9	146.2	294.9	316.3	206.2	0.5
Renewable Diesel^B	91.7	155.6	158.7	192.6	226.6	222.7	177.3	213.0	230.2	331.7	460.3	493.7	525.5
% Renewable Content	3.0%	4.3%	4.3%	5.2%	6.1%	6.3%	5.2%	5.7%	5.9%	8.9%	13.6%	13.4%	13.3%

A – Includes ethanol, co-processed renewable gasoline, and renewable naphtha

B – Includes biodiesel, Hydrogenation-Derived Renewable Diesel, and co-processed renewable diesel



Part 3: Low Carbon Fuel Requirements

Part 3 of the Act requires fuel suppliers to reduce the lifecycle greenhouse gas emission intensity, also known as carbon intensity, of the transportation fuel mix that they supply. Compliance is measured in terms of credits and debits, which represent the difference between the carbon intensity of the fuel and the current Part 3 (low carbon) requirements for the relevant fuel class. The Regulation establishes a schedule of reductions that will reduce the carbon intensity of the transportation fuel mix in B.C. On January 1, 2023, the reduction schedule was amended to increase the carbon intensity reduction requirement from 20 percent to 30 percent by 2030 for gasoline and diesel class fuels.

Table 2 – Annual Part 3 fuel quantities reported (millions)

	Units	Fuel Class	2010	2011	2012 ^A	2013 ^B	2014 ^C	2015	2016	2017	2018	2019	2020	2021	2022
Diesel	L	Diesel	3,305.1	3,654.3	3,682.4	3,649.2	3,704.7	3,443.5	3,392.7	3,692.1	3,811.8	3,699.7	3,236.7	3,402.2	3,418.4
Gasoline	L	Gasoline	4,741.1	4,469.9	4,286.8	4,346.0	4,522.5	4,629.2	4,871.3	4,865.8	4,747.2	4,831.5	4,193.8	4,399.3	4,253.6
Biodiesel	L	Diesel	61.1	96.3	89.1	95.1	101.1	102.2	104.0	107.3	115.6	113.8	106.9	124.8	134.6
CNG	m ³	Diesel	-	0.1	4.4	6.2	7.9	13.6	15.9	20.8	24.7	30.1	33.4	37.2	39.1
	m ³	Gasoline	0.3	1.2	1.4	1.4	1.3	1.5	1.2	0.9	0.8	0.9	1.0	0.7	0.8
Electricity	kWh	Diesel	184.3	185.1	190.6	185.4	180.2	182.2	180.5	204.2	205.3	204.1	197.9	201.3	213.0
	kWh	Gasoline	-	-	-	0.1	0.3	0.9	9.4	15.4	31.8	58.1	87.9	130.4	146.8
Ethanol	L	Gasoline	234.7	262.7	250.8	274.9	299.0	342.9	375.1	376.0	370.4	334.6	307.4	359.8	430.3
HRD	L	Diesel	30.6	59.3	69.6	97.5	125.5	120.5	73.3	105.8	114.6	214.8	344.4	343.9	368.9
Hydrogen	kg	Diesel	0.2	0.3	0.3	0.2	0.1	-	-	-	9.0E-04	8.5E-04	1.8E-04	4.0E-04	1.8E-04
	kg	Gasoline	-	-	-	8.3E-06	1.7E-05	1.2E-03	1.3E-03	1.2E-03	5.3E-04	1.7E-03	2.9E-03	1.1E-02	2.7E-02
LNG	kg	Diesel	-	0.2	2.4	4.3	6.2	8.6	9.0	12.1	19.6	25.0	26.3	25.5	29.7
Propane	L	Gasoline	1.6	77.0	70.8	66.9	63.0	70.2	70.3	68.3	66.3	65.5	57.5	66.9	52.5
Renewable Diesel^D	L	Diesel	-	-	-	-	-	-	-	-	-	3.1	9.0	25.0	22.0
Renewable Gasoline^D	L	Gasoline	-	-	-	-	-	-	-	-	-	11.4	26.6	47.3	71.8
Renewable Naphtha^D	L	Gasoline	-	-	-	-	-	-	-	-	-	-	-	-	2.4

A – Quantities represent 2/3 of the 18 month compliance period ending June 30, 2013

B – Quantities represent 1/3 of the values for the 18 month compliance period ending June 30, 2013 plus 1/3 of the values for the 18 month compliance period ending December 31, 2014

C – Quantities represent 2/3 of the 18 month compliance period ending December 31, 2014

D – Renewable diesel, renewable gasoline and renewable naphtha can be produced by co-processing biogenic feedstocks alongside crude oil in a refinery or at renewable diesel production facilities.



Transportation Energy Use

Table 3 shows total transportation energy use in B.C. from 2010-2022. Transportation energy use has generally trended upward over this period except for the drop in use due to the COVID-19 pandemic. Year over year, 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 supplied by Part 3 fuels

	2010	2011	2012 ^A	2013 ^B	2014 ^C	2015	2016	2017	2018	2019	2020	2021	2022
Diesel	127.7	141.2	142.3	141.0	143.2	133.1	131.1	142.7	147.3	143.0	125.1	131.5	132.1
Gasoline	164.5	155.1	148.7	150.8	156.9	160.6	169.0	168.8	164.7	167.6	145.5	152.6	147.6
Biodiesel	2.3	3.6	3.3	3.5	3.7	3.8	3.8	3.8	4.1	4.0	3.8	4.4	4.8
CNG	9.7E-03	5.0E-02	0.2	0.3	0.4	0.6	0.7	0.8	1.0	1.2	1.3	1.4	1.5
Electricity	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.2	1.3
Ethanol	5.5	6.2	5.9	6.5	7.1	8.1	8.8	8.9	8.7	7.9	7.2	8.5	10.1
HDRD	1.1	2.2	2.5	3.6	4.6	4.4	2.7	3.9	4.2	7.8	12.6	12.6	13.5
Hydrogen	2.1E-02	3.1E-02	3.4E-02	2.3E-02	1.2E-02	1.4E-04	1.6E-04	1.6E-04	2.0E-04	3.7E-04	4.3E-04	1.7E-03	3.9E-03
LNG	-	8.2E-03	0.1	0.2	0.3	0.5	0.5	0.6	1.0	1.3	1.4	1.3	1.6
Propane	4.0E-02	2.0	1.8	1.7	1.6	1.8	1.8	1.7	1.7	1.7	1.5	1.7	1.3
Renewable Diesel	-	-	-	-	-	-	-	-	-	0.1	0.3	1.0	0.8
Renewable Gasoline	-	-	-	-	-	-	-	-	-	0.4	0.9	1.6	2.5
Renewable Naphtha	-	-	-	-	-	-	-	-	-	-	-	-	0.1
Total	301.9	310.9	305.7	308.3	318.4	313.4	319.1	332.0	333.5	336.0	300.6	317.8	317.1

A – Quantities represent 2/3 of the 18 month compliance period ending June 30, 2013

B – Quantities represent 1/3 of the values for the 18 month compliance period ending June 30, 2013 plus 1/3 of the values for the 18 month compliance period ending December 31, 2014

C – Quantities represent 2/3 of the 18 month compliance period ending December 31, 2014



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](#).

To encourage producers to apply for specific carbon intensities, the Regulation sets a precautionarily high default carbon intensity for each fuel type recognized by the Regulation.

Table 4^A – Annual weighted average carbon intensity (gCO₂e/MJ) of fuels reported

	2010	2011	2012	2013 ^B	2014	2015	2016	2017 ^B	2018	2019	2020	2021	2022
Biodiesel	15.23	16.20	21.84	21.06	20.37	16.07	15.37	6.49	2.48	-1.62	-3.39	-3.06	-2.54
CNG	59.74	59.74	59.74	61.21	62.14	62.14	62.14	63.64	63.64	62.40	60.94	58.65	60.89
Electricity	11.94	11.94	11.94	11.48	11.00	11.00	11.00	19.73	19.73	19.73	19.73	19.73	19.73
Ethanol	55.51	51.66	53.11	51.27	49.74	49.47	41.00	32.51	30.43	29.18	31.73	30.73	28.39
HDRD	48.04	40.30	45.42	32.11	24.72	16.37	16.40	20.08	20.27	17.87	15.12	16.10	16.83
Hydrogen	92.06	92.06	92.06	92.95	95.51	95.51	95.51	96.82	96.82	91.26	96.82	46.66	55.36
LNG	-	66.54	66.54	64.18	63.26	63.26	63.26	63.08	63.04	64.74	63.99	62.95	63.42
Propane	78.29	78.29	78.29	73.66	68.46	68.17	68.02	67.97	67.84	67.52	67.60	68.98	67.37
Renewable Diesel	-	-	-	-	-	-	-	-	-	-0.21	3.81	5.39	5.26
Renewable Gasoline	-	-	-	-	-	-	-	-	-	-5.94	3.86	4.88	-4.21
Renewable Naphtha	-	-	-	-	-	-	-	-	-	-	-	-	30.98

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 – Changes in carbon intensities occurred as a result of adopting newer versions of the lifecycle assessment model, GHGenius, on July 1, 2013, and January 1, 2017



Table 5 – Gasoline class renewable content (Ethanol + Renewable Gasoline + Renewable Naphtha) supplied (million litres) by carbon intensity range (gCO₂e/MJ)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
< 0	-	-	-	-	-	-	-	-	-	11.4	15.7	25.9	69.4
0 to 10	-	-	-	-	-	-	-	-	-	94.1	47.0	30.9	1.0
10 to 20	-	-	-	0.9	1.8	17.2	64.3	105.0	124.1	2.9	11.2	21.5	54.5
20 to 30	-	-	-	-	-	-	-	-	3.0E-02	11.0	22.7	139.0	194.1
30 to 40	15.1	27.6	-	6.5	12.9	2.4	93.0	219.6	211.2	196.9	203.7	145.4	139.1
40 to 50	0.5	91.3	113.1	114.2	115.2	108.5	102.8	19.8	14.9	14.9	23.7	20.3	26.6
50 to 60	132.1	88.4	94.3	125.8	157.2	177.5	108.2	31.3	20.1	14.7	9.1	18.6	14.0
60 to 70	54.2	48.7	38.1	24.7	11.4	37.2	6.8	3.8E-02	-	-	1.0	5.3	2.3
CI > 70	-	3.3	-	-	-	-	-	-	-	-	-	-	-
Default	32.8	3.6	5.3	2.8	0.4	-	-	0.3	-	1.7E-03	8.2E-03	0.3	1.0

Table 6 – Diesel class renewable content (Biodiesel + HDRD + Renewable Diesel) supplied (million litres) by carbon intensity range (gCO₂e/MJ)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
< 0	-	-	-	-	-	-	1.7	10.0	35.0	48.2	61.8	65.8	83.7
0 to 10	-	-	-	9.3	18.6	11.1	25.3	87.9	97.6	148.4	170.0	83.5	64.9
10 to 20	39.0	75.8	40.4	81.3	122.2	182.8	118.5	76.6	56.9	65.7	208.8	293.5	289.9
20 to 30	6.6	25.7	16.7	31.6	46.5	19.2	30.7	35.4	39.4	63.9	19.8	51.0	86.8
30 to 40	-	-	29.3	19.3	9.4	9.7	1.2	0.4	1.3	5.4	-	-	0.2
40 to 50	30.6	42.4	64.0	41.8	19.6	-	-	-	-	-	-	-	-
50 to 60	-	-	5.6	6.0	6.4	-	-	-	-	-	-	-	-
CI > 60	-	2.9	-	1.9	3.7	-	-	2.7	-	-	-	-	-
Default	15.5	8.8	2.7	1.4	0.2	-	-	-	-	-	1.0E-03	-	-



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

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Barley & Wheat	-	-	-	6.4	12.8	0.2	1.0	-	-	-	-	-	-
Biodiesel Bottoms	-	-	-	-	-	-	-	-	-	-	6.2	1.6	2.1
Canola	38.6	71.1	48.1	62.4	76.8	91.3	95.5	92.9	79.0	64.8	81.3	111.8	76.9
Canola & Soy	3.2	2.7	39.2	19.6	-	-	-	-	-	-	-	-	-
Canola & Tallow	-	3.4	-	-	-	-	-	-	-	-	-	-	-
Corn	66.5	106.0	92.4	181.6	270.7	287.0	269.2	236.0	244.8	190.2	170.4	257.3	323.4
Corn Oil	-	-	-	3.5	7.1	1.5	1.3	-	-	-	-	-	-
Corn & Wheat	121.8	115.9	157.8	78.9	-	-	-	-	-	-	-	-	-
Fatty Acid Distillate	-	-	-	-	-	-	-	-	-	-	-	6.5	4.4
Palm (RPO) & Rapeseed	-	-	5.6	2.8	-	-	-	-	-	-	-	-	-
Palm Sludge Oil (PSO)	-	-	-	46.4	92.7	71.6	43.7	-	-	3.1	1.3	-	-
Pea Starch	-	-	-	-	-	-	-	-	-	0.1	0.1	0.02	-
Refined Palm Oil (RPO)	30.6	42.4	56.9	43.3	29.7	-	-	-	-	-	-	-	-
Renewable Natural Gas ^A	-	-	-	-	-	-	-	-	-	0.8	1.6	3.2	1.8
Soy	14.8	2.8	-	7.6	15.2	11.1	9.5	14.4	36.5	54.3	55.3	60.9	89.8
Spent Bleaching Earth Oil (SBE0)	-	-	-	-	-	-	-	34.6	27.6	33.8	-	-	-
Sugarbeet & Potato Waste	-	-	-	-	-	-	-	-	-	-	-	0.6	-
Tallow	-	16.9	7.0	3.5	-	0.3	0.4	0.5	3.7	44.6	24.4	68.1	8.5
Unknown	25.6	29.6	2.5	1.6	0.6	-	-	-	-	1.7E-03	9.2E-03	-	-
Water	-	-	-	-	-	-	-	-	-	-	-	0.01	0.02
Wheat	25.2	27.6	-	8.4	16.8	55.6	104.9	139.9	133.1	144.4	136.9	101.6	93.4
Yellow Grease (UCO)	-	-	-	1.6	3.2	46.8	26.9	27.9	72.5	142.5	318.3	288.9	274.9

A – The volume of renewable natural gas feedstock is represented in millions of m³



Credit and Debit Generation

The Regulation sets carbon intensity limits that decrease each year. Fuel suppliers generate credits for supplying fuels with a carbon intensity below the limits and receive debits for supplying fuels with a carbon intensity above the targets. The debits and credits are proportional to the emissions a fuel generates over its full life cycle. Credits or debits for a quantity of fuel in a given compliance year are calculated by the following formula:

$$\text{Credit or Debit} = (\text{CI fuel class} \times \text{EER fuel} - \text{CI fuel}) \times \text{EC fuel} / 1,000,000$$

Where:

Credit or Debit = the number of credits generated, if the number is positive, or the number of debits incurred, if the number is negative, for the compliance period

CI fuel class = the prescribed carbon intensity limit for the compliance period for the class of fuel of which the fuel is a part

EER fuel = the prescribed energy effectiveness ratio for that fuel in that class of fuel

CI fuel = the carbon intensity of the fuel

EC fuel = the energy content of the low carbon fuel calculated in accordance with the Regulation, using the prescribed energy densities

Values for the Credit or Debit formula, including CI fuel class, EER and prescribed energy densities are published in the [Renewable & Low Carbon Fuel Requirements Regulation](#).



Table 8 – Net credits (debits) generated by fuel

	Fuel Class	2013-14	2015	2016	2017	2018	2019	2020	2021	2022
Petroleum Diesel	Diesel	(238,201)	(299,356)	(409,470)	(649,294)	(872,719)	(997,493)	(971,831)	(1,192,028)	(1,410,864)
Petroleum Gasoline	Gasoline	(245,043)	(340,347)	(500,784)	(729,216)	(922,015)	(1,125,260)	(1,081,031)	(1,288,310)	(1,466,459)
Biodiesel^A	Diesel	402,547	283,579	287,812	317,198	352,323	357,746	338,939	389,414	412,853
CNG	Diesel	9,571	10,413	11,611	13,678	15,035	18,357	21,102	25,424	21,974
	Gasoline	1,770	1,276	986	674	559	582	623	422	413
Electricity	Diesel	232,071	154,282	151,206	164,162	162,211	158,457	151,640	152,211	158,973
	Gasoline	425	866	9,342	14,688	29,772	53,260	79,955	117,061	130,042
Ethanol^A	Gasoline	385,064	288,175	382,431	454,515	453,956	409,634	350,803	410,553	505,327
HDRD	Diesel	464,919	329,343	197,776	270,095	285,936	543,505	893,038	866,476	905,646
Hydrogen	Diesel	1,405	-	-	-	9	8	2	4	2
	Gasoline	0	16	18	18	8	28	42	247	537
LNG	Diesel	14,216	12,747	12,870	17,150	26,211	29,474	30,541	29,670	32,217
Propane	Gasoline	42,906	30,431	29,169	27,413	24,625	22,659	18,368	17,358	14,474
Renewable Diesel	Diesel	-	-	-	-	-	10,349	28,615	77,070	66,968
Renewable Gasoline	Gasoline	-	-	-	-	-	34,320	70,400	122,013	202,095
Renewable Naphtha	Gasoline	-	-	-	-	-	-	-	-	3,757
Total Net Credits (Debits)		1,071,650	471,425	172,968	(98,918)	(444,088)	(484,374)	(68,795)	(272,416)	(422,045)

A – Some biodiesel and ethanol were reported using the default carbon intensity resulting in debits. The data reflects the net number of credits generated in the compliance period



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.

$$\text{Tonnes of CO}_2\text{e Avoided} = (\text{CI fossil fuel displaced} \times \text{EER fuel} - \text{CI fuel}) \times \text{EC fuel} / 1,000,000$$

Where:

CI fossil fuel displaced = the carbon intensity prescribed for the displaced fuel in that compliance period

EER fuel = the prescribed energy effectiveness ratio of the low carbon fuel

CI fuel = the carbon intensity of the low carbon fuel

EC fuel = the energy content of the low carbon fuel calculated in accordance with the Regulation, using the prescribed energy densities



Table 9^A – Lifecycle emissions avoided (tonnes CO₂e) by fuel

	2010	2011	2012 ^B	2013 ^C	2014 ^D	2015	2016	2017	2018	2019	2020	2021	2022
Biodiesel	176,238	274,372	235,316	254,255	273,195	292,410	300,376	335,198	377,524	388,282	371,532	432,035	463,759
CNG	294	1,496	5,740	6,837	7,934	12,910	14,521	17,857	20,942	26,955	31,834	38,325	36,903
Electricity	159,245	159,995	164,696	160,873	157,051	159,314	166,637	189,087	206,501	231,742	256,771	302,463	328,985
Ethanol	192,072	238,823	219,394	242,074	264,753	305,801	409,500	493,529	503,998	465,265	408,865	486,656	606,177
HDRD	50,564	114,878	121,702	218,554	315,406	339,641	206,529	288,400	311,712	602,947	1,001,285	987,642	1,049,473
Hydrogen	1,821	2,654	2,888	1,925	963	17	20	20	20	42	53	288	634
LNG	-	219	3,418	6,638	9,858	13,814	14,428	20,168	32,529	39,432	42,408	42,592	48,868
Propane	478	23,480	21,611	25,986	30,361	34,347	34,676	35,062	34,306	34,426	30,107	32,640	27,757
Renewable Diesel	-	-	-	-	-	-	-	-	-	11,247	31,607	86,400	76,042
Renewable Gasoline	-	-	-	-	-	-	-	-	-	37,100	77,793	136,746	226,856
Renewable Naphtha	-	-	-	-	-	-	-	-	-	-	-	-	4,548
Total	580,711	815,918	774,763	917,142	1,059,521	1,158,253	1,146,686	1,379,322	1,487,533	1,837,439	2,252,256	2,545,785	2,865,453

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), and are therefore conservative estimates of emissions avoided for those fuels that were consumed in a compression ignition engine. Prior to July 1, 2013, compression ignition engines were prescribed an EER of 1.2 under the Regulation (relative to spark ignition engines)

B – Quantities represent 2/3 of the 18 month compliance period ending June 30, 2013

C – Quantities represent 1/3 of the values for the 18 month compliance period ending June 30, 2013 plus 1/3 of the values for the 18 month compliance period ending December 31, 2014

D – Quantities represent 2/3 of the 18 month compliance period ending December 31, 2014



Credit Market Scope

Under section 6 of the Act, Part 3 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., petroleum-based gasoline and diesel). In addition, Part 3 fuel suppliers may also enter into Part 3 Agreements with the Director under the Act to take actions that have a reasonable possibility of reducing GHG emissions through the supply of Part 3 fuels sooner than would occur without the agreed-upon action. The table below shows the quantity of debits incurred and credits generated each year.

Table 10 – Credit Market Scope

Compliance Period	Debits Incurred from Fuel Supply	Credits Generated from Fuel Supply	Credits Awarded from Part 3 Agreements	Surplus Credits (Debits)
2013	(161,091)	518,307	-	357,217
2014	(322,182)	1,036,615	-	714,433
2015	(639,704)	1,111,129	66,355	537,780
2016	(910,254)	1,083,222	166,636	339,604
2017	(1,379,343)	1,280,425	97,833	(1,085)
2018	(1,794,734)	1,350,646	200,592	-(43,496)
2019	(2,122,753)	1,638,379	231,774	(252,600)
2020	(2,052,864)	1,984,069	188,853	120,058
2021	(2,480,410)	2,207,994	475,561	203,145
2022	(2,877,668)	2,455,623	279,985	(142,060)
Total	(14,741,003)	14,666,409	1,707,589	1,632,995

The credits awarded from Part 3 Agreements are for the completion of project milestones during a given compliance period. 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.



**Ministry of Energy, Mines and Low
Carbon Innovation**

Revised: March 2024

Renewable and Low Carbon Fuel Requirements Regulation

Summary for 2010 - 2022

Information Bulletin RLCF-007-2022

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 a Part 3 Fuel Supplier review the *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act* and the Renewable and Low Carbon Fuel Requirements Regulation and seek independent legal advice to confirm their status, legal obligations and opportunities. The *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act* and the Renewable and Low Carbon Fuel Requirements Regulation can be found on the internet at: <http://www.bclaws.ca>.