

## Summary of Gasoline Illustrative Scenarios

The purpose of these illustrative scenarios is directly related to the 2011 Low Carbon Fuel Standard (LCFS) program review, which is required by the regulation and due to the Board no later than January 1, 2012. Specifically, the regulation requires an assessment of the need to adjust the compliance schedule, as well as an economic assessment of the LCFS, for which these scenarios will inform. These illustrative scenarios are not projections, but plausible pathways to compliance based on a series of assumptions, which are clearly outlined below.

### Assumptions Common to All Scenarios

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH CI	87.8	84.7	81.6	79.0	76.6	74.3	72.0	69.9	67.9	66.0
Cane EtOH CI	73.4	72.0	71.0	70.0	69.0	68.0	67.0	66.0	65.0	64.0
Cellulosic CI	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Drop-In CI	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Avg. % EtOH of Gasoline (Scenarios 1-8)	10.0	10.0	10.0	10.0	10.0	13.5	13.7	13.9	14.2	14.5
Avg. % EtOH of Gasoline (Scenarios 9-11)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
No. of FCVs (1,000s)	0.9	2.0	3.0	4.0	10.0	15.0	20.0	22.943	29.158	39.783
No. PHEVs (1,000s)	0.5	20.0	45.0	70.0	110	150	200	261.259	336.522	425.618
No. of BEVs (1,000s)	3.0	5.0	7.0	9.0	20.0	30.0	40.0	53.873	81.123	118.795

Scenario 1 - CA gets about 85% of EIA cellulosic projections; low corn EtOH use in 2016 and after; large FFV use using EtOH 50% of the time; substantial early surplus credit generation before 2017; annual deficits generated between 2017 and 2020, but some credits remain after 2020.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.40	1.27	1.05	0.51	0.22	0.14	0.10	0.06	0
Cane EtOH (bgal)	0	0.08	0.18	0.40	0.80	1.55	1.52	1.44	1.27	0.76
Cellulosic (bgal)	0	0.01	0.04	0.07	0.24	0.39	0.61	0.95	1.44	2.16
FFVs (1,000s)	0	50	100	200	300	500	900	1,400	2,200	2,700
% time E85	50	50	50	50	50	50	50	60	60	60
Total EtOH (bgal)	1.50	1.52	1.53	1.56	1.58	2.16	2.28	2.49	2.77	2.92
Total E85 (bgal)	0	0.02	0.04	0.08	0.11	0.18	0.33	0.59	0.92	1.10
Total CARBOB (bgal)	13.5	13.5	13.5	13.5	13.3	12.8	12.6	12.4	12.1	11.9
Avg. % EtOH	10.0	10.1	10.2	10.4	10.6	14.4	15.3	16.7	18.6	19.8
An. Credits (1,000s MT)	556	714	550	410	131	827	-181	-599	-305	-267
Cum. Credits (1,000s MT)	556	1,270	1,820	2,230	2,361	3,188	3,007	2,408	2,103	1,836

Scenario 2 - CA gets nearly all (about 90 percent) of EIA cellulosic projections between 2011 and 2020; low sugar cane EtOH use and low corn EtOH use in 2020; relatively low FFV use using E85 about 50% of the time before 2018 and about 60% of the time after; substantial early surplus credit generation before 2017; annual deficits generated between 2017 and 2020, but some surplus credits remain after 2020.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.48	1.41	1.35	1.10	1.28	0.93	0.40	0.07	0
Cane EtOH (bgal)	0	0.01	0.03	0.05	0.16	0.32	0.43	0.67	0.39	0
Cellulosic (bgal)	0	0.018	0.08	0.14	0.32	0.53	0.80	1.16	1.84	2.35
FFVs (1,000s)	0	30	60	120	200	400	500	600	700	810
% time E85	50	50	50	50	50	50	50	60	60	60
Total EtOH (bgal)	1.50	1.51	1.52	1.53	1.58	2.13	2.17	2.23	2.30	2.35
Total E85 (bgal)	0	0.01	0.02	0.04	0.11	0.15	0.18	0.25	0.29	0.33
Total CARBOB (bgal)	13.5	13.5	13.5	13.5	13.3	12.9	12.7	12.5	12.4	12.2
Avg.% EtOH	10.0	10.1	10.1	10.2	10.6	14.2	14.6	15.1	15.6	16.1
An. Credits (1,000s MT)	556	683	577	408	63	725	-118	-587	-171	-1,146
Cum. Credits (1,000s MT)	556	1,239	1,816	2,224	2,287	3,012	2,894	2,307	2,136	990

Scenario 3 - Delayed cellulosic EtOH introduction; mostly corn EtOH used until 2015; increasing sugar cane EtOH use through 2020; CA gets about a third of EIA nationwide cellulosic projection; high FFV use beginning in 2015 using E85 a high percentage of the time; surplus credits accumulate until 2019; deficits generated in 2019 and 2020, but some surplus credits remain after 2020.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.50	1.50	1.60	1.22	1.77	1.67	1.04	0.68	0.36
Cane EtOH (bgal)	0	0	0	0.08	0.61	0.86	1.52	2.11	2.48	2.73
Cellulosic (bgal)	0	0	0	0	0.08	0.11	0.19	0.43	0.63	0.93
FFVs (1,000s)	0	0	0	300	700	1,300	2,500	2,900	3,300	3,800
% time E85	100	100	100	100	100	100	100	100	100	100
Total EtOH (bgal)	1.50	1.50	1.50	1.68	1.90	2.74	3.38	3.57	3.79	4.02
Total E85	0	0	0	0.23	0.53	0.96	1.8	2.1	2.3	2.6
Total CARBOB (bgal)	13.5	13.5	13.5	13.4	13.1	12.5	11.9	11.6	11.4	11.1
Avg.% EtOH	10.0	10.0	10.0	11.2	12.6	18.0	22.1	23.5	24.9	26.6
An. Credits (1,000s MT)	556	572	184	39	-158	378	324	197	-523	-1,389
Cum. Credits (1,000s MT)	556	1,128	1,312	1,351	1,193	1,571	1,895	2,092	1,569	180

Scenario 4 - Only corn and sugar cane EtOH until 2015; high corn and sugar cane EtOH through 2020; cellulosic EtOH introduced in 2015 up to only about a third of EIA nationwide projection for 2020; very high FFV use using E85 100 percent of the time; less surplus credit accumulation before 2019 than in Scenario 3; deficits generated between 2018 and 2020, but some surplus credits remain after 2020.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.44	1.42	1.40	1.14	1.65	1.74	1.78	1.64	1.46
Cane EtOH (bgal)	0	0.08	0.16	0.25	0.53	0.77	1.09	1.45	1.76	2.08
Cellulosic (bgal)	0	0	0	0	0.11	0.15	0.28	0.40	0.60	0.89
FFVs (1,000s)	0	20	125	250	500	1,000	2,000	3,000	3,700	4,600
% time E85	100	100	100	100	100	100	100	100	100	100
Total EtOH (bgal)	1.50	1.52	1.58	1.65	1.78	2.57	3.11	3.63	4.00	4.42
Total E85 (bgal)	0	0.016	0.10	0.19	0.38	0.74	1.45	2.12	2.58	3.14
Total CARBOB (bgal)	13.5	13.5	13.5	13.4	13.2	12.6	12.1	11.6	11.3	10.8
Avg.% EtOH	10.0	10.1	10.5	11.0	11.9	17.0	20.5	23.8	26.1	29.0
An. Credits (1,000s MT)	556	661	406	117	-255	221	-13	-191	-315	-655
Cum. Credits (1,000s MT)	556	1,217	1,623	1,740	1,485	1,706	1,693	1,502	1,187	532

Scenario 5 - Small amounts of cellulosic EtOH begins in 2014; drop-in fuel begins in 2015; cellulosic about 25% of EIA 2020 nation-wide projection; no FFVs; substantial surplus credits in early years; deficits generated between 2018 and 2020, but some surplus credits remain after 2020.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.50	1.50	1.39	1.32	1.70	1.57	1.41	1.23	0.98
Cane EtOH (bgal)	0	0	0	0.06	0.10	0.22	0.30	0.39	0.48	0.54
Cellulosic (bgal)	0	0	0	0.050	0.07	0.10	0.16	0.25	0.38	0.59
Drop-in Fuel (bgal)	0	0	0	0	0.13	0.18	0.37	0.51	0.63	0.78
Total EtOH (bgal)	1.50	1.50	1.50	1.50	1.49	2.02	2.03	2.04	2.08	2.10
Total E85 (bgal)	0	0	0	0	0	0	0	0	0	0
Total CARBOB (bgal)	13.5	13.5	13.5	13.5	13.3	12.8	12.4	12.2	12.0	11.6
Avg.% EtOH	10.0	10.0	10.0	10.0	10.0	13.5	13.7	13.9	14.2	14.5
An. Credits (1,000s MT)	556	572	184	6	-3	289	296	-96	-373	-892
Cum. Credits (1,000s MT)	556	1,128	1,312	1,318	1,315	1,604	1,900	1,804	1,431	539

Scenario 6 - Only corn EtOH is used until 2014; sugar cane EtOH and cellulosic EtOH begin in 2014; drop-in fuel begins in 2015; cellulosic about 40% of EIA 2020 nationwide projection; no FFVs; early credits generated with corn EtOH; compliance is achieved every year up to 2020; surplus credits from early generation remain after 2020.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.50	1.50	1.36	1.17	1.64	1.41	1.19	0.93	0.47
Cane EtOH (bgal)	0	0	0	0.09	0.18	0.22	0.34	0.43	0.54	0.63
Cellulosic (bgal)	0	0	0	0.05	0.14	0.16	0.28	0.43	0.61	1.00
Drop-in Fuel (bgal)	0	0	0	0	0.09	0.12	0.28	0.44	0.57	0.72
Total EtOH (bgal)	1.50	1.50	1.50	1.50	1.49	2.02	2.03	2.04	2.08	2.10
Total E85 (bgal)	0	0	0	0	0	0	0	0	0	0
Total CARBOB (bgal)	13.5	13.5	13.5	13.5	13.3	12.8	12.5	12.2	12.0	11.7
Avg.% EtOH	10.0	10.0	10.0	10.0	10.0	13.5	13.7	13.9	14.2	14.5
An. Credits (1,000s MT)	556	572	184	3	0	-3	4	3	1	5
Cum. Credits (1,000s MT)	556	1,128	1,312	1,315	1,315	1,312	1,316	1,319	1,320	1,325

Scenario 7 - Similar to Scenario 6, but with a small number of FFVs operating on E85 50 percent of the time; early surplus credits remain after 2020.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.50	1.50	1.38	1.22	1.72	1.54	1.40	1.03	0.65
Cane EtOH (bgal)	0	0	0	0.08	0.20	0.24	0.34	0.36	0.61	0.69
Cellulosic (bgal)	0	0	0	0.05	0.11	0.13	0.23	0.38	0.55	0.89
FFVs (1,000s)	0	0	0	0	150	220	280	350	400	500
Drop-in Fuel (bgal)	0	0	0	0	0.10	0.12	0.29	0.44	0.57	0.73
Total EtOH (bgal)	1.50	1.50	1.50	1.50	1.53	2.08	2.11	2.14	2.19	2.23
Total E85 (bgal)	0	0	0	0	0.054	0.076	0.093	0.11	0.13	0.15
Total CARBOB (bgal)	13.5	13.5	13.5	13.5	13.3	12.8	12.5	12.2	11.9	11.6
Avg.% EtOH	10.0	10.0	10.0	10.0	10.3	13.9	14.2	14.5	14.9	15.3
An. Credits (1,000s MT)	556	572	184	0	2	6	2	7	7	4
Cum. Credits (1,000s MT)	556	1,128	1,312	1,312	1,314	1,320	1,322	1,329	1,336	1,340

Scenario 8 - Large number of FFVs operating on E85 50 percent of the time; sugar cane and cellulosic EtOH introduced in 2015; drop-in fuel starts in 2016; cellulosic about 25% of EIA 2020 nation-wide projection; compliance is achieved every year between 2011 and 2020, and early surplus credits are generated as in Scenario 7, which remain after 2020; less drop-in fuel than Scenario 7, but large number of FFVs used so that projected E85 use is in line with CEC projections.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.50	1.50	1.56	1.55	2.03	2.10	2.03	1.73	1.61
Cane EtOH (bgal)	0	0	0	0.05	0.18	0.24	0.40	0.52	0.88	0.98
Cellulosic (bgal)	0	0	0	0.016	0.10	0.14	0.24	0.36	0.48	0.68
FFVs (1,000s)	0	0	0	400	1,200	1,400	2,600	3,300	3,900	4,600
Drop-in Fuel (bgal)	0	0	0	0	0.05	0.05	0.14	0.25	0.35	0.51
Total EtOH (bgal)	1.50	1.50	1.50	1.62	1.84	2.41	2.73	2.91	3.09	3.26
Total E85 (bgal)	0	0	0	0.15	0.45	0.52	0.94	1.17	1.36	1.57
Total CARBOB (bgal)	13.5	13.5	13.5	13.4	13.1	12.6	12.2	11.8	11.6	11.1
Avg.% EtOH	10.0	10.0	10.0	10.8	12.3	16.0	18.2	19.4	20.6	21.9
An. Credits (1,000s MT)	556	572	184	4	7	5	2	1	-1	1
Cum. Credits (1,000s MT)	556	1,128	1,312	1,316	1,323	1,328	1,330	1,331	1,330	1,331
An. Credits (New Schedule)	556	572	178	-2	11	56	86	105	121	120
(Cum. Credits (New Schedule)	556	1,128	1,306	1,304	1,315	1,371	1,457	1,562	1,683	1,803

Scenario 9 - Similar to Scenario 7; but with the use of E10 instead of E15; and with greater number of FFVs.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.50	1.50	1.38	1.37	1.36	1.30	1.15	0.93	0.65
Cane EtOH (bgal)	0	0	0	0.08	0.14	0.26	0.29	0.40	0.56	0.69
Cellulosic (bgal)	0	0	0	0.05	0.09	0.22	0.33	0.44	0.60	0.89
FFVs (1,000s)					400	1,270	1,600	2,000	2,400	3,030
Drop-in Fuel (bgal)	0	0	0	0	0.01	0.12	0.29	0.44	0.57	0.73
Total EtOH (bgal)	1.50	1.50	1.50	1.50	1.61	1.84	1.91	2.00	2.09	2.23
Total E85 (bgal)	0	0	0	0	0.15	0.47	0.58	0.71	0.84	1.03
Total CARBOB (bgal)	13.5	13.5	13.5	13.5	13.1	13.0	12.6	12.3	12.0	11.6
Avg.% EtOH	10.0	10.0	10.0	10.0	10.8	12.4	12.9	13.6	14.3	15.3
An. Credits (1,000s MT)	556	572	184	0	1	-1	1	1	0	2
Cum. Credits (1,000s MT)	556	1,128	1,312	1,312	1,313	1,312	1,313	1,314	1,314	1,316

Scenario 10 - Use of E10 instead of E15; same number of FFVs and about the same amount of drop-in as Scenario 8; but with greater amount of cellulosic ethanol than in Scenario 8; compliance achieved every year.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.50	1.50	1.56	1.63	1.57	1.47	1.37	1.20	1.00
Cane EtOH (bgal)	0	0	0	0.05	0.09	0.14	0.20	0.31	0.43	0.54
Cellulosic (bgal)	0	0	0	0.02	0.12	0.31	0.53	0.68	0.87	1.11
FFVs (1,000s)	0	0	0	400	1,200	1,900	2,600	3,300	3,900	4,600
FFVs % E85	50	50	50	50	50	50	50	50	50	50
Drop-in Fuel (bgal)	0	0	0	0	0.05	0.05	0.14	0.26	0.36	0.53
Total EtOH (bgal)	1.50	1.50	1.50	1.62	1.84	2.02	1.19	2.36	2.50	2.64
Total E85 (bgal)	0	0	0	0.15	0.45	0.70	0.94	1.17	1.36	1.57
Total CARBOB (bgal)	13.5	13.5	13.5	13.4	13.1	13.0	12.6	12.2	11.9	11.5
Avg.% EtOH	10.0	10.0	10.0	10.8	12.3	13.5	14.7	15.9	16.9	18.0
An. Credits (1,000s MT)	556	572	184	4	4	7	1	-1	2	2
Cum. Credits (1,000s MT)	556	1,128	1,312	1,316	1,320	1,327	1,328	1,327	1,329	1,331

Scenario 11 - Use of E10 instead of E15; fewer FFVs than Scenarios 9 and 10; about the same amount of cellulosic ethanol as Scenario 8; about the same amount of drop-in as Scenario 9; compliance achieved every year.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Corn EtOH (bgal)	1.50	1.50	1.50	1.38	1.29	1.14	1.06	0.92	0.62	0.44
Cane EtOH (bgal)	0	0	0	0.08	0.12	0.15	0.19	0.25	0.44	0.45
Cellulosic (bgal)	0	0	0	0.05	0.12	0.33	0.45	0.59	0.77	1.07
FFVs (1,000s)	0	0	0	0	150	500	800	1,100	1,400	2,000
FFVs % E85	50	50	50	50	50	50	50	50	50	50
Drop-in Fuel (bgal)	0	0	0	0	0.01	0.12	0.29	0.45	0.58	0.74
Total EtOH (bgal)	1.50	1.50	1.50	1.50	1.53	1.62	1.69	1.75	1.82	1.96
Total E85 (bgal)	0	0	0	0	0.06	0.18	0.29	0.39	0.49	0.68
Total CARBOB (bgal)	13.5	13.5	13.5	13.5	13.3	13.1	12.7	12.4	12.2	11.8
Avg.% EtOH	10.0	10.0	10.0	10.0	10.3	10.9	11.5	12.0	12.5	13.5
An. Credits (1,000s MT)	556	572	184	0	1	2	0	3	3	0
Cum. Credits (1,000s MT)	556	1,128	1,312	1,312	1,313	1,315	1,315	1,318	1,321	1,321

## Summary of Diesel Scenarios

### Assumptions on CI Common to All Diesel Scenarios

Note - In all of the diesel scenarios, the 2011 deficits that are shown will be offset by surplus gasoline credits. Therefore, small amounts of surplus credits would accumulate between 2012 and 2020 in the diesel scenarios.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Soy BD CI	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
UCO BD	15.84	15.84	15.84	15.84	15.84	15.84	15.84	15.84	15.84	15.84
Canola BD (Scenario1 1-4)	62.99	62.99	62.99	62.99	62.99	62.99	62.99	62.99	62.99	62.99
Canola BD (Scenarios 5 & 6)	62.99	62.17	61.36	60.58	59.81	59.07	58.34	59.81	56.94	56.27
Corn Oil BD	5	5	5	5	5	5	5	5	5	5
Tallow RD	29.49	29.49	29.49	29.49	29.49	29.49	29.49	29.49	29.49	29.49
Drop-In RD	35	35	35	35	35	35	35	35	35	35

### Scenario 1 - Use of soy biodiesel and used cooking oil biodiesel

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
% Non-Conven. Diesel	0	4	6	8	10	15	20	20	20	20
Soy BD (mgal)	0	132	189	249	282	450	595	525	451	344
UCO BD (mgal)	0	1	17	31	75	99	154	241	333	458
Total BD (mgal)	0	133	206	280	357	549	749	766	784	802
Total Diesel (bgal)	3.3	3.4	3.4	3.5	3.6	3.7	3.7	3.8	3.9	4.0
An. Credits (1,000s MT)	-105	-7	0	0	21	17	27	23	17	7
Cum. Credits (1,000s MT)	-105	-112	-112	-112	-91	-74	-47	-24	-7	0

### Scenario 2 - Use of soy, used cooking oil, and canola biodiesel

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
% Non-Conv. Diesel	0	4	6	8	10	15	20	20	20	20
Soy BD (mgal)	0	132	187	245	275	434	566	483	384	249
UCO BD (mgal)	0	1	17	29	72	93	138	222	305	417
Canola BD (mgal)	0	0	2	6	11	22	45	62	94	136
Total BD (mgal)	0	133	206	280	358	549	749	767	783	802
Total Diesel (bgal)	3.3	3.4	3.4	3.5	3.6	3.7	3.7	3.8	3.9	4.0
An. Credits (1,000s MT)	-105	-7	5	2	18	27	15	16	25	9
Cum. Credits (1,000s MT)	-105	-112	-107	-105	-87	-60	-45	-29	-4	5

Scenario 3 - Use of soy, used cooking oil, canola, and corn oil biodiesel

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
% Non-Conv. Diesel	0	4	6	8	10	15	20	20	20	20
Soy BD (mgal)	0	132	187	245	277	438	569	487	402	259
UCO BD (mgal)	0	1	17	26	63	73	109	188	268	375
Canola BD (mgal)	0	0	2	6	11	22	45	61	78	128
Corn Oil BD (mgal)	0	0	0	3	7	17	26	31	35	40
Total BD (mgal)	0	133	206	280	358	550	749	767	783	802
Total Diesel (bgal)	3.3	3.4	3.4	3.5	3.6	3.7	3.7	3.8	3.9	4.0
An. Credits (1,000s MT)	-105	-7	5	1	13	16	18	26	13	23
Cum. Credits (1,000s MT)	-105	-112	-107	-106	-93	-77	-59	-33	-20	3

Scenario 4 - Use of soy, used cooking oil, canola, and corn oil biodiesel, and tallow renewable diesel

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
% Non-Conv. Diesel	0	4	6	8	10	15	20	20	20	20
Soy BD (mgal)	0	132	186	245	276	435	566	483	395	253
UCO BD (mgal)	0	1	16	23	57	59	86	161	238	341
Canola BD (mgal)	0	0	2	6	11	22	45	61	78	128
Corn Oil BD (mgal)	0	0	0	3	7	16	26	31	35	40
Tallow RD (mgal)	0	0	0	3	7	16	26	31	35	40
Total BD and RD (mgal)	0	133	204	280	358	548	749	767	781	802
Total Conv. Diesel (bgal)	3.3	3.2	3.2	3.2	3.2	3.1	3.0	3.0	3.1	3.2
Total Diesel (bgal)	3.3	3.3	3.4	3.5	3.6	3.7	3.7	3.8	3.9	4.0
An. Credits (1,000s MT)	-105	-7	5	-2	16	15	19	21	15	27
Cum. Credits (1,000s MT)	-105	-112	-107	-109	-93	-77	-59	-38	-23	4



Scenario 5 - Use of soy, used cooking oil, canola, and corn oil biodiesel, and tallow and drop-in renewable diesel

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
% Non-Conv. Diesel	0	4	6	8	10	15	20	20	20	20
Soy BD (mgal)	0	132	188	248	276	447	584	510	420	273
UCO BD (mgal)	0	1	15	17	20	24	31	104	177	273
Canola BD (mgal)	0	0	2	6	18	22	45	50	71	120
Corn Oil BD (mgal)	0	0	0	3	14	17	26	31	35	40
Drop-In RD (mgal)	0	0	0	6	29	40	63	73	82	96
Total BD and RD (mgal)	0	133	205	280	357	550	749	768	785	802
Total Conv. Diesel (bgal)	3.3	3.2	3.2	3.2	3.2	3.1	3.0	3.1	3.1	3.2
Total Diesel (bgal)	3.3	3.3	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0
An. Credits (1,000s MT)	-105	2	16	15	11	14	16	11	10	13
Cum. Credits (1,000s MT)	-105	-103	-87	-72	-61	-47	-32	-21	-11	2

Scenario 6 - Use of soy, used cooking oil, canola, and corn oil biodiesel, and tallow and drop-in renewable diesel. CNG Vehicles up to 10,000 vehicles in 2020.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
% Non-Conv. Diesel	0	4	6	8	10	15	20	20	20	20
Soy BD (mgal)	0	132	189	249	277	448	585	510	420	275
UCO BD (mgal)	0	1	4	17	19	22	29	101	174	268
Canola BD (mgal)	0	0	2	5	18	21	44	49	68	117
Corn Oil BD (mgal)	0	0	0	3	14	16	25	30	34	39
Drop-In RD (mgal)	0	0	0	5	29	39	61	71	80	94
HD CNG Vehicles (1,000s)	0	0	0	0	2.5	3.5	5.0	6.5	8.0	10.0
Total BD and RD (mgal)	0	133	205	280	357	546	744	761	776	793
Total Conv. Diesel (bgal)	3.3	3.2	3.2	3.2	3.2	3.1	3.0	3.1	3.1	3.2
Total Diesel (bgal)	3.3	3.3	3.4	3.5	3.6	3.6	3.7	3.8	3.9	4.0
An. Credits (1,000s MT)	-105	3	9	10	12	13	15	14	17	14
Cum. Credits (1,000s MT)	-105	-102	-93	-83	-72	-58	-43	-29	-12	2
An. Credits (New Schedule)	-105	3	47	54	70	102	136	129	121	99
Cum. Credits (New Schedule)	-105	-102	-55	-1	69	171	307	436	557	656