

Independent Statistics & Analysis U.S. Energy Information Administration

Monthly Biodiesel Production Report

With data for October 2016

December 2016



Independent Statistics & Analysis www.eia.gov U.S. Department of Energy Washington, DC 20585

This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views in this report therefore should not be construed as representing those of the Department of Energy or other Federal agencies.

Biodiesel Highlights and Background, Data for October 2016

Highlights

Production – U.S. production of biodiesel was 142 million gallons in October 2016. Biodiesel production during October 2016 was 7 million gallons higher than production in September 2016. Biodiesel production from the Midwest region (Petroleum Administration for Defense District 2) accounted for 68 percent of the United States total. Production came from 93 biodiesel plants with capacity of 2.1 billion gallons per year.

Sales – Producer sales of biodiesel during October 2016 included 74 million gallons sold as B100 (100% biodiesel) and an additional 65 million gallons of B100 sold in biodiesel blends with diesel fuel derived from petroleum.

Feedstocks – There were a total of 1,018 million pounds of feedstocks used to produce biodiesel in October 2016. Soybean oil remained the largest biodiesel feedstock during October 2016 with 526 million pounds consumed.

Background

The Monthly Biodiesel Production Report provides data on operations of the U.S. biodiesel industry as part of EIA's response to section 1508 of the Energy Policy Act of 2005 which directed EIA to publish information on renewable fuels including biodiesel. Data are provided for the U.S. and in selected cases by state and region.

The source of data is <u>Form EIA-22M Monthly Biodiesel Production Survey</u>, used to collect the following information from registered producers of biodiesel.

- plant location, operating status, and annual production capacity
- production of 100% biodiesel (B100)
- biodiesel coproduct production
- stocks
- feedstock, alcohol input, and catalysts used in biodiesel production
- sales of B100 and blended biodiesel from producing plants
- sales of biodiesel to end-users

Form EIA-22M provides data necessary to monitor growth of the biodiesel industry in order to allow Congress to assess whether objectives of Section 503 of the Energy Policy Act of 1992 and Section 1508 of the Energy Policy Act of 2005 are being achieved.

Table 1. U.S. Biodiesel production capacity and production

million gallons

Period	Annual Production Capacity	Monthly B100 Production
2014		
January	1,959	73
February	2,102	76
March	2,073	99
April	2,079	93
May	2,120	106
June	2,002	110
July	2,106	122
August	2,118	124
September	2,131	114
October	2,146	122
November	2,131	108
December	2,145	124
Total		1,271
2015 January	2,106	73
February	2,155	78
March	2,160	98
April	2,209	108
Мау	2,168	117
June	2,151	122
July	2,131	122
August	2,131	124
		107
September October	2,154	
	2,166	100
November	2,122	106
December	2,029	108
Total		1,268
2016		
lanuary	2,099	105
February	2,099	105
March	2,128	123
April	2,119	120
May	2,104	135
lune	2,104	13!
luly	2,104	14(
August	2,064	142
September	2,107	135
October	2,052	142
10 Month Total		1,279
2015 10 Month Total		1,055
2013 10 Month Total		1,038

-- = Not Applicable

R = Revised

Totals may not equal the sum of components due to independent rounding.

B100 is the industry designation for pure biodiesel; a biodiesel blend contains both pure biodiesel and petroleum diesel fuel.

Source: U.S. Energy Information Administration, Form EIA-22M "Monthly Biodiesel Production Survey"

U.S. Energy Information Administration | Monthly Biodiesel Production Report

Table 2. U.S. Biodiesel production, sales, and stocks

million gallons

million gallons			Sales of B100 included in	Ending stocks	B100 stocl
Period	B100 production	Sales of B100	biodiesel blends	of B100	change
2014					
January	73	50	16	26	e
February	76	52	20	32	7
March	99	67	31	36	4
April	93	58	33	39	3
Мау	106	67	42	36	(2
June	110	70	41	34	(2
July	121	79	43	36	2
August	124	77	49	34	(2
September	114	71	47	30	(5
October	122	76	45	32	3
November	108	61	40	41	ç
December	124	65	83	15	(25
Total	1,271	792	491		(4
2015					
January	73	39	22	30	15
February	78	51	19	39	g
March	98	63	29	45	e
April	108	70	37	46	1
May	117	76	45	42	(4
June	122	80	45	38	(3
July	122	74	52	47	ç
August	124	75	46	42	(5
September	107	71	42	32	(10
October	106	65	39	35	
November	106	52	40	48	13
December	108	64	49	44	(4
12 Month Total	1,268	781	465		29
2016					
January	105	46	45	57	13
February	105	44	56	61	5
March	121	62	64	56	(5
April	120	65	61	49	(7
Мау	135	67	68	50	1
June	135	68	72	45	(5
July	140	79	60	46	1
August	142	84	66	38	(8
September	135	70	69	35	(3
October	142	74	65	38	3
10 Month Total	1,279	659	626		(6
2015 10 Month Total	1,055	666	376		19
2014 10 Month Total	1,038	667	368		13

R = Revised

(s) = Value is less than 0.5 of the table metric, but value is included in any associated total.

Totals may not equal the sum of components due to independent rounding.

B100 is the industry designation for pure biodiesel; a biodiesel blend contains both pure biodiesel and petroleum diesel fuel.

Source: U.S. Energy Information Administration, Form EIA-22M "Monthly Biodiesel Production Survey"

U.S. Energy Information Administration | Monthly Biodiesel Production

Table 3. U.S. Inputs to biodiesel production

million pounds

	Feedstock inputs								
	Vegetable oils Animal fats								
eriod	Canola oil	Corn oil	Cottonseed oil	Palm oil	Soybean oil	Other	Poultry	Tallow	
)14									
nuary	36	73	W	W	273	W	2	15	
ebruary	27	54	W	W	277	W	6	21	
arch	32	78	W	W	379	W	13	43	
oril	58	66	W	W	360	W	17	33	
ay	68	89	W	W	399	W	23	48	
ne	91	75	W	W	467	W	18	21	
ly	135	91	W	W	435	W	22	42	
Jgust	136	91	W	W	448	W	15	37	
eptember	126	93	W	W	395	W	18	49	
ctober	133	86	W	W	459	W	13	32	
ovember	121	86	W	W	447	W	15	15	
ecember	85	95		W		W	10	24	
	1,046	95 977	W		531 4,869		15 176	380	
otal	1,040	3//	-	vv	4,009	W	170	560	
)15									
nuary	65	54	W	W	306	W	9	19	
bruary	30	68	W	W	312	W	9	9	
arch	80	72	W	W	381	W	8	34	
oril	94	94	W	W	385	W	16	31	
ау	55	87	W	W	443	W	23	49	
ne	56	78	W	W	474	W	20	57	
ly	76	110	W	W	447	W	18	48	
ugust	73	111	W	W	464	W	21	44	
eptember	68	92	W	W	390	W	23	40	
ctober ovember	60 40	102 89	W W	W	408 464	W	17 17	42 24	
ecember	40	100	W	W	404 436	W	17	33	
otal	48 745	1,057	-	1	430 4,908	w	197	429	
016									
nuary	61	94	_	(s)	392	3	11	23	
bruary	47	88	-	-	395	W	11	19	
arch	68	93	-	_	464	1	15	15	
oril	92	87		_	415	W	19	38	
ay	122	94	_	_	544	W	20	24	
ne	129	103			520	W	17	36	
ly	125	103	_	_	536	W	21	36	
			-	-					
ugust	109	123	-	-	561	W	27	32	
eptember	117	106	W	-	537	W	21	29	
ctober	117	120	-	- / \	526	W	20	31	
) Month Total	977	1,035	W	(s)	4,889	W	182	284	
015 10 Month Total	657	868	W	W	4,009	W	165	373 341	
015 10 Month Total 014 10 Month Total • No data reported	657 841	868 796	w W	W W	4,009 3,891	w w	165 146		

R = Revised

W = Withheld to avoid disclosure of individual company data.

(s) = Value is less than 0.5 of the table metric, but value is included in any associated total.

Totals may not equal the sum of components due to independent rounding.

Table 3a. U.S. Inputs to biodiesel production (continuation of table 3)

million pounds

	Feedstock inputs					Other inputs				
	Animal fats Recycled feeds									
Period	White grease	Other	Yellow grease	Other	Algae	Other	Alcohol	Catalyst		
2014										
January	30	2	60	15	-	17	56	8		
February	41	4	76	22	-	21	56	ç		
March	41	3	103	23	-	4	76	ç		
April	39	4	86	27	-	6	68	ç		
May	46	4	105	34	-	2	82	11		
June	29	4	86	22	-	7	80	11		
July	37	4	98	18	-	29	85	13		
August	36	2	104	5	_	15	92	15		
September	41	1	105	9	-	15	87	14		
October	45	- 1	98	7	_	17	92	16		
November	37	1	74	5	_	13	79	14		
December	49	1	93	11		3	90	15		
Total	49	31		197	- 1	3 149	90 943	13		
Total	470	51	1,089	197	<u>⊥</u>	145	545	144		
2015										
January	29	0	53	W	-	4	54	10		
February	33	1	78	W	-	6	63	11		
March	43	4	93	w	-	10	74	14		
April	57	3	105	w	_	12	81	14		
May	60	9	120	w	-	9	92	15		
June	56	18	131	W	-	8	94	16		
July	49	3	131	W	-	14	95	15		
August	54	6	120	W		10	93	16		
September	54	2	108	W	-	6	79	14		
October	52	2	108	W	-	2	87	15		
November December	45 58	43	103 106	W	-	6 3	<u>84</u>	15 16		
Total	589	56	1,254	122	0		982	170		
		50	1,234	122	.	51	502	170		
2016										
January	57	1	93	W	-	W	80	14		
February	53	7	109	W	-	6	85	14		
March	44	14	110	W	-	W	95	15		
April	53	12	118	W	(s)	W	87	14		
May	47	15	106	W	(s)	6	101	17		
June	42	5	113	W	-	6	101	17		
July	38	6	130	W	-	W	106	17		
August	38	4	127	W	-	8	108	18		
September	36	W	117	W	-	W	113	19		
October	47	W	137	W	-	6	123	21		
10 Month Total	455	W	1,160	W	(s)	W	999	166		
							~~~			
2015 10 Month Total 2014 10 Month Total	486 384	48 29	1,047 922	- 181		82 133	812 775	140		

R = Revised

W = Withheld to avoid disclosure of individual company data.

(s) = Value is less than 0.5 of the table metric, but value is included in any associated total.

Totals may not equal the sum of components due to independent rounding.

State	Number of producers	Annual production capacity (million gallons per year)
Alabama	2	29
Alaska	1	0
Arizona	1	2
Arkansas	2	63
California	8	77
Colorado		-
Connecticut	1	15
Delaware		-
District of Columbia		-
Florida	3	15
Georgia	4	19
Hawaii	1	6
Idaho	-	-
Illinois	5	166
Indiana	2	104
lowa	11	370
Kansas	2	51
Kentucky	1	45
Louisiana		-
Maine	1	1
Maryland		
Massachusetts	1	1
Michigan	2	10
Minnesota	3	69
Mississippi	3	94
Missouri	8	169
	٥	169
Montana Nebraska	- 1	-
Nevada	1	3
New Hampshire	1	4
New Jersey	1	25
New Mexico	1	1
New York	-	-
North Carolina	3	8
North Dakota	1	85
Ohio	1	65
Oklahoma	1	38
Oregon	1	17
Pennsylvania	1	45
Rhode Island	1	1
South Carolina	1	5
South Dakota	-	-
Tennessee	2	5
Texas	6	265
Utah	1	40
Vermont		-
Virginia	4	9
Washington	2	105
West Virginia	-	-
Wisconsin	2	26
Wyoming	-	-
U.S. Total	93	2,052

#### Table 4. Biodiesel producers and production capacity by state, October 2016

- = No data reported.

Totals may not equal the sum of components due to independent rounding.

Number of producers is a count of plants with operable capacity during the report month.

Source: U.S. Energy Information Administration, Form EIA-22M "Monthly Biodiesel Production Survey"

U.S. Energy Information Administration | Monthly Biodiesel Production Report

# Table 5. Biodiesel (B100) production by Petroleum Administration for Defense District (PADD) million gallons

	PADD			Rocky		
	East Coast	Midwest	Gulf Coast	Mountain	West Coast	
Period	(PADD 1)	(PADD 2)	(PADD 3)	(PADD 4)	(PADD 5)	U.S.
2014						
January	3	50	17	(s)	2	73
February	5	57	10	(s)	4	76
March	5	75	13	(s)	6	99
April	6	68	14	(s)	5	93
May	5	76	17	1	8	106
June	5	85	13	1	6	110
July	6	86	20	1	9	121
August	7	85	22	1	10	124
September	8	79	19	(s)	8	114
October	5	86	23	(s)	8	122
November	3	78	19	(s)	8	108
December	4	88	25	(s)	7	124
Total	61	913	210	4	81	1,271
				· · ·		_,_,_
2015						
January	3	54	9	(s)	7	73
February	3	56	12	(s)	6	78
March	5	68	16	(s)	8	98
April	6	75	18	(s)	9	108
May	6	81	19	(s)	9	117
June	6	84	21	(s)	10	122
July	7	87	17	(s)	11	122
August	6	86	21	(s)	10	124
September	6	74	17	(s)	9	107
October	5	73	19	(s)	9	106
November	5	75	20	(s)	6	106
December	6	78	20	(s)	4	108
Total	64	891	212	(s)	98	1,268
2016 January	6	74	16	(s)	8	105
February	7	72	22	(s)	5	105
March		83	22	(s)		105
April	7	83	21	(s)	9	121
May		91	26	(s)	11	120
June		92	24	(s)	11	135
July	8	96	24	(s)	11	133
August	7	97	25	(s)	11	140
September	7	89	20	(s)	12	142
October	8	96	27	(s) (s)	12	135
10 Month Total	874	873	20	(s) (s)	98	1,279
	/4	0/3	200	(5)	70	1,2/9
2015 10 Month Total	53	738	172	(s)	88	1,055
2014 10 Month Total	54	747	168	4	66	1,038

R = Revised

(s) = Value is less than 0.5 of the table metric, but value is included in any associated total.

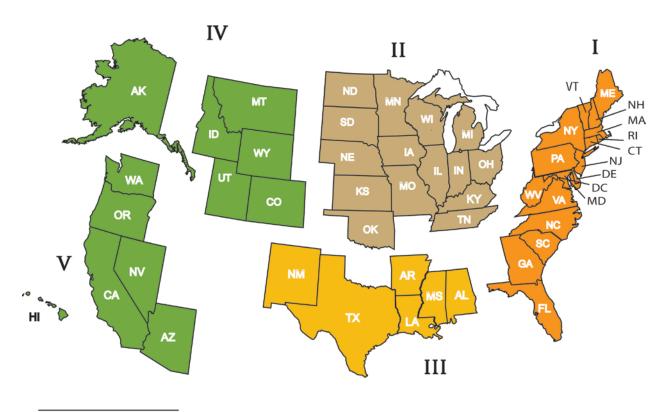
Totals may not equal the sum of components due to independent rounding.

B100 is the industry designation for pure biodiesel; a biodiesel blend contains both pure biodiesel and petroleum diesel fuel.

See Appendix A for a map of states included in each PADD.

Source: U.S. Energy Information Administration, Form EIA-22M "Monthly Biodiesel Production Survey"

U.S. Energy Information Administration | Monthly Biodiesel



## Appendix A Petroleum Administration for Defense Districts (PADD)

NOTE: MAP NOT TO SCALE.