

Monthly Biodiesel Production Report

January 2013

With Data for November 2012















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Biodiesel Highlights and Background, Data for November 2012

Highlights

Production – U.S. production of biodiesel was 57 million gallons in November 2012. Biodiesel production from the Midwest region (Petroleum Administration for Defense District 2) was 77% of the U.S. total. Production came from 112 biodiesel plants with operable capacity of 2.1 billion gallons per year. Biodiesel production during January-November 2012 was 912 million gallons, which was up from production of 858 million gallons during the first 11 months of 2011.

Sales – Producer sales of biodiesel during November 2012 included 53 million gallons sold as B100 (100% biodiesel) and an additional 12 million gallons of B100 sold in biodiesel blends with diesel fuel derived from petroleum.

Feedstocks – Soybean oil was the largest biodiesel feedstock during November 2012 with 244 million pounds consumed. The next three largest biodiesel feedstocks during the period were corn oil (48 million pounds), yellow grease (35 million pounds), and white grease (28 million pounds).

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 |
|---------------------|----------------------------|-------------------------|
| 2010 | | |
| January | 2,026 | 27 |
| February | 2,026 | 29 |
| March | 1,972 | 34 |
| April | 1,950 | 34 |
| May | 1,939 | 32 |
| June | 1,966 | 27 |
| July | 1,962 | 28 |
| August | 2,015 | 27 |
| September | 2,021 | 30 |
| October | 2,021 | 28 |
| November | 2,013 | 22 |
| December | 2,014 | 25 |
| Total | | 343 |
| 2011 | | |
| January | 2,114 | 35 |
| February | 2,104 | 40 |
| March | 2,081 | 60 |
| April | 2,101 | 71 |
| May | 2,064 | 77 |
| June | 2,069 | 81 |
| July | 1,958 | 92 |
| August | 2,008 | 95 |
| September | 2,087 | 96 |
| October | 2,119 | 105 |
| November | 2,098 | 105 |
| December | 2,090 | 109 |
| Total | | 967 |
| 2012 | | |
| January | 2,140 | 71 |
| February | 2,111 | 77 |
| March | 2,110 | 92 |
| April | 2,122 | 92 |
| May | 2,123 | 100 |
| June | 2,120 | 91 |
| July | 2,090 | 87 |
| August | 2,106 | 90 |
| September | 2,106 | 81 |
| October | 2,121 | 75 |
| November | 2,130 | 57 |
| 11 Month Total | | 912 |
| 2011 11 Month Total | | 858 |
| 2011 11 Month Total | | 319 |
| = Not Applicable | | 313 |

^{-- =} Not Applicable

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.

R = Revised

Table 2. U.S. Biodiesel Production, Sales, and Stocks (million gallons)

| Period | B100 Production | Sales of B100 | Sales of B100 Included in Biodiesel Blends | Ending Stocks of B100 | B100 Stock Change |
|---------------------|-----------------|---------------|--|--------------------------|----------------------|
| 2010 | | | | | |
| January | 27 | 13 | 7 | 18 | 5 |
| February | 29 | 20 | 8 | 18 | (s) |
| March | 34 | 25 | 10 | 17 | (1) |
| April | 34 | 23 | 8 | 20 | 3 |
| May | 32 | 20 | 11 | 21 | 1 |
| June | 27 | 22 | 9 | 17 | (4) |
| July | 28 | 19 | 8 | 16 | (s) |
| August | 27 | 19 | 7 | 18 | 1 |
| September | 30 | 25 | 6 | 17 | (1) |
| October | 28 | 25 | 4 | 17 | (s) |
| November | 22 | 17 | 4 | 18 | 2 |
| December | 25 | 22 | | 13 | (5) |
| Total | 343 | 251 | 89 | | (s) |
| 2011 | | - | | | |
| January | 35 | 22 | 9 | 17 | 4 |
| February | 40 | 27 | 13 | 17 | 1 |
| March | 60 | 41 | 17 | 19 | 2 |
| April | 71 | 47 | 22 | 21 | 2 |
| May | 77 | 50 | 27 | 23 | 2 |
| June | 81 | 62 | 24 | 19 | (4) |
| July | 92 | 66 | 22 | 23 | 4 |
| August | 95 | 64 | 30 | 25 | 2 |
| September | 96 | 68 | 37 | 21 | (4) |
| October | 105 | 69 | 36 | 25 | 4 |
| November | 105 | 66 | 39 | 26 | 1 |
| December | 109 | 59 | 62 | 14 | (12) |
| Total | 967 | 641 | 339 | | 1 |
| 2012 | | | | | |
| January | 71 | 45 | 21 | 26 | 12 |
| February | 77 | 56 | 19 | 33 | 7 |
| March | 92 | 73 | 32 | 35 | 2 |
| April | 92 | 68 | 31 | 40 | 5 |
| May | 100 | 75 | 35 | 37 | (3) |
| June | 91 | 77 | 19 | 31 | (6) |
| July | 87 | 70 | 18 | 29 | (2) |
| August | 90 | 72 | 17 | 30 | 1 |
| September | 81 | 61 | 17 | 32 | 2 |
| October | 75 | 62 | 12 | 33 | 1 |
| November | 57 | 53 | 12 | 26 | (8) |
| 11 Month Total | 912 | 712 | 233 | | 11 |
| 2011 11 Month Total | 858 | 582 | 277 | | 13 |
| 2010 11 Month Total | 319 | 229 | 82 | | 6 |
| = Not Applicable | | | | | |

^{-- =} Not Applicable

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

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.

Table 3. U.S. Inputs to Biodiesel Production (million pounds)

| Period - | Feedstock Inputs | | | | | | | | |
|--------------------------|------------------|------------------|-------------------|---------------|---------------------|---------------|------------------|------------------|--|
| | Vegetable Oils | | | | | | Animal Fats | | |
| | Canola Oil | Corn Oil | Cottonseed Oil | Palm Oil | Soybean Oil | Other | Poultry | Tallow | |
| 2010 | | | | | | | | | |
| January | 33 | 3 | W | W | 90 | W | 4 | 23 | |
| February | 30 | 8 | W | W | 102 | W | 2 | 27 | |
| March | 22 | 3 | W | W | 112 | W | 6 | 17 | |
| April | 30 | 4 | W | W | 127 | W | 5 | 28 | |
| May | 36 | 8 | W | W | 98 | W | 7 | 19 | |
| June | 28 | 1 | W | W | 89 | W | 8 | 9 | |
| July | 17 | 11 | W | W | 96 | W | 7 | 8 | |
| August | 19 | 12 | W | W | 84 | W | 13 | 7 | |
| September | 11 | 19 | W | W | 102 | W | 13 | 11 | |
| October | 10 | 14 | W | W | 105 | W | 14 | 9 | |
| November | 4 | 11 | W | W | 73 | W | 9 | | |
| December | 8 | 18 | W | W | 63 | W | 11 | 8 | |
| Total | 246 | 112 | w | W | 1,141 | W | 100 | 170 | |
| 2011 | | | | | | | | | |
| | 8 | 17 | | W | 150 | W | 14 | 11 | |
| January February | 26 | 13 | | W | 150 | v | 14 | 11 | |
| March | 68 | 14 | | W | 190 | vv | 19 | 27 | |
| | 88 | | | | | W | | 47 | |
| April | | 20 | | W | 236 264 | vv | 15 | | |
| May | 113 75 | 21 | - | W W | | vv | 16 | 36 | |
| June | | 34 | | | 311 | | 23 | 49 | |
| July | 77 | 35 | | W | 367 | W | 26 | 64 | |
| August | 84 | 37 | W | W | 398 | W | 34 | 38 | |
| September | 84 | 27 | W | W | 430 | W | 20 | 49 | |
| October | 69 | 30 | W | W | 527 | W | 31 | 39 | |
| November | 84 | 27 | W | W | 538 | W | 13 | 31 | |
| December Total | 71 847 | 30 304 | W W | w w | 592 4,153 | w w | 15 240 | 27 431 | |
| IOtal | 047 | 304 | VV | VV | 4,155 | VV | 240 | 431 | |
| 2012 | | | | | | | | | |
| January | 73 | 40 | - | W | 306 | W | 20 | 25 | |
| February | 90 | 43 | - | W | 320 | W | 8 | 20 | |
| March | 117 | 44 | - | W | 387 | W | 11 | 23 | |
| April | 112 | 45 | - | W | 349 | W | 11 | 44 | |
| May | 85 | 46 | - | W | 428 | W | 16 | 50 | |
| June | 103 | 46 | - | W | 369 | W | 10 | 28 | |
| July | 64 | 45 | - | W | 347 | W | 20 | 30 | |
| August | 48 | 50 | - | W | 385 | W | 21 | 44 | |
| September | 46 | 55 | - | W | 322 | W | 19 | 49 | |
| October | 16 | 59 | - | W | 307 | W | 14 | 44 | |
| November | 17 | 48 | - | W | 244 | W | 11 | 22 | |
| 11 Month Total | 771 | 521 | - | W | 3,764 | W | 161 | 379 | |
| 2011 11 Month Total | 776 | 275 | w | w | 3,561 | w | 225 | 402 | |
| 2010 11 Month Total | 240 | 94 | W | W | 1,078 | W | 88 | 162 | |

^{- =} No data reported.

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.

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

Table 3a. Inputs to Biodiesel Production (continuation of table 3) (million pounds)

| Period | Feedstock Inputs | | | | | | Other Inputs | |
|---------------------|------------------|---------------|------------------|------------|--------------|--------------|--------------|----------------|
| | Animal Fats | | Recycled Feeds | | | | | |
| | White Grease | Other | Yellow Grease | Other | Algae | Other | Alcohol | Catalysts |
| 2010 | | | • | | | | | |
| January | 19 | 6 | 8 | 1 | - | 3 | 18 | 3 |
| February | 17 | 4 | 9 | 1 | _ | 2 | 17 | 3 |
| March | 34 | 10 | 19 | 1 | _ | 2 | 21 | 4 |
| April | 26 | 2 | 15 | (s) | _ | (s) | 21 | 4 |
| May | 23 | 6 | 21 | 2 | _ | 2 | 20 | 3 |
| June | 20 | 3 | 29 | 2 | - | 1 | 21 | 4 |
| July | 32 | 2 | 29 | 2 | | 1 | 18 | 3 |
| August | 30 | 1 | 30 | 1 | - | 1 | 20 | 3 |
| September | 33 | 1 | 27 | | - | 1 | 23 | 3 |
| October | 32 | 1 | 19 | | - | <u>+</u> | 20 | 3 |
| November | 32 | 2 | 13 | 8 8 | | | 14 | |
| December | 35 | 2 3 | 25 | 10 | | 8 | 18 | 3 |
| Total | 333 | 42 | 246 | 4 0 | | ° 33 | 233 | 3 38 |
| Total | 333 | 72 | 240 | | | | 233 | |
| 2011 | | | | | | | | |
| January | 31 | 3 | 18 | 10 | - | 7 | 20 | 4 |
| February | 48 | 2 | 19 | 11 | - | 4 | 20 | 3 |
| March | 60 | 12 | 33 | 10 | - | 7 | 34 | 5 |
| April | 55 | 8 | 52 | 11 | - | (s) | 46 | 7 |
| May | 57 | 10 | 41 | 15 | - | (s) | 48 | 8 |
| June | 55 | 7 | 50 | 18 | - | 1 | 58 | 9 |
| July | 49 | 6 | 45 | 20 | _ | 2 | 62 | 9 |
| August | 48 | 15 | 47 | 19 | _ | 5 | 63 | 9 |
| September | 40 | 4 | 50 | 21 | _ | (s) | 64 | 9 |
| October | 29 | 7 | 42 | 21 | _ | (s) | 71 | 10 |
| November | 35 | 8 | 39 | 20 | - | (s) | 71 | 10 |
| December | 26 | 5 | 35 | 20 | - | (s) | 68 | 11 |
| Total | 533 | 85 | 471 | 195 | - | 27 | 626 | 94 |
| | | | | | | | | |
| 2012 | 20 | 2 | 21 | 10 | | (6) | 42 | 7 |
| January February | 29 29 | 3 4 | 31 34 | 18 22 | | (s) | 43 45 | 7 8 |
| | 29 31 | 4 6 | 34 54 | 22 | - | - (s) | 45 51 | 8 9 |
| March | 41 | <u>6</u> 5 | 61 | 21 | | (S) - | 51 54 | 9 |
| April | 38 | 5 | 54 | 24 26 | | - | 60 | 10 |
| May | | | | | | - | | 10 9 |
| June | 39 | 4 | 57 | 27 | (s) | - (c) | 55 | |
| July | 31 | 4 | 57 | 24 | - | (s) | 55 | 9 |
| August | 34 | 4 | 67 | 27 | - | (s) | 54 | 10 |
| September | 33 | 4 | 62 | 25 | - | | 50 | 9 |
| October | 41 | 4 | 57 | 29 | - | (s) | 47 | 8 |
| November | 28 | 4 | 35 | 23 | | | 38 | 7 |
| 11 Month Total | 374 | 47 | 569 | 266 | (s) | (s) | 552 | 95 |
| 2011 11 Month Total | 507 | 82 | 436 | 176 | _ | 26 | 557 | 83 |
| 2010 11 Month Total | 298 | 38 | 219 | 31 | | 25 | 213 | 35 |

^{- =} No data reported.

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

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W = Withheld to avoid discloaure of individual company data

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

Table 4. Biodiesel Producers and Production Capacity by State, November 2012

| Number of Producers | Annual Production Capacity (million gallons per year) |
|---------------------|--|
| 2 | 49 |
| - | - |
| 1 | 2 |
| | 85 |
| | 57 |
| - | |
| 2 | 3 |
| - | - |
| - | - |
| 1 | |
| | 20 |
| - | - |
| - | |
| 6 | 251 |
| | 104 |
| | 250 |
| | |
| | |
| | 12 |
| | |
| | |
| | |
| | |
| | 107 |
| | 105 |
| | 170 |
| | |
| | |
| | |
| | 1 |
| 1 | 3 |
| | |
| | 20 |
| | 10 |
| 4 | |
| | - |
| | 67 |
| | 15 |
| | 1 |
| | 90 |
| | 1 |
| | 41 |
| | 2 |
| | 2 |
| | 408 |
| 1 | 10 |
| - | - |
| | 9 |
| 4 | 109 |
| | |
| 4 | 31 |
| - 112 | 2,130 |
| | 2 |

^{- =} 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.

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

| | PADD | | | | | | |
|---------------------|------------------------|---------------------|------------------------|-------------------------------|------------------------|------|--|
| Period | East Coast (PADD 1) | Midwest (PADD 2) | Gulf Coast (PADD 3) | Rocky Mountain (PADD 4) | West Coast (PADD 5) | U.S. | |
| 2010 | | | | | | | |
| January | 2 | 18 | 5 | - | 2 | 27 | |
| February | 2 | 19 | 6 | - | 2 | 29 | |
| March | 4 | 24 | 3 | - | 2 | 34 | |
| April | 3 | 26 | 4 | - | 2 | 34 | |
| May | 3 | 22 | 3 | - | 3 | 32 | |
| June | 2 | 19 | 4 | - | 2 | 27 | |
| July | 4 | 22 | 2 | - | (s) | 28 | |
| August | 3 | 23 | 2 | - | (s) | 27 | |
| September | 3 | 25 | 2 | - | (s) | 30 | |
| October | 3 | 23 | 1 | - | 2 | 28 | |
| November | 3 | 18 | 1 | - | (s) | 22 | |
| December | 3 | 19 | 2 | - | 1 | 25 | |
| Total | 35 | 258 | 34 | - | 17 | 343 | |
| 2011 | | | | | | | |
| January | 3 | 30 | 1 | - | 1 | 35 | |
| February | 3 | 32 | 4 | | 1 | 40 | |
| March | 3 | 47 | 6 | - | 2 | 60 | |
| April | 3 | 54 | 10 | - | 3 | 71 | |
| May | 4 | 58 | 11 | | 4 | 77 | |
| June | 4 | 56 | 14 | | 7 | 81 | |
| July | 5 | 65 | 17 | | 5 | 92 | |
| August | 5 | 66 | 20 | | 5 | 95 | |
| September | 6 | 65 | 20 | | 6 | 96 | |
| October | 7 | 73 | 22 | | 4 | 105 | |
| November | 6 | 71 | 23 | - | 4 | 105 | |
| December | 6 | 77 | 23 | | 4 | 109 | |
| Total | 56 | 695 | 171 | - | 46 | 967 | |
| 2012 | | | | | | | |
| January | 5 | 48 | 13 | - | 6 | 71 | |
| February | 4 | 53 | 16 | - | 4 | 77 | |
| March | 5 | 65 | 15 | - | 6 | 92 | |
| April | 6 | 62 | 17 | 1 | 6 | 92 | |
| May | 7 | 69 | 17 | 1 | 6 | 100 | |
| June | 6 | 66 | 16 | (s) | | 91 | |
| July | 5 | 65 | 14 | (s) | 3 | 87 | |
| August | 6 | 65 | 16 | (s) | 2 | 90 | |
| September | 5 | 60 | 14 | (s) | 2 | 81 | |
| October | 5 | 55 | 14 | (s) | 1 | 75 | |
| November | 2 | 44 | 8 | (s) | 2 | 57 | |
| 11 Month Total | 56 | 652 | 160 | 3 | 41 | 912 | |
| 2011 11 Month Total | 49 | 617 | 148 | _ | 42 | 858 | |
| 2010 11 Month Total | 32 | 239 | 33 | | 16 | 319 | |

^{- =} No data reported.

petroleum diesel fuel.

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

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.

Appendix A Petroleum Administration for Defense Districts (PADD)

