Released: November 2017 Next MECS will be fielded in 2019

Table 2.3 Nonfuel (Feedstock) Use of Combustible Energy, 2014;

Level: National and Regional Data; Row: Values of Shipments and Employment Sizes; Column: Energy Sources; Unit: Trillion Btu.

Economic		Residual			Natural HGL (excluding		Coke and		
Characteristic(a)	Total	Fuel Oil	Fuel Oil(b)	Gas(c)	natural gasoline)(d)	Coal	Breeze	Other(e)	
	Total United States								
Value of Shipments and Receipts									
(million dollars)									
Under 20	291	*	Q	33	*	Q	0	256	
20-49	130	*	*	10	W	W	W	105	
50-99	269	W	W	25	71	W	W	123	
100-249	312	33	*	70	24	116	2	68	
250-499	347	0	1	139	W	W	W	49	
500 and Over	3,409	W	W	278	2,234	269	1	608	
Subtotal	4,758	59	8	554	2,363	484	81	1,209	
Not Ascertained(f)	529	0	0	0	0	0	0	529	
Total	5,287	59	8	554	2,363	484	81	1,738	
Employment Size									
Under 50	644	3	Q	100	W	W	0	375	
50-99	286	W	1	32	W	W	W	W	
100-249	834	13	1	178	410	W	W	107	
250-499	946	W	1	99	696	W	8	89	
500-999	922	W	4	67	697	9	0	W	
1000 and Over	1,126	0	*	78	W	260	W	385	
Subtotal	4,758	59	8	554	2,363	484	81	1,209	
Not Ascertained(f)	529	0	0	0	0	0	0	529	
Total	5,287	59	8	554	2,363	484	81	1,738	
	Northeast Census Region								

Value of Shipments and Receipts

(million dollars)								
Under 20	62	0	*	Q	*	0	0	60
20-49	W	0	*	1	*	W	*	W
50-99	11	0	*	*	*	W	1	W
100-249	11	0	*	1	*	*	2	8
250-499	5	0	0	*	Q	*	0	4
500 and Over	W	0	*	*	75	W	*	*
Total	321	0	*	4	76	137	3	100
Employment Size								
Under 50	73	0	*	1	*	0	0	72
50-99	W	0	*	Q	*	1	*	W
100-249	94	0	*	*	75	3	2	13
250-499	Q	0	*	*	Q	*	0	*
500-999	W	0	*	1	0	*	0	W
1000 and Over	134	0	0	0	*	134	*	*
Total	321	0	*	4	76	137	3	100
	Midwest Census Region							

Value of Shipments and Receipts								
								and the set of the set of the set of
(million dollars)								
Under 20	53	*	*	6	*	*	0	47

20-49	W	0	0	Q	W	0	W	W
50-99	72	3	*	5	*	0	W	W
100-249	104	0	*	28	W	W	0	23
250-499	158	0	*	17	W	W	W	24
500 and Over	W	0	*	18	104	W	0	1
Total	666	3	1	80	131	237	71	143
Employment Size								
Under 50	130	3	*	11	W	W	0	71
50-99	W	*	*	23	W	W	W	28
100-249	173	0	1	25	9	W	W	42
250-499	109	0	*	1	105	*	*	2
500-999	W	0	0	3	*	W	0	*
1000 and Over	167	0	*	17	W	114	W	*
Total	666	3	1	80	131	237	71	143

South Census Region

Value of Shipments and Receipts

(million dollars)								
Under 20	135	*	*	25	*	Q	0	109
20-49	37	*	*	*	*	*	0	36
50-99	169	W	W	18	71	1	0	71
100-249	184	33	*	35	W	W	0	29
250-499	176	0	*	121	W	W	1	21
500 and Over	2,956	W	W	259	2,055	17	1	606
Total	3,657	55	6	459	2,155	110	1	872
Employment Size								
Under 50	362	*	*	86	118	Q	0	157
50-99	176	W	1	5	56	W	0	58
100-249	557	13	*	146	327	22	0	49
250-499	829	W	1	98	590	W	1	86
500-999	909	W	4	63	697	W	0	137
1000 and Over	825	0	*	61	367	12	0	385
Total	3,657	55	6	459	2,155	110	1	872

West Census Region

Value of Shipments and Receipts

(million dollars)								
Under 20	41	0	Q	1	*	0	0	40
20-49	34	0	*	3	*	0	0	31
50-99	17	0	*	3	*	0	0	14
100-249	14	0	*	6	*	0	*	8
250-499	8	0	1	*	0	0	6	1
500 and Over	*	0	0	*	0	0	0	*
Total	115	0	1	12	1	0	6	94
Employment Size								
Under 50	79	0	Q	2	*	0	0	76
50-99	18	0	*	3	*	0	0	14
100-249	10	0	1	6	*	0	*	3
250-499	7	0	*	*	0	0	6	1
500-999	Q	0	0	Q	0	0	0	*
1000 and Over	*	0	0	*	0	0	0	*
Total	115	0	1	12	1	0	6	94

(a) Value of Shipments and Receipts and Employment Size categories were supplied by the Bureau of the Census.

(b) 'Distillate Fuel Oil' includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.

(c) 'Natural Gas' includes natural gas obtained from utilities, local distribution companies, and any other supplier(s), such as independent gas producers, gas brokers, marketers, and any marketing subsidiaries of utilities.

(d) Hydrocarbon Gas Liquids '(HGL)' include ethane, ethylene, propane, propylene, normal butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw Natural Gas Liquids (NGL).

(e) 'Other' includes net steam (the sum of purchases, generation from renewables, and net transfers), and other energy that respondents indicated was used to produce heat and power or as feedstock/raw material inputs. See also Footnote 'f'.

(f) Previously, the Manufacturing Energy Consumption Survey (MECS) had accounted for energy consumed in petroleum refineries by measuring their own fuel use, assuming shipments of fuel products would later be counted in the industries that use them, and assigning the heat equivalent of the nonfuel products to the petroleum refinery (for a more detailed explanation see, "Feedstock and Offsite-Produced Fuel at Petroleum Refineries"). Starting with the 2014 MECS, however, EIA began collecting asphalt and petrochemical feedstock data from establishments that use those nonfuel products. These data are included in the 'Other' column. However, other 'Miscellaneous Nonfuel Products' (i.e. lubricants, solvents, waxes, and special naphthas) from refineries, and used elsewhere throughout the manufacturing sector as energy are not collected on the MECS. An estimate of the 'Miscellaneous Nonfuel Products' used in manufacturing was derived using EIA's "U.S. Product Supplied for Crude Oil and Petroleum Products" data. The Miscellaneous Nonfuel Products are shown as a separate row, 'Not Ascertained,' under the 'Subtotal' for the 'Total United States' and this row is not allocated regionally. Therefore, the sum of the regional totals will equal the United States subtotal in the previous method. Similarly, the quantities in 'Other' for Chemicals (NAICS 325 and certain subindustries) and the asphalt industries (NAICS 324122) are now larger than they would otherwise be under the previous method. The 2014 "Feedstock and Offsite-Produced Fuel at Petroleum Refineries" data may be found on EIA's website:

https://www.eia.gov/dnav/pet/pet cons psup dc nus mbbl a.htm

* Estimate less than 0.5.

W=Withheld to avoid disclosing data for individual establishments.

Q=Withheld because Relative Standard Error is greater than 50 percent.

NA=Not available.

Notes: Totals may not equal sum of components because of independent rounding. The derived estimates presented in this table are for the first use (formerly primary consumption) of energy for heat and power and as feedstocks or raw material inputs. First use is defined as the consumption of the energy that was originally produced offsite or was produced onsite from input materials not classified as energy. Examples of the latter are hydrogen produced from the electrolysis of brine; the output of captive (onsite) mines or wells; woodchips, bark, and woodwaste from wood purchased as a raw material input; and waste materials, such as wastepaper and packing materials. First use excludes quantities of energy that are produced from other energy inputs and, therefore, avoids double counting.

Sources: Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, '2014 Manufacturing Energy Consumption Survey,' and the Bureau of the Census, data files for the '2014 Annual Survey of Manufactures.'

RSE Table 2.3 Relative Standard Errors for Table 2.3;

Unit: Percents.

Economic Characteristic(a)	Total	Residual Fuel Oil	Distillate Fuel Oil(b)	Natural Gas(c)	HGL (excluding natural gasoline)(d)	Coal	Coke and Breeze	Other(e)
	Total	ruer on		605(0)		cour	Diccic	o ther (e)
Total United S	States							
Value of Shipments and Receipts								
(million dollars)								
Under 20	5.3	51.0	55.3	8.2	79.0	73.8	Х	6.0
20-49	9.2	0.0	29.3	32.4	68.6	0.0	39.4	5.8
50-99	0.9	0.0	6.1	5.6	0.2	4.0	0.0	1.7
100-249	2.2	0.0	4.5	2.1	24.2	0.0	0.0	3.4
250-499	0.6	Х	15.8	0.7	5.1	0.0	0.0	2.9
500 and Over	0.0	0.0	0.4	0.1	0.1	0.0	0.0	0.0
Subtotal	0.4	0.1	7.3	0.9	0.4	0.1	0.7	1.4
Not Ascertained(f)	0.0	Х	Х	Х	Х	Х	Х	0.0
Total	0.4	0.1	7.3	0.9	0.4	0.1	0.7	1.0
Employment Size								
Under 50	3.0	1.0	53.8	3.5	5.7	1.1	Х	4.2
50-99	2.8	0.0	14.5	8.1	9.2	0.2	39.7	3.8
100-249	0.4	0.0	10.5	1.0	0.2	0.0	0.0	2.3
250-499	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.0
500-999	0.2	0.0	0.1	1.8	0.0	0.0	Х	0.6
1000 and Over	0.0	Х	15.8	0.0	0.0	0.0	0.0	0.0
Subtotal	0.4	0.1	7.3	0.9	0.4	0.1	0.7	1.4
Not Ascertained(f)	0.0	Х	X	Х	X	Х	Х	0.0
Total	0.4	0.1	7.3	0.9	0.4	0.1	0.7	1.0

Northeast Census Region

Value of Shipments and Receipts

(million dollars)								
Under 20	8.3	Х	0.0	51.5	52.2	Х	Х	8.4
20-49	11.3	Х	52.6	32.7	6.1	0.1	0.0	12.8
50-99	0.2	Х	0.0	16.3	66.3	0.1	0.0	0.0
100-249	17.6	Х	0.0	2.4	0.0	57.4	0.0	23.8
250-499	15.0	Х	Х	0.0	96.4	45.2	Х	0.0
500 and Over	0.0	Х	0.0	0.0	0.0	0.1	0.0	0.0
Total	1.9	Х	5.4	21.5	1.0	0.0	0.0	5.8
Employment Size								
Employment Size								
Under 50	6.3	Х	11.5	26.8	43.8	Х	х	6.4
Under 50 50-99	6.3 25.3	X X	11.5 0.0	26.8 71.2	35.0	0.0	X 0.0	
Under 50	6.3 25.3	X X	11.5 0.0	26.8 71.2		X 0.0 0.2	X 0.0 0.0	
Under 50 50-99	6.3 25.3	X X	11.5 0.0	26.8 71.2	35.0	0.0	0.0	29.0
Under 50 50-99 100-249	6.3 25.3 2.1	X X	11.5 0.0 0.0	26.8 71.2	35.0 0.0	0.0	0.0	29.0 14.9
Under 50 50-99 100-249 250-499	6.3 25.3 2.1 65.5	X X	11.5 0.0 0.0 0.0	26.8 71.2	35.0 0.0	0.0 0.2 0.1	0.0	29.0 14.9 3.0

Midwest Census Region

(million dollars)								
Under 20	8.5	51.3	81.6	46.0	59.4	43.0	Х	7.8
20-49	29.1	Х	Х	52.1	70.4	Х	39.7	11.9
50-99	0.7	0.0	9.1	11.3	0.0	Х	0.0	0.1
100-249	0.3	Х	0.0	0.3	0.0	0.0	Х	1.1
250-499	0.9	Х	0.0	5.1	0.0	0.0	0.0	4.9
500 and Over	0.1	Х	6.3	0.9	0.0	0.0	Х	0.0
Total	1.7	1.1	17.1	5.3	5.5	0.0	0.8	3.0
Employment Size								
Under 50	8.4	1.0	81.9	32.7	70.3	0.0	Х	5.2
50-99	4.2	99.0	0.0	8.9	0.0	0.0	39.7	8.8
100-249	0.6	х	8.6	3.9	0.0	0.0	0.0	0.1
250-499	0.1	Х	0.9	6.6	0.0	0.0	0.0	1.1
500-999	11.1	х	Х	34.3	78.0	0.0	Х	20.6
1000 and Over	0.0	Х	31.8	0.1	0.3	0.0	0.0	0.1
Total	1.7	1.1	17.1	5.3	5.5	0.0	0.8	3.0

South Census Region

Value of Shipments and Receipts

9.5	89.5	78.2	0.3	94.4	75.1	Х	11.8
7.3	0.0	32.7	16.7	54.2	26.1	Х	7.5
1.5	0.0	9.7	7.4	0.1	6.9	Х	3.0
3.6	0.0	84.4	3.8	37.3	0.0	Х	3.8
0.7	Х	2.0	0.4	6.5	0.0	0.0	3.9
0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
0.4	0.0	3.5	0.4	0.3	0.4	0.1	1.5
3.7	89.5	12.3	0.2	1.1	75.1	Х	8.4
3.7	0.0	16.3	26.9	10.3	0.3	Х	1.7
0.4	0.0	94.1	0.9	0.3	0.1	х	2.8
0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
0.1	0.0	0.1	0.8	0.1	0.1	Х	0.6
0.0	Х	0.0	0.0	0.0	0.0	Х	0.0
0.4	0.0	3.5	0.4	0.3	0.4	0.1	1.5
	7.3 1.5 3.6 0.7 0.0 0.4 3.7 3.7 3.7 0.4 0.0 0.1 0.0 0.1 0.0 0.4	9.5 89.5 7.3 0.0 1.5 0.0 3.6 0.0 0.0 0.7 0.0 0.0 0.4 0.0 3.7 89.5 3.7 0.0 0.4 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0 X 0.0 0.0	9.5 89.5 78.2 7.3 0.0 32.7 1.5 0.0 9.7 3.6 0.0 84.4 0.7 X 2.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.0 3.5 3.7 89.5 12.3 3.7 0.0 16.3 0.4 0.0 94.1 0.0 0.0 0.0 0.1 0.0 0.1 0.0 X 0.0 0.1 0.0 3.5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

West Census Region

Value of Shipments and Receipts

(million dollars)								
Under 20	13.2	х	92.9	16.8	95.7	Х	Х	13.5
20-49	12.7	Х	43.8	23.3	67.8	Х	Х	13.8
50-99	0.8	х	0.0	0.2	50.2	Х	Х	0.0
100-249	4.6	х	0.0	11.2	0.0	Х	0.0	0.0
250-499	1.4	Х	22.2	60.7	Х	Х	0.0	0.0
500 and Over	3.7	Х	Х	0.0	Х	Х	Х	38.0
Total	6.0	Х	42.7	7.8	37.1	Х	0.0	7.2
Employment Size Under 50	8.7	X	86.0	1.9	4.7	Х	X	9.0
		Х			4.7	X	Х	
50-99	1.5	Х	0.0	3.8	98.7	Х	Х	0.0
100-249	8.0	Х	17.7	11.4	47.3	Х	0.0	0.0
250-499	0.3	Х	0.0	0.0	Х	Х	0.0	2.1
500-999	92.7	Х	Х	93.4	Х	Х	Х	0.1
1000 and Over	3.1	х	Х	0.0	Х	Х	Х	12.6
Total	6.0	Х	42.7	7.8	37.1	Х	0.0	7.2

(a) Value of Shipments and Receipts and Employment Size categories were supplied by the Bureau of the Census.

(b) 'Distillate Fuel Oil' includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.

(c) 'Natural Gas' includes natural gas obtained from utilities, local distribution companies, and any other supplier(s), such as independent gas producers, gas brokers, marketers, and any marketing subsidiaries of utilities.

(d) Hydrocarbon Gas Liquids '(HGL)' include ethane, ethylene, propane, propylene, normal butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw Natural Gas Liquids (NGL).

(e) 'Other' includes net steam (the sum of purchases, generation from renewables, and net transfers), and other energy that respondents indicated was used to produce heat and power or as feedstock/raw material inputs. See also Footnote 'f'.

(f) Previously, the Manufacturing Energy Consumption Survey (MECS) had accounted for energy consumed in petroleum refineries by measuring their own fuel use, assuming shipments of fuel products would later be counted in the industries that use them, and assigning the heat equivalent of the nonfuel products to the petroleum refinery (for a more detailed explanation see, "Feedstock and Offsite-Produced Fuel at Petroleum Refineries"). Starting with the 2014 MECS, however, EIA began collecting asphalt and petrochemical feedstock data from establishments that use those nonfuel products. These data are included in the 'Other' column. However, other 'Miscellaneous Nonfuel Products' (i.e. lubricants, solvents, waxes, and special naphthas) from refineries, and used elsewhere throughout the manufacturing sector as energy are not collected on the MECS. An estimate of the 'Miscellaneous Nonfuel Products' used in manufacturing was derived using EIA's "U.S. Product Supplied for Crude Oil and Petroleum Products" data. The Miscellaneous Nonfuel Products are shown as a separate row, 'Not Ascertained,' under the 'Subtotal' for the 'Total United States' and this row is not allocated regionally. Therefore, the sum of the regional totals will equal the United States subtotal in the previous row. Because of the changes made to the 2014 MECS, the quantity in 'Other' for the petroleum refineries in Tables 1 and 2 is now less than it would otherwise be using the previous method. Similarly, the quantities in 'Other' for Chemicals (NAICS 325 and certain subindustries) and the asphalt industries (NAICS 324121 and 324122) are now larger than they would otherwise be under the previous method. The 2014 "Feedstock and Offsite-Produced Fuel at Petroleum Refineries" data may be found on EIA's website:

https://www.eia.gov/dnav/pet/pet cons psup dc nus mbbl a.htm

* Estimate less than 0.5.

W=Withheld to avoid disclosing data for individual establishments.

Q=Withheld because Relative Standard Error is greater than 50 percent.

NA=Not available.

X=Not defined because RSE corresponds to a value of zero.

-- Estimation is not applicable. Energy source is not included in series.

Notes: Totals may not equal sum of components because of independent rounding. The derived estimates presented in this table are for the first use (formerly primary consumption) of energy for heat and power and as feedstocks or raw material inputs. First use is defined as the consumption of the energy that was originally produced offsite or was produced onsite from input materials not classified as energy. Examples of the latter are hydrogen produced from the electrolysis of brine; the output of captive (onsite) mines or wells; woodchips, bark, and woodwaste from wood purchased as a raw material input; and waste materials, such as wastepaper and packing materials. First use excludes quantities of energy that are produced from other energy inputs and, therefore, avoids double counting.

Sources: Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, '2014 Manufacturing Energy Consumption Survey,' and the Bureau of the Census, data files for the '2014 Annual Survey of Manufactures.'