

Released: May 2021  
 Next MECS will be fielded in 2023.

**Table 3.3 Fuel Consumption, 2018;**

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

Economic Characteristic(a)	Total	Net Electricity(b)	Residual Fuel Oil	Distillate Fuel Oil(c)	Natural Gas(d)	HGL (excluding natural gasoline)(e)	Coal	Coke and Breeze	Other(f)	
<b>Total United States</b>										
<b>Value of Shipments and Receipts</b>										
<b>(million dollars)</b>										
Under 20	971	321	1	35	461	15	30	3	105	
20-49	815	268	1	7	366	10	42	7	114	
50-99	1,298	400	*	11	602	6	80	4	196	
100-249	2,124	509	2	11	1,108	8	66	37	384	
250-499	1,776	342	5	5	755	2	55	2	609	
500 and Over	7,876	751	9	19	3,071	22	159	284	3,562	
<b>Total</b>	<b>14,859</b>	<b>2,591</b>	<b>17</b>	<b>86</b>	<b>6,362</b>	<b>64</b>	<b>432</b>	<b>337</b>	<b>4,970</b>	
<b>Employment Size</b>										
Under 50	1,263	316	1	31	738	15	21	2	138	
50-99	1,107	276	*	11	632	8	47	5	128	
100-249	2,534	642	1	15	1,164	12	128	23	549	
250-499	3,290	576	6	11	1,248	13	119	3	1,314	
500-999	3,586	460	6	9	1,291	9	59	8	1,743	
1000 and Over	3,080	320	2	9	1,290	5	59	297	1,097	
<b>Total</b>	<b>14,859</b>	<b>2,591</b>	<b>17</b>	<b>86</b>	<b>6,362</b>	<b>64</b>	<b>432</b>	<b>337</b>	<b>4,970</b>	
<b>Northeast Census Region</b>										
<b>Value of Shipments and Receipts</b>										
<b>(million dollars)</b>										
Under 20	175	46	*	10	79	4	1	*	36	
20-49	94	38	*	1	45	2	1	*	6	
50-99	152	54	*	Q	82	1	2	0	12	
100-249	169	44	*	*	91	1	1	1	29	
250-499	116	22	2	*	53	*	7	*	31	
500 and Over	423	46	1	1	139	1	7	30	199	
<b>Total</b>	<b>1,130</b>	<b>250</b>	<b>4</b>	<b>15</b>	<b>490</b>	<b>9</b>	<b>19</b>	<b>31</b>	<b>313</b>	
<b>Employment Size</b>										
Under 50	132	39	*	6	70	3	2	0	11	
50-99	111	34	*	Q	53	2	0	*	16	
100-249	232	78	*	Q	116	2	2	1	30	
250-499	161	36	*	1	84	1	1	*	37	
500-999	229	31	3	1	68	*	9	0	118	
1000 and Over	265	32	*	1	97	1	5	30	100	
<b>Total</b>	<b>1,130</b>	<b>250</b>	<b>4</b>	<b>15</b>	<b>490</b>	<b>9</b>	<b>19</b>	<b>31</b>	<b>313</b>	
<b>Midwest Census Region</b>										
<b>Value of Shipments and Receipts</b>										
<b>(million dollars)</b>										
Under 20	336	117	*	10	168	4	9	1	28	
20-49	260	89	0	1	134	2	16	1	15	
50-99	376	130	*	3	201	2	23	1	16	
100-249	810	170	*	2	493	2	29	34	80	
250-499	384	96	*	1	200	1	16	2	68	
500 and Over	1,742	233	*	5	627	7	89	253	529	
<b>Total</b>	<b>3,907</b>	<b>834</b>	<b>1</b>	<b>21</b>	<b>1,823</b>	<b>18</b>	<b>182</b>	<b>293</b>	<b>736</b>	
<b>Employment Size</b>										
Under 50	496	110	*	9	323	3	16	1	34	
50-99	479	112	*	1	324	3	17	1	20	
100-249	607	169	*	1	300	2	35	15	82	
250-499	686	184	*	3	298	3	83	2	113	
500-999	618	144	*	3	212	4	5	6	243	
1000 and Over	1,022	114	*	3	367	2	26	266	243	

Total	3,907	834	1	21	1,823	18	182	293	736
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### South Census Region

#### Value of Shipments and Receipts

(million dollars)

Under 20	321	106	*	10	164	5	3	0	34
20-49	362	110	*	2	143	3	16	5	82
50-99	554	139	*	3	246	2	31	3	131
100-249	891	232	*	4	418	4	16	2	215
250-499	1,077	160	2	3	409	1	24	*	478
500 and Over	4,691	396	6	9	1,978	5	52	2	2,243
Total	7,897	1,143	8	32	3,358	20	141	11	3,183

#### Employment Size

Under 50	486	115	*	10	276	5	1	0	78
50-99	424	104	0	3	211	2	18	4	83
100-249	1,295	285	*	6	622	4	43	4	331
250-499	1,769	272	3	5	626	3	18	1	841
500-999	2,279	229	3	4	847	4	33	1	1,157
1000 and Over	1,645	138	2	4	777	1	28	1	692
Total	7,897	1,143	8	32	3,358	20	141	11	3,183

### West Census Region

#### Value of Shipments and Receipts

(million dollars)

Under 20	138	52	*	6	50	4	Q	Q	6
20-49	99	32	*	2	44	2	8	*	10
50-99	216	78	0	2	73	1	25	*	37
100-249	255	63	1	5	105	1	19	*	60
250-499	198	65	*	1	92	*	8	*	32
500 and Over	1,020	76	2	3	326	9	12	0	591
Total	1,925	365	4	18	691	17	90	3	737

#### Employment Size

Under 50	149	52	1	7	68	4	2	*	15
50-99	93	26	0	2	44	Q	12	*	8
100-249	401	111	*	5	126	3	48	Q	106
250-499	674	84	3	2	240	7	16	0	322
500-999	460	56	0	2	164	1	12	*	224
1000 and Over	148	36	0	*	49	1	0	0	61
Total	1,925	365	4	18	691	17	90	3	737

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

(b) *Net Electricity* is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It does not include electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal).

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

(d) *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.

(e) *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).

(f) *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.

\* Estimate less than 0.5.

D=Withheld to avoid disclosing data for individual establishments.

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

NA=Not available.

Notes: Totals may not equal sum of components because of independent rounding. The estimates presented in this table are for the total consumption of energy (formerly total inputs of energy) for the production of heat, power, and electricity generation, regardless of where the energy was produced. Specifically, the estimates include the quantities of energy that were originally produced offsite and purchased by or transferred to the establishment, plus those that were produced onsite from other energy or input materials not classified as energy, or were extracted from captive (onsite) mines or wells. During manufacturing processes, it is possible that the thermal energy content of an energy input is not completely consumed for the production of heat, power, or electricity generation. Hence, residuals of that input may remain. Those residual leftovers may be subsequently consumed for fuel purposes, whether onsite or offsite at another manufacturing establishment (for example, blast furnace gas as a byproduct recovered from coke and other inputs that were not completely consumed). In such cases, double counting of inputs cannot be avoided, and the *Fuel Consumption* estimates will be inflated.

Sources: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, *2018 Manufacturing Energy Consumption Survey*, and the Bureau of the Census, data files for the *2018 Annual Survey of Manufactures*.

The Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied (Approval ID: CBDRB-FY20-260).

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**RSE Table 3.3 Relative Standard Errors for Table 3.3;**  
 Unit: Percents.

Economic Characteristic(a)	Total	Net Electricity(b)	Residual Fuel Oil	Distillate Fuel Oil(c)	Natural Gas(d)	HGL (excluding natural gasoline)(e)	Coal	Coke and Breeze	Other(f)
<b>Total United States</b>									
<b>Value of Shipments and Receipts (million dollars)</b>									
Under 20	5.2	6.3	31.9	17.7	7.1	9.3	47.5	42.5	14.5
20-49	6.1	4.9	1.9	12.0	6.6	17.1	0.5	6.9	27.2
50-99	4.2	9.3	47.7	19.4	4.0	12.4	0.2	6.5	2.7
100-249	2.1	3.2	11.8	15.5	2.8	7.5	0.8	0.0	1.9
250-499	2.2	3.8	1.2	5.4	2.8	9.8	0.0	0.0	2.9
500 and Over	0.3	1.1	2.1	3.3	0.4	2.7	0.0	0.1	0.2
Total	0.7	1.8	2.5	7.9	0.9	3.9	3.3	0.4	0.8
<b>Employment Size</b>									
Under 50	4.9	5.1	23.5	15.7	5.2	10.4	1.0	24.3	23.6
50-99	2.8	5.9	0.0	36.6	3.0	17.4	0.4	10.9	7.2
100-249	2.7	6.0	24.5	14.8	2.8	8.1	11.1	5.0	3.8
250-499	1.2	2.8	0.1	10.4	2.0	6.0	0.4	0.0	0.2
500-999	0.6	2.3	0.9	1.0	1.0	3.5	0.4	0.0	0.1
1000 and Over	0.6	2.4	8.1	6.3	0.8	5.6	0.0	0.1	0.5
Total	0.7	1.8	2.5	7.9	0.9	3.9	3.3	0.4	0.8
<b>Northeast Census Region</b>									
<b>Value of Shipments and Receipts (million dollars)</b>									
Under 20	9.6	8.2	7.8	41.7	17.1	8.3	12.4	51.6	12.7
20-49	9.4	13.4	0.0	12.7	10.9	27.0	0.0	0.0	13.0
50-99	12.9	18.6	0.0	73.7	14.3	30.6	0.0	X	0.4
100-249	5.6	11.2	1.7	34.0	6.5	25.9	0.0	0.0	0.1
250-499	2.8	7.1	0.0	6.5	2.7	12.7	0.0	0.0	3.5
500 and Over	1.2	4.6	21.0	5.6	2.5	23.0	0.0	0.0	0.1
Total	2.6	5.2	5.3	28.8	4.0	8.6	0.3	0.1	1.5
<b>Employment Size</b>									
Under 50	10.7	6.5	5.6	16.3	17.1	12.5	3.8	X	40.4
50-99	7.0	12.0	0.0	80.0	6.2	12.6	X	8.1	0.5
100-249	9.9	14.4	0.0	63.8	12.4	25.8	0.0	0.0	0.2
250-499	4.5	10.1	0.0	30.1	4.4	4.8	0.0	0.0	3.6
500-999	1.9	8.6	0.2	3.9	3.0	5.5	0.0	X	0.1
1000 and Over	1.6	5.1	52.1	8.4	3.2	28.8	0.0	0.0	0.1
Total	2.6	5.2	5.3	28.8	4.0	8.6	0.3	0.1	1.5
<b>Midwest Census Region</b>									
<b>Value of Shipments and Receipts (million dollars)</b>									
Under 20	11.2	11.7	63.4	41.5	16.8	13.3	1.6	31.1	39.9
20-49	8.7	8.9 X		14.3	13.4	32.7	0.0	2.6	3.6
50-99	5.3	7.3	0.0	26.4	6.6	28.6	0.0	0.0	2.7
100-249	3.0	5.1	66.9	30.0	3.5	13.7	1.7	0.0	1.0
250-499	4.1	6.0	6.7	2.2	3.2	22.3	0.0	0.0	13.2
500 and Over	0.7	2.5	0.1	4.4	1.2	8.0	0.0	0.1	0.1
Total	1.4	2.5	29.3	20.0	2.2	7.0	0.3	0.1	2.0
<b>Employment Size</b>									
Under 50	8.1	11.8	52.0	42.5	9.8	15.7	0.1	32.9	33.2
50-99	3.8	6.7	0.0	15.8	4.0	26.9	0.8	0.0	1.6
100-249	4.1	6.4	75.1	17.8	5.0	24.6	0.0	0.2	10.6
250-499	2.8	4.3	0.0	36.7	4.2	18.0	0.6	0.0	0.7
500-999	2.5	4.8	0.0	0.8	4.5	5.1	0.0	0.0	0.1
1000 and Over	1.0	4.6	0.1	3.0	1.5	6.8	0.0	0.1	0.9
Total	1.4	2.5	29.3	20.0	2.2	7.0	0.3	0.1	2.0
<b>South Census Region</b>									
<b>Value of Shipments and Receipts (million dollars)</b>									
Under 20	6.1	13.3	20.3	19.3	5.1	12.1	2.9	X	25.8
20-49	12.0	8.3	88.0	9.9	10.4	28.4	0.8	9.8	37.6
50-99	4.0	5.8	91.2	11.0	6.1	13.9	0.6	10.4	4.1
100-249	3.8	5.4	0.0	12.2	6.1	11.6	1.4	0.0	3.1
250-499	1.8	3.0	2.3	2.6	1.9	15.2	0.0	0.0	3.2
500 and Over	0.3	1.4	0.1	5.9	0.4	2.0	0.0	0.0	0.2
Total	0.8	2.0	1.0	6.6	1.0	6.3	0.2	5.2	1.2
<b>Employment Size</b>									
Under 50	9.1	8.0	20.0	20.1	6.5	16.9	9.8	X	38.5
50-99	5.5	13.1	X	5.9	6.3	18.5	0.7	14.0	11.0
100-249	2.8	4.1	34.8	7.6	3.8	11.1	0.4	6.3	5.6
250-499	1.0	3.1	0.1	8.4	1.7	19.9	0.5	0.0	0.3
500-999	0.6	3.1	1.6	2.2	0.8	5.6	0.7	0.0	0.1
1000 and Over	0.8	4.0	0.1	12.5	1.0	13.6	0.0	0.0	0.8
Total	0.8	2.0	1.0	6.6	1.0	6.3	0.2	5.2	1.2

**West Census Region**

**Value of Shipments and Receipts**

(million dollars)

Under 20	16.9	7.1	58.9	33.1	11.3	32.5	79.2	78.9	35.7
20-49	6.9	9.2	0.0	35.2	9.1	46.0	2.3	9.3	17.0
50-99	18.9	43.4	X	14.4	10.3	11.2	0.0	0.0	0.1
100-249	4.1	7.0	0.0	31.4	5.3	13.3	0.0	0.0	5.2
250-499	14.9	16.2	0.0	42.9	20.4	16.2	0.0	0.0	0.6
500 and Over	0.3	1.5	0.0	5.6	0.5	0.3	0.0	X	0.1
Total	2.9	9.8	7.0	14.0	3.2	9.6	15.8	42.9	0.6

**Employment Size**

Under 50	6.4	6.1	38.4	30.2	8.8	30.4	7.7	10.2	13.1
50-99	6.3	10.9	X	49.9	6.7	60.3	0.0	0.0	1.9
100-249	11.7	30.4	0.0	22.0	6.9	5.5	29.8	52.5	3.6
250-499	4.4	13.1	0.0	15.1	7.9	1.3	0.0	X	0.1
500-999	1.2	3.3	X	0.7	2.3	15.2	0.0	0.0	0.1
1000 and Over	1.5	2.8	X	0.3	2.6	0.1	X	X	0.0
Total	2.9	9.8	7.0	14.0	3.2	9.6	15.8	42.9	0.6

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

(b) *Net Electricity* is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It does not include electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal).

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

(d) *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.

(e) 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).

(f) *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.

\* Estimate less than 0.5.

D=Withheld to avoid disclosing data for individual establishments.

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

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

NA=Not available.

Notes: Totals may not equal sum of components because of independent rounding. The estimates presented in this table are for the total consumption of energy (formerly total inputs of energy) for the production of heat, power, and electricity generation, regardless of where the energy was produced. Specifically, the estimates include the quantities of energy that were originally produced offsite and purchased by or transferred to the establishment, plus those that were produced onsite from other energy or input materials not classified as energy, or were extracted from captive (onsite) mines or wells. During manufacturing processes, it is possible that the thermal energy content of an energy input is not completely consumed for the production of heat, power, or electricity generation. Hence, residuals of that input may remain. Those residual leftovers may be subsequently consumed for fuel purposes, whether onsite or offsite at another manufacturing establishment (for example, blast furnace gas as a byproduct recovered from coke and other inputs that were not completely consumed). In such cases, double counting of inputs cannot be avoided, and the *Fuel Consumption* estimates will be inflated.

Sources: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, *2018 Manufacturing Energy Consumption Survey*, and the Bureau of the Census, data files for the *2018 Annual Survey of Manufactures*.

The Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied (Approval ID: CBDRB-FY20-260).