

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

Table 4.3 Offsite-Produced 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	Electricity(b)	Residual Fuel Oil	Distillate Fuel Oil(c)	Natural Gas(d)	HGL (excluding natural gasoline)(e)	Coal	Coke and Breeze	Other(f)
Total United States									
Value of Shipments and Receipts (million dollars)									
Under 20	908	325	1	35	460	15	30	3	38
20-49	758	268	*	7	366	10	42	7	57
50-99	1,200	403	*	11	602	6	80	4	95
100-249	1,893	517	2	11	1,107	8	66	37	146
250-499	1,375	351	5	5	747	2	55	2	208
500 and Over	5,008	815	7	15	3,029	10	159	208	765
Total	11,142	2,680	14	82	6,312	52	432	262	1,308
Employment Size									
Under 50	1,188	322	1	31	738	15	21	2	58
50-99	1,052	279	*	11	632	8	47	5	72
100-249	D	650	1	14	D	11	128	23	295
250-499	2,241	595	4	10	1,247	8	119	3	255
500-999	D	470	6	8	D	5	59	8	388
1000 and Over	2,191	364	2	8	1,290	3	59	222	241
Total	11,142	2,680	14	82	6,312	52	432	262	1,308
Northeast Census Region									
Value of Shipments and Receipts (million dollars)									
Under 20	148	46	*	9	79	4	1	*	9
20-49	90	38	*	1	45	2	1	*	3
50-99	149	54	*	Q	82	1	2	0	8
100-249	151	46	*	*	91	1	1	1	9
250-499	D	25	2	*	D	*	7	*	9
500 and Over	D	46	1	1	D	1	7	0	29
Total	859	255	4	15	489	9	19	1	67
Employment Size									
Under 50	129	39	*	5	70	3	2	0	9
50-99	97	34	*	Q	53	2	0	*	2
100-249	214	78	*	Q	116	2	2	1	12
250-499	136	40	*	1	84	1	1	*	9
500-999	142	32	3	*	68	*	9	0	29
1000 and Over	141	32	*	1	97	1	5	0	5
Total	859	255	4	15	489	9	19	1	67
Midwest Census Region									
Value of Shipments and Receipts (million dollars)									
Under 20	321	117	*	10	168	4	9	1	13
20-49	257	89	0	1	134	2	16	1	13
50-99	372	130	*	3	201	2	23	1	13
100-249	775	171	*	2	493	2	29	34	44
250-499	D	96	*	1	D	1	16	2	31
500 and Over	D	235	*	5	D	3	89	207	85
Total	3,322	836	*	20	1,823	14	182	247	200
Employment Size									
Under 50	481	110	*	9	323	3	16	1	19
50-99	477	114	*	1	324	3	17	1	17
100-249	589	169	*	1	300	2	35	15	65
250-499	604	184	*	3	298	3	83	2	31
500-999	406	144	*	2	212	1	5	6	34
1000 and Over	765	114	*	3	367	1	26	220	33
Total	3,322	836	*	20	1,823	14	182	247	200
South Census Region									

Value of Shipments and Receipts

(million dollars)									
Under 20	302	111	*	10	164	5	3	0	10
20-49	313	110	*	2	143	3	16	5	33
50-99	475	141	*	3	246	2	31	3	49
100-249	746	234	*	4	418	4	16	2	68
250-499	763	164	2	3	409	1	24	*	159
500 and Over	D	449	4	8	D	4	52	2	580
Total	D	1,210	7	30	D	18	141	11	899

Employment Size

Under 50	429	122	*	10	276	5	1	0	15
50-99	388	105	0	2	211	2	18	4	47
100-249	D	289	*	6	D	4	43	4	176
250-499	1,106	278	1	5	626	3	18	1	174
500-999	D	235	3	4	D	3	33	1	301
1000 and Over	1,180	181	2	4	777	1	28	1	186
Total	D	1,210	7	30	D	18	141	11	899

West Census Region

Value of Shipments and Receipts

(million dollars)									
Under 20	137	51	*	6	50	4	Q	Q	6
20-49	97	32	*	2	44	2	8	*	8
50-99	204	79	0	2	73	1	25	*	25
100-249	221	66	1	5	105	1	19	*	24
250-499	D	66	*	1	D	*	8	*	8
500 and Over	D	85	2	2	D	3	12	0	71
Total	D	379	4	17	D	11	90	3	143

Employment Size

Under 50	148	51	1	7	68	4	2	*	14
50-99	91	26	0	2	44	Q	12	*	6
100-249	D	114	*	4	D	2	48	Q	42
250-499	396	93	3	2	240	2	16	0	40
500-999	260	58	0	2	164	1	12	*	23
1000 and Over	105	37	0	*	49	*	0	0	17
Total	D	379	4	17	D	11	90	3	143

- (a) *Value of Shipments and Receipts* and *Employment Size* categories were supplied by the Bureau of the Census.
 - (b) *Electricity* consists of quantities of electricity that were purchased or transferred in, and is equivalent to *purchased electricity* as defined in the *Annual Survey of Manufactures*.
 - (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 all other energy that was purchased or transferred in and not shown elsewhere.
- * 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 derived estimates presented in this table represent the consumption of energy originally produced offsite, acquired as a result of a purchase or transfer and consumed onsite for the production of heat and power. This definition is consistent with the definition of *purchased* fuels and electric energy used by the Bureau of the Census in the preparation of *Fuels and Electric Energy Consumed*, of the *Annual Survey of Manufactures*.

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 4.3 Relative Standard Errors for Table 4.3;

Unit: Percents.

Economic Characteristic(a)	Total	Electricity(b)	Residual Fuel Oil	Distillate Fuel Oil(c)	Natural Gas(d)	HGL (excluding natural gasoline)(e)	Coal	Coke and Breeze	Other(f)
Total United States									
Value of Shipments and Receipts									
(million dollars)									
Under 20	5.4	6.2	31.9	17.8	7.1	9.3	47.5	42.5	15.2
20-49	4.3	4.9	2.1	12.0	6.6	17.1	0.5	6.9	5.9
50-99	4.5	9.2	47.7	19.4	4.0	12.4	0.2	6.5	5.4
100-249	2.3	3.2	0.2	15.5	2.8	7.5	0.8	0.0	4.9
250-499	2.8	3.7	1.2	5.4	2.9	9.8	0.0	0.0	8.5
500 and Over	0.4	1.0	2.8	4.2	0.4	6.0	0.0	0.1	0.7
Total	0.8	1.8	2.5	8.3	0.9	4.9	3.3	0.5	1.6
Employment Size									
Under 50	4.1	5.0	24.2	15.8	5.2	10.4	1.0	24.3	10.2
50-99	2.8	5.8	0.0	38.2	3.0	17.5	0.4	10.9	3.9
100-249	D	6.0	3.9	16.1	D	8.5	11.1	5.0	6.7
250-499	1.8	2.7	0.1	11.2	2.0	9.7	0.4	0.0	1.0
500-999	D	2.2	0.9	1.1	D	6.7	0.4	0.0	0.1
1000 and Over	0.8	2.1	8.1	6.9	0.8	8.8	0.0	0.1	2.2
Total	0.8	1.8	2.5	8.3	0.9	4.9	3.3	0.5	1.6
Northeast Census Region									
Value of Shipments and Receipts									
(million dollars)									
Under 20	11.4	8.2	7.8	41.9	17.1	8.3	12.4	51.6	49.7
20-49	9.7	13.4	0.0	12.7	10.9	27.0	0.0	0.0	8.0
50-99	13.2	18.6	0.0	73.7	14.3	30.6	0.0	X	0.6
100-249	6.3	10.8	1.7	34.0	6.5	25.9	0.0	0.0	0.2
250-499	D	6.3	0.0	6.5	D	12.7	0.0	0.0	11.2
500 and Over	D	4.5	21.0	6.0	D	27.2	0.0	X	0.1
Total	3.4	5.1	5.3	29.1	4.0	8.7	0.3	1.6	7.0
Employment Size									
Under 50	10.9	6.5	5.6	16.4	17.1	12.5	3.8	X	49.0
50-99	8.0	12.0	0.0	80.0	6.2	12.6	X	8.1	2.6
100-249	10.7	14.4	0.0	63.8	12.4	25.8	0.0	0.0	0.4
250-499	5.2	9.3	0.0	30.1	4.4	4.8	0.0	0.0	11.4
500-999	3.0	8.2	0.2	4.6	3.0	7.1	0.0	X	0.3
1000 and Over	3.1	5.0	52.1	8.4	3.2	28.8	0.0	X	0.4
Total	3.4	5.1	5.3	29.1	4.0	8.7	0.3	1.6	7.0
Midwest Census Region									
Value of Shipments and Receipts									
(million dollars)									
Under 20	11.2	11.7	63.4	41.5	16.8	13.3	1.6	31.1	18.3
20-49	8.7	8.9	X	14.3	13.4	32.7	0.0	2.6	1.7
50-99	5.3	7.3	0.0	26.4	6.6	28.6	0.0	0.0	1.5
100-249	3.1	5.1	0.6	30.1	3.5	13.7	1.7	0.0	1.8
250-499	D	6.0	6.7	2.2	D	22.3	0.0	0.0	27.8
500 and Over	D	2.5	0.1	4.8	D	19.5	0.0	0.1	0.6
Total	1.6	2.5	0.6	20.3	2.2	9.1	0.3	0.2	4.6
Employment Size									
Under 50	8.1	11.8	52.0	42.5	9.8	15.7	0.1	32.9	12.8
50-99	3.8	6.6	0.0	15.8	4.0	26.9	0.8	0.0	1.4
100-249	4.2	6.4	67.2	17.8	5.0	24.6	0.0	0.2	13.4
250-499	3.2	4.3	0.0	37.1	4.2	19.8	0.6	0.0	2.5
500-999	3.8	4.8	0.0	0.9	4.5	14.2	0.0	0.0	0.3
1000 and Over	1.2	4.6	0.1	3.0	1.5	12.6	0.0	0.1	1.6
Total	1.6	2.5	0.6	20.3	2.2	9.1	0.3	0.2	4.6
South Census Region									
Value of Shipments and Receipts									
(million dollars)									
Under 20	5.8	12.7	20.3	19.3	5.1	12.1	2.9	X	12.9
20-49	6.7	8.3	88.0	9.9	10.4	28.4	0.8	9.8	8.5

50-99	4.6	5.7	91.2	11.0	6.1	13.9	0.6	10.4	10.5
100-249	4.6	5.4	0.0	12.2	6.1	11.6	1.4	0.0	9.8
250-499	2.6	2.9	2.3	2.6	1.9	15.2	0.0	0.0	9.7
500 and Over	D	1.2	0.1	7.3	D	3.0	0.0	0.0	0.9
Total	D	1.9	1.2	7.0	D	6.8	0.2	5.2	2.1

Employment Size									
Under 50	5.6	7.6	20.0	20.1	6.5	16.9	9.8	X	13.8
50-99	5.6	12.9	X	7.0	6.3	18.5	0.7	14.0	6.0
100-249	D	4.1	34.8	7.6	D	11.1	0.4	6.3	9.8
250-499	1.6	3.0	0.1	9.3	1.7	21.7	0.5	0.0	1.2
500-999	D	3.0	1.6	2.3	D	8.4	0.7	0.0	0.1
1000 and Over	1.2	3.1	0.1	14.8	1.0	14.8	0.0	0.0	2.9
Total	D	1.9	1.2	7.0	D	6.8	0.2	5.2	2.1

West Census Region

Value of Shipments and Receipts (million dollars)									
Under 20	17.1	6.7	58.9	33.1	11.3	32.6	79.2	78.9	38.5
20-49	7.0	9.2	0.0	35.2	9.1	46.0	2.3	9.3	22.8
50-99	20.0	42.9	X	14.4	10.3	11.2	0.0	0.0	0.1
100-249	4.6	6.7	0.0	31.4	5.3	13.3	0.0	0.0	10.2
250-499	D	15.8	0.0	42.9	D	16.2	0.0	0.0	2.2
500 and Over	D	1.3	0.0	10.5	D	1.0	0.0	X	0.1
Total	D	9.4	7.6	15.4	D	15.0	15.8	42.9	2.7

Employment Size									
Under 50	6.3	5.6	40.3	30.3	8.8	30.4	7.7	10.2	14.0
50-99	6.5	10.9	X	49.9	6.7	60.6	0.0	0.0	1.3
100-249	D	29.7	0.0	29.0	D	7.1	29.8	52.5	7.8
250-499	7.5	11.8	0.0	17.3	7.9	4.0	0.0	X	0.2
500-999	2.1	3.2	X	0.8	2.3	26.1	0.0	0.0	0.4
1000 and Over	2.1	2.7	X	0.3	2.6	0.4	X	X	0.0
Total	D	9.4	7.6	15.4	D	15.0	15.8	42.9	2.7

- (a) *Value of Shipments and Receipts* and *Employment Size* categories were supplied by the Bureau of the Census.
- (b) *Electricity* consists of quantities of electricity that were purchased or transferred in, and is equivalent to *purchased electricity* as defined in the *Annual Survey of Manufactures*.
- (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 all other energy that was purchased or transferred in and not shown elsewhere.

* 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 derived estimates presented in this table represent the consumption of energy originally produced offsite, acquired as a result of a purchase or transfer and consumed onsite for the production of heat and power. This definition is consistent with the definition of *purchased* fuels and electric energy used by the Bureau of the Census in the preparation of *Fuels and Electric Energy Consumed*, of the *Annual Survey of Manufactures*.

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*.

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