

Released: September 2025
Next MECS will be fielded in 2027

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Table 2.3 Nonfuel (feedstock) use of combustible energy, 2022

Level: National and regional data

Row: Values of shipments and employment sizes

Column: Energy sources

Unit: Trillion British thermal units (Btu)

Economic characteristic ^a	Imports							Other ^e
	Total	Residual fuel oil	Distillate fuel oil ^b	Natural gas ^c	HGL (excluding natural gasoline) ^d	Coal	Coke and breeze	
Total United States								
Value of shipments and receipts (million dollars)								
Under 20	524	0	1	49	165	Q	0	308
20–49	427	0	*	88	*	7	*	331
50–99	212	6	*	46	66	7	0	86
100–249	281	16	1	D	10	D	*	192
250–499	445	0	2	D	74	D	0	120
500 and over	4,004	0	*	407	2,750	361	0	485
Subtotal	5,892	22	4	779	3,065	501	*	1,521
Not ascertained ^d	499	0	0	0	0	0	0	499
Total	6,391	22	4	779	3,065	501	*	2,020

Employment size								
Under 50	884	D	1	D	165	D	*	587
50–99	500	D	*	D	132	D		D
100–249	1,091	11	2	169	533	101	0	274
250–499	1,096	0		135	709	119		134
500–999	1,489	0	*	D	1,114	D	0	D
1,000 and over	833	0	*	107	411	204	0	111
Subtotal	5,892	22	4	779	3,065	501	*	1,521
Not ascertained ^d	499	0	0	0	0	0	0	499
Total	6,391	22	4	779	3,065	501	*	2,020

Northeast Census Region								
Value of shipments and receipts (million dollars)								
Under 20	95	0	*	Q	*	0	0	91
20-49	42	0	*	1	*	0	0	41
50-99	6	0	0	1	*	0	0	6
100-249	9	0	*	*	Q	*	0	7
250-499	2	0				*	0	2
500 and over	141	0	0	18	0	123	0	141
Total	296	0	*	24	Q	123	0	147

Employment size								
Under 50	135	0	D	D	*	0	0	130
50-99	8	0	0	D	0	0	0	D
100-249	10	0	D	*	Q	0	0	D
250-499	2	0	D	*	0	D	0	D
500-999	*	0	*	D	0	D	0	*
1,000 and over	141	0	0	18	*	123	0	*
Total	296	0	*	24	Q	123	0	147

Midwest Census Region									
Value of shipments and receipts (million dollars)									
	2017	2018	2019	2020	2021	2022	2023	2024	2025
Under 20	83	0	*	Q	*	*	0	81	
20–49	116	0	*	1	*	0	0	115	
50–99	46	3	*	6	*	1	0	37	
100–249	60	0	1	D	*	D	0	44	
250–499	181	0	*	D	4	D	0	40	
500 and over	524	0	*	63	123	222	0	116	
Total	1,010	3	1	127	127	320	0	433	

Employment size

Under 50	262	3	D	D	D	D	0	213
50–99	75	*	D	D	*	0	0	D
100–249	189	0	D	31	D	D	0	D
250–499	300	0	*	55	D	D	0	D
500–999	6	0	D	D	*	D	0	D
1,000 and over	178	0	*	11	*	D	0	D
Total	1,010	3	1	127	127	320	0	433

South Census Region

Value of shipments and receipts

(million dollars)

Under 20	315	0	*	42	164	Q	0	106
20–49	215	0	*	87	*	1	*	127
50–99	148	3	*	36	65	7	0	37
100–249	185	16	*	28	8	2	*	131
250–499	253	0	2	87	70	25	0	70
500 and over	3,337	0	*	325	2,627	16	0	368
Total	4,454	19	3	605	2,935	51	*	840

Employment size

Under 50	394	D	D	55	D	0	*	170
50–99	396	D	D	104	D	D	0	128
100–249	881	11	D	137	D	D	0	198
250–499	787	0	D	78	583	D	*	121
500–999	1,482	0	D	153	1,114	D	0	D
1,000 and over	513	0	*	78	411	D	0	D
Total	4,454	19	3	605	2,935	51	*	840

West Census Region

Value of shipments and receipts

(million dollars)

Under 20	30	0	*	1	*	*	0	29
20–49	54	0	*	*	*	6	0	47
50–99	11	0	*	4	1	0	0	6
100–249	27	0	*	16	0	0	0	10
250–499	8	0	*	1	*	0	0	7
500 and over	3	0	*	1	*	1	0	1
Total	133	0	*	23	1	7	0	101

Employment size

Under 50	93	0	D	19	D	*	0	73
50–99	21	0	*	1	D	D	0	D
100–249	11	0	D	2	D	0	0	D
250–499	7	0	D	2	D	D	0	D
500–999	*	0	*	0	*	0	0	*
1,000 and over	1	0	0	0	*	D	0	D
Total	133	0	*	23	1	7	0	101

Data source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, *2022 Manufacturing Energy Consumption Survey*, and the Bureau of the Census, data files for the *2022 Economic Census, Manufacturing – Industry Series*

Note: 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 feedstock 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; wood chips, bark, and wood waste 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.

^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 suppliers, such as independent gas producers, gas brokers, marketers, and any marketing subsidiaries of utilities.

^d Hydrocarbon gas liquids (HGLs) 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 (NGLs).

^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) 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* (that is, 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.

* 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%
NA=Not available

The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure protection of the confidential source data (Project No. 7504703, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0054).

RSE Table 2.3 Relative standard errors for Table 2.3

Unit: Percentage

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 United States								
Value of shipments and receipts								
(million dollars)								
Under 20	3.6	X	20.3	5.5	0.1	93.7	X	6.0
20–49	5.3	X	0.6	1.4	28.7	0.7	72.2	6.8
50–99	1.5	0.0	29.3	6.4	0.1	0.0	X	0.9
100–249	15.2	0.0	6.1	D	18.1	D	0.0	22.1
250–499	0.7	X	0.1	D	0.1	D	X	2.4
500 and over	1.4	X	0.6	0.3	0.1	0.0	X	11.2
Subtotal	1.3	0.0	4.4	0.7	0.1	0.3	64.2	4.9
Not ascertained ^l	0.0	X	X	X	X	X	X	0.0
Total	1.3	0.0	4.4	0.7	0.1	0.3	64.2	4.9
Employment size								
Under 50	3.2	D	15.8	D	0.1	D	72.2	4.9
50–99	0.7	D	1.1	D	0.1	D	X	D
100–249	4.1	0.0	2.5	1.6	0.3	0.1	X	16.3
250–499	0.3	X	0.5	0.8	0.1	0.0	0.0	2.4
500–999	0.3	X	12.5	D	0.1	D	X	D
1,000 and over	6.3	X	0.4	0.1	0.1	0.0	X	47.4
Subtotal	1.3	0.0	4.4	0.7	0.1	0.3	64.2	4.9
Not ascertained ^l	0.0	X	X	X	X	X	X	0.0
Total	1.3	0.0	4.4	0.7	0.1	0.3	64.2	4.9
Northeast Census Region								
Value of shipments and receipts								
(million dollars)								
Under 20	14.1	X	2.7	57.6	14.1	X	X	14.5
20–49	3.2	X	0.0	12.9	0.0	X	X	3.3
50–99	0.8	X	X	7.9	0.0	X	X	0.0
100–249	20.1	X	0.0	12.9	97.0	0.0	X	0.8
250–499	4.4	X	0.0	0.0	X	0.0	X	4.9
500 and over	0.1	X	X	0.0	0.0	0.0	X	0.1
Total	4.6	X	0.8	10.0	96.3	0.0	X	9.0
Employment size								
Under 50	10.0	X	D	D	96.5	X	X	10.1
50–99	1.4	X	X	D	X	X	X	D
100–249	18.7	X	D	30.8	97.1	X	X	D
250–499	1.0	X	D	44.0	X	D	X	D
500–999	18.7	X	0.0	D	X	D	X	69.9
1,000 and over	0.1	X	X	0.0	0.0	0.0	X	0.1
Total	4.6	X	0.8	10.0	96.3	0.0	X	9.0
Midwest Census Region								
Value of shipments and receipts								
(million dollars)								
Under 20	11.3	X	15.3	58.4	91.1	96.1	X	11.5
20–49	16.0	X	0.0	47.2	99.0	X	X	16.2
50–99	0.5	0.0	50.8	0.4	39.6	0.0	X	0.6
100–249	3.5	X	6.8	D	67.9	D	X	3.0
250–499	0.7	X	0.0	D	0.1	D	X	0.1
500 and over	10.0	X	0.0	0.1	0.1	0.0	X	45.3
Total	5.6	0.0	7.1	1.9	0.1	0.1	X	13.0

Employment size									
Under 50	7.7	0.0	D	D	D	D	X	9.5	
50–99	0.5	0.0	D	D	83.8	X	X	D	
100–249	1.1	X	D	5.3	D	D	X	D	
250–499	0.1	X	0.0	0.0	D	D	X	D	
500–999	20.2	X	D	D	0.2	D	X	D	
1,000 and over	29.5	X	15.2	0.3	36.6	D	X	D	
Total	5.6	0.0	7.1	1.9	0.1	0.1	X	13.0	

South Census Region

Value of shipments and receipts (million dollars)									
Under 20	2.5	X	36.0	1.0	0.1	94.2	X	7.3	
20–49	5.9	X	12.1	1.3	0.0	6.2	72.2	9.8	
50–99	2.0	0.0	0.0	8.2	0.1	0.0	X	1.9	
100–249	23.0	0.0	0.0	7.6	1.0	0.0	0.0	32.4	
250–499	1.0	X	0.1	0.0	0.1	0.1	X	3.7	
500 and over	0.4	X	0.6	0.3	0.1	0.0	X	3.9	
Total	1.1	0.0	6.4	0.7	0.1	2.9	64.2	5.6	

Employment size									
Under 50	3.7	D	D	0.8	D	X	72.2	8.5	
50–99	0.8	D	D	2.8	D	D	X	0.3	
100–249	5.1	0.0	D	1.6	D	D	X	22.6	
250–499	0.4	X	D	1.4	0.1	D	0.0	2.4	
500–999	0.3	X	D	0.7	0.0	D	X	D	
1,000 and over	0.1	X	0.4	0.1	0.1	D	X	D	
Total	1.1	0.0	6.4	0.7	0.1	2.9	64.2	5.6	

West Census Region

Value of shipments and receipts (million dollars)									
Under 20	15.5	X	0.5	32.9	57.8	0.0	X	16.0	
20–49	3.0	X	96.1	27.6	38.3	0.0	X	3.4	
50–99	5.7	X	37.6	11.0	5.9	X	X	6.1	
100–249	0.1	X	0.2	0.0	X	X	X	0.1	
250–499	16.2	X	0.0	0.0	18.2	X	X	17.7	
500 and over	0.1	X	0.0	0.0	0.0	0.0	X	0.1	
Total	3.7	X	0.7	2.3	16.1	0.0	X	4.8	

Employment size									
Under 50	5.1	X	D	1.9	D	0.0	X	6.4	
50–99	3.8	X	0.0	0.1	D	D	X	D	
100–249	4.2	X	D	22.8	D	X	X	D	
250–499	18.5	X	D	1.0	D	D	X	D	
500–999	0.0	X	0.0	X	0.0	X	X	0.0	
1,000 and over	0.1	X	X	X	0.0	D	X	D	
Total	3.7	X	0.7	2.3	16.1	0.0	X	4.8	

Data source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, *2022 Manufacturing Energy Consumption Survey*, and the Bureau of the Census, data files for the *2022 Economic Census, Manufacturing – Industry Series*

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produce heat and power or as feedstock/raw material inputs. See also Footnote *f*.

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* 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%

NA=Not available

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

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