

Released: March 2025

Next MECS will be fielded in 2027.

Table 1.5 (Preliminary) First use of energy for all purposes (fuel and nonfuel), 2022

Level: National data

Row: Energy sources and shipments, including further classification of *other* energy sources

Column: First use per energy sources and shipments

Unit: Trillion British thermal units

Energy source	Total first use
Total United States	
Coal	929
Natural gas	7,968
Net electricity	2,769
Purchases	2,853
Transfers in	15
Onsite generation from noncombustible renewable energy	9
Sales and transfers offsite	107
Coke and breeze	268
Residual fuel oil	33
Distillate fuel oil	81
Hydrocarbon gas liquids, excluding natural gasoline	3,120
Hydrogen	170
Other	6,085
Lubricants ^a	245
Special naphthas ^a	58
Waxes ^a	13
Miscellaneous nonfuel products ^a	183
Naphtha	486
Bitumen	769
Kerosene	12
Motor gasoline	7
Petroleum coke	624
Still gas or waste gas	1,476
Pulping liquor or black liquor	840
Biomass total	671
Agricultural waste	100
Wood harvested directly from trees	24
Wood residues and byproducts from mill processing	538
Wood-related and paper-related refuse	9

Net steam or hot water	490
Miscellaneous	211
Shipments of energy sources produced onsite ^b	765
Total ^c	20,658

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, 2022 *Manufacturing Energy Consumption Survey*, and Office of Energy Production, Conversion & Delivery, Form EIA-810, *Monthly Refinery Report* for 2022

Notes: Totals may not equal sum of components because of independent rounding.

^a 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 refineries (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 under *other*. However, *miscellaneous nonfuel products* (that is, lubricants, solvents, waxes, and special naphthas) from refineries, which are 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.

^b *Shipments of energy sources produced onsite* are those shipments produced or transformed onsite from the nonfuel use of other energy sources. For example, at an establishment that processes coal to make coke for later use, the entire quantity of coal is counted as first use. Any onsite consumption of coke is not counted as first use because it would duplicate the coal use. If some of the coke is then sold to another establishment, then that second establishment will consider this coke to be a shipment of an offsite-produced energy source. Hence, the second establishment will count this coke as its first use, thereby resulting in double counting. To eliminate the double counting, the energy equivalent of the coke shipment must be subtracted from first use.

^c *Total* is the sum of all the listed energy sources, including *other*, minus the *shipments of energy sources produced onsite*. It is the total amount of first use of energy for all (fuel and nonfuel) purposes.

* 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.

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

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).

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RSE Table 1.5 Relative standard errors for Table 1.5

Unit: Percentage

Energy source	Total first use
Total United States	
Coal	3.1%
Natural gas	2.6%
Net electricity	3.8%
Purchases	3.7%
Transfers in	3.7%
Onsite generation from noncombustible renewable energy	13.0%
Sales and transfers offsite	4.6%
Coke and breeze	3.0%
Residual fuel oil	1.4%
Distillate fuel oil	6.8%
Hydrocarbon gas liquids, excluding natural gasoline	0.6%
Hydrogen	8.0%
Other	1.3%
Lubricants ^a	0.0%
Special naphthas ^a	0.0%
Waxes ^a	0.0%
Miscellaneous nonfuel products ^a	0.0%
Naphtha	0.0%
Bitumen	3.7%
Kerosene	4.5%
Motor gasoline	6.3%
Petroleum coke	1.8%
Still gas or waste gas	0.2%
Pulping liquor or black liquor	0.0%
Biomass total	1.0%
Agricultural waste	1.0%
Wood harvested directly from trees	15.6%
Wood residues and byproducts from mill processing	1.0%
Wood-related and paper-related refuse	0.5%
Net steam or hot water	1.8%

Miscellaneous	28.2%
Shipments of energy sources produced onsite ^b	0.2%
Total ^c	1.4%

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, 2022 *Manufacturing Energy Consumption Survey*, and Office of Energy Production, Conversion & Delivery, Form EIA-810, *Monthly Refinery Report* for 2022

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