Released: December 2025

Next MECS will be fielded in 2027

Table 10.16 Percentage of establishments by levels of price difference that would cause fuel switching from coal to a less expensive substitute, 2022

Level: National data
Row: NAICS codes
Column: Levels of price difference
Unit: Establishment counts

NAICS code[a]	Subsector and industry	Establishments able to switch[b]	Levels of price difference that would cause a switch from coal[c]						
			Would not switch due to price	1 to 10 percent	11 to 25 percent	26 to 50 percent	Over 50 percent	Estimate cannot be provided	Would switch to more expensive substitute
		Total United States							
311	Food	D	0	0	D	0	0	0	0
3112	Grain and Oilseed Milling	D	0	0	D	0	0	0	0
311221	Wet Corn Milling and Starch Manufacturing	0	0	0	0	0	0	0	0
31131	Sugar Manufacturing	0	0	0	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	0	0	0	0	0	0	0	0
3115	Dairy Product Manufacturing	0	0	0	0	0	0	0	0
3116	Animal Slaughtering and Processing	0	0	0	0	0	0	0	0
312	Beverage and Tobacco Products	0	0	0	0	0	0	0	0
3121	Beverages	0	0	0	0	0	0	0	0
3122	Tobacco	0	0	0	0	0	0	0	0
313	Textile Mills	D	0	D	0	0	0	0	Q
314	Textile Product Mills	0	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0	0
321	Wood Products	0	0	0	0	0	0	0	0
321113	Sawmills	0	0	0	0	0	0	0	0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	0	0	0	0	0	0	0	0
321219	Reconstituted Wood Products	0	0	0	0	0	0	0	0
3219	Other Wood Products	0	0	0	0	0	0	0	0
322	Paper	9	D	0	D	0	0	D	0
322110	Pulp Mills	0	0	0	0	0	0	0	0
322120	Paper Mills	4	0	0	D	0	0	D	0
322130	Paperboard Mills	4	D	0	D	0	0	D	0
323	Printing and Related Support	0	0	0	0	0	0	0	0
324	Petroleum and Coal Products	0	0	0	0	0	0	0	0
324110	Petroleum Refineries	0	0	0	0	0	0	0	0
324121	Asphalt Paving Mixture and Block	0	0	0	0	0	0	0	0
324122	Asphalt Shingle and Coating Materials	0	0	0	0	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	0	0	0	0	0	0	0	0
324199	All Other Petroleum and Coal Products Manufacturing	0	0	0	0	0	0	0	0
325	Chemicals	4	D	D	0	0	0	D	0
325110	Petrochemicals	0	0	0	0	0	0	0	0
325120	Industrial Gases	0	0	0	0	0	0	0	0
325180	Other Basic Inorganic Chemical Manufacturing	0	0	0	0	0	0	0	0
325193	Ethyl Alcohol	D	D	0	0	0	0	D	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0	0	0	0	0	0	0	0
325199	All Other Basic Organic Chemical Manufacturing	D	0	D	0	0	0	0	0
325211	Plastics Materials and Resins	0	0	0	0	0	0	0	0
325212	Synthetic Rubber	0	0	0	0	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	0	0	0	0	0	0	0	0
325311	Nitrogenous Fertilizers	0	0	0	0	0	0	0	0
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	0	0	0	0	0	0	0	0
325412	Pharmaceutical Preparation	0	0	0	0	0	0	0	0
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	0	0	0	0	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	35	D	6	D	3	0	20	0
327120	Clay Building Material and Refractories	0	0	0	0	0	0	0	0

327211	Flat Glass	0	0	0	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0	0
327213	Glass Containers	0	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0	0
327310	Cements	24	D	6	D	3	0	9	0
327410	Lime	D	0	0	0	0	0	D	0
327420	Gypsum	0	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0	0
331	Primary Metals	0	0	0	0	0	0	0	0
331110	Iron and Steel Mills and Ferroalloys	0	0	0	0	0	0	0	0
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0	0
3313	Alumina and Aluminum Production and Processing	0	0	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0	0	0	0	0
3314	Nonferrous Metal (except Aluminum) Production and Processing	0	0	0	0	0	0	0	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0	0	0	0	0	0	0	0
3315	Foundries	0	0	0	0	0	0	0	0
331511	Iron Foundries	0	0	0	0	0	0	0	0
331523	Nonferrous Metal Die-Casting Foundries	0	0	0	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	0	0	0	0	0	0	0	0
332	Fabricated Metal Products	0	0	0	0	0	0	0	0
333	Machinery	0	0	0	0	0	0	0	0
334	Computer and Electronic Products	0	0	0	0	0	0	0	0
334413	Semiconductors and Related Devices	0	0	0	0	0	0	0	0
335	Electrical Equipment, Appliances, and Components	0	0	0	0	0	0	0	0
336	Transportation Equipment	0	0	0	0	0	0	0	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	0	0	0	0	0	0	0	0
3364	Aerospace Product and Parts	0	0	0	0	0	0	0	0
336411	Aircraft	0	0	0	0	0	0	0	0
337	Furniture and Related Products	0	0	0	0	0	0	0	0
339	Miscellaneous	0	0	0	0	0	0	0	0
	Total	52	5	9	8	3	0	24	Q

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, *2022 Manufacturing Energy Consumption Survey*
Note: Totals may not equal sum of components because of independent rounding. Establishment percentage may not equal 100% because of unknown and/or unreported fuel-switching guesstimate.
[a] The Bureau of the Census classifies establishments using the 2022 North American Industry Classification System (NAICS).
[b] This count includes only those establishments that reported this activity in 2022.
[c] These levels of price difference were guesstimates at which establishments perceived that they would switch. These levels were not actual values at which switching occurred. The percentage of price difference is computed as the quantity of (current fuel price minus alternative fuel price) divided by the current fuel price, expressed as a percentage.
* 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).

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RSE Table 10.16 Relative standard errors for Table 10.16

Unit: Percentage

NAICS code[a]	Subsector and industry	Establishments able to switch[b]	Levels of price difference that would cause a switch from coal[c]: Would not switch due to price	1 to 10 percent	11 to 25 percent	26 to 50 percent	Over 50 percent	Estimate cannot be provided	Would switch to more expensive substitute
		Total United States							
311	Food	D	X	X	D	X	X	X	X
3112	Grain and Oilseed Milling	D	X	X	D	X	X	X	X
311221	Wet Corn Milling and Starch Manufacturing	X	X	X	X	X	X	X	X
31131	Sugar Manufacturing	X	X	X	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	X	X	X	X	X	X	X	X
3115	Dairy Product Manufacturing	X	X	X	X	X	X	X	X
3116	Animal Slaughtering and Processing	X	X	X	X	X	X	X	X
312	Beverage and Tobacco Products	X	X	X	X	X	X	X	X
3121	Beverages	X	X	X	X	X	X	X	X
3122	Tobacco	X	X	X	X	X	X	X	X
313	Textile Mills	D	X	D	X	X	X	X	73.3
314	Textile Product Mills	X	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X	X
316	Leather and Allied Products	X	X	X	X	X	X	X	X
321	Wood Products	X	X	X	X	X	X	X	X
321113	Sawmills	X	X	X	X	X	X	X	X
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	X	X	X	X	X	X	X	X
321219	Reconstituted Wood Products	X	X	X	X	X	X	X	X
3219	Other Wood Products	X	X	X	X	X	X	X	X
322	Paper	0.0	D	X	D	X	X	D	X
322110	Pulp Mills	X	X	X	X	X	X	X	X
322120	Paper Mills	0.0	X	X	D	X	X	D	X
322130	Paperboard Mills	0.0	D	X	D	X	X	D	X
323	Printing and Related Support	X	X	X	X	X	X	X	X
324	Petroleum and Coal Products	X	X	X	X	X	X	X	X
324110	Petroleum Refineries	X	X	X	X	X	X	X	X
324121	Asphalt Paving Mixture and Block	X	X	X	X	X	X	X	X
324122	Asphalt Shingle and Coating Materials	X	X	X	X	X	X	X	X
324191	Petroleum Lubricating Oil and Grease Manufacturing	X	X	X	X	X	X	X	X
324199	All Other Petroleum and Coal Products Manufacturing	X	X	X	X	X	X	X	X
325	Chemicals	0.0	D	D	X	X	X	D	X
325110	Petrochemicals	X	X	X	X	X	X	X	X
325120	Industrial Gases	X	X	X	X	X	X	X	X
325180	Other Basic Inorganic Chemical Manufacturing	X	X	X	X	X	X	X	X
325193	Ethyl Alcohol	D	D	X	X	X	X	D	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	X	X	X	X	X	X	X	X
325199	All Other Basic Organic Chemical Manufacturing	D	X	D	X	X	X	X	X
325211	Plastics Materials and Resins	X	X	X	X	X	X	X	X
325212	Synthetic Rubber	X	X	X	X	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	X	X	X	X	X	X	X	X
325311	Nitrogenous Fertilizers	X	X	X	X	X	X	X	X
325312	Phosphatic Fertilizers	X	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	X	X	X	X	X	X	X	X
325412	Pharmaceutical Preparation	X	X	X	X	X	X	X	X
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	X	X	X	X	X	X	X	X
326	Plastics and Rubber Products	X	X	X	X	X	X	X	X
327	Nonmetallic Mineral Products	2.6	D	0.0	D	0.0	X	4.6	X
327120	Clay Building Material and Refractories	X	X	X	X	X	X	X	X
327211	Flat Glass	X	X	X	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	X	X	X	X	X
327310	Cements	0.0	D	0.0	D	0.0	X	0.0	X
327410	Lime	D	X	X	X	X	X	D	X

327420	Gypsum	X	X	X	X	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X	X
331	Primary Metals	X	X	X	X	X	X	X	X
331110	Iron and Steel Mills and Ferroalloys	X	X	X	X	X	X	X	X
3312	Steel Products from Purchased Steel	X	X	X	X	X	X	X	X
3313	Alumina and Aluminum Production and Processing	X	X	X	X	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X	X	X	X	X
3314	Nonferrous Metal (except Aluminum) Production and Processing	X	X	X	X	X	X	X	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	X	X	X	X	X	X	X	X
3315	Foundries	X	X	X	X	X	X	X	X
331511	Iron Foundries	X	X	X	X	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	X	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	X	X	X	X	X	X	X	X
332	Fabricated Metal Products	X	X	X	X	X	X	X	X
333	Machinery	X	X	X	X	X	X	X	X
334	Computer and Electronic Products	X	X	X	X	X	X	X	X
334413	Semiconductors and Related Devices	X	X	X	X	X	X	X	X
335	Electrical Equipment, Appliances, and Components	X	X	X	X	X	X	X	X
336	Transportation Equipment	X	X	X	X	X	X	X	X
336110	Automobile and Light Duty Motor Vehicle Manufacturing	X	X	X	X	X	X	X	X
3364	Aerospace Product and Parts	X	X	X	X	X	X	X	X
336411	Aircraft	X	X	X	X	X	X	X	X
337	Furniture and Related Products	X	X	X	X	X	X	X	X
339	Miscellaneous	X	X	X	X	X	X	X	X
	Total	4.1	0.0	0.0	0.0	0.0	X	3.8	73.3

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, *2022 Manufacturing Energy Consumption Survey*
Note: Totals may not equal sum of components because of independent rounding. Establishment percentage may not equal 100% because of unknown and/or unreported fuel-switching guesstimate.
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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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