

325312	Phosphatic Fertilizers	4	0	0	0	0	0	4	0
3254	Pharmaceuticals and Medicines	11	D	D	0	0	0	7	0
325412	Pharmaceutical Preparation	5	D	0	0	0	0	D	0
325992	Photographic Film, Paper, Plate, and Chemicals	0	0	0	0	0	0	0	0
326	Plastics and Rubber Products	370	Q	Q	Q	Q	0	Q	0
327	Nonmetallic Mineral Products	447	244	3	3	Q	6	180	3
327120	Clay Building Material and Refractories	24	D	D	0	D	D	12	0
327211	Flat Glass	3	0	0	0	0	D	0	D
327212	Other Pressed and Blown Glass and Glassware	D	0	D	0	0	0	0	0
327213	Glass Containers	D	D	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	10	0	0	3	D	D	D	D
327310	Cements	3	0	0	0	D	0	D	0
327410	Lime	0	0	0	0	0	0	0	0
327420	Gypsum	0	0	0	0	0	0	0	0
327993	Mineral Wool	D	0	D	0	0	0	D	0
331	Primary Metals	119	30	D	9	26	D	37	D
331110	Iron and Steel Mills and Ferroalloys	18	D	0	D	4	0	D	D
3312	Steel Products from Purchased Steel	20	D	D	0	0	D	0	0
3313	Alumina and Aluminum	9	D	0	D	5	0	D	0
331314	Secondary Smelting and Alloying of Aluminum	5	D	0	0	D	0	D	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	3	0	0	D	D	0	0	0
3314	Nonferrous Metals, except Aluminum	37	D	0	D	9	0	23	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	6	D	0	0	3	0	D	0
3315	Foundries	35	6	0	4	Q	Q	5	0
331511	Iron Foundries	10	3	0	0	D	D	0	0
331523	Nonferrous Metal Die-Casting Foundries	15	D	0	0	0	D	D	0
331524	Aluminum Foundries, except Die-Casting	4	0	0	D	0	0	D	0
332	Fabricated Metal Products	1,001	Q	0	Q	Q	Q	Q	5
333	Machinery	482	Q	Q	0	Q	Q	Q	Q
334	Computer and Electronic Products	125	D	0	Q	0	D	D	0
334413	Semiconductors and Related Devices	5	D	0	0	0	D	D	0
335	Electrical Equip., Appliances, and Components	Q	Q	0	0	0	0	Q	0
336	Transportation Equipment	136	101	0	Q	0	5	13	Q
336111	Automobiles	D	D	0	0	0	0	D	0
336112	Light Trucks and Utility Vehicles	0	0	0	0	0	0	0	0
3364	Aerospace Product and Parts	17	0	0	Q	0	5	0	Q
336411	Aircraft	0	0	0	0	0	0	0	0
337	Furniture and Related Products	34	0	Q	0	Q	Q	3	0
339	Miscellaneous	369	Q	Q	Q	0	0	0	3
	Total	5,283	1,303	267	1,091	662	512	1,336	111

(a) The Bureau of the Census classifies establishments using the 2017 North American Industry Classification System (NAICS).

(b) This count includes only those establishments that reported this activity in 2018.

(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 percent.

* Estimate less than 0.5.

D=Withheld to avoid disclosing data for individual establishments.

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

NA=Not available.

Notes: Totals may not equal sum of components because of independent rounding. Establishment percent may not equal 100 percent because of unknown and/or unreported fuel-switching guesstimate.

Source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, 2018 Manufacturing Energy Consumption Survey.

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).

Released: August 2021

Next MECS will be fielded in 2023.

RSE Table 10.17 Relative Standard Errors for Table 10.17;

Unit: Percents.

		Levels of Price Difference that Would Cause a Switch from HGL(c)								
NAICS Code(a)	Subsector and Industry	Establishments Able to Switch(b)	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	10.1	4.5	0.0	26.0	24.2	66.0	13.7	68.9	
3112	Grain and Oilseed Milling	1.6	D	X	2.2	D	D	D	X	
311221	Wet Corn Milling	D	D	X	D	X	X	D	X	
31131	Sugar Manufacturing	D	X	X	X	D	X	D	X	
3114	Fruit and Vegetable Preserving and Specialty Food	23.3	D	D	D	D	X	D	68.9	
3115	Dairy Product	24.4	19.0	D	D	X	X	20.8	X	
3116	Animal Slaughtering and Processing	D	X	X	74.4	X	D	D	X	
312	Beverage and Tobacco Products	18.7	97.1	D	D	D	X	58.0	X	
3121	Beverages	36.5	97.1	D	D	X	X	58.0	X	
3122	Tobacco	0.0	X	D	X	D	X	X	X	
313	Textile Mills	42.7	D	D	17.9	D	X	X	D	
314	Textile Product Mills	60.2	X	D	D	X	X	X	X	
315	Apparel	95.3	X	D	D	X	X	X	X	
316	Leather and Allied Products	69.6	X	X	X	X	D	D	X	
321	Wood Products	33.0	61.9	X	12.2	52.6	63.2	0.0	X	
321113	Sawmills	21.7	42.7	X	20.5	43.4	64.4	0.0	X	
3212	Veneer, Plywood, and Engineered Woods	46.3	89.1	X	0.0	92.0	69.0	X	X	
321219	Reconstituted Wood Products	X	X	X	X	X	X	X	X	
3219	Other Wood Products	D	70.1	X	D	0.0	X	X	X	
322	Paper	31.1	69.7	50.1	X	98.0	76.8	58.1	95.5	
322110	Pulp Mills	X	X	X	X	X	X	X	X	
322121	Paper Mills, except Newsprint	D	X	D	X	X	X	D	X	
322122	Newsprint Mills	X	X	X	X	X	X	X	X	
322130	Paperboard Mills	D	X	D	X	X	X	D	X	
323	Printing and Related Support	58.0	91.5	96.6	X	X	X	67.6	X	
324	Petroleum and Coal Products	8.2	7.2	D	D	37.6	X	D	X	
324110	Petroleum Refineries	0.0	D	D	X	X	X	D	X	
324121	Asphalt Paving Mixture and Block	39.4	D	X	17.7	D	X	D	X	
324122	Asphalt Shingle and Coating Materials	D	D	X	D	X	X	12.3	X	
324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X	X	X	X	X	
324199	Other Petroleum and Coal Products	D	X	X	X	D	X	D	X	
325	Chemicals	12.4	36.3	10.0	19.4	40.2	30.5	16.4	X	
325110	Petrochemicals	D	X	D	X	X	X	X	X	
325120	Industrial Gases	50.8	X	73.8	X	66.1	X	X	X	
325180	Other Basic Inorganic Chemicals	37.9	D	X	X	X	D	X	X	
325193	Ethyl Alcohol	36.2	X	D	D	X	X	X	X	
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	D	D	X	D	X	X	X	X	
325199	Other Basic Organic Chemicals	65.9	83.6	D	69.7	D	X	D	X	
325211	Plastics Materials and Resins	44.2	73.3	D	X	X	82.9	D	X	
325212	Synthetic Rubber	D	X	X	X	X	D	D	X	
325220	Artificial and Synthetic Fibers and Filaments	0.0	X	D	D	D	X	X	X	
325311	Nitrogenous Fertilizers	X	X	X	X	X	X	X	X	
325312	Phosphatic Fertilizers	0.0	X	X	X	X	X	0.0	X	
3254	Pharmaceuticals and Medicines	29.6	D	D	X	X	X	46.3	X	

325412	Pharmaceutical Preparation	26.9	D	X	X	X	X	D	X
325992	Photographic Film, Paper, Plate, and Chemicals	X	X	X	X	X	X	X	X
326	Plastics and Rubber Products	35.8	96.7	97.8	59.4	98.5	X	64.3	X
327	Nonmetallic Mineral Products	12.3	25.9	10.5	10.5	54.5	6.0	28.7	0.0
327120	Clay Building Material and Refractories	32.8	D	D	X	D	D	49.3	X
327211	Flat Glass	0.0	X	X	X	X	D	X	D
327212	Other Pressed and Blown Glass and Glassware	D	X	D	X	X	X	X	X
327213	Glass Containers	D	D	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	22.0	X	X	10.5	D	D	D	D
327310	Cements	20.6	X	X	X	D	X	D	X
327410	Lime	X	X	X	X	X	X	X	X
327420	Gypsum	X	X	X	X	X	X	X	X
327993	Mineral Wool	D	X	D	X	X	X	D	X
331	Primary Metals	9.7	14.5	D	10.7	15.1	D	12.7	D
331110	Iron and Steel Mills and Ferroalloys	0.0	D	X	D	0.0	X	D	D
3312	Steel Products from Purchased Steel	25.4	D	D	X	X	D	X	X
3313	Alumina and Aluminum	17.7	D	X	D	26.5	X	D	X
331314	Secondary Smelting and Alloying of Aluminum	17.8	D	X	X	D	X	D	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	45.7	X	X	D	D	X	X	X
3314	Nonferrous Metals, except Aluminum	14.9	D	X	D	18.0	X	21.5	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	18.0	D	X	X	18.0	X	D	X
3315	Foundries	25.5	35.3	X	8.5	51.4	59.2	32.4	X
331511	Iron Foundries	43.8	30.4	X	X	D	D	X	X
331523	Nonferrous Metal Die-Casting Foundries	46.6	D	X	X	X	D	D	X
331524	Aluminum Foundries, except Die-Casting	12.2	X	X	D	X	X	D	X
332	Fabricated Metal Products	36.7	99.4	X	70.2	82.9	70.2	99.4	0.0
333	Machinery	35.4	98.9	98.4	X	98.9	97.1	55.4	98.9
334	Computer and Electronic Products	41.1	D	X	98.6	X	D	D	X
334413	Semiconductors and Related Devices	30.2	D	X	X	X	D	D	X
335	Electrical Equip., Appliances, and Components	69.0	74.8	X	X	X	X	77.6	X
336	Transportation Equipment	20.5	36.4	X	53.2	X	38.5	8.3	81.2
336111	Automobiles	D	D	X	X	X	X	D	X
336112	Light Trucks and Utility Vehicles	X	X	X	X	X	X	X	X
3364	Aerospace Product and Parts	36.9	X	X	57.4	X	38.5	X	81.2
336411	Aircraft	X	X	X	X	X	X	X	X
337	Furniture and Related Products	48.3	X	59.8	X	93.9	94.1	0.0	X
339	Miscellaneous	47.9	69.6	98.8	94.3	X	X	X	0.0
	Total	5.5	13.9	10.7	18.7	11.3	21.1	7.5	18.5

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(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 percent.

* Estimate less than 0.5.

D=Withheld to avoid disclosing data for individual establishments.

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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. Establishment percent may not equal 100 percent because of unknown and/or unreported fuel-switching guesstimate.

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