

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

Table 10.15 Percent of Establishments by Levels of Price Difference that Would Cause Fuel Switching from Natural Gas to a Less Expensive Substitute, 2018;

Level: National Data;
Row: NAICS Codes;
Column: Levels of Price Difference;
Unit: Establishment Counts.

NAICS Code(a)	Subsector and Industry	Levels of Price Difference that Would Cause a Switch from Natural Gas(c)						Estimate Cannot Be Provided	Would Switch to More Expensive Substitute
		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		
Total United States									
311	Food	871	156	109	178	142	105	167	13
	Grain and Oilseed Milling	53	9	9	11	4	13	8	0
311221	Wet Corn Milling	7	D	D	0	D	0	0	0
31131	Sugar Manufacturing	9	D	0	D	0	D	4	D
3114	Fruit and Vegetable Preserving and Specialty Food	56	D	4	D	16	D	18	D
3115	Dairy Product	107	23	8	26	31	D	12	D
3116	Animal Slaughtering and Processing	148	7	Q	Q	16	9	40	4
312	Beverage and Tobacco Products	60	10	6	21	D	D	D	0
3121	Beverages	50	10	6	Q	0	11	4	0
3122	Tobacco	9	0	0	3	D	D	D	0
313	Textile Mills	124	14	Q	49	Q	0	23	0
314	Textile Product Mills	34	D	6	24	D	0	0	0
315	Apparel	12	D	0	3	5	0	D	0
316	Leather and Allied Products	8	D	D	D	0	0	D	0
321	Wood Products	318	D	Q	D	66	49	D	Q
321113	Sawmills	29	4	0	0	16	3	7	0
3212	Veneer, Plywood, and Engineered Woods	99	D	0	16	22	4	D	0
321219	Reconstituted Wood Products	15	D	0	Q	6	D	D	0
3219	Other Wood Products	186	Q	Q	0	Q	Q	Q	Q
322	Paper	336	8	68	22	34	67	125	Q
322110	Pulp Mills	5	0	D	D	0	0	D	0
322121	Paper Mills, except Newsprint	33	D	9	5	D	D	7	0
322122	Newsprint Mills	D	0	0	D	0	0	0	0
322130	Paperboard Mills	31	D	10	11	D	D	6	0
323	Printing and Related Support	375	Q	Q	Q	D	0	D	D
324	Petroleum and Coal Products	220	24	14	88	27	5	58	3
324110	Petroleum Refineries	33	D	9	D	D	D	10	D
324121	Asphalt Paving Mixture and Block	174	11	6	80	D	D	45	D
324122	Asphalt Shingle and Coating Materials	10	6	0	D	0	0	D	0
324191	Petroleum Lubricating Oil and Grease Products	3	D	0	0	0	0	D	0
324199	Other Petroleum and Coal Products	0	0	0	0	0	0	0	0
325	Chemicals	563	144	26	67	50	69	202	4
325110	Petrochemicals	9	3	D	D	0	0	D	D
325120	Industrial Gases	Q	0	Q	0	0	0	Q	0
325180	Other Basic Inorganic Chemicals	14	D	D	D	0	D	Q	D
325193	Ethyl Alcohol	D	D	0	3	Q	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	27	D	0	D	0	D	0	0
325199	Other Basic Organic Chemicals	48	3	11	Q	5	4	8	0
325211	Plastics Materials and Resins	47	8	D	D	4	Q	Q	0
325212	Synthetic Rubber	13	3	D	D	3	D	D	0
325220	Artificial and Synthetic Fibers and Filaments	13	D	4	5	D	D	0	0
325311	Nitrogenous Fertilizers	D	0	0	0	D	0	0	0

325312	Phosphatic Fertilizers	0	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	78	23	D	7	7	D	20	0
325412	Pharmaceutical Preparation	50	10	D	D	D	D	11	0
325992	Photographic Film, Paper, Plate, and Chemicals	15	4	0	0	Q	D	D	D
326	Plastics and Rubber Products	247	Q	Q	Q	Q	0	Q	0
327	Nonmetallic Mineral Products	531	181	143	99	28	D	31	D
327120	Clay Building Material and Refractories	35	0	D	4	D	Q	8	0
327211	Flat Glass	4	0	0	D	0	0	D	D
327212	Other Pressed and Blown Glass and Glassware	8	D	0	0	D	0	D	0
327213	Glass Containers	0	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	Q	6	0	5	5	Q	5	0
327310	Cements	23	D	4	7	3	D	6	0
327410	Lime	8	0	D	D	0	0	4	0
327420	Gypsum	D	0	0	0	D	0	0	0
327993	Mineral Wool	7	D	D	0	0	0	D	0
331	Primary Metals	145	D	Q	17	27	D	38	D
331110	Iron and Steel Mills and Ferroalloys	26	D	0	4	D	D	13	D
3312	Steel Products from Purchased Steel	9	4	0	0	0	0	5	0
3313	Alumina and Aluminum	12	4	0	0	D	D	5	0
331314	Secondary Smelting and Alloying of Aluminum	D	0	0	0	D	0	0	0
331315	Aluminum Sheet, Plate and Foils	D	4	0	0	0	0	D	0
331318	Other Aluminum Rolling, Drawing and Extruding	D	0	0	0	D	D	D	0
3314	Nonferrous Metals, except Aluminum	28	6	0	7	3	4	7	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	5	D	0	D	D	0	0	0
3315	Foundries	70	9	Q	5	19	3	Q	8
331511	Iron Foundries	23	Q	D	D	D	D	0	0
331523	Nonferrous Metal Die-Casting Foundries	25	D	D	D	3	D	D	8
331524	Aluminum Foundries, except Die-Casting	3	0	0	D	D	0	0	0
332	Fabricated Metal Products	1,442	Q	Q	Q	Q	Q	Q	0
333	Machinery	358	Q	Q	Q	Q	Q	Q	0
334	Computer and Electronic Products	123	5	D	D	0	0	43	0
334413	Semiconductors and Related Devices	10	5	0	0	0	0	4	0
335	Electrical Equip., Appliances, and Components	Q	Q	0	0	Q	Q	Q	0
336	Transportation Equipment	256	17	0	87	D	D	145	D
336111	Automobiles	D	0	0	0	D	0	D	0
336112	Light Trucks and Utility Vehicles	D	0	0	0	0	D	0	0
3364	Aerospace Product and Parts	29	7	0	15	0	D	D	D
336411	Aircraft	3	D	0	0	0	D	0	0
337	Furniture and Related Products	Q	Q	3	Q	0	Q	0	0
339	Miscellaneous	380	Q	0	Q	0	0	Q	Q
	Total	6,650	1,409	753	1,314	499	754	1,787	134

(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).

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RSE Table 10.15 Relative Standard Errors for Table 10.15;

Unit: Percents.

NAICS Code(a)	Subsector and Industry	Establishments Able to Switch(b)	Levels of Price Difference that Would Cause a Switch from Natural Gas(c)					Estimate Cannot Be Provided	Would Switch to More Expensive Substitute
			Would Not Switch Due to Price	1 to 10 Percent	11 to 25 Percent	26 to 50 Percent	Over 50 Percent		
Total United States									
311	Food	5.4	8.7	9.9	20.6	11.2	15.4	9.8	24.5
3112	Grain and Oilseed Milling	5.9	3.3	1.6	41.8	0.7	24.3	35.6	X
311221	Wet Corn Milling	0.0	D	D	X	D	X	X	X
31131	Sugar Manufacturing	0.0	D	X	D	X	D	0.0	D
3114	Fruit and Vegetable Preserving and Specialty Food	16.2	D	41.2	D	16.8	D	35.7	D
3115	Dairy Product	15.7	34.1	28.0	22.1	33.5	D	17.0	D
3116	Animal Slaughtering and Processing	24.8	0.0	53.0	58.6	20.8	39.3	25.3	0.0
312	Beverage and Tobacco Products	2.7	30.8	25.5	8.3	D	D	D	X
3121	Beverages	25.3	30.8	25.5	59.8	X	38.9	0.0	X
3122	Tobacco	0.0	X	X	0.0	D	D	D	X
313	Textile Mills	21.8	49.2	60.7	31.8	94.3	X	28.8	X
314	Textile Product Mills	37.0	D	38.8	48.5	D	X	X	X
315	Apparel	23.4	D	X	0.0	31.1	X	D	X
316	Leather and Allied Products	19.2	D	D	D	X	X	D	X
321	Wood Products	20.4	D	95.2	D	32.9	33.2	D	98.4
321113	Sawmills	20.1	0.0	X	X	35.3	0.0	0.0	X
3212	Veneer, Plywood, and Engineered Woods	25.7	D	X	40.9	40.4	14.7	D	X
321219	Reconstituted Wood Products	24.8	D	X	56.1	36.0	D	D	X
3219	Other Wood Products	47.7	75.7	95.2	X	58.4	98.1	68.4	98.4
322	Paper	4.1	0.0	6.8	0.3	25.0	49.7	12.4	95.5
322110	Pulp Mills	0.0	X	D	D	X	X	D	X
322121	Paper Mills, except Newsprint	0.0	D	0.0	0.0	D	D	0.0	X
322122	Newsprint Mills	D	X	X	D	X	X	X	X
322130	Paperboard Mills	0.0	D	0.0	0.0	D	D	0.0	X
323	Printing and Related Support	42.4	89.3	96.6	83.4	D	X	D	D
324	Petroleum and Coal Products	3.4	4.9	2.3	7.6	19.8	11.8	6.2	9.7
324110	Petroleum Refineries	0.0	D	0.0	D	D	D	0.0	D
324121	Asphalt Paving Mixture and Block	10.0	15.2	34.3	14.1	D	D	21.5	D
324122	Asphalt Shingle and Coating Materials	12.1	12.1	X	D	X	X	D	X
324191	Petroleum Lubricating Oil and Grease Products	12.7	D	X	X	X	X	D	X
324199	Other Petroleum and Coal Products	X	X	X	X	X	X	X	X
325	Chemicals	6.7	9.8	7.5	10.7	28.1	4.0	33.2	7.2
325110	Petrochemicals	0.0	0.0	D	D	X	X	D	D
325120	Industrial Gases	75.6	X	73.8	X	X	X	81.2	X
325180	Other Basic Inorganic Chemicals	33.2	D	D	D	X	D	88.3	D
325193	Ethyl Alcohol	D	D	X	13.6	74.0	X	X	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	D	X	D	X	D	X	X
325199	Other Basic Organic Chemicals	22.9	8.8	27.6	58.7	32.5	43.8	18.3	X
325211	Plastics Materials and Resins	28.5	16.2	D	D	16.1	82.9	65.5	X
325212	Synthetic Rubber	0.0	0.0	D	D	0.0	D	D	X
325220	Artificial and Synthetic Fibers and Filaments	0.0	D	0.0	0.0	D	D	X	X

325311	Nitrogenous Fertilizers	D	X	X	X	D	X	X	X
325312	Phosphatic Fertilizers	X	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	22.5	45.2	D	27.5	30.8	D	7.9	X
325412	Pharmaceutical Preparation	28.6	16.3	D	D	D	D	10.8	X
325992	Photographic Film, Paper, Plate, and Chemicals	36.8	18.8	X	X	78.1	D	D	D
326	Plastics and Rubber Products	42.0	72.0	80.8	77.2	83.0	X	66.8	X
327	Nonmetallic Mineral Products	10.6	22.1	16.8	9.7	26.1	D	5.1	D
327120	Clay Building Material and Refractories	25.2	X	D	8.6	D	56.0	22.1	X
327211	Flat Glass	0.0	X	X	D	X	X	D	D
327212	Other Pressed and Blown Glass and Glassware	39.0	D	X	X	D	X	D	X
327213	Glass Containers	X	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	57.8	10.5	X	19.1	30.2	92.7	21.3	X
327310	Cements	15.5	D	15.1	16.7	15.1	D	15.1	X
327410	Lime	0.0	X	D	D	X	X	0.0	X
327420	Gypsum	D	X	X	X	D	X	X	X
327993	Mineral Wool	17.6	D	D	X	X	X	D	X
331	Primary Metals	7.9	D	51.2	5.6	20.2	D	12.5	D
331110	Iron and Steel Mills and Ferroalloys	0.0	D	X	0.0	D	D	0.0	D
3312	Steel Products from Purchased Steel	25.7	10.0	X	X	X	X	40.6	X
3313	Alumina and Aluminum	3.1	0.0	X	X	D	D	3.9	X
331314	Secondary Smelting and Alloying of Aluminum	D	X	X	X	D	X	X	X
331315	Aluminum Sheet, Plate and Foils	D	0.0	X	X	X	X	D	X
331318	Other Aluminum Rolling, Drawing and Extruding	D	X	X	X	D	D	D	X
3314	Nonferrous Metals, except Aluminum	12.9	18.5	X	12.3	15.8	11.5	36.0	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	18.0	D	X	D	D	X	X	X
3315	Foundries	18.3	34.4	51.2	5.7	36.2	21.3	57.7	31.1
331511	Iron Foundries	42.1	57.1	D	D	D	D	X	X
331523	Nonferrous Metal Die-Casting Foundries	22.1	D	D	D	21.3	D	D	31.1
331524	Aluminum Foundries, except Die-Casting	21.2	X	X	D	D	X	X	X
332	Fabricated Metal Products	30.4	70.2	99.4	61.1	96.4	93.3	54.4	X
333	Machinery	38.8	57.9	96.3	94.0	95.7	93.7	60.8	X
334	Computer and Electronic Products	30.5	12.9	D	D	X	X	38.7	X
334413	Semiconductors and Related Devices	20.2	12.9	X	X	X	X	35.8	X
335	Electrical Equip., Appliances, and Components	58.1	87.3	X	X	85.9	97.4	94.9	X
336	Transportation Equipment	17.8	12.6	X	45.5	D	D	42.2	D
336111	Automobiles	D	X	X	X	D	X	D	X
336112	Light Trucks and Utility Vehicles	D	X	X	X	X	D	X	X
3364	Aerospace Product and Parts	21.3	9.9	X	36.5	X	D	D	D
336411	Aircraft	19.1	D	X	X	X	D	X	X
337	Furniture and Related Products	54.9	98.7	0.0	84.4	X	70.5	X	X
339	Miscellaneous	46.6	98.8	X	93.5	X	X	68.6	91.5
	Total	2.8	4.4	6.0	4.0	9.8	7.3	7.7	11.7

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

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