

Table 10.17 Percent of Establishments by Levels of Price Difference that Would Cause Fuel Switching from HGL (excluding natural gasoline) to a Less Expensive Substitute, 2014;

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 HGL(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	482	W	26	58	Q	7	44	W
3112	Grain and Oilseed Milling	76	7	W	12	Q	W	W	W
311221	Wet Corn Milling	W	0	0	0	W	0	0	0
31131	Sugar Manufacturing	0	0	0	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	77	Q	W	W	4	W	16	0
3115	Dairy Product	43	9	Q	7	5	W	W	0
3116	Animal Slaughtering and Processing	35	5	W	W	W	0	7	W
312	Beverage and Tobacco Products	188	W	W	95	0	0	Q	0
3121	Beverages	W	W	W	95	0	0	W	0
3122	Tobacco	W	W	0	0	0	0	W	0
313	Textile Mills	Q	W	W	W	0	W	Q	0
314	Textile Product Mills	Q	W	W	W	0	W	W	0
315	Apparel	W	0	W	0	0	0	0	0
316	Leather and Allied Products	11	W	0	0	W	0	W	0
321	Wood Products	268	W	W	31	18	Q	42	W
321113	Sawmills	29	5	0	W	W	W	5	W
3212	Veneer, Plywood, and Engineered Woods	28	W	W	W	W	W	6	0
321219	Reconstituted Wood Products	8	W	0	0	W	0	W	0
3219	Other Wood Products	W	W	0	16	W	0	W	0
322	Paper	93	Q	W	W	0	0	Q	W
322110	Pulp Mills	0	0	0	0	0	0	0	0
322121	Paper Mills, except Newsprint	6	W	W	W	0	0	W	W
322122	Newsprint Mills	0	0	0	0	0	0	0	0
322130	Paperboard Mills	W	0	0	0	0	0	W	0
323	Printing and Related Support	Q	W	W	0	W	0	0	0
324	Petroleum and Coal Products	125	20	18	9	W	6	W	W
324110	Petroleum Refineries	Q	3	W	0	0	0	W	0
324121	Asphalt Paving Mixture and Block	33	W	W	W	0	W	0	W
324122	Asphalt Shingle and Coating Materials	12	W	W	0	0	W	W	0
324199	Other Petroleum and Coal Products	W	0	0	0	W	0	0	0
325	Chemicals	208	50	W	10	Q	5	Q	W
325110	Petrochemicals	W	0	W	0	0	0	0	0
325120	Industrial Gases	W	0	0	0	0	0	0	W
325180	Other Basic Inorganic Chemicals	31	Q	0	W	W	0	W	0
325193	Ethyl Alcohol	W	0	0	0	0	0	W	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	W	0	0	0	0	0	W	0
325199	Other Basic Organic Chemicals	W	0	0	W	0	W	Q	0
325211	Plastics Materials and Resins	Q	Q	0	W	W	W	W	0
325212	Synthetic Rubber	5	0	0	0	0	0	W	W
325220	Artificial and Synthetic Fibers and Filaments	6	W	0	W	0	W	W	0
325311	Nitrogenous Fertilizers	3	W	0	W	0	W	0	0
325312	Phosphatic Fertilizers	W	0	0	0	0	0	W	0
3254	Pharmaceuticals and Medicines	5	W	0	W	0	0	W	0
325412	Pharmaceutical Preparation	5	W	0	W	0	0	W	0
325992	Photographic Film, Paper, Plate, and Chemicals	W	W	0	0	0	0	W	0
326	Plastics and Rubber Products	593	W	W	0	Q	W	Q	0
327	Nonmetallic Mineral Products	390	Q	11	Q	25	W	W	0
327120	Clay Building Material and Refractories	13	5	W	W	0	W	0	0
327211	Flat Glass	W	0	0	0	0	0	W	0
327212	Other Pressed and Blown Glass and Glassware	8	W	0	W	W	0	W	0
327213	Glass Containers	0	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	W	4	W	W	W	0	W	0
327310	Cements	5	W	0	W	0	0	W	0
327410	Lime	W	W	0	0	0	0	0	0
327420	Gypsum	0	0	0	0	0	0	0	0
327993	Mineral Wool	14	W	W	W	0	0	6	0
331	Primary Metals	156	32	W	27	23	17	42	W
331110	Iron and Steel Mills and Ferroalloys	10	W	0	4	0	W	W	0
3312	Steel Products from Purchased Steel	25	W	0	0	0	W	9	W
3313	Alumina and Aluminum	30	W	W	9	6	W	W	0
331314	Secondary Smelting and Alloying of Aluminum	W	W	W	W	W	0	W	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	18	W	W	W	W	W	W	0
3314	Nonferrous Metals, except Aluminum	32	5	0	0	Q	W	W	W
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	6	W	0	0	W	0	0	W
3315	Foundries	59	13	6	14	5	8	14	0
331511	Iron Foundries	21	W	W	0	W	W	W	0
331523	Nonferrous Metal Die-Casting Foundries	9	W	0	W	W	W	W	0
331524	Aluminum Foundries, except Die-Casting	17	W	W	10	0	0	0	0
332	Fabricated Metal Products	955	W	W	W	W	W	Q	0
333	Machinery	588	W	0	0	W	W	Q	0
334	Computer and Electronic Products	Q	0	0	W	0	W	W	W
334413	Semiconductors and Related Devices	W	0	0	0	0	0	W	W
335	Electrical Equip., Appliances, and Components	91	Q	0	0	W	0	W	0
336	Transportation Equipment	617	Q	W	Q	Q	0	W	Q
336111	Automobiles	W	0	0	0	W	0	0	0
336112	Light Trucks and Utility Vehicles	W	0	0	W	0	0	W	0
3364	Aerospace Product and Parts	82	0	W	W	W	0	8	Q
336411	Aircraft	6	0	0	W	W	0	W	0
337	Furniture and Related Products	W	W	0	W	W	0	W	0
339	Miscellaneous	Q	0	W	0	W	W	0	0
	Total	5,573	1,568	Q	547	845	467	1,704	91

(a) The Bureau of the Census classifies establishments using the 2012 North American Industry Classification System (NAICS).
 (b) This count includes only those establishments that reported this activity in 2014.
 (c) These levels of price difference were guestimates 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.

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

Source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, '2014 Manufacturing Energy Consumption Survey.'

Released: February 2018

Next MECS will be fielded in 2019

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					Estimate Cannot Be Provided	Would Switch to More Expensive Substitute
			1 to 10 Percent	11 to 25 Percent	26 to 50 Percent	Over 50 Percent			
Total United States									
311	Food	29.2	57.7	45.2	38.4	54.8	39.5	27.0	5.7
3112	Grain and Oilseed Milling	34.9	23.6	9.1	42.6	52.6	9.1	9.1	9.1
311221	Wet Corn Milling	0.0	X	X	X	0.0	X	X	X
31131	Sugar Manufacturing	X	X	X	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	31.2	70.7	63.2	60.9	9.2	60.6	26.9	X
3115	Dairy Product	27.9	34.3	72.0	34.2	26.0	7.1	31.7	X
3116	Animal Slaughtering and Processing	28.1	23.8	36.1	43.7	64.7	X	34.6	7.1
312	Beverage and Tobacco Products	33.6	93.2	97.4	45.3	X	X	82.2	X
3121	Beverages	34.0	96.9	97.4	45.3	X	X	84.7	X
3122	Tobacco	0.1	0.1	X	X	X	X	0.1	X
313	Textile Mills	53.5	9.9	57.1	60.5	X	32.5	75.9	X
314	Textile Product Mills	81.5	101.0	56.1	97.8	X	64.8	16.9	X
315	Apparel	98.3	X	98.3	X	X	X	X	X
316	Leather and Allied Products	50.0	79.2	X	X	73.8	X	33.7	X
321	Wood Products	38.3	62.6	10.6	19.7	44.0	63.9	48.7	5.5
321113	Sawmills	10.1	5.5	X	20.5	5.5	5.5	14.2	5.5
3212	Veneer, Plywood, and Engineered Woods	36.2	47.3	10.6	73.3	10.2	77.8	17.0	X
321219	Reconstituted Wood Products	27.3	74.8	X	X	17.7	X	20.6	X
3219	Other Wood Products	49.1	66.2	X	31.8	60.3	X	72.5	X
322	Paper	41.9	52.9	92.5	0.1	X	X	57.9	0.1
322110	Pulp Mills	X	X	X	X	X	X	X	X
322121	Paper Mills, except Newsprint	0.1	0.1	0.1	0.1	X	X	0.1	0.1
322122	Newsprint Mills	X	X	X	X	X	X	X	X
322130	Paperboard Mills	0.0	X	X	X	X	X	0.0	X
323	Printing and Related Support	83.3	93.9	75.4	X	99.1	X	X	X
324	Petroleum and Coal Products	32.1	11.0	15.5	14.9	0.0	41.6	65.5	71.0
324110	Petroleum Refineries	59.7	36.2	36.2	X	X	X	77.8	X
324121	Asphalt Paving Mixture and Block	10.8	13.9	9.4	19.6	X	4.2	X	71.0
324122	Asphalt Shingle and Coating Materials	21.9	18.9	4.0	X	X	55.8	4.0	X
324199	Other Petroleum and Coal Products	0.0	X	X	X	0.0	X	X	X
325	Chemicals	28.8	37.9	26.6	20.8	76.7	21.9	55.5	86.7
325110	Petrochemicals	26.6	X	26.6	X	X	X	X	X
325120	Industrial Gases	91.7	X	X	X	X	X	X	91.7
325180	Other Basic Inorganic Chemicals	40.8	59.9	X	73.5	75.2	X	45.1	X
325193	Ethyl Alcohol	7.3	X	X	X	X	X	7.3	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	X	X	X	X	0.0	X
325199	Other Basic Organic Chemicals	80.6	X	X	12.4	X	12.4	85.9	X
325211	Plastics Materials and Resins	64.2	69.6	X	8.1	97.7	59.7	8.1	X
325212	Synthetic Rubber	0.0	X	X	X	X	X	0.0	0.0
325220	Artificial and Synthetic Fibers and Filaments	0.0	0.0	X	0.0	X	0.0	0.0	X
325311	Nitrogenous Fertilizers	22.9	22.9	X	22.9	X	22.9	X	X
325312	Phosphatic Fertilizers	0.0	X	X	X	X	X	0.0	X
3254	Pharmaceuticals and Medicines	28.1	55.8	X	13.9	X	X	23.7	X
325412	Pharmaceutical Preparation	28.1	55.8	X	13.9	X	X	23.7	X
325992	Photographic Film, Paper, Plate, and Chemicals	25.5	25.5	X	X	X	X	25.5	X
326	Plastics and Rubber Products	31.5	69.8	66.6	X	60.7	73.4	56.3	X
327	Nonmetallic Mineral Products	39.2	60.4	29.6	65.2	38.4	5.3	65.4	X
327120	Clay Building Material and Refractories	23.3	8.3	75.9	8.3	X	8.3	X	X
327211	Flat Glass	0.0	X	X	X	X	X	0.0	X
327212	Other Pressed and Blown Glass and Glassware	39.0	21.2	X	21.2	78.0	X	21.2	X
327213	Glass Containers	X	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	50.9	10.6	10.6	91.0	50.1	X	10.6	X
327310	Cements	31.9	31.9	X	31.9	X	X	31.9	X
327410	Lime	0.0	0.0	X	X	X	X	X	X
327420	Gypsum	X	X	X	X	X	X	X	X
327993	Mineral Wool	37.5	24.9	24.9	62.0	X	X	42.1	X
331	Primary Metals	9.9	20.7	4.8	8.5	30.1	20.7	22.4	66.0
331110	Iron and Steel Mills and Ferroalloys	3.3	3.3	X	3.3	X	3.3	3.3	X
3312	Steel Products from Purchased Steel	30.4	66.0	X	X	X	12.1	12.4	88.0
3313	Alumina and Aluminum	11.4	5.9	3.5	9.0	2.5	54.9	41.2	X
331314	Secondary Smelting and Alloying of Aluminum	0.1	0.1	0.1	0.1	0.1	X	0.1	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	18.7	10.0	10.0	13.7	10.0	54.9	52.6	X
3314	Nonferrous Metals, except Aluminum	33.5	25.2	X	X	58.3	10.4	63.7	37.4
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	37.4	37.4	X	X	37.4	X	X	37.4
3315	Foundries	12.8	25.5	7.4	15.2	22.2	34.7	28.9	X
331511	Iron Foundries	31.2	48.2	18.5	X	18.5	70.1	49.9	X
331523	Nonferrous Metal Die-Casting Foundries	21.2	38.5	X	9.6	58.6	21.5	9.6	X
331524	Aluminum Foundries, except Die-Casting	13.6	7.9	7.9	21.3	X	X	X	X
332	Fabricated Metal Products	38.3	74.4	99.6	99.6	95.7	97.7	66.6	X
333	Machinery	33.3	69.9	X	X	99.1	70.4	52.0	X
334	Computer and Electronic Products	74.2	X	X	94.2	X	85.8	20.1	20.1
334413	Semiconductors and Related Devices	20.1	X	X	X	X	X	20.1	20.1
335	Electrical Equip., Appliances, and Components	41.9	60.5	X	X	59.8	X	58.8	X
336	Transportation Equipment	29.9	60.5	11.9	52.7	67.0	X	58.9	58.8
336111	Automobiles	0.0	X	X	X	0.0	X	X	X
336112	Light Trucks and Utility Vehicles	0.0	X	X	0.0	X	X	0.0	X
3364	Aerospace Product and Parts	38.8	X	11.9	71.8	65.3	X	33.4	58.8
336411	Aircraft	34.3	X	X	42.9	53.3	X	25.8	X
337	Furniture and Related Products	60.3	43.8	X	92.1	93.0	X	89.8	X
339	Miscellaneous	55.3	X	78.4	X	91.4	75.9	X	X
	Total	11.1	23.4	50.3	33.3	25.5	32.5	20.4	40.3

(a) The Bureau of the Census classifies establishments using the 2012 North American Industry Classification System (NAICS).

(b) This count includes only those establishments that reported this activity in 2014.

(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.

W=Withheld to avoid disclosing data for individual establishments.

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

NA=Not available.

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

-- Estimation is not applicable.

Notes: Totals may not equal sum of components because of independent rounding. Establishment percents may not equal 100 percent because of unknown and/or unreported fuel-switching guesstimate.
Source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Form EIA-846, '2014 Manufacturing Energy Consumption Survey.'