

Released: February 2018
 Next MECS will be fielded in 2019

Table 10.7 Number of Establishments with Capability to Switch Electricity to Alternative Energy Sources, 2014;

Level: National Data;
 Row: NAICS Codes;
 Column: Energy Sources;
 Unit: Establishment Counts.

NAICS Code(a)	Subsector and Industry	Electricity Receipts(b)			Alternative Energy Sources(c)						
		Total Receipts(d)	Switchable	Not Switchable	Natural Gas	Distillate Fuel Oil	Residual Fuel Oil	Coal	HGL (excluding natural gasoline)	Coal Coke and Breeze	Other(e)
Total United States											
311	Food	13,652	220	12,554	Q	106	W	5	3	W	W
3112	Grain and Oilseed Milling	600	25	567	Q	5	0	W	0	W	0
311221	Wet Corn Milling	49	W	49	W	W	0	W	0	0	0
31131	Sugar Manufacturing	71	8	65	W	5	W	0	W	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	985	15	965	7	10	0	W	W	W	W
3115	Dairy Product	992	40	956	6	33	0	0	W	0	W
3116	Animal Slaughtering and Processing	1,603	Q	1,426	W	Q	0	0	0	0	0
312	Beverage and Tobacco Products	2,411	Q	2,220	W	Q	0	W	W	0	W
3121	Beverages	2,337	W	2,146	W	W	0	W	W	0	W
3122	Tobacco	74	W	74	0	W	0	0	0	0	0
313	Textile Mills	1,355	Q	1,271	W	W	0	0	0	0	0
314	Textile Product Mills	4,277	W	3,897	0	W	0	0	0	0	0
315	Apparel	3,874	W	3,494	W	0	0	0	0	0	0
316	Leather and Allied Products	466	0	464	0	0	0	0	0	0	0
321	Wood Products	8,316	183	7,296	Q	76	W	0	15	0	12
321113	Sawmills	1,609	73	1,464	Q	54	W	0	W	0	12
3212	Veneer, Plywood, and Engineered Woods	973	W	868	W	0	0	0	0	0	0
321219	Reconstituted Wood Products	154	0	154	0	0	0	0	0	0	0
3219	Other Wood Products	5,486	Q	4,754	W	W	0	0	W	0	0
322	Paper	3,219	51	3,089	45	5	8	7	0	0	8
322110	Pulp Mills	28	W	28	0	0	0	0	0	0	W
322121	Paper Mills, except Newsprint	164	14	159	W	W	4	W	0	0	W
322122	Newsprint Mills	18	0	18	0	0	0	0	0	0	0
322130	Paperboard Mills	147	15	141	12	W	4	W	0	0	W
323	Printing and Related Support	14,005	Q	12,167	W	Q	0	0	0	0	0
324	Petroleum and Coal Products	1,904	185	1,720	94	89	6	0	10	0	8
324110	Petroleum Refineries	174	21	172	W	W	0	0	3	0	8
324121	Asphalt Paving Mixture and Block	1,275	159	1,096	79	84	W	0	W	0	0
324122	Asphalt Shingle and Coating Materials	158	W	154	W	W	0	0	W	0	0
324199	Other Petroleum and Coal Products	86	0	86	0	0	0	0	0	0	0
325	Chemicals	8,529	252	7,969	80	171	W	W	8	0	15
325110	Petrochemicals	44	W	43	W	0	0	0	0	0	W
325120	Industrial Gases	427	0	426	0	0	0	0	0	0	0
325180	Other Basic Inorganic Chemicals	511	17	504	W	Q	0	0	0	0	0
325193	Ethyl Alcohol	211	4	209	W	W	0	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	69	0	69	0	0	0	0	0	0	0
325199	Other Basic Organic Chemicals	518	19	511	7	12	0	0	0	0	W
325211	Plastics Materials and Resins	843	Q	808	Q	5	W	0	W	0	0
325212	Synthetic Rubber	85	6	81	W	W	0	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	89	6	87	4	W	0	W	W	0	0
325311	Nitrogenous Fertilizers	133	W	132	W	0	0	0	W	0	0
325312	Phosphatic Fertilizers	57	0	54	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	1,199	84	1,065	Q	46	0	0	5	0	5
325412	Pharmaceutical Preparation	601	24	546	8	19	0	0	W	0	5
325992	Photographic Film, Paper, Plate, and Chemicals	121	Q	111	W	W	0	0	0	0	W
326	Plastics and Rubber Products	8,217	260	7,484	Q	W	0	0	W	0	0
327	Nonmetallic Mineral Products	12,174	455	11,488	410	62	W	W	Q	W	W
327120	Clay Building Material and Refractories	446	5	436	W	W	0	0	0	0	0
327211	Flat Glass	50	W	50	0	W	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	194	15	176	Q	7	0	0	W	0	0
327213	Glass Containers	59	W	59	0	W	0	0	0	0	0
327215	Glass Products from Purchased Glass	683	Q	635	Q	W	W	W	W	W	W
327310	Cements	189	0	189	0	0	0	0	0	0	0
327410	Lime	83	W	75	W	0	0	0	0	0	0
327420	Gypsum	122	W	121	W	0	0	0	0	0	0
327993	Mineral Wool	186	W	181	W	W	0	0	W	0	0
331	Primary Metals	3,129	96	3,023	67	23	0	0	25	0	8
331110	Iron and Steel Mills and Ferroalloys	345	23	334	22	W	0	0	W	0	W
3312	Steel Products from Purchased Steel	470	W	413	W	0	0	0	0	0	W
3313	Alumina and Aluminum	374	22	361	13	10	0	0	W	0	W
331314	Secondary Smelting and Alloying of Aluminum	96	W	90	W	W	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	57	W	57	0	W	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	182	13	176	W	W	0	0	W	0	0
3314	Nonferrous Metals, except Aluminum	662	W	654	W	7	0	0	W	0	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	108	W	104	W	0	0	0	0	0	0
3315	Foundries	1,278	27	1,261	23	W	0	0	W	0	W
331511	Iron Foundries	320	W	319	W	W	0	0	0	0	0
331523	Nonferrous Metal Die-Casting Foundries	254	W	245	W	0	0	0	0	0	W
331524	Aluminum Foundries, except Die-Casting	268	20	262	18	W	0	0	W	0	W
332	Fabricated Metal Products	36,439	Q	33,464	Q	W	0	0	0	0	W
333	Machinery	15,307	335	14,495	Q	Q	0	0	0	0	0
334	Computer and Electronic Products	6,831	313	6,375	Q	Q	0	0	Q	0	0
334413	Semiconductors and Related Devices	388	15	358	W	14	0	0	W	0	0
335	Electrical Equip., Appliances, and Components	3,298	Q	3,260	W	Q	0	0	0	0	0
336	Transportation Equipment	6,603	590	6,107	547	314	0	0	Q	0	W
336111	Automobiles	44	0	43	0	0	0	0	0	0	0
336112	Light Trucks and Utility Vehicles	37	0	37	0	0	0	0	0	0	0
3364	Aerospace Product and Parts	1,063	43	1,009	Q	35	0	0	W	0	W
336411	Aircraft	293	7	283	W	5	0	0	W	0	W
337	Furniture and Related Products	7,913	Q	7,008	Q	0	0	0	0	0	W
339	Miscellaneous	12,906	Q	11,885	Q	Q	0	0	W	0	0
	Total	174,824	4,304	160,728	2,980	1,556	Q	Q	510	Q	222

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

(b) These counts include only those establishments that reported this activity in 2014. Establishments for which only a portion of the total consumed fuel was reported as switchable contribute to the establishment counts in both the 'Switchable' and 'Not Switchable' columns. Therefore, the sum of these establishment counts may be greater than the corresponding establishment count of the total number of establishments consuming the fuel.

(c) 'Alternative Energy Sources' consist of those energy sources that could have been substituted for electricity receipts during 2014. The quantities are expressed in millions of kilowatthours, and therefore represent the quantity of electricity that could have been displaced by the given alternative type of energy.

(d) 'Total Receipts' represents those quantities of electricity generated off the manufacturing establishment site and available at the site for consumption. It includes those quantities for which payment was made, quantities transferred in, quantities purchased and paid for by a central purchasing entity, and quantities for which payment was made in kind. It does not include electricity generated onsite. 'Electricity Receipts' has not been adjusted to account for any quantities that might have been resold or transferred out. The estimates include those quantities that were ascertained switchable or not switchable, plus an additional quantity for which the switching status was not ascertained.

(e) 'Other' includes all other types of energy not already identified that respondents indicated could have been consumed in place of electricity.

* 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.

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 10.7 Relative Standard Errors for Table 10.7;

Unit: Percents.

NAICS Code(a)	Subsector and Industry	Electricity Receipts(b)					Alternative Energy Sources(c)				
		Total Receipts(d)	Switchable	Not Switchable	Natural Gas	Distillate Fuel Oil	Residual Fuel Oil	Coal	HGL (excluding natural gasoline)	Coal Coke and Breeze	Other(e)
Total United States											
311	Food	0.2	39.2	2.0	58.1	31.5	0.1	4.9	4.1	6.5	5.7
3112	Grain and Oilseed Milling	0.1	45.3	2.5	56.5	15.9	X	5.8	X	9.1	X
311221	Wet Corn Milling	0.0	0.0	0.0	0.0	0.0	X	0.0	X	X	X
31131	Sugar Manufacturing	0.1	0.1	0.1	0.1	0.1	0.1	X	0.1	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	0.1	22.1	0.5	20.6	28.0	X	9.2	9.2	9.2	9.2
3115	Dairy Product	0.1	19.3	0.9	16.5	22.7	X	X	7.1	X	7.1
3116	Animal Slaughtering and Processing	0.1	70.0	4.3	97.5	70.0	X	X	X	X	X
312	Beverage and Tobacco Products	1.3	51.6	3.1	62.0	55.7	X	7.0	7.0	X	56.4
3121	Beverages	1.3	53.2	3.2	62.0	57.5	X	7.0	7.0	X	56.4
3122	Tobacco	0.1	0.1	0.1	X	0.1	X	X	X	X	X
313	Textile Mills	0.1	60.8	3.5	62.5	93.9	X	X	X	X	X
314	Textile Product Mills	0.1	48.8	6.3	X	48.8	X	X	X	X	X
315	Apparel	0.1	73.2	6.0	73.2	X	X	X	X	X	X
316	Leather and Allied Products	0.1	X	0.2	X	X	X	X	X	X	X
321	Wood Products	0.9	41.1	2.8	71.7	29.7	5.5	X	30.2	X	35.6
321113	Sawmills	0.4	28.2	2.2	51.2	36.5	5.5	X	36.7	X	35.6
3212	Veneer, Plywood, and Engineered Woods	0.1	53.8	5.2	53.8	X	X	X	X	X	X
321219	Reconstituted Wood Products	0.1	X	0.1	X	X	X	X	X	X	X
3219	Other Wood Products	1.3	72.7	4.0	90.0	60.6	X	X	45.5	X	X
322	Paper	0.1	34.9	2.7	39.8	0.1	0.1	0.1	X	X	0.1
322110	Pulp Mills, except Newsprint	0.0	0.0	0.0	X	X	X	X	X	X	0.0
322121	Paper Mills, except Newsprint	0.1	0.1	0.1	0.1	0.1	0.1	0.1	X	X	0.1
322122	Newsprint Mills	0.0	X	0.0	X	X	X	X	X	X	X
322130	Paperboard Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	X	0.0
323	Printing and Related Support	0.1	63.5	3.0	93.5	86.5	X	X	X	X	X
324	Petroleum and Coal Products	0.3	8.5	1.3	12.7	9.1	3.5	X	13.7	X	36.2
324110	Petroleum Refineries	0.1	36.2	0.5	36.2	36.2	X	X	36.2	X	36.2
324121	Asphalt Paving Mixture and Block	0.3	8.7	2.0	13.9	9.7	4.2	X	12.7	X	X
324122	Asphalt Shingle and Coating Materials	1.8	4.0	1.8	4.0	4.0	X	X	4.0	X	X
324199	Other Petroleum and Coal Products	0.0	X	0.0	X	X	X	X	X	X	X
325	Chemicals	0.1	31.8	2.0	40.7	42.9	8.1	0.0	20.8	X	37.7
325110	Petrochemicals	0.1	26.6	0.6	26.6	X	X	X	X	X	26.6
325120	Industrial Gases	0.1	X	0.1	X	X	X	X	X	X	X
325180	Other Basic Inorganic Chemicals	0.1	47.8	1.3	12.7	51.1	X	X	X	X	X
325193	Ethyl Alcohol	0.1	22.9	0.4	48.5	18.1	X	X	X	X	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	0.0	X	X	X	X	X	X	X
325199	Other Basic Organic Chemicals	0.1	35.7	1.1	39.2	49.8	X	X	X	X	12.4
325211	Plastics Materials and Resins	0.1	60.0	2.9	80.3	13.2	8.1	X	8.1	X	X
325212	Synthetic Rubber	0.0	0.0	0.0	0.0	0.0	X	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	0.0	0.0	0.0	0.0	0.0	X	0.0	0.0	X	X
325311	Nitrogenous Fertilizers	0.1	22.9	0.2	22.9	X	X	X	22.9	X	X
325312	Phosphatic Fertilizers	0.0	X	0.0	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	0.1	37.6	4.5	69.2	21.0	X	X	35.0	X	34.9
325412	Pharmaceutical Preparation	0.1	15.5	4.8	25.0	16.5	X	X	70.0	X	34.9
325992	Photographic Film, Paper, Plate, and Chemicals	0.1	63.3	5.3	25.5	25.5	X	X	X	X	80.5
326	Plastics and Rubber Products	0.1	48.6	2.7	67.4	99.2	X	X	99.2	X	X
327	Nonmetallic Mineral Products	0.1	38.5	1.9	42.6	46.6	96.5	96.5	61.2	96.5	73.4
327120	Clay Building Material and Refractories	0.1	8.3	1.6	8.3	8.3	X	X	X	X	X
327211	Flat Glass	0.0	0.0	0.0	X	0.0	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	0.1	44.2	5.8	71.9	21.2	X	X	21.2	X	X
327213	Glass Containers	0.0	0.0	0.0	X	0.0	X	X	X	X	X
327215	Glass Products from Purchased Glass	0.1	62.9	5.0	65.0	91.9	96.5	96.5	96.5	96.5	96.5
327310	Cements	0.1	X	0.1	X	X	X	X	X	X	X
327410	Lime	0.0	0.0	0.0	0.0	X	X	X	X	X	X
327420	Gypsum	0.1	17.3	0.2	17.3	X	X	X	X	X	X
327993	Mineral Wool	0.1	50.9	1.7	24.9	50.9	X	X	24.9	X	X
331	Primary Metals	0.2	16.4	1.0	19.6	18.1	X	X	38.6	X	3.8
331110	Iron and Steel Mills and Ferroalloys	0.1	45.6	0.1	49.0	3.3	X	X	3.3	X	3.3
3312	Steel Products from Purchased Steel	0.1	54.6	7.0	77.7	X	X	X	X	X	12.1
3313	Alumina and Aluminum	2.0	14.6	2.1	22.2	21.0	X	X	68.5	X	0.0
331314	Secondary Smelting and Alloying of Aluminum	0.1	0.1	0.1	0.1	0.1	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	0.1	21.4	0.1	X	21.4	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	4.1	25.0	4.3	30.9	36.0	X	X	68.5	X	X
3314	Nonferrous Metals, except Aluminum	0.1	51.8	0.5	59.9	47.3	X	X	68.3	X	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.1	37.4	1.5	37.4	X	X	X	X	X	X
3315	Foundries	0.1	20.8	0.3	24.3	33.3	X	X	54.0	X	6.1
331511	Iron Foundries	0.1	18.5	0.1	18.5	18.5	X	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	0.1	9.6	1.6	9.6	X	X	X	X	X	9.6
331524	Aluminum Foundries, except Die-Casting	0.1	27.5	0.7	30.0	7.9	X	X	54.0	X	7.9
332	Fabricated Metal Products	0.1	52.8	2.0	57.2	78.1	X	X	X	X	97.6
333	Machinery	0.1	43.2	1.6	50.7	57.5	X	X	X	X	X
334	Computer and Electronic Products	0.1	42.4	2.7	53.1	60.3	X	X	79.6	X	X
334413	Semiconductors and Related Devices	0.1	20.7	4.7	20.1	20.8	X	X	20.1	X	X
335	Electrical Equip., Appliances, and Components	0.1	63.9	0.8	93.6	62.0	X	X	X	X	X
336	Transportation Equipment	0.1	35.0	3.1	37.6	48.9	X	X	55.9	X	25.8
336111	Automobiles	0.0	X	0.0	X	X	X	X	X	X	X
336112	Light Trucks and Utility Vehicles	0.0	X	0.0	X	X	X	X	X	X	X
3364	Aerospace Product and Parts	0.1	38.3	3.2	59.2	43.3	X	X	64.1	X	25.8
336411	Aircraft	0.1	32.6	1.4	25.8	35.2	X	X	25.8	X	25.8
337	Furniture and Related Products	0.1	83.1	3.6	57.0	X	X	X	X	X	99.3
339	Miscellaneous	0.7	51.7	2.5	64.6	73.9	X	X	83.5	X	X
	Total	0.1	12.4	0.7	16.2	16.9	54.9	63.3	34.5	88.7	44.4

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

(b) These counts include only those establishments that reported this activity in 2014. Establishments for which only a portion of the total consumed fuel was reported as switchable contribute to the establishment counts in both the 'Switchable' and 'Not Switchable' columns. Therefore, the sum of these establishment counts may be greater than the corresponding establishment count of the total number of establishments consuming the fuel.

(c) 'Alternative Energy Sources' consist of those energy sources that could have been substituted for electricity receipts during 2014. The quantities are expressed in millions of kilowatt-hours, and therefore represent the quantity of electricity that could have been displaced by the given alternative type of energy.

(d) 'Total Receipts' represents those quantities of electricity generated off the manufacturing establishment site and available at the site for consumption. It includes those quantities for which payment was made, quantities transferred in, quantities purchased and paid for by a central purchasing entity, and quantities for which payment was made in kind. It does not include electricity generated onsite. 'Electricity Receipts' has not been adjusted to account for any quantities that might have been resold or transferred out. The estimates include those quantities that were ascertained switchable or not switchable, plus an additional quantity for which the switching status was not ascertained.

(e) 'Other' includes all other types of energy not already identified that respondents indicated could have been consumed in place of electricity.

* 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.

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