

**Table 10.7 Number of Establishments with Capability to Switch Electricity to Alternative Energy Sources, 2010;**

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

NAICS Code(a)	Selected Subsectors and Industry	Electricity Receipts(b)			Alternative Energy Sources(c)						
		Total Establishments with Electricity Receipts(d)	Switchable	Not Switchable	Natural Gas	Distillate Fuel Oil	Residual Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)
<b>Total United States</b>											
311	Food	13,265	765	11,829	482	292	Q	Q	51	Q	Q
3112	Grain and Oilseed Milling	602	13	580	9	8	W	Q	W	Q	W
311221	Wet Corn Milling	59	W	W	W	0	W	0	0	0	0
31131	Sugar Manufacturing	73	W	W	0	W	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Foods	987	74	875	Q	Q	0	0	W	0	W
3115	Dairy Products	998	57	941	23	40	W	0	5	0	W
3116	Animal Slaughtering and Processing	1,709	78	1,541	21	63	0	W	Q	0	W
312	Beverage and Tobacco Products	2,093	121	1,844	Q	Q	W	W	W	0	Q
3121	Beverages	2,022	W	1,781	Q	Q	W	W	W	0	W
3122	Tobacco	71	W	63	0	0	0	0	0	0	W
313	Textile Mills	1,341	Q	1,147	Q	Q	W	0	0	0	0
314	Textile Product Mills	3,531	Q	2,614	Q	W	W	W	W	0	W
315	Apparel	4,193	Q	3,595	W	0	0	0	0	0	0
316	Leather and Allied Products	452	Q	340	W	0	0	W	0	0	W
321	Wood Products	7,709	229	6,719	81	124	5	W	21	W	41
321113	Sawmills	1,647	124	1,409	Q	69	W	W	6	0	Q
3212	Veneer, Plywood, and Engineered Woods	1,228	Q	1,103	Q	Q	W	W	W	W	W
321219	Reconstituted Wood Products	182	3	180	W	W	0	0	0	0	0
3219	Other Wood Products	4,515	88	3,909	W	Q	0	0	W	0	W
322	Paper	3,733	125	3,228	92	27	9	Q	W	W	Q
322110	Pulp Mills	41	3	39	W	0	W	0	0	0	0
322121	Paper Mills, except Newsprint	204	21	194	15	W	4	6	W	W	4
322122	Newsprint Mills	26	3	24	W	W	W	W	0	0	0
322130	Paperboard Mills	177	14	171	10	5	W	4	0	0	W
323	Printing and Related Support	15,313	975	12,333	793	W	0	W	W	0	W
324	Petroleum and Coal Products	2,017	289	1,787	118	200	W	4	21	0	18
324110	Petroleum Refineries	231	49	225	W	W	W	0	15	0	10
324121	Asphalt Paving Mixture and Block	1,332	225	1,118	70	190	W	W	6	0	W
324199	Other Petroleum and Coal Products	48	4	44	W	0	0	W	0	0	W
325	Chemicals	8,287	494	7,321	198	242	Q	Q	46	Q	Q
325110	Petrochemicals	40	5	40	W	0	W	0	0	0	W
325120	Industrial Gases	486	W	441	W	0	0	W	W	0	0
325181	Alkalies and Chlorine	35	W	W	W	0	0	W	0	0	0
325182	Carbon Black	32	0	31	0	0	0	0	0	0	0
325188	Other Basic Inorganic Chemicals	470	6	469	W	3	0	0	0	0	0
325192	Cyclic Crudes and Intermediates	24	0	24	0	0	0	0	0	0	0
325193	Ethyl Alcohol	185	4	181	W	0	0	0	0	0	0
325199	Other Basic Organic Chemicals	475	42	466	6	Q	0	0	0	0	W
325211	Plastics Materials and Resins	744	11	702	5	W	W	0	W	0	W
325212	Synthetic Rubber	126	17	111	9	5	0	0	0	0	W
325222	Noncellulosic Organic Fibers	77	8	74	W	5	0	W	0	0	W
325311	Nitrogenous Fertilizers	70	W	64	W	0	0	0	0	0	0
325312	Phosphatic Fertilizers	65	0	65	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	1,178	121	1,081	40	105	W	W	Q	W	Q
325412	Pharmaceutical Preparation	609	53	564	7	53	W	0	W	0	W
325992	Photographic Film, Paper, Plate, and Chemicals	138	16	126	6	6	0	W	0	0	W
326	Plastics and Rubber Products	8,268	395	7,472	Q	Q	Q	W	Q	W	W
327	Nonmetallic Mineral Products	11,997	841	10,795	383	590	W	0	Q	0	6
327121	Brick and Structural Clay Tile	156	0	149	0	0	0	0	0	0	0
327211	Flat Glass	61	10	50	W	7	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	153	10	159	W	6	0	0	W	0	W
327213	Glass Containers	68	16	66	6	4	W	0	11	0	0
327215	Glass Products from Purchased Glass	561	8	514	6	W	0	0	W	0	W
327310	Cements	209	5	166	W	W	W	0	W	0	0
327410	Lime	83	6	78	6	0	0	0	0	0	0
327420	Gypsum	138	5	135	W	0	0	0	W	0	0
327993	Mineral Wool	203	0	202	0	0	0	0	0	0	0
331	Primary Metals	3,196	141	2,987	106	40	W	0	30	0	8
331111	Iron and Steel Mills	427	W	394	17	W	0	0	4	0	W
331112	Electrometallurgical Ferroalloy Products	20	0	20	0	0	0	0	0	0	0
3312	Steel Products from Purchased Steel	418	W	408	4	W	0	0	W	0	0

**Table 10.7 Number of Establishments with Capability to Switch Electricity to Alternative Energy Sources, 2010;**

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

NAICS Code(a)	Selected Subsectors and Industry	Electricity Receipts(b)			Alternative Energy Sources(c)						
		Total Establishments with Electricity Receipts(d)	Switchable	Not Switchable	Natural Gas	Distillate Fuel Oil	Residual Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)
3313	Alumina and Aluminum	388	19	333	13	W	0	0	W	0	W
331314	Secondary Smelting and Alloying of Aluminum	79	4	72	W	W	0	0	W	0	W
331315	Aluminum Sheet, Plate and Foils	67	W	64	W	0	0	0	0	0	0
331316	Aluminum Extruded Products	133	11	128	7	W	0	0	W	0	0
3314	Nonferrous Metals, except Aluminum	602	24	575	19	6	0	0	W	0	0
331419	Primary Smelting and Refining of Nonferrous Metals, except Copper and Alu	82	8	77	8	W	0	0	W	0	0
3315	Foundries	1,341	74	1,257	53	25	W	0	17	0	W
331511	Iron Foundries	332	11	315	9	7	W	0	W	0	0
331521	Aluminum Die-Casting Foundries	162	Q	127	Q	W	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	271	20	258	9	8	0	0	8	0	W
332	Fabricated Metal Products	32,369	1,104	27,860	623	Q	0	0	W	0	W
333	Machinery	14,370	717	11,798	416	269	Q	W	263	W	Q
334	Computer and Electronic Products	6,685	499	5,639	Q	Q	0	W	0	0	Q
334413	Semiconductors and Related Devices	419	15	408	W	9	0	0	0	0	W
335	Electrical Equip., Appliances, and Components	3,294	Q	3,111	Q	W	0	0	0	0	0
336	Transportation Equipment	6,270	319	5,747	293	226	W	W	Q	0	Q
336111	Automobiles	68	W	W	0	W	0	0	0	0	W
336112	Light Trucks and Utility Vehicles	50	W	38	0	W	0	0	0	0	0
3364	Aerospace Product and Parts	1,077	77	967	56	63	W	0	Q	0	Q
336411	Aircraft	278	20	265	8	17	W	0	W	0	W
337	Furniture and Related Products	8,187	Q	7,008	Q	Q	0	W	W	0	W
339	Miscellaneous	13,491	490	11,573	325	Q	0	W	W	W	W
	<b>Total</b>	<b>170,061</b>	<b>8,176</b>	<b>146,745</b>	<b>4,854</b>	<b>3,007</b>	<b>386</b>	<b>729</b>	<b>1,222</b>	<b>345</b>	<b>1,239</b>

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

(b) These counts include only those establishments that reported this activity in 2010.

(c) 'Alternative Energy Sources' consist of those energy sources that could have been substituted for electricity receipts during 2010. 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.

NF=No applicable RSE row/column factor.

\* 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, '2010 Manufacturing Energy Consumption Survey.'

**RSE Table 10.7 Relative Standard Errors for Table 10.7;**

**Unit: Percents.**

NAICS Code(a)	Selected Subsectors and Industry	Electricity Receipts(b)				Alternative Energy Sources(c)					
		Total Establishments with Electricity Receipts(d)	Switchable	Not Switchable	Natural Gas	Distillate Fuel Oil	Residual Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)
<b>Total United States</b>											
311	Food	0.1	25.2	2.3	35.3	32.7	53.5	56.9	49.5	61.1	57.5
3112	Grain and Oilseed Milling	0.0	26.8	1.1	37.4	46.5	72.4	50.6	72.4	61.1	17.3
311221	Wet Corn Milling	0.0	0.0	0.0	0.0	X	X	0.0	X	X	X
31131	Sugar Manufacturing	0.0	0.0	0.0	X	0.0	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Foods	0.1	41.5	4.4	72.7	54.6	X	X	92.1	X	64.0
3115	Dairy Products	0.1	29.0	1.9	24.2	40.0	6.7	X	15.5	X	84.4
3116	Animal Slaughtering and Processing	0.0	35.0	2.9	47.3	41.1	X	92.9	63.4	X	91.9
312	Beverage and Tobacco Products	0.0	40.0	3.8	58.5	65.8	66.4	7.1	88.8	X	67.2
3121	Beverages	0.0	40.4	3.9	58.5	65.8	66.4	7.1	88.8	X	68.9
3122	Tobacco	0.0	0.0	0.0	X	X	X	X	X	X	0.0
313	Textile Mills	0.0	53.1	5.2	52.6	61.6	86.7	X	X	X	X
314	Textile Product Mills	0.0	52.7	11.2	64.8	74.0	93.6	98.3	89.0	X	93.6
315	Apparel	0.0	79.6	8.7	79.6	X	X	X	X	X	X
316	Leather and Allied Products	0.0	63.1	14.4	17.6	X	X	85.1	X	X	91.8
321	Wood Products	0.9	23.5	2.6	45.6	29.4	5.3	67.2	44.9	89.8	49.9
321113	Sawmills	0.7	24.3	2.8	63.4	26.3	6.4	77.2	35.2	X	76.0
3212	Veneer, Plywood, and Engineered Woods	0.0	56.7	4.0	64.4	65.6	9.1	89.8	76.2	89.8	89.8
321219	Reconstituted Wood Products	0.0	13.5	0.1	13.5	13.5	X	X	X	X	X
3219	Other Wood Products	1.5	49.5	4.3	80.6	74.7	X	X	7.8	X	75.5
322	Paper	0.0	30.9	4.5	38.3	45.8	0.0	69.6	0.0	0.0	65.7
322110	Pulp Mills	0.0	0.0	0.0	0.0	X	0.0	X	X	X	X
322121	Paper Mills, except Newsprint	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
322122	Newsprint Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	27.4	3.5	30.7	66.4	X	98.8	92.6	X	98.8
324	Petroleum and Coal Products	0.1	11.0	1.9	8.6	15.7	1.9	2.1	8.0	X	13.1
324110	Petroleum Refineries	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X	0.0
324121	Asphalt Paving Mixture and Block	0.1	14.0	3.0	13.5	16.5	5.3	5.3	27.2	X	38.0
324199	Other Petroleum and Coal Products	0.0	0.0	0.0	0.0	X	X	0.0	X	X	0.0
325	Chemicals	0.1	23.8	2.8	38.5	25.5	66.6	50.9	41.8	66.6	53.4
325110	Petrochemicals	0.0	0.0	0.0	0.0	X	0.0	X	X	X	0.0
325120	Industrial Gases	0.0	42.9	6.8	42.9	X	X	42.9	42.9	X	X
325181	Alkalies and Chlorine	0.0	0.0	0.0	0.0	X	X	0.0	X	X	X
325182	Carbon Black	0.0	X	0.0	X	X	X	X	X	X	X
325188	Other Basic Inorganic Chemicals	0.0	11.6	0.1	11.6	11.6	X	X	X	X	X
325192	Cyclic Crudes and Intermediates	0.0	X	0.0	X	X	X	X	X	X	X
325193	Ethyl Alcohol	0.0	4.3	0.1	4.3	4.3	X	X	X	X	X
325199	Other Basic Organic Chemicals	0.1	49.5	0.9	28.7	59.1	X	X	X	X	16.6
325211	Plastics Materials and Resins	0.1	29.7	2.8	29.3	55.0	66.8	X	66.8	X	47.7
325212	Synthetic Rubber	0.0	21.1	2.3	29.8	31.2	X	X	X	X	12.3
325222	Noncellulosic Organic Fibers	0.0	0.0	0.0	0.0	0.0	X	0.0	X	X	0.0
325311	Nitrogenous Fertilizers	0.0	0.0	0.0	0.0	X	X	X	X	X	X
325312	Phosphatic Fertilizers	0.0	X	0.0	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	0.0	17.7	2.6	37.2	19.0	81.0	93.8	50.6	93.8	74.5
325412	Pharmaceutical Preparation	0.0	19.8	3.0	15.0	19.8	10.2	X	30.0	X	10.2
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	26.6	3.2	14.1	14.1	X	14.1	X	X	79.9
326	Plastics and Rubber Products	0.0	36.6	2.7	50.6	57.6	62.3	80.5	62.3	80.5	96.6
327	Nonmetallic Mineral Products	0.1	26.3	2.3	39.8	32.4	35.0	X	60.3	X	27.5
327121	Brick and Structural Clay Tile	0.0	X	1.8	X	X	X	X	X	X	X
327211	Flat Glass	0.0	0.0	0.0	0.0	0.0	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	0.0	20.8	1.2	13.2	13.2	X	X	13.2	X	46.7
327213	Glass Containers	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X	X
327215	Glass Products from Purchased Glass	0.0	8.9	3.1	8.9	8.9	X	X	8.9	X	8.9
327310	Cements	0.1	30.1	9.2	13.2	61.4	59.6	X	13.2	X	X
327410	Lime	0.0	0.0	0.0	0.0	X	X	X	X	X	X
327420	Gypsum	0.0	30.3	0.3	13.9	X	X	X	40.8	X	X
327993	Mineral Wool	0.0	X	0.1	X	X	X	X	X	X	X
331	Primary Metals	0.1	10.0	1.3	12.6	10.1	54.7	X	15.0	X	18.2
331111	Iron and Steel Mills	0.0	0.0	0.0	0.0	0.0	X	X	0.0	X	0.0
331112	Electrometallurgical Ferroalloy Products	0.0	X	0.0	X	X	X	X	X	X	X
3312	Steel Products from Purchased Steel	0.0	12.2	1.4	12.2	12.2	X	X	12.2	X	X
3313	Alumina and Aluminum	0.0	8.5	9.4	7.1	21.4	X	X	12.5	X	0.0

**RSE Table 10.7 Relative Standard Errors for Table 10.7;**

**Unit: Percents.**

NAICS Code(a)	Selected Subsectors and Industry	Electricity Receipts(b)				Alternative Energy Sources(c)					
		Total Establishments with Electricity Receipts(d)	Switchable	Not Switchable	Natural Gas	Distillate Fuel Oil	Residual Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)
331314	Secondary Smelting and Alloying of Aluminum	0.0	0.0	0.0	0.0	0.0	X	X	0.0	X	0.0
331315	Aluminum Sheet, Plate and Foils	0.0	0.0	0.0	0.0	X	X	X	X	X	X
331316	Aluminum Extruded Products	0.0	12.9	1.0	5.6	33.3	X	X	5.6	X	X
3314	Nonferrous Metals, except Aluminum	0.0	24.7	2.3	29.9	8.2	X	X	0.0	X	X
331419	Primary Smelting and Refining of Nonferrous Metals, except Copper and Alu	0.0	0.0	0.0	0.0	0.0	X	X	0.0	X	X
3315	Foundries	0.1	17.1	1.5	22.7	15.2	54.7	X	25.2	X	29.8
331511	Iron Foundries	0.1	28.2	2.3	36.4	44.7	70.6	X	70.6	X	X
331521	Aluminum Die-Casting Foundries	0.0	51.0	12.3	60.2	11.7	X	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	0.1	19.9	1.6	25.8	14.2	X	X	32.8	X	12.3
332	Fabricated Metal Products	0.0	33.2	2.6	43.2	55.3	X	X	77.2	X	99.4
333	Machinery	0.0	30.4	3.3	39.7	48.1	62.1	69.7	49.4	69.7	56.8
334	Computer and Electronic Products	0.0	34.4	4.4	50.1	54.6	X	98.6	X	X	68.2
334413	Semiconductors and Related Devices	0.0	37.9	1.4	84.5	46.0	X	X	X	X	14.9
335	Electrical Equip., Appliances, and Components	0.0	67.2	3.2	67.2	95.1	X	X	X	X	X
336	Transportation Equipment	0.0	40.5	2.9	44.2	47.6	11.1	73.6	71.5	X	72.9
336111	Automobiles	0.0	0.0	0.0	X	0.0	X	X	X	X	0.0
336112	Light Trucks and Utility Vehicles	0.0	0.0	0.0	X	0.0	X	X	X	X	X
3364	Aerospace Product and Parts	0.0	35.5	4.3	48.0	42.9	11.1	X	76.2	X	81.8
336411	Aircraft	0.0	21.0	1.3	16.8	22.7	16.8	X	16.8	X	16.8
337	Furniture and Related Products	0.8	52.3	3.8	56.8	83.5	X	96.5	98.7	X	98.0
339	Miscellaneous	0.1	37.4	3.0	46.4	64.8	X	98.8	98.8	98.8	98.8
	Total	0.1	8.8	0.9	11.7	13.1	36.0	30.9	21.0	41.9	23.0

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

(b) These counts include only those establishments that reported this activity in 2010.

(c) 'Alternative Energy Sources' consist of those energy sources that could have been substituted for electricity receipts during 2010. 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.

NF=No applicable RSE row/column factor.

\* 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.

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, '2010 Manufacturing Energy Consumption Survey.'