

Released: December 2025

Next MECS will be fielded in 2027

Table 10.7 Number of establishments with capability to switch electricity to alternative energy sources, 2022

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	18,250	330	18,034	Q	46	D	0	6	0	0
3112	Grain and Oilseed Milling	661	D	647	0	D	0	0	0	0	0
311221	Wet Corn Milling and Starch Manufacturing	55	D	53	0	D	0	0	0	0	0
31131	Sugar Manufacturing	64	D	64	0	0	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	1,076	8	1,073	4	4	0	0	0	0	0
3115	Dairy Product Manufacturing	1,087	36	1,057	10	20	D	0	6	0	0
3116	Animal Slaughtering and Processing	2,022	40	1,986	Q	D	0	0	0	0	0
312	Beverage and Tobacco Products	5,990	140	5,925	Q	Q	0	Q	0	0	Q
3121	Beverages	5,906	140	5,841	Q	Q	0	Q	0	0	Q
3122	Tobacco	84	0	84	0	0	0	0	0	0	0
313	Textile Mills	1,089	Q	1,089	D	0	0	0	D	0	0
314	Textile Product Mills	3,638	Q	3,554	D	0	0	0	Q	0	0
315	Apparel	3,236	0	3,236	0	0	0	0	0	0	0
316	Leather and Allied Products	636	0	636	0	0	0	0	0	0	0
321	Wood Products	9,637	201	9,602	Q	88	0	Q	0	0	D
321113	Sawmills	1,925	73	1,901	17	Q	0	0	0	0	D
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	1,122	D	1,122	0	0	0	0	0	0	Q
321219	Reconstituted Wood Products	119	0	119	0	0	0	0	0	0	0
3219	Other Wood Products	6,313	D	6,303	Q	Q	0	Q	0	0	0
322	Paper	3,057	33	3,051	27	D	D	D	0	0	D
322110	Pulp Mills	33	4	33	4	D	D	0	0	0	0
322120	Paper Mills	138	12	135	10	D	D	D	0	0	D
322130	Paperboard Mills	164	14	161	10	D	0	0	0	0	D
323	Printing and Related Support	12,389	573	12,118	Q	0	0	0	0	0	Q
324	Petroleum and Coal Products	1,808	86	1,754	27	45	6	0	0	0	5
324110	Petroleum Refineries	130	14	128	10	D	0	0	0	0	D
324121	Asphalt Paving Mixture and Block	1,273	60	1,225	13	40	6	0	0	0	D
324122	Asphalt Shingle and Coating Materials	142	3	140	D	0	0	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	213	D	212	D	D	0	0	0	0	0
324199	All Other Petroleum and Coal Products Manufacturing	50	D	50	D	D	0	0	0	0	0
325	Chemicals	10,040	309	9,841	Q	138	D	0	Q	0	D
325110	Petrochemicals	60	D	60	D	0	0	0	0	0	D
325120	Industrial Gases	611	Q	512	Q	D	0	0	Q	0	0
325180	Other Basic Inorganic Chemical Manufacturing	586	D	586	D	Q	0	0	0	0	0
325193	Ethyl Alcohol	207	0	207	0	0	0	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	61	10	61	D	0	0	0	0	0	0
325199	All Other Basic Organic Chemical Manufacturing	590	9	585	D	Q	0	0	0	0	0
325211	Plastics Materials and Resins	1,037	Q	1,037	Q	Q	0	0	0	0	0
325212	Synthetic Rubber	98	3	95	D	D	0	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	88	D	86	D	D	0	0	0	0	0
325311	Nitrogenous Fertilizers	160	5	157	D	0	0	0	0	0	0
325312	Phosphatic Fertilizers	79	4	78	D	D	0	0	0	0	0
3254	Pharmaceuticals and Medicines	1,471	Q	1,391	24	Q	D	0	0	0	0
325412	Pharmaceutical Preparation	687	D	623	5	Q	D	0	0	0	0
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	69	3	68	0	D	0	0	0	0	0
326	Plastics and Rubber Products	8,490	Q	8,489	Q	Q	0	0	D	0	0
327	Nonmetallic Mineral Products	12,285	Q	12,275	Q	D	0	0	D	0	0
327120	Clay Building Material and Refractories	364	4	361	3	0	0	0	0	0	0
327211	Flat Glass	93	0	93	0	0	0	0	0	0	0

327212	Other Pressed and Blown Glass and Glassware	156	Q	154	D	0	0	0	0	0	0
327213	Glass Containers	54	0	54	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	597	D	595	0	0	0	0	0	0	0
327310	Cements	159	0	159	0	0	0	0	0	0	0
327410	Lime	95	0	95	0	0	0	0	0	0	0
327420	Gypsum	126	D	125	D	0	0	0	0	0	0
327993	Mineral Wool	184	4	182	D	D	0	0	D	0	0
331	Primary Metals	2,671	40	2,648	15	9	0	D	D	D	9
331110	Iron and Steel Mills and Ferroalloys	162	D	161	D	D	0	0	0	0	0
3312	Steel Products from Purchased Steel	564	8	556	D	D	0	D	0	D	D
3313	Alumina and Aluminum Production and Processing	351	D	348	5	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	88	3	85	D	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	67	0	67	0	0	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	182	D	182	D	0	0	0	0	0	0
3314	Nonferrous Metal (except Aluminum) Production and Processing	517	11	512	D	Q	0	0	0	0	D
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	74	0	74	0	0	0	0	0	0	0
3315	Foundries	1,077	14	1,072	5	D	0	0	D	0	0
331511	Iron Foundries	258	D	257	D	0	0	0	0	0	0
331523	Nonferrous Metal Die-Casting Foundries	217	D	217	0	D	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	247	3	245	0	0	0	0	0	0	0
332	Fabricated Metal Products	38,096	1,552	37,318	774	Q	Q	Q	Q	Q	Q
333	Machinery	14,061	249	13,863	Q	Q	Q	Q	Q	D	Q
334	Computer and Electronic Products	6,625	Q	6,446	Q	Q	0	0	0	0	Q
334413	Semiconductors and Related Devices	375	6	372	3	3	0	0	0	0	0
335	Electrical Equipment, Appliances, and Components	3,301	Q	3,292	Q	0	0	0	Q	0	Q
336	Transportation Equipment	7,600	Q	7,508	Q	Q	0	D	Q	0	6
336110	Automobile and Light Duty Motor Vehicle Manufacturing	210	7	210	5	D	0	0	4	0	D
3364	Aerospace Product and Parts	1,227	13	1,218	4	9	0	D	0	0	D
336411	Aircraft	286	4	285	D	D	0	0	0	0	D
337	Furniture and Related Products	8,170	479	7,792	390	Q	Q	Q	Q	Q	Q
339	Miscellaneous	13,055	323	12,962	Q	Q	Q	Q	Q	0	0
	Total	184,124	5,166	181,431	2,514	1,392	544	826	786	Q	871

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, 2022 *Manufacturing Energy Consumption Survey*

Note: Totals may not equal sum of components because of independent rounding.

^a The Bureau of the Census classifies establishments using the 2022 North American Industry Classification System (NAICS).

^b These counts include only those establishments that reported this activity in 2022. 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 2022. 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* represent 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* have 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

D=Withheld to avoid disclosing data for individual establishments

Q=Withheld because relative standard error (RSE) is greater than 50%

NA=Not available

The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure protection of the confidential source data (Project No. 7504703, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0054).

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RSE Table 10.7 Relative standard errors for Table 10.7

Unit: Percentage

NAICS code ^a	Subsector and industry	Electricity receipts ^b			Alternative energy sources ^c							Coal coke and breeze	Other ^e
		Total receipts ^d	Switchable	Not switchable	Natural gas	Distillate fuel oil	Residual fuel oil	Coal	HGL (excluding natural gasoline)				
Total United States													
311	Food	5.1	40.0	5.2	53.7	30.2	D	X		20.5	X	X	
3112	Grain and Oilseed Milling	7.7	D	7.9	X	D	X	X		X	X	X	
311221	Wet Corn Milling and Starch Manufacturing	0.0	D	0.0	X	D	X	X		X	X	X	
31131	Sugar Manufacturing	0.0	D	0.0	X	X	X	X		X	X	X	
3114	Fruit and Vegetable Preserving and Specialty Food	13.0	22.7	13.1	0.0	43.6	X	X		X	X	X	
3115	Dairy Product Manufacturing	11.7	21.8	12.0	45.1	22.6	D	X		20.5	X	X	
3116	Animal Slaughtering and Processing	7.3	44.2	7.4	54.2	D	X	X		X	X	X	
312	Beverage and Tobacco Products	6.2	48.1	6.2	80.0	64.8	X	74.9		X	X	97.2	
3121	Beverages	6.2	48.1	6.3	80.0	64.8	X	74.9		X	X	97.2	
3122	Tobacco	0.0	X	0.0	X	X	X	X		X	X	X	
313	Textile Mills	16.6	87.9	16.6	D	X	X	X		D	X	X	
314	Textile Product Mills	20.9	99.0	21.3	D	X	X	X		99.0	X	X	
315	Apparel	18.3	X	18.3	X	X	X	X		X	X	X	
316	Leather and Allied Products	23.0	X	23.0	X	X	X	X		X	X	X	
321	Wood Products	5.8	34.0	5.8	71.5	44.3	X	88.8		X	X	D	
321113	Sawmills	7.5	44.2	7.6	38.7	56.6	X	X		X	X	D	
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	9.7	D	9.7	X	X	X	X		X	X	63.1	
321219	Reconstituted Wood Products	18.2	X	18.2	X	X	X	X		X	X	X	
3219	Other Wood Products	8.5	D	8.5	91.3	70.9	X	88.8		X	X	X	
322	Paper	10.3	7.3	10.3	8.9	D	D	D		X	X	D	
322110	Pulp Mills	0.0	0.0	0.0	0.0	D	D	X		X	X	X	
322120	Paper Mills	0.0	0.0	0.0	0.0	D	D	D		X	X	D	
322130	Paperboard Mills	0.0	0.0	0.0	0.0	D	X	X		X	X	D	
323	Printing and Related Support	7.1	41.1	7.3	77.7	X	X	X		X	X	66.9	
324	Petroleum and Coal Products	2.7	14.4	2.8	18.4	24.8	10.3	X		X	X	42.8	
324110	Petroleum Refineries	0.0	0.0	0.0	0.0	D	X	X		X	X	D	
324121	Asphalt Paving Mixture and Block	3.4	20.6	3.5	39.8	27.8	10.3	X		X	X	D	
324122	Asphalt Shingle and Coating Materials	13.0	0.0	13.2	D	X	X	X		X	X	X	
324191	Petroleum Lubricating Oil and Grease Manufacturing	7.5	D	7.5	D	D	X	X		X	X	X	
324199	All Other Petroleum and Coal Products Manufacturing	0.0	D	0.0	D	D	X	X		X	X	X	
325	Chemicals	5.7	37.0	5.8	54.3	46.7	D	X		90.2	X	D	
325110	Petrochemicals	0.0	D	0.0	D	X	X	X		X	X	D	
325120	Industrial Gases	20.7	91.9	17.4	91.9	D	X	X		94.0	X	X	
325180	Other Basic Inorganic Chemical Manufacturing	22.9	D	22.9	D	63.5	X	X		X	X	X	
325193	Ethyl Alcohol	3.9	X	3.9	X	X	X	X		X	X	X	
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	0.0	0.0	D	X	X	X		X	X	X	
325199	All Other Basic Organic Chemical Manufacturing	13.8	26.5	13.9	D	50.0	X	X		X	X	X	
325211	Plastics Materials and Resins	16.7	77.2	16.7	79.0	96.2	X	X		X	X	X	
325212	Synthetic Rubber	29.8	0.0	30.9	D	D	X	X		X	X	X	
325220	Artificial and Synthetic Fibers and Filaments	6.6	D	6.8	D	D	X	X		X	X	X	
325311	Nitrogenous Fertilizers	0.0	0.0	0.0	D	X	X	X		X	X	X	
325312	Phosphatic Fertilizers	0.0	0.0	0.0	D	D	X	X		X	X	X	
3254	Pharmaceuticals and Medicines	10.4	50.2	10.4	48.8	64.5	D	X		X	X	X	
325412	Pharmaceutical Preparation	14.6	D	14.0	43.3	69.7	D	X		X	X	X	
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	0.0	0.0	0.0	X	D	X	X		X	X	X	
326	Plastics and Rubber Products	6.0	51.3	6.0	98.9	97.4	X	X		D	X	X	
327	Nonmetallic Mineral Products	6.9	56.9	6.9	76.5	D	X	X		D	X	X	
327120	Clay Building Material and Refractories	12.5	15.6	12.6	0.0	X	X	X		X	X	X	
327211	Flat Glass	4.1	X	4.1	X	X	X	X		X	X	X	
327212	Other Pressed and Blown Glass and Glassware	23.7	83.8	24.1	D	X	X	X		X	X	X	
327213	Glass Containers	1.0	X	1.0	X	X	X	X		X	X	X	
327215	Glass Products from Purchased Glass	10.7	D	10.8	X	X	X	X		X	X	X	
327310	Cements	18.3	X	18.3	X	X	X	X		X	X	X	

327410	Lime	0.0	X	0.0	X	X	X	X	X	X	X
327420	Gypsum	10.4	D	10.6	D	X	X	X	X	X	X
327993	Mineral Wool	25.8	0.0	26.0	D	D	X	X	D	X	X
331	Primary Metals	3.0	12.3	3.1	6.6	32.7	X	D	D	D	32.9
331110	Iron and Steel Mills and Ferroalloys	0.0	D	0.0	D	D	X	X	X	X	X
3312	Steel Products from Purchased Steel	6.8	36.1	6.9	D	D	X	D	X	D	D
3313	Alumina and Aluminum Production and Processing	5.4	D	5.4	0.0	X	X	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	0.0	0.0	0.0	D	X	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	23.5	X	23.5	X	X	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	5.7	D	5.7	D	X	X	X	X	X	X
3314	Nonferrous Metal (except Aluminum) Production and Processing	9.1	29.3	9.2	D	75.0	X	X	X	X	D
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	19.7	X	19.7	X	X	X	X	X	X	X
3315	Foundries	4.8	18.9	4.8	6.6	D	X	X	D	X	X
331511	Iron Foundries	9.2	D	9.2	D	X	X	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	5.7	D	5.7	X	D	X	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	7.8	0.0	7.9	X	X	X	X	X	X	X
332	Fabricated Metal Products	4.2	30.8	4.3	43.9	56.1	70.3	57.3	70.3	70.3	70.3
333	Machinery	5.7	48.3	5.8	58.9	65.0	98.2	98.2	98.2	D	98.8
334	Computer and Electronic Products	8.1	52.8	8.3	83.4	95.5	X	X	X	X	99.0
334413	Semiconductors and Related Devices	16.2	0.0	16.3	0.0	0.0	X	X	X	X	X
335	Electrical Equipment, Appliances, and Components	12.8	79.6	12.9	97.2	X	X	X	97.2	X	88.8
336	Transportation Equipment	7.9	54.4	8.0	50.8	65.7	X	D	72.5	X	35.3
336110	Automobile and Light Duty Motor Vehicle Manufacturing	31.1	0.0	31.1	0.0	D	X	X	0.0	X	D
3364	Aerospace Product and Parts	12.4	21.4	12.5	0.0	22.4	X	D	X	X	D
336411	Aircraft	42.6	0.0	42.8	D	D	X	X	X	X	D
337	Furniture and Related Products	8.1	40.2	8.3	43.9	72.1	99.0	65.2	99.0	99.0	99.0
339	Miscellaneous	6.7	48.5	6.8	97.4	96.4	99.0	99.0	99.0	X	X
	Total	1.6	13.0	1.6	18.9	24.2	46.6	37.5	36.3	53.3	34.9

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, 2022 Manufacturing Energy Consumption Survey

Note: Totals may not equal sum of components because of independent rounding.

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* Estimate less than 0.5

D=Withheld to avoid disclosing data for individual establishments

Q=Withheld because relative standard error (RSE) is greater than 50%

NA=Not available

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

The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure protection of the confidential source data (Project No. 7504703, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0054).