

Released: February 2021
 Next MECS will be fielded in 2022.

Table 11.3 Electricity: Components of Onsite Generation, 2018;

Level: National and Regional Data;
 Row: NAICS Codes; Column: Onsite-Generation Components;

NAICS Code(a)	Subsector and Industry	Total Onsite Generation	Cogeneration(b)	Renewable Energy (excluding Wood and Other Biomass)(c)	Other(d)
Total United States					
311	Food	2,964	2,495	84	384
3112	Grain and Oilseed Milling	1,025	1,003	16	6
311221	Wet Corn Milling	562	562	0	1
31131	Sugar Manufacturing	895	841	0	54
3114	Fruit and Vegetable Preserving and Specialty Food	612	580	23	9
3115	Dairy Product	79	61	13	5
3116	Animal Slaughtering and Processing	26	Q	15	3
312	Beverage and Tobacco Products	261	173	78	9
3121	Beverages	241	154	78	9
3122	Tobacco	19	19	*	0
313	Textile Mills	80	68	12	0
314	Textile Product Mills	Q	0	Q	0
315	Apparel	2	0	2	0
316	Leather and Allied Products	0	0	0	0
321	Wood Products	1,840	1,735	Q	Q
321113	Sawmills	1,439	1,436	2	Q
3212	Veneer, Plywood, and Engineered Woods	290	270	*	20
321219	Reconstituted Wood Products	133	114	0	20
3219	Other Wood Products	Q	Q	Q	Q
322	Paper	40,518	38,663	406	1,449
322110	Pulp Mills	6,505	6,069	83	352
322121	Paper Mills, except Newsprint	15,940	15,073	289	577
322122	Newsprint Mills	432	432	0	0
322130	Paperboard Mills	17,380	16,840	20	520
323	Printing and Related Support	Q	*	Q	Q
324	Petroleum and Coal Products	19,678	19,181	19	478
324110	Petroleum Refineries	18,817	18,341	19	458
324121	Asphalt Paving Mixture and Block	7	*	*	7
324122	Asphalt Shingle and Coating Materials	1	0	*	1
324191	Petroleum Lubricating Oil and Grease Products	*	0	*	0
324199	Other Petroleum and Coal Products	853	840	0	13
325	Chemicals	60,634	59,888	30	716
325110	Petrochemicals	3,984	3,983	1	0
325120	Industrial Gases	3,564	3,564	0	*
325180	Other Basic Inorganic Chemicals	13,552	13,517	Q	Q
325193	Ethyl Alcohol	2,747	2,722	0	25
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	103	103	0	0
325199	Other Basic Organic Chemicals	11,698	11,406	*	292
325211	Plastics Materials and Resins	21,939	21,906	Q	29
325212	Synthetic Rubber	274	192	1	81
325220	Artificial and Synthetic Fibers and Filaments	275	275	0	0
325311	Nitrogenous Fertilizers	541	296	*	245
325312	Phosphatic Fertilizers	592	592	*	*
3254	Pharmaceuticals and Medicines	673	654	11	8
325412	Pharmaceutical Preparation	76	67	7	1
325992	Photographic Film, Paper, Plate, and Chemicals	*	*	*	*
326	Plastics and Rubber Products	Q	0	Q	*
327	Nonmetallic Mineral Products	270	71	78	Q
327120	Clay Building Material and Refractories	2	0	1	1
327211	Flat Glass	*	0	0	*
327212	Other Pressed and Blown Glass and Glassware	Q	0	Q	*
327213	Glass Containers	0	0	0	0
327215	Glass Products from Purchased Glass	9	*	7	1
327310	Cements	24	0	24	*
327410	Lime	14	14	0	0
327420	Gypsum	Q	16	*	Q
327993	Mineral Wool	1	*	*	*
331	Primary Metals	8,627	7,873	5	749
331110	Iron and Steel Mills and Ferroalloys	4,884	4,148	1	735

3312	Steel Products from Purchased Steel	4	4	Q	*
3313	Alumina and Aluminum	3,711	3,711	*	*
331314	Secondary Smelting and Alloying of Aluminum	*	0	*	*
331315	Aluminum Sheet, Plate and Foils	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	*	*	0	0
3314	Nonferrous Metals, except Aluminum	7	*	2	4
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	*	*	*	*
3315	Foundries	20	10	1	9
331511	Iron Foundries	9	0	*	9
331523	Nonferrous Metal Die-Casting Foundries	*	0	*	*
331524	Aluminum Foundries, except Die-Casting	*	0	*	0
332	Fabricated Metal Products	Q	*	Q	*
333	Machinery	311	176	Q	78
334	Computer and Electronic Products	60	0	36	Q
334413	Semiconductors and Related Devices	7	0	6	1
335	Electrical Equip., Appliances, and Components	46	Q	Q	29
336	Transportation Equipment	497	268	85	144
336111	Automobiles	79	1	4	73
336112	Light Trucks and Utility Vehicles	57	0	5	52
3364	Aerospace Product and Parts	313	264	41	7
336411	Aircraft	1	*	1	*
337	Furniture and Related Products	Q	Q	Q	*
339	Miscellaneous	Q	Q	Q	Q
	Total	136,187	130,692	1,223	4,272

Northeast Census Region

311	Food	144	116	20	8
3112	Grain and Oilseed Milling	*	0	0	*
311221	Wet Corn Milling	0	0	0	0
31131	Sugar Manufacturing	40	40	0	*
3114	Fruit and Vegetable Preserving and Specialty Food	92	76	8	8
3115	Dairy Product	9	*	9	0
3116	Animal Slaughtering and Processing	Q	0	Q	0
312	Beverage and Tobacco Products	25	20	Q	4
3121	Beverages	25	20	Q	4
3122	Tobacco	0	0	0	0
313	Textile Mills	70	68	2	0
314	Textile Product Mills	Q	0	Q	0
315	Apparel	0	0	0	0
316	Leather and Allied Products	0	0	0	0
321	Wood Products	37	15	2	20
321113	Sawmills	15	15	0	*
3212	Veneer, Plywood, and Engineered Woods	19	0	0	19
321219	Reconstituted Wood Products	19	0	0	19
3219	Other Wood Products	2	*	2	*
322	Paper	5,295	5,140	155	*
322110	Pulp Mills	664	581	83	0
322121	Paper Mills, except Newsprint	4,472	4,407	65	0
322122	Newsprint Mills	0	0	0	0
322130	Paperboard Mills	154	152	2	*
323	Printing and Related Support	Q	0	Q	0
324	Petroleum and Coal Products	590	525	0	65
324110	Petroleum Refineries	578	513	0	65
324121	Asphalt Paving Mixture and Block	*	*	0	*
324122	Asphalt Shingle and Coating Materials	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Products	0	0	0	0
324199	Other Petroleum and Coal Products	12	12	0	0
325	Chemicals	738	731	2	5
325110	Petrochemicals	*	0	*	0
325120	Industrial Gases	0	0	0	0
325180	Other Basic Inorganic Chemicals	0	0	0	0
325193	Ethyl Alcohol	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0	0	0	0
325199	Other Basic Organic Chemicals	124	124	*	*
325211	Plastics Materials and Resins	44	43	1	*
325212	Synthetic Rubber	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	0	0	0	0
325311	Nitrogenous Fertilizers	*	0	*	0
325312	Phosphatic Fertilizers	0	0	0	0
3254	Pharmaceuticals and Medicines	564	559	1	4
325412	Pharmaceutical Preparation	2	1	1	*
325992	Photographic Film, Paper, Plate, and Chemicals	*	0	*	0

326	Plastics and Rubber Products	Q	0	Q	0
327	Nonmetallic Mineral Products	83	71	11	*
327120	Clay Building Material and Refractories	*	0	*	*
327211	Flat Glass	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	Q	0	Q	*
327213	Glass Containers	0	0	0	0
327215	Glass Products from Purchased Glass	4	*	4	*
327310	Cements	0	0	0	0
327410	Lime	14	14	0	0
327420	Gypsum	16	16	*	0
327993	Mineral Wool	*	*	0	0
331	Primary Metals	631	8	3	620
331110	Iron and Steel Mills and Ferroalloys	624	4	0	620
3312	Steel Products from Purchased Steel	4	4	Q	*
3313	Alumina and Aluminum	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0
3314	Nonferrous Metals, except Aluminum	2	0	2	*
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0	0	0	0
3315	Foundries	*	0	*	*
331511	Iron Foundries	*	0	0	*
331523	Nonferrous Metal Die-Casting Foundries	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	*	0	*	0
332	Fabricated Metal Products	Q	0	Q	0
333	Machinery	15	Q	3	Q
334	Computer and Electronic Products	14	0	Q	2
334413	Semiconductors and Related Devices	1	0	0	1
335	Electrical Equip., Appliances, and Components	Q	0	Q	0
336	Transportation Equipment	274	264	5	4
336111	Automobiles	0	0	0	0
336112	Light Trucks and Utility Vehicles	0	0	0	0
3364	Aerospace Product and Parts	272	264	3	4
336411	Aircraft	*	*	0	*
337	Furniture and Related Products	0	0	0	0
339	Miscellaneous	Q	0	Q	0
	Total	8,004	6,967	307	731

Midwest Census Region

311	Food	1,068	1,056	*	12
3112	Grain and Oilseed Milling	837	831	0	6
311221	Wet Corn Milling	473	472	0	1
31131	Sugar Manufacturing	224	224	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	Q	Q	*	*
3115	Dairy Product	4	*	0	4
3116	Animal Slaughtering and Processing	Q	0	0	Q
312	Beverage and Tobacco Products	47	46	*	0
3121	Beverages	47	46	*	0
3122	Tobacco	0	0	0	0
313	Textile Mills	0	0	0	0
314	Textile Product Mills	0	0	0	0
315	Apparel	0	0	0	0
316	Leather and Allied Products	0	0	0	0
321	Wood Products	Q	2	Q	Q
321113	Sawmills	2	1	*	Q
3212	Veneer, Plywood, and Engineered Woods	1	1	*	*
321219	Reconstituted Wood Products	*	0	0	*
3219	Other Wood Products	Q	*	Q	Q
322	Paper	4,460	4,212	248	0
322110	Pulp Mills	0	0	0	0
322121	Paper Mills, except Newsprint	4,075	3,853	222	0
322122	Newsprint Mills	0	0	0	0
322130	Paperboard Mills	377	359	18	0
323	Printing and Related Support	0	0	0	0
324	Petroleum and Coal Products	1,246	1,234	*	12
324110	Petroleum Refineries	882	871	0	11
324121	Asphalt Paving Mixture and Block	1	*	*	*
324122	Asphalt Shingle and Coating Materials	1	0	0	1
324191	Petroleum Lubricating Oil and Grease Products	0	0	0	0
324199	Other Petroleum and Coal Products	363	363	0	0
325	Chemicals	4,996	4,956	12	28
325110	Petrochemicals	0	0	0	0

325120	Industrial Gases	0	0	0	0
325180	Other Basic Inorganic Chemicals	*	0	0	*
325193	Ethyl Alcohol	2,745	2,720	0	25
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0	0	0	0
325199	Other Basic Organic Chemicals	1,323	1,323	0	*
325211	Plastics Materials and Resins	843	841	Q	*
325212	Synthetic Rubber	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	0	0	0	0
325311	Nitrogenous Fertilizers	1	0	0	1
325312	Phosphatic Fertilizers	0	0	0	0
3254	Pharmaceuticals and Medicines	23	22	Q	*
325412	Pharmaceutical Preparation	22	22	0	*
325992	Photographic Film, Paper, Plate, and Chemicals	*	*	0	0
326	Plastics and Rubber Products	Q	0	Q	0
327	Nonmetallic Mineral Products	*	0	*	*
327120	Clay Building Material and Refractories	*	0	*	*
327211	Flat Glass	*	0	0	*
327212	Other Pressed and Blown Glass and Glassware	*	0	0	*
327213	Glass Containers	0	0	0	0
327215	Glass Products from Purchased Glass	*	0	0	*
327310	Cements	0	0	0	0
327410	Lime	0	0	0	0
327420	Gypsum	0	0	0	0
327993	Mineral Wool	*	0	0	*
331	Primary Metals	7,701	7,575	*	125
331110	Iron and Steel Mills and Ferroalloys	4,259	4,144	*	116
3312	Steel Products from Purchased Steel	*	0	0	*
3313	Alumina and Aluminum	3,432	3,432	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	*	*	0	0
3314	Nonferrous Metals, except Aluminum	*	*	0	*
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	*	*	0	0
3315	Foundries	9	0	*	9
331511	Iron Foundries	9	0	0	9
331523	Nonferrous Metal Die-Casting Foundries	*	0	0	*
331524	Aluminum Foundries, except Die-Casting	0	0	0	0
332	Fabricated Metal Products	Q	0	Q	0
333	Machinery	245	165	Q	75
334	Computer and Electronic Products	5	0	5	*
334413	Semiconductors and Related Devices	5	0	5	*
335	Electrical Equip., Appliances, and Components	*	0	0	*
336	Transportation Equipment	123	1	Q	89
336111	Automobiles	31	1	3	27
336112	Light Trucks and Utility Vehicles	52	0	0	52
3364	Aerospace Product and Parts	*	0	0	*
336411	Aircraft	0	0	0	0
337	Furniture and Related Products	Q	Q	0	*
339	Miscellaneous	Q	Q	0	Q
	Total	20,067	19,337	322	408

South Census Region

311	Food	1,163	1,136	20	6
3112	Grain and Oilseed Milling	157	144	13	*
311221	Wet Corn Milling	61	61	0	0
31131	Sugar Manufacturing	519	514	0	5
3114	Fruit and Vegetable Preserving and Specialty Food	469	468	*	*
3115	Dairy Product	*	0	0	*
3116	Animal Slaughtering and Processing	13	Q	Q	Q
312	Beverage and Tobacco Products	89	88	2	0
3121	Beverages	70	68	2	0
3122	Tobacco	19	19	*	0
313	Textile Mills	Q	0	Q	0
314	Textile Product Mills	Q	0	Q	0
315	Apparel	0	0	0	0
316	Leather and Allied Products	0	0	0	0
321	Wood Products	242	237	3	Q
321113	Sawmills	48	47	1	*
3212	Veneer, Plywood, and Engineered Woods	161	161	0	*
321219	Reconstituted Wood Products	114	114	0	*
3219	Other Wood Products	Q	Q	2	Q
322	Paper	28,799	27,350	0	1,449

322110	Pulp Mills	5,723	5,371	0	352
322121	Paper Mills, except Newsprint	6,337	5,760	0	577
322122	Newsprint Mills	432	432	0	0
322130	Paperboard Mills	16,307	15,787	0	520
323	Printing and Related Support	Q	*	Q	Q
324	Petroleum and Coal Products	12,213	12,136	0	78
324110	Petroleum Refineries	11,730	11,671	0	59
324121	Asphalt Paving Mixture and Block	6	0	0	6
324122	Asphalt Shingle and Coating Materials	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Products	0	0	0	0
324199	Other Petroleum and Coal Products	478	465	0	13
325	Chemicals	52,746	52,055	8	683
325110	Petrochemicals	3,984	3,983	1	0
325120	Industrial Gases	2,444	2,444	0	*
325180	Other Basic Inorganic Chemicals	12,829	12,795	*	Q
325193	Ethyl Alcohol	1	1	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	18	18	0	0
325199	Other Basic Organic Chemicals	10,251	9,959	*	292
325211	Plastics Materials and Resins	21,052	21,022	0	29
325212	Synthetic Rubber	274	192	1	81
325220	Artificial and Synthetic Fibers and Filaments	275	275	0	0
325311	Nitrogenous Fertilizers	540	296	0	244
325312	Phosphatic Fertilizers	419	419	*	*
3254	Pharmaceuticals and Medicines	37	29	5	3
325412	Pharmaceutical Preparation	3	0	2	1
325992	Photographic Film, Paper, Plate, and Chemicals	*	0	0	*
326	Plastics and Rubber Products	*	0	0	*
327	Nonmetallic Mineral Products	Q	0	Q	3
327120	Clay Building Material and Refractories	2	0	1	1
327211	Flat Glass	*	0	0	*
327212	Other Pressed and Blown Glass and Glassware	Q	0	Q	*
327213	Glass Containers	0	0	0	0
327215	Glass Products from Purchased Glass	1	0	0	1
327310	Cements	0	0	0	0
327410	Lime	0	0	0	0
327420	Gypsum	0	0	0	0
327993	Mineral Wool	*	0	0	*
331	Primary Metals	284	279	*	4
331110	Iron and Steel Mills and Ferroalloys	1	*	*	*
3312	Steel Products from Purchased Steel	*	0	0	*
3313	Alumina and Aluminum	279	279	*	*
331314	Secondary Smelting and Alloying of Aluminum	*	0	*	*
331315	Aluminum Sheet, Plate and Foils	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0
3314	Nonferrous Metals, except Aluminum	4	0	0	4
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	*	0	0	*
3315	Foundries	*	0	*	0
331511	Iron Foundries	0	0	0	0
331523	Nonferrous Metal Die-Casting Foundries	*	0	*	0
331524	Aluminum Foundries, except Die-Casting	0	0	0	0
332	Fabricated Metal Products	*	0	0	*
333	Machinery	Q	Q	Q	0
334	Computer and Electronic Products	*	0	0	*
334413	Semiconductors and Related Devices	*	0	0	*
335	Electrical Equip., Appliances, and Components	26	Q	Q	Q
336	Transportation Equipment	80	0	33	48
336111	Automobiles	48	0	1	47
336112	Light Trucks and Utility Vehicles	5	0	5	*
3364	Aerospace Product and Parts	25	0	25	*
336411	Aircraft	1	0	1	*
337	Furniture and Related Products	5	2	Q	0
339	Miscellaneous	*	0	0	*
	Total	95,722	93,295	142	2,285

West Census Region

311	Food	588	187	43	358
3112	Grain and Oilseed Milling	32	28	4	0
311221	Wet Corn Milling	28	28	0	0
31131	Sugar Manufacturing	112	63	0	49
3114	Fruit and Vegetable Preserving and Specialty Food	50	35	15	*
3115	Dairy Product	66	61	Q	1
3116	Animal Slaughtering and Processing	Q	0	Q	*

312	Beverage and Tobacco Products	100	19	76	5
3121	Beverages	100	19	76	5
3122	Tobacco	0	0	0	0
313	Textile Mills	0	0	0	0
314	Textile Product Mills	0	0	0	0
315	Apparel	2	0	2	0
316	Leather and Allied Products	0	0	0	0
321	Wood Products	1,482	1,481	*	0
321113	Sawmills	1,374	1,374	0	0
3212	Veneer, Plywood, and Engineered Woods	108	108	0	0
321219	Reconstituted Wood Products	0	0	0	0
3219	Other Wood Products	0	0	0	0
322	Paper	1,963	1,961	2	*
322110	Pulp Mills	118	118	0	0
322121	Paper Mills, except Newsprint	1,055	1,053	2	*
322122	Newsprint Mills	0	0	0	0
322130	Paperboard Mills	542	542	0	0
323	Printing and Related Support	Q	0	Q	0
324	Petroleum and Coal Products	5,629	5,286	19	324
324110	Petroleum Refineries	5,628	5,286	19	324
324121	Asphalt Paving Mixture and Block	*	*	0	*
324122	Asphalt Shingle and Coating Materials	*	0	*	*
324191	Petroleum Lubricating Oil and Grease Products	*	0	*	0
324199	Other Petroleum and Coal Products	*	*	0	0
325	Chemicals	2,154	2,146	8	*
325110	Petrochemicals	0	0	0	0
325120	Industrial Gases	1,120	1,120	0	0
325180	Other Basic Inorganic Chemicals	723	722	Q	0
325193	Ethyl Alcohol	1	1	0	*
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	85	85	0	0
325199	Other Basic Organic Chemicals	*	0	*	*
325211	Plastics Materials and Resins	*	0	0	*
325212	Synthetic Rubber	*	0	*	0
325220	Artificial and Synthetic Fibers and Filaments	0	0	0	0
325311	Nitrogenous Fertilizers	0	0	0	0
325312	Phosphatic Fertilizers	173	173	0	0
3254	Pharmaceuticals and Medicines	49	45	4	*
325412	Pharmaceutical Preparation	49	45	4	0
325992	Photographic Film, Paper, Plate, and Chemicals	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0
327	Nonmetallic Mineral Products	163	0	46	Q
327120	Clay Building Material and Refractories	0	0	0	0
327211	Flat Glass	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0
327213	Glass Containers	0	0	0	0
327215	Glass Products from Purchased Glass	3	0	3	*
327310	Cements	24	0	24	*
327410	Lime	0	0	0	0
327420	Gypsum	Q	0	0	Q
327993	Mineral Wool	*	0	*	0
331	Primary Metals	12	10	1	*
331110	Iron and Steel Mills and Ferroalloys	*	0	*	0
3312	Steel Products from Purchased Steel	*	0	0	*
3313	Alumina and Aluminum	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0
3314	Nonferrous Metals, except Aluminum	*	0	*	*
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	*	0	*	*
3315	Foundries	11	10	*	0
331511	Iron Foundries	*	0	*	0
331523	Nonferrous Metal Die-Casting Foundries	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	0	0	0	0
332	Fabricated Metal Products	Q	*	Q	0
333	Machinery	Q	0	Q	0
334	Computer and Electronic Products	Q	0	Q	Q
334413	Semiconductors and Related Devices	1	0	1	0
335	Electrical Equip., Appliances, and Components	18	0	0	18
336	Transportation Equipment	19	Q	14	3
336111	Automobiles	*	0	0	*
336112	Light Trucks and Utility Vehicles	0	0	0	0
3364	Aerospace Product and Parts	16	0	13	3

336411	Aircraft	*	0	*	*
337	Furniture and Related Products	0	0	0	0
339	Miscellaneous	Q	*	Q	0
	Total	12,394	11,094	452	848

(a) The Bureau of the Census classifies establishments using the 2017 North American Industry Classification System (NAICS).

(b) *Cogeneration* is the production of electrical energy and another form of useful energy, such as heat or steam, through the sequential use of energy. Cogeneration includes electricity generated from fossil fuels, such as natural gas, fuel oils, and coal; wood; and other biomass.

(c) *Renewable Energy* is energy obtained from essentially inexhaustible sources. Noncombustible sources include solar power, wind power, hydropower, and geothermal power.

(d) *Other* is that electricity obtained from a generator fueled by combustible energy sources, such as diesel fuels and other fuel oils.

* 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.

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).

Released: February 2021
 Next MECS will be fielded in 2022.

RSE Table 11.3 Relative Standard Errors for Table 11.3;

Unit: Percents.

NAICS Code(a)	Subsector and Industry	Total Onsite Generation	Cogeneration(b)	Renewable Energy (excluding Wood and Other Biomass)(c)	
				Other Biomass)(c)	Other(d)
Total United States					
311	Food	4.8	1.6	15.1	35.1
3112	Grain and Oilseed Milling	0.1	0.0	2.9	0.1
311221	Wet Corn Milling	0.0	0.0	X	0.0
31131	Sugar Manufacturing	0.0	0.0	X	0.0
3114	Fruit and Vegetable Preserving and Specialty Food	6.3	6.6	26.7	2.5
3115	Dairy Product	9.7	10.8	29.6	30.4
3116	Animal Slaughtering and Processing	32.4	73.2	39.3	38.9
312	Beverage and Tobacco Products	4.2	0.5	13.8	0.0
3121	Beverages	4.5	0.5	13.8	0.0
3122	Tobacco	0.0	0.0	0.0	X
313	Textile Mills	24.5	27.8	43.5	X
314	Textile Product Mills	76.9	X	76.9	X
315	Apparel	32.2	X	32.2	X
316	Leather and Allied Products	X	X	X	X
321	Wood Products	3.1	1.4	58.0	57.1
321113	Sawmills	0.1	0.0	0.0	69.5
3212	Veneer, Plywood, and Engineered Woods	0.1	0.1	5.6	0.0
321219	Reconstituted Wood Products	0.0	0.0	X	0.0
3219	Other Wood Products	51.5	82.3	68.4	75.0
322	Paper	0.1	0.0	0.7	0.0
322110	Pulp Mills	0.0	0.0	0.0	0.0
322121	Paper Mills, except Newsprint	0.0	0.0	0.0	0.0
322122	Newsprint Mills	0.0	0.0	X	X
322130	Paperboard Mills	0.0	0.0	0.0	0.0
323	Printing and Related Support	61.1	99.0	65.6	98.3
324	Petroleum and Coal Products	0.1	0.0	0.0	0.6
324110	Petroleum Refineries	0.0	0.0	0.0	0.0
324121	Asphalt Paving Mixture and Block	40.5	0.0	0.0	41.8
324122	Asphalt Shingle and Coating Materials	1.1	X	0.0	1.2
324191	Petroleum Lubricating Oil and Grease Products	0.0	X	0.0	X
324199	Other Petroleum and Coal Products	0.0	0.0	X	0.0
325	Chemicals	0.3	0.3	12.6	3.0
325110	Petrochemicals	0.0	0.0	0.0	X
325120	Industrial Gases	0.0	0.0	X	0.0
325180	Other Basic Inorganic Chemicals	0.2	0.1	90.9	61.8
325193	Ethyl Alcohol	1.6	1.6	X	0.1
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	0.0	X	X
325199	Other Basic Organic Chemicals	1.6	1.7	43.6	0.1
325211	Plastics Materials and Resins	0.1	0.1	64.7	4.9
325212	Synthetic Rubber	0.0	0.0	0.0	0.0
325220	Artificial and Synthetic Fibers and Filaments	0.0	0.0	X	X
325311	Nitrogenous Fertilizers	0.0	0.0	0.0	0.0
325312	Phosphatic Fertilizers	0.0	0.0	0.0	0.0
3254	Pharmaceuticals and Medicines	0.2	0.1	13.6	1.2
325412	Pharmaceutical Preparation	1.6	0.1	15.8	7.4
325992	Photographic Film, Paper, Plate, and Chemicals	0.6	0.0	0.0	32.1
326	Plastics and Rubber Products	86.0	X	87.5	66.9
327	Nonmetallic Mineral Products	29.0	0.1	33.0	61.4
327120	Clay Building Material and Refractories	0.0	X	0.0	0.0
327211	Flat Glass	0.0	X	X	0.0
327212	Other Pressed and Blown Glass and Glassware	69.1	X	70.4	0.1
327213	Glass Containers	X	X	X	X
327215	Glass Products from Purchased Glass	3.3	80.5	3.7	0.0
327310	Cements	0.0	X	0.0	0.0
327410	Lime	0.0	0.0	X	X
327420	Gypsum	54.5	0.0	0.0	87.6

327993	Mineral Wool	0.0	0.0	0.0	0.0
331	Primary Metals	0.1	0.1	20.7	0.1
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	0.0	0.0
3312	Steel Products from Purchased Steel	11.9	0.2	63.3	0.0
3313	Alumina and Aluminum	0.1	0.0	0.0	49.9
331314	Secondary Smelting and Alloying of Aluminum	48.8	X	0.0	49.9
331315	Aluminum Sheet, Plate and Foils	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	0.0	0.0	X	X
3314	Nonferrous Metals, except Aluminum	13.9	0.0	37.8	0.3
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	3.7	0.0	0.0	31.6
3315	Foundries	0.8	0.0	18.2	0.1
331511	Iron Foundries	0.0	X	0.0	0.0
331523	Nonferrous Metal Die-Casting Foundries	0.0	X	0.0	0.0
331524	Aluminum Foundries, except Die-Casting	0.0	X	0.0	X
332	Fabricated Metal Products	87.7	99.5	87.8	99.5
333	Machinery	11.5	3.9	58.7	13.0
334	Computer and Electronic Products	48.9	X	41.9	87.6
334413	Semiconductors and Related Devices	2.3	X	2.8	0.6
335	Electrical Equip., Appliances, and Components	26.1	59.4	70.2	31.8
336	Transportation Equipment	5.0	0.8	29.3	0.2
336111	Automobiles	0.0	0.0	0.0	0.0
336112	Light Trucks and Utility Vehicles	0.0	X	0.0	0.0
3364	Aerospace Product and Parts	0.7	0.0	5.3	1.9
336411	Aircraft	16.9	0.0	0.0	66.7
337	Furniture and Related Products	68.3	70.5	75.0	0.0
339	Miscellaneous	55.4	93.3	65.3	98.1
	Total	0.2	0.2	16.8	3.9

Northeast Census Region

311	Food	24.8	30.9	12.2	0.6
3112	Grain and Oilseed Milling	0.0	X	X	0.0
311221	Wet Corn Milling	X	X	X	X
31131	Sugar Manufacturing	0.0	0.0	X	0.0
3114	Fruit and Vegetable Preserving and Specialty Food	39.0	47.3	21.5	0.0
3115	Dairy Product	9.3	42.5	9.3	X
3116	Animal Slaughtering and Processing	50.4	X	50.4	X
312	Beverage and Tobacco Products	1.7	0.1	62.4	0.0
3121	Beverages	1.7	0.1	62.4	0.0
3122	Tobacco	X	X	X	X
313	Textile Mills	26.9	27.8	0.0	X
314	Textile Product Mills	94.7	X	94.7	X
315	Apparel	X	X	X	X
316	Leather and Allied Products	X	X	X	X
321	Wood Products	1.0	0.1	0.0	1.8
321113	Sawmills	1.7	0.0	X	69.0
3212	Veneer, Plywood, and Engineered Woods	0.0	X	X	0.0
321219	Reconstituted Wood Products	0.0	X	X	0.0
3219	Other Wood Products	13.0	0.1	0.0	91.6
322	Paper	0.1	0.0	1.8	0.0
322110	Pulp Mills	0.0	0.0	0.0	X
322121	Paper Mills, except Newsprint	0.0	0.0	0.0	X
322122	Newsprint Mills	X	X	X	X
322130	Paperboard Mills	0.0	0.0	0.0	0.0
323	Printing and Related Support	95.6	X	95.6	X
324	Petroleum and Coal Products	0.1	0.0	X	0.1
324110	Petroleum Refineries	0.0	0.0	X	0.0
324121	Asphalt Paving Mixture and Block	3.9	0.0	X	73.6
324122	Asphalt Shingle and Coating Materials	X	X	X	X
324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X
324199	Other Petroleum and Coal Products	0.0	0.0	X	X
325	Chemicals	0.7	0.7	9.0	0.1
325110	Petrochemicals	0.0	X	0.0	X
325120	Industrial Gases	X	X	X	X
325180	Other Basic Inorganic Chemicals	X	X	X	X
325193	Ethyl Alcohol	X	X	X	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	X	X	X	X

325199	Other Basic Organic Chemicals	0.1	0.0	30.2	28.7
325211	Plastics Materials and Resins	0.5	0.0	28.3	0.0
325212	Synthetic Rubber	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	X	X	X	X
325311	Nitrogenous Fertilizers	0.0	X	0.0	X
325312	Phosphatic Fertilizers	X	X	X	X
3254	Pharmaceuticals and Medicines	0.1	0.1	0.0	0.0
325412	Pharmaceutical Preparation	0.2	0.5	0.0	0.0
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	X	0.0	X
326	Plastics and Rubber Products	92.4	X	92.4	X
327	Nonmetallic Mineral Products	6.7	0.1	48.9	90.2
327120	Clay Building Material and Refractories	0.0	X	0.0	0.0
327211	Flat Glass	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	80.8	X	80.9	8.6
327213	Glass Containers	X	X	X	X
327215	Glass Products from Purchased Glass	6.8	80.5	6.9	0.0
327310	Cements	X	X	X	X
327410	Lime	0.0	0.0	X	X
327420	Gypsum	0.0	0.0	0.0	X
327993	Mineral Wool	0.0	0.0	X	X
331	Primary Metals	0.2	0.1	30.5	0.1
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	X	0.0
3312	Steel Products from Purchased Steel	12.0	0.2	63.3	0.0
3313	Alumina and Aluminum	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X
3314	Nonferrous Metals, except Aluminum	40.1	X	40.3	40.1
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	X	X	X	X
3315	Foundries	0.1	X	0.0	0.2
331511	Iron Foundries	0.0	X	X	0.0
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	0.0	X	0.0	X
332	Fabricated Metal Products	99.4	X	99.4	X
333	Machinery	47.8	71.8	0.0	97.9
334	Computer and Electronic Products	46.8	X	53.1	0.0
334413	Semiconductors and Related Devices	0.0	X	X	0.0
335	Electrical Equip., Appliances, and Components	96.6	X	96.6	X
336	Transportation Equipment	0.6	0.0	33.5	0.1
336111	Automobiles	X	X	X	X
336112	Light Trucks and Utility Vehicles	X	X	X	X
3364	Aerospace Product and Parts	0.1	0.0	3.9	0.0
336411	Aircraft	0.0	0.0	X	0.0
337	Furniture and Related Products	X	X	X	X
339	Miscellaneous	77.3	X	77.3	X
	Total	0.7	0.6	12.4	0.4

Midwest Census Region

311	Food	0.2	0.1	69.2	15.2
3112	Grain and Oilseed Milling	0.1	0.0	X	0.1
311221	Wet Corn Milling	0.0	0.0	X	0.0
31131	Sugar Manufacturing	0.0	0.0	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	64.7	78.1	69.2	0.0
3115	Dairy Product	39.9	0.0	X	39.9
3116	Animal Slaughtering and Processing	50.3	X	X	50.3
312	Beverage and Tobacco Products	0.1	0.1	58.9	X
3121	Beverages	0.1	0.1	58.9	X
3122	Tobacco	X	X	X	X
313	Textile Mills	X	X	X	X
314	Textile Product Mills	X	X	X	X
315	Apparel	X	X	X	X
316	Leather and Allied Products	X	X	X	X
321	Wood Products	65.3	0.1	88.7	75.9
321113	Sawmills	49.6	0.0	0.0	88.9
3212	Veneer, Plywood, and Engineered Woods	0.8	0.1	5.6	0.0
321219	Reconstituted Wood Products	0.0	X	X	0.0

3219	Other Wood Products	68.1	88.9	91.5	77.2
322	Paper	0.0	0.0	0.0	X
322110	Pulp Mills	X	X	X	X
322121	Paper Mills, except Newsprint	0.0	0.0	0.0	X
322122	Newsprint Mills	X	X	X	X
322130	Paperboard Mills	0.0	0.0	0.0	X
323	Printing and Related Support	X	X	X	X
324	Petroleum and Coal Products	0.1	0.0	0.0	1.9
324110	Petroleum Refineries	0.0	0.0	X	0.0
324121	Asphalt Paving Mixture and Block	34.9	0.0	0.0	45.8
324122	Asphalt Shingle and Coating Materials	0.0	X	X	0.0
324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X
324199	Other Petroleum and Coal Products	0.0	0.0	X	X
325	Chemicals	0.9	0.9	20.7	4.7
325110	Petrochemicals	X	X	X	X
325120	Industrial Gases	X	X	X	X
325180	Other Basic Inorganic Chemicals	38.4	X	X	38.4
325193	Ethyl Alcohol	1.6	1.6	X	0.1
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	X	X	X	X
325199	Other Basic Organic Chemicals	0.1	0.0	X	3.0
325211	Plastics Materials and Resins	0.2	0.0	83.4	0.0
325212	Synthetic Rubber	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	X	X	X	X
325311	Nitrogenous Fertilizers	0.0	X	X	0.0
325312	Phosphatic Fertilizers	X	X	X	X
3254	Pharmaceuticals and Medicines	4.3	0.0	92.5	34.2
325412	Pharmaceutical Preparation	0.5	0.0	X	34.7
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	0.0	X	X
326	Plastics and Rubber Products	95.9	X	95.9	X
327	Nonmetallic Mineral Products	0.1	X	0.0	0.1
327120	Clay Building Material and Refractories	0.0	X	0.0	0.0
327211	Flat Glass	0.0	X	X	0.0
327212	Other Pressed and Blown Glass and Glassware	0.0	X	X	0.0
327213	Glass Containers	X	X	X	X
327215	Glass Products from Purchased Glass	0.0	X	X	0.0
327310	Cements	X	X	X	X
327410	Lime	X	X	X	X
327420	Gypsum	X	X	X	X
327993	Mineral Wool	0.0	X	X	0.0
331	Primary Metals	0.1	0.0	43.4	0.1
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	0.0	0.0
3312	Steel Products from Purchased Steel	0.0	X	X	0.0
3313	Alumina and Aluminum	0.0	0.0	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	0.0	0.0	X	X
3314	Nonferrous Metals, except Aluminum	21.3	0.0	X	49.2
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.0	0.0	X	X
3315	Foundries	1.7	X	87.8	0.0
331511	Iron Foundries	0.0	X	X	0.0
331523	Nonferrous Metal Die-Casting Foundries	0.0	X	X	0.0
331524	Aluminum Foundries, except Die-Casting	X	X	X	X
332	Fabricated Metal Products	99.5	X	99.5	X
333	Machinery	4.4	0.0	85.5	13.0
334	Computer and Electronic Products	0.7	X	0.0	71.5
334413	Semiconductors and Related Devices	0.2	X	0.0	65.3
335	Electrical Equip., Appliances, and Components	42.7	X	X	42.7
336	Transportation Equipment	20.0	0.0	75.3	0.2
336111	Automobiles	0.0	0.0	0.0	0.0
336112	Light Trucks and Utility Vehicles	0.0	X	X	0.0
3364	Aerospace Product and Parts	0.0	X	X	0.0
336411	Aircraft	X	X	X	X
337	Furniture and Related Products	72.5	72.5	X	0.0
339	Miscellaneous	86.1	99.0	X	99.0
	Total	0.5	0.4	8.6	12.6

South Census Region

311	Food	0.7	0.6	20.9	12.4
3112	Grain and Oilseed Milling	0.0	0.0	0.0	0.0
311221	Wet Corn Milling	0.0	0.0	X	X
31131	Sugar Manufacturing	0.0	0.0	X	0.0
3114	Fruit and Vegetable Preserving and Specialty Food	0.2	0.1	58.7	59.0
3115	Dairy Product	61.5	X	X	61.5
3116	Animal Slaughtering and Processing	49.8	73.2	53.7	61.4
312	Beverage and Tobacco Products	0.8	0.0	42.7	X
3121	Beverages	1.1	0.0	49.0	X
3122	Tobacco	0.0	0.0	0.0	X
313	Textile Mills	54.4	X	54.4	X
314	Textile Product Mills	74.5	X	74.5	X
315	Apparel	X	X	X	X
316	Leather and Allied Products	X	X	X	X
321	Wood Products	10.0	10.2	0.0	92.9
321113	Sawmills	0.0	0.0	0.0	0.0
3212	Veneer, Plywood, and Engineered Woods	0.0	0.0	X	0.0
321219	Reconstituted Wood Products	0.0	0.0	X	0.0
3219	Other Wood Products	74.2	82.7	0.0	94.1
322	Paper	0.0	0.0	X	0.0
322110	Pulp Mills	0.0	0.0	X	0.0
322121	Paper Mills, except Newsprint	0.0	0.0	X	0.0
322122	Newsprint Mills	0.0	0.0	X	X
322130	Paperboard Mills	0.0	0.0	X	0.0
323	Printing and Related Support	81.6	99.0	96.3	98.3
324	Petroleum and Coal Products	0.1	0.0	X	3.8
324110	Petroleum Refineries	0.0	0.0	X	0.0
324121	Asphalt Paving Mixture and Block	48.0	X	X	48.0
324122	Asphalt Shingle and Coating Materials	X	X	X	X
324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X
324199	Other Petroleum and Coal Products	0.0	0.0	X	0.0
325	Chemicals	0.4	0.4	11.2	3.1
325110	Petrochemicals	0.0	0.0	0.0	X
325120	Industrial Gases	0.0	0.0	X	0.0
325180	Other Basic Inorganic Chemicals	0.2	0.0	0.0	62.3
325193	Ethyl Alcohol	0.0	0.0	X	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	0.0	X	X
325199	Other Basic Organic Chemicals	1.9	1.9	41.4	0.0
325211	Plastics Materials and Resins	0.1	0.1	X	5.0
325212	Synthetic Rubber	0.0	0.0	0.0	0.0
325220	Artificial and Synthetic Fibers and Filaments	0.0	0.0	X	X
325311	Nitrogenous Fertilizers	0.0	0.0	X	0.0
325312	Phosphatic Fertilizers	0.0	0.0	0.0	0.0
3254	Pharmaceuticals and Medicines	0.2	0.0	1.4	0.1
325412	Pharmaceutical Preparation	0.1	X	0.0	0.1
325992	Photographic Film, Paper, Plate, and Chemicals	32.1	X	X	32.1
326	Plastics and Rubber Products	66.9	X	X	66.9
327	Nonmetallic Mineral Products	71.0	X	82.6	11.3
327120	Clay Building Material and Refractories	0.0	X	0.0	0.0
327211	Flat Glass	0.0	X	X	0.0
327212	Other Pressed and Blown Glass and Glassware	89.9	X	91.9	0.0
327213	Glass Containers	X	X	X	X
327215	Glass Products from Purchased Glass	0.0	X	X	0.0
327310	Cements	X	X	X	X
327410	Lime	X	X	X	X
327420	Gypsum	X	X	X	X
327993	Mineral Wool	0.0	X	X	0.0
331	Primary Metals	0.1	0.0	0.0	0.1
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	0.0	0.0
3312	Steel Products from Purchased Steel	0.0	X	X	0.0
3313	Alumina and Aluminum	0.1	0.0	0.0	49.9
331314	Secondary Smelting and Alloying of Aluminum	48.8	X	0.0	49.9
331315	Aluminum Sheet, Plate and Foils	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X
3314	Nonferrous Metals, except Aluminum	0.0	X	X	0.0

331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.0	X	X	0.0
3315	Foundries	0.0	X	0.0	X
331511	Iron Foundries	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	0.0	X	0.0	X
331524	Aluminum Foundries, except Die-Casting	X	X	X	X
332	Fabricated Metal Products	99.5	X	X	99.5
333	Machinery	89.7	99.0	96.1	X
334	Computer and Electronic Products	0.1	X	X	0.1
334413	Semiconductors and Related Devices	0.0	X	X	0.0
335	Electrical Equip., Appliances, and Components	46.2	59.4	91.4	87.0
336	Transportation Equipment	2.8	X	6.9	0.6
336111	Automobiles	0.0	X	0.0	0.0
336112	Light Trucks and Utility Vehicles	0.0	X	0.0	0.0
3364	Aerospace Product and Parts	8.5	X	8.6	70.3
336411	Aircraft	17.3	X	0.0	70.8
337	Furniture and Related Products	43.3	37.1	75.0	X
339	Miscellaneous	93.9	X	X	93.9
	Total	0.2	0.2	23.7	1.0
West Census Region					
311	Food	23.1	8.0	27.1	37.7
3112	Grain and Oilseed Milling	1.5	0.0	13.1	X
311221	Wet Corn Milling	0.0	0.0	X	X
31131	Sugar Manufacturing	0.0	0.0	X	0.0
3114	Fruit and Vegetable Preserving and Specialty Food	29.3	38.3	40.5	0.0
3115	Dairy Product	11.4	10.8	96.8	4.4
3116	Animal Slaughtering and Processing	64.5	X	64.6	78.4
312	Beverage and Tobacco Products	10.8	4.4	14.2	0.0
3121	Beverages	10.8	4.4	14.2	0.0
3122	Tobacco	X	X	X	X
313	Textile Mills	X	X	X	X
314	Textile Product Mills	X	X	X	X
315	Apparel	32.2	X	32.2	X
316	Leather and Allied Products	X	X	X	X
321	Wood Products	0.1	0.0	23.7	X
321113	Sawmills	0.0	0.0	X	X
3212	Veneer, Plywood, and Engineered Woods	0.0	0.0	X	X
321219	Reconstituted Wood Products	X	X	X	X
3219	Other Wood Products	X	X	X	X
322	Paper	0.0	0.0	0.0	0.0
322110	Pulp Mills	0.0	0.0	X	X
322121	Paper Mills, except Newsprint	0.0	0.0	0.0	0.0
322122	Newsprint Mills	X	X	X	X
322130	Paperboard Mills	0.0	0.0	X	X
323	Printing and Related Support	98.1	X	98.1	X
324	Petroleum and Coal Products	0.1	0.0	0.0	0.1
324110	Petroleum Refineries	0.0	0.0	0.0	0.0
324121	Asphalt Paving Mixture and Block	0.0	0.0	X	0.0
324122	Asphalt Shingle and Coating Materials	13.1	X	0.0	28.4
324191	Petroleum Lubricating Oil and Grease Products	0.0	X	0.0	X
324199	Other Petroleum and Coal Products	0.0	0.0	X	X
325	Chemicals	0.6	0.5	35.3	10.8
325110	Petrochemicals	X	X	X	X
325120	Industrial Gases	0.0	0.0	X	X
325180	Other Basic Inorganic Chemicals	1.6	1.6	92.2	X
325193	Ethyl Alcohol	0.0	0.0	X	0.0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	0.0	X	X
325199	Other Basic Organic Chemicals	83.1	X	83.1	54.1
325211	Plastics Materials and Resins	7.3	X	X	7.3
325212	Synthetic Rubber	0.0	X	0.0	X
325220	Artificial and Synthetic Fibers and Filaments	X	X	X	X
325311	Nitrogenous Fertilizers	X	X	X	X
325312	Phosphatic Fertilizers	0.0	0.0	X	X
3254	Pharmaceuticals and Medicines	2.4	0.1	29.8	22.8
325412	Pharmaceutical Preparation	2.4	0.1	30.0	X
325992	Photographic Film, Paper, Plate, and Chemicals	X	X	X	X

326	Plastics and Rubber Products	X	X	X	X
327	Nonmetallic Mineral Products	46.9	X	40.2	63.4
327120	Clay Building Material and Refractories	X	X	X	X
327211	Flat Glass	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X
327213	Glass Containers	X	X	X	X
327215	Glass Products from Purchased Glass	0.0	X	0.0	0.0
327310	Cements	0.0	X	0.0	0.0
327410	Lime	X	X	X	X
327420	Gypsum	87.6	X	X	87.6
327993	Mineral Wool	0.0	X	0.0	X
331	Primary Metals	0.1	0.0	0.0	2.2
331110	Iron and Steel Mills and Ferroalloys	0.0	X	0.0	X
3312	Steel Products from Purchased Steel	0.0	X	X	0.0
3313	Alumina and Aluminum	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X
3314	Nonferrous Metals, except Aluminum	1.7	X	0.0	2.7
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	4.3	X	0.0	60.2
3315	Foundries	0.0	0.0	0.0	X
331511	Iron Foundries	0.0	X	0.0	X
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	X	X	X	X
332	Fabricated Metal Products	99.5	99.5	99.5	X
333	Machinery	94.6	X	94.6	X
334	Computer and Electronic Products	70.1	X	72.9	94.9
334413	Semiconductors and Related Devices	19.3	X	19.3	X
335	Electrical Equip., Appliances, and Components	0.0	X	X	0.0
336	Transportation Equipment	12.5	98.7	7.9	0.0
336111	Automobiles	0.0	X	X	0.0
336112	Light Trucks and Utility Vehicles	X	X	X	X
3364	Aerospace Product and Parts	0.0	X	0.0	0.0
336411	Aircraft	0.0	X	0.0	0.0
337	Furniture and Related Products	X	X	X	X
339	Miscellaneous	69.2	99.0	73.5	X
	Total	2.0	0.2	43.7	18.3

(a) The Bureau of the Census classifies establishments using the 2017 North American Industry Classification System (NAICS).

(b) *Cogeneration* is the production of electrical energy and another form of useful energy, such as heat or steam, through the sequential use of energy. Cogeneration includes electricity generated from fossil fuels, such as natural gas, fuel oils, and coal; wood; and other biomass.

(c) *Renewable Energy* is energy obtained from essentially inexhaustible sources. Noncombustible sources include solar power, wind power, hydropower, and geothermal power

(d) *Other* is that electricity obtained from a generator fueled by combustible energy sources, such as diesel fuels and other fuel oils.

* 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.

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).