

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

Table 3.5 Selected Byproducts in Fuel Consumption, 2018;

Level: National Data and Regional Data;
 Row: NAICS Codes; Column: Energy Sources;
 Unit: Trillion Btu.

NAICS Code(a)	Subsector and Industry	Total	Blast	Waste Gas	Petroleum Coke	Pulping Liquor	Wood Chips, Bark	Waste
			Furnace/Coke Oven Gases			or Black Liquor		Oils/Tars and Waste Materials
Total United States								
311	Food	12	*	4	0	0	6	Q
3112	Grain and Oilseed Milling	6	0	1	0	0	5	*
311221	Wet Corn Milling	5	0	*	0	0	5	0
31131	Sugar Manufacturing	*	0	*	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	1	*	1	0	0	0	*
3115	Dairy Product	*	0	*	0	0	0	0
3116	Animal Slaughtering and Processing	3	0	2	0	0	Q	*
312	Beverage and Tobacco Products	Q	0	1	0	0	Q	0
3121	Beverages	Q	0	1	0	0	Q	0
3122	Tobacco	0	0	0	0	0	0	0
313	Textile Mills	*	0	0	0	0	*	0
314	Textile Product Mills	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0
321	Wood Products	229	0	0	0	0	228	1
321113	Sawmills	110	0	0	0	0	110	*
3212	Veneer, Plywood, and Engineered Woods	82	0	0	0	0	82	*
321219	Reconstituted Wood Products	42	0	0	0	0	42	*
3219	Other Wood Products	35	0	0	0	0	34	*
322	Paper	1,184	0	1	15	854	306	9
322110	Pulp Mills	D	0	*	*	D	48	*
322121	Paper Mills, except Newsprint	358	0	*	14	262	81	1
322122	Newsprint Mills	12	0	0	0	6	6	0
322130	Paperboard Mills	568	0	*	*	392	168	8
323	Printing and Related Support	0	0	0	0	0	0	0
324	Petroleum and Coal Products	1,959	13	1,394	550	0	*	2
324110	Petroleum Refineries	1,930	0	1,392	538	0	0	0
324121	Asphalt Paving Mixture and Block	2	0	0	0	0	0	2

324122	Asphalt Shingle and Coating Materials	*	0	0	0	0	*	0
324191	Petroleum Lubricating Oil and Grease Products	0	0	0	0	0	0	0
324199	Other Petroleum and Coal Products	27	13	2	12	0	0	*
325	Chemicals	418	0	402	Q	3	4	6
325110	Petrochemicals	159	0	156	0	3	0	0
325120	Industrial Gases	2	0	2	0	0	0	0
325180	Other Basic Inorganic Chemicals	Q	0	Q	0	0	0	0
325193	Ethyl Alcohol	3	0	2	0	0	1	1
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	6	0	2	0	0	3	*
325199	Other Basic Organic Chemicals	130	0	126	0	0	0	4
325211	Plastics Materials and Resins	70	0	69	0	0	0	1
325212	Synthetic Rubber	*	0	*	0	0	0	*
325220	Artificial and Synthetic Fibers and Filaments	*	0	0	0	0	0	*
325311	Nitrogenous Fertilizers	1	0	1	0	0	*	0
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	1	0	*	0	0	*	*
325412	Pharmaceutical Preparation	*	0	*	0	0	0	*
325992	Photographic Film, Paper, Plate, and Chemicals	*	0	*	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	90	0	*	79	0	2	9
327120	Clay Building Material and Refractories	1	0	*	*	0	1	0
327211	Flat Glass	0	0	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0
327213	Glass Containers	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0
327310	Cements	71	0	0	62	0	1	8
327410	Lime	17	0	*	16	0	0	*
327420	Gypsum	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0
331	Primary Metals	187	182	3	1	0	1	*
331110	Iron and Steel Mills and Ferroalloys	186	182	3	1	0	*	*
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0
3313	Alumina and Aluminum	0	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0	0	0	0
3314	Nonferrous Metals, except Aluminum	1	0	0	*	0	1	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	1	0	0	*	0	1	0
3315	Foundries	*	0	*	0	0	0	0
331511	Iron Foundries	0	0	0	0	0	0	0
331523	Nonferrous Metal Die-Casting Foundries	0	0	0	0	0	0	0

331524	Aluminum Foundries, except Die-Casting	0	0	0	0	0	0	0
332	Fabricated Metal Products	*	0	0	0	0	0	*
333	Machinery	Q	0	*	0	0	0	*
334	Computer and Electronic Products	0	0	0	0	0	0	0
334413	Semiconductors and Related Devices	0	0	0	0	0	0	0
335	Electrical Equip., Appliances, and Components	0	0	0	0	0	0	0
336	Transportation Equipment	1	0	1	0	0	0	0
336111	Automobiles	*	0	*	0	0	0	0
336112	Light Trucks and Utility Vehicles	1	0	1	0	0	0	0
3364	Aerospace Product and Parts	*	0	*	0	0	0	0
336411	Aircraft	0	0	0	0	0	0	0
337	Furniture and Related Products	5	0	0	0	0	Q	*
339	Miscellaneous	0	0	0	0	0	0	0
	Total	4,098	195	1,806	647	857	564	28

Northeast Census Region

311	Food	*	*	*	0	0	0	0
3112	Grain and Oilseed Milling	0	0	0	0	0	0	0
311221	Wet Corn Milling	0	0	0	0	0	0	0
31131	Sugar Manufacturing	0	0	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	*	*	0	0	0	0	0
3115	Dairy Product	*	0	*	0	0	0	0
3116	Animal Slaughtering and Processing	*	0	*	0	0	0	0
312	Beverage and Tobacco Products	0	0	0	0	0	0	0
3121	Beverages	0	0	0	0	0	0	0
3122	Tobacco	0	0	0	0	0	0	0
313	Textile Mills	0	0	0	0	0	0	0
314	Textile Product Mills	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0
321	Wood Products	39	0	0	0	0	39	*
321113	Sawmills	6	0	0	0	0	6	*
3212	Veneer, Plywood, and Engineered Woods	27	0	0	0	0	27	*
321219	Reconstituted Wood Products	15	0	0	0	0	15	*
3219	Other Wood Products	Q	0	0	0	0	Q	*
322	Paper	75	0	0	2	54	19	*
322110	Pulp Mills	D	0	0	0	D	8	0
322121	Paper Mills, except Newsprint	47	0	0	2	35	10	*
322122	Newsprint Mills	0	0	0	0	0	0	0
322130	Paperboard Mills	0	0	0	0	0	0	0
323	Printing and Related Support	0	0	0	0	0	0	0

324	Petroleum and Coal Products	96	3	59	34	0	0	*
324110	Petroleum Refineries	93	0	59	34	0	0	0
324121	Asphalt Paving Mixture and Block	*	0	0	0	0	0	*
324122	Asphalt Shingle and Coating Materials	0	0	0	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Products	0	0	0	0	0	0	0
324199	Other Petroleum and Coal Products	3	3	0	0	0	0	0
325	Chemicals	1	0	*	0	0	*	*
325110	Petrochemicals	*	0	*	0	0	0	0
325120	Industrial Gases	0	0	0	0	0	0	0
325180	Other Basic Inorganic Chemicals	0	0	0	0	0	0	0
325193	Ethyl Alcohol	0	0	0	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0	0	0	0	0	0	0
325199	Other Basic Organic Chemicals	*	0	0	0	0	0	*
325211	Plastics Materials and Resins	*	0	*	0	0	0	0
325212	Synthetic Rubber	0	0	0	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	*	0	0	0	0	0	*
325311	Nitrogenous Fertilizers	*	0	0	0	0	*	0
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	0	0	0	0	0	0	0
325412	Pharmaceutical Preparation	0	0	0	0	0	0	0
325992	Photographic Film, Paper, Plate, and Chemicals	*	0	*	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	4	0	*	4	0	0	*
327120	Clay Building Material and Refractories	*	0	*	*	0	0	0
327211	Flat Glass	0	0	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0
327213	Glass Containers	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0
327310	Cements	4	0	0	4	0	0	0
327410	Lime	*	0	0	*	0	0	0
327420	Gypsum	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0
331	Primary Metals	60	60	0	0	0	*	0
331110	Iron and Steel Mills and Ferroalloys	60	60	0	0	0	*	0
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0
3313	Alumina and Aluminum	0	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0	0	0	0
3314	Nonferrous Metals, except Aluminum	*	0	0	0	0	*	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0	0	0	0	0	0	0

3315	Foundries	0	0	0	0	0	0	0
331511	Iron Foundries	0	0	0	0	0	0	0
331523	Nonferrous Metal Die-Casting Foundries	0	0	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	0	0	0	0	0	0	0
332	Fabricated Metal Products	*	0	0	0	0	0	*
333	Machinery	0	0	0	0	0	0	0
334	Computer and Electronic Products	0	0	0	0	0	0	0
334413	Semiconductors and Related Devices	0	0	0	0	0	0	0
335	Electrical Equip., Appliances, and Components	0	0	0	0	0	0	0
336	Transportation Equipment	0	0	0	0	0	0	0
336111	Automobiles	0	0	0	0	0	0	0
336112	Light Trucks and Utility Vehicles	0	0	0	0	0	0	0
3364	Aerospace Product and Parts	0	0	0	0	0	0	0
336411	Aircraft	0	0	0	0	0	0	0
337	Furniture and Related Products	*	0	0	0	0	*	*
339	Miscellaneous	0	0	0	0	0	0	0
	Total	275	63	60	39	54	58	1

Midwest Census Region

311	Food	2	0	2	0	0	0	*
3112	Grain and Oilseed Milling	1	0	*	0	0	0	*
311221	Wet Corn Milling	*	0	*	0	0	0	0
31131	Sugar Manufacturing	*	0	*	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	*	0	*	0	0	0	*
3115	Dairy Product	0	0	0	0	0	0	0
3116	Animal Slaughtering and Processing	1	0	1	0	0	0	*
312	Beverage and Tobacco Products	Q	0	*	0	0	Q	0
3121	Beverages	Q	0	*	0	0	Q	0
3122	Tobacco	0	0	0	0	0	0	0
313	Textile Mills	0	0	0	0	0	0	0
314	Textile Product Mills	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0
321	Wood Products	13	0	0	0	0	13	*
321113	Sawmills	4	0	0	0	0	4	*
3212	Veneer, Plywood, and Engineered Woods	6	0	0	0	0	6	*
321219	Reconstituted Wood Products	3	0	0	0	0	3	0
3219	Other Wood Products	4	0	0	0	0	4	*
322	Paper	89	0	*	4	59	22	4
322110	Pulp Mills	*	0	*	0	0	0	0
322121	Paper Mills, except Newsprint	81	0	*	4	58	20	*

322122	Newsprint Mills	0	0	0	0	0	0	0
322130	Paperboard Mills	8	0	*	0	2	2	4
323	Printing and Related Support	0	0	0	0	0	0	0
324	Petroleum and Coal Products	319	8	228	83	0	*	*
324110	Petroleum Refineries	311	0	228	83	0	0	0
324121	Asphalt Paving Mixture and Block	*	0	0	0	0	0	*
324122	Asphalt Shingle and Coating Materials	*	0	0	0	0	*	0
324191	Petroleum Lubricating Oil and Grease Products	0	0	0	0	0	0	0
324199	Other Petroleum and Coal Products	8	8	0	0	0	0	0
325	Chemicals	8	0	7	0	0	1	1
325110	Petrochemicals	0	0	0	0	0	0	0
325120	Industrial Gases	0	0	0	0	0	0	0
325180	Other Basic Inorganic Chemicals	*	0	*	0	0	0	0
325193	Ethyl Alcohol	3	0	2	0	0	1	1
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0	0	0	0	0	0	0
325199	Other Basic Organic Chemicals	*	0	*	0	0	0	*
325211	Plastics Materials and Resins	4	0	4	0	0	0	1
325212	Synthetic Rubber	*	0	*	0	0	0	*
325220	Artificial and Synthetic Fibers and Filaments	0	0	0	0	0	0	0
325311	Nitrogenous Fertilizers	*	0	*	0	0	0	0
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	*	0	*	0	0	0	0
325412	Pharmaceutical Preparation	*	0	*	0	0	0	0
325992	Photographic Film, Paper, Plate, and Chemicals	0	0	0	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	35	0	*	31	0	0	4
327120	Clay Building Material and Refractories	0	0	0	0	0	0	0
327211	Flat Glass	0	0	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0
327213	Glass Containers	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0
327310	Cements	29	0	0	25	0	0	4
327410	Lime	7	0	*	7	0	0	*
327420	Gypsum	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0
331	Primary Metals	121	117	3	1	0	0	*
331110	Iron and Steel Mills and Ferroalloys	121	117	3	1	0	0	*
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0
3313	Alumina and Aluminum	0	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0

331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0	0	0	0
3314	Nonferrous Metals, except Aluminum	0	0	0	0	0	0	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0	0	0	0	0	0	0
3315	Foundries	*	0	*	0	0	0	0
331511	Iron Foundries	0	0	0	0	0	0	0
331523	Nonferrous Metal Die-Casting Foundries	0	0	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	0	0	0	0	0	0	0
332	Fabricated Metal Products	0	0	0	0	0	0	0
333	Machinery	0	0	0	0	0	0	0
334	Computer and Electronic Products	0	0	0	0	0	0	0
334413	Semiconductors and Related Devices	0	0	0	0	0	0	0
335	Electrical Equip., Appliances, and Components	0	0	0	0	0	0	0
336	Transportation Equipment	1	0	1	0	0	0	0
336111	Automobiles	*	0	*	0	0	0	0
336112	Light Trucks and Utility Vehicles	1	0	1	0	0	0	0
3364	Aerospace Product and Parts	*	0	*	0	0	0	0
336411	Aircraft	0	0	0	0	0	0	0
337	Furniture and Related Products	Q	0	0	0	0	Q	0
339	Miscellaneous	0	0	0	0	0	0	0
	Total	605	125	241	119	59	50	10

South Census Region

311	Food	8	0	2	0	0	6	*
3112	Grain and Oilseed Milling	6	0	1	0	0	5	0
311221	Wet Corn Milling	5	0	0	0	0	5	0
31131	Sugar Manufacturing	0	0	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	*	0	*	0	0	0	*
3115	Dairy Product	0	0	0	0	0	0	0
3116	Animal Slaughtering and Processing	Q	0	1	0	0	Q	0
312	Beverage and Tobacco Products	1	0	1	0	0	1	0
3121	Beverages	1	0	1	0	0	1	0
3122	Tobacco	0	0	0	0	0	0	0
313	Textile Mills	*	0	0	0	0	*	0
314	Textile Product Mills	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0
321	Wood Products	127	0	0	0	0	127	*
321113	Sawmills	64	0	0	0	0	64	*
3212	Veneer, Plywood, and Engineered Woods	37	0	0	0	0	37	*
321219	Reconstituted Wood Products	20	0	0	0	0	20	*
3219	Other Wood Products	24	0	0	0	0	24	*

322	Paper	944	0	1	9	685	247	3
322110	Pulp Mills	209	0	*	*	170	38	*
322121	Paper Mills, except Newsprint	211	0	*	9	156	46	0
322122	Newsprint Mills	12	0	0	0	6	6	0
322130	Paperboard Mills	510	0	0	*	352	154	3
323	Printing and Related Support	0	0	0	0	0	0	0
324	Petroleum and Coal Products	1,019	1	719	298	0	0	*
324110	Petroleum Refineries	1,007	0	717	290	0	0	0
324121	Asphalt Paving Mixture and Block	*	0	0	0	0	0	*
324122	Asphalt Shingle and Coating Materials	0	0	0	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Products	0	0	0	0	0	0	0
324199	Other Petroleum and Coal Products	11	1	2	8	0	0	*
325	Chemicals	405	0	391	Q	3	3	5
325110	Petrochemicals	159	0	156	0	3	0	0
325120	Industrial Gases	2	0	2	0	0	0	0
325180	Other Basic Inorganic Chemicals	Q	0	Q	0	0	0	0
325193	Ethyl Alcohol	0	0	0	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	5	0	2	0	0	3	*
325199	Other Basic Organic Chemicals	130	0	126	0	0	0	4
325211	Plastics Materials and Resins	66	0	65	0	0	0	*
325212	Synthetic Rubber	0	0	0	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	0	0	0	0	0	0	0
325311	Nitrogenous Fertilizers	1	0	1	0	0	0	0
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	1	0	*	0	0	*	*
325412	Pharmaceutical Preparation	*	0	*	0	0	0	*
325992	Photographic Film, Paper, Plate, and Chemicals	0	0	0	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	35	0	*	29	0	2	5
327120	Clay Building Material and Refractories	1	0	*	0	0	1	0
327211	Flat Glass	0	0	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0
327213	Glass Containers	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0
327310	Cements	27	0	0	23	0	1	3
327410	Lime	6	0	0	6	0	0	*
327420	Gypsum	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0
331	Primary Metals	7	5	0	*	0	1	0
331110	Iron and Steel Mills and Ferroalloys	5	5	0	*	0	0	0
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0

3313	Alumina and Aluminum	0	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0	0	0	0
3314	Nonferrous Metals, except Aluminum	1	0	0	0	0	1	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	1	0	0	0	0	1	0
3315	Foundries	0	0	0	0	0	0	0
331511	Iron Foundries	0	0	0	0	0	0	0
331523	Nonferrous Metal Die-Casting Foundries	0	0	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	0	0	0	0	0	0	0
332	Fabricated Metal Products	0	0	0	0	0	0	0
333	Machinery	*	0	0	0	0	0	*
334	Computer and Electronic Products	0	0	0	0	0	0	0
334413	Semiconductors and Related Devices	0	0	0	0	0	0	0
335	Electrical Equip., Appliances, and Components	0	0	0	0	0	0	0
336	Transportation Equipment	*	0	*	0	0	0	0
336111	Automobiles	*	0	*	0	0	0	0
336112	Light Trucks and Utility Vehicles	0	0	0	0	0	0	0
3364	Aerospace Product and Parts	0	0	0	0	0	0	0
336411	Aircraft	0	0	0	0	0	0	0
337	Furniture and Related Products	Q	0	0	0	0	Q	0
339	Miscellaneous	0	0	0	0	0	0	0
	Total	2,548	7	1,113	339	688	388	13

West Census Region

311	Food	Q	0	1	0	0	0	Q
3112	Grain and Oilseed Milling	*	0	*	0	0	0	0
311221	Wet Corn Milling	*	0	*	0	0	0	0
31131	Sugar Manufacturing	0	0	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	*	0	*	0	0	0	0
3115	Dairy Product	*	0	*	0	0	0	0
3116	Animal Slaughtering and Processing	*	0	*	0	0	0	0
312	Beverage and Tobacco Products	*	0	*	0	0	*	0
3121	Beverages	*	0	*	0	0	*	0
3122	Tobacco	0	0	0	0	0	0	0
313	Textile Mills	0	0	0	0	0	0	0
314	Textile Product Mills	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0
321	Wood Products	49	0	0	0	0	49	*
321113	Sawmills	36	0	0	0	0	36	*

3212	Veneer, Plywood, and Engineered Woods	13	0	0	0	0	13	0
321219	Reconstituted Wood Products	4	0	0	0	0	4	0
3219	Other Wood Products	0	0	0	0	0	0	0
322	Paper	75	0	0	0	56	18	1
322110	Pulp Mills	6	0	0	0	4	1	0
322121	Paper Mills, except Newsprint	18	0	0	0	13	5	*
322122	Newsprint Mills	*	0	0	0	0	*	0
322130	Paperboard Mills	51	0	0	0	38	12	*
323	Printing and Related Support	0	0	0	0	0	0	0
324	Petroleum and Coal Products	525	0	388	135	0	0	Q
324110	Petroleum Refineries	519	0	388	131	0	0	0
324121	Asphalt Paving Mixture and Block	Q	0	0	0	0	0	Q
324122	Asphalt Shingle and Coating Materials	0	0	0	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Products	0	0	0	0	0	0	0
324199	Other Petroleum and Coal Products	4	0	0	4	0	0	0
325	Chemicals	4	0	3	0	0	*	0
325110	Petrochemicals	0	0	0	0	0	0	0
325120	Industrial Gases	0	0	0	0	0	0	0
325180	Other Basic Inorganic Chemicals	3	0	3	0	0	0	0
325193	Ethyl Alcohol	0	0	0	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	*	0	0	0	0	*	0
325199	Other Basic Organic Chemicals	*	0	*	0	0	0	0
325211	Plastics Materials and Resins	*	0	*	0	0	0	0
325212	Synthetic Rubber	0	0	0	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	0	0	0	0	0	0	0
325311	Nitrogenous Fertilizers	0	0	0	0	0	0	0
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	*	0	*	0	0	0	0
325412	Pharmaceutical Preparation	0	0	0	0	0	0	0
325992	Photographic Film, Paper, Plate, and Chemicals	0	0	0	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	15	0	0	15	0	0	*
327120	Clay Building Material and Refractories	0	0	0	0	0	0	0
327211	Flat Glass	0	0	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0
327213	Glass Containers	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0
327310	Cements	12	0	0	11	0	0	*
327410	Lime	3	0	0	3	0	0	0
327420	Gypsum	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0

331	Primary Metals	*	0	0	*	0	0	0
331110	Iron and Steel Mills and Ferroalloys	0	0	0	0	0	0	0
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0
3313	Alumina and Aluminum	0	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0	0	0	0
3314	Nonferrous Metals, except Aluminum	*	0	0	*	0	0	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	*	0	0	*	0	0	0
3315	Foundries	0	0	0	0	0	0	0
331511	Iron Foundries	0	0	0	0	0	0	0
331523	Nonferrous Metal Die-Casting Foundries	0	0	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	0	0	0	0	0	0	0
332	Fabricated Metal Products	0	0	0	0	0	0	0
333	Machinery	*	0	*	0	0	0	0
334	Computer and Electronic Products	0	0	0	0	0	0	0
334413	Semiconductors and Related Devices	0	0	0	0	0	0	0
335	Electrical Equip., Appliances, and Components	0	0	0	0	0	0	0
336	Transportation Equipment	*	0	*	0	0	0	0
336111	Automobiles	0	0	0	0	0	0	0
336112	Light Trucks and Utility Vehicles	0	0	0	0	0	0	0
3364	Aerospace Product and Parts	*	0	*	0	0	0	0
336411	Aircraft	0	0	0	0	0	0	0
337	Furniture and Related Products	0	0	0	0	0	0	0
339	Miscellaneous	0	0	0	0	0	0	0
	Total	670	0	393	150	56	68	4

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

(b) *Net Electricity* is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It does not include electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal).

(c) *Distillate Fuel Oil* includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.

(d) *Natural Gas* includes natural gas obtained from utilities, local distribution companies, and any other supplier(s), such as independent gas producers, gas brokers, marketers, and any marketing subsidiaries of utilities.

(e) Hydrocarbon Gas Liquids (*HGL*) include ethane, ethylene, propane, propylene, normal butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw Natural Gas Liquids (NGL).

(f) *Other* includes net steam (the sum of purchases, generation from renewables, and net transfers), and other energy that respondents indicated was used to produce heat and power.

* 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 percent.

NA=Not available.

Notes: Totals may not equal sum of components because of independent rounding. The estimates presented in this table are for the total consumption of energy (formerly total inputs of energy) for the production of heat, power, and electricity generation, regardless of where the energy was produced. Specifically, the estimates include the quantities of energy that were originally produced offsite and purchased by or transferred to the establishment, plus those that were produced onsite from other energy or input materials not classified as energy, or were extracted from captive (onsite) mines or wells. During manufacturing processes, it is possible that the thermal energy content of an energy input is not completely consumed for the production of heat, power, or

captive (onsite) mines or wells. During manufacturing processes, it is possible that the thermal energy content of an energy input is not completely consumed for the production of heat, power, or electricity generation. Hence, residuals of that input may remain. Those residual leftovers may be subsequently consumed for fuel purposes, whether onsite or offsite at another manufacturing establishment (for example, blast furnace gas as a byproduct recovered from coke and other inputs that were not completely consumed). In such cases, double counting of inputs cannot be avoided, and the *Fuel Consumption* estimates will be inflated.

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 3.5 Relative Standard Errors for Table 3.5;

Unit: Percents.

NAICS Code(a)	Subsector and Industry	Total	Blast Furnace/Coke Oven Gases	Waste Gas	Petroleum Coke	Pulping Liquor or Black Liquor	Wood Chips, Bark	Waste Oils/Tars and Waste Materials
Total United States								
311	Food	11.6	82.9	3.9	X	X	14.3	77.9
3112	Grain and Oilseed Milling	2.1	X	12.1	X	X	0.0	0.0
311221	Wet Corn Milling	0.0	X	0.0	X	X	0.0	X
31131	Sugar Manufacturing	0.0	X	0.0	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	3.1	82.9	3.1	X	X	X	74.3
3115	Dairy Product	0.0	X	0.0	X	X	X	X
3116	Animal Slaughtering and Processing	29.0	X	5.2	X	X	90.8	0.0
312	Beverage and Tobacco Products	86.0	X	0.0	X	X	91.4	X
3121	Beverages	86.0	X	0.0	X	X	91.4	X
3122	Tobacco	X	X	X	X	X	X	X
313	Textile Mills	82.3	X	X	X	X	82.3	X
314	Textile Product Mills	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X
316	Leather and Allied Products	X	X	X	X	X	X	X
321	Wood Products	5.1	X	X	X	X	5.1	49.2
321113	Sawmills	1.3	X	X	X	X	1.3	0.1
3212	Veneer, Plywood, and Engineered Woods	1.5	X	X	X	X	1.5	0.3
321219	Reconstituted Wood Products	0.1	X	X	X	X	0.1	0.0
3219	Other Wood Products	33.4	X	X	X	X	33.8	93.9
322	Paper	0.0	X	0.0	0.0	0.0	0.0	0.0
322110	Pulp Mills	D	X	0.0	0.0	D	0.0	0.0
322121	Paper Mills, except Newsprint	0.0	X	0.0	0.0	0.0	0.0	0.0
322122	Newsprint Mills	0.0	X	X	X	0.0	0.0	X
322130	Paperboard Mills	0.0	X	0.0	0.0	0.0	0.0	0.0
323	Printing and Related Support	X	X	X	X	X	X	X
324	Petroleum and Coal Products	0.1	0.0	0.0	0.0	X	0.0	45.2
324110	Petroleum Refineries	0.0	X	0.0	0.0	X	X	X
324121	Asphalt Paving Mixture and Block	45.2	X	X	X	X	X	45.2
324122	Asphalt Shingle and Coating Materials	0.0	X	X	X	X	0.0	X
324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X	X	X	X
324199	Other Petroleum and Coal Products	0.0	0.0	0.0	0.0	X	X	0.0

325	Chemicals	6.9	X	7.1	53.6	0.0	0.0	0.0
325110	Petrochemicals	0.0	X	0.0	X	0.0	X	X
325120	Industrial Gases	0.0	X	0.0	X	X	X	X
325180	Other Basic Inorganic Chemicals	75.5	X	75.5	X	X	X	X
325193	Ethyl Alcohol	12.9	X	20.1	X	X	0.0	0.0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	0.0	X	X	0.0	0.0
325199	Other Basic Organic Chemicals	0.2	X	0.3	X	X	X	0.0
325211	Plastics Materials and Resins	2.2	X	2.2	X	X	X	0.0
325212	Synthetic Rubber	0.0	X	0.0	X	X	X	0.0
325220	Artificial and Synthetic Fibers and Filaments	0.0	X	X	X	X	X	0.0
325311	Nitrogenous Fertilizers	0.0	X	0.0	X	X	0.0	X
325312	Phosphatic Fertilizers	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	0.1	X	0.1	X	X	0.0	0.0
325412	Pharmaceutical Preparation	0.0	X	0.0	X	X	X	0.0
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	X	0.0	X	X	X	X
326	Plastics and Rubber Products	X	X	X	X	X	X	X
327	Nonmetallic Mineral Products	1.1	X	0.0	0.0	X	19.6	10.8
327120	Clay Building Material and Refractories	33.2	X	0.0	0.0	X	39.9	X
327211	Flat Glass	X	X	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	X	X	X	X
327310	Cements	0.0	X	X	0.0	X	0.0	0.0
327410	Lime	0.0	X	0.0	0.0	X	X	0.0
327420	Gypsum	X	X	X	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X
331	Primary Metals	0.0	0.0	0.0	0.0	X	0.0	0.0
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	0.0	0.0	X	0.0	0.0
3312	Steel Products from Purchased Steel	X	X	X	X	X	X	X
3313	Alumina and Aluminum	X	X	X	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X	X	X	X
3314	Nonferrous Metals, except Aluminum	0.0	X	X	0.0	X	0.0	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.0	X	X	0.0	X	0.0	X
3315	Foundries	0.0	X	0.0	X	X	X	X
331511	Iron Foundries	X	X	X	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	X	X	X	X	X	X	X
332	Fabricated Metal Products	99.5	X	X	X	X	X	99.5
333	Machinery	82.4	X	91.3	X	X	X	97.6
334	Computer and Electronic Products	X	X	X	X	X	X	X

334413	Semiconductors and Related Devices	X	X	X	X	X	X	X
335	Electrical Equip., Appliances, and Components	X	X	X	X	X	X	X
336	Transportation Equipment	0.0	X	0.0	X	X	X	X
336111	Automobiles	0.0	X	0.0	X	X	X	X
336112	Light Trucks and Utility Vehicles	0.0	X	0.0	X	X	X	X
3364	Aerospace Product and Parts	0.0	X	0.0	X	X	X	X
336411	Aircraft	X	X	X	X	X	X	X
337	Furniture and Related Products	50.0	X	X	X	X	53.0	73.5
339	Miscellaneous	X	X	X	X	X	X	X
	Total	0.8	0.1	1.6	0.2	0.0	2.9	6.1

Northeast Census Region

311	Food	0.1	82.9	0.0	X	X	X	X
3112	Grain and Oilseed Milling	X	X	X	X	X	X	X
311221	Wet Corn Milling	X	X	X	X	X	X	X
31131	Sugar Manufacturing	X	X	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	82.9	82.9	X	X	X	X	X
3115	Dairy Product	0.0	X	0.0	X	X	X	X
3116	Animal Slaughtering and Processing	0.0	X	0.0	X	X	X	X
312	Beverage and Tobacco Products	X	X	X	X	X	X	X
3121	Beverages	X	X	X	X	X	X	X
3122	Tobacco	X	X	X	X	X	X	X
313	Textile Mills	X	X	X	X	X	X	X
314	Textile Product Mills	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X
316	Leather and Allied Products	X	X	X	X	X	X	X
321	Wood Products	10.3	X	X	X	X	10.3	1.1
321113	Sawmills	1.4	X	X	X	X	1.4	0.0
3212	Veneer, Plywood, and Engineered Woods	0.1	X	X	X	X	0.1	1.5
321219	Reconstituted Wood Products	0.0	X	X	X	X	0.0	0.0
3219	Other Wood Products	60.4	X	X	X	X	60.4	85.9
322	Paper	0.0	X	X	0.0	0.0	0.0	0.0
322110	Pulp Mills	D	X	X	X	D	0.0	X
322121	Paper Mills, except Newsprint	0.0	X	X	0.0	0.0	0.0	0.0
322122	Newsprint Mills	X	X	X	X	X	X	X
322130	Paperboard Mills	X	X	X	X	X	X	X
323	Printing and Related Support	X	X	X	X	X	X	X
324	Petroleum and Coal Products	0.0	0.0	0.0	0.0	X	X	0.0
324110	Petroleum Refineries	0.0	X	0.0	0.0	X	X	X
324121	Asphalt Paving Mixture and Block	0.0	X	X	X	X	X	0.0
324122	Asphalt Shingle and Coating Materials	X	X	X	X	X	X	X
324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X	X	X	X

324199	Other Petroleum and Coal Products	0.0	0.0	X	X	X	X	X
325	Chemicals	12.7	X	17.6	X	X	0.0	0.0
325110	Petrochemicals	0.0	X	0.0	X	X	X	X
325120	Industrial Gases	X	X	X	X	X	X	X
325180	Other Basic Inorganic Chemicals	X	X	X	X	X	X	X
325193	Ethyl Alcohol	X	X	X	X	X	X	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	X	X	X	X	X	X	X
325199	Other Basic Organic Chemicals	0.0	X	X	X	X	X	0.0
325211	Plastics Materials and Resins	0.0	X	0.0	X	X	X	X
325212	Synthetic Rubber	X	X	X	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	0.0	X	X	X	X	X	0.0
325311	Nitrogenous Fertilizers	0.0	X	X	X	X	0.0	X
325312	Phosphatic Fertilizers	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	X	X	X	X	X	X	X
325412	Pharmaceutical Preparation	X	X	X	X	X	X	X
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	X	0.0	X	X	X	X
326	Plastics and Rubber Products	X	X	X	X	X	X	X
327	Nonmetallic Mineral Products	1.0	X	0.0	0.0	X	X	99.0
327120	Clay Building Material and Refractories	0.0	X	0.0	0.0	X	X	X
327211	Flat Glass	X	X	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	X	X	X	X
327310	Cements	0.0	X	X	0.0	X	X	X
327410	Lime	0.0	X	X	0.0	X	X	X
327420	Gypsum	X	X	X	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X
331	Primary Metals	0.0	0.0	X	X	X	0.0	X
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	X	X	X	0.0	X
3312	Steel Products from Purchased Steel	X	X	X	X	X	X	X
3313	Alumina and Aluminum	X	X	X	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X	X	X	X
3314	Nonferrous Metals, except Aluminum	0.0	X	X	X	X	0.0	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	X	X	X	X	X	X	X
3315	Foundries	X	X	X	X	X	X	X
331511	Iron Foundries	X	X	X	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	X	X	X	X	X	X	X
332	Fabricated Metal Products	99.5	X	X	X	X	X	99.5
333	Machinery	X	X	X	X	X	X	X

334	Computer and Electronic Products	X	X	X	X	X	X	X
334413	Semiconductors and Related Devices	X	X	X	X	X	X	X
335	Electrical Equip., Appliances, and Components	X	X	X	X	X	X	X
336	Transportation Equipment	X	X	X	X	X	X	X
336111	Automobiles	X	X	X	X	X	X	X
336112	Light Trucks and Utility Vehicles	X	X	X	X	X	X	X
3364	Aerospace Product and Parts	X	X	X	X	X	X	X
336411	Aircraft	X	X	X	X	X	X	X
337	Furniture and Related Products	73.5	X	X	X	X	73.5	73.5
339	Miscellaneous	X	X	X	X	X	X	X
	Total	1.5	0.1	0.1	0.0	0.0	6.9	21.7

Midwest Census Region

311	Food	6.7	X	7.7	X	X	X	0.1
3112	Grain and Oilseed Milling	21.7	X	37.8	X	X	X	0.0
311221	Wet Corn Milling	0.0	X	0.0	X	X	X	X
31131	Sugar Manufacturing	0.0	X	0.0	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	9.1	X	9.1	X	X	X	55.3
3115	Dairy Product	X	X	X	X	X	X	X
3116	Animal Slaughtering and Processing	3.4	X	3.4	X	X	X	0.0
312	Beverage and Tobacco Products	97.0	X	0.0	X	X	97.1	X
3121	Beverages	97.0	X	0.0	X	X	97.1	X
3122	Tobacco	X	X	X	X	X	X	X
313	Textile Mills	X	X	X	X	X	X	X
314	Textile Product Mills	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X
316	Leather and Allied Products	X	X	X	X	X	X	X
321	Wood Products	14.6	X	X	X	X	14.6	4.6
321113	Sawmills	3.5	X	X	X	X	3.5	0.0
3212	Veneer, Plywood, and Engineered Woods	20.6	X	X	X	X	20.8	0.0
321219	Reconstituted Wood Products	0.3	X	X	X	X	0.3	X
3219	Other Wood Products	40.8	X	X	X	X	40.8	91.0
322	Paper	0.0	X	0.0	0.0	0.0	0.0	0.0
322110	Pulp Mills	0.0	X	0.0	X	X	X	X
322121	Paper Mills, except Newsprint	0.0	X	0.0	0.0	0.0	0.0	0.0
322122	Newsprint Mills	X	X	X	X	X	X	X
322130	Paperboard Mills	0.0	X	0.0	X	0.0	0.0	0.0
323	Printing and Related Support	X	X	X	X	X	X	X
324	Petroleum and Coal Products	0.1	0.0	0.0	0.0	X	0.0	53.4
324110	Petroleum Refineries	0.0	X	0.0	0.0	X	X	X
324121	Asphalt Paving Mixture and Block	53.4	X	X	X	X	X	53.4
324122	Asphalt Shingle and Coating Materials	0.0	X	X	X	X	0.0	X

324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X	X	X	X
324199	Other Petroleum and Coal Products	0.0	0.0	X	X	X	X	X
325	Chemicals	4.6	X	5.8	X	X	0.0	0.0
325110	Petrochemicals	X	X	X	X	X	X	X
325120	Industrial Gases	X	X	X	X	X	X	X
325180	Other Basic Inorganic Chemicals	0.0	X	0.0	X	X	X	X
325193	Ethyl Alcohol	12.9	X	20.1	X	X	0.0	0.0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	X	X	X	X	X	X	X
325199	Other Basic Organic Chemicals	0.0	X	0.0	X	X	X	0.0
325211	Plastics Materials and Resins	0.0	X	0.0	X	X	X	0.0
325212	Synthetic Rubber	0.0	X	0.0	X	X	X	0.0
325220	Artificial and Synthetic Fibers and Filaments	X	X	X	X	X	X	X
325311	Nitrogenous Fertilizers	0.0	X	0.0	X	X	X	X
325312	Phosphatic Fertilizers	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	0.0	X	0.0	X	X	X	X
325412	Pharmaceutical Preparation	0.0	X	0.0	X	X	X	X
325992	Photographic Film, Paper, Plate, and Chemicals	X	X	X	X	X	X	X
326	Plastics and Rubber Products	X	X	X	X	X	X	X
327	Nonmetallic Mineral Products	0.0	X	0.0	0.0	X	X	0.0
327120	Clay Building Material and Refractories	X	X	X	X	X	X	X
327211	Flat Glass	X	X	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	X	X	X	X
327310	Cements	0.0	X	X	0.0	X	X	0.0
327410	Lime	0.0	X	0.0	0.0	X	X	0.0
327420	Gypsum	X	X	X	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X
331	Primary Metals	0.0	0.0	0.0	0.0	X	X	0.0
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	0.0	0.0	X	X	0.0
3312	Steel Products from Purchased Steel	X	X	X	X	X	X	X
3313	Alumina and Aluminum	X	X	X	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X	X	X	X
3314	Nonferrous Metals, except Aluminum	X	X	X	X	X	X	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	X	X	X	X	X	X	X
3315	Foundries	0.0	X	0.0	X	X	X	X
331511	Iron Foundries	X	X	X	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	X	X	X	X	X	X	X
332	Fabricated Metal Products	X	X	X	X	X	X	X

333	Machinery	X	X	X	X	X	X	X
334	Computer and Electronic Products	X	X	X	X	X	X	X
334413	Semiconductors and Related Devices	X	X	X	X	X	X	X
335	Electrical Equip., Appliances, and Components	X	X	X	X	X	X	X
336	Transportation Equipment	0.0	X	0.0	X	X	X	X
336111	Automobiles	0.0	X	0.0	X	X	X	X
336112	Light Trucks and Utility Vehicles	0.0	X	0.0	X	X	X	X
3364	Aerospace Product and Parts	0.0	X	0.0	X	X	X	X
336411	Aircraft	X	X	X	X	X	X	X
337	Furniture and Related Products	72.5	X	X	X	X	72.5	X
339	Miscellaneous	X	X	X	X	X	X	X
	Total	1.9	0.0	0.2	0.0	0.0	22.7	0.3

South Census Region

311	Food	11.2	X	6.0	X	X	14.3	90.1
3112	Grain and Oilseed Milling	0.0	X	0.0	X	X	0.0	X
311221	Wet Corn Milling	0.0	X	X	X	X	0.0	X
31131	Sugar Manufacturing	X	X	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	0.5	X	0.0	X	X	X	90.1
3115	Dairy Product	X	X	X	X	X	X	X
3116	Animal Slaughtering and Processing	53.9	X	15.3	X	X	90.8	X
312	Beverage and Tobacco Products	0.0	X	0.0	X	X	0.0	X
3121	Beverages	0.0	X	0.0	X	X	0.0	X
3122	Tobacco	X	X	X	X	X	X	X
313	Textile Mills	82.3	X	X	X	X	82.3	X
314	Textile Product Mills	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X
316	Leather and Allied Products	X	X	X	X	X	X	X
321	Wood Products	8.6	X	X	X	X	8.6	94.8
321113	Sawmills	2.2	X	X	X	X	2.2	54.9
3212	Veneer, Plywood, and Engineered Woods	0.7	X	X	X	X	0.7	0.0
321219	Reconstituted Wood Products	0.0	X	X	X	X	0.0	0.0
3219	Other Wood Products	44.4	X	X	X	X	45.2	94.8
322	Paper	0.0	X	0.0	0.0	0.0	0.0	0.0
322110	Pulp Mills	0.0	X	0.0	0.0	0.0	0.0	0.0
322121	Paper Mills, except Newsprint	0.0	X	0.0	0.0	0.0	0.0	X
322122	Newsprint Mills	0.0	X	X	X	0.0	0.0	X
322130	Paperboard Mills	0.0	X	X	0.0	0.0	0.0	0.0
323	Printing and Related Support	X	X	X	X	X	X	X
324	Petroleum and Coal Products	0.1	0.0	0.0	0.0	X	X	8.2
324110	Petroleum Refineries	0.0	X	0.0	0.0	X	X	X
324121	Asphalt Paving Mixture and Block	8.3	X	X	X	X	X	8.3

324122	Asphalt Shingle and Coating Materials	X	X	X	X	X	X	X
324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X	X	X	X
324199	Other Petroleum and Coal Products	0.0	0.0	0.0	0.0	X	X	0.0
325	Chemicals	7.1	X	7.3	53.6	0.0	0.0	0.0
325110	Petrochemicals	0.0	X	0.0	X	0.0	X	X
325120	Industrial Gases	0.0	X	0.0	X	X	X	X
325180	Other Basic Inorganic Chemicals	82.3	X	82.3	X	X	X	X
325193	Ethyl Alcohol	X	X	X	X	X	X	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	0.0	X	X	0.0	0.0
325199	Other Basic Organic Chemicals	0.2	X	0.3	X	X	X	0.0
325211	Plastics Materials and Resins	2.3	X	2.3	X	X	X	0.0
325212	Synthetic Rubber	X	X	X	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	X	X	X	X	X	X	X
325311	Nitrogenous Fertilizers	0.0	X	0.0	X	X	X	X
325312	Phosphatic Fertilizers	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	0.0	X	0.0	X	X	0.0	0.0
325412	Pharmaceutical Preparation	0.0	X	0.0	X	X	X	0.0
325992	Photographic Film, Paper, Plate, and Chemicals	X	X	X	X	X	X	X
326	Plastics and Rubber Products	X	X	X	X	X	X	X
327	Nonmetallic Mineral Products	2.9	X	0.0	0.0	X	19.6	21.2
327120	Clay Building Material and Refractories	37.6	X	0.0	X	X	39.9	X
327211	Flat Glass	X	X	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	X	X	X	X
327310	Cements	0.0	X	X	0.0	X	0.0	0.0
327410	Lime	0.0	X	X	0.0	X	X	0.0
327420	Gypsum	X	X	X	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X
331	Primary Metals	0.0	0.0	X	0.0	X	0.0	X
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	X	0.0	X	X	X
3312	Steel Products from Purchased Steel	X	X	X	X	X	X	X
3313	Alumina and Aluminum	X	X	X	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X	X	X	X
3314	Nonferrous Metals, except Aluminum	0.0	X	X	X	X	0.0	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.0	X	X	X	X	0.0	X
3315	Foundries	X	X	X	X	X	X	X
331511	Iron Foundries	X	X	X	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	X	X	X	X	X	X	X

332	Fabricated Metal Products	X	X	X	X	X	X	X
333	Machinery	97.6	X	X	X	X	X	97.6
334	Computer and Electronic Products	X	X	X	X	X	X	X
334413	Semiconductors and Related Devices	X	X	X	X	X	X	X
335	Electrical Equip., Appliances, and Components	X	X	X	X	X	X	X
336	Transportation Equipment	0.0	X	0.0	X	X	X	X
336111	Automobiles	0.0	X	0.0	X	X	X	X
336112	Light Trucks and Utility Vehicles	X	X	X	X	X	X	X
3364	Aerospace Product and Parts	X	X	X	X	X	X	X
336411	Aircraft	X	X	X	X	X	X	X
337	Furniture and Related Products	62.0	X	X	X	X	62.0	X
339	Miscellaneous	X	X	X	X	X	X	X
	Total	1.2	0.0	2.6	0.4	0.0	2.8	8.0

West Census Region

311	Food	61.7	X	0.0	X	X	X	97.0
3112	Grain and Oilseed Milling	0.0	X	0.0	X	X	X	X
311221	Wet Corn Milling	0.0	X	0.0	X	X	X	X
31131	Sugar Manufacturing	X	X	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	0.0	X	0.0	X	X	X	X
3115	Dairy Product	0.0	X	0.0	X	X	X	X
3116	Animal Slaughtering and Processing	0.0	X	0.0	X	X	X	X
312	Beverage and Tobacco Products	3.6	X	0.0	X	X	82.0	X
3121	Beverages	3.6	X	0.0	X	X	82.0	X
3122	Tobacco	X	X	X	X	X	X	X
313	Textile Mills	X	X	X	X	X	X	X
314	Textile Product Mills	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X
316	Leather and Allied Products	X	X	X	X	X	X	X
321	Wood Products	0.3	X	X	X	X	0.3	0.0
321113	Sawmills	0.4	X	X	X	X	0.4	0.0
3212	Veneer, Plywood, and Engineered Woods	0.5	X	X	X	X	0.5	X
321219	Reconstituted Wood Products	0.0	X	X	X	X	0.0	X
3219	Other Wood Products	X	X	X	X	X	X	X
322	Paper	0.0	X	X	X	0.0	0.0	0.0
322110	Pulp Mills	0.0	X	X	X	0.0	0.0	X
322121	Paper Mills, except Newsprint	0.0	X	X	X	0.0	0.0	0.0
322122	Newsprint Mills	0.0	X	X	X	X	0.0	X
322130	Paperboard Mills	0.0	X	X	X	0.0	0.0	0.0
323	Printing and Related Support	X	X	X	X	X	X	X
324	Petroleum and Coal Products	0.2	X	0.0	0.0	X	X	58.3
324110	Petroleum Refineries	0.0	X	0.0	0.0	X	X	X

324121	Asphalt Paving Mixture and Block	58.3	X	X	X	X	X	58.3
324122	Asphalt Shingle and Coating Materials	X	X	X	X	X	X	X
324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X	X	X	X
324199	Other Petroleum and Coal Products	0.0	X	X	0.0	X	X	X
325	Chemicals	4.1	X	4.6	X	X	0.0	X
325110	Petrochemicals	X	X	X	X	X	X	X
325120	Industrial Gases	X	X	X	X	X	X	X
325180	Other Basic Inorganic Chemicals	5.1	X	5.1	X	X	X	X
325193	Ethyl Alcohol	X	X	X	X	X	X	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	X	X	X	0.0	X
325199	Other Basic Organic Chemicals	0.0	X	0.0	X	X	X	X
325211	Plastics Materials and Resins	6.7	X	6.7	X	X	X	X
325212	Synthetic Rubber	X	X	X	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	X	X	X	X	X	X	X
325311	Nitrogenous Fertilizers	X	X	X	X	X	X	X
325312	Phosphatic Fertilizers	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	96.4	X	96.4	X	X	X	X
325412	Pharmaceutical Preparation	X	X	X	X	X	X	X
325992	Photographic Film, Paper, Plate, and Chemicals	X	X	X	X	X	X	X
326	Plastics and Rubber Products	X	X	X	X	X	X	X
327	Nonmetallic Mineral Products	0.0	X	X	0.0	X	X	0.0
327120	Clay Building Material and Refractories	X	X	X	X	X	X	X
327211	Flat Glass	X	X	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	X	X	X	X
327310	Cements	0.0	X	X	0.0	X	X	0.0
327410	Lime	0.0	X	X	0.0	X	X	X
327420	Gypsum	X	X	X	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X
331	Primary Metals	0.0	X	X	0.0	X	X	X
331110	Iron and Steel Mills and Ferroalloys	X	X	X	X	X	X	X
3312	Steel Products from Purchased Steel	X	X	X	X	X	X	X
3313	Alumina and Aluminum	X	X	X	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X	X	X	X
3314	Nonferrous Metals, except Aluminum	0.0	X	X	0.0	X	X	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.0	X	X	0.0	X	X	X
3315	Foundries	X	X	X	X	X	X	X
331511	Iron Foundries	X	X	X	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	X	X	X	X

331524	Aluminum Foundries, except Die-Casting	X	X	X	X	X	X	X
332	Fabricated Metal Products	X	X	X	X	X	X	X
333	Machinery	91.3	X	91.3	X	X	X	X
334	Computer and Electronic Products	X	X	X	X	X	X	X
334413	Semiconductors and Related Devices	X	X	X	X	X	X	X
335	Electrical Equip., Appliances, and Components	X	X	X	X	X	X	X
336	Transportation Equipment	0.0	X	0.0	X	X	X	X
336111	Automobiles	X	X	X	X	X	X	X
336112	Light Trucks and Utility Vehicles	X	X	X	X	X	X	X
3364	Aerospace Product and Parts	0.0	X	0.0	X	X	X	X
336411	Aircraft	X	X	X	X	X	X	X
337	Furniture and Related Products	X	X	X	X	X	X	X
339	Miscellaneous	X	X	X	X	X	X	X
	Total	0.2	X	0.1	0.0	0.0	0.2	35.3

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

(b) *Net Electricity* is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It does not include electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal).

(c) *Distillate Fuel Oil* includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.

(d) *Natural Gas* includes natural gas obtained from utilities, local distribution companies, and any other supplier(s), such as independent gas producers, gas brokers, marketers, and any marketing subsidiaries of utilities.

(e) Hydrocarbon Gas Liquids (*HGL*) include ethane, ethylene, propane, propylene, normal butane, butylene, ethane-propane mixtures, propane-butane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw Natural Gas Liquids (*NGL*).

(f) *Other* includes net steam (the sum of purchases, generation from renewables, and net transfers), and other energy that respondents indicated was used to produce heat and power.

* 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 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. The estimates presented in this table are for the total consumption of energy (formerly total inputs of energy) for the production of heat, power, and electricity generation, regardless of where the energy was produced. Specifically, the estimates include the quantities of energy that were originally produced offsite and purchased by or transferred to the establishment, plus those that were produced onsite from other energy or input materials not classified as energy, or were extracted from captive (onsite) mines or wells. During manufacturing processes, it is possible that the thermal energy content of an energy input is not completely consumed for the production of heat, power, or electricity generation. Hence, residuals of that input may remain. Those residual leftovers may be subsequently consumed for fuel purposes, whether onsite or offsite at another manufacturing establishment (for example, blast furnace gas as a byproduct recovered from coke and other inputs that were not completely consumed). In such cases, double counting of inputs cannot be avoided, and the *Fuel Consumption* estimates will be inflated.

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).