

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

**Table 2.1 Nonfuel (Feedstock) Use of Combustible Energy, 2018;**

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

NAICS Code(a)	Subsector and Industry	Total (trillion Btu)	Residual Fuel Oil (million bbl)	Distillate Fuel Oil(b) (million bbl)	Natural Gas(c) (billion cu ft)	HGL (excluding natural gasoline)(d) (million bbl)	Coal (million short tons)	Coke and Breeze (million short tons)	Other(e) (trillion Btu)
<b>Total United States</b>									
311	Food	Q	0	*	6	*	*	0	Q
3112	Grain and Oilseed Milling	2	0	*	1	0	0	0	*
311221	Wet Corn Milling	1	0	*	0	0	0	0	*
31131	Sugar Manufacturing	1	0	*	*	0	*	0	*
3114	Fruit and Vegetable Preserving and Specialty Food	2	0	*	2	0	0	0	*
3115	Dairy Product	2	0	0	2	*	0	0	*
3116	Animal Slaughtering and Processing	1	0	*	1	0	0	0	*
312	Beverage and Tobacco Products	*	0	*	*	*	0	0	*
3121	Beverages	*	0	*	*	*	0	0	*
3122	Tobacco	*	0	0	*	0	0	0	*
313	Textile Mills	*	0	*	*	*	0	0	*
314	Textile Product Mills	0	0	0	0	0	0	0	0
315	Apparel	*	0	0	*	*	0	0	0
316	Leather and Allied Products	*	0	0	*	0	0	0	0
321	Wood Products	1	*	*	*	*	0	0	*
321113	Sawmills	*	*	*	*	*	0	0	*
3212	Veneer, Plywood, and Engineered Woods	*	*	*	*	0	0	0	*
321219	Reconstituted Wood Products	*	*	*	0	0	0	0	*
3219	Other Wood Products	*	0	*	*	*	0	0	*
322	Paper	3	0	*	2	*	*	0	*
322110	Pulp Mills	*	0	0	0	0	0	0	*
322121	Paper Mills, except Newsprint	2	0	*	2	0	*	0	*
322122	Newsprint Mills	*	0	0	0	0	0	0	*
322130	Paperboard Mills	*	0	*	*	*	0	0	*
323	Printing and Related Support	Q	0	0	*	*	0	0	*
324	Petroleum and Coal Products	903	*	*	3	*	8	0	741
324110	Petroleum Refineries	0	0	0	0	0	0	0	0
324121	Asphalt Paving Mixture and Block	412	*	*	1	*	0	0	411
324122	Asphalt Shingle and Coating Materials	257	*	0	0	0	0	0	257
324191	Petroleum Lubricating Oil and Grease Products	Q	0	0	Q	*	0	0	*
324199	Other Petroleum and Coal Products	231	0	*	*	0	8	0	73
325	Chemicals	4,326	7	Q	858	881	1	0	539
325110	Petrochemicals	1,490	0	*	3	386	0	0	283

325120	Industrial Gases	161	0	0	155	*	0	0	*
325180	Other Basic Inorganic Chemicals	175	7	*	Q	16	*	0	30
325193	Ethyl Alcohol	1	0	0	1	*	0	0	*
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	156	0	0	67	19	*	0	6
325199	Other Basic Organic Chemicals	801	0	Q	188	127	1	0	178
325211	Plastics Materials and Resins	D	0	*	39	D	0	0	16
325212	Synthetic Rubber	3	0	0	*	1	0	0	*
325220	Artificial and Synthetic Fibers and Filaments	*	0	0	*	0	0	0	*
325311	Nitrogenous Fertilizers	D	0	*	D	*	0	0	D
325312	Phosphatic Fertilizers	4	0	0	4	0	0	0	0
3254	Pharmaceuticals and Medicines	1	0	*	1	0	0	0	*
325412	Pharmaceutical Preparation	1	0	*	*	0	0	0	*
325992	Photographic Film, Paper, Plate, and Chemicals	*	0	0	*	0	0	0	*
326	Plastics and Rubber Products	1	0	*	Q	*	0	0	*
327	Nonmetallic Mineral Products	Q	0	*	2	*	*	0	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	0	*
327213	Glass Containers	*	0	0	0	0	0	0	*
327215	Glass Products from Purchased Glass	1	0	*	1	*	0	0	*
327310	Cements	*	0	0	*	0	0	0	*
327410	Lime	*	0	0	*	0	0	0	0
327420	Gypsum	*	0	0	*	0	0	0	*
327993	Mineral Wool	*	0	*	*	*	0	0	*
331	Primary Metals	307	0	*	42	*	12	*	14
331110	Iron and Steel Mills and Ferroalloys	290	0	*	40	*	12	0	3
3312	Steel Products from Purchased Steel	2	0	*	1	*	*	0	*
3313	Alumina and Aluminum	10	0	*	*	*	0	0	10
331314	Secondary Smelting and Alloying of Aluminum	*	0	0	*	*	0	0	*
331315	Aluminum Sheet, Plate and Foils	*	0	*	*	*	0	0	*
331318	Other Aluminum Rolling, Drawing and Extruding	*	0	*	*	0	0	0	*
3314	Nonferrous Metals, except Aluminum	5	0	0	1	*	*	*	1
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	4	0	0	*	0	*	0	*
3315	Foundries	1	0	*	1	*	*	0	*
331511	Iron Foundries	1	0	*	*	*	*	0	*
331523	Nonferrous Metal Die-Casting Foundries	*	0	0	*	*	0	0	*
331524	Aluminum Foundries, except Die-Casting	*	0	*	*	*	0	0	*
332	Fabricated Metal Products	Q	0	*	Q	*	0	0	*
333	Machinery	2	0	*	2	*	0	0	*
334	Computer and Electronic Products	Q	0	*	Q	0	0	0	1
334413	Semiconductors and Related Devices	*	0	*	*	0	0	0	*
335	Electrical Equip., Appliances, and Components	8	0	0	0	0	0	0	8
336	Transportation Equipment	3	0	*	2	*	0	0	1
336111	Automobiles	*	0	0	0	*	0	0	*
336112	Light Trucks and Utility Vehicles	*	0	*	*	0	0	0	*
3364	Aerospace Product and Parts	2	0	*	2	*	0	0	*

336411	Aircraft	*	0	0	0	0	0	0	*
337	Furniture and Related Products	*	0	0	*	0	0	0	*
339	Miscellaneous	*	0	*	*	*	0	0	*
	Subtotal	5,609	7	1	923	881	20	*	1,341
	Miscellaneous Nonfuel Products(i)	529	0	0	0	0	0	0	529
	Total	6,138	7	1	923	881	20	*	1,870

**Northeast Census Region**

311	Food	*	0	*	*	*	0	0	*
3112	Grain and Oilseed Milling	0	0	0	0	0	0	0	0
311221	Wet Corn Milling	0	0	0	0	0	0	0	0
31131	Sugar Manufacturing	0	0	0	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	*	0	*	0	0	0	0	0
3115	Dairy Product	*	0	0	*	*	0	0	*
3116	Animal Slaughtering and Processing	*	0	0	*	0	0	0	0
312	Beverage and Tobacco Products	*	0	0	*	*	0	0	*
3121	Beverages	*	0	0	0	*	0	0	*
3122	Tobacco	*	0	0	*	0	0	0	0
313	Textile Mills	*	0	0	0	*	0	0	0
314	Textile Product Mills	0	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0	0
321	Wood Products	*	*	*	0	*	0	0	*
321113	Sawmills	*	0	*	0	*	0	0	*
3212	Veneer, Plywood, and Engineered Woods	*	0	*	0	0	0	0	0
321219	Reconstituted Wood Products	0	0	0	0	0	0	0	0
3219	Other Wood Products	*	0	0	0	*	0	0	*
322	Paper	2	0	*	2	*	0	0	*
322110	Pulp Mills	*	0	0	0	0	0	0	*
322121	Paper Mills, except Newsprint	2	0	*	2	0	0	0	*
322122	Newsprint Mills	0	0	0	0	0	0	0	0
322130	Paperboard Mills	*	0	0	0	*	0	0	0
323	Printing and Related Support	0	0	0	0	0	0	0	0
324	Petroleum and Coal Products	109	0	*	*	*	0	0	109
324110	Petroleum Refineries	0	0	0	0	0	0	0	0
324121	Asphalt Paving Mixture and Block	76	0	*	*	0	0	0	76
324122	Asphalt Shingle and Coating Materials	33	0	0	0	0	0	0	33
324191	Petroleum Lubricating Oil and Grease Products	*	0	0	0	*	0	0	0
324199	Other Petroleum and Coal Products	*	0	*	0	0	0	0	0
325	Chemicals	22	0	0	21	0	0	0	*
325110	Petrochemicals	*	0	0	0	0	0	0	*
325120	Industrial Gases	Q	0	0	Q	0	0	0	*
325180	Other Basic Inorganic Chemicals	*	0	0	*	0	0	0	*
325193	Ethyl Alcohol	0	0	0	0	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0	0	0	0	0	0	0	0
325199	Other Basic Organic Chemicals	21	0	0	20	0	0	0	*

325211	Plastics Materials and Resins	*	0	0	0	0	0	0	*
325212	Synthetic Rubber	0	0	0	0	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	0	0	0	0	0	0	0	0
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	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	0
326	Plastics and Rubber Products	*	0	0	*	0	0	0	0
327	Nonmetallic Mineral Products	Q	0	*	*	0	0	0	Q
327120	Clay Building Material and Refractories	*	0	*	*	0	0	0	0
327211	Flat Glass	0	0	0	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	*	0	0	0	0	0	0	*
327213	Glass Containers	0	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	*	0	0	*	0	0	0	*
327310	Cements	*	0	0	*	0	0	0	*
327410	Lime	*	0	0	*	0	0	0	0
327420	Gypsum	0	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0	0
331	Primary Metals	130	0	*	*	*	6	0	1
331110	Iron and Steel Mills and Ferroalloys	129	0	0	*	*	6	0	*
3312	Steel Products from Purchased Steel	*	0	0	0	*	*	0	*
3313	Alumina and Aluminum	*	0	0	*	0	0	0	*
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	*	0	0	*	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	*	0	0	0	0	0	0	*
3314	Nonferrous Metals, except Aluminum	*	0	0	*	*	0	0	*
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	*	0	0	*	0	0	0	0
3315	Foundries	*	0	*	*	*	0	0	*
331511	Iron Foundries	*	0	0	0	*	0	0	*
331523	Nonferrous Metal Die-Casting Foundries	0	0	0	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	*	0	*	0	0	0	0	*
332	Fabricated Metal Products	Q	0	*	0	*	0	0	*
333	Machinery	Q	0	0	Q	*	0	0	0
334	Computer and Electronic Products	*	0	*	0	0	0	0	*
334413	Semiconductors and Related Devices	*	0	*	0	0	0	0	*
335	Electrical Equip., Appliances, and Components	*	0	0	0	0	0	0	*
336	Transportation Equipment	*	0	0	*	0	0	0	*
336111	Automobiles	0	0	0	0	0	0	0	0
336112	Light Trucks and Utility Vehicles	0	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	0
337	Furniture and Related Products	*	0	0	*	0	0	0	0
339	Miscellaneous	*	0	0	0	*	0	0	0
	Total	273	*	*	24	*	6	0	118

## Midwest Census Region

311	Food	4	0	*	2	0	*	0	*
3112	Grain and Oilseed Milling	2	0	*	1	0	0	0	*
311221	Wet Corn Milling	1	0	*	0	0	0	0	*
31131	Sugar Manufacturing	1	0	*	0	0	*	0	*
3114	Fruit and Vegetable Preserving and Specialty Food	*	0	0	*	0	0	0	*
3115	Dairy Product	Q	0	0	Q	0	0	0	*
3116	Animal Slaughtering and Processing	*	0	*	*	0	0	0	*
312	Beverage and Tobacco Products	0	0	0	0	0	0	0	0
3121	Beverages	0	0	0	0	0	0	0	0
3122	Tobacco	0	0	0	0	0	0	0	0
313	Textile Mills	*	0	0	*	0	0	0	0
314	Textile Product Mills	0	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0	0
321	Wood Products	*	0	*	*	*	0	0	*
321113	Sawmills	*	0	*	*	0	0	0	*
3212	Veneer, Plywood, and Engineered Woods	*	0	0	0	0	0	0	*
321219	Reconstituted Wood Products	0	0	0	0	0	0	0	0
3219	Other Wood Products	*	0	*	*	*	0	0	*
322	Paper	*	0	*	*	0	*	0	*
322110	Pulp Mills	0	0	0	0	0	0	0	0
322121	Paper Mills, except Newsprint	*	0	0	0	0	*	0	*
322122	Newsprint Mills	0	0	0	0	0	0	0	0
322130	Paperboard Mills	*	0	0	*	0	0	0	*
323	Printing and Related Support	*	0	0	*	0	0	0	0
324	Petroleum and Coal Products	316	*	*	*	0	6	0	201
324110	Petroleum Refineries	0	0	0	0	0	0	0	0
324121	Asphalt Paving Mixture and Block	113	*	*	*	0	0	0	113
324122	Asphalt Shingle and Coating Materials	88	*	0	0	0	0	0	88
324191	Petroleum Lubricating Oil and Grease Products	*	0	0	*	0	0	0	*
324199	Other Petroleum and Coal Products	115	0	*	0	0	6	0	*
325	Chemicals	204	D	*	81	D	*	0	18
325110	Petrochemicals	0	0	0	0	0	0	0	0
325120	Industrial Gases	6	0	0	5	0	0	0	0
325180	Other Basic Inorganic Chemicals	8	D	*	1	0	0	0	D
325193	Ethyl Alcohol	1	0	0	*	*	0	0	*
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	1	0	0	0	0	*	0	0
325199	Other Basic Organic Chemicals	D	0	0	*	D	0	0	*
325211	Plastics Materials and Resins	D	0	*	*	D	0	0	*
325212	Synthetic Rubber	*	0	0	0	0	0	0	*
325220	Artificial and Synthetic Fibers and Filaments	*	0	0	*	0	0	0	0
325311	Nitrogenous Fertilizers	D	0	0	D	0	0	0	D
325312	Phosphatic Fertilizers	*	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
326	Plastics and Rubber Products	Q	0	0	Q	*	0	0	*
327	Nonmetallic Mineral Products	1	0	*	1	*	0	0	*
327120	Clay Building Material and Refractories	*	0	0	0	0	0	0	*
327211	Flat Glass	*	0	0	0	0	0	0	*
327212	Other Pressed and Blown Glass and Glassware	*	0	0	0	*	0	0	*
327213	Glass Containers	0	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	1	0	0	1	*	0	0	*
327310	Cements	0	0	0	0	0	0	0	0
327410	Lime	0	0	0	0	0	0	0	0
327420	Gypsum	*	0	0	*	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0	0
331	Primary Metals	112	0	*	17	*	4	0	4
331110	Iron and Steel Mills and Ferroalloys	107	0	*	16	*	4	0	*
3312	Steel Products from Purchased Steel	1	0	*	*	0	*	0	*
3313	Alumina and Aluminum	3	0	*	*	*	0	0	3
331314	Secondary Smelting and Alloying of Aluminum	*	0	0	0	*	0	0	0
331315	Aluminum Sheet, Plate and Foils	*	0	0	*	0	0	0	*
331318	Other Aluminum Rolling, Drawing and Extruding	*	0	*	*	0	0	0	*
3314	Nonferrous Metals, except Aluminum	*	0	0	*	*	0	0	*
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	*	0	0	0	0	0	0	*
3315	Foundries	1	0	*	1	*	*	0	*
331511	Iron Foundries	*	0	*	*	0	*	0	*
331523	Nonferrous Metal Die-Casting Foundries	*	0	0	0	*	0	0	*
331524	Aluminum Foundries, except Die-Casting	*	0	0	*	*	0	0	*
332	Fabricated Metal Products	*	0	*	*	*	0	0	*
333	Machinery	*	0	*	*	*	0	0	*
334	Computer and Electronic Products	*	0	0	*	0	0	0	*
334413	Semiconductors and Related Devices	*	0	0	0	0	0	0	*
335	Electrical Equip., Appliances, and Components	0	0	0	0	0	0	0	0
336	Transportation Equipment	2	0	*	1	*	0	0	*
336111	Automobiles	*	0	0	0	*	0	0	*
336112	Light Trucks and Utility Vehicles	*	0	*	*	0	0	0	*
3364	Aerospace Product and Parts	1	0	0	*	*	0	0	*
336411	Aircraft	0	0	0	0	0	0	0	0
337	Furniture and Related Products	*	0	0	*	0	0	0	0
339	Miscellaneous	*	0	*	*	0	0	0	*
	Total	641	D	*	104	D	10	0	223

**South Census Region**

311	Food	2	0	*	1	0	0	0	*
3112	Grain and Oilseed Milling	*	0	*	*	0	0	0	*
311221	Wet Corn Milling	0	0	0	0	0	0	0	0
31131	Sugar Manufacturing	*	0	0	0	0	0	0	*
3114	Fruit and Vegetable Preserving and Specialty Food	0	0	0	0	0	0	0	0
3115	Dairy Product	*	0	0	*	0	0	0	*

3116	Animal Slaughtering and Processing	1	0	*	1	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	*
313	Textile Mills	*	0	*	0	0	0	0	*
314	Textile Product Mills	0	0	0	0	0	0	0	0
315	Apparel	*	0	0	*	*	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0	0
321	Wood Products	*	*	*	*	*	0	0	*
321113	Sawmills	*	*	*	0	0	0	0	*
3212	Veneer, Plywood, and Engineered Woods	*	*	*	0	0	0	0	*
321219	Reconstituted Wood Products	*	*	*	0	0	0	0	*
3219	Other Wood Products	*	0	*	*	*	0	0	*
322	Paper	*	0	*	*	*	0	0	*
322110	Pulp Mills	*	0	0	0	0	0	0	*
322121	Paper Mills, except Newsprint	*	0	0	*	0	0	0	*
322122	Newsprint Mills	0	0	0	0	0	0	0	0
322130	Paperboard Mills	*	0	*	*	*	0	0	*
323	Printing and Related Support	*	0	0	0	*	0	0	*
324	Petroleum and Coal Products	367	0	*	Q	*	2	0	321
324110	Petroleum Refineries	0	0	0	0	0	0	0	0
324121	Asphalt Paving Mixture and Block	151	0	*	*	0	0	0	150
324122	Asphalt Shingle and Coating Materials	108	0	0	0	0	0	0	108
324191	Petroleum Lubricating Oil and Grease Products	Q	0	0	Q	*	0	0	*
324199	Other Petroleum and Coal Products	106	0	0	*	0	2	0	62
325	Chemicals	4,069	D	Q	727	D	1	0	521
325110	Petrochemicals	1,490	0	*	3	386	0	0	283
325120	Industrial Gases	136	0	0	131	*	0	0	*
325180	Other Basic Inorganic Chemicals	165	D	*	Q	16	*	0	D
325193	Ethyl Alcohol	0	0	0	0	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	155	0	0	67	19	*	0	6
325199	Other Basic Organic Chemicals	D	0	Q	168	D	1	0	177
325211	Plastics Materials and Resins	D	0	0	38	D	0	0	16
325212	Synthetic Rubber	3	0	0	*	1	0	0	*
325220	Artificial and Synthetic Fibers and Filaments	*	0	0	0	0	0	0	*
325311	Nitrogenous Fertilizers	287	0	0	276	0	0	0	*
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	1	0	*	*	0	0	0	*
325412	Pharmaceutical Preparation	1	0	0	*	0	0	0	*
325992	Photographic Film, Paper, Plate, and Chemicals	0	0	0	0	0	0	0	0
326	Plastics and Rubber Products	Q	0	*	0	0	0	0	*
327	Nonmetallic Mineral Products	*	0	*	*	*	*	0	*
327120	Clay Building Material and Refractories	*	0	*	0	0	0	0	*
327211	Flat Glass	*	0	0	*	0	*	0	*
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0	0
327213	Glass Containers	*	0	0	0	0	0	0	*

327215	Glass Products from Purchased Glass	*	0	*	0	0	0	0	*
327310	Cements	*	0	0	*	0	0	0	0
327410	Lime	0	0	0	0	0	0	0	0
327420	Gypsum	*	0	0	0	0	0	0	*
327993	Mineral Wool	*	0	0	0	*	0	0	*
331	Primary Metals	61	0	*	24	*	1	*	6
331110	Iron and Steel Mills and Ferroalloys	52	0	0	23	0	1	0	2
3312	Steel Products from Purchased Steel	*	0	0	*	0	0	0	*
3313	Alumina and Aluminum	4	0	*	*	0	0	0	4
331314	Secondary Smelting and Alloying of Aluminum	*	0	0	*	0	0	0	*
331315	Aluminum Sheet, Plate and Foils	*	0	*	0	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	*	0	0	*	0	0	0	*
3314	Nonferrous Metals, except Aluminum	4	0	0	*	*	*	*	*
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	4	0	0	0	0	*	0	0
3315	Foundries	*	0	0	*	0	*	0	*
331511	Iron Foundries	*	0	0	*	0	0	0	*
331523	Nonferrous Metal Die-Casting Foundries	*	0	0	0	0	0	0	*
331524	Aluminum Foundries, except Die-Casting	*	0	0	*	0	0	0	*
332	Fabricated Metal Products	Q	0	0	Q	*	0	0	*
333	Machinery	Q	0	0	Q	0	0	0	*
334	Computer and Electronic Products	Q	0	0	Q	0	0	0	*
334413	Semiconductors and Related Devices	*	0	0	0	0	0	0	*
335	Electrical Equip., Appliances, and Components	7	0	0	0	0	0	0	7
336	Transportation Equipment	1	0	0	*	*	0	0	*
336111	Automobiles	*	0	0	0	*	0	0	0
336112	Light Trucks and Utility Vehicles	*	0	0	0	0	0	0	*
3364	Aerospace Product and Parts	1	0	0	*	*	0	0	*
336411	Aircraft	*	0	0	0	0	0	0	*
337	Furniture and Related Products	*	0	0	*	0	0	0	*
339	Miscellaneous	*	0	0	*	0	0	0	*
	Total	4,513	D	Q	760	D	4	*	856

**West Census Region**

311	Food	Q	0	*	2	*	0	0	Q
3112	Grain and Oilseed Milling	*	0	*	0	0	0	0	*
311221	Wet Corn Milling	*	0	0	0	0	0	0	*
31131	Sugar Manufacturing	*	0	0	*	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	1	0	0	1	0	0	0	0
3115	Dairy Product	1	0	0	1	0	0	0	*
3116	Animal Slaughtering and Processing	*	0	*	*	0	0	0	0
312	Beverage and Tobacco Products	*	0	*	*	*	0	0	*
3121	Beverages	*	0	*	*	*	0	0	*
3122	Tobacco	0	0	0	0	0	0	0	0
313	Textile Mills	0	0	0	0	0	0	0	0
314	Textile Product Mills	0	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0	0



316	Leather and Allied Products	*	0	0	*	0	0	0	0
321	Wood Products	*	*	*	*	*	0	0	*
321113	Sawmills	*	0	*	*	0	0	0	0
3212	Veneer, Plywood, and Engineered Woods	*	0	0	*	0	0	0	0
321219	Reconstituted Wood Products	0	0	0	0	0	0	0	0
3219	Other Wood Products	*	0	0	0	*	0	0	*
322	Paper	*	0	0	0	0	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	0	0	*
322130	Paperboard Mills	*	0	0	0	0	0	0	*
323	Printing and Related Support	*	0	0	*	0	0	0	*
324	Petroleum and Coal Products	110	0	*	*	*	0	0	110
324110	Petroleum Refineries	0	0	0	0	0	0	0	0
324121	Asphalt Paving Mixture and Block	72	0	*	*	*	0	0	72
324122	Asphalt Shingle and Coating Materials	28	0	0	0	0	0	0	28
324191	Petroleum Lubricating Oil and Grease Products	0	0	0	0	0	0	0	0
324199	Other Petroleum and Coal Products	10	0	0	0	0	0	0	10
325	Chemicals	31	0	*	29	*	*	0	*
325110	Petrochemicals	0	0	0	0	0	0	0	0
325120	Industrial Gases	18	0	0	17	0	0	0	*
325180	Other Basic Inorganic Chemicals	1	0	0	1	0	0	0	*
325193	Ethyl Alcohol	1	0	0	1	0	0	0	*
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	*	0	0	0	0	*	0	0
325199	Other Basic Organic Chemicals	*	0	0	*	*	0	0	*
325211	Plastics Materials and Resins	*	0	0	*	0	0	0	0
325212	Synthetic Rubber	0	0	0	0	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	0	0	0	0	0	0	0	0
325311	Nitrogenous Fertilizers	7	0	*	6	*	0	0	0
325312	Phosphatic Fertilizers	4	0	0	4	0	0	0	0
3254	Pharmaceuticals and Medicines	*	0	0	*	0	0	0	0
325412	Pharmaceutical Preparation	0	0	0	0	0	0	0	0
325992	Photographic Film, Paper, Plate, and Chemicals	*	0	0	0	0	0	0	*
326	Plastics and Rubber Products	*	0	0	*	0	0	0	*
327	Nonmetallic Mineral Products	Q	0	*	1	*	0	0	Q
327120	Clay Building Material and Refractories	*	0	*	*	0	0	0	0
327211	Flat Glass	*	0	0	0	0	0	0	*
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0	0
327213	Glass Containers	*	0	0	0	0	0	0	*
327215	Glass Products from Purchased Glass	1	0	0	1	*	0	0	*
327310	Cements	*	0	0	*	0	0	0	*
327410	Lime	0	0	0	0	0	0	0	0
327420	Gypsum	*	0	0	0	0	0	0	*
327993	Mineral Wool	*	0	*	*	0	0	0	*
331	Primary Metals	4	0	*	*	*	*	0	3
331110	Iron and Steel Mills and Ferroalloys	1	0	0	0	0	*	*	*

3312	Steel Products from Purchased Steel	*	0	*	*	*	0	0	*
3313	Alumina and Aluminum	3	0	0	*	*	0	0	3
331314	Secondary Smelting and Alloying of Aluminum	*	0	0	*	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	*	0	0	0	*	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	0	0	0	0	0	0	0	0
3314	Nonferrous Metals, except Aluminum	1	0	0	*	0	0	0	*
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	*	0	0	*	0	0	0	0
3315	Foundries	*	0	0	*	*	0	0	*
331511	Iron Foundries	*	0	0	*	*	0	0	*
331523	Nonferrous Metal Die-Casting Foundries	*	0	0	*	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	*	0	0	*	*	0	0	*
332	Fabricated Metal Products	*	0	0	0	*	0	0	*
333	Machinery	Q	0	0	Q	*	0	0	*
334	Computer and Electronic Products	*	0	0	*	0	0	0	*
334413	Semiconductors and Related Devices	*	0	0	*	0	0	0	*
335	Electrical Equip., Appliances, and Components	*	0	0	0	0	0	0	*
336	Transportation Equipment	1	0	*	1	*	0	0	*
336111	Automobiles	0	0	0	0	0	0	0	0
336112	Light Trucks and Utility Vehicles	0	0	0	0	0	0	0	0
3364	Aerospace Product and Parts	1	0	*	1	*	0	0	*
336411	Aircraft	0	0	0	0	0	0	0	0
337	Furniture and Related Products	0	0	0	0	0	0	0	0
339	Miscellaneous	*	0	0	*	0	0	0	*
	Total	182	*	*	35	*	*	0	144

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

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

(c) *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.

(d) 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).

(e) *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 or as feedstock/raw material inputs. See also Footnote *f*.

(f) Previously, the Manufacturing Energy Consumption Survey (MECS) had accounted for energy consumed in petroleum refineries by measuring their own fuel use, assuming shipments of fuel products would later be counted in the industries that use them, and assigning the heat equivalent of the nonfuel products to the petroleum refinery (for a more detailed explanation see, *Feedstock and Offsite-Produced Fuel at Petroleum Refineries*). Starting with the 2014 MECS, however, EIA began collecting asphalt and petrochemical feedstock data from establishments that use those nonfuel products. These data are included in the *Other* column. However, other *Miscellaneous Nonfuel Products* (i.e. lubricants, solvents, waxes, and special naphthas) from refineries, and used elsewhere throughout the manufacturing sector as energy are not collected on the MECS. An estimate of the *Miscellaneous Nonfuel Products* used in manufacturing was derived using EIA's [U.S. Product Supplied for Crude Oil and Petroleum Products](#) data.

\* 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 derived estimates presented in this table are for the first use (formerly primary consumption) of energy for heat and power and as feedstocks or raw material inputs. First use is defined as the consumption of the energy that was originally produced offsite or was produced onsite from input materials not classified as energy. Examples of the latter are hydrogen produced from the electrolysis of brine; the output of captive (onsite) mines or wells; wood chips, bark, and wood waste from wood purchased as a raw material input; and waste materials, such as wastepaper and packing materials. First use excludes quantities of energy that are produced from other energy inputs and, therefore, avoids double counting.

Sources: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, *2018 Manufacturing Energy Consumption Survey*, and Office of Energy Production, Conversion & Delivery, Form EIA-810, *Monthly Refinery Report* for 2018.

*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 2.1 Relative Standard Errors for Table 2.1;**

Unit: Percents.

NAICS Code(a)	Subsector and Industry	Total	Residual Fuel Oil	Distillate Fuel Oil(b)	Natural Gas(c)	HGL (excluding natural gasoline)(d)	Coal	Coke and Breeze	Other(e)
<b>Total United States</b>									
311	Food	62.5	X	3.7	12.9	98.9	0.0	X	95.7
3112	Grain and Oilseed Milling	0.1	X	0.0	0.0	X	X	X	0.1
311221	Wet Corn Milling	0.0	X	0.0	X	X	X	X	0.0
31131	Sugar Manufacturing	0.0	X	0.0	0.0	X	0.0	X	0.0
3114	Fruit and Vegetable Preserving and Specialty Food	13.1	X	64.8	13.1	X	X	X	96.7
3115	Dairy Product	29.4	X	X	29.4	0.0	X	X	53.9
3116	Animal Slaughtering and Processing	22.2	X	0.1	23.9	X	X	X	3.0
312	Beverage and Tobacco Products	43.8	X	0.9	66.0	20.2	X	X	8.5
3121	Beverages	47.7	X	0.9	75.1	20.2	X	X	27.2
3122	Tobacco	0.0	X	X	0.0	X	X	X	0.0
313	Textile Mills	55.1	X	82.3	45.9	3.4	X	X	52.6
314	Textile Product Mills	X	X	X	X	X	X	X	X
315	Apparel	80.4	X	X	80.7	98.2	X	X	X
316	Leather and Allied Products	0.3	X	X	0.3	X	X	X	X
321	Wood Products	10.1	0.5	0.8	43.0	85.0	X	X	1.0
321113	Sawmills	24.7	83.8	40.0	2.1	0.0	X	X	10.9
3212	Veneer, Plywood, and Engineered Woods	0.1	0.0	0.1	0.0	X	X	X	0.1
321219	Reconstituted Wood Products	0.0	0.0	0.0	X	X	X	X	0.0
3219	Other Wood Products	41.5	X	89.4	44.5	85.5	X	X	59.6
322	Paper	16.5	X	59.6	16.7	63.6	0.0	X	0.0
322110	Pulp Mills	0.0	X	X	X	X	X	X	0.0
322121	Paper Mills, except Newsprint	0.0	X	0.0	0.0	X	0.0	X	0.0
322122	Newsprint Mills	0.0	X	X	X	X	X	X	0.0
322130	Paperboard Mills	0.0	X	0.0	0.0	0.0	X	X	0.0
323	Printing and Related Support	75.1	X	X	79.5	72.4	X	X	74.2
324	Petroleum and Coal Products	2.2	0.0	1.0	43.5	47.1	0.0	X	2.6
324110	Petroleum Refineries	X	X	X	X	X	X	X	X
324121	Asphalt Paving Mixture and Block	4.7	0.0	1.9	16.2	88.6	X	X	4.7
324122	Asphalt Shingle and Coating Materials	1.3	0.0	X	X	X	X	X	1.3
324191	Petroleum Lubricating Oil and Grease Products	52.9	X	X	56.6	55.6	X	X	83.6
324199	Other Petroleum and Coal Products	0.0	X	0.0	0.0	X	0.0	X	0.0
325	Chemicals	1.5	0.1	69.7	4.4	1.4	10.8	X	2.6
325110	Petrochemicals	0.0	X	0.0	0.0	0.0	X	X	0.0

325120	Industrial Gases	8.7	X	X	8.7	0.0	X	X	92.6
325180	Other Basic Inorganic Chemicals	17.0	0.1	0.0	64.4	0.0	0.0	X	9.9
325193	Ethyl Alcohol	9.9	X	X	11.6	0.0	X	X	32.1
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	X	0.0	0.0	0.0	X	0.0
325199	Other Basic Organic Chemicals	4.8	X	79.5	7.7	5.8	0.0	X	5.2
325211	Plastics Materials and Resins	D	X	0.0	0.1	D	X	X	1.2
325212	Synthetic Rubber	0.0	X	X	0.0	0.0	X	X	0.0
325220	Artificial and Synthetic Fibers and Filaments	0.0	X	X	0.0	X	X	X	0.0
325311	Nitrogenous Fertilizers	D	X	90.1	D	0.0	X	X	D
325312	Phosphatic Fertilizers	0.0	X	X	0.0	X	X	X	X
3254	Pharmaceuticals and Medicines	17.9	X	0.0	24.2	X	X	X	0.1
325412	Pharmaceutical Preparation	19.9	X	0.0	26.6	X	X	X	0.1
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	X	X	0.0	X	X	X	0.0
326	Plastics and Rubber Products	41.4	X	99.0	50.8	63.7	X	X	2.0
327	Nonmetallic Mineral Products	60.7	X	58.1	13.1	4.8	6.7	X	65.2
327120	Clay Building Material and Refractories	36.2	X	0.0	37.5	X	X	X	41.4
327211	Flat Glass	0.0	X	X	0.0	X	0.0	X	0.0
327212	Other Pressed and Blown Glass and Glassware	0.0	X	X	X	0.0	X	X	0.0
327213	Glass Containers	0.0	X	X	X	X	X	X	0.0
327215	Glass Products from Purchased Glass	0.6	X	0.0	0.6	6.8	X	X	0.1
327310	Cements	28.4	X	X	28.4	X	X	X	12.4
327410	Lime	0.0	X	X	0.0	X	X	X	X
327420	Gypsum	0.0	X	X	0.0	X	X	X	0.0
327993	Mineral Wool	0.1	X	0.0	0.0	0.0	X	X	57.3
331	Primary Metals	0.1	X	0.1	0.7	6.6	0.0	57.4	1.2
331110	Iron and Steel Mills and Ferroalloys	0.0	X	0.0	0.0	0.0	0.0	X	0.0
3312	Steel Products from Purchased Steel	19.7	X	0.0	40.9	47.1	0.0	X	34.1
3313	Alumina and Aluminum	0.1	X	0.0	3.0	0.0	X	X	0.1
331314	Secondary Smelting and Alloying of Aluminum	3.0	X	X	3.1	0.0	X	X	9.5
331315	Aluminum Sheet, Plate and Foils	0.0	X	0.0	0.0	0.0	X	X	0.0
331318	Other Aluminum Rolling, Drawing and Extruding	4.8	X	0.0	4.8	X	X	X	30.4
3314	Nonferrous Metals, except Aluminum	0.7	X	X	5.4	47.1	0.0	57.4	0.6
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.7	X	X	10.2	X	0.0	X	0.0
3315	Foundries	5.6	X	0.1	6.3	0.5	0.0	X	0.4
331511	Iron Foundries	0.1	X	49.4	0.0	0.0	0.0	X	1.5
331523	Nonferrous Metal Die-Casting Foundries	17.6	X	X	0.0	89.7	X	X	38.5
331524	Aluminum Foundries, except Die-Casting	15.4	X	0.0	16.5	3.3	X	X	0.0
332	Fabricated Metal Products	57.8	X	88.0	84.1	68.3	X	X	95.7
333	Machinery	47.3	X	59.4	48.1	67.5	X	X	80.0
334	Computer and Electronic Products	64.8	X	0.0	81.1	X	X	X	42.1
334413	Semiconductors and Related Devices	53.4	X	0.0	96.3	X	X	X	16.4
335	Electrical Equip., Appliances, and Components	33.8	X	X	X	X	X	X	33.8
336	Transportation Equipment	14.6	X	13.3	18.0	4.1	X	X	29.0
336111	Automobiles	0.0	X	X	X	0.0	X	X	0.0

336112	Light Trucks and Utility Vehicles	0.0	X	0.0	0.0	X	X	X	0.0
3364	Aerospace Product and Parts	0.1	X	0.0	0.1	0.0	X	X	0.1
336411	Aircraft	0.0	X	X	X	X	X	X	0.0
337	Furniture and Related Products	55.9	X	X	55.9	X	X	X	86.7
339	Miscellaneous	62.4	X	47.5	66.6	88.0	X	X	73.9
	Subtotal	1.3	0.1	40.8	4.1	1.4	0.4	57.4	2.4
	Miscellaneous Nonfuel Products(i)	0	X	X	X	X	X	X	0
	Total	1.3	0.1	40.8	4.1	1.4	0.4	57.4	2.4

#### Northeast Census Region

311	Food	48.9	X	64.8	52.3	99.0	X	X	11.9
3112	Grain and Oilseed Milling	X	X	X	X	X	X	X	X
311221	Wet Corn Milling	X	X	X	X	X	X	X	X
31131	Sugar Manufacturing	X	X	X	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	64.8	X	64.8	X	X	X	X	X
3115	Dairy Product	88.6	X	X	88.6	0.0	X	X	11.9
3116	Animal Slaughtering and Processing	0.0	X	X	0.0	X	X	X	X
312	Beverage and Tobacco Products	14.2	X	X	0.0	18.1	X	X	0.0
3121	Beverages	18.1	X	X	X	18.1	X	X	0.0
3122	Tobacco	0.0	X	X	0.0	X	X	X	X
313	Textile Mills	3.4	X	X	X	3.4	X	X	X
314	Textile Product Mills	X	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X	X
316	Leather and Allied Products	X	X	X	X	X	X	X	X
321	Wood Products	40.1	0.0	0.1	X	96.5	X	X	8.9
321113	Sawmills	4.3	X	16.7	X	0.0	X	X	10.2
3212	Veneer, Plywood, and Engineered Woods	2.1	X	2.1	X	X	X	X	X
321219	Reconstituted Wood Products	X	X	X	X	X	X	X	X
3219	Other Wood Products	97.1	X	X	X	97.1	X	X	0.0
322	Paper	0.3	X	0.0	0.0	76.9	X	X	0.0
322110	Pulp Mills	0.0	X	X	X	X	X	X	0.0
322121	Paper Mills, except Newsprint	0.0	X	0.0	0.0	X	X	X	0.0
322122	Newsprint Mills	X	X	X	X	X	X	X	X
322130	Paperboard Mills	0.0	X	X	X	0.0	X	X	X
323	Printing and Related Support	X	X	X	X	X	X	X	X
324	Petroleum and Coal Products	4.3	X	0.0	77.6	0.0	X	X	4.3
324110	Petroleum Refineries	X	X	X	X	X	X	X	X
324121	Asphalt Paving Mixture and Block	6.2	X	0.0	77.6	X	X	X	6.2
324122	Asphalt Shingle and Coating Materials	0.0	X	X	X	X	X	X	0.0
324191	Petroleum Lubricating Oil and Grease Products	0.0	X	X	X	0.0	X	X	X
324199	Other Petroleum and Coal Products	0.0	X	0.0	X	X	X	X	X
325	Chemicals	3.0	X	X	3.1	X	X	X	36.3
325110	Petrochemicals	0.0	X	X	X	X	X	X	0.0
325120	Industrial Gases	65.9	X	X	79.4	X	X	X	94.1



3364	Aerospace Product and Parts	0.1	X	X	0.0	X	X	X	0.1
336411	Aircraft	X	X	X	X	X	X	X	X
337	Furniture and Related Products	67.5	X	X	67.5	X	X	X	X
339	Miscellaneous	88.0	X	X	X	88.0	X	X	X
	Total	2.2	0.0	64.0	3.2	48.4	0.0	X	5.1

**Midwest Census Region**

311	Food	17.1	X	0.0	30.8	X	0.0	X	0.1
3112	Grain and Oilseed Milling	0.0	X	0.0	0.0	X	X	X	0.0
311221	Wet Corn Milling	0.0	X	0.0	X	X	X	X	0.0
31131	Sugar Manufacturing	0.0	X	0.0	X	X	0.0	X	0.0
3114	Fruit and Vegetable Preserving and Specialty Food	51.0	X	X	51.0	X	X	X	96.7
3115	Dairy Product	61.0	X	X	61.0	X	X	X	39.6
3116	Animal Slaughtering and Processing	56.5	X	0.0	56.8	X	X	X	0.0
312	Beverage and Tobacco Products	X	X	X	X	X	X	X	X
3121	Beverages	X	X	X	X	X	X	X	X
3122	Tobacco	X	X	X	X	X	X	X	X
313	Textile Mills	45.9	X	X	45.9	X	X	X	X
314	Textile Product Mills	X	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X	X
316	Leather and Allied Products	X	X	X	X	X	X	X	X
321	Wood Products	20.2	X	1.7	56.2	93.7	X	X	27.3
321113	Sawmills	37.4	X	62.2	0.0	X	X	X	11.2
3212	Veneer, Plywood, and Engineered Woods	0.0	X	X	X	X	X	X	0.0
321219	Reconstituted Wood Products	X	X	X	X	X	X	X	X
3219	Other Wood Products	53.9	X	0.0	58.0	93.7	X	X	0.0
322	Paper	96.0	X	81.6	96.4	X	0.0	X	0.0
322110	Pulp Mills	X	X	X	X	X	X	X	X
322121	Paper Mills, except Newsprint	0.0	X	X	X	X	0.0	X	0.0
322122	Newsprint Mills	X	X	X	X	X	X	X	X
322130	Paperboard Mills	0.0	X	X	0.0	X	X	X	0.0
323	Printing and Related Support	82.1	X	X	82.1	X	X	X	X
324	Petroleum and Coal Products	3.8	0.0	0.0	38.4	X	0.0	X	6.0
324110	Petroleum Refineries	X	X	X	X	X	X	X	X
324121	Asphalt Paving Mixture and Block	10.6	0.0	0.0	46.3	X	X	X	10.6
324122	Asphalt Shingle and Coating Materials	1.7	0.0	X	X	X	X	X	1.7
324191	Petroleum Lubricating Oil and Grease Products	68.2	X	X	0.0	X	X	X	68.5
324199	Other Petroleum and Coal Products	0.0	X	0.0	X	X	0.0	X	0.0
325	Chemicals	0.6	D	0.0	1.0	D	0.0	X	2.3
325110	Petrochemicals	X	X	X	X	X	X	X	X
325120	Industrial Gases	9.6	X	X	9.6	X	X	X	X
325180	Other Basic Inorganic Chemicals	1.6	D	0.0	14.4	X	X	X	D
325193	Ethyl Alcohol	18.7	X	X	35.9	0.0	X	X	32.7
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	X	X	X	0.0	X	X



325199	Other Basic Organic Chemicals	D	X	X	45.8	D	X	X	0.0
325211	Plastics Materials and Resins	D	X	0.0	5.7	D	X	X	0.1
325212	Synthetic Rubber	0.0	X	X	X	X	X	X	0.0
325220	Artificial and Synthetic Fibers and Filaments	0.0	X	X	0.0	X	X	X	X
325311	Nitrogenous Fertilizers	D	X	X	D	X	X	X	D
325312	Phosphatic Fertilizers	0.0	X	X	0.0	X	X	X	X
3254	Pharmaceuticals and Medicines	0.0	X	0.0	0.0	X	X	X	X
325412	Pharmaceutical Preparation	0.0	X	0.0	0.0	X	X	X	X
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	X	X	0.0	X	X	X	X
326	Plastics and Rubber Products	58.4	X	X	58.6	63.7	X	X	92.9
327	Nonmetallic Mineral Products	5.4	X	97.1	5.6	0.0	X	X	0.2
327120	Clay Building Material and Refractories	43.1	X	X	X	X	X	X	43.1
327211	Flat Glass	0.0	X	X	X	X	X	X	0.0
327212	Other Pressed and Blown Glass and Glassware	0.0	X	X	X	0.0	X	X	0.0
327213	Glass Containers	X	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	0.0	X	X	0.0	0.0	X	X	0.0
327310	Cements	X	X	X	X	X	X	X	X
327410	Lime	X	X	X	X	X	X	X	X
327420	Gypsum	0.0	X	X	0.0	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X	X
331	Primary Metals	0.2	X	0.1	1.1	21.0	0.0	X	1.3
331110	Iron and Steel Mills and Ferroalloys	0.0	X	0.0	0.0	0.0	0.0	X	0.0
3312	Steel Products from Purchased Steel	19.2	X	0.0	45.8	X	0.0	X	45.7
3313	Alumina and Aluminum	0.4	X	0.0	7.9	0.0	X	X	0.1
331314	Secondary Smelting and Alloying of Aluminum	0.0	X	X	X	0.0	X	X	X
331315	Aluminum Sheet, Plate and Foils	0.0	X	X	0.0	X	X	X	0.0
331318	Other Aluminum Rolling, Drawing and Extruding	17.2	X	0.0	17.7	X	X	X	32.4
3314	Nonferrous Metals, except Aluminum	31.1	X	X	81.6	76.5	X	X	0.1
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.0	X	X	X	X	X	X	0.0
3315	Foundries	9.0	X	49.4	10.2	0.4	0.0	X	19.3
331511	Iron Foundries	0.1	X	49.4	0.0	X	0.0	X	22.1
331523	Nonferrous Metal Die-Casting Foundries	51.5	X	X	X	89.7	X	X	43.4
331524	Aluminum Foundries, except Die-Casting	22.0	X	X	22.0	0.0	X	X	0.0
332	Fabricated Metal Products	57.4	X	86.4	67.1	99.5	X	X	68.8
333	Machinery	44.8	X	59.4	49.4	95.8	X	X	93.9
334	Computer and Electronic Products	85.4	X	X	99.0	X	X	X	6.6
334413	Semiconductors and Related Devices	6.7	X	X	X	X	X	X	6.7
335	Electrical Equip., Appliances, and Components	X	X	X	X	X	X	X	X
336	Transportation Equipment	28.6	X	0.0	38.3	12.6	X	X	40.4
336111	Automobiles	0.0	X	X	X	0.0	X	X	0.0
336112	Light Trucks and Utility Vehicles	0.0	X	0.0	0.0	X	X	X	0.0
3364	Aerospace Product and Parts	0.1	X	X	0.0	0.0	X	X	0.1
336411	Aircraft	X	X	X	X	X	X	X	X
337	Furniture and Related Products	98.8	X	X	98.8	X	X	X	X

339	Miscellaneous	84.5	X	47.5	90.0	X	X	X	88.2
	Total	1.9	D	2.3	1.3	D	0.0	X	5.4

**South Census Region**

311	Food	26.2	X	0.1	29.3	X	X	X	0.4
3112	Grain and Oilseed Milling	0.4	X	0.0	0.0	X	X	X	0.4
311221	Wet Corn Milling	X	X	X	X	X	X	X	X
31131	Sugar Manufacturing	0.0	X	X	X	X	X	X	0.0
3114	Fruit and Vegetable Preserving and Specialty Food	X	X	X	X	X	X	X	X
3115	Dairy Product	85.8	X	X	85.8	X	X	X	83.2
3116	Animal Slaughtering and Processing	27.2	X	0.1	29.4	X	X	X	30.2
312	Beverage and Tobacco Products	96.1	X	X	97.2	97.2	X	X	9.0
3121	Beverages	96.6	X	X	97.2	97.2	X	X	36.9
3122	Tobacco	0.0	X	X	X	X	X	X	0.0
313	Textile Mills	82.3	X	82.3	X	X	X	X	52.6
314	Textile Product Mills	X	X	X	X	X	X	X	X
315	Apparel	80.4	X	X	80.7	98.2	X	X	X
316	Leather and Allied Products	X	X	X	X	X	X	X	X
321	Wood Products	8.1	2.4	0.8	60.9	92.6	X	X	0.2
321113	Sawmills	58.0	83.8	47.2	X	X	X	X	11.6
3212	Veneer, Plywood, and Engineered Woods	0.1	0.0	0.0	X	X	X	X	0.1
321219	Reconstituted Wood Products	0.0	0.0	0.0	X	X	X	X	0.0
3219	Other Wood Products	57.9	X	97.2	60.9	92.6	X	X	45.3
322	Paper	50.4	X	0.0	0.0	90.7	X	X	0.0
322110	Pulp Mills	0.0	X	X	X	X	X	X	0.0
322121	Paper Mills, except Newsprint	0.0	X	X	0.0	X	X	X	0.0
322122	Newsprint Mills	X	X	X	X	X	X	X	X
322130	Paperboard Mills	0.0	X	0.0	0.0	0.0	X	X	0.0
323	Printing and Related Support	72.3	X	X	X	72.4	X	X	96.3
324	Petroleum and Coal Products	3.4	X	34.0	53.4	56.6	0.0	X	3.8
324110	Petroleum Refineries	X	X	X	X	X	X	X	X
324121	Asphalt Paving Mixture and Block	7.9	X	34.0	94.4	X	X	X	7.9
324122	Asphalt Shingle and Coating Materials	2.7	X	X	X	X	X	X	2.7
324191	Petroleum Lubricating Oil and Grease Products	53.3	X	X	56.6	56.6	X	X	92.1
324199	Other Petroleum and Coal Products	0.0	X	X	0.0	X	0.0	X	0.0
325	Chemicals	1.6	D	69.7	5.2	D	11.5	X	2.7
325110	Petrochemicals	0.0	X	0.0	0.0	0.0	X	X	0.0
325120	Industrial Gases	10.3	X	X	10.3	0.0	X	X	0.0
325180	Other Basic Inorganic Chemicals	18.0	D	0.0	67.4	0.0	0.0	X	D
325193	Ethyl Alcohol	X	X	X	X	X	X	X	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	X	0.0	0.0	0.0	X	0.0
325199	Other Basic Organic Chemicals	D	X	79.5	8.6	D	0.0	X	5.2
325211	Plastics Materials and Resins	D	X	X	0.1	D	X	X	1.2
325212	Synthetic Rubber	0.0	X	X	0.0	0.0	X	X	0.0

325220	Artificial and Synthetic Fibers and Filaments	0.0	X	X	X	X	X	X	0.0
325311	Nitrogenous Fertilizers	5.4	X	X	5.4	X	X	X	0.0
325312	Phosphatic Fertilizers	X	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	19.5	X	0.0	28.6	X	X	X	0.1
325412	Pharmaceutical Preparation	22.8	X	X	32.1	X	X	X	0.0
325992	Photographic Film, Paper, Plate, and Chemicals	X	X	X	X	X	X	X	X
326	Plastics and Rubber Products	69.4	X	99.0	X	X	X	X	0.1
327	Nonmetallic Mineral Products	82.5	X	0.0	93.9	0.0	6.7	X	25.4
327120	Clay Building Material and Refractories	1.8	X	0.0	X	X	X	X	66.3
327211	Flat Glass	0.0	X	X	0.0	X	0.0	X	0.0
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X	X
327213	Glass Containers	0.0	X	X	X	X	X	X	0.0
327215	Glass Products from Purchased Glass	0.0	X	0.0	X	X	X	X	0.0
327310	Cements	0.0	X	X	0.0	X	X	X	X
327410	Lime	X	X	X	X	X	X	X	X
327420	Gypsum	0.0	X	X	X	X	X	X	0.0
327993	Mineral Wool	0.3	X	X	X	0.0	X	X	59.0
331	Primary Metals	0.4	X	0.0	0.9	0.0	0.0	57.4	1.5
331110	Iron and Steel Mills and Ferroalloys	0.0	X	X	0.0	X	0.0	X	0.0
3312	Steel Products from Purchased Steel	51.5	X	X	74.5	X	X	X	57.0
3313	Alumina and Aluminum	0.1	X	0.0	0.2	X	X	X	0.1
331314	Secondary Smelting and Alloying of Aluminum	26.6	X	X	35.7	X	X	X	9.5
331315	Aluminum Sheet, Plate and Foils	0.0	X	0.0	X	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	0.0	X	X	0.0	X	X	X	0.0
3314	Nonferrous Metals, except Aluminum	0.4	X	X	0.0	0.0	0.0	57.4	0.1
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.0	X	X	X	X	0.0	X	X
3315	Foundries	8.3	X	X	8.7	X	0.0	X	0.4
331511	Iron Foundries	0.0	X	X	0.0	X	X	X	0.0
331523	Nonferrous Metal Die-Casting Foundries	83.0	X	X	X	X	X	X	83.0
331524	Aluminum Foundries, except Die-Casting	0.0	X	X	0.0	X	X	X	0.0
332	Fabricated Metal Products	81.8	X	X	93.9	98.3	X	X	99.5
333	Machinery	90.3	X	X	90.4	X	X	X	81.5
334	Computer and Electronic Products	92.9	X	X	97.6	X	X	X	0.0
334413	Semiconductors and Related Devices	0.0	X	X	X	X	X	X	0.0
335	Electrical Equip., Appliances, and Components	35.6	X	X	X	X	X	X	35.6
336	Transportation Equipment	0.8	X	X	0.0	0.1	X	X	6.8
336111	Automobiles	0.0	X	X	X	0.0	X	X	X
336112	Light Trucks and Utility Vehicles	0.0	X	X	X	X	X	X	0.0
3364	Aerospace Product and Parts	0.1	X	X	0.0	0.0	X	X	0.4
336411	Aircraft	0.0	X	X	X	X	X	X	0.0
337	Furniture and Related Products	89.8	X	X	92.1	X	X	X	86.7
339	Miscellaneous	97.5	X	X	99.0	X	X	X	77.9
	Total	1.5	D	57.4	5.0	D	2.0	57.4	2.2

**West Census Region**

311	Food	83.8	X	76.7	2.4	97.8	X	X	98.2
3112	Grain and Oilseed Milling	0.0	X	0.0	X	X	X	X	0.0
311221	Wet Corn Milling	0.0	X	X	X	X	X	X	0.0
31131	Sugar Manufacturing	0.0	X	X	0.0	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	0.0	X	X	0.0	X	X	X	X
3115	Dairy Product	0.1	X	X	0.0	X	X	X	81.5
3116	Animal Slaughtering and Processing	27.3	X	0.0	28.7	X	X	X	X
312	Beverage and Tobacco Products	63.5	X	0.9	78.7	97.4	X	X	84.7
3121	Beverages	63.5	X	0.9	78.7	97.4	X	X	84.7
3122	Tobacco	X	X	X	X	X	X	X	X
313	Textile Mills	X	X	X	X	X	X	X	X
314	Textile Product Mills	X	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X	X
316	Leather and Allied Products	0.3	X	X	0.3	X	X	X	X
321	Wood Products	0.8	0.0	0.0	3.9	97.5	X	X	74.1
321113	Sawmills	2.9	X	0.0	70.8	X	X	X	X
3212	Veneer, Plywood, and Engineered Woods	0.0	X	X	0.0	X	X	X	X
321219	Reconstituted Wood Products	X	X	X	X	X	X	X	X
3219	Other Wood Products	63.6	X	X	X	97.5	X	X	74.1
322	Paper	0.0	X	X	X	X	X	X	0.0
322110	Pulp Mills	X	X	X	X	X	X	X	X
322121	Paper Mills, except Newsprint	X	X	X	X	X	X	X	X
322122	Newsprint Mills	0.0	X	X	X	X	X	X	0.0
322130	Paperboard Mills	0.0	X	X	X	X	X	X	0.0
323	Printing and Related Support	99.0	X	X	99.0	X	X	X	99.0
324	Petroleum and Coal Products	7.4	X	4.5	6.0	88.6	X	X	7.5
324110	Petroleum Refineries	X	X	X	X	X	X	X	X
324121	Asphalt Paving Mixture and Block	11.3	X	4.5	6.0	88.6	X	X	11.4
324122	Asphalt Shingle and Coating Materials	1.3	X	X	X	X	X	X	1.3
324191	Petroleum Lubricating Oil and Grease Products	X	X	X	X	X	X	X	X
324199	Other Petroleum and Coal Products	0.0	X	X	X	X	X	X	0.0
325	Chemicals	1.0	X	90.1	1.0	0.1	0.0	X	12.3
325110	Petrochemicals	X	X	X	X	X	X	X	X
325120	Industrial Gases	0.0	X	X	0.0	X	X	X	0.0
325180	Other Basic Inorganic Chemicals	23.0	X	X	24.1	X	X	X	13.2
325193	Ethyl Alcohol	0.0	X	X	0.0	X	X	X	0.0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	X	X	X	0.0	X	X
325199	Other Basic Organic Chemicals	0.8	X	X	0.0	52.5	X	X	23.0
325211	Plastics Materials and Resins	0.0	X	X	0.0	X	X	X	X
325212	Synthetic Rubber	X	X	X	X	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	X	X	X	X	X	X	X	X
325311	Nitrogenous Fertilizers	0.5	X	90.1	0.5	0.0	X	X	X
325312	Phosphatic Fertilizers	0.0	X	X	0.0	X	X	X	X

3254	Pharmaceuticals and Medicines	94.9	X	X	94.9	X	X	X	X
325412	Pharmaceutical Preparation	X	X	X	X	X	X	X	X
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	X	X	X	X	X	X	0.0
326	Plastics and Rubber Products	92.7	X	X	92.7	X	X	X	92.7
327	Nonmetallic Mineral Products	82.8	X	66.3	3.2	65.5	X	X	85.9
327120	Clay Building Material and Refractories	0.0	X	0.0	0.0	X	X	X	X
327211	Flat Glass	0.0	X	X	X	X	X	X	0.0
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X	X
327213	Glass Containers	0.0	X	X	X	X	X	X	0.0
327215	Glass Products from Purchased Glass	0.1	X	X	0.0	48.5	X	X	0.1
327310	Cements	28.8	X	X	28.8	X	X	X	80.5
327410	Lime	X	X	X	X	X	X	X	X
327420	Gypsum	0.0	X	X	X	X	X	X	0.0
327993	Mineral Wool	0.0	X	0.0	0.0	X	X	X	0.0
331	Primary Metals	0.7	X	0.0	6.9	16.2	0.0	X	0.1
331110	Iron and Steel Mills and Ferroalloys	0.0	X	X	X	X	0.0	X	0.0
3312	Steel Products from Purchased Steel	37.4	X	0.0	49.0	54.9	X	X	0.0
3313	Alumina and Aluminum	0.0	X	X	0.0	0.0	X	X	0.0
331314	Secondary Smelting and Alloying of Aluminum	0.0	X	X	0.0	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	0.0	X	X	X	0.0	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	X	X	X	X	X	X	X	X
3314	Nonferrous Metals, except Aluminum	4.5	X	X	10.2	X	X	X	0.0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	10.2	X	X	10.2	X	X	X	X
3315	Foundries	6.0	X	X	6.0	15.6	X	X	0.9
331511	Iron Foundries	0.0	X	X	0.0	0.0	X	X	0.0
331523	Nonferrous Metal Die-Casting Foundries	0.0	X	X	0.0	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	10.6	X	X	10.6	41.0	X	X	0.0
332	Fabricated Metal Products	97.2	X	X	X	99.3	X	X	71.1
333	Machinery	88.5	X	X	87.8	91.3	X	X	91.0
334	Computer and Electronic Products	75.1	X	X	96.3	X	X	X	47.7
334413	Semiconductors and Related Devices	89.6	X	X	96.3	X	X	X	3.0
335	Electrical Equip., Appliances, and Components	95.7	X	X	X	X	X	X	95.7
336	Transportation Equipment	10.4	X	58.9	11.3	0.0	X	X	41.8
336111	Automobiles	X	X	X	X	X	X	X	X
336112	Light Trucks and Utility Vehicles	X	X	X	X	X	X	X	X
3364	Aerospace Product and Parts	0.1	X	0.0	0.1	0.0	X	X	0.0
336411	Aircraft	X	X	X	X	X	X	X	X
337	Furniture and Related Products	X	X	X	X	X	X	X	X
339	Miscellaneous	98.4	X	X	99.0	X	X	X	99.0
	Total	11.9	0.0	37.5	2.0	37.2	0.0	X	15.1

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

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

(c) *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.

(d) 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).

(e) *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 or as feedstock/raw material inputs. See also Footnote *f*.

(f) Previously, the Manufacturing Energy Consumption Survey (MECS) had accounted for energy consumed in petroleum refineries by measuring their own fuel use, assuming shipments of fuel products would later be counted in the industries that use them, and assigning the heat equivalent of the nonfuel products to the petroleum refinery (for a more detailed explanation see, *Feedstock and Offsite-Produced Fuel at Petroleum Refineries*). Starting with the 2014 MECS, however, EIA began collecting asphalt and petrochemical feedstock data from establishments that use those nonfuel products. These data are included in the *Other* column. However, other *Miscellaneous Nonfuel Products* (i.e. lubricants, solvents, waxes, and special naphthas) from refineries, and used elsewhere throughout the manufacturing sector as energy are not collected on the MECS. An estimate of the *Miscellaneous Nonfuel Products* used in manufacturing was derived using EIA's [U.S. Product Supplied for Crude Oil and Petroleum Products](#) data.

\* 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 derived estimates presented in this table are for the first use (formerly primary consumption) of energy for heat and power and as feedstocks or raw material inputs. First use is defined as the consumption of the energy that was originally produced offsite or was produced onsite from input materials not classified as energy. Examples of the latter are hydrogen produced from the electrolysis of brine; the output of captive (onsite) mines or wells; wood chips, bark, and wood waste from wood purchased as a raw material input; and waste materials, such as wastepaper and packing materials. First use excludes quantities of energy that are produced from other energy inputs and, therefore, avoids double counting.

Sources: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, *2018 Manufacturing Energy Consumption Survey*, and Office of Energy Production, Conversion & Delivery, Form EIA-810, *Monthly Refinery Report* for 2018.

*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).*