Released: August 2025

Next MECS will be fielded in 2027

## Table 3.5 Selected byproducts in fuel consumption, 2022

Level: National Data and regional data

Row: NAICS codes Column: Energy sources

Unit: Trillion British thermal units

			Blast			Pulping liquor		oils/tars
NAICS			urnace and coke	Waste	Petroleum	or	Wood chips,	and waste
code <sup>a</sup>	Subsector and industry	Total	oven gases	gas	coke	black liquor	bark	materials
244	FI	Total United States					*	
311	Food	4	0	1	0	0	т •	3
3112	Grain and Oilseed Milling	3	0	·	0	0	· · · · · · · · · · · · · · · · · · ·	3
311221	Wet Corn Milling and Starch Manufacturing	3	0	· · · · · · · · · · · · · · · · · · ·	0	0	·	3
31131	Sugar Manufacturing		0	· · · · · · · · · · · · · · · · · · ·	0	0	0	
3114	Fruit and Vegetable Preserving and Specialty Food		0	·	0	0	0	<del>-</del>
3115	Dairy Product Manufacturing	0	0	0	0	0	0	0
3116	Animal Slaughtering and Processing	*	0	*	0	0	0	*
312	Beverage and Tobacco Products	*	0	*	0	0	0	0
3121	Beverages	*	0	*	0	0	0	0
3122	Tobacco	0	0	0	0	0	0	0
313	Textile Mills	*	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	250	0	0	0	0	249	*
321113	Sawmills	146	0	0	0	0	146	*
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	85	0	0	0	0	85	*
321219	Reconstituted Wood Products	40	0	0	0	0	40	*
3219	Other Wood Products	17	0	0	0	0	17	0
322	Paper	1,143	0	1	9	846	283	4
322110	Pulp Mills	279	0	0	*	224	54	*
322120	Paper Mills	203	0	*	8	136	57	2
322130	Paperboard Mills	615	0	*	*	453	159	3
323	Printing and Related Support	0	0	0	0	0	0	0
324	Petroleum and Coal Products	1,907	50	1,377	479	0	1	1
324110	Petroleum Refineries	1,851	0	1,377	474	0	0	0
324121	Asphalt Paving Mixture and Block	2	0	0	0	0	1	1
324122	Asphalt Shingle and Coating Materials	0	0	0	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	*	0	*	*	0	0	0
324199	All Other Petroleum and Coal Products Manufacturing	54	50	0	4	0	0	0
325	Chemicals	427	0	387	10	0	21	10
323	CICIIICUIS	427	J	307				10

Waste

325110	Petrochemicals	231	0	231	0	0	0	0
325120	Industrial Gases	4	0	4	0	0	0	0
325180	Other Basic Inorganic Chemical Manufacturing	56	0	56	0	0	0	0
325193	Ethyl Alcohol	2	0	1	0	0	1	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	24	0	5	0	0	19	*
325199	All Other Basic Organic Chemical Manufacturing	38	0	23	7	0	*	7
325211	Plastics Materials and Resins	32	0	31	0	0	*	1
325212	Synthetic Rubber	8	0	8	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	1	0	*	0	0	0	1
3254	Pharmaceuticals and Medicines	*	0	*	0	0	*	0
325412	Pharmaceutical Preparation	*	0	0	0	0	*	0
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	0	0	0	0	0	0	0
326	Plastics and Rubber Products	Q	0	Q	0	0	0	0
327	Nonmetallic Mineral Products	105	0	*	87	0	1	17
327120	Clay Building Material and Refractories	1	0	*	0	0	*	1
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	53	0	0	38	0	1	Q
327410	Lime	13	0	0	12	0	0	1
327420	Gypsum	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0
331	Primary Metals	163	156	4	3	0	*	*
331110	Iron and Steel Mills and Ferroalloys	161	156	4	1	0	*	*
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0
3313	Alumina and Aluminum Production and Processing	2	0	*	2	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
3314	Nonferrous Metal (except Aluminum) Production and Processing	*	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	Q	0	0	0	0	*	Q
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	4	0	4	0	0	*	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	4	0	4	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	4	0	0	0	0	4	*
339	Miscellaneous	0	0	0	0	0	0	0
	Total	4,012	206	1,777	587	846	559	36
		Northeast Census Region						
311	Food	*	0	*	0	0	0	*
3112	Grain and Oilseed Milling	*	0	0	0	0	0	*
311221	Wet Corn Milling and Starch Manufacturing	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	0	0
3115	Dairy Product Manufacturing	0	0	0	0	0	0	0
3116	Animal Slaughtering and Processing	*	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	*	*
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	31	0	0	0	0	31	*
321113	Sawmills	5	0	0	0	0	5	*
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	24	0	0	0	0	24	*
321219	Reconstituted Wood Products	12	0	0	0	0	12	*
3219	Other Wood Products	1	0	0	0	0	1	0
322	Paper	68	0	*	0	51	17	1
322110	Pulp Mills	D	0	0	0	D	2	*
322120	Paper Mills	44	0	0	0	31	13	1
322130	Paperboard Mills	*	0	*	0	0	0	0
323	Printing and Related Support	0	0	0	0	0	0	0
324	Petroleum and Coal Products	92	17	51	23	0	0	*
324110	Petroleum Refineries	75	0	51	23	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 Manufacturing	*	0	*	*	0	0	0
324199	All Other Petroleum and Coal Products Manufacturing	17	17	0	0	0	0	0
325	Chemicals	4	0	Q	0	0	0	1
325110	Petrochemicals	0	0	0	0	0	0	0
325120	Industrial Gases	0	0	0	0	0	0	0
325180	Other Basic Inorganic Chemical Manufacturing	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	0	0	0	0	0	0	0
325199	All Other Basic Organic Chemical Manufacturing	1	0	*	0	0	0	1
325211	Plastics Materials and Resins	0	0	0	0	0	0	0
222211								

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, Chemical, and Copy Toner Manufacturing	0	0	0	0	0	0	0
326	Plastics and Rubber Products	Q	0	Q	0	0	0	0
327	Nonmetallic Mineral Products	*	0	0	0	0	*	0
327120	Clay Building Material and Refractories	*	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	0	0	0	0	0	0	0
327410	Lime	0	0	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	42	42	0	0	0	*	0
331110	Iron and Steel Mills and Ferroalloys	42	42	0	0	0	*	0
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0
3313	Alumina and Aluminum Production and Processing	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 Metal (except Aluminum) Production and Processing	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	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	0	0	0	0	0	0	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	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	241	60	58	23	51	48	2

311	Food	1	0	1	0	0	*	*
3112	Grain and Oilseed Milling	*	0	0	0	0	*	*
311221	Wet Corn Milling and Starch Manufacturing	*	0	0	0	0	*	0
31131	Sugar Manufacturing	*	0	*	0	0	0	*
3114	Fruit and Vegetable Preserving and Specialty Food	*	0	0	0	0	0	*
3115	Dairy Product Manufacturing	0	0	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	17	0	0	0	0	17	*
321113	Sawmills	2	0	0	0	0	2	*
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	6	0	0	0	0	6	*
321219	Reconstituted Wood Products	6	0	0	0	0	6	0
3219	Other Wood Products	Q	0	0	0	0	Q	0
322	Paper	75	0	*	3	52	19	1
322110	Pulp Mills	D	0	0	0	D	3	0
322120	Paper Mills	46	0	0	3	32	10	1
322130	Paperboard Mills	6	0	*	0	1	4	0
323	Printing and Related Support	0	0	0	0	0	0	0
324	Petroleum and Coal Products	362	17	262	82	0	1	*
324110	Petroleum Refineries	344	0	262	82	0	0	0
324121	Asphalt Paving Mixture and Block	1	0	0	0	0	1	*
324122	Asphalt Shingle and Coating Materials	0	0	0	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	0	0	0	0	0	0	0
324199	All Other Petroleum and Coal Products Manufacturing	17	17	0	0	0	0	0
325	Chemicals	9	0	6	0	0	2	1
325110	Petrochemicals	0	0	0	0	0	0	0
325120	Industrial Gases	0	0	0	0	0	0	0
325180	Other Basic Inorganic Chemical Manufacturing	Q	0	Q	0	0	0	0
325193	Ethyl Alcohol	2	0	1	0	0	1	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	1	0	0	0	0	1	0
325199	All Other Basic Organic Chemical Manufacturing	0	0	0	0	0	0	0
325211	Plastics Materials and Resins	4	0	3	0	0	*	1
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
325312	Phosphatic Fertilizers	*	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, Chemical, and Copy Toner Manufacturing	0	0	0	0	0	0	0

326	Plastics and Rubber Products	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	30	0	0	19	0	0	Q
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	25	0	0	15	0	0	Q
327410	Lime	5	0	0	4	0	0	1
327420	Gypsum	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0
331	Primary Metals	118	114	4	*	0	0	*
331110	Iron and Steel Mills and Ferroalloys	118	114	4	*	0	0	*
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0
3313	Alumina and Aluminum Production and Processing	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 Metal (except Aluminum) Production and Processing	*	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	1	0	1	0	0	*	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	1	0	1	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	612	130	272	105	52	40	Q
		Cough Comment Design						
311	Food	South Census Region 3	0	*	0	0	0	3
3112	Grain and Oilseed Milling	3	0	0	0	0	0	3
311221	Wet Corn Milling and Starch Manufacturing	3	0	0	0	0	0	3
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 Manufacturing	0	0	0	0	0	0	0
3116	Animal Slaughtering and Processing	*	0	*	0	0	0	*
3110	Animal Staughtering and Frocessing							

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
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	145	0	0	0	0	145	*
321113	Sawmills	92	0	0	0	0	92	0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	45	0	0	0	0	45	*
321219	Reconstituted Wood Products	22	0	0	0	0	22	*
3219	Other Wood Products	7	0	0	0	0	7	0
322	Paper	919	0	*	5	692	219	3
322110	Pulp Mills	250	0	0	*	202	48	0
322120	Paper Mills	88	0	*	5	61	22	*
322130	Paperboard Mills	559	0	0	*	416	141	3
323	Printing and Related Support	0	0	0	0	0	0	0
324	Petroleum and Coal Products	998	16	713	269	0	0	*
324110	Petroleum Refineries	978	0	713	264	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 Manufacturing	0	0	0	0	0	0	0
324199	All Other Petroleum and Coal Products Manufacturing	20	16	0	4	0	0	0
325	Chemicals	395	0	378	Q	0	7	7
325110	Petrochemicals	231	0	231	0	0	0	0
325120	Industrial Gases	4	0	4	0	0	0	0
325180	Other Basic Inorganic Chemical Manufacturing	52	0	52	0	0	0	0
325193	Ethyl Alcohol	0	0	0	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	12	0	5	0	0	7	*
325199	All Other Basic Organic Chemical Manufacturing	30	0	23	0	0	*	7
325211	Plastics Materials and Resins	28	0	28	0	0	0	*
325212	Synthetic Rubber	8	0	8	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
3254	Pharmaceuticals and Medicines	*	0	0	0	0	*	0
325412	Pharmaceutical Preparation	*	0	0	0	0	*	0
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	0	0	0	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	32	0	*	25	0	1	6
327120	Clay Building Material and Refractories	1	0	*	0	0	0	1
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	23	0	0	18	0	1	3
327410	Lime	5	0	0	5	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	3	0	*	2	0	0	0
331110	Iron and Steel Mills and Ferroalloys	1	0	*	1	0	0	0
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0
3313	Alumina and Aluminum Production and Processing	2	0	*	2	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
3314	Nonferrous Metal (except Aluminum) Production and Processing	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	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	Q	0	0	0	0	*	Q
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	3	0	3	0	0	0	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	3	0	3	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	3	0	0	0	0	3	*
339	Miscellaneous	0	0	0	0	0	0	0
	Total	2,503	16	1,096	304	692	376	20
		West Census Region						
311	Food	*	0	*	0	0	0	*
3112	Grain and Oilseed Milling	*	0	*	0	0	0	0
311221	Wet Corn Milling and Starch Manufacturing	*	0	*	0	0	0	0
31131	Sugar Manufacturing	O	0	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	*	0	0	0	0	0	*
3115	Dairy Product Manufacturing	O	0	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
3121	Beverages	*	0	*	0	0	0	0
3122	Tobacco	O	0	0	0	0	0	0
313	Textile Mills	0	0	0	0	0	0	0
314	Textile Product Mills	O	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0
316	Leather and Allied Products	O	0	0	0	0	0	0

321	Wood Products	57	0	0	0	0	56	*
321113	Sawmills	46	0	0	0	0	46	*
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	9	0	0	0	0	9	0
321219	Reconstituted Wood Products	*	0	0	0	0	*	0
3219	Other Wood Products	1	0	0	0	0	1	0
322	Paper	81	0	0	0	52	28	*
322110	Pulp Mills	6	0	0	0	5	1	0
322120	Paper Mills	24	0	0	0	11	13	*
322130	Paperboard Mills	51	0	0	0	37	14	0
323	Printing and Related Support	0	0	0	0	0	0	0
324	Petroleum and Coal Products	455	0	350	105	0	0	0
324110	Petroleum Refineries	455	0	350	105	0	0	0
324121	Asphalt Paving Mixture and Block	0	0	0	0	0	0	0
324122	Asphalt Shingle and Coating Materials	0	0	0	0	0	0	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	0	0	0	0	0	0	0
324199	All Other Petroleum and Coal Products Manufacturing	0	0	0	0	0	0	0
325	Chemicals	19	0	1	7	0	11	*
325110	Petrochemicals	0	0	0	0	0	0	0
325120	Industrial Gases	0	0	0	0	0	0	0
325180	Other Basic Inorganic Chemical Manufacturing	1	0	1	0	0	0	0
325193	Ethyl Alcohol	0	0	0	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	11	0	0	0	0	11	0
325199	All Other Basic Organic Chemical Manufacturing	7	0	0	7	0	0	0
325211	Plastics Materials and Resins	0	0	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
325312	Phosphatic Fertilizers	*	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, Chemical, and Copy Toner Manufacturing	0	0	0	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	Q	0	0	Q	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	5	0	0	5	0	*	*
327410	Lime	2	0	0	2	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	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 Production and Processing	0	0	0	0	00	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 Metal (except Aluminum) Production and Processing	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	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	*	0	*	0	0	0	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	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	655	0	352	155	52	96	1

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

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.

D=Withheld to avoid disclosing data for individual establishments.

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

NA=Not available.

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

<sup>&</sup>lt;sup>a</sup> The Bureau of the Census classifies establishments using the 2022 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).

<sup>&</sup>lt;sup>c</sup> 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.

<sup>\*</sup> Estimate less than 0.5.

## RSE Table 3.5 Relative standard errors for table 3.5

Unit: Percentage

			Blast			Pulping liquor		Waste oils/tars
NAICS			furnace and coke	Waste	Petroleum	or	Wood chips,	and waste
code <sup>a</sup>	Subsector and industry	Total	oven gases	gas	coke	black liquor	bark	materials
		<b>-</b>						
211	rand	Total United States					0.0	0.2
311	Food	1.4	X	5.2	X	X	0.0	0.2
3112	Grain and Oilseed Milling	0.1	X	0.0	X	X	0.0	0.1
311221	Wet Corn Milling and Starch Manufacturing	0.0	X	0.0	X	X	0.0	0.0
31131	Sugar Manufacturing	0.0	X	0.0	X	X	X	0.0
3114	Fruit and Vegetable Preserving and Specialty Food	14.9	X	15.1	X	X	X	79.1
3115	Dairy Product Manufacturing	X	X	X	X	X	X	X
3116	Animal Slaughtering and Processing	6.1	X	6.2	X	X	X	0.0
312	Beverage and Tobacco Products	0.0	X	0.0	X	X	X	X
3121	Beverages	0.0	X	0.0	X	X	X	X
3122	Tobacco	X	X	X	X	X	X	X
313	Textile Mills	73.3	X	X	X	X	73.7	62.5
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	Х	X	X	X
321	Wood Products	2.5	X	X	X	X	2.5	0.2
321113	Sawmills	2.7	Х	Х	Х	X	2.7	0.0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	1.6	Х	Х	Х	X	1.6	0.6
321219	Reconstituted Wood Products	0.0	Х	Х	Х	Х	0.0	0.0
3219	Other Wood Products	26.6	Х	Х	Х	Х	26.6	Х
322	Paper	0.0	X	0.0	0.0	0.0	0.0	0.0
322110	Pulp Mills	0.0	X	X	0.0	0.0	0.0	0.0
322120	Paper Mills	0.0	Х	0.0	0.0	0.0	0.0	0.0
322130	Paperboard Mills	0.0	Х	0.0	0.0	0.0	0.0	0.0
323	Printing and Related Support	X	Х	Х	Х	X	Х	X
324	Petroleum and Coal Products	0.1	0.0	0.0	0.0	X	0.0	8.5
324110	Petroleum Refineries	0.0	Х	0.0	0.0	X	X	Х
324121	Asphalt Paving Mixture and Block	3.2	Х	X	Х	X	0.0	8.5
324122	Asphalt Shingle and Coating Materials	X		X	Х	X	X	X
324191	Petroleum Lubricating Oil and Grease Manufacturing	0.0	X	0.0	0.0	X	X	X
324199	All Other Petroleum and Coal Products Manufacturing	0.0	0.0	X	0.0	X	X	X
325	Chemicals	0.6		0.5	17.0	X	0.1	0.0
325110	Petrochemicals	0.0	X	0.0	X	X	X	X
325110	Industrial Gases	0.0	X	0.0	X		X	^ X
325120	Other Basic Inorganic Chemical Manufacturing	3.0		3.0	X		X	^ X
325193	Ethyl Alcohol	1.8	X	4.4	X	X	0.0	

325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	х	0.0	Χ	X	0.0	0.0
325199	All Other Basic Organic Chemical Manufacturing	0.1	X	0.1	0.0	X	0.0	0.0
325211	Plastics Materials and Resins	0.2	X	0.1	Х	Х	77.1	0.0
325212	Synthetic Rubber	0.0	X	0.0	X	X	X	0.0
325220	Artificial and Synthetic Fibers and Filaments	Х	X	Х	X	Х	X	Х
325311	Nitrogenous Fertilizers	0.0	X	0.0	Х	Х	X	Х
325312	Phosphatic Fertilizers	0.0	Х	0.0	Х	Х	X	0.0
3254	Pharmaceuticals and Medicines	11.6	Х	26.7	Х	Х	0.0	Χ
325412	Pharmaceutical Preparation	0.0	X	Х	Х	Х	0.0	Х
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	X	Х	Х	Х	Х	X	Х
326	Plastics and Rubber Products	83.5	Х	83.5	Х	Х	Х	Х
327	Nonmetallic Mineral Products	33.8	Х	0.0	40.0	Х	0.0	43.8
327120	Clay Building Material and Refractories	0.0	X	0.0	Х	X	0.0	0.0
327211	Flat Glass	Х	X	Х	Х	Х	Х	Х
327212	Other Pressed and Blown Glass and Glassware	Х	Х	Х	Х	Х	Х	Х
327213	Glass Containers	Х	Х	Х	Х	Х	Х	Х
327215	Glass Products from Purchased Glass	Х	Х	Х	Х	Х	Х	Х
327310	Cements	13.8	X	Х	0.0	X	0.0	53.8
327410	Lime	0.0	Х	Х	0.0	Х	Х	0.0
327420	Gypsum	Х	Х	Х	Х	Х	Х	X
327993	Mineral Wool	Х	X	Х	Х	X	X	Х
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	Х
3313	Alumina and Aluminum Production and Processing	0.0	X	0.0	0.0	X	X	Х
331314	Secondary Smelting and Alloying of Aluminum	Х	X	Х	Х	X	X	Х
331315	Aluminum Sheet, Plate and Foils	X	X	Х	X	X	X	Х
331318	Other Aluminum Rolling, Drawing and Extruding	0.0	X	0.0	X	X	X	Х
3314	Nonferrous Metal (except Aluminum) Production and Processing	0.0	X	Х	X	X	X	0.0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	X	X	Х	X	X	X	Х
3315	Foundries	X	X	Х	X	X	X	X
331511	Iron Foundries	X	X	Х	X	X	X	Х
331523	Nonferrous Metal Die-Casting Foundries	X	X	Х	X	X	X	Х
331524	Aluminum Foundries, except Die-Casting	X	X	Х	X	X	X	Х
332	Fabricated Metal Products	97.0	X	X	X	X	99.0	99.5
333	Machinery	X	X	Х	X	X	X	Х
334	Computer and Electronic Products	X	X	Х	X	X	X	Х
334413	Semiconductors and Related Devices	X	X	X	X	X	X	X
335	Electrical Equip., Appliances, and Components	X	X	Х	X	X	X	Х
336	Transportation Equipment	0.1	X	0.0	X	X	99.0	Х
336110	Automobile and Light Duty Motor Vehicle Manufacturing	0.0	X	0.0	X	X	X	X
3364	Aerospace Product and Parts	0.0	X	0.0	X	X	X	Х
336411	Aircraft	X	X	X	X	X	X	X
337	Furniture and Related Products	26.0	X	X	X	X	27.0	78.6
339	Miscellaneous	X	X	X	X	X	X	Х
	Total	0.9	0.0	0.2	5.9	0.0	1.1	20.3

**Northeast Census Region** 

		Northeast Census Region						
311	Food	1.9	X	0.0	X	X	X	6.0
3112	Grain and Oilseed Milling	64.5	Х	Х	X	Х	X	64.5
311221	Wet Corn Milling and Starch Manufacturing	X	Х	Х	Х	Х	Х	Х
31131	Sugar Manufacturing	X	Х	Х	Х	Х	Х	Х
3114	Fruit and Vegetable Preserving and Specialty Food	X	Х	Х	Х	X	Х	X
3115	Dairy Product Manufacturing	X	Х	Х	Х	X	Х	X
3116	Animal Slaughtering and Processing	0.0	Х	0.0	Х	X	Х	0.0
312	Beverage and Tobacco Products	X	Х	Х	Х	X	Х	X
3121	Beverages	X	Х	Х	Х	X	Х	X
3122	Tobacco	X	Х	Х	Х	X	Х	X
313	Textile Mills	76.0	Х	Х	Х	X	76.5	62.5
314	Textile Product Mills	X	Х	Х	Х	X	Х	X
315	Apparel	X	Х	Х	Х	X	Х	X
316	Leather and Allied Products	X	Х	Х	Х	X	Х	X
321	Wood Products	0.8	Х	Х	Х	X	0.8	0.0
321113	Sawmills	0.2	Х	Х	Х	Х	0.2	0.0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	0.1	Х	Х	Х	Х	0.1	0.0
321219	Reconstituted Wood Products	0.0	Х	Х	Х	Х	0.0	0.0
3219	Other Wood Products	21.7	Х	Х	Х	Х	21.7	Х
322	Paper	0.0	Х	0.0	Х	0.0	0.0	0.0
322110	Pulp Mills	D	Х	Х	Х	D	0.0	0.0
322120	Paper Mills	0.0	X	Х	X	0.0	0.0	0.0
322130	Paperboard Mills	0.0	X	0.0	X	X	X	X
323	Printing and Related Support	X	Х	Х	Х	X	X	Х
324	Petroleum and Coal Products	0.0	0.0	0.0	0.0	Х	X	0.0
324110	Petroleum Refineries	0.0	X	0.0	0.0	Х	X	Х
324121	Asphalt Paving Mixture and Block	0.0	Х	Х	Х	Х	X	0.0
324122	Asphalt Shingle and Coating Materials	X	X	Х	Х	X	Х	X
324191	Petroleum Lubricating Oil and Grease Manufacturing	0.0	Х	0.0	0.0	Х	X	Х
324199	All Other Petroleum and Coal Products Manufacturing	0.0	0.0	Х	Х	X	Х	X
325	Chemicals	38.6	Х	51.5	Х	X	Х	0.0
325110	Petrochemicals	X	X	Х	Х	Х	X	Х
325120	Industrial Gases	X	Х	Х	Х	X	Х	X
325180	Other Basic Inorganic Chemical Manufacturing	58.1	Х	58.1	X	X	X	Х
325193	Ethyl Alcohol	X	Х	Х	Х	Х	X	Х
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	X	Х	Х	Х	X	Х	X
325199	All Other Basic Organic Chemical Manufacturing	0.0	Х	0.0	Х	X	Х	0.0
325211	Plastics Materials and Resins	X	Х	Х	Х	X	Х	X
325212	Synthetic Rubber	X	Х	Х	Х	X	Х	X
325220	Artificial and Synthetic Fibers and Filaments	X	Х	X	X	Х	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	0.0	X	0.0	X	X	X	X
325412	Pharmaceutical Preparation	X	Х	Х	Х	Х	X	X

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Х	0.0	0.0
X	0.0	Х
X	X	0.0
	X	53.0
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	X	Х
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312	Beverage and Tobacco Products	Х	Х	Х	Х	Х	Х	Х
3121	Beverages	Х	Х	Х	Х	Х	Х	X
3122	Tobacco	Х	Х	Х	Х	Х	Х	Х
313	Textile Mills	Х	Х	Х	Х	Х	Х	X
314	Textile Product Mills	X	Х	X	Х	X	Х	X
315	Apparel	X	Х	X	Х	X	Х	X
316	Leather and Allied Products	Х	Х	X	Х	Х	Х	X
321	Wood Products	26.1	Х	X	Х	Х	26.1	28.1
321113	Sawmills	8.7	Х	X	X	X	8.7	0.0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	0.2	Х	X	X	X	0.2	30.7
321219	Reconstituted Wood Products	0.0	Х	X	Х	X	0.0	X
3219	Other Wood Products	52.8	Х	X	Х	X	52.8	X
322	Paper	0.0	Х	0.0	0.0	0.0	0.0	0.0
322110	Pulp Mills	D	Х	X	Х	D	0.0	X
322120	Paper Mills	0.0	X	X	0.0	0.0	0.0	0.0
322130	Paperboard Mills	0.0	Х	0.0	X	0.0	0.0	X
323	Printing and Related Support	Х	Х	Х	X	Х	Х	X
324	Petroleum and Coal Products	0.1	0.0	0.0	0.0	Х	0.0	18.3
324110	Petroleum Refineries	0.0	Х	0.0	0.0	Х	Х	X
324121	Asphalt Paving Mixture and Block	3.3	Х	Х	X	X	0.0	18.3
324122	Asphalt Shingle and Coating Materials	Х	Х	X	X	Х	Х	X
324191	Petroleum Lubricating Oil and Grease Manufacturing	Х	Х	Х	X	X	Х	X
324199	All Other Petroleum and Coal Products Manufacturing	0.0	0.0	Х	X	X	X	X
325	Chemicals	11.5	X	18.6	X	X	1.2	0.0
325110	Petrochemicals	X	X	Х	X	X	X	X
325120	Industrial Gases	Х	Х	Х	X	X	X	X
325180	Other Basic Inorganic Chemical Manufacturing	84.4	X	84.4	X	X	X	X
325193	Ethyl Alcohol	1.8	Х	4.4	X	X	0.0	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	Х	Х	X	X	0.0	X
325199	All Other Basic Organic Chemical Manufacturing	Х	Х	Х	X	X	X	X
325211	Plastics Materials and Resins	0.8	Х	0.0	X	X	77.1	0.0
325212	Synthetic Rubber	Х	X	Х	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	Х	X	X	X	X	X	X
325311	Nitrogenous Fertilizers	0.0	Х	0.0	X	X	X	X
325312	Phosphatic Fertilizers	0.0	Х	0.0	X	X	X	0.0
3254	Pharmaceuticals and Medicines	96.1	Х	96.1	X	Х	Х	X
325412	Pharmaceutical Preparation	Х	Х	Х	Х	Х	Х	X
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	Х	Х	Х	X	X	X	X
326	Plastics and Rubber Products	Х	Х	Х	X	X	Х	X
327	Nonmetallic Mineral Products	24.5	X	X	0.0	X	X	68.5
327120	Clay Building Material and Refractories	Х	X	X	X	X	X	X
327211	Flat Glass	Х	X	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	Х	Х	Х	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	Х	X	X	X
327310	Cements	29.7	X	X	0.0	X	X	73.9

327410	Lime	0.0	X	X	0.0	X	X	0.0
327420	Gypsum	X	X	Х	X	Х	Х	Χ
327993	Mineral Wool	X	Х	Х	X	X	Х	X
331	Primary Metals	0.0	0.0	0.0	0.0	Х	Х	0.0
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	0.0	0.0	Х	Х	0.0
3312	Steel Products from Purchased Steel	X	Х	X	Х	X	Х	Х
3313	Alumina and Aluminum Production and Processing	X	Х	Х	Х	Х	Х	Х
331314	Secondary Smelting and Alloying of Aluminum	X	Х	Х	Х	X	X	Х
331315	Aluminum Sheet, Plate and Foils	X	X	Х	Х	X	X	Х
331318	Other Aluminum Rolling, Drawing and Extruding	X	Х	X	X	X	X	X
3314	Nonferrous Metal (except Aluminum) Production and Processing	0.0	X	X	X	X	X	0.0
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	0.0	X	X	X	X	X	0.0
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	0.1	X	0.0	X	X	99.0	X
336110	Automobile and Light Duty Motor Vehicle Manufacturing	0.0	X	0.0	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	52.4	X	X	X	X	52.4	X
339	Miscellaneous	X	X	X	X	X	X	X
	Total	1.4	0.0	0.4	0.0	0.0	11.1	53.8
211	rand	South Census Region		15.4				
311	Food	1.9	X	15.4	X	X	X	0.0
3112	Grain and Oilseed Milling	0.0	X	X	X X	X X	X X	0.0
311221	Wet Corn Milling and Starch Manufacturing	0.0	X					0.0
31131	Sugar Manufacturing	X 15.1	X X	X	X	X X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	15.1		15.1	X		X	X
3115 3116	Dairy Product Manufacturing	X 75.4	X X	76.6	X X	X X	X X	X
3110	Animal Slaughtering and Processing  Beverage and Tobacco Products	76.4 X	X	76.6 X	X	X	X	0.0
					X		X	X
3121 3122	Beverages Tobacco	X X	X X	X X	X	X X	X	X
313	Textile Mills	0.0	X	X	X	X	0.0	X X
314	Textile Product Mills	X	X	X	X	X	X	<u>^</u>
					X	X		
315 316	Apparel  Leather and Allied Products	X X	X	X			X	X
321		0.9	X	X X	X X	X X	0.9	X
321	Wood Products	0.9		X	X X		0.9	0.0
321113	Sawmills	0.4	X	^		X	0.4	X

3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	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	17.9	X	X	X	X	17.9	X
322	Paper	0.0	X	0.0	0.0	0.0	0.0	0.0
322110	Pulp Mills	0.0	X	X	0.0	0.0	0.0	X
322120	Paper Mills	0.0	X	0.0	0.0	0.0	0.0	0.0
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	53.4
324110	Petroleum Refineries	0.0	X	0.0	0.0	X	X	Х
324121	Asphalt Paving Mixture and Block	53.4	X	X	X	X	X	53.4
324122	Asphalt Shingle and Coating Materials	X	X	X	X	X	X	Х
324191	Petroleum Lubricating Oil and Grease Manufacturing	X	X	Х	Х	X	X	Х
324199	All Other Petroleum and Coal Products Manufacturing	0.0	0.0	Х	0.0	X	Х	X
325	Chemicals	0.5	Х	0.2	53.7	Х	0.0	0.0
325110	Petrochemicals	0.0	X	0.0	Х	Х	Х	Х
325120	Industrial Gases	0.0	Х	0.0	Х	Х	Х	Х
325180	Other Basic Inorganic Chemical Manufacturing	0.0	Х	0.0	X	Х	Х	Х
325193	Ethyl Alcohol	X	Х	Х	X	X	Х	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	0.0	X	X	0.0	0.0
325199	All Other Basic Organic Chemical Manufacturing	0.1	X	0.1	X	X	0.0	0.0
325211	Plastics Materials and Resins	0.2	X	0.2	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	X	X	X	X	X	X	Х
325311	Nitrogenous Fertilizers	0.0	X	0.0	X	X	X	Х
325312	Phosphatic Fertilizers	0.0	X	0.0	X	X	X	Х
3254	Pharmaceuticals and Medicines	0.0	X	X	X	X	0.0	X
325412	Pharmaceutical Preparation	0.0	X	X	X	X	0.0	X
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	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	0.0	0.0
327120	Clay Building Material and Refractories	0.0	X	0.0	X	X	X	0.0
327211	Flat Glass	X	X	X	X	X	X	Х
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	X
327420	Gypsum	X	X	х х	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X
331	Primary Metals	0.0	X	0.0	0.0	X	X	^
331110	Iron and Steel Mills and Ferroalloys	0.0	X	0.0	0.0	X	X	X
331110	Steel Products from Purchased Steel	V.U			V.U			
			X	X		X	X	X
3313	Alumina and Aluminum Production and Processing	0.0	X	0.0	0.0	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	Х

331318	Other Aluminum Rolling, Drawing and Extruding	0.0	Х	0.0	Х	Х	Х	Х
3314	Nonferrous Metal (except Aluminum) Production and Processing	X	Х	X	X	X	X	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	Х	X	X	Х
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	Х	X	X	Х
331524	Aluminum Foundries, except Die-Casting	X	X	X	X	X	X	Х
332	Fabricated Metal Products	97.0	X	X	X	X	99.0	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	0.0	X	0.0	X	X	X	X
336110	Automobile and Light Duty Motor Vehicle Manufacturing	0.0	X	0.0	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	30.5	X	X	X	X	32.0	79.0
339	Miscellaneous	X	X	X	X	X	X	X
	Total	0.1	0.0	0.1	0.5	0.0	0.5	3.8
		West Census Region						
311	Food	2.0	X	0.0	X	X	X	85.7
3112	Grain and Oilseed Milling	0.0	X	0.0	X	Х	Х	Х
311221	Wet Corn Milling and Starch Manufacturing	0.0	Х	0.0	Х	Х	Х	Х
31131	Sugar Manufacturing	X	X	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	85.7	Х	X	Х	Х	X	85.7
3115	Dairy Product Manufacturing	X	X	X	X	X	Х	X
3116	Animal Slaughtering and Processing	0.0	X	0.0	X	X	Х	X
312	Beverage and Tobacco Products	0.0	X	0.0	X	X	Х	X
3121	Beverages	0.0	X	0.0	X	X	Х	X
3122	Tobacco	X	Х	X	Х	Х	Х	Х
313	Textile Mills	X	X	X	X	X	X	X
314	Textile Product Mills	X	Х	X	X	Х	Х	X
315	Apparel	X	X	Х	Х	Х	X	Х
316	Leather and Allied Products	X	X	Х	Х	Х	X	Х
321	Wood Products	7.3	X	X	Х	Х	7.4	0.0
321113	Sawmills	8.4	X	Х	Х	Х	8.5	0.0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	14.2	X	Х	Х	Х	14.2	Х
321219	Reconstituted Wood Products	0.0	X	X	Х	Х	0.0	Х
3219	Other Wood Products	46.9	X	Х	Х	X	46.9	Х
322	Paper	0.0	X	Х	Х	0.0	0.0	0.0
322110	Pulp Mills	0.0	Х	X	Х	0.0	0.0	X
322120	Paper Mills	0.0	X	X	Х	0.0	0.0	0.0
322130	Paperboard Mills	0.0	X	X	Х	0.0	0.0	X
323	Printing and Related Support	X	X	X	X	Х	X	Х
324	Petroleum and Coal Products	0.0	X	0.0	0.0	Х	X	X

324110	Petroleum Refineries	0.0	Χ	0.0	0.0	X	X	Х
324121	Asphalt Paving Mixture and Block	X	Х	Х	X	Х	Х	Х
324122	Asphalt Shingle and Coating Materials	X	Х	Х	X	Х	Х	Х
324191	Petroleum Lubricating Oil and Grease Manufacturing	X	Х	Х	X	Х	Х	Х
324199	All Other Petroleum and Coal Products Manufacturing	X	Х	Х	Х	Х	Х	Х
325	Chemicals	0.0	Х	0.0	0.0	Х	0.0	0.0
325110	Petrochemicals	X	Х	Х	Х	Х	X	Х
325120	Industrial Gases	X	X	Х	Х	X	X	Х
325180	Other Basic Inorganic Chemical Manufacturing	0.0	X	0.0	X	X	X	Х
325193	Ethyl Alcohol	X	Х	Х	X	Х	Х	Χ
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	X	Х	X	X	0.0	Χ
325199	All Other Basic Organic Chemical Manufacturing	0.0	Х	Х	0.0	Х	Х	Χ
325211	Plastics Materials and Resins	X	Х	Х	Х	Х	Х	Χ
325212	Synthetic Rubber	X	Х	Х	X	Х	Х	Χ
325220	Artificial and Synthetic Fibers and Filaments	X	X	X	X	X	Х	X
325311	Nitrogenous Fertilizers	0.0	X	0.0	X	X	X	X
325312	Phosphatic Fertilizers	0.0	X	X	Х	X	X	0.0
3254	Pharmaceuticals and Medicines	X	X	X	Х	X	X	X
325412	Pharmaceutical Preparation	X	X	X	Х	X	X	X
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	X	X	X	X	X	X	X
326	Plastics and Rubber Products	X	X	X	X	X	X	Х
327	Nonmetallic Mineral Products	79.7	X	X	80.6	X	0.0	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	Х	Х	Х	Х	Х	Х
327215	Glass Products from Purchased Glass	X	Х	Х	Х	X	X	Х
327310	Cements	0.0	Х	Х	0.0	Х	0.0	0.0
327410	Lime	0.0	Х	Х	0.0	Х	Х	Х
327420	Gypsum	X	X	Х	X	X	X	Х
327993	Mineral Wool	X	Х	Х	Х	Х	Х	Х
331	Primary Metals	X	X	Х	Х	X	X	Х
331110	Iron and Steel Mills and Ferroalloys	X	X	Х	Х	X	X	Х
3312	Steel Products from Purchased Steel	X	X	Х	X	X	X	Х
3313	Alumina and Aluminum Production and Processing	X	X	Х	X	X	X	Х
331314	Secondary Smelting and Alloying of Aluminum	X	X	Х	X	X	X	Х
331315	Aluminum Sheet, Plate and Foils	X	X	Х	Х	X	X	Χ
331318	Other Aluminum Rolling, Drawing and Extruding	X	Х	Х	X	Х	Х	Χ
3314	Nonferrous Metal (except Aluminum) Production and Processing	X	Х	Х	X	Х	Х	Χ
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	X	X	X	X	X	Х	X
3315	Foundries	X	X	X	X	X	Х	X
331511	Iron Foundries	Х	X	X	X	X	X	X
331523	Nonferrous Metal Die-Casting Foundries	X	X	X	X	X	X	Х
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	Х	X	X	X
334413	Semiconductors and Related Devices	X	X	X	Х	X	Х	Х
335	Electrical Equip., Appliances, and Components	X	X	X	Х	X	X	X
336	Transportation Equipment	0.0	X	0.0	Х	X	X	X
336110	Automobile and Light Duty Motor Vehicle Manufacturing	X	X	X	Х	X	X	X
3364	Aerospace Product and Parts	0.0	Х	0.0	Х	X	X	X
336411	Aircraft	X	Х	X	Х	Х	X	Х
337	Furniture and Related Products	X	X	X	Х	X	X	Х
339	Miscellaneous	X	Х	Х	Х	Х	Х	X
	Total	5.3	X	0.0	22.5	0.0	4.3	0.5

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

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.

<sup>a</sup> The Bureau of the Census classifies establishments using the 2022 North American Industry Classification System (NAICS).

<sup>c</sup> Distillate fuel oil includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.

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%.

NA=Not available.

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

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

<sup>&</sup>lt;sup>b</sup> 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).

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. 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