

Released: August 2025

Next MECS will be fielded in 2027

Table 1.2 First use of energy for all purposes (fuel and nonfuel), 2022

Level: National and regional data

Row: NAICS codes

Column: Energy sources and shipments

Unit: Trillion British thermal units

NAICS code ^a	Subsector and industry	Total ^b	Net electricity ^c	Residual fuel oil	Distillate fuel oil ^d	Natural gas ^e	HGL (excluding natural gasoline) ^f	Coal	Coke and breeze	Other ^g	Shipments of energy sources produced onsite ^h
Total United States											
311	Food	1,235	271	*	15	705	8	93	1	141	0
3112	Grain and Oilseed Milling	339	60	*	1	170	*	67	0	41	0
311221	Wet Corn Milling and Starch Manufacturing	169	27	0	*	69	*	40	0	32	0
31131	Sugar Manufacturing	167	5	*	*	39	*	26	1	93	0
3114	Fruit and Vegetable Preserving and Specialty Food	121	31	*	*	88	1	0	0	1	0
3115	Dairy Product Manufacturing	171	45	*	2	118	Q	0	0	Q	0
3116	Animal Slaughtering and Processing	246	76	*	3	163	2	0	0	2	0
312	Beverage and Tobacco Products	265	51	0	*	212	1	1	0	*	0
3121	Beverages	258	48	0	*	Q	1	1	0	*	0
3122	Tobacco	7	2	0	*	4	*	0	0	*	0
313	Textile Mills	57	30	0	*	24	*	*	0	2	0
314	Textile Product Mills	21	10	0	*	10	Q	0	0	*	0
315	Apparel	3	2	0	*	1	*	0	0	*	0
316	Leather and Allied Products	3	1	0	*	2	*	0	0	*	0
321	Wood Products	416	69	*	12	80	3	*	0	251	0
321113	Sawmills	199	27	*	7	18	1	0	0	147	0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	144	19	*	1	38	1	0	0	85	0
321219	Reconstituted Wood Products	72	10	*	*	22	*	0	0	40	0
3219	Other Wood Products	62	21	0	1	21	1	*	0	17	0
322	Paper	2,003	170	8	4	617	3	32	0	1,169	0
322110	Pulp Mills	345	5	1	1	55	*	2	0	281	0
322120	Paper Mills	475	55	2	1	188	*	14	0	214	0
322130	Paperboard Mills	986	61	3	2	279	*	13	0	628	0
323	Printing and Related Support	53	31	*	*	21	*	0	0	*	0
324	Petroleum and Coal Products	4,464	160	2	8	1,110	29	167	7	3,054	73
324110	Petroleum Refineries	3,314	150	*	3	1,021	27	0	0	2,112	0
324121	Asphalt Paving Mixture and Block	693	5	2	4	54	1	0	0	628	2
324122	Asphalt Shingle and Coating Materials	243	3	0	*	11	*	0	0	228	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	16	2	0	*	13	*	0	0	*	0
324199	All Other Petroleum and Coal Products Manufacturing	198	-1	0	1	10	*	167	7	85	71
325	Chemicals	7,459	512	23	10	3,317	3,079	200	0	894	576
325110	Petrochemicals	1,949	27	0	1	405	1,585	*	0	373	442
325120	Industrial Gases	D	91	0	*	D	1	0	0	D	D
325180	Other Basic Inorganic Chemical Manufacturing	507	88	22	*	236	24	26	0	111	0
325193	Ethyl Alcohol	488	37	0	*	383	*	20	0	49	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	364	16	0	1	125	170	9	0	43	0
325199	All Other Basic Organic Chemical Manufacturing	D	64	*	3	418	292	29	0	106	D
325211	Plastics Materials and Resins	1,578	41	0	1	588	937	0	0	96	85
325212	Synthetic Rubber	48	4	0	*	27	2	2	0	13	0
325220	Artificial and Synthetic Fibers and Filaments	25	8	0	*	17	*	0	0	*	0
325311	Nitrogenous Fertilizers	572	D	0	*	539	1	0	0	D	0
325312	Phosphatic Fertilizers	125	10	*	3	5	*	114	0	*	6

3254	Pharmaceuticals and Medicines	120	46	0	*	70	*	*	0	3	*
325412	Pharmaceutical Preparation	62	22	0	*	38	*	0	0	1	0
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	7	2	0	*	3	*	0	0	2	0
326	Plastics and Rubber Products	361	241	*	*	108	6	0	0	Q	0
327	Nonmetallic Mineral Products	1,168	211	*	17	418	3	193	7	318	*
327120	Clay Building Material and Refractories	39	5	0	*	31	*	1	0	2	0
327211	Flat Glass	44	5	0	*	38	*	0	0	*	0
327212	Other Pressed and Blown Glass and Glassware	26	7	0	*	19	*	0	0	*	0
327213	Glass Containers	54	12	0	*	42	*	0	0	*	0
327215	Glass Products from Purchased Glass	Q	13	0	*	9	*	0	0	Q	0
327310	Cements	362	44	0	3	90	*	121	4	100	0
327410	Lime	103	5	0	1	26	*	56	2	13	0
327420	Gypsum	77	6	*	*	70	*	0	0	*	0
327993	Mineral Wool	47	14	0	*	32	*	*	1	*	0
331	Primary Metals	1,364	339	*	8	659	4	213	215	23	98
331110	Iron and Steel Mills and Ferroalloys	943	186	*	4	421	*	213	199	17	97
3312	Steel Products from Purchased Steel	55	19	0	2	33	*	0	*	1	*
3313	Alumina and Aluminum Production and Processing	193	68	0	1	119	1	0	0	5	*
331314	Secondary Smelting and Alloying of Aluminum	22	2	0	*	20	*	0	0	*	0
331315	Aluminum Sheet, Plate and Foils	84	21	0	1	62	*	0	0	*	*
331318	Other Aluminum Rolling, Drawing and Extruding	26	7	0	*	18	*	0	0	*	0
3314	Nonferrous Metal (except Aluminum) Production and Processing	85	33	0	*	44	2	*	6	*	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	30	15	0	*	14	*	*	*	*	0
3315	Foundries	88	34	0	*	43	1	*	10	*	*
331511	Iron Foundries	38	16	0	*	12	*	*	10	*	*
331523	Nonferrous Metal Die-Casting Foundries	23	7	0	*	16	*	0	0	*	0
331524	Aluminum Foundries, except Die-Casting	6	2	0	*	4	*	0	0	*	0
332	Fabricated Metal Products	441	143	*	2	276	5	0	0	Q	0
333	Machinery	147	76	0	3	64	4	0	0	*	0
334	Computer and Electronic Products	227	95	*	*	32	*	0	0	Q	0
334413	Semiconductors and Related Devices	68	47	*	*	19	*	0	0	Q	0
335	Electrical Equip., Appliances, and Components	87	40	0	Q	37	*	0	9	*	0
336	Transportation Equipment	307	159	*	1	133	3	0	0	11	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	77	27	0	*	40	*	0	0	9	0
3364	Aerospace Product and Parts	64	33	0	*	29	*	0	0	1	0
336411	Aircraft	18	9	0	*	8	*	0	0	*	0
337	Furniture and Related Products	51	Q	0	*	14	1	*	0	4	0
339	Miscellaneous	57	33	0	*	24	*	0	0	*	0
	Subtotal	20,188	2,674	33	83	7,866	3,150	899	240	5,991	747
	Miscellaneous Nonfuel Products	499	0	0	0	0	0	0	0	499	0
	Total	20,687	2,674	33	83	7,866	3,150	899	240	6,490	747

Northeast Census Region

311	Food	78	25	*	Q	50	1	0	0	*	0
3112	Grain and Oilseed Milling	4	2	0	*	2	*	0	0	*	0
311221	Wet Corn Milling and Starch Manufacturing	0	0	0	0	0	0	0	0	0	0
31131	Sugar Manufacturing	2	1	0	0	2	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Food	9	3	*	*	5	*	0	0	*	0
3115	Dairy Product Manufacturing	21	6	*	*	15	*	0	0	*	0
3116	Animal Slaughtering and Processing	12	4	0	*	7	*	0	0	*	0
312	Beverage and Tobacco Products	16	6	0	*	10	*	0	0	*	0
3121	Beverages	15	6	0	*	9	*	0	0	*	0
3122	Tobacco	1	*	0	0	1	*	0	0	0	0
313	Textile Mills	6	2	0	*	3	*	0	0	*	0
314	Textile Product Mills	Q	*	0	0	Q	*	0	0	*	0

315	Apparel	1	*	0	*	*	*	0	0	0	0
316	Leather and Allied Products	*	*	0	*	*	*	0	0	*	0
321	Wood Products	42	5	*	1	5	*	*	0	31	0
321113	Sawmills	8	2	*	1	*	*	0	0	5	0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	28	1	*	*	3	*	0	0	24	0
321219	Reconstituted Wood Products	15	*	*	*	3	*	0	0	12	0
3219	Other Wood Products	6	2	0	*	2	*	*	0	1	0
322	Paper	205	21	3	1	100	1	5	0	75	0
322110	Pulp Mills	D	*	0	0	4	*	0	0	D	0
322120	Paper Mills	123	9	2	*	59	*	2	0	51	0
322130	Paperboard Mills	18	4	0	*	14	*	0	0	1	0
323	Printing and Related Support	11	6	*	*	4	*	0	0	*	0
324	Petroleum and Coal Products	326	8	*	2	48	2	0	0	267	1
324110	Petroleum Refineries	123	6	*	*	33	2	0	0	81	0
324121	Asphalt Paving Mixture and Block	188	1	*	1	12	*	0	0	174	1
324122	Asphalt Shingle and Coating Materials	12	*	0	*	1	*	0	0	11	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	1	*	0	*	*	*	0	0	*	0
324199	All Other Petroleum and Coal Products Manufacturing	2	*	0	*	2	*	0	0	0	0
325	Chemicals	184	65	*	Q	97	3	0	0	19	2
325110	Petrochemicals	3	1	0	*	0	2	0	0	0	0
325120	Industrial Gases	34	33	0	*	1	*	0	0	1	1
325180	Other Basic Inorganic Chemical Manufacturing	16	5	0	*	11	*	0	0	*	0
325193	Ethyl Alcohol	3	*	0	0	3	*	0	0	0	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	*	*	0	0	*	*	0	0	0	0
325199	All Other Basic Organic Chemical Manufacturing	49	5	*	*	44	*	0	0	1	1
325211	Plastics Materials and Resins	13	4	0	*	7	*	0	0	1	0
325212	Synthetic Rubber	*	*	0	0	*	*	0	0	0	0
325220	Artificial and Synthetic Fibers and Filaments	*	*	0	0	*	*	0	0	*	0
325311	Nitrogenous Fertilizers	*	*	0	*	*	*	0	0	0	0
325312	Phosphatic Fertilizers	*	*	0	*	0	*	0	0	0	0
3254	Pharmaceuticals and Medicines	30	11	0	*	19	*	0	0	*	0
325412	Pharmaceutical Preparation	13	5	0	*	8	*	0	0	*	0
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	4	1	0	*	1	*	0	0	2	0
326	Plastics and Rubber Products	67	25	*	*	37	Q	0	0	Q	0
327	Nonmetallic Mineral Products	154	12	*	2	53	*	11	0	Q	0
327120	Clay Building Material and Refractories	5	1	0	*	2	*	1	0	*	0
327211	Flat Glass	6	1	0	0	5	*	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	4	1	0	*	3	*	0	0	*	0
327213	Glass Containers	7	2	0	*	6	*	0	0	*	0
327215	Glass Products from Purchased Glass	Q	1	0	*	1	*	0	0	Q	0
327310	Cements	27	3	0	*	17	*	3	0	3	0
327410	Lime	9	*	0	*	3	0	6	0	0	0
327420	Gypsum	11	1	*	*	10	*	0	0	0	0
327993	Mineral Wool	3	*	0	*	3	*	0	0	*	0
331	Primary Metals	149	36	0	*	68	*	123	2	3	83
331110	Iron and Steel Mills and Ferroalloys	92	14	0	*	38	*	123	*	*	83
3312	Steel Products from Purchased Steel	10	3	0	*	7	*	0	*	*	0
3313	Alumina and Aluminum Production and Processing	25	10	0	*	13	*	0	0	2	0
331314	Secondary Smelting and Alloying of Aluminum	1	*	0	0	1	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	10	2	0	*	8	*	0	0	*	0
331318	Other Aluminum Rolling, Drawing and Extruding	D	D	0	*	3	*	0	0	*	0
3314	Nonferrous Metal (except Aluminum) Production and Processing	15	6	0	*	8	*	0	1	*	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	3	1	0	*	2	*	0	*	0	0
3315	Foundries	7	3	0	*	3	*	*	0	*	0
331511	Iron Foundries	2	1	0	*	1	*	*	0	*	0

331523	Nonferrous Metal Die-Casting Foundries	1	*	0	0	*	*	0	0	*	0
331524	Aluminum Foundries, except Die-Casting	1	*	0	*	*	*	0	0	*	0
332	Fabricated Metal Products	63	23	*	*	38	*	0	0	*	0
333	Machinery	15	6	0	*	Q	Q	0	0	*	0
334	Computer and Electronic Products	23	15	*	*	8	*	0	0	*	0
334413	Semiconductors and Related Devices	14	8	*	*	5	*	0	0	*	0
335	Electrical Equip., Appliances, and Components	20	7	0	*	4	*	0	9	*	0
336	Transportation Equipment	28	12	0	*	14	Q	0	0	1	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	*	*	0	0	*	0	0	0	*	0
3364	Aerospace Product and Parts	10	3	0	*	6	*	0	0	1	0
336411	Aircraft	2	1	0	*	1	*	0	0	*	0
337	Furniture and Related Products	3	1	0	*	1	*	0	0	*	0
339	Miscellaneous	7	3	0	*	4	*	0	0	*	0
	Total	1,400	279	4	10	555	14	139	10	475	86

Midwest Census Region

311	Food	587	122	*	4	327	Q	90	1	40	0
3112	Grain and Oilseed Milling	282	45	*	1	135	*	66	0	35	0
311221	Wet Corn Milling and Starch Manufacturing	161	26	0	*	65	*	40	0	29	0
31131	Sugar Manufacturing	37	2	*	*	9	*	24	1	*	0
3114	Fruit and Vegetable Preserving and Specialty Food	31	9	0	*	21	*	0	0	*	0
3115	Dairy Product Manufacturing	66	18	*	1	42	Q	0	0	Q	0
3116	Animal Slaughtering and Processing	105	30	*	2	72	1	0	0	1	0
312	Beverage and Tobacco Products	22	10	0	*	12	*	0	0	*	0
3121	Beverages	22	10	0	*	12	*	0	0	*	0
3122	Tobacco	*	*	0	0	*	*	0	0	0	0
313	Textile Mills	2	1	0	*	1	*	0	0	0	0
314	Textile Product Mills	3	1	0	0	2	*	0	0	0	0
315	Apparel	*	*	0	0	*	0	0	0	0	0
316	Leather and Allied Products	2	*	0	*	Q	*	0	0	*	0
321	Wood Products	45	10	0	3	15	1	0	0	17	0
321113	Sawmills	6	1	0	*	2	*	0	0	2	0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	18	3	0	*	8	*	0	0	6	0
321219	Reconstituted Wood Products	14	2	0	*	6	*	0	0	6	0
3219	Other Wood Products	19	5	0	*	5	*	0	0	Q	0
322	Paper	248	39	*	*	118	*	4	0	86	0
322110	Pulp Mills	D	1	0	*	4	*	0	0	D	0
322120	Paper Mills	109	12	*	*	43	*	3	0	51	0
322130	Paperboard Mills	61	11	*	*	37	*	0	0	12	0
323	Printing and Related Support	24	13	0	0	11	*	0	0	*	0
324	Petroleum and Coal Products	1,017	35	*	2	164	3	132	7	674	1
324110	Petroleum Refineries	541	34	0	1	139	3	0	0	364	0
324121	Asphalt Paving Mixture and Block	241	1	*	1	16	*	0	0	222	0
324122	Asphalt Shingle and Coating Materials	92	1	0	*	3	*	0	0	87	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	2	1	0	*	2	*	0	0	*	0
324199	All Other Petroleum and Coal Products Manufacturing	141	-1	0	*	3	*	132	7	1	1
325	Chemicals	1,277	145	3	1	783	128	133	0	90	6
325110	Petrochemicals	1	*	0	0	*	*	0	0	*	0
325120	Industrial Gases	28	23	0	0	5	*	0	0	0	*
325180	Other Basic Inorganic Chemical Manufacturing	36	7	3	*	19	*	0	0	6	0
325193	Ethyl Alcohol	463	35	0	*	361	*	20	0	47	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	7	1	0	*	2	*	1	0	3	0
325199	All Other Basic Organic Chemical Manufacturing	47	12	0	*	21	4	0	0	11	0
325211	Plastics Materials and Resins	177	11	0	*	38	123	0	0	5	*
325212	Synthetic Rubber	1	*	0	0	*	*	0	0	0	0

325220	Artificial and Synthetic Fibers and Filaments	1	*	0	0	*	*	0	0	0	0
325311	Nitrogenous Fertilizers	177	D	0	*	155	*	0	0	D	0
325312	Phosphatic Fertilizers	113	4	*	*	2	*	112	0	*	6
3254	Pharmaceuticals and Medicines	54	17	0	*	35	*	*	0	2	*
325412	Pharmaceutical Preparation	28	7	0	*	20	*	0	0	Q	0
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	*	*	0	*	*	*	0	0	0	0
326	Plastics and Rubber Products	136	102	*	*	34	Q	0	0	*	0
327	Nonmetallic Mineral Products	294	48	0	3	105	1	54	1	Q	0
327120	Clay Building Material and Refractories	7	1	0	*	6	*	0	0	*	0
327211	Flat Glass	16	2	0	*	14	*	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	8	1	0	*	6	*	0	0	*	0
327213	Glass Containers	15	3	0	*	12	*	0	0	*	0
327215	Glass Products from Purchased Glass	8	5	0	*	3	*	0	0	*	0
327310	Cements	82	11	0	1	12	*	28	*	29	0
327410	Lime	46	2	0	*	11	*	26	*	6	0
327420	Gypsum	12	1	0	*	11	*	0	0	*	0
327993	Mineral Wool	23	7	0	*	15	*	0	*	*	0
331	Primary Metals	760	120	*	3	350	3	79	208	12	14
331110	Iron and Steel Mills and Ferroalloys	605	70	*	2	258	*	79	199	12	14
3312	Steel Products from Purchased Steel	20	7	0	*	12	*	0	0	*	0
3313	Alumina and Aluminum Production and Processing	56	16	0	*	39	*	0	0	*	0
331314	Secondary Smelting and Alloying of Aluminum	9	1	0	*	8	*	0	0	*	0
331315	Aluminum Sheet, Plate and Foils	34	8	0	*	25	*	0	0	*	0
331318	Other Aluminum Rolling, Drawing and Extruding	D	D	0	*	6	*	0	0	*	0
3314	Nonferrous Metal (except Aluminum) Production and Processing	21	5	0	*	13	1	0	2	*	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	1	*	0	*	1	*	0	0	*	0
3315	Foundries	57	21	0	*	28	*	*	8	*	*
331511	Iron Foundries	26	11	0	*	8	*	*	8	*	*
331523	Nonferrous Metal Die-Casting Foundries	15	4	0	*	10	*	0	0	*	0
331524	Aluminum Foundries, except Die-Casting	4	1	0	*	3	*	0	0	*	0
332	Fabricated Metal Products	133	48	0	*	82	2	0	0	*	0
333	Machinery	84	41	0	Q	40	1	0	0	*	0
334	Computer and Electronic Products	128	Q	0	*	5	*	0	0	Q	0
334413	Semiconductors and Related Devices	3	2	0	*	1	*	0	0	*	0
335	Electrical Equip., Appliances, and Components	28	13	0	*	14	*	0	0	*	0
336	Transportation Equipment	155	78	0	*	69	1	0	0	6	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	43	13	0	*	25	*	0	0	5	0
3364	Aerospace Product and Parts	17	8	0	*	8	*	0	0	1	0
336411	Aircraft	4	2	0	*	2	*	0	0	*	0
337	Furniture and Related Products	15	7	0	*	7	*	0	0	Q	0
339	Miscellaneous	29	16	0	*	14	*	0	0	*	0
	Total	4,989	873	3	18	2,154	147	491	218	1,105	21

South Census Region

311	Food	386	79	*	3	201	2	*	0	100	0
3112	Grain and Oilseed Milling	47	11	*	*	30	*	*	0	6	0
311221	Wet Corn Milling and Starch Manufacturing	8	1	0	*	4	*	*	0	3	0
31131	Sugar Manufacturing	105	2	0	*	10	*	0	0	93	0
3114	Fruit and Vegetable Preserving and Specialty Food	28	7	0	*	20	*	0	0	*	0
3115	Dairy Product Manufacturing	38	7	0	1	30	*	0	0	*	0
3116	Animal Slaughtering and Processing	107	36	0	1	69	1	0	0	1	0
312	Beverage and Tobacco Products	Q	26	0	*	Q	*	1	0	*	0
3121	Beverages	Q	23	0	*	Q	*	1	0	*	0
3122	Tobacco	6	2	0	*	4	*	0	0	*	0
313	Textile Mills	47	26	0	*	19	*	*	0	2	0

314	Textile Product Mills	15	8	0	*	7	*	0	0	*	0
315	Apparel	2	1	0	*	1	*	0	0	*	0
316	Leather and Allied Products	*	*	0	*	*	*	0	0	*	0
321	Wood Products	237	40	0	6	43	1	0	0	146	0
321113	Sawmills	126	17	0	4	12	*	0	0	93	0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	75	10	0	1	19	*	0	0	45	0
321219	Reconstituted Wood Products	40	6	0	*	11	*	0	0	22	0
3219	Other Wood Products	29	11	0	1	Q	*	0	0	7	0
322	Paper	1,386	87	3	3	342	2	21	0	927	0
322110	Pulp Mills	306	3	1	1	48	*	2	0	252	0
322120	Paper Mills	184	22	*	1	64	*	8	0	88	0
322130	Paperboard Mills	818	37	2	2	201	*	11	0	565	0
323	Printing and Related Support	14	9	0	*	5	*	0	0	0	0
324	Petroleum and Coal Products	2,205	96	1	4	606	13	29	0	1,526	70
324110	Petroleum Refineries	1,845	92	0	2	567	12	0	0	1,172	0
324121	Asphalt Paving Mixture and Block	188	2	1	2	19	*	0	0	164	0
324122	Asphalt Shingle and Coating Materials	113	1	0	*	6	*	0	0	106	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	12	2	0	*	11	*	0	0	*	0
324199	All Other Petroleum and Coal Products Manufacturing	46	*	0	*	3	*	29	0	84	70
325	Chemicals	5,810	263	19	8	2,343	2,946	37	0	760	567
325110	Petrochemicals	1,945	26	0	1	405	1,583	*	0	373	442
325120	Industrial Gases	D	24	0	*	D	1	0	0	D	D
325180	Other Basic Inorganic Chemical Manufacturing	401	64	19	*	189	24	1	0	103	0
325193	Ethyl Alcohol	12	1	0	*	11	*	0	0	*	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	336	15	0	*	120	170	2	0	29	0
325199	All Other Basic Organic Chemical Manufacturing	D	45	0	2	333	288	29	0	87	D
325211	Plastics Materials and Resins	1,385	24	0	1	541	815	0	0	89	84
325212	Synthetic Rubber	47	4	0	*	26	2	2	0	13	0
325220	Artificial and Synthetic Fibers and Filaments	24	8	0	*	16	*	0	0	*	0
325311	Nitrogenous Fertilizers	386	8	0	*	377	*	0	0	*	0
325312	Phosphatic Fertilizers	9	4	0	3	1	*	1	0	*	0
3254	Pharmaceuticals and Medicines	25	12	0	*	12	*	0	0	*	0
325412	Pharmaceutical Preparation	14	7	0	*	7	*	0	0	*	0
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	1	1	0	*	1	*	0	0	*	0
326	Plastics and Rubber Products	134	96	0	*	32	2	0	0	Q	0
327	Nonmetallic Mineral Products	439	111	0	10	185	1	61	3	67	0
327120	Clay Building Material and Refractories	26	3	0	*	20	*	0	0	2	0
327211	Flat Glass	17	2	0	*	14	*	0	0	*	0
327212	Other Pressed and Blown Glass and Glassware	13	4	0	*	9	*	0	0	*	0
327213	Glass Containers	19	4	0	*	15	*	0	0	*	0
327215	Glass Products from Purchased Glass	9	6	0	*	4	*	0	0	*	0
327310	Cements	169	19	0	2	49	*	41	2	58	0
327410	Lime	37	2	0	1	11	*	17	1	5	0
327420	Gypsum	40	3	0	*	36	*	0	0	*	0
327993	Mineral Wool	17	5	0	*	12	*	*	*	*	0
331	Primary Metals	398	164	0	5	207	1	10	5	7	*
331110	Iron and Steel Mills and Ferroalloys	227	95	0	1	116	*	10	*	4	0
3312	Steel Products from Purchased Steel	19	7	0	2	10	*	0	0	*	0
3313	Alumina and Aluminum Production and Processing	102	39	0	1	60	*	0	0	3	*
331314	Secondary Smelting and Alloying of Aluminum	11	1	0	*	10	*	0	0	*	0
331315	Aluminum Sheet, Plate and Foils	35	9	0	*	26	*	0	0	*	*
331318	Other Aluminum Rolling, Drawing and Extruding	D	D	0	*	7	*	0	0	*	0
3314	Nonferrous Metal (except Aluminum) Production and Processing	31	16	0	*	12	*	0	3	*	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	12	9	0	*	2	*	0	0	*	0
3315	Foundries	19	8	0	*	9	*	*	2	*	0

331511	Iron Foundries	8	4	0	*	3	*	*	2	*	0
331523	Nonferrous Metal Die-Casting Foundries	6	2	0	*	4	*	0	0	*	0
331524	Aluminum Foundries, except Die-Casting	1	*	0	*	*	*	0	0	0	0
332	Fabricated Metal Products	Q	47	0	Q	Q	1	0	0	Q	0
333	Machinery	35	21	0	1	12	Q	0	0	*	0
334	Computer and Electronic Products	34	26	0	*	8	*	0	0	*	0
334413	Semiconductors and Related Devices	24	19	0	*	5	*	0	0	*	0
335	Electrical Equip., Appliances, and Components	35	18	0	*	17	*	0	0	*	0
336	Transportation Equipment	98	55	*	1	37	1	0	0	4	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	32	13	0	*	15	*	0	0	4	0
3364	Aerospace Product and Parts	17	11	0	*	5	*	0	0	*	0
336411	Aircraft	6	4	0	*	2	*	0	0	*	0
337	Furniture and Related Products	Q	Q	0	*	4	*	*	0	3	0
339	Miscellaneous	12	10	0	*	2	*	0	0	*	0
	Total	11,723	1,205	24	42	4,389	2,972	159	8	3,562	637

West Census Region

311	Food	184	45	*	7	127	*	3	*	2	0
3112	Grain and Oilseed Milling	6	3	*	*	3	*	0	0	*	0
311221	Wet Corn Milling and Starch Manufacturing	*	*	0	0	*	*	0	0	0	0
31131	Sugar Manufacturing	23	1	0	*	19	*	3	*	*	0
3114	Fruit and Vegetable Preserving and Specialty Food	54	11	0	*	42	*	0	0	1	0
3115	Dairy Product Manufacturing	46	13	0	*	32	*	0	0	*	0
3116	Animal Slaughtering and Processing	22	6	0	*	15	*	0	0	*	0
312	Beverage and Tobacco Products	25	10	0	*	15	*	0	0	*	0
3121	Beverages	25	10	0	*	15	*	0	0	*	0
3122	Tobacco	*	*	0	0	*	0	0	0	0	0
313	Textile Mills	2	1	0	0	1	*	0	0	*	0
314	Textile Product Mills	2	1	0	0	1	*	0	0	0	0
315	Apparel	*	*	0	0	*	0	0	0	0	0
316	Leather and Allied Products	*	*	0	0	*	*	0	0	0	0
321	Wood Products	92	15	0	2	17	1	0	0	57	0
321113	Sawmills	59	7	0	2	4	*	0	0	46	0
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	24	5	0	*	8	*	0	0	10	0
321219	Reconstituted Wood Products	4	2	0	*	2	*	0	0	1	0
3219	Other Wood Products	8	3	0	*	4	*	0	0	1	0
322	Paper	165	23	2	*	57	*	2	0	81	0
322110	Pulp Mills	7	*	1	*	*	0	0	0	6	0
322120	Paper Mills	59	13	0	*	22	*	0	0	25	0
322130	Paperboard Mills	88	8	1	*	27	*	2	0	51	0
323	Printing and Related Support	5	3	0	0	2	*	0	0	0	0
324	Petroleum and Coal Products	916	21	*	1	293	10	7	0	586	Q
324110	Petroleum Refineries	805	19	*	*	282	10	0	0	494	0
324121	Asphalt Paving Mixture and Block	76	1	*	*	7	*	0	0	69	Q
324122	Asphalt Shingle and Coating Materials	25	*	0	*	1	*	0	0	24	0
324191	Petroleum Lubricating Oil and Grease Manufacturing	*	*	0	0	*	*	0	0	0	0
324199	All Other Petroleum and Coal Products Manufacturing	9	*	0	0	2	*	7	0	0	0
325	Chemicals	188	38	0	*	94	1	31	0	25	2
325110	Petrochemicals	*	*	0	0	0	0	0	0	0	0
325120	Industrial Gases	36	10	0	0	27	*	0	0	0	2
325180	Other Basic Inorganic Chemical Manufacturing	55	11	0	*	18	*	24	0	2	0
325193	Ethyl Alcohol	10	1	0	*	8	*	0	0	2	0
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	20	1	0	*	2	*	6	0	11	0
325199	All Other Basic Organic Chemical Manufacturing	30	2	0	*	20	*	0	0	7	0
325211	Plastics Materials and Resins	3	1	0	*	1	*	0	0	*	0

325212	Synthetic Rubber	*	*	0	0	*	*	0	0	*	0
325220	Artificial and Synthetic Fibers and Filaments	*	*	0	0	*	*	0	0	0	0
325311	Nitrogenous Fertilizers	10	2	0	*	6	1	0	0	*	0
325312	Phosphatic Fertilizers	3	1	0	*	2	*	0	0	*	0
3254	Pharmaceuticals and Medicines	12	6	0	*	5	*	0	0	*	0
325412	Pharmaceutical Preparation	6	4	0	*	3	*	0	0	0	0
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	2	1	0	*	1	*	0	0	*	0
326	Plastics and Rubber Products	23	18	0	0	Q	*	0	0	*	0
327	Nonmetallic Mineral Products	281	39	0	2	76	1	67	3	Q	*
327120	Clay Building Material and Refractories	2	*	0	*	2	*	0	0	*	0
327211	Flat Glass	5	1	0	0	4	*	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	1	*	0	*	1	*	0	0	0	0
327213	Glass Containers	12	3	0	*	9	*	0	0	*	0
327215	Glass Products from Purchased Glass	2	1	0	0	1	*	0	0	*	0
327310	Cements	84	11	0	*	12	*	49	2	10	0
327410	Lime	11	1	0	*	1	*	7	1	2	0
327420	Gypsum	15	1	0	*	14	*	0	0	*	0
327993	Mineral Wool	4	2	0	*	2	*	0	0	*	0
331	Primary Metals	58	20	0	*	34	*	1	*	1	*
331110	Iron and Steel Mills and Ferroalloys	18	7	0	*	9	*	1	0	1	0
3312	Steel Products from Purchased Steel	7	2	0	*	5	*	0	0	*	*
3313	Alumina and Aluminum Production and Processing	10	3	0	*	7	*	0	0	*	0
331314	Secondary Smelting and Alloying of Aluminum	1	*	0	*	1	*	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	5	2	0	*	3	*	0	0	0	0
331318	Other Aluminum Rolling, Drawing and Extruding	3	1	0	*	2	*	0	0	*	0
3314	Nonferrous Metal (except Aluminum) Production and Processing	18	7	0	*	11	*	*	0	*	0
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	13	5	0	*	9	*	*	0	*	0
3315	Foundries	5	2	0	*	3	*	0	*	*	0
331511	Iron Foundries	2	*	0	*	1	*	0	*	*	0
331523	Nonferrous Metal Die-Casting Foundries	1	*	0	*	1	*	0	0	*	0
331524	Aluminum Foundries, except Die-Casting	*	*	0	0	*	*	0	0	*	0
332	Fabricated Metal Products	39	24	0	*	14	1	0	0	*	0
333	Machinery	13	8	0	*	4	Q	0	0	*	0
334	Computer and Electronic Products	42	29	0	*	12	*	0	0	Q	0
334413	Semiconductors and Related Devices	28	18	0	*	8	*	0	0	Q	0
335	Electrical Equip., Appliances, and Components	4	2	0	*	Q	*	0	0	*	0
336	Transportation Equipment	26	14	0	*	12	*	0	0	*	0
336110	Automobile and Light Duty Motor Vehicle Manufacturing	2	1	0	*	1	*	0	0	*	0
3364	Aerospace Product and Parts	21	10	0	*	10	*	0	0	*	0
336411	Aircraft	6	3	0	*	3	*	0	0	*	0
337	Furniture and Related Products	3	1	0	0	1	*	0	0	*	0
339	Miscellaneous	9	5	0	*	3	*	0	0	*	0
	Total	2,076	316	2	14	769	17	110	3	849	3

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, *2022 Manufacturing Energy Consumption Survey*, and Office of Energy Production, Conversion & Delivery, Form EIA-810, *Monthly Refinery Report* for 2022

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 feedstock 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.

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

^b Total is the sum of all the listed energy sources, including *Other*, minus the *Shipments of energy sources produced onsite*. It is the total amount of first use of energy for all (fuel and nonfuel) purposes.

^c 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 Distillate fuel oil includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.

^e 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.

^f 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).

^g *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 *i*.

^h *Shipments of energy sources produced onsite* are those shipments produced or transformed onsite from the nonfuel use of other energy sources. For example, at an establishment that processes coal to make coke for later use, the entire quantity of coal is counted as first use. Any onsite consumption of coke is not counted as first use because it would duplicate the coal use. If some of the coke is then sold to another establishment, that second establishment will consider this coke to be a shipment of an offsite-produced energy source. Hence, the second establishment will count this coke as its first use, thereby resulting in double counting. In order to eliminate the double counting, the energy equivalent of the coke shipment must be subtracted from first use.

ⁱ 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* (that is, 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%.

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).

Released: August 2025
Next MECS will be fielded in 2027

RSE Table 1.2 Relative standard errors for table 1.2
Unit: Percentage

NAICS code ^a	Subsector and industry	Total ^o	Net electricity ^c	Residual fuel oil	Distillate fuel oil ^d	Natural gas ^e	HGL (excluding natural gasoline) ^f	Coal	Coke and breeze	Other ^g	Shipments of energy sources produced onsite ⁿ
Total United States											
311	Food	2.4	3.2	40.5	20.0	3.5	36.4	0.0	0.0	1.5	X
3112	Grain and Oilseed Milling	2.4	2.9	15.6	6.0	4.1	16.5	0.0	X	0.6	X
311221	Wet Corn Milling and Starch Manufacturing	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
31131	Sugar Manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X
3114	Fruit and Vegetable Preserving and Specialty Food	2.7	3.0	0.0	16.5	3.0	11.7	X	X	19.0	X
3115	Dairy Product Manufacturing	3.9	4.0	74.0	21.3	3.4	77.0	X	X	59.4	X
3116	Animal Slaughtering and Processing	4.3	4.0	0.0	5.0	5.0	25.5	X	X	9.6	X
312	Beverage and Tobacco Products	40.1	17.8	X	22.2	49.8	9.7	0.0	X	36.7	X
3121	Beverages	41.2	18.7	X	25.0	50.9	10.8	0.0	X	36.9	X
3122	Tobacco	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
313	Textile Mills	6.6	6.5	X	78.1	10.5	6.4	42.2	X	12.8	X
314	Textile Product Mills	10.9	13.3	X	54.8	13.5	55.3	X	X	98.7	X
315	Apparel	11.2	11.3	X	96.8	17.9	27.5	X	X	0.0	X
316	Leather and Allied Products	33.0	4.9	X	34.7	44.4	13.6	X	X	91.3	X
321	Wood Products	2.7	6.5	37.3	10.3	7.2	12.3	99.0	X	2.5	X
321113	Sawmills	2.2	2.1	38.7	4.7	7.5	8.0	X	X	2.7	X
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	1.6	2.8	0.0	22.1	2.0	8.1	X	X	1.6	X
321219	Reconstituted Wood Products	1.1	3.2	0.0	0.0	2.7	26.6	X	X	0.1	X
3219	Other Wood Products	15.9	20.7	X	27.2	26.0	16.4	99.0	X	26.5	X
322	Paper	0.5	2.6	0.9	0.4	1.4	16.6	0.9	X	0.1	X
322110	Pulp Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X
322120	Paper Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X
322130	Paperboard Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X
323	Printing and Related Support	11.5	12.3	99.0	58.4	13.8	22.2	X	X	88.6	X
324	Petroleum and Coal Products	0.7	0.1	15.7	3.0	0.2	0.2	0.0	0.0	0.9	1.0
324110	Petroleum Refineries	0.0	0.0	0.0	0.0	0.0	0.0	X	X	0.0	X
324121	Asphalt Paving Mixture and Block	3.9	3.8	17.4	5.4	4.0	6.1	X	X	4.1	39.4
324122	Asphalt Shingle and Coating Materials	4.9	1.1	X	0.0	0.6	2.3	X	X	5.2	X
324191	Petroleum Lubricating Oil and Grease Manufacturing	10.4	1.8	X	4.1	12.5	9.3	X	X	0.3	X
324199	All Other Petroleum and Coal Products Manufacturing	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0	0.0	0.0
325	Chemicals	1.2	3.4	0.0	8.3	2.3	0.1	0.7	X	5.0	0.2
325110	Petrochemicals	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	0.0
325120	Industrial Gases	D	16.9	X	7.2	D	1.2	X	X	D	D
325180	Other Basic Inorganic Chemical Manufacturing	8.7	2.9	0.0	23.5	3.7	0.2	0.0	X	38.1	X
325193	Ethyl Alcohol	2.5	2.6	X	3.1	2.7	0.1	0.0	X	11.9	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
325199	All Other Basic Organic Chemical Manufacturing	D	2.5	0.0	4.6	2.9	0.1	0.1	X	3.7	D
325211	Plastics Materials and Resins	0.5	7.0	X	4.0	1.1	0.1	X	X	1.7	0.0
325212	Synthetic Rubber	0.1	0.5	X	0.0	0.1	0.0	0.0	X	0.0	X

31131	Sugar Manufacturing	0.0	0.0	X	X	0.0	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Food	8.5	10.1	0.0	0.9	9.4	4.4	X	X	96.3	X
3115	Dairy Product Manufacturing	4.0	4.7	19.6	0.7	4.7	10.6	X	X	2.6	X
3116	Animal Slaughtering and Processing	4.2	4.3	X	21.6	5.2	28.2	X	X	0.0	X
312	Beverage and Tobacco Products	17.6	14.0	X	20.5	20.4	23.3	X	X	0.0	X
3121	Beverages	18.5	14.2	X	20.5	22.0	23.6	X	X	0.0	X
3122	Tobacco	0.0	0.0	X	X	0.0	0.0	X	X	X	X
313	Textile Mills	13.8	13.0	X	80.2	17.6	0.3	X	X	76.0	X
314	Textile Product Mills	55.8	58.7	X	X	67.6	66.2	X	X	99.3	X
315	Apparel	41.5	44.3	X	32.0	56.7	0.0	X	X	X	X
316	Leather and Allied Products	11.0	5.9	X	37.3	12.6	41.6	X	X	95.9	X
321	Wood Products	2.4	7.5	37.3	9.4	12.5	28.7	99.0	X	0.8	X
321113	Sawmills	1.5	2.3	38.7	12.6	5.9	17.2	X	X	0.2	X
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	2.5	20.0	0.0	7.3	19.9	16.5	X	X	0.1	X
321219	Reconstituted Wood Products	4.7	28.0	0.0	0.0	20.7	0.0	X	X	0.0	X
3219	Other Wood Products	12.3	14.3	X	52.5	11.9	50.1	99.0	X	21.7	X
322	Paper	3.2	8.8	2.5	0.3	4.8	19.5	0.0	X	0.1	X
322110	Pulp Mills	D	0.0	X	X	0.0	0.0	X	X	D	X
322120	Paper Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X
322130	Paperboard Mills	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
323	Printing and Related Support	23.8	23.9	99.0	62.6	27.9	51.2	X	X	92.9	X
324	Petroleum and Coal Products	4.2	0.9	29.5	2.8	3.2	1.0	X	X	4.9	0.0
324110	Petroleum Refineries	0.0	0.0	0.0	0.0	0.0	0.0	X	X	0.0	X
324121	Asphalt Paving Mixture and Block	7.3	5.9	31.9	3.6	13.3	12.4	X	X	7.6	0.0
324122	Asphalt Shingle and Coating Materials	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
324191	Petroleum Lubricating Oil and Grease Manufacturing	3.8	4.8	X	0.0	4.1	31.7	X	X	0.0	X
324199	All Other Petroleum and Coal Products Manufacturing	0.0	0.0	X	0.0	0.0	0.0	X	X	X	X
325	Chemicals	9.9	23.6	0.0	62.3	5.6	4.9	X	X	26.1	0.0
325110	Petrochemicals	0.0	0.0	X	0.0	X	0.0	X	X	X	X
325120	Industrial Gases	44.2	45.4	X	0.0	2.5	0.0	X	X	0.0	0.0
325180	Other Basic Inorganic Chemical Manufacturing	18.4	1.7	X	33.7	26.6	5.2	X	X	0.1	X
325193	Ethyl Alcohol	0.0	0.0	X	X	0.0	0.0	X	X	X	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	0.0	X	X	0.0	0.0	X	X	X	X
325199	All Other Basic Organic Chemical Manufacturing	3.5	10.5	0.0	10.2	2.7	23.5	X	X	0.1	0.0
325211	Plastics Materials and Resins	5.6	14.6	X	0.5	3.8	26.7	X	X	0.1	X
325212	Synthetic Rubber	18.6	35.6	X	X	12.7	0.0	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	0.0	0.0	X	X	0.0	0.0	X	X	0.0	X
325311	Nitrogenous Fertilizers	0.0	0.0	X	0.0	0.0	0.0	X	X	X	X
325312	Phosphatic Fertilizers	0.0	0.0	X	0.0	X	0.0	X	X	X	X
3254	Pharmaceuticals and Medicines	13.9	17.2	X	2.5	12.8	0.5	X	X	0.0	X
325412	Pharmaceutical Preparation	19.5	17.3	X	0.0	21.6	0.6	X	X	0.0	X
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
326	Plastics and Rubber Products	25.0	26.6	92.1	49.8	30.3	87.2	X	X	83.1	X
327	Nonmetallic Mineral Products	44.7	7.1	0.0	43.8	4.0	41.9	0.0	X	91.4	X
327120	Clay Building Material and Refractories	6.2	1.9	X	0.1	11.4	1.4	0.0	X	0.2	X
327211	Flat Glass	0.0	0.0	X	X	0.0	0.0	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	1.0	1.7	X	0.0	0.8	59.2	X	X	0.0	X
327213	Glass Containers	0.1	0.1	X	0.0	0.1	0.0	X	X	0.0	X
327215	Glass Products from Purchased Glass	92.5	2.9	X	72.1	2.9	1.7	X	X	95.1	X

327310	Cements	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
327410	Lime	0.0	0.0	X	0.0	0.0	X	0.0	X	X	X
327420	Gypsum	0.0	0.0	0.0	0.0	0.0	0.0	X	X	X	X
327993	Mineral Wool	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
331	Primary Metals	0.3	0.7	X	1.5	0.5	2.0	0.1	0.0	0.4	0.0
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3312	Steel Products from Purchased Steel	4.4	5.6	X	39.9	5.1	13.1	X	0.0	0.1	X
3313	Alumina and Aluminum Production and Processing	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
331314	Secondary Smelting and Alloying of Aluminum	0.0	0.0	X	X	0.0	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
331318	Other Aluminum Rolling, Drawing and Extruding	D	D	X	0.0	0.0	0.0	X	X	0.0	X
3314	Nonferrous Metal (except Aluminum) Production and Processing	1.4	2.4	X	0.9	1.8	9.6	X	0.0	11.5	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.4	0.4	X	0.0	0.5	0.1	X	0.0	X	X
3315	Foundries	2.9	3.5	X	15.2	2.6	1.4	66.3	X	3.5	X
331511	Iron Foundries	1.9	2.9	X	29.9	0.5	1.9	66.3	X	0.0	X
331523	Nonferrous Metal Die-Casting Foundries	3.0	3.8	X	X	2.9	0.2	X	X	71.1	X
331524	Aluminum Foundries, except Die-Casting	3.5	1.8	X	38.1	4.7	5.2	X	X	0.0	X
332	Fabricated Metal Products	33.2	24.8	99.5	63.2	44.7	56.2	X	X	57.8	X
333	Machinery	37.4	31.5	X	90.9	53.8	88.5	X	X	98.1	X
334	Computer and Electronic Products	8.8	9.9	0.0	11.1	8.8	74.5	X	X	93.8	X
334413	Semiconductors and Related Devices	2.2	2.9	0.0	0.0	1.2	0.0	X	X	0.0	X
335	Electrical Equip., Appliances, and Components	12.7	22.1	X	6.5	25.4	32.5	X	0.0	94.4	X
336	Transportation Equipment	19.1	22.5	X	8.2	18.0	67.4	X	X	33.8	X
336110	Automobile and Light Duty Motor Vehicle Manufacturing	0.0	0.0	X	X	0.0	X	X	X	0.0	X
3364	Aerospace Product and Parts	5.1	11.2	X	0.0	3.7	13.5	X	X	0.0	X
336411	Aircraft	11.3	36.7	X	0.0	0.0	0.0	X	X	0.0	X
337	Furniture and Related Products	27.0	30.8	X	99.0	33.1	67.2	X	X	56.7	X
339	Miscellaneous	31.1	25.7	X	72.4	41.6	64.6	X	X	72.2	X
	Total	5.6	6.7	8.5	15.4	4.3	16.6	0.1	0.0	14.8	0.0

Midwest Census Region

311	Food	4.1	5.4	51.3	11.6	6.3	71.1	0.0	0.0	5.1	X
3112	Grain and Oilseed Milling	2.8	2.8	65.8	0.9	5.1	7.9	0.0	X	0.1	X
311221	Wet Corn Milling and Starch Manufacturing	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
31131	Sugar Manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X
3114	Fruit and Vegetable Preserving and Specialty Food	3.3	4.4	X	41.4	3.9	39.0	X	X	71.9	X
3115	Dairy Product Manufacturing	8.7	6.6	79.2	35.3	8.0	98.4	X	X	70.7	X
3116	Animal Slaughtering and Processing	8.3	9.1	0.0	8.7	8.7	48.6	X	X	0.5	X
312	Beverage and Tobacco Products	6.5	9.2	X	3.8	6.4	38.8	X	X	97.2	X
3121	Beverages	6.5	9.2	X	3.8	6.4	38.8	X	X	97.2	X
3122	Tobacco	0.0	0.0	X	X	0.0	0.0	X	X	X	X
313	Textile Mills	7.7	7.7	X	0.0	8.9	34.1	X	X	X	X
314	Textile Product Mills	36.6	32.4	X	X	43.6	63.7	X	X	X	X
315	Apparel	43.8	42.6	X	X	46.8	X	X	X	X	X
316	Leather and Allied Products	46.6	8.2	X	0.0	53.8	7.6	X	X	1.9	X
321	Wood Products	10.4	4.7	X	38.9	4.2	21.7	X	X	26.1	X
321113	Sawmills	7.6	7.1	X	34.2	17.7	6.8	X	X	8.7	X
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	1.2	2.7	X	22.7	1.7	17.3	X	X	0.2	X
321219	Reconstituted Wood Products	0.6	0.6	X	0.0	1.2	9.5	X	X	0.1	X

3219	Other Wood Products	24.1	8.7	X	42.9	11.6	32.9	X	X	52.7	X
322	Paper	2.8	6.0	0.0	1.3	4.5	30.9	7.1	X	0.1	X
322110	Pulp Mills	D	0.0	X	0.0	0.0	0.0	X	X	D	X
322120	Paper Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X
322130	Paperboard Mills	0.0	0.0	0.0	0.0	0.0	0.0	X	X	0.0	X
323	Printing and Related Support	20.5	24.4	X	X	21.0	10.3	X	X	6.9	X
324	Petroleum and Coal Products	2.0	0.5	0.0	1.2	0.5	0.3	0.0	0.0	3.0	0.0
324110	Petroleum Refineries	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
324121	Asphalt Paving Mixture and Block	8.5	17.2	0.0	2.3	4.8	7.9	X	X	9.1	X
324122	Asphalt Shingle and Coating Materials	1.5	1.7	X	0.0	0.6	5.2	X	X	1.5	X
324191	Petroleum Lubricating Oil and Grease Manufacturing	1.8	1.5	X	0.3	2.0	4.5	X	X	20.0	X
324199	All Other Petroleum and Coal Products Manufacturing	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0	0.0	0.0
325	Chemicals	4.8	3.8	0.0	7.7	7.6	0.6	0.1	X	6.6	0.1
325110	Petrochemicals	0.0	0.0	X	X	0.0	0.0	X	X	0.0	X
325120	Industrial Gases	4.3	5.2	X	X	1.5	0.0	X	X	X	0.0
325180	Other Basic Inorganic Chemical Manufacturing	13.6	5.4	0.0	37.5	18.6	13.7	X	X	14.8	X
325193	Ethyl Alcohol	2.6	2.7	X	3.3	2.9	0.1	0.0	X	12.3	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
325199	All Other Basic Organic Chemical Manufacturing	1.9	2.5	X	16.3	3.6	1.7	X	X	1.9	X
325211	Plastics Materials and Resins	0.8	3.1	X	24.0	3.2	0.1	X	X	0.6	0.0
325212	Synthetic Rubber	0.0	0.0	X	X	0.0	0.0	X	X	X	X
325220	Artificial and Synthetic Fibers and Filaments	0.0	0.0	X	X	0.0	0.0	X	X	X	X
325311	Nitrogenous Fertilizers	0.0	D	X	0.0	0.0	0.0	X	X	D	X
325312	Phosphatic Fertilizers	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	0.0
3254	Pharmaceuticals and Medicines	18.6	6.9	X	11.6	27.9	33.1	96.1	X	41.8	96.1
325412	Pharmaceutical Preparation	33.3	6.7	X	14.6	45.8	63.2	X	X	67.2	X
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	0.0	0.0	X	0.0	0.0	0.0	X	X	X	X
326	Plastics and Rubber Products	31.8	40.4	99.0	87.5	32.4	64.7	X	X	96.1	X
327	Nonmetallic Mineral Products	15.6	4.6	X	22.0	5.9	38.8	0.0	15.6	54.0	X
327120	Clay Building Material and Refractories	4.9	7.2	X	6.8	4.9	4.2	X	X	15.1	X
327211	Flat Glass	0.3	2.3	X	0.0	0.1	0.0	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	1.1	0.9	X	0.0	1.3	0.0	X	X	0.0	X
327213	Glass Containers	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
327215	Glass Products from Purchased Glass	1.9	2.2	X	0.0	2.9	19.3	X	X	1.3	X
327310	Cements	9.8	5.0	X	6.7	0.1	0.0	0.0	77.0	24.9	X
327410	Lime	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0	0.0	X
327420	Gypsum	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
327993	Mineral Wool	32.7	26.9	X	0.0	34.9	79.4	X	0.0	0.0	X
331	Primary Metals	0.2	0.3	0.0	0.3	0.2	6.3	0.0	0.5	0.1	0.0
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3312	Steel Products from Purchased Steel	2.9	1.7	X	4.1	4.1	15.6	X	X	0.9	X
3313	Alumina and Aluminum Production and Processing	0.4	0.2	X	0.0	0.3	29.5	X	X	0.1	X
331314	Secondary Smelting and Alloying of Aluminum	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
331315	Aluminum Sheet, Plate and Foils	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
331318	Other Aluminum Rolling, Drawing and Extruding	D	D	X	0.0	1.7	42.6	X	X	0.1	X
3314	Nonferrous Metal (except Aluminum) Production and Processing	4.7	1.7	X	11.3	3.1	7.2	X	49.0	0.0	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
3315	Foundries	1.9	1.8	X	3.4	1.7	9.8	0.0	9.7	3.2	0.0
331511	Iron Foundries	3.5	3.2	X	0.5	1.6	3.3	0.0	9.7	14.1	0.0

331523	Nonferrous Metal Die-Casting Foundries	3.4	3.3	X	0.0	3.7	25.7	X	X	0.3	X
331524	Aluminum Foundries, except Die-Casting	3.9	5.1	X	0.0	3.9	38.3	X	X	85.7	X
332	Fabricated Metal Products	16.5	13.9	X	62.3	20.9	35.3	X	X	62.4	X
333	Machinery	16.1	17.7	X	63.9	17.2	32.2	X	X	35.0	X
334	Computer and Electronic Products	42.7	55.2	X	41.6	27.7	47.1	X	X	54.0	X
334413	Semiconductors and Related Devices	2.9	2.2	X	0.0	4.0	0.1	X	X	7.9	X
335	Electrical Equip., Appliances, and Components	24.4	22.8	X	90.4	28.8	38.6	X	X	47.6	X
336	Transportation Equipment	8.8	10.6	X	18.3	9.9	41.1	X	X	2.9	X
336110	Automobile and Light Duty Motor Vehicle Manufacturing	0.1	0.1	X	0.0	0.1	0.0	X	X	0.1	X
3364	Aerospace Product and Parts	4.0	7.9	X	5.9	1.5	4.0	X	X	3.9	X
336411	Aircraft	4.0	4.4	X	13.1	3.8	7.9	X	X	31.0	X
337	Furniture and Related Products	19.7	20.1	X	61.7	24.5	40.4	X	X	52.3	X
339	Miscellaneous	28.3	31.2	X	63.2	31.9	50.5	X	X	71.3	X
	Total	2.3	5.3	2.1	10.8	3.1	2.1	0.1	0.5	6.5	0.1

South Census Region											
311	Food	3.6	4.6	0.0	17.8	5.6	22.6	0.0	X	0.3	X
3112	Grain and Oilseed Milling	4.0	10.9	0.0	8.5	3.8	10.8	0.0	X	4.2	X
311221	Wet Corn Milling and Starch Manufacturing	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
31131	Sugar Manufacturing	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
3114	Fruit and Vegetable Preserving and Specialty Food	3.4	5.0	X	2.2	3.3	19.8	X	X	0.1	X
3115	Dairy Product Manufacturing	3.1	11.3	X	17.0	1.5	36.2	X	X	62.7	X
3116	Animal Slaughtering and Processing	5.4	3.5	X	5.6	7.6	33.0	X	X	26.3	X
312	Beverage and Tobacco Products	52.6	34.8	X	12.3	60.3	9.7	0.0	X	27.7	X
3121	Beverages	54.2	38.4	X	18.2	61.6	14.1	0.0	X	29.3	X
3122	Tobacco	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
313	Textile Mills	7.7	7.2	X	35.6	13.1	23.9	42.2	X	0.1	X
314	Textile Product Mills	13.4	16.3	X	54.8	15.2	57.7	X	X	96.3	X
315	Apparel	12.2	14.0	X	96.8	15.4	39.4	X	X	0.0	X
316	Leather and Allied Products	5.5	8.0	X	48.1	3.7	24.2	X	X	25.6	X
321	Wood Products	3.7	11.1	X	11.0	12.5	22.1	X	X	0.9	X
321113	Sawmills	1.0	2.8	X	6.4	6.6	17.2	X	X	0.4	X
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	0.7	3.1	X	23.9	0.7	11.1	X	X	0.7	X
321219	Reconstituted Wood Products	0.8	4.8	X	0.0	0.1	37.6	X	X	0.0	X
3219	Other Wood Products	29.3	39.5	X	47.6	51.2	26.3	X	X	17.8	X
322	Paper	0.6	4.8	0.0	0.5	1.7	30.0	0.0	X	0.1	X
322110	Pulp Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X
322120	Paper Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X
322130	Paperboard Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X
323	Printing and Related Support	21.1	19.9	X	97.9	32.6	37.4	X	X	X	X
324	Petroleum and Coal Products	0.7	0.1	23.3	6.1	0.3	0.1	0.0	X	0.9	0.0
324110	Petroleum Refineries	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
324121	Asphalt Paving Mixture and Block	5.1	3.8	23.3	12.8	6.7	5.6	X	X	5.1	X
324122	Asphalt Shingle and Coating Materials	10.4	1.9	X	0.0	1.0	4.1	X	X	11.1	X
324191	Petroleum Lubricating Oil and Grease Manufacturing	13.3	2.7	X	4.4	15.3	5.7	X	X	0.5	X
324199	All Other Petroleum and Coal Products Manufacturing	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	0.0
325	Chemicals	1.2	2.4	0.0	1.7	2.1	0.1	4.0	X	5.7	0.2
325110	Petrochemicals	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	0.0
325120	Industrial Gases	D	6.3	X	8.6	D	1.1	X	X	D	D

325180	Other Basic Inorganic Chemical Manufacturing	10.9	3.9	0.0	30.1	3.9	0.2	0.0	X	41.0	X
325193	Ethyl Alcohol	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
325199	All Other Basic Organic Chemical Manufacturing	D	3.2	X	4.9	3.7	0.1	0.1	X	4.6	D
325211	Plastics Materials and Resins	0.6	11.2	X	3.8	1.2	0.1	X	X	1.8	0.0
325212	Synthetic Rubber	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
325220	Artificial and Synthetic Fibers and Filaments	0.8	2.3	X	0.0	0.1	0.0	X	X	0.0	X
325311	Nitrogenous Fertilizers	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
325312	Phosphatic Fertilizers	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
3254	Pharmaceuticals and Medicines	3.9	5.7	X	1.0	2.8	0.7	X	X	0.1	X
325412	Pharmaceutical Preparation	2.8	3.6	X	0.1	2.7	0.0	X	X	0.0	X
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
326	Plastics and Rubber Products	18.0	19.9	X	47.1	24.0	49.3	X	X	64.3	X
327	Nonmetallic Mineral Products	12.6	48.8	X	37.7	3.5	11.8	3.6	12.7	0.8	X
327120	Clay Building Material and Refractories	4.9	3.3	X	2.6	5.5	2.2	X	X	11.4	X
327211	Flat Glass	0.4	2.2	X	0.0	0.1	0.0	X	X	0.0	X
327212	Other Pressed and Blown Glass and Glassware	0.4	0.4	X	0.0	0.2	50.7	X	X	73.0	X
327213	Glass Containers	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
327215	Glass Products from Purchased Glass	3.2	4.1	X	0.0	3.3	49.8	X	X	0.0	X
327310	Cements	2.7	3.3	X	4.2	3.9	2.1	5.2	20.5	0.8	X
327410	Lime	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0	0.0	X
327420	Gypsum	5.7	6.9	X	7.6	5.6	10.8	X	X	0.0	X
327993	Mineral Wool	0.5	1.6	X	0.0	0.0	0.2	0.0	0.0	0.0	X
331	Primary Metals	0.3	0.4	X	20.4	0.2	2.4	0.0	0.9	0.2	0.0
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0	0.0	X
3312	Steel Products from Purchased Steel	6.1	8.2	X	39.1	3.4	10.4	X	X	31.4	X
3313	Alumina and Aluminum Production and Processing	0.2	0.3	X	0.0	0.2	2.0	X	X	0.1	0.0
331314	Secondary Smelting and Alloying of Aluminum	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
331315	Aluminum Sheet, Plate and Foils	0.5	1.1	X	0.0	0.3	1.4	X	X	0.0	0.0
331318	Other Aluminum Rolling, Drawing and Extruding	D	D	X	0.0	0.8	4.4	X	X	28.3	X
3314	Nonferrous Metal (except Aluminum) Production and Processing	1.3	1.7	X	0.2	1.6	6.7	X	0.9	51.8	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.7	0.2	X	0.0	2.3	19.4	X	X	0.0	X
3315	Foundries	2.3	2.1	X	3.2	3.3	4.4	0.0	2.1	0.7	X
331511	Iron Foundries	2.5	3.7	X	4.1	2.5	5.0	0.0	2.1	0.0	X
331523	Nonferrous Metal Die-Casting Foundries	5.6	3.2	X	38.0	6.8	7.8	X	X	11.2	X
331524	Aluminum Foundries, except Die-Casting	14.8	6.3	X	0.0	21.9	12.6	X	X	X	X
332	Fabricated Metal Products	52.4	42.7	X	58.4	54.9	36.0	X	X	94.0	X
333	Machinery	19.2	19.2	X	49.3	26.5	72.0	X	X	70.2	X
334	Computer and Electronic Products	9.6	9.0	X	54.5	13.6	33.0	X	X	0.0	X
334413	Semiconductors and Related Devices	1.1	1.4	X	0.0	0.0	0.0	X	X	0.0	X
335	Electrical Equip., Appliances, and Components	17.5	16.6	X	31.6	21.3	44.1	X	X	66.8	X
336	Transportation Equipment	10.5	11.6	96.5	7.8	14.5	27.9	X	X	4.0	X
336110	Automobile and Light Duty Motor Vehicle Manufacturing	1.4	2.0	X	0.0	1.2	0.0	X	X	0.3	X
3364	Aerospace Product and Parts	12.9	13.6	X	8.6	12.0	36.8	X	X	2.6	X
336411	Aircraft	1.8	2.3	X	3.3	1.0	53.0	X	X	26.5	X
337	Furniture and Related Products	53.3	71.0	X	35.8	29.2	41.2	84.0	X	30.0	X
339	Miscellaneous	22.8	23.1	X	86.2	35.0	57.1	X	X	66.1	X
	Total	1.5	5.4	1.4	9.9	3.2	0.1	1.7	5.2	1.3	0.2

West Census Region											
311	Food	4.6	7.7	41.7	41.7	4.1	11.7	0.0	0.0	18.0	X
3112	Grain and Oilseed Milling	4.4	8.3	41.7	35.3	5.9	39.6	X	X	11.6	X
311221	Wet Corn Milling and Starch Manufacturing	0.0	0.0	X	X	0.0	0.0	X	X	X	X
31131	Sugar Manufacturing	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0	0.0	X
3114	Fruit and Vegetable Preserving and Specialty Food	5.3	6.0	X	32.0	5.7	18.4	X	X	24.5	X
3115	Dairy Product Manufacturing	6.7	7.9	X	61.3	6.8	0.8	X	X	47.7	X
3116	Animal Slaughtering and Processing	5.0	7.6	X	3.5	4.8	63.9	X	X	0.1	X
312	Beverage and Tobacco Products	14.4	6.2	X	48.7	22.3	17.3	X	X	42.1	X
3121	Beverages	14.5	6.2	X	48.7	22.3	17.3	X	X	42.1	X
3122	Tobacco	0.0	0.0	X	X	0.0	X	X	X	X	X
313	Textile Mills	21.4	37.7	X	X	5.9	5.5	X	X	0.0	X
314	Textile Product Mills	34.8	49.9	X	X	37.7	98.8	X	X	X	X
315	Apparel	30.2	32.1	X	X	49.5	X	X	X	X	X
316	Leather and Allied Products	38.8	20.5	X	X	70.7	0.0	X	X	X	X
321	Wood Products	5.5	5.5	X	10.9	10.7	14.5	X	X	7.3	X
321113	Sawmills	7.0	4.7	X	5.7	23.7	8.6	X	X	8.4	X
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	9.0	7.8	X	49.4	4.9	16.6	X	X	13.9	X
321219	Reconstituted Wood Products	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
3219	Other Wood Products	25.7	22.7	X	44.1	34.4	34.0	X	X	46.0	X
322	Paper	2.0	5.6	0.0	2.0	5.3	34.6	0.0	X	0.0	X
322110	Pulp Mills	0.0	0.0	0.0	0.0	0.0	X	X	X	0.0	X
322120	Paper Mills	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
322130	Paperboard Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0	X
323	Printing and Related Support	31.2	27.7	X	X	41.3	46.7	X	X	X	X
324	Petroleum and Coal Products	0.4	0.2	23.7	10.6	0.1	0.4	0.0	X	0.6	57.0
324110	Petroleum Refineries	0.0	0.0	0.0	0.0	0.0	0.0	X	X	0.0	X
324121	Asphalt Paving Mixture and Block	5.1	3.3	43.1	24.0	5.5	12.7	X	X	5.4	57.0
324122	Asphalt Shingle and Coating Materials	0.1	1.0	X	0.0	2.2	0.8	X	X	0.1	X
324191	Petroleum Lubricating Oil and Grease Manufacturing	0.0	0.0	X	X	0.0	0.0	X	X	X	X
324199	All Other Petroleum and Coal Products Manufacturing	0.0	0.0	X	X	0.0	0.0	0.0	X	X	X
325	Chemicals	2.2	3.2	X	23.4	1.3	14.8	0.0	X	13.2	0.0
325110	Petrochemicals	0.0	0.0	X	X	X	X	X	X	X	X
325120	Industrial Gases	0.8	2.7	X	X	0.1	69.1	X	X	X	0.0
325180	Other Basic Inorganic Chemical Manufacturing	0.9	1.5	X	75.2	2.5	38.0	0.0	X	0.8	X
325193	Ethyl Alcohol	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
325194	Cyclic Crudes, Intermediate and Gum and Wood Chemicals	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
325199	All Other Basic Organic Chemical Manufacturing	1.0	2.0	X	55.5	1.3	22.1	X	X	0.0	X
325211	Plastics Materials and Resins	34.7	39.4	X	13.8	31.6	20.5	X	X	0.1	X
325212	Synthetic Rubber	0.0	0.0	X	X	0.0	0.0	X	X	0.0	X
325220	Artificial and Synthetic Fibers and Filaments	0.0	0.0	X	X	0.0	0.0	X	X	X	X
325311	Nitrogenous Fertilizers	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
325312	Phosphatic Fertilizers	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
3254	Pharmaceuticals and Medicines	6.8	9.9	X	1.9	5.0	78.0	X	X	0.0	X
325412	Pharmaceutical Preparation	10.0	15.2	X	6.3	6.9	49.0	X	X	X	X
325992	Photographic Film, Paper, Plate, Chemical, and Copy Toner Manufacturing	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
326	Plastics and Rubber Products	30.9	31.4	X	X	67.8	66.3	X	X	27.0	X
327	Nonmetallic Mineral Products	37.0	34.8	X	38.7	24.2	47.6	29.9	0.0	66.7	88.8
327120	Clay Building Material and Refractories	2.5	4.1	X	8.0	2.6	9.2	X	X	29.4	X

327211	Flat Glass	0.0	0.0	X	X	0.0	0.0	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	3.5	14.6	X	0.0	0.3	7.8	X	X	X	X
327213	Glass Containers	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
327215	Glass Products from Purchased Glass	2.8	5.0	X	X	1.5	21.0	X	X	21.4	X
327310	Cements	23.1	23.6	X	0.0	2.2	0.0	34.1	0.0	0.0	X
327410	Lime	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0	0.0	X
327420	Gypsum	0.5	2.9	X	5.2	0.4	0.0	X	X	0.0	X
327993	Mineral Wool	0.0	0.0	X	0.0	0.0	0.0	X	X	0.0	X
331	Primary Metals	2.2	1.3	X	4.2	2.8	3.0	0.0	0.0	1.4	0.0
331110	Iron and Steel Mills and Ferroalloys	0.0	0.0	X	0.0	0.0	0.0	0.0	X	0.0	X
3312	Steel Products from Purchased Steel	18.2	14.6	X	3.3	20.7	38.4	X	X	4.7	0.0
3313	Alumina and Aluminum Production and Processing	0.5	0.6	X	0.0	0.5	0.6	X	X	0.0	X
331314	Secondary Smelting and Alloying of Aluminum	0.0	0.0	X	0.0	0.0	0.0	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	0.0	0.0	X	0.0	0.0	0.0	X	X	X	X
331318	Other Aluminum Rolling, Drawing and Extruding	1.5	2.1	X	0.0	1.4	1.3	X	X	0.0	X
3314	Nonferrous Metal (except Aluminum) Production and Processing	1.2	0.3	X	10.6	1.8	0.4	0.0	X	0.0	X
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	0.1	0.2	X	0.0	0.1	0.1	0.0	X	0.0	X
3315	Foundries	1.9	1.6	X	9.1	2.5	1.5	X	0.0	0.1	X
331511	Iron Foundries	0.6	0.9	X	0.0	1.0	1.6	X	0.0	0.0	X
331523	Nonferrous Metal Die-Casting Foundries	6.5	5.5	X	42.1	7.0	8.1	X	X	1.9	X
331524	Aluminum Foundries, except Die-Casting	2.2	3.3	X	X	1.9	0.5	X	X	0.0	X
332	Fabricated Metal Products	22.1	24.7	X	61.7	31.1	37.7	X	X	88.7	X
333	Machinery	30.5	32.3	X	92.0	40.6	58.4	X	X	89.5	X
334	Computer and Electronic Products	11.2	9.6	X	42.5	19.3	7.2	X	X	69.0	X
334413	Semiconductors and Related Devices	8.4	5.1	X	51.2	14.7	15.3	X	X	69.3	X
335	Electrical Equip., Appliances, and Components	41.0	36.8	X	67.3	57.6	98.4	X	X	75.8	X
336	Transportation Equipment	6.1	6.8	X	38.3	6.8	27.1	X	X	19.9	X
336110	Automobile and Light Duty Motor Vehicle Manufacturing	10.3	14.5	X	91.1	3.4	27.9	X	X	0.0	X
3364	Aerospace Product and Parts	5.4	5.0	X	4.2	6.8	18.0	X	X	15.8	X
336411	Aircraft	13.6	14.9	X	5.6	12.9	33.5	X	X	47.0	X
337	Furniture and Related Products	33.6	30.1	X	X	45.4	49.0	X	X	94.3	X
339	Miscellaneous	22.7	21.9	X	55.7	28.1	53.7	X	X	56.2	X
	Total	5.1	5.3	4.4	21.0	2.7	4.9	18.3	0.0	7.4	22.8

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Form EIA-846, *2022 Manufacturing Energy Consumption Survey*, and Office of Energy Production, Conversion & Delivery, Form EIA-810, *Monthly Refinery Report* for 2022

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 feedstock 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.

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

^b *Total* is the sum of all the listed energy sources, including *Other*, minus the *Shipments of energy sources produced onsite*. It is the total amount of first use of energy for all (fuel and nonfuel) purposes.

^c *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 *Distillate fuel oil* includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels.

^e *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.

^f 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).

^g *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 *i*.

^h *Shipments of energy sources produced onsite* are those shipments produced or transformed onsite from the nonfuel use of other energy sources. For example, at an establishment that processes coal to make coke for later use, the entire quantity of coal is counted as first use. Any onsite consumption of coke is not counted as first use because it would duplicate the coal use. If some of the coke is then sold to another establishment, that second establishment will

entire quantity of coal is counted as first use. Any onsite consumption of coke is not counted as first use because it would duplicate the coal use. If some of the coke is then sold to another establishment, that second establishment will consider this coke to be a shipment of an offsite-produced energy source. Hence, the second establishment will count this coke as its first use, thereby resulting in double counting. In order to eliminate the double counting, the energy equivalent of the coke shipment must be subtracted from first use.

¹Previously, 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* (that is, 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%.

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).