

Released: August 2025
Next MECS will be fielded in 2027

Table 5.1 End uses of fuel consumption, 2022

Level: National data
Row: End uses within NAICS codes
Column: Energy sources, including net electricity
Unit: Physical units or British thermal units (Btu)

NAICS code ^a	End use	Total (trillion Btu)	Net electricity ^b (million kilowatthours)	Residual fuel oil (million barrels)	Distillate fuel oil and diesel fuel ^c (million barrels)	Natural gas ^d (billion cubic feet)	HGL (excluding natural gasoline) ^e (million barrels)	Coal (excluding coal coke and breeze) (million short tons)	Other ^f (trillion Btu)
Total United States									
311 - 339	All manufacturing industries								
	Total fuel consumption	15,742	783,620	2	14	6,827	24	19	5,405
	Indirect Uses—Boiler Fuel	--	13,886	1	2	2,883	4	5	--
	Conventional Boiler Use	--	13,886	*	*	837	2	1	--
	CHP and/or Cogeneration Process	--	0	1	2	2,046	2	4	--
	Direct Uses—Total Process	--	594,593	*	4	3,383	13	11	--
	Process Heating	--	70,657	*	1	2,838	11	10	--
	Process Cooling and Refrigeration	--	63,573	*	*	42	*	*	--
	Machine Drive	--	396,282	*	2	241	1	*	--
	Electro-Chemical Processes	--	38,861	--	--	--	--	--	--
	Other Process Use	--	25,219	*	2	263	1	1	--
	Direct Uses—Total Nonprocess	--	155,606	*	7	524	7	*	--
	Facility HVAC ^g	--	80,000	*	*	397	1	*	--
	Facility Lighting	--	48,783	--	--	--	--	--	--
	Other Facility Support	--	15,747	*	*	54	*	*	--
	Onsite Transportation	--	6,724	--	5	7	5	--	--
	Conventional Electricity Generation	--	--	*	*	41	*	*	--
	Other Nonprocess Use	--	4,352	*	1	25	*	*	--
	End use not reported	5,593	19,534	*	1	36	*	4	5,405
311	Food								
	Total fuel consumption	1,235	79,553	*	3	679	2	4	144
	Indirect Uses—Boiler Fuel	--	2,871	*	1	379	1	2	--
	Conventional Boiler Use	--	2,871	*	*	130	Q	*	--
	CHP and/or Cogeneration Process	--	0	*	1	249	*	2	--
	Direct Uses—Total Process	--	60,802	*	*	215	1	*	--
	Process Heating	--	3,454	*	*	166	Q	*	--
	Process Cooling and Refrigeration	--	21,283	*	*	13	*	0	--
	Machine Drive	--	34,259	*	*	21	*	*	--
	Electro-Chemical Processes	--	310	--	--	--	--	--	--
	Other Process Use	--	1,496	0	*	15	*	0	--
	Direct Uses—Total Nonprocess	--	14,488	*	1	71	*	0	--
	Facility HVAC ^g	--	6,865	*	*	49	*	0	--

Facility Lighting	--	4,624	--	--	--	--	--	--
Other Facility Support	--	1,878	0	*	18	*	0	--
Onsite Transportation	--	813	--	1	1	*	--	--
Conventional Electricity Generation	--	--	0	*	1	*	0	--
Other Nonprocess Use	--	308	0	*	2	*	0	--
End use not reported	203	1,391	0	*	13	*	2	144

3112 Grain and oilseed milling

Total fuel consumption	338	17,703	*	*	164	*	3	40
Indirect Uses—Boiler Fuel	--	526	*	*	117	*	1	--
Conventional Boiler Use	--	526	*	*	60	0	*	--
CHP and/or Cogeneration Process	--	0	0	0	57	*	1	--
Direct Uses—Total Process	--	15,520	*	*	42	*	0	--
Process Heating	--	947	*	*	39	*	0	--
Process Cooling and Refrigeration	--	1,783	0	0	*	0	0	--
Machine Drive	--	12,435	0	*	2	*	0	--
Electro-Chemical Processes	--	158	--	--	--	--	--	--
Other Process Use	--	198	0	0	1	*	0	--
Direct Uses—Total Nonprocess	--	1,623	*	*	4	*	0	--
Facility HVAC ^g	--	733	*	*	3	*	0	--
Facility Lighting	--	587	--	--	--	--	--	--
Other Facility Support	--	220	0	*	1	*	0	--
Onsite Transportation	--	68	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	*	0	--
Other Nonprocess Use	--	15	0	*	0	*	0	--
End use not reported	81	34	0	0	1	*	2	40

311221 Wet corn milling and starch manufacturing

Total fuel consumption	169	7,876	0	*	67	*	2	32
Indirect Uses—Boiler Fuel	--	149	0	0	47	0	*	--
Conventional Boiler Use	--	149	0	0	15	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	32	0	*	--
Direct Uses—Total Process	--	7,347	0	*	19	*	0	--
Process Heating	--	334	0	*	19	*	0	--
Process Cooling and Refrigeration	--	1,384	0	0	*	0	0	--
Machine Drive	--	5,485	0	*	0	*	0	--
Electro-Chemical Processes	--	145	--	--	--	--	--	--
Other Process Use	--	0	0	0	*	0	0	--
Direct Uses—Total Nonprocess	--	380	0	*	1	*	0	--
Facility HVAC ^g	--	147	0	*	*	*	0	--
Facility Lighting	--	196	--	--	--	--	--	--
Other Facility Support	--	31	0	*	*	*	0	--
Onsite Transportation	--	5	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	0	0	0	--
Other Nonprocess Use	--	0	0	*	0	*	0	--
End use not reported	72	0	0	0	0	0	2	32

31131 Sugar manufacturing

	Total fuel consumption	167	1,590	*	*	38	*	1	96
	Indirect Uses—Boiler Fuel	--	112	*	*	24	0	1	--
	Conventional Boiler Use	--	112	*	0	4	0	*	--
	CHP and/or Cogeneration Process	--	0	0	*	20	0	1	--
	Direct Uses—Total Process	--	1,141	0	*	13	*	*	--
	Process Heating	--	30	0	0	12	0	*	--
	Process Cooling and Refrigeration	--	4	0	0	0	0	0	--
	Machine Drive	--	1,098	0	*	1	*	*	--
	Electro-Chemical Processes	--	3	--	--	--	--	--	--
	Other Process Use	--	6	0	*	0	0	0	--
	Direct Uses—Total Nonprocess	--	336	0	*	1	*	0	--
	Facility HVAC ⁶	--	100	0	0	*	*	0	--
	Facility Lighting	--	111	--	--	--	--	--	--
	Other Facility Support	--	74	0	0	*	0	0	--
	Onsite Transportation	--	40	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	11	0	0	0	*	0	--
	End use not reported	96	0	0	0	0	0	0	96
3114	Fruit and vegetable preserving and specialty foods								
	Total fuel consumption	121	8,953	*	*	85	*	0	1
	Indirect Uses—Boiler Fuel	--	423	0	*	56	*	0	--
	Conventional Boiler Use	--	423	0	*	16	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	40	*	0	--
	Direct Uses—Total Process	--	6,452	*	*	18	*	0	--
	Process Heating	--	447	*	0	15	*	0	--
	Process Cooling and Refrigeration	--	3,256	0	*	*	*	0	--
	Machine Drive	--	2,637	0	*	1	*	0	--
	Electro-Chemical Processes	--	19	--	--	--	--	--	--
	Other Process Use	--	92	0	*	1	*	0	--
	Direct Uses—Total Nonprocess	--	1,974	*	*	10	*	0	--
	Facility HVAC ⁶	--	859	*	*	8	*	0	--
	Facility Lighting	--	652	--	--	--	--	--	--
	Other Facility Support	--	223	0	*	1	*	0	--
	Onsite Transportation	--	113	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	0	0	--
	Other Nonprocess Use	--	128	0	*	1	*	0	--
	End use not reported	2	104	0	*	1	*	0	1
3115	Dairy product manufacturing								
	Total fuel consumption	171	13,073	*	*	114	Q	0	Q
	Indirect Uses—Boiler Fuel	--	501	*	*	74	*	0	--
	Conventional Boiler Use	--	501	0	*	23	*	0	--
	CHP and/or Cogeneration Process	--	0	*	*	51	*	0	--
	Direct Uses—Total Process	--	9,587	*	*	30	*	0	--
	Process Heating	--	571	0	*	20	*	0	--
	Process Cooling and Refrigeration	--	3,764	*	*	3	0	0	--
	Machine Drive	--	4,862	*	*	4	*	0	--

Electro-Chemical Processes	--	60	--	--	--	--	--	--
Other Process Use	--	331	0	*	3	*	0	--
Direct Uses—Total Nonprocess	--	2,708	*	*	8	*	0	--
Facility HVAC [§]	--	1,236	*	*	7	*	0	--
Facility Lighting	--	892	--	--	--	--	--	--
Other Facility Support	--	304	0	0	1	*	0	--
Onsite Transportation	--	215	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	61	0	*	*	*	0	--
End use not reported	Q	278	0	0	Q	*	0	Q

3116 Animal slaughtering and processing

Total fuel consumption	246	22,133	*	1	157	*	0	2
Indirect Uses—Boiler Fuel	--	741	*	*	77	*	0	--
Conventional Boiler Use	--	741	0	*	20	*	0	--
CHP and/or Cogeneration Process	--	0	*	*	56	*	0	--
Direct Uses—Total Process	--	16,852	0	*	43	*	0	--
Process Heating	--	705	0	*	34	*	0	--
Process Cooling and Refrigeration	--	8,986	0	*	2	*	0	--
Machine Drive	--	6,994	0	*	4	*	0	--
Electro-Chemical Processes	--	46	--	--	--	--	--	--
Other Process Use	--	121	0	*	2	*	0	--
Direct Uses—Total Nonprocess	--	3,811	0	*	27	*	0	--
Facility HVAC [§]	--	1,714	0	0	16	*	0	--
Facility Lighting	--	1,277	--	--	--	--	--	--
Other Facility Support	--	568	0	*	11	*	0	--
Onsite Transportation	--	238	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	14	0	*	*	*	0	--
End use not reported	16	729	0	*	10	*	0	2

312 Beverage and tobacco products

Total fuel consumption	265	14,896	0	*	204	*	*	*
Indirect Uses—Boiler Fuel	--	384	0	*	Q	*	*	--
Conventional Boiler Use	--	384	0	*	15	*	0	--
CHP and/or Cogeneration Process	--	0	0	*	Q	*	*	--
Direct Uses—Total Process	--	11,339	0	*	49	*	0	--
Process Heating	--	719	0	*	45	*	0	--
Process Cooling and Refrigeration	--	3,513	0	*	1	*	0	--
Machine Drive	--	6,829	0	*	2	*	0	--
Electro-Chemical Processes	--	41	--	--	--	--	--	--
Other Process Use	--	236	0	*	*	*	0	--
Direct Uses—Total Nonprocess	--	3,107	0	*	22	*	0	--
Facility HVAC [§]	--	1,590	0	*	Q	*	0	--
Facility Lighting	--	855	--	--	--	--	--	--
Other Facility Support	--	318	0	*	1	*	0	--
Onsite Transportation	--	227	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	*	0	--
Other Nonprocess Use	--	116	0	*	1	*	0	--

	End use not reported	1	Q	0	*	*	*	0	*
3121	Beverages								
	Total fuel consumption	258	14,172	0	*	Q	*	*	*
	Indirect Uses—Boiler Fuel	--	374	0	*	Q	*	*	--
	Conventional Boiler Use	--	374	0	*	13	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	Q	*	*	--
	Direct Uses—Total Process	--	10,921	0	*	48	*	0	--
	Process Heating	--	700	0	*	45	*	0	--
	Process Cooling and Refrigeration	--	3,480	0	*	1	*	0	--
	Machine Drive	--	6,471	0	*	2	*	0	--
	Electro-Chemical Processes	--	41	--	--	--	--	--	--
	Other Process Use	--	230	0	*	*	*	0	--
	Direct Uses—Total Nonprocess	--	2,810	0	*	22	*	0	--
	Facility HVAC [®]	--	1,416	0	*	Q	*	0	--
	Facility Lighting	--	782	--	--	--	--	--	--
	Other Facility Support	--	280	0	*	1	*	0	--
	Onsite Transportation	--	216	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	116	0	*	1	*	0	--
	End use not reported	1	Q	0	*	*	*	0	*
3122	Tobacco								
	Total fuel consumption	7	724	0	*	4	*	0	*
	Indirect Uses—Boiler Fuel	--	10	0	*	4	*	0	--
	Conventional Boiler Use	--	10	0	*	2	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	2	*	0	--
	Direct Uses—Total Process	--	418	0	*	*	*	0	--
	Process Heating	--	20	0	*	*	*	0	--
	Process Cooling and Refrigeration	--	33	0	0	*	0	0	--
	Machine Drive	--	358	0	*	*	0	0	--
	Electro-Chemical Processes	--	1	--	--	--	--	--	--
	Other Process Use	--	7	0	*	0	*	0	--
	Direct Uses—Total Nonprocess	--	296	0	*	*	*	0	--
	Facility HVAC [®]	--	174	0	*	*	*	0	--
	Facility Lighting	--	73	--	--	--	--	--	--
	Other Facility Support	--	38	0	*	*	*	0	--
	Onsite Transportation	--	11	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	0	*	0	0	--
	Other Nonprocess Use	--	*	0	*	*	*	0	--
	End use not reported	*	0	0	0	0	*	0	*
313	Textile mills								
	Total fuel consumption	57	8,677	0	*	23	*	*	2
	Indirect Uses—Boiler Fuel	--	192	0	*	10	*	*	--
	Conventional Boiler Use	--	192	0	*	5	*	*	--
	CHP and/or Cogeneration Process	--	0	0	*	5	*	*	--

	Direct Uses—Total Process	--	6,173	0	*	12	*	*	--
	Process Heating	--	575	0	*	10	*	*	--
	Process Cooling and Refrigeration	--	483	0	0	*	0	*	--
	Machine Drive	--	5,051	0	*	1	*	*	--
	Electro-Chemical Processes	--	20	--	--	--	--	--	--
	Other Process Use	--	43	0	*	*	*	0	--
	Direct Uses—Total Nonprocess	--	2,096	0	*	1	*	0	--
	Facility HVAC [®]	--	1,528	0	0	1	*	0	--
	Facility Lighting	--	414	--	--	--	--	--	--
	Other Facility Support	--	103	0	0	*	0	0	--
	Onsite Transportation	--	49	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	0	*	0	0	--
	Other Nonprocess Use	--	2	0	*	*	0	0	--
	End use not reported	4	217	0	*	Q	*	0	2
314	Textile product mills								
	Total fuel consumption	21	2,982	0	*	10	*	0	*
	Indirect Uses—Boiler Fuel	--	Q	0	*	3	*	0	--
	Conventional Boiler Use	--	Q	0	*	2	*	0	--
	CHP and/or Cogeneration Process	--	0	0	0	1	*	0	--
	Direct Uses—Total Process	--	1,945	0	0	4	*	0	--
	Process Heating	--	49	0	0	4	*	0	--
	Process Cooling and Refrigeration	--	121	0	0	*	0	0	--
	Machine Drive	--	1,713	0	0	*	*	0	--
	Electro-Chemical Processes	--	11	--	--	--	--	--	--
	Other Process Use	--	52	0	0	0	0	0	--
	Direct Uses—Total Nonprocess	--	749	0	*	1	*	0	--
	Facility HVAC [®]	--	485	0	0	1	*	0	--
	Facility Lighting	--	189	--	--	--	--	--	--
	Other Facility Support	--	57	0	0	*	*	0	--
	Onsite Transportation	--	18	--	*	0	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	0	0	0	0	0	0	--
	End use not reported	2	207	0	0	Q	0	0	*
315	Apparel								
	Total fuel consumption	3	535	0	*	1	*	0	*
	Indirect Uses—Boiler Fuel	--	Q	0	*	*	*	0	--
	Conventional Boiler Use	--	Q	0	*	*	0	0	--
	CHP and/or Cogeneration Process	--	0	0	0	*	*	0	--
	Direct Uses—Total Process	--	204	0	0	*	*	0	--
	Process Heating	--	8	0	0	*	0	0	--
	Process Cooling and Refrigeration	--	17	0	0	0	0	0	--
	Machine Drive	--	178	0	0	*	*	0	--
	Electro-Chemical Processes	--	0	--	--	--	--	--	--
	Other Process Use	--	0	0	0	*	0	0	--
	Direct Uses—Total Nonprocess	--	303	0	*	*	*	0	--
	Facility HVAC [®]	--	157	0	0	*	*	0	--
	Facility Lighting	--	102	--	--	--	--	--	--

Other Facility Support	--	11	0	0	*	*	0	--
Onsite Transportation	--	Q	--	0	0	*	--	--
Conventional Electricity Generation	--	--	0	0	0	0	0	--
Other Nonprocess Use	--	30	0	*	*	0	0	--
End use not reported	*	Q	0	0	*	0	0	*

316 Leather and allied products

Total fuel consumption	3	242	0	*	2	*	0	*
Indirect Uses—Boiler Fuel	--	2	0	*	*	0	0	--
Conventional Boiler Use	--	2	0	0	*	0	0	--
CHP and/or Cogeneration Process	--	0	0	*	*	0	0	--
Direct Uses—Total Process	--	160	0	*	*	*	0	--
Process Heating	--	11	0	*	*	*	0	--
Process Cooling and Refrigeration	--	8	0	0	*	*	0	--
Machine Drive	--	140	0	0	*	*	0	--
Electro-Chemical Processes	--	0	--	--	--	--	--	--
Other Process Use	--	Q	0	0	0	*	0	--
Direct Uses—Total Nonprocess	--	77	0	*	Q	*	0	--
Facility HVAC [§]	--	40	0	*	Q	*	0	--
Facility Lighting	--	24	--	--	--	--	--	--
Other Facility Support	--	11	0	0	*	*	0	--
Onsite Transportation	--	3	--	0	0	*	--	--
Conventional Electricity Generation	--	--	0	0	0	*	0	--
Other Nonprocess Use	--	0	0	*	0	0	0	--
End use not reported	*	Q	0	0	0	0	0	*

321 Wood products

Total fuel consumption	414	20,175	*	2	77	1	*	251
Indirect Uses—Boiler Fuel	--	501	0	*	17	*	0	--
Conventional Boiler Use	--	501	0	*	3	*	0	--
CHP and/or Cogeneration Process	--	0	0	*	14	*	0	--
Direct Uses—Total Process	--	16,537	*	*	52	*	*	--
Process Heating	--	Q	*	*	48	*	*	--
Process Cooling and Refrigeration	--	263	0	*	*	*	0	--
Machine Drive	--	13,654	*	*	1	*	0	--
Electro-Chemical Processes	--	203	--	--	--	--	--	--
Other Process Use	--	253	0	*	2	*	0	--
Direct Uses—Total Nonprocess	--	2,760	*	1	7	1	0	--
Facility HVAC [§]	--	1,153	*	*	7	*	0	--
Facility Lighting	--	1,149	--	--	--	--	--	--
Other Facility Support	--	293	*	*	*	*	0	--
Onsite Transportation	--	76	--	1	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	*	0	--
Other Nonprocess Use	--	90	0	*	*	*	0	--
End use not reported	254	377	0	*	1	*	0	251

321113 Sawmills

Total fuel consumption	199	7,868	*	1	17	*	0	147
Indirect Uses—Boiler Fuel	--	203	0	*	3	*	0	--
Conventional Boiler Use	--	203	0	*	1	*	0	--
CHP and/or Cogeneration Process	--	0	0	*	2	*	0	--
Direct Uses—Total Process	--	6,776	*	*	13	*	0	--
Process Heating	--	348	*	*	13	*	0	--
Process Cooling and Refrigeration	--	98	0	0	0	0	0	--
Machine Drive	--	6,129	*	*	*	*	0	--
Electro-Chemical Processes	--	3	--	--	--	--	--	--
Other Process Use	--	198	0	*	*	*	0	--
Direct Uses—Total Nonprocess	--	858	*	1	1	*	0	--
Facility HVAC [§]	--	347	*	*	1	*	0	--
Facility Lighting	--	402	--	--	--	--	--	--
Other Facility Support	--	71	0	*	*	*	0	--
Onsite Transportation	--	11	--	1	*	*	--	--
Conventional Electricity Generation	--	--	0	*	0	*	0	--
Other Nonprocess Use	--	26	0	*	0	*	0	--
End use not reported	148	32	0	*	1	*	0	147

3212 Veneer, plywood, and engineered wood product manufacturing

Total fuel consumption	144	5,541	*	*	36	*	0	85
Indirect Uses—Boiler Fuel	--	144	0	*	10	*	0	--
Conventional Boiler Use	--	144	0	*	2	*	0	--
CHP and/or Cogeneration Process	--	0	0	*	9	*	0	--
Direct Uses—Total Process	--	4,414	*	*	24	*	0	--
Process Heating	--	197	*	*	21	*	0	--
Process Cooling and Refrigeration	--	65	0	0	*	*	0	--
Machine Drive	--	4,093	*	*	1	*	0	--
Electro-Chemical Processes	--	44	--	--	--	--	--	--
Other Process Use	--	16	0	*	2	*	0	--
Direct Uses—Total Nonprocess	--	757	*	*	2	*	0	--
Facility HVAC [§]	--	293	*	0	2	*	0	--
Facility Lighting	--	360	--	--	--	--	--	--
Other Facility Support	--	71	*	*	*	*	0	--
Onsite Transportation	--	10	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	*	0	--
Other Nonprocess Use	--	23	0	*	*	*	0	--
End use not reported	87	226	0	*	*	*	0	85

321219 Reconstituted wood products

Total fuel consumption	72	2,906	*	*	21	*	0	40
Indirect Uses—Boiler Fuel	--	36	0	*	3	*	0	--
Conventional Boiler Use	--	36	0	0	*	0	0	--
CHP and/or Cogeneration Process	--	0	0	*	2	*	0	--
Direct Uses—Total Process	--	2,434	*	*	18	*	0	--
Process Heating	--	55	*	*	16	*	0	--
Process Cooling and Refrigeration	--	23	0	0	*	0	0	--
Machine Drive	--	2,325	*	*	1	*	0	--
Electro-Chemical Processes	--	31	--	--	--	--	--	--

Other Process Use	--	1	0	0	1	0	0	--
Direct Uses—Total Nonprocess	--	282	*	*	1	*	0	--
Facility HVAC [§]	--	116	*	0	1	*	0	--
Facility Lighting	--	145	--	--	--	--	--	--
Other Facility Support	--	19	*	*	*	0	0	--
Onsite Transportation	--	1	--	*	0	*	--	--
Conventional Electricity Generation	--	--	0	*	0	0	0	--
Other Nonprocess Use	--	0	0	0	0	0	0	--
End use not reported	41	155	0	0	*	0	0	40

3219 Other wood products

Total fuel consumption	62	6,251	0	*	20	*	*	17
Indirect Uses—Boiler Fuel	--	129	0	*	2	*	0	--
Conventional Boiler Use	--	129	0	*	1	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	1	*	0	--
Direct Uses—Total Process	--	4,980	0	*	14	*	*	--
Process Heating	--	Q	0	0	13	*	*	--
Process Cooling and Refrigeration	--	84	0	*	*	0	0	--
Machine Drive	--	3,172	0	*	*	*	0	--
Electro-Chemical Processes	--	155	--	--	--	--	--	--
Other Process Use	--	37	0	*	*	*	0	--
Direct Uses—Total Nonprocess	--	1,038	0	*	4	*	0	--
Facility HVAC [§]	--	476	0	*	4	*	0	--
Facility Lighting	--	358	--	--	--	--	--	--
Other Facility Support	--	115	0	0	*	*	0	--
Onsite Transportation	--	49	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	Q	0	*	0	*	0	--
End use not reported	18	Q	0	*	*	*	0	17

322 Paper

Total fuel consumption	2,003	49,711	1	1	595	1	2	1,170
Indirect Uses—Boiler Fuel	--	1,298	1	*	393	*	2	--
Conventional Boiler Use	--	1,298	*	*	67	*	*	--
CHP and/or Cogeneration Process	--	0	1	*	326	*	2	--
Direct Uses—Total Process	--	40,779	*	*	168	*	*	--
Process Heating	--	1,995	*	*	142	*	0	--
Process Cooling and Refrigeration	--	1,359	0	0	2	0	0	--
Machine Drive	--	36,543	0	*	22	*	*	--
Electro-Chemical Processes	--	395	--	--	--	--	--	--
Other Process Use	--	486	0	*	3	*	0	--
Direct Uses—Total Nonprocess	--	7,379	*	*	32	1	*	--
Facility HVAC [§]	--	2,900	0	*	20	*	0	--
Facility Lighting	--	2,518	--	--	--	--	--	--
Other Facility Support	--	790	0	*	2	*	0	--
Onsite Transportation	--	351	--	*	1	*	--	--
Conventional Electricity Generation	--	--	*	*	7	*	*	--
Other Nonprocess Use	--	820	0	*	1	*	0	--
End use not reported	1,173	Q	*	0	Q	*	0	1,170

322110	Pulp mills								
	Total fuel consumption	345	1,368	*	*	53	*	*	281
	Indirect Uses—Boiler Fuel	--	32	*	*	32	*	*	--
	Conventional Boiler Use	--	32	0	*	1	0	0	--
	CHP and/or Cogeneration Process	--	0	*	*	31	*	*	--
	Direct Uses—Total Process	--	1,253	0	*	21	0	0	--
	Process Heating	--	-121	0	*	21	0	0	--
	Process Cooling and Refrigeration	--	23	0	0	0	0	0	--
	Machine Drive	--	1,273	0	*	*	0	0	--
	Electro-Chemical Processes	--	61	--	--	--	--	--	--
	Other Process Use	--	17	0	*	0	0	0	--
	Direct Uses—Total Nonprocess	--	84	0	*	*	*	0	--
	Facility HVAC ⁶	--	56	0	*	*	*	0	--
	Facility Lighting	--	22	--	--	--	--	--	--
	Other Facility Support	--	8	0	0	*	0	0	--
	Onsite Transportation	--	-1	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	0	*	0	0	--
	Other Nonprocess Use	--	0	0	*	0	0	0	--
	End use not reported	281	0	0	0	0	0	0	281
322120	Paper mills								
	Total fuel consumption	475	16,167	*	*	181	*	1	214
	Indirect Uses—Boiler Fuel	--	265	*	*	126	*	1	--
	Conventional Boiler Use	--	265	*	*	29	*	0	--
	CHP and/or Cogeneration Process	--	0	*	*	97	*	1	--
	Direct Uses—Total Process	--	13,959	0	*	51	*	0	--
	Process Heating	--	571	0	0	46	*	0	--
	Process Cooling and Refrigeration	--	307	0	0	0	0	0	--
	Machine Drive	--	13,036	0	*	6	*	0	--
	Electro-Chemical Processes	--	23	--	--	--	--	--	--
	Other Process Use	--	21	0	*	*	0	0	--
	Direct Uses—Total Nonprocess	--	1,944	*	*	4	*	0	--
	Facility HVAC ⁶	--	680	0	*	3	*	0	--
	Facility Lighting	--	642	--	--	--	--	--	--
	Other Facility Support	--	139	0	*	*	*	0	--
	Onsite Transportation	--	21	--	*	0	*	--	--
	Conventional Electricity Generation	--	--	*	*	*	*	0	--
	Other Nonprocess Use	--	462	0	*	1	0	0	--
	End use not reported	214	0	0	0	0	*	0	214
322130	Paperboard mills								
	Total fuel consumption	986	17,738	*	*	269	*	1	629
	Indirect Uses—Boiler Fuel	--	827	*	*	190	*	1	--
	Conventional Boiler Use	--	827	*	*	26	0	*	--
	CHP and/or Cogeneration Process	--	0	*	*	164	*	1	--
	Direct Uses—Total Process	--	14,605	*	*	62	*	*	--

Process Heating	--	948	*	*	50	*	0	--
Process Cooling and Refrigeration	--	320	0	0	2	0	0	--
Machine Drive	--	12,851	0	*	9	*	*	--
Electro-Chemical Processes	--	130	--	--	--	--	--	--
Other Process Use	--	357	0	*	2	*	0	--
Direct Uses—Total Nonprocess	--	2,306	0	*	16	*	*	--
Facility HVAC ⁶	--	835	0	*	6	*	0	--
Facility Lighting	--	815	--	--	--	--	--	--
Other Facility Support	--	316	0	*	2	*	0	--
Onsite Transportation	--	95	--	*	1	*	--	--
Conventional Electricity Generation	--	--	0	0	7	*	*	--
Other Nonprocess Use	--	246	0	0	*	*	0	--
End use not reported	629	0	*	0	0	*	0	629

323 Printing and related support

Total fuel consumption	53	9,177	*	*	20	*	0	*
Indirect Uses—Boiler Fuel	--	33	0	0	3	*	0	--
Conventional Boiler Use	--	33	0	0	3	*	0	--
CHP and/or Cogeneration Process	--	0	0	0	*	0	0	--
Direct Uses—Total Process	--	5,764	0	*	9	*	0	--
Process Heating	--	151	0	0	6	*	0	--
Process Cooling and Refrigeration	--	560	0	0	*	0	0	--
Machine Drive	--	4,907	0	*	2	0	0	--
Electro-Chemical Processes	--	140	--	--	--	--	--	--
Other Process Use	--	Q	0	0	*	*	0	--
Direct Uses—Total Nonprocess	--	3,369	*	*	9	*	0	--
Facility HVAC ⁶	--	1,479	*	0	7	*	0	--
Facility Lighting	--	1,287	--	--	--	--	--	--
Other Facility Support	--	456	0	0	*	0	0	--
Onsite Transportation	--	104	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	*	0	--
Other Nonprocess Use	--	Q	0	*	Q	0	0	--
End use not reported	*	Q	0	0	*	*	0	*

324 Petroleum and coal products

Total fuel consumption	3,543	46,754	*	1	1,068	8	*	2,231
Indirect Uses—Boiler Fuel	--	99	*	*	339	1	0	--
Conventional Boiler Use	--	99	0	*	104	1	0	--
CHP and/or Cogeneration Process	--	0	*	*	236	*	0	--
Direct Uses—Total Process	--	43,986	*	1	681	7	*	--
Process Heating	--	-934	*	*	605	6	0	--
Process Cooling and Refrigeration	--	2,170	0	0	6	*	0	--
Machine Drive	--	41,235	0	*	15	*	0	--
Electro-Chemical Processes	--	1,180	--	--	--	--	--	--
Other Process Use	--	335	0	*	55	*	*	--
Direct Uses—Total Nonprocess	--	2,638	*	1	42	*	0	--
Facility HVAC ⁶	--	1,252	0	*	5	*	0	--
Facility Lighting	--	965	--	--	--	--	--	--
Other Facility Support	--	391	0	*	1	*	0	--

Onsite Transportation	--	15	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	25	*	0	--
Other Nonprocess Use	--	15	*	*	12	*	0	--
End use not reported	2,237	31	*	*	6	*	0	2,231

324110 Petroleum refineries

Total fuel consumption	3,314	44,038	*	1	984	8	0	2,112
Indirect Uses—Boiler Fuel	--	-6	*	0	324	1	0	--
Conventional Boiler Use	--	-6	0	0	100	1	0	--
CHP and/or Cogeneration Process	--	0	*	0	225	*	0	--
Direct Uses—Total Process	--	41,910	*	*	616	6	0	--
Process Heating	--	-1,165	*	*	553	6	0	--
Process Cooling and Refrigeration	--	1,957	0	0	6	*	0	--
Machine Drive	--	39,786	0	*	4	*	0	--
Electro-Chemical Processes	--	1,056	--	--	--	--	--	--
Other Process Use	--	275	0	*	53	*	0	--
Direct Uses—Total Nonprocess	--	2,134	0	*	38	*	0	--
Facility HVAC [§]	--	1,021	0	*	2	*	0	--
Facility Lighting	--	784	--	--	--	--	--	--
Other Facility Support	--	313	0	0	*	*	0	--
Onsite Transportation	--	2	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	24	*	0	--
Other Nonprocess Use	--	14	0	*	10	*	0	--
End use not reported	2,118	0	*	*	6	*	0	2,112

324121 Asphalt paving mixture and block

Total fuel consumption	119	1,502	*	1	51	*	0	54
Indirect Uses—Boiler Fuel	--	46	0	*	3	*	0	--
Conventional Boiler Use	--	46	0	0	*	*	0	--
CHP and/or Cogeneration Process	--	0	0	*	3	*	0	--
Direct Uses—Total Process	--	1,171	*	*	45	*	0	--
Process Heating	--	113	*	*	36	*	0	--
Process Cooling and Refrigeration	--	Q	0	0	*	0	0	--
Machine Drive	--	960	0	*	8	*	0	--
Electro-Chemical Processes	--	10	--	--	--	--	--	--
Other Process Use	--	23	0	*	1	*	0	--
Direct Uses—Total Nonprocess	--	263	*	*	2	*	0	--
Facility HVAC [§]	--	103	0	*	1	*	0	--
Facility Lighting	--	120	--	--	--	--	--	--
Other Facility Support	--	30	0	*	*	*	0	--
Onsite Transportation	--	5	--	*	0	*	--	--
Conventional Electricity Generation	--	--	0	*	0	0	0	--
Other Nonprocess Use	--	4	*	*	Q	0	0	--
End use not reported	55	22	0	*	*	*	0	54

324122 Asphalt shingle and coating materials

Total fuel consumption	16	824	0	*	11	*	0	2
-------------------------------	----	-----	---	---	----	---	---	---

Indirect Uses—Boiler Fuel	--	14	0	*	2	*	0	--
Conventional Boiler Use	--	14	0	*	1	*	0	--
CHP and/or Cogeneration Process	--	0	0	0	1	*	0	--
Direct Uses—Total Process	--	678	0	*	8	*	0	--
Process Heating	--	50	0	*	7	*	0	--
Process Cooling and Refrigeration	--	34	0	0	*	0	0	--
Machine Drive	--	556	0	*	1	*	0	--
Electro-Chemical Processes	--	34	--	--	--	--	--	--
Other Process Use	--	5	0	*	*	*	0	--
Direct Uses—Total Nonprocess	--	132	0	*	1	*	0	--
Facility HVAC ⁶	--	60	0	*	1	*	0	--
Facility Lighting	--	53	--	--	--	--	--	--
Other Facility Support	--	17	0	0	*	*	0	--
Onsite Transportation	--	2	--	*	0	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	0	0	*	0	*	0	--
End use not reported	2	0	0	0	0	0	0	2
324191 Petroleum lubricating oil and grease manufacturing								
Total fuel consumption	16	716	0	*	12	*	0	*
Indirect Uses—Boiler Fuel	--	35	0	*	5	*	0	--
Conventional Boiler Use	--	35	0	0	2	0	0	--
CHP and/or Cogeneration Process	--	0	0	*	3	*	0	--
Direct Uses—Total Process	--	502	0	*	6	*	0	--
Process Heating	--	38	0	0	4	0	0	--
Process Cooling and Refrigeration	--	89	0	0	*	*	0	--
Machine Drive	--	339	0	*	2	*	0	--
Electro-Chemical Processes	--	5	--	--	--	--	--	--
Other Process Use	--	33	0	*	*	0	0	--
Direct Uses—Total Nonprocess	--	172	0	*	1	*	0	--
Facility HVAC ⁶	--	80	0	*	1	*	0	--
Facility Lighting	--	59	--	--	--	--	--	--
Other Facility Support	--	27	0	*	*	*	0	--
Onsite Transportation	--	6	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	0	0	0	--
Other Nonprocess Use	--	*	0	*	*	0	0	--
End use not reported	*	7	0	0	0	0	0	*
324199 All other petroleum and coal products manufacturing								
Total fuel consumption	79	-326	0	*	10	*	*	63
Indirect Uses—Boiler Fuel	--	10	0	0	4	*	0	--
Conventional Boiler Use	--	10	0	0	1	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	4	*	0	--
Direct Uses—Total Process	--	-275	0	*	5	*	*	--
Process Heating	--	30	0	*	5	*	0	--
Process Cooling and Refrigeration	--	24	0	0	*	0	0	--
Machine Drive	--	-405	0	*	*	0	0	--
Electro-Chemical Processes	--	75	--	--	--	--	--	--
Other Process Use	--	*	0	*	*	0	*	--

Direct Uses—Total Nonprocess	--	-63	0	*	*	*	0	--
Facility HVAC [§]	--	-14	0	0	*	*	0	--
Facility Lighting	--	-51	--	--	--	--	--	--
Other Facility Support	--	3	0	*	*	*	0	--
Onsite Transportation	--	1	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	0	0	0	--
Other Nonprocess Use	--	-3	0	0	*	*	0	--
End use not reported	63	2	0	0	0	0	0	63

325

Chemicals

Total fuel consumption	3,976	149,928	*	1	2,490	5	3	791
Indirect Uses—Boiler Fuel	--	3,999	*	1	1,388	1	1	--
Conventional Boiler Use	--	3,999	*	*	446	*	*	--
CHP and/or Cogeneration Process	--	0	*	*	942	1	*	--
Direct Uses—Total Process	--	116,510	0	*	1,021	4	*	--
Process Heating	--	6,134	0	*	743	2	*	--
Process Cooling and Refrigeration	--	12,478	0	*	11	*	*	--
Machine Drive	--	81,355	0	*	121	*	*	--
Electro-Chemical Processes	--	14,783	--	--	--	--	--	--
Other Process Use	--	1,760	0	*	146	1	*	--
Direct Uses—Total Nonprocess	--	20,728	0	*	78	1	*	--
Facility HVAC [§]	--	11,680	0	*	58	*	*	--
Facility Lighting	--	5,654	--	--	--	--	--	--
Other Facility Support	--	2,161	0	*	12	*	*	--
Onsite Transportation	--	540	--	*	1	1	--	--
Conventional Electricity Generation	--	--	0	*	5	*	*	--
Other Nonprocess Use	--	693	0	*	2	*	*	--
End use not reported	862	8,692	0	*	4	*	2	791

325110

Petrochemicals

Total fuel consumption	746	7,881	0	*	390	2	0	309
Indirect Uses—Boiler Fuel	--	601	0	*	175	*	0	--
Conventional Boiler Use	--	601	0	*	48	*	0	--
CHP and/or Cogeneration Process	--	0	0	0	126	*	0	--
Direct Uses—Total Process	--	6,822	0	*	211	1	0	--
Process Heating	--	272	0	*	174	1	0	--
Process Cooling and Refrigeration	--	703	0	0	0	*	0	--
Machine Drive	--	5,744	0	*	11	*	0	--
Electro-Chemical Processes	--	56	--	--	--	--	--	--
Other Process Use	--	46	0	*	26	*	0	--
Direct Uses—Total Nonprocess	--	458	0	*	5	*	0	--
Facility HVAC [§]	--	264	0	0	*	*	0	--
Facility Lighting	--	170	--	--	--	--	--	--
Other Facility Support	--	23	0	0	2	*	0	--
Onsite Transportation	--	*	--	*	0	*	--	--
Conventional Electricity Generation	--	--	0	*	3	*	0	--
Other Nonprocess Use	--	0	0	*	0	0	0	--
End use not reported	309	0	0	0	0	*	0	309

325120 Industrial gases

Total fuel consumption	190	26,571	0	*	90	*	0	6
Indirect Uses—Boiler Fuel	--	34	0	*	51	0	0	--
Conventional Boiler Use	--	34	0	*	8	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	42	0	0	--
Direct Uses—Total Process	--	20,502	0	*	39	*	0	--
Process Heating	--	40	0	0	D	*	0	--
Process Cooling and Refrigeration	--	853	0	0	*	0	0	--
Machine Drive	--	20,304	0	*	D	*	0	--
Electro-Chemical Processes	--	-1,233	--	--	--	--	--	--
Other Process Use	--	538	0	0	8	*	0	--
Direct Uses—Total Nonprocess	--	791	0	*	*	*	0	--
Facility HVAC ^c	--	612	0	*	*	0	0	--
Facility Lighting	--	145	--	--	--	--	--	--
Other Facility Support	--	34	0	0	*	0	0	--
Onsite Transportation	--	0	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	0	0	0	0	--
Other Nonprocess Use	--	0	0	*	*	0	0	--
End use not reported	Q	Q	0	0	0	*	0	Q

325180 Other basic inorganic chemical manufacturing

Total fuel consumption	401	25,712	0	*	207	*	1	74
Indirect Uses—Boiler Fuel	--	215	0	*	104	*	*	--
Conventional Boiler Use	--	215	0	*	13	*	*	--
CHP and/or Cogeneration Process	--	0	0	*	90	0	0	--
Direct Uses—Total Process	--	23,511	0	*	98	*	*	--
Process Heating	--	2,036	0	*	42	*	*	--
Process Cooling and Refrigeration	--	988	0	0	*	0	0	--
Machine Drive	--	7,585	0	*	54	*	0	--
Electro-Chemical Processes	--	12,877	--	--	--	--	--	--
Other Process Use	--	25	0	*	2	*	0	--
Direct Uses—Total Nonprocess	--	1,937	0	*	5	*	0	--
Facility HVAC ^c	--	1,019	0	0	4	*	0	--
Facility Lighting	--	643	--	--	--	--	--	--
Other Facility Support	--	200	0	0	1	0	0	--
Onsite Transportation	--	18	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	0	*	0	--
Other Nonprocess Use	--	57	0	*	*	*	0	--
End use not reported	91	49	0	*	*	*	1	74

325193 Ethyl alcohol

Total fuel consumption	470	10,833	0	*	368	*	1	31
Indirect Uses—Boiler Fuel	--	540	0	0	209	0	*	--
Conventional Boiler Use	--	540	0	0	142	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	67	0	*	--
Direct Uses—Total Process	--	9,612	0	*	151	*	0	--
Process Heating	--	321	0	0	125	0	0	--

Process Cooling and Refrigeration	--	1,639	0	0	6	0	0	--
Machine Drive	--	7,517	0	*	13	*	0	--
Electro-Chemical Processes	--	43	--	--	--	--	--	--
Other Process Use	--	92	0	*	7	*	0	--
Direct Uses—Total Nonprocess	--	681	0	*	8	*	0	--
Facility HVAC ⁶	--	338	0	*	4	*	0	--
Facility Lighting	--	233	--	--	--	--	--	--
Other Facility Support	--	101	0	*	2	*	0	--
Onsite Transportation	--	9	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	1	0	0	--
Other Nonprocess Use	--	Q	0	*	*	*	0	--
End use not reported	50	0	0	0	0	*	1	31

325194 Cyclic crudes, intermediate and gum and wood chemicals

Total fuel consumption	102	4,786	0	*	38	2	0	40
Indirect Uses—Boiler Fuel	--	27	0	*	15	1	0	--
Conventional Boiler Use	--	27	0	*	3	0	0	--
CHP and/or Cogeneration Process	--	0	0	*	12	1	0	--
Direct Uses—Total Process	--	4,229	0	*	22	1	0	--
Process Heating	--	104	0	*	20	1	0	--
Process Cooling and Refrigeration	--	366	0	0	*	0	0	--
Machine Drive	--	2,515	0	0	0	*	0	--
Electro-Chemical Processes	--	1,243	--	--	--	--	--	--
Other Process Use	--	1	0	*	2	0	0	--
Direct Uses—Total Nonprocess	--	531	0	*	*	*	0	--
Facility HVAC ⁶	--	307	0	0	*	*	0	--
Facility Lighting	--	184	--	--	--	--	--	--
Other Facility Support	--	34	0	0	*	*	0	--
Onsite Transportation	--	4	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	2	0	*	0	0	0	--
End use not reported	40	0	0	0	0	0	0	40

325199 All other basic organic chemical manufacturing

Total fuel consumption	509	18,704	*	*	298	*	1	117
Indirect Uses—Boiler Fuel	--	306	*	*	186	*	*	--
Conventional Boiler Use	--	306	*	*	85	*	*	--
CHP and/or Cogeneration Process	--	0	*	*	101	*	*	--
Direct Uses—Total Process	--	15,632	0	*	108	*	*	--
Process Heating	--	253	0	*	83	*	0	--
Process Cooling and Refrigeration	--	2,253	0	0	1	*	0	--
Machine Drive	--	10,801	0	*	2	*	0	--
Electro-Chemical Processes	--	2,207	--	--	--	--	--	--
Other Process Use	--	117	0	*	22	*	*	--
Direct Uses—Total Nonprocess	--	2,001	0	*	4	*	0	--
Facility HVAC ⁶	--	916	0	0	3	*	0	--
Facility Lighting	--	613	--	--	--	--	--	--
Other Facility Support	--	268	0	*	*	*	0	--
Onsite Transportation	--	40	--	*	*	*	--	--

	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	164	0	*	*	*	0	--
	End use not reported	120	765	0	0	*	*	0	117
325211	Plastics materials and resins								
	Total fuel consumption	683	11,898	0	*	484	1	0	136
	Indirect Uses—Boiler Fuel	--	425	0	*	365	*	0	--
	Conventional Boiler Use	--	425	0	*	43	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	323	*	0	--
	Direct Uses—Total Process	--	9,174	0	*	111	1	0	--
	Process Heating	--	901	0	*	95	*	0	--
	Process Cooling and Refrigeration	--	Q	0	*	1	*	0	--
	Machine Drive	--	8,684	0	*	8	*	0	--
	Electro-Chemical Processes	--	-1,283	--	--	--	--	--	--
	Other Process Use	--	271	0	*	7	1	0	--
	Direct Uses—Total Nonprocess	--	2,229	0	*	7	*	0	--
	Facility HVAC [§]	--	1,090	0	0	4	*	0	--
	Facility Lighting	--	710	--	--	--	--	--	--
	Other Facility Support	--	341	0	*	1	*	0	--
	Onsite Transportation	--	81	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	7	0	*	Q	*	0	--
	End use not reported	136	70	0	0	*	*	0	136
325212	Synthetic rubber								
	Total fuel consumption	46	1,241	0	*	26	*	*	13
	Indirect Uses—Boiler Fuel	--	52	0	*	21	0	*	--
	Conventional Boiler Use	--	52	0	*	16	0	*	--
	CHP and/or Cogeneration Process	--	0	0	0	6	0	*	--
	Direct Uses—Total Process	--	1,009	0	*	4	*	*	--
	Process Heating	--	69	0	0	3	*	*	--
	Process Cooling and Refrigeration	--	308	0	*	*	*	*	--
	Machine Drive	--	525	0	*	*	*	*	--
	Electro-Chemical Processes	--	99	--	--	--	--	--	--
	Other Process Use	--	8	0	*	1	0	0	--
	Direct Uses—Total Nonprocess	--	180	0	*	*	*	*	--
	Facility HVAC [§]	--	88	0	0	*	0	*	--
	Facility Lighting	--	56	--	--	--	--	--	--
	Other Facility Support	--	25	0	0	*	0	*	--
	Onsite Transportation	--	12	--	*	0	*	--	--
	Conventional Electricity Generation	--	--	0	*	0	*	*	--
	Other Nonprocess Use	--	*	0	*	*	*	0	--
	End use not reported	13	0	0	0	0	*	0	13
325220	Artificial and synthetic fibers and filaments								
	Total fuel consumption	25	2,384	0	*	16	*	0	*
	Indirect Uses—Boiler Fuel	--	42	0	*	11	*	0	--

Conventional Boiler Use	--	42	0	*	6	0	0	--
CHP and/or Cogeneration Process	--	0	0	*	5	*	0	--
Direct Uses—Total Process	--	1,833	0	*	2	*	0	--
Process Heating	--	200	0	0	2	*	0	--
Process Cooling and Refrigeration	--	292	0	0	0	0	0	--
Machine Drive	--	1,262	0	*	*	0	0	--
Electro-Chemical Processes	--	71	--	--	--	--	--	--
Other Process Use	--	7	0	0	*	*	0	--
Direct Uses—Total Nonprocess	--	509	0	*	3	*	0	--
Facility HVAC [§]	--	301	0	0	3	*	0	--
Facility Lighting	--	136	--	--	--	--	--	--
Other Facility Support	--	55	0	0	*	*	0	--
Onsite Transportation	--	10	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	0	*	*	0	--
Other Nonprocess Use	--	7	0	*	0	*	0	--
End use not reported	*	0	0	0	0	0	0	*

325311 Nitrogenous fertilizers

Total fuel consumption	215	0	0	*	189	*	0	D
Indirect Uses—Boiler Fuel	--	76	0	*	44	*	0	--
Conventional Boiler Use	--	76	0	0	20	*	0	--
CHP and/or Cogeneration Process	--	0	0	*	23	*	0	--
Direct Uses—Total Process	--	4,349	0	*	141	*	0	--
Process Heating	--	88	0	*	106	*	0	--
Process Cooling and Refrigeration	--	509	0	0	*	*	0	--
Machine Drive	--	3,351	0	*	1	*	0	--
Electro-Chemical Processes	--	388	--	--	--	--	--	--
Other Process Use	--	14	0	*	33	0	0	--
Direct Uses—Total Nonprocess	--	411	0	*	1	*	0	--
Facility HVAC [§]	--	211	0	0	1	*	0	--
Facility Lighting	--	132	--	--	--	--	--	--
Other Facility Support	--	57	0	*	*	*	0	--
Onsite Transportation	--	4	--	*	0	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	7	0	*	*	*	0	--
End use not reported	6	0	0	*	3	*	0	D

325312 Phosphatic fertilizers

Total fuel consumption	18	2,791	*	1	3	*	*	1
Indirect Uses—Boiler Fuel	--	8	*	*	2	*	0	--
Conventional Boiler Use	--	8	*	0	1	0	0	--
CHP and/or Cogeneration Process	--	0	0	*	1	*	0	--
Direct Uses—Total Process	--	1,514	0	*	1	*	*	--
Process Heating	--	33	0	*	1	*	*	--
Process Cooling and Refrigeration	--	62	0	0	*	0	0	--
Machine Drive	--	1,419	0	*	0	*	0	--
Electro-Chemical Processes	--	0	--	--	--	--	--	--
Other Process Use	--	0	0	*	0	0	0	--
Direct Uses—Total Nonprocess	--	89	0	*	*	*	0	--

	Facility HVAC ⁶	--	38	0	*	*	*	0	--
	Facility Lighting	--	36	--	--	--	--	--	--
	Other Facility Support	--	14	0	0	*	*	0	--
	Onsite Transportation	--	*	--	*	0	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	0	0	--
	Other Nonprocess Use	--	0	0	0	*	*	0	--
	End use not reported	5	1,180	0	*	0	0	0	1
3254	Pharmaceuticals and medicines								
	Total fuel consumption	120	13,532	0	*	68	*	*	3
	Indirect Uses—Boiler Fuel	--	291	0	*	34	*	0	--
	Conventional Boiler Use	--	291	0	*	20	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	14	*	0	--
	Direct Uses—Total Process	--	6,319	0	*	12	*	0	--
	Process Heating	--	457	0	*	7	*	0	--
	Process Cooling and Refrigeration	--	2,211	0	*	Q	*	0	--
	Machine Drive	--	3,269	0	*	Q	*	0	--
	Electro-Chemical Processes	--	122	--	--	--	--	--	--
	Other Process Use	--	261	0	*	1	*	0	--
	Direct Uses—Total Nonprocess	--	6,618	0	*	21	*	*	--
	Facility HVAC ⁶	--	4,109	0	*	18	*	0	--
	Facility Lighting	--	1,386	--	--	--	--	--	--
	Other Facility Support	--	621	0	*	3	*	0	--
	Onsite Transportation	--	169	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	Q	0	*	*	*	*	--
	End use not reported	4	305	0	0	*	*	0	3
325412	Pharmaceutical preparation								
	Total fuel consumption	62	6,543	0	*	37	*	0	1
	Indirect Uses—Boiler Fuel	--	120	0	*	17	*	0	--
	Conventional Boiler Use	--	120	0	*	11	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	6	*	0	--
	Direct Uses—Total Process	--	3,142	0	*	Q	*	0	--
	Process Heating	--	217	0	*	5	*	0	--
	Process Cooling and Refrigeration	--	1,006	0	0	Q	0	0	--
	Machine Drive	--	1,724	0	*	Q	*	0	--
	Electro-Chemical Processes	--	9	--	--	--	--	--	--
	Other Process Use	--	187	0	*	*	*	0	--
	Direct Uses—Total Nonprocess	--	3,103	0	*	10	*	0	--
	Facility HVAC ⁶	--	1,914	0	*	8	*	0	--
	Facility Lighting	--	559	--	--	--	--	--	--
	Other Facility Support	--	243	0	*	2	*	0	--
	Onsite Transportation	--	84	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	0	0	--
	Other Nonprocess Use	--	Q	0	*	*	*	0	--
	End use not reported	2	177	0	0	*	*	0	1
325992	Photographic film, paper, plate, chemical, and copy toner manufacturing								

Total fuel consumption	7	705	0	*	3	*	0	2
Indirect Uses—Boiler Fuel	--	8	0	0	2	0	0	--
Conventional Boiler Use	--	8	0	0	1	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	1	0	0	--
Direct Uses—Total Process	--	441	0	*	1	0	0	--
Process Heating	--	29	0	0	*	0	0	--
Process Cooling and Refrigeration	--	100	0	0	*	0	0	--
Machine Drive	--	256	0	*	*	0	0	--
Electro-Chemical Processes	--	28	--	--	--	--	--	--
Other Process Use	--	28	0	*	*	0	0	--
Direct Uses—Total Nonprocess	--	257	0	*	*	*	0	--
Facility HVAC ⁶	--	141	0	*	*	*	0	--
Facility Lighting	--	70	--	--	--	--	--	--
Other Facility Support	--	31	0	*	*	0	0	--
Onsite Transportation	--	5	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	10	0	*	*	*	0	--
End use not reported	2	*	0	0	0	*	0	2
326	Plastics and rubber products							
Total fuel consumption	357	70,536	*	*	102	1	0	Q
Indirect Uses—Boiler Fuel	--	2,488	*	*	41	*	0	--
Conventional Boiler Use	--	2,488	*	*	13	0	0	--
CHP and/or Cogeneration Process	--	0	0	*	28	*	0	--
Direct Uses—Total Process	--	48,094	*	*	36	*	0	--
Process Heating	--	6,029	0	*	26	*	0	--
Process Cooling and Refrigeration	--	6,923	*	0	*	*	0	--
Machine Drive	--	33,344	*	*	7	*	0	--
Electro-Chemical Processes	--	Q	--	--	--	--	--	--
Other Process Use	--	Q	0	*	Q	*	0	--
Direct Uses—Total Nonprocess	--	17,966	0	*	25	1	0	--
Facility HVAC ⁶	--	9,271	0	*	23	*	0	--
Facility Lighting	--	6,548	--	--	--	--	--	--
Other Facility Support	--	1,168	0	*	2	*	0	--
Onsite Transportation	--	915	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	*	0	--
Other Nonprocess Use	--	Q	0	*	0	*	0	--
End use not reported	13	Q	0	0	*	*	0	Q
327	Nonmetallic mineral products							
Total fuel consumption	1,166	61,841	*	3	402	1	9	324
Indirect Uses—Boiler Fuel	--	407	*	*	15	*	0	--
Conventional Boiler Use	--	407	0	0	4	*	0	--
CHP and/or Cogeneration Process	--	0	*	*	12	*	0	--
Direct Uses—Total Process	--	50,868	0	2	362	*	9	--
Process Heating	--	11,372	0	*	337	*	9	--
Process Cooling and Refrigeration	--	2,872	0	0	4	0	0	--

Machine Drive	--	34,463	0	1	19	*	*	--
Electro-Chemical Processes	--	1,163	--	--	--	--	--	--
Other Process Use	--	999	0	Q	3	*	0	--
Direct Uses—Total Nonprocess	--	9,967	*	1	23	*	*	--
Facility HVAC [§]	--	4,545	*	*	17	*	*	--
Facility Lighting	--	3,714	--	--	--	--	--	--
Other Facility Support	--	520	0	*	3	*	0	--
Onsite Transportation	--	Q	--	1	1	*	--	--
Conventional Electricity Generation	--	--	*	*	1	0	0	--
Other Nonprocess Use	--	113	0	*	1	*	0	--
End use not reported	328	599	0	*	1	*	0	324

327120 Clay building material and refractories

Total fuel consumption	39	1,487	0	*	29	*	*	2
Indirect Uses—Boiler Fuel	--	1	0	0	*	*	0	--
Conventional Boiler Use	--	1	0	0	*	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	*	*	0	--
Direct Uses—Total Process	--	1,202	0	*	28	*	*	--
Process Heating	--	279	0	*	28	*	*	--
Process Cooling and Refrigeration	--	33	0	0	*	0	0	--
Machine Drive	--	884	0	*	*	*	0	--
Electro-Chemical Processes	--	3	--	--	--	--	--	--
Other Process Use	--	3	0	*	*	0	0	--
Direct Uses—Total Nonprocess	--	276	0	*	1	*	0	--
Facility HVAC [§]	--	121	0	0	1	*	0	--
Facility Lighting	--	117	--	--	--	--	--	--
Other Facility Support	--	23	0	0	*	*	0	--
Onsite Transportation	--	14	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	1	0	*	0	*	0	--
End use not reported	2	9	0	0	0	*	0	2

327211 Flat glass

Total fuel consumption	44	1,573	0	*	37	*	0	*
Indirect Uses—Boiler Fuel	--	8	0	0	2	0	0	--
Conventional Boiler Use	--	8	0	0	*	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	2	0	0	--
Direct Uses—Total Process	--	1,342	0	*	34	*	0	--
Process Heating	--	532	0	*	34	*	0	--
Process Cooling and Refrigeration	--	240	0	0	*	0	0	--
Machine Drive	--	528	0	0	0	*	0	--
Electro-Chemical Processes	--	3	--	--	--	--	--	--
Other Process Use	--	40	0	*	*	0	0	--
Direct Uses—Total Nonprocess	--	222	0	*	1	*	0	--
Facility HVAC [§]	--	112	0	0	1	*	0	--
Facility Lighting	--	61	--	--	--	--	--	--
Other Facility Support	--	23	0	0	*	*	0	--
Onsite Transportation	--	21	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--

	Other Nonprocess Use	--	5	0	0	*	0	0	--
	End use not reported	*	0	0	0	*	*	0	*
327212	Other pressed and blown glass and glassware								
	Total fuel consumption	26	1,913	0	*	18	*	0	*
	Indirect Uses—Boiler Fuel	--	5	0	0	*	*	0	--
	Conventional Boiler Use	--	5	0	0	*	0	0	--
	CHP and/or Cogeneration Process	--	0	0	0	*	*	0	--
	Direct Uses—Total Process	--	1,629	0	*	17	*	0	--
	Process Heating	--	803	0	0	17	*	0	--
	Process Cooling and Refrigeration	--	212	0	0	*	0	0	--
	Machine Drive	--	540	0	*	*	0	0	--
	Electro-Chemical Processes	--	9	--	--	--	--	--	--
	Other Process Use	--	65	0	0	*	*	0	--
	Direct Uses—Total Nonprocess	--	279	0	*	1	*	0	--
	Facility HVAC ⁶	--	144	0	0	1	*	0	--
	Facility Lighting	--	104	--	--	--	--	--	--
	Other Facility Support	--	26	0	0	*	*	0	--
	Onsite Transportation	--	5	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	0	0	0	--
	Other Nonprocess Use	--	*	0	*	0	0	0	--
	End use not reported	*	0	0	0	*	0	0	*
327213	Glass containers								
	Total fuel consumption	54	3,449	0	*	40	*	0	*
	Indirect Uses—Boiler Fuel	--	41	0	0	*	0	0	--
	Conventional Boiler Use	--	41	0	0	*	0	0	--
	CHP and/or Cogeneration Process	--	0	0	0	*	0	0	--
	Direct Uses—Total Process	--	2,998	0	0	37	*	0	--
	Process Heating	--	1,825	0	0	30	*	0	--
	Process Cooling and Refrigeration	--	236	0	0	2	0	0	--
	Machine Drive	--	813	0	0	5	0	0	--
	Electro-Chemical Processes	--	67	--	--	--	--	--	--
	Other Process Use	--	57	0	0	*	0	0	--
	Direct Uses—Total Nonprocess	--	410	0	*	3	*	0	--
	Facility HVAC ⁶	--	224	0	*	2	0	0	--
	Facility Lighting	--	132	--	--	--	--	--	--
	Other Facility Support	--	45	0	0	1	0	0	--
	Onsite Transportation	--	2	--	*	0	*	--	--
	Conventional Electricity Generation	--	--	0	*	0	0	0	--
	Other Nonprocess Use	--	6	0	0	*	0	0	--
	End use not reported	*	0	0	0	0	0	0	*
327215	Glass products from purchased glass								
	Total fuel consumption	Q	3,707	0	*	9	*	0	Q
	Indirect Uses—Boiler Fuel	--	29	0	0	1	0	0	--
	Conventional Boiler Use	--	29	0	0	*	0	0	--

	CHP and/or Cogeneration Process	--	0	0	0	*	0	0	--
	Direct Uses—Total Process	--	2,663	0	0	6	*	0	--
	Process Heating	--	956	0	0	6	*	0	--
	Process Cooling and Refrigeration	--	243	0	0	*	0	0	--
	Machine Drive	--	955	0	0	*	*	0	--
	Electro-Chemical Processes	--	28	--	--	--	--	--	--
	Other Process Use	--	481	0	0	*	*	0	--
	Direct Uses—Total Nonprocess	--	975	0	*	2	*	0	--
	Facility HVAC ^g	--	588	0	*	2	*	0	--
	Facility Lighting	--	251	--	--	--	--	--	--
	Other Facility Support	--	86	0	*	*	0	0	--
	Onsite Transportation	--	34	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	0	*	0	0	--
	Other Nonprocess Use	--	17	0	*	*	*	0	--
	End use not reported	Q	40	0	0	*	*	0	Q
327310	Cements								
	Total fuel consumption	362	13,035	0	1	86	*	6	104
	Indirect Uses—Boiler Fuel	--	58	0	0	*	*	0	--
	Conventional Boiler Use	--	58	0	0	*	*	0	--
	CHP and/or Cogeneration Process	--	0	0	0	*	0	0	--
	Direct Uses—Total Process	--	12,342	0	*	86	*	6	--
	Process Heating	--	1,148	0	*	81	*	6	--
	Process Cooling and Refrigeration	--	445	0	0	0	0	0	--
	Machine Drive	--	10,020	0	*	5	*	0	--
	Electro-Chemical Processes	--	512	--	--	--	--	--	--
	Other Process Use	--	217	0	*	0	0	0	--
	Direct Uses—Total Nonprocess	--	635	0	*	1	*	*	--
	Facility HVAC ^g	--	290	0	*	1	*	*	--
	Facility Lighting	--	212	--	--	--	--	--	--
	Other Facility Support	--	55	0	0	*	*	0	--
	Onsite Transportation	--	55	--	*	0	*	--	--
	Conventional Electricity Generation	--	--	0	0	0	0	0	--
	Other Nonprocess Use	--	24	0	*	0	*	0	--
	End use not reported	104	0	0	*	0	*	0	104
327410	Lime								
	Total fuel consumption	103	1,371	0	*	25	*	3	15
	Indirect Uses—Boiler Fuel	--	0	0	0	*	0	0	--
	Conventional Boiler Use	--	0	0	0	*	0	0	--
	CHP and/or Cogeneration Process	--	0	0	0	0	0	0	--
	Direct Uses—Total Process	--	1,306	0	*	24	*	3	--
	Process Heating	--	467	0	*	24	*	3	--
	Process Cooling and Refrigeration	--	11	0	0	0	0	0	--
	Machine Drive	--	809	0	*	*	*	*	--
	Electro-Chemical Processes	--	0	--	--	--	--	--	--
	Other Process Use	--	20	0	*	*	*	0	--
	Direct Uses—Total Nonprocess	--	65	0	*	*	*	0	--
	Facility HVAC ^g	--	24	0	*	*	*	0	--

Facility Lighting	--	19	--	--	--	--	--	--
Other Facility Support	--	22	0	0	*	0	0	--
Onsite Transportation	--	*	--	*	0	*	--	--
Conventional Electricity Generation	--	--	0	*	0	0	0	--
Other Nonprocess Use	--	*	0	*	0	*	0	--
End use not reported	15	0	0	0	0	*	0	15

327420 Gypsum

Total fuel consumption	77	1,826	*	*	68	*	0	*
Indirect Uses—Boiler Fuel	--	21	*	*	3	0	0	--
Conventional Boiler Use	--	21	0	0	1	0	0	--
CHP and/or Cogeneration Process	--	0	*	*	2	0	0	--
Direct Uses—Total Process	--	1,469	0	*	58	*	0	--
Process Heating	--	138	0	*	52	*	0	--
Process Cooling and Refrigeration	--	83	0	0	1	0	0	--
Machine Drive	--	1,176	0	*	4	*	0	--
Electro-Chemical Processes	--	25	--	--	--	--	--	--
Other Process Use	--	46	0	*	1	0	0	--
Direct Uses—Total Nonprocess	--	337	*	*	6	*	0	--
Facility HVAC [§]	--	91	*	*	2	*	0	--
Facility Lighting	--	99	--	--	--	--	--	--
Other Facility Support	--	52	0	*	1	0	0	--
Onsite Transportation	--	59	--	*	1	*	--	--
Conventional Electricity Generation	--	--	*	0	1	0	0	--
Other Nonprocess Use	--	36	0	0	1	0	0	--
End use not reported	*	0	0	0	0	0	0	*

327993 Mineral wool

Total fuel consumption	47	4,111	0	*	31	*	*	1
Indirect Uses—Boiler Fuel	--	15	0	0	*	0	0	--
Conventional Boiler Use	--	15	0	0	*	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	*	0	0	--
Direct Uses—Total Process	--	3,420	0	*	28	*	*	--
Process Heating	--	1,571	0	*	27	*	*	--
Process Cooling and Refrigeration	--	238	0	0	*	0	0	--
Machine Drive	--	1,543	0	*	1	*	0	--
Electro-Chemical Processes	--	17	--	--	--	--	--	--
Other Process Use	--	50	0	*	*	0	0	--
Direct Uses—Total Nonprocess	--	661	0	*	2	*	0	--
Facility HVAC [§]	--	276	0	*	2	*	0	--
Facility Lighting	--	263	--	--	--	--	--	--
Other Facility Support	--	96	0	0	*	*	0	--
Onsite Transportation	--	12	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	0	0	0	--
Other Nonprocess Use	--	14	0	*	0	*	0	--
End use not reported	1	16	0	0	0	0	0	1

331 Primary metals

	Total fuel consumption	1,449	99,469	*	1	603	1	*	460
	Indirect Uses—Boiler Fuel	--	463	*	*	72	*	*	--
	Conventional Boiler Use	--	463	*	*	18	*	0	--
	CHP and/or Cogeneration Process	--	0	*	*	54	*	*	--
	Direct Uses—Total Process	--	88,326	0	*	484	*	*	--
	Process Heating	--	24,314	0	*	436	*	*	--
	Process Cooling and Refrigeration	--	2,014	0	*	3	*	0	--
	Machine Drive	--	37,658	0	*	16	*	0	--
	Electro-Chemical Processes	--	17,351	--	--	--	--	--	--
	Other Process Use	--	6,988	0	*	30	*	*	--
	Direct Uses—Total Nonprocess	--	10,587	*	1	47	1	*	--
	Facility HVAC ⁶	--	4,580	0	*	40	*	*	--
	Facility Lighting	--	3,635	--	--	--	--	--	--
	Other Facility Support	--	1,345	0	*	4	*	0	--
	Onsite Transportation	--	259	--	1	1	*	--	--
	Conventional Electricity Generation	--	--	0	*	1	*	0	--
	Other Nonprocess Use	--	768	*	*	1	*	*	--
	End use not reported	464	93	0	*	*	*	*	460
331110	Iron and steel mills and ferroalloys								
	Total fuel consumption	1,032	54,501	*	1	374	*	*	441
	Indirect Uses—Boiler Fuel	--	137	*	0	44	*	*	--
	Conventional Boiler Use	--	137	*	0	12	0	0	--
	CHP and/or Cogeneration Process	--	0	*	0	32	*	*	--
	Direct Uses—Total Process	--	49,540	0	*	313	*	*	--
	Process Heating	--	15,970	0	*	282	*	*	--
	Process Cooling and Refrigeration	--	1,011	0	0	2	*	0	--
	Machine Drive	--	D	0	*	4	*	0	--
	Electro-Chemical Processes	--	D	--	--	--	--	--	--
	Other Process Use	--	4,908	0	*	26	*	*	--
	Direct Uses—Total Nonprocess	--	4,824	*	1	18	*	*	--
	Facility HVAC ⁶	--	2,056	0	*	16	*	0	--
	Facility Lighting	--	1,664	--	--	--	--	--	--
	Other Facility Support	--	629	0	*	1	*	0	--
	Onsite Transportation	--	29	--	1	1	*	--	--
	Conventional Electricity Generation	--	--	0	*	0	*	0	--
	Other Nonprocess Use	--	446	*	*	*	*	*	--
	End use not reported	442	0	0	*	0	*	*	441
3312	Steel products from purchased steel								
	Total fuel consumption	55	5,551	0	*	31	*	0	1
	Indirect Uses—Boiler Fuel	--	186	0	0	3	*	0	--
	Conventional Boiler Use	--	186	0	0	2	0	0	--
	CHP and/or Cogeneration Process	--	0	0	0	2	*	0	--
	Direct Uses—Total Process	--	4,319	0	*	22	*	0	--
	Process Heating	--	665	0	0	21	*	0	--
	Process Cooling and Refrigeration	--	175	0	0	1	*	0	--
	Machine Drive	--	3,141	0	*	1	*	0	--

Electro-Chemical Processes	--	28	--	--	--	--	--	--
Other Process Use	--	309	0	*	0	*	0	--
Direct Uses—Total Nonprocess	--	1,025	0	*	6	*	0	--
Facility HVAC ⁶	--	495	0	*	5	*	0	--
Facility Lighting	--	387	--	--	--	--	--	--
Other Facility Support	--	118	0	*	1	*	0	--
Onsite Transportation	--	11	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	14	0	*	1	0	0	--
End use not reported	3	Q	0	*	0	*	0	1

3313 Alumina and aluminum production and processing

Total fuel consumption	189	19,793	0	*	114	*	0	2
Indirect Uses—Boiler Fuel	--	27	0	0	13	*	0	--
Conventional Boiler Use	--	27	0	0	1	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	12	*	0	--
Direct Uses—Total Process	--	17,880	0	*	93	*	0	--
Process Heating	--	1,058	0	0	85	*	0	--
Process Cooling and Refrigeration	--	292	0	0	*	*	0	--
Machine Drive	--	D	0	*	5	*	0	--
Electro-Chemical Processes	--	D	--	--	--	--	--	--
Other Process Use	--	247	0	*	2	*	0	--
Direct Uses—Total Nonprocess	--	1,882	0	*	8	*	0	--
Facility HVAC ⁶	--	602	0	*	6	*	0	--
Facility Lighting	--	723	--	--	--	--	--	--
Other Facility Support	--	302	0	0	2	*	0	--
Onsite Transportation	--	118	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	137	0	*	*	*	0	--
End use not reported	2	Q	0	0	*	*	0	2

331314 Secondary smelting and alloying of aluminum

Total fuel consumption	22	550	0	*	19	*	0	*
Indirect Uses—Boiler Fuel	--	0	0	0	*	0	0	--
Conventional Boiler Use	--	0	0	0	0	0	0	--
CHP and/or Cogeneration Process	--	0	0	0	*	0	0	--
Direct Uses—Total Process	--	450	0	*	18	*	0	--
Process Heating	--	78	0	0	15	*	0	--
Process Cooling and Refrigeration	--	14	0	0	*	0	0	--
Machine Drive	--	338	0	*	2	*	0	--
Electro-Chemical Processes	--	2	--	--	--	--	--	--
Other Process Use	--	17	0	0	*	*	0	--
Direct Uses—Total Nonprocess	--	100	0	*	1	*	0	--
Facility HVAC ⁶	--	44	0	0	1	*	0	--
Facility Lighting	--	35	--	--	--	--	--	--
Other Facility Support	--	12	0	0	*	0	0	--
Onsite Transportation	--	1	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	0	0	--
Other Nonprocess Use	--	8	0	0	0	0	0	--

	End use not reported	*	0	0	0	0	0	0	*
331315	Aluminum sheet, plate and foils								
	Total fuel consumption	84	6,166	0	*	60	*	0	*
	Indirect Uses—Boiler Fuel	--	13	0	0	2	*	0	--
	Conventional Boiler Use	--	13	0	0	1	0	0	--
	CHP and/or Cogeneration Process	--	0	0	0	1	*	0	--
	Direct Uses—Total Process	--	5,045	0	*	53	*	0	--
	Process Heating	--	694	0	0	52	*	0	--
	Process Cooling and Refrigeration	--	193	0	0	*	0	0	--
	Machine Drive	--	4,059	0	*	1	0	0	--
	Electro-Chemical Processes	--	0	--	--	--	--	--	--
	Other Process Use	--	98	0	0	*	*	0	--
	Direct Uses—Total Nonprocess	--	1,107	0	*	5	*	0	--
	Facility HVAC [®]	--	324	0	*	3	*	0	--
	Facility Lighting	--	433	--	--	--	--	--	--
	Other Facility Support	--	213	0	0	1	0	0	--
	Onsite Transportation	--	72	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	0	*	0	0	--
	Other Nonprocess Use	--	66	0	*	*	*	0	--
	End use not reported	*	*	0	0	*	0	0	*
331318	Other aluminum rolling, drawing and extruding								
	Total fuel consumption	26	2,070	0	*	18	*	0	*
	Indirect Uses—Boiler Fuel	--	13	0	0	D	*	0	--
	Conventional Boiler Use	--	13	0	0	*	0	0	--
	CHP and/or Cogeneration Process	--	0	0	0	D	*	0	--
	Direct Uses—Total Process	--	1,727	0	*	D	*	0	--
	Process Heating	--	285	0	0	D	*	0	--
	Process Cooling and Refrigeration	--	83	0	0	*	*	0	--
	Machine Drive	--	1,188	0	0	2	*	0	--
	Electro-Chemical Processes	--	40	--	--	--	--	--	--
	Other Process Use	--	132	0	*	1	*	0	--
	Direct Uses—Total Nonprocess	--	326	0	*	D	*	0	--
	Facility HVAC [®]	--	136	0	0	D	*	0	--
	Facility Lighting	--	123	--	--	--	--	--	--
	Other Facility Support	--	62	0	0	*	*	0	--
	Onsite Transportation	--	5	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	0	0	0	0	--
	Other Nonprocess Use	--	*	0	0	0	*	0	--
	End use not reported	*	Q	0	0	0	*	0	*
3314	Nonferrous metal (except aluminum) production and processing								
	Total fuel consumption	85	9,801	0	*	42	*	0	6
	Indirect Uses—Boiler Fuel	--	76	0	*	9	*	0	--
	Conventional Boiler Use	--	76	0	*	2	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	7	*	0	--

	Direct Uses—Total Process	--	8,503	0	*	27	*	0	--
	Process Heating	--	2,998	0	*	23	*	0	--
	Process Cooling and Refrigeration	--	326	0	*	*	0	0	--
	Machine Drive	--	3,176	0	*	3	*	0	--
	Electro-Chemical Processes	--	1,147	--	--	--	--	--	--
	Other Process Use	--	856	0	*	1	*	0	--
	Direct Uses—Total Nonprocess	--	1,174	0	*	5	*	0	--
	Facility HVAC [®]	--	674	0	*	4	*	0	--
	Facility Lighting	--	331	--	--	--	--	--	--
	Other Facility Support	--	124	0	0	*	*	0	--
	Onsite Transportation	--	25	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	19	0	*	*	*	0	--
	End use not reported	6	48	0	*	*	*	0	6
331410	Nonferrous metal (except aluminum) smelting and refining								
	Total fuel consumption	30	4,523	0	*	13	*	0	*
	Indirect Uses—Boiler Fuel	--	24	0	*	6	*	0	--
	Conventional Boiler Use	--	24	0	*	1	0	0	--
	CHP and/or Cogeneration Process	--	0	0	*	5	*	0	--
	Direct Uses—Total Process	--	4,217	0	*	5	*	0	--
	Process Heating	--	1,886	0	*	4	*	0	--
	Process Cooling and Refrigeration	--	150	0	0	*	0	0	--
	Machine Drive	--	615	0	*	*	*	0	--
	Electro-Chemical Processes	--	1,043	--	--	--	--	--	--
	Other Process Use	--	524	0	*	1	*	0	--
	Direct Uses—Total Nonprocess	--	279	0	*	2	*	0	--
	Facility HVAC [®]	--	144	0	0	1	*	0	--
	Facility Lighting	--	90	--	--	--	--	--	--
	Other Facility Support	--	43	0	0	*	*	0	--
	Onsite Transportation	--	1	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	0	0	0	0	0	0	--
	End use not reported	*	2	0	0	*	*	0	*
3315	Foundries								
	Total fuel consumption	87	9,824	0	*	41	*	*	10
	Indirect Uses—Boiler Fuel	--	38	0	*	2	*	0	--
	Conventional Boiler Use	--	38	0	0	1	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	2	*	0	--
	Direct Uses—Total Process	--	8,084	0	*	29	*	0	--
	Process Heating	--	3,622	0	*	25	*	0	--
	Process Cooling and Refrigeration	--	211	0	0	*	*	0	--
	Machine Drive	--	3,558	0	*	4	*	0	--
	Electro-Chemical Processes	--	24	--	--	--	--	--	--
	Other Process Use	--	668	0	*	*	*	0	--
	Direct Uses—Total Nonprocess	--	1,683	0	*	10	*	*	--
	Facility HVAC [®]	--	753	0	*	9	*	*	--
	Facility Lighting	--	530	--	--	--	--	--	--

	Other Facility Support	--	172	0	*	1	*	0	--
	Onsite Transportation	--	76	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	152	0	*	*	*	0	--
	End use not reported	10	20	0	*	*	*	0	10
331511	Iron foundries								
	Total fuel consumption	38	4,718	0	*	11	*	*	10
	Indirect Uses—Boiler Fuel	--	Q	0	*	*	*	0	--
	Conventional Boiler Use	--	Q	0	0	*	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	*	*	0	--
	Direct Uses—Total Process	--	4,126	0	*	7	*	0	--
	Process Heating	--	2,092	0	0	5	*	0	--
	Process Cooling and Refrigeration	--	47	0	0	0	*	0	--
	Machine Drive	--	1,771	0	*	1	*	0	--
	Electro-Chemical Processes	--	Q	--	--	--	--	--	--
	Other Process Use	--	210	0	*	*	*	0	--
	Direct Uses—Total Nonprocess	--	583	0	*	4	*	*	--
	Facility HVAC [§]	--	277	0	*	4	*	*	--
	Facility Lighting	--	208	--	--	--	--	--	--
	Other Facility Support	--	72	0	*	*	*	0	--
	Onsite Transportation	--	25	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	2	0	0	*	*	0	--
	End use not reported	10	0	0	*	0	*	0	10
331523	Nonferrous metal die-casting foundries								
	Total fuel consumption	23	2,031	0	*	15	*	0	*
	Indirect Uses—Boiler Fuel	--	13	0	0	1	*	0	--
	Conventional Boiler Use	--	13	0	0	*	*	0	--
	CHP and/or Cogeneration Process	--	0	0	0	1	*	0	--
	Direct Uses—Total Process	--	1,466	0	*	12	*	0	--
	Process Heating	--	446	0	0	10	*	0	--
	Process Cooling and Refrigeration	--	47	0	0	*	*	0	--
	Machine Drive	--	918	0	*	1	*	0	--
	Electro-Chemical Processes	--	2	--	--	--	--	--	--
	Other Process Use	--	52	0	*	*	*	0	--
	Direct Uses—Total Nonprocess	--	552	0	*	3	*	0	--
	Facility HVAC [§]	--	226	0	0	2	*	0	--
	Facility Lighting	--	168	--	--	--	--	--	--
	Other Facility Support	--	40	0	0	*	*	0	--
	Onsite Transportation	--	37	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	0	*	0	0	--
	Other Nonprocess Use	--	81	0	0	*	*	0	--
	End use not reported	*	0	0	0	0	*	0	*
331524	Aluminum foundries, except die-casting								

	Total fuel consumption	6	569	0	*	4	*	0	*
	Indirect Uses—Boiler Fuel	--	5	0	0	*	*	0	--
	Conventional Boiler Use	--	5	0	0	*	*	0	--
	CHP and/or Cogeneration Process	--	0	0	0	*	0	0	--
	Direct Uses—Total Process	--	412	0	*	3	*	0	--
	Process Heating	--	137	0	*	3	*	0	--
	Process Cooling and Refrigeration	--	19	0	0	*	0	0	--
	Machine Drive	--	237	0	*	*	*	0	--
	Electro-Chemical Processes	--	Q	--	--	--	--	--	--
	Other Process Use	--	17	0	0	*	*	0	--
	Direct Uses—Total Nonprocess	--	151	0	*	1	*	0	--
	Facility HVAC [§]	--	72	0	*	1	*	0	--
	Facility Lighting	--	49	--	--	--	--	--	--
	Other Facility Support	--	22	0	0	*	0	0	--
	Onsite Transportation	--	4	--	*	0	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	0	0	--
	Other Nonprocess Use	--	Q	0	0	*	0	0	--
	End use not reported	*	1	0	0	*	*	0	*
332	Fabricated metal products								
	Total fuel consumption	425	41,863	*	*	265	1	0	Q
	Indirect Uses—Boiler Fuel	--	154	*	0	49	*	0	--
	Conventional Boiler Use	--	154	0	0	Q	*	0	--
	CHP and/or Cogeneration Process	--	0	*	0	Q	*	0	--
	Direct Uses—Total Process	--	29,104	*	*	173	*	0	--
	Process Heating	--	6,451	0	*	169	*	0	--
	Process Cooling and Refrigeration	--	921	0	0	*	0	0	--
	Machine Drive	--	19,204	*	*	3	*	0	--
	Electro-Chemical Processes	--	780	--	--	--	--	--	--
	Other Process Use	--	1,748	0	*	Q	*	0	--
	Direct Uses—Total Nonprocess	--	11,236	*	*	42	1	0	--
	Facility HVAC [§]	--	5,978	*	*	39	*	0	--
	Facility Lighting	--	3,607	--	--	--	--	--	--
	Other Facility Support	--	1,264	0	0	3	*	0	--
	Onsite Transportation	--	310	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	Q	0	*	*	*	0	--
	End use not reported	7	1,369	0	0	Q	*	0	Q
333	Machinery								
	Total fuel consumption	143	22,232	0	1	58	1	0	*
	Indirect Uses—Boiler Fuel	--	143	0	*	5	*	0	--
	Conventional Boiler Use	--	143	0	0	2	0	0	--
	CHP and/or Cogeneration Process	--	0	0	*	3	*	0	--
	Direct Uses—Total Process	--	12,111	0	Q	24	*	0	--
	Process Heating	--	1,177	0	*	19	*	0	--
	Process Cooling and Refrigeration	--	763	0	*	Q	0	0	--
	Machine Drive	--	9,152	0	*	3	*	0	--
	Electro-Chemical Processes	--	66	--	--	--	--	--	--

Other Process Use	--	954	0	Q	1	*	0	--
Direct Uses—Total Nonprocess	--	8,535	0	*	27	1	0	--
Facility HVAC [§]	--	4,451	0	*	24	*	0	--
Facility Lighting	--	2,133	--	--	--	--	--	--
Other Facility Support	--	1,021	0	*	1	*	0	--
Onsite Transportation	--	Q	--	*	*	*	--	--
Conventional Electricity Generation	--	--	0	*	*	*	0	--
Other Nonprocess Use	--	Q	0	*	Q	*	0	--
End use not reported	7	1,442	0	*	Q	*	0	*

334 Computer and electronic products

Total fuel consumption	128	27,906	*	*	31	*	0	*
Indirect Uses—Boiler Fuel	--	200	0	*	8	*	0	--
Conventional Boiler Use	--	200	0	*	4	*	0	--
CHP and/or Cogeneration Process	--	0	0	*	4	0	0	--
Direct Uses—Total Process	--	17,083	*	*	7	*	0	--
Process Heating	--	1,604	0	*	4	*	0	--
Process Cooling and Refrigeration	--	3,616	0	*	*	0	0	--
Machine Drive	--	5,716	0	*	Q	0	0	--
Electro-Chemical Processes	--	326	--	--	--	--	--	--
Other Process Use	--	Q	*	*	1	*	0	--
Direct Uses—Total Nonprocess	--	10,268	0	*	16	*	0	--
Facility HVAC [§]	--	6,228	0	*	12	*	0	--
Facility Lighting	--	2,147	--	--	--	--	--	--
Other Facility Support	--	1,411	0	*	1	*	0	--
Onsite Transportation	--	101	--	*	0	*	--	--
Conventional Electricity Generation	--	--	0	*	1	0	0	--
Other Nonprocess Use	--	381	0	*	Q	*	0	--
End use not reported	2	355	0	0	*	*	0	*

334413 Semiconductors and related devices

Total fuel consumption	66	13,783	*	*	18	*	0	*
Indirect Uses—Boiler Fuel	--	77	0	*	5	*	0	--
Conventional Boiler Use	--	77	0	*	3	*	0	--
CHP and/or Cogeneration Process	--	0	0	*	2	0	0	--
Direct Uses—Total Process	--	9,499	*	*	4	*	0	--
Process Heating	--	1,091	0	*	2	*	0	--
Process Cooling and Refrigeration	--	2,392	0	*	*	0	0	--
Machine Drive	--	3,228	0	*	*	0	0	--
Electro-Chemical Processes	--	274	--	--	--	--	--	--
Other Process Use	--	2,514	*	*	1	*	0	--
Direct Uses—Total Nonprocess	--	4,196	0	*	8	*	0	--
Facility HVAC [§]	--	2,812	0	*	6	*	0	--
Facility Lighting	--	582	--	--	--	--	--	--
Other Facility Support	--	592	0	*	*	*	0	--
Onsite Transportation	--	19	--	*	0	*	--	--
Conventional Electricity Generation	--	--	0	*	1	0	0	--
Other Nonprocess Use	--	190	0	*	*	0	0	--
End use not reported	*	Q	0	0	*	0	0	*

	Process Heating	--	199	0	0	23	*	0	--
	Process Cooling and Refrigeration	--	591	0	0	*	0	0	--
	Machine Drive	--	3,736	0	*	*	0	0	--
	Electro-Chemical Processes	--	70	--	--	--	--	--	--
	Other Process Use	--	436	0	*	1	*	0	--
	Direct Uses—Total Nonprocess	--	2,637	0	*	10	*	0	--
	Facility HVAC ⁶	--	1,635	0	0	10	*	0	--
	Facility Lighting	--	656	--	--	--	--	--	--
	Other Facility Support	--	180	0	*	*	0	0	--
	Onsite Transportation	--	139	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	0	0	--
	Other Nonprocess Use	--	26	0	*	0	*	0	--
	End use not reported	10	141	0	*	1	0	0	8
3364	Aerospace product and parts								
	Total fuel consumption	62	9,589	0	*	26	*	0	1
	Indirect Uses—Boiler Fuel	--	123	0	*	8	*	0	--
	Conventional Boiler Use	--	123	0	*	4	*	0	--
	CHP and/or Cogeneration Process	--	0	0	*	5	*	0	--
	Direct Uses—Total Process	--	5,169	0	*	7	*	0	--
	Process Heating	--	1,138	0	*	6	*	0	--
	Process Cooling and Refrigeration	--	923	0	0	*	*	0	--
	Machine Drive	--	2,761	0	*	*	*	0	--
	Electro-Chemical Processes	--	83	--	--	--	--	--	--
	Other Process Use	--	264	0	*	1	*	0	--
	Direct Uses—Total Nonprocess	--	4,196	0	*	10	*	0	--
	Facility HVAC ⁶	--	2,205	0	*	9	*	0	--
	Facility Lighting	--	1,416	--	--	--	--	--	--
	Other Facility Support	--	420	0	*	1	*	0	--
	Onsite Transportation	--	124	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	31	0	*	1	*	0	--
	End use not reported	2	101	0	0	*	*	0	1
336411	Aircraft								
	Total fuel consumption	18	2,647	0	*	8	*	0	*
	Indirect Uses—Boiler Fuel	--	15	0	*	3	0	0	--
	Conventional Boiler Use	--	15	0	*	2	0	0	--
	CHP and/or Cogeneration Process	--	0	0	*	2	0	0	--
	Direct Uses—Total Process	--	1,070	0	*	2	*	0	--
	Process Heating	--	136	0	*	2	*	0	--
	Process Cooling and Refrigeration	--	213	0	0	*	*	0	--
	Machine Drive	--	633	0	*	*	*	0	--
	Electro-Chemical Processes	--	22	--	--	--	--	--	--
	Other Process Use	--	65	0	0	*	0	0	--
	Direct Uses—Total Nonprocess	--	1,541	0	*	2	*	0	--
	Facility HVAC ⁶	--	778	0	0	2	*	0	--
	Facility Lighting	--	508	--	--	--	--	--	--
	Other Facility Support	--	193	0	*	*	*	0	--

	Onsite Transportation	--	61	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	*	0	--
	Other Nonprocess Use	--	*	0	*	*	*	0	--
	End use not reported	*	Q	0	0	0	*	0	*
337	Furniture and related products								
	Total fuel consumption	51	Q	0	*	13	*	*	4
	Indirect Uses—Boiler Fuel	--	37	0	0	1	*	0	--
	Conventional Boiler Use	--	37	0	0	*	0	0	--
	CHP and/or Cogeneration Process	--	0	0	0	*	*	0	--
	Direct Uses—Total Process	--	4,283	0	*	5	*	0	--
	Process Heating	--	112	0	0	5	*	0	--
	Process Cooling and Refrigeration	--	Q	0	0	*	0	0	--
	Machine Drive	--	3,610	0	*	*	*	0	--
	Electro-Chemical Processes	--	12	--	--	--	--	--	--
	Other Process Use	--	Q	0	0	0	*	0	--
	Direct Uses—Total Nonprocess	--	Q	0	*	6	*	*	--
	Facility HVAC ⁶	--	Q	0	0	6	*	*	--
	Facility Lighting	--	Q	--	--	--	--	--	--
	Other Facility Support	--	Q	0	0	*	*	0	--
	Onsite Transportation	--	Q	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	0	*	*	0	--
	Other Nonprocess Use	--	Q	0	*	0	0	0	--
	End use not reported	7	332	0	*	Q	*	0	4
339	Miscellaneous								
	Total fuel consumption	57	9,673	0	*	23	*	0	*
	Indirect Uses—Boiler Fuel	--	77	0	0	3	0	0	--
	Conventional Boiler Use	--	77	0	0	*	0	0	--
	CHP and/or Cogeneration Process	--	0	0	0	3	0	0	--
	Direct Uses—Total Process	--	5,287	0	*	10	*	0	--
	Process Heating	--	415	0	0	9	*	0	--
	Process Cooling and Refrigeration	--	681	0	0	*	*	0	--
	Machine Drive	--	3,434	0	*	*	*	0	--
	Electro-Chemical Processes	--	Q	--	--	--	--	--	--
	Other Process Use	--	726	0	0	*	*	0	--
	Direct Uses—Total Nonprocess	--	4,136	0	*	10	*	0	--
	Facility HVAC ⁶	--	2,579	0	*	9	*	0	--
	Facility Lighting	--	1,034	--	--	--	--	--	--
	Other Facility Support	--	391	0	0	1	*	0	--
	Onsite Transportation	--	Q	--	*	*	*	--	--
	Conventional Electricity Generation	--	--	0	*	*	0	0	--
	Other Nonprocess Use	--	41	0	*	*	0	0	--
	End use not reported	Q	Q	0	0	*	*	0	*

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. CHP is defined as combined heat and power. Allocations to specific end uses are made based on reasonable approximations by respondents.

respondents.

^aThe 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).

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

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

^eHydrocarbon 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.

^gFacility heating, ventilation, and air conditioning (*facility HVAC*) excludes steam and hot water.

* 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.

-- Estimation is not applicable.

S=Negative value.

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).

RSE Table 5.1 Relative standard errors for table 5.1
Unit: Percentage

NAICS code ^a	End use	Total	Net electricity ^b	Residual fuel oil	Distillate fuel oil and diesel fuel ^c	Natural gas ^d	HGL (excluding natural gasoline) ^e	Coal (excluding coal coke and breeze)	Other ^f
Total United States									
311 - 339	All manufacturing industries								
	Total fuel consumption	1.5	3.1	3.5	7.0	2.2	4.1	5.1	1.9
	Indirect Uses—Boiler Fuel	--	9.3	3.5	11.2	3.3	9.3	0.3	--
	Conventional Boiler Use	--	9.3	10.7	6.4	1.9	17.4	0.0	--
	CHP and/or Cogeneration Process	--	X	1.8	14.0	4.6	6.2	0.3	--
	Direct Uses—Total Process	--	3.0	13.2	17.6	2.1	3.8	9.1	--
	Process Heating	--	4.5	13.4	6.4	2.5	4.0	10.0	--
	Process Cooling and Refrigeration	--	3.4	68.9	75.5	12.2	41.3	1.7	--
	Machine Drive	--	3.9	55.2	17.6	3.7	19.9	0.3	--
	Electro-Chemical Processes	--	1.7	--	--	--	--	--	--
	Other Process Use	--	12.6	0.0	39.4	1.7	5.9	0.0	--
	Direct Uses—Total Nonprocess	--	4.3	6.7	6.2	3.9	7.3	0.6	--
	Facility HVAC ^g	--	4.1	71.5	23.3	4.8	20.0	2.3	--
	Facility Lighting	--	5.8	--	--	--	--	--	--
	Other Facility Support	--	3.6	0.0	22.2	5.7	40.5	0.0	--
	Onsite Transportation	--	14.6	--	5.9	6.0	7.1	--	--
	Conventional Electricity Generation	--	--	0.0	31.3	1.2	52.8	0.0	--
	Other Nonprocess Use	--	8.3	0.0	27.4	7.7	29.6	0.4	--
	End use not reported	1.9	22.0	0.0	28.0	9.8	35.2	0.0	1.9
311	Food								
	Total fuel consumption	2.4	3.2	40.5	20.2	3.5	36.4	0.0	1.4
	Indirect Uses—Boiler Fuel	--	7.4	51.3	28.9	2.6	40.7	0.0	--
	Conventional Boiler Use	--	7.4	3.7	10.6	3.8	54.3	0.0	--
	CHP and/or Cogeneration Process	--	X	61.3	34.5	3.4	25.1	0.0	--
	Direct Uses—Total Process	--	3.4	3.7	69.3	6.6	49.5	0.0	--
	Process Heating	--	11.3	0.0	30.0	6.2	56.8	0.0	--
	Process Cooling and Refrigeration	--	4.3	19.6	77.8	36.4	56.9	X	--
	Machine Drive	--	4.5	19.6	73.5	23.9	36.9	0.0	--
	Electro-Chemical Processes	--	7.3	--	--	--	--	--	--
	Other Process Use	--	17.3	X	0.3	21.6	54.9	X	--
	Direct Uses—Total Nonprocess	--	4.4	8.8	16.3	12.2	18.1	X	--

	Facility HVAC ⁶	--	6.0	8.8	38.9	16.6	25.7	X	--
	Facility Lighting	--	4.7	--	--	--	--	--	--
	Other Facility Support	--	5.9	X	40.4	12.3	35.0	X	--
	Onsite Transportation	--	5.8	--	13.0	12.3	21.9	--	--
	Conventional Electricity Generation	--	--	X	45.8	33.2	0.0	X	--
	Other Nonprocess Use	--	13.7	X	40.1	18.1	2.4	X	--
	End use not reported	2.1	20.9	X	77.3	18.3	47.4	0.0	1.4
3112	Grain and oilseed milling								
	Total fuel consumption	2.4	2.9	15.6	6.0	4.1	16.5	0.0	0.1
	Indirect Uses—Boiler Fuel	--	2.7	65.8	4.6	3.6	0.0	0.0	--
	Conventional Boiler Use	--	2.7	65.8	4.6	6.4	X	0.0	--
	CHP and/or Cogeneration Process	--	X	X	X	2.5	0.0	0.0	--
	Direct Uses—Total Process	--	2.9	0.0	2.7	8.8	26.4	X	--
	Process Heating	--	31.7	0.0	75.9	9.3	41.1	X	--
	Process Cooling and Refrigeration	--	1.8	X	X	0.0	X	X	--
	Machine Drive	--	3.0	X	0.4	12.8	6.7	X	--
	Electro-Chemical Processes	--	0.1	--	--	--	--	--	--
	Other Process Use	--	15.5	X	X	21.8	0.0	X	--
	Direct Uses—Total Nonprocess	--	5.3	41.7	8.0	6.2	20.6	X	--
	Facility HVAC ⁶	--	7.0	41.7	0.0	7.4	12.4	X	--
	Facility Lighting	--	4.0	--	--	--	--	--	--
	Other Facility Support	--	9.0	X	0.0	10.2	0.0	X	--
	Onsite Transportation	--	16.8	--	4.4	5.1	24.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	0.0	X	--
	Other Nonprocess Use	--	0.0	X	53.3	X	3.5	X	--
	End use not reported	0.2	24.8	X	X	16.3	67.8	0.0	0.1
311221	Wet corn milling and starch manufacturing								
	Total fuel consumption	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	X	0.0	X	0.0	--
	Conventional Boiler Use	--	0.0	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	0.0	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	X	--
	Process Heating	--	0.0	X	0.0	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.0	X	0.0	X	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	0.0	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	0.0	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	X	X	--

	Other Nonprocess Use	--	X	X	0.0	X	0.0	X	--
	End use not reported	0.0	X	X	X	X	X	0.0	0.0
31131	Sugar manufacturing								
	Total fuel consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	0.0	0.0	0.0	X	0.0	--
	Conventional Boiler Use	--	0.0	0.0	X	0.0	X	0.0	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.0	X	0.0	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	0.0	--
	Process Heating	--	0.0	X	X	0.0	X	0.0	--
	Process Cooling and Refrigeration	--	0.0	X	X	X	X	X	--
	Machine Drive	--	0.0	X	0.0	0.0	0.0	0.0	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	X	X	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	X	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	X	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	0.0	X	--
	Other Nonprocess Use	--	0.0	X	X	X	0.0	X	--
	End use not reported	0.0	X	X	X	X	X	X	0.0
3114	Fruit and vegetable preserving and specialty foods								
	Total fuel consumption	2.7	3.0	0.0	7.6	3.0	11.7	X	16.5
	Indirect Uses—Boiler Fuel	--	7.5	X	0.0	3.7	18.7	X	--
	Conventional Boiler Use	--	7.5	X	0.0	10.0	26.4	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	3.5	14.8	X	--
	Direct Uses—Total Process	--	3.2	0.0	22.0	6.0	4.3	X	--
	Process Heating	--	8.3	0.0	X	6.8	0.0	X	--
	Process Cooling and Refrigeration	--	4.1	X	47.0	24.0	69.5	X	--
	Machine Drive	--	4.0	X	21.9	38.8	15.2	X	--
	Electro-Chemical Processes	--	38.0	--	--	--	--	--	--
	Other Process Use	--	17.8	X	86.6	0.1	0.0	X	--
	Direct Uses—Total Nonprocess	--	3.6	0.0	4.9	4.9	22.7	X	--
	Facility HVAC ⁶	--	4.2	0.0	53.5	6.2	15.9	X	--
	Facility Lighting	--	4.1	--	--	--	--	--	--
	Other Facility Support	--	5.9	X	0.0	5.5	2.5	X	--
	Onsite Transportation	--	6.9	--	5.1	14.2	23.6	--	--
	Conventional Electricity Generation	--	--	X	0.0	39.7	X	X	--
	Other Nonprocess Use	--	0.0	X	0.6	0.0	0.0	X	--
	End use not reported	22.7	38.6	X	69.1	38.7	50.5	X	16.5
3115	Dairy product manufacturing								

	Total fuel consumption	3.9	4.0	74.0	21.3	3.4	77.0	X	59.4
	Indirect Uses—Boiler Fuel	--	8.9	79.2	23.8	4.0	71.8	X	--
	Conventional Boiler Use	--	8.9	X	0.0	2.5	91.5	X	--
	CHP and/or Cogeneration Process	--	X	79.2	29.3	5.8	24.1	X	--
	Direct Uses—Total Process	--	4.5	19.6	26.2	6.7	88.9	X	--
	Process Heating	--	9.7	X	61.6	6.5	96.7	X	--
	Process Cooling and Refrigeration	--	5.7	19.6	46.2	7.6	X	X	--
	Machine Drive	--	5.1	19.6	12.0	33.0	11.6	X	--
	Electro-Chemical Processes	--	18.5	--	--	--	--	--	--
	Other Process Use	--	21.4	X	1.4	17.3	32.6	X	--
	Direct Uses—Total Nonprocess	--	4.3	19.6	23.7	6.1	8.9	X	--
	Facility HVAC ⁶	--	4.4	19.6	64.9	7.0	14.8	X	--
	Facility Lighting	--	4.7	--	--	--	--	--	--
	Other Facility Support	--	8.0	X	X	7.1	2.8	X	--
	Onsite Transportation	--	9.6	--	27.4	54.6	10.4	--	--
	Conventional Electricity Generation	--	--	X	49.1	80.9	X	X	--
	Other Nonprocess Use	--	27.1	X	1.7	12.9	2.4	X	--
	End use not reported	59.8	47.7	X	X	72.6	1.3	X	59.4
3116	Animal slaughtering and processing								
	Total fuel consumption	4.3	4.0	0.0	5.1	5.0	25.5	X	7.6
	Indirect Uses—Boiler Fuel	--	8.9	0.0	0.9	7.2	31.6	X	--
	Conventional Boiler Use	--	8.9	X	3.8	6.1	40.3	X	--
	CHP and/or Cogeneration Process	--	X	0.0	0.6	9.7	48.7	X	--
	Direct Uses—Total Process	--	4.3	X	60.7	6.6	60.2	X	--
	Process Heating	--	9.2	X	39.2	7.2	69.1	X	--
	Process Cooling and Refrigeration	--	6.0	X	78.6	10.1	94.3	X	--
	Machine Drive	--	3.9	X	0.0	30.4	57.7	X	--
	Electro-Chemical Processes	--	4.1	--	--	--	--	--	--
	Other Process Use	--	38.3	X	0.0	10.3	80.0	X	--
	Direct Uses—Total Nonprocess	--	4.9	X	8.4	10.1	19.6	X	--
	Facility HVAC ⁶	--	5.4	X	X	6.0	26.3	X	--
	Facility Lighting	--	6.6	--	--	--	--	--	--
	Other Facility Support	--	4.6	X	0.0	18.2	39.5	X	--
	Onsite Transportation	--	9.2	--	9.4	28.1	25.9	--	--
	Conventional Electricity Generation	--	--	X	49.1	14.5	X	X	--
	Other Nonprocess Use	--	40.6	X	7.3	62.5	13.8	X	--
	End use not reported	16.9	19.7	X	30.3	21.8	71.7	X	7.6
312	Beverage and tobacco products								
	Total fuel consumption	40.1	17.8	X	22.2	49.8	9.8	0.0	27.7
	Indirect Uses—Boiler Fuel	--	34.4	X	44.0	57.1	24.8	0.0	--
	Conventional Boiler Use	--	34.4	X	5.3	10.2	14.3	X	--
	CHP and/or Cogeneration Process	--	X	X	81.4	64.2	31.0	0.0	--

	Direct Uses—Total Process	--	18.8	X	33.1	36.9	21.3	X	--
	Process Heating	--	36.0	X	2.6	39.5	33.1	X	--
	Process Cooling and Refrigeration	--	11.0	X	97.4	39.2	68.5	X	--
	Machine Drive	--	23.0	X	10.1	48.4	51.1	X	--
	Electro-Chemical Processes	--	15.5	--	--	--	--	--	--
	Other Process Use	--	15.1	X	53.1	18.8	18.1	X	--
	Direct Uses—Total Nonprocess	--	12.9	X	15.6	46.1	10.6	X	--
	Facility HVAC ⁶	--	16.7	X	96.8	51.2	25.4	X	--
	Facility Lighting	--	9.9	--	--	--	--	--	--
	Other Facility Support	--	9.3	X	97.3	19.9	35.2	X	--
	Onsite Transportation	--	13.2	--	18.1	45.3	11.7	--	--
	Conventional Electricity Generation	--	--	X	57.2	0.0	41.5	X	--
	Other Nonprocess Use	--	14.6	X	12.7	9.3	64.4	X	--
	End use not reported	25.9	54.7	X	85.2	53.0	61.6	X	27.7
3121	Beverages								
	Total fuel consumption	41.2	18.7	X	25.0	50.9	10.9	0.0	27.8
	Indirect Uses—Boiler Fuel	--	35.3	X	55.2	58.8	39.5	0.0	--
	Conventional Boiler Use	--	35.3	X	8.9	11.7	14.4	X	--
	CHP and/or Cogeneration Process	--	X	X	83.8	65.2	58.1	0.0	--
	Direct Uses—Total Process	--	19.5	X	37.7	37.1	22.7	X	--
	Process Heating	--	37.0	X	2.6	39.7	33.2	X	--
	Process Cooling and Refrigeration	--	11.1	X	97.4	39.4	68.5	X	--
	Machine Drive	--	24.3	X	10.1	49.0	51.1	X	--
	Electro-Chemical Processes	--	15.7	--	--	--	--	--	--
	Other Process Use	--	15.5	X	66.7	18.8	23.2	X	--
	Direct Uses—Total Nonprocess	--	14.2	X	15.8	46.6	11.2	X	--
	Facility HVAC ⁶	--	18.7	X	97.1	51.5	25.5	X	--
	Facility Lighting	--	10.8	--	--	--	--	--	--
	Other Facility Support	--	10.5	X	97.4	20.4	35.3	X	--
	Onsite Transportation	--	13.8	--	18.1	47.1	12.6	--	--
	Conventional Electricity Generation	--	--	X	57.2	0.0	41.5	X	--
	Other Nonprocess Use	--	14.6	X	14.4	10.5	66.0	X	--
	End use not reported	26.0	54.7	X	85.2	53.0	61.6	X	27.8
3122	Tobacco								
	Total fuel consumption	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	0.0	0.0	0.0	X	--
	Conventional Boiler Use	--	0.0	X	0.0	0.0	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	X	--
	Process Heating	--	0.0	X	0.0	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.0	X	0.0	0.0	X	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--

Other Process Use	--	0.0	X	0.0	X	0.0	X	--
Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
Facility HVAC ⁶	--	0.0	X	0.0	0.0	0.0	X	--
Facility Lighting	--	0.0	--	--	--	--	--	--
Other Facility Support	--	0.0	X	0.0	0.0	0.0	X	--
Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
Conventional Electricity Generation	--	--	X	X	0.0	X	X	--
Other Nonprocess Use	--	0.0	X	0.0	0.0	0.0	X	--
End use not reported	0.0	X	X	X	X	0.0	X	0.0

313 Textile mills

Total fuel consumption	6.6	6.5	X	78.1	10.5	6.4	42.2	12.8
Indirect Uses—Boiler Fuel	--	38.2	X	0.0	12.5	0.5	8.7	--
Conventional Boiler Use	--	38.2	X	0.0	11.8	1.2	0.0	--
CHP and/or Cogeneration Process	--	X	X	0.0	21.6	0.0	25.8	--
Direct Uses—Total Process	--	6.9	X	95.6	14.6	12.6	73.3	--
Process Heating	--	11.6	X	96.6	12.4	13.0	73.3	--
Process Cooling and Refrigeration	--	12.2	X	X	49.9	X	73.3	--
Machine Drive	--	7.5	X	96.6	28.6	55.1	73.3	--
Electro-Chemical Processes	--	45.6	--	--	--	--	--	--
Other Process Use	--	31.0	X	92.5	0.6	61.0	X	--
Direct Uses—Total Nonprocess	--	9.0	X	19.2	12.6	17.1	X	--
Facility HVAC ⁶	--	10.9	X	X	15.6	9.0	X	--
Facility Lighting	--	8.4	--	--	--	--	--	--
Other Facility Support	--	8.3	X	X	9.5	X	X	--
Onsite Transportation	--	18.7	--	2.7	1.4	28.6	--	--
Conventional Electricity Generation	--	--	X	X	73.3	X	X	--
Other Nonprocess Use	--	0.0	X	45.8	96.7	X	X	--
End use not reported	19.3	49.1	X	76.5	64.6	64.6	X	12.8

314 Textile product mills

Total fuel consumption	10.9	13.3	X	54.8	13.5	55.3	X	98.7
Indirect Uses—Boiler Fuel	--	57.2	X	57.6	19.4	97.2	X	--
Conventional Boiler Use	--	57.2	X	57.6	21.9	41.4	X	--
CHP and/or Cogeneration Process	--	X	X	X	41.2	97.7	X	--
Direct Uses—Total Process	--	10.9	X	X	12.9	76.8	X	--
Process Heating	--	26.3	X	X	11.7	82.8	X	--
Process Cooling and Refrigeration	--	7.6	X	X	77.8	X	X	--
Machine Drive	--	11.9	X	X	63.2	41.4	X	--
Electro-Chemical Processes	--	4.3	--	--	--	--	--	--
Other Process Use	--	48.1	X	X	X	X	X	--
Direct Uses—Total Nonprocess	--	26.5	X	25.9	29.5	46.6	X	--
Facility HVAC ⁶	--	36.2	X	X	30.7	61.0	X	--
Facility Lighting	--	12.4	--	--	--	--	--	--
Other Facility Support	--	29.1	X	X	40.8	41.4	X	--

Onsite Transportation	--	41.7	--	25.9	X	57.9	--	--
Conventional Electricity Generation	--	--	X	25.9	88.5	41.4	X	--
Other Nonprocess Use	--	X	X	X	X	X	X	--
End use not reported	43.3	49.3	X	X	62.1	X	X	98.7

	Total fuel consumption	11.2	11.3	X	96.8	17.9	27.5	X	0.0
	Indirect Uses—Boiler Fuel	--	59.5	X	97.8	25.0	52.6	X	--
	Conventional Boiler Use	--	59.5	X	97.8	99.3	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	25.5	52.6	X	--
	Direct Uses—Total Process	--	11.6	X	X	27.3	6.9	X	--
	Process Heating	--	24.9	X	X	33.3	X	X	--
	Process Cooling and Refrigeration	--	25.9	X	X	X	X	X	--
	Machine Drive	--	12.1	X	X	75.1	6.9	X	--
	Electro-Chemical Processes	--	X	--	--	--	--	--	--
	Other Process Use	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	15.9	X	1.3	20.4	16.8	X	--
	Facility HVAC ⁶	--	18.7	X	X	22.1	5.3	X	--
	Facility Lighting	--	20.5	--	--	--	--	--	--
	Other Facility Support	--	21.3	X	X	43.1	52.9	--	--
	Onsite Transportation	--	59.4	--	X	X	62.3	--	--
	Conventional Electricity Generation	--	--	X	X	X	X	X	--
	Other Nonprocess Use	--	44.8	X	1.3	54.8	X	X	--
	End use not reported	73.0	64.2	X	X	87.2	X	X	0.0

	Total fuel consumption	33.0	4.9	X	34.7	44.4	13.6	X	91.3
	Indirect Uses—Boiler Fuel	--	8.9	X	75.5	0.2	X	X	--
	Conventional Boiler Use	--	8.9	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	75.5	0.6	X	X	--
	Direct Uses—Total Process	--	4.3	X	0.0	4.8	53.4	X	--
	Process Heating	--	8.6	X	0.0	5.0	39.9	X	--
	Process Cooling and Refrigeration	--	21.2	X	X	0.0	25.6	X	--
	Machine Drive	--	4.3	X	X	34.4	55.1	X	--
	Electro-Chemical Processes	--	X	--	--	--	--	--	--
	Other Process Use	--	66.9	X	X	X	28.1	X	--
	Direct Uses—Total Nonprocess	--	8.2	X	6.3	53.7	13.6	X	--
	Facility HVAC ⁶	--	9.4	X	6.4	54.3	26.6	X	--
	Facility Lighting	--	10.2	--	--	--	--	--	--
	Other Facility Support	--	15.3	X	X	32.3	6.6	X	--
	Onsite Transportation	--	3.6	--	X	X	7.3	--	--
	Conventional Electricity Generation	--	--	X	X	X	25.6	X	--
	Other Nonprocess Use	--	X	X	16.6	X	X	X	--
	End use not reported	76.8	71.9	X	X	X	X	X	91.3

321	Wood products								
	Total fuel consumption	2.7	6.5	37.3	11.3	7.2	12.8	99.0	2.5
	Indirect Uses—Boiler Fuel	--	4.0	X	27.3	4.2	29.3	X	--
	Conventional Boiler Use	--	4.0	X	2.3	8.5	0.7	X	--
	CHP and/or Cogeneration Process	--	X	X	71.6	4.5	33.6	X	--
	Direct Uses—Total Process	--	7.4	88.5	15.2	10.1	17.0	99.0	--
	Process Heating	--	51.7	59.4	26.7	10.8	17.6	99.0	--
	Process Cooling and Refrigeration	--	4.9	X	40.0	69.0	96.1	X	--
	Machine Drive	--	2.4	92.4	20.5	6.4	45.5	X	--
	Electro-Chemical Processes	--	2.4	--	--	--	--	--	--
	Other Process Use	--	36.6	X	44.0	4.3	45.7	X	--
	Direct Uses—Total Nonprocess	--	4.2	1.3	14.9	8.4	17.2	X	--
	Facility HVAC ⁸	--	5.4	1.3	15.4	8.8	41.5	X	--
	Facility Lighting	--	3.9	--	--	--	--	--	--
	Other Facility Support	--	6.7	0.0	9.2	21.1	29.2	X	--
	Onsite Transportation	--	17.7	--	5.9	43.2	18.8	--	--
	Conventional Electricity Generation	--	--	X	56.7	53.9	74.3	X	--
	Other Nonprocess Use	--	30.2	X	88.2	0.0	96.0	X	--
	End use not reported	2.4	14.5	X	59.9	31.5	46.3	X	2.5
321113	Sawmills								
	Total fuel consumption	2.2	2.1	38.7	4.7	7.5	9.6	X	2.7
	Indirect Uses—Boiler Fuel	--	4.1	X	1.5	9.9	4.1	X	--
	Conventional Boiler Use	--	4.1	X	0.7	0.5	1.0	X	--
	CHP and/or Cogeneration Process	--	X	X	16.6	14.5	6.0	X	--
	Direct Uses—Total Process	--	2.4	89.7	14.8	9.6	12.3	X	--
	Process Heating	--	10.0	71.0	0.9	9.8	13.8	X	--
	Process Cooling and Refrigeration	--	3.2	X	X	X	X	X	--
	Machine Drive	--	1.8	93.1	24.0	1.6	11.8	X	--
	Electro-Chemical Processes	--	3.5	--	--	--	--	--	--
	Other Process Use	--	46.5	X	38.7	0.0	31.3	X	--
	Direct Uses—Total Nonprocess	--	2.0	1.3	3.8	21.2	11.4	X	--
	Facility HVAC ⁸	--	2.1	1.3	4.3	22.3	21.6	X	--
	Facility Lighting	--	2.0	--	--	--	--	--	--
	Other Facility Support	--	4.2	X	0.0	3.0	11.5	X	--
	Onsite Transportation	--	8.5	--	3.9	0.0	12.7	--	--
	Conventional Electricity Generation	--	--	X	93.9	X	0.0	X	--
	Other Nonprocess Use	--	0.7	X	25.6	X	0.0	X	--
	End use not reported	2.7	4.5	X	72.7	0.0	58.7	X	2.7
3212	Veneer, plywood, and engineered wood product manufacturing								
	Total fuel consumption	1.6	2.8	0.0	22.1	2.0	8.1	X	1.6
	Indirect Uses—Boiler Fuel	--	1.2	X	2.6	3.6	1.5	X	--

	Conventional Boiler Use	--	1.2	X	42.9	17.5	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	1.7	2.9	X	--
	Direct Uses—Total Process	--	3.0	0.0	3.6	1.8	22.2	X	--
	Process Heating	--	4.4	0.0	0.0	2.0	47.3	X	--
	Process Cooling and Refrigeration	--	5.7	X	X	17.5	96.1	X	--
	Machine Drive	--	3.2	0.0	4.8	3.5	35.8	X	--
	Electro-Chemical Processes	--	5.0	--	--	--	--	--	--
	Other Process Use	--	3.4	X	63.9	4.7	0.0	X	--
	Direct Uses—Total Nonprocess	--	4.0	0.0	16.6	9.3	7.6	X	--
	Facility HVAC ⁶	--	4.2	0.0	X	9.8	16.5	X	--
	Facility Lighting	--	6.0	--	--	--	--	--	--
	Other Facility Support	--	5.9	0.0	13.3	8.9	26.8	X	--
	Onsite Transportation	--	16.6	--	16.7	35.1	7.8	--	--
	Conventional Electricity Generation	--	--	X	40.9	52.5	77.0	X	--
	Other Nonprocess Use	--	5.0	X	0.0	0.0	0.0	X	--
	End use not reported	1.6	5.3	X	88.8	19.3	96.2	X	1.6
321219	Reconstituted wood products								
	Total fuel consumption	1.1	3.2	0.0	0.0	2.7	26.6	X	0.1
	Indirect Uses—Boiler Fuel	--	0.6	X	0.0	2.1	0.0	X	--
	Conventional Boiler Use	--	0.6	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	2.5	0.0	X	--
	Direct Uses—Total Process	--	3.1	0.0	0.0	2.3	7.7	X	--
	Process Heating	--	8.8	0.0	0.0	2.6	0.0	X	--
	Process Cooling and Refrigeration	--	1.7	X	X	0.0	X	X	--
	Machine Drive	--	3.2	0.0	0.0	0.0	41.2	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	47.8	X	X	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	6.3	0.0	0.0	13.4	28.5	X	--
	Facility HVAC ⁶	--	7.5	0.0	X	13.4	0.0	X	--
	Facility Lighting	--	6.4	--	--	--	--	--	--
	Other Facility Support	--	1.8	0.0	0.0	0.0	X	X	--
	Onsite Transportation	--	16.7	--	0.0	X	28.7	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	X	X	--
	Other Nonprocess Use	--	X	X	X	X	X	X	--
	End use not reported	0.1	0.0	X	X	0.0	X	X	0.1
3219	Other wood products								
	Total fuel consumption	15.9	20.7	X	27.4	26.1	16.9	99.0	26.5
	Indirect Uses—Boiler Fuel	--	14.2	X	0.0	14.0	53.7	X	--
	Conventional Boiler Use	--	14.2	X	0.0	9.4	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	21.1	53.7	X	--
	Direct Uses—Total Process	--	24.4	X	58.8	35.6	39.3	99.0	--
	Process Heating	--	73.0	X	X	37.6	50.7	99.0	--
	Process Cooling and Refrigeration	--	14.3	X	41.0	95.3	X	X	--

	Machine Drive	--	8.7	X	44.0	25.3	69.0	X	--
	Electro-Chemical Processes	--	2.7	--	--	--	--	--	--
	Other Process Use	--	26.3	X	83.5	10.4	91.5	X	--
	Direct Uses—Total Nonprocess	--	10.8	X	32.4	14.1	20.9	X	--
	Facility HVAC ⁶	--	12.8	X	98.3	14.6	60.3	X	--
	Facility Lighting	--	10.8	--	--	--	--	--	--
	Other Facility Support	--	16.3	X	X	38.0	95.8	X	--
	Onsite Transportation	--	26.5	--	34.4	80.2	22.5	--	--
	Conventional Electricity Generation	--	--	X	74.1	95.3	X	X	--
	Other Nonprocess Use	--	67.1	X	0.0	X	96.8	X	--
	End use not reported	25.2	51.7	X	0.0	81.7	54.9	X	26.5

322 Paper

	Total fuel consumption	0.5	2.6	0.9	0.4	1.4	16.6	0.9	0.1
	Indirect Uses—Boiler Fuel	--	3.5	1.0	0.2	1.5	0.0	0.9	--
	Conventional Boiler Use	--	3.5	0.0	0.0	4.2	0.0	0.0	--
	CHP and/or Cogeneration Process	--	X	1.3	0.2	1.6	0.0	0.9	--
	Direct Uses—Total Process	--	2.5	0.0	0.1	3.3	49.2	0.0	--
	Process Heating	--	6.1	0.0	0.0	3.0	0.2	X	--
	Process Cooling and Refrigeration	--	22.4	X	X	0.8	X	X	--
	Machine Drive	--	2.4	X	0.1	17.6	59.4	0.0	--
	Electro-Chemical Processes	--	35.5	--	--	--	--	--	--
	Other Process Use	--	13.1	X	0.0	1.5	5.2	X	--
	Direct Uses—Total Nonprocess	--	4.9	0.0	0.9	5.0	13.9	0.0	--
	Facility HVAC ⁶	--	7.5	X	0.0	7.8	18.3	X	--
	Facility Lighting	--	4.5	--	--	--	--	--	--
	Other Facility Support	--	7.7	X	0.0	6.0	4.9	X	--
	Onsite Transportation	--	12.7	--	1.0	0.9	14.8	--	--
	Conventional Electricity Generation	--	--	0.0	0.0	0.0	0.0	0.0	--
	Other Nonprocess Use	--	9.0	X	0.0	3.3	60.7	X	--
	End use not reported	0.2	51.9	0.0	X	94.0	97.3	X	0.1

322110 Pulp mills

	Total fuel consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	0.0	0.0	0.0	0.0	0.0	--
	Conventional Boiler Use	--	0.0	X	0.0	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	0.0	0.0	0.0	0.0	0.0	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	X	X	--
	Process Heating	--	0.0	X	0.0	0.0	X	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	X	X	X	--
	Machine Drive	--	0.0	X	0.0	0.0	X	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	X	X	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	0.0	0.0	0.0	X	--

	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	X	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	X	0.0	X	X	--
	Other Nonprocess Use	--	X	X	0.0	X	X	X	--
	End use not reported	0.0	X	X	X	X	X	X	0.0
322120	Paper mills								
	Total fuel consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	0.0	0.0	0.0	0.0	0.0	--
	Conventional Boiler Use	--	0.0	0.0	0.0	0.0	0.0	X	--
	CHP and/or Cogeneration Process	--	X	0.0	0.0	0.0	0.0	0.0	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	X	--
	Process Heating	--	0.0	X	X	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	X	X	X	--
	Machine Drive	--	0.0	X	0.0	0.0	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	0.0	0.0	0.0	0.0	0.0	X	--
	Facility HVAC [®]	--	0.0	X	0.0	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	0.0	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	X	0.0	--	--
	Conventional Electricity Generation	--	--	0.0	0.0	0.0	0.0	X	--
	Other Nonprocess Use	--	0.0	X	0.0	0.0	X	X	--
	End use not reported	0.0	X	X	X	X	0.0	X	0.0
322130	Paperboard mills								
	Total fuel consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	0.0	0.0	0.0	0.0	0.0	--
	Conventional Boiler Use	--	0.0	0.0	0.0	0.0	X	0.0	--
	CHP and/or Cogeneration Process	--	X	0.0	0.0	0.0	0.0	0.0	--
	Direct Uses—Total Process	--	0.0	0.0	0.0	0.0	0.0	0.0	--
	Process Heating	--	0.0	0.0	0.0	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.0	X	0.0	0.0	0.0	0.0	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	0.0	--
	Facility HVAC [®]	--	0.0	X	0.0	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	0.0	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	X	0.0	0.0	0.0	--
	Other Nonprocess Use	--	0.0	X	X	0.0	0.0	X	--

	End use not reported	0.0	X	0.0	X	X	0.0	X	0.0
323	Printing and related support								
	Total fuel consumption	11.5	12.3	99.0	58.4	13.8	22.2	X	88.6
	Indirect Uses—Boiler Fuel	--	47.8	X	X	25.7	62.1	X	--
	Conventional Boiler Use	--	47.8	X	X	26.8	62.1	X	--
	CHP and/or Cogeneration Process	--	X	X	X	61.0	X	X	--
	Direct Uses—Total Process	--	11.5	X	77.7	19.5	69.3	X	--
	Process Heating	--	29.7	X	X	22.3	85.4	X	--
	Process Cooling and Refrigeration	--	16.3	X	X	50.7	X	X	--
	Machine Drive	--	12.0	X	77.7	47.2	X	X	--
	Electro-Chemical Processes	--	35.9	--	--	--	--	--	--
	Other Process Use	--	87.0	X	X	56.7	99.0	X	--
	Direct Uses—Total Nonprocess	--	16.8	99.0	65.1	16.3	21.5	X	--
	Facility HVAC ⁶	--	11.3	99.0	X	18.7	94.9	X	--
	Facility Lighting	--	34.7	--	--	--	--	--	--
	Other Facility Support	--	16.3	X	X	24.1	X	X	--
	Onsite Transportation	--	23.0	--	80.7	43.2	20.3	--	--
	Conventional Electricity Generation	--	--	X	68.5	54.2	99.0	X	--
	Other Nonprocess Use	--	65.6	X	80.7	58.5	X	X	--
	End use not reported	51.5	65.2	X	X	97.0	97.0	X	88.6
324	Petroleum and coal products								
	Total fuel consumption	0.1	0.1	15.9	2.5	0.2	0.1	0.0	0.1
	Indirect Uses—Boiler Fuel	--	6.4	0.0	2.5	0.3	0.2	X	--
	Conventional Boiler Use	--	6.4	X	0.0	0.8	0.1	X	--
	CHP and/or Cogeneration Process	--	X	0.0	2.5	0.2	0.6	X	--
	Direct Uses—Total Process	--	0.1	17.0	4.7	0.3	0.2	0.0	--
	Process Heating	--	1.0	17.0	4.8	0.3	0.2	X	--
	Process Cooling and Refrigeration	--	2.2	X	X	0.9	0.0	X	--
	Machine Drive	--	0.1	X	3.4	2.5	0.3	X	--
	Electro-Chemical Processes	--	0.3	--	--	--	--	--	--
	Other Process Use	--	3.8	X	36.5	0.1	0.0	0.0	--
	Direct Uses—Total Nonprocess	--	0.4	0.0	1.5	2.2	2.0	X	--
	Facility HVAC ⁶	--	0.4	X	24.1	2.5	3.6	X	--
	Facility Lighting	--	0.5	--	--	--	--	--	--
	Other Facility Support	--	0.8	X	68.3	1.3	16.0	X	--
	Onsite Transportation	--	3.4	--	1.7	0.0	2.7	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	0.0	X	--
	Other Nonprocess Use	--	7.3	0.0	1.8	8.0	0.1	X	--
	End use not reported	0.1	2.4	0.0	3.1	0.1	0.4	X	0.1
324110	Petroleum refineries								

	Total fuel consumption	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	0.0	X	0.0	0.0	X	--
	Conventional Boiler Use	--	0.0	X	X	0.0	0.0	X	--
	CHP and/or Cogeneration Process	--	X	0.0	X	0.0	0.0	X	--
	Direct Uses—Total Process	--	0.0	0.0	0.0	0.0	0.0	X	--
	Process Heating	--	0.0	0.0	0.0	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	0.0	X	--
	Machine Drive	--	0.0	X	0.0	0.0	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ^g	--	0.0	X	0.0	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	0.0	X	--
	Other Nonprocess Use	--	0.0	X	0.0	0.0	0.0	X	--
	End use not reported	0.0	X	0.0	0.0	0.0	0.0	X	0.0
324121	Asphalt paving mixture and block								
	Total fuel consumption	3.1	3.8	17.7	4.7	4.1	6.1	X	4.9
	Indirect Uses—Boiler Fuel	--	8.7	X	2.6	12.6	49.2	X	--
	Conventional Boiler Use	--	8.7	X	X	20.8	84.2	X	--
	CHP and/or Cogeneration Process	--	X	X	2.6	14.1	55.3	X	--
	Direct Uses—Total Process	--	4.6	17.7	8.1	4.0	6.2	X	--
	Process Heating	--	7.7	17.7	6.1	5.0	10.1	X	--
	Process Cooling and Refrigeration	--	72.1	X	X	82.4	X	X	--
	Machine Drive	--	2.2	X	8.1	4.5	0.9	X	--
	Electro-Chemical Processes	--	0.7	--	--	--	--	--	--
	Other Process Use	--	42.1	X	45.1	6.7	0.0	X	--
	Direct Uses—Total Nonprocess	--	3.6	0.0	3.1	41.7	19.5	X	--
	Facility HVAC ^g	--	4.5	X	30.8	11.3	14.7	X	--
	Facility Lighting	--	3.6	--	--	--	--	--	--
	Other Facility Support	--	5.4	X	77.3	12.8	80.8	X	--
	Onsite Transportation	--	2.2	--	3.9	X	6.4	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	X	X	--
	Other Nonprocess Use	--	27.0	0.0	2.6	68.7	X	X	--
	End use not reported	4.8	3.3	X	27.0	0.1	59.2	X	4.9
324122	Asphalt shingle and coating materials								
	Total fuel consumption	0.6	1.1	X	0.0	0.6	2.3	X	0.1
	Indirect Uses—Boiler Fuel	--	2.0	X	0.0	1.8	0.0	X	--
	Conventional Boiler Use	--	2.0	X	0.0	0.1	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	X	3.8	0.0	X	--
	Direct Uses—Total Process	--	1.0	X	0.0	0.7	0.2	X	--

	Process Heating	--	2.3	X	0.0	0.8	0.2	X	--
	Process Cooling and Refrigeration	--	1.4	X	X	0.0	X	X	--
	Machine Drive	--	1.0	X	0.0	0.1	0.0	X	--
	Electro-Chemical Processes	--	9.8	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	1.7	X	0.0	0.4	2.6	X	--
	Facility HVAC ⁸	--	1.5	X	0.0	0.5	0.0	X	--
	Facility Lighting	--	1.7	--	--	--	--	--	--
	Other Facility Support	--	3.3	X	X	0.3	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	X	2.7	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	X	X	--
	Other Nonprocess Use	--	X	X	0.0	X	1.0	X	--
	End use not reported	0.1	X	X	X	X	X	X	0.1
324191	Petroleum lubricating oil and grease manufacturing								
	Total fuel consumption	10.4	1.8	X	1.3	12.5	9.3	X	0.3
	Indirect Uses—Boiler Fuel	--	14.3	X	0.0	15.3	37.0	X	--
	Conventional Boiler Use	--	14.3	X	X	43.8	X	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.7	37.0	X	--
	Direct Uses—Total Process	--	1.9	X	13.5	13.0	0.0	X	--
	Process Heating	--	5.5	X	X	20.4	X	X	--
	Process Cooling and Refrigeration	--	0.9	X	X	23.7	0.0	X	--
	Machine Drive	--	2.0	X	0.0	0.0	0.0	X	--
	Electro-Chemical Processes	--	10.3	--	--	--	--	--	--
	Other Process Use	--	26.3	X	55.1	25.2	X	X	--
	Direct Uses—Total Nonprocess	--	3.8	X	1.2	6.6	8.3	X	--
	Facility HVAC ⁸	--	3.0	X	0.0	10.1	50.3	X	--
	Facility Lighting	--	3.7	--	--	--	--	--	--
	Other Facility Support	--	9.6	X	0.0	1.1	41.3	X	--
	Onsite Transportation	--	8.7	--	1.5	0.0	8.8	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	21.3	X	X	--
	End use not reported	0.2	0.0	X	X	X	X	X	0.3
324199	All other petroleum and coal products manufacturing								
	Total fuel consumption	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	X	0.0	0.0	X	--
	Conventional Boiler Use	--	0.0	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	0.0	X	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	0.0	--
	Process Heating	--	0.0	X	0.0	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.0	X	0.0	0.0	X	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	X	0.0	--

	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	X	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	0.0	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	X	X	--
	Other Nonprocess Use	--	0.0	X	X	0.0	0.0	X	--
	End use not reported	0.0	0.0	X	X	X	X	X	0.0
325	Chemicals								
	Total fuel consumption	2.0	3.4	0.0	10.1	2.9	4.0	0.1	1.2
	Indirect Uses—Boiler Fuel	--	6.6	0.0	3.6	3.7	0.1	0.0	--
	Conventional Boiler Use	--	6.6	0.0	25.5	2.7	0.1	0.0	--
	CHP and/or Cogeneration Process	--	X	0.0	0.1	5.4	0.1	0.0	--
	Direct Uses—Total Process	--	3.2	X	36.8	3.6	1.2	0.0	--
	Process Heating	--	8.4	X	5.1	4.9	0.5	0.0	--
	Process Cooling and Refrigeration	--	3.2	X	0.0	14.3	2.1	0.0	--
	Machine Drive	--	4.4	X	62.3	3.4	9.8	0.0	--
	Electro-Chemical Processes	--	1.1	--	--	--	--	--	--
	Other Process Use	--	10.6	X	3.6	1.8	4.0	0.0	--
	Direct Uses—Total Nonprocess	--	4.0	X	4.1	10.7	31.7	0.2	--
	Facility HVAC ⁶	--	4.5	X	3.6	12.8	45.3	0.0	--
	Facility Lighting	--	4.1	--	--	--	--	--	--
	Other Facility Support	--	6.5	X	15.1	13.3	7.7	0.0	--
	Onsite Transportation	--	8.6	--	5.2	13.8	36.4	--	--
	Conventional Electricity Generation	--	--	X	9.3	0.1	18.5	0.0	--
	Other Nonprocess Use	--	32.5	X	2.1	45.0	7.3	96.1	--
	End use not reported	2.0	45.9	X	4.4	9.9	17.7	0.0	1.2
325110	Petrochemicals								
	Total fuel consumption	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	0.0	0.0	0.0	X	--
	Conventional Boiler Use	--	0.0	X	0.0	0.0	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	0.0	X	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	X	--
	Process Heating	--	0.0	X	0.0	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	X	0.0	X	--
	Machine Drive	--	0.0	X	0.0	0.0	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	X	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	X	0.0	--	--

	Conventional Electricity Generation	--	--	X	0.0	0.0	0.0	X	--
	Other Nonprocess Use	--	X	X	0.0	X	X	X	--
	End use not reported	0.0	X	X	X	X	0.0	X	0.0
325120	Industrial gases								
	Total fuel consumption	8.0	16.9	X	7.2	0.2	66.9	X	11.2
	Indirect Uses—Boiler Fuel	--	0.0	X	0.0	0.0	X	X	--
	Conventional Boiler Use	--	0.0	X	0.0	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Process	--	15.9	X	0.0	0.3	85.3	X	--
	Process Heating	--	23.6	X	X	D	93.3	X	--
	Process Cooling and Refrigeration	--	5.7	X	X	83.1	X	X	--
	Machine Drive	--	16.0	X	0.0	D	83.1	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	X	0.1	0.0	X	--
	Direct Uses—Total Nonprocess	--	21.7	X	8.7	29.2	83.2	X	--
	Facility HVAC ⁶	--	28.0	X	0.0	25.5	X	X	--
	Facility Lighting	--	3.4	--	--	--	--	--	--
	Other Facility Support	--	25.9	X	X	66.7	X	X	--
	Onsite Transportation	--	X	--	0.0	94.0	83.2	--	--
	Conventional Electricity Generation	--	--	X	X	X	X	X	--
	Other Nonprocess Use	--	X	X	22.0	0.0	X	X	--
	End use not reported	57.1	75.3	X	X	X	0.0	X	11.2
325180	Other basic inorganic chemical manufacturing								
	Total fuel consumption	2.5	2.9	X	24.6	3.3	26.1	0.0	3.2
	Indirect Uses—Boiler Fuel	--	1.1	X	67.9	2.1	0.0	0.0	--
	Conventional Boiler Use	--	1.1	X	69.6	7.1	0.0	0.0	--
	CHP and/or Cogeneration Process	--	X	X	69.8	2.2	X	X	--
	Direct Uses—Total Process	--	2.7	X	41.8	6.1	58.6	0.0	--
	Process Heating	--	4.3	X	65.2	11.7	62.5	0.0	--
	Process Cooling and Refrigeration	--	7.9	X	X	11.2	X	X	--
	Machine Drive	--	7.5	X	45.0	6.8	22.5	X	--
	Electro-Chemical Processes	--	0.2	--	--	--	--	--	--
	Other Process Use	--	9.4	X	16.5	15.0	72.7	X	--
	Direct Uses—Total Nonprocess	--	14.0	X	7.2	17.0	31.7	X	--
	Facility HVAC ⁶	--	17.3	X	X	16.0	60.2	X	--
	Facility Lighting	--	12.2	--	--	--	--	--	--
	Other Facility Support	--	13.9	X	X	29.4	X	X	--
	Onsite Transportation	--	46.5	--	7.1	48.3	34.9	--	--
	Conventional Electricity Generation	--	--	X	23.9	X	35.9	X	--
	Other Nonprocess Use	--	10.3	X	25.2	17.2	57.7	X	--
	End use not reported	2.6	8.1	X	73.0	82.5	54.5	0.0	3.2
325193	Ethyl alcohol								

	Total fuel consumption	2.6	2.6	X	3.1	2.7	0.5	0.0	18.8
	Indirect Uses—Boiler Fuel	--	12.2	X	X	3.8	X	0.0	--
	Conventional Boiler Use	--	12.2	X	X	4.1	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	10.0	X	0.0	--
	Direct Uses—Total Process	--	2.7	X	3.3	3.3	0.0	X	--
	Process Heating	--	7.8	X	X	4.0	X	X	--
	Process Cooling and Refrigeration	--	3.7	X	X	20.2	X	X	--
	Machine Drive	--	3.3	X	0.4	5.2	0.0	X	--
	Electro-Chemical Processes	--	13.3	--	--	--	--	--	--
	Other Process Use	--	28.1	X	3.6	13.1	0.0	X	--
	Direct Uses—Total Nonprocess	--	4.9	X	3.2	4.0	1.1	X	--
	Facility HVAC ^c	--	6.8	X	18.7	6.9	2.3	X	--
	Facility Lighting	--	5.0	--	--	--	--	--	--
	Other Facility Support	--	5.9	X	18.7	4.0	0.0	X	--
	Onsite Transportation	--	5.3	--	3.3	10.8	1.2	--	--
	Conventional Electricity Generation	--	--	X	7.4	0.1	X	X	--
	Other Nonprocess Use	--	55.9	X	0.0	41.7	0.0	X	--
	End use not reported	11.6	X	X	X	X	5.4	0.0	18.8
325194	Cyclic crudes, intermediate and gum and wood chemicals								
	Total fuel consumption	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	0.0	0.0	0.0	X	--
	Conventional Boiler Use	--	0.0	X	0.0	0.0	X	--	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	X	--
	Process Heating	--	0.0	X	0.0	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.0	X	X	X	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ^c	--	0.0	X	X	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	X	X	X	--
	End use not reported	0.0	X	X	X	X	X	X	0.0
325199	All other basic organic chemical manufacturing								
	Total fuel consumption	2.7	2.5	0.0	11.3	3.9	10.7	0.0	2.7
	Indirect Uses—Boiler Fuel	--	39.3	0.0	58.3	4.7	3.1	0.0	--
	Conventional Boiler Use	--	39.3	0.0	60.4	2.6	70.4	0.0	--

	CHP and/or Cogeneration Process	--	X	0.0	0.0	8.5	3.1	0.0	--
	Direct Uses—Total Process	--	2.4	X	5.8	7.2	12.5	0.0	--
	Process Heating	--	8.7	X	0.4	9.3	0.0	X	--
	Process Cooling and Refrigeration	--	3.3	X	X	14.8	0.0	X	--
	Machine Drive	--	3.0	X	10.1	27.4	13.2	X	--
	Electro-Chemical Processes	--	0.6	--	--	--	--	--	--
	Other Process Use	--	17.1	X	15.7	3.5	47.5	0.0	--
	Direct Uses—Total Nonprocess	--	5.6	X	3.3	10.7	22.4	X	--
	Facility HVAC ⁶	--	7.2	X	X	13.8	40.1	X	--
	Facility Lighting	--	5.1	--	--	--	--	--	--
	Other Facility Support	--	7.4	X	17.3	14.1	0.0	X	--
	Onsite Transportation	--	9.0	--	3.7	65.7	23.4	--	--
	Conventional Electricity Generation	--	--	X	7.3	0.0	52.0	X	--
	Other Nonprocess Use	--	3.0	X	2.1	15.8	0.0	X	--
	End use not reported	2.6	0.6	X	X	86.0	0.0	X	2.7
325211	Plastics materials and resins								
	Total fuel consumption	1.2	7.0	X	4.0	1.3	3.2	X	1.2
	Indirect Uses—Boiler Fuel	--	19.5	X	0.0	0.8	0.0	X	--
	Conventional Boiler Use	--	19.5	X	0.0	2.7	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.9	0.0	X	--
	Direct Uses—Total Process	--	7.3	X	16.6	3.9	0.6	X	--
	Process Heating	--	10.0	X	61.3	3.5	25.9	X	--
	Process Cooling and Refrigeration	--	50.7	X	0.0	4.6	26.6	X	--
	Machine Drive	--	6.0	X	6.9	9.8	54.0	X	--
	Electro-Chemical Processes	--	9.4	--	--	--	--	--	--
	Other Process Use	--	22.1	X	77.6	27.3	0.0	X	--
	Direct Uses—Total Nonprocess	--	8.5	X	7.0	14.6	34.6	X	--
	Facility HVAC ⁶	--	10.7	X	X	10.8	69.9	X	--
	Facility Lighting	--	8.2	--	--	--	--	--	--
	Other Facility Support	--	14.1	X	0.0	3.8	6.3	X	--
	Onsite Transportation	--	13.9	--	6.9	0.0	34.5	--	--
	Conventional Electricity Generation	--	--	X	48.7	64.2	76.3	X	--
	Other Nonprocess Use	--	14.7	X	23.8	81.2	0.4	X	--
	End use not reported	1.3	27.5	X	X	53.1	88.0	X	1.2
325212	Synthetic rubber								
	Total fuel consumption	0.1	0.5	X	0.0	0.1	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	0.0	0.0	X	0.0	--
	Conventional Boiler Use	--	0.0	X	0.0	0.0	X	0.0	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	0.0	--
	Direct Uses—Total Process	--	0.3	X	0.0	0.0	0.0	0.0	--
	Process Heating	--	1.7	X	X	0.0	0.0	0.0	--
	Process Cooling and Refrigeration	--	0.3	X	0.0	0.0	0.0	0.0	--
	Machine Drive	--	0.3	X	0.0	0.0	0.0	0.0	--

	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	1.3	X	0.0	4.5	0.0	0.0	--
	Facility HVAC ⁶	--	1.0	X	X	7.7	X	0.0	--
	Facility Lighting	--	1.0	--	--	--	--	--	--
	Other Facility Support	--	3.5	X	X	0.0	X	0.0	--
	Onsite Transportation	--	0.0	--	0.0	X	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	0.0	0.0	--
	Other Nonprocess Use	--	0.0	X	0.0	0.0	0.0	X	--
	End use not reported	0.0	X	X	X	X	0.0	X	0.0

325220 Artificial and synthetic fibers and filaments

	Total fuel consumption	0.8	2.2	X	0.0	0.1	0.0	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	0.0	0.0	0.0	X	--
	Conventional Boiler Use	--	0.0	X	0.0	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Process	--	2.8	X	0.0	0.8	0.0	X	--
	Process Heating	--	0.0	X	X	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	X	X	X	--
	Machine Drive	--	4.1	X	0.0	43.3	X	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	X	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	X	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	X	0.0	0.0	X	--
	Other Nonprocess Use	--	0.0	X	0.0	X	0.0	X	--
	End use not reported	0.0	X	X	X	X	X	X	0.0

325311 Nitrogenous fertilizers

	Total fuel consumption	0.0	D	X	0.0	0.0	0.0	X	D
	Indirect Uses—Boiler Fuel	--	0.0	X	0.0	0.0	0.0	X	--
	Conventional Boiler Use	--	0.0	X	X	0.0	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	X	--
	Process Heating	--	0.0	X	0.0	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	0.0	X	--
	Machine Drive	--	0.0	X	0.0	0.0	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	X	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--

	Other Facility Support	--	0.0	X	0.0	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	X	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	0.0	0.0	X	--
	End use not reported	0.0	D	X	0.0	0.0	0.0	X	D
325312	Phosphatic fertilizers								
	Total fuel consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	0.0	0.0	0.0	0.0	X	--
	Conventional Boiler Use	--	0.0	0.0	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	0.0	--
	Process Heating	--	0.0	X	0.0	0.0	0.0	0.0	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.0	X	0.0	X	0.0	X	--
	Electro-Chemical Processes	--	X	--	--	--	--	--	--
	Other Process Use	--	X	X	0.0	X	X	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁸	--	0.0	X	0.0	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	X	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	X	X	--
	Other Nonprocess Use	--	X	X	X	0.0	0.0	X	--
	End use not reported	0.0	0.0	X	0.0	X	X	X	0.0
3254	Pharmaceuticals and medicines								
	Total fuel consumption	9.2	5.1	X	1.5	14.1	4.5	96.1	33.2
	Indirect Uses—Boiler Fuel	--	10.6	X	0.0	6.2	0.4	X	--
	Conventional Boiler Use	--	10.6	X	0.0	7.9	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	10.7	0.8	X	--
	Direct Uses—Total Process	--	3.6	X	2.1	37.4	1.4	X	--
	Process Heating	--	6.8	X	0.0	32.0	0.1	X	--
	Process Cooling and Refrigeration	--	3.0	X	0.0	53.1	0.0	X	--
	Machine Drive	--	4.5	X	14.1	51.5	12.2	X	--
	Electro-Chemical Processes	--	49.1	--	--	--	--	--	--
	Other Process Use	--	9.6	X	4.0	8.8	0.0	X	--
	Direct Uses—Total Nonprocess	--	7.4	X	2.4	24.4	11.9	96.1	--
	Facility HVAC ⁸	--	6.2	X	0.2	24.1	0.1	X	--
	Facility Lighting	--	10.4	--	--	--	--	--	--
	Other Facility Support	--	15.9	X	0.0	31.8	0.0	X	--
	Onsite Transportation	--	8.9	--	12.6	32.1	52.7	--	--
	Conventional Electricity Generation	--	--	X	4.3	8.1	0.0	X	--
	Other Nonprocess Use	--	66.5	X	9.3	46.7	67.1	96.1	--
	End use not reported	25.2	25.6	X	X	82.7	31.8	X	33.2

325412	Pharmaceutical preparation								
	Total fuel consumption	15.7	5.0	X	1.2	24.8	5.8	X	43.3
	Indirect Uses—Boiler Fuel	--	7.1	X	0.0	9.5	0.0	X	--
	Conventional Boiler Use	--	7.1	X	0.0	14.7	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	5.8	0.0	X	--
	Direct Uses—Total Process	--	3.5	X	0.2	50.0	2.2	X	--
	Process Heating	--	3.9	X	0.0	44.5	0.0	X	--
	Process Cooling and Refrigeration	--	2.1	X	X	59.9	X	X	--
	Machine Drive	--	5.4	X	14.2	64.0	57.4	X	--
	Electro-Chemical Processes	--	1.9	--	--	--	--	--	--
	Other Process Use	--	2.9	X	0.0	0.1	0.0	X	--
	Direct Uses—Total Nonprocess	--	8.4	X	2.2	42.5	12.5	X	--
	Facility HVAC ⁶	--	4.6	X	0.0	42.0	0.0	X	--
	Facility Lighting	--	6.6	--	--	--	--	--	--
	Other Facility Support	--	5.2	X	0.0	47.1	0.0	X	--
	Onsite Transportation	--	12.8	--	19.7	0.0	58.2	--	--
	Conventional Electricity Generation	--	--	X	3.5	1.6	X	X	--
	Other Nonprocess Use	--	72.7	X	2.9	57.9	67.7	X	--
	End use not reported	31.5	37.4	X	X	88.4	0.0	X	43.3
325992	Photographic film, paper, plate, chemical, and copy toner manufacturing								
	Total fuel consumption	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	X	0.0	X	X	--
	Conventional Boiler Use	--	0.0	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	X	X	--
	Process Heating	--	0.0	X	X	0.0	X	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.0	X	0.0	0.0	X	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	0.0	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	0.0	0.0	X	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	0.0	0.0	X	--
	End use not reported	0.0	0.0	X	X	X	0.0	X	0.0
326	Plastics and rubber products								
	Total fuel consumption	14.0	18.6	90.7	44.7	16.0	34.2	X	57.8

	Indirect Uses—Boiler Fuel	--	49.2	92.1	44.2	25.1	69.2	X	--
	Conventional Boiler Use	--	49.2	92.1	62.1	42.9	X	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	29.9	69.2	X	--
	Direct Uses—Total Process	--	20.2	99.0	72.9	17.8	68.2	X	--
	Process Heating	--	19.7	X	18.7	20.8	76.2	X	--
	Process Cooling and Refrigeration	--	19.7	99.0	X	57.7	93.5	X	--
	Machine Drive	--	23.2	99.0	99.0	41.8	91.1	X	--
	Electro-Chemical Processes	--	54.0	--	--	--	--	--	--
	Other Process Use	--	63.2	X	77.4	63.6	76.6	X	--
	Direct Uses—Total Nonprocess	--	18.1	X	47.4	26.4	29.6	X	--
	Facility HVAC ⁶	--	17.8	X	80.0	26.0	62.8	X	--
	Facility Lighting	--	27.8	--	--	--	--	--	--
	Other Facility Support	--	17.7	X	84.9	40.9	68.0	X	--
	Onsite Transportation	--	40.3	--	56.5	84.9	30.0	--	--
	Conventional Electricity Generation	--	--	X	73.6	97.3	91.7	X	--
	Other Nonprocess Use	--	59.6	X	95.4	X	96.5	X	--
	End use not reported	38.0	51.2	X	X	60.4	64.9	X	57.8
327	Nonmetallic mineral products								
	Total fuel consumption	12.3	26.5	0.0	23.7	4.9	19.6	10.5	31.7
	Indirect Uses—Boiler Fuel	--	26.7	0.0	80.1	12.5	70.6	X	--
	Conventional Boiler Use	--	26.7	X	X	13.6	96.1	X	--
	CHP and/or Cogeneration Process	--	X	0.0	80.1	15.8	72.8	X	--
	Direct Uses—Total Process	--	24.3	X	39.4	5.2	33.9	10.5	--
	Process Heating	--	4.3	X	3.1	5.2	42.9	10.6	--
	Process Cooling and Refrigeration	--	26.9	X	X	11.6	X	X	--
	Machine Drive	--	35.1	X	39.8	12.4	39.2	0.0	--
	Electro-Chemical Processes	--	33.2	--	--	--	--	--	--
	Other Process Use	--	0.9	X	71.5	28.0	88.9	X	--
	Direct Uses—Total Nonprocess	--	40.7	0.0	22.4	6.3	24.4	0.0	--
	Facility HVAC ⁶	--	36.0	0.0	62.1	8.3	35.8	0.0	--
	Facility Lighting	--	44.1	--	--	--	--	--	--
	Other Facility Support	--	6.6	X	73.8	3.4	56.1	X	--
	Onsite Transportation	--	74.0	--	23.2	10.4	26.6	--	--
	Conventional Electricity Generation	--	--	0.0	83.6	0.1	X	X	--
	Other Nonprocess Use	--	3.6	X	74.0	7.6	0.3	X	--
	End use not reported	31.3	45.2	X	87.0	19.8	47.2	X	31.7
327120	Clay building material and refractories								
	Total fuel consumption	3.4	2.5	X	1.9	3.9	1.8	0.0	11.3
	Indirect Uses—Boiler Fuel	--	16.0	X	X	8.2	90.8	X	--
	Conventional Boiler Use	--	16.0	X	X	4.6	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	8.3	90.8	X	--
	Direct Uses—Total Process	--	2.7	X	2.5	4.1	0.3	0.0	--
	Process Heating	--	4.2	X	0.1	4.1	0.2	0.0	--

	Process Cooling and Refrigeration	--	4.8	X	X	56.0	X	X	--
	Machine Drive	--	3.3	X	8.9	2.0	5.5	X	--
	Electro-Chemical Processes	--	1.8	--	--	--	--	--	--
	Other Process Use	--	36.7	X	0.0	0.2	X	X	--
	Direct Uses—Total Nonprocess	--	4.3	X	2.1	7.8	3.5	X	--
	Facility HVAC ⁶	--	4.4	X	X	8.1	1.8	X	--
	Facility Lighting	--	4.3	--	--	--	--	--	--
	Other Facility Support	--	4.4	X	X	7.8	51.6	X	--
	Onsite Transportation	--	11.9	--	1.5	91.4	3.7	--	--
	Conventional Electricity Generation	--	--	X	21.1	0.0	X	X	--
	Other Nonprocess Use	--	15.6	X	7.0	X	61.0	X	--
	End use not reported	11.1	14.2	X	X	X	61.8	X	11.3
327211	Flat glass								
	Total fuel consumption	0.2	1.2	X	0.0	0.1	0.0	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	X	0.0	X	X	--
	Conventional Boiler Use	--	0.0	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Process	--	1.0	X	0.0	0.1	0.0	X	--
	Process Heating	--	1.3	X	0.0	0.1	0.0	X	--
	Process Cooling and Refrigeration	--	1.9	X	X	0.0	X	X	--
	Machine Drive	--	0.5	X	X	X	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	7.2	X	0.0	1.1	X	X	--
	Direct Uses—Total Nonprocess	--	2.0	X	0.0	0.4	0.0	X	--
	Facility HVAC ⁶	--	1.6	X	X	0.6	0.0	X	--
	Facility Lighting	--	3.0	--	--	--	--	--	--
	Other Facility Support	--	3.1	X	X	0.0	0.0	X	--
	Onsite Transportation	--	1.3	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	X	X	--
	Other Nonprocess Use	--	0.0	X	X	0.0	X	X	--
	End use not reported	0.0	X	X	X	0.0	0.0	X	0.0
327212	Other pressed and blown glass and glassware								
	Total fuel consumption	0.4	0.7	X	0.0	0.5	36.6	X	21.4
	Indirect Uses—Boiler Fuel	--	5.4	X	X	0.0	0.0	X	--
	Conventional Boiler Use	--	5.4	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	0.0	X	--
	Direct Uses—Total Process	--	0.8	X	0.0	0.5	39.1	X	--
	Process Heating	--	1.3	X	X	0.5	39.2	X	--
	Process Cooling and Refrigeration	--	0.5	X	X	0.0	X	X	--
	Machine Drive	--	0.6	X	0.0	0.0	X	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	X	0.0	60.5	X	--
	Direct Uses—Total Nonprocess	--	0.8	X	0.0	1.5	39.2	X	--

	Facility HVAC ⁶	--	0.9	X	X	1.7	70.2	X	--
	Facility Lighting	--	0.6	--	--	--	--	--	--
	Other Facility Support	--	1.5	X	X	0.0	71.6	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	X	X	X	--
	End use not reported	2.3	X	X	X	0.0	X	X	21.4
327213	Glass containers								
	Total fuel consumption	0.1	0.1	X	0.0	0.1	0.0	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	X	0.0	X	X	--
	Conventional Boiler Use	--	0.0	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Process	--	0.1	X	X	0.0	0.0	X	--
	Process Heating	--	0.0	X	X	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.1	X	X	0.0	X	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	X	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	0.1	X	0.0	0.1	0.0	X	--
	Facility HVAC ⁶	--	0.1	X	0.0	0.1	X	X	--
	Facility Lighting	--	0.1	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	X	X	--
	Onsite Transportation	--	0.0	--	0.0	X	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	X	X	--
	Other Nonprocess Use	--	0.0	X	X	0.0	X	X	--
	End use not reported	0.0	X	X	X	X	X	X	0.0
327215	Glass products from purchased glass								
	Total fuel consumption	73.0	2.1	X	43.7	1.7	28.1	X	95.0
	Indirect Uses—Boiler Fuel	--	4.2	X	X	10.4	X	X	--
	Conventional Boiler Use	--	4.2	X	X	22.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	2.0	X	X	--
	Direct Uses—Total Process	--	2.2	X	X	1.6	39.3	X	--
	Process Heating	--	3.5	X	X	1.7	49.6	X	--
	Process Cooling and Refrigeration	--	4.6	X	X	1.7	X	X	--
	Machine Drive	--	4.6	X	X	3.6	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.9	X	X	1.2	0.0	X	--
	Direct Uses—Total Nonprocess	--	2.6	X	43.7	4.2	8.1	X	--
	Facility HVAC ⁶	--	2.5	X	75.4	4.9	16.6	X	--
	Facility Lighting	--	3.3	--	--	--	--	--	--
	Other Facility Support	--	3.9	X	0.0	8.2	X	X	--
	Onsite Transportation	--	2.5	--	5.5	2.8	8.1	--	--
	Conventional Electricity Generation	--	--	X	X	14.3	X	X	--

	Other Nonprocess Use	--	3.1	X	0.0	2.6	0.0	X	--
	End use not reported	94.8	24.9	X	X	35.1	57.0	X	95.0
327310	Cements								
	Total fuel consumption	5.9	6.1	X	3.1	2.1	0.5	13.8	7.2
	Indirect Uses—Boiler Fuel	--	19.7	X	X	0.0	0.0	X	--
	Conventional Boiler Use	--	19.7	X	X	0.0	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Process	--	6.2	X	3.9	2.1	6.6	13.8	--
	Process Heating	--	3.7	X	3.6	2.3	0.0	13.8	--
	Process Cooling and Refrigeration	--	0.0	X	X	X	X	X	--
	Machine Drive	--	7.6	X	0.1	0.0	66.8	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.7	X	16.4	X	X	X	--
	Direct Uses—Total Nonprocess	--	4.0	X	3.3	2.2	0.0	0.0	--
	Facility HVAC ⁶	--	3.1	X	0.0	2.3	0.0	0.0	--
	Facility Lighting	--	3.9	--	--	--	--	--	--
	Other Facility Support	--	15.1	X	X	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	3.3	X	0.0	--	--
	Conventional Electricity Generation	--	--	X	X	X	X	X	--
	Other Nonprocess Use	--	11.5	X	92.6	X	0.0	X	--
	End use not reported	7.2	X	X	0.0	X	0.0	X	7.2
327410	Lime								
	Total fuel consumption	0.0	0.0	X	0.0	0.0	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	X	X	X	0.0	X	X	--
	Conventional Boiler Use	--	X	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	X	X	X	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	0.0	--
	Process Heating	--	0.0	X	0.0	0.0	0.0	0.0	--
	Process Cooling and Refrigeration	--	0.0	X	X	X	X	X	--
	Machine Drive	--	0.0	X	0.0	0.0	0.0	0.0	--
	Electro-Chemical Processes	--	X	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	0.0	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	X	X	--
	Onsite Transportation	--	0.0	--	0.0	X	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	X	0.0	X	--
	End use not reported	0.0	X	X	X	X	0.0	X	0.0
327420	Gypsum								

	Total fuel consumption	2.9	3.7	0.0	4.7	2.9	6.4	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	0.0	0.0	0.0	X	X	--
	Conventional Boiler Use	--	0.0	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	0.0	0.0	0.0	X	X	--
	Direct Uses—Total Process	--	4.4	X	3.6	3.3	0.0	X	--
	Process Heating	--	4.1	X	0.0	3.7	0.0	X	--
	Process Cooling and Refrigeration	--	2.4	X	X	0.5	X	X	--
	Machine Drive	--	5.4	X	15.0	0.3	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	0.7	0.0	5.2	0.5	6.5	X	--
	Facility HVAC ⁶	--	0.8	0.0	0.0	1.1	0.0	X	--
	Facility Lighting	--	1.4	--	--	--	--	--	--
	Other Facility Support	--	0.9	X	0.0	0.4	X	X	--
	Onsite Transportation	--	0.7	--	5.2	0.0	6.5	--	--
	Conventional Electricity Generation	--	--	0.0	X	0.0	X	X	--
	Other Nonprocess Use	--	0.0	X	X	0.0	X	X	--
	End use not reported	0.0	X	X	X	X	X	X	0.0
327993	Mineral wool								
	Total fuel consumption	16.0	13.2	X	0.0	16.9	67.3	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	X	0.0	X	X	--
	Conventional Boiler Use	--	0.0	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Process	--	11.9	X	0.0	18.1	45.1	0.0	--
	Process Heating	--	22.9	X	0.0	18.6	0.0	0.0	--
	Process Cooling and Refrigeration	--	0.2	X	X	0.0	X	X	--
	Machine Drive	--	4.2	X	0.0	0.0	47.1	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	20.7	X	0.0	4.5	68.7	X	--
	Facility HVAC ⁶	--	19.7	X	0.0	4.8	90.7	X	--
	Facility Lighting	--	20.9	--	--	--	--	--	--
	Other Facility Support	--	28.3	X	X	3.3	0.0	X	--
	Onsite Transportation	--	42.3	--	0.0	0.0	67.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	X	0.0	X	--
	End use not reported	0.0	0.0	X	X	X	X	X	0.0
331	Primary metals								
	Total fuel consumption	0.2	0.3	0.0	11.7	0.2	4.1	0.1	0.2
	Indirect Uses—Boiler Fuel	--	1.4	0.0	1.0	0.3	0.1	0.0	--
	Conventional Boiler Use	--	1.4	0.0	0.0	0.8	0.1	X	--
	CHP and/or Cogeneration Process	--	X	0.0	1.0	0.4	0.3	0.0	--

	Direct Uses—Total Process	--	0.2	X	4.4	0.2	3.8	0.0	--
	Process Heating	--	0.5	X	2.5	0.3	5.2	0.0	--
	Process Cooling and Refrigeration	--	0.5	X	91.3	0.8	1.7	X	--
	Machine Drive	--	0.4	X	6.5	1.3	3.4	X	--
	Electro-Chemical Processes	--	0.1	--	--	--	--	--	--
	Other Process Use	--	0.6	X	0.1	0.3	2.3	0.0	--
	Direct Uses—Total Nonprocess	--	0.6	0.0	0.3	0.8	7.7	1.8	--
	Facility HVAC ⁶	--	0.7	X	0.4	0.6	3.3	66.3	--
	Facility Lighting	--	0.8	--	--	--	--	--	--
	Other Facility Support	--	0.5	X	0.0	1.5	13.1	X	--
	Onsite Transportation	--	0.9	--	0.3	1.9	7.5	--	--
	Conventional Electricity Generation	--	--	X	0.4	18.0	0.0	X	--
	Other Nonprocess Use	--	0.7	0.0	6.8	20.4	62.2	0.0	--
	End use not reported	0.3	20.7	X	43.0	32.1	25.3	0.0	0.2
331110	Iron and steel mills and ferroalloys								
	Total fuel consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Indirect Uses—Boiler Fuel	--	0.0	0.0	X	0.0	0.0	0.0	--
	Conventional Boiler Use	--	0.0	0.0	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	0.0	X	0.0	0.0	0.0	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	0.0	--
	Process Heating	--	0.0	X	0.0	0.0	0.0	0.0	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	0.0	X	--
	Machine Drive	--	D	X	0.0	0.0	0.0	X	--
	Electro-Chemical Processes	--	D	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	0.0	0.0	--
	Direct Uses—Total Nonprocess	--	0.0	0.0	0.0	0.0	0.0	0.0	--
	Facility HVAC ⁶	--	0.0	X	0.0	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	0.0	0.0	0.0	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	X	0.0	X	--
	Other Nonprocess Use	--	0.0	0.0	0.0	0.0	0.0	0.0	--
	End use not reported	0.0	X	X	0.0	X	0.0	0.0	0.0
3312	Steel products from purchased steel								
	Total fuel consumption	3.3	3.5	X	37.3	3.6	9.0	X	2.8
	Indirect Uses—Boiler Fuel	--	1.6	X	X	4.7	3.2	X	--
	Conventional Boiler Use	--	1.6	X	X	8.6	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	4.2	3.2	X	--
	Direct Uses—Total Process	--	3.4	X	30.8	4.4	19.0	X	--
	Process Heating	--	6.7	X	X	4.6	37.5	X	--
	Process Cooling and Refrigeration	--	2.7	X	X	2.5	49.5	X	--
	Machine Drive	--	4.0	X	30.8	13.1	16.4	X	--
	Electro-Chemical Processes	--	6.9	--	--	--	--	--	--

	Other Process Use	--	11.3	X	0.0	X	51.4	X	--
	Direct Uses—Total Nonprocess	--	5.2	X	4.8	4.9	11.1	X	--
	Facility HVAC ⁶	--	5.4	X	0.0	3.2	30.1	X	--
	Facility Lighting	--	6.8	--	--	--	--	--	--
	Other Facility Support	--	3.8	X	0.0	8.9	24.0	X	--
	Onsite Transportation	--	4.1	--	4.9	6.4	12.0	--	--
	Conventional Electricity Generation	--	--	X	85.8	0.0	X	X	--
	Other Nonprocess Use	--	23.7	X	15.7	36.8	X	X	--
	End use not reported	32.3	86.9	X	43.1	X	0.0	X	2.8
3313	Alumina and aluminum production and processing								
	Total fuel consumption	0.2	0.2	X	0.0	0.1	16.9	X	0.1
	Indirect Uses—Boiler Fuel	--	1.9	X	X	0.1	0.1	X	--
	Conventional Boiler Use	--	1.9	X	X	0.3	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.1	0.1	X	--
	Direct Uses—Total Process	--	0.2	X	0.0	0.1	0.0	X	--
	Process Heating	--	1.4	X	X	0.1	0.0	X	--
	Process Cooling and Refrigeration	--	2.3	X	X	0.4	0.0	X	--
	Machine Drive	--	D	X	0.0	1.8	0.0	X	--
	Electro-Chemical Processes	--	D	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	0.5	X	0.0	0.5	21.3	X	--
	Facility HVAC ⁶	--	0.6	X	0.0	0.7	0.0	X	--
	Facility Lighting	--	0.7	--	--	--	--	--	--
	Other Facility Support	--	0.6	X	X	0.1	0.0	X	--
	Onsite Transportation	--	0.2	--	0.0	0.3	21.5	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	0.0	0.0	X	--
	End use not reported	0.4	61.0	X	X	0.0	0.0	X	0.1
331314	Secondary smelting and alloying of aluminum								
	Total fuel consumption	0.0	0.0	X	0.0	0.0	0.0	X	0.0
	Indirect Uses—Boiler Fuel	--	X	X	X	0.0	X	X	--
	Conventional Boiler Use	--	X	X	X	X	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Process	--	0.0	X	0.0	0.0	0.0	X	--
	Process Heating	--	0.0	X	X	0.0	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.0	X	0.0	0.0	0.0	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	0.0	X	X	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	0.0	X	0.0	0.0	0.0	X	--
	Facility HVAC ⁶	--	0.0	X	X	0.0	0.0	X	--
	Facility Lighting	--	0.0	--	--	--	--	--	--
	Other Facility Support	--	0.0	X	X	0.0	X	X	--

	Onsite Transportation	--	0.0	--	0.0	0.0	0.0	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	X	X	--
	Other Nonprocess Use	--	0.0	X	X	X	X	X	--
	End use not reported	0.0	X	X	X	X	X	X	0.0
331315	Aluminum sheet, plate and foils								
	Total fuel consumption	0.2	0.5	X	0.0	0.1	0.5	X	0.0
	Indirect Uses—Boiler Fuel	--	0.0	X	X	0.0	0.0	X	--
	Conventional Boiler Use	--	0.0	X	X	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	0.0	X	--
	Direct Uses—Total Process	--	0.4	X	0.0	0.1	0.0	X	--
	Process Heating	--	2.1	X	X	0.1	0.0	X	--
	Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
	Machine Drive	--	0.2	X	0.0	0.0	X	X	--
	Electro-Chemical Processes	--	X	--	--	--	--	--	--
	Other Process Use	--	0.0	X	X	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	0.6	X	0.0	0.1	0.7	X	--
	Facility HVAC ⁶	--	0.7	X	0.0	0.1	0.0	X	--
	Facility Lighting	--	1.0	--	--	--	--	--	--
	Other Facility Support	--	0.3	X	X	0.0	X	X	--
	Onsite Transportation	--	0.0	--	0.0	0.0	0.7	--	--
	Conventional Electricity Generation	--	--	X	X	0.0	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	0.0	0.0	X	--
	End use not reported	0.0	0.0	X	X	0.0	X	X	0.0
331318	Other aluminum rolling, drawing and extruding								
	Total fuel consumption	1.0	1.4	X	0.0	0.7	26.7	X	0.1
	Indirect Uses—Boiler Fuel	--	4.1	X	X	D	0.7	X	--
	Conventional Boiler Use	--	4.1	X	X	1.5	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	D	0.7	X	--
	Direct Uses—Total Process	--	1.4	X	0.0	D	0.0	X	--
	Process Heating	--	1.8	X	X	D	0.0	X	--
	Process Cooling and Refrigeration	--	8.0	X	X	1.4	0.0	X	--
	Machine Drive	--	1.1	X	X	5.0	0.0	X	--
	Electro-Chemical Processes	--	19.7	--	--	--	--	--	--
	Other Process Use	--	0.0	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	2.0	X	0.0	D	33.0	X	--
	Facility HVAC ⁶	--	1.9	X	X	D	0.0	X	--
	Facility Lighting	--	2.3	--	--	--	--	--	--
	Other Facility Support	--	2.8	X	X	0.3	0.0	X	--
	Onsite Transportation	--	4.7	--	0.0	0.3	33.2	--	--
	Conventional Electricity Generation	--	--	X	X	X	X	X	--
	Other Nonprocess Use	--	0.0	X	X	X	0.0	X	--
	End use not reported	33.0	68.6	X	X	X	0.0	X	0.1

3314 Nonferrous metal (except aluminum) production and processing

Total fuel consumption	1.3	0.9	X	3.8	1.2	5.9	X	13.4
Indirect Uses—Boiler Fuel	--	2.4	X	0.0	1.2	0.0	X	--
Conventional Boiler Use	--	2.4	X	0.0	0.3	0.0	X	--
CHP and/or Cogeneration Process	--	X	X	0.0	1.6	0.0	X	--
Direct Uses—Total Process	--	0.9	X	28.6	1.6	1.3	X	--
Process Heating	--	1.4	X	0.0	1.8	1.4	X	--
Process Cooling and Refrigeration	--	0.9	X	91.3	47.1	X	X	--
Machine Drive	--	1.9	X	63.6	2.4	9.1	X	--
Electro-Chemical Processes	--	1.4	--	--	--	--	--	--
Other Process Use	--	0.7	X	0.0	2.7	0.0	X	--
Direct Uses—Total Nonprocess	--	2.1	X	2.9	2.7	19.7	X	--
Facility HVAC ⁸	--	2.5	X	0.0	2.1	6.5	X	--
Facility Lighting	--	2.5	--	--	--	--	--	--
Other Facility Support	--	2.7	X	X	5.7	17.2	X	--
Onsite Transportation	--	6.8	--	2.7	3.3	5.8	--	--
Conventional Electricity Generation	--	--	X	0.5	47.6	0.0	X	--
Other Nonprocess Use	--	19.3	X	75.0	31.2	65.2	X	--
End use not reported	13.0	10.0	X	0.0	47.6	0.0	X	13.4

331410 Nonferrous metal (except aluminum) smelting and refining

Total fuel consumption	0.3	0.1	X	0.0	0.4	8.1	X	0.0
Indirect Uses—Boiler Fuel	--	0.0	X	0.0	0.0	0.0	X	--
Conventional Boiler Use	--	0.0	X	0.0	0.0	X	X	--
CHP and/or Cogeneration Process	--	X	X	0.0	0.0	0.0	X	--
Direct Uses—Total Process	--	0.1	X	0.0	0.1	2.3	X	--
Process Heating	--	0.0	X	0.0	0.1	0.0	X	--
Process Cooling and Refrigeration	--	0.0	X	X	0.0	X	X	--
Machine Drive	--	0.1	X	0.0	0.0	49.1	X	--
Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
Other Process Use	--	0.5	X	0.0	0.0	0.0	X	--
Direct Uses—Total Nonprocess	--	2.0	X	0.0	3.0	14.9	X	--
Facility HVAC ⁸	--	1.9	X	X	3.3	0.0	X	--
Facility Lighting	--	1.2	--	--	--	--	--	--
Other Facility Support	--	3.8	X	X	1.7	0.0	X	--
Onsite Transportation	--	0.0	--	0.0	3.4	16.2	--	--
Conventional Electricity Generation	--	--	X	0.0	0.0	0.0	X	--
Other Nonprocess Use	--	X	X	X	X	X	X	--
End use not reported	11.1	44.5	X	X	47.6	0.0	X	0.0

3315 Foundries

Total fuel consumption	1.4	1.3	X	2.8	1.3	4.9	66.3	7.8
Indirect Uses—Boiler Fuel	--	14.2	X	64.6	6.4	1.0	X	--

	Conventional Boiler Use	--	14.2	X	X	1.2	0.9	X	--
	CHP and/or Cogeneration Process	--	X	X	64.6	8.1	21.7	X	--
	Direct Uses—Total Process	--	1.4	X	12.5	1.6	13.7	X	--
	Process Heating	--	2.7	X	28.6	1.6	19.7	X	--
	Process Cooling and Refrigeration	--	2.1	X	X	3.2	63.0	X	--
	Machine Drive	--	1.1	X	1.1	4.2	2.1	X	--
	Electro-Chemical Processes	--	14.7	--	--	--	--	--	--
	Other Process Use	--	2.9	X	0.3	14.7	5.1	X	--
	Direct Uses—Total Nonprocess	--	1.3	X	2.5	1.8	2.0	66.3	--
	Facility HVAC ⁶	--	1.7	X	25.4	1.8	2.2	66.3	--
	Facility Lighting	--	2.0	--	--	--	--	--	--
	Other Facility Support	--	1.7	X	0.0	5.3	44.0	X	--
	Onsite Transportation	--	2.1	--	2.6	23.4	2.5	--	--
	Conventional Electricity Generation	--	--	X	0.1	0.0	0.0	X	--
	Other Nonprocess Use	--	1.8	X	0.0	0.1	57.6	X	--
	End use not reported	7.7	10.5	X	0.0	69.8	43.6	X	7.8
331511	Iron foundries								
	Total fuel consumption	2.5	2.3	X	1.8	1.2	1.9	66.3	7.8
	Indirect Uses—Boiler Fuel	--	51.9	X	65.1	1.7	12.8	X	--
	Conventional Boiler Use	--	51.9	X	X	2.5	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	65.1	2.4	47.5	X	--
	Direct Uses—Total Process	--	2.4	X	0.0	1.3	0.1	X	--
	Process Heating	--	4.3	X	X	1.6	0.3	X	--
	Process Cooling and Refrigeration	--	4.8	X	X	X	0.0	X	--
	Machine Drive	--	1.4	X	0.0	2.8	0.8	X	--
	Electro-Chemical Processes	--	51.2	--	--	--	--	--	--
	Other Process Use	--	7.1	X	0.0	14.2	0.1	X	--
	Direct Uses—Total Nonprocess	--	3.3	X	1.5	2.0	2.5	66.3	--
	Facility HVAC ⁶	--	4.1	X	28.9	2.0	1.0	66.3	--
	Facility Lighting	--	4.6	--	--	--	--	--	--
	Other Facility Support	--	2.7	X	0.0	4.8	53.5	X	--
	Onsite Transportation	--	1.8	--	1.5	27.0	4.1	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	0.0	X	--
	Other Nonprocess Use	--	0.0	X	X	0.0	70.3	X	--
	End use not reported	7.8	X	X	0.0	X	0.0	X	7.8
331523	Nonferrous metal die-casting foundries								
	Total fuel consumption	2.7	2.3	X	6.3	3.1	13.9	X	0.8
	Indirect Uses—Boiler Fuel	--	0.5	X	X	15.1	5.9	X	--
	Conventional Boiler Use	--	0.5	X	X	0.0	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	X	16.3	65.7	X	--
	Direct Uses—Total Process	--	2.8	X	38.0	3.5	28.7	X	--
	Process Heating	--	4.0	X	X	3.3	34.6	X	--
	Process Cooling and Refrigeration	--	4.5	X	X	0.0	0.0	X	--

	Machine Drive	--	2.8	X	40.1	9.6	2.8	X	--
	Electro-Chemical Processes	--	29.5	--	--	--	--	--	--
	Other Process Use	--	2.9	X	63.7	28.4	35.6	X	--
	Direct Uses—Total Nonprocess	--	1.2	X	0.3	3.4	4.8	X	--
	Facility HVAC ⁶	--	1.7	X	X	4.1	1.5	X	--
	Facility Lighting	--	1.6	--	--	--	--	--	--
	Other Facility Support	--	1.9	X	X	4.9	40.3	X	--
	Onsite Transportation	--	1.1	--	0.3	65.2	5.0	--	--
	Conventional Electricity Generation	--	--	X	X	0.0	X	X	--
	Other Nonprocess Use	--	0.1	X	X	0.1	75.7	X	--
	End use not reported	0.7	X	X	X	X	1.0	X	0.8
331524	Aluminum foundries, except die-casting								
	Total fuel consumption	3.3	3.5	X	48.9	3.7	17.3	X	0.0
	Indirect Uses—Boiler Fuel	--	24.0	X	X	0.6	22.7	X	--
	Conventional Boiler Use	--	24.0	X	X	0.0	22.7	X	--
	CHP and/or Cogeneration Process	--	X	X	X	1.1	X	X	--
	Direct Uses—Total Process	--	3.5	X	68.9	4.8	6.1	X	--
	Process Heating	--	7.6	X	69.7	5.3	7.5	X	--
	Process Cooling and Refrigeration	--	6.5	X	X	0.0	X	X	--
	Machine Drive	--	1.6	X	0.0	10.0	10.5	X	--
	Electro-Chemical Processes	--	54.5	--	--	--	--	--	--
	Other Process Use	--	43.8	X	X	42.6	0.0	X	--
	Direct Uses—Total Nonprocess	--	4.4	X	7.5	1.0	5.2	X	--
	Facility HVAC ⁶	--	3.8	X	69.7	1.1	0.1	X	--
	Facility Lighting	--	3.9	--	--	--	--	--	--
	Other Facility Support	--	5.8	X	X	0.6	X	X	--
	Onsite Transportation	--	17.7	--	0.0	X	5.4	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.0	X	X	--
	Other Nonprocess Use	--	58.0	X	X	2.2	X	X	--
	End use not reported	51.5	0.0	X	X	0.0	77.4	X	0.0
332	Fabricated metal products								
	Total fuel consumption	23.5	15.5	99.5	34.4	29.7	21.6	X	69.7
	Indirect Uses—Boiler Fuel	--	39.0	99.5	X	46.2	66.6	X	--
	Conventional Boiler Use	--	39.0	X	X	56.1	69.9	X	--
	CHP and/or Cogeneration Process	--	X	99.5	X	54.1	75.7	X	--
	Direct Uses—Total Process	--	16.6	99.5	51.0	31.1	37.2	X	--
	Process Heating	--	38.7	X	0.0	31.8	48.4	X	--
	Process Cooling and Refrigeration	--	27.1	X	X	99.5	X	X	--
	Machine Drive	--	14.1	99.5	51.1	39.0	43.2	X	--
	Electro-Chemical Processes	--	32.6	--	--	--	--	--	--
	Other Process Use	--	46.1	X	0.0	60.7	82.2	X	--
	Direct Uses—Total Nonprocess	--	16.3	99.5	37.0	18.1	25.2	X	--
	Facility HVAC ⁶	--	19.4	99.5	89.3	19.3	52.3	X	--

	Facility Lighting	--	16.4	--	--	--	--	--	--
	Other Facility Support	--	17.6	X	X	30.2	83.0	X	--
	Onsite Transportation	--	32.7	--	41.5	51.0	21.2	--	--
	Conventional Electricity Generation	--	--	X	72.7	57.1	99.5	X	--
	Other Nonprocess Use	--	67.4	X	71.3	79.4	99.5	X	--
	End use not reported	37.0	46.3	X	X	55.2	69.0	X	69.7
333	Machinery								
	Total fuel consumption	10.7	11.0	X	44.3	13.3	35.3	X	33.1
	Indirect Uses—Boiler Fuel	--	29.8	X	82.5	37.1	94.2	X	--
	Conventional Boiler Use	--	29.8	X	X	46.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	82.5	49.3	94.2	X	--
	Direct Uses—Total Process	--	11.8	X	50.0	21.7	55.6	X	--
	Process Heating	--	22.9	X	31.7	25.0	58.0	X	--
	Process Cooling and Refrigeration	--	20.2	X	31.7	64.4	X	X	--
	Machine Drive	--	14.0	X	80.2	42.4	60.8	X	--
	Electro-Chemical Processes	--	43.7	--	--	--	--	--	--
	Other Process Use	--	29.3	X	50.8	14.7	68.1	X	--
	Direct Uses—Total Nonprocess	--	12.6	X	42.1	11.8	30.2	X	--
	Facility HVAC [®]	--	10.4	X	68.2	11.7	58.1	X	--
	Facility Lighting	--	12.5	--	--	--	--	--	--
	Other Facility Support	--	19.6	X	99.0	20.9	96.6	X	--
	Onsite Transportation	--	56.7	--	35.6	58.6	24.9	--	--
	Conventional Electricity Generation	--	--	X	28.7	73.1	96.3	X	--
	Other Nonprocess Use	--	57.3	X	81.5	79.6	0.4	X	--
	End use not reported	46.7	49.8	X	0.5	59.6	45.6	X	33.1
334	Computer and electronic products								
	Total fuel consumption	11.9	15.1	0.0	29.3	8.8	42.9	X	45.3
	Indirect Uses—Boiler Fuel	--	24.7	X	0.0	16.9	0.0	X	--
	Conventional Boiler Use	--	24.7	X	0.0	6.1	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	31.2	X	X	--
	Direct Uses—Total Process	--	21.2	0.0	29.4	16.5	94.2	X	--
	Process Heating	--	11.6	X	32.3	21.3	96.0	X	--
	Process Cooling and Refrigeration	--	18.3	X	0.0	75.7	X	X	--
	Machine Drive	--	8.7	X	1.3	59.4	X	X	--
	Electro-Chemical Processes	--	9.6	--	--	--	--	--	--
	Other Process Use	--	50.3	0.0	65.1	3.1	84.6	X	--
	Direct Uses—Total Nonprocess	--	9.1	X	35.8	9.0	54.3	X	--
	Facility HVAC [®]	--	8.9	X	67.7	7.4	0.0	X	--
	Facility Lighting	--	11.7	--	--	--	--	--	--
	Other Facility Support	--	16.4	X	0.0	30.4	0.0	X	--
	Onsite Transportation	--	33.4	--	88.2	X	65.5	--	--
	Conventional Electricity Generation	--	--	X	3.6	0.1	X	X	--
	Other Nonprocess Use	--	20.1	X	16.4	69.3	99.0	X	--

	End use not reported	34.5	45.9	X	X	15.8	66.9	X	45.3
334413	Semiconductors and related devices								
	Total fuel consumption	2.6	2.1	0.0	8.8	5.9	4.6	X	54.1
	Indirect Uses—Boiler Fuel	--	16.7	X	0.0	19.4	0.0	X	--
	Conventional Boiler Use	--	16.7	X	0.0	4.9	0.0	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	49.1	X	X	--
	Direct Uses—Total Process	--	2.0	0.0	28.9	2.1	0.0	X	--
	Process Heating	--	8.8	X	0.0	2.9	0.0	X	--
	Process Cooling and Refrigeration	--	2.4	X	0.0	72.3	X	X	--
	Machine Drive	--	2.5	X	1.3	0.0	X	X	--
	Electro-Chemical Processes	--	3.0	--	--	--	--	--	--
	Other Process Use	--	2.2	0.0	91.3	1.6	0.0	X	--
	Direct Uses—Total Nonprocess	--	3.6	X	1.2	3.4	6.9	X	--
	Facility HVAC ⁶	--	3.6	X	0.9	4.4	0.0	X	--
	Facility Lighting	--	8.3	--	--	--	--	--	--
	Other Facility Support	--	5.7	X	0.0	1.8	0.0	X	--
	Onsite Transportation	--	28.3	--	0.0	X	15.2	--	--
	Conventional Electricity Generation	--	--	X	0.0	0.1	X	X	--
	Other Nonprocess Use	--	0.3	X	15.3	0.0	X	X	--
	End use not reported	26.6	50.3	X	X	4.1	X	X	54.1
335	Electrical equip., appliances, and components								
	Total fuel consumption	10.0	10.1	X	50.7	14.4	24.7	X	2.3
	Indirect Uses—Boiler Fuel	--	19.8	X	X	42.6	X	X	--
	Conventional Boiler Use	--	19.8	X	X	46.5	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	7.9	X	X	--
	Direct Uses—Total Process	--	10.9	X	33.1	16.0	50.5	X	--
	Process Heating	--	21.6	X	X	18.1	50.6	X	--
	Process Cooling and Refrigeration	--	19.5	X	19.8	87.7	X	X	--
	Machine Drive	--	15.2	X	27.7	32.5	96.3	X	--
	Electro-Chemical Processes	--	13.7	--	--	--	--	--	--
	Other Process Use	--	39.3	X	70.9	73.9	X	X	--
	Direct Uses—Total Nonprocess	--	13.6	X	53.0	21.3	26.8	X	--
	Facility HVAC ⁶	--	17.5	X	96.3	21.7	79.1	X	--
	Facility Lighting	--	16.1	--	--	--	--	--	--
	Other Facility Support	--	17.7	X	X	36.1	77.5	X	--
	Onsite Transportation	--	32.9	--	63.6	X	28.2	--	--
	Conventional Electricity Generation	--	--	X	49.1	X	88.8	X	--
	Other Nonprocess Use	--	53.2	X	70.2	68.4	69.1	X	--
	End use not reported	10.7	39.7	X	X	58.6	79.6	X	2.3
336	Transportation equipment								

	Total fuel consumption	5.4	6.3	96.5	6.5	6.7	26.7	X	3.7
	Indirect Uses—Boiler Fuel	--	8.3	X	0.0	7.3	30.0	X	--
	Conventional Boiler Use	--	8.3	X	0.0	7.7	2.3	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	12.8	63.6	X	--
	Direct Uses—Total Process	--	7.5	X	4.5	8.7	44.1	X	--
	Process Heating	--	12.1	X	0.0	9.1	58.4	X	--
	Process Cooling and Refrigeration	--	8.7	X	X	4.7	0.0	X	--
	Machine Drive	--	9.1	X	6.5	60.4	69.4	X	--
	Electro-Chemical Processes	--	37.1	--	--	--	--	--	--
	Other Process Use	--	15.4	X	1.7	15.7	24.4	X	--
	Direct Uses—Total Nonprocess	--	7.2	96.5	9.9	9.9	28.2	X	--
	Facility HVAC ^g	--	8.2	96.5	57.9	10.2	59.1	X	--
	Facility Lighting	--	8.1	--	--	--	--	--	--
	Other Facility Support	--	12.5	X	0.0	22.7	86.9	X	--
	Onsite Transportation	--	12.3	--	10.9	40.0	24.2	--	--
	Conventional Electricity Generation	--	--	X	33.1	4.1	12.4	X	--
	Other Nonprocess Use	--	11.6	X	3.8	24.2	84.1	X	--
	End use not reported	13.0	44.5	X	0.0	2.1	94.8	X	3.7
336110	Automobile and light duty motor vehicle manufacturing								
	Total fuel consumption	0.7	1.2	X	2.0	0.5	0.3	X	0.1
	Indirect Uses—Boiler Fuel	--	1.7	X	X	1.7	X	X	--
	Conventional Boiler Use	--	1.7	X	X	2.1	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	0.0	X	X	--
	Direct Uses—Total Process	--	0.9	X	0.0	0.3	0.0	X	--
	Process Heating	--	1.9	X	X	0.3	0.0	X	--
	Process Cooling and Refrigeration	--	0.7	X	X	0.0	X	X	--
	Machine Drive	--	1.0	X	0.0	0.0	X	X	--
	Electro-Chemical Processes	--	0.0	--	--	--	--	--	--
	Other Process Use	--	1.8	X	0.0	0.0	0.0	X	--
	Direct Uses—Total Nonprocess	--	2.2	X	2.2	0.5	0.3	X	--
	Facility HVAC ^g	--	2.5	X	X	0.5	0.0	--	--
	Facility Lighting	--	1.1	--	--	--	--	--	--
	Other Facility Support	--	2.1	X	0.0	0.6	X	X	--
	Onsite Transportation	--	5.9	--	0.0	0.0	0.3	--	--
	Conventional Electricity Generation	--	--	X	54.9	0.0	X	X	--
	Other Nonprocess Use	--	0.0	X	0.0	X	0.0	X	--
	End use not reported	0.1	0.0	X	0.0	0.0	X	X	0.1
3364	Aerospace product and parts								
	Total fuel consumption	4.0	5.3	X	2.9	3.1	14.5	X	2.2
	Indirect Uses—Boiler Fuel	--	7.2	X	0.0	1.0	30.0	X	--
	Conventional Boiler Use	--	7.2	X	0.0	2.1	2.3	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.8	63.6	X	--
	Direct Uses—Total Process	--	6.6	X	15.5	6.5	39.6	X	--

	Process Heating	--	6.6	X	0.0	7.6	42.8	X	--
	Process Cooling and Refrigeration	--	6.7	X	X	11.4	0.0	X	--
	Machine Drive	--	9.3	X	16.3	10.8	46.7	X	--
	Electro-Chemical Processes	--	13.9	--	--	--	--	--	--
	Other Process Use	--	2.9	X	15.5	7.4	20.6	X	--
	Direct Uses—Total Nonprocess	--	5.3	X	4.0	5.3	7.9	X	--
	Facility HVAC ⁸	--	6.1	X	0.0	5.6	8.3	X	--
	Facility Lighting	--	5.2	--	--	--	--	--	--
	Other Facility Support	--	3.9	X	0.0	5.0	28.3	X	--
	Onsite Transportation	--	6.3	--	5.2	1.3	14.1	--	--
	Conventional Electricity Generation	--	--	X	5.5	7.5	45.4	X	--
	Other Nonprocess Use	--	8.3	X	1.6	22.4	4.3	X	--
	End use not reported	6.5	34.5	X	X	15.7	64.3	X	2.2
336411	Aircraft								
	Total fuel consumption	4.7	5.6	X	2.5	4.3	26.3	X	27.4
	Indirect Uses—Boiler Fuel	--	3.1	X	0.0	0.0	X	X	--
	Conventional Boiler Use	--	3.1	X	0.0	0.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	0.0	0.0	X	X	--
	Direct Uses—Total Process	--	9.3	X	0.0	11.6	56.6	X	--
	Process Heating	--	13.1	X	0.0	12.2	56.8	X	--
	Process Cooling and Refrigeration	--	14.6	X	X	0.0	0.0	X	--
	Machine Drive	--	12.1	X	0.0	0.0	0.0	X	--
	Electro-Chemical Processes	--	23.7	--	--	--	--	--	--
	Other Process Use	--	7.0	X	X	0.0	X	X	--
	Direct Uses—Total Nonprocess	--	3.6	X	3.2	5.2	16.7	X	--
	Facility HVAC ⁸	--	4.6	X	X	5.4	51.9	X	--
	Facility Lighting	--	3.4	--	--	--	--	--	--
	Other Facility Support	--	4.1	X	0.0	6.5	71.9	X	--
	Onsite Transportation	--	1.5	--	3.4	0.0	17.2	--	--
	Conventional Electricity Generation	--	--	X	3.9	0.0	0.0	X	--
	Other Nonprocess Use	--	0.0	X	5.9	0.0	0.0	X	--
	End use not reported	49.9	76.9	X	X	X	69.5	X	27.4
337	Furniture and related products								
	Total fuel consumption	32.0	50.8	X	47.1	15.9	26.1	84.0	25.0
	Indirect Uses—Boiler Fuel	--	43.0	X	X	38.9	73.6	X	--
	Conventional Boiler Use	--	43.0	X	X	59.0	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	51.6	73.6	X	--
	Direct Uses—Total Process	--	44.1	X	99.0	24.3	55.5	X	--
	Process Heating	--	30.3	X	X	25.1	67.5	X	--
	Process Cooling and Refrigeration	--	87.9	X	X	76.7	X	X	--
	Machine Drive	--	39.5	X	99.0	87.5	62.0	X	--
	Electro-Chemical Processes	--	43.8	--	--	--	--	--	--
	Other Process Use	--	76.7	X	X	X	77.5	X	--

	Direct Uses—Total Nonprocess	--	61.4	X	28.1	19.1	27.0	84.0	--
	Facility HVAC ^g	--	61.0	X	X	19.4	41.1	84.0	--
	Facility Lighting	--	61.1	--	--	--	--	--	--
	Other Facility Support	--	55.5	X	X	51.7	90.5	X	--
	Onsite Transportation	--	77.3	--	35.8	98.1	28.4	--	--
	Conventional Electricity Generation	--	--	X	X	93.0	99.0	X	--
	Other Nonprocess Use	--	99.0	X	30.3	X	X	X	--
	End use not reported	26.5	42.2	X	99.0	70.4	99.0	X	25.0
339	Miscellaneous								
	Total fuel consumption	15.8	16.3	X	47.5	20.5	33.6	X	49.5
	Indirect Uses—Boiler Fuel	--	27.5	X	X	45.2	X	X	--
	Conventional Boiler Use	--	27.5	X	X	55.4	X	X	--
	CHP and/or Cogeneration Process	--	X	X	X	44.7	X	X	--
	Direct Uses—Total Process	--	19.8	X	99.0	32.6	48.1	X	--
	Process Heating	--	39.2	X	X	34.6	70.1	X	--
	Process Cooling and Refrigeration	--	23.3	X	X	80.0	51.0	X	--
	Machine Drive	--	27.2	X	99.0	72.9	71.1	X	--
	Electro-Chemical Processes	--	60.2	--	--	--	--	--	--
	Other Process Use	--	32.6	X	X	45.1	99.0	X	--
	Direct Uses—Total Nonprocess	--	16.4	X	54.0	25.6	36.4	X	--
	Facility HVAC ^g	--	17.6	X	75.9	27.2	53.5	X	--
	Facility Lighting	--	16.5	--	--	--	--	--	--
	Other Facility Support	--	14.1	X	X	36.1	76.6	X	--
	Onsite Transportation	--	50.9	--	62.9	93.3	48.8	--	--
	Conventional Electricity Generation	--	--	X	53.5	85.3	X	X	--
	Other Nonprocess Use	--	34.3	X	43.9	91.5	X	X	--
	End use not reported	65.6	69.8	X	X	61.8	61.5	X	49.5

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. CHP is defined as combined heat and power. Allocations to specific end uses are made based on reasonable approximations by respondents.

^a 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).

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

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

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

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

^g Facility heating, ventilation, and air conditioning (*facility HVAC*) excludes steam and hot water.

* 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.

-- Estimation is not applicable.

S=Negative value.

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).