

**Table 8.3 Number of Establishments by Usage of Cogeneration Technologies, 2002;**  
**Level: National Data;**  
**Row: NAICS Codes;**  
**Column: Usage within Cogeneration Technologies;**  
**Unit: Establishment Counts.**

<b>Steam Turbines Supplied by Either Conventional or Fluidized Bed Boilers</b>	<b>Conventional Combustion Turbines with Heat Recovery</b>
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NAICS Code(a)	Subsector and Industry	Establishments with Any Cogeneration Technology in Use(c)							
		Establishments(b)	In Use(d)	Not in Use	Don't Know	In Use(d)	Not in Use	Don't Know	
<b>Total United States</b>									
<b>RSE Column Factors:</b>		0	1	0.7	0.8	1.7	0.6	0.8	1.7
311	Food	15,089	443	131	13,850	1,109	80	13,729	1,280
311221	Wet Corn Milling	49	11	8	40	1	3	45	1
31131	Sugar	77	45	44	27	5	8	61	8
311421	Fruit and Vegetable Canning	468	50	42	375	51	44	374	50
312	Beverage and Tobacco Products	1,595	22	12	1,398	185	3	1,444	147
3121	Beverages	1,517	18	9	1,326	183	3	1,369	145
3122	Tobacco	78	4	4	72	2	0	76	2
313	Textile Mills	2,247	29	8	2,141	98	W	2,147	W
314	Textile Product Mills	3,457	W	0	2,973	484	W	2,972	W
315	Apparel	5,500	W	0	4,480	1,020	W	4,633	W
316	Leather and Allied Products	685	0	0	554	145	0	528	157
321	Wood Products	10,486	92	62	9,725	700	10	9,775	702
321113	Sawmills	2,235	37	31	1,969	235	5	1,997	234
3212	Veneer, Plywood, and Engineered Woods	1,478	7	3	1,413	61	W	1,410	W
3219	Other Wood Products	6,461	46	26	6,066	368	W	6,091	W
322	Paper	4,257	209	174	3,752	330	26	3,890	341
322110	Pulp Mills	34	20	17	14	3	W	29	W
322121	Paper Mills, except Newsprint	323	91	80	234	10	10	303	10
322122	Newsprint Mills	21	6	6	14	1	W	18	W
322130	Paperboard Mills	210	85	70	132	8	11	188	11
323	Printing and Related Support	20,220	92	4	17,748	2,468	W	17,751	W
324	Petroleum and Coal Products	1,916	66	45	1,616	256	25	1,608	283
324110	Petroleum Refineries	215	59	39	169	7	25	182	8
324199	Other Petroleum and Coal Products	47	7	6	36	5	0	32	15
325	Chemicals	8,909	247	163	8,309	437	89	8,355	465
325110	Petrochemicals	37	13	10	21	6	8	23	6
325120	Industrial Gases	527	3	W	519	W	W	521	W
325181	Alkalies and Chlorine	33	4	3	29	1	W	30	W
325182	Carbon Black	22	4	W	W	0	W	W	0
325188	Other Basic Inorganic Chemicals	515	19	11	454	50	W	463	W
325192	Cyclic Crudes and Intermediates	37	5	3	31	2	W	32	W
325193	Ethyl Alcohol	48	W	W	40	W	0	43	5
325199	Other Basic Organic Chemicals	578	76	61	508	10	16	540	22
325211	Plastics Materials and Resins	709	15	6	671	31	9	668	32
325212	Synthetic Rubber	125	11	4	116	6	8	111	6
325222	Noncellulosic Organic Fibers	64	6	5	58	1	W	60	W
325311	Nitrogenous Fertilizers	56	13	6	42	7	6	43	7
325312	Phosphatic Fertilizers	27	17	16	11	0	W	W	0
3254	Pharmaceuticals and Medicines	1,143	20	12	1,095	36	10	1,097	36
325412	Pharmaceutical Preparation	606	12	8	569	29	8	569	29
325992	Photographic Film, Paper, Plate, and Chemicals	171	W	W	W	0	0	171	0
326	Plastics and Rubber Products	10,538	16	4	10,042	493	W	9,938	W
327	Nonmetallic Mineral Products	11,593	24	4	10,416	1,174	W	10,401	W
3272	Glass and Glass Products	1,047	10	0	1,011	36	0	944	103

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Combined-Cycle Combustion Turbines	Internal Combustion Engines with Heat Recovery	Steam Turbines Supplied by Heat Recovered from High-Temperature Processes
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NAICS Code(a)	Subsector and Industry	In Use(d)	Not in Use	Don't Know	In Use(d)	Not in Use	Don't Know	In Use(d)	Not in Use	Don't Know	RSE Row Factors
<b>RSE Column Factors:</b>		0.6	0.8	1.6	1.1	0.8	1.8	0.8	0.8	1.6	
311	Food	111	13,695	1,283	66	13,808	1,215	Q	13,675	1,284	8.7
311221	Wet Corn Milling	W	47	W	0	47	2	0	48	1	1
31131	Sugar	W	64	W	0	69	8	5	64	8	1
311421	Fruit and Vegetable Canning	0	416	52	4	415	49	4	374	91	6.5
312	Beverage and Tobacco Products	W	1,445	W	5	1,442	147	5	1,452	138	7.6
3121	Beverages	W	1,370	W	5	1,367	145	5	1,376	135	8.1
3122	Tobacco	0	76	2	0	76	2	0	76	2	0.9
313	Textile Mills	0	2,135	112	3	2,115	129	16	2,119	112	5.7
314	Textile Product Mills	0	2,973	484	W	2,972	W	0	3,051	406	4.7
315	Apparel	0	4,635	865	0	4,466	1,034	0	4,620	880	4
316	Leather and Allied Products	0	528	157	0	528	157	0	528	157	12.9
321	Wood Products	W	9,780	W	27	9,729	731	22	9,745	720	3.4
321113	Sawmills	0	2,000	236	W	1,997	W	7	1,986	243	3.7
3212	Veneer, Plywood, and Engineered Woods	0	1,411	67	0	1,412	66	W	1,413	W	5.6
3219	Other Wood Products	W	6,091	W	24	6,043	394	12	6,069	380	4.9
322	Paper	21	3,889	347	6	3,899	352	48	3,865	344	2.3
322110	Pulp Mills	0	29	5	0	31	3	6	26	1	1
322121	Paper Mills, except Newsprint	9	303	11	0	298	25	27	273	23	6.7
322122	Newsprint Mills	W	18	W	0	20	1	0	20	1	1
322130	Paperboard Mills	8	189	13	W	191	W	14	181	15	1.7
323	Printing and Related Support	88	17,664	2,468	W	17,664	W	4	17,748	2,468	5.1
324	Petroleum and Coal Products	12	1,615	289	W	1,635	W	49	1,603	264	5.1
324110	Petroleum Refineries	12	193	10	W	197	W	W	160	W	1.3
324199	Other Petroleum and Coal Products	0	32	15	0	32	15	W	30	W	0.9
325	Chemicals	41	8,400	468	26	8,382	501	113	8,290	506	2.4
325110	Petrochemicals	W	29	W	W	30	W	11	20	6	1
325120	Industrial Gases	W	520	W	0	522	5	W	517	W	3.8
325181	Alkalies and Chlorine	3	29	1	0	32	1	W	30	W	1
325182	Carbon Black	0	21	1	0	22	0	W	W	0	1.2
325188	Other Basic Inorganic Chemicals	W	463	W	5	459	51	9	455	50	7.6
325192	Cyclic Crudes and Intermediates	W	33	W	0	35	2	3	31	2	1
325193	Ethyl Alcohol	0	42	6	0	40	8	0	40	8	0.9
325199	Other Basic Organic Chemicals	8	557	13	5	528	46	26	506	47	2
325211	Plastics Materials and Resins	8	669	32	0	677	32	11	666	32	2
325212	Synthetic Rubber	W	118	W	0	119	6	0	118	7	1.5
325222	Noncellulosic Organic Fibers	0	63	1	0	63	1	W	61	W	1
325311	Nitrogenous Fertilizers	W	47	W	0	49	7	11	37	7	1
325312	Phosphatic Fertilizers	0	26	1	W	W	0	16	10	1	1.1
3254	Pharmaceuticals and Medicines	W	1,105	W	W	1,096	W	W	1,098	W	3.8
325412	Pharmaceutical Preparation	W	575	W	W	575	W	W	575	W	4.6
325992	Photographic Film, Paper, Plate, and Chemicals	W	W	0	0	171	0	0	170	1	2.9
326	Plastics and Rubber Products	W	9,908	W	12	9,847	679	W	10,012	W	1.8
327	Nonmetallic Mineral Products	W	10,392	W	15	10,392	1,187	3	10,502	1,089	5.2
3272	Glass and Glass Products	0	945	102	10	936	101	0	1,011	36	13.5

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NAICS Code(a)	Subsector and Industry	Establishments(b)	Establishments with Any Cogeneration Technology in Use(c)			Establishments with Any Cogeneration Technology in Use(c)			
			In Use(d)	Not in Use	Don't Know	In Use(d)	Not in Use	Don't Know	
327211	Flat Glass	38	0	0	30	8	0	29	9
327213	Glass Containers	61	W	0	58	3	0	57	4
327310	Cements	195	7	W	190	W	0	192	3
327410	Lime	65	W	0	62	3	0	62	3
327993	Mineral Wool	207	0	0	207	1	0	207	1
331	Primary Metals	4,166	31	14	3,881	272	9	3,879	279
331111	Iron and Steel Mills	771	12	9	656	106	W	665	W
331112	Electrometallurgical Ferroalloy Products	15	0	0	13	2	0	13	2
3312	Steel Products from Purchased Steel	548	0	0	524	24	0	526	22
3313	Alumina and Aluminum	446	W	W	394	W	W	388	W
331312	Primary Aluminum	41	0	0	40	1	0	40	1
3314	Nonferrous Metals, except Aluminum	671	W	W	643	W	W	643	W
3315	Foundries	1,715	12	W	1,651	W	5	1,644	66
331511	Iron Foundries	453	3	0	447	6	W	446	W
331521	Aluminum Die-Casting Foundries	227	W	0	212	15	W	223	W
331524	Aluminum Foundries, except Die-Casting	341	W	0	333	8	W	327	W
332	Fabricated Metal Products	35,349	71	0	32,565	2,784	0	32,257	3,092
333	Machinery	17,381	W	W	16,144	W	W	16,146	W
334	Computer and Electronic Products	9,238	8	W	8,863	W	0	8,865	373
334413	Semiconductors and Related Devices	578	W	0	577	1	0	576	2
335	Electrical Equip., Appliances, and Components	3,886	9	W	3,490	W	W	3,490	W
336	Transportation Equipment	7,653	39	14	7,187	452	10	7,191	452
336112	Light Trucks and Utility Vehicles	42	3	W	39	W	0	40	2
337	Furniture and Related Products	10,941	22	8	9,834	1,100	11	9,836	1,094
339	Miscellaneous	15,605	52	4	14,039	1,562	W	14,057	W
	Total	200,710	1,479	653	183,007	17,050	287	182,892	17,531

(a) The Bureau of the Census classifies establishments using the North American Industry Classification System (NAICS).  
(b) The 'Establishments' column includes those units which reported any of the five listec cogeneration technologies in use anytime in 2002, plus those units where usage of those cogeneration technologies was not ascertained.  
(c) This count includes only those establishments that reported any of the five listec cogeneration technologies in use anytime in 2002.  
(d) This count includes only those establishments that reported this cogeneration technology in use anytime in 2002.  
NF=No applicable RSE row/column factor.  
\* Estimate less than 0.5.  
W=Withheld to avoid disclosing data for individual establishments.  
Q=Withheld because Relative Standard Error is greater than 50 percent.  
NA=Not available.

Notes: To obtain the RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. Totals may not equal sum of components because of independent rounding.  
Source: Energy Information Administration, Office of Energy Markets and End Use, Energy Consumption Division, Form EIA-846, '2002 Manufacturing Energy Consumption Survey.'

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NAICS Code(a)	Subsector and Industry	In Use(d)	Not in Use	Don't Know	In Use(d)	Not in Use	Don't Know	In Use(d)	Not in Use	Don't Know	RSE Row Factors
327211	Flat Glass	0	30	8	0	30	8	0	30	8	0.9
327213	Glass Containers	0	57	4	W	57	W	0	57	4	0.9
327310	Cements	W	192	W	W	188	W	3	190	2	1.6
327410	Lime	0	60	5	W	60	W	0	62	3	0.9
327993	Mineral Wool	0	207	1	0	207	1	0	207	1	2.7
331	Primary Metals	W	3,870	W	8	3,872	286	12	3,882	272	3.4
331111	Iron and Steel Mills	0	666	105	0	666	105	8	657	106	7.1
331112	Electrometallurgical Ferroalloy Products	0	13	2	0	13	2	0	13	2	0.9
3312	Steel Products from Purchased Steel	0	523	25	0	526	22	0	524	24	3.3
3313	Alumina and Aluminum	W	388	W	0	388	58	0	389	57	3.1
331312	Primary Aluminum	0	40	1	0	40	1	0	40	1	1.7
3314	Nonferrous Metals, except Aluminum	0	632	39	W	642	W	W	642	W	2.7
3315	Foundries	0	1,648	67	W	1,637	W	W	1,658	W	3.6
331511	Iron Foundries	0	447	6	W	444	W	0	447	6	3.6
331521	Aluminum Die-Casting Foundries	0	220	7	0	218	9	0	223	4	1.1
331524	Aluminum Foundries, except Die-Casting	0	328	13	0	327	14	W	328	W	2.8
332	Fabricated Metal Products	0	32,272	3,077	W	32,137	W	W	32,428	W	5.1
333	Machinery	0	16,145	1,236	0	15,938	1,443	0	16,143	1,238	2.1
334	Computer and Electronic Products	0	8,863	375	5	8,852	381	0	8,864	374	2.1
334413	Semiconductors and Related Devices	0	576	2	W	567	W	0	576	2	1.9
335	Electrical Equip., Appliances, and Components	0	3,491	395	Q	3,471	407	0	3,499	387	8
336	Transportation Equipment	W	7,218	W	14	7,122	517	W	7,146	W	2
336112	Light Trucks and Utility Vehicles	0	40	2	W	39	W	W	39	W	0.9
337	Furniture and Related Products	W	9,768	W	W	9,668	W	W	9,729	W	6.1
339	Miscellaneous	W	14,026	W	39	14,035	1,532	40	14,034	1,532	3.5
	Total	296	182,713	17,701	308	181,975	18,427	453	182,935	17,322	2.9

(a) The Bureau of the Census classifies establishments using the North American Industry Classification System (NAICS).  
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(c) This count includes only those establishments that reported any of the five listed cogeneration technologies in use anytime in 2002.  
(d) This count includes only those establishments that reported this cogeneration technology in use anytime in 2002.  
NF=No applicable RSE row/column factor.  
\* Estimate less than 0.5.  
W=Withheld to avoid disclosing data for individual establishments.  
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Notes: To obtain the RSE percentage for any table cell, multiply the cell's corresponding RSE column and RSE row factors. Totals may not equal sum of components because of independent rounding.  
Source: Energy Information Administration, Office of Energy Markets and End Use, Energy Consumption Division, Form EIA-846, '2002 Manufacturing Energy Consumption Survey.'