Table 3.1 Fuel Consumption, 2002;

	Unit: Physical Units or Btu.										
NAICS Code(a)	Subsector and Industry	Total (trillion Btu)	Net Electricity(b) (million kWh)	Residual Fuel Oil (million bbl)	Distillate Fuel Oil(c) (million bbl)	Natural Gas(d) (billion cu ft)	LPG and NGL(e) (million bbl)	Coal (million short tons)	Coke and Breeze (million short tons)	Other(f) (trillion Btu)	RSE Row Factors
		Total Uni	ted States								
	RSE Column Factors:	0.8	0.8	1.1	1.6	0.9	1.8	0.7	0.7	1.1	
311	Food	1,116	67,521	2	3	560	1	8	*	90	7.6
311221	Wet Corn Milling	217	6,851	*	*	59	*	5	0	11	1.2
31131 311421	Sugar Fruit and Vegetable Canning	111 47	725 1,960	*	*	22 35	*	2	0	46 1	1 12.5
312	Beverage and Tobacco Products	104	7,639	*	*	45	*	1	0	10	4.4
3121	Beverages	85	6,426	*	*	41	*	*	0	10	5.9
3122 313	Tobacco Textile Mills	19 205	1,213 25,271	1	*	4 72	*	1	0	* 15	1 15.7
314	Textile Product Mills	60	4,875	*	Q		*	! *	0	Q	21.7
315	Apparel	30	3,588	*	*	16	*	0	0	*	23.2
316	Leather and Allied Products	7	716	*	*	4	*	0	0	*	8.5
321 321113	Wood Products Sawmills	375 128	20,985 5,845	*	2	56 10	1	0	0	229 92	4.5 5.4
3211	Veneer, Plywood, and Engineered Woods	167	9,619	*	*	32	1	*	0	95	5.2
3219	Other Wood Products	73	5,282	*	*	11	*	0	0	40	9
322	Paper Pula Milla	2,361	65,503	16			2	11	*	1,276	2
322110 322121	Pulp Mills Paper Mills, except Newsprint	224 1,002	1,579 22,831	W 8	1	23 201	*	W 6	0	175 522	1 1.9
322122	Newsprint Mills	94	11,174	W	*	15	*	w	0	27	1
322130	Paperboard Mills	907	16,369	5	1		*	4	0	542	2.4
323 324	Printing and Related Support	98	14,714	*	*	45	*	0 1	0	1	11.6
324110	Petroleum and Coal Products Petroleum Refineries	3,202 3,086	37,186 35,478	4			6 5	! *	0	2,119 2,097	3.6 3.3
324199	Other Petroleum and Coal Products	34	-533	*	*	4	*	1	*	19	1.4
325	Chemicals	3,769	153,104	7	2		9	14	*	1,158	5.1
325110 325120	Petrochemicals Industrial Gases	474 177	W W	W 0	*	167 51	W *	W 0	0	233 W	1 6.2
325181	Alkalies and Chlorine	173	12,354	*	*	92	*	1	0	16	1.4
325182	Carbon Black	42	605	2	*	9	*	0	0	16	0.9
325188 325192	Other Basic Inorganic Chemicals	210 72	25,904	*	*	67 36	*	1	*	30 23	3 0.9
325192	Cyclic Crudes and Intermediates Ethyl Alcohol	60	3,443 W	0	*	29	*	1	0	23 W	5.7
325199	Other Basic Organic Chemicals	1,184	22,917	2	*	414	W	W	0	514	13
325211	Plastics Materials and Resins	665	21,495	*	*	339	*	1	*	214	6.7
325212 325222	Synthetic Rubber Noncellulosic Organic Fibers	52 61	1,878 W	* W	*	27 29	*	w W	0	12 3	7.4 1.6
325311	Nitrogenous Fertilizers	205	3,496	0	*	184	*	0	0	4	0.9
325312	Phosphatic Fertilizers	27	1,025	*	*	18	*	*	*	1	1
3254	Pharmaceuticals and Medicines	121	10,715	*	*	60	*	*	0	9	5.1
325412 325992	Pharmaceutical Preparation Photographic Film, Paper, Plate, and Chemicals	84 29	8,312 W	*	*	39 7	*	W	0	4	6 6.3
326	Plastics and Rubber Products	348	53,181	1	*	125	1	Q	0	5	9.5
327	Nonmetallic Mineral Products	1,052	41,393	*	5		1	14	*	133	4
3272 327211	Glass and Glass Products Flat Glass	200 62	12,233 1,842	W W	W W	148 51	*	0	0	4 2	2.4 0.9
327213	Glass Containers	66	3,932	0	*	51	*	0	0	*	0.9
327310	Cements	409	12,471	*	1		*	11	*	95	2.1
327410	Lime	106	1,353	*	*	7	*	3	*	26	1
327993 331	Mineral Wool Primary Metals	51 2,123	3,750 144,502	0	3	34	1	0 2	22	342	2.9 2.1
331111	Iron and Steel Mills	1,455	53,915	*	2		*	2	21	311	2.1
331112	Electrometallurgical Ferroalloy Products	24	3,555	0	*	7	*	*	*	2	2.6
3312	Steel Products from Purchased Steel	41	4,611	*	*	23	*	0	0	1	12.3
3313 331312	Alumina and Aluminum Primary Aluminum	351 208	56,673 W	*	*	127 19	*	0	0	26 W	1.9 0.9
3314	Nonferrous Metals, except Aluminum	95	9,855	*	*	42	*	*	*	3	4.6
3315	Foundries	157	15,893	*	*	75	*	*	1	*	3.8
331511	Iron Foundries	81	8,211	0	*	27	*	*	1	*	4.7
331521 331524	Aluminum Die-Casting Foundries Aluminum Foundries, except Die-Casting	23 19	1,897 1,350	*	*	16 14	*	0	0	*	2.4 4.8
332	Fabricated Metal Products	387	47,123	*	1	204	1	*	*	2	17.1
333	Machinery	175	24,563	*	*	80	1	*	0	4	11.5

Table 3.1 Fuel Consumption, 2002;

	Onit: Physical Onits of Btu.										
NAICS Code(a)	Subsector and Industry	Total (trillion Btu)	Net Electricity(b) (million kWh)	Residual Fuel Oil (million bbl)	Distillate Fuel Oil(c) (million bbl)	Natural Gas(d) (billion cu ft)	LPG and NGL(e) (million bbl)	Coal (million short tons)	Coke and Breeze (million short tons)	Other(f) (trillion Btu)	RSE Row Factors
334	Computer and Electronic Products	200	38,352	*	*	63	*	*	0	2	17.7
334413	Semiconductors and Related Devices	66	13,001	*	*	21	*	0	0	Q	3.9
335	Electrical Equip., Appliances, and Components	103	13,901	*	*	51	*	*	0	1	6.7
336	Transportation Equipment	424	50,508	1	1	197	1	*	0	28	5.9
336112 337	Light Trucks and Utility Vehicles Furniture and Related Products	57 63	W 7,062	*	*	35 24	*	W *	0	3 11	1 10.1
339	Miscellaneous	71	10,374	*	*	31	*	0	0	2	9.3
000	Total	16,276	832,061	34	24		26	53	23	5,431	3
		Northoos	t Census Regio	n							
		Northeas	Census Regio	11							
	RSE Column Factors:	1	1.1	1	1.5	1	1.8	0.8	0.6	0.8	
311	Food	90	6,440	1	1	53	*	*	0	Q	23
311221	Wet Corn Milling	*	W	w	w	0	0	0	0	W	1
31131	Sugar	W	W	*	*	W	*	0	0	*	0.9
311421	Fruit and Vegetable Canning	5	342	*	*	3	*	0	0	*	10.9
312	Beverage and Tobacco Products	13	1,000	*	*	7	*	0	0	1	4.9
3121	Beverages Tobacco	12	W W	*	W W	W W	W W	0	0	1	5.4
3122 313	Textile Mills	1 24	1,337	*	*	13	۷۷ *	0	0	*	0.9 25.4
314	Textile Product Mills	4	425	*	*	2	*	*	0	*	4.3
315	Apparel	6	567	0	*	4	*	0	0	0	27.6
316	Leather and Allied Products	W	111	*	*	W	*	0	0	*	11
321	Wood Products	22	1,319	*	*	4	*	0	0	11	12.7
321113	Sawmills	7	380	*	*	*	*	0	0	4	5.7
3212 3219	Veneer, Plywood, and Engineered Woods Other Wood Products	5 10	316 682	*	*	2 2	*	0	0	2 5	11.8 20.3
3219	Paper	284	8,114	6	*	W	*	W	0	127	3.8
322110	Pulp Mills	W	37	W	0	W	*	0	0	0	8.4
322121	Paper Mills, except Newsprint	218	2,891	4	*	46	*	1	0	118	3.2
322122	Newsprint Mills	7	W	W	*	0	0	0	0	0	0.9
322130	Paperboard Mills	28	983	1	*	W	W	W	0	W	2.7
323 324	Printing and Related Support Petroleum and Coal Products	23 223	3,164 3,103	W 1	1	W 43	*	0	0	153	15 3.2
324110	Petroleum Refineries	202	2,585	*	*	35	*	*	0	151	1.5
324199	Other Petroleum and Coal Products	4	71	*	*	*	*	*	*	1	1
325	Chemicals	163	12,367	W	1	W	*	W	0	21	7.4
325110	Petrochemicals	W	19	0	*	W	0	0	0	0	1.8
325120	Industrial Gases	9	1,961	0	W	W	0	0	0	2	1
325181 325182	Alkalies and Chlorine Carbon Black	W 0	W 0	0	0	0	0	0	0	W 0	1 0
325188	Other Basic Inorganic Chemicals	13	963	W	*	W	*	0	0	Q	2.8
325192	Cyclic Crudes and Intermediates	6	205	W	*	W	*	0	0	W	0.9
325193	Ethyl Alcohol	*	W	0	0	*	0	0	0	W	1
325199	Other Basic Organic Chemicals	17	764	W	*	W	*	0	0	6	8.2
325211	Plastics Materials and Resins	14	1,010	W	*	W *	*	0	0	3	12.9
325212 325222	Synthetic Rubber Noncellulosic Organic Fibers	1	50 W	0 W	0		*	0	0	*	0.9 5.8
325311	Nitrogenous Fertilizers	2	74	0	*	1	*	0	0	*	0.9
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	43	2,814	W	*	W	*	0	0	2	7.6
325412	Pharmaceutical Preparation	31	2,166	*	*	20	*	0	0	1	10.2
325992	Photographic Film, Paper, Plate, and Chemicals Plastics and Rubber Products	W	W	W *	*	W	*	W *	0	1	4.3
326 327	Nonmetallic Mineral Products	46 151	7,558 6,575	W	1	14 W	*	2	*	18	8.4 5.2
3272	Glass and Glass Products	40	2,089	W	W	W	*	0	0	2	3.6
327211	Flat Glass	11	321	0	W	W	W	0	0	W	0.9
327213	Glass Containers	13	751	0	W	W	*	0	0	*	0.9
327310	Cements	56	1,648	W	W	*	*	W	*	14	1
327410 327993	Lime Mineral Wool	6 5	W 346	0	W *	3	W *	W 0	0	1	0.9 3.3
327993	Primary Metals	241	15,021	*	*	W W	*	W	1	71	5.8
331111	Iron and Steel Mills	152	6,071	0	*	W	*	W	1	W	2.9
331112	Electrometallurgical Ferroalloy Products	W	W	0	*	W	*	0	0	W	0.9
3312	Steel Products from Purchased Steel	W	W	*	*	W	*	0	0	W	15.3

Table 3.1 Fuel Consumption, 2002; Level: National and Regional Data; Row: NAICS Codes; Column: Energy Sources; Unit: Physical Units or Btu.

NAICS Code(a)	Subsector and Industry	Total (trillion Btu)	Net Electricity(b) (million kWh)	Residual Fuel Oil (million bbl)	Distillate Fuel Oil(c) (million bbl)	Natural Gas(d) (billion cu ft)	LPG and NGL(e) (million bbl)	Coal (million short tons)	Coke and Breeze (million short tons)	Other(f) (trillion Btu)	RSE Row Factors
3313	Alumina and Aluminum	37	W	*	*	W	*	0	0	W	1.2
331312	Primary Aluminum	W	W	*	*	W	*	0	0	W	0.9
3314	Nonferrous Metals, except Aluminum	24	1,634	*	*	W	*	*	*	W	4.1
3315	Foundries	W	1,284	*	*	W	*	*	*	*	4.3
331511	Iron Foundries	13	607	0	*	3	*	*	*	*	5.3
331521	Aluminum Die-Casting Foundries	1	52	0	*	*	*	0	0	*	3.4
331524	Aluminum Foundries, except Die-Casting	3	209	*	*	2	*	0	0	*	1.4
332	Fabricated Metal Products	55	6,449	W	*	W	*	*	*	1	19
333 334	Machinery Computer and Electronic Products	27 61	3,692 11,167	*	*	12 20	*	0	0	Q 1	14.8 30.4
334413	Semiconductors and Related Devices	14	2,390	*	*	5	*	0		Q	2.3
335	Electrical Equip., Appliances, and Components	17	2,013	*	*	9	*	0		*	15.9
336	Transportation Equipment	49	4,026	1	*	20	*	0		11	4.8
336112	Light Trucks and Utility Vehicles	2	W	0	W	W	*	0	0	W	0.9
337	Furniture and Related Products	W	831	0	*	W	*	0	0	1	12.3
339	Miscellaneous	21	2,521	W	*	W	*	0		2	13.5
	Total	1,530	97,798	11	5	523	2	4	2	422	4.2
		Midwest (	Census Region								
	RSE Column Factors:	1.1	1.1	0.9	1.3	1.2	2	0.5	0.6	1.1	
311	Food	533	28,311	1	*	240	*	7	*	24	10.7
311221	Wet Corn Milling	191	5,846	W	*	51	W	5		6	0.9
31131	Sugar	29	379	*	*	5	*	1	*	*	1
311421	Fruit and Vegetable Canning	7	397	*	*	5	*	0	0	*	3.1
312	Beverage and Tobacco Products	22	1,391	*	*	10	*	*	0	1	3.4
3121	Beverages	22	W	*	W	W	W	*	0	1	3.4
3122	Tobacco	*	W	0	W	W	W	0		*	0.8
313	Textile Mills	3	310	0	*	W	W	0	0	*	6.5
314	Textile Product Mills	2	307	0	0	W	W	0	-	W	9.4
315 316	Apparel Leather and Allied Products	1 4	193 428	0	0	W 3	W *	0	0	W *	13.9 13.3
321	Wood Products	47	3,050	*	*	W	*	W	0	20	5.2
321113	Sawmills	5	428	0	*	1	*	0		3	9.5
3212	Veneer, Plywood, and Engineered Woods	23	1,026	*	*	W	*	W	0	11	3.4
3219	Other Wood Products	17	1,558	0	*	5	*	0	0	Q	11.7
322	Paper	337	14,825	1	*	97	Q	4	*	93	3.4
322110	Pulp Mills	W	119	0	*	W	*	W	0	W	0.9
322121	Paper Mills, except Newsprint	212	8,153	1	*	51	*	3		60	2.3
322122	Newsprint Mills	4	W	0	*	W	× 14/	W	0	W	0.9
322130 323	Paperboard Mills Printing and Related Support	60 34	2,452 5,171	W 0	*	W 14	W *	W 0	0	W 1	6.1 13.4
323	Petroleum and Coal Products	485	6,758	1	*	100	2		0	344	4.4
324110	Petroleum Refineries	457	6,047	1	*	82	1	0	0	339	2.5
324199	Other Petroleum and Coal Products	4	60	0	*	*	*	0		4	0.8
325	Chemicals	493	29,236	W	*	183	W	3	*	141	7.3
325110	Petrochemicals	W	W	0	*	W	W	0		*	0.8
325120	Industrial Gases	Q	6,276	0	0		0	0	0	W	1.3
325181	Alkalies and Chlorine	W	W	0	*	W	*	W	0	*	4.2
325182	Carbon Black	W	56	W	0		*	0	0	1	0.9
325188 325192	Other Basic Inorganic Chemicals Cyclic Crudes and Intermediates	42 9	2,116 W	W W	W	W W	*	W 0	0	14 W	2.8 0.8
325192	Ethyl Alcohol	57	1,218	0	*	28	*	1	0	6	5.6
325199	Other Basic Organic Chemicals	74		0	W	19	*	w	0	Q	2.9
325211	Plastics Materials and Resins	75	4,322	w	*	W	*	*	*	33	3.6
325212	Synthetic Rubber	4	233	0	*	W	*	W	0	*	3.4
325222	Noncellulosic Organic Fibers	0	0	0	0		0	0		0	0
325311	Nitrogenous Fertilizers	36	1,070	0	*	30	0	0	0	1	0.9
325312	Phosphatic Fertilizers	0	0	0	0		0	0		0	0
3254	Pharmaceutical Properties	44	4,089	W	*	W	*	*	0	1	6.7
325412 325992	Pharmaceutical Preparation Photographic Film, Paper, Plate, and Chemicals	34 W	3,612 W	0	0	12 W	*	0	0	0	2.6 3.6
325992	Plastics and Rubber Products	137	19,776	*	*	47	*	Q		1	12.3
327	Nonmetallic Mineral Products	303	10,674	W	Q		*	4		59	5.2
3272	Glass and Glass Products	58	3,618	0	*	43	*	0		1	1.5

Table 3.1 Fuel Consumption, 2002;

NAICS Code(a)	Subsector and Industry	Total (trillion Btu)	Net Electricity(b) (million kWh)	Residual Fuel Oil (million bbl)	Distillate Fuel Oil(c) (million bbl)	Natural Gas(d) (billion cu ft)	LPG and NGL(e) (million bbl)	Coal (million short tons)	Coke and Breeze (million short tons)	Other(f) (trillion Btu)	RSE Row Factors
327211	Flat Glass	19	469	0	*	16	*	0	0	1	0.8
327213	Glass Containers	16	978	0	W	W	*	0		*	0.8
327310	Cements	117	3,036	0	W	W	*	2	*	45	3.6
327410	Lime	48	487	W	*	4	W	1	*	12	1
327993	Mineral Wool	20	1,427	0	*	13	*	0	*	*	1.3
331	Primary Metals	1,186	55,534	*	1	326	*	1	17	215	2
331111	Iron and Steel Mills	937	22,557	*	1	217	*	1	16	209	2.3
331112 3312	Electrometallurgical Ferroalloy Products Steel Products from Purchased Steel	19 22	2,337 2,160	0	*	W W	*	0	0	W	1 7.8
3313	Alumina and Aluminum	89	15,954	0	*	W	*	0	0	W	3
331312	Primary Aluminum	53	13,892	0	*	W	*	0	0	W	0.8
3314	Nonferrous Metals, except Aluminum	26	2,716	*	*	W	*	0	*	W	5.7
3315	Foundries	93	9,810	*	*	46	*	*	*	*	3
331511	Iron Foundries	47	5,634	0	*	16	*	*	*	*	4.3
331521	Aluminum Die-Casting Foundries	17	1,510	*	*	12	*	0	0	*	3.1
331524	Aluminum Foundries, except Die-Casting	11	828	0	*	8	*	0	0	*	2.8
332	Fabricated Metal Products	182	21,313	W	*	W	*	*		1	15.5
333 334	Machinery Computer and Electronic Products	92 32	11,445 5,270	0	*	46 W	W	0	0	2	12.3 7.2
334413	Semiconductors and Related Devices	32	5,270	0	*	1	*	0	0	0	1.5
335	Electrical Equip., Appliances, and Components	36	4,949	0	*	18	*	*	0	*	4.7
336	Transportation Equipment	238	27,614	*	*	W	1	W	0	14	12.4
336112		36	3,047	*	*	W	*	W	0	W	0.9
337	Furniture and Related Products	25	2,242	0	*	W	*	W	0	5	13.8
339	Miscellaneous	19	2,786	W	*	W	*	0		*	8.9
	Total	4,213	251,584	4	5	1,455	5	20	17	921	4.6
		South Ce	nsus Region								
	RSE Column Factors:	0.9	1.1	0.9	1.3	1	1.8	0.7	0.7	1	
311	Food	322	22,923	Q	1	165	1	*	0	53	8.3
311221	Wet Corn Milling	20	1,070	0	*	5	*	*	0	4	0.9
31131	Sugar	57	205	*	*	10	*	*	0	42	0.9
311421	Fruit and Vegetable Canning	14	534	*	*	10	*	0	0	*	8.5
312	Beverage and Tobacco Products	45	3,457	*	*	18	*	*	0	2	3.4
3121 3122	Beverages Tobacco	27 18	2,283	*	*	15 3	*	*	0	2	3.8 0.9
3122	Tobacco Textile Mills	168	1,174 22,688	*	*	50	*	1	0	15	18.4
314	Textile Product Mills	51	3,928	*	*	23	W	*	0	W	21.6
315	Apparel	15	1,956	*	*	W	*	0	0	W	22.8
316	Leather and Allied Products	1	142	0	*	*	*	0	0	*	9.2
321	Wood Products	213	11,501	*	1	W	1	W	0	142	7
321113	Sawmills	70	3,159	0	*	3	*	0	0	54	9.8
3212	Veneer, Plywood, and Engineered Woods	101	5,985	*	*	W	*	W	0	60	8
3219	Other Wood Products			_			*	0	0	27	12.4
		38	2,166	0	*	3	*		0		
322	Paper	1,434	30,148	8	2	236	*	6	0	888	2.1
322110	Paper Pulp Mills	1,434 194	30,148 1,155	8 2		236 W	* *	6 W	0	888 156	2.1 0.9
322110 322121	Paper Pulp Mills Paper Mills, except Newsprint	1,434 194 473	30,148 1,155 9,124	8	2	236 W 77	* * *	6 W 3	0 0	888 156 284	2.1 0.9 1.6
322110	Paper Pulp Mills	1,434 194	30,148 1,155 9,124 4,866	8 2	2 1 *	236 W		6 W	0	888 156	2.1 0.9 1.6 0.9
322110 322121 322122	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills	1,434 194 473 48	30,148 1,155 9,124	8 2 2 *	2 1 *	236 W 77 W	* * * W	6 W 3 W	0 0 0	888 156 284 W	2.1 0.9 1.6
322110 322121 322122 322130	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills	1,434 194 473 48 673	30,148 1,155 9,124 4,866 9,828	8 2 2 *	2 1 * * *	236 W 77 W 105 W 548	W	6 W 3 W	0 0 0	888 156 284 W 433	2.1 0.9 1.6 0.9 2.6
322110 322121 322122 322130 323 324 324110	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries	1,434 194 473 48 673 28 1,798 1,749	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420	8 2 2 * 4 W 1 1	2 1 * * * * * * 1 * *	236 W 77 W 105 W 548 529	W *	6 W 3 W W 0	0 0 0 0 0	888 156 284 W 433 * 1,128 1,119	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9
322110 322121 322122 322130 323 324 324110 324199	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products	1,434 194 473 48 673 28 1,798 1,749	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420	8 2 2 * 4 W 1 1	2 1 * * * * * 1 * * *	236 W 77 W 105 W 548 529	W * 2 2 *	6 W 3 W W 0 *	0 0 0 0 0 0	888 156 284 W 433 * 1,128 1,119	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4
322110 322121 322122 322130 323 324 324110 324199 325	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products Chemicals	1,434 194 473 48 673 28 1,798 1,749 20 2,958	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420 16 99,875	8 2 2 2 * 4 W 1 1 1 0 W	2 1 1 * * * * * * * * * * * * * * * * *	236 W 77 W 105 W 548 529 2 1,301	W * 2 2 * W	6 W 3 W W 0 *	0 0 0 0 0 0 0 0	888 156 284 W 433 * 1,128 1,119 8 988	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4 5.8
322110 322121 322122 322130 323 324 324110 324199 325 325110	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products Chemicals Petrochemicals	1,434 194 473 48 673 28 1,798 1,749 20 2,958 470	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420 16 99,875	8 2 2 * 4 W 1 1 0 W	2 1 1 * * * * * * * * * * * * * * * * *	236 W 77 W 105 W 548 529 2 1,301	W * 2 2 *	6 W 3 W W 0 * 10 W	0 0 0 0 0 0 0 0 0 0	888 156 284 W 433 * 1,128 1,119 8 988 233	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4 5.8 0.9
322110 322121 322122 322130 323 324 324110 324199 325 325110 325120	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products Chemicals Petrochemicals Industrial Gases	1,434 194 473 48 673 28 1,798 1,749 20 2,958 470 85	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420 16 99,875 W	8 2 2 * 4 W 1 1 0 W W 0 0	2 1 1 * * * * * * * * * * * * * * * * *	236 W 77 W 105 W 548 529 2 1,301 W	W * 2 2 * W	6 W 3 W W 0 * 10 W	0 0 0 0 0 0 0 0 0 0 0 0	888 156 284 W 433 * 1,128 1,119 8 988 233 W	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4 5.8 0.9 4.3
322110 322121 322122 322130 323 324 324110 324199 325 325110 325120 325181	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products Chemicals Petrochemicals Industrial Gases Alkalies and Chlorine	1,434 194 473 48 673 28 1,798 1,749 20 2,958 470	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420 16 99,875 W 10,880 8,681	8 2 2 * 4 W 1 1 0 W	2 1 * * * 1 * * * * * * * * * * * * * *	236 W 77 W 105 W 548 529 2 1,301	W * 2 2 * W	6 W 3 W W 0 * 10 W	0 0 0 0 0 0 0 0 0 0	888 156 284 W 433 * 1,128 1,119 8 988 233	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4 5.8 0.9 4.3
322110 322121 322122 322130 323 324 324110 324199 325 325110 325120	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products Chemicals Petrochemicals Industrial Gases Alkalies and Chlorine Carbon Black	1,434 194 473 48 673 28 1,798 1,749 2,958 470 85 131	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420 16 99,875 W 10,880 8,681 549	8 2 2 * 4 W 1 1 1 0 W W 0 0 0	2 1 * * * * 1 * * * * * * * * * * * * *	236 W 77 W 105 W 548 529 2 1,301 W 46 W	W * 2 2 * W	6 W 3 W W 0 * 10 W 0 W	0 0 0 0 0 0 0 0 0 *	888 156 284 W 433 * 1,128 1,119 8 988 233 W	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4 5.8 0.9 4.3
322110 322121 322122 322130 323 324 324110 324199 325 32510 325120 325181 325182	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products Chemicals Petrochemicals Industrial Gases Alkalies and Chlorine	1,434 194 473 48 673 28 1,798 1,749 20 2,958 470 85 131	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420 16 99,875 W 10,880 8,681	8 2 2 * 4 W 1 1 1 0 W W W 0 0 W W	2 1 * * * * 1 * * * * * * * * * * * * *	236 W 77 W 105 W 548 529 2 2 1,301 W 46 W	W * 2 2 * W	6 W 3 W W 0 0 * * 10 W 0 W 0	0 0 0 0 0 0 0 0 0 0 0	888 156 284 W 433 * 1,128 1,119 8 988 233 W W	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4 5.8 0.9 4.3 0.9
322110 322121 322122 322130 323 324 324110 324199 325 325110 325120 325181 325182 325188	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products Chemicals Petrochemicals Industrial Gases Alkalies and Chlorine Carbon Black Other Basic Inorganic Chemicals Cyclic Crudes and Intermediates Ethyl Alcohol	1,434 194 473 48 673 28 1,798 1,749 20 2,958 470 85 131 W 114 57	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420 16 99,875 W 10,880 8,681 549	8 2 2 * 4 W 1 1 1 0 W W W 0 0 W W W W	2 1 * * * * 1 * * * * * * * * * * * * *	236 W 77 W 105 W 548 529 2 1,301 W 46 W 9	W * 2 2 * W	6 W 3 W W 0 0 * * 10 W 0 0 W W	0 0 0 0 0 0 0 0 0 0 0	888 156 284 W 433 * 1,128 1,119 8 988 233 W W 16	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4 5.8 0.9 4.3 0.9
322110 322121 322122 322130 323 324 324110 324199 325 325110 325120 325181 325182 325188 325192 325193 325193	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products Chemicals Petrochemicals Industrial Gases Alkalies and Chlorine Carbon Black Other Basic Inorganic Chemicals Cyclic Crudes and Intermediates Ethyl Alcohol Other Basic Organic Chemicals	1,434 194 473 48 673 28 1,798 1,749 20 2,958 470 85 131 W 114 57 **	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420 16 99,875 W 10,880 8,681 549 19,919 2,980 W	8 2 2 2 * 4 4 W 1 1 1 0 W W W 0 0 0 W W W W 0 0 2 2	2 1 * * * * 1 * * W * * W * * W W	236 W 777 W 105 V 548 529 2 1,301 W 46 W 9 W 25 *	W * 2 2 2 * W W * * * * * * *	6 W 3 W W 0 0 * 10 W 0 0 W 0 0 W	0 0 0 0 0 0 0 0 *	888 156 284 W 433 * 1,128 1,119 8 988 233 W W 16 11 21 W 474	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4 5.8 0.9 4.3 0.9 0.9 0.9
322110 322121 322122 322130 323 324 324110 324199 325 325110 325120 325181 325182 325188 325192 325193	Paper Pulp Mills Paper Mills, except Newsprint Newsprint Mills Paperboard Mills Printing and Related Support Petroleum and Coal Products Petroleum Refineries Other Petroleum and Coal Products Chemicals Petrochemicals Industrial Gases Alkalies and Chlorine Carbon Black Other Basic Inorganic Chemicals Cyclic Crudes and Intermediates Ethyl Alcohol	1,434 194 473 48 673 28 1,798 1,749 20 2,958 470 85 131 W 114 57	30,148 1,155 9,124 4,866 9,828 4,527 22,236 21,420 16 99,875 W 10,880 8,681 549 19,919 2,980	8 2 2 * * 4 W 1 1 1 0 W W W 0 0 W W W W 0 0	2 1 * * * * 1 * * W * * * W * *	236 W 77 W 105 W 548 529 2 1,301 W 46 W 9 W	W * 2 2 2 * * W W * * * * * * * * * *	6 W 3 W W 0 0 * * 10 W 0 0 W 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	888 156 284 W 433 * 1,128 1,119 8 988 233 W W 16 11 21	2.1 0.9 1.6 0.9 2.6 7.7 4.4 1.9 2.4 5.8 0.9 4.3 0.9 0.9 0.9

Table 3.1 Fuel Consumption, 2002;

NAICS		Total (trillion	Net Electricity(b)	Residual Fuel Oil (million	Distillate Fuel Oil(c) (million	Natural Gas(d) (billion	LPG and NGL(e) (million	Coal (million short	Coke and Breeze (million short	Other(f) (trillion	RSE Row
Code(a)	Subsector and Industry	Btu)	(million kWh)	bbl)	bbl)	cu ft)	bbl)	tons)	tons)	Btu)	Factors
325222	Noncellulosic Organic Fibers	60	4,241	W	*	W	*	W	0	3	0.9
325311	Nitrogenous Fertilizers	137	1,889	0	*	125	*	0	0	2	0.9
325312	Phosphatic Fertilizers	19	525	*	*	13	*	*	*	*	1
3254	Pharmaceutical Properties	25 14	2,740	*	*	8 4	*	0	0	6 3	8
325412 325992	Pharmaceutical Preparation Photographic Film, Paper, Plate, and Chemicals	5	1,868 747	W	*	W W	*	0	0	*	12.4 5.4
326	Plastics and Rubber Products	141	21,454	1	*	56	*	0	0	2	13.6
327	Nonmetallic Mineral Products	421	17,738	W	2	179	W	5	*	42	5.7
3272	Glass and Glass Products	80	5,095	W	W	W	*	0	0	1	2.3
327211	Flat Glass	25	840	W	W	W	W	0	0	1	0.9
327213 327310	Glass Containers Cements	22 149	1,233 5,005	0	*	18 10	*	0	*	24	0.9 3.8
327410	Lime	39	575	0	*	3	*	1	0	11	0.9
327993	Mineral Wool	21	1,448	0	*	14	*	0	*	*	3.7
331	Primary Metals	606	60,466	*	*	221	*	*	4	55	1.6
331111	Iron and Steel Mills	333	21,615	*	*	W	*	*	4	W	1.8
331112 3312	Electrometallurgical Ferroalloy Products Steel Products from Purchased Steel	4 11	W W	0	*	W W	*	0	0	W	11.1 19.7
3313	Alumina and Aluminum	195	29,063	0	*	W	*	0	*	W	2.7
331312	Primary Aluminum	110	24,945	0	*	W	*	0	0	W	0.9
3314	Nonferrous Metals, except Aluminum	27	3,205	0	*	W	*	0	*	W	10.9
3315	Foundries	37	4,079	0	*	18	*	*	*	*	1.5
331511	Iron Foundries	18	1,804	0	*	7	*	0	*	*	1.7
331521 331524	Aluminum Die-Casting Foundries Aluminum Foundries, except Die-Casting	4	274 244	0	*	3	*	0	0	*	1.7 3.7
332	Fabricated Metal Products	120	15,240	W	*	W	*	*	0	Q	15.2
333	Machinery	43	7,273	0	*	16	*	0	0	*	10
334	Computer and Electronic Products	40	9,179	0	*	8	*	0	0	*	6.6
334413	Semiconductors and Related Devices	16	3,641	0	*	3	*	0	0	*	3.1
335 336	Electrical Equip., Appliances, and Components	40	6,026	*	*	18 W	*	0 W	0	1	10.1
336112	Transportation Equipment Light Trucks and Utility Vehicles	101 19	14,135 W	0	*	W	*	0	0	1	5.9 0.9
337	Furniture and Related Products	25	3,181	0	*	W	*	W	0	5	18.3
339	Miscellaneous	19	3,041	W	*	W	*	0	0	*	15.2
	Total	8,589	381,113	17	9	3,005	15	24	5	3,327	3.5
		West Cen	sus Region								
			<b>J</b>								
	RSE Column Factors:	1.2	1.2	0.7	1.4	1.3	1.9	0.6	0.5	1	
311	Food	170	9.848	*	1	102	*	1	*	9	7.5
311221	Wet Corn Milling	5	0,040 W	0	W	4	W	0	0	W	3.6
31131	Sugar	W	W	*	*	W	*	1	*	3	1
311421	Fruit and Vegetable Canning	20	686	*	*	17	*	0	0	*	7.1
312	Beverage and Tobacco Products	23	1,791	0	*	9	*	0	0	7	3.9
3121 3122	Beverages Tobacco	23	1,790	0	0	9	0	0	0	7 0	3.9 0.8
313	Textile Mills	11	936	0	0	W	W	0	0	1	9.4
314	Textile Product Mills	2	215	0	0	W	W	0	0	0	17.2
315	Apparel	8	872	0	*	W	W	0	0	*	28.7
316	Leather and Allied Products	W	36	0	*	W	0	0	0	0	29.1
321	Wood Products Sawmills	93 46	5,116	*	*	15 6	*	0	0	56 32	6.8
321113 3212	Veneer, Plywood, and Engineered Woods	38	1,879 2,293	0	*	7	*	0	0	32 22	6.5 5.1
3219	Other Wood Products	8	876	0	*	2	*	0	0	Q	12
322	Paper	307	12,417	1	*	W	*	W	0	168	1.4
322110	Pulp Mills	W	268	W	*	W	*	0	0	W	0.8
322121	Paper Mills, except Newsprint	99	2,664	*	*	26	*	0	0	60	1.8
322122 322130	Newsprint Mills Paperboard Mills	34 145	4,767 3,106	W W	*	W W	*	0 W	0	W 87	0.8 1
322130	Printing and Related Support	145	1,852	0	*	vv 8	*	0	0	*	17.1
324	Petroleum and Coal Products	696	5,089	1	*	163	2	0	0	495	8.1
324110	Petroleum Refineries	677	5,425	1	*	153	2	0	0	488	5.8
324199	Other Petroleum and Coal Products	6	-680	0	*	2	0	0	0	6	0.8
325	Chemicals	155	11,626	W	*	W	W 0	W 0	0	9	4.6
325110	Petrochemicals	0	0	0	0	0	U	U	U	0	0

Table 3.1 Fuel Consumption, 2002;

Level: National and Regional Data;

Row: NAICS Codes; Column: Energy Sources;

Unit: Physical Units or Btu.

		Total	Net	Residual Fuel Oil	Distillate Fuel Oil(c)	Natural Gas(d)	LPG and NGL(e)	Coal (million	Coke and Breeze (million	Other(f)	RSE
NAICS		(trillion	Electricity(b)	(million	(million	(billion	(million	short	short	(trillion	Row
Code(a)	Subsector and Industry	Btu)	(million kWh)	bbl)	bbl)	cu ft)	bbl)	tons)	tons)	Btu)	Factors
					_		_	_	_	_	
325120	Industrial Gases	15	W	0	0		0	0	0	0	1.5
325181	Alkalies and Chlorine	31	1,785	0		W *	*	W	0	W	0.9
325182	Carbon Black	44	0.007	0	0	W		0	0	0	0.7
325188 325192	Other Basic Inorganic Chemicals Cyclic Crudes and Intermediates	41	2,907 W	W 0	*	W	*	W 0	0	3 W	1.5 0.8
325192	Ethyl Alcohol	2	47	0	*	vv 1	*	0	0	vv 1	0.8
325193	Other Basic Organic Chemicals	5	296	W	W	W	*	0	0	1 1	7.6
325199	Plastics Materials and Resins	4	340	0	W	W	*	0	0	1	7.6 4.7
325211	Synthetic Rubber	*	18	0	0		*	0	0	! *	0.8
325222	Noncellulosic Organic Fibers	*	2	0	0	0	*	0	0	0	0.7
325311	Nitrogenous Fertilizers	30	463	0	*	28	*	0	0	*	0.8
325311	Phosphatic Fertilizers	8	500	0	*	6	*	0	0	*	0.8
3254	Pharmaceuticals and Medicines	9	1,071	0	*	5	*	0	0	*	4.1
325412	Pharmaceutical Preparation	5	665	0	*	3	*	0	0	*	5.7
325992	Photographic Film, Paper, Plate, and Chemicals	3	W	0	*	W	*	0	0	0	0.7
326	Plastics and Rubber Products	24	4,393	0	*	8	*	0	0	*	13.2
327	Nonmetallic Mineral Products	178	6,406	W	2		W	3	*	14	3.6
3272	Glass and Glass Products	23	1,431	W	W	W	*	0	0	*	1
327211	Flat Glass	7	212	W	W	W	W	0	0	W	0.8
327213	Glass Containers	14	970	0	W	W	*	0	0	*	0.8
327310	Cements	87	2,782	W	*	W	*	W	*	12	1.3
327410	Lime	14	W	W	W	1	*	W	0	2	0.9
327993	Mineral Wool	5	528	0	*	3	*	0	*	*	1.1
331	Primary Metals	91	13,481	0	*	W	*	W	*	1	2
331111	Iron and Steel Mills	32	3,672	0	*	W	*	W	*	W	2.1
331112	Electrometallurgical Ferroalloy Products	W	W	0	*	W	*	0	0	W	0.8
3312	Steel Products from Purchased Steel	W	W	0	*	W	*	0	0	*	2.6
3313	Alumina and Aluminum	31	W	0	*	W	*	0	0	W	2.9
331312	Primary Aluminum	W	W	0	*	W	*	0	0	W	0.9
3314	Nonferrous Metals, except Aluminum	18	2,299	0	*	8	*	0	0	*	4.4
3315	Foundries	W	720	0	*	W	*	*	*	*	2.4
331511	Iron Foundries	2	166	0	*	1	*	*	*	*	1.2
331521	Aluminum Die-Casting Foundries	1	61	0	0		*	0	0	*	12.1
331524	Aluminum Foundries, except Die-Casting	1	69	0	*	1	*	0	0	*	2.2
332	Fabricated Metal Products	30	4,121	0	*	15	*	0	0	_	11.9
333	Machinery	13	2,153	0	•	6		0	0		10.2
334	Computer and Electronic Products	67	12,736		*	W	W	0	0	*	6.5
334413	Semiconductors and Related Devices	34	6,376	0	*	12	*	0	0	*	6
335	Electrical Equip., Appliances, and Components	10 36	912	0	*	Q 10	*	0	0	1	5.6
336 336112	Transportation Equipment Light Trucks and Utility Vehicles	36	4,733 W	0	W	18	*	0	0	*	12.8 0.8
337	Furniture and Related Products	W	807	*	۷۷ *	W	*	0	0	*	13.4
339	Miscellaneous	12	2,026	0	*	vv 5	*	0	0	*	15.4
555	Total	1,945	101,565	2	5	658	4	5	*	761	3.3
	i otal	1,070	101,000		J	000	4	5		701	0.0

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

NF=No applicable RSE row/column factor.

<sup>(</sup>b) 'Net Electricity' is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It does not include electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal).

<sup>(</sup>c) 'Distillate Fuel Oil' includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels

<sup>(</sup>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.

<sup>(</sup>e) Examples of Liquefied Petroleum Gases '(LPG)' are 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).'

<sup>(</sup>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.

Table 3.1 Fuel Consumption, 2002;

Level: National and Regional Data;

Row: NAICS Codes; Column: Energy Sources;

Unit: Physical Units or Btu.

				Residual	Distillate Fuel	Natural	LPG	Coal	Coke and Breeze		
							and				
		Total	Net	Fuel Oil	Oil(c)	Gas(d)	NGL(e)	(million	(million	Other(f)	RSE
NAICS		(trillion	Electricity(b)	(million	(million	(billion	(million	short	short	(trillion	Row
Code(a)	Subsector and Industry	Btu)	(million kWh)	bbl)	bbl)	cu ft)	bbl)	tons)	tons)	Btu)	Factors

<sup>\*</sup> 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. The estimates presented in this table are for the total consumption of energy (formerly total inputs of energy) for the production of heat, power, and electricity generation, regardless of where the energy was produced. Specifically, the estimates include the quantities of energy that were originally produced offsite and purchased by or transferred to the establishment, plus those that were produced onsite from other energy or input materials not classified as energy, or were extracted from captive (onsite) mines or wells.

During manufacturing processes, it is possible that the thermal energy content of an energy input is not completely consumed for the production of heat, power, or electricity generation. Hence, residuals of that input may remain. Those residual leftovers may be subsequently consumed for fuel purposes, whether onsite or offsite at another manufacturing establishment (for example, blast furnace gas as a byproduct recovered from coke and other inputs that were not completely consumed). In such cases, double counting of inputs cannot be avoided, and the "Fuel Consumption" estimates will be inflated.

Source: Energy Information Administration, Office of Energy Markets and End Use, Energy Consumption Division, Form EIA-846, '2002 Manufacturing Energy Consumption Survey,' and Office of Oil and Gas, Petroleum Supply Division, Form EIA-810, 'Monthly Refinery Report' for 2002.