

Table 10.4 Capability to Switch Residual Fuel Oil to Alternative Energy Sources, 2006;**Level: National Data and Regional Totals;****Row: NAICS Codes, Value of Shipments and Employment Sizes;****Column: Energy Sources;****Unit: Thousand Barrels.**

NAICS Code(a)	Subsector and Industry	Residual Fuel Oil			Alternative Energy Sources(b)						
		Total Consumed(c)	Switchable	Not Switchable	Electricity Receipts(d)	Natural Gas	Distillate Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)
Total United States											
311	Food	4,124	2,134	454	0	1,896	284	0	Q	0	Q
3112	Grain and Oilseed Milling	260	186	45	0	186	0	0	0	0	0
311221	Wet Corn Milling	27	0	27	0	0	0	0	0	0	0
31131	Sugar Manufacturing	1,359	162	48	0	162	16	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Foods	393	249	27	0	152	134	0	Q	0	0
3115	Dairy Products	209	Q	Q	0	Q	Q	0	Q	0	0
3116	Animal Slaughtering and Processing	539	324	172	0	274	0	0	0	0	Q
312	Beverage and Tobacco Products	431	325	107	0	325	58	0	0	0	0
3121	Beverages	290	232	58	0	232	0	0	0	0	0
3122	Tobacco	141	93	49	0	93	58	0	0	0	0
313	Textile Mills	396	164	228	0	164	0	0	0	0	0
314	Textile Product Mills	Q	36	Q	0	35	Q	0	0	0	0
315	Apparel	Q	0	0	0	0	0	0	0	0	0
316	Leather and Allied Products	42	0	19	0	0	0	0	0	0	0
321	Wood Products	604	427	117	0	355	427	0	0	0	Q
321113	Sawmills	58	0	58	0	0	0	0	0	0	0
3212	Veneer, Plywood, and Engineered Woods	64	0	59	0	0	0	0	0	0	0
3219	Other Wood Products	Q	Q	0	0	0	Q	0	0	0	Q
322	Paper	14,528	4,748	8,539	851	3,507	692	660	64	0	97
322110	Pulp Mills	1,796	238	1,131	0	228	10	0	2	0	14
322121	Paper Mills, except Newsprint	7,521	2,134	5,290	850	1,371	156	200	62	0	42
322122	Newsprint Mills	373	0	307	0	0	0	0	0	0	0
322130	Paperboard Mills	4,555	2,304	1,779	1	1,836	526	460	0	0	42
323	Printing and Related Support	Q	0	Q	0	0	0	0	0	0	0
324	Petroleum and Coal Products	9,198	2,121	903	0	429	1,542	0	404	0	19
324110	Petroleum Refineries	8,292	1,244	903	0	429	665	0	404	0	19
324199	Other Petroleum and Coal Products	0	0	0	0	0	0	0	0	0	0
325	Chemicals	3,733	2,015	1,468	0	1,799	403	16	0	0	0
325110	Petrochemicals	732	138	593	0	138	0	0	0	0	0
325120	Industrial Gases	0	0	0	0	0	0	0	0	0	0
325181	Alkalies and Chlorine	0	0	0	0	0	0	0	0	0	0
325182	Carbon Black	72	72	0	0	72	0	0	0	0	0
325188	Other Basic Inorganic Chemicals	1,406	777	622	0	777	0	0	0	0	0
325192	Cyclic Crudes and Intermediates	93	85	8	0	0	85	0	0	0	0
325193	Ethyl Alcohol	0	0	0	0	0	0	0	0	0	0
325199	Other Basic Organic Chemicals	254	162	59	0	110	65	0	0	0	0
325211	Plastics Materials and Resins	58	58	0	0	58	0	0	0	0	0
325212	Synthetic Rubber	5	5	0	0	2	3	0	0	0	0
325222	Noncellulosic Organic Fibers	434	434	0	0	357	231	16	0	0	0
325311	Nitrogenous Fertilizers	0	0	0	0	0	0	0	0	0	0
325312	Phosphatic Fertilizers	39	0	39	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	173	41	128	0	41	20	0	0	0	0
325412	Pharmaceutical Preparation	173	41	128	0	41	20	0	0	0	0
325992	Photographic Film, Paper, Plate, and Chemicals	21	3	18	0	3	0	0	0	0	0
326	Plastics and Rubber Products	1,414	885	Q	0	665	Q	0	0	0	0
327	Nonmetallic Mineral Products	513	384	129	*	130	219	5	*	35	0
327211	Flat Glass	218	218	0	0	0	218	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0	0	0	0
327213	Glass Containers	0	0	0	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0	0	0	0
327310	Cements	156	58	98	*	23	0	5	*	35	0
327410	Lime	60	60	0	0	58	2	0	0	0	0
327420	Gypsum	*	0	0	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0	0	0	0
331	Primary Metals	3,097	510	545	0	510	0	0	0	0	0

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Unit: Thousand Barrels.

NAICS Code(a)	Subsector and Industry	Residual Fuel Oil		Alternative Energy Sources(b)								
		Total Consumed(c)	Switchable	Not Switchable	Electricity Receipts(d)	Natural Gas	Distillate Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)	
325188	Other Basic Inorganic Chemicals	826	697	122	0	697	0	0	0	0	0	0
325192	Cyclic Crudes and Intermediates	0	0	0	0	0	0	0	0	0	0	0
325193	Ethyl Alcohol	0	0	0	0	0	0	0	0	0	0	0
325199	Other Basic Organic Chemicals	77	53	24	0	1	52	0	0	0	0	0
325211	Plastics Materials and Resins	19	19	0	0	19	0	0	0	0	0	0
325212	Synthetic Rubber	0	0	0	0	0	0	0	0	0	0	0
325222	Noncellulosic Organic Fibers	9	9	0	0	9	0	0	0	0	0	0
325311	Nitrogenous Fertilizers	0	0	0	0	0	0	0	0	0	0	0
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	152	Q	128	0	Q	0	0	0	0	0	0
325412	Pharmaceutical Preparation	152	Q	128	0	Q	0	0	0	0	0	0
325992	Photographic Film, Paper, Plate, and Chemicals	21	3	18	0	3	0	0	0	0	0	0
326	Plastics and Rubber Products	Q	Q	Q	0	Q	0	0	0	0	0	0
327	Nonmetallic Mineral Products	214	Q	129	0	Q	2	0	0	35	0	0
327211	Flat Glass	0	0	0	0	0	0	0	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0	0	0	0	0
327213	Glass Containers	0	0	0	0	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0	0	0	0	0
327310	Cements	133	35	98	0	0	0	0	0	35	0	0
327410	Lime	2	2	0	0	0	2	0	0	0	0	0
327420	Gypsum	*	0	0	0	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0	0	0	0	0
331	Primary Metals	55	32	5	0	32	0	0	0	0	0	0
331111	Iron and Steel Mills	0	0	0	0	0	0	0	0	0	0	0
331112	Electrometallurgical Ferroalloy Products	0	0	0	0	0	0	0	0	0	0	0
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0	0	0	0	0
3313	Alumina and Aluminum	43	26	0	0	26	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	18	0	0	0	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0	0	0	0	0
331316	Aluminum Extruded Products	0	4	0	0	4	0	0	0	0	0	0
3314	Nonferrous Metals, except Aluminum	10	6	3	0	6	0	0	0	0	0	0
3315	Foundries	Q	0	Q	0	0	0	0	0	0	0	0
331511	Iron Foundries	*	0	0	0	0	0	0	0	0	0	0
331521	Aluminum Die-Casting Foundries	0	0	0	0	0	0	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	Q	0	Q	0	0	0	0	0	0	0	0
332	Fabricated Metal Products	9	0	9	0	0	0	0	0	0	0	0
333	Machinery	Q	Q	0	0	Q	0	0	0	0	0	0
334	Computer and Electronic Products	58	45	Q	0	45	Q	0	0	0	0	0
334413	Semiconductors and Related Devices	4	0	4	0	0	0	0	0	0	0	0
335	Electrical Equip., Appliances, and Components	0	0	0	0	0	0	0	0	0	0	0
336	Transportation Equipment	410	305	105	0	305	0	0	0	0	0	0
336111	Automobiles	0	0	0	0	0	0	0	0	0	0	0
336112	Light Trucks and Utility Vehicles	0	0	0	0	0	0	0	0	0	0	0
3364	Aerospace Product and Parts	410	305	105	0	305	0	0	0	0	0	0
336411	Aircraft	0	0	0	0	0	0	0	0	0	0	0
337	Furniture and Related Products	Q	Q	*	0	0	Q	0	0	0	0	0
339	Miscellaneous	Q	Q	*	0	0	Q	0	0	0	0	0
	Total	10,195	4,878	4,321	724	3,115	1,298	62	249	35	0	0
Midwest Census Region												
311	Food	1,813	Q	177	0	Q	Q	0	Q	0	0	0
3112	Grain and Oilseed Milling	175	159	16	0	159	0	0	0	0	0	0
311221	Wet Corn Milling	0	0	0	0	0	0	0	0	0	0	0
31131	Sugar Manufacturing	210	162	48	0	162	16	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Foods	117	0	0	0	0	0	0	0	0	0	0
3115	Dairy Products	Q	Q	16	0	0	Q	0	Q	0	0	0
3116	Animal Slaughtering and Processing	301	205	Q	0	205	0	0	0	0	0	0
312	Beverage and Tobacco Products	117	117	0	0	117	0	0	0	117	0	0
3121	Beverages	117	117	0	0	117	0	0	0	0	0	0

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NAICS Code(a)	Subsector and Industry	Residual Fuel Oil			Alternative Energy Sources(b)							
		Total Consumed(c)	Switchable	Not Switchable	Electricity Receipts(d)	Natural Gas	Distillate Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)	
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0	0	0	0	0
327310	Cements	23	23	0	*	23	0	5	*	0	0	0
327410	Lime	0	0	0	0	0	0	0	0	0	0	0
327420	Gypsum	0	0	0	0	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0	0	0	0	0
331	Primary Metals	577	478	10	0	478	0	0	0	0	0	0
331111	Iron and Steel Mills	577	478	10	0	478	0	0	0	0	0	0
331112	Electrometallurgical Ferroalloy Products	0	0	0	0	0	0	0	0	0	0	0
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0	0	0	0	0
3313	Alumina and Aluminum	0	0	0	0	0	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0	0	0	0	0
331316	Aluminum Extruded Products	0	0	0	0	0	0	0	0	0	0	0
3314	Nonferrous Metals, except Aluminum	0	0	0	0	0	0	0	0	0	0	0
3315	Foundries	0	0	0	0	0	0	0	0	0	0	0
331511	Iron Foundries	0	0	0	0	0	0	0	0	0	0	0
331521	Aluminum Die-Casting Foundries	0	0	0	0	0	0	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	0	0	0	0	0	0	0	0	0	0	0
332	Fabricated Metal Products	Q	Q	Q	0	0	0	0	0	0	0	0
333	Machinery	0	0	0	0	0	0	0	0	0	0	0
334	Computer and Electronic Products	0	0	0	0	0	0	0	0	0	0	0
334413	Semiconductors and Related Devices	0	0	0	0	0	0	0	0	0	0	0
335	Electrical Equip., Appliances, and Components	0	0	0	0	0	0	0	0	0	0	0
336	Transportation Equipment	451	13	21	0	13	0	0	0	0	0	0
336111	Automobiles	27	7	20	0	7	0	0	0	0	0	0
336112	Light Trucks and Utility Vehicles	6	6	0	0	6	0	0	0	0	0	0
3364	Aerospace Product and Parts	38	0	1	0	0	0	0	0	0	0	0
336411	Aircraft	1	0	1	0	0	0	0	0	0	0	0
337	Furniture and Related Products	0	0	0	0	0	0	0	0	0	0	0
339	Miscellaneous	0	0	0	0	0	0	0	0	0	0	0
	Total	20,887	5,556	6,791	1	4,415	1,404	493	*	0		179
West Census Region												
311	Food	112	112	0	0	112	0	0	Q	0	0	0
3112	Grain and Oilseed Milling	0	0	0	0	0	0	0	0	0	0	0
311221	Wet Corn Milling	0	0	0	0	0	0	0	0	0	0	0
31131	Sugar Manufacturing	0	0	0	0	0	0	0	0	0	0	0
3114	Fruit and Vegetable Preserving and Specialty Foods	112	112	0	0	112	0	0	Q	0	0	0
3115	Dairy Products	0	0	0	0	0	0	0	0	0	0	0
3116	Animal Slaughtering and Processing	0	0	0	0	0	0	0	0	0	0	0
312	Beverage and Tobacco Products	0	0	0	0	0	0	0	0	0	0	0
3121	Beverages	0	0	0	0	0	0	0	0	0	0	0
3122	Tobacco	0	0	0	0	0	0	0	0	0	0	0
313	Textile Mills	0	0	0	0	0	0	0	0	0	0	0
314	Textile Product Mills	0	0	0	0	0	0	0	0	0	0	0
315	Apparel	0	0	0	0	0	0	0	0	0	0	0
316	Leather and Allied Products	0	0	0	0	0	0	0	0	0	0	0
321	Wood Products	428	355	24	0	355	355	0	0	0	0	0
321113	Sawmills	24	0	24	0	0	0	0	0	0	0	0
3212	Veneer, Plywood, and Engineered Woods	0	0	0	0	0	0	0	0	0	0	0
3219	Other Wood Products	*	0	0	0	0	0	0	0	0	0	0
322	Paper	834	277	465	0	275	0	0	2	0	0	16
322110	Pulp Mills	40	40	0	0	40	0	0	2	0	0	14
322121	Paper Mills, except Newsprint	546	101	418	0	99	0	0	0	0	0	2
322122	Newsprint Mills	66	0	0	0	0	0	0	0	0	0	0
322130	Paperboard Mills	181	135	46	0	135	0	0	0	0	0	0
323	Printing and Related Support	0	0	0	0	0	0	0	0	0	0	0
324	Petroleum and Coal Products	1,217	828	285	0	65	566	0	217	0	0	19

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NAICS Code(a)	Subsector and Industry	Residual Fuel Oil		Alternative Energy Sources(b)							
		Total Consumed(c)	Switchable	Not Switchable	Electricity Receipts(d)	Natural Gas	Distillate Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)
324110	Petroleum Refineries	1,055	666	285	0	65	403	0	217	0	19
324199	Other Petroleum and Coal Products	0	0	0	0	0	0	0	0	0	0
325	Chemicals	26	0	26	0	0	0	0	0	0	0
325110	Petrochemicals	0	0	0	0	0	0	0	0	0	0
325120	Industrial Gases	0	0	0	0	0	0	0	0	0	0
325181	Alkalies and Chlorine	0	0	0	0	0	0	0	0	0	0
325182	Carbon Black	0	0	0	0	0	0	0	0	0	0
325188	Other Basic Inorganic Chemicals	26	0	26	0	0	0	0	0	0	0
325192	Cyclic Crudes and Intermediates	0	0	0	0	0	0	0	0	0	0
325193	Ethyl Alcohol	0	0	0	0	0	0	0	0	0	0
325199	Other Basic Organic Chemicals	0	0	0	0	0	0	0	0	0	0
325211	Plastics Materials and Resins	0	0	0	0	0	0	0	0	0	0
325212	Synthetic Rubber	0	0	0	0	0	0	0	0	0	0
325222	Noncellulosic Organic Fibers	0	0	0	0	0	0	0	0	0	0
325311	Nitrogenous Fertilizers	0	0	0	0	0	0	0	0	0	0
325312	Phosphatic Fertilizers	0	0	0	0	0	0	0	0	0	0
3254	Pharmaceuticals and Medicines	0	0	0	0	0	0	0	0	0	0
325412	Pharmaceutical Preparation	0	0	0	0	0	0	0	0	0	0
325992	Photographic Film, Paper, Plate, and Chemicals	0	0	0	0	0	0	0	0	0	0
326	Plastics and Rubber Products	0	0	0	0	0	0	0	0	0	0
327	Nonmetallic Mineral Products	276	276	0	0	58	218	0	0	0	0
327211	Flat Glass	218	218	0	0	0	218	0	0	0	0
327212	Other Pressed and Blown Glass and Glassware	0	0	0	0	0	0	0	0	0	0
327213	Glass Containers	0	0	0	0	0	0	0	0	0	0
327215	Glass Products from Purchased Glass	0	0	0	0	0	0	0	0	0	0
327310	Cements	0	0	0	0	0	0	0	0	0	0
327410	Lime	58	58	0	0	58	0	0	0	0	0
327420	Gypsum	0	0	0	0	0	0	0	0	0	0
327993	Mineral Wool	0	0	0	0	0	0	0	0	0	0
331	Primary Metals	0	0	0	0	0	0	0	0	0	0
331111	Iron and Steel Mills	0	0	0	0	0	0	0	0	0	0
331112	Electrometallurgical Ferroalloy Products	0	0	0	0	0	0	0	0	0	0
3312	Steel Products from Purchased Steel	0	0	0	0	0	0	0	0	0	0
3313	Alumina and Aluminum	0	0	0	0	0	0	0	0	0	0
331314	Secondary Smelting and Alloying of Aluminum	0	0	0	0	0	0	0	0	0	0
331315	Aluminum Sheet, Plate and Foils	0	0	0	0	0	0	0	0	0	0
331316	Aluminum Extruded Products	0	0	0	0	0	0	0	0	0	0
3314	Nonferrous Metals, except Aluminum	0	0	0	0	0	0	0	0	0	0
3315	Foundries	0	0	0	0	0	0	0	0	0	0
331511	Iron Foundries	0	0	0	0	0	0	0	0	0	0
331521	Aluminum Die-Casting Foundries	0	0	0	0	0	0	0	0	0	0
331524	Aluminum Foundries, except Die-Casting	0	0	0	0	0	0	0	0	0	0
332	Fabricated Metal Products	0	0	0	0	0	0	0	0	0	0
333	Machinery	0	0	0	0	0	0	0	0	0	0
334	Computer and Electronic Products	0	0	0	0	0	0	0	0	0	0
334413	Semiconductors and Related Devices	0	0	0	0	0	0	0	0	0	0
335	Electrical Equip., Appliances, and Components	0	0	0	0	0	0	0	0	0	0
336	Transportation Equipment	0	0	0	0	0	0	0	0	0	0
336111	Automobiles	0	0	0	0	0	0	0	0	0	0
336112	Light Trucks and Utility Vehicles	0	0	0	0	0	0	0	0	0	0
3364	Aerospace Product and Parts	0	0	0	0	0	0	0	0	0	0
336411	Aircraft	0	0	0	0	0	0	0	0	0	0
337	Furniture and Related Products	0	0	0	0	0	0	0	0	0	0
339	Miscellaneous	0	0	0	0	0	0	0	0	0	0
	Total	2,894	1,848	800	0	865	1,138	0	305	0	35

Economic Characteristic (f)

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		Total Consumed(c)	Switchable	Not Switchable	Electricity Receipts(d)	Natural Gas	Distillate Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)
Value of Shipments and Receipts (million dollars)											
	Under 20	3,619	2,568	946	*	1,682	1,203	0	*	0	Q
	20-49	2,090	968	887	*	569	408	*	Q	35	0
	50-99	3,470	1,963	1,198	0	1,524	477	5	0	0	2
	100-249	4,031	1,201	2,427	62	862	395	62	64	0	45
	250-499	8,364	2,697	3,992	0	2,227	602	482	0	0	0
	500 and Over	18,351	5,353	3,833	789	3,796	971	132	404	0	70
	Total	39,925	14,750	13,283	851	10,660	4,057	681	645	35	239
Employment Size											
	Under 50	1,552	1,176	105	*	296	928	0	Q	0	Q
	50-99	2,953	1,868	1,070	0	1,681	481	*	0	35	Q
	100-249	5,984	3,286	2,086	*	2,109	1,078	5	286	0	16
	250-499	7,029	2,169	3,131	1	1,554	641	17	19	0	51
	500-999	9,139	3,663	4,599	724	2,473	851	532	249	0	0
	1000 and Over	13,269	2,588	2,292	126	2,548	77	126	0	0	50
	Total	39,925	14,750	13,283	851	10,660	4,057	681	645	35	239

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

(b) 'Alternative Energy Sources' consist of those energy sources that could have been substituted for residual fuel oil during 2006. The quantities are expressed in thousands of barrels, and therefore represent the quantity of residual fuel oil that could have been displaced by the given alternative type of energy.

(c) 'Total Consumed' represents those quantities (Total Inputs) of residual fuel oil that were ascertained switchable or not switchable, plus an additional quantity for which the switching status was not ascertained.

(d) 'Electricity Receipts' represents those quantities of electricity generated off the manufacturing establishment site and available at the site for consumption. It includes those quantities for which payment was made, quantities transferred in, quantities purchased and paid for by a central purchasing entity, and quantities for which payment was made in kind. It does not include electricity generated onsite. 'Electricity Receipts' has not been adjusted to account for any quantities that might have been resold or transferred out. The estimates include those quantities that were ascertained switchable or not switchable, plus an additional quantity for which the switching status was not ascertained.

(e) 'Other' includes all other types of energy not already identified that respondents indicated could have been consumed in place of residual fuel oil.

(f) Value of Shipments and Receipts and Employment Size categories were supplied by the Bureau of the Census.

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, '2006 Manufacturing Energy Consumption Survey,' and the Bureau of the Census, data files for the '2006 Annual Survey of Manufacturers.'

**RSE Table 10.4 Relative Standard Errors for Table 10.4;
Unit: Percents.**

NAICS Code(a)	Subsector and Industry	Residual Fuel Oil			Alternative Energy Sources(b)						
		Total Consumed(c)	Switchable	Not Switchable	Electricity Receipts(d)	Natural Gas	Distillate Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(e)
Total United States											
311	Food	21.5	40.8	24.6	X	45.6	33.8	X	58.0	X	95.1
3112	Grain and Oilseed Milling	19.1	23.8	16.1	X	23.8	X	X	X	X	X
311221	Wet Corn Milling	0.0	X	0.0	X	X	X	X	X	X	X
31131	Sugar Manufacturing	0.0	0.0	0.0	X	0.0	0.0	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Foods	14.7	23.1	0.0	X	38.0	14.7	X	62.9	X	X
3115	Dairy Products	45.7	71.4	51.1	X	57.7	88.4	X	95.9	X	X
3116	Animal Slaughtering and Processing	23.1	28.1	48.5	X	28.5	X	X	X	X	95.1
312	Beverage and Tobacco Products	0.4	0.6	0.0	X	0.6	0.0	X	X	X	X
3121	Beverages	0.6	0.8	0.0	X	0.8	X	X	X	X	X
3122	Tobacco	0.0	0.0	0.0	X	0.0	0.0	X	X	X	X
313	Textile Mills	37.5	45.4	45.8	X	45.4	X	X	X	X	X
314	Textile Product Mills	60.2	28.9	83.6	X	29.9	78.4	X	X	X	X
315	Apparel	84.0	X	X	X	X	X	X	X	X	X
316	Leather and Allied Products	0.0	X	0.0	X	X	X	X	X	X	X
321	Wood Products	13.0	16.6	28.5	X	0.0	16.6	X	X	X	97.6
321113	Sawmills	34.9	X	34.9	X	X	X	X	X	X	X
3212	Veneer, Plywood, and Engineered Woods	41.6	X	44.9	X	X	X	X	X	X	X
3219	Other Wood Products	97.4	97.6	X	X	X	97.6	X	X	X	97.6
322	Paper	0.5	0.1	0.3	0.0	0.1	0.0	0.0	0.0	X	0.0
322110	Pulp Mills	0.0	0.0	0.0	X	0.0	0.0	X	0.0	X	0.0
322121	Paper Mills, except Newsprint	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	0.0
322122	Newsprint Mills	0.0	X	0.0	X	X	X	X	X	X	X
322130	Paperboard Mills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	X	0.0
323	Printing and Related Support	98.1	X	98.1	X	X	X	X	X	X	X
324	Petroleum and Coal Products	5.6	24.1	0.0	X	0.0	33.2	X	0.0	X	0.0
324110	Petroleum Refineries	0.0	0.0	0.0	X	0.0	0.0	X	0.0	X	0.0
324199	Other Petroleum and Coal Products	X	X	X	X	X	X	X	X	X	X
325	Chemicals	8.8	10.2	13.5	X	11.5	2.3	0.0	X	X	X
325110	Petrochemicals	0.0	0.0	0.0	X	0.0	X	X	X	X	X
325120	Industrial Gases	X	X	X	X	X	X	X	X	X	X
325181	Alkalies and Chlorine	X	X	X	X	X	X	X	X	X	X
325182	Carbon Black	0.0	0.0	X	X	0.0	X	X	X	X	X
325188	Other Basic Inorganic Chemicals	14.3	4.8	31.8	X	4.8	X	X	X	X	X
325192	Cyclic Crudes and Intermediates	0.0	0.0	0.0	X	X	0.0	X	X	X	X
325193	Ethyl Alcohol	X	X	X	X	X	X	X	X	X	X
325199	Other Basic Organic Chemicals	10.0	5.7	10.8	X	8.4	14.3	X	X	X	X
325211	Plastics Materials and Resins	0.0	0.0	X	X	0.0	X	X	X	X	X
325212	Synthetic Rubber	0.0	0.0	X	X	0.0	0.0	X	X	X	X
325222	Noncellulosic Organic Fibers	0.0	0.0	X	X	0.0	0.0	0.0	X	X	X
325311	Nitrogenous Fertilizers	X	X	X	X	X	X	X	X	X	X
325312	Phosphatic Fertilizers	0.0	X	0.0	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	9.4	39.1	0.0	X	39.1	0.0	X	X	X	X
325412	Pharmaceutical Preparation	9.4	39.1	0.0	X	39.1	0.0	X	X	X	X
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	0.0	0.0	X	0.0	X	X	X	X	X
326	Plastics and Rubber Products	33.5	38.6	77.7	X	40.1	83.6	X	X	X	X
327	Nonmetallic Mineral Products	10.7	12.2	22.5	85.6	36.1	0.0	0.0	85.6	0.0	X
327211	Flat Glass	0.0	0.0	X	X	X	0.0	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	X	X	X	X	X	X	X
327310	Cements	0.1	0.2	0.0	85.6	0.5	X	0.0	85.6	0.0	X
327410	Lime	0.0	0.0	X	X	0.0	0.0	X	X	X	X
327420	Gypsum	0.0	X	X	X	X	X	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X	X	X	X
331	Primary Metals	0.1	0.0	0.3	X	0.0	X	X	X	X	X
331111	Iron and Steel Mills	0.0	0.0	0.0	X	0.0	X	X	X	X	X
331112	Electrometallurgical Ferroalloy Products	X	X	X	X	X	X	X	X	X	X
3312	Steel Products from Purchased Steel	X	X	X	X	X	X	X	X	X	X
3313	Alumina and Aluminum	0.0	0.0	X	X	0.0	X	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	0.0	X	X	X	X	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X	X	X	X
331316	Aluminum Extruded Products	0.0	0.0	X	X	0.0	X	X	X	X	X
3314	Nonferrous Metals, except Aluminum	0.0	0.0	0.0	X	0.0	X	X	X	X	X
3315	Foundries	92.5	X	95.2	X	X	X	X	X	X	X

331511	Iron Foundries	0.0		X	X	X	X	X	X	X	X	X
331521	Aluminum Die-Casting Foundries	X	X	X	X	X	X	X	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	95.2	X	95.2	X	X	X	X	X	X	X	X
332	Fabricated Metal Products	68.1	X	68.3	X	X	X	X	X	X	X	X
333	Machinery	97.4	97.4	X	X	97.4	X	X	X	X	X	X
334	Computer and Electronic Products	41.1	40.3	51.8	X	40.3	75.7	X	X	X	X	X
334413	Semiconductors and Related Devices	0.0	X	0.0	X	X	X	X	X	X	X	X
335	Electrical Equip., Appliances, and Components	X	X	X	X	X	X	X	X	X	X	X
336	Transportation Equipment	8.7	14.4	34.0	X	14.4	X	X	X	X	X	X
336111	Automobiles	0.0	0.0	0.0	X	0.0	X	X	X	X	X	X
336112	Light Trucks and Utility Vehicles	0.0	0.0	X	X	0.0	X	X	X	X	X	X
3364	Aerospace Product and Parts	0.1	0.0	0.6	X	0.0	X	X	X	X	X	X
336411	Aircraft	0.0	X	0.0	X	X	X	X	X	X	X	X
337	Furniture and Related Products	98.6	98.8	98.8	X	X	98.8	X	X	X	X	X
339	Miscellaneous	94.3	94.4	99.2	X	82.7	97.4	X	X	X	X	X
	Total	3.1	7.8	3.2	0.1	9.4	14.3	0.0	15.9	0.0		35.6

Northeast Census Region

311	Food	20.5	24.3	41.1	X	32.5	22.9	X	X	X	X	X
3112	Grain and Oilseed Milling	0.0	X	0.0	X	X	X	X	X	X	X	X
311221	Wet Corn Milling	0.0	X	0.0	X	X	X	X	X	X	X	X
31131	Sugar Manufacturing	X	X	X	X	X	X	X	X	X	X	X
3114	Fruit and Vegetable Preserving and Specialty Foods	14.4	14.4	X	X	50.0	14.7	X	X	X	X	X
3115	Dairy Products	47.1	57.7	73.8	X	57.7	64.4	X	X	X	X	X
3116	Animal Slaughtering and Processing	X	X	X	X	X	X	X	X	X	X	X
312	Beverage and Tobacco Products	1.2	2.4	0.0	X	2.4	X	X	X	X	X	X
3121	Beverages	2.1	3.3	0.0	X	3.3	X	X	X	X	X	X
3122	Tobacco	0.0	0.0	0.0	X	0.0	X	X	X	X	X	X
313	Textile Mills	45.7	70.0	47.2	X	70.0	X	X	X	X	X	X
314	Textile Product Mills	X	X	X	X	X	X	X	X	X	X	X
315	Apparel	X	X	X	X	X	X	X	X	X	X	X
316	Leather and Allied Products	0.0	X	0.0	X	X	X	X	X	X	X	X
321	Wood Products	57.8	X	66.1	X	X	X	X	X	X	X	X
321113	Sawmills	66.1	X	66.1	X	X	X	X	X	X	X	X
3212	Veneer, Plywood, and Engineered Woods	X	X	X	X	X	X	X	X	X	X	X
3219	Other Wood Products	X	X	X	X	X	X	X	X	X	X	X
322	Paper	1.8	0.4	0.8	0.0	0.9	0.0	0.0	0.0	X	X	X
322110	Pulp Mills	0.0	X	0.0	X	X	X	X	X	X	X	X
322121	Paper Mills, except Newsprint	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	X	X	X
322122	Newsprint Mills	0.0	X	0.0	X	X	X	X	X	X	X	X
322130	Paperboard Mills	0.0	0.0	0.0	X	0.0	X	X	X	X	X	X
323	Printing and Related Support	98.1	X	98.1	X	X	X	X	X	X	X	X
324	Petroleum and Coal Products	27.1	51.5	0.0	X	0.0	64.1	X	0.0	X	X	X
324110	Petroleum Refineries	0.0	0.0	0.0	X	0.0	0.0	X	0.0	X	X	X
324199	Other Petroleum and Coal Products	X	X	X	X	X	X	X	X	X	X	X
325	Chemicals	16.7	19.4	2.1	X	20.4	0.0	X	X	X	X	X
325110	Petrochemicals	X	X	X	X	X	X	X	X	X	X	X
325120	Industrial Gases	X	X	X	X	X	X	X	X	X	X	X
325181	Alkalies and Chlorine	X	X	X	X	X	X	X	X	X	X	X
325182	Carbon Black	X	X	X	X	X	X	X	X	X	X	X
325188	Other Basic Inorganic Chemicals	0.0	0.0	0.0	X	0.0	X	X	X	X	X	X
325192	Cyclic Crudes and Intermediates	X	X	X	X	X	X	X	X	X	X	X
325193	Ethyl Alcohol	X	X	X	X	X	X	X	X	X	X	X
325199	Other Basic Organic Chemicals	8.1	0.0	26.2	X	0.0	0.0	X	X	X	X	X
325211	Plastics Materials and Resins	0.0	0.0	X	X	0.0	X	X	X	X	X	X
325212	Synthetic Rubber	X	X	X	X	X	X	X	X	X	X	X
325222	Noncellulosic Organic Fibers	0.0	0.0	X	X	0.0	X	X	X	X	X	X
325311	Nitrogenous Fertilizers	X	X	X	X	X	X	X	X	X	X	X
325312	Phosphatic Fertilizers	X	X	X	X	X	X	X	X	X	X	X
3254	Pharmaceuticals and Medicines	10.6	76.9	0.0	X	76.9	X	X	X	X	X	X
325412	Pharmaceutical Preparation	10.7	76.9	0.0	X	76.9	X	X	X	X	X	X
325992	Photographic Film, Paper, Plate, and Chemicals	0.0	0.0	0.0	X	0.0	X	X	X	X	X	X
326	Plastics and Rubber Products	74.4	92.9	97.4	X	92.9	X	X	X	X	X	X
327	Nonmetallic Mineral Products	25.8	55.5	22.5	X	97.4	0.0	X	X	0.0	X	X
327211	Flat Glass	X	X	X	X	X	X	X	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	X	X	X	X	X	X	X	X
327310	Cements	0.0	0.0	0.0	X	X	X	X	X	0.0	X	X
327410	Lime	0.0	0.0	X	X	X	0.0	X	X	X	X	X
327420	Gypsum	0.0	X	X	X	X	X	X	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X	X	X	X	X
331	Primary Metals	3.2	0.0	33.0	X	0.0	X	X	X	X	X	X
331111	Iron and Steel Mills	X	X	X	X	X	X	X	X	X	X	X
331112	Electrometallurgical Ferroalloy Products	X	X	X	X	X	X	X	X	X	X	X
3312	Steel Products from Purchased Steel	X	X	X	X	X	X	X	X	X	X	X
3313	Alumina and Aluminum	0.0	0.0	X	X	0.0	X	X	X	X	X	X

326	Plastics and Rubber Products	X	X	X	X	X	X	X	X	X	X
327	Nonmetallic Mineral Products	0.0	0.0	X	X	0.0	0.0	X	X	X	X
327211	Flat Glass	0.0	0.0	X	X	X	0.0	X	X	X	X
327212	Other Pressed and Blown Glass and Glassware	X	X	X	X	X	X	X	X	X	X
327213	Glass Containers	X	X	X	X	X	X	X	X	X	X
327215	Glass Products from Purchased Glass	X	X	X	X	X	X	X	X	X	X
327310	Cements	X	X	X	X	X	X	X	X	X	X
327410	Lime	0.0	0.0	X	X	0.0	X	X	X	X	X
327420	Gypsum	X	X	X	X	X	X	X	X	X	X
327993	Mineral Wool	X	X	X	X	X	X	X	X	X	X
331	Primary Metals	X	X	X	X	X	X	X	X	X	X
331111	Iron and Steel Mills	X	X	X	X	X	X	X	X	X	X
331112	Electrometallurgical Ferroalloy Products	X	X	X	X	X	X	X	X	X	X
3312	Steel Products from Purchased Steel	X	X	X	X	X	X	X	X	X	X
3313	Alumina and Aluminum	X	X	X	X	X	X	X	X	X	X
331314	Secondary Smelting and Alloying of Aluminum	X	X	X	X	X	X	X	X	X	X
331315	Aluminum Sheet, Plate and Foils	X	X	X	X	X	X	X	X	X	X
331316	Aluminum Extruded Products	X	X	X	X	X	X	X	X	X	X
3314	Nonferrous Metals, except Aluminum	X	X	X	X	X	X	X	X	X	X
3315	Foundries	X	X	X	X	X	X	X	X	X	X
331511	Iron Foundries	X	X	X	X	X	X	X	X	X	X
331521	Aluminum Die-Casting Foundries	X	X	X	X	X	X	X	X	X	X
331524	Aluminum Foundries, except Die-Casting	X	X	X	X	X	X	X	X	X	X
332	Fabricated Metal Products	X	X	X	X	X	X	X	X	X	X
333	Machinery	X	X	X	X	X	X	X	X	X	X
334	Computer and Electronic Products	X	X	X	X	X	X	X	X	X	X
334413	Semiconductors and Related Devices	X	X	X	X	X	X	X	X	X	X
335	Electrical Equip., Appliances, and Components	X	X	X	X	X	X	X	X	X	X
336	Transportation Equipment	X	X	X	X	X	X	X	X	X	X
336111	Automobiles	X	X	X	X	X	X	X	X	X	X
336112	Light Trucks and Utility Vehicles	X	X	X	X	X	X	X	X	X	X
3364	Aerospace Product and Parts	X	X	X	X	X	X	X	X	X	X
336411	Aircraft	X	X	X	X	X	X	X	X	X	X
337	Furniture and Related Products	X	X	X	X	X	X	X	X	X	X
339	Miscellaneous	X	X	X	X	X	X	X	X	X	X
	Total	5.6	8.7	0.0	X	6.3	13.4	X	17.8	X	0.0

Economic Characteristic (f)

**Value of Shipments and Receipts
(million dollars)**

Under 20	26.7	36.4	25.2	84.1	48.7	37.3	X	84.1	X	64.2
20-49	12.1	21.0	14.4	0.0	13.4	46.9	0.0	53.4	0.0	X
50-99	9.1	13.8	2.9	X	10.9	44.7	0.0	X	X	0.0

100-249	7.9	3.5	12.9	0.0	4.9	0.3	0.0	0.0	X	0.0
250-499	2.3	7.3	0.0	X	8.8	3.1	0.0	X	X	X
500 and Over	2.3	7.7	0.2	0.0	10.8	1.5	0.0	0.0	X	0.0
Total	3.1	7.8	3.2	0.1	9.4	14.3	0.0	15.9	0.0	35.6

Employment Size

Under 50	30.5	39.3	17.7	84.1	30.0	49.0	X	87.0	X	89.9
50-99	28.7	43.7	21.3	X	48.4	9.3	0.0	X	0.0	88.2
100-249	6.0	8.8	6.5	0.0	4.4	25.4	0.0	18.1	X	0.0
250-499	5.1	7.7	10.2	0.0	10.8	0.7	0.0	0.0	X	0.0
500-999	0.8	2.0	0.3	0.0	3.0	2.2	0.0	0.0	X	X
1000 and Over	3.5	17.3	1.2	0.0	17.6	19.1	0.0	X	X	0.0
Total	3.1	7.8	3.2	0.1	9.4	14.3	0.0	15.9	0.0	35.6

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

(b) 'Alternative Energy Sources' consist of those energy sources that could have been substituted for residual fuel oil during 2006. The quantities are expressed in thousands of barrels, and therefore represent the quantity of residual fuel oil that could have been displaced by the given alternative type of energy.

(c) 'Total Consumed' represents those quantities (Total Inputs) of residual fuel oil that were ascertained switchable or not switchable, plus an additional quantity for which the switching status was not ascertained.

(d) 'Electricity Receipts' represents those quantities of electricity generated off the manufacturing establishment site and available at the site for consumption. It includes those quantities for which payment was made, quantities transferred in, quantities purchased and paid for by a central purchasing entity, and quantities for which payment was made in kind. It does not include electricity generated onsite. 'Electricity Receipts' has not been adjusted to account for any quantities that might have been resold or transferred out. The estimates include those quantities that were ascertained switchable or not switchable, plus an additional quantity for which the switching status was not ascertained.

(e) 'Other' includes all other types of energy not already identified that respondents indicated could have been consumed in place of residual fuel oil.

(f) Value of Shipments and Receipts and Employment Size categories were supplied by the Bureau of the Census.

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.

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

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, '2006 Manufacturing Energy Consumption Survey,' and the Bureau of the Census, data files for the '2006 Annual Survey of Manufacturers.'