

Table 10.5 Number of Establishments with Capability to Switch Residual Fuel Oil to Alternative Energy Sources, 2002;

Level: National Data;

Row: NAICS Codes;

Column: Energy Sources;

Unit: Establishment Counts.

NAICS Code(a)	Subsector and Industry	Residual Fuel Oil(b)			Alternative Energy Sources(c)							RSE Row Factors
		Total Consumed(d)	Switchable	Not Switchable	Electricity Receipts(e)	Natural Gas	Distillate Fuel Oil	Coal	LPG	Coal Coke and Breeze	Other(f)	
Total United States												
	RSE Column Factors:	1.3	1	1.5	0.7	1	0.8	0.6	1.2	1.4	0.8	
311	Food	274	183	108	0	119	72	W	Q	0	15	15.2
311221	Wet Corn Milling	3	W	W	0	0	W	0	0	0	0	0.9
31131	Sugar	18	9	9	0	9	0	W	0	0	0	1
311421	Fruit and Vegetable Canning	38	26	30	0	26	W	0	0	0	0	8.1
312	Beverage and Tobacco Products	35	17	Q	0	17	6	W	0	0	0	8
3121	Beverages	24	9	Q	0	9	4	0	0	0	0	20.9
3122	Tobacco	11	8	4	0	8	W	W	0	0	0	1
313	Textile Mills	145	68	85	0	55	25	5	5	0	6	13.4
314	Textile Product Mills	16	W	W	0	12	6	W	4	0	0	23
315	Apparel	26	0	26	0	0	0	0	0	0	0	15.3
316	Leather and Allied Products	W	0	W	0	0	0	0	0	0	0	0.7
321	Wood Products	69	9	66	W	W	W	0	0	0	6	2.5
321113	Sawmills	W	W	W	W	0	0	0	0	0	0	0.9
3212	Veneer, Plywood, and Engineered Woods	7	W	W	0	W	W	0	0	0	0	2
3219	Other Wood Products	55	6	55	0	0	0	0	0	0	6	5.2
322	Paper	242	105	162	9	90	18	10	6	0	10	3.7
322110	Pulp Mills	15	9	10	W	8	3	0	W	0	0	1.1
322121	Paper Mills, except Newsprint	111	49	73	6	39	8	W	W	0	7	6
322122	Newsprint Mills	4	W	W	0	W	0	0	0	0	0	0.8
322130	Paperboard Mills	57	38	29	W	34	7	6	W	0	W	1
323	Printing and Related Support	136	136	0	84	84	52	0	0	0	52	24.5
324	Petroleum and Coal Products	118	56	61	W	55	36	0	10	0	W	7.8
324110	Petroleum Refineries	40	15	24	W	15	W	0	10	0	W	1
324199	Other Petroleum and Coal Products	W	0	W	0	0	0	0	0	0	0	0.7
325	Chemicals	270	156	123	56	92	34	57	0	55	0	3.5
325110	Petrochemicals	W	W	3	0	W	0	0	0	0	0	0.8
325120	Industrial Gases	0	0	0	0	0	0	0	0	0	0	0
325181	Alkalies and Chlorine	W	0	W	0	0	0	0	0	0	0	1.4
325182	Carbon Black	4	W	W	0	W	0	0	0	0	0	0.8
325188	Other Basic Inorganic Chemicals	16	0	16	0	0	0	0	0	0	0	3.5
325192	Cyclic Crudes and Intermediates	4	W	W	0	W	0	0	0	0	0	0.8
325193	Ethyl Alcohol	0	0	0	0	0	0	0	0	0	0	0
325199	Other Basic Organic Chemicals	30	17	13	0	17	W	0	0	0	0	2
325211	Plastics Materials and Resins	62	58	5	55	4	0	55	0	55	0	4.6

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325212	Synthetic Rubber	24	24	0	0	24	17	0	0	0	0	1
325222	Noncellulosic Organic Fibers	19	11	9	W	9	W	0	0	0	0	1.1
325311	Nitrogenous Fertilizers	0	0	0	0	0	0	0	0	0	0	0.7
325312	Phosphatic Fertilizers	5	W	W	0	W	0	0	0	0	0	0.8
3254	Pharmaceuticals and Medicines	56	10	50	0	4	W	0	0	0	0	2.4
325412	Pharmaceutical Preparation	11	9	5	0	4	W	0	0	0	0	5
325992	Photographic Film, Paper, Plate, and Chemicals	4	W	W	0	W	0	W	0	0	0	1
326	Plastics and Rubber Products	81	31	50	0	31	5	0	W	0	W	2.1
327	Nonmetallic Mineral Products	27	9	84	Q	8	0	W	0	0	W	3.8
3272	Glass and Glass Products	W	W	W	0	W	0	0	0	0	0	0.8
327211	Flat Glass	W	0	W	0	0	0	0	0	0	0	0.7
327213	Glass Containers	0	0	0	0	0	0	0	0	0	0	0
327310	Cements	3	W	W	0	W	0	0	0	0	0	0.8
327410	Lime	7	W	W	W	W	0	0	0	0	W	1
327993	Mineral Wool	0	0	0	0	0	0	0	0	0	0	0.7
331	Primary Metals	44	9	35	0	9	W	0	0	0	0	3.9
331111	Iron and Steel Mills	5	0	5	0	0	0	0	0	0	0	0.7
331112	Electrometallurgical Ferroalloy Products	0	0	0	0	0	0	0	0	0	0	0
3312	Steel Products from Purchased Steel	13	W	W	0	W	0	0	0	0	0	10.9
3313	Alumina and Aluminum	W	W	0	0	W	0	0	0	0	0	0.9
331312	Primary Aluminum	W	W	0	0	W	0	0	0	0	0	0.9
3314	Nonferrous Metals, except Aluminum	W	5	W	0	5	W	0	0	0	0	4.2
3315	Foundries	13	W	W	0	W	0	0	0	0	0	4.6
331511	Iron Foundries	0	0	0	0	0	0	0	0	0	0	0
331521	Aluminum Die-Casting Foundries	W	W	0	0	W	0	0	0	0	0	0.9
331524	Aluminum Foundries, except Die-Casting	W	0	W	0	0	0	0	0	0	0	22.3
332	Fabricated Metal Products	201	22	179	0	22	0	0	0	0	0	24.6
333	Machinery	14	7	7	0	7	0	0	0	0	0	8.8
334	Computer and Electronic Products	23	12	13	0	11	W	0	0	0	0	3.1
334413	Semiconductors and Related Devices	W	W	0	0	W	0	0	0	0	0	0.9
335	Electrical Equip., Appliances, and Components	17	7	12	0	7	0	0	0	0	0	4.3
336	Transportation Equipment	33	18	21	W	18	W	W	W	0	W	1.4
336112	Light Trucks and Utility Vehicles	3	W	W	0	W	0	0	0	0	0	0.8
337	Furniture and Related Products	W	0	W	0	0	0	0	0	0	0	29.3
339	Miscellaneous	12	W	W	0	W	0	0	0	0	0	1.8
	Total	1,846	861	1,128	218	641	261	78	Q	55	94	10.6

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		Total Consumed(d)	Switchable	Not Switchable	Electricity Receipts(e)	Natural Gas	Distillate Fuel Oil	Coal	LPG	

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

(b) These counts include only those establishments that reported this activity in 2002.

(c) 'Alternative Energy Sources' consist of those energy sources that could have been substituted for residual fuel oil during 2002. 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.

(d) '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.

(e) '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.

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

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 End Use Division, Form EIA-846, '2002 Manufacturing Energy Consumption Survey.'