

1997 Consumption and Expenditures Tables

Appliances Consumption Tables

(17 pages, 60 kb)

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These data are from the 1997 Residential Energy Consumption Survey (RECS) which provides information on the use of energy in residential housing units in the United States. The RECS is a national statistical survey that collects data for occupied primary housing units. RECS was first conducted in 1978; the sixth and most recent survey was conducted in 1997 RECS. The data were collected from a sample of 5,900 housing units statistically selected to represent the 101.5 million units in the United States. The 1997 data are available for the four Census regions, the nine Census divisions, and for the four most populous States--California, Florida, New York, and Texas.

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World Wide Web: <http://www.eia.doe.gov/emeu/consumption>

Table CE5-1c. Appliances¹ Energy Consumption in U.S. Households by Climate Zone, 1997

	Climate Zone ²						RSE Row Factors
	Total	Fewer than 2,000 CDD and --				2,000 CDD or More and Fewer than 4,000 HDD	
		More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD		
RSE Column Factor:	0.3	1.6	1.0	1.2	1.3	1.1	
Million Households							
Total U.S. Households	101.5	9.3	28.0	22.5	19.5	22.2	7.7
Number of Households With Appliances, Fuels Used (more than one may apply):							
Electricity for:							
Refrigerators	101.3	9.2	28.0	22.5	19.5	22.1	7.7
Other Appliances and Lighting	101.4	9.2	28.0	22.5	19.5	22.2	7.7
Natural Gas	40.4	2.5	13.2	8.9	8.4	7.3	8.6
LPG	4.8	0.9	1.1	1.0	0.8	0.9	24.1
Quadrillion Btu							
Appliances Btu Consumption, Fuels Used:							
Electricity for:							
Refrigerators	0.46	0.04	0.11	0.10	0.08	0.13	7.2
Other Appliances and Lighting	1.87	0.18	0.51	0.41	0.32	0.46	7.6
Natural Gas	0.37	0.02	0.13	0.07	0.08	0.07	10.7
LPG	0.02	(*)	0.01	(*)	0.01	(*)	25.7
Total	2.73	0.24	0.76	0.58	0.49	0.67	7.3
Physical Units							
Physical Units of Appliances Consumption, Fuels Used:							
Electricity for:							
Refrigerators (billion kWh)	134	10	33	28	25	37	7.2
Other Appliances and Lighting (billion kWh)	549	52	149	119	94	136	7.6
Natural Gas (billion cf)	365	22	125	69	76	72	10.7
LPG (million gallons)	267	44	67	48	56	53	25.7
Million Btu per Household³							
Appliances Btu Consumption per Household, Fuels Used:							
Electricity for:							
Refrigerators	4.5	3.9	4.1	4.3	4.3	5.8	2.3
Other Appliances and Lighting	18.5	19.1	18.1	18.1	16.4	20.9	2.6
Natural Gas	9.3	8.7	9.7	8.0	9.3	10.2	5.5
LPG	5.1	4.3	5.3	4.6	6.1	5.1	12.0
Total	26.9	25.8	27.0	25.7	24.9	30.2	2.4

See footnotes at end of table.

Table CE5-1c. Appliances¹ Energy Consumption in U.S. Households by Climate Zone, 1997 (Continued)

	Climate Zone ²						RSE Row Factors
	Total	Fewer than 2,000 CDD and --				2,000 CDD or More and Fewer than 4,000 HDD	
		More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD		
RSE Column Factor:	0.3	1.6	1.0	1.2	1.3	1.1	

Physical Units per Household³

Physical Units of Appliances Consumption per Household, Fuels Used:							
Electricity for:							
Refrigerators (kWh)	1,323	1,136	1,194	1,247	1,268	1,691	2.3
Other Appliances and Lighting (kWh)	5,412	5,607	5,311	5,293	4,799	6,115	2.6
Natural Gas (thousand cf)	9	8	9	8	9	10	5.5
LPG (gallons)	55	47	58	50	66	56	12.0

¹ Includes energy consumption for refrigeration and lighting.

² One of five climatically distinct areas, determined according to the 30-year average (1961-1990) of the annual heating and cooling degree-days. For this report, the heating or cooling degree-days are a measure of how cold or how hot a location is over a period of one year, relative to a base temperature of 65 degrees Fahrenheit. A household is assigned to a climate zone according to the 30-year average annual degree-days for an appropriate nearby weather station.

³ Averages are for those households using each of the fuels for appliances.

(*) = Value rounds to zero in the units displayed.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-2c. Appliances¹ Energy Consumption in U.S. Households by Year of Construction, 1997

	Total	Year of Construction						RSE Row Factors
		1990 to 1997 ²	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before	
RSE Column Factor:	0.4	1.9	1.3	1.0	1.0	1.2	0.9	
Million Households								
Total U.S. Households	101.5	9.7	17.3	19.6	14.4	12.5	27.9	4.1
Number of Households With Appliances, Fuels Used (more than one may apply):								
Electricity for:								
Refrigerators	101.3	9.7	17.3	19.5	14.4	12.5	27.8	4.1
Other Appliances and Lighting	101.4	9.7	17.3	19.6	14.4	12.5	27.9	4.1
Natural Gas	40.4	2.9	4.4	5.2	5.3	6.5	16.1	7.5
LPG	4.8	0.5	0.8	0.9	0.8	0.2	1.6	17.1
Quadrillion Btu								
Appliances Btu Consumption, Fuels Used:								
Electricity for:								
Refrigerators	0.46	0.04	0.08	0.09	0.07	0.06	0.11	4.4
Other Appliances and Lighting	1.87	0.21	0.35	0.39	0.25	0.22	0.45	4.3
Natural Gas	0.37	0.04	0.05	0.05	0.05	0.06	0.14	9.8
LPG	0.02	(*)	(*)	(*)	(*)	(*)	0.01	22.2
Total	2.73	0.30	0.48	0.53	0.37	0.34	0.71	4.3
Physical Units								
Physical Units of Appliances Consumption, Fuels Used:								
Electricity for:								
Refrigerators (billion kWh)	134	13	25	27	19	17	33	4.4
Other Appliances and Lighting (billion kWh)	549	62	103	113	74	65	132	4.3
Natural Gas (billion cf)	365	36	45	49	44	58	132	9.8
LPG (million gallons)	267	46	43	50	39	6	83	22.2
Million Btu per Household³								
Appliances Btu Consumption per Household, Fuels Used:								
Electricity for:								
Refrigerators	4.5	4.5	4.9	4.7	4.6	4.7	4.0	2.4
Other Appliances and Lighting	18.5	21.8	20.2	19.7	17.6	17.6	16.2	2.3
Natural Gas	9.3	12.8	10.6	9.7	8.5	9.2	8.4	5.7
LPG	5.1	8.1	5.0	4.8	4.4	2.5	4.9	13.6
Total	26.9	30.6	28.0	27.2	25.5	27.1	25.3	2.3

See footnotes at end of table.

Table CE5-2c. Appliances¹ Energy Consumption in U.S. Households by Year of Construction, 1997 (Continued)

	Total	Year of Construction						RSE Row Factors
		1990 to 1997 ²	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before	
RSE Column Factor:	0.4	1.9	1.3	1.0	1.0	1.2	0.9	

Physical Units per Household³

Physical Units of Appliances Consumption per Household, Fuels Used:

Electricity for:								
Refrigerators (kWh)	1,323	1,327	1,424	1,378	1,348	1,370	1,187	2.4
Other Appliances and Lighting (kWh)	5,412	6,396	5,926	5,777	5,149	5,169	4,740	2.3
Natural Gas (thousand cf)	9	12	10	9	8	9	8	5.7
LPG (gallons)	55	89	55	53	48	27	54	13.6

¹ Includes energy consumption for refrigeration and lighting.

² New construction for 1997 includes only those housing units built and occupied between January and the April-August period when the household interviews were conducted.

³ Averages are for those households using each of the fuels for appliances.

(*) = Value rounds to zero in the units displayed.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-3c. Appliances¹ Energy Consumption in U.S. Households by Household Income, 1997

	Total	1997 Household Income				Below Poverty Line	Eli-gible for Fed-eral Assist-ance ²	RSE Row Factors
		Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More			
RSE Column Factor:	0.5	1.6	1.0	0.9	1.1	1.3	0.9	
Million Households								
Total U.S. Households	101.5	13.3	29.1	31.1	27.9	14.6	34.1	2.7
Number of Households With Appliances, Fuels Used (more than one may apply):								
Electricity for:								
Refrigerators	101.3	13.2	29.1	31.1	27.9	14.6	34.0	2.7
Other Appliances and Lighting	101.4	13.3	29.1	31.1	27.9	14.6	34.0	2.7
Natural Gas	40.4	5.8	11.3	11.7	11.7	6.8	14.7	4.8
LPG	4.8	0.7	1.6	1.4	1.1	0.8	1.9	14.7
Quadrillion Btu								
Appliances Btu Consumption, Fuels Used:								
Electricity for:								
Refrigerators	0.46	0.05	0.12	0.14	0.15	0.06	0.13	3.2
Other Appliances and Lighting	1.87	0.16	0.44	0.59	0.69	0.21	0.50	3.2
Natural Gas	0.37	0.05	0.08	0.11	0.13	0.06	0.12	6.6
LPG	0.02	(*)	0.01	0.01	0.01	(*)	0.01	17.1
Total	2.73	0.26	0.65	0.84	0.98	0.33	0.77	3.2
Physical Units								
Physical Units of Appliances Consumption, Fuels Used:								
Electricity for:								
Refrigerators (billion kWh)	134	15	35	40	45	16	39	3.2
Other Appliances and Lighting (billion kWh)	549	46	130	172	201	61	146	3.2
Natural Gas (billion cf)	365	44	81	111	128	59	121	6.6
LPG (million gallons)	267	35	81	73	77	34	103	17.2
Million Btu per Household³								
Appliances Btu Consumption per Household, Fuels Used:								
Electricity for:								
Refrigerators	4.5	3.8	4.1	4.4	5.5	3.8	3.9	1.9
Other Appliances and Lighting	18.5	11.8	15.2	18.8	24.6	14.1	14.6	2.0
Natural Gas	9.3	7.8	7.4	9.8	11.3	8.9	8.5	3.8
LPG	5.1	4.4	4.6	4.9	6.3	3.9	5.0	11.1
Total	26.9	19.2	22.4	27.0	35.1	22.3	22.5	1.9

See footnotes at end of table.

Table CE5-3c. Appliances¹ Energy Consumption in U.S. Households by Household Income, 1997 (Continued)

	Total	1997 Household Income				Below Poverty Line	Eli-gible for Federal Assist-ance ²	RSE Row Factors
		Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More			
RSE Column Factor:	0.5	1.6	1.0	0.9	1.1	1.3	0.9	

Physical Units per Household³

Physical Units of Appliances Consumption per Household, Fuels Used:

	Total	Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More	Below Poverty Line	Eli-gible for Federal Assist-ance ²	RSE Row Factors
Electricity for:								
Refrigerators (kWh)	1,323	1,114	1,198	1,279	1,603	1,123	1,147	1.9
Other Appliances and Lighting (kWh)	5,412	3,461	4,462	5,511	7,219	4,139	4,292	2.0
Natural Gas (thousand cf)	9	8	7	10	11	9	8	3.8
LPG (gallons)	55	48	51	54	69	43	55	11.1

¹ Includes energy consumption for refrigeration and lighting.

² Below 150 percent of poverty line or 60 percent of median State income.

³ Averages are for those households using each of the fuels for appliances.

(*) = Value rounds to zero in the units displayed.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

**Table CE5-4c. Appliances¹ Energy Consumption in U.S. Households
by Type of Housing Unit, 1997**

	Total	Type of Housing Unit				RSE Row Factors
		Single-Family	Multifamily		Mobile Home	
			Two to Four Units	Five or More Units		
RSE Column Factor:	0.5	0.5	1.8	1.4	1.6	
Million Households						
Total U.S. Households	101.5	73.7	5.6	15.8	6.3	4.0
Number of Households With Appliances, Fuels Used (more than one may apply):						
Electricity for:						
Refrigerators	101.3	73.7	5.6	15.7	6.3	4.0
Other Appliances and Lighting	101.4	73.7	5.6	15.8	6.3	4.0
Natural Gas	40.4	30.4	2.7	5.4	1.8	6.9
LPG	4.8	3.4	Q	Q	1.3	16.7
Quadrillion Btu						
Appliances Btu Consumption, Fuels Used:						
Electricity for:						
Refrigerators	0.46	0.37	0.02	0.05	0.02	3.9
Other Appliances and Lighting	1.87	1.56	0.06	0.14	0.11	3.9
Natural Gas	0.37	0.31	0.02	0.03	0.01	8.5
LPG	0.02	0.02	Q	Q	0.01	19.9
Total	2.73	2.25	0.10	0.23	0.15	3.7
Physical Units						
Physical Units of Appliances Consumption, Fuels Used:						
Electricity for:						
Refrigerators (billion kWh)	134	107	6	14	7	3.9
Other Appliances and Lighting (billion kWh)	549	457	18	42	32	3.9
Natural Gas (billion cf)	365	302	19	32	12	8.5
LPG (million gallons)	267	189	Q	Q	75	19.9
Million Btu per Household²						
Appliances Btu Consumption per Household, Fuels Used:						
Electricity for:						
Refrigerators	4.5	5.0	3.4	3.1	3.9	2.0
Other Appliances and Lighting	18.5	21.1	10.7	9.1	17.4	2.1
Natural Gas	9.3	10.2	7.1	6.0	6.8	4.3
LPG	5.1	5.1	Q	Q	5.2	10.6
Total	26.9	30.5	17.5	14.3	24.3	1.8

See footnotes at end of table.

Table CE5-4c. Appliances¹ Energy Consumption in U.S. Households by Type of Housing Unit, 1997 (Continued)

	Total	Type of Housing Unit			Mobile Home	RSE Row Factors
		Single-Family	Multifamily			
			Two to Four Units	Five or More Units		
RSE Column Factor:	0.5	0.5	1.8	1.4	1.6	

Physical Units per Household²

Physical Units of Appliances Consumption per Household, Fuels Used:

	Total	Single-Family	Two to Four Units	Five or More Units	Mobile Home	RSE Row Factors
Electricity for:						
Refrigerators (kWh)	1,323	1,454	982	906	1,136	2.0
Other Appliances and Lighting (kWh)	5,412	6,198	3,129	2,677	5,102	2.1
Natural Gas (thousand cf)	9	10	7	6	7	4.3
LPG (gallons)	55	56	Q	Q	57	10.6

¹ Includes energy consumption for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-5u. Appliances¹ Energy Consumption and Expenditures in U.S. Households by Household Demographics, 1997

Household Demographics	Appliances Energy					RSE Row Factors
	Households (millions)	Total		Per Household		
		Consumption (quadrillion Btu)	Expenditures (billion dollars)	Consumption (million Btu)	Expenditures (dollars)	
RSE Column Factor:	1.1	1.3	1.3	0.7	0.7	
Total	101.5	2.73	63.80	26.9	629	1.2
Household Size						
1 Person	25.5	0.42	10.38	16.6	407	2.1
2 Persons	33.0	0.87	20.49	26.3	621	2.2
3 Persons	17.4	0.53	12.35	30.3	709	2.5
4 Persons	15.2	0.52	11.74	34.0	770	2.7
5 Persons	6.4	0.24	5.39	37.0	839	4.7
6 or More Persons	3.9	0.15	3.46	39.7	894	6.4
1997 Household Income Category						
Less than \$5,000	3.8	0.08	1.77	20.2	472	6.1
\$5,000 to \$9,999	9.5	0.18	4.17	18.8	437	5.7
\$10,000 to \$14,999	10.3	0.21	4.94	20.8	479	4.2
\$15,000 to \$19,999	10.4	0.24	5.61	22.7	539	4.3
\$20,000 to \$24,999	8.4	0.20	4.70	24.1	558	4.1
\$25,000 to \$34,999	15.6	0.40	9.17	25.5	587	3.0
\$35,000 to \$49,999	15.5	0.44	10.27	28.6	662	2.6
\$50,000 to \$74,999	16.4	0.52	12.56	31.8	765	3.2
\$75,000 or More	11.5	0.46	10.61	39.7	924	4.1
Below Poverty Line						
100 Percent	14.6	0.33	7.51	22.3	512	3.6
125 Percent	19.7	0.44	9.98	22.2	508	3.3
150 Percent	26.7	0.60	13.77	22.5	516	2.7
Eligible for Federal Assistance²	34.1	0.77	17.78	22.5	522	2.5
Age of Householder						
Under 25 Years	5.7	0.11	2.56	19.1	451	5.0
25 to 34 Years	18.5	0.44	10.30	23.9	556	2.6
35 to 44 Years	23.2	0.71	16.21	30.6	699	2.5
45 to 59 Years	25.6	0.80	18.68	31.4	730	2.2
60 Years and Over	28.5	0.66	16.05	23.3	563	2.7
Race of Householder						
White	78.5	2.18	50.68	27.8	646	1.4
Black	12.7	0.33	7.69	26.1	606	4.0
Other ³	10.3	0.22	5.43	21.1	528	5.3
Householder of Hispanic Descent						
Yes	9.4	0.21	5.28	22.7	560	4.9
No	92.0	2.51	58.52	27.3	636	1.4

¹ These consumption and expenditures amounts cover the total energy used for all appliances (including refrigerators and lighting) and any of the three fuels (electricity, natural gas, and LPG) used in the housing unit. They do not only cover the energy used for the appliance listed.

² Below 150 percent of poverty line or 60 percent of median State income.

³ Includes 5.5 million householders who described themselves as Hispanic rather than White, Black, or other.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1997 Residential Energy Consumption Survey.

Table CE5-6u. Appliances¹ Energy Consumption and Expenditures in U.S. Households by Usage Indicators, 1997

Usage Indicators	Appliances Energy					RSE Row Factors
	Households (millions)	Total		Per Household		
		Consumption (quadrillion Btu)	Expenditures (billion dollars)	Consumption (million Btu)	Expenditures (dollars)	
	RSE Column Factor:	1.2	1.3	1.4	0.7	
Total	101.5	2.73	63.80	26.9	629	1.2
Estimated Heated Floorspace Category (square feet)²						
Fewer than 600	7.9	0.11	2.84	14.6	361	4.7
600 to 999	21.5	0.42	9.96	19.5	463	3.1
1,000 to 1,599	30.4	0.80	18.48	26.3	609	2.3
1,600 to 1,999	15.3	0.48	11.26	31.5	737	2.8
2,000 to 2,399	7.9	0.27	6.45	34.6	818	4.0
2,400 to 2,999	5.3	0.22	4.77	40.5	895	5.2
3,000 or More	4.1	0.22	4.74	52.2	1,148	7.2
No Estimate Provided	9.1	0.21	5.30	23.3	582	5.0
Household Size						
1 Person	25.5	0.42	10.38	16.6	407	2.2
2 Persons	33.0	0.87	20.49	26.3	621	2.2
3 Persons	17.4	0.53	12.35	30.3	709	2.5
4 Persons	15.2	0.52	11.74	34.0	770	2.7
5 Persons	6.4	0.24	5.39	37.0	839	4.7
6 or More Persons	3.9	0.15	3.46	39.7	894	6.4
Weekday Home Activities						
Home Used for Business						
Yes	7.4	0.24	5.56	32.9	756	5.4
No	94.1	2.49	58.24	26.4	619	1.3
Energy-Intensive Activity						
Yes	2.4	0.09	2.07	38.4	863	8.5
No	99.1	2.64	61.73	26.6	623	1.3
Someone Home All Day						
Yes	51.3	1.47	34.24	28.7	667	1.9
No	50.1	1.26	29.56	25.1	589	1.7
Number of Refrigerators¹						
1	85.9	2.13	49.95	24.8	581	1.4
2 or More	15.4	0.60	13.82	39.0	898	3.0
Electric Appliances Used (more than one may apply)¹						
Refrigerators	101.3	2.73	63.77	26.9	629	1.2
Separate Freezer	33.7	1.15	25.66	34.2	762	2.0
Dishwasher	50.9	1.60	37.20	31.4	731	1.9
Clothes Washer	78.5	2.39	55.18	30.5	703	1.2
Clothes Dryer	72.2	2.27	51.85	31.4	718	1.4
Waterbed Heater	8.4	0.30	6.64	35.5	790	4.8
Swimming-Pool Pump	5.5	0.27	6.18	48.7	1,128	5.4
Hot-Tub or Spa Heater	2.7	0.12	2.78	44.9	1,037	6.7
Well Pump	14.3	0.48	11.30	33.3	788	5.1
Appliance Combination Usage						
Dishwasher, Clothes Washer, and Clothes Dryer						
All	44.4	1.50	34.48	33.7	776	2.0
Some	39.8	0.98	22.94	24.6	576	2.1
None	17.2	0.25	6.38	14.6	371	3.7

See footnotes at end of table.

Table CE5-6u. Appliances¹ Energy Consumption and Expenditures in U.S. Households by Usage Indicators, 1997 (Continued)

Usage Indicators	Appliances Energy					RSE Row Factors
	Households (millions)	Total		Per Household		
		Consumption (quadrillion Btu)	Expenditures (billion dollars)	Consumption (million Btu)	Expenditures (dollars)	
RSE Column Factor:	1.2	1.3	1.4	0.7	0.7	
Local Electricity Utility Rate (cents per kWh)						
Less than 6	7.8	0.23	3.51	28.8	449	9.0
6 to Less than 8	37.1	1.07	21.60	29.0	583	3.9
8 to Less than 10	24.7	0.69	16.09	27.9	652	6.2
10 to Less than 12	13.7	0.33	9.05	24.2	661	6.2
12 to Less than 14	14.0	0.33	10.20	23.4	731	5.3
14 or More	4.2	0.08	3.35	19.7	795	7.3
Fuels for Appliance Use Paid by Household						
All Major Fuels³						
Yes	93.4	2.59	60.51	27.7	648	1.3
No	4.7	0.08	1.72	15.9	364	7.8
Some	3.3	0.06	1.57	19.3	475	7.8
Electricity						
Yes	96.3	2.65	61.90	27.5	643	1.3
No	5.1	0.08	1.90	16.0	370	7.5
Natural Gas						
Yes	35.5	1.11	24.64	31.2	695	2.7
No	5.0	0.09	2.19	18.8	441	6.0
LPG						
Yes	4.8	0.13	3.35	28.1	700	6.9
No	Q	Q	Q	Q	Q	NF

¹ These consumption and expenditures amounts cover the total energy used for all appliances (including refrigerators and lighting) and any of the three fuels (electricity, natural gas, and LPG) used in the housing unit. They do not only cover the energy used for the appliance listed.

² Estimates provided by the household interview respondents, who were asked which category best described the total heated floorspace in the home.

³ The major fuels are electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas (LPG).

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• Appliances include refrigerators. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 1997 Residential Energy Consumption Survey.

Table CE5-7c. Appliances¹ Energy Consumption in U.S. Households by Four Most Populated States, 1997

	Total U.S.	Four Most Populated States				RSE Row Factors
		New York	California	Texas	Florida	
RSE Column Factor:	0.3	1.0	1.1	1.4	1.9	
Million Households						
Total U.S. Households	101.5	6.8	11.5	7.0	5.9	NF
Number of Households With Appliances, Fuels Used (more than one may apply):						
Electricity for:						
Refrigerators	101.3	6.8	11.4	7.0	5.9	NF
Other Appliances and Lighting	101.4	6.8	11.5	7.0	5.9	NF
Natural Gas	40.4	4.2	7.3	3.1	0.6	7.1
LPG	4.8	0.5	0.3	0.3	0.3	23.2
Quadrillion Btu						
Appliances Btu Consumption, Fuels Used:						
Electricity for:						
Refrigerators	0.46	0.02	0.04	0.04	0.03	3.5
Other Appliances and Lighting	1.87	0.09	0.15	0.16	0.13	4.0
Natural Gas	0.37	0.03	0.07	0.04	Q	9.4
LPG	0.02	(*)	(*)	(*)	(*)	30.6
Total	2.73	0.15	0.26	0.24	0.17	3.9
Physical Units						
Physical Units of Appliances Consumption, Fuels Used:						
Electricity for:						
Refrigerators (billion kWh)	134	7	13	13	10	3.5
Other Appliances and Lighting (billion kWh)	549	27	43	47	37	4.0
Natural Gas (billion cf)	365	31	67	35	Q	9.4
LPG (million gallons)	267	18	18	19	12	30.7
Million Btu per Household²						
Appliances Btu Consumption per Household, Fuels Used:						
Electricity for:						
Refrigerators	4.5	3.3	3.9	6.4	5.8	3.5
Other Appliances and Lighting	18.5	13.3	12.8	22.9	21.2	4.1
Natural Gas	9.3	7.6	9.5	11.7	13.6	7.1
LPG	5.1	3.4	4.9	6.7	4.0	15.2
Total	26.9	21.6	22.8	34.8	28.7	3.9
Physical Units per Household²						
Physical Units of Appliances Consumption per Household, Fuels Used:						
Electricity for:						
Refrigerators (kWh)	1,323	975	1,150	1,868	1,690	3.5
Other Appliances and Lighting (kWh)	5,412	3,903	3,739	6,722	6,222	4.1
Natural Gas (thousand cf)	9	7	9	11	13	7.1
LPG (gallons)	55	38	53	74	44	15.2

¹ Includes energy consumption for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

(*) = Value rounds to zero in the units displayed.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-8c. Appliances¹ Energy Consumption in U.S. Households by Urban/Rural Location, 1997

	Urban/Rural Location ²					RSE Row Factors
	Total	City	Town	Suburbs	Rural	
RSE Column Factor:	0.5	0.9	1.3	1.5	1.2	
Million Households						
Total U.S. Households	101.5	48.2	18.2	18.6	16.5	3.9
Number of Households With Appliances, Fuels Used (more than one may apply):						
Electricity for:						
Refrigerators	101.3	48.1	18.2	18.6	16.4	3.9
Other Appliances and Lighting	101.4	48.2	18.2	18.6	16.4	3.9
Natural Gas	40.4	23.9	6.1	8.0	2.4	6.4
LPG	4.8	0.5	0.8	0.3	3.2	16.8
Quadrillion Btu						
Appliances Btu Consumption, Fuels Used:						
Electricity for:						
Refrigerators	0.46	0.21	0.08	0.09	0.08	3.9
Other Appliances and Lighting	1.87	0.76	0.33	0.40	0.39	3.8
Natural Gas	0.37	0.21	0.05	0.09	0.02	8.5
LPG	0.02	(*)	(*)	(*)	0.02	21.6
Total	2.73	1.18	0.46	0.58	0.51	3.7
Physical Units						
Physical Units of Appliances Consumption, Fuels Used:						
Electricity for:						
Refrigerators (billion kWh)	134	60	23	28	23	3.9
Other Appliances and Lighting (billion kWh)	549	222	96	117	114	3.8
Natural Gas (billion cf)	365	204	53	86	22	8.5
LPG (million gallons)	267	24	40	15	188	21.6
Million Btu per Household³						
Appliances Btu Consumption per Household, Fuels Used:						
Electricity for:						
Refrigerators	4.5	4.3	4.3	5.1	4.9	1.9
Other Appliances and Lighting	18.5	15.7	18.0	21.5	23.6	1.8
Natural Gas	9.3	8.8	8.8	11.1	9.3	4.8
LPG	5.1	4.1	4.5	5.2	5.4	13.8
Total	26.9	24.4	25.5	31.4	30.8	1.8
Physical Units per Household³						
Physical Units of Appliances Consumption per Household, Fuels Used:						
Electricity for:						
Refrigerators (kWh)	1,323	1,248	1,248	1,496	1,431	1.9
Other Appliances and Lighting (kWh)	5,412	4,609	5,288	6,287	6,913	1.8
Natural Gas (thousand cf)	9	9	9	11	9	4.8
LPG (gallons)	55	45	49	57	59	13.8

¹ Includes energy consumption for refrigeration and lighting.

² Based on the household respondent's description rather than the Federal Government definition.

³ Averages are for those households using each of the fuels for appliances.

(*) = Value rounds to zero in the units displayed.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

**Table CE5-9c. Appliances¹ Energy Consumption in U.S. Households
by Northeast Census Region, 1997**

	Northeast Census Region				RSE Row Factors
	Total U.S.	Census Division			
		Total	Middle Atlantic	New England	
RSE Column Factor:	0.5	1.0	1.2	1.6	
Million Households					
Total U.S. Households	101.5	19.7	14.4	5.3	NF
Number of Households With Appliances, Fuels Used (more than one may apply):					
Electricity for:					
Refrigerators	101.3	19.7	14.4	5.3	NF
Other Appliances and Lighting	101.4	19.7	14.4	5.3	NF
Natural Gas	40.4	9.6	8.1	1.5	7.7
LPG	4.8	1.2	0.7	0.5	18.8
Quadrillion Btu					
Appliances Btu Consumption, Fuels Used:					
Electricity for:					
Refrigerators	0.46	0.07	0.05	0.02	2.4
Other Appliances and Lighting	1.87	0.30	0.22	0.08	2.5
Natural Gas	0.37	0.08	0.07	0.01	10.5
LPG	0.02	(*)	(*)	(*)	18.9
Total	2.73	0.45	0.34	0.11	1.8
Physical Units					
Physical Units of Appliances Consumption, Fuels Used:					
Electricity for:					
Refrigerators (billion kWh)	134	21	16	5	2.4
Other Appliances and Lighting (billion kWh)	549	87	64	23	2.5
Natural Gas (billion cf)	365	75	65	11	10.5
LPG (million gallons)	267	52	24	28	19.0
Million Btu per Household²					
Appliances Btu Consumption per Household, Fuels Used:					
Electricity for:					
Refrigerators	4.5	3.6	3.7	3.5	2.4
Other Appliances and Lighting	18.5	15.0	15.1	14.8	2.5
Natural Gas	9.3	8.1	8.2	7.4	3.2
LPG	5.1	4.0	3.2	5.3	11.6
Total	26.9	22.8	23.6	20.8	1.8
Physical Units per Household²					
Physical Units of Appliances Consumption per Household, Fuels Used:					
Electricity for:					
Refrigerators (kWh)	1,323	1,068	1,089	1,011	2.4
Other Appliances and Lighting (kWh)	5,412	4,406	4,430	4,341	2.5
Natural Gas (thousand cf)	9	8	8	7	3.2
LPG (gallons)	55	44	35	58	11.6

¹ Includes energy consumption for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

(*) = Value rounds to zero in the units displayed.

NF = No applicable RSE row factor.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-10c. Appliances¹ Energy Consumption in U.S. Households by Midwest Census Region, 1997

	Midwest Census Region				RSE Row Factors
	Total U.S.	Total	Census Division		
			East North Central	West North Central	
RSE Column Factor:	0.5	1.0	1.2	1.7	
Million Households					
Total U.S. Households	101.5	24.1	16.9	7.2	NF
Number of Households With Appliances, Fuels Used (more than one may apply):					
Electricity for:					
Refrigerators	101.3	24.0	16.9	7.1	NF
Other Appliances and Lighting	101.4	24.1	16.9	7.2	NF
Natural Gas	40.4	11.7	9.1	2.5	5.5
LPG	4.8	1.3	0.6	0.6	22.3
Quadrillion Btu					
Appliances Btu Consumption, Fuels Used:					
Electricity for:					
Refrigerators	0.46	0.10	0.07	0.03	2.1
Other Appliances and Lighting	1.87	0.46	0.31	0.14	2.2
Natural Gas	0.37	0.11	0.09	0.02	8.3
LPG	0.02	0.01	(*)	Q	22.8
Total	2.73	0.68	0.48	0.20	2.1
Physical Units					
Physical Units of Appliances Consumption, Fuels Used:					
Electricity for:					
Refrigerators (billion kWh)	134	30	21	9	2.1
Other Appliances and Lighting (billion kWh)	549	134	92	42	2.2
Natural Gas (billion cf)	365	109	89	20	8.3
LPG (million gallons)	267	81	44	Q	22.8
Million Btu per Household²					
Appliances Btu Consumption per Household, Fuels Used:					
Electricity for:					
Refrigerators	4.5	4.3	4.2	4.5	2.1
Other Appliances and Lighting	18.5	19.0	18.6	20.0	2.2
Natural Gas	9.3	9.6	10.0	8.2	5.1
LPG	5.1	5.9	6.2	5.5	12.6
Total	26.9	28.2	28.4	28.0	2.1
Physical Units per Household²					
Physical Units of Appliances Consumption per Household, Fuels Used:					
Electricity for:					
Refrigerators (kWh)	1,323	1,251	1,218	1,329	2.1
Other Appliances and Lighting (kWh)	5,412	5,571	5,442	5,874	2.2
Natural Gas (thousand cf)	9	9	10	8	5.1
LPG (gallons)	55	64	68	60	12.7

¹ Includes energy consumption for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

(*) = Value rounds to zero in the units displayed.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-11c. Appliances¹ Energy Consumption in U.S. Households by South Census Region, 1997

	South Census Region					RSE Row Factors
	Total U.S.	Census Division			Total	
		South Atlantic	East South Central	West South Central		
RSE Column Factor:	0.5	0.9	1.4	1.2	1.4	
Million Households						
Total U.S. Households	101.5	35.9	18.7	6.3	10.8	NF
Number of Households With Appliances, Fuels Used (more than one may apply):						
Electricity for:						
Refrigerators	101.3	35.8	18.7	6.3	10.8	NF
Other Appliances and Lighting	101.4	35.9	18.7	6.3	10.8	NF
Natural Gas	40.4	9.6	3.5	1.2	4.9	8.7
LPG	4.8	1.7	0.8	0.5	0.4	20.2
Quadrillion Btu						
Appliances Btu Consumption, Fuels Used:						
Electricity for:						
Refrigerators	0.46	0.19	0.09	0.04	0.07	2.2
Other Appliances and Lighting	1.87	0.77	0.38	0.14	0.25	2.3
Natural Gas	0.37	0.10	0.03	0.01	0.05	12.7
LPG	0.02	0.01	(*)	(*)	(*)	23.3
Total	2.73	1.07	0.51	0.20	0.37	2.2
Physical Units						
Physical Units of Appliances Consumption, Fuels Used:						
Electricity for:						
Refrigerators (billion kWh)	134	57	27	10	19	2.2
Other Appliances and Lighting (billion kWh)	549	225	111	42	72	2.3
Natural Gas (billion cf)	365	95	32	12	51	12.7
LPG (million gallons)	267	100	43	33	24	23.3
Million Btu per Household²						
Appliances Btu Consumption per Household, Fuels Used:						
Electricity for:						
Refrigerators	4.5	5.4	4.9	5.5	6.1	2.2
Other Appliances and Lighting	18.5	21.4	20.3	22.8	22.7	2.3
Natural Gas	9.3	10.1	9.3	10.2	10.6	5.9
LPG	5.1	5.3	4.7	6.1	5.6	12.9
Total	26.9	29.8	27.1	30.8	33.8	2.2
Physical Units per Household²						
Physical Units of Appliances Consumption per Household, Fuels Used:						
Electricity for:						
Refrigerators (kWh)	1,323	1,579	1,437	1,625	1,796	2.2
Other Appliances and Lighting (kWh)	5,412	6,279	5,936	6,676	6,639	2.3
Natural Gas (thousand cf)	9	10	9	10	10	5.9
LPG (gallons)	55	58	52	67	62	12.9

¹ Includes energy consumption for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

(*) = Value rounds to zero in the units displayed.

NF = No applicable RSE row factor.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-12c. Appliances¹ Energy Consumption in U.S. Households by West Census Region, 1997

	West Census Region				RSE Row Factors
	Total U.S.	Total	Census Division		
			Mountain	Pacific	
RSE Column Factor:	0.5	1.0	1.7	1.3	
Million Households					
Total U.S. Households	101.5	21.8	6.2	15.6	NF
Number of Households With Appliances, Fuels Used (more than one may apply):					
Electricity for:					
Refrigerators	101.3	21.7	6.2	15.6	NF
Other Appliances and Lighting	101.4	21.8	6.2	15.6	NF
Natural Gas	40.4	9.5	1.9	7.5	5.1
LPG	4.8	0.7	0.2	0.4	22.2
Quadrillion Btu					
Appliances Btu Consumption, Fuels Used:					
Electricity for:					
Refrigerators	0.46	0.09	0.03	0.06	2.5
Other Appliances and Lighting	1.87	0.35	0.12	0.23	2.9
Natural Gas	0.37	0.09	0.01	0.07	7.9
LPG	0.02	(*)	(*)	(*)	23.5
Total	2.73	0.53	0.16	0.37	2.8
Physical Units					
Physical Units of Appliances Consumption, Fuels Used:					
Electricity for:					
Refrigerators (billion kWh)	134	26	8	18	2.5
Other Appliances and Lighting (billion kWh)	549	103	34	69	2.9
Natural Gas (billion cf)	365	85	14	71	7.9
LPG (million gallons)	267	34	14	20	23.5
Million Btu per Household²					
Appliances Btu Consumption per Household, Fuels Used:					
Electricity for:					
Refrigerators	4.5	4.1	4.4	4.1	2.5
Other Appliances and Lighting	18.5	16.1	18.7	15.1	2.9
Natural Gas	9.3	9.3	7.4	9.8	5.0
LPG	5.1	4.7	5.5	4.3	12.9
Total	26.9	24.4	25.6	23.9	2.8
Physical Units per Household²					
Physical Units of Appliances Consumption per Household, Fuels Used:					
Electricity for:					
Refrigerators (kWh)	1,323	1,213	1,280	1,187	2.5
Other Appliances and Lighting (kWh)	5,412	4,717	5,488	4,411	2.9
Natural Gas (thousand cf)	9	9	7	9	5.0
LPG (gallons)	55	52	60	47	12.9

¹ Includes energy consumption for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

(*) = Value rounds to zero in the units displayed.

NF = No applicable RSE row factor.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.