

**Table CE4-1e. Water-Heating Energy Expenditures in U.S. Households by Climate Zone, 2001**

	Climate Zone <sup>1</sup>						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		
		0.4	1.6	1.0	1.1		
RSE Column Factor:							
<b>Million Households</b>							
<b>Total U.S. Households</b> .....	107.0	9.2	28.6	24.0	21.0	24.1	8.1
No Water Heating .....	Q	Q	Q	Q	Q	Q	NF
Water Heating .....	106.9	9.2	28.6	24.0	20.9	24.0	8.1
Not Using a Major Fuel <sup>2</sup> .....	0.2	Q	Q	Q	Q	Q	90.3
Using a Major Fuel <sup>2</sup> .....	106.7	9.2	28.6	24.0	20.9	24.0	8.1
For Main Water Heating .....	106.5	9.2	28.6	24.0	20.8	23.9	8.1
<b>Number of Households with Water Heating, Major Fuels Used:</b>							
Electricity .....	41.6	4.1	7.4	8.6	8.6	13.0	10.3
Natural Gas .....	58.2	3.8	19.2	12.4	12.2	10.6	8.9
Fuel Oil .....	4.7	0.8	1.5	2.4	Q	Q	20.0
LPG .....	3.0	0.6	0.8	0.6	0.5	0.5	27.6
<b>Billion Dollars<sup>a</sup></b>							
<b>Water-Heating Expenditures, Major Fuels Used:</b>							
Electricity .....	8.47	0.84	1.45	1.67	1.70	2.81	11.2
Natural Gas .....	11.31	0.58	3.59	2.47	2.58	2.08	9.7
Fuel Oil .....	1.14	0.24	0.38	0.51	Q	Q	21.5
LPG .....	0.69	0.14	0.19	0.13	0.11	0.12	26.6
Total <sup>3</sup> .....	21.61	1.79	5.62	4.79	4.39	5.02	7.0
<b>Dollars per Household<sup>a</sup></b>							
<b>Average Water-Heating Expenditures per Household</b>							
Using a Major Fuel <sup>2</sup> .....	203	196	196	200	210	209	2.6
For Main Water Heating .....	203	196	196	200	211	210	2.6
<b>Million Households</b>							
<b>Number of Households, Where the Main Water-Heating Fuel Is:</b>							
Electricity .....	40.8	4.0	7.3	8.5	8.1	12.8	10.4
Natural Gas .....	58.0	3.7	19.1	12.4	12.2	10.6	8.9
Fuel Oil .....	4.6	0.8	1.4	2.4	Q	Q	20.6
LPG .....	2.9	0.6	0.8	0.6	0.5	0.4	27.7
Does Not Heat Water .....	Q	Q	Q	Q	Q	Q	NF
<b>Dollars per Household<sup>a</sup></b>							
<b>Water-Heating Expenditures per Household,<sup>4</sup> Where the Main Water-Heating Fuel Is:</b>							
Electricity .....	208	209	198	195	210	219	3.3
Natural Gas .....	194	153	187	199	211	196	3.7
Fuel Oil .....	243	289	266	213	Q	Q	5.5
LPG .....	233	239	242	207	219	261	9.6

See footnotes at end of table.

**Table CE4-1e. Water-Heating Energy Expenditures in U.S. Households by Climate Zone, 2001 (Continued)**

	Climate Zone <sup>1</sup>						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:	0.4	1.6	1.0	1.1	1.2	1.0	
<b>Number of Household Members (NHM) per Household<sup>5</sup></b>							
<b>Number of Household Members per Household, Where the Main Water-Heating Fuel Is:</b>							
Electricity .....	2.4	2.6	2.3	2.5	2.5	2.4	3.1
Natural Gas .....	2.7	2.4	2.6	2.5	3.0	2.7	3.1
Fuel Oil .....	2.4	2.4	2.5	2.4	Q	Q	6.0
LPG .....	2.6	2.6	2.6	2.3	2.2	3.3	9.3
<b>Water-Heating Intensity<sup>5,a</sup> (Dollars÷NHM)</b>							
<b>Water-Heating Intensity, Where the Main Water-Heating Fuel Is:</b>							
Electricity .....	85	81	86	80	84	91	3.2
Natural Gas .....	73	63	73	79	70	72	3.7
Fuel Oil .....	101	119	109	90	Q	Q	7.2
LPG .....	91	92	94	90	99	79	12.5

<sup>1</sup> 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.

<sup>2</sup> The major fuels are electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas (LPG).

<sup>3</sup> Includes a small amount of kerosene use for water heating.

<sup>4</sup> Includes only the water-heating expenditures of the water-heating fuel. Not included are: 1) the expenditures of the main water-heating fuel for uses other than water heating; 2) the expenditures of the main water-heating fuel where it is the secondary, and not the main, water-heating fuel, and; 3) the expenditures of other fuels that are used as secondary water-heating fuels.

<sup>5</sup> Averages are for those households using each of the main water-heating fuels.

<sup>a</sup> The row factor in this section is underestimated because it contains no error for estimating the end-use.

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 2001 Residential Energy Consumption Survey.