Table 101. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy: Coal: Coking Coal	Coal: Steam Coal	Coal: Total	Natural Gas	Petroleum: Distillate Fuel	Petroleum: Jet Fuel	Petroleum: LPG [a]	Petroleum: Motor Gasoline	Petroleum: Residual Fuel	Petroleum: Other [b]	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total [c,d]	Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Prices in Nominal Dollars per Million Btu																
1970	—	0.36	0.36	0.57	1.01	0.75	1.59	2.83	0.61	1.58	2.11	—	R 2.40	R 1.20	0.30	6.39	1.80
1975	—	0.95	0.95	1.00	2.45	2.09	3.00	4.59	1.88	3.18	3.74	0.25	R 2.74	2.16	0.75	9.11	3.12
1980	—	1.42	1.42	2.79	6.41	6.47	5.57	9.97	3.19	7.31	8.19	0.39	R 3.74	R 4.59	1.32	13.97	R 6.69
1981	—	1.54	1.54	3.42	7.50	7.60	5.88	11.07	3.81	8.93	9.36	0.53	R 3.91	R 5.11	1.44	15.92	R 7.74
1982	—	1.62	1.62	4.19	7.32	7.19	6.09	10.62	3.66	8.00	8.86	0.54	R 3.86	R 5.23	1.50	17.36	R 8.03
1983	—	1.64	1.64	4.76	6.94	6.73	6.81	9.49	3.73	R 8.18	8.34	0.68	R 3.80	R 5.07	1.56	18.43	R 8.22
1984	—	1.56	1.56	4.71	6.96	6.55	6.44	9.34	4.99	R 8.30	R 8.29	0.79	R 3.82	R 4.97	1.48	18.87	R 8.05
1985	—	1.52	1.52	4.60	6.53	6.28	7.54	9.47	4.07	R 8.00	8.27	0.94	R 3.74	R 4.90	1.46	19.02	R 8.03
1986	—	1.41	1.41	4.22	5.50	4.36	7.44	7.13	2.86	6.52	6.57	0.75	R 3.29	R 4.09	1.31	19.25	R 7.25
1987	—	1.31	1.31	3.63	5.93	4.27	6.00	7.36	2.48	6.45	6.72	0.71	R 3.35	3.87	1.21	18.30	R 7.03
1988	—	1.28	1.28	3.80	5.64	4.12	5.94	7.37	2.38	R 6.03	6.59	0.68	R 3.39	R 3.80	1.19	17.59	R 6.86
1989	—	1.25	1.25	3.57	6.46	4.57	6.95	8.40	2.25	R 6.37	7.52	0.67	e R 3.53	e 4.01	1.18	17.30	e R 7.13
1990	—	1.16	1.16	3.81	7.65	6.11	5.97	9.38	2.36	R 6.85	R 8.38	0.66	R 1.36	R 4.26	1.10	17.37	R 7.65
1991	—	1.15	1.15	3.65	6.98	5.21	7.62	9.11	2.24	R 7.34	8.20	0.66	R 1.32	R 4.05	1.07	17.41	R 7.44
1992	—	1.14	1.14	4.24	6.69	4.78	7.64	8.72	2.21	R 7.90	7.89	0.56	R 1.22	R 4.23	1.06	17.53	R 7.58
1993	—	1.07	1.07	4.49	6.58	4.52	8.61	8.42	2.18	R 8.18	7.85	0.60	R 1.04	R 4.34	1.00	17.49	R 7.70
1994	—	1.06	1.06	4.51	6.59	4.26	7.14	8.71	2.10	7.39	7.69	0.66	R 2.51	R 4.31	0.97	17.36	R 7.64
1995	—	1.06	1.06	3.99	6.61	4.22	7.39	8.69	2.38	R 8.12	7.76	0.74	R 2.51	R 4.18	0.98	17.68	R 7.53
1996	—	1.03	1.03	4.43	7.68	5.08	8.99	9.51	2.94	7.63	8.70	0.72	2.63	4.54	0.95	17.41	7.95
1997	—	1.03	1.03	4.97	7.31	4.79	8.76	9.42	3.05	6.86	8.44	0.64	2.54	4.55	0.94	17.49	8.10
	Expenditures in Million Nominal Dollars																
1970	—	47.5	47.5	190.2	80.7	3.0	66.2	530.1	1.5	49.0	730.5	—	R 3.7	R 971.8	-50.4	337.5	R 1,259.0
1975	—	125.4	125.4	332.4	207.6	9.8	152.2	942.1	7.2	84.6	1,403.5	6.3	R 5.1	R 1,872.7	-132.5	624.4	R 2,364.6
1980	—	333.3	333.3	719.9	594.5	29.6	228.5	1,853.2	8.3	315.3	3,029.5	10.9	R 37.8	R 4,131.4	-313.1	1,184.5	R 5,002.8
1981	—	388.0	388.0	831.7	633.8	30.6	212.0	1,993.7	2.4	283.4	3,155.9	12.9	R 40.8	R 4,429.2	-352.6	1,433.5	R 5,510.0
1982	—	394.5	394.5	963.8	692.1	25.6	263.0	1,843.2	7.7	227.3	3,058.9	13.5	R 40.2	R 4,470.9	-356.0	1,561.9	R 5,676.8
1983	—	415.2	415.2	1,025.3	569.6	22.3	295.9	1,615.3	4.9	R 198.6	R 2,706.5	17.0	R 44.1	R 4,208.2	-387.6	1,745.1	R 5,565.6
1984	—	R 392.8	R 392.8	1,071.6	622.8	22.5	170.1	1,580.8	4.4	R 219.7	R 2,620.3	23.0	R 44.1	R 4,151.8	-367.3	1,653.2	R 5,437.7
1985	—	R 407.7	R 407.7	1,003.4	588.8	20.9	231.0	R 1,566.0	4.7	R 214.1	R 2,625.4	19.6	R 43.2	R 4,099.3	-366.7	1,666.6	R 5,399.2
1986	—	370.6	370.6	851.8	510.9	14.5	237.5	1,174.7	9.1	150.1	2,096.9	24.4	R 28.1	R 3,371.8	-335.2	1,731.1	R 4,767.7
1987	—	R 375.3	R 375.3	713.4	544.8	18.7	133.9	R 1,225.7	1.8	139.7	R 2,064.7	19.3	R 27.6	R 3,200.3	-326.2	1,687.4	R 4,561.4
1988	—	R 390.7	R 390.7	874.1	524.2	16.5	143.4	R 1,258.9	3.9	R 146.9	R 2,093.7	23.0	R 28.5	R 3,410.1	-354.1	1,731.0	R 4,787.0
1989	—	397.8	397.8	777.2	562.6	19.3	183.7	R 1,436.5	2.6	R 131.5	R 2,336.2	22.6	e R 25.4	e R 3,559.1	-350.2	1,695.0	e R 4,903.9
1990	—	386.2	386.2	803.0	678.4	30.7	137.6	R 1,561.2	1.9	R 137.1	R 2,546.8	21.3	R 8.7	R 3,766.0	-340.8	1,744.6	R 5,169.8
1991	—	397.9	397.9	833.2	594.0	26.1	199.8	R 1,553.3	1.4	R 134.9	R 2,509.4	29.2	R 8.8	R 3,778.6	-353.3	1,829.0	R 5,254.3
1992	—	373.1	373.1	953.1	638.3	21.6	248.7	R 1,453.2	1.5	R 139.5	R 2,502.7	20.4	R 8.5	R 3,857.7	-330.5	1,807.2	R 5,334.4
1993	—	364.3	364.3	1,084.0	650.0	18.3	486.2	R 1,446.0	2.3	R 143.8	R 2,746.5	20.9	R 7.1	R 4,222.7	-328.9	1,915.5	R 5,809.4
1994	—	368.0	368.0	1,081.2	711.1	21.5	406.7	R 1,549.9	2.4	158.0	R 2,849.6	28.9	R 19.2	R 4,346.8	-330.2	1,957.5	R 5,974.1
1995	—	389.4	389.4	1,008.5	726.5	25.0	455.2	1,571.3	1.4	R 153.8	R 2,933.2	29.2	R 20.2	R 4,380.5	-347.6	2,069.2	R 6,102.1
1996	—	391.2	391.2	1,158.7	907.0	23.6	335.2	1,794.7	1.8	165.6	3,227.9	29.9	21.7	4,829.5	-336.1	2,078.5	6,571.8
1997	—	402.0	402.0	1,219.8	874.7	21.5	330.1	1,760.6	1.4	177.5	3,165.8	28.1	20.1	4,835.7	-343.3	2,156.8	6,649.2

[a] Liquefied petroleum gases.

[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.

[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 102. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy								Electricity	Total Energy [b]
	Coal	Natural Gas	Petroleum				Wood	Total [b]		
			Distillate Fuel	Kerosene	LPG [a]	Total				
	Prices in Nominal Dollars per Million Btu									
1970	1.27	0.96	1.22	1.57	1.85	1.63	0.61	1.16	7.75	2.06
1975	3.69	1.42	2.56	2.99	3.55	3.25	1.20	R 1.93	10.46	3.44
1980	3.31	3.18	6.79	8.10	6.86	6.84	3.06	R 4.08	16.13	R 6.82
1981	3.51	3.88	8.06	9.91	6.47	7.36	3.77	R 4.73	18.42	R 8.00
1982	3.84	4.66	7.90	9.91	7.20	7.68	3.66	R 5.34	19.87	R 8.68
1983	3.67	5.45	7.41	R 7.70	7.66	R 7.60	3.54	R 5.84	21.07	R 9.89
1984	3.07	5.48	7.37	R 7.93	7.01	R 7.18	3.60	R 5.70	21.90	R 9.71
1985	3.41	5.33	5.94	R 7.85	5.62	R 5.83	3.46	R 5.35	22.53	R 9.56
1986	3.12	5.07	5.32	R 6.32	5.51	R 5.45	2.77	R 5.07	22.56	R 9.55
1987	2.89	4.71	5.33	R 6.38	5.00	R 5.16	2.64	R 4.71	22.91	R 9.87
1988	2.51	4.76	4.80	R 6.26	5.31	R 5.15	2.67	R 4.73	22.23	R 9.43
1989	2.60	4.65	4.86	R 6.78	8.68	R 7.40	2.95	R 5.11	22.19	R 9.57
1990	2.41	4.96	5.73	R 8.20	7.19	R 6.74	3.56	5.15	22.89	R 10.17
1991	2.32	4.77	5.32	R 7.45	6.39	R 6.09	3.41	4.92	22.76	R 9.80
1992	2.25	5.21	5.38	R 7.10	6.92	6.51	3.12	R 5.37	23.51	R 10.26
1993	2.41	5.46	4.34	R 6.28	6.64	6.06	3.05	R 5.51	23.50	R 10.26
1994	2.35	5.36	4.91	R 6.00	6.90	6.33	2.96	R 5.49	23.72	R 10.44
1995	2.31	5.06	4.94	R 4.97	6.94	R 6.42	2.90	R 5.25	24.14	R 10.43
1996	2.42	5.46	7.07	6.00	8.80	8.42	3.33	5.93	23.93	10.53
1997	2.42	6.11	6.89	5.62	8.43	8.09	3.31	6.36	24.05	11.10
	Expenditures in Million Nominal Dollars									
1970	1.6	92.9	15.8	2.9	47.6	66.4	(s)	R 161.1	171.3	R 332.4
1975	3.3	134.7	26.9	2.3	89.5	118.8	(s)	R 257.2	297.5	R 554.7
1980	2.1	271.2	94.5	2.2	98.0	194.6	6.3	R 474.2	552.6	R 1,026.8
1981	5.1	299.9	94.4	13.2	84.9	192.5	7.8	R 505.3	619.2	R 1,124.5
1982	5.1	397.9	97.1	16.8	98.0	211.9	8.2	R 623.1	691.4	R 1,314.5
1983	5.3	427.1	43.8	R 2.4	124.1	R 170.2	7.8	R 610.4	795.6	R 1,406.0
1984	4.9	443.2	47.0	R 6.0	74.3	R 127.3	7.0	R 582.4	737.6	R 1,320.0
1985	7.1	424.1	49.7	R 5.1	60.6	R 115.4	6.6	R 553.2	757.4	R 1,310.6
1986	5.9	379.8	43.0	R 2.7	65.5	R 111.2	5.1	R 502.1	770.4	R 1,272.5
1987	7.1	309.9	37.8	2.1	46.1	R 86.0	4.2	R 407.3	785.1	R 1,192.3
1988	7.2	364.6	31.2	R 2.8	59.6	R 93.6	4.5	R 469.9	810.0	R 1,279.9
1989	3.7	363.8	30.2	R 1.6	107.8	R 139.5	5.1	R 512.1	787.0	R 1,299.2
1990	5.0	356.2	26.6	R 1.1	71.5	R 99.2	7.8	R 468.2	821.2	R 1,289.4
1991	4.4	379.0	27.5	R 1.4	77.6	R 106.5	7.9	R 497.8	866.4	R 1,364.2
1992	1.2	391.6	24.4	0.8	85.3	R 110.5	7.6	R 510.9	825.3	R 1,336.2
1993	1.5	457.2	20.7	R 1.2	94.7	R 116.6	6.1	R 581.4	890.1	R 1,471.5
1994	0.8	422.6	27.8	0.6	98.5	127.0	5.8	R 556.2	895.1	R 1,451.4
1995	1.8	418.6	24.3	R 0.7	99.6	R 124.6	6.4	R 551.4	958.7	R 1,510.0
1996	4.6	483.5	32.3	1.0	150.0	183.3	7.3	678.7	941.9	1,620.6
1997	7.5	504.1	30.8	0.9	143.8	175.5	5.3	692.2	958.1	1,650.3

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 103. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.41	0.68	1.05	0.81	1.16	2.83	0.66	1.30	0.61	0.77	7.68	1.80
1975	1.24	1.05	2.40	2.30	2.46	4.59	1.69	2.71	1.20	1.29	10.55	2.94
1980	1.59	2.84	6.44	5.52	4.88	9.97	3.80	6.57	3.06	3.38	15.93	R 6.32
1981	1.76	3.50	7.74	6.17	5.55	11.07	4.64	7.85	3.77	4.03	18.34	8.12
1982	1.84	4.28	7.52	6.16	5.58	10.62	4.03	7.59	3.66	4.64	19.76	R 8.73
1983	1.69	4.97	6.37	R 7.70	6.30	9.49	4.08	6.70	3.54	5.15	20.98	9.66
1984	R 1.71	4.98	6.37	R 7.93	6.06	9.34	5.05	6.61	3.60	5.10	21.91	9.40
1985	1.66	4.80	6.03	R 7.85	8.58	9.47	4.07	R 6.98	NA	4.95	21.88	9.32
1986	1.57	4.41	3.69	R 6.32	8.58	7.13	2.86	5.63	NA	4.40	21.81	9.41
1987	R 1.53	3.84	4.21	R 6.38	6.71	7.36	2.49	R 5.31	NA	3.85	19.95	8.88
1988	R 1.43	4.00	3.80	R 6.26	6.48	7.37	2.38	5.26	NA	3.95	19.06	8.40
1989	1.35	3.86	4.44	R 6.78	5.42	8.40	2.25	R 5.46	NA	3.93	18.63	8.47
1990	1.34	4.00	5.44	R 8.20	5.05	9.38	2.36	R 5.83	NA	R 4.01	18.30	8.62
1991	1.31	3.96	4.83	R 7.45	8.68	9.11	2.24	R 7.46	NA	4.35	18.24	8.68
1992	1.32	4.25	4.66	R 7.10	8.08	8.72	2.21	7.05	NA	R 4.64	18.63	9.14
1993	1.39	4.51	4.50	R 6.28	9.28	8.42	2.18	7.64	3.05	R 4.86	18.42	R 9.31
1994	1.42	4.47	4.29	R 6.00	8.14	8.71	2.10	R 6.39	2.96	R 4.61	18.38	R 9.51
1995	1.40	4.12	4.30	R 4.97	8.17	8.69	—	6.29	2.90	4.25	18.74	R 9.25
1996	1.38	4.56	5.24	6.00	9.45	9.51	2.94	8.07	3.33	4.73	18.88	9.16
1997	1.38	5.13	4.91	5.62	9.98	9.42	—	8.42	3.31	5.17	19.15	9.69
	Expenditures in Million Nominal Dollars											
1970	1.0	39.4	5.5	R (s)	5.3	4.0	R (s)	15.1	(s)	55.5	95.8	151.3
1975	2.0	71.1	10.1	R (s)	11.0	7.8	1.2	30.2	(s)	103.3	184.3	287.6
1980	1.9	144.0	28.2	R (s)	12.3	18.3	1.9	60.8	(s)	R 206.8	299.0	R 505.8
1981	4.7	164.1	28.1	R (s)	12.8	22.2	0.8	64.4	(s)	R 233.4	424.2	R 657.6
1982	4.4	222.3	28.3	1.3	13.4	21.3	0.7	65.0	(s)	R 291.8	461.8	R 753.6
1983	4.5	236.3	45.4	R (s)	18.0	12.0	R (s)	75.7	(s)	R 316.7	514.0	R 830.7
1984	5.0	242.9	49.0	R (s)	11.3	10.0	R (s)	70.6	(s)	R 318.7	469.9	R 788.5
1985	6.4	231.3	39.5	R (s)	16.3	11.8	(s)	R 68.0	NA	305.7	470.8	776.5
1986	5.5	194.7	14.6	(s)	18.0	10.2	0.7	43.6	NA	243.8	487.4	731.2
1987	6.9	147.3	18.6	R (s)	10.9	10.3	R (s)	R 40.3	NA	R 194.5	457.3	651.7
1988	7.2	181.2	15.2	R (s)	12.8	13.1	R (s)	41.6	NA	230.0	464.0	694.0
1989	3.5	180.0	12.7	R (s)	11.9	10.3	R (s)	35.5	NA	R 219.0	464.0	R 683.0
1990	5.1	177.1	15.7	R 1.8	8.9	R 7.0	R (s)	R 33.8	NA	R 216.0	470.2	R 686.2
1991	4.6	186.0	15.8	R (s)	18.6	34.8	R (s)	R 69.5	NA	260.0	494.0	754.0
1992	1.3	196.8	13.3	R (s)	17.6	29.6	0.5	R 61.1	NA	259.2	494.7	753.9
1993	1.4	227.5	9.3	R (s)	23.4	28.2	R (s)	R 61.2	(s)	R 290.2	536.5	826.6
1994	0.9	216.1	9.8	R (s)	20.5	1.6	(s)	R 32.3	(s)	R 249.8	548.9	R 798.7
1995	2.0	208.3	11.2	R (s)	20.7	1.6	—	33.6	(s)	R 244.4	568.5	R 813.0
1996	4.9	250.5	11.0	(s)	28.4	12.2	(s)	51.8	0.6	307.7	558.8	866.5
1997	7.9	260.0	9.7	(s)	30.0	22.0	—	62.0	0.5	330.5	584.4	914.9

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 104. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.41	0.41	0.36	0.72	0.75	0.81	1.16	5.08	2.83	0.57	2.15	1.48	R 4.00	R 0.84	3.87	R 1.05
1975	—	1.24	1.24	0.77	2.06	2.15	2.30	2.46	7.48	4.59	1.92	3.21	2.85	R 4.00	R 1.62	6.31	R 2.02
1980	—	1.59	1.59	2.51	3.77	5.28	5.52	4.88	14.36	9.97	2.88	7.65	6.27	R 4.00	R 3.97	10.47	R 4.67
1981	—	1.76	1.76	3.10	5.50	5.86	6.17	5.55	18.00	11.07	3.23	9.49	7.27	R 4.00	R 4.45	11.72	R 5.33
1982	—	1.84	1.84	3.71	4.42	5.82	6.16	5.58	17.25	10.62	3.59	8.79	6.54	R 4.00	R 4.61	12.85	R 5.66
1983	—	1.69	1.69	4.05	4.72	6.67	R 7.17	6.30	16.98	9.49	3.68	8.30	6.75	R 4.00	R 4.66	13.42	R 5.88
1984	—	R 1.71	R 1.71	3.95	4.92	6.61	R 7.28	6.06	17.63	9.34	5.05	8.46	6.96	R 4.00	R 4.61	13.71	R 5.86
1985	—	1.66	1.66	3.87	5.03	6.28	R 6.99	8.58	17.61	9.47	4.07	8.17	7.27	R 4.00	R 4.76	13.50	R 5.93
1986	—	1.57	1.57	3.36	3.89	4.06	R 4.85	8.58	15.59	7.13	2.86	6.44	5.53	R 3.82	3.93	14.16	R 5.37
1987	—	R 1.53	R 1.53	2.80	3.55	4.50	R 4.89	6.71	13.58	7.36	2.49	7.20	5.36	R 3.82	R 3.40	12.71	R 4.76
1988	—	R 1.43	R 1.43	3.09	3.46	4.16	R 4.39	6.48	14.62	7.37	2.38	6.21	4.97	R 3.82	R 3.39	12.15	R 4.67
1989	—	1.35	1.35	2.51	3.00	4.72	R 5.38	5.42	14.48	8.40	2.25	6.91	5.25	d R 3.82	d R 3.03	11.81	d R 4.36
1990	—	1.34	1.34	2.85	3.12	5.81	R 7.11	5.05	14.60	9.38	2.36	7.29	R 5.80	R 0.14	R 3.23	11.66	R 4.57
1991	—	1.31	1.31	2.63	3.15	5.17	R 6.26	8.68	16.80	9.11	2.24	8.98	6.30	R 0.14	R 3.23	11.75	R 4.52
1992	—	1.32	1.32	3.54	2.49	5.14	R 5.45	8.08	18.32	8.72	2.21	10.19	6.21	R 0.15	R 3.82	11.77	R 5.02
1993	—	1.39	1.39	3.75	2.89	5.00	R 4.88	9.28	18.96	8.42	2.18	9.31	R 7.04	R 0.15	R 4.45	11.50	R 5.47
1994	—	1.42	1.42	3.96	2.87	4.86	R 5.19	7.14	19.11	8.71	2.10	10.07	6.00	R 2.39	R 4.19	11.38	R 5.21
1995	—	1.40	1.40	3.21	3.22	4.87	R 5.16	7.49	R 19.41	8.69	2.38	10.25	6.36	R 2.39	R 3.96	11.53	R 5.05
1996	—	1.38	1.38	3.61	3.11	5.85	6.08	9.11	20.08	9.51	2.94	10.80	6.74	2.39	3.95	11.45	5.16
1997	—	1.38	1.38	4.07	3.44	5.37	5.83	8.88	17.86	9.42	3.05	10.17	6.31	2.36	4.09	11.59	5.33
	Expenditures in Million Nominal Dollars																
1970	—	17.8	17.8	36.3	13.9	25.8	0.7	13.0	6.8	80.0	0.9	7.1	148.2	R 3.2	R 205.6	70.5	R 276.1
1975	—	35.1	35.1	94.6	31.4	58.6	0.9	51.2	7.0	91.5	3.4	16.8	260.8	R 4.3	R 394.8	142.6	R 537.4
1980	—	51.6	51.6	288.2	42.5	144.4	3.7	117.6	16.7	136.7	5.0	196.2	662.9	R 30.8	R 1,033.5	332.9	R 1,366.4
1981	—	56.5	56.5	357.5	72.0	147.1	4.4	112.2	20.1	168.8	1.2	109.7	635.5	R 32.5	R 1,082.1	390.0	R 1,472.2
1982	—	57.4	57.4	334.5	56.2	155.6	4.0	149.5	17.6	120.6	6.3	77.6	587.5	R 31.5	R 1,010.9	408.8	R 1,419.7
1983	—	53.4	53.4	349.4	50.2	148.2	1.2	151.0	18.1	46.3	4.3	71.5	490.8	R 35.6	R 929.2	435.5	R 1,364.6
1984	—	R 55.1	R 55.1	373.8	60.1	158.6	1.7	81.3	20.0	85.4	3.9	72.5	483.5	R 36.3	R 948.7	445.8	R 1,394.5
1985	—	R 58.9	R 58.9	340.2	67.6	175.3	1.3	151.3	18.6	84.8	4.6	66.2	569.6	R 36.1	R 1,004.9	438.4	R 1,443.3
1986	—	55.6	55.6	272.6	52.6	138.2	R 1.1	149.6	16.1	56.5	8.4	27.2	R 449.7	R 22.8	R 800.7	473.2	R 1,273.9
1987	—	R 64.9	R 64.9	249.1	42.1	129.9	1.3	75.7	15.9	R 57.6	1.4	30.7	R 354.6	R 22.7	R 691.3	445.1	R 1,136.3
1988	—	R 59.5	R 59.5	317.3	50.8	124.5	0.6	69.9	16.5	R 54.5	3.6	25.8	R 346.1	R 23.6	R 746.4	457.0	R 1,203.4
1989	—	72.7	72.7	226.9	34.1	112.9	0.7	63.0	16.8	57.5	2.1	27.9	315.0	d R 19.9	d R 634.6	444.0	d R 1,078.6
1990	—	71.3	71.3	259.0	31.8	140.1	R 0.8	56.5	17.4	R 52.8	1.4	32.3	R 333.0	R 0.6	R 663.9	453.3	R 1,117.2
1991	—	77.9	77.9	258.2	32.6	138.8	0.5	102.1	17.9	55.5	1.2	30.0	R 378.6	R 0.6	R 715.4	468.6	R 1,183.9
1992	—	69.9	69.9	357.7	23.2	186.4	R 0.5	144.5	19.9	48.2	1.0	37.5	461.2	R 0.6	R 889.4	487.2	R 1,376.6
1993	—	70.0	70.0	385.9	25.9	179.3	R 0.9	366.3	21.0	35.3	2.2	34.6	R 665.5	R 0.6	R 1,122.1	488.9	R 1,611.0
1994	—	78.2	78.2	433.8	37.4	189.1	0.8	282.7	22.1	50.7	2.4	33.8	618.9	R 12.4	R 1,143.4	513.5	R 1,656.9
1995	—	80.9	80.9	371.7	35.0	172.7	1.2	332.8	R 22.1	47.4	1.4	31.8	644.3	R 13.0	R 1,110.0	541.9	R 1,651.9
1996	—	90.7	90.7	413.8	42.3	215.9	0.7	153.9	22.2	55.2	1.8	35.7	527.6	13.5	1,045.6	577.9	1,623.5
1997	—	91.3	91.3	441.7	59.8	214.4	0.9	153.8	20.8	54.0	1.4	34.5	539.7	14.0	1,086.6	614.2	1,700.8

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 105. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.41	—	2.17	1.27	0.75	1.16	5.08	2.83	0.66	2.60	2.60	—	2.60
1975	1.24	—	3.45	2.65	2.09	2.46	7.48	4.59	—	4.24	4.24	—	4.24
1980	—	—	9.02	6.97	6.47	4.88	14.36	9.97	—	9.34	9.34	—	9.34
1981	—	—	10.84	8.28	7.60	5.55	18.00	11.07	4.50	10.53	10.53	—	10.53
1982	—	—	10.92	7.96	7.19	5.58	17.25	10.62	—	10.02	10.02	—	10.02
1983	—	—	10.44	7.10	6.73	6.30	16.98	9.49	3.86	9.04	9.04	—	9.04
1984	—	—	10.27	7.18	6.55	6.06	17.63	9.34	4.42	8.90	8.90	—	8.90
1985	—	—	9.99	6.85	6.28	8.58	17.61	9.47	—	8.95	8.95	—	8.95
1986	—	—	8.41	6.76	4.36	8.58	15.59	7.13	—	7.13	7.13	—	7.13
1987	—	—	7.55	7.01	4.27	6.71	13.58	7.36	2.33	7.31	7.31	—	7.31
1988	—	—	7.41	6.77	4.12	6.48	14.62	7.37	—	7.27	7.27	—	7.27
1989	—	—	8.28	7.55	4.57	5.42	14.48	8.40	2.08	8.20	8.20	—	8.20
1990	—	6.43	9.32	8.74	6.11	5.05	14.60	9.38	1.82	9.22	9.22	—	9.22
1991	—	3.09	8.71	8.32	5.21	8.68	16.80	9.11	—	8.94	8.94	—	8.94
1992	—	3.97	8.54	8.05	4.78	8.08	18.32	8.72	—	8.61	8.61	—	8.61
1993	—	3.83	8.24	7.89	4.52	9.28	18.96	8.42	—	8.36	8.36	—	8.36
1994	—	3.48	7.96	8.00	4.26	9.11	19.11	8.71	—	8.57	8.57	—	8.57
1995	—	2.97	8.36	7.79	4.22	9.46	R 19.41	8.69	—	8.48	8.48	—	8.48
1996	—	2.68	9.29	8.73	5.08	8.78	20.08	9.51	—	9.34	9.34	—	9.34
1997	—	5.36	9.39	8.52	4.79	8.28	17.86	9.42	—	9.19	9.19	—	9.19
	Expenditures in Million Nominal Dollars												
1970	(s)	—	2.8	32.2	3.0	R (s)	14.8	446.0	R (s)	499.1	499.2	—	499.2
1975	(s)	—	3.3	105.7	9.8	R (s)	22.7	842.8	—	984.9	984.9	—	984.9
1980	—	—	8.4	321.6	29.6	0.6	45.4	1,698.2	—	2,103.8	2,103.8	—	2,103.8
1981	—	—	8.8	356.6	30.6	2.1	54.6	1,802.8	R (s)	2,255.7	2,255.7	—	2,255.7
1982	—	—	6.1	406.2	25.6	2.1	47.7	1,701.3	—	2,189.1	2,189.1	—	2,189.1
1983	—	—	5.8	327.2	22.3	2.8	49.2	1,557.0	R (s)	1,964.3	1,964.3	—	1,964.3
1984	—	—	4.6	364.4	22.5	3.1	54.5	1,485.4	R (s)	1,934.7	1,934.7	—	1,934.7
1985	—	—	4.2	320.9	20.9	2.8	50.7	R 1,469.4	—	R 1,868.9	R 1,868.9	—	R 1,868.9
1986	—	—	6.4	312.8	14.5	4.4	43.9	1,108.0	—	1,490.1	1,490.1	—	1,490.1
1987	—	—	4.2	355.8	18.7	1.2	43.2	R 1,157.8	R (s)	R 1,581.0	R 1,581.0	—	R 1,581.0
1988	—	—	5.4	350.6	16.5	1.1	44.9	R 1,191.3	—	R 1,609.8	R 1,609.8	—	R 1,609.8
1989	—	—	4.6	403.9	19.3	1.0	45.6	R 1,368.7	(s)	R 1,843.2	R 1,843.2	—	R 1,843.2
1990	—	(s)	4.7	492.3	30.7	0.8	47.3	R 1,501.4	(s)	R 2,077.1	R 2,077.1	—	R 2,077.1
1991	—	(s)	3.6	409.1	26.1	1.5	48.7	R 1,463.1	—	R 1,952.1	R 1,952.1	—	R 1,952.1
1992	—	(s)	3.2	412.1	21.6	1.3	54.1	R 1,375.4	—	R 1,867.7	R 1,867.7	—	R 1,867.7
1993	—	(s)	2.9	437.7	18.3	1.8	57.0	R 1,382.5	—	R 1,900.2	R 1,900.2	—	R 1,900.2
1994	—	(s)	2.8	480.2	21.5	5.0	60.1	R 1,497.6	—	R 2,067.2	R 2,067.2	—	R 2,067.2
1995	—	(s)	3.0	514.7	25.0	2.0	60.0	1,522.3	—	2,127.1	R 2,127.2	—	R 2,127.2
1996	—	(s)	3.4	643.8	23.6	2.9	60.2	1,727.3	—	2,461.2	2,461.2	—	2,461.2
1997	—	(s)	3.7	614.3	21.5	2.5	56.6	1,684.5	—	2,383.1	2,383.1	—	2,383.1

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 106. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Iowa

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.32	0.27	0.70	0.75	—	0.74	—	0.65	0.30
1975	0.85	0.68	1.93	2.11	—	2.05	0.25	0.92	0.75
1980	1.39	2.41	3.78	6.06	—	5.41	0.39	1.74	1.32
1981	1.49	2.97	4.63	7.39	—	7.29	0.53	1.24	1.44
1982	1.57	3.57	4.06	6.22	—	5.86	0.54	1.28	1.50
1983	1.62	3.75	4.20	6.18	—	5.96	0.68	1.12	1.56
1984	1.53	3.69	4.50	6.10	—	5.97	0.79	1.28	1.48
1985	1.48	3.61	3.99	5.93	—	5.88	0.94	0.79	1.46
1986	1.37	3.42	—	R 3.62	—	R 3.62	0.75	0.32	1.31
1987	1.25	2.15	—	4.06	—	4.06	0.71	0.95	1.21
1988	1.24	2.03	—	3.72	—	3.72	0.68	0.87	1.19
1989	1.22	2.67	—	4.45	—	4.45	0.67	1.47	1.18
1990	1.12	3.05	—	5.18	—	5.18	0.66	1.60	1.10
1991	1.10	2.69	—	4.38	—	4.38	0.66	1.67	1.07
1992	1.10	3.07	—	4.24	—	4.24	0.56	1.58	1.06
1993	1.01	3.10	—	4.08	—	4.08	0.60	1.50	1.00
1994	0.99	3.16	—	3.92	—	3.92	0.66	1.52	0.97
1995	0.99	2.71	—	4.09	—	4.09	0.74	1.50	0.98
1996	0.94	3.22	—	5.08	—	5.08	0.72	1.38	0.95
1997	0.94	3.40	—	4.45	—	4.45	0.64	1.38	0.94
	Expenditures in Million Nominal Dollars								
1970	27.0	21.5	R (s)	1.4	—	1.6	—	R (s)	50.4
1975	85.0	32.0	2.6	6.2	—	8.8	6.3	R (s)	132.5
1980	277.7	16.6	1.5	5.9	—	7.4	10.9	0.5	313.1
1981	321.8	10.0	R (s)	7.5	—	7.7	12.9	R (s)	352.6
1982	327.7	9.1	0.6	4.8	—	5.5	13.5	R (s)	356.0
1983	352.1	12.5	R (s)	5.0	—	5.4	17.0	0.5	387.6
1984	327.9	11.7	R (s)	3.9	—	4.1	23.0	0.6	367.3
1985	335.3	7.7	R (s)	3.5	—	3.6	19.6	R (s)	366.7
1986	303.6	4.7	—	2.2	—	2.2	24.4	R (s)	335.2
1987	296.4	7.1	—	2.7	—	2.7	19.3	0.7	326.2
1988	316.7	11.1	—	2.7	—	2.7	23.0	0.5	354.1
1989	317.9	6.5	—	2.9	—	2.9	22.6	R (s)	350.2
1990	304.8	10.7	—	3.7	—	3.7	21.3	R (s)	340.8
1991	311.1	9.9	—	2.8	—	2.8	29.2	R (s)	353.3
1992	300.7	7.0	—	2.2	—	2.2	20.4	R (s)	330.5
1993	291.4	13.4	—	2.9	—	2.9	20.9	R (s)	328.9
1994	288.1	8.6	—	4.2	—	4.2	28.9	R (s)	330.2
1995	304.7	9.8	—	3.5	—	3.5	29.2	R (s)	347.6
1996	291.1	10.9	—	4.0	—	4.0	29.9	(s)	336.1
1997	295.4	14.1	—	5.5	—	5.5	28.1	(s)	343.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.