

Table 1. Total Energy Supply and Disposition Summary
(Quadrillion Btu per Year, Unless Otherwise Noted)

Supply, Disposition, and Prices	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Production										
Crude Oil and Lease Condensate	13.71	12.74	12.71	12.68	12.19	12.14	11.99	10.54	10.44	10.06
Natural Gas Plant Liquids	2.46	2.67	2.59	2.46	3.22	3.11	2.65	3.74	3.57	2.96
Dry Natural Gas	19.55	23.12	22.53	21.42	27.61	26.67	22.99	31.52	30.27	25.41
Coal	22.64	20.19	21.02	22.02	12.72	13.69	17.11	6.74	9.08	15.27
Nuclear Power	7.20	7.45	7.30	7.30	7.40	6.98	6.83	7.41	5.90	4.80
Renewable Energy ¹	6.83	7.36	7.18	7.41	8.09	7.70	8.29	10.15	9.73	9.68
Other ²	1.33	0.52	0.52	0.52	0.57	0.56	0.57	0.89	0.66	0.90
Total	73.73	74.04	73.84	73.80	71.81	70.85	70.42	70.99	69.65	69.08
Imports										
Crude Oil ³	16.30	21.46	21.33	21.30	22.06	21.94	21.80	25.19	24.67	24.28
Petroleum Products ⁴	3.98	5.16	5.23	5.05	5.37	5.34	4.55	8.51	7.42	4.49
Natural Gas	2.93	5.42	4.93	4.75	6.05	5.49	4.87	6.76	6.10	5.10
Other Imports ⁵	0.57	0.45	0.52	0.50	0.31	0.44	0.31	0.32	0.49	0.26
Total	23.78	32.50	32.00	31.60	33.80	33.21	31.53	40.77	38.67	34.13
Exports										
Petroleum ⁶	2.04	1.98	1.88	1.92	1.92	1.87	1.78	1.86	1.67	1.66
Natural Gas	0.16	0.14	0.15	0.20	0.14	0.14	0.26	0.14	0.14	0.48
Coal	2.37	2.27	2.27	2.27	2.28	2.28	2.28	2.37	2.37	2.37
Total	4.57	4.39	4.30	4.40	4.33	4.29	4.31	4.37	4.18	4.52
Discrepancy⁷	0.82	0.07	0.07	0.09	-0.14	-0.20	-0.11	-0.10	-0.34	-0.28
Consumption										
Petroleum Products ⁸	36.01	40.41	40.36	39.94	41.39	41.12	39.58	46.82	44.78	40.63
Natural Gas	22.43	28.27	27.18	25.85	33.32	31.82	27.41	37.94	36.02	29.83
Coal	20.90	18.40	19.28	20.27	10.65	11.68	15.10	4.67	7.06	13.07
Nuclear Power	7.20	7.45	7.30	7.30	7.40	6.98	6.83	7.41	5.90	4.80
Renewable Energy ¹	6.84	7.37	7.20	7.43	8.11	7.72	8.32	10.19	9.77	9.73
Other ⁹	0.39	0.31	0.30	0.32	0.25	0.25	0.30	0.27	0.26	0.35
Total	93.77	102.22	101.61	101.10	101.13	99.57	97.53	107.29	103.79	98.41
Net Imports - Petroleum	18.25	24.65	24.68	24.44	25.52	25.41	24.57	31.83	30.42	27.11
Prices (1996 dollars per unit)										
World Oil Price (dollars per barrel) ¹⁰	20.48	20.04	19.96	19.74	18.78	18.72	18.09	20.02	19.73	18.74
Gas Wellhead Price (dollars per Mcf) ¹¹	2.24	2.28	2.21	2.16	3.10	2.78	2.25	4.37	3.71	2.28
Coal Minemouth Price (dollars per ton)	18.50	16.59	16.10	15.80	17.34	16.42	15.90	17.83	16.24	13.77
Average Electric Price (cents per kwh)	6.8	8.4	7.4	7.2	10.2	8.8	8.0	10.0	8.1	6.3

¹Includes grid-connected electricity from conventional hydroelectric; wood and wood waste; landfill gas; municipal solid waste; other biomass; wind; photovoltaic and solar thermal sources; non-electric energy from renewable sources, such as active and passive solar systems, and wood; and both the ethanol and gasoline components of E85, but not the ethanol components of blends less than 85 percent. Excludes electricity imports using renewable sources and nonmarketed renewable energy. See Table 18 for selected nonmarketed residential and commercial renewable energy.

²Includes liquid hydrogen, methanol, supplemental natural gas, and some domestic inputs to refineries.

³Includes imports of crude oil for the Strategic Petroleum Reserve.

⁴Includes imports of finished petroleum products, imports of unfinished oils, alcohols, ethers, and blending components.

⁵Includes coal, coal coke (net), and electricity (net).

⁶Includes crude oil and petroleum products.

⁷Balancing item. Includes unaccounted for supply, losses, gains, and net storage withdrawals.

⁸Includes natural gas plant liquids, crude oil consumed as a fuel, and nonpetroleum based liquids for blending, such as ethanol.

⁹Includes net electricity imports, methanol, and liquid hydrogen.

¹⁰Average refiner acquisition cost for imported crude oil.

¹¹Represents lower 48 onshore and offshore supplies.

Btu = British thermal unit.

Mcf = Thousand cubic feet.

Kwh = Kilowatt-hour.

Note: Totals may not equal sum of components due to independent rounding. Figures may differ from published data due to internal conversion factors.

Sources: 1996 natural gas values: Energy Information Administration (EIA), *Natural Gas Monthly*, DOE/EIA-0130(97/06) (Washington, DC, June 1997). 1996 coal minemouth price: *Coal Industry Annual 1996* DOE/EIA-0584(96) (Washington, DC, November 1997). Coal production and exports derived from: EIA, *Monthly Energy Review*, DOE/EIA-0035(97/08) (Washington, DC, August 1997). Other 1996 values: EIA, *Annual Energy Review 1996*, DOE/EIA-0384(96) (Washington, DC, July 1997). **Projections:** EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A.

Table 2. Energy Consumption by Sector and Source
(Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Energy Consumption										
Residential										
Distillate Fuel	0.89	0.74	0.74	0.73	0.66	0.65	0.65	0.61	0.59	0.60
Kerosene	0.08	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
Liquefied Petroleum Gas	0.42	0.42	0.43	0.42	0.42	0.43	0.42	0.42	0.46	0.46
Petroleum Subtotal	1.40	1.24	1.23	1.22	1.14	1.15	1.14	1.09	1.11	1.12
Natural Gas	5.39	5.23	5.25	5.21	4.98	5.00	4.95	5.25	5.10	5.29
Coal	0.05	0.04	0.04	0.05	0.04	0.04	0.04	0.03	0.04	0.04
Renewable Energy ¹	0.61	0.62	0.61	0.60	0.64	0.62	0.62	0.67	0.64	0.64
Electricity	3.68	4.06	4.13	4.13	4.12	4.19	4.15	4.74	4.82	4.77
Delivered Energy	11.13	11.18	11.26	11.21	10.90	11.00	10.89	11.79	11.71	11.86
Electricity Related Losses	8.21	8.33	8.33	8.37	7.51	7.27	7.64	7.82	7.28	7.29
Total	19.34	19.52	19.59	19.58	18.42	18.27	18.53	19.60	18.99	19.15
Commercial										
Distillate Fuel	0.44	0.35	0.36	0.37	0.30	0.33	0.34	0.28	0.31	0.35
Residual Fuel	0.15	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.12	0.12
Kerosene	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Liquefied Petroleum Gas	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09
Motor Gasoline ²	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02
Petroleum Subtotal	0.71	0.60	0.61	0.62	0.55	0.58	0.60	0.52	0.57	0.60
Natural Gas	3.30	3.30	3.42	3.47	2.94	3.22	3.43	2.86	3.27	3.76
Coal	0.08	0.08	0.09	0.09	0.07	0.08	0.08	0.07	0.08	0.09
Renewable Energy ³	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	3.37	3.59	3.70	3.72	3.46	3.68	3.76	3.76	4.02	4.26
Delivered Energy	7.47	7.57	7.82	7.90	7.02	7.56	7.88	7.22	7.94	8.72
Electricity Related Losses	7.52	7.37	7.46	7.55	6.32	6.38	6.93	6.21	6.06	6.52
Total	14.98	14.93	15.29	15.45	13.34	13.94	14.81	13.43	14.00	15.24
Industrial⁴										
Distillate Fuel	1.17	1.33	1.33	1.31	1.45	1.43	1.32	1.60	1.55	1.28
Liquefied Petroleum Gas	2.12	2.24	2.25	2.23	2.39	2.38	2.22	2.61	2.46	2.08
Petrochemical Feedstock	1.28	1.35	1.36	1.35	1.39	1.41	1.33	1.44	1.44	1.24
Residual Fuel	0.34	0.36	0.34	0.34	0.37	0.36	0.29	0.53	0.50	0.26
Motor Gasoline ²	0.19	0.22	0.22	0.22	0.23	0.23	0.22	0.25	0.25	0.22
Other Petroleum ⁵	4.12	4.44	4.44	4.45	4.60	4.61	4.37	5.15	5.16	4.31
Petroleum Subtotal	9.23	9.93	9.95	9.91	10.44	10.41	9.75	11.58	11.37	9.39
Natural Gas ⁶	9.96	11.39	11.11	10.97	11.91	11.54	10.85	11.77	11.31	10.71
Metallurgical Coal	0.85	0.76	0.75	0.72	0.71	0.61	0.51	0.61	0.40	0.28
Steam Coal	1.55	1.53	1.24	1.20	1.48	1.07	0.88	1.57	1.26	1.08
Net Coal Coke Imports	0.00	0.13	0.15	0.13	0.18	0.23	0.10	0.25	0.33	0.11
Coal Subtotal	2.40	2.42	2.13	2.04	2.37	1.91	1.49	2.43	1.99	1.47
Renewable Energy ⁷	1.82	2.08	2.10	2.11	2.18	2.23	2.32	2.32	2.39	2.57
Electricity	3.46	4.00	3.92	3.88	4.15	3.95	3.58	4.37	4.13	3.29
Delivered Energy	26.87	29.82	29.21	28.91	31.05	30.04	28.00	32.47	31.19	27.43
Electricity Related Losses	7.72	8.22	7.91	7.86	7.57	6.85	6.60	7.20	6.23	5.04
Total	34.59	38.04	37.12	36.78	38.62	36.89	34.60	39.67	37.42	32.47

Table 2. Energy Consumption by Sector and Source (Continued)
(Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Transportation										
Distillate Fuel ⁸	4.48	5.61	5.54	5.47	5.97	5.73	5.48	6.53	5.93	5.39
Jet Fuel ⁹	3.27	4.23	4.31	4.33	4.53	4.68	4.66	5.69	5.68	5.34
Motor Gasoline ²	14.94	16.90	16.81	16.53	16.70	16.55	15.94	17.95	17.49	16.40
Residual Fuel	0.90	1.10	1.10	1.10	1.26	1.26	1.26	1.57	1.56	1.57
Liquefied Petroleum Gas	0.04	0.13	0.13	0.14	0.19	0.19	0.20	0.25	0.25	0.28
Other Petroleum ¹⁰	0.29	0.32	0.32	0.32	0.33	0.33	0.33	0.36	0.36	0.37
Petroleum Subtotal	23.92	28.30	28.21	27.88	28.98	28.75	27.86	32.35	31.27	29.35
Pipeline Fuel Natural Gas	0.73	0.84	0.82	0.77	0.98	0.96	0.82	1.17	1.10	0.92
Compressed Natural Gas	0.01	0.17	0.17	0.17	0.22	0.23	0.22	0.29	0.31	0.30
Renewable Energy (E85) ¹¹	0.01	0.08	0.07	0.09	0.13	0.13	0.17	0.18	0.18	0.26
Methanol ¹²	0.01	0.09	0.08	0.10	0.15	0.14	0.19	0.23	0.21	0.31
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.06	0.08	0.08	0.09	0.11	0.10	0.12	0.14	0.12	0.16
Delivered Energy	24.73	29.56	29.45	29.10	30.56	30.30	29.39	34.35	33.19	31.30
Electricity Related Losses	0.13	0.17	0.17	0.18	0.19	0.17	0.22	0.23	0.18	0.24
Total	24.86	29.72	29.61	29.29	30.76	30.47	29.60	34.59	33.38	31.54
Delivered Energy Consumption for All Sectors										
Distillate Fuel	6.98	8.03	7.97	7.88	8.38	8.14	7.80	9.01	8.39	7.63
Kerosene	0.14	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11
Jet Fuel ⁹	3.27	4.23	4.31	4.33	4.53	4.68	4.66	5.69	5.68	5.34
Liquefied Petroleum Gas	2.66	2.88	2.90	2.88	3.08	3.08	2.92	3.37	3.27	2.90
Motor Gasoline ²	15.16	17.15	17.06	16.78	16.96	16.81	16.18	18.23	17.76	16.64
Petrochemical Feedstock	1.28	1.35	1.36	1.35	1.39	1.41	1.33	1.44	1.44	1.24
Residual Fuel	1.39	1.57	1.55	1.55	1.75	1.73	1.66	2.22	2.18	1.96
Other Petroleum ¹³	4.37	4.73	4.74	4.74	4.90	4.91	4.68	5.48	5.50	4.65
Petroleum Subtotal	35.26	40.06	40.01	39.63	41.11	40.88	39.35	45.55	44.32	40.47
Natural Gas ⁶	19.39	20.93	20.77	20.60	21.03	20.96	20.27	21.33	21.09	20.98
Metallurgical Coal	0.85	0.76	0.75	0.72	0.71	0.61	0.51	0.61	0.40	0.28
Steam Coal	1.68	1.66	1.37	1.33	1.59	1.19	1.00	1.68	1.38	1.22
Net Coal Coke Imports	0.00	0.13	0.15	0.13	0.18	0.23	0.10	0.25	0.33	0.11
Coal Subtotal	2.53	2.54	2.26	2.18	2.48	2.03	1.62	2.53	2.11	1.61
Renewable Energy ¹⁴	2.44	2.77	2.78	2.81	2.95	2.98	3.11	3.17	3.21	3.47
Methanol ¹²	0.01	0.09	0.08	0.10	0.15	0.14	0.19	0.23	0.21	0.31
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	10.57	11.73	11.83	11.82	11.83	11.92	11.62	13.01	13.09	12.48
Delivered Energy	70.19	78.13	77.74	77.13	79.54	78.90	76.15	85.83	84.04	79.32
Electricity Related Losses	23.57	24.08	23.87	23.97	21.59	20.67	21.38	21.47	19.76	19.09
Total	93.77	102.22	101.61	101.10	101.13	99.57	97.53	107.29	103.79	98.41
Electric Generators¹⁵										
Distillate Fuel	0.08	0.04	0.04	0.04	0.03	0.03	0.04	1.16	0.37	0.03
Residual Fuel	0.67	0.31	0.31	0.27	0.26	0.21	0.19	0.11	0.09	0.12
Petroleum Subtotal	0.75	0.35	0.35	0.31	0.29	0.24	0.23	1.27	0.47	0.16
Natural Gas	3.04	7.34	6.41	5.25	12.29	10.86	7.14	16.60	14.93	8.85
Steam Coal	18.36	15.85	17.01	18.09	8.17	9.65	13.48	2.13	4.95	11.46
Nuclear Power	7.20	7.45	7.30	7.30	7.40	6.98	6.83	7.41	5.90	4.80
Renewable Energy ¹⁶	4.40	4.60	4.42	4.62	5.17	4.74	5.21	7.01	6.56	6.27
Electricity Imports ¹⁷	0.39	0.22	0.22	0.22	0.10	0.10	0.10	0.04	0.04	0.04
Total	34.14	35.81	35.70	35.78	33.42	32.58	33.00	34.48	32.85	31.58

Table 2. Energy Consumption by Sector and Source (Continued)
(Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Total Energy Consumption										
Distillate Fuel	7.06	8.07	8.01	7.93	8.41	8.17	7.83	10.17	8.76	7.66
Kerosene	0.14	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11
Jet Fuel ⁹	3.27	4.23	4.31	4.33	4.53	4.68	4.66	5.69	5.68	5.34
Liquefied Petroleum Gas	2.66	2.88	2.90	2.88	3.08	3.08	2.92	3.37	3.27	2.90
Motor Gasoline ²	15.16	17.15	17.06	16.78	16.96	16.81	16.18	18.23	17.76	16.64
Petrochemical Feedstock	1.28	1.35	1.36	1.35	1.39	1.41	1.33	1.44	1.44	1.24
Residual Fuel	2.06	1.88	1.86	1.82	2.01	1.94	1.86	2.33	2.27	2.08
Other Petroleum ¹³	4.37	4.73	4.74	4.74	4.90	4.91	4.68	5.48	5.50	4.65
Petroleum Subtotal	36.01	40.41	40.36	39.94	41.39	41.12	39.58	46.82	44.78	40.63
Natural Gas	22.43	28.27	27.18	25.85	33.32	31.82	27.41	37.94	36.02	29.83
Metallurgical Coal	0.85	0.76	0.75	0.72	0.71	0.61	0.51	0.61	0.40	0.28
Steam Coal	20.05	17.51	18.38	19.42	9.76	10.85	14.49	3.81	6.33	12.68
Net Coal Coke Imports	0.00	0.13	0.15	0.13	0.18	0.23	0.10	0.25	0.33	0.11
Coal Subtotal	20.90	18.40	19.28	20.27	10.65	11.68	15.10	4.67	7.06	13.07
Nuclear Power	7.20	7.45	7.30	7.30	7.40	6.98	6.83	7.41	5.90	4.80
Renewable Energy ¹⁸	6.84	7.37	7.20	7.43	8.11	7.72	8.32	10.19	9.77	9.73
Methanol ¹²	0.01	0.09	0.08	0.10	0.15	0.14	0.19	0.23	0.21	0.31
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Imports ¹⁷	0.39	0.22	0.22	0.22	0.10	0.10	0.10	0.04	0.04	0.04
Total	93.77	102.22	101.61	101.10	101.13	99.57	97.53	107.29	103.79	98.41
Energy Use and Related Statistics										
Delivered Energy Use	70.19	78.13	77.74	77.13	79.54	78.90	76.15	85.83	84.04	79.32
Total Energy Use	93.77	102.23	101.63	101.11	101.14	99.58	97.52	107.30	103.79	98.33
Population (millions)	266.07	287.12	287.12	287.12	298.92	298.92	298.92	323.47	323.47	323.47
Gross Domestic Product (billion 1992 dollars)	6928.40	8424.85	8456.69	8453.75	9198.55	9260.14	9262.00	10849.70	10856.33	10957.21
Total Carbon Emissions (million metric tons)	1462.90	1574.17	1579.45	1579.01	1462.20	1461.50	1462.86	1467.58	1467.78	1466.00

¹Includes wood used for residential heating. See Table 18 estimates of nonmarketed renewable energy consumption for geothermal heat pumps & solar thermal hot water heating.

²Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

³Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass. See Table 18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating.

⁴Fuel consumption includes consumption for cogeneration.

⁵Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

⁶Includes lease and plant fuel.

⁷Includes consumption of energy from hydroelectric, wood & wood waste, municipal solid waste, & other biomass; includes for cogeneration, both sales to the grid & for own use.

⁸Low sulfur diesel fuel.

⁹Includes naphtha and kerosene type.

¹⁰Includes aviation gas and lubricants.

¹¹E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline(nonrenewable).

¹²Only M85 (85 percent methanol and 15 percent motor gasoline).

¹³Includes unfinished oils, natural gasoline, motor gasoline blending compounds, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

¹⁴Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps and solar thermal hot water heaters.

¹⁵Includes consumption of energy by all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy.

¹⁶Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, E85, wind, photovoltaic and solar thermal sources. Excludes cogeneration. Excludes net electricity imports.

¹⁷In 1996 approximately two-thirds of the U.S. electricity imports were provided by renewable sources (hydroelectricity); EIA does not project future proportions.

¹⁸Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps and solar thermal hot water heaters.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. Figures for 1996 may differ from published data due to internal conversion factors. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 1996 natural gas lease, plant, and pipeline fuel values: Energy Information Administration, *Short-Term Energy Outlook, August 1997*. Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). 1996 electric utility fuel consumption: EIA, *Electric Power Annual 1996, Volume I*, DOE/EIA-0348(96)/1 (Washington, DC, August 1997). 1996 nonutility consumption estimates: EIA Form 867, "Annual Nonutility Power Producer Report." Other 1996 values: EIA, *Short-Term Energy Outlook August 1997*. Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). **Projections:** EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A.

Table 3. Energy Prices by Sector and Source
(1996 Dollars per Million Btu)

Sector and Source	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Residential	12.86	16.61	14.92	14.38	21.13	18.11	16.30	22.30	18.14	13.60
Primary Energy ¹	6.63	8.28	7.52	7.20	10.71	9.18	8.00	11.81	9.61	6.95
Petroleum Products ²	8.51	11.34	10.51	10.16	13.38	11.94	11.00	14.08	11.83	9.91
Distillate Fuel	7.09	9.88	9.00	8.62	12.07	10.47	9.50	12.58	10.21	8.18
Liquefied Petroleum Gas	11.59	13.97	13.22	12.94	15.53	14.27	13.43	16.30	13.99	12.31
Natural Gas	6.19	7.59	6.85	6.54	10.13	8.58	7.34	11.37	9.16	6.36
Electricity	24.44	29.98	26.62	25.65	36.69	31.29	28.55	36.40	29.20	22.60
Commercial	12.85	16.67	14.68	14.07	21.66	17.99	15.75	21.96	17.16	12.07
Primary Energy ¹	5.26	6.87	6.07	5.73	9.35	7.71	6.46	10.26	7.88	5.19
Petroleum Products ²	5.56	8.08	7.19	6.81	10.23	8.64	7.66	10.81	8.40	6.42
Distillate Fuel	5.27	7.68	6.79	6.40	9.87	8.26	7.26	10.43	7.98	5.94
Residual Fuel	3.24	5.62	4.67	4.28	7.98	6.26	5.28	8.40	6.06	4.15
Natural Gas ³	5.28	6.71	5.93	5.60	9.22	7.60	6.30	10.22	7.87	5.05
Electricity	22.07	27.52	24.28	23.42	34.33	28.85	25.91	32.69	26.21	19.25
Industrial⁴	5.35	7.21	6.37	6.06	9.50	7.92	6.86	10.09	7.83	5.46
Primary Energy	3.99	5.54	4.88	4.59	7.57	6.26	5.33	8.45	6.44	4.44
Petroleum Products ²	5.58	6.66	6.09	5.84	7.91	6.87	6.18	8.51	6.75	5.42
Distillate Fuel	5.50	7.76	6.87	6.47	9.97	8.35	7.33	10.64	8.10	6.05
Liquefied Petroleum Gas	7.80	8.56	7.80	7.52	10.03	8.76	7.93	10.87	8.47	6.80
Residual Fuel	2.99	5.28	4.34	3.94	7.66	5.96	4.93	8.20	5.74	3.75
Natural Gas ⁵	2.96	4.66	3.93	3.62	7.25	5.74	4.57	8.58	6.35	3.69
Metallurgical Coal	1.77	4.70	3.60	3.16	7.71	5.69	4.64	7.76	5.05	2.94
Steam Coal	1.46	4.38	3.27	2.85	7.39	5.37	4.32	7.42	4.72	2.61
Electricity	13.38	16.44	14.61	14.13	20.11	17.12	15.65	18.94	15.38	11.58
Transportation	8.77	10.94	10.03	9.64	12.80	11.22	10.15	13.01	10.67	8.62
Primary Energy	8.76	10.93	10.02	9.62	12.80	11.21	10.13	13.01	10.66	8.60
Petroleum Products ²	8.76	10.93	10.02	9.62	12.79	11.20	10.11	12.98	10.63	8.56
Distillate Fuel ⁶	8.90	10.79	9.89	9.48	12.77	11.18	10.16	12.95	10.42	8.36
Jet Fuel ⁷	5.52	7.64	6.79	6.39	9.71	8.15	7.17	10.32	8.01	6.01
Motor Gasoline ⁸	9.89	12.26	11.35	10.97	14.11	12.55	11.44	14.33	12.05	9.96
Residual Fuel	2.55	5.23	4.30	3.88	7.67	5.96	4.92	8.16	5.70	3.75
Liquid Petroleum Gas ⁹	12.63	14.82	14.07	13.79	16.15	14.89	14.07	16.47	14.27	12.62
Natural Gas ¹⁰	5.42	7.72	6.98	6.72	10.88	9.39	8.28	12.35	10.15	7.58
E85 ¹¹	15.85	16.97	16.69	16.54	18.37	16.39	15.63	19.12	16.54	14.70
M85 ¹²	12.24	14.58	13.78	13.41	16.12	14.71	13.73	16.42	14.42	12.58
Electricity	15.34	14.29	13.93	13.89	15.29	14.74	14.21	13.76	13.15	11.97
Average End-Use Energy	8.65	11.02	9.97	9.57	13.60	11.73	10.55	14.10	11.43	8.80
Primary Energy	8.32	10.57	9.57	9.18	12.93	11.16	10.04	13.33	10.80	8.37
Electricity	20.01	24.50	21.82	21.08	30.00	25.70	23.57	29.22	23.77	18.41

Table 3. Energy Prices by Sector and Source (Continued)
(1995 Dollars per Million Btu)

Sector and Source	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Electric Generators¹³										
Fossil Fuel Average	1.54	4.35	3.32	2.88	7.29	5.49	4.24	8.55	5.90	2.90
Petroleum Products	3.25	5.86	4.91	4.56	8.31	6.71	5.81	9.95	7.36	4.87
Distillate Fuel	4.91	7.34	6.45	6.05	9.66	8.03	6.97	10.03	7.52	5.72
Residual Fuel	3.07	5.67	4.71	4.32	8.16	6.52	5.60	9.14	6.72	4.65
Natural Gas	2.64	4.48	3.74	3.40	7.27	5.70	4.34	8.61	6.31	3.50
Steam Coal	1.29	4.25	3.13	2.71	7.28	5.23	4.16	7.28	4.52	2.41
Average Price to All Users¹⁴										
Petroleum Products ²	7.83	9.88	9.06	8.69	11.58	10.14	9.18	11.87	9.69	7.90
Distillate Fuel	7.84	10.05	9.15	8.74	12.12	10.50	9.48	12.16	9.79	7.84
Jet Fuel	5.52	7.64	6.79	6.39	9.71	8.15	7.17	10.32	8.01	6.01
Liquefied Petroleum Gas	8.53	9.75	8.98	8.72	11.24	10.00	9.25	12.05	9.80	8.33
Motor Gasoline ⁸	9.89	12.25	11.33	10.95	14.09	12.53	11.42	14.32	12.04	9.95
Residual Fuel	2.84	5.34	4.39	3.98	7.75	6.04	5.01	8.23	5.77	3.83
Natural Gas	4.14	5.48	4.79	4.53	7.94	6.45	5.32	9.18	6.95	4.38
Coal	1.32	4.27	3.14	2.72	7.30	5.24	4.18	7.34	4.57	2.43
E85 ¹¹	15.85	16.97	16.69	16.54	18.37	16.39	15.63	19.12	16.54	14.70
Methanol	12.24	14.58	13.78	13.41	16.12	14.71	13.73	16.42	14.42	12.58
Electricity	20.01	24.50	21.82	21.08	30.00	25.70	23.57	29.22	23.77	18.41
Non-Renewable Energy Expenditures by Sector (Billion 1996 dollars)										
Residential	135.30	175.55	158.96	152.54	216.91	187.98	167.51	247.78	200.87	152.61
Commercial	95.90	126.05	114.83	111.14	152.05	136.02	124.05	158.47	136.19	105.21
Industrial	111.93	165.62	142.18	133.53	228.42	181.59	144.21	253.01	184.55	108.50
Transportation	210.43	313.89	286.57	271.82	378.81	328.53	287.66	431.03	340.63	258.02
Total Non-Renewable Expenditures	553.56	781.11	702.54	669.03	976.18	834.12	723.44	1090.29	862.23	624.34
Transportation Renewable Expenditures	0.08	1.29	1.19	1.44	2.31	2.07	2.62	3.41	2.93	3.79
Total Expenditures	553.64	782.40	703.74	670.47	978.49	836.18	726.06	1093.70	865.16	628.13

¹Weighted average price includes fuels below as well as coal.

²This quantity is the weighted average for all petroleum products, not just those listed below.

³Excludes independent power producers.

⁴Includes cogenerators.

⁵Excludes uses for lease and plant fuel.

⁶Low sulfur diesel fuel. Price includes Federal and State taxes while excluding county and local taxes.

⁷Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

⁸Sales weighted-average price for all grades. Includes Federal and State taxes and excludes county and local taxes.

⁹Includes Federal and State taxes while excluding county and local taxes.

¹⁰Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

¹¹E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

¹²Only M85 (85 percent methanol and 15 percent motor gasoline).

¹³Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.

¹⁴Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

Note: 1996 figures may differ from published data due to internal rounding.

Sources: 1996 prices for gasoline, distillate, and jet fuel are based on prices in various issues of Energy Information Administration (EIA), *Petroleum Marketing Monthly*, DOE/EIA-0380(96/13-97/4) (Washington, DC, 1996-97). 1996 prices for all other petroleum products are derived from the EIA, *State Energy Price and Expenditure Report 1994*, DOE/EIA-0376(94) (Washington, DC, June 1997). 1996 industrial gas delivered prices are based on EIA, *Manufacturing Energy Consumption Survey 1991*. 1996 residential and commercial natural gas delivered prices: EIA, *Natural Gas Monthly*, DOE/EIA-0130(97/6) (Washington, DC, June 1997). Other 1996 natural gas delivered prices: EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A. Values for 1996 coal prices have been estimated from EIA, *State Energy Price and Expenditure Report 1994*, DOE/EIA-0376(94) (Washington, DC, June 1997) by use of consumption quantities aggregated from EIA, *State Energy Data Report 1994*. Online. <ftp://ftp.eia.doe.gov/pub/state.data/021494.pdf> (August 26, 1997) and the *Coal Industry Annual 1996*, DOE/EIA-0584(96) (Washington, DC, November 1997). 1996 electricity prices for commercial, industrial, and transportation: EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A. **Projections:** EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A.

Table 4. Residential Sector Key Indicators and End-Use Consumption
(Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Key Indicators										
Households (millions)										
Single-Family	69.61	77.35	77.40	77.40	81.21	81.34	81.35	89.41	89.50	89.89
Multifamily	24.76	26.46	26.50	26.50	27.54	27.68	27.70	30.57	30.71	30.99
Mobile Homes	6.00	7.07	7.07	7.07	7.55	7.56	7.56	8.42	8.40	8.49
Total	100.37	110.88	110.97	110.97	116.30	116.58	116.61	128.41	128.60	129.37
Average House Square Footage	1649	1691	1691	1691	1708	1707	1707	1732	1732	1732
Energy Intensity (million Btu consumed per household)										
Delivered Energy Consumption	110.92	100.87	101.50	101.03	93.76	94.35	93.39	91.78	91.07	91.70
Electricity Related Losses	81.78	75.13	75.07	75.42	64.61	62.35	65.51	60.89	56.62	56.35
Total Energy Consumption	192.70	176.01	176.57	176.45	158.38	156.70	158.90	152.67	147.68	148.05
Delivered Energy Consumption by Fuel										
Electricity										
Space Heating	0.47	0.45	0.45	0.45	0.43	0.42	0.44	0.49	0.45	0.50
Space Cooling	0.46	0.47	0.48	0.47	0.46	0.46	0.46	0.51	0.49	0.51
Water Heating	0.37	0.34	0.35	0.36	0.33	0.34	0.36	0.34	0.37	0.42
Refrigeration	0.41	0.31	0.31	0.31	0.28	0.28	0.28	0.27	0.27	0.27
Cooking	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.17	0.17	0.17
Clothes Dryers	0.19	0.20	0.20	0.20	0.20	0.20	0.21	0.22	0.23	0.25
Freezers	0.13	0.09	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.07
Lighting	0.32	0.34	0.35	0.35	0.35	0.35	0.36	0.39	0.41	0.44
Clothes Washers ¹	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Dishwashers ¹	0.05	0.04	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.05
Color Televisions	0.21	0.28	0.28	0.28	0.29	0.27	0.28	0.33	0.31	0.32
Personal Computers	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.06
Furnace Fans	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.12	0.13	0.13
Other Uses ²	0.79	1.23	1.27	1.26	1.35	1.41	1.31	1.69	1.79	1.53
Delivered Energy	3.68	4.06	4.13	4.13	4.12	4.19	4.15	4.74	4.82	4.77
Natural Gas										
Space Heating	3.77	3.67	3.65	3.60	3.46	3.44	3.42	3.64	3.47	3.61
Space Cooling	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.01
Water Heating	1.31	1.25	1.28	1.29	1.20	1.24	1.20	1.26	1.27	1.33
Cooking	0.16	0.17	0.17	0.17	0.17	0.18	0.17	0.19	0.19	0.18
Clothes Dryers	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06
Other Uses ³	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.11
Delivered Energy	5.39	5.23	5.25	5.21	4.98	5.00	4.95	5.25	5.10	5.29
Distillate										
Space Heating	0.80	0.66	0.65	0.64	0.58	0.57	0.57	0.53	0.51	0.51
Water Heating	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.09
Other Uses ⁴	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delivered Energy	0.89	0.74	0.74	0.73	0.66	0.65	0.65	0.61	0.59	0.60
Liquefied Petroleum Gas										
Space Heating	0.32	0.31	0.31	0.30	0.30	0.31	0.30	0.30	0.32	0.33
Water Heating	0.07	0.07	0.07	0.07	0.07	0.08	0.07	0.08	0.09	0.08
Cooking	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.04	0.04
Other Uses ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Delivered Energy	0.42	0.42	0.43	0.42	0.42	0.43	0.42	0.42	0.46	0.46
Marketed Renewables (wood) ⁵	0.61	0.62	0.61	0.60	0.64	0.62	0.62	0.67	0.64	0.64
Other Fuels ⁶	0.13	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.10	0.11

Table 4. Residential Sector Key Indicators and Consumption (Continued)
(Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Delivered Energy Consumption by End-Use										
Space Heating	6.10	5.81	5.78	5.72	5.50	5.45	5.44	5.72	5.49	5.69
Space Cooling	0.47	0.48	0.48	0.48	0.46	0.46	0.46	0.52	0.50	0.52
Water Heating	1.84	1.75	1.80	1.81	1.68	1.75	1.72	1.75	1.81	1.91
Refrigeration	0.41	0.31	0.31	0.31	0.28	0.28	0.28	0.27	0.27	0.27
Cooking	0.33	0.35	0.35	0.35	0.36	0.36	0.36	0.39	0.40	0.40
Clothes Dryers	0.24	0.24	0.25	0.25	0.25	0.26	0.26	0.27	0.29	0.31
Freezers	0.13	0.09	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.07
Lighting	0.32	0.34	0.35	0.35	0.35	0.35	0.36	0.39	0.41	0.44
Clothes Washers	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Dishwashers	0.05	0.04	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.05
Color Televisions	0.21	0.28	0.28	0.28	0.29	0.27	0.28	0.33	0.31	0.32
Personal Computers	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.06
Furnace Fans	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.12	0.13	0.13
Other Uses ⁷	0.90	1.33	1.38	1.37	1.45	1.51	1.42	1.80	1.91	1.66
Delivered Energy	11.13	11.18	11.26	11.21	10.90	11.00	10.89	11.79	11.71	11.86
Electricity Related Losses	8.21	8.33	8.33	8.37	7.51	7.27	7.64	7.82	7.28	7.29
Total Energy Consumption by End-Use										
Space Heating	7.15	6.74	6.69	6.63	6.30	6.18	6.24	6.53	6.17	6.45
Space Cooling	1.50	1.45	1.44	1.43	1.29	1.26	1.31	1.35	1.24	1.30
Water Heating	2.66	2.46	2.51	2.54	2.28	2.34	2.37	2.32	2.36	2.54
Refrigeration	1.32	0.96	0.95	0.95	0.80	0.78	0.81	0.72	0.68	0.69
Cooking	0.62	0.64	0.63	0.64	0.64	0.62	0.64	0.68	0.65	0.66
Clothes Dryers	0.68	0.65	0.66	0.67	0.60	0.61	0.65	0.64	0.64	0.70
Freezers	0.42	0.26	0.26	0.26	0.21	0.21	0.21	0.19	0.18	0.18
Lighting	1.05	1.04	1.05	1.07	0.98	0.97	1.03	1.04	1.02	1.11
Clothes Washers	0.09	0.09	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08
Dishwashers	0.15	0.14	0.14	0.14	0.13	0.13	0.13	0.14	0.14	0.13
Color Televisions	0.68	0.86	0.84	0.85	0.81	0.75	0.79	0.88	0.77	0.81
Personal Computers	0.05	0.09	0.09	0.09	0.10	0.10	0.11	0.14	0.14	0.15
Furnace Fans	0.29	0.30	0.30	0.31	0.29	0.29	0.31	0.31	0.32	0.34
Other Uses ⁷	2.67	3.86	3.95	3.94	3.91	3.95	3.84	4.59	4.61	4.00
Total	19.34	19.52	19.59	19.58	18.42	18.27	18.53	19.60	18.99	19.15
Non-Marketed Renewables										
Geothermal ⁸	0.01	0.01	0.01	0.02	0.02	0.02	0.05	0.02	0.04	0.12
Solar ⁹	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	0.02	0.02	0.02	0.03	0.03	0.03	0.06	0.03	0.05	0.13

¹Does not include water heating of load.

²Includes small electric devices, heating elements and motors.

³Includes such appliances as swimming pool heaters, outdoor grills, and outdoor lighting (natural gas).

⁴Includes such appliances as swimming pool and hot tub heaters.

⁵Includes wood used for primary and secondary heating in wood stoves or fireplaces as reported in the *Residential Energy Consumption Survey 1993*.

⁶Includes kerosene and coal.

⁷Includes all other uses listed above.

⁸Includes primary energy displaced by geothermal heat pumps in space heating and cooling applications.

⁹Includes primary energy displaced by solar thermal water heaters.

Btu = British thermal unit.

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

Sources: 1996: Energy Information Administration (EIA) *Short-Term Energy Outlook, August 1997*. Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). Projections: EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A.

Table 5. Commercial Sector Key Indicators and End-Use Consumption
(Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Key Indicators										
Total Floor Space (billion square feet)										
Surviving	69.2	77.3	77.3	77.3	80.8	80.9	80.9	85.3	85.5	85.6
New Additions	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.1	1.1	1.1
Total	70.9	79.0	79.0	79.0	82.4	82.6	82.6	86.4	86.6	86.7
Energy Consumption Intensity (thousand Btu per square foot)										
Delivered Energy Consumption	105.3	95.8	99.0	100.0	85.2	91.6	95.3	83.6	91.7	100.6
Electricity Related Losses	106.0	93.3	94.5	95.5	76.6	77.2	83.8	71.9	70.0	75.2
Total Energy Consumption	211.2	189.0	193.5	195.6	161.8	168.9	179.2	155.4	161.7	175.8
Delivered Energy Consumption by Fuel										
Electricity										
Space Heating	0.12	0.10	0.10	0.10	0.09	0.09	0.10	0.08	0.09	0.09
Space Cooling	0.51	0.49	0.51	0.51	0.45	0.48	0.50	0.45	0.48	0.52
Water Heating	0.17	0.16	0.16	0.17	0.14	0.15	0.16	0.13	0.14	0.16
Ventilation	0.17	0.16	0.17	0.17	0.15	0.16	0.17	0.15	0.16	0.18
Cooking	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.02	0.02	0.02
Lighting	1.16	1.15	1.17	1.18	1.02	1.08	1.12	1.04	1.09	1.20
Refrigeration	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.16	0.17
Office Equipment (PC)	0.07	0.07	0.08	0.08	0.07	0.08	0.08	0.09	0.10	0.10
Office Equipment (non-PC)	0.20	0.23	0.24	0.24	0.24	0.25	0.26	0.29	0.31	0.34
Other Uses ¹	0.80	1.05	1.09	1.09	1.12	1.19	1.20	1.35	1.45	1.48
Delivered Energy	3.37	3.59	3.70	3.72	3.46	3.68	3.76	3.76	4.02	4.26
Natural Gas²										
Space Heating	1.34	1.25	1.29	1.31	1.10	1.20	1.26	1.04	1.18	1.35
Space Cooling	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
Water Heating	0.46	0.45	0.47	0.47	0.39	0.44	0.46	0.39	0.45	0.52
Cooking	0.18	0.19	0.20	0.20	0.17	0.19	0.20	0.16	0.19	0.23
Other Uses ³	1.29	1.38	1.44	1.46	1.25	1.38	1.47	1.23	1.41	1.62
Delivered Energy	3.30	3.30	3.42	3.47	2.94	3.22	3.43	2.86	3.27	3.76
Distillate										
Space Heating	0.20	0.15	0.16	0.16	0.13	0.14	0.14	0.11	0.12	0.13
Water Heating	0.05	0.04	0.05	0.05	0.04	0.04	0.04	0.03	0.04	0.04
Other Uses ⁴	0.19	0.15	0.16	0.16	0.14	0.15	0.16	0.13	0.16	0.17
Delivered Energy	0.44	0.35	0.36	0.37	0.30	0.33	0.34	0.28	0.31	0.35
Other Fuels⁵	0.36	0.33	0.33	0.34	0.32	0.33	0.34	0.32	0.34	0.35
Marketed Renewable Fuels										
Biomass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delivered Energy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delivered Energy Consumption by End-Use										
Space Heating	1.65	1.50	1.55	1.58	1.31	1.43	1.50	1.23	1.39	1.58
Space Cooling	0.53	0.51	0.54	0.54	0.48	0.51	0.53	0.48	0.51	0.56
Water Heating	0.68	0.65	0.68	0.68	0.57	0.63	0.66	0.55	0.63	0.72
Ventilation	0.17	0.16	0.17	0.17	0.15	0.16	0.17	0.15	0.16	0.18
Cooking	0.21	0.22	0.23	0.23	0.19	0.21	0.23	0.18	0.21	0.25
Lighting	1.16	1.15	1.17	1.18	1.02	1.08	1.12	1.04	1.09	1.20
Refrigeration	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.16	0.17
Office Equipment (PC)	0.07	0.07	0.08	0.08	0.07	0.08	0.08	0.09	0.10	0.10
Office Equipment (non-PC)	0.20	0.23	0.24	0.24	0.24	0.25	0.26	0.29	0.31	0.34
Other Uses ⁶	2.65	2.91	3.02	3.05	2.83	3.05	3.17	3.04	3.36	3.63
Delivered Energy	7.47	7.57	7.82	7.90	7.02	7.56	7.88	7.22	7.94	8.72

Table 5. Commercial Sector Key Indicators and Consumption (Continued)
(Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Electricity Related Losses	7.52	7.37	7.46	7.55	6.32	6.38	6.93	6.21	6.06	6.52
Total Energy Consumption by End-Use										
Space Heating	1.91	1.71	1.76	1.79	1.47	1.59	1.68	1.37	1.52	1.72
Space Cooling	1.67	1.51	1.56	1.58	1.29	1.34	1.44	1.22	1.24	1.36
Water Heating	1.07	0.97	1.01	1.02	0.83	0.89	0.95	0.76	0.85	0.96
Ventilation	0.55	0.50	0.52	0.52	0.43	0.45	0.48	0.41	0.41	0.46
Cooking	0.28	0.27	0.28	0.29	0.23	0.25	0.27	0.21	0.24	0.29
Lighting	3.75	3.51	3.53	3.58	2.89	2.96	3.18	2.75	2.74	3.03
Refrigeration	0.45	0.47	0.46	0.46	0.45	0.43	0.45	0.44	0.41	0.42
Office Equipment (PC)	0.22	0.23	0.23	0.24	0.21	0.22	0.24	0.24	0.24	0.26
Office Equipment (non-PC)	0.63	0.69	0.71	0.72	0.67	0.69	0.74	0.77	0.79	0.86
Other Uses ⁶	4.43	5.07	5.22	5.26	4.87	5.12	5.37	5.26	5.56	5.90
Total	14.98	14.93	15.29	15.45	13.34	13.94	14.81	13.43	14.00	15.24
Non-Marketed Renewable Fuels										
Solar ⁷	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Total	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04

¹Includes miscellaneous uses, such as service station equipment, district services, automated teller machines, telecommunications equipment, and medical equipment.

²Excludes estimated consumption from independent power producers.

³Includes miscellaneous uses, such as district services, pumps, lighting, emergency electric generators, and manufacturing performed in commercial buildings.

⁴Includes miscellaneous uses, such as cooking, district services, and emergency electric generators.

⁵Includes residual fuel oil, liquefied petroleum gas, coal, motor gasoline, and kerosene.

⁶Includes miscellaneous uses, such as service station equipment, district services, automated teller machines, telecommunications equipment, medical equipment, pumps, lighting, emergency electric generators, manufacturing performed in commercial buildings, and cooking (distillate), plus residual fuel oil, liquefied petroleum gas, coal, motor gasoline, and kerosene.

⁷Includes primary energy displaced by solar thermal water heaters.

Btu = British thermal unit.

PC = Personal computer.

Note: Totals may not equal sum of components due to independent rounding. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.

Sources: 1996 Energy Information Administration, *Short-Term Energy Outlook, August 1997*, Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997).

Projections: EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A.

Table 6. Industrial Sector Key Indicators and Consumption
(Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Key Indicators										
Value of Gross Output (billion 1987 dollars)										
Manufacturing	3030	3730	3756	3756	4150	4188	4174	4788	4797	4757
Nonmanufacturing	774	878	883	880	931	937	933	1033	1035	1045
Total	3805	4608	4639	4636	5081	5126	5107	5822	5832	5802
Energy Prices (1996 dollars per million Btu)										
Electricity	13.38	16.44	14.61	14.13	20.11	17.12	15.65	18.94	15.38	11.58
Natural Gas	2.96	4.66	3.93	3.62	7.25	5.74	4.57	8.58	6.35	3.69
Steam Coal	1.46	4.38	3.27	2.85	7.39	5.37	4.32	7.42	4.72	2.61
Residual Oil	2.99	5.28	4.34	3.94	7.66	5.96	4.93	8.20	5.74	3.75
Distillate Oil	5.50	7.76	6.87	6.47	9.97	8.35	7.33	10.64	8.10	6.05
Liquefied Petroleum Gas	7.80	8.56	7.80	7.52	10.03	8.76	7.93	10.87	8.47	6.80
Motor Gasoline	9.86	11.13	10.21	9.83	13.14	11.57	10.46	13.66	11.36	9.27
Metallurgical Coal	1.77	4.70	3.60	3.16	7.71	5.69	4.64	7.76	5.05	2.94
Energy Consumption										
Consumption¹										
Purchased Electricity	3.46	4.00	3.92	3.88	4.15	3.95	3.58	4.37	4.13	3.29
Natural Gas ²	9.96	11.39	11.11	10.97	11.91	11.54	10.85	11.77	11.31	10.71
Steam Coal	1.55	1.53	1.24	1.20	1.48	1.07	0.88	1.57	1.26	1.08
Metallurgical Coal and Coke ³	0.85	0.89	0.89	0.85	0.89	0.83	0.61	0.86	0.73	0.39
Residual Fuel	0.34	0.36	0.34	0.34	0.37	0.36	0.29	0.53	0.50	0.26
Distillate	1.17	1.33	1.33	1.31	1.45	1.43	1.32	1.60	1.55	1.28
Liquefied Petroleum Gas	2.12	2.24	2.25	2.23	2.39	2.38	2.22	2.61	2.46	2.08
Petrochemical Feedstocks	1.28	1.35	1.36	1.35	1.39	1.41	1.33	1.44	1.44	1.24
Other Petroleum ⁴	4.31	4.66	4.67	4.67	4.84	4.84	4.59	5.40	5.41	4.53
Renewables ⁵	1.82	2.08	2.10	2.11	2.18	2.23	2.32	2.32	2.39	2.57
Delivered Energy	26.87	29.82	29.21	28.91	31.05	30.04	28.00	32.47	31.19	27.43
Electricity Related Losses	7.72	8.22	7.91	7.86	7.57	6.85	6.60	7.20	6.23	5.04
Total	34.59	38.04	37.12	36.78	38.62	36.89	34.60	39.67	37.42	32.47
Consumption per Unit of Output¹ (thousand Btu per 1987 dollars)										
Purchased Electricity	0.91	0.87	0.84	0.84	0.82	0.77	0.70	0.75	0.71	0.57
Natural Gas ²	2.62	2.47	2.39	2.37	2.34	2.25	2.12	2.02	1.94	1.85
Steam Coal	0.41	0.33	0.27	0.26	0.29	0.21	0.17	0.27	0.22	0.19
Metallurgical Coal and Coke ³	0.22	0.19	0.19	0.18	0.18	0.16	0.12	0.15	0.13	0.07
Residual Fuel	0.09	0.08	0.07	0.07	0.07	0.07	0.06	0.09	0.09	0.05
Distillate	0.31	0.29	0.29	0.28	0.29	0.28	0.26	0.27	0.27	0.22
Liquefied Petroleum Gas	0.56	0.49	0.49	0.48	0.47	0.46	0.43	0.45	0.42	0.36
Petrochemical Feedstocks	0.34	0.29	0.29	0.29	0.27	0.27	0.26	0.25	0.25	0.21
Other Petroleum ⁴	1.13	1.01	1.01	1.01	0.95	0.94	0.90	0.93	0.93	0.78
Renewables ⁵	0.48	0.45	0.45	0.46	0.43	0.44	0.45	0.40	0.41	0.44
Delivered Energy	7.06	6.47	6.30	6.24	6.11	5.86	5.48	5.58	5.35	4.73
Electricity Related Losses	2.03	1.78	1.71	1.70	1.49	1.34	1.29	1.24	1.07	0.87
Total	9.09	8.26	8.00	7.93	7.60	7.20	6.77	6.81	6.42	5.60

¹Fuel consumption includes consumption for cogeneration.

²Includes lease and plant fuel.

³Includes net coke coal imports.

⁴Includes petroleum coke, asphalt, road oil, lubricants, motor gasoline, still gas, and miscellaneous petroleum products.

⁵Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

Btu = British thermal unit.

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

Sources: 1996 prices for gasoline and distillate are based on prices in various issues of Energy Information Administration (EIA), *Petroleum Marketing Monthly*, DOE/EIA-0380(96/03-97/04) (Washington, DC, 1996 - 97). 1996 coal prices: EIA, *Monthly Energy Review*, DOE/EIA-0035(97/08) (Washington, DC, August 1997). 1996 electricity prices: EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A. Other 1996 prices derived from EIA, *State Energy Data Report 1994*. Online: <ftp://ftp.eia.doe.gov/pub/state.data/021494.pdf> (August 26, 1997). Other 1996 values: EIA, *Short-Term Energy Outlook, August 1997*. Online: <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997). **Projections:** EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A.

Table 7. Transportation Sector Key Indicators and Delivered Energy Consumption

Key Indicators and Consumption	1996	Projections								
		2005			2010			2020		
		Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology	Low Technology	9 Percent Above	High Technology
Key Indicators										
Level of Travel (billions)										
Light-Duty Vehicles <8,500 lbs. (VMT) . . .	2276	2601	2639	2654	2612	2752	2827	2919	3147	3285
Commercial Light Trucks (VMT) ¹	67	78	79	79	82	84	85	92	96	98
Freight Trucks >10,000 lbs. (VMT)	162	208	210	209	225	226	225	245	245	245
Air (seat miles available)	999	1414	1453	1459	1548	1638	1685	2066	2197	2289
Rail (ton miles traveled)	1218	1342	1379	1411	1227	1266	1346	1184	1242	1401
Marine (ton miles traveled)	779	836	841	831	856	863	848	876	884	877
Energy Efficiency Indicators										
New Car (miles per gallon) ²	28.2	28.0	30.7	32.6	28.3	33.6	36.8	28.9	33.6	35.5
New Light Truck (miles per gallon) ²	20.9	19.5	20.6	22.2	19.7	22.1	26.1	20.2	23.0	26.0
Light-Duty Fleet (miles per gallon) ³	20.2	19.9	20.3	20.7	20.0	21.2	22.2	20.4	22.6	24.6
New Commercial Light Truck (MPG) ¹	20.2	18.8	19.9	21.1	19.0	21.3	24.6	19.0	21.7	23.8
Stock Commercial Light Truck (MPG) ¹	14.5	14.7	14.9	15.1	14.7	15.3	16.1	14.8	16.0	17.6
Aircraft Efficiency (seat miles per gallon)	50.6	53.4	53.9	53.9	54.5	55.6	57.5	56.2	59.8	66.7
Freight Truck Efficiency (miles per gallon)	5.6	5.8	5.9	6.1	5.8	6.1	6.6	5.9	6.5	7.5
Rail Efficiency (ton miles per thousand Btu)	2.7	2.7	2.8	2.8	2.7	2.9	2.9	2.7	3.0	3.0
Domestic Shipping Efficiency (ton miles per thousand Btu)	2.7	2.7	2.8	2.8	2.7	2.9	2.9	2.7	3.0	3.0
Energy Use by Mode (quadrillion Btu)										
Light-Duty Vehicles	13.95	16.40	16.29	16.12	16.45	16.27	15.87	18.01	17.49	16.81
Commercial Light Trucks ¹	0.58	0.66	0.66	0.66	0.69	0.69	0.66	0.78	0.75	0.70
Freight Trucks	4.04	4.96	4.89	4.74	5.27	5.07	4.71	5.66	5.17	4.44
Air	3.32	4.28	4.35	4.37	4.58	4.73	4.71	5.75	5.74	5.40
Rail	0.53	0.57	0.58	0.59	0.53	0.53	0.56	0.52	0.51	0.56
Marine	1.43	1.70	1.70	1.69	1.90	1.89	1.88	2.27	2.23	2.24
Pipeline Fuel	0.73	0.84	0.82	0.77	0.98	0.96	0.82	1.17	1.10	0.92
Other ⁴	0.24	0.27	0.28	0.28	0.28	0.29	0.29	0.32	0.32	0.33
Total	24.73	29.56	29.45	29.10	30.56	30.30	29.39	34.35	33.19	31.30

¹Commercial trucks 8,500 to 10,000 pounds.

²Environmental Protection Agency rated miles per gallon.

³Combined car and light truck "on-the-road" estimate.

⁴Includes lubricants and aviation gasoline.

Btu = British thermal unit.

VMT=Vehicle miles traveled.

MPG = Miles per gallon.

Lbs. = Pounds.

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

Sources: 1996: Federal Aviation Administration (FAA), *FAA Aviation Forecasts Fiscal Years 1996-2007*, (Washington, DC, February 1995); Energy Information Administration (EIA), *Short-Term Energy Outlook, August 1997*, Online. <http://www.eia.doe.gov/emeu/steo/pub/upd/aug97/index.html> (August 21, 1997); EIA, *Fuel Oil and Kerosene Sales 1996*, DOE/EIA-0535(96) (Washington, DC, September 1997); and United States Department of Defense, Defense Fuel Supply Center. **Projections:** EIA, AEO98 National Energy Modeling System runs FREEZE09.D080798A, FD09ABV.D080398B, and HITECH09.D080698A.